DR21-0005 BARSOTTI WAREHOUSE OFFICE
EXHIBIT T - PROPOSED NEGATIVE DECLARATION AND INITIAL STUDY

DRAFT NEGATIVE DECLARATION

FILE: DR21-0005

PROJECT NAME Barsotti Warehouse and Office

NAME OF APPLICANT: Doug Granade

ASSESSOR'S PARCEL NO.: 109-240-030 **SECTION:** 2 **T:** 09N **R:** 09E, MDM

LOCATION: The project is located on the west side of Business Drive, approximately 0.25 mile north of the intersection with Dividend Drive, in the Shingle Springs area.

☐ **GENERAL PLAN AMENDMENT: FROM: TO:**

☐ **REZONING: FROM: TO:**

☐ **TENTATIVE PARCEL MAP** ☐ **SUBDIVISION:**

SUBDIVISION (NAME):

☐ **SPECIAL USE PERMIT TO ALLOW:**

☒ **OTHER:** A Staff Level Design Review Permit to allow the construction and operation of a new 22,800 square foot warehouse and office for Barsotti Juice Company. Project includes associated improvements for landscaping, lighting and parking. The project is located within the Barnett Ranch Business Park.

REASONS THE PROJECT WILL NOT HAVE A SIGNIFICANT ENVIRONMENTAL IMPACT:

☒ **NO SIGNIFICANT ENVIRONMENTAL CONCERNS WERE IDENTIFIED DURING THE INITIAL STUDY.**

☐ **MITIGATION HAS BEEN IDENTIFIED WHICH WOULD REDUCE POTENTIALLY SIGNIFICANT IMPACTS.**

☐ **OTHER:**

In accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), State Guidelines, and El Dorado County Guidelines for the Implementation of CEQA, the County Environmental Agent analyzed the project and determined that the project will not have a significant impact on the environment. Based on this finding, the Planning Department hereby prepares this NEGATIVE DECLARATION. A period of thirty (20) days from the date of filing this negative declaration will be provided to enable public review of the project specifications and this document prior to action on the project by COUNTY OF EL DORADO. A copy of the project specifications is on file at the County of El Dorado Planning Services, 2850 Fairlane Court, Placerville, CA 95667.

This Negative Declaration was adopted by the _____ on _____.

_____
Executive Secretary

COUNTY OF EL DORADO
PLANNING AND BUILDING DEPARTMENT
INITIAL STUDY
ENVIRONMENTAL CHECKLIST

Project Title: Design Review Permit DR21-0005 / Barsotti Warehouse & Office

Lead Agency Name and Address: El Dorado County, 2850 Fairlane Court, Placerville, CA 95667

Contact Person: Bianca Dinkler, Associate Planner | **Phone Number:** (530) 621-5875

Owner's Name and Address: Barsotti Family LLC, 2239 Hidden Valley Lane, Camino, CA 95709

Applicant's Name and Address: Doug Granade, 4420 Business Drive, Shingle Springs, CA 95682

Project Engineer's Name and Address: Doug Granade, 4420 Business Drive, Shingle Springs, CA 95682

Project Location: The project is located on the west side of Business Drive, approximately 0.25 miles north of the intersection with Dividend Drive in the community of Shingle Springs. (Attachments A, B).

Assessor's Parcel Number: 109-240-030 (Attachment C) **Acres:** 15.43-acres

Sections: S:02 **T:** 09N **R:** 09E

General Plan Designation: Industrial (I) (Attachment D)

Zoning: Industrial Light within a Design Review Community Combining Zones (IL-DC) (Attachment E)

Description of Project: A staff level Design Review Permit to allow the construction and operation of a new 22,800 square foot warehouse and office for Barsotti Juice Company located in the Barnett Ranch Business Park. The scope of work would occur on the southern 7.8-acres portion of the 15.43-acre parcel. The warehouse portion of the building would represent the majority of square footage at approximately 21,233 square feet, and the office areas would be approximately 1,567 square feet total and includes the main office, a smaller office, lobby area, accounting room, file storage room, two restrooms, server room, break room, and janitor closet. Additional site improvements include 20 standard 9-ft x 18-ft parking spaces, two ADA parking spaces, one EVA parking space, six truck loading/unloading stalls, and trash enclosures. New 6-foot chain link fencing would be installed to secure the perimeter of the developed area (not the entire parcel). Project signage would be building signage only identifying the address. Landscaping is designed to utilize drought-tolerant species and would be consistent with the County's Model Water Efficiency Model (MWELO) program. Proposed lighting would be building lighting with wall luminaires designed to be fully shielded pursuant to the Illumination Engineering Society of North America's (IESNA) full cut-off designation. Access to the project site is from Business Drive. This portion of Business Drive is not a County-maintained roadway and an encroachment permit is not required. Proposed grading would occur at the project entrance driveway, warehouse/office building pad, on-site circulation isles, an open area to the north of the warehouse/office building, and stormwater improvements. A Facilities Improvement Letter (FIL) from the El Dorado Irrigation District (EID) was included with requirements for improvements to connect to public water/sewer service. Electricity/utilities would be provided by connecting to PG&E. The project would have approximately 12 employees. Business hours would be from 7am to 5pm.

Environmental Setting: The project site is a 7.8-acre portion of a 15.43-acre parcel located at an elevation of 1,426 to 1,436 feet above mean sea level. A Botanical Survey was prepared for the project by Sycamore Environmental Consultants on November 1, 2019 (Attachment 18). The site is predominantly flat and previously disturbed by grading and spoils pile stockpiling. Vegetation on-site is ruderal/disturbed and annual California grassland. There is open canopy mixed oak woodland at the northwest corner (no development is proposed in that area). Old Mill Creek crosses Shingle Lime Mine Road but does not occur on the property. There is no chaparral in the Biological Study Area (BSA). Proposed grading would occur at the project entrance for a new driveway, the warehouse/office building pad, on-site circulation isles, an open area north of the warehouse/office, and for stormwater improvements. Stormwater would be treated by vegetative swales and a detention basin to be located at the southwestern corner of the parcel. As shown on Record of Survey R/S 27/23/1, there is a 60-ft non-exclusive road and public utilities easement along the western property line, and a 30-ft non-exclusive road and public utilities easement at the northern property line. The proposed location of the new warehouse and office building are outside of these easements. Based on review of the report, the study area does not contain chaparral or oak woodland habitats that typically provide habitat for Pine Hill Plants. No special-status plants were found. The project would be subject to paying the Mitigation Area 1 fee at time of building permit. The report summary does not recommend further analysis. Further discussion is contained in this Initial Study.

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement)

1. El Dorado County Department of Transportation
2. El Dorado County Building Services
3. El Dorado County Air Quality Management District
4. El Dorado County Environmental Management
5. El Dorado County Surveyor's Office
6. El Dorado Irrigation District
7. El Dorado County Department of Transportation
8. El Dorado County Stormwater Coordinator, West Slope
9. Cameron Park Fire Protection District/CALFIRE
10. PG&E

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

At the time of the application request, seven tribes had requested to be notified of proposed projects for consultation in the project area: Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville-El Dorado Miwok-Maidu-Nishinam Tribe, Shingle Springs Band of Miwok Indians, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of California and Nevada, and T'si-Akim Maidu. The United Auburn Indian Community (Auburn Rancheria) requested consultation. An initial records search was conducted by searching California Historic Resources Information System (CHRIS) maps for cultural resource site records and survey reports in El Dorado County within a 1/4-mile radius of the proposed project area. It was determined that there is low potential for locating historic-period cultural resources in the immediate vicinity of the proposed project area. Further, a comprehensive Cultural Resources Study was conducted in October 2019 by Historic Resource Associates and the report stated that no significant prehistoric archaeological sites, features, or artifacts were found, nor any significant historical buildings, structures or objects, and no further analysis recommended. Further discussion is contained in this Initial Study, Cultural Resources and Tribal Cultural Resources.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources		Cultural Resources		Geology / Soils
	Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality
	Land Use / Planning		Mineral Resources		Noise
	Population / Housing		Public Services		Recreation
	Transportation/Traffic		Tribal Cultural Resources		Utilities / Service Systems

DETERMINATION

On the basis of this initial evaluation:

☒ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by Mitigation Measures based on the earlier analysis as described in attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to applicable standards; and b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or Mitigation Measures that are imposed upon the proposed project, nothing further is required.

Signature: Bianca Dinkler Date: 8/18/21

Printed Name: Bianca Dinkler, Associate Planner For: El Dorado County

Signature: Date: 8/18/21

Printed Name: Rommel Pabalinas, Current Planning Manager For: El Dorado County

PROJECT DESCRIPTION

Throughout this Initial Study, please reference the following Attachments:

Project Specific Plans:

Attachment 1: Location Map
Attachment 2: Aerial Photo
Attachment 3: Assessors Parcel Map
Attachment 4: General Plan Land Use Map
Attachment 5: Zoning Map
Attachment 6: Site Plans
Attachment 7: Building Elevations and Design
Attachment 8: Landscape Plans
Attachment 9: Lighting Plans
Attachment 10: Improvement Plans

Agencies Comments:

Attachment 11: County Stormwater Coordinator West Slope Comments
Attachment 12: PG&E Comments
Attachment 13: AQMD Comments
Attachment 14: El Dorado Irrigation District Comments
Attachment 15: Environmental Management Department Comments
Attachment 16: Department of Transportation Comments
Attachment 17: County Surveyor's Office Comments

Project Specialty Reports:

Attachment 18: Botanical Survey, Sycamore Environmental Consultants
Attachment 19: Drainage Study, Warren Consulting Engineers

Additional Attachments:

Attachment 20: Application Packet

Introduction:

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts resulting from the proposed project.

Project Description:

A Staff Level Design Review to allow the construction and operation of a new 22,800 square foot warehouse and office for Barsotti Juice Company located in the Barnett Ranch Business Park. The scope of work would occur on the southern 7.8-acres portion of the 15.43-acre parcel. The warehouse portion of the building would represent the majority of square footage at approximately 21,233 square feet, and the office areas would be approximately 1,567 square feet total and includes the main office, a smaller office, lobby area, accounting room, file storage room, two restrooms, server room, break room, and janitor closet. Additional site improvements include 20 standard 9-ft x 18-ft parking spaces, two Americans with Disabilities Act (ADA) parking spaces, one Electric Vehicle Approved (EVA) parking space, six truck loading/unloading stalls, and trash enclosures. New 6-ft chain link fencing would be installed to secure the perimeter of the developed area (not the entire parcel). Project signage would be building signage only identifying the address. Landscaping is designed to utilize drought-tolerant species and would be consistent with the County's Model Water Efficiency Model (MWELO) program. Proposed lighting would be building lighting with wall luminaires designed to be fully shielded pursuant to the Illumination Engineering Society

of North America's (IESNA) full cut-off designation. Access to the project site is from Business Drive. This portion of Business Drive is not a County-maintained roadway and an encroachment permit is not required. Proposed grading would occur at the project entrance driveway, warehouse/office building pad, on-site circulation isles, an open area to the north of the warehouse/office building, and stormwater improvements. There would be five types of surface paving used: Type 1 (3" AB on compacted subgrade), Type 2 (3" AC over 6" AB on compacted subgrade), Type 3 (8" PCC with #4 bars at 12" O.C.E.W. over 6" AB on compacted subgrade), Type 4 (4" PCC with #3 bars at 24" O.C.E.W. over 4" AB on compacted subgrade), and Type 5 (8" Class II AB on compacted subgrade). A Facilities Improvement Letter (FIL) from the El Dorado Irrigation District (EID) was included with requirements for improvements to connect to public water/sewer service. Electricity/utilities would be provided by connecting to PG&E. The project would have approximately 12 employees. Business hours would be from 7am to 5pm.

Site Description:

The project site is a 7.8-acre portion of a 15.43-acre parcel located at an elevation of 1,426 to 1,436 feet above mean sea level. A Botanical Survey was prepared for the project by Sycamore Environmental Consultants on November 1, 2019 (Attachment 18). The site is predominantly flat and previously disturbed by grading and spoils pile stockpiling. Vegetation on-site is ruderal/disturbed and annual California grassland. There is open canopy mixed oak woodland at the northwest corner (no development is proposed in that area). Old Mill Creek crosses Shingle Lime Mine Road but does not occur on the property. There is no chaparral in the Biological Study Area (BSA). Proposed grading would occur at the project entrance for a new driveway, the warehouse/office building pad, on-site circulation isles, an open area north of the warehouse/office, and for stormwater improvements. Stormwater would be treated by vegetative swales and a detention basin to be located at the southwestern corner of the parcel. As shown on Record of Survey R/S 27/23/1, there is a 60-ft non-exclusive road and public utilities easement along the western property line, and a 30-ft non-exclusive road and public utilities easement at the northern property line. The proposed location of the new warehouse and office building are outside of these easements. Based on review of the report, the study area does not contain chaparral or oak woodland habitats that typically provide habitat for Pine Hill Plants. No special-status plants were found. The project would be subject to paying the Mitigation Area 1 fee at time of building permit. The report summary does not recommend further analysis. Further discussion is contained in this Initial Study.

Vegetation: Ruderal/disturbed habitat occurs in areas that are heavily disturbed by past or ongoing human activities but retain a soil substrate. Ruderal/disturbed areas may be sparsely to densely vegetated, but do not support a recognizable vegetation community or species assemblage. Vegetative cover is usually herbaceous and dominated by a wide variety of weedy non-native species or a few ruderal native species.

Soil types: Based on review of the Drainage Study prepared for the project, a soil analysis determined that the soils on-site are mostly Class C, Rescue Sandy Loam (REB). (Attachment 19).

Special Status Plants (rare plants): Although there are special-status plants in the region, the site is comprised of ruderal/disturbed habitat and vegetated almost entirely with annual California grassland. Due to the present site conditions and past disturbance, the site lacks suitable habitat for special-status plants and none would be expected to occur on the site. Therefore, no impacts to special-status plants are anticipated as a result of the proposed project. Although no impacts to special-status plant species are anticipated, El Dorado County has a Rare Plant Mitigation Fee program (Zoning Ordinance Section 130.71.040 - Ecological Preserve Mitigation and Fee in Lieu of Mitigation), to offset the impacts of development in western El Dorado County on lands potentially suitable for rare plants. Development projects within Rare Plant Mitigation Areas are required to pay an Ecological Preserve Fee. The project site is in Rare Plant Mitigation Area 1. Lands in Mitigation Area 1 are within the rare soils study area and offsite mitigation through payment of the Ecological Preserve Fee is required. The Ecological Preserve Fee for commercial development is $0.59 per square foot of building area. No further analysis was recommended in the Botanical Survey summary. (Attachment 18).

Special Status Species (wildlife): The proposed site for the warehouse/office would be on the southern 7.8-acre portion of the 15.43-acre parcel. This portion of the property is comprised of ruderal/disturbed habitat and the vegetation is annual California grassland. No oak trees would be removed as a result of the proposed project and no

impacts to special-status wildlife species are anticipated as a result of the project. Further discussion is contained within this Initial Study.

Project Location and Surrounding Land Uses:

The project is located on the west side of Business Drive, approximately 0.25 miles north of the intersection with Dividend Drive in the community of Shingle Springs. The adjacent-neighboring parcels are zoned Industrial Light (IL) to the north, east and south, and Estate Residential, Five-acre (RE-5) to the west; and General Plan land use designations of Industrial (I) to the north, east and south, and Low Density Residential (LDR) to the west.

Project Characteristics:

1. Transportation/Circulation/Parking

The project was reviewed by the County Department of Transportation (DOT) and they provided comments that they take no exceptions to the project and offer no further comments or conditions (Attachment 16). The project was also distributed to the Cameron Park Fire Department; however, they did not provide formal comments/conditions at this time. The Cameron Park Fire Department would defer their review of the project improvement plans until submittal for the building permit, at which time they would review for compliance with their adopted standards.

Access would be from Business Drive, and this portion of Business Drive is not a County-maintained roadway. Road maintenance is privately managed via the Barnett Business Park association. Proposed on-site vehicle and pedestrian circulation would be from 30-ft wide drive-isle with two-way traffic on the interior of the project site around the parking spaces and building. The surfacing would be comprised of five types of paving: Type 1 (3" AB on compacted subgrade), Type 2 (3" AC over 6" AB on compacted subgrade), Type 3 (8" PCC with #4 bars at 12" O.C.E.W. over 6" AB on compacted subgrade), Type 4 (4" PCC with #3 bars at 24" O.C.E.W. over 4" AB on compacted subgrade), and Type 5 (8" Class II AB on compacted subgrade). There would be 20 standard 9-ft x 18-ft parking spaces, two ADA parking spaces, one EVA parking space, and six truck loading/unloading stalls. (Attachments 6, 10).

2. Utilities and Infrastructure

Electricity/utilities services would be provided by connecting to Pacific Gas & Electric (Attachment 12). The El Dorado Irrigation District (EID) reviewed the project and provided conditions for improvements to the existing utilities, on-site, specifically requiring an extension to connect to the sewer line and water line (Attachment 14). The County Environmental Management Department (EMD) reviewed the project and provided comments specific to construction/demolition debris recycling, mandatory commercial recycling, mandatory commercial organics recycling, and trash/recycling enclosures per CalGreen (Attachment 15).

Public Water/Sewer: The project would be served by public water and sewer service. The El Dorado Irrigation District (EID) reviewed the project and provided comments in their Facility Improvement Letter (FIL) verifying water and sewer connectivity, recommended improvements, and adequacy of the existing system for fire service and fire hydrants (Attachment 14). **Water:** The proposed project would require 10 EDUs of water. The FIL outlines the specific improvement requirements; and **Sewer:** There is a 6-inch gravity sewer line located in Business Drive. This sewer line has adequate capacity at this time. In order to receive service from this line, an extension of facilities of adequate size must be constructed. The project would require 10 EDUs of sewer service. The FIL outlines the specific improvement requirements; and **Easements:** Proposed water lines, sewer lines, and related facilities shall be located within an easement and shall remain accessible by conventional maintenance vehicles. Easements for any new EID facilities constructed by the project must be granted to EID prior to approval of water and sewer improvements, whether onsite or offsite; and **Fire Hydrants:** The Cameron Park Fire Department in cooperation with CalFire would review the improvement plans at time of building permit submittal to verify the project meets required fire flow at that time.

3. Construction Considerations

The project would maintain the current zoning designation and development would require conformance with applicable agency requirements, and subject to a building permit from the El Dorado County Building Services. The proposed development is designed in conformance with the development standards for the Industrial Light (IL) zone including meeting required setbacks, building height, and Floor Area Ratio (FAR). There are no requested modifications to these development standards.

Grading, Drainage, Utilities: A Drainage Study was prepared by Warren Consulting Engineers, Inc. dated March 16, 2021 (Attachment 19). Preliminary Grading, Drainage, and Utility Plans are included and show the proposed improvements to cut/fill/export grading amounts, design flow of drainage system, and all proposed utilities. (Attachment 10).

Building Elevations and Design: The building elevations and design are shown in the Building Elevations which include the perimeter elevations, conceptual roof plan/parapets, details of the building materials, architectural theme, heights, and paint colors. The Barsotti Warehouse/Office would be constructed of steel buildings in reflective white/sandstone/and burnished slate. (Attachment 7).

Fencing: A new 6-ft chain link fence would be installed around the development area (not the entire parcel). (Attachment 10).

Landscape Details: A Landscape Plan is included for the proposed project showing approved drought-tolerant plant and tree species that comply with the Landscaping and Irrigation Standards contained in the Community Design Standards, as well as with the County's Model Water Efficient Landscape Ordinance (MWELO). (Attachment 8).

On-Site Lighting and Signage: Proposed lighting for both the building and perimeter within the development area. Lighting would utilize LED technology and all project lighting is designed to be shielded downwards to minimize nighttime glare. All lighting would be manufactured to U.L. Specifications. No freestanding monument signage is proposed. The only signage would be the address on building. (Attachment 9).

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. If the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is a fair argument that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of Mitigation Measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the Mitigation Measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL IMPACTS

I. **AESTHETICS.** *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?				**X**
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				**X**
c. Substantially degrade the existing visual character 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**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to aesthetics in relation to the proposed project.

State Laws, Regulations, and Policies

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (Caltrans, 2015). The state highway system includes designated scenic highways and those that are eligible for designation as scenic highways.

There are no officially designated state scenic corridors in the vicinity of the project site.

Local Laws, Regulations, and Policies

The County has several standards and ordinances that address issues relating to visual resources. Many of these can be found in the County Zoning Ordinance (Title 130 of the County Code). The Zoning Ordinance consists of descriptions of the zone districts, including identification of uses allowed by right or uses requiring a discretionary permit, and specific development standards that include development attributes for parcel size, density range, required setbacks, maximum building height, and Floor Area Ratio (FAR).

Visual resources are classified as 1.) scenic resources or 2.) scenic views. Scenic resources include specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements. Scenic views are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor.

A list of the county's scenic views and resources is presented in Table 5.3-1 of the El Dorado County General Plan EIR (p. 5.3-3). This list includes areas along highways where viewers can see large water bodies (e.g., Lake Tahoe and Folsom Reservoir), river canyons, rolling hills, forests, or historic structures or districts that are reminiscent of El Dorado County's heritage.

Several highways in El Dorado County have been designated by the California Department of Transportation (Caltrans) as scenic highways or are eligible for such designation. These include U.S. 50 from the eastern limits of the Government Center interchange (Placerville Drive/Forni Road) in Placerville to South Lake Tahoe, all of SR 89 within the county, and those portions of SR 88 along the southern border of the county.

Rivers in El Dorado County include the American, Cosumnes, Rubicon, and Upper Truckee rivers. A large portion of El Dorado County is under the jurisdiction of the USFS, which under the Wild and Scenic Rivers Act may designate rivers or river sections to be Wild and Scenic Rivers. To date, no river sections in El Dorado County have been nominated for or granted Wild and Scenic River status.

Discussion: A substantial adverse effect to Visual Resources would result in the introduction of physical features that are not characteristic of the surrounding development, substantially change the natural landscape, or obstruct an identified public scenic vista.

a. **Scenic Vista or Resource:** No scenic vistas, as designated by the county General Plan, are located in the vicinity of the site (El Dorado County, 2003, p. 5.3-3 through 5.3-5). The project site is not adjacent to or visible from a State Scenic Highway. Any new structures would require permits for construction and would comply with the General Plan and the Zoning Ordinance. There would be no impact.

b. **Scenic Resources:** The project site is not visible from an officially designated State Scenic Highway or County-designated scenic highway, or any roadway that is part of a corridor protection program (Caltrans, 2013). There are no views of the site from public parks or scenic vistas. There are no trees or historic buildings that have been identified by the County as contributing to exceptional aesthetic value at the project site. There would be no impact.

c. **Visual Character:** The adjacent-neighboring parcels are zoned Industrial Light (IL) to the north, east and south, and Estate Residential, Five-acre (RE-5) to the west; and General Plan land use designations of Industrial (I) to the north, east and south, and Low Density Residential (LDR) to the west. Zoning Ordinance Section 130.23.010 states the IL zone "is applied to lands for manufacturing and associated retail or service activities, wholesaling, and other industrial uses, where the primary activity is conducted within a building or buildings, or in outdoor storage or activity areas." The proposed warehouse/office for Barsotti Juice Company is a permitted use in the IL zone and would be compatible with the surrounding development in the Barnett Business Park. The project has been designed in a manner to fit in with the surrounding commercial/industrial uses, including neutral building colors, landscaping, downward-shielded building and perimeter lighting, and building address signage only. Impacts would be less than significant.

d. **Light and Glare:** The proposed project could produce new light and glare, but has been designed to minimize any impact to a level of less than significant (Attachment 9). Consistent with County requirements, all lighting would be shielded downward on the building and in the parking lot. This design would maintain minimal light impacts to adjacent uses, while also providing enough lighting for safety and security. The project is designed to comply with County lighting ordinance requirements and would be reviewed for compliance at time of building permit issuance. Impacts would be less than significant.

FINDING: With adherence to El Dorado County Code of Ordinances (County Code), for this Aesthetics category, impacts would be anticipated to be less than significant.

II. AGRICULTURE AND FOREST 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 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:

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

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to agricultural and forestry resources in relation to the proposed project.

State Laws, Regulations, and Policies

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP), administered by the California Department of Conservation (CDC), produces maps and statistical data for use in analyzing impacts on California's agricultural resources (CDC 2008). FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDC 2013a):

> ***Prime Farmland:*** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

Farmland of Statewide Importance: Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

Unique Farmland: Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the 4 years before the FMMP's mapping date.

Farmland of Local Importance: Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDC 2013b). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

Z'berg-Nejedly Forest Practice Act

Logging on private and corporate land in California is regulated by the 1973 Z'berg-Nejedly Forest Practice Act. This Act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. The California Department of Forestry (CALFIRE) works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs.

Discussion: A substantial adverse effect to Agricultural Resources would occur if:

- There is a conversion of choice agricultural land to nonagricultural use, or impairment of the agricultural productivity of agricultural land;
- The amount of agricultural land in the County is substantially reduced; or
- Agricultural uses are subjected to impacts from adjacent incompatible land uses.

a. **Farmland Mapping and Monitoring Program:** The site is not zoned for agricultural use or located within an Agricultural District. The site is not designated as farm land of local importance. There would be no impact.

b. **Agricultural Uses:** The property is not located within a Williamson Act Contract, nor is it adjacent to lands under a contract. There would be no impact.

c.-d. **Loss of Forest land or Conversion of Forest land:** The site is not designated as Timberland Preserve Zone (TPZ) or other forestland according to the General Plan and Zoning Ordinance. There would be no impact to forest land.

e. **Conversion of Prime Farmland or Forest Land:** The project is not within an agricultural zone district, or located on forest land, and would not convert farmland or forest land to non-agriculture use. There would be no impact.

FINDING: For this Agriculture category, the thresholds of significance have not been exceeded and no impacts would be anticipated to result from the project.

III. AIR QUALITY. *Would the project:*				
	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 pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			**X**	
d. Expose sensitive receptors to substantial pollutant concentrations?			**X**	
e. Create objectionable odors affecting a substantial number of people?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

The Clean Air Act is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM10), particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO2), ground-level ozone, and lead. Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health.

State Laws, Regulations, and Policies

The California Air Resources Board (CARB) sets standards for criteria pollutants in California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride. The proposed project is located within the Mountain Counties Air Basin, which is comprised of seven air districts: the Northern Sierra Air Quality Management District (AQMD), Placer County Air Pollution Control District (APCD), Amador County APCD, Calaveras County APCD, the Tuolumne County APCD, the Mariposa County APCD, and a portion of the El Dorado County Air Quality Management District (AQMD), which consists of the western portion of El Dorado County. The El Dorado County AQMD manages air quality for attainment and permitting purposes within the west slope portion of El Dorado County.

USEPA and CARB regulate various stationary sources, area sources, and mobile sources. USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), known as hazardous air pollutants (HAPs) at the federal level. In addition, USEPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications.

Air quality in the project area is regulated by the El Dorado County Air Quality Management District. California Air Resources Board and local air districts are responsible for overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required to comply with CEQA. The AQMD

regulates air quality through the federal and state Clean Air Acts, district rules, and its permit authority. National and state ambient air quality standards (AAQS) have been adopted by the Environmental Protection Agency and State of California, respectively, for each criteria pollutant: ozone, particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide.

The Environmental Protection Agency and State also designate regions as "attainment" (within standards) or "nonattainment" (exceeds standards) based on the ambient air quality. The County is in nonattainment status for both federal and state ozone standards and for the state PM10 standard, and is in attainment or unclassified status for other pollutants (California Air Resources Board 2013). County thresholds are included in the chart below.

Criteria Pollutant	**El Dorado County Threshold**	
Reactive Organic Gasses (ROG)	82 lbs/day	
Nitrogen Oxides (NOx)	82 lbs/day	
Carbon Monoxide (CO)	8-hour average: 6 parts per million (ppm)	1-hour average: 20 ppm
Particulate Matter (PM10):	Annual geometric mean: 30 µg/m3	24-hour average: 50 µg/m3
Particulate Matter (PM2.5):	Annual arithmetic mean: 15 µg/m3	24-hour average: 65 µg/m3
Ozone	8-hour average: 0.12 ppm	1-hour average: .09

The guide includes a Table (Table 5.2) listing project types with potentially significant emissions. ROG and NOx Emissions may be assumed to not be significant if:

- The project encompasses 12 acres or less of ground that is being worked at one time during construction;
- At least one of the recommended mitigation measures related to such pollutants is incorporated into the construction of the project;
- The project proponent commits to pay mitigation fees in accordance with the provisions of an established mitigation fee program in the district (or such program in another air pollution control district that is acceptable to District); or
- Daily average fuel use is less than 337 gallons per day for equipment from 1995 or earlier, or 402 gallons per day for equipment from 1996 or later.

If the project meets one of the conditions above, AQMD assumed that exhaust emissions of other air pollutants from the operation of equipment and vehicles are also not significant.

For Fugitive dust (PM10), if dust suppression measures will prevent visible emissions beyond the boundaries of the project, further calculations to determine PM emissions are not necessary. For the other criteria pollutants, including CO, PM10, SO2, NO2, sulfates, lead, and H2S, a project is considered to have a significant impact on air quality if it will cause or contribute significantly to a violation of the applicable national or state ambient air quality standard(s).

Naturally occurring asbestos (NOA) is also a concern in El Dorado County because it is known to be present in certain soils and can pose a health risk if released into the air. The AQMD has adopted an El Dorado County Naturally Occurring Asbestos Review Area Map that identifies those areas more likely to contain NOA (El Dorado County 2005).

Discussion: The El Dorado County Air Quality Management District (AQMD) has developed a Guide to Air Quality Assessment (2002) to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. A substantial adverse effect on air quality would occur if:

- Emissions of ROG and No_x will result in construction or operation emissions greater than 82lbs/day (Table 3.2);
- Emissions of PM_{10}, CO, SO_2 and No_x, as a result of construction or operation emissions, will result in ambient pollutant concentrations in excess of the applicable National or State Ambient Air Quality Standard (AAQS). Special standards for ozone, CO, and visibility apply in the Lake Tahoe Air Basin portion of the County; or
- Emissions of toxic air contaminants cause cancer risk greater than 1 in 1 million (10 in 1 million if best available control technology for toxics is used) or a non-cancer Hazard Index greater than 1. In addition, the project must demonstrate compliance with all applicable District, State and U.S. EPA regulations governing toxic and hazardous emissions.

a.-b. **Air Quality Plan, Air Quality Standards:** El Dorado County Air Quality Management District (EDCAQMD) has adopted Rules and Regulations establishing rules and standards for the reduction of stationary source air pollutants (ROG/VOC, NOx, and O3). The EDC/State Clean Air Act Plan has set a schedule for implementing and funding transportation contract measures to limit mobile source emissions. The project would not conflict with or obstruct implementation of either plan. Any activities associated with grading and construction would require a Fugitive Dust Mitigation Plan (FDMP). The FDMP would address grading measures and operation of equipment to minimize and reduce the level of defined particulate matter exposure and/or emissions to a less than significant level.

c. **Air Quality Standards and Cumulative Impacts:** Existing regulations implemented at issuance of building and grading permits would ensure that any construction related PM10 dust emissions would be reduced to acceptable levels. The EDCAQMD reviewed the project and conditions have been incorporated into the project to reduce any potential impacts to less than significant (Attachment 13). Construction and operation of the proposed project would not be considered to conflict with or obstruct the implementation of any applicable air quality plans. As such, the proposed project would have a less than significant impact.

d. **Sensitive Receptors:** The CEQA Guidelines (14 CCR §15000) identify sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others that are especially sensitive to the effects of air pollutants. Hospitals, schools, and convalescent hospitals are examples of sensitive receptors. The project site is not located near sensitive receptors and would not be considered a source of substantial pollutant concentrations. The project is conditioned to require protective measures during construction and post-construction. The proposed project would not be anticipated to result in the production of substantial concentrations of TACs, including DPM, localized CO, or criteria pollutants. In addition, the likelihood of NOA being present on the project site is low as the project site is not within an Asbestos Review Area according to the El Dorado County Naturally Occurring Asbestos Review Map. Therefore, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

e. **Objectionable Odors:** Table 3-1 of the Guide to Air Quality Assessment (AQMD, 2002) does not list the proposed use for warehouse/office as a use known to create objectionable odors. The project would also be conditioned to meet the requirements set forth by the County Environmental Management Department (Attachment 15). Impacts would be less than significant.

FINDING: The proposed project would not affect the implementation of regional air quality regulations or management plans. The proposed project would not be anticipated to cause substantial adverse effects to air quality, nor exceed established significance thresholds for air quality impacts.

IV. BIOLOGICAL RESOURCES. *Would the project:*				
	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 Wildlife 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, 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**

Regulatory Setting:

Federal Laws, Regulations, and Policies

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Code [USC] Section 1531 *et seq*.; 50 Code of Federal Regulations [CFR] Parts 17 and 222) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 *et seq*.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 10(a)(1)(B) of the ESA provides a process by which nonfederal entities may obtain an incidental take permit

from USFWS or NMFS for otherwise lawful activities that incidentally may result in “take” of endangered or threatened species, subject to specific conditions.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory birds. Most actions that result in take, or the permanent or temporary possession of, a migratory bird constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. USFWS is responsible for overseeing compliance with the MBTA.

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), first enacted in 1940, prohibits "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The definition for "Disturb" includes injury to an eagle, a decrease in its productivity, or nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present.

Clean Water Act

Clean Water Act (CWA) section 404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR Section 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies such as swimming pools, and water-filled depressions (33 CFR Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of U.S. Army Corps of Engineers (USACE) under the provisions of CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE through permit requirements. No USACE permit is effective in the absence of state water quality certification pursuant to Section 401 of CWA.

Section 401 of the CWA requires an evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. In California, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with the CWA and its water quality control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that may result in the discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401 water quality certification to ensure that any such discharge will comply with the applicable provisions of the CWA.

State Laws, Regulations, and Policies

California Fish and Game Code

The California Fish and Game Code includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA) and the California Endangered Species Act (CESA). The NPPA (California Fish and Game Code Section 1900-1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized in limited circumstances.

CESA (California Fish and Game Code Section 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the California Fish and Game Code prohibits the take of any species that is state listed as endangered or

threatened, or designated as a candidate for such listing. California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing the take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

California Fish and Game Code Section 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Section 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

Streambed Alteration Agreement

Sections 1601 to 1606 of the California Fish and Game Code require that a Streambed Alteration Application be submitted to CDFW for any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake. As a general rule, this requirement applies to any work undertaken within the 100-year floodplain of a stream or river containing fish or wildlife resources.

California Native Plant Protection Act

The California Native Plant Protection Act (California Fish and Game Code Section 1900–1913) prohibits the taking, possessing, or sale of any plants with a state designation of rare, threatened, or endangered (as defined by CDFW). The California Native Plant Society (CNPS) maintains a list of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (CNPS 2001). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

Forest Practice Act

Logging on private and corporate land in California is regulated by the Z'berg-Nejedly Forest Practices Act (FPA), which took effect January 1, 1974. The act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. CALFIRE works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs. A Timber Harvest Plan (THP) must be prepared by a Registered Professional Forester (RPF) for timber harvest on virtually all non-federal land. The FPA also established the requirement that all non-federal forests cut in the State be regenerated with at least three hundred stems per acre on high site lands, and one hundred fifty trees per acre on low site lands.

Local Laws, Regulations, and Policies

The County General Plan also include policies that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address potential impacts on special-status plant species or create opportunities for habitat improvement. The El Dorado County General Plan designates the Important Biological Corridor (IBC) (Exhibits 5.12-14, 5.12-5 and 5.12-7, El Dorado County, 2003). Lands located within the overlay district are subject to the following provisions, given that they do not interfere with agricultural practices:

- Increased minimum parcel size;
- Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;
- Lower thresholds for grading permits;
- Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;
- Increased riparian corridor and wetland setbacks;
- Greater protection for rare plants (e.g., no disturbance at all or disturbance only as recommended by U.S. Fish and Wildlife Service/California Department of Fish and Wildlife);
- Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;

- Building permits discretionary or some other type of "site review" to ensure that canopy is retained;
- More stringent standards for lot coverage, floor area ratio (FAR), and building height; and
- No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).

Discussion: A substantial adverse effect on Biological Resources would occur if the implementation of the project would:

- Substantially reduce or diminish habitat for native fish, wildlife or plants;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a native plant or animal community;
- Reduce the number or restrict the range of a rare or endangered plant or animal;
- Substantially affect a rare or endangered species of animal or plant or the habitat of the species; or
- Interfere substantially with the movement of any resident or migratory fish or wildlife species.

a. **Special Status Species:** Review of the California Natural Diversity Database (CNDDB) and of the County Geographic Information System (GIS) demonstrates the project site is not located within a sensitive natural community of the County, State or Federal agency, including but not limited to an Ecological Preserve, Important Biological Corridor (IBC), or the U.S. Fish and Wildlife Service (USFWS) Recovery Plan boundaries. The potential is low for the presence of any special-status wildlife species. The proposed building site is ruderal/disturbed grasslands and no trees would be removed as a result of the project. Impacts would be less than significant.

b.-c. **Riparian Habitat and Wetlands:** Review of the County Geographic Information System (GIS) demonstrates that there are no identified riparian habitat or wetlands located on the project site. Vegetation is ruderal/disturbed and heavily dominated by a dense cover of annual California grassland. No wetlands or other aquatic resources are present on-site. Impacts would be less than significant.

d. **Migration Corridors:** Review of the Department of Fish and Wildlife Migratory Deer Herd Maps and General Plan DEIR Exhibit 5.12-7 indicate that the Outside deer herd migration corridor does not extend over the project site. The El Dorado County General Plan does identify the project site as an Important Biological Corridor (IBC). The project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with any established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. Impacts would be less than significant.

e. **Local Policies:** Local policies to protect biological resources include the Important Biological Corridor (IBC) overlay, oak woodland preservation, rare plants and special-status species, and wetland preservation, all with the goal to preserve and protect sensitive natural resources within the County. Based on review of the County Geographic Information System (GIS), the project is not located in the IBC. The proposed project was analyzed in accordance with the requirements of Zoning Ordinance Chapter 130.39 (Oak Resources Conservation) and no trees are proposed for removal. Further, a Botanical Survey was prepared for the project by Sycamore Environmental Consultants on November 1, 2019 (Attachment 18). The site is predominantly flat and previously disturbed by grading and spoils pile stockpiling. Vegetation on-site is ruderal/disturbed and annual California grassland. There is open canopy mixed oak woodland at the north/west corner; however, no development is proposed in that area. Old Mill Creek crosses Shingle Lime Mine Road but does not occur on the property. There is no chaparral in the Biological Study Area (BSA). Based on review of the report, the study area does not contain chaparral or oak woodland habitats that typically provide habitat and no special-status plants were found. The project would be subject to paying a Mitigation Area 1 fee at time of building permit. The report summary did not recommend further analysis. Impacts would be less than significant.

f. **Adopted Plans**: The project would not conflict with the provisions of an adopted Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The project site is not in an Important Biological Corridor (IBC). There would be no impact.

Finding: With the incorporation of standard conditions of approval (COA), impacts to Biological Resources would be less than significant.

V. CULTURAL RESOURCES. *Would the project:*				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			**X**	
b. Cause a substantial adverse change in the significance of 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**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

The National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. The criteria for listing in the NRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of history (events);
B. Are associated with the lives of persons significant in our past (persons);
C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (architecture); or
D. Have yielded or may likely yield information important in prehistory or history (information potential).

State Laws, Regulations, and Policies

California Register of Historical Resources

Public Resources Code Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

A. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
B. Are associated with the lives of persons important in our past;

C. Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
D. Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

The California Register of Historic Places

The California Register of Historic Places (CRHP) program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under the California Environmental Quality Act. The criteria for listing in the CRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
B. Are associated with the lives of persons important to local, California or national history.
C. Embody the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
D. Have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The State Office of Historic Preservation sponsors the California Historical Resources Information System (CHRIS), a statewide system for managing information on the full range of historical resources identified in California. CHRIS provides an integrated database of site-specific archaeological and historical resources information. The State Office of Historic Preservation also maintains the California Register of Historical Resources (CRHR), which identifies the State's architectural, historical, archeological and cultural resources. The CRHR includes properties listed in or formally determined eligible for the National Register and lists selected California Registered Historical Landmarks.

Public Resources Code (Section 5024.1[B]) states that any agency proposing a project that could potentially impact a resource listed on the CRHR must first notify the State Historic Preservation Officer, and must work with the officer to ensure that the project incorporates "prudent and feasible measures that will eliminate or mitigate the adverse effects."

California Health and Safety Code Section 7050.5 requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Section 5097.98 of the California Public Resources Code stipulates that whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The decedents may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the Native American Heritage

Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CEQA and CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.
- Although not specifically inclusive of paleontological resources, these criteria may also help to define "a unique paleontological resource or site."

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA Section 21083.2.

Section 15064.5 of the CEQA Guidelines notes that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of a historic resource before they approve such projects. Historic resources are those that are:

- listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code Section 5024.1[k]);
- included in a local register of historic resources (Public Resources Code Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of Public Resources Code Section 5024.1(g); or
- determined by a lead agency to be historically significant.

CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

The lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with CEQA and other applicable statutes. Paleontological and historical resource management is also addressed in Public Resources Code Section 5097.5, "Archaeological, Paleontological, and Historical Sites." This statute defines as a misdemeanor any unauthorized disturbance or removal of a fossil site or remains on public land and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources. This statute would apply to any construction or other related project impacts that would occur on state-owned or state-managed lands. The County General Plan contains policies describing specific, enforceable measures to protect cultural resources and the treatment of resources when found.

Discussion: In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a historical or cultural resource significant or important. A substantial adverse effect on Cultural Resources would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a prehistoric or historic archaeological site or property that is historically or culturally significant to a community or ethnic or social group; or a paleontological site except as a part of a scientific study;
- Affect a landmark of cultural/historical importance;
- Conflict with established recreational, educational, religious or scientific uses of the area; or
- Conflict with adopted environmental plans and goals of the community where it is located.

a.-d. **Historic, Archeological Resources, Human Remains.** A comprehensive Cultural Resources Study was prepared for the project dated October 2019 by Historic Resource Associates. The report stated that no significant prehistoric archaeological sites, features, or artifacts were found, nor any significant historical buildings, structures or objects, and no further analysis was recommended. Further, with inclusion of COA impacts would be less than significant.

FINDING: With the inclusion of COA, the proposed project would have a less than significant impact on Cultural Resources.

VI. GEOLOGY AND SOILS. *Would the project:*	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:				
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 on a geologic 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 waste water disposal systems where sewers are not available for the disposal of waste water?				**X**

Regulatory Setting:

Federal Laws, Regulations, and Policies
National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk-reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: USGS, National Science Foundation (NSF), Federal Emergency Management Agency (FEMA), and National Institute of Standards and Technology (NIST). Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2009) are to:

1. Develop effective measures to reduce earthquake hazards;
2. Promote the adoption of earthquake hazard reduction activities by federal, state, and local governments; national building standards and model building code organizations; engineers; architects; building owners; and others who play a role in planning and constructing buildings, bridges, structures, and critical infrastructure or "lifelines";
3. Improve the basic understanding of earthquakes and their effects on people and infrastructure through interdisciplinary research involving engineering; natural sciences; and social, economic, and decision sciences; and
4. Develop and maintain the USGS seismic monitoring system (Advanced National Seismic System); the NSF-funded project aimed at improving materials, designs, and construction techniques (George E. Brown Jr. Network for Earthquake Engineering Simulation); and the global earthquake monitoring network (Global Seismic Network).

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

State Laws, Regulations, and Policies

Alquist–Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 *et seq*.) was passed to reduce the risk to life and property from surface faulting in California. The Alquist–Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are "sufficiently active" and "well defined." Before a project can be permitted, cities and counties are required to have a geologic investigation conducted to demonstrate that the proposed buildings would not be constructed across active faults.

Historical seismic activity and fault and seismic hazards mapping in the project vicinity indicate that the area has relatively low potential for seismic activity (El Dorado County 2003). No active faults have been mapped in the project area, and none of the known faults have been designated as an Alquist-Priolo Earthquake Fault Zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690–2699.6) establishes statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist–Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the

Alquist–Priolo Act. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other seismic hazards, and cities and counties are required to regulate development within mapped seismic hazard zones. In addition, the act addresses not only seismically induced hazards but also expansive soils, settlement, and slope stability.
Mapping and other information generated pursuant to the SHMA is to be made available to local governments for planning and development purposes. The State requires: (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation, as part of the local construction permit approval process; and (2) the agent for a property seller or the seller if acting without an agent, must disclose to any prospective buyer if the property is located within a Seismic Hazard Zone. Under the Seismic Hazards Mapping Act, cities and counties may withhold the development permits for a site within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

California Building Standards Code

Title 24 CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California.

Discussion: A substantial adverse effect on Geologic Resources would occur if the implementation of the project would:

- Allow substantial development of structures or features in areas susceptible to seismically induced hazards such as groundshaking, liquefaction, seiche, and/or slope failure where the risk to people and property resulting from earthquakes could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards;
- Allow substantial development in areas subject to landslides, slope failure, erosion, subsidence, settlement, and/or expansive soils where the risk to people and property resulting from such geologic hazards could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards; or
- Allow substantial grading and construction activities in areas of known soil instability, steep slopes, or shallow depth to bedrock where such activities could result in accelerated erosion and sedimentation or exposure of people, property, and/or wildlife to hazardous conditions (e.g., blasting) that could not be mitigated through engineering and construction measures in accordance with regulations, codes, and professional standards.

a. **Seismic Hazards:**

i) According to the California Department of Conservation Division of Mines and Geology, there are no Alquist-Priolo fault zones within the west slope of El Dorado County. However, a fault zone has been located in the Tahoe Basin and Echo Lakes area. The West Tahoe Fault runs along the base of the range front at the west side of the Tahoe Basin. The West Tahoe Fault has a mapped length of 45 km. South of Emerald Bay the West Tahoe Fault extends onshore as two parallel strands. In the lake, the fault has clearly defined scarps that offset submarine fans, lake-bottom sediments, and the McKinney Bay slide deposits (DOC, 2016). There is clear evidence that the discussed onshore portion of the West Tahoe Fault is active with multiple events in the Holocene and poses a surface rupture hazard. However, because of the distance between the project site and these faults, the impact would be less than significant.

ii) The potential for seismic ground shaking in the project area would be considered remote for the reason stated in Section i) above. Any potential impacts due to seismic impacts would be addressed through compliance with the Uniform Building Code (UBC). All structures would be built to meet the construction standards of the UBC for the appropriate seismic zone. The impact would be less than significant.

iii) El Dorado County is considered an area with low potential for seismic activity. There are no landslide, liquefaction, or fault zones (DOC, 2007). All structures would be built to meet the construction standards of the UBC for the appropriate seismic zone. The impact would be less than significant.

iv) All grading activities onsite would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. The impact would be less than significant.

b. **Soil Erosion:** Based on review of the Drainage Study prepared for the project (Attachment 19), a soil analysis determined that the soils on-site are mostly Class C, Rescue Sandy Loam (REB). There could be the potential for some erosion, changes in topography, and minimal change to soil conditions, however, these concerns would be addressed during the grading permit process. All grading activities onsite would comply with the El Dorado County Grading, Erosion and Sediment Control Ordinance including the implementation of pre- and post-construction Best Management Practices (BMPs). Implemented BMPs are required to be consistent with the County's California Stormwater Pollution Prevention Plan (SWPPP) issued by the State Water Resources Control Board to eliminate run-off and erosion and sediment controls. Any grading activities exceeding 250 cubic yards of graded material or grading completed for the purpose of supporting a structure must meet the provisions contained in the County of El Dorado Grading, Erosion, and Sediment Control Ordinance. Any future construction would require similar review for compliance with the County SWPPP. With compliance with County Ordinance requirements, impacts would be less than significant.

c. **Geologic Hazards:** Based on the Seismic Hazards Mapping Program administered by the California Geological Survey, no portion of El Dorado County is located in a Seismic Hazard Zone or those areas prone to liquefaction and earthquake-induced landslides (DOC, 2013). Therefore, El Dorado County is not considered to be at risk from liquefaction hazards. Lateral spreading is typically associated with areas experiencing liquefaction. Because liquefaction hazards are not present in El Dorado County, the county is not at risk for lateral spreading. All grading activities would comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. With compliance with County Ordinance requirements, impacts would be less than significant.

d. **Expansive Soils:** Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. When buildings are placed on expansive soils, foundations may rise each wet season and fall each dry season. This movement may result in cracking foundations, distortion of structures, and warping of doors and windows. The western portions of the county have a low expansiveness rating. Any development of the site would be required to comply with the El Dorado County Grading, Erosion and Sediment Control Ordinance and the development plans for any structures would be required to implement the Seismic construction standards. With compliance with County Ordinance requirements, impacts would be less than significant.

e. **Septic Capability:** No septic is proposed as part of the project. The project site would be served by public sewer. A Facilities Improvement Letter (FIL) from the El Dorado Irrigation District (EID) was obtained confirming there is existing sewer line at the project site has adequate capacity. There would be no impact.

FINDING: A review of the soils and geologic conditions on the project site determined that the project would not result in a substantial adverse effect. All grading activities would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance which would address potential impacts related to soil erosion, landslides and other geologic impacts. Future development would be required to comply with the UBC which would address potential seismic related impacts. With compliance with County Ordinance requirements, impacts would be less than significant.

VII. GREENHOUSE GAS EMISSIONS. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			**X**	

Background/Science

Cumulative greenhouse gases (GHG) emissions are believed to contribute to an increased greenhouse effect and global climate change, which may result in sea level rise, changes in precipitation, habitat, temperature, wildfires, air pollution levels, and changes in the frequency and intensity of weather-related events. While criteria pollutants and toxic air contaminants are pollutants of regional and local concern (see Section III. Air Quality above); GHG are global pollutants. The primary land-use related GHG are carbon dioxide (CO_2), methane (CH_4) and nitrous oxides (N_2O). The individual pollutant's ability to retain infrared radiation represents its "global warming potential" and is expressed in terms of CO_2 equivalents; therefore CO_2 is the benchmark having a global warming potential of 1. Methane has a global warming potential of 21 and thus has a 21 times greater global warming effect per metric ton of CH_4 than CO_2. Nitrous Oxide has a global warming potential of 310. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., $MTCO_2e/yr$). The three other main GHG are Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride. While these compounds have significantly higher global warming potentials (ranging in the thousands), all three typically are not a concern in land-use development projects and are usually only used in specific industrial processes.

GHG Sources

The primary man-made source of CO_2 is the burning of fossil fuels; the two largest sources being coal burning to produce electricity and petroleum burning in combustion engines. The primary sources of man-made CH_4 are natural gas systems losses (during production, processing, storage, transmission and distribution), enteric fermentation (digestion from livestock) and landfill off-gassing. The primary source of man-made N_2O is agricultural soil management (fertilizers), with fossil fuel combustion a very distant second. In El Dorado County, the primary source of GHG is fossil fuel combustion mainly in the transportation sector (estimated at 70% of countywide GHG emissions). A distant second are residential sources (approximately 20%), and commercial/industrial sources are third (approximately 7%). The remaining sources are waste/landfill (approximately 3%) and agricultural (<1%).

Regulatory Setting:

Federal Laws, Regulations, and Policies

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012-2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses.

State Laws, Regulations, and Policies

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the *California Climate Solutions Act of 2006* (Stats. 2006, ch. 488) (Health & Safety Code, Section 38500 et seq.). AB 32 requires a statewide GHG emissions reduction to 1990 levels by the year 2020. AB 32 requires the California Air Resources Board (CARB) to implement and enforce the statewide cap. When AB 32 was signed, California's annual GHG emissions were estimated at 600 million metric tons of CO_2 equivalent ($MMTCO_2e$) while 1990 levels were estimated at 427 $MMTCO_2e$. Setting 427 $MMTCO_2e$ as the emissions target for 2020, current (2006) GHG emissions levels must be reduced by 29%. CARB adopted the AB 32 Scoping Plan in December 2008 establishing various actions the state would implement to achieve this reduction (CARB, 2008). The Scoping Plan recommends a community-wide GHG reduction goal for local governments of 15%.

In June 2008, the California Governor's Office of Planning and Research's (OPR) issued a Technical Advisory (OPR, 2008) providing interim guidance regarding a proposed project's GHG emissions and contribution to global climate change. In the absence of adopted local or statewide thresholds, OPR recommends the following approach for analyzing GHG emissions: Identify and quantify the project's GHG emissions, assess the significance of the impact on climate change; and if the impact is found to be significant, identify alternatives and/or Mitigation Measures that would reduce the impact to less than significant levels (CEC, 2006).

Discussion

CEQA does not provide clear direction on addressing climate change. It requires lead agencies identify project GHG emissions impacts and their "significance," but is not clear what constitutes a "significant" impact. As stated above, GHG impacts are inherently cumulative, and since no single project could cause global climate change, the CEQA test is if impacts are "cumulatively considerable." Not all projects emitting GHG contribute significantly to climate change. CEQA authorizes reliance on previously approved plans (i.e., a Climate Action Plan (CAP), etc.) and mitigation programs adequately analyzing and mitigating GHG emissions to a less than significant level. "Tiering" from such a programmatic-level document is the preferred method to address GHG emissions. El Dorado County does not have an adopted CAP or similar program-level document; therefore, the project's GHG emissions must be addressed at the project-level.

Unlike thresholds of significance established for criteria air pollutants in EDCAQMD's *Guide to Air Quality Assessment* (February 2002) ("CEQA Guide"), the District has not adopted GHG emissions thresholds for land use development projects. In the absence of County adopted thresholds, EDCAQMD recommends using the adopted thresholds of other lead agencies which are based on consistency with the goals of AB 32. Since climate change is a global problem and the location of the individual source of GHG emissions is somewhat irrelevant, it's appropriate to use thresholds established by other jurisdictions as a basis for impact significance determinations. Projects exceeding these thresholds would have a potentially significant impact and be required to mitigate those impacts to a less than significant level. Until the County adopts a CAP consistent with CEQA Guidelines Section 15183.5, and/or establishes GHG thresholds, the County will follow an interim approach to evaluating GHG emissions utilizing significance criteria adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) to determine the significance of GHG emissions.

The SMAQMD has developed a screening table using CalEEMod which allows quick assessment of projects to screen out those below the thresholds as their impacts would be less than significant. For projects below the threshold, no further GHG analysis is required.

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

Implementation of the proposed project is not expected to cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO2) and, to a lesser extent, other GHG pollutants, such as methane (CH4) and nitrous oxide (N2O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO2 equivalents (MTCO2e/yr).

The EDCAQMD has not formally adopted thresholds for evaluating GHG emissions, but has recommended the use of thresholds adopted by the SMAQMD. The thresholds of significance established by SMAQMD, and used by EDCAQMD, were developed to identify emissions levels for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization. Per the SMAQMD Thresholds of Significance Table, updated April 2020, if a proposed project results in emissions less than 1,100 MTCO2e/yr during either construction or operation, the proposed project would be anticipated to result in a less-than-significant impact related to GHG emissions.

GHG emissions are quantified with CalEEMod using the same assumptions as presented in the Air Quality section above, and compared to the thresholds of significance noted above. The proposed project's required compliance with the 2019 California Building Energy Efficiency Standards Code would ensure the project meets current applicable requirements.

Construction Emissions: Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. However, the proposed project's construction GHG emissions are not expected to be a cumulatively considerable contribution to global climate change.

Operational GHG Emissions: The operational GHG emissions at full buildout are not expected to exceed the applicable threshold of significance. Therefore, the proposed project would not result in a cumulatively considerable contribution to global climate change.

FINDING: The project would not generate GHG emissions that would have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs; herefore, the project would not result in a cumulatively considerable incremental contribution to impacts related to GHG emissions or climate change. Impacts would be less than significant.

VIII. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	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**	

VIII. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
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 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 or working 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**	

Regulatory Setting:

Hazardous materials and hazardous wastes are subject to extensive federal, state, and local regulations to protect public health and the environment. These regulations provide definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, state, and regional agencies enforcing these regulations are USEPA and the Occupational Safety and Health Administration (OSHA); California Department of Toxic Substances Control (DTSC); California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA); California Governor's Office of Emergency Services (Cal OES); and El Dorado County Environmental Management Department, Hazardous Materials.

Federal Laws, Regulations, and Policies

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq.*) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC Section 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Energy Policy Act of 2005

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the Underground Storage Tank (UST) Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with USEPA, SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from tanks. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies [CUPAs], described in more detail below), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing.

Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 CFR, Part 112) apply to facilities with a single above-ground storage tank (AST) with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

Occupational Safety and Health Administration

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

Code of Federal Regulations (14 CFR) Part 77

14 CFR Part 77.9 is designed to promote air safety and the efficient use of navigable airspace. Implementation of the code is administered by the Federal Aviation Administration (FAA). If an organization plans to sponsor any construction or alterations that might affect navigable airspace, a Notice of Proposed Construction or Alteration (FAA Form 7460-1) must be filed. The code provides specific guidance regarding FAA notification requirements.

State Laws, Regulations, and Policies

Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public of exposure to such chemicals in the

products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. OEHHA, an agency under the California Environmental Protection Agency (CalEPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other state agencies set the standards for their programs, while local governments (CUPAs) implement the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of USTs and ASTs;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

Hazardous Materials Business Plans

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet (cf) of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A) (Cal OES, 2015). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees (Cal OES, 2015). In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups) (Cal OES, 2015).

California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans.
Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers must also make material safety data sheets available to employees and document employee information and training programs. In addition, Cal/OSHA has established maximum permissible RF radiation exposure limits for workers (Title 8 CCR Section 5085[b]), and requires warning signs where RF radiation might exceed the specified limits (Title 8 CCR Section 5085 [c]).

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance are required to develop a risk management plan (RMP). This RMP

must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or a trade secret.

California Department of Forestry and Fire Protection Wildland Fire Management

The Office of the State Fire Marshal and the CALFIRE administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline fueled internal combustion engines must not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Highway Patrol

CHP, along with Caltrans, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

Local Laws, Regulations, and Policies

A map of the fuel loading in the County (General Plan Figure HS-1) shows the fire hazard severity classifications of the SRAs in El Dorado County, as established by CDF. The classification system provides three classes of fire hazards: Moderate, High, and Very High. Fire Hazard Ordinance (Chapter 8.08) requires defensible space as described by the State Public Resources Code, including the incorporation and maintenance of a 30-foot fire break or vegetation fuel clearance around structures in fire hazard zones. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by state law (Patton 2002). The Fire Hazard Ordinance also establishes limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments.

Discussion: A substantial adverse effect due to Hazards or Hazardous Materials would occur if implementation of the project would:

- Expose people and property to hazards associated with the use, storage, transport, and disposal of hazardous materials where the risk of such exposure could not be reduced through implementation of Federal, State, and local laws and regulations;
- Expose people and property to risks associated with wildland fires where such risks could not be reduced through implementation of proper fuel management techniques, buffers and landscape setbacks, structural design features, and emergency access; or
- Expose people to safety hazards as a result of former on-site mining operations.

a.-c. **Hazardous Materials:** The project would not involve the routine transportation, use, or disposal of hazardous materials such as construction materials, paints, fuels, landscaping materials, and household cleaning supplies. Project construction may involve some hazardous materials temporarily but on a small scale and therefore impacts would be less than significant.

d. **Hazardous Sites:** The project site is not included on a list of or near any hazardous materials sites pursuant to Government Code section 65962.5 (DTSC, 2015). There would be no impact.

e.-f. **Aircraft Hazards, Private Airstrips:** As shown on the El Dorado County GIS map for Airport Safety Zones, the project is not located within an Airport Safety District. Impacts would be less than significant.

g. **Emergency Plan:** The project was distributed to local law enforcement El Dorado County Sheriff's Office, for review. The project would not impair implementation of any emergency response plan or emergency evacuation plan. Impacts would be less than significant.

h. **Wildfire Hazards:** The project site is in the high fire hazard area for wildland fire pursuant to Figure HS-1 of the Fire Hazard Rating in El Dorado County of the General Plan (2015), and review of Review of the County Geographic Information System (GIS). The Cameron Park Fire Department in cooperation with the California Department of Forestry and Fire Protection (CAL FIRE) would review the project improvement plans at time of building permit review. Impacts would be less than significant.

FINDING: The project would not expose the area to hazards relating to the use, storage, transport, or disposal of hazardous materials. For this Hazards and Hazardous Materials category, impacts would be less than significant.

IX. HYDROLOGY AND WATER QUALITY. Would the project:	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 alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff 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 runoff?			**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**

IX. HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				**X**
j. Inundation by seiche, tsunami, or mudflow?				**X**

Regulatory Setting:

Federal Laws, Regulations, and Policies

Clean Water Act

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The key sections pertaining to water quality regulation for the Proposed Project are CWA Section 303 and Section 402.

Section 303(d) — Listing of Impaired Water Bodies

Under CWA Section 303(d), states are required to identify "impaired water bodies" (those not meeting established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for the development of control plans to improve water quality. USEPA then approves the State's recommended list of impaired waters or adds and/or removes waterbodies.

Section 402—NPDES Permits for Stormwater Discharge

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the NPDES, which is officially administered by USEPA. In California, USEPA has delegated its authority to the State Water Resources Control Board (SWRCB), which, in turn, delegates implementation responsibility to the nine RWQCBs, as discussed below in reference to the Porter-Cologne Water Quality Control Act.
The NPDES program provides for both general (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits. General Permit for Construction Activities: Most construction projects that disturb 1.0 or more acre of land are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). SWPPP must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations, and present a list of Best Management Practices (BMPs) that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor construction activities and report compliance to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Municipal Stormwater Permitting Program

SWRCB regulates stormwater discharges from municipal separate storm sewer systems (MS4s) through its Municipal Storm Water Permitting Program (SWRCB, 2013). Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for medium (population between 100,000 and 250,000 people) and large (population of 250,000 or more people) municipalities, and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990. Beginning in 2003, SWRCB began issuing Phase II MS4 permits for smaller municipalities (population less than 100,000).

El Dorado County is covered under two SWRCB Regional Boards. The West Slope Phase II Municipal Separate Storm Sewer Systems (MS4) NPDES Permit is administered by the Central Valley Regional Water Quality Control Board (RWQCB) (Region Five). The Lake Tahoe Phase I MS4 NPDES Permit is administered by the Lahontan RWQCB (Region Six). The current West Slope MS4 NPDES Permit was adopted by the SWRCB on February 5, 2013. The Permit became effective on July 1, 2013 for a term of five years and focuses on the enhancement of surface water quality within high priority urbanized areas. The current Lake Tahoe MS4 NPDES Permit was adopted and took effect on December 6, 2011 for a term of five years. The Permit incorporated the Lake Tahoe Total Maximum Daily Load (TMDL) and the Lake Clarity Crediting Program (LCCP) to account for the reduction of fine sediment particles and nutrients discharged to Lake Tahoe.

On May 19, 2015 the El Dorado County Board of Supervisors formally adopted revisions to the Storm Water Quality Ordinance (Ordinance 4992). Previously applicable only to the Lake Tahoe Basin, the ordinance establishes legal authority for the entire unincorporated portion of the County. The purpose of the ordinance is to 1) protect health, safety, and general welfare, 2) enhance and protect the quality of Waters of the State by reducing pollutants in storm water discharges to the maximum extent practicable and controlling non-storm water discharges to the storm drain system, and 3) cause the use of Best Management Practices to reduce the adverse effects of polluted runoff discharges on Waters of the State.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities complying with FEMA regulations that limit development in floodplains. The NFIP regulations permit development within special flood hazard zones provided that residential structures are raised above the base flood elevation of a 100-year flood event. Non-residential structures are required either to provide flood proofing construction techniques for that portion of structures below the 100-year flood elevation or to elevate above the 100-year flood elevation. The regulations also apply to substantial improvements of existing structures.

State Laws, Regulations, and Policies

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (known as the Porter–Cologne Act), passed in 1969, dovetails with the CWA (see discussion of the CWA above). It established the SWRCB and divided the state into nine regions, each overseen by an RWQCB. SWRCB is the primary State agency responsible for protecting the quality of the state's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303[d]. In general, SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires RWQCBs to develop water quality control plans (also known as basin plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met. Under the Porter–Cologne Act, basin plans must be updated every 3 years.

Discussion: A substantial adverse effect on Hydrology and Water Quality would occur if the implementation of the project would:

- Expose residents to flood hazards by being located within the 100-year floodplain as defined by the Federal Emergency Management Agency;
- Cause substantial change in the rate and amount of surface runoff leaving the project site ultimately causing a substantial change in the amount of water in a stream, river or other waterway;
- Substantially interfere with groundwater recharge;
- Cause degradation of water quality (temperature, dissolved oxygen, turbidity and/or other typical stormwater pollutants) in the project area; or
- Cause degradation of groundwater quality in the vicinity of the project site.

a. **Water Quality Standards:** Some waste discharge may occur as part of the project. Erosion control would be required as part of any future building or grading permit. Stormwater runoff from potential development would contain water quality protection features in accordance with a potential National Pollutant Discharge Elimination System (NPDES) stormwater permit, as deemed applicable. The project would comply with County Ordinances and standards regarding waste discharge therefore the project would not be expected to violate water quality standards. Impacts would be less than significant.

b. **Groundwater Supplies:** The geology of the Western Slope portion of El Dorado County is principally hard, crystalline, igneous, or metamorphic rock overlain with a thin mantle of sediment or soil. Groundwater in this region is found in fractures, joints, cracks, and fault zones within the bedrock mass. These discrete fracture areas are typically vertical in orientation rather than horizontal as in sedimentary or alluvial aquifers. Recharge is predominantly through rainfall infiltrating into the fractures. Movement of this groundwater is very limited due to the lack of porosity in the bedrock. Wells are typically drilled to depths ranging from 80 to 300 feet in depth. There is no evidence that the project will substantially reduce or alter the quantity of groundwater in the vicinity, or materially interfere with groundwater recharge in the area of the proposed project. The project is not anticipated to affect potential groundwater supplies above pre-project levels. Water for the project would be provided by public water connection to the El Dorado Irrigation District (EID). Impacts to groundwater supplies would be less than significant.

c.-f. **Drainage Patterns:** A grading permit would be required to address grading, erosion and sediment control for project construction. Construction activities would be required to adhere to the El Dorado County Grading, Erosion Control and Sediment Ordinance. This includes the use of Best Management Practices (BMPs) to minimize degradation of water quality during construction. Preliminary Grading and Drainage Plans are included and show the location of proposed development including the building site, parking, storm drains/drain inlets, and bio-swales (Attachments 10 and 19). Further, with implementation of standard requirements, impacts on drainage patterns would be less than significant.

g.-j. **Flood-related Hazards:** The project site is not located within any mapped 100-year flood areas and would not result in the construction of any structures that would impede or redirect flood flows (FEMA, 2008). No dams which would result in potential hazards related to dam failures are located in the project area. The risk of exposure to seiche, tsunami, or mudflows would be remote. There would be no impact.

FINDING: The proposed project would be required to address any potential erosion and sediment control. No significant hydrological impacts are expected with the development of the project either directly or indirectly. With implementation and compliance with the County Ordinances and standards, impacts would be less than significant.

X. **LAND USE PLANNING.** *Would the project:*	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 plan?				X

Regulatory Setting:

California State law requires that each City and County adopt a General Plan "for the physical development of the City and any land outside its boundaries which bears relation to its planning." Ideally, a General Plan is designed to address the issues facing the City or County for the next 15-20 years. The General Plan expresses the community's development goals and incorporates public policies relative to the distribution of future public and private land uses. The El Dorado County General Plan was updated in 2015. The 2013-2021 Housing Element was adopted in 2013, and is currently undergoing a comprehensive update.

Discussion: A substantial adverse effect on Land Use would occur if the implementation of the project would:

- Result in the conversion of Prime Farmland as defined by the State Department of Conservation;
- Result in conversion of land that either contains choice soils or which the County Agricultural Commission has identified as suitable for sustained grazing, provided that such lands were not assigned urban or other nonagricultural use in the Land Use Map;
- Result in conversion of undeveloped open space to more intensive land uses;
- Result in a use substantially incompatible with the existing surrounding land uses; or
- Conflict with adopted environmental plans, policies, and goals of the community.

a. **Established Community:** The project is located within the Cameron Park Community Region. Community Regions are defined as those areas which are appropriate for the highest intensity of self-sustaining compact urban-type development or suburban type development within the County based on the municipal spheres of influence, availability of infrastructure, public services, major transportation corridors and travel patterns, the location of major topographic patterns and features, and the ability to provide and maintain appropriate transitions at Community Region boundaries. The project site is surrounded by existing commercial and residential development. The project would not be considered to contributing to urban decay (urban decay is a process in which a previously functioning area falls into disrepair; or creating an urban landscape that is generally decrepit and desolate); it would not conflict with the existing land use pattern in the area; or physically divide an established community. Impacts would be less than significant.

b. **Land Use Consistency:** The parcel has a General Plan land use designation of Industrial (I), and zoned Light Industrial within a Design Review Community Combining Zone (IL-DC). The purpose of the Industrial (I) General Plan land use designation is “to provide for a full range of light and heavy industrial uses. Types of uses that would be permitted include manufacturing, processing, distribution, and storage.

Incompatible, non-industrial uses, excluding support services, shall be discouraged. Industrial lands in Rural Regions may have uses which support agriculture, timber resource production, mineral extraction, or other resource utilization. This designation is considered appropriate within Community Regions, Rural Centers and Rural Regions". The proposed use for a warehouse/office is an allowed use within the IL zone, is consistent with the (I) General Plan land use designation, and would be compatible with the surrounding development in the Barnett Ranch Business Park. The project has been designed in a manner to fit in with the surrounding commercial/industrial uses, including neutral earth tone colors, installation of landscape, downward-shielded lighting, and building address signage only. Impacts would be less than significant.

c. **Habitat Conservation Plan:** The project site is not located within an adopted habitat conservation plan or natural community conservation plan. There would be no impact.

FINDING: The proposed use of the land would be consistent with uses allowed in the Cameron Park Community Region, with the General Plan, and Zoning Ordinance. For this Land Use Planning section, impacts would be less than significant.

XI. MINERAL RESOURCES. *Would the project:*	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**

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to mineral resources and the Proposed Project.

State Laws, Regulations, and Policies

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain regionally significant mineral resources. Designations of land areas are assigned by CDC and California Geological Survey following analysis of geologic reports and maps, field investigations, and using information about the locations of active sand and gravel mining operations. Local jurisdictions are required to enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans.

The California Mineral Land Classification System represents the relationship between knowledge of mineral deposits and their economic characteristics (grade and size). The nomenclature used with the California Mineral Land Classification System is important in communicating mineral potential information in activities such as mineral land classification, and usage of these terms are incorporated into the criteria developed for assigning

mineral resource zones. Lands classified MRZ-2 are areas that contain identified mineral resources. Areas classified as MRZ-2a or MRZ-2b (referred to hereafter as MRZ-2) are considered important mineral resource areas.

Local Laws, Regulations, and Policies

El Dorado County in general is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, including gold, are considered the most significant extractive mineral resources. Exhibit 5.9-6 shows the MRZ-2 areas within the county based on designated Mineral Resource (-MR) overlay areas. The -MR overlay areas are based on mineral resource mapping published in the mineral land classification reports referenced above. The majority of the county's important mineral resource deposits are concentrated in the western third of the county.

According to General Plan Policy 2.2.2.7, before authorizing any land uses within the -MR overlay zone that will threaten the potential to extract minerals in the affected area, the County shall prepare a statement specifying its reasons for considering approval of the proposed land use and shall provide for public and agency notice of such a statement consistent with the requirements of Public Resources Code section 2762. Furthermore, before finally approving any such proposed land use, the County shall balance the mineral values of the threatened mineral resource area against the economic, social, or other values associated with the proposed alternative land uses. Where the affected minerals are of regional significance, the County shall consider the importance of these minerals to their market region as a whole and not just their importance to the County.

Where the affected minerals are of Statewide significance, the County shall consider the importance of these minerals to the State and Nation as a whole. The County may approve the alternative land use if it determines that the benefits of such uses outweigh the potential or certain loss of the affected mineral resources in the affected regional, Statewide, or national market.

Discussion: A substantial adverse effect on Mineral Resources would occur if the implementation of the project would:

- Result in obstruction of access to, and extraction of mineral resources classified MRZ-2x, or result in land use compatibility conflicts with mineral extraction operations.

a.-b. **Mineral Resources.** The project site has not been delineated in the El Dorado County General Plan as a locally important mineral resource recovery site (2003, Exhibits 5.9-6 and 5.9-7). Review of the California Department of Conservation Geologic Map data showed that the project site is not within a mineral resource zone district. There would be no impact.

FINDING: No impacts to mineral resources are expected either directly or indirectly. For this mineral resources category, there would be no impacts.

XII.NOISE. *Would the project result in:*				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact

XII.NOISE. *Would the project result in:*	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 groundborne vibration or groundborne 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 level?			**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**	

Regulatory Setting:

No federal or state laws, regulations, or policies for construction-related noise and vibration apply to the proposed project. However, the Federal Transit Administration (FTA) Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA Leq and 100 dBA Leq should be used for residential and commercial/industrial areas, respectively (FTA 2006).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inches per second (in/sec) PPV for buildings susceptible to vibration damage (FTA 2006).

Discussion: A substantial adverse effect due to Noise would occur if the implementation of the project would:

- Result in short-term construction noise that creates noise exposures to surrounding noise sensitive land uses in excess of 60dBA CNEL;
- Result in long-term operational noise that creates noise exposures in excess of 60 dBA CNEL at the adjoining property line of a noise sensitive land use and the background noise level is increased by 3dBA, or more; or
- Results in noise levels inconsistent with the performance standards contained in Table 130.37.060.1 and Table 130.37.060.2 of the El Dorado County Zoning Ordinance.

TABLE 6-2
NOISE LEVEL PERFORMANCE PROTECTION STANDARDS
FOR NOISE SENSITIVE LAND USES
AFFECTED BY NON-TRANSPORTATION* SOURCES

Noise Level Descriptor	Daytime 7 a.m. - 7 p.m.		Evening 7 p.m. - 10 p.m.		Night 10 p.m. - 7 a.m.	
	Community/ Rural Centers	Rural Regions	Community/ Rural Centers	Rural Regions	Community/ Rural Centers	Rural Regions
Hourly L_{eq}, dB	55	50	50	45	45	40
Maximum level, dB	70	60	60	55	55	50

a. **Noise Exposures:** The proposed warehouse/office is not expected to generate noise levels exceeding the performance standards contained within Chapter 130.37 of the Zoning Ordinance, and General Plan Policies. Further, the hours of operation are limited to 7am-5pm. Impacts would be less than significant.

b. **Groundborne Shaking:** Construction of the project may generate short-term ground borne vibration or shaking events during project construction however this would be temporary. Impacts would be less than significant.

c. **Permanent Noise Increases:** The long term noise associated with the operation of a warehouse/office would be a new noise source however is not be expected to exceed the noise standards contained in the Zoning Ordinance and General Plan. Noise from the proposed project is not expected to exceed existing noise from the businesses in the Business Park. Impacts would be less than significant.

d. **Short Term Noise:** The noise resulting from construction activities for the project development may result in short-term noise impacts, however these activities would require grading and building permits and would be restricted to construction hours. All construction and grading operations would be required to comply with the noise performance standards contained in the General Plan. Impacts would be less than significant.

e.-f. **Aircraft Noise:** The project is not within the vicinity of an airport; therefore, the project would not expose people residing or working in the project area to excessive noise from aircraft or airport operations. Impacts would be less than significant.

FINDING: With adherence to County Code, no significant direct or indirect impacts to noise levels are expected either directly or indirectly from the project. Impacts would be less than significant.

XIII. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (proposing new homes and businesses) or indirectly (extension of roads or other infrastructure)?				**X**
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				**X**

XIII. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				**X**

Regulatory Setting:

No federal or state laws, regulations, or policies apply to population and housing and the proposed project.

Discussion: A substantial adverse effect on Population and Housing would occur if the implementation of the project would:

- Create substantial growth or concentration in population;
- Create a more substantial imbalance in the County's current jobs to housing ratio; or
- Conflict with adopted goals and policies set forth in applicable planning documents.

a. **Population Growth:** The subject parcel is zoned Light Industrial (IL) and designated for industrial uses. The proposed warehouse/office would not generate additional housing or affect population growth and therefore would not be considered a significant population growth project. There would be no impact.

b. **Housing Displacement:** Housing would not be displaced by the project. There would be no impact.

c. **Replacement Housing:** The proposed project would not displace substantial numbers of people, necessitating construction of replacement housing elsewhere. There would be no impact.

FINDING: The project would not induce substantial population growth, or displace housing, or displace substantial numbers of people necessitating construction of replacement house. There would be no impact to population and housing.

XIV. 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 public services:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact

XIV. **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 public services:*				
	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 government services?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

California Fire Code

The California Fire Code (Title 24 CCR, Part 9) establishes minimum requirements to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of CCR contains requirements for fire safety during construction and demolition.

Discussion: A substantial adverse effect on Public Services would occur if the implementation of the project would:

- Substantially increase or expand the demand for fire protection and emergency medical services without increasing staffing and equipment to meet the Department's/District's goal of 1.5 firefighters per 1,000 residents and 2 firefighters per 1,000 residents, respectively;
- Substantially increase or expand the demand for public law enforcement protection without increasing staffing and equipment to maintain the Sheriff's Department goal of one sworn officer per 1,000 residents;
- Substantially increase the public school student population exceeding current school capacity without also including provisions to adequately accommodate the increased demand in services;
- Place a demand for library services in excess of available resources;
- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Be inconsistent with County adopted goals, objectives or policies.

a. **Fire Protection:** The project was distributed to and reviewed by the Cameron Park Fire Department in cooperation with the California Department of Forestry and Fire Protection (CAL FIRE). Although no formal comments were provided during the initial consultation review, the fire department reviews improvement plans at the time of building permit submittal to ensure compliance with all fire safety requirements. With future review of improvement plans at time of building permit submittal, any potential impacts would be less than significant.

b. **Police Protection:** Police protection services would be provided by the El Dorado County Sheriff's Office. The proposed project is not anticipated to create a significant increase in demand for law enforcement protection. Impacts would be less than significant.

c. **Schools:** There are no schools within close proximity of the proposed project. The project would not have a substantial adverse impact on schools. Impacts would be less than significant.

d. **Parks:** There are no parks within close proximity of the proposed project. The project would not have a substantial adverse impact on parks. Impacts would be less than significant.

e. **Government Services:** The proposed project would not have a substantial adverse impact on government services. Impacts would be less than significant.

FINDING: The project would not result in a significant increase of public services to the project. Further, any increased demand for public services would be addressed through the payment of established impact fees, if applicable, at time of building permit issuance. Impacts would be less than significant.

XV. RECREATION.	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 substantial 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**

Regulatory Setting:

National Trails System

The National Trails System Act of 1968 authorized The National Trails System (NTS) in order to provide additional outdoor recreation opportunities and to promote the preservation of access to the outdoor areas and historic resources of the nation. The Appalachian and Pacific Crest National Scenic Trails were the first two components, and the System has grown to include 20 national trails.

The National Trails System includes three classes of trails:

1. National Scenic Trails (NST) provide outdoor recreation and the conservation and enjoyment of significant scenic, historic, natural, or cultural qualities. The Pacific Coast Trail falls under this category. The PCT passes through the Desolation Wilderness area along the western plan area boundary.
2. National Historic Trails (NHT) follow travel routes of national historic significance. The National Park Service has designated two National Historic Trail (NHT) alignments that pass through El Dorado County, the California National Historic Trail and the Pony Express National Historic Trail. The California Historic Trail is a route of approximately 5,700 miles including multiple routes and cutoffs, extending from Independence and Saint Joseph, Missouri, and Council Bluffs, Iowa, to various points in California and Oregon. The Pony Express NHT commemorates the route used to relay mail via horseback from Missouri

to California before the advent of the telegraph.

3. National Recreation Trails (NRT) are in, or reasonably accessible to, urban areas on federal, state, or private lands. In El Dorado County there are 5 NRTs.

State Laws, Regulations, and Policies

The California Parklands Act

The California Parklands Act of 1980 (Public Resources Code Section 5096.141-5096.143) recognizes the public interest for the state to acquire, develop, and restore areas for recreation and to aid local governments to do the same. The California Parklands Act also identifies the necessity of local agencies to exercise vigilance to see that the parks, recreation areas, and recreational facilities they now have are not lost to other uses.

The California state legislature approved the California Recreational Trail Act of 1974 (Public Resources Code Section 2070-5077.8) requiring that the Department of Parks and Recreation prepare a comprehensive plan for California trails. The California Recreational Trails Plan is produced for all California agencies and recreation providers that manage trails. The Plan includes information on the benefits of trails, how to acquire funding, effective stewardship, and how to encourage cooperation among different trail users.

The 1975 Quimby Act (California Government Code Section 66477) requires residential subdivision developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act gave authority for passage of land dedication ordinances to cities and counties for parkland dedication or in-lieu fees paid to the local jurisdiction. Quimby exactions must be roughly proportional and closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. The exactions only apply to the acquisition of new parkland; they do not apply to the physical development of new park facilities or associated operations and maintenance costs.

The County implements the Quimby Act through §16.12.090 of the County Code. The County Code sets standards for the acquisition of land for parks and recreational purposes, or payments of fees in lieu thereof, on any land subdivision. Other projects, such as ministerial residential or commercial development, could contribute to the demand for park and recreation facilities without providing land or funding for such facilities.

Local Laws, Regulations, and Policies

The 2015 El Dorado County General Plan Parks and Recreation Element establishes goals and policies that address needs for the provision and maintenance of parks and recreation facilities in the county, with a focus on providing recreational opportunities and facilities on a regional scale, securing adequate funding sources, and increasing tourism and recreation-based businesses. The Recreation Element describes the need for 1.5 acres of regional parkland, 1.5 acres of community parkland, and 2 acres of neighborhood parkland per 1,000 residents. Another 95 acres of park land are needed to meet the General Plan guidelines.

Discussion: A substantial adverse effect on Recreational Resources would occur if the implementation of the project would:

- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Substantially increase the use of neighborhood or regional parks in the area such that substantial physical deterioration of the facility would occur.

a. **Parks:** The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. There would be no impact.

b. **Recreational Services:** The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. There would be no impact.

FINDING: There would be no impact to open space or park facilities as a result of the project.

XVI. TRANSPORTATION/TRAFFIC. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (Vehicle Miles Traveled)?			**X**	
c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
d. Result in inadequate emergency access?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to transportation/traffic and the proposed project.

State Laws, Regulations, and Policies

Caltrans manages the state highway system and ramp interchange intersections. This state agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

Local Laws, Regulations, and Policies

The Transportation and Circulation Element of the County General Plan relies on automobile delay and Level of Service (LOS) as performance measures to determine impacts on County-maintained roads and state highways within the unincorporated areas of the county.

County General Plan Policy TC-Xd states that Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions. Level of Service is calculated using the methodologies in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council). There are some roadway segments that are except from these standards and are allowed to operate at LOS F and are listed in Table TC-2. According to Policy TC-Xe, "worsen" is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

A. A two percent increase in traffic during a.m., p.m. peak hour, or daily
B. The addition of 100 or more daily trips, or
C. The addition of 10 or more trips during the a.m. or p.m. peak hour.

Automobile delay and level of service (LOS) may no longer be used as the performance measure to determine the transportation impacts of land development under CEQA. Instead, an alternative metric that supports the goals of SB 743 legislation will be required. The use of vehicle miles traveled (VMT) has been recommended by the Governor's Office of Planning and Research (OPR) and is cited in the CEQA Guidelines as the most appropriate measure of transportation impacts (Section 15064.3(a)).

The intent of SB743 is to bring CEQA transportation analysis into closer alignment with other statewide policies regarding greenhouse gases, complete streets, and smart growth. Using VMT as a performance measure, instead of LOS, is intended to discourage suburban sprawl, reduce greenhouse gas emissions, and encourage the development of smart growth, complete streets, and multimodal transportation networks.

Current direction regarding methods to identify VMT and comply with state requirements is provided by the California Governor's Office of Planning and Research (OPR) December 2018 publication, Technical Advisory on Evaluating Transportation Impacts in CEQA. This advisory contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. OPR provides this Technical Advisory as a resource for the public to use at their discretion. OPR is not enforcing or attempting to enforce any part of the recommendations contained herein. (Government Code Section 65035 ["It is not the intent of the Legislature to vest in the Office of Planning and Research any direct operating or regulatory powers over land use, public works, or other state, regional, or local projects or programs."].)

OPR's Technical Advisory provides this direction for small projects:

Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

On October 6, 2020 El Dorado County Board of Supervisors adopted Resolution 141-2020 setting thresholds of significance for VMT resulting from proposed development projects. The VMT threshold for commercial retail is no net increase in County-wide VMT.

Discussion: A substantial adverse effect on Transportation would occur if the implementation of the project would:

- Conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (Vehicle Miles Traveled); or
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

a. **Conflicts with a Transportation Plan, Policy or Ordinance:** No substantial traffic increases would result from the proposed project. Access to the project site is from Business Drive at the intersection with Trade Way. This portion of Business Drive is not a County-maintained roadway and an encroachment permit is not required. Trip generation from the project using the ITE Trip Generation Manual, 10th Edition would be 4 trips in the AM Peak Hour and 4 trips in the PM Peak Hour and 40 trips daily. This is less than the threshold for study set by El Dorado County General Plan Policy TC-Xe. The project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant.

b. **Vehicle Miles Travelled (VMT):** The proposed project would be a warehouse/office building. The proposed project would generate fewer than 100 trips per day and is therefore presumed to have a less than significant impact under CEQA in accordance with El Dorado County Resolution 141-2020 which set thresholds of significance for VMT resulting from proposed development projects. Impacts would be less than significant.

c. **Design Hazards**: The design and location of the project is not anticipated to create any significant hazards. The project site has access from Business Drive within the Barnett Ranch Business Park. The project would be built within an established commercial/industrial business park. Impacts would be less than significant.

d. **Emergency Access:** The existing project site has access from Business Drive at the intersection with Trade Way. The Cameron Park Fire Department/CAL FIRE reviewed the project and will be reviewing the improvement plans at time of building permit submittal to ensure compliance with all safety protocols. Impacts would be less than significant.

FINDING: The project would not conflict with applicable General Plan policies regarding effective operation of the County circulation system and the project would not exceed the level of service thresholds for traffic identified within the General Plan. Further, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) (VMT). The project would not create any road hazards or affect road safety and would not result in inadequate emergency access. For this Transportation category, the threshold of significance would not be exceeded and impacts would be less than significant.

XVII. TRIBAL CULTURAL RESOURCES. *Would the project: Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in 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:*	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), or			**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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to Tribal Cultural Resources (TCRs) and the proposed project.

State Laws, Regulations, and Policies

Assembly Bill (AB) 52

AB 52, which was approved in September 2014 and effective on July 1, 2015, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in CEQA Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the Public Resources Code, TCRs are:

1. Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:

a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or
b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

2. 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074 as follows:

a. A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and
b. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TRCs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

Discussion:

In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a TCR significant or important. To be considered a TCR, a resource must be either: (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or: (2) a resource that the lead agency chooses, in its discretion, to treat as a TCR and meets the criteria for listing in the state register of historic resources pursuant to the criteria set forth in Public Resources Code Section 5024.1(c). A substantial adverse change to a TCR would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a TCR such that the significance of the resource would be materially impaired.

a.-b. **Tribal Cultural Resources:** At the time of the initial review consultation, seven tribes had requested to be notified of proposed projects for consultation in the project area: Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville-El Dorado Miwok-Maidu-Nishinam Tribe, Shingle Springs Band of Miwok Indians, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of California and Nevada, and T'si-Akim Maidu. United Auburn Indian Community (Auburn Rancheria) requested consultation. An initial records search was conducted by searching California Historic Resources Information System (CHRIS) maps for cultural resource site records and survey reports in El Dorado County within a 1/4-mile radius of the proposed project area. It was determined that there is low potential for locating historic-period cultural resources in the immediate vicinity of the proposed project area. Further, a comprehensive Cultural Resources Study was conducted in October 2019 by Historic Resource Associates and the report stated that no significant prehistoric archaeological sites, features, or artifacts were found, nor any significant historical buildings, structures or objects, and no further analysis recommended. Further, inclusion of COA would reduce impacts to less than significant.

FINDING: With the inclusion of COA, the proposed project would have a less than significant impact on Tribal Cultural Resources.

XVIII. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	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 stormwater 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**	
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to 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**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

Energy Policy Act of 2005

The Energy Policy Act of 2005, intended to reduce reliance on fossil fuels, provides loan guarantees or tax credits for entities that develop or use fuel-efficient and/or energy efficient technologies (USEPA, 2014). The act also increases the amount of biofuel that must be mixed with gasoline sold in the United States (USEPA, 2014).

State Laws, Regulations, and Policies

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Public Resources Code Section 41780). The state, acting through the California Integrated Waste Management Board (CIWMB), determines compliance with this mandate. Per-capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Public Resources Code Sections 42900-42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years (CEC 2015a). The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2015a). The 2014 Draft Integrated Energy Policy Report Update includes policy recommendations, such as increasing investments in electric vehicle charging infrastructure at workplaces, multi-unit dwellings, and public sites (CEC 2015b).

Title 24–Building Energy Efficiency Standards

Title 24 Building Energy Efficiency Standards of the California Building Code are intended to ensure that building construction, system design, and installation achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC 2012). The standards are updated on an approximately 3-year cycle. The 2013 standards went into effect on July 1, 2014.

Urban Water Management Planning Act

California Water Code Sections 10610 *et seq.* requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet per year (AFY), prepare an urban water management plan (UWMP).

Discussion: A substantial adverse effect on Utilities and Service Systems would occur if the implementation of the project would:

- Breach published national, state, or local standards relating to solid waste or litter control;
- Substantially increase the demand for potable water in excess of available supplies or distribution capacity without also including provisions to adequately accommodate the increased demand, or is unable to provide an adequate on-site water supply, including treatment, storage and distribution;
- Substantially increase the demand for the public collection, treatment, and disposal of wastewater without also including provisions to adequately accommodate the increased demand, or is unable to provide for adequate on-site wastewater system; or
- Result in demand for expansion of power or telecommunications service facilities without also including provisions to adequately accommodate the increased or expanded demand.

a. **Wastewater Requirements**: The project will require connecting to public sewer. The El Dorado Irrigation District (EID) reviewed the project and confirmed service is available. There is a 6-inch gravity sewer line located in Business Drive. This sewer line has adequate capacity at this time. In order to receive service from this line, an extension of facilities of adequate size must be constructed. The project would require 10 EDUs of sewer service. The Facilities Improvement Letter (FIL) outlines the specific improvement requirements. Proposed water lines, sewer lines, and related facilities shall be located within an easement and shall remain accessible by conventional maintenance vehicles. Easements for any new EID facilities constructed by the project must be granted to EID prior to approval of water and sewer improvements, whether onsite or offsite. Impacts would be less than significant.

b. **Construction of New Facilities:** Construction of new facilities may be required to serve the project. Proposed water lines, sewer lines, and related facilities shall be located within an easement and shall remain accessible by conventional maintenance vehicles. Easements for any new EID facilities constructed by the project must be granted to EID prior to approval of water and sewer improvements, whether onsite

or offsite. For electricity service, the project would require connecting for service with PG&E. PG&E reviewed the project and provided standard comments, which would be implemented at time of building permit review. Impacts associated with construction of new facilities overall would be less than significant.

c. **New Stormwater Facilities:** Any stormwater drainage facilities needed for the project would be built in accordance with the El Dorado County Drainage Manual and would be reviewed during the grading and building permit review processes. Impacts would be less than significant.

d. **Sufficient Water Supply:** The project would be served by public water infrastructure. The El Dorado Irrigation District (EID) reviewed the project and provided verification of water service. The proposed project would require 10 EDUs of water. The FIL outlines the specific improvement requirements. Proposed water lines, sewer lines, and related facilities shall be located within an easement and shall remain accessible by conventional maintenance vehicles. Easements for any new EID facilities constructed by the project must be granted to EID prior to approval of water and sewer improvements, whether onsite or offsite. Further, The Cameron Park Fire Department in cooperation with CalFire would review the improvement plans at time of building permit submittal to verify the project meets required fire flow at that time. Impacts would be less than significant.

e. **Adequate Wastewater Capacity:** The project would be served by connection to public sewer. As discussed in section (a.) above, EID has provided verification of adequate sewer service. The project would require 10 EDUs of sewer service. Proposed water lines, sewer lines, and related facilities shall be located within an easement and shall remain accessible by conventional maintenance vehicles. Easements for any new EID facilities constructed by the project must be granted to EID prior to approval of water and sewer improvements, whether onsite or offsite. Impacts would be less than significant.

f.-g. **Solid Waste Disposal and Requirements:** El Dorado Disposal distributes municipal solid waste to Forward Landfill in Stockton and Kiefer Landfill in Sacramento. Pursuant to El Dorado County Environmental Management Solid Waste Division staff, both facilities have sufficient capacity to serve the County. Recyclable materials are distributed to a facility in Benicia and green wastes are sent to a processing facility in Sacramento. County Ordinance No. 4319 requires that new development provide areas for adequate, accessible, and convenient storing, collecting and loading of solid waste and recyclables. Further, the project would be conditioned to meet the requirements set forth by the County Environmental Management Department (Attachment 15). Impacts would be less than significant.

FINDING: No significant utility and service system impacts would be anticipated for the project, either directly or indirectly. With implementation of the required construction improvements installed according to established protocols, impacts to public utilities would be less than significant.

XIV. MANDATORY FINDINGS OF SIGNIFICANCE. *Does the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			**X**	
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			**X**	
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			**X**	

Discussion

a. No substantial evidence contained in the project record has been found that would indicate that this project would have the potential to significantly degrade the quality of the environment. As conditioned and with adherence to County permit requirements, this project would not have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of California history or pre-history. Any impacts from the project would be less than significant due to the design of the project and required standards that would be implemented prior to issuance of the building permit processes and/or any required project specific improvements on the property.

b. Cumulative impacts are defined in Section 15355 of the California Environmental Quality Act (CEQA) Guidelines as *two or more individual effects, which when considered together, would be considerable or which would compound or increase other environmental impacts.*

The proposed project and site-specific environmental conditions, which have been disclosed in the Project Description and analyzed in Items I through XVIII, show there would be no significant impacts anticipated related to agriculture resources, air quality, biological resources, cultural resources, geology/soils, hazards/hazardous materials, hydrology/water quality, land use/planning, mineral resources, noise, population/housing, public services, recreation, traffic/transportation, or utilities/service systems that would combine with similar effects such that the project's contribution would be cumulatively considerable. For all categories, a determination of either less than significant impacts or no impacts would be anticipated.

As outlined and discussed in this document, as conditioned and with compliance with County Codes, this project would be anticipated to have a less than significant project-related environmental effect which would cause substantial adverse effects on human beings, either directly or indirectly. Based on the analysis in this study, it has been determined that the project would have less than significant cumulative impacts.

c. Based on the discussion contained in this document, no potentially significant impacts to human beings are anticipated to occur with respect to potential project impacts. The project would require review and permitting through the County. Adherence to all applicable standards and conditions would be expected to reduce potential impacts to a less than significant level.

FINDINGS: It has been determined that the proposed project would not result in significant environmental impacts. The project would not exceed applicable environmental standards, nor significantly contribute to cumulative environmental impacts.

SUPPORTING INFORMATION SOURCE LIST

CAPCOA Guide (August 2010): http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-QuantificationReport-9-14-Final.pdf

California Air Resources Board (CARB). (2008). *Climate Change Scoping Plan.* Available at: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf

California Attorney General's Office. (2010). Addressing Climate Change at the Project Level. Available at: http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf

California Department of Conservation (CDC). (2008). *Farmland Mapping and Monitoring Program: El Dorado County Important Farmland 2008*. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/eld08.pdf.

California Department of Conservation (CDC). (2013a). Important Farmland Categories webpage. Available online at: www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/ map_categories.aspx.

California Department of Conservation (CDC). (2013b). The Land Conservation Act. Available online at: www.conservation.ca.gov/dlrp/lca/Pages/Index.aspx.

California Department of Toxic Substances Control (DTSC). (2015). *DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List)*. Retrieved April 15, 2015 from http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm.

California Energy Commission. (2006). *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004*, *Staff Final Report*. Publication CEC-600-2006-013-SF.

California Department of Transportation (Caltrans). (2015). Scenic Highway Program FAQs: Caltrans Landscape Architecture Program. Retrieved February 27, 2015 from www.dot.ca.gov/hq/ LandArch/scenic/faq.htm.

California Department of Transportation (Caltrans). (2013). *California Scenic Highway Program, Officially Designated State Scenic Highways*. Retrieved April 8, 2015 from http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm.

California Geological Survey. (2016). Alquist-Priolo Earthquake Fault Zone Maps. Retrieved October 4, 2016 from http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm.

California Geological Survey. (2013). Seismic Hazards Zonation Program. Retrieved April 15, 2015 from http://www.conservation.ca.gov/cgs/shzp/Pages/affected.aspx.

California Code of Regulations. *Guidelines for Implementation of the California Environmental Quality Act.* Title 14, Section 15000, et seq. 14 CCR 15000

California Office of Emergency Services. 2015. Business Plan/EPCRA 312. Available online at: www.caloes.ca.gov/for-businesses-organizations/plan-prepare/hazardousmaterials/hazmat-business-plan.

El Dorado County. (2003). *El Dorado County General Plan Draft Environmental Impact Report*. State Clearinghouse No. 2001082030. Placerville, CA: El Dorado County Planning Services.

El Dorado County. (2015). *El Dorado County General Plan: A Plan for Managed Growth and Open Roads; A Plan for Quality Neighborhoods and Traffic Relief.* Placerville, CA: El Dorado County Planning Services.

El Dorado County. (2005, July 21). Asbestos Review Areas, Western Slope, El Dorado County, California. Available at: < http://www.edcgov.us/Government/AirQualityManagement/Asbestos.aspx>.

El Dorado County Air Quality Management District (AQMD). (2000). *Rules and Regulations of the El Dorado County Air Quality Management District*. Retrieved April 15, 2015 from http://www.arb.ca.gov/DRDB/ED/CURHTML/R101.HTM.

El Dorado County Air Quality Management District (AQMD). (2002). *Guide to Air Quality Assessment: Determining the Significance of Air Quality Impacts Under the California Environmental Quality Act*. Retrieved from http://www.edcgov.us/Government/AirQualityManagement/Guide_to_Air_Quality_Assessment.aspx.

El Dorado County Geographic Information System (GIS) Data. Placerville, CA: Esri ArcGIS. Available: El Dorado County controlled access data GISDATA\LIBRARIES.

El Dorado County Transportation Commission. (2012). *El Dorado County Airport Land Use Compatibility Plan*. Retrieved from http://www.edctc.org/2/Airports.html.

Federal Emergency Management Agency (FEMA). (2008). FEMA Map Service Center, Current FEMA Issued Flood Maps: El Dorado County, California, unincorporated area, no. 06017C1025E. Available at: http://map1.msc.fema.gov/idms/IntraView.cgi?KEY=94926033&IFIT=1.

Governor's Office of Planning and Research (OPR). (2008, June 19). *Technical advisory: CEQA and climate change: Addressing climate change through California Environmental Quality Act Review*. Available at: Sacramento, CA. http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf.

Sacramento Metropolitan Air Quality Management District (SMAQMD). (2010). Construction GHG Emissions Reductions. Available at: http://airquality.org/ceqa/cequguideupdate/Ch6FinalConstructionGHGReductions.pdf

State Water Resources Control Board (SWRCB). (2013). Storm Water Program, Municipal Program. Available online at: www.waterboards.ca.gov/water_issues/programs/stormwater/municipal.shtml.

National Earthquake Hazards Reduction Program (NEHRP). (2009). Background and History. Available online at: www.nehrp.gov/about/history.htm.

San Luis Obispo County Air Pollution Control District (SLOAPCD). (2012, April). A Guide for Assessing The Air Quality Impacts For Projects Subject To CEQA Review. Available at http://www.slocleanair.org/images/cms/upload/files/CEQA_Handbook_2012_v1.pdf.

United States Department of Agriculture (USDA) Soil Conservation Service and Soil Service. (1974). *Soil Survey of El Dorado Area, California*. Retrieved April 10, 2015 from http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/el_doradoCA1974/EDA.pdf

U.S. Environmental Protection Agency. (2014). Summary of the Energy Policy Act. Available online at: www2.epa.gov/laws-regulations/summary-energy-policy-act.

U.S. Environmental Protection Agency. (2015). The Green Book Nonattainment Areas for Criteria Pollutants. Available online at: www.epa.gov/airquality/greenbook.

U.S. Green Building Council (USGBC). (2014). LEED v4 for Building Design and Construction Addenda. Updated October 1, 2014. Available online at: www.usgbc.org/resources/leed-v4-building-design-and-construction-redline-current-version.

U.S. Green Building Council (USGBC). (2015). LEED Overview. Available online at: www.usgbc.org/leed.

COUNTY OF EL DORADO
PLANNING AND BUILDING DEPARTMENT
INITIAL STUDY
ENVIRONMENTAL CHECKLIST

Project Title: Design Review Permit DR21-0005 / Barsotti Warehouse & Office

Lead Agency Name and Address: El Dorado County, 2850 Fairlane Court, Placerville, CA 95667

Contact Person: Bianca Dinkler, Associate Planner | **Phone Number:** (530) 621-5875

Owner's Name and Address: Barsotti Family LLC, 2239 Hidden Valley Lane, Camino, CA 95709

Applicant's Name and Address: Doug Granade, 4420 Business Drive, Shingle Springs, CA 95682

Project Engineer's Name and Address: Doug Granade, 4420 Business Drive, Shingle Springs, CA 95682

Project Location: The project is located on the west side of Business Drive, approximately 0.25 miles north of the intersection with Dividend Drive in the community of Shingle Springs. (Attachments A, B).

Assessor's Parcel Number: 109-240-030 (Attachment C) **Acres:** 15.43-acres

Sections: S:02 **T:** 09N **R:** 09E

General Plan Designation: Industrial (I) (Attachment D)

Zoning: Industrial Light within a Design Review Community Combining Zones (IL-DC) (Attachment E)

Description of Project: A staff level Design Review Permit to allow the construction and operation of a new 22,800 square foot warehouse and office for Barsotti Juice Company located in the Barnett Ranch Business Park. The scope of work would occur on the southern 7.8-acres portion of the 15.43-acre parcel. The warehouse portion of the building would represent the majority of square footage at approximately 21,233 square feet, and the office areas would be approximately 1,567 square feet total and includes the main office, a smaller office, lobby area, accounting room, file storage room, two restrooms, server room, break room, and janitor closet. Additional site improvements include 20 standard 9-ft x 18-ft parking spaces, two ADA parking spaces, one EVA parking space, six truck loading/unloading stalls, and trash enclosures. New 6-foot chain link fencing would be installed to secure the perimeter of the developed area (not the entire parcel). Project signage would be building signage only identifying the address. Landscaping is designed to utilize drought-tolerant species and would be consistent with the County's Model Water Efficiency Model (MWELO) program. Proposed lighting would be building lighting with wall luminaires designed to be fully shielded pursuant to the Illumination Engineering Society of North America's (IESNA) full cut-off designation. Access to the project site is from Business Drive. This portion of Business Drive is not a County-maintained roadway and an encroachment permit is not required. Proposed grading would occur at the project entrance driveway, warehouse/office building pad, on-site circulation isles, an open area to the north of the warehouse/office building, and stormwater improvements. A Facilities Improvement Letter (FIL) from the El Dorado Irrigation District (EID) was included with requirements for improvements to connect to public water/sewer service. Electricity/utilities would be provided by connecting to PG&E. The project would have approximately 12 employees. Business hours would be from 7am to 5pm.

Environmental Setting: The project site is a 7.8-acre portion of a 15.43-acre parcel located at an elevation of 1,426 to 1,436 feet above mean sea level. A Botanical Survey was prepared for the project by Sycamore Environmental Consultants on November 1, 2019 (Attachment 18). The site is predominantly flat and previously disturbed by grading and spoils pile stockpiling. Vegetation on-site is ruderal/disturbed and annual California grassland. There is open canopy mixed oak woodland at the northwest corner (no development is proposed in that area). Old Mill Creek crosses Shingle Lime Mine Road but does not occur on the property. There is no chaparral in the Biological Study Area (BSA). Proposed grading would occur at the project entrance for a new driveway, the warehouse/office building pad, on-site circulation isles, an open area north of the warehouse/office, and for stormwater improvements. Stormwater would be treated by vegetative swales and a detention basin to be located at the southwestern corner of the parcel. As shown on Record of Survey R/S 27/23/1, there is a 60-ft non-exclusive road and public utilities easement along the western property line, and a 30-ft non-exclusive road and public utilities easement at the northern property line. The proposed location of the new warehouse and office building are outside of these easements. Based on review of the report, the study area does not contain chaparral or oak woodland habitats that typically provide habitat for Pine Hill Plants. No special-status plants were found. The project would be subject to paying the Mitigation Area 1 fee at time of building permit. The report summary does not recommend further analysis. Further discussion is contained in this Initial Study.

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement)

1. El Dorado County Department of Transportation
2. El Dorado County Building Services
3. El Dorado County Air Quality Management District
4. El Dorado County Environmental Management
5. El Dorado County Surveyor's Office
6. El Dorado Irrigation District
7. El Dorado County Department of Transportation
8. El Dorado County Stormwater Coordinator, West Slope
9. Cameron Park Fire Protection District/CALFIRE
10. PG&E

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

At the time of the application request, seven tribes had requested to be notified of proposed projects for consultation in the project area: Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville-El Dorado Miwok-Maidu-Nishinam Tribe, Shingle Springs Band of Miwok Indians, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of California and Nevada, and T'si-Akim Maidu. The United Auburn Indian Community (Auburn Rancheria) requested consultation. An initial records search was conducted by searching California Historic Resources Information System (CHRIS) maps for cultural resource site records and survey reports in El Dorado County within a 1/4-mile radius of the proposed project area. It was determined that there is low potential for locating historic-period cultural resources in the immediate vicinity of the proposed project area. Further, a comprehensive Cultural Resources Study was conducted in October 2019 by Historic Resource Associates and the report stated that no significant prehistoric archaeological sites, features, or artifacts were found, nor any significant historical buildings, structures or objects, and no further analysis recommended. Further discussion is contained in this Initial Study, Cultural Resources and Tribal Cultural Resources.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources		Cultural Resources		Geology / Soils
	Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality
	Land Use / Planning		Mineral Resources		Noise
	Population / Housing		Public Services		Recreation
	Transportation/Traffic		Tribal Cultural Resources		Utilities / Service Systems

DETERMINATION

On the basis of this initial evaluation:

☒ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by Mitigation Measures based on the earlier analysis as described in attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to applicable standards; and b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or Mitigation Measures that are imposed upon the proposed project, nothing further is required.

Signature: Bianca Dinkler Date: 8/18/21

Printed Name: Bianca Dinkler, Associate Planner For: El Dorado County

Signature: Date: 8/18/21

Printed Name: Rommel Pabalinas, Current Planning Manager For: El Dorado County

PROJECT DESCRIPTION

Throughout this Initial Study, please reference the following Attachments:

Project Specific Plans:

Attachment 1: Location Map
Attachment 2: Aerial Photo
Attachment 3: Assessors Parcel Map
Attachment 4: General Plan Land Use Map
Attachment 5: Zoning Map
Attachment 6: Site Plans
Attachment 7: Building Elevations and Design
Attachment 8: Landscape Plans
Attachment 9: Lighting Plans
Attachment 10: Improvement Plans

Agencies Comments:

Attachment 11: County Stormwater Coordinator West Slope Comments
Attachment 12: PG&E Comments
Attachment 13: AQMD Comments
Attachment 14: El Dorado Irrigation District Comments
Attachment 15: Environmental Management Department Comments
Attachment 16: Department of Transportation Comments
Attachment 17: County Surveyor's Office Comments

Project Specialty Reports:

Attachment 18: Botanical Survey, Sycamore Environmental Consultants
Attachment 19: Drainage Study, Warren Consulting Engineers

Additional Attachments:

Attachment 20: Application Packet

Introduction:

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts resulting from the proposed project.

Project Description:

A Staff Level Design Review to allow the construction and operation of a new 22,800 square foot warehouse and office for Barsotti Juice Company located in the Barnett Ranch Business Park. The scope of work would occur on the southern 7.8-acres portion of the 15.43-acre parcel. The warehouse portion of the building would represent the majority of square footage at approximately 21,233 square feet, and the office areas would be approximately 1,567 square feet total and includes the main office, a smaller office, lobby area, accounting room, file storage room, two restrooms, server room, break room, and janitor closet. Additional site improvements include 20 standard 9-ft x 18-ft parking spaces, two Americans with Disabilities Act (ADA) parking spaces, one Electric Vehicle Approved (EVA) parking space, six truck loading/unloading stalls, and trash enclosures. New 6-ft chain link fencing would be installed to secure the perimeter of the developed area (not the entire parcel). Project signage would be building signage only identifying the address. Landscaping is designed to utilize drought-tolerant species and would be consistent with the County's Model Water Efficiency Model (MWELO) program. Proposed lighting would be building lighting with wall luminaires designed to be fully shielded pursuant to the Illumination Engineering Society

of North America's (IESNA) full cut-off designation. Access to the project site is from Business Drive. This portion of Business Drive is not a County-maintained roadway and an encroachment permit is not required. Proposed grading would occur at the project entrance driveway, warehouse/office building pad, on-site circulation isles, an open area to the north of the warehouse/office building, and stormwater improvements. There would be five types of surface paving used: Type 1 (3" AB on compacted subgrade), Type 2 (3" AC over 6" AB on compacted subgrade), Type 3 (8" PCC with #4 bars at 12" O.C.E.W. over 6" AB on compacted subgrade), Type 4 (4" PCC with #3 bars at 24" O.C.E.W. over 4" AB on compacted subgrade), and Type 5 (8" Class II AB on compacted subgrade). A Facilities Improvement Letter (FIL) from the El Dorado Irrigation District (EID) was included with requirements for improvements to connect to public water/sewer service. Electricity/utilities would be provided by connecting to PG&E. The project would have approximately 12 employees. Business hours would be from 7am to 5pm.

Site Description:

The project site is a 7.8-acre portion of a 15.43-acre parcel located at an elevation of 1,426 to 1,436 feet above mean sea level. A Botanical Survey was prepared for the project by Sycamore Environmental Consultants on November 1, 2019 (Attachment 18). The site is predominantly flat and previously disturbed by grading and spoils pile stockpiling. Vegetation on-site is ruderal/disturbed and annual California grassland. There is open canopy mixed oak woodland at the northwest corner (no development is proposed in that area). Old Mill Creek crosses Shingle Lime Mine Road but does not occur on the property. There is no chaparral in the Biological Study Area (BSA). Proposed grading would occur at the project entrance for a new driveway, the warehouse/office building pad, on-site circulation isles, an open area north of the warehouse/office, and for stormwater improvements. Stormwater would be treated by vegetative swales and a detention basin to be located at the southwestern corner of the parcel. As shown on Record of Survey R/S 27/23/1, there is a 60-ft non-exclusive road and public utilities easement along the western property line, and a 30-ft non-exclusive road and public utilities easement at the northern property line. The proposed location of the new warehouse and office building are outside of these easements. Based on review of the report, the study area does not contain chaparral or oak woodland habitats that typically provide habitat for Pine Hill Plants. No special-status plants were found. The project would be subject to paying the Mitigation Area 1 fee at time of building permit. The report summary does not recommend further analysis. Further discussion is contained in this Initial Study.

Vegetation: Ruderal/disturbed habitat occurs in areas that are heavily disturbed by past or ongoing human activities but retain a soil substrate. Ruderal/disturbed areas may be sparsely to densely vegetated, but do not support a recognizable vegetation community or species assemblage. Vegetative cover is usually herbaceous and dominated by a wide variety of weedy non-native species or a few ruderal native species.

Soil types: Based on review of the Drainage Study prepared for the project, a soil analysis determined that the soils on-site are mostly Class C, Rescue Sandy Loam (REB). (Attachment 19).

Special Status Plants (rare plants): Although there are special-status plants in the region, the site is comprised of ruderal/disturbed habitat and vegetated almost entirely with annual California grassland. Due to the present site conditions and past disturbance, the site lacks suitable habitat for special-status plants and none would be expected to occur on the site. Therefore, no impacts to special-status plants are anticipated as a result of the proposed project. Although no impacts to special-status plant species are anticipated, El Dorado County has a Rare Plant Mitigation Fee program (Zoning Ordinance Section 130.71.040 - Ecological Preserve Mitigation and Fee in Lieu of Mitigation), to offset the impacts of development in western El Dorado County on lands potentially suitable for rare plants. Development projects within Rare Plant Mitigation Areas are required to pay an Ecological Preserve Fee. The project site is in Rare Plant Mitigation Area 1. Lands in Mitigation Area 1 are within the rare soils study area and offsite mitigation through payment of the Ecological Preserve Fee is required. The Ecological Preserve Fee for commercial development is $0.59 per square foot of building area. No further analysis was recommended in the Botanical Survey summary. (Attachment 18).

Special Status Species (wildlife): The proposed site for the warehouse/office would be on the southern 7.8-acre portion of the 15.43-acre parcel. This portion of the property is comprised of ruderal/disturbed habitat and the vegetation is annual California grassland. No oak trees would be removed as a result of the proposed project and no

impacts to special-status wildlife species are anticipated as a result of the project. Further discussion is contained within this Initial Study.

Project Location and Surrounding Land Uses:

The project is located on the west side of Business Drive, approximately 0.25 miles north of the intersection with Dividend Drive in the community of Shingle Springs. The adjacent-neighboring parcels are zoned Industrial Light (IL) to the north, east and south, and Estate Residential, Five-acre (RE-5) to the west; and General Plan land use designations of Industrial (I) to the north, east and south, and Low Density Residential (LDR) to the west.

Project Characteristics:

1. Transportation/Circulation/Parking

The project was reviewed by the County Department of Transportation (DOT) and they provided comments that they take no exceptions to the project and offer no further comments or conditions (Attachment 16). The project was also distributed to the Cameron Park Fire Department; however, they did not provide formal comments/conditions at this time. The Cameron Park Fire Department would defer their review of the project improvement plans until submittal for the building permit, at which time they would review for compliance with their adopted standards.

Access would be from Business Drive, and this portion of Business Drive is not a County-maintained roadway. Road maintenance is privately managed via the Barnett Business Park association. Proposed on-site vehicle and pedestrian circulation would be from 30-ft wide drive-isle with two-way traffic on the interior of the project site around the parking spaces and building. The surfacing would be comprised of five types of paving: Type 1 (3" AB on compacted subgrade), Type 2 (3" AC over 6" AB on compacted subgrade), Type 3 (8" PCC with #4 bars at 12" O.C.E.W. over 6" AB on compacted subgrade), Type 4 (4" PCC with #3 bars at 24" O.C.E.W. over 4" AB on compacted subgrade), and Type 5 (8" Class II AB on compacted subgrade). There would be 20 standard 9-ft x 18-ft parking spaces, two ADA parking spaces, one EVA parking space, and six truck loading/unloading stalls. (Attachments 6, 10).

2. Utilities and Infrastructure

Electricity/utilities services would be provided by connecting to Pacific Gas & Electric (Attachment 12). The El Dorado Irrigation District (EID) reviewed the project and provided conditions for improvements to the existing utilities, on-site, specifically requiring an extension to connect to the sewer line and water line (Attachment 14). The County Environmental Management Department (EMD) reviewed the project and provided comments specific to construction/demolition debris recycling, mandatory commercial recycling, mandatory commercial organics recycling, and trash/recycling enclosures per CalGreen (Attachment 15).

Public Water/Sewer: The project would be served by public water and sewer service. The El Dorado Irrigation District (EID) reviewed the project and provided comments in their Facility Improvement Letter (FIL) verifying water and sewer connectivity, recommended improvements, and adequacy of the existing system for fire service and fire hydrants (Attachment 14). **Water:** The proposed project would require 10 EDUs of water. The FIL outlines the specific improvement requirements; and **Sewer:** There is a 6-inch gravity sewer line located in Business Drive. This sewer line has adequate capacity at this time. In order to receive service from this line, an extension of facilities of adequate size must be constructed. The project would require 10 EDUs of sewer service. The FIL outlines the specific improvement requirements; and **Easements:** Proposed water lines, sewer lines, and related facilities shall be located within an easement and shall remain accessible by conventional maintenance vehicles. Easements for any new EID facilities constructed by the project must be granted to EID prior to approval of water and sewer improvements, whether onsite or offsite; and **Fire Hydrants:** The Cameron Park Fire Department in cooperation with CalFire would review the improvement plans at time of building permit submittal to verify the project meets required fire flow at that time.

3. Construction Considerations

The project would maintain the current zoning designation and development would require conformance with applicable agency requirements, and subject to a building permit from the El Dorado County Building Services. The proposed development is designed in conformance with the development standards for the Industrial Light (IL) zone including meeting required setbacks, building height, and Floor Area Ratio (FAR). There are no requested modifications to these development standards.

Grading, Drainage, Utilities: A Drainage Study was prepared by Warren Consulting Engineers, Inc. dated March 16, 2021 (Attachment 19). Preliminary Grading, Drainage, and Utility Plans are included and show the proposed improvements to cut/fill/export grading amounts, design flow of drainage system, and all proposed utilities. (Attachment 10).

Building Elevations and Design: The building elevations and design are shown in the Building Elevations which include the perimeter elevations, conceptual roof plan/parapets, details of the building materials, architectural theme, heights, and paint colors. The Barsotti Warehouse/Office would be constructed of steel buildings in reflective white/sandstone/and burnished slate. (Attachment 7).

Fencing: A new 6-ft chain link fence would be installed around the development area (not the entire parcel). (Attachment 10).

Landscape Details: A Landscape Plan is included for the proposed project showing approved drought-tolerant plant and tree species that comply with the Landscaping and Irrigation Standards contained in the Community Design Standards, as well as with the County's Model Water Efficient Landscape Ordinance (MWELO). (Attachment 8).

On-Site Lighting and Signage: Proposed lighting for both the building and perimeter within the development area. Lighting would utilize LED technology and all project lighting is designed to be shielded downwards to minimize nighttime glare. All lighting would be manufactured to U.L. Specifications. No freestanding monument signage is proposed. The only signage would be the address on building. (Attachment 9).

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. If the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is a fair argument that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of Mitigation Measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the Mitigation Measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL IMPACTS

I. **AESTHETICS.** *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?				**X**
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				**X**
c. Substantially degrade the existing visual character 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**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to aesthetics in relation to the proposed project.

State Laws, Regulations, and Policies

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (Caltrans, 2015). The state highway system includes designated scenic highways and those that are eligible for designation as scenic highways.

There are no officially designated state scenic corridors in the vicinity of the project site.

Local Laws, Regulations, and Policies

The County has several standards and ordinances that address issues relating to visual resources. Many of these can be found in the County Zoning Ordinance (Title 130 of the County Code). The Zoning Ordinance consists of descriptions of the zone districts, including identification of uses allowed by right or uses requiring a discretionary permit, and specific development standards that include development attributes for parcel size, density range, required setbacks, maximum building height, and Floor Area Ratio (FAR).

Visual resources are classified as 1.) scenic resources or 2.) scenic views. Scenic resources include specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements. Scenic views are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor.

A list of the county's scenic views and resources is presented in Table 5.3-1 of the El Dorado County General Plan EIR (p. 5.3-3). This list includes areas along highways where viewers can see large water bodies (e.g., Lake Tahoe and Folsom Reservoir), river canyons, rolling hills, forests, or historic structures or districts that are reminiscent of El Dorado County's heritage.

Several highways in El Dorado County have been designated by the California Department of Transportation (Caltrans) as scenic highways or are eligible for such designation. These include U.S. 50 from the eastern limits of the Government Center interchange (Placerville Drive/Forni Road) in Placerville to South Lake Tahoe, all of SR 89 within the county, and those portions of SR 88 along the southern border of the county.

Rivers in El Dorado County include the American, Cosumnes, Rubicon, and Upper Truckee rivers. A large portion of El Dorado County is under the jurisdiction of the USFS, which under the Wild and Scenic Rivers Act may designate rivers or river sections to be Wild and Scenic Rivers. To date, no river sections in El Dorado County have been nominated for or granted Wild and Scenic River status.

Discussion: A substantial adverse effect to Visual Resources would result in the introduction of physical features that are not characteristic of the surrounding development, substantially change the natural landscape, or obstruct an identified public scenic vista.

a. **Scenic Vista or Resource:** No scenic vistas, as designated by the county General Plan, are located in the vicinity of the site (El Dorado County, 2003, p. 5.3-3 through 5.3-5). The project site is not adjacent to or visible from a State Scenic Highway. Any new structures would require permits for construction and would comply with the General Plan and the Zoning Ordinance. There would be no impact.

b. **Scenic Resources:** The project site is not visible from an officially designated State Scenic Highway or County-designated scenic highway, or any roadway that is part of a corridor protection program (Caltrans, 2013). There are no views of the site from public parks or scenic vistas. There are no trees or historic buildings that have been identified by the County as contributing to exceptional aesthetic value at the project site. There would be no impact.

c. **Visual Character:** The adjacent-neighboring parcels are zoned Industrial Light (IL) to the north, east and south, and Estate Residential, Five-acre (RE-5) to the west; and General Plan land use designations of Industrial (I) to the north, east and south, and Low Density Residential (LDR) to the west. Zoning Ordinance Section 130.23.010 states the IL zone "is applied to lands for manufacturing and associated retail or service activities, wholesaling, and other industrial uses, where the primary activity is conducted within a building or buildings, or in outdoor storage or activity areas." The proposed warehouse/office for Barsotti Juice Company is a permitted use in the IL zone and would be compatible with the surrounding development in the Barnett Business Park. The project has been designed in a manner to fit in with the surrounding commercial/industrial uses, including neutral building colors, landscaping, downward-shielded building and perimeter lighting, and building address signage only. Impacts would be less than significant.

d. **Light and Glare:** The proposed project could produce new light and glare, but has been designed to minimize any impact to a level of less than significant (Attachment 9). Consistent with County requirements, all lighting would be shielded downward on the building and in the parking lot. This design would maintain minimal light impacts to adjacent uses, while also providing enough lighting for safety and security. The project is designed to comply with County lighting ordinance requirements and would be reviewed for compliance at time of building permit issuance. Impacts would be less than significant.

FINDING: With adherence to El Dorado County Code of Ordinances (County Code), for this Aesthetics category, impacts would be anticipated to be less than significant.

II. AGRICULTURE AND FOREST 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 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:

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

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to agricultural and forestry resources in relation to the proposed project.

State Laws, Regulations, and Policies

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP), administered by the California Department of Conservation (CDC), produces maps and statistical data for use in analyzing impacts on California's agricultural resources (CDC 2008). FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDC 2013a):

> ***Prime Farmland:*** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

Farmland of Statewide Importance: Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

Unique Farmland: Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the 4 years before the FMMP's mapping date.

Farmland of Local Importance: Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDC 2013b). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

Z'berg-Nejedly Forest Practice Act

Logging on private and corporate land in California is regulated by the 1973 Z'berg-Nejedly Forest Practice Act. This Act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. The California Department of Forestry (CALFIRE) works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs.

Discussion: A substantial adverse effect to Agricultural Resources would occur if:

- There is a conversion of choice agricultural land to nonagricultural use, or impairment of the agricultural productivity of agricultural land;
- The amount of agricultural land in the County is substantially reduced; or
- Agricultural uses are subjected to impacts from adjacent incompatible land uses.

a. **Farmland Mapping and Monitoring Program:** The site is not zoned for agricultural use or located within an Agricultural District. The site is not designated as farm land of local importance. There would be no impact.

b. **Agricultural Uses:** The property is not located within a Williamson Act Contract, nor is it adjacent to lands under a contract. There would be no impact.

c.-d. **Loss of Forest land or Conversion of Forest land:** The site is not designated as Timberland Preserve Zone (TPZ) or other forestland according to the General Plan and Zoning Ordinance. There would be no impact to forest land.

e. **Conversion of Prime Farmland or Forest Land:** The project is not within an agricultural zone district, or located on forest land, and would not convert farmland or forest land to non-agriculture use. There would be no impact.

FINDING: For this Agriculture category, the thresholds of significance have not been exceeded and no impacts would be anticipated to result from the project.

III. AIR QUALITY. *Would the project:*				
	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 pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			**X**	
d. Expose sensitive receptors to substantial pollutant concentrations?			**X**	
e. Create objectionable odors affecting a substantial number of people?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

The Clean Air Act is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM10), particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO2), ground-level ozone, and lead. Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health.

State Laws, Regulations, and Policies

The California Air Resources Board (CARB) sets standards for criteria pollutants in California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride. The proposed project is located within the Mountain Counties Air Basin, which is comprised of seven air districts: the Northern Sierra Air Quality Management District (AQMD), Placer County Air Pollution Control District (APCD), Amador County APCD, Calaveras County APCD, the Tuolumne County APCD, the Mariposa County APCD, and a portion of the El Dorado County Air Quality Management District (AQMD), which consists of the western portion of El Dorado County. The El Dorado County AQMD manages air quality for attainment and permitting purposes within the west slope portion of El Dorado County.

USEPA and CARB regulate various stationary sources, area sources, and mobile sources. USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), known as hazardous air pollutants (HAPs) at the federal level. In addition, USEPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications.

Air quality in the project area is regulated by the El Dorado County Air Quality Management District. California Air Resources Board and local air districts are responsible for overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required to comply with CEQA. The AQMD

regulates air quality through the federal and state Clean Air Acts, district rules, and its permit authority. National and state ambient air quality standards (AAQS) have been adopted by the Environmental Protection Agency and State of California, respectively, for each criteria pollutant: ozone, particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide.

The Environmental Protection Agency and State also designate regions as "attainment" (within standards) or "nonattainment" (exceeds standards) based on the ambient air quality. The County is in nonattainment status for both federal and state ozone standards and for the state PM10 standard, and is in attainment or unclassified status for other pollutants (California Air Resources Board 2013). County thresholds are included in the chart below.

Criteria Pollutant	**El Dorado County Threshold**	
Reactive Organic Gasses (ROG)	82 lbs/day	
Nitrogen Oxides (NOx)	82 lbs/day	
Carbon Monoxide (CO)	8-hour average: 6 parts per million (ppm)	1-hour average: 20 ppm
Particulate Matter (PM10):	Annual geometric mean: 30 µg/m3	24-hour average: 50 µg/m3
Particulate Matter (PM2.5):	Annual arithmetic mean: 15 µg/m3	24-hour average: 65 µg/m3
Ozone	8-hour average: 0.12 ppm	1-hour average: .09

The guide includes a Table (Table 5.2) listing project types with potentially significant emissions. ROG and NOx Emissions may be assumed to not be significant if:

- The project encompasses 12 acres or less of ground that is being worked at one time during construction;
- At least one of the recommended mitigation measures related to such pollutants is incorporated into the construction of the project;
- The project proponent commits to pay mitigation fees in accordance with the provisions of an established mitigation fee program in the district (or such program in another air pollution control district that is acceptable to District); or
- Daily average fuel use is less than 337 gallons per day for equipment from 1995 or earlier, or 402 gallons per day for equipment from 1996 or later.

If the project meets one of the conditions above, AQMD assumed that exhaust emissions of other air pollutants from the operation of equipment and vehicles are also not significant.

For Fugitive dust (PM10), if dust suppression measures will prevent visible emissions beyond the boundaries of the project, further calculations to determine PM emissions are not necessary. For the other criteria pollutants, including CO, PM10, SO2, NO2, sulfates, lead, and H2S, a project is considered to have a significant impact on air quality if it will cause or contribute significantly to a violation of the applicable national or state ambient air quality standard(s).

Naturally occurring asbestos (NOA) is also a concern in El Dorado County because it is known to be present in certain soils and can pose a health risk if released into the air. The AQMD has adopted an El Dorado County Naturally Occurring Asbestos Review Area Map that identifies those areas more likely to contain NOA (El Dorado County 2005).

Discussion: The El Dorado County Air Quality Management District (AQMD) has developed a Guide to Air Quality Assessment (2002) to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. A substantial adverse effect on air quality would occur if:

- Emissions of ROG and No_x will result in construction or operation emissions greater than 82lbs/day (Table 3.2);
- Emissions of PM_{10}, CO, SO_2 and No_x, as a result of construction or operation emissions, will result in ambient pollutant concentrations in excess of the applicable National or State Ambient Air Quality Standard (AAQS). Special standards for ozone, CO, and visibility apply in the Lake Tahoe Air Basin portion of the County; or
- Emissions of toxic air contaminants cause cancer risk greater than 1 in 1 million (10 in 1 million if best available control technology for toxics is used) or a non-cancer Hazard Index greater than 1. In addition, the project must demonstrate compliance with all applicable District, State and U.S. EPA regulations governing toxic and hazardous emissions.

a.-b. **Air Quality Plan, Air Quality Standards:** El Dorado County Air Quality Management District (EDCAQMD) has adopted Rules and Regulations establishing rules and standards for the reduction of stationary source air pollutants (ROG/VOC, NOx, and O3). The EDC/State Clean Air Act Plan has set a schedule for implementing and funding transportation contract measures to limit mobile source emissions. The project would not conflict with or obstruct implementation of either plan. Any activities associated with grading and construction would require a Fugitive Dust Mitigation Plan (FDMP). The FDMP would address grading measures and operation of equipment to minimize and reduce the level of defined particulate matter exposure and/or emissions to a less than significant level.

c. **Air Quality Standards and Cumulative Impacts:** Existing regulations implemented at issuance of building and grading permits would ensure that any construction related PM10 dust emissions would be reduced to acceptable levels. The EDCAQMD reviewed the project and conditions have been incorporated into the project to reduce any potential impacts to less than significant (Attachment 13). Construction and operation of the proposed project would not be considered to conflict with or obstruct the implementation of any applicable air quality plans. As such, the proposed project would have a less than significant impact.

d. **Sensitive Receptors:** The CEQA Guidelines (14 CCR §15000) identify sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others that are especially sensitive to the effects of air pollutants. Hospitals, schools, and convalescent hospitals are examples of sensitive receptors. The project site is not located near sensitive receptors and would not be considered a source of substantial pollutant concentrations. The project is conditioned to require protective measures during construction and post-construction. The proposed project would not be anticipated to result in the production of substantial concentrations of TACs, including DPM, localized CO, or criteria pollutants. In addition, the likelihood of NOA being present on the project site is low as the project site is not within an Asbestos Review Area according to the El Dorado County Naturally Occurring Asbestos Review Map. Therefore, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

e. **Objectionable Odors:** Table 3-1 of the Guide to Air Quality Assessment (AQMD, 2002) does not list the proposed use for warehouse/office as a use known to create objectionable odors. The project would also be conditioned to meet the requirements set forth by the County Environmental Management Department (Attachment 15). Impacts would be less than significant.

FINDING: The proposed project would not affect the implementation of regional air quality regulations or management plans. The proposed project would not be anticipated to cause substantial adverse effects to air quality, nor exceed established significance thresholds for air quality impacts.

IV. BIOLOGICAL RESOURCES. *Would the project:*				
	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 Wildlife 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, 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**

Regulatory Setting:

Federal Laws, Regulations, and Policies

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Code [USC] Section 1531 *et seq*.; 50 Code of Federal Regulations [CFR] Parts 17 and 222) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 *et seq*.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 10(a)(1)(B) of the ESA provides a process by which nonfederal entities may obtain an incidental take permit

from USFWS or NMFS for otherwise lawful activities that incidentally may result in “take” of endangered or threatened species, subject to specific conditions.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory birds. Most actions that result in take, or the permanent or temporary possession of, a migratory bird constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. USFWS is responsible for overseeing compliance with the MBTA.

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), first enacted in 1940, prohibits "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The definition for "Disturb" includes injury to an eagle, a decrease in its productivity, or nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present.

Clean Water Act

Clean Water Act (CWA) section 404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR Section 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies such as swimming pools, and water-filled depressions (33 CFR Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of U.S. Army Corps of Engineers (USACE) under the provisions of CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE through permit requirements. No USACE permit is effective in the absence of state water quality certification pursuant to Section 401 of CWA.

Section 401 of the CWA requires an evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. In California, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with the CWA and its water quality control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that may result in the discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401 water quality certification to ensure that any such discharge will comply with the applicable provisions of the CWA.

State Laws, Regulations, and Policies

California Fish and Game Code

The California Fish and Game Code includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA) and the California Endangered Species Act (CESA). The NPPA (California Fish and Game Code Section 1900-1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized in limited circumstances.

CESA (California Fish and Game Code Section 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the California Fish and Game Code prohibits the take of any species that is state listed as endangered or

threatened, or designated as a candidate for such listing. California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing the take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

California Fish and Game Code Section 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Section 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

Streambed Alteration Agreement

Sections 1601 to 1606 of the California Fish and Game Code require that a Streambed Alteration Application be submitted to CDFW for any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake. As a general rule, this requirement applies to any work undertaken within the 100-year floodplain of a stream or river containing fish or wildlife resources.

California Native Plant Protection Act

The California Native Plant Protection Act (California Fish and Game Code Section 1900–1913) prohibits the taking, possessing, or sale of any plants with a state designation of rare, threatened, or endangered (as defined by CDFW). The California Native Plant Society (CNPS) maintains a list of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (CNPS 2001). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

Forest Practice Act

Logging on private and corporate land in California is regulated by the Z'berg-Nejedly Forest Practices Act (FPA), which took effect January 1, 1974. The act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. CALFIRE works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs. A Timber Harvest Plan (THP) must be prepared by a Registered Professional Forester (RPF) for timber harvest on virtually all non-federal land. The FPA also established the requirement that all non-federal forests cut in the State be regenerated with at least three hundred stems per acre on high site lands, and one hundred fifty trees per acre on low site lands.

Local Laws, Regulations, and Policies

The County General Plan also include policies that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address potential impacts on special-status plant species or create opportunities for habitat improvement. The El Dorado County General Plan designates the Important Biological Corridor (IBC) (Exhibits 5.12-14, 5.12-5 and 5.12-7, El Dorado County, 2003). Lands located within the overlay district are subject to the following provisions, given that they do not interfere with agricultural practices:

- Increased minimum parcel size;
- Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;
- Lower thresholds for grading permits;
- Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;
- Increased riparian corridor and wetland setbacks;
- Greater protection for rare plants (e.g., no disturbance at all or disturbance only as recommended by U.S. Fish and Wildlife Service/California Department of Fish and Wildlife);
- Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;

- Building permits discretionary or some other type of "site review" to ensure that canopy is retained;
- More stringent standards for lot coverage, floor area ratio (FAR), and building height; and
- No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).

Discussion: A substantial adverse effect on Biological Resources would occur if the implementation of the project would:

- Substantially reduce or diminish habitat for native fish, wildlife or plants;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a native plant or animal community;
- Reduce the number or restrict the range of a rare or endangered plant or animal;
- Substantially affect a rare or endangered species of animal or plant or the habitat of the species; or
- Interfere substantially with the movement of any resident or migratory fish or wildlife species.

a. **Special Status Species:** Review of the California Natural Diversity Database (CNDDB) and of the County Geographic Information System (GIS) demonstrates the project site is not located within a sensitive natural community of the County, State or Federal agency, including but not limited to an Ecological Preserve, Important Biological Corridor (IBC), or the U.S. Fish and Wildlife Service (USFWS) Recovery Plan boundaries. The potential is low for the presence of any special-status wildlife species. The proposed building site is ruderal/disturbed grasslands and no trees would be removed as a result of the project. Impacts would be less than significant.

b.-c. **Riparian Habitat and Wetlands:** Review of the County Geographic Information System (GIS) demonstrates that there are no identified riparian habitat or wetlands located on the project site. Vegetation is ruderal/disturbed and heavily dominated by a dense cover of annual California grassland. No wetlands or other aquatic resources are present on-site. Impacts would be less than significant.

d. **Migration Corridors:** Review of the Department of Fish and Wildlife Migratory Deer Herd Maps and General Plan DEIR Exhibit 5.12-7 indicate that the Outside deer herd migration corridor does not extend over the project site. The El Dorado County General Plan does identify the project site as an Important Biological Corridor (IBC). The project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with any established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. Impacts would be less than significant.

e. **Local Policies:** Local policies to protect biological resources include the Important Biological Corridor (IBC) overlay, oak woodland preservation, rare plants and special-status species, and wetland preservation, all with the goal to preserve and protect sensitive natural resources within the County. Based on review of the County Geographic Information System (GIS), the project is not located in the IBC. The proposed project was analyzed in accordance with the requirements of Zoning Ordinance Chapter 130.39 (Oak Resources Conservation) and no trees are proposed for removal. Further, a Botanical Survey was prepared for the project by Sycamore Environmental Consultants on November 1, 2019 (Attachment 18). The site is predominantly flat and previously disturbed by grading and spoils pile stockpiling. Vegetation on-site is ruderal/disturbed and annual California grassland. There is open canopy mixed oak woodland at the north/west corner; however, no development is proposed in that area. Old Mill Creek crosses Shingle Lime Mine Road but does not occur on the property. There is no chaparral in the Biological Study Area (BSA). Based on review of the report, the study area does not contain chaparral or oak woodland habitats that typically provide habitat and no special-status plants were found. The project would be subject to paying a Mitigation Area 1 fee at time of building permit. The report summary did not recommend further analysis. Impacts would be less than significant.

f. **Adopted Plans**: The project would not conflict with the provisions of an adopted Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The project site is not in an Important Biological Corridor (IBC). There would be no impact.

Finding: With the incorporation of standard conditions of approval (COA), impacts to Biological Resources would be less than significant.

V. CULTURAL RESOURCES. *Would the project:*				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			**X**	
b. Cause a substantial adverse change in the significance of 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**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

The National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. The criteria for listing in the NRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of history (events);
B. Are associated with the lives of persons significant in our past (persons);
C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (architecture); or
D. Have yielded or may likely yield information important in prehistory or history (information potential).

State Laws, Regulations, and Policies

California Register of Historical Resources

Public Resources Code Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

A. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
B. Are associated with the lives of persons important in our past;

C. Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
D. Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

The California Register of Historic Places

The California Register of Historic Places (CRHP) program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under the California Environmental Quality Act. The criteria for listing in the CRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
B. Are associated with the lives of persons important to local, California or national history.
C. Embody the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
D. Have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The State Office of Historic Preservation sponsors the California Historical Resources Information System (CHRIS), a statewide system for managing information on the full range of historical resources identified in California. CHRIS provides an integrated database of site-specific archaeological and historical resources information. The State Office of Historic Preservation also maintains the California Register of Historical Resources (CRHR), which identifies the State's architectural, historical, archeological and cultural resources. The CRHR includes properties listed in or formally determined eligible for the National Register and lists selected California Registered Historical Landmarks.

Public Resources Code (Section 5024.1[B]) states that any agency proposing a project that could potentially impact a resource listed on the CRHR must first notify the State Historic Preservation Officer, and must work with the officer to ensure that the project incorporates "prudent and feasible measures that will eliminate or mitigate the adverse effects."

California Health and Safety Code Section 7050.5 requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Section 5097.98 of the California Public Resources Code stipulates that whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The decedents may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the Native American Heritage

Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CEQA and CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.
- Although not specifically inclusive of paleontological resources, these criteria may also help to define "a unique paleontological resource or site."

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA Section 21083.2.

Section 15064.5 of the CEQA Guidelines notes that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of a historic resource before they approve such projects. Historic resources are those that are:

- listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code Section 5024.1[k]);
- included in a local register of historic resources (Public Resources Code Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of Public Resources Code Section 5024.1(g); or
- determined by a lead agency to be historically significant.

CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

The lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with CEQA and other applicable statutes. Paleontological and historical resource management is also addressed in Public Resources Code Section 5097.5, "Archaeological, Paleontological, and Historical Sites." This statute defines as a misdemeanor any unauthorized disturbance or removal of a fossil site or remains on public land and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources. This statute would apply to any construction or other related project impacts that would occur on state-owned or state-managed lands. The County General Plan contains policies describing specific, enforceable measures to protect cultural resources and the treatment of resources when found.

Discussion: In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a historical or cultural resource significant or important. A substantial adverse effect on Cultural Resources would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a prehistoric or historic archaeological site or property that is historically or culturally significant to a community or ethnic or social group; or a paleontological site except as a part of a scientific study;
- Affect a landmark of cultural/historical importance;
- Conflict with established recreational, educational, religious or scientific uses of the area; or
- Conflict with adopted environmental plans and goals of the community where it is located.

a.-d. **Historic, Archeological Resources, Human Remains.** A comprehensive Cultural Resources Study was prepared for the project dated October 2019 by Historic Resource Associates. The report stated that no significant prehistoric archaeological sites, features, or artifacts were found, nor any significant historical buildings, structures or objects, and no further analysis was recommended. Further, with inclusion of COA impacts would be less than significant.

FINDING: With the inclusion of COA, the proposed project would have a less than significant impact on Cultural Resources.

VI. GEOLOGY AND SOILS. *Would the project:*	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:				
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 on a geologic 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 waste water disposal systems where sewers are not available for the disposal of waste water?				**X**

Regulatory Setting:

Federal Laws, Regulations, and Policies
National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk-reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: USGS, National Science Foundation (NSF), Federal Emergency Management Agency (FEMA), and National Institute of Standards and Technology (NIST). Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2009) are to:

1. Develop effective measures to reduce earthquake hazards;
2. Promote the adoption of earthquake hazard reduction activities by federal, state, and local governments; national building standards and model building code organizations; engineers; architects; building owners; and others who play a role in planning and constructing buildings, bridges, structures, and critical infrastructure or "lifelines";
3. Improve the basic understanding of earthquakes and their effects on people and infrastructure through interdisciplinary research involving engineering; natural sciences; and social, economic, and decision sciences; and
4. Develop and maintain the USGS seismic monitoring system (Advanced National Seismic System); the NSF-funded project aimed at improving materials, designs, and construction techniques (George E. Brown Jr. Network for Earthquake Engineering Simulation); and the global earthquake monitoring network (Global Seismic Network).

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

State Laws, Regulations, and Policies

Alquist–Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 *et seq*.) was passed to reduce the risk to life and property from surface faulting in California. The Alquist–Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are "sufficiently active" and "well defined." Before a project can be permitted, cities and counties are required to have a geologic investigation conducted to demonstrate that the proposed buildings would not be constructed across active faults.

Historical seismic activity and fault and seismic hazards mapping in the project vicinity indicate that the area has relatively low potential for seismic activity (El Dorado County 2003). No active faults have been mapped in the project area, and none of the known faults have been designated as an Alquist-Priolo Earthquake Fault Zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690–2699.6) establishes statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist–Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the

Alquist–Priolo Act. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other seismic hazards, and cities and counties are required to regulate development within mapped seismic hazard zones. In addition, the act addresses not only seismically induced hazards but also expansive soils, settlement, and slope stability.
Mapping and other information generated pursuant to the SHMA is to be made available to local governments for planning and development purposes. The State requires: (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation, as part of the local construction permit approval process; and (2) the agent for a property seller or the seller if acting without an agent, must disclose to any prospective buyer if the property is located within a Seismic Hazard Zone. Under the Seismic Hazards Mapping Act, cities and counties may withhold the development permits for a site within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

California Building Standards Code

Title 24 CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California.

Discussion: A substantial adverse effect on Geologic Resources would occur if the implementation of the project would:

- Allow substantial development of structures or features in areas susceptible to seismically induced hazards such as groundshaking, liquefaction, seiche, and/or slope failure where the risk to people and property resulting from earthquakes could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards;
- Allow substantial development in areas subject to landslides, slope failure, erosion, subsidence, settlement, and/or expansive soils where the risk to people and property resulting from such geologic hazards could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards; or
- Allow substantial grading and construction activities in areas of known soil instability, steep slopes, or shallow depth to bedrock where such activities could result in accelerated erosion and sedimentation or exposure of people, property, and/or wildlife to hazardous conditions (e.g., blasting) that could not be mitigated through engineering and construction measures in accordance with regulations, codes, and professional standards.

a. **Seismic Hazards:**

i) According to the California Department of Conservation Division of Mines and Geology, there are no Alquist-Priolo fault zones within the west slope of El Dorado County. However, a fault zone has been located in the Tahoe Basin and Echo Lakes area. The West Tahoe Fault runs along the base of the range front at the west side of the Tahoe Basin. The West Tahoe Fault has a mapped length of 45 km. South of Emerald Bay the West Tahoe Fault extends onshore as two parallel strands. In the lake, the fault has clearly defined scarps that offset submarine fans, lake-bottom sediments, and the McKinney Bay slide deposits (DOC, 2016). There is clear evidence that the discussed onshore portion of the West Tahoe Fault is active with multiple events in the Holocene and poses a surface rupture hazard. However, because of the distance between the project site and these faults, the impact would be less than significant.

ii) The potential for seismic ground shaking in the project area would be considered remote for the reason stated in Section i) above. Any potential impacts due to seismic impacts would be addressed through compliance with the Uniform Building Code (UBC). All structures would be built to meet the construction standards of the UBC for the appropriate seismic zone. The impact would be less than significant.

iii) El Dorado County is considered an area with low potential for seismic activity. There are no landslide, liquefaction, or fault zones (DOC, 2007). All structures would be built to meet the construction standards of the UBC for the appropriate seismic zone. The impact would be less than significant.

iv) All grading activities onsite would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. The impact would be less than significant.

b. **Soil Erosion:** Based on review of the Drainage Study prepared for the project (Attachment 19), a soil analysis determined that the soils on-site are mostly Class C, Rescue Sandy Loam (REB). There could be the potential for some erosion, changes in topography, and minimal change to soil conditions, however, these concerns would be addressed during the grading permit process. All grading activities onsite would comply with the El Dorado County Grading, Erosion and Sediment Control Ordinance including the implementation of pre- and post-construction Best Management Practices (BMPs). Implemented BMPs are required to be consistent with the County's California Stormwater Pollution Prevention Plan (SWPPP) issued by the State Water Resources Control Board to eliminate run-off and erosion and sediment controls. Any grading activities exceeding 250 cubic yards of graded material or grading completed for the purpose of supporting a structure must meet the provisions contained in the County of El Dorado Grading, Erosion, and Sediment Control Ordinance. Any future construction would require similar review for compliance with the County SWPPP. With compliance with County Ordinance requirements, impacts would be less than significant.

c. **Geologic Hazards:** Based on the Seismic Hazards Mapping Program administered by the California Geological Survey, no portion of El Dorado County is located in a Seismic Hazard Zone or those areas prone to liquefaction and earthquake-induced landslides (DOC, 2013). Therefore, El Dorado County is not considered to be at risk from liquefaction hazards. Lateral spreading is typically associated with areas experiencing liquefaction. Because liquefaction hazards are not present in El Dorado County, the county is not at risk for lateral spreading. All grading activities would comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. With compliance with County Ordinance requirements, impacts would be less than significant.

d. **Expansive Soils:** Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. When buildings are placed on expansive soils, foundations may rise each wet season and fall each dry season. This movement may result in cracking foundations, distortion of structures, and warping of doors and windows. The western portions of the county have a low expansiveness rating. Any development of the site would be required to comply with the El Dorado County Grading, Erosion and Sediment Control Ordinance and the development plans for any structures would be required to implement the Seismic construction standards. With compliance with County Ordinance requirements, impacts would be less than significant.

e. **Septic Capability:** No septic is proposed as part of the project. The project site would be served by public sewer. A Facilities Improvement Letter (FIL) from the El Dorado Irrigation District (EID) was obtained confirming there is existing sewer line at the project site has adequate capacity. There would be no impact.

FINDING: A review of the soils and geologic conditions on the project site determined that the project would not result in a substantial adverse effect. All grading activities would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance which would address potential impacts related to soil erosion, landslides and other geologic impacts. Future development would be required to comply with the UBC which would address potential seismic related impacts. With compliance with County Ordinance requirements, impacts would be less than significant.

VII. GREENHOUSE GAS EMISSIONS. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			**X**	

Background/Science

Cumulative greenhouse gases (GHG) emissions are believed to contribute to an increased greenhouse effect and global climate change, which may result in sea level rise, changes in precipitation, habitat, temperature, wildfires, air pollution levels, and changes in the frequency and intensity of weather-related events. While criteria pollutants and toxic air contaminants are pollutants of regional and local concern (see Section III. Air Quality above); GHG are global pollutants. The primary land-use related GHG are carbon dioxide (CO_2), methane (CH_4) and nitrous oxides (N_2O). The individual pollutant's ability to retain infrared radiation represents its "global warming potential" and is expressed in terms of CO_2 equivalents; therefore CO_2 is the benchmark having a global warming potential of 1. Methane has a global warming potential of 21 and thus has a 21 times greater global warming effect per metric ton of CH_4 than CO_2. Nitrous Oxide has a global warming potential of 310. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., $MTCO_2e/yr$). The three other main GHG are Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride. While these compounds have significantly higher global warming potentials (ranging in the thousands), all three typically are not a concern in land-use development projects and are usually only used in specific industrial processes.

GHG Sources

The primary man-made source of CO_2 is the burning of fossil fuels; the two largest sources being coal burning to produce electricity and petroleum burning in combustion engines. The primary sources of man-made CH_4 are natural gas systems losses (during production, processing, storage, transmission and distribution), enteric fermentation (digestion from livestock) and landfill off-gassing. The primary source of man-made N_2O is agricultural soil management (fertilizers), with fossil fuel combustion a very distant second. In El Dorado County, the primary source of GHG is fossil fuel combustion mainly in the transportation sector (estimated at 70% of countywide GHG emissions). A distant second are residential sources (approximately 20%), and commercial/industrial sources are third (approximately 7%). The remaining sources are waste/landfill (approximately 3%) and agricultural (<1%).

Regulatory Setting:

Federal Laws, Regulations, and Policies

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012-2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses.

State Laws, Regulations, and Policies

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the *California Climate Solutions Act of 2006* (Stats. 2006, ch. 488) (Health & Safety Code, Section 38500 et seq.). AB 32 requires a statewide GHG emissions reduction to 1990 levels by the year 2020. AB 32 requires the California Air Resources Board (CARB) to implement and enforce the statewide cap. When AB 32 was signed, California's annual GHG emissions were estimated at 600 million metric tons of CO_2 equivalent ($MMTCO_2e$) while 1990 levels were estimated at 427 $MMTCO_2e$. Setting 427 $MMTCO_2e$ as the emissions target for 2020, current (2006) GHG emissions levels must be reduced by 29%. CARB adopted the AB 32 Scoping Plan in December 2008 establishing various actions the state would implement to achieve this reduction (CARB, 2008). The Scoping Plan recommends a community-wide GHG reduction goal for local governments of 15%.

In June 2008, the California Governor's Office of Planning and Research's (OPR) issued a Technical Advisory (OPR, 2008) providing interim guidance regarding a proposed project's GHG emissions and contribution to global climate change. In the absence of adopted local or statewide thresholds, OPR recommends the following approach for analyzing GHG emissions: Identify and quantify the project's GHG emissions, assess the significance of the impact on climate change; and if the impact is found to be significant, identify alternatives and/or Mitigation Measures that would reduce the impact to less than significant levels (CEC, 2006).

Discussion

CEQA does not provide clear direction on addressing climate change. It requires lead agencies identify project GHG emissions impacts and their "significance," but is not clear what constitutes a "significant" impact. As stated above, GHG impacts are inherently cumulative, and since no single project could cause global climate change, the CEQA test is if impacts are "cumulatively considerable." Not all projects emitting GHG contribute significantly to climate change. CEQA authorizes reliance on previously approved plans (i.e., a Climate Action Plan (CAP), etc.) and mitigation programs adequately analyzing and mitigating GHG emissions to a less than significant level. "Tiering" from such a programmatic-level document is the preferred method to address GHG emissions. El Dorado County does not have an adopted CAP or similar program-level document; therefore, the project's GHG emissions must be addressed at the project-level.

Unlike thresholds of significance established for criteria air pollutants in EDCAQMD's *Guide to Air Quality Assessment* (February 2002) ("CEQA Guide"), the District has not adopted GHG emissions thresholds for land use development projects. In the absence of County adopted thresholds, EDCAQMD recommends using the adopted thresholds of other lead agencies which are based on consistency with the goals of AB 32. Since climate change is a global problem and the location of the individual source of GHG emissions is somewhat irrelevant, it's appropriate to use thresholds established by other jurisdictions as a basis for impact significance determinations. Projects exceeding these thresholds would have a potentially significant impact and be required to mitigate those impacts to a less than significant level. Until the County adopts a CAP consistent with CEQA Guidelines Section 15183.5, and/or establishes GHG thresholds, the County will follow an interim approach to evaluating GHG emissions utilizing significance criteria adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) to determine the significance of GHG emissions.

The SMAQMD has developed a screening table using CalEEMod which allows quick assessment of projects to screen out those below the thresholds as their impacts would be less than significant. For projects below the threshold, no further GHG analysis is required.

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

Implementation of the proposed project is not expected to cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO2) and, to a lesser extent, other GHG pollutants, such as methane (CH4) and nitrous oxide (N2O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO2 equivalents (MTCO2e/yr).

The EDCAQMD has not formally adopted thresholds for evaluating GHG emissions, but has recommended the use of thresholds adopted by the SMAQMD. The thresholds of significance established by SMAQMD, and used by EDCAQMD, were developed to identify emissions levels for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization. Per the SMAQMD Thresholds of Significance Table, updated April 2020, if a proposed project results in emissions less than 1,100 MTCO2e/yr during either construction or operation, the proposed project would be anticipated to result in a less-than-significant impact related to GHG emissions.

GHG emissions are quantified with CalEEMod using the same assumptions as presented in the Air Quality section above, and compared to the thresholds of significance noted above. The proposed project's required compliance with the 2019 California Building Energy Efficiency Standards Code would ensure the project meets current applicable requirements.

Construction Emissions: Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. However, the proposed project's construction GHG emissions are not expected to be a cumulatively considerable contribution to global climate change.

Operational GHG Emissions: The operational GHG emissions at full buildout are not expected to exceed the applicable threshold of significance. Therefore, the proposed project would not result in a cumulatively considerable contribution to global climate change.

FINDING: The project would not generate GHG emissions that would have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs; herefore, the project would not result in a cumulatively considerable incremental contribution to impacts related to GHG emissions or climate change. Impacts would be less than significant.

VIII. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	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**	

VIII. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
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 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 or working 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**	

Regulatory Setting:

Hazardous materials and hazardous wastes are subject to extensive federal, state, and local regulations to protect public health and the environment. These regulations provide definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, state, and regional agencies enforcing these regulations are USEPA and the Occupational Safety and Health Administration (OSHA); California Department of Toxic Substances Control (DTSC); California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA); California Governor's Office of Emergency Services (Cal OES); and El Dorado County Environmental Management Department, Hazardous Materials.

Federal Laws, Regulations, and Policies

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq.*) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC Section 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Energy Policy Act of 2005

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the Underground Storage Tank (UST) Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with USEPA, SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from tanks. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies [CUPAs], described in more detail below), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing.

Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 CFR, Part 112) apply to facilities with a single above-ground storage tank (AST) with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

Occupational Safety and Health Administration

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

Code of Federal Regulations (14 CFR) Part 77

14 CFR Part 77.9 is designed to promote air safety and the efficient use of navigable airspace. Implementation of the code is administered by the Federal Aviation Administration (FAA). If an organization plans to sponsor any construction or alterations that might affect navigable airspace, a Notice of Proposed Construction or Alteration (FAA Form 7460-1) must be filed. The code provides specific guidance regarding FAA notification requirements.

State Laws, Regulations, and Policies

Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public of exposure to such chemicals in the

products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. OEHHA, an agency under the California Environmental Protection Agency (CalEPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other state agencies set the standards for their programs, while local governments (CUPAs) implement the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of USTs and ASTs;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

Hazardous Materials Business Plans

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet (cf) of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A) (Cal OES, 2015). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees (Cal OES, 2015). In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups) (Cal OES, 2015).

California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans.
Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers must also make material safety data sheets available to employees and document employee information and training programs. In addition, Cal/OSHA has established maximum permissible RF radiation exposure limits for workers (Title 8 CCR Section 5085[b]), and requires warning signs where RF radiation might exceed the specified limits (Title 8 CCR Section 5085 [c]).

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance are required to develop a risk management plan (RMP). This RMP

must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or a trade secret.

California Department of Forestry and Fire Protection Wildland Fire Management

The Office of the State Fire Marshal and the CALFIRE administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline fueled internal combustion engines must not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Highway Patrol

CHP, along with Caltrans, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

Local Laws, Regulations, and Policies

A map of the fuel loading in the County (General Plan Figure HS-1) shows the fire hazard severity classifications of the SRAs in El Dorado County, as established by CDF. The classification system provides three classes of fire hazards: Moderate, High, and Very High. Fire Hazard Ordinance (Chapter 8.08) requires defensible space as described by the State Public Resources Code, including the incorporation and maintenance of a 30-foot fire break or vegetation fuel clearance around structures in fire hazard zones. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by state law (Patton 2002). The Fire Hazard Ordinance also establishes limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments.

Discussion: A substantial adverse effect due to Hazards or Hazardous Materials would occur if implementation of the project would:

- Expose people and property to hazards associated with the use, storage, transport, and disposal of hazardous materials where the risk of such exposure could not be reduced through implementation of Federal, State, and local laws and regulations;
- Expose people and property to risks associated with wildland fires where such risks could not be reduced through implementation of proper fuel management techniques, buffers and landscape setbacks, structural design features, and emergency access; or
- Expose people to safety hazards as a result of former on-site mining operations.

a.-c. **Hazardous Materials:** The project would not involve the routine transportation, use, or disposal of hazardous materials such as construction materials, paints, fuels, landscaping materials, and household cleaning supplies. Project construction may involve some hazardous materials temporarily but on a small scale and therefore impacts would be less than significant.

d. **Hazardous Sites:** The project site is not included on a list of or near any hazardous materials sites pursuant to Government Code section 65962.5 (DTSC, 2015). There would be no impact.

e.-f. **Aircraft Hazards, Private Airstrips:** As shown on the El Dorado County GIS map for Airport Safety Zones, the project is not located within an Airport Safety District. Impacts would be less than significant.

g. **Emergency Plan:** The project was distributed to local law enforcement El Dorado County Sheriff's Office, for review. The project would not impair implementation of any emergency response plan or emergency evacuation plan. Impacts would be less than significant.

h. **Wildfire Hazards:** The project site is in the high fire hazard area for wildland fire pursuant to Figure HS-1 of the Fire Hazard Rating in El Dorado County of the General Plan (2015), and review of Review of the County Geographic Information System (GIS). The Cameron Park Fire Department in cooperation with the California Department of Forestry and Fire Protection (CAL FIRE) would review the project improvement plans at time of building permit review. Impacts would be less than significant.

FINDING: The project would not expose the area to hazards relating to the use, storage, transport, or disposal of hazardous materials. For this Hazards and Hazardous Materials category, impacts would be less than significant.

IX. HYDROLOGY AND WATER QUALITY. Would the project:	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 alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff 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 runoff?			**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**

IX. HYDROLOGY AND WATER QUALITY. Would the project:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				**X**
j. Inundation by seiche, tsunami, or mudflow?				**X**

Regulatory Setting:

Federal Laws, Regulations, and Policies

Clean Water Act

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The key sections pertaining to water quality regulation for the Proposed Project are CWA Section 303 and Section 402.

Section 303(d) — Listing of Impaired Water Bodies

Under CWA Section 303(d), states are required to identify "impaired water bodies" (those not meeting established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for the development of control plans to improve water quality. USEPA then approves the State's recommended list of impaired waters or adds and/or removes waterbodies.

Section 402—NPDES Permits for Stormwater Discharge

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the NPDES, which is officially administered by USEPA. In California, USEPA has delegated its authority to the State Water Resources Control Board (SWRCB), which, in turn, delegates implementation responsibility to the nine RWQCBs, as discussed below in reference to the Porter-Cologne Water Quality Control Act.
The NPDES program provides for both general (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits. General Permit for Construction Activities: Most construction projects that disturb 1.0 or more acre of land are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). SWPPP must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations, and present a list of Best Management Practices (BMPs) that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor construction activities and report compliance to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Municipal Stormwater Permitting Program

SWRCB regulates stormwater discharges from municipal separate storm sewer systems (MS4s) through its Municipal Storm Water Permitting Program (SWRCB, 2013). Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for medium (population between 100,000 and 250,000 people) and large (population of 250,000 or more people) municipalities, and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990. Beginning in 2003, SWRCB began issuing Phase II MS4 permits for smaller municipalities (population less than 100,000).

El Dorado County is covered under two SWRCB Regional Boards. The West Slope Phase II Municipal Separate Storm Sewer Systems (MS4) NPDES Permit is administered by the Central Valley Regional Water Quality Control Board (RWQCB) (Region Five). The Lake Tahoe Phase I MS4 NPDES Permit is administered by the Lahontan RWQCB (Region Six). The current West Slope MS4 NPDES Permit was adopted by the SWRCB on February 5, 2013. The Permit became effective on July 1, 2013 for a term of five years and focuses on the enhancement of surface water quality within high priority urbanized areas. The current Lake Tahoe MS4 NPDES Permit was adopted and took effect on December 6, 2011 for a term of five years. The Permit incorporated the Lake Tahoe Total Maximum Daily Load (TMDL) and the Lake Clarity Crediting Program (LCCP) to account for the reduction of fine sediment particles and nutrients discharged to Lake Tahoe.

On May 19, 2015 the El Dorado County Board of Supervisors formally adopted revisions to the Storm Water Quality Ordinance (Ordinance 4992). Previously applicable only to the Lake Tahoe Basin, the ordinance establishes legal authority for the entire unincorporated portion of the County. The purpose of the ordinance is to 1) protect health, safety, and general welfare, 2) enhance and protect the quality of Waters of the State by reducing pollutants in storm water discharges to the maximum extent practicable and controlling non-storm water discharges to the storm drain system, and 3) cause the use of Best Management Practices to reduce the adverse effects of polluted runoff discharges on Waters of the State.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities complying with FEMA regulations that limit development in floodplains. The NFIP regulations permit development within special flood hazard zones provided that residential structures are raised above the base flood elevation of a 100-year flood event. Non-residential structures are required either to provide flood proofing construction techniques for that portion of structures below the 100-year flood elevation or to elevate above the 100-year flood elevation. The regulations also apply to substantial improvements of existing structures.

State Laws, Regulations, and Policies

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (known as the Porter–Cologne Act), passed in 1969, dovetails with the CWA (see discussion of the CWA above). It established the SWRCB and divided the state into nine regions, each overseen by an RWQCB. SWRCB is the primary State agency responsible for protecting the quality of the state's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303[d]. In general, SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires RWQCBs to develop water quality control plans (also known as basin plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met. Under the Porter–Cologne Act, basin plans must be updated every 3 years.

Discussion: A substantial adverse effect on Hydrology and Water Quality would occur if the implementation of the project would:

- Expose residents to flood hazards by being located within the 100-year floodplain as defined by the Federal Emergency Management Agency;
- Cause substantial change in the rate and amount of surface runoff leaving the project site ultimately causing a substantial change in the amount of water in a stream, river or other waterway;
- Substantially interfere with groundwater recharge;
- Cause degradation of water quality (temperature, dissolved oxygen, turbidity and/or other typical stormwater pollutants) in the project area; or
- Cause degradation of groundwater quality in the vicinity of the project site.

a. **Water Quality Standards:** Some waste discharge may occur as part of the project. Erosion control would be required as part of any future building or grading permit. Stormwater runoff from potential development would contain water quality protection features in accordance with a potential National Pollutant Discharge Elimination System (NPDES) stormwater permit, as deemed applicable. The project would comply with County Ordinances and standards regarding waste discharge therefore the project would not be expected to violate water quality standards. Impacts would be less than significant.

b. **Groundwater Supplies:** The geology of the Western Slope portion of El Dorado County is principally hard, crystalline, igneous, or metamorphic rock overlain with a thin mantle of sediment or soil. Groundwater in this region is found in fractures, joints, cracks, and fault zones within the bedrock mass. These discrete fracture areas are typically vertical in orientation rather than horizontal as in sedimentary or alluvial aquifers. Recharge is predominantly through rainfall infiltrating into the fractures. Movement of this groundwater is very limited due to the lack of porosity in the bedrock. Wells are typically drilled to depths ranging from 80 to 300 feet in depth. There is no evidence that the project will substantially reduce or alter the quantity of groundwater in the vicinity, or materially interfere with groundwater recharge in the area of the proposed project. The project is not anticipated to affect potential groundwater supplies above pre-project levels. Water for the project would be provided by public water connection to the El Dorado Irrigation District (EID). Impacts to groundwater supplies would be less than significant.

c.-f. **Drainage Patterns:** A grading permit would be required to address grading, erosion and sediment control for project construction. Construction activities would be required to adhere to the El Dorado County Grading, Erosion Control and Sediment Ordinance. This includes the use of Best Management Practices (BMPs) to minimize degradation of water quality during construction. Preliminary Grading and Drainage Plans are included and show the location of proposed development including the building site, parking, storm drains/drain inlets, and bio-swales (Attachments 10 and 19). Further, with implementation of standard requirements, impacts on drainage patterns would be less than significant.

g.-j. **Flood-related Hazards:** The project site is not located within any mapped 100-year flood areas and would not result in the construction of any structures that would impede or redirect flood flows (FEMA, 2008). No dams which would result in potential hazards related to dam failures are located in the project area. The risk of exposure to seiche, tsunami, or mudflows would be remote. There would be no impact.

FINDING: The proposed project would be required to address any potential erosion and sediment control. No significant hydrological impacts are expected with the development of the project either directly or indirectly. With implementation and compliance with the County Ordinances and standards, impacts would be less than significant.

X. **LAND USE PLANNING.** *Would the project:*	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 plan?				X

Regulatory Setting:

California State law requires that each City and County adopt a General Plan "for the physical development of the City and any land outside its boundaries which bears relation to its planning." Ideally, a General Plan is designed to address the issues facing the City or County for the next 15-20 years. The General Plan expresses the community's development goals and incorporates public policies relative to the distribution of future public and private land uses. The El Dorado County General Plan was updated in 2015. The 2013-2021 Housing Element was adopted in 2013, and is currently undergoing a comprehensive update.

Discussion: A substantial adverse effect on Land Use would occur if the implementation of the project would:

- Result in the conversion of Prime Farmland as defined by the State Department of Conservation;
- Result in conversion of land that either contains choice soils or which the County Agricultural Commission has identified as suitable for sustained grazing, provided that such lands were not assigned urban or other nonagricultural use in the Land Use Map;
- Result in conversion of undeveloped open space to more intensive land uses;
- Result in a use substantially incompatible with the existing surrounding land uses; or
- Conflict with adopted environmental plans, policies, and goals of the community.

a. **Established Community:** The project is located within the Cameron Park Community Region. Community Regions are defined as those areas which are appropriate for the highest intensity of self-sustaining compact urban-type development or suburban type development within the County based on the municipal spheres of influence, availability of infrastructure, public services, major transportation corridors and travel patterns, the location of major topographic patterns and features, and the ability to provide and maintain appropriate transitions at Community Region boundaries. The project site is surrounded by existing commercial and residential development. The project would not be considered to contributing to urban decay (urban decay is a process in which a previously functioning area falls into disrepair; or creating an urban landscape that is generally decrepit and desolate); it would not conflict with the existing land use pattern in the area; or physically divide an established community. Impacts would be less than significant.

b. **Land Use Consistency:** The parcel has a General Plan land use designation of Industrial (I), and zoned Light Industrial within a Design Review Community Combining Zone (IL-DC). The purpose of the Industrial (I) General Plan land use designation is “to provide for a full range of light and heavy industrial uses. Types of uses that would be permitted include manufacturing, processing, distribution, and storage.

Incompatible, non-industrial uses, excluding support services, shall be discouraged. Industrial lands in Rural Regions may have uses which support agriculture, timber resource production, mineral extraction, or other resource utilization. This designation is considered appropriate within Community Regions, Rural Centers and Rural Regions". The proposed use for a warehouse/office is an allowed use within the IL zone, is consistent with the (I) General Plan land use designation, and would be compatible with the surrounding development in the Barnett Ranch Business Park. The project has been designed in a manner to fit in with the surrounding commercial/industrial uses, including neutral earth tone colors, installation of landscape, downward-shielded lighting, and building address signage only. Impacts would be less than significant.

c. **Habitat Conservation Plan:** The project site is not located within an adopted habitat conservation plan or natural community conservation plan. There would be no impact.

FINDING: The proposed use of the land would be consistent with uses allowed in the Cameron Park Community Region, with the General Plan, and Zoning Ordinance. For this Land Use Planning section, impacts would be less than significant.

XI. MINERAL RESOURCES. *Would the project:*	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**

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to mineral resources and the Proposed Project.

State Laws, Regulations, and Policies

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain regionally significant mineral resources. Designations of land areas are assigned by CDC and California Geological Survey following analysis of geologic reports and maps, field investigations, and using information about the locations of active sand and gravel mining operations. Local jurisdictions are required to enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans.

The California Mineral Land Classification System represents the relationship between knowledge of mineral deposits and their economic characteristics (grade and size). The nomenclature used with the California Mineral Land Classification System is important in communicating mineral potential information in activities such as mineral land classification, and usage of these terms are incorporated into the criteria developed for assigning

mineral resource zones. Lands classified MRZ-2 are areas that contain identified mineral resources. Areas classified as MRZ-2a or MRZ-2b (referred to hereafter as MRZ-2) are considered important mineral resource areas.

Local Laws, Regulations, and Policies

El Dorado County in general is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, including gold, are considered the most significant extractive mineral resources. Exhibit 5.9-6 shows the MRZ-2 areas within the county based on designated Mineral Resource (-MR) overlay areas. The -MR overlay areas are based on mineral resource mapping published in the mineral land classification reports referenced above. The majority of the county's important mineral resource deposits are concentrated in the western third of the county.

According to General Plan Policy 2.2.2.7, before authorizing any land uses within the -MR overlay zone that will threaten the potential to extract minerals in the affected area, the County shall prepare a statement specifying its reasons for considering approval of the proposed land use and shall provide for public and agency notice of such a statement consistent with the requirements of Public Resources Code section 2762. Furthermore, before finally approving any such proposed land use, the County shall balance the mineral values of the threatened mineral resource area against the economic, social, or other values associated with the proposed alternative land uses. Where the affected minerals are of regional significance, the County shall consider the importance of these minerals to their market region as a whole and not just their importance to the County.

Where the affected minerals are of Statewide significance, the County shall consider the importance of these minerals to the State and Nation as a whole. The County may approve the alternative land use if it determines that the benefits of such uses outweigh the potential or certain loss of the affected mineral resources in the affected regional, Statewide, or national market.

Discussion: A substantial adverse effect on Mineral Resources would occur if the implementation of the project would:

- Result in obstruction of access to, and extraction of mineral resources classified MRZ-2x, or result in land use compatibility conflicts with mineral extraction operations.

a.-b. **Mineral Resources.** The project site has not been delineated in the El Dorado County General Plan as a locally important mineral resource recovery site (2003, Exhibits 5.9-6 and 5.9-7). Review of the California Department of Conservation Geologic Map data showed that the project site is not within a mineral resource zone district. There would be no impact.

FINDING: No impacts to mineral resources are expected either directly or indirectly. For this mineral resources category, there would be no impacts.

XII.NOISE. *Would the project result in:*				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact

XII.NOISE. *Would the project result in:*	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 groundborne vibration or groundborne 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 level?			**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**	

Regulatory Setting:

No federal or state laws, regulations, or policies for construction-related noise and vibration apply to the proposed project. However, the Federal Transit Administration (FTA) Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA Leq and 100 dBA Leq should be used for residential and commercial/industrial areas, respectively (FTA 2006).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inches per second (in/sec) PPV for buildings susceptible to vibration damage (FTA 2006).

Discussion: A substantial adverse effect due to Noise would occur if the implementation of the project would:

- Result in short-term construction noise that creates noise exposures to surrounding noise sensitive land uses in excess of 60dBA CNEL;
- Result in long-term operational noise that creates noise exposures in excess of 60 dBA CNEL at the adjoining property line of a noise sensitive land use and the background noise level is increased by 3dBA, or more; or
- Results in noise levels inconsistent with the performance standards contained in Table 130.37.060.1 and Table 130.37.060.2 of the El Dorado County Zoning Ordinance.

TABLE 6-2
NOISE LEVEL PERFORMANCE PROTECTION STANDARDS
FOR NOISE SENSITIVE LAND USES
AFFECTED BY NON-TRANSPORTATION* SOURCES

Noise Level Descriptor	Daytime 7 a.m. - 7 p.m.		Evening 7 p.m. - 10 p.m.		Night 10 p.m. - 7 a.m.	
	Community/ Rural Centers	Rural Regions	Community/ Rural Centers	Rural Regions	Community/ Rural Centers	Rural Regions
Hourly L_{eq}, dB	55	50	50	45	45	40
Maximum level, dB	70	60	60	55	55	50

a. **Noise Exposures:** The proposed warehouse/office is not expected to generate noise levels exceeding the performance standards contained within Chapter 130.37 of the Zoning Ordinance, and General Plan Policies. Further, the hours of operation are limited to 7am-5pm. Impacts would be less than significant.

b. **Groundborne Shaking:** Construction of the project may generate short-term ground borne vibration or shaking events during project construction however this would be temporary. Impacts would be less than significant.

c. **Permanent Noise Increases:** The long term noise associated with the operation of a warehouse/office would be a new noise source however is not be expected to exceed the noise standards contained in the Zoning Ordinance and General Plan. Noise from the proposed project is not expected to exceed existing noise from the businesses in the Business Park. Impacts would be less than significant.

d. **Short Term Noise:** The noise resulting from construction activities for the project development may result in short-term noise impacts, however these activities would require grading and building permits and would be restricted to construction hours. All construction and grading operations would be required to comply with the noise performance standards contained in the General Plan. Impacts would be less than significant.

e.-f. **Aircraft Noise:** The project is not within the vicinity of an airport; therefore, the project would not expose people residing or working in the project area to excessive noise from aircraft or airport operations. Impacts would be less than significant.

FINDING: With adherence to County Code, no significant direct or indirect impacts to noise levels are expected either directly or indirectly from the project. Impacts would be less than significant.

XIII. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (proposing new homes and businesses) or indirectly (extension of roads or other infrastructure)?				**X**
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				**X**

XIII. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				**X**

Regulatory Setting:

No federal or state laws, regulations, or policies apply to population and housing and the proposed project.

Discussion: A substantial adverse effect on Population and Housing would occur if the implementation of the project would:

- Create substantial growth or concentration in population;
- Create a more substantial imbalance in the County's current jobs to housing ratio; or
- Conflict with adopted goals and policies set forth in applicable planning documents.

a. **Population Growth:** The subject parcel is zoned Light Industrial (IL) and designated for industrial uses. The proposed warehouse/office would not generate additional housing or affect population growth and therefore would not be considered a significant population growth project. There would be no impact.

b. **Housing Displacement:** Housing would not be displaced by the project. There would be no impact.

c. **Replacement Housing:** The proposed project would not displace substantial numbers of people, necessitating construction of replacement housing elsewhere. There would be no impact.

FINDING: The project would not induce substantial population growth, or displace housing, or displace substantial numbers of people necessitating construction of replacement house. There would be no impact to population and housing.

XIV. 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 public services:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact

XIV. **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 public services:*				
	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 government services?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

California Fire Code

The California Fire Code (Title 24 CCR, Part 9) establishes minimum requirements to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of CCR contains requirements for fire safety during construction and demolition.

Discussion: A substantial adverse effect on Public Services would occur if the implementation of the project would:

- Substantially increase or expand the demand for fire protection and emergency medical services without increasing staffing and equipment to meet the Department's/District's goal of 1.5 firefighters per 1,000 residents and 2 firefighters per 1,000 residents, respectively;
- Substantially increase or expand the demand for public law enforcement protection without increasing staffing and equipment to maintain the Sheriff's Department goal of one sworn officer per 1,000 residents;
- Substantially increase the public school student population exceeding current school capacity without also including provisions to adequately accommodate the increased demand in services;
- Place a demand for library services in excess of available resources;
- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Be inconsistent with County adopted goals, objectives or policies.

a. **Fire Protection:** The project was distributed to and reviewed by the Cameron Park Fire Department in cooperation with the California Department of Forestry and Fire Protection (CAL FIRE). Although no formal comments were provided during the initial consultation review, the fire department reviews improvement plans at the time of building permit submittal to ensure compliance with all fire safety requirements. With future review of improvement plans at time of building permit submittal, any potential impacts would be less than significant.

b. **Police Protection:** Police protection services would be provided by the El Dorado County Sheriff's Office. The proposed project is not anticipated to create a significant increase in demand for law enforcement protection. Impacts would be less than significant.

c. **Schools:** There are no schools within close proximity of the proposed project. The project would not have a substantial adverse impact on schools. Impacts would be less than significant.

d. **Parks:** There are no parks within close proximity of the proposed project. The project would not have a substantial adverse impact on parks. Impacts would be less than significant.

e. **Government Services:** The proposed project would not have a substantial adverse impact on government services. Impacts would be less than significant.

FINDING: The project would not result in a significant increase of public services to the project. Further, any increased demand for public services would be addressed through the payment of established impact fees, if applicable, at time of building permit issuance. Impacts would be less than significant.

XV. RECREATION.	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 substantial 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**

Regulatory Setting:

National Trails System

The National Trails System Act of 1968 authorized The National Trails System (NTS) in order to provide additional outdoor recreation opportunities and to promote the preservation of access to the outdoor areas and historic resources of the nation. The Appalachian and Pacific Crest National Scenic Trails were the first two components, and the System has grown to include 20 national trails.

The National Trails System includes three classes of trails:

1. National Scenic Trails (NST) provide outdoor recreation and the conservation and enjoyment of significant scenic, historic, natural, or cultural qualities. The Pacific Coast Trail falls under this category. The PCT passes through the Desolation Wilderness area along the western plan area boundary.
2. National Historic Trails (NHT) follow travel routes of national historic significance. The National Park Service has designated two National Historic Trail (NHT) alignments that pass through El Dorado County, the California National Historic Trail and the Pony Express National Historic Trail. The California Historic Trail is a route of approximately 5,700 miles including multiple routes and cutoffs, extending from Independence and Saint Joseph, Missouri, and Council Bluffs, Iowa, to various points in California and Oregon. The Pony Express NHT commemorates the route used to relay mail via horseback from Missouri

to California before the advent of the telegraph.

3. National Recreation Trails (NRT) are in, or reasonably accessible to, urban areas on federal, state, or private lands. In El Dorado County there are 5 NRTs.

State Laws, Regulations, and Policies

The California Parklands Act

The California Parklands Act of 1980 (Public Resources Code Section 5096.141-5096.143) recognizes the public interest for the state to acquire, develop, and restore areas for recreation and to aid local governments to do the same. The California Parklands Act also identifies the necessity of local agencies to exercise vigilance to see that the parks, recreation areas, and recreational facilities they now have are not lost to other uses.

The California state legislature approved the California Recreational Trail Act of 1974 (Public Resources Code Section 2070-5077.8) requiring that the Department of Parks and Recreation prepare a comprehensive plan for California trails. The California Recreational Trails Plan is produced for all California agencies and recreation providers that manage trails. The Plan includes information on the benefits of trails, how to acquire funding, effective stewardship, and how to encourage cooperation among different trail users.

The 1975 Quimby Act (California Government Code Section 66477) requires residential subdivision developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act gave authority for passage of land dedication ordinances to cities and counties for parkland dedication or in-lieu fees paid to the local jurisdiction. Quimby exactions must be roughly proportional and closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. The exactions only apply to the acquisition of new parkland; they do not apply to the physical development of new park facilities or associated operations and maintenance costs.

The County implements the Quimby Act through §16.12.090 of the County Code. The County Code sets standards for the acquisition of land for parks and recreational purposes, or payments of fees in lieu thereof, on any land subdivision. Other projects, such as ministerial residential or commercial development, could contribute to the demand for park and recreation facilities without providing land or funding for such facilities.

Local Laws, Regulations, and Policies

The 2015 El Dorado County General Plan Parks and Recreation Element establishes goals and policies that address needs for the provision and maintenance of parks and recreation facilities in the county, with a focus on providing recreational opportunities and facilities on a regional scale, securing adequate funding sources, and increasing tourism and recreation-based businesses. The Recreation Element describes the need for 1.5 acres of regional parkland, 1.5 acres of community parkland, and 2 acres of neighborhood parkland per 1,000 residents. Another 95 acres of park land are needed to meet the General Plan guidelines.

Discussion: A substantial adverse effect on Recreational Resources would occur if the implementation of the project would:

- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Substantially increase the use of neighborhood or regional parks in the area such that substantial physical deterioration of the facility would occur.

a. **Parks:** The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. There would be no impact.

b. **Recreational Services:** The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. There would be no impact.

FINDING: There would be no impact to open space or park facilities as a result of the project.

XVI. TRANSPORTATION/TRAFFIC. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (Vehicle Miles Traveled)?			**X**	
c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
d. Result in inadequate emergency access?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to transportation/traffic and the proposed project.

State Laws, Regulations, and Policies

Caltrans manages the state highway system and ramp interchange intersections. This state agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

Local Laws, Regulations, and Policies

The Transportation and Circulation Element of the County General Plan relies on automobile delay and Level of Service (LOS) as performance measures to determine impacts on County-maintained roads and state highways within the unincorporated areas of the county.

County General Plan Policy TC-Xd states that Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions. Level of Service is calculated using the methodologies in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council). There are some roadway segments that are except from these standards and are allowed to operate at LOS F and are listed in Table TC-2. According to Policy TC-Xe, "worsen" is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

A. A two percent increase in traffic during a.m., p.m. peak hour, or daily
B. The addition of 100 or more daily trips, or
C. The addition of 10 or more trips during the a.m. or p.m. peak hour.

Automobile delay and level of service (LOS) may no longer be used as the performance measure to determine the transportation impacts of land development under CEQA. Instead, an alternative metric that supports the goals of SB 743 legislation will be required. The use of vehicle miles traveled (VMT) has been recommended by the Governor's Office of Planning and Research (OPR) and is cited in the CEQA Guidelines as the most appropriate measure of transportation impacts (Section 15064.3(a)).

The intent of SB743 is to bring CEQA transportation analysis into closer alignment with other statewide policies regarding greenhouse gases, complete streets, and smart growth. Using VMT as a performance measure, instead of LOS, is intended to discourage suburban sprawl, reduce greenhouse gas emissions, and encourage the development of smart growth, complete streets, and multimodal transportation networks.

Current direction regarding methods to identify VMT and comply with state requirements is provided by the California Governor's Office of Planning and Research (OPR) December 2018 publication, Technical Advisory on Evaluating Transportation Impacts in CEQA. This advisory contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. OPR provides this Technical Advisory as a resource for the public to use at their discretion. OPR is not enforcing or attempting to enforce any part of the recommendations contained herein. (Government Code Section 65035 ["It is not the intent of the Legislature to vest in the Office of Planning and Research any direct operating or regulatory powers over land use, public works, or other state, regional, or local projects or programs."].)

OPR's Technical Advisory provides this direction for small projects:

Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

On October 6, 2020 El Dorado County Board of Supervisors adopted Resolution 141-2020 setting thresholds of significance for VMT resulting from proposed development projects. The VMT threshold for commercial retail is no net increase in County-wide VMT.

Discussion: A substantial adverse effect on Transportation would occur if the implementation of the project would:

- Conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (Vehicle Miles Traveled); or
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

a. **Conflicts with a Transportation Plan, Policy or Ordinance:** No substantial traffic increases would result from the proposed project. Access to the project site is from Business Drive at the intersection with Trade Way. This portion of Business Drive is not a County-maintained roadway and an encroachment permit is not required. Trip generation from the project using the ITE Trip Generation Manual, 10th Edition would be 4 trips in the AM Peak Hour and 4 trips in the PM Peak Hour and 40 trips daily. This is less than the threshold for study set by El Dorado County General Plan Policy TC-Xe. The project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant.

b. **Vehicle Miles Travelled (VMT):** The proposed project would be a warehouse/office building. The proposed project would generate fewer than 100 trips per day and is therefore presumed to have a less than significant impact under CEQA in accordance with El Dorado County Resolution 141-2020 which set thresholds of significance for VMT resulting from proposed development projects. Impacts would be less than significant.

c. **Design Hazards**: The design and location of the project is not anticipated to create any significant hazards. The project site has access from Business Drive within the Barnett Ranch Business Park. The project would be built within an established commercial/industrial business park. Impacts would be less than significant.

d. **Emergency Access:** The existing project site has access from Business Drive at the intersection with Trade Way. The Cameron Park Fire Department/CAL FIRE reviewed the project and will be reviewing the improvement plans at time of building permit submittal to ensure compliance with all safety protocols. Impacts would be less than significant.

FINDING: The project would not conflict with applicable General Plan policies regarding effective operation of the County circulation system and the project would not exceed the level of service thresholds for traffic identified within the General Plan. Further, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) (VMT). The project would not create any road hazards or affect road safety and would not result in inadequate emergency access. For this Transportation category, the threshold of significance would not be exceeded and impacts would be less than significant.

XVII. TRIBAL CULTURAL RESOURCES. *Would the project: Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in 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:*	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), or			**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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to Tribal Cultural Resources (TCRs) and the proposed project.

State Laws, Regulations, and Policies

Assembly Bill (AB) 52

AB 52, which was approved in September 2014 and effective on July 1, 2015, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in CEQA Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the Public Resources Code, TCRs are:

1. Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:

a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or
b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

2. 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074 as follows:

a. A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and
b. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TRCs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

Discussion:

In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a TCR significant or important. To be considered a TCR, a resource must be either: (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or: (2) a resource that the lead agency chooses, in its discretion, to treat as a TCR and meets the criteria for listing in the state register of historic resources pursuant to the criteria set forth in Public Resources Code Section 5024.1(c). A substantial adverse change to a TCR would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a TCR such that the significance of the resource would be materially impaired.

a.-b. **Tribal Cultural Resources:** At the time of the initial review consultation, seven tribes had requested to be notified of proposed projects for consultation in the project area: Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville-El Dorado Miwok-Maidu-Nishinam Tribe, Shingle Springs Band of Miwok Indians, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of California and Nevada, and T'si-Akim Maidu. United Auburn Indian Community (Auburn Rancheria) requested consultation. An initial records search was conducted by searching California Historic Resources Information System (CHRIS) maps for cultural resource site records and survey reports in El Dorado County within a 1/4-mile radius of the proposed project area. It was determined that there is low potential for locating historic-period cultural resources in the immediate vicinity of the proposed project area. Further, a comprehensive Cultural Resources Study was conducted in October 2019 by Historic Resource Associates and the report stated that no significant prehistoric archaeological sites, features, or artifacts were found, nor any significant historical buildings, structures or objects, and no further analysis recommended. Further, inclusion of COA would reduce impacts to less than significant.

FINDING: With the inclusion of COA, the proposed project would have a less than significant impact on Tribal Cultural Resources.

XVIII. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	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 stormwater 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**	
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to 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**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

Energy Policy Act of 2005

The Energy Policy Act of 2005, intended to reduce reliance on fossil fuels, provides loan guarantees or tax credits for entities that develop or use fuel-efficient and/or energy efficient technologies (USEPA, 2014). The act also increases the amount of biofuel that must be mixed with gasoline sold in the United States (USEPA, 2014).

State Laws, Regulations, and Policies

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Public Resources Code Section 41780). The state, acting through the California Integrated Waste Management Board (CIWMB), determines compliance with this mandate. Per-capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Public Resources Code Sections 42900-42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years (CEC 2015a). The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2015a). The 2014 Draft Integrated Energy Policy Report Update includes policy recommendations, such as increasing investments in electric vehicle charging infrastructure at workplaces, multi-unit dwellings, and public sites (CEC 2015b).

Title 24–Building Energy Efficiency Standards

Title 24 Building Energy Efficiency Standards of the California Building Code are intended to ensure that building construction, system design, and installation achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC 2012). The standards are updated on an approximately 3-year cycle. The 2013 standards went into effect on July 1, 2014.

Urban Water Management Planning Act

California Water Code Sections 10610 *et seq.* requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet per year (AFY), prepare an urban water management plan (UWMP).

Discussion: A substantial adverse effect on Utilities and Service Systems would occur if the implementation of the project would:

- Breach published national, state, or local standards relating to solid waste or litter control;
- Substantially increase the demand for potable water in excess of available supplies or distribution capacity without also including provisions to adequately accommodate the increased demand, or is unable to provide an adequate on-site water supply, including treatment, storage and distribution;
- Substantially increase the demand for the public collection, treatment, and disposal of wastewater without also including provisions to adequately accommodate the increased demand, or is unable to provide for adequate on-site wastewater system; or
- Result in demand for expansion of power or telecommunications service facilities without also including provisions to adequately accommodate the increased or expanded demand.

a. **Wastewater Requirements**: The project will require connecting to public sewer. The El Dorado Irrigation District (EID) reviewed the project and confirmed service is available. There is a 6-inch gravity sewer line located in Business Drive. This sewer line has adequate capacity at this time. In order to receive service from this line, an extension of facilities of adequate size must be constructed. The project would require 10 EDUs of sewer service. The Facilities Improvement Letter (FIL) outlines the specific improvement requirements. Proposed water lines, sewer lines, and related facilities shall be located within an easement and shall remain accessible by conventional maintenance vehicles. Easements for any new EID facilities constructed by the project must be granted to EID prior to approval of water and sewer improvements, whether onsite or offsite. Impacts would be less than significant.

b. **Construction of New Facilities:** Construction of new facilities may be required to serve the project. Proposed water lines, sewer lines, and related facilities shall be located within an easement and shall remain accessible by conventional maintenance vehicles. Easements for any new EID facilities constructed by the project must be granted to EID prior to approval of water and sewer improvements, whether onsite

or offsite. For electricity service, the project would require connecting for service with PG&E. PG&E reviewed the project and provided standard comments, which would be implemented at time of building permit review. Impacts associated with construction of new facilities overall would be less than significant.

c. **New Stormwater Facilities:** Any stormwater drainage facilities needed for the project would be built in accordance with the El Dorado County Drainage Manual and would be reviewed during the grading and building permit review processes. Impacts would be less than significant.

d. **Sufficient Water Supply:** The project would be served by public water infrastructure. The El Dorado Irrigation District (EID) reviewed the project and provided verification of water service. The proposed project would require 10 EDUs of water. The FIL outlines the specific improvement requirements. Proposed water lines, sewer lines, and related facilities shall be located within an easement and shall remain accessible by conventional maintenance vehicles. Easements for any new EID facilities constructed by the project must be granted to EID prior to approval of water and sewer improvements, whether onsite or offsite. Further, The Cameron Park Fire Department in cooperation with CalFire would review the improvement plans at time of building permit submittal to verify the project meets required fire flow at that time. Impacts would be less than significant.

e. **Adequate Wastewater Capacity:** The project would be served by connection to public sewer. As discussed in section (a.) above, EID has provided verification of adequate sewer service. The project would require 10 EDUs of sewer service. Proposed water lines, sewer lines, and related facilities shall be located within an easement and shall remain accessible by conventional maintenance vehicles. Easements for any new EID facilities constructed by the project must be granted to EID prior to approval of water and sewer improvements, whether onsite or offsite. Impacts would be less than significant.

f.-g. **Solid Waste Disposal and Requirements:** El Dorado Disposal distributes municipal solid waste to Forward Landfill in Stockton and Kiefer Landfill in Sacramento. Pursuant to El Dorado County Environmental Management Solid Waste Division staff, both facilities have sufficient capacity to serve the County. Recyclable materials are distributed to a facility in Benicia and green wastes are sent to a processing facility in Sacramento. County Ordinance No. 4319 requires that new development provide areas for adequate, accessible, and convenient storing, collecting and loading of solid waste and recyclables. Further, the project would be conditioned to meet the requirements set forth by the County Environmental Management Department (Attachment 15). Impacts would be less than significant.

FINDING: No significant utility and service system impacts would be anticipated for the project, either directly or indirectly. With implementation of the required construction improvements installed according to established protocols, impacts to public utilities would be less than significant.

XIV. MANDATORY FINDINGS OF SIGNIFICANCE. *Does the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			**X**	
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			**X**	
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			**X**	

Discussion

a. No substantial evidence contained in the project record has been found that would indicate that this project would have the potential to significantly degrade the quality of the environment. As conditioned and with adherence to County permit requirements, this project would not have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of California history or pre-history. Any impacts from the project would be less than significant due to the design of the project and required standards that would be implemented prior to issuance of the building permit processes and/or any required project specific improvements on the property.

b. Cumulative impacts are defined in Section 15355 of the California Environmental Quality Act (CEQA) Guidelines as *two or more individual effects, which when considered together, would be considerable or which would compound or increase other environmental impacts.*

The proposed project and site-specific environmental conditions, which have been disclosed in the Project Description and analyzed in Items I through XVIII, show there would be no significant impacts anticipated related to agriculture resources, air quality, biological resources, cultural resources, geology/soils, hazards/hazardous materials, hydrology/water quality, land use/planning, mineral resources, noise, population/housing, public services, recreation, traffic/transportation, or utilities/service systems that would combine with similar effects such that the project's contribution would be cumulatively considerable. For all categories, a determination of either less than significant impacts or no impacts would be anticipated.

As outlined and discussed in this document, as conditioned and with compliance with County Codes, this project would be anticipated to have a less than significant project-related environmental effect which would cause substantial adverse effects on human beings, either directly or indirectly. Based on the analysis in this study, it has been determined that the project would have less than significant cumulative impacts.

c. Based on the discussion contained in this document, no potentially significant impacts to human beings are anticipated to occur with respect to potential project impacts. The project would require review and permitting through the County. Adherence to all applicable standards and conditions would be expected to reduce potential impacts to a less than significant level.

FINDINGS: It has been determined that the proposed project would not result in significant environmental impacts. The project would not exceed applicable environmental standards, nor significantly contribute to cumulative environmental impacts.

SUPPORTING INFORMATION SOURCE LIST

CAPCOA Guide (August 2010): http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-QuantificationReport-9-14-Final.pdf

California Air Resources Board (CARB). (2008). *Climate Change Scoping Plan.* Available at: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf

California Attorney General's Office. (2010). Addressing Climate Change at the Project Level. Available at: http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf

California Department of Conservation (CDC). (2008). *Farmland Mapping and Monitoring Program: El Dorado County Important Farmland 2008*. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/eld08.pdf.

California Department of Conservation (CDC). (2013a). Important Farmland Categories webpage. Available online at: www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/ map_categories.aspx.

California Department of Conservation (CDC). (2013b). The Land Conservation Act. Available online at: www.conservation.ca.gov/dlrp/lca/Pages/Index.aspx.

California Department of Toxic Substances Control (DTSC). (2015). *DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List)*. Retrieved April 15, 2015 from http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm.

California Energy Commission. (2006). *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004*, *Staff Final Report*. Publication CEC-600-2006-013-SF.

California Department of Transportation (Caltrans). (2015). Scenic Highway Program FAQs: Caltrans Landscape Architecture Program. Retrieved February 27, 2015 from www.dot.ca.gov/hq/ LandArch/scenic/faq.htm.

California Department of Transportation (Caltrans). (2013). *California Scenic Highway Program, Officially Designated State Scenic Highways*. Retrieved April 8, 2015 from http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm.

California Geological Survey. (2016). Alquist-Priolo Earthquake Fault Zone Maps. Retrieved October 4, 2016 from http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm.

California Geological Survey. (2013). Seismic Hazards Zonation Program. Retrieved April 15, 2015 from http://www.conservation.ca.gov/cgs/shzp/Pages/affected.aspx.

California Code of Regulations. *Guidelines for Implementation of the California Environmental Quality Act.* Title 14, Section 15000, et seq. 14 CCR 15000

California Office of Emergency Services. 2015. Business Plan/EPCRA 312. Available online at: www.caloes.ca.gov/for-businesses-organizations/plan-prepare/hazardousmaterials/hazmat-business-plan.

El Dorado County. (2003). *El Dorado County General Plan Draft Environmental Impact Report*. State Clearinghouse No. 2001082030. Placerville, CA: El Dorado County Planning Services.

El Dorado County. (2015). *El Dorado County General Plan: A Plan for Managed Growth and Open Roads; A Plan for Quality Neighborhoods and Traffic Relief.* Placerville, CA: El Dorado County Planning Services.

El Dorado County. (2005, July 21). Asbestos Review Areas, Western Slope, El Dorado County, California. Available at: < http://www.edcgov.us/Government/AirQualityManagement/Asbestos.aspx>.

El Dorado County Air Quality Management District (AQMD). (2000). *Rules and Regulations of the El Dorado County Air Quality Management District*. Retrieved April 15, 2015 from http://www.arb.ca.gov/DRDB/ED/CURHTML/R101.HTM.

El Dorado County Air Quality Management District (AQMD). (2002). *Guide to Air Quality Assessment: Determining the Significance of Air Quality Impacts Under the California Environmental Quality Act*. Retrieved from http://www.edcgov.us/Government/AirQualityManagement/Guide_to_Air_Quality_Assessment.aspx.

El Dorado County Geographic Information System (GIS) Data. Placerville, CA: Esri ArcGIS. Available: El Dorado County controlled access data GISDATA\LIBRARIES.

El Dorado County Transportation Commission. (2012). *El Dorado County Airport Land Use Compatibility Plan*. Retrieved from http://www.edctc.org/2/Airports.html.

Federal Emergency Management Agency (FEMA). (2008). FEMA Map Service Center, Current FEMA Issued Flood Maps: El Dorado County, California, unincorporated area, no. 06017C1025E. Available at: http://map1.msc.fema.gov/idms/IntraView.cgi?KEY=94926033&IFIT=1.

Governor's Office of Planning and Research (OPR). (2008, June 19). *Technical advisory: CEQA and climate change: Addressing climate change through California Environmental Quality Act Review*. Available at: Sacramento, CA. http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf.

Sacramento Metropolitan Air Quality Management District (SMAQMD). (2010). Construction GHG Emissions Reductions. Available at: http://airquality.org/ceqa/cequguideupdate/Ch6FinalConstructionGHGReductions.pdf

State Water Resources Control Board (SWRCB). (2013). Storm Water Program, Municipal Program. Available online at: www.waterboards.ca.gov/water_issues/programs/stormwater/municipal.shtml.

National Earthquake Hazards Reduction Program (NEHRP). (2009). Background and History. Available online at: www.nehrp.gov/about/history.htm.

San Luis Obispo County Air Pollution Control District (SLOAPCD). (2012, April). A Guide for Assessing The Air Quality Impacts For Projects Subject To CEQA Review. Available at http://www.slocleanair.org/images/cms/upload/files/CEQA_Handbook_2012_v1.pdf.

United States Department of Agriculture (USDA) Soil Conservation Service and Soil Service. (1974). *Soil Survey of El Dorado Area, California*. Retrieved April 10, 2015 from http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/el_doradoCA1974/EDA.pdf

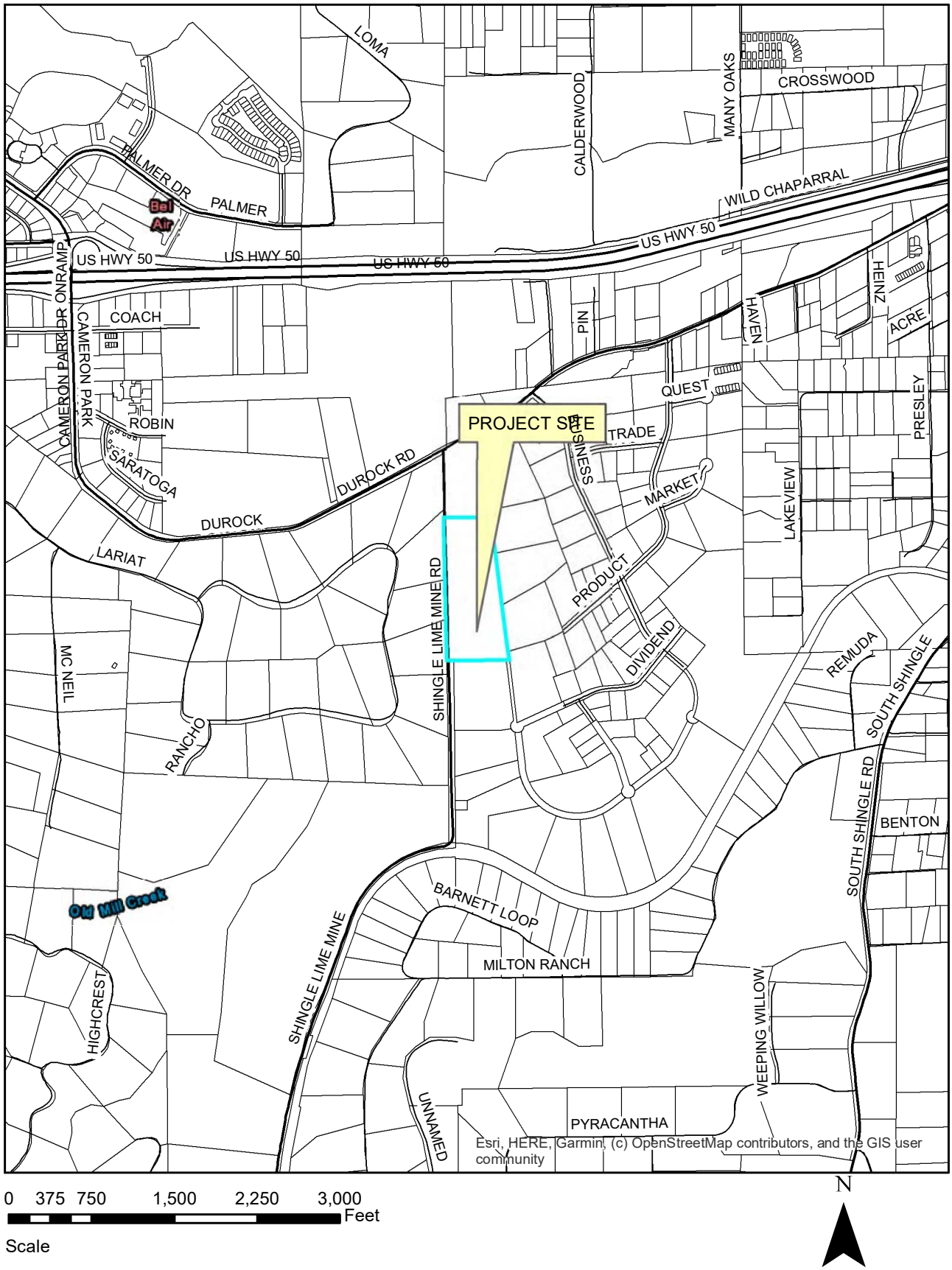
U.S. Environmental Protection Agency. (2014). Summary of the Energy Policy Act. Available online at: www2.epa.gov/laws-regulations/summary-energy-policy-act.

U.S. Environmental Protection Agency. (2015). The Green Book Nonattainment Areas for Criteria Pollutants. Available online at: www.epa.gov/airquality/greenbook.

U.S. Green Building Council (USGBC). (2014). LEED v4 for Building Design and Construction Addenda. Updated October 1, 2014. Available online at: www.usgbc.org/resources/leed-v4-building-design-and-construction-redline-current-version.

U.S. Green Building Council (USGBC). (2015). LEED Overview. Available online at: www.usgbc.org/leed.

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 1 - LOCATION MAP



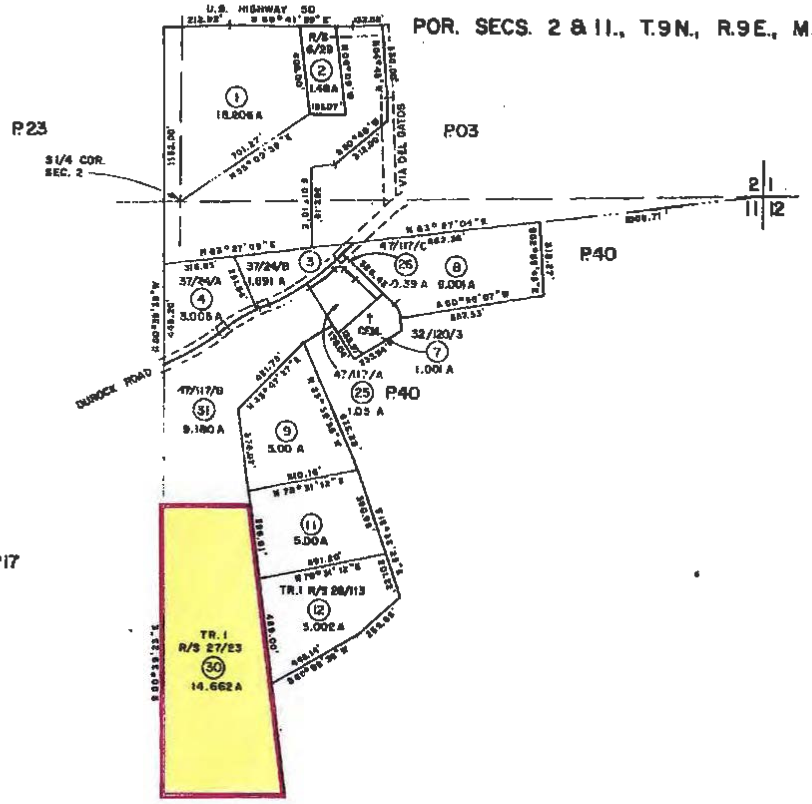
DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 2 - AERIAL MAP

0 185 370 740 1,110 1,480
Feet

Scale

N

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 3 - ASSESSORS PARCEL MAP



Tax Area Code 109:24

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1" = 400'

THIS MAP IS NOT A SURVEY. It is prepared by the El Dorado Co. Assessor's office for assessment purposes only.

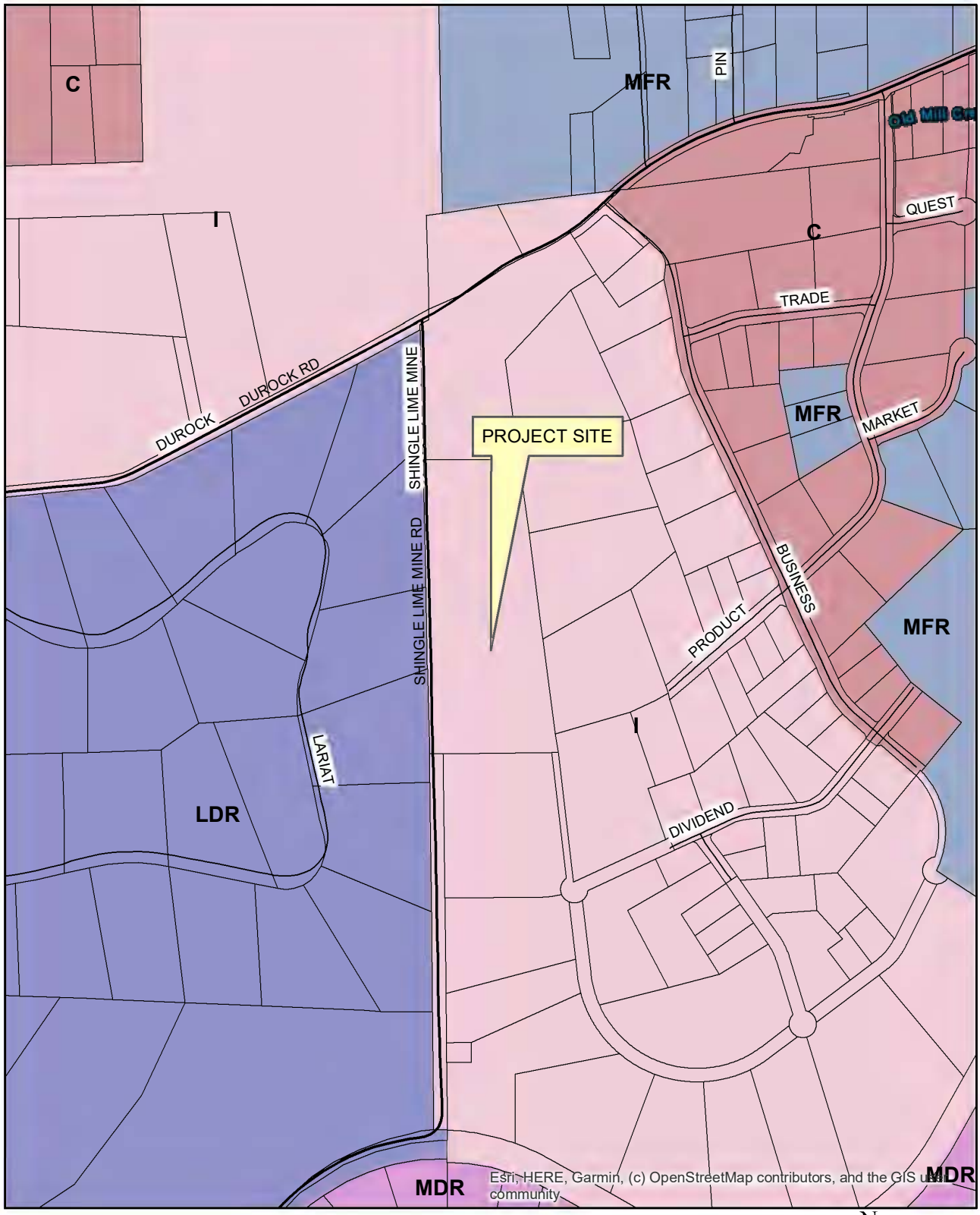
NOTE – Assessor's Block Numbers Shown in Ellipse
Assessor's Parcel Numbers Shown in Circles

ACREAGES ARE ESTIMATES

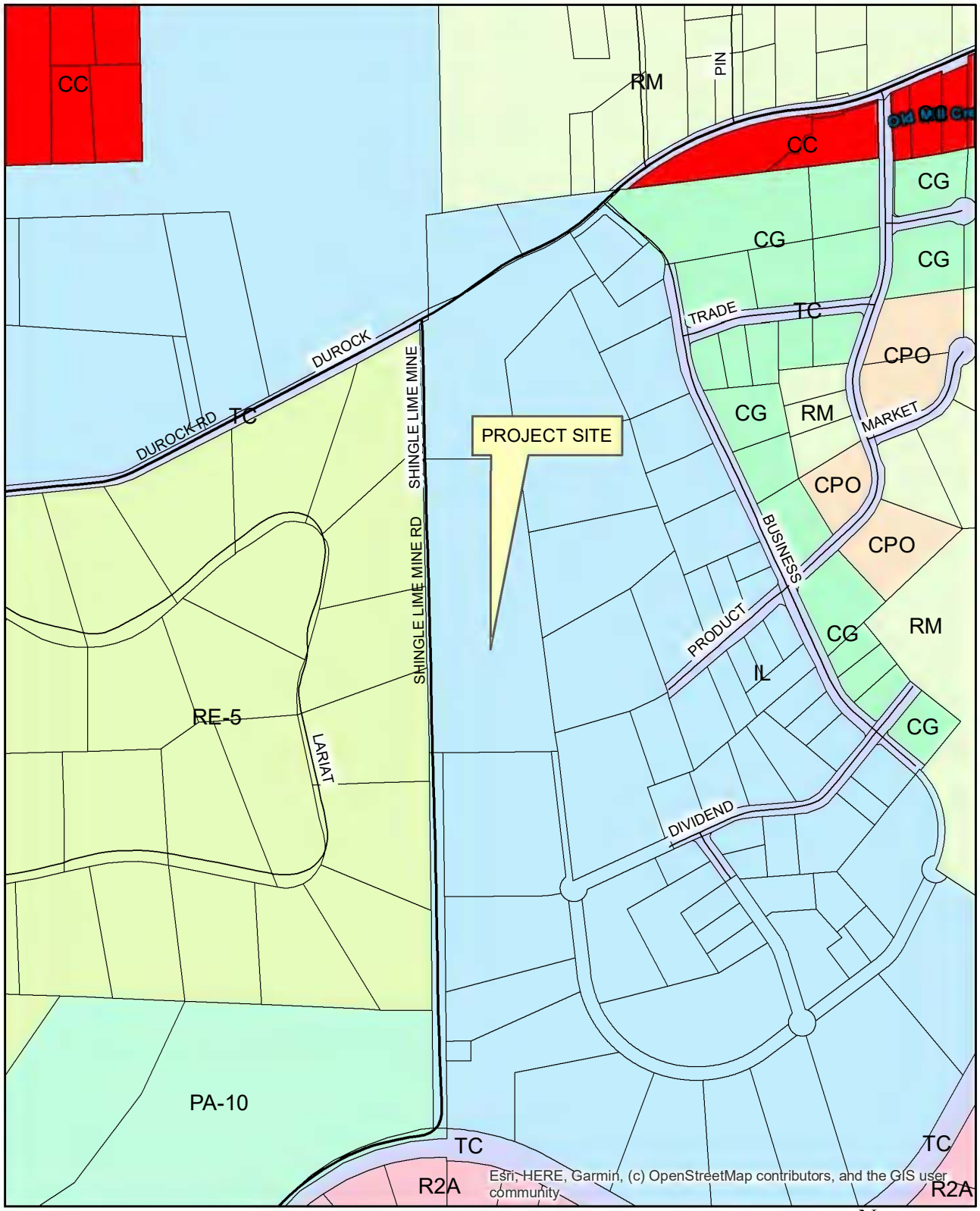
Assessor's Map Bk. 109 – Pg. 24
County of El Dorado, California

DR21-0005

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 4 - GENERAL PLAN LAND USE MAP



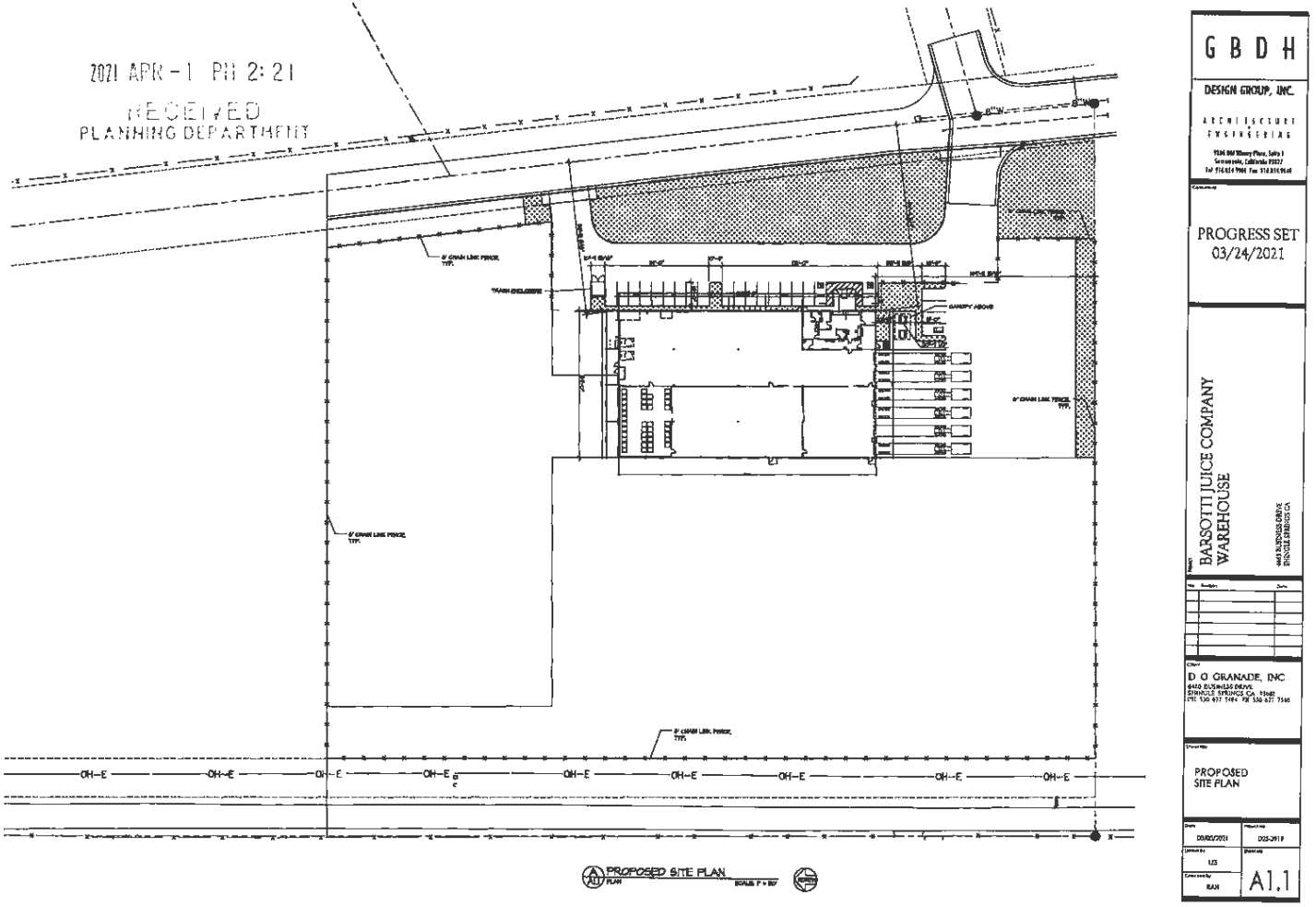
DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 5 - ZONING MAP



0 185 370 740 1,110 1,480
Feet

Scale

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 6 - SITE PLANS



DR21-0005

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 6 - SITE PLANS

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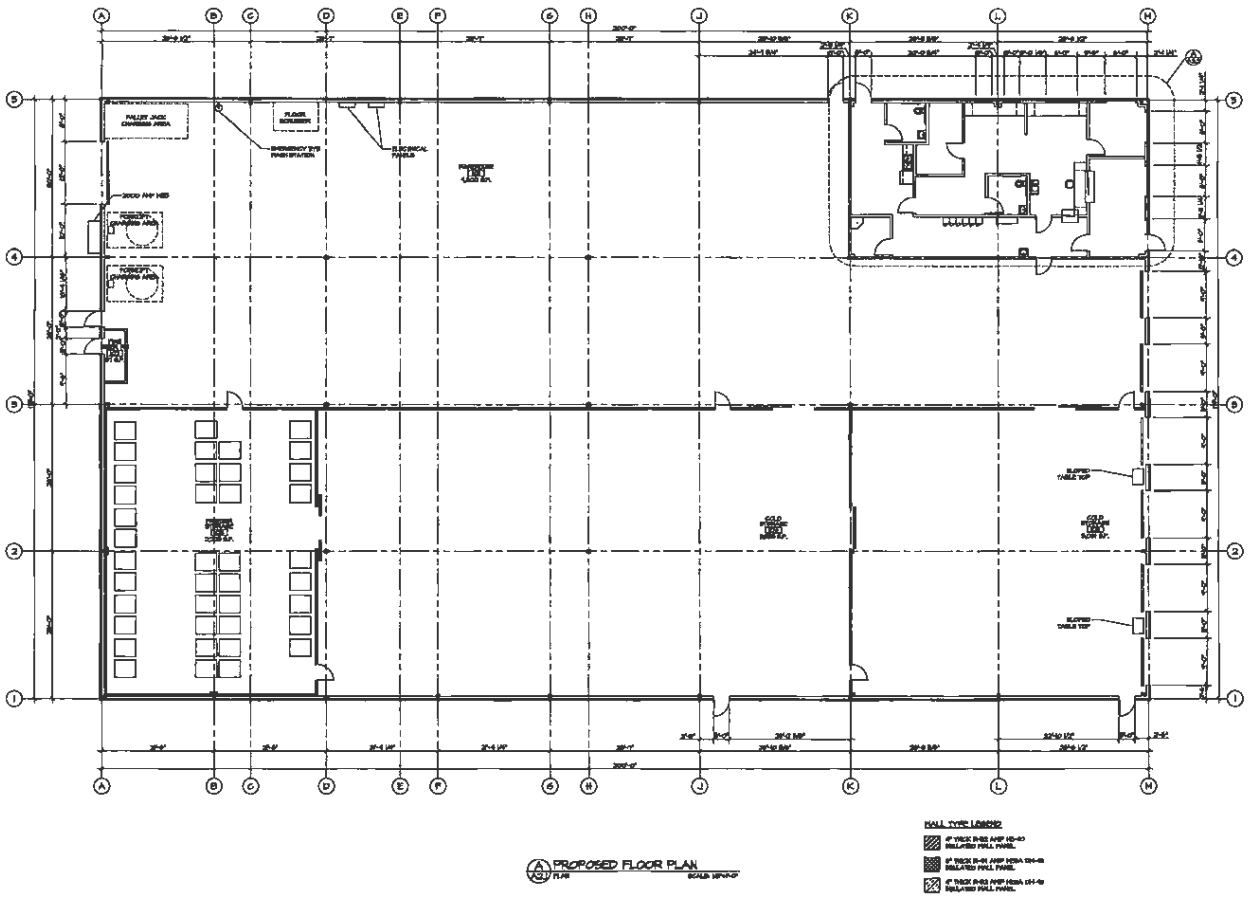
PLANNING DEPARTMENT



GBDH
DESIGN GROUP, INC.
ARCHITECTURE
ENGINEERING

PROGRESS SET
03/24/2021

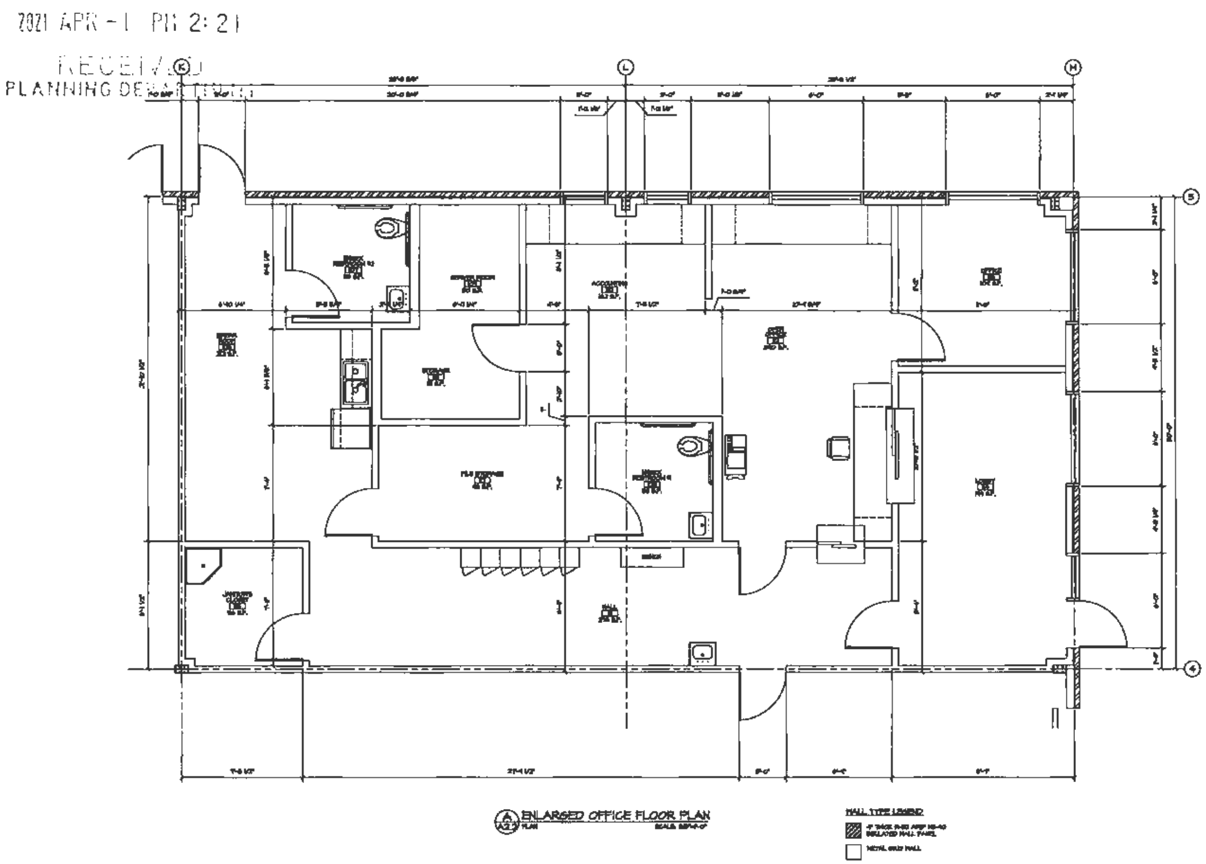
BARSOTTI JUICE COMPANY
WAREHOUSE

D G GRANADE, INC

PROPOSED
FLOOR PLAN

A2.1

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 6 - SITE PLANS



GBDH
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ARCHITECTURE
ENGINEERING

PROGRESS SET
03/24/2021

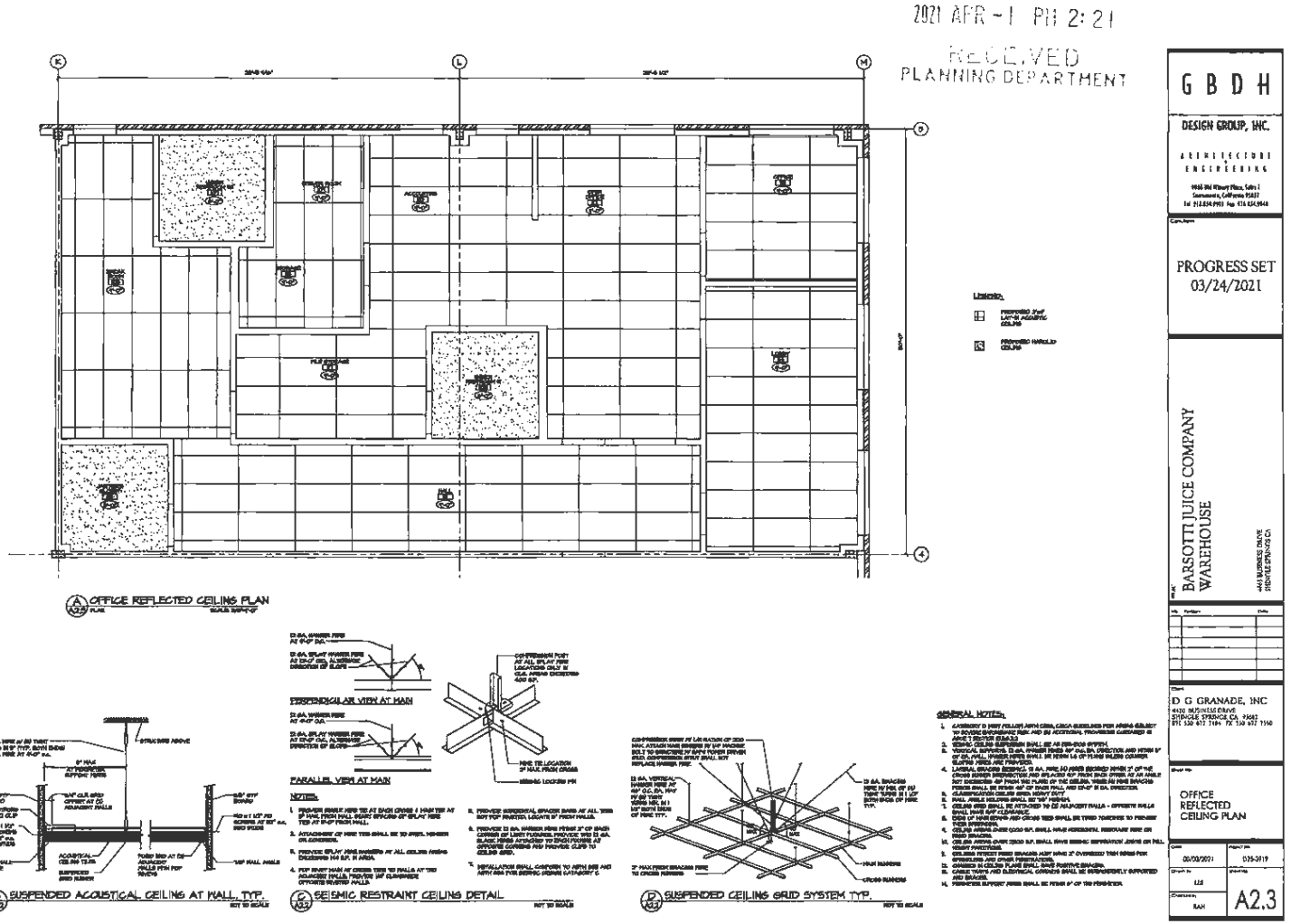
BARSOTTI JUICE COMPANY
WAREHOUSE

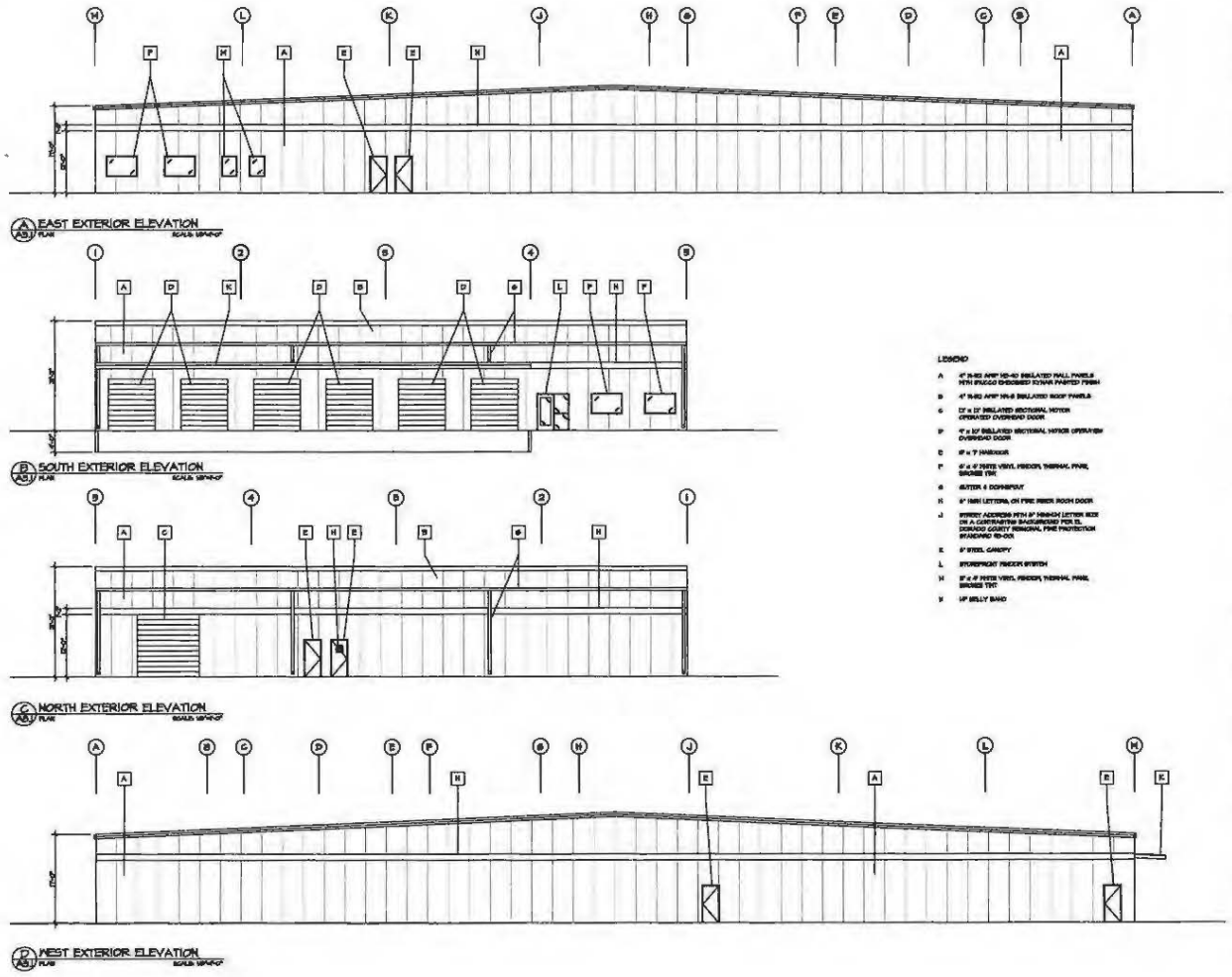
D G GRANADE, INC

ENLARGED
OFFICE
FLOOR PLAN

LES
RAM
A2.2

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 6 - SITE PLANS





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PROGRESS SET
03/24/2021

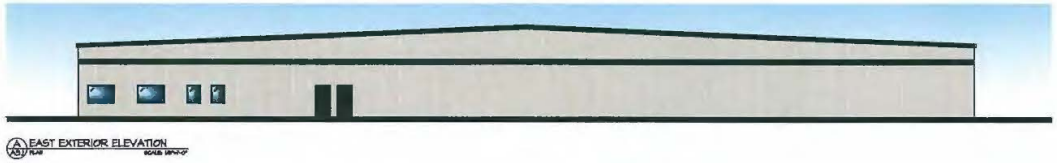
BARSOTTI JUICE COMPANY
WAREHOUSE

D G GRANADE, INC

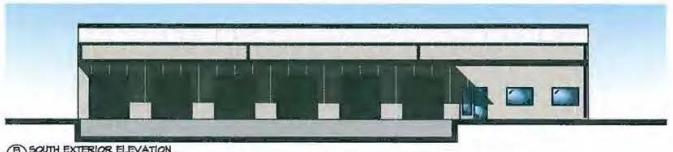
EXTERIOR
ELEVATIONS

A3.1

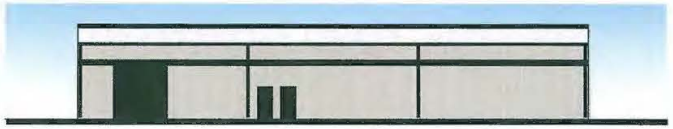
DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 7 - BUILDING ELEVATIONS AND DESIGN



A EAST EXTERIOR ELEVATION



B SOUTH EXTERIOR ELEVATION



C NORTH EXTERIOR ELEVATION

D WEST EXTERIOR ELEVATION

COLOR LEGEND:

CBC STEEL BUILDINGS REFLECTIVE WHITE

CBC STEEL BUILDINGS SANDSTONE

CBC STEEL BUILDINGS BURNISHED SLATE

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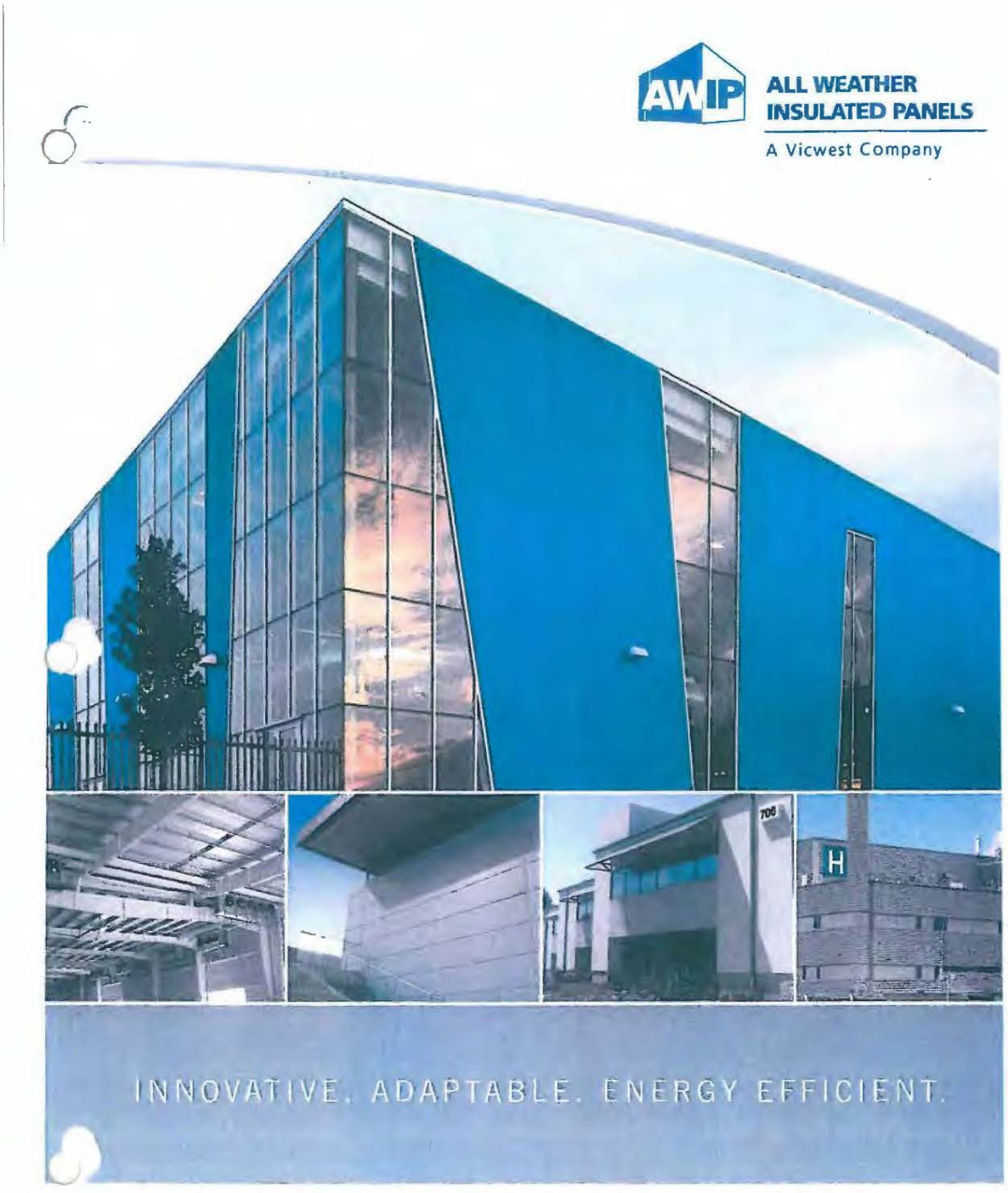
D. G. GRANADE, INC.

BARSOTTI JUICE COMPANY WAREHOUSE

4665 BUSINESS DRIVE, SHINGLE SPRINGS CALIFORNIA

GBDH

DR21-0005


AWIP
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awipanels.com

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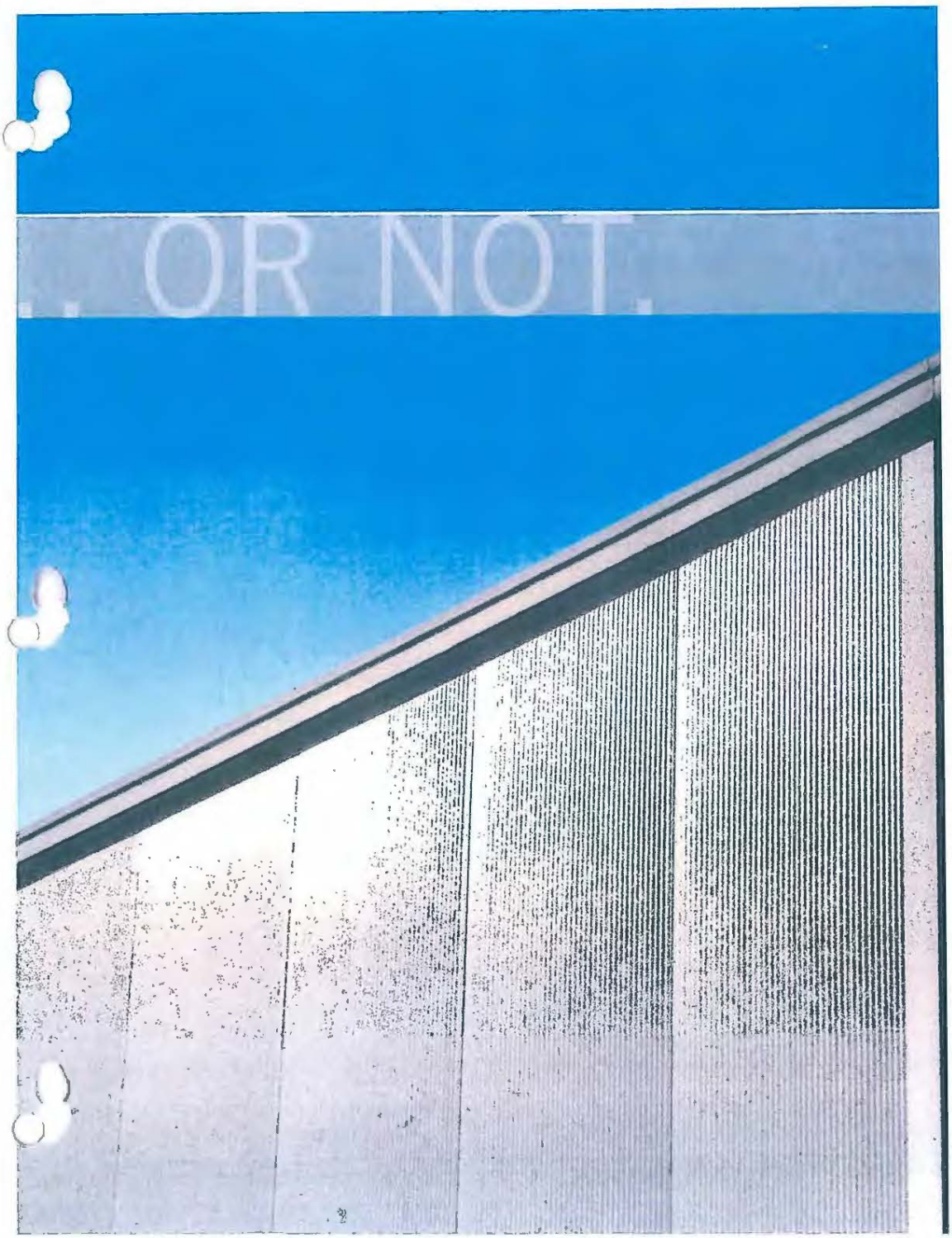
A Vicwest Company

WEATHER

From freezing, sub-zero temperatures to dry heat or high humidity, Mother Nature continually tests the limits of building envelopes. That's why All Weather Insulated Panels are specifically engineered to maintain interior climate control regardless of external weather conditions. Discover the wide range of panel colors, finishes, dimensions, concealed fastening systems plus other options that will help you unleash your full design capabilities. .

Contents


. OR NOT.

INNOVATIVE. ADAPTABLE. ENERGY EFFICIEN

E.P Sexsmith Center photos courtesy: Murdock & Boyd Architects St. John, NB

All Weather Insulated Panels

Today's building projects require the perfect combination of energy efficiency, creative versatility and construction efficiency. All Weather Insulated Panels are the ideal choice to deliver the superior thermal capabilities and building performance that eco-conscious builders, designers and owners demand.

Advantages

More Energy Efficient:
- Superior thermal insulation capabilities compared to other insulating materials
- Closed cell polyisocyanurate insulation and self-aligning, double inter-locking tongue and groove joints with concealed fasteners create an air- and water-tight seal to stabilize interior environments

Single Component:
- Factory-injected insulation is continuously foamed-in-place and integrated with dual metal facing panels to create a single high strength unit

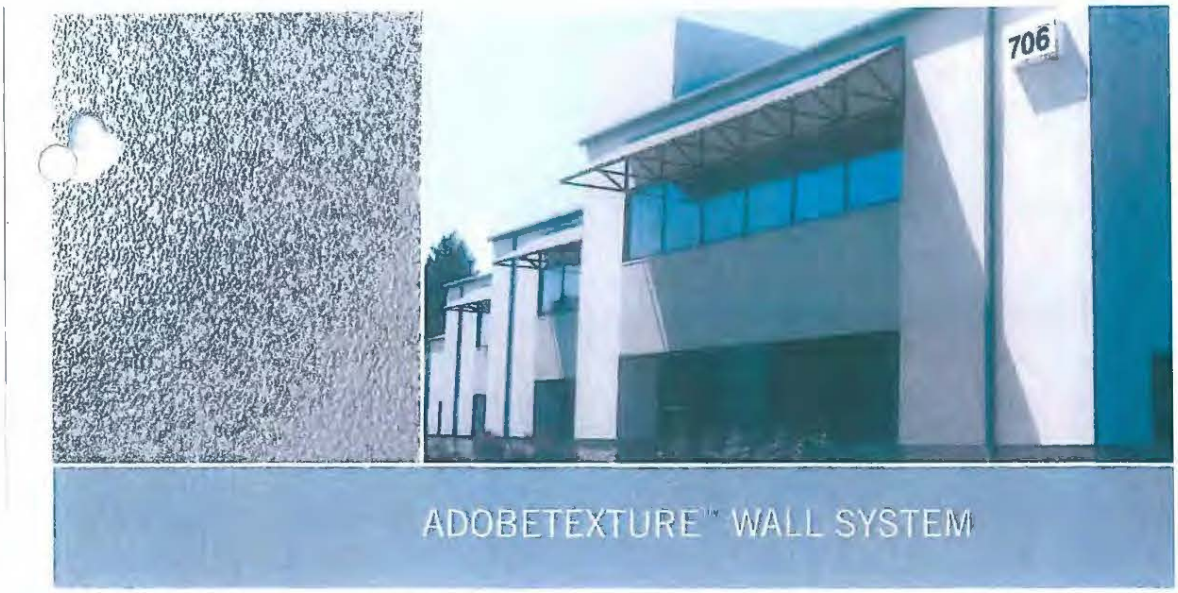
Measureable Savings:
- Fast one-pass, single component installation eliminates the inefficiencies of multi-piece, field assembled wall and roof systems saving in installation time and labor costs
- Panels have high strength-to-weight ratio that allow for longer spans and reduce structural costs

Versatile:
- Hidden fastener system with multiple profiles, colors, finishes, accessories and trims integrates into any building design
- Can be used in either vertical and horizontal applications
- Design vision is not compromised when doors, windows or other construction materials are incorporated into the design

Sustainable:
- Minimum of 30% Recycled steel content
- 100% recyclable and reusable at the end of its service life
- Contribute to LEED® credits and Net-Zero Energy targets

Durable & Economical:
- Last as long as typical buildings
- Reduces operational costs and maintenance

Tested & Approved:
- Tested for compliance with North American industry standards and codes
- Factory Mutual approved



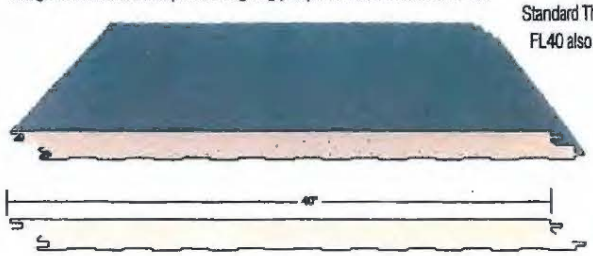
AdobeTexture™ wall panels offer a matte finish, multi-textured profile that simulates a precast or stucco-like appearance. Our unique proprietary process eliminates the need for additional factory- or field-applied stucco coatings offering an economical alternative that delivers superior adhesion and color retention when compared to other coating systems. Typical trim matching and finishing issues common to sprayed elastomeric applications (such as lengthly lead times) are also avoided due to our matching **AdobeTexture™** Trim and Finishing System.

- Proprietary breakthrough technology integrates a stucco look and texture into insulated wall panels
- Eliminates the need for sprayed elastomeric coating applications
- Eliminates multi-step field-applied or additional factory-applied stucco coating
- Matching AdobeTexture™ trim & finishing system for a clean, continuous look and feel
- No special storage or handling required
- Same easy, economical installation as standard IMP wall panels - Arrives on site in one piece for a simple one-step installation
- 25 year limited paint warranty against chalking, fading and loss of adhesion

Standard Thicknesses: 2", 2.5", 3", 4"

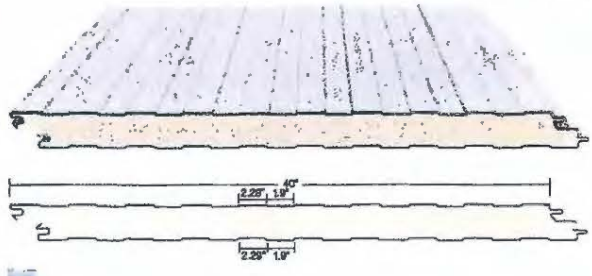
Flat (FL40): Installed either horizontally or vertically, our Flat wall panels are produced with a smooth or standard embossed exterior face and are perfect for designers seeking a high-end architectural look with all the thermal benefits that insulated metal panels offer. The horizontal assembly incorporates a clean, simple end joint design that utilizes a unique self-aligning pre-painted aluminum extrusion.

Standard Thicknesses: 2", 2.5", 3"
FL40 also available in 36" width*
**Only from Vacaville, CA and Little Rock, AR*



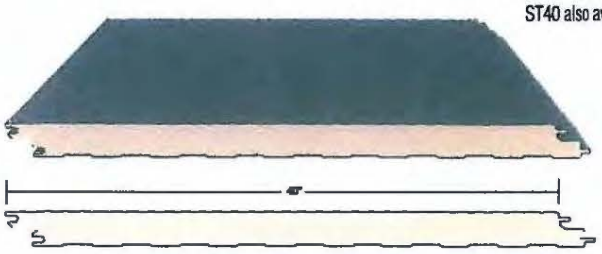
Mesa (DM40): Our Mesa profile panel is an economical choice that is perfect for exterior / interior wall and ceiling applications on industrial and cold storage use buildings. The low profile linear exterior surface simplifies flashing connections designed to inhibit moisture vapor transmission compared with other deep fluted products offered on the market. The additional mesa profile on the interior face makes this panel particularly suited for thicker, long-length walls.

Standard Thicknesses: 2", 2.5", 3", 4", 5", 6"



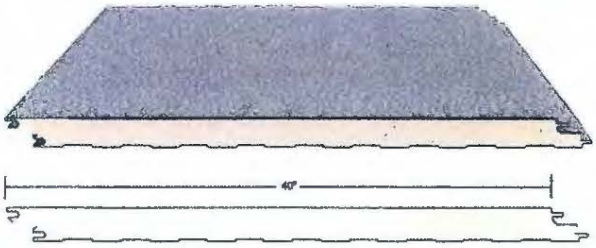
Striated (ST40): The Striated profile offers an extremely economical exterior or interior wall where a clean, flat appearance is desired. The nominal embossed striations add rigidity and ensure an acceptable flatness tolerance.

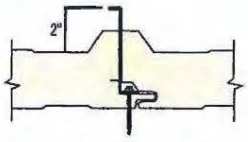
Standard Thicknesses: 2", 2.5", 3", 4"
ST40 also available in 36" width*
**Only from Vacaville, CA and Little Rock, AR*



Heavy Embossed (HE40): The distinctive pattern of our Heavy Embossed profile makes this panel ideal for exterior walls of industrial or commercial facilities where design character is desired. The heavy embossment adds rigidity to the surface and maintains a patterned flat appearance. The panel can be installed with a pre-painted finish or may be field sprayed with a textured or stucco-style elastomeric coating to create further character.

Standard Thicknesses: 2", 2.5", 3", 4"





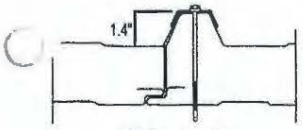
SR Roof Joint

Standing Seam (SR2): Get the look of a traditional metal standing seam roof with all the benefits of an insulated metal panel. Our Standing Seam roof profile offers a field seamed, hidden fastener joinery for maximum protection against the elements. The trapezoidal rib design provides added strength against potential foot traffic damage compared to other standing seam roof products. Because the joint design utilizes a rollformed steel base to support the attachment assembly, the thermally broken clip is only one piece.

Standard Thicknesses: 3.25", 4", 5", 6"

HR3

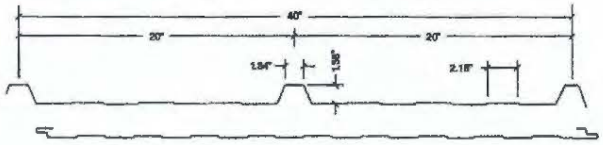
HR5



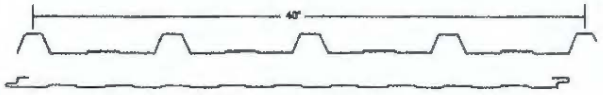
HR Roof Joint

HR Series (HR3 & HR5): Available in 3 Rib and 5 Rib models, our HR Series roof panel is an economical solution to field assembled metal roofing. This panel installs quickly and easily by through fastening at the standing ribs into supporting structural members. The 5 Rib model provides for long span requirements and/or severe loading conditions.

Standard Thicknesses: 2.5", 4", 5", 6"

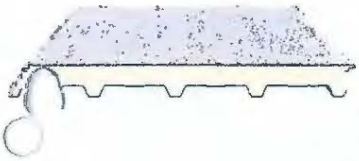


HR3



HR5

ROOF DECK SYSTEMS

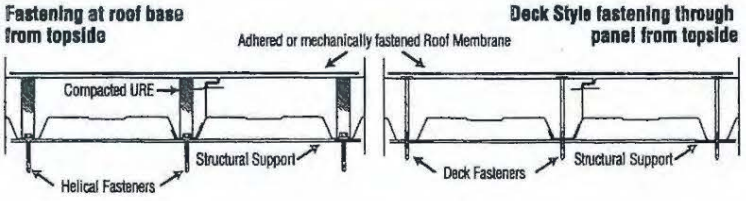


Roof Deck (RD5): Our Roof Deck panel combines into a single component the steel deck, insulation and substrate necessary for white single ply membrane or non-structural standing seam roof coverings – an economical alternative to rigorous and expensive field assembled roof deck systems. The top side substrate can be either primed steel or an approved flexible facer depending on the roof covering attachment requirements.

Advantages:

- Allows for longer spans between supports
- A working platform during installation
- Superior deflection resistance
- Pre-painted white reflective interior
- Easier installation with fewer required trades

Standard Thicknesses: 2.5", 4", 5", 6"



SPECIFICATIONS

Testing & Approvals:

All Weather Insulated Panels have been extensively tested under a variety of North American Standards to ensure compliance with various building codes and industry standards.

FM 4880: Class 1 Fire Rating

FM 4881: Class 1 Exterior Wall System

CAN/ULC S102: Flame Spread

CAN/ULC S101: Fire Endurance

CAN/ULC S138: Fire Endurance

CAN/ULC S127: Flammability

CAN/ULC S126: Flame Spread (Roof)

ASTM C518/C1363: Thermal Transmission

ASTM E283: Air Infiltration

ASTM E331: Water Infiltration

ASTM E72: Structural Strength

ASTM E84: Flame Spread

ASTM E119: Fire Endurance

AAMA 501.1: Air/Water Infiltration

FM 4471: (Roof)

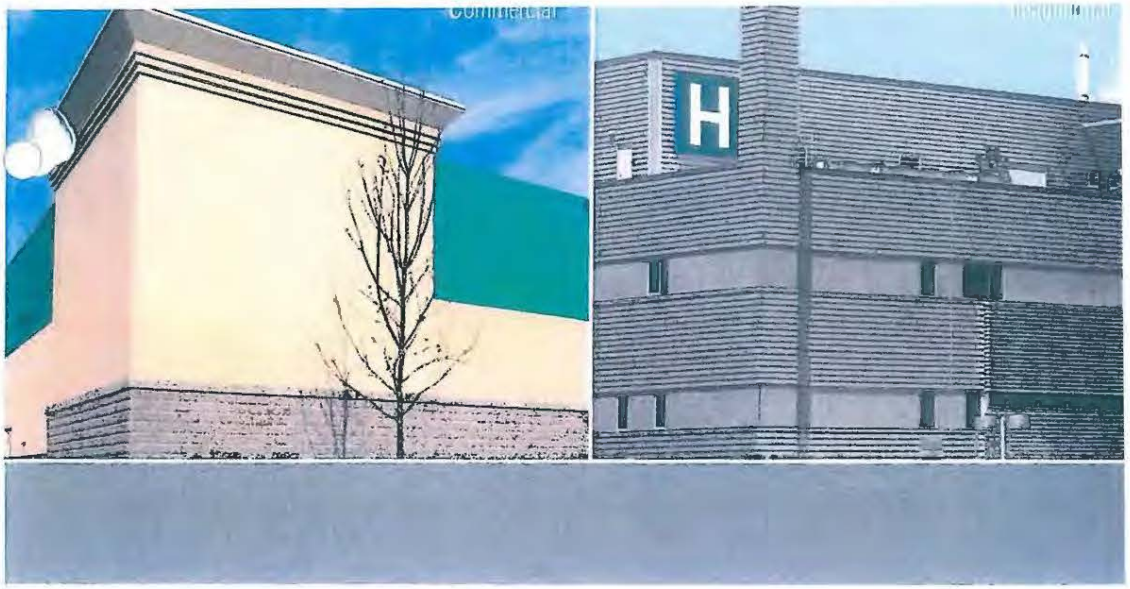
CAN/ULC S134: Fire Test of Exterior Wall Assemblies

Specifications for Wall & Roof Panels

R-Value* (per inch):	7.1 @ mean temperature of 75°F 7.9 @ mean temperature of 40°F
Thicknesses (inches):	**Wall System Standards:** Mesa: 2, 2.5, 3, 4, 5, 6 Striated: 2, 2.5, 3, 4 Flat: 2, 2.5, 3 Heavy Embossed & AdobeTexture™: 2, 2.5, 3, 4 **Roof and Roof Deck System Standards:** Standing Seam: 3.25, 4, 5, 6 HR Series: 2.5, 4, 5, 6 Roof Deck: 2.5, 4, 5, 6
Panel Width:	40" standard. Flat(FL) and Striated(ST) panels available in 36" width**.
Panel Length:	8' minimum to 50' maximum based on standard 46' flatbed trailer length Consult your sales representative for other available lengths.
Insulation:	CFC-free foamed-in-place Polyisocyanurate foam @ 2.2 to 2.5 pcf density
Metal Facings:	26ga standard galvanized or galvalume steel. (22ga, 24ga available. Consult your sales representative for availability)
Coatings:	Standard PVDF & SMP (other finishes may be available)
Joint & Fastening:	**Wall & Standing Seam Roof Panels:** Off-set tongue and groove with concealed fastener **HR Series Roof Panels:** Overlapping with through fastening at the standing rib

*R-Values shown is for general use only. They do not reflect system or specific end-use insulation values. Please consult with your All Weather Insulated Panels sales representative for project specific analysis.

**Only from Vacaville, CA and Little Rock, AR



Advancing the North American insulated metal panel market.

About ALL WEATHER

Vicwest owned All Weather Insulated Panels has 3 state of the art continuous line manufacturing facilities including Vacaville, CA, Little Rock, AR and Hamilton, Ontario, Canada. All Weather Insulated Panels is an innovator in the design, construction and advancement of insulated metal panels and is strategically positioned to meet the growing energy, environmental and economic challenges facing the North American building industry. All Weather Insulated Panels provides its customers with a broad line of insulated wall and roof panels and a full range of complementary trims, accessories and engineering services. For more information, visit **www.awipanels.com**

About VICWEST

Headquartered in Oakville, Ontario, Vicwest is one of North America's leading manufacturers and distributors of exterior building products, including metal roofing, siding, decking, and architectural panels. Founded in 1905, Vicwest offers a wide and trusted range of products for the residential, industrial, commercial, institutional and agricultural construction markets. VICWEST has 13 manufacturing facilities with more than 800,000 square feet of operations strategically located throughout Canada and approximately 700 dedicated employees committed to providing quality products and excellent service to its North American customers. For more information, visit **www.vicwest.com**

All Weather Insulated Panels

Committed to a sustainable environment.

All Weather Insulated Panels is committed to the future and the environment. Our insulated metal panels are manufactured to deliver superior thermal capabilities designed to minimize the use of energy required in the heating and cooling of buildings. We manufacture using blowing agents that meet or exceed regulatory standards for the reduction of global warming potential (GWP) and our panels have zero ozone depleting potential (ODP) and do not produce volatile organic compounds (VOC). We also use recyclable materials to produce 100% recyclable products and incorporate finishes that are engineered to reduce the carbon footprint and maximize solar reflectance and thermal emissivity.

All Weather Insulated Panels significantly contribute to credits toward LEED® certification of a building.

FM APPROVED

MCA Metal Construction Association

CSSBI

Note: For more information about building with steel, please refer to the CSSBI publication on the structural integrity of steel building panels.

In accordance with ongoing efforts to improve our products and their performance, Vicwest and All Weather Insulated Panels reserve the right to change without notice the specifications contained herein.

The contents herein are for general information and illustrative purposes only and are not intended to serve as any type of advice. Every effort is made to ensure the accuracy of the information included in this brochure and it is believed that the information contained herein is accurate and reliable as of the date of publication. Vicwest and All Weather Insulated Panels do not warrant or represent the accuracy or reliability of any information included in this brochure. Any reliance on any information without consultation with Vicwest, All Weather Insulated Panels or a duly authorized representative shall be at the user's own risk.

To locate a sales representative in your area, please visit our website (see below)

Or call:

U.S. 888 970-AWIP (2947)
Canada 800 265-6583
800 567-2582

awipanels.com

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A Vicwest Company

awipanels.com

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A Vicwest Company

Insulated Metal Panels

Color Availability Chart

The colors shown here are representative only and not necessarily true reproductions of actual coating colors. Coil coat color chips are available on request.

For information regarding color availability, please contact your sales representative.

PVDF In-stock Colors

- Sandstone
- Surrey Beige
- Regal White
- Royal Blue
- Natural Green
- Pearl Gray

SMP In-stock Colors

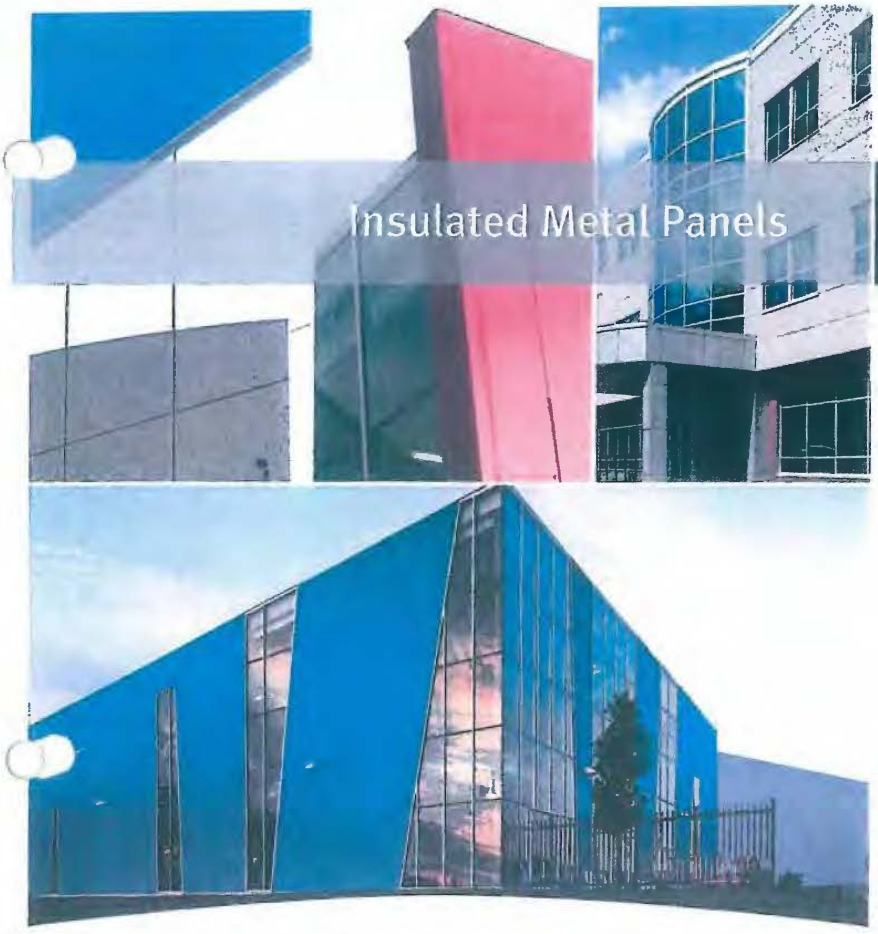
- Imperial White
- Sandstone
- Surrey Beige

Available PVDF Non-stock Colors

- Warm White
- Slate Gray
- Evergreen
- Slate Blue
- Colonial Red
- Weathered Copper

Interior Colors

- Imperial White



- Embossed metal surfaces are offered as a standard on wall panels and non-embossed (smooth) for roof exterior surfaces. Non-embossed finishes may be available on wall panels upon request depending on color, gauge and end use.
- Complete paint system specifications are available upon request.
- The standard interior paint finish for all panels is Imperial White.
- AdobeTexture™ finish is available in Sandstone, Surrey Beige, Pearl Gray and Regal White only.
- Non-stock colors and paint systems and special orders are typically subject to higher pricing and may increase lead times from point of order.

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ATTACHMENT 8 - LANDSCAPE PLANS

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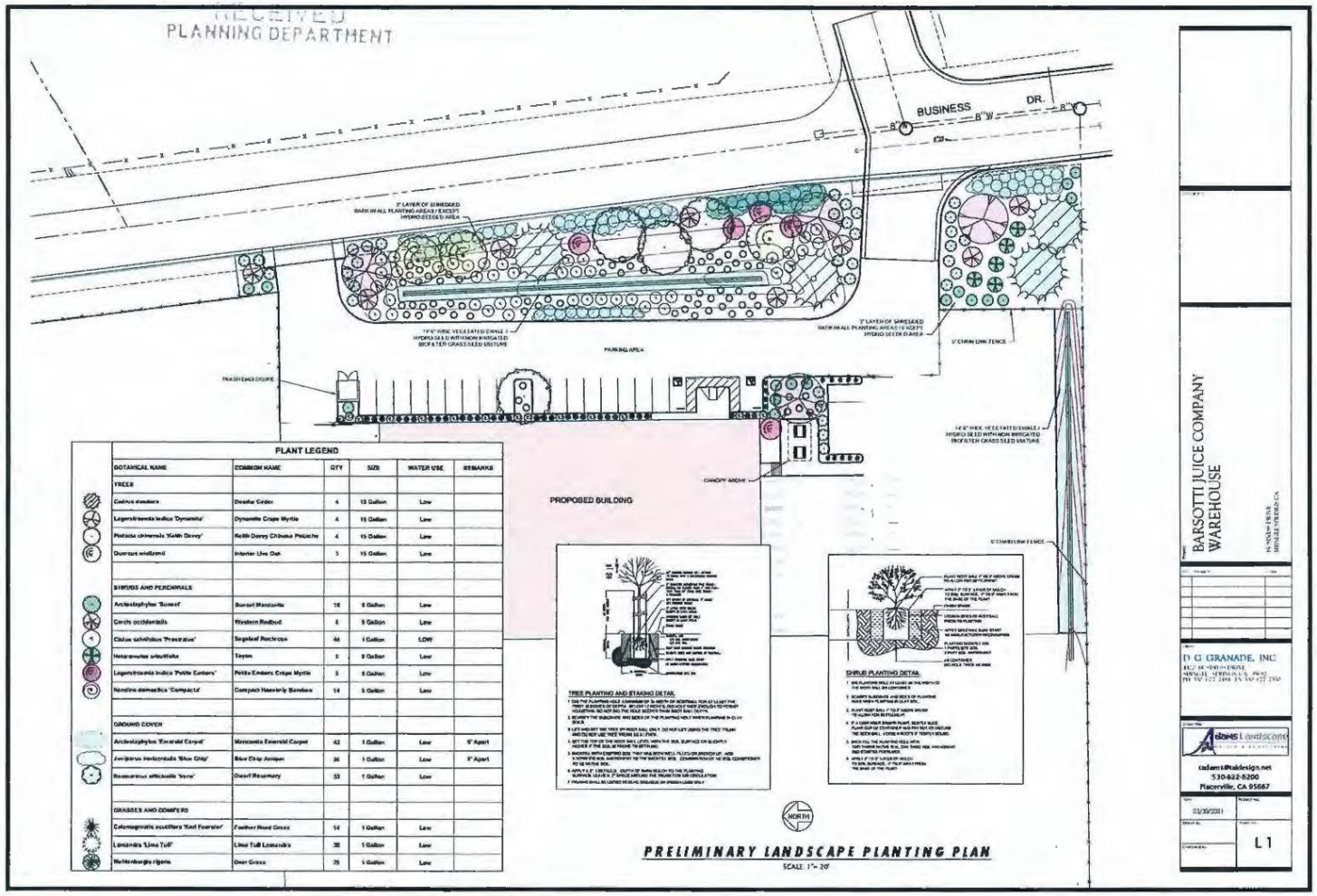
PLANNING DEPARTMENT



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DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 8 - LANDSCAPE PLANS

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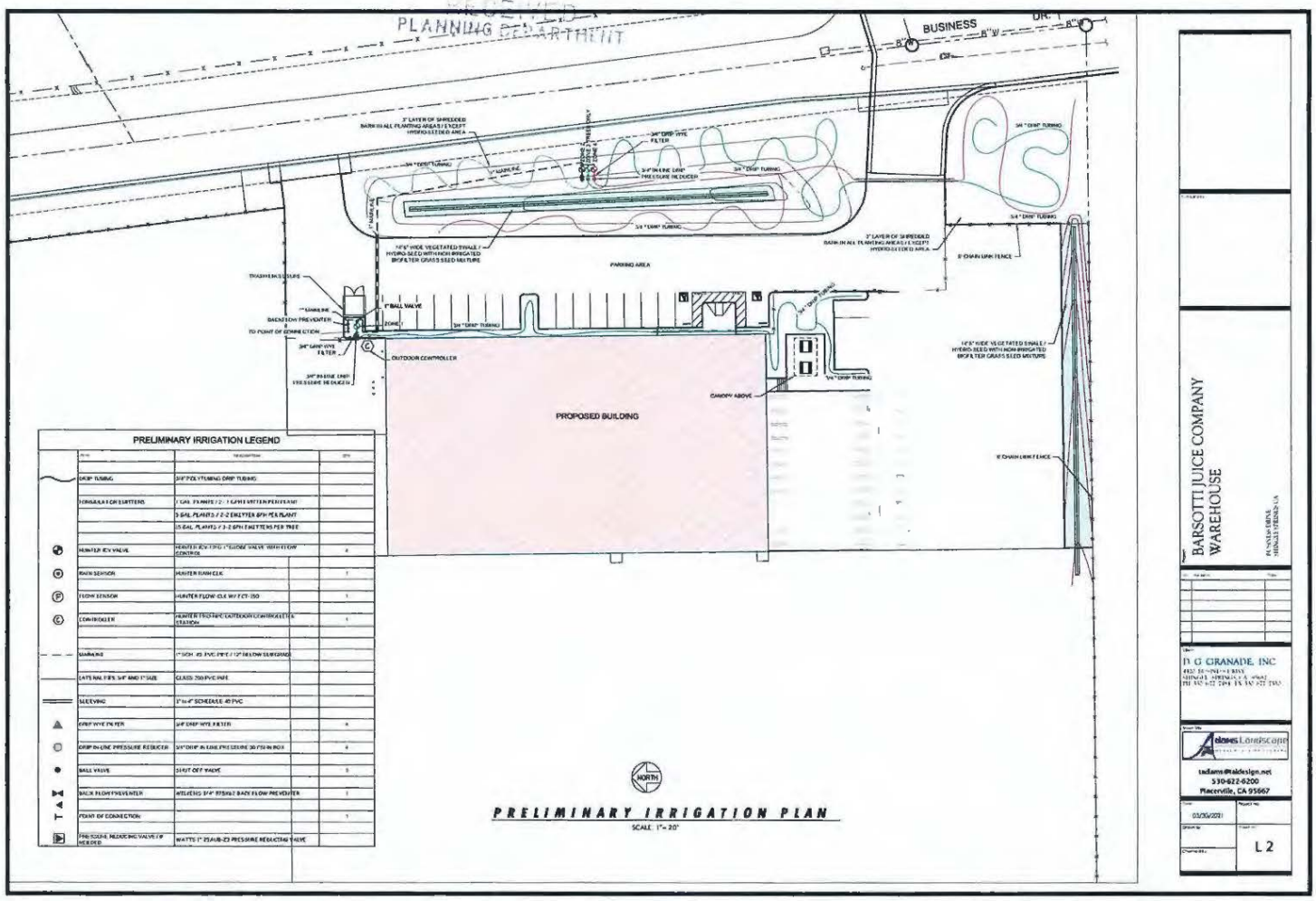

PLANNING AND BUILDING DEPARTMENT

2850 Fairlane Court, Placerville, CA 95667
Phone: (530) 621-5355 www.edcgov.us/Planning/

Model Water Efficient Landscape Ordinance (MWELO) Submittal Form

Applicant Information:

Name: DG Granade Inc

Phone: 530-677-7484 Email: doug.granade@dggranade.com

Address: 4420 Business Drive Shingle Springs Ca. 95682

Project

Site Address: 4665 Business Drive Shingle Springs Ca. 95682

Assessor's Parcel Number(s) (APNs): 109-240-30

Project Type: office/warehouse 22,800 sf Permit # _____

Master Plan ☐ Yes ☐ No; Lot # _____ Landscape Design # L1

☐ Currently, this project does not include landscaping. I am aware that future landscape installations may be required to comply with the Model Water Efficient Landscape Ordinance (MWELO) requirements per California Code of Regulations, Title 23, Division 2, Chapter 2.7.

☒ This project does incorporate landscaping. Please provide the information below specific to the landscape area which will be completed as part of this project and specify the compliance method to be used:

Total Landscape Area (sq. ft.): 15,000sf Turf Area (sq. ft.): none

Non-Turf Plan Area (sq. ft.): 15,000sf Special Landscape Area (sq. ft.): none

Water Type *(potable, recycled, well)*: potable

Name of water purveyor *(If not served by private well)*: EID

Compliance Method

☐ Less than 500 square feet

☐ Prescriptive (500 - 2,500 square feet), See Prescriptive Compliance Appendix D Checklist.

☒ Performance (2,500 square feet or greater), See Performance Checklist.

Signature

I certify the above information is correct and agree to comply with the requirements of the MWELO.

Signature of property owner or authorized representative — Date: 4/1/21

Revised 7/29/2019

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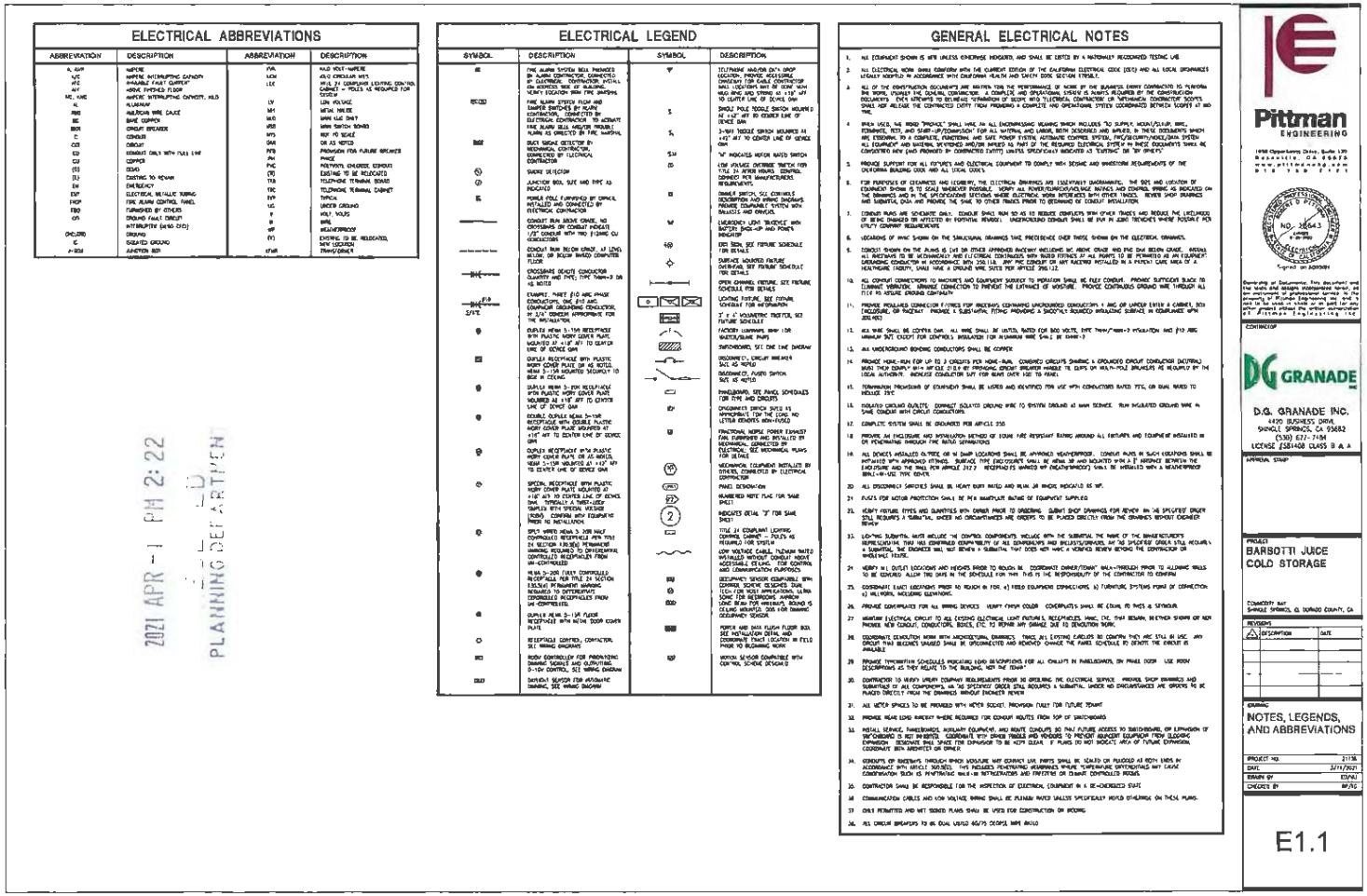
ATTACHMENT 9 - LIGHTING PLANS



ELECTRICAL ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A, AMP	AMPERE	KVA	KILO VOLT-AMPERE
AIC	AMPERE INTERRUPTING CAPACITY	KVAR	KILO VOLT-AMPERE REACTIVE
AFC	AVAILABLE FAULT CURRENT	LCC	LIGHTING CONTROL CABINET - POLES AS REQUIRED FOR SYSTEM
AFF	ABOVE FINISHED FLOOR		
AIC, KAIC	AMPERE INTERRUPTING CAPACITY, KILO		
AL	ALUMINUM	LV	LOW VOLTAGE
AWG	AMERICAN WIRE GAUGE	MH	METAL HALIDE
BC	BARE COPPER	MCB	MAIN CIRCUIT BREAKER
BKR	CIRCUIT BREAKER	MSB	MAIN SWITCH BOARD
C	CONDUIT	MTS	MAY TO SCALE
CIR	CIRCUIT	OAR	OR AS NOTED
CU	COPPER	PER	PROVISION FOR FUTURE BREAKER
CU	COPPER	PH	PHASE
DIA	DIAM	PVC	POLYVINYL CHLORIDE CONDUIT
(D)	DEMO	(R)	EXISTING TO BE RELOCATED
(E)	EXISTING TO REMAIN	TEB	TELEPHONE TERMINAL BOARD
EM	EMERGENCY	TBC	TELEPHONE TERMINAL CABINET
ESP	ELECTRICAL METALLIC TUBING	TYP	TYPICAL
FACP	FIRE ALARM CONTROL PANEL	UG	UNDER GROUND
FBO	FURNISHED BY OTHERS	V	VOLT, VOLTS
GFI	GROUND FAULT CIRCUIT INTERRUPTER (GFCI)	W	WIRE
		WP	WEATHERPROOF
(INSURE)	GROUND	(W)	EXISTING TO BE RELOCATED, NEW LOCATION
IG	ISOLATED GROUND	XFMR	TRANSFORMER
J-BOX	JUNCTION BOX		

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
FACP	FIRE ALARM SYSTEM BOX PROVIDED BY ALARM CONTRACTOR, CONNECTED BY ELECTRICAL CONTRACTOR, INSTALL PER MANUFACTURER'S RECOMMENDATIONS VERIFY LOCATION WITH FIRE MARSHAL		TELEPHONE MASTER UNIT, DROP LOCATION. PROVIDE ACCESSIBLE OWNERSHIP FOR CABLE CONTRACTOR TO INSTALL. LOCATE WITH 3/4" NOM WIDE, 8'-0" HIGH PLYWOOD BACKBOARD
(DC)(D)	FIRE ALARM SYSTEM FLOW AND TAMPER SWITCHES BY ALARM CONTRACTOR, CONNECTED BY ELECTRICAL CONTRACTOR TO ALTERNATE FIRE ALARM BELL MINUTES TROUBLE, ALARM AS DIRECTED BY FIRE MARSHAL	S	SINGLE POLE TOGGLE SWITCH MOUNTED AT +48" AFF TO CENTER LINE OF DEVICE BOX
DUCT	DUCT SMOKE DETECTOR BY MECHANICAL CONTRACTOR, CONNECTED BY ELECTRICAL CONTRACTOR	S_M	3-WAY TOGGLE SWITCH MOUNTED AT +48" AFF TO CENTER LINE OF DEVICE BOX
(S)	SMOKE DETECTOR	S_M	"M" INDICATES MOTOR RATED SWITCH
(J)	JUNCTION BOX, SIZE AND TYPE AS INDICATED	S_D	LOW VOLTAGE ON/OFF SWITCH FOR T-24, 24 HOUR HOURS ESSENTIAL. CONNECT PER MANUFACTURERS REQUIREMENTS
EC	MANUFACTURER FURNISHED BY OWNER, INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR		DIMMER SWITCH, SEE DRAWINGS DESCRIPTION AND WIRING DIAGRAMS. PROVIDE COMPATIBLE SYSTEM WITH BALLASTS AND DRIVERS
	CONDUIT RUN ABOVE GRADE, NO CROSSBARS OR DOMESTIC INDICATE 1/2" CONDUIT WITH TWO #12AWG CU CONDUCTORS	W	EMERGENCY LIGHT "BUGEYE" WITH BATTERY BACK-UP AND REMOTE HEADLAMP
	CONDUIT RUN BELOW GRADE, AT LEVEL WITH OR BELOW RAISED COMPUTER FLOOR	S_{EM}	EXIT SIGN, SEE FIXTURE SCHEDULE FOR DETAILS
#4AWG	CROSSBARS DENOTE CONDUCTOR QUANTITY AND TYPE; TYPE THWN-3 OR AS NOTED		SURFACE MOUNTED FIXTURE OVERHEAD, SEE FIXTURE SCHEDULE FOR DETAILS
#10 3/4"C	EXAMPLE: THREE #10 AWG PHASE CONDUCTORS, ONE #10 AWG EQUIPMENT GROUNDING CONDUCTOR, IN 3/4" CONDUIT APPROPRIATE FOR THE INSTALLATION		OPEN CHANNEL FIXTURE, SEE FIXTURE SCHEDULE FOR DETAILS
			LIGHTING FIXTURE, SEE FIXTURE SCHEDULE FOR INFORMATION
			2' X 4' VOLUMETRIC TROFFER, SEE FIXTURE SCHEDULE
	DUPLEX MOUNTED 5-15R RECEPTACLE WITH PLASTIC IVORY COVER PLATE, MOUNTED AT +18" AFF TO CENTER LINE OF DEVICE BOX		FACTORY LUMINAIRE, SEMI / OR WASTE/PLANE PLATE
	DUPLEX RECEPTACLE WITH PLASTIC IVORY COVER PLATE OR AS NOTED, MEDIA 5-15R MOUNTED SECURELY TO BOX IN CEILING		SWITCHBOARD, SEE ONE LINE DIAGRAM
			DISCONNECT, CIRCUIT BREAKER SIZE AS NOTED
	DUPLEX MEDIA 3-20R RECEPTACLE WITH PLASTIC IVORY COVER PLATE MOUNTED AT +18" AFF TO CENTER LINE OF DEVICE BOX		DISCONNECT, FUSED SWITCH SIZE AS NOTED
			PANELBOARD, SEE PANEL SCHEDULES FOR TYPE AND CIRCUITS
	DOUBLE DUPLEX MEDIA 5-15R RECEPTACLE WITH DOUBLE PLASTIC IVORY COVER PLATE MOUNTED AT +18" AFF TO CENTER LINE OF DEVICE BOX		ENCLOSURED SWITCH SIZED AS APPROPRIATE FOR THE LOAD, NO LETTER DENOTES NON-FUSED
			FRACTIONAL HORSE POWER EXHAUST FAN, SUSPENDED AND INSTALLED BY MECHANICAL, CONNECTED BY ELECTRICAL, SEE MECHANICAL PLANS FOR DETAILS
	DUPLEX RECEPTACLE WITH PLASTIC IVORY COVER PLATE OR AS NOTED, MEDIA 5-15R MOUNTED AT +15" AFF TO CENTER LINE OF DEVICE BOX	(M)	MECHANICAL EQUIPMENT INSTALLED BY OTHERS, CONNECTED BY ELECTRICAL CONTRACTOR
	SPECIAL RECEPTACLE WITH PLASTIC IVORY COVER PLATE MOUNTED AT +18" AFF TO CENTER LINE OF DEVICE BOX. TYPICALLY A THREE-LEGGED SIMPLEX WITH SPECIAL HOSPITAL GRADE. CONFIRM WITH EQUIPMENT PRIOR TO INSTALLATION	(PNL)	PANEL DESIGNATION
		(F2)	NUMBERED NOTE FLAG FOR SAME SHEET
		2	INDICATES DETAIL "2" FOR SAME SHEET
	SPLIT WIRED MEDIA 3-20R HALF CONTROLLED RECEPTACLE PER TYPE 24 SECTION 130.5(D) TAMPER-RESISTANT WARNING REQUIRED TO DIFFERENTIATE CONTROLLED RECEPTACLES FROM UN-CONTROLLED		T24 24 COMPLIANT LIGHTING CONTROL SUMMARY - POLES AS REQUIRED FOR SYSTEM
			LOW VOLTAGE CABLE, PLENUM RATED INSTALLED WITHOUT CONDUIT ABOVE ACCESSIBLE CEILING. FOR CONTROL AND COMMUNICATION PURPOSES
	MEDIA 5-20R TAMPER RESISTANT RECEPTACLE PER TYPE 24 SECTION 130.5(A) TAMPER RESISTANT WARNING REQUIRED TO DIFFERENTIATE CONTROLLED RECEPTACLES FROM UN-CONTROLLED	(OS)	OCCUPANCY SENSOR COMPATIBLE WITH CONTROL SYSTEM DESCRIBED. SEE T24 FOR MORE APPLICATIONS. USING SONIC FOR BEDROOMS AVERAGE LONG BEAM FOR HALLWAYS, ROUND IS CEILING MOUNTED. SEE T24 FOR DRAWING OCCUPANCY SENSOR
	DUPLEX MEDIA 5-15R FLOOR RECEPTACLE WITH MEDIA DOOR COVER PLATE		POWER AND DATA FLUSH FLOOR BOX. SEE INSTALLATION DETAIL AND COORDINATE FINAL LOCATION IN FIELD PRIOR TO BEGINNING WORK
	RECEPTACLE CONTROL, CONTRACTOR SEE WIRING DIAGRAMS		MOTION SENSOR COMPATIBLE WITH CONTROL SCHEME DESIGNED
	ROOM CONTROLLER FOR PROVIDING DIMMING MODULE AND OCCUPYING 0-10V CONTROL, SEE WIRING DIAGRAM		
	DAYLIGHT SENSOR FOR AUTOMATIC DIMMING, SEE WIRING DIAGRAM		

GENERAL ELECTRICAL NOTES

1. ALL EQUIPMENT SHOWN IS NEW UNLESS OTHERWISE INDICATED, AND SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LAB.
2. ALL ELECTRICAL WORK SHALL CONFORM WITH THE CURRENT EDITION OF THE CALIFORNIA ELECTRICAL CODE (CEC) AND ALL LOCAL ORDINANCES LEGALLY ADOPTED IN ACCORDANCE WITH CALIFORNIA HEALTH AND SAFETY CODE SECTION 17958.5.
3. ALL OF THE CONSTRUCTION DOCUMENTS ARE WRITTEN TOWARD THE PERFORMANCE OF WORK BY THE BUSINESS ENTITY CONTRACTED TO PERFORM THE WORK, KNOWN AS THE GENERAL CONTRACTOR. A COMPLETE AND OPERATIONAL SYSTEM IS SIMPLY REQUIRED BY THE CONSTRUCTION DOCUMENTS. EVEN ATTEMPTS TO DELINEATE "SEPARATION OF SCOPE" INTO "ELECTRICAL CONTRACTOR" OR "MECHANICAL CONTRACTOR" SCOPES SHALL NOT RELEASE THE CONTRACTED ENTITY FROM PROVIDING A COMPLETE AND OPERATIONAL SYSTEM COORDINATED BETWEEN SCOPES AT NO TIME.
4. SPACE USED, AND WORD "PROVIDE" SHALL MEAN, AN ALL ENCOMPASSING MEANING WHICH INCLUDES "TO SUPPLY, MOUNT/INSTALL, WIRE, TERMINATE, TEST, AND START-UP/COMMISSION" FOR ALL MATERIAL AND LABOR, BOTH DESCRIBED AND IMPLIED, IN THESE DOCUMENTS WHICH ARE NECESSARY TO A COMPLETE, FUNCTIONAL AND SAFE POWER SYSTEM, AUTOMATIC COMPLETE SYSTEM, FIRE/SECURITY/VOICE/DATA SYSTEM. ALL EQUIPMENT AND MATERIAL SPECIFIED AND/OR IMPLIED AS PART OF THE REQUIRED ELECTRICAL SYSTEM IN THESE DOCUMENTS SHALL BE CONSIDERED NEW (NOT PREVIOUSLY BY CONTRACTOR ENTITY) UNLESS SPECIFICALLY INDICATED AS "EXISTING" OR "BY OTHERS".
5. PROVIDE SUPPORT FOR ALL FIXTURES AND ELECTRICAL EQUIPMENT TO COMPLY WITH SEISMIC AND WINDSTORM REQUIREMENTS OF THE CALIFORNIA BUILDING CODE AND ALL LOCAL CODES.
6. FOR PURPOSES OF CLEARANCES AND ACCESSIBILITY, THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC. THE SIZE AND LOCATION OF EQUIPMENT SHOWN IS TO SCALE WHENEVER POSSIBLE. VERIFY ALL POWER/SIGNAL/VOLTAGE RATINGS AND CONFIRM WIRING AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS BEFORE ORDERING. WHERE ELECTRICAL WORK INTERFACES WITH OTHER TRADES, REVIEW SHOP DRAWINGS AND SUBMITTAL DATA AND PROVIDE THE SAME TO OTHER TRADES PRIOR TO BEGINNING OF CONDUIT INSTALLATION.
7. CONDUIT RUNS ARE SCHEMATIC ONLY. CONDUIT SHALL RUN SO AS TO REDUCE CONFLICTS WITH OTHER TRADES AND REDUCE THE LIKELIHOOD OF BEING DAMAGED OR AFFECTED BY FOOTPRINT REVISIONS. UNDERGROUND CONDUIT SHALL BE RUN IN JOINT TRENCHES WHERE POSSIBLE PER UTILITY COMPANY REQUIREMENTS.
8. LOCATIONS OF HVAC SHOWN ON THE SIMULTANEOUS DRAWINGS TAKE PRECEDENCE OVER THOSE SHOWN ON THE ELECTRICAL DRAWINGS.
9. CONDUIT SHOWN ON THE PLANS IS CUT ON STUDS APPROVED PATENT HOLLOWS NO ABOVE GRADE AND PVC DUCT BELOW GRADE. SPECIAL ALL RACEWAYS TO BE INTERCONNECTED AND ELECTRICAL CONTINUOUS WITH RATED FITTINGS AT ALL POINTS TO BE PERMITTED AS AN EQUIPMENT GROUNDING CONDUCTOR IN ACCORDANCE WITH 250.118. ANY RMC CONDUIT OR ANY RACEWAY INSTALLED IN A PATIENT CARE AREA OF A HEALTHCARE FACILITY, SHALL HAVE A GROUND WIRE SIZED PER ARTICLE 250.122.
10. ALL CONDUIT CONNECTIONS TO MACHINES AND EQUIPMENT SUBJECT TO VIBRATION SHALL BE FLEX CONDUIT. PROVIDE SUFFICIENT SLACK TO ELIMINATE VIBRATION. ARRANGE CONNECTION TO PREVENT THE ENTRANCE OF MOISTURE. PROVIDE CONTINUOUS GROUND WIRE THROUGH ALL FLEX TO ASSURE GROUNDING CONTINUITY.
11. PROVIDE PROPERLY SIZED CONNECTION FITTINGS FOR RACEWAYS CONTAINING UNGROUNDED CONDUCTORS. A WIRE OR LARGER ENTER A CABINET, BOX ENCLOSURE, OR RACEWAY. PROVIDE A SUBSTANTIAL FITTING PROVIDING A SMOOTH OR ROUNDED INSULATING SURFACE IN ACCORDANCE WITH 300.4(G).
12. ALL WIRE SHALL BE COPPER. ALL WIRE SHALL BE RATED FOR 600 VOLTS, TYPE THWN-2 INSULATION AND #10 AWG MINIMUM BUT EXCEPT FOR CONTROL INSULATION FOR STANDARD WIRE SHALL BE STRANDED.
13. ALL UNDERGROUND BONDING CONDUCTORS SHALL BE COPPER.
14. PROVIDE HOME-RUN FOR UP TO 3 CIRCUITS PER HOME-RUN. COMBINED CIRCUITS SHARING A GROUNDED CIRCUIT CONDUCTOR (NEUTRAL) MUST THEY COMPLY WITH ARTICLE 210.4 BY PROVIDING CIRCUIT BREAKER HANDLE TIE DEVICE ON MULTI-POLE BREAKERS AS REQUIRED BY THE LOCAL AUTHORITY. INDICATED CIRCULATION SLOT FOR SIGNS OVER 100 TO PANEL.
15. TERMINATION PROVISIONS OF EQUIPMENTS SHALL BE LISTED AND IDENTIFIED FOR USE WITH CONDUCTORS RATED TYPE, OR SIZE RATED TO INSULATE TEMP.
16. ISOLATED GROUND QUALITY. EQUIPMENT ISOLATED GROUND WIRE TO SYSTEM GROUND AT MAIN SERVICE. RUN INSULATED GROUND WIRE IN SAME CONDUIT WITH CIRCUIT CONDUCTORS.
17. COMPLETE SYSTEM SHALL BE GROUNDED PER ARTICLE 250.
18. PROVIDE AN ENCLOSURE AND INSTALLATION METHOD OF EQUIPMENT FIRE RESISTANT RATING AROUND ALL FIXTURES AND EQUIPMENT INSTALLED IN OR PENETRATING THROUGH FIRE RATED SEPARATIONS.
19. ALL DEVICES INSTALLED OUTSIDE, OR IN DAMP LOCATIONS SHALL BE APPROVED WEATHERPROOF. CONDUIT RUNS IN SUCH LOCATIONS SHALL BE INSTALLED WITH APPROVED FITTINGS. SURFACE TYPE ENCLOSURES SHALL BE MEDIA 30 AND MOUNTED WITH A 1" AIRSPACE BETWEEN THE ENCLOSURE AND THE WALL PER ARTICLE 312.2. RECEPTACLES MARKED WP (WEATHERPROOF) SHALL BE INSTALLED WITH A WEATHERPROOF WHILE-IN-USE TYPE COVER.
20. ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY RATED AND HUNG AT HEIGHT INDICATED AS HP.
21. FUSES FOR MOTOR PROTECTION SHALL BE PER NAMEPLATE RATING OF EQUIPMENT SUPPLIED.
22. VERIFY FIXTURE TYPES AND QUANTITIES WITH OWNER PRIOR TO ORDERING. SUBMIT SHOP DRAWINGS FOR REVIEW AS SPECIFIED UNDER SPLIT REQUIRES A SUBMITTAL, ORDER NO FIXTURES ARE REQUIRED TO BE PLACED DIRECTLY FROM THE DRAWINGS WITHOUT ENGINEER REVIEW.
23. LIGHTING SUBMITTAL SHEETS INCLUDE THE CONTROL COMPONENTS, INCLUDE WITH THE SUBMITTAL THE NAME OF THE MANUFACTURER'S REPRESENTATIVE THAT HAS CONFIRMED COMPATIBILITY OF ALL COMPONENTS AND BALLASTS/DRIVERS, AND THE SPECIFIED DRIVER STILL REQUIRES A SUBMITTAL, THE ENGINEER WILL NOT REVIEW A SUBMITTAL THAT DOES NOT HAVE A VENDORS REVIEW BEFORE THE CONTRACTOR OR SUBCONTRACTOR TESTING.
24. VERIFY ALL OUTLET LOCATIONS AND HEIGHTS PRIOR TO ROUGH-IN. COORDINATE OWNER/TENANT WALK-THROUGH PRIOR TO ALLOWING WALLS TO BE ENCASED. ALLOW THE TIME IN THE SCHEDULE FOR THIS. THIS IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM.
25. COORDINATE EXACT LOCATIONS PRIOR TO ROUGH IN FOR: a) FIELD EQUIPMENT CONNECTIONS. b) FURNITURE, SYSTEMS POINT OF CONNECTION. c) MILLWORK, INCLUDING ELEVATIONS.
26. PROVIDE CONFIRMATE FOR ALL WIRING DEVICES. VERIFY FINISH COLOR. COORDINATE WITH ARCHITECT.
27. MAINTAIN ELECTRICAL CIRCUIT TO ALL EXISTING ELECTRICAL LIGHT FIXTURES, RECEPTACLES, HVAC, ETC. THAT REMAIN, WHETHER SHOWN OR NOT SHOWN. NEW CONDUIT, CONDUCTORS, BOXES, ETC. TO REPAIR ANY DAMAGE DUE TO DEMOLITION WORK.
28. COORDINATE DEMOLITION WORK WITH ARCHITECTURAL DRAWINGS. TRACE ALL EXISTING CIRCUITS SO CONFIRM THEY ARE STILL IN USE, AND CIRCUIT THAT BECOMES UNUSED SHALL BE DISCONNECTED AND REMOVED. CHANGE THE PANEL SCHEDULE TO REFLECT THE CIRCUIT IS AVAILABLE.
29. PROVIDE TYPEWRITTEN SCHEDULES INDICATING ROOM DESCRIPTIONS FOR ALL CIRCUITS IN PANELBOARDS, ON PANEL DOOR. USE ROOM DESCRIPTIONS AS THEY RELATE TO THE BUILDING, NOT THE TENANT.
30. CONTRACTOR TO VERIFY UNDER COMPANY REQUIREMENTS PRIOR TO ORDERING THE ELECTRICAL SERVICE. PROVIDE SHOP DRAWINGS AND SUBMITTALS OF ALL COMPONENTS, AS "AS SPECIFIED" ORDER STILL REQUIRES A SUBMITTAL UNDER NO CIRCUMSTANCES ARE ORDERS TO BE PLACED DIRECTLY FROM THE DRAWINGS WITHOUT ENGINEER REVIEW.
31. ALL MOTOR SPACES TO BE PROVIDED WITH MOTOR SOURCE. PROVISION CHART FOR FUTURE TENANT.
32. PROVIDE REAR BOND BARRIER WHERE REQUIRED FOR CONDUIT ROUTES FROM TOP OF SWITCHBOARD.
33. INSTALL SERVICE, PANELBOARDS, AUXILIARY EQUIPMENT, AND REMOTE CONDUITS SO THAT FUTURE ACCESS TO SWITCHBOARD OR EXPANSION OF SWITCHBOARD IS NOT PROHIBITED. COORDINATE WITH OTHER TRADES AND VENDORS TO PREVENT ADJACENT EQUIPMENT FROM BLOCKING EXPANSION. RESERVE WALL SPACE FOR EXPANSION TO BE KEPT CLEAR. 5' PLANS DO NOT INDICATE AREA OF FUTURE EXPANSION. COORDINATE WITH ARCHITECT OR OWNER.
34. CONDUITS OR RACEWAYS THROUGH WHICH MOISTURE MAY CONTACT USE PARTS SHALL BE SEALED OR PLUGGED AT BOTH ENDS IN ACCORDANCE WITH ARTICLE 300.5(E). THIS INCLUDES PENETRATING ASSEMBLIES WHERE TEMPERATURE DIFFERENTIALS MAY CAUSE CONDENSATION SUCH AS REFRIGERATORS AND FREEZERS OR CLIMATE CONTROLLED ROOMS.
35. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION OF ELECTRICAL EQUIPMENT BY A RE-CHECKLIST STAFF.
36. COMMUNICATION CABLES AND LOW VOLTAGE WIRING SHALL BE PLENUM RATED UNLESS SPECIFICALLY NOTED OTHERWISE ON THESE PLANS.
37. ONLY PERMITTED AND WET SEALED PLANS SHALL BE USED FOR CONSTRUCTION OR BIDDING.
38. ALL CIRCUIT BREAKERS TO BE DUAL USED 60/75 DEGREE WIRE RATED

2021 APR -1 PM 2:22
PLANNING DEPARTMENT

Pittman ENGINEERING
1998 Opportunity Drive, Suite 130
Roseville, CA 95678
www.pittmaneng.com
916 780 7141

REGISTERED PROFESSIONAL ENGINEER
No. 28643
ELECTRICAL
Signed on 03/19/21

Ownership of Documents: This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of Pittman Engineering Inc and is not to be used in whole or in part for any other project without the written permission of Pittman Engineering Inc.

CONTRACTOR
DG GRANADE
D.G. GRANADE INC.
4420 BUSINESS DRIVE
SHINGLE SPRINGS, CA 95682
(530) 677-7484
LICENSE #581408 CLASS B & A

APPROVAL STAMP

PROJECT
BARSOTTI JUICE COLD STORAGE
COUNTY MAP
SHINGLE SPRINGS, EL DORADO COUNTY, CA

REVISIONS		
	DESCRIPTION	DATE
1		
2		
3		
4		

DRAWING
NOTES, LEGENDS, AND ABBREVIATIONS

PROJECT NO	21136
DATE	3/19/2021
DRAWN BY	ESPAU
CHECKED BY	RPAG

E1.1

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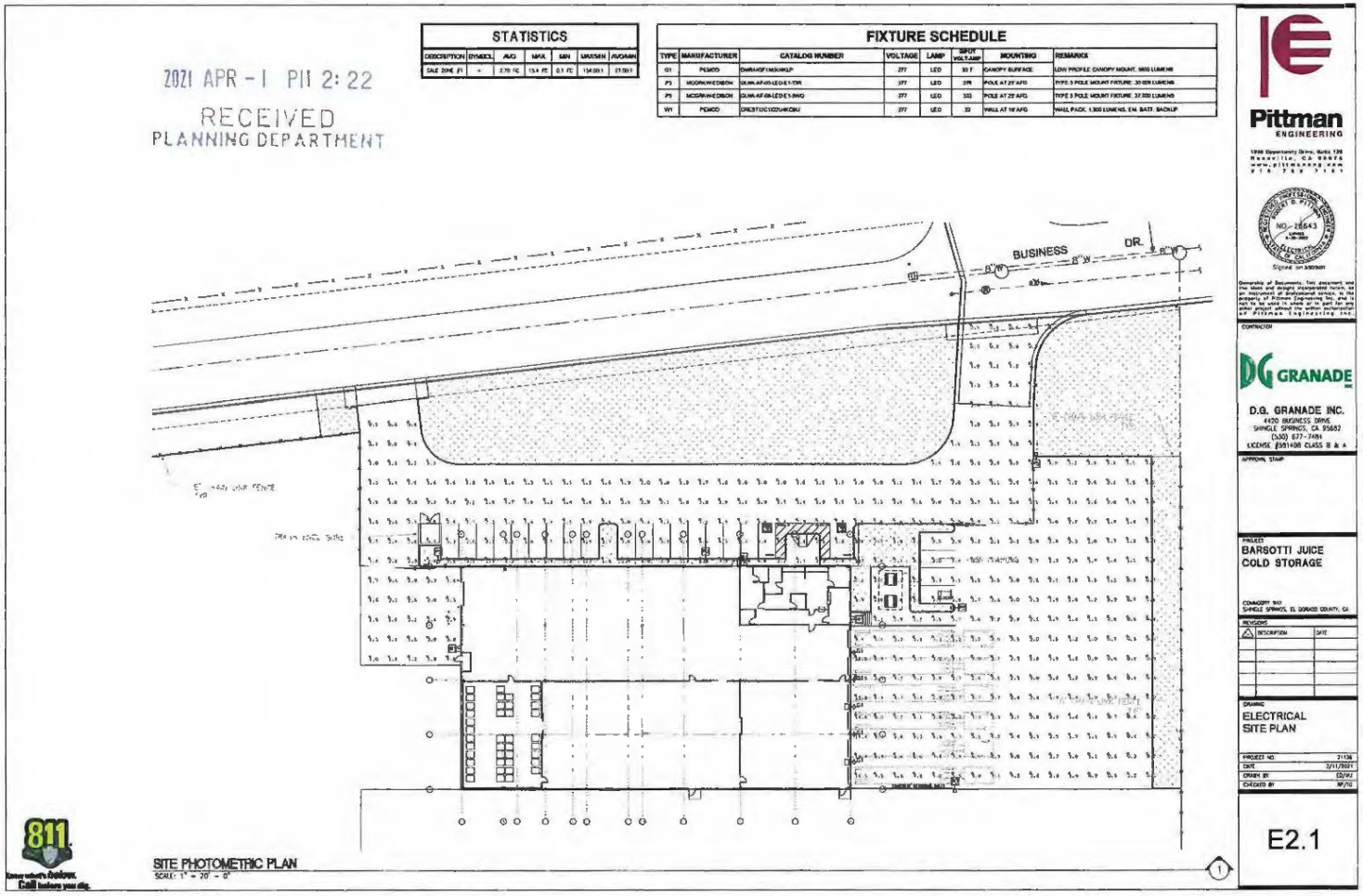
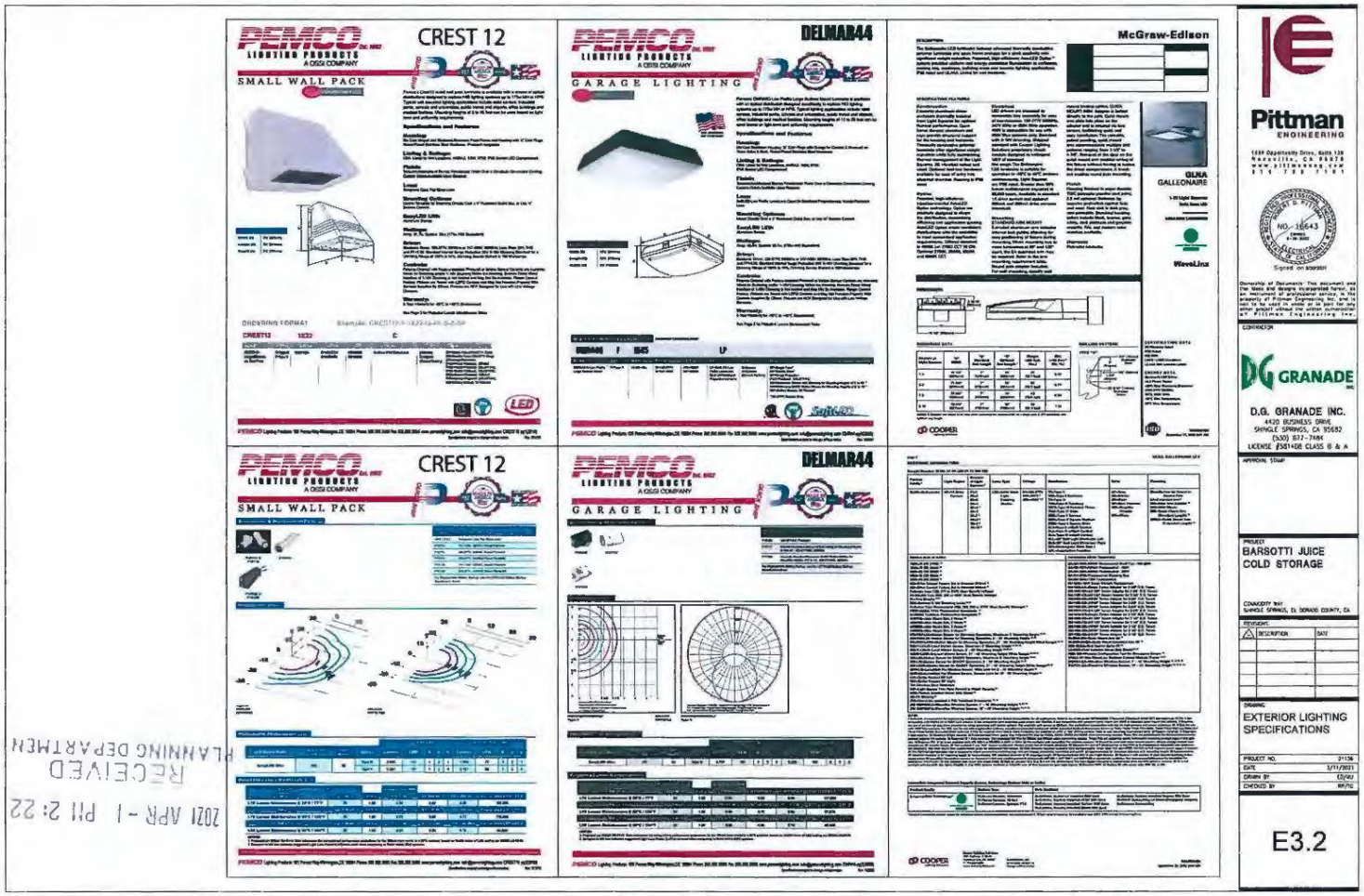
DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 9 - LIGHTING PLANS





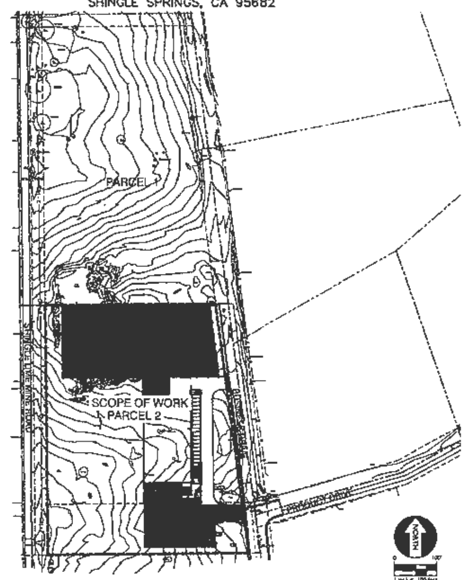
DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 10 - IMPROVEMENT PLANS

2021 ... PLANNING DEPARTMENT

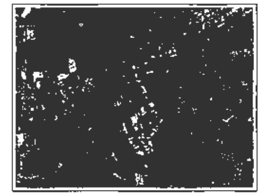
IMPROVEMENT PLANS FOR

BARSOTTI JUICE COMPANY WAREHOUSE

BUSINESS AND PRODUCT DRIVE
SHINGLE SPRINGS, CA 95682



SITE



VICINITY MAP
N.T.S.

AREA OF PARCEL(S)	7.31 ACRES
AREA OF DISTURBANCE	7.80 ACRES
W.O.I.D.#	—
A.P.N.	109-240-030

BENCHMARK NO. 185-002 ELEV. 1320.73

EARTHWORK QUANTITIES IN CUBIC YARDS		
CUT (CY)	FILL (CY)	NET (CY)
17,000	17,000	0

A SEPARATE GRADING PERMIT WILL BE REQUIRED IF IMPORT SOIL IS TAKEN FROM LOCATIONS WITHIN EL DORADO COUNTY.

PROJECT ADDRESS
BUSINESS AND PRODUCT DRIVE
SHINGLE SPRINGS, CA 95682

OWNER
DG GRANADE, INC.
4420 BUSINESS DRIVE
SHINGLE SPRINGS, CA 95682
PHONE: 530-677-7484
CONTACT: DOUG GRANADE

GEOTECHNICAL REPORT
YOUNGDAHL CONSULTING GROUP INC.
1234 GLENHAVEN COURT
EL DORADO HILLS, CA 95762
PROJECT NUMBER: E18129.001
DATE: FEBRUARY 2021
PHONE: 916-933-0633
FAX: 916-933-6482

UTILITY REPRESENTATIVES				
CABLE T.V.	COMCAST CABLE (AC SQUARE, INC.)	AVGOUSTIN MARCHENKO	CONTACT	(916) 376-7782
SEWER	EL DORADO IRRIGATION DISTRICT	MARC MACKAY	ENGINEER	(530) 642-4135
GAS/ELEC	P.G. & E.	KELLY MARSHALL	SVC. PLANNING DEPT.	KLMe@pge.com
WATER	EL DORADO IRRIGATION DISTRICT	MARC MACKAY	ENGINEER	(530) 642-4135
DRAINAGE	EL DORADO COUNTY	DEPT. OF TRANSPORTATION	ENGINEER	(530) 621-5900
TELEPHONE	AT&T	DARREN MORTENSEN	ENGINEER	(530) 621-6920
FIRE	EL DORADO COUNTY FIRE PROTECTION DIST.	BRANDON MCKAY	DEPUTY FIRE MARSHAL	(530) 644-9636
MISC.	UNDERGROUND SERVICE ALERT	N/A	N/A	(800) 642-2444 OR 811

GRADING AND GEOTECHNICAL SPECIFICATIONS

ALL GRADING SHALL BE DONE UNDER THE OBSERVATION AND TESTING OF A QUALIFIED CIVIL ENGINEER OR GEOTECHNICAL ENGINEER AND IF REQUIRED BOTH A CIVIL ENGINEER OR GEOTECHNICAL ENGINEER AND AN ENGINEERING GEOLOGIST. ALL GRADING MUST BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE COUNTY ORDINANCES AND THE RECOMMENDATIONS AND SPECIFICATION SET FORTH IN THE THE SOILS REPORT OR GEOLOGICAL/GEOTECHNICAL INVESTIGATION.

AS SHOWN

AT COMPLETION OF THE GRADING OPERATIONS, AN AS-GRADED SOILS AND GEOLOGICAL REPORT WILL BE PREPARED. ONE COPY OF THE REPORT WILL BE SUBMITTED TO EACH, THE DOT INSPECTOR AND DOT DEVELOPMENT SERVICES UNIT.

GEOTECHNICAL ENGINEERS STATEMENT

THESE GRADING PLANS HAVE BEEN REVIEWED BY THE UNDERSIGNED AND FOUND TO BE IN GENERAL CONFORMANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS IN THE REFERENCED SOILS REPORT OR GEOTECHNICAL INVESTIGATION PREPARED FOR THIS DEVELOPMENT.

______ GE# DATE: ______ EXPIRES: ______

______ RCE# DATE: ______ EXPIRES: ______

MATERIAL LIST (SEWER)

ITEM	MANUFACTURER	MODEL/ TYPE/SIZE	QUANTITY
PIPE			
MANHOLES			
SERVICES			

MATERIAL LIST (WATER)

ITEM	MANUFACTURER	MODEL/ TYPE/SIZE	QUANTITY
PIPE			
SERVICES			
FIRE HYDRANT			
VALVES (BY TYPE)			

SHEET INDEX

SHT. NO.	DESCRIPTION
C0.0	COVER SHEET
C0.1	GENERAL NOTES
C1.1	ENGINEERED FILL PLAN
C2.1	PARTIAL GRADING PLAN
C2.2	PARTIAL GRADING PLAN
C2.3	PARTIAL GRADING PLAN
C3.1	UTILITY PLAN
C4.1	PAVING PLAN
C4.2	STRIPING AND SIGNAGE PLAN
C5.1	EROSION CONTROL GENERAL NOTES
C5.2	EROSION CONTROL PLAN
C6.1	DETAILS AND SECTIONS
C6.2	DETAILS AND SECTIONS

PROJECT DESCRIPTION

CONSTRUCTION OF A NEW WAREHOUSE BUILDING FOR BARSOTTI COMPANY. SITE WORK INCLUDES: GRADING ACTIVITIES, UTILITIES, ASPHALT AND CONCRETE PAVING AND EROSION CONTROL MEASURES.

RECORD DRAWING CERTIFICATION

THIS SET OF PLANS, HAVING BEEN REVIEWED BY ME, REFLECT ALL APPROVED REVISIONS TO THE PROJECT KNOWN TO ME, AND ALL FIELD DEVIATIONS TO THE PLANNED IMPROVEMENTS BY THE CONSTRUCTION CONTRACTOR, AS REPORTED TO ME AS OF ______. IT DOES NOT REPRESENT FIELD VERIFICATION OF PLANNED IMPROVEMENTS BY ME.

REGISTERED CIVIL ENGINEER ______ RCE NO. ______ DATE ______

WATER SERVICE CERTIFICATION

I HEREBY CERTIFY THAT THE WATER SYSTEM AS SHOWN ON DRAWING ______ HAS BEEN DESIGNED TO PROVIDE ALL OF THIS PROJECT WITH ADEQUATE WATER PRESSURE AND FIRE FLOW AS OF THE DATE SHOWN, BASE ON CRITERIA SUPPLIED BY THE EL DORADO IRRIGATION DISTRICT.

REGISTERED CIVIL ENGINEER ______ RCE NO. ______ DATE ______

SEWER SERVICE CERTIFICATION

I HEREBY CERTIFY THAT THE SEWER SYSTEM AS SHOWN ON DRAWING ______ HAS BEEN DESIGNED TO PROVIDE ALL OF THIS PROJECT EACH LOT (OR FACILITY) OF THIS TRACT (PROJECT) WITH SEWER SERVICE AS OF THE DATE SHOWN BASED ON CRITERIA SUPPLIED BY THE EL DORADO IRRIGATION DISTRICT.

REGISTERED CIVIL ENGINEER ______ RCE NO. ______ DATE ______

EL DORADO COUNTY FIRE DEPARTMENT
(FIRE PROTECTION DISTRICT ONLY)

APPROVED BY ______ DATE ______

EL DORADO IRRIGATION DISTRICT

COVER SHEET
BUSINESS AND PRODUCT DRIVE IMPROVEMENT PLANS
A.P.N. 109-240-030
JOB NO. 20-153
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: N/A

C0.0

FILENAME: I:\20-153\CIVIL\DWG\20-153 C00.DWG

DR21-0005

STANDARD GENERAL NOTES - ROADWORK, GRADING AND DRAINAGE

1. MATERIALS, CONSTRUCTION QUALITY, AND METHODS FOR THIS PROJECT ARE SUBJECT TO THE COUNTY OF EL DORADO DESIGN AND IMPROVEMENT STANDARDS MANUAL, STANDARD PLANS, AND THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND STANDARD SPECIFICATIONS.
2. ALL REFERENCE TO TD SHALL MEAN THE CDA-TRANSPORTATION DIVISION DIRECTOR, OF EL DORADO COUNTY OR AUTHORIZED REPRESENTATIVE.
3. ALL WORK SHALL BE ACCOMPLISHED TO THE SATISFACTION OF THE TD OR AN AUTHORIZED REPRESENTATIVE.
4. ALL REFERENCE TO THE STANDARD SPECIFICATIONS SHALL MEAN THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2015.
5. THE CONTRACTOR SHALL HAVE A RESPONSIBLE PARTY, WHO SHALL HAVE FULL AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR ON SITE AT ALL TIMES DURING WORKING HOURS.
6. THE CONTRACTOR SHALL NOTIFY TD 48 HOURS IN ADVANCE OF COMMENCING WORK TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE AND INSPECTION WITH THE ENGINEER AND TD. NO WORK SHALL BEGIN UNTIL AFTER THE PRE-CONSTRUCTION CONFERENCE AND INSPECTION HAVE BEEN COMPLETED.
7. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 7, LEGAL RELATIONS AND RESPONSIBILITY OF THE STANDARD SPECIFICATIONS.
8. RIGHTS TO ENTER AND CONSTRUCT SHALL BE OBTAINED PRIOR TO CONSTRUCTING ANY OFF-SITE WORK SHOWN IN THESE PLANS. COPIES OF SUCH DOCUMENTS SHALL BE KEPT ON-SITE AT ALL TIMES DURING THE PERFORMANCE OF OFF-SITE WORK.
9. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) 811 OR 1-800-227-2600 PRIOR TO PERFORMING ANY EXCAVATION ON THE PROJECT SITE. THE OWNER(S) OF IDENTIFIED EXISTING UNDERGROUND FACILITIES SHALL ALSO BE CONTACTED PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR SHALL NOT CONSTRUCT ANY WORK WITHOUT ADEQUATE CONSTRUCTION STAKING. AS A MINIMUM, THE FOLLOWING STAKING SHALL BE REQUIRED: 1) CLEARING LIMITS, 2) SLOPE STAKES, 3) WATER LINE STAKES, 4) SEWER LINE STAKES, 5) STORM DRAIN STAKES, 6) FINISHED GRADE STAKES. ADDITIONAL STAKING MAY BE REQUIRED BY TD DUE TO THE NATURE AND/OR COMPLEXITY OF THE WORK. LOST OR DAMAGED STAKES SHALL BE REPLACED TO THE SATISFACTION OF TD WHETHER RESULTING FROM CONSTRUCTION PROCEDURES, VANDALISM, OR ANY OTHER CAUSE. SURVEY CUT SHEETS SHALL BE PROVIDED TO THE CONTRACTOR WITHIN ONE BUSINESS DAY OF COMPLETION OF THE SURVEY REQUEST. CONTRACTOR SHALL PROVIDE ALL CUT SHEETS TO THE TD INSPECTOR AND EID THE SAME DAY THEY ARE RECEIVED.
11. THE CONTRACTOR'S ATTENTION IS DIRECTED TO COUNTY OF EL DORADO RESOLUTION NO. 199-91, WHICH CONTAINS SPECIFIC REQUIREMENTS FOR THE PROTECTION AND PRESERVATION OF OAK TREES AND WETLANDS. THE CONTRACTOR SHALL REMOVE ONLY THOSE TREES SHOWN ON THE PLANS TO BE REMOVED. THE CONTRACTOR SHALL INSTALL PROTECTIVE FENCING AT THE DRIP LINE OF ALL REMAINING TREES WITHIN 30 FEET OF ANY GRADING, AND OTHERWISE COMPLY WITH THE PROVISIONS OF SAID ORDINANCE.
12. CONSTRUCTION HOURS SHALL BE LIMITED FROM 7:00AM TO 7:00PM (OR SUNSET), MONDAY THROUGH FRIDAY, AND 8:00AM TO 5:00PM WEEKENDS AND FEDERALLY RECOGNIZED HOLIDAYS, UNLESS OTHERWISE SPECIFIED BY SEPARATE AGREEMENT (SUBDIVISION GRADING AGREEMENT, SUBDIVISION IMPROVEMENT AGREEMENT, ROAD IMPROVEMENT AGREEMENT, ETC.). ALL HEAVY EQUIPMENT AND ANY INTERNAL COMBUSTION ENGINES SHALL BE FITTED WITH ADEQUATE MUFFLERS.
13. THE CONTRACTOR SHALL PROVIDE, PLACE AND MAINTAIN ALL LIGHTS, SIGNS, DELINEATORS, BARRICADES, TEMPORARY TRAFFIC STRIPING, FLAGMEN, DETOURS OR OTHER DEVICES NECESSARY TO PROVIDE FOR THE SAFE AND CONVENIENT PASSAGE OF PUBLIC VEHICLE AND PEDESTRIAN TRAFFIC THROUGH THE CONSTRUCTION SITE.
14. THE CONTRACTOR SHALL OBTAIN THE EXPRESS WRITTEN CONSENT OF TD PRIOR TO IMPLEMENTING ANY LANE CLOSURE OR DETOUR ON A COUNTY MAINTAINED STREET OR HIGHWAY. ALL LANE CLOSURES OR DETOURS SHALL CONFORM TO CHAPTER 5, "TRAFFIC CONTROL DEVICES FOR LOW VOLUME ROADS" OF THE CALIFORNIA MUTCD.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING CONSTRUCTION. AT LEAST ONE WATER TRUCK SHALL BE ON SITE AT ALL TIMES. ADDITIONAL EQUIPMENT MAY BE REQUIRED AS DETERMINED BY TD.
16. THE CONTRACTOR SHALL OBTAIN AN APPROVED FUGITIVE DUST CONTROL PLAN, INCLUDING PROVISIONS FOR ASBESTOS HAZARD MITIGATION, IF REQUIRED, FROM THE COUNTY OF EL DORADO ENVIRONMENTAL MANAGEMENT DEPARTMENT PRIOR TO BEGINNING OF WORK.
17. IF UNUSUAL AMOUNTS OF STONE, BONE, OR ARTIFACTS ARE UNCOVERED DURING CONSTRUCTION, ALL WORK SHALL BE STOPPED WITHIN ONE HUNDRED FEET (100') OF THE FIND, AND A QUALIFIED ARCHAEOLOGIST CONSULTED FOR AN ON-SITE EVALUATION.
18. IF THE PRESENCE OF SERPENTINE ROCK (SMT) IS DISCOVERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, TD AND THE COUNTY OF EL DORADO ENVIRONMENTAL MANAGEMENT DIVISION THAT SERPENTINE ROCK IS PRESENT ON THE SITE. ADDITIONALLY, THE CONTRACTOR SHALL IMPLEMENT THE ASBESTOS HAZARD MITIGATION PROVISIONS OF THE FUGITIVE DUST PLAN PRIOR TO CONTINUATION OF EARTHWORK IN AREAS WHERE SERPENTINE ROCK IS PRESENT.
19. UPON JOB COMPLETION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE INFORMATION TO ANTHONY TASSANO, WARREN CONSULTING ENGINEERS, INC. (ENGINEER), REGARDING ANY MATERIAL CHANGES MADE DURING CONSTRUCTION AS WELL AS ANY OTHER INFORMATION REQUIRED TO BE SHOWN ON THE RECORD DRAWINGS BY TD, THE EL DORADO IRRIGATION DISTRICT (EID), OTHER UTILITY COMPANIES, OR OTHER RESPONSIBLE AGENCIES.
20. CLEARING AND GRUBBING SHALL CONFORM TO THE PROVISIONS OF SECTION 16, "CLEARING AND GRUBBING" OF THE STANDARD SPECIFICATIONS. ROOTS, STUMPS, TREES, ROCKS OR OTHER DELETERIOUS SUBSTANCES SHALL BE DISPOSED OF OFF-SITE AND IN A LAWFUL MANNER.
21. EARTHWORK SHALL CONFORM TO THE PROVISIONS OF SECTION 19, "EARTHWORK" OF THE STANDARD SPECIFICATIONS. WIDENING OF EMBANKMENTS AND FLATTENING OF SLOPES, WHICH RESULT IN AN INCREASED AREA OF GRADING, WILL NOT BE PERMITTED WITHOUT EXPRESS WRITTEN APPROVAL FROM TD.
22. AGGREGATE BASE SHALL CONFORM TO THE PROVISIONS OF SECTION 26, "AGGREGATE BASE" OF THE STANDARD SPECIFICATIONS FOR CLASS 2 AGGREGATE BASE, 3/4" MAXIMUM GRADATION. AGGREGATE BASE SHALL NOT BE PLACED UNTIL THE PRIOR GRADING PLANE HAS BEEN APPROVED BY TD.
23. ASPHALT CONCRETE SHALL CONFORM TO THE PROVISIONS OF SECTION 39, "ASPHALT CONCRETE" OF THE STANDARD SPECIFICATIONS. ASPHALT BINDER(S) SHALL BE PERFORMANCE GRADE 64-16. ASPHALT CONCRETE SHALL NOT BE PLACED UNTIL THE PRIOR GRADING PLANE HAS BEEN APPROVED BY TD, AND ALL UTILITIES WITHIN THE PAVED AREA HAVE BEEN PLACED, TESTED, AND APPROVED.
24. ALL ASPHALT CONCRETE DRAIN(S) SHALL BE A MINIMUM OF 3 INCHES AND REPLACED IN KIND WITH ASPHALT CONCRETE AS DEFINED IN SECTION 39, OF THE STANDARD SPECIFICATIONS. IF AGGREGATE BASE IS NOT PRESENT IT SHALL BE REPLACED WITH A MINIMUM OF 8 INCHES OF CLASS 2 AGGREGATE BASE AND CONFORM TO THE PROVISIONS OF SECTION 26 OF THE STANDARD SPECIFICATIONS FOR CLASS 2 AGGREGATE BASE. ANY EXCEPTION TO THE 8 INCH MINIMUM OF CLASS 2 AGGREGATE BASE REPLACEMENT MUST BE PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER.
25. AFTER ACCEPTANCE OF THE FINAL LIFT OF ASPHALT CONCRETE, AND PRIOR TO THE END OF THE WARRANTY PERIOD, ALL ROADWAYS SHALL BE FOG SEALED IN ACCORDANCE WITH SECTION 37-2, "SEAL COATS" OF THE STANDARD SPECIFICATIONS. ASPHALTIC EMULSION SHALL BE SLOW-SETTING ANIONIC ASPHALTIC EMULSIONS TYPE, GRADE SS1, CONFORMING TO THE REQUIREMENTS OF SECTION 94, "ASPHALTIC EMULSIONS" OF THE STANDARD SPECIFICATIONS. ALL PROJECTS THAT HAVE RE-STRIPING DUE TO TRAFFIC STAGING OR NEW LANE LINES SHALL BE SEALED WITH A SLURRY SEAL CONFORMING TO THE REQUIREMENTS OF SECTION 37-3 "SLURRY SEAL AND MICRO-SURFACING" OF THE STANDARD SPECIFICATIONS AFTER THE EXISTING STRIPING IS REMOVED BY GRINDING, SANDBLASTING OR PAVEMENT OVERLAY.
26. SUBGRADE — WHEN ASPHALT CONCRETE OR ASPHALT CONCRETE BASE IS TO BE PLACED ON THE GRADING PLANE, THE GRADING PLANE AT ANY POINT SHALL NOT VARY MORE THAN 0.05 FOOT ABOVE OR BELOW THE GRADE ESTABLISHED BY THE ENGINEER. WHEN SUBBASE OR BASE MATERIAL (OTHER THAN ASPHALT CONCRETE BASE) IS TO BE PLACED ON THE GRADING PLANE, THE GRADING PLANE AT ANY POINT SHALL NOT VARY MORE THAN 0.05 FOOT ABOVE THE GRADE ESTABLISHED BY THE ENGINEER.
27. CONCRETE STRUCTURES SHALL CONFORM TO SECTION 90-2 "MINOR CONCRETE" OF THE STANDARD SPECIFICATIONS.
28. PRECAST CONCRETE STRUCTURES SHALL CONFORM TO SECTION 70-4 "PRECAST CONCRETE PIPE DRAINAGE FACILITIES" OF THE STANDARD SPECIFICATIONS.
29. WHERE TYPE B DROP INLETS EXCEED 3 FEET IN HEIGHT, REINFORCING STEEL SHALL BE INSTALLED AS SHOWN ON THE PLAN DETAIL. REINFORCING STEEL SHALL BE # 4 BARS, INSTALLED IN THE VERTICAL WALLS AT 12" O.C. (BOTH DIRECTIONS). A 3" CLEARANCE SHALL BE MAINTAINED FROM THE OUTSIDE FACE OF THE WALLS. UNDER NO CIRCUMSTANCES WILL TYPE B DROP INLETS BE ALLOWED IN EXCESS OF 8 FEET IN HEIGHT.
30. WHERE ANY PORTION OF THE STRUCTURE EXCAVATION FOR VERTICAL CONCRETE STRUCTURES (MANHOLES, INLETS, VAULTS, ETC.) IS WITHIN THE STREET, MATERIAL USED TO BACKFILL SUCH STRUCTURES SHALL CONFORM TO SECTION 19-3.02D, "STRUCTURE BACKFILL" OF THE STANDARD SPECIFICATIONS. COMPACTION TESTS WILL BE TAKEN EVERY 2-3 FEET VERTICALLY. WHERE CAST-IN-PLACE STRUCTURES ARE PLACED AGAINST UNDISTURBED NATIVE MATERIAL, THIS REQUIREMENT SHALL NOT APPLY.
31. TRAFFIC STRIPING AND PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, CONFORMING TO SECTION 84-2 "TRAFFIC STRIPES AND PAVEMENT MARKINGS" OF THE STANDARD SPECIFICATIONS.
32. A GEOTECHNICAL ENGINEER AND A STRUCTURAL ENGINEER SHALL CERTIFY, RESPECTIVELY, THE GEOTECHNICAL AND STRUCTURAL ITEMS ON THE PLAN(S) WERE BUILT IN CONFORMANCE WITH THE RESPECTIVE GEOTECHNICAL AND STRUCTURAL RECOMMENDATIONS FOR THE PROJECT BEFORE FINALIZATION OF THE PROJECT.
33. IF BLASTING ACTIVITIES ARE TO OCCUR IN CONJUNCTION WITH DEVELOPMENT, THE DEVELOPER SHALL ENSURE THAT SUCH BLASTING ACTIVITIES ARE CONDUCTED IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
34. IF BURNING ACTIVITIES ARE TO OCCUR DURING CONSTRUCTION, THE DEVELOPER SHALL OBTAIN THE NECESSARY BURNING PERMITS AND AIR POLLUTION PERMITS FROM THE CALIFORNIA DEPARTMENT OF FORESTRY (CDF) AND FORM THE AIR QUALITY MANAGEMENT DISTRICT (AQMD) PRIOR TO SAID BURNING ACTIVITIES.
35. STORM DRAINS SHALL BE TELEVISED WHEN BACKFILL REACHES THE POINT OF 2 FOOT OF COMPACTED TRENCH FILL OVER THE PIPE. A COPY OF THE VIDEOTAPE WILL BE PROVIDED TO THE DOT INSPECTOR, AND NO PAVING OVER THE PIPE WILL BE DONE WITHOUT THE INSPECTOR'S AUTHORIZATION. COST OF TELEVISING WILL BE INCLUDED IN THE UNIT COST OF CONSTRUCTION.
36. STORM DRAINS IN PUBLIC RIGHT-OF-WAY, IN IRREVOCABLE OFFERS OF DEDICATIONS, OR THAT ARE TO BE MAINTAINED BY A ZONE OF BENEFIT (ZOB), SERVICE DISTRICT (CSD), SERVICE AREA (CSA), OR ANY OTHER PUBLICLY ADMINISTERED AGENCY WILL BE OF THE FOLLOWING MATERIALS:
    A. REINFORCED CONCRETE PIPE (RCP)
    B. HIGH DENSITY POLYETHYLENE PIPE (HDPE), 48" MAXIMUM
    C. CORRUGATED STEEL PIPE, BUT ONLY UNDER THE FOLLOWING CIRCUMSTANCES
        (1) 48" MAXIMUM
        (2) NON-EROSIVE FLOW VELOCITIES
        (3) ALUMINIZED
        (4) NOMINAL THICKNESS FOR 50 YEAR LIFE (AASHTO DESIGNATION M196)
        (5) 4 INCH REINFORCED CONCRETE PAD IN BOTTOM THIRD
        (6) IN NON-CORROSIVE SOILS (INCLUDING BACKFILL) (7). STEEL PLATE OR
    D. STEEL ARCH WITH CONCRETE OR "SOFT" BOTTOM.
37. STREET NAME SIGNS SHALL BE INSTALLED AT EVERY INTERSECTION IN ACCORDANCE WITH LATEST APPROVED CALIFORNIA MUTCD.
38. THE CONTRACTOR SHALL FURNISH AND INSTALL TYPE F-2 MARKERS AT BOTH ENDS OF CULVERTS. THE CULVERT MARKERS SHALL HAVE A TWO INCH WIDE BLACK STRIP AT THE TOP OF THE MARKER. ABOVE ELEVATIONS 3,000 FEET, THE CONTRACTOR SHALL FURNISH AND INSTALL TYPE F MARKERS WITH SNOW POLE BRACKETS ON ALL DIKES AT 100 FOOT INTERVALS AND AT BOTH ENDS OF CULVERTS. ABOVE ELEVATION 3,000 FEET, THE CONTRACTOR SHALL INSTALL METAL MARKER POSTS WITH SNOW POLE BRACKETS NEAR EACH FIRE HYDRANT.
39. CONTRACTOR SHALL NOT START ANY UTILITY WORK UNTIL A JOINT TRENCH COMPOSITE PLAN HAS BEEN APPROVED BY THE TD (WATER AND SEWER EXCEPTED). ALL UTILITY WORK PERFORMED IN THE COUNTY RIGHT OF WAY SHALL REQUIRE AN ENCROACHMENT PERMIT.
40. WATER AND SEWER LINES SHALL BE TESTED AND APPROVED BY EID PRIOR TO PLACING PAVEMENT ON THE STREET.
41. OMISSIONS AND ERRORS ON PLANS SHALL NOT BE VALID, AND ALL CODES AND LAWS MUST BE COMPLIED WITH BY THE OWNER, ENGINEER AND CONTRACTOR.
42. ALL NEW OR RECONSTRUCTED DRAINAGE INLETS SHALL HAVE A STORM WATER QUALITY MESSAGE STAMPED INTO THE CONCRETE. ALL STAMPS SHALL BE APPROVED BY THE TD INSPECTOR PRIOR TO BEING USED.
43. IMPORT OR EXPORT OVER 250 CUBIC YARDS TO ANY OFF-SITE BORROW OR DISPOSAL SITE WILL REQUIRE A SEPARATE APPROVED GRADING PERMIT FOR THE OFF-SITE LOCATION PRIOR TO TD SIGNATURE APPROVAL OF PLANS.
44. IN THE EVENT OF THE DISCOVERY OF HUMAN REMAINS, ALL WORK IS TO STOP AND THE COUNTY CORONER SHALL BE IMMEDIATELY NOTIFIED PURSUANT TO SECTION 7050.5 OF THE HEALTH AND SAFETY CODE AND SECTION 5097.98 OF THE PUBLIC RESOURCES CODE. IF THE REMAINS ARE DETERMINED TO BE NATIVE AMERICAN, THE CORONER MUST CONTACT THE NATIVE AMERICAN HERITAGE COMMISSION WITHIN 24 HOURS. THE TREATMENT AND DISPOSITION OF HUMAN REMAINS SHALL BE COMPLETED CONSISTENT WITH GUIDELINES OF THE NATIVE AMERICAN HERITAGE COMMISSION.

GENERAL WATER NOTES

1. WORK SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION AND TO THE SATISFACTION OF THE EL DORADO IRRIGATION DISTRICT (EID). CONSTRUCTION SHALL CONFORM TO THESE PLANS AND EID's LATEST VERSION OF THE TECHNICAL SPECIFICATIONS, STANDARD DRAWINGS, AND CURRENT DRINKING WATER REGULATIONS OR THESE STANDARDS.
2. CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION CONFERENCE WITH EID INSPECTION 5 WORKING DAYS IN ADVANCE OF DOING WORK WITHIN THEIR JURISDICTION. CONSTRUCTION SHALL BE STARTED NO LATER THAN FIVE(5) DAYS AFTER THE PRECONSTRUCTION CONFERENCE.
3. LOCATION OF ALL UNDERGROUND FACILITIES ARE APPROXIMATE ONLY - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL FACILITIES PRIOR TO ANY EXCAVATION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND FACILITIES AFFECTED BY THE WORK AND SHALL CONTACT UNDERGROUND SERVICES ALERT (USA) 48 HOURS PRIOR TO ANY EXCAVATION WORK FOR DETERMINATION AND LOCATION OF UNDERGROUND UTILITIES (811 OR 800-227-2600)
5. CONNECTIONS TO EXISTING WATER FACILITY SHALL BE DONE BY A CLASS A LICENSED CONTRACTOR IN ACCORDANCE WITH EID TIE-IN PROCEDURES PER TECHNICAL SPECIFICATION.
6. WHERE EXCAVATIONS FOR ANY FACILITIES CONSTRUCTION EXCEED 5 FEET IN DEPTH, CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM CAL/OSHA IN SACRAMENTO (PHONE 1-916-263-2800) POST PERMIT AT THE CONSTRUCTION SITE AND COMPLY WITH ALL REQUIREMENTS.
7. THE CONTRACTOR SHALL NOTIFY EID INSPECTION 48 HOURS PRIOR TO START OR RESTART OF WORK, ADDITIONALLY IF WORK WILL BE STOPPED FOR MORE THAN ONE WORKING DAY.
8. ONLY EID PERSONNEL SHALL OPERATE ANY VALVES OR APPURTENANCES ON EXISTING WATER SYSTEM.
9. THE TOTAL SITE REQUIRED FIRE FLOW IS 1500 GPM AT 20 PSIG RESIDUAL.
10. BASED UPON A HYDRAULIC GRADE LINE OF --- FT AT STATIC CONDITIONS AND --- FT DURING FIRE FLOW AND MAXIMUM DAY DEMANDS, THE MAXIMUM AND MINIMUM PRESSURES ARE CALCULATED TO BE --- PSI AND --- PSI RESPECTIVELY.
11. PIPELINES SHALL BE CONTINUITY AND HYDROSTATICALLY TESTED, DISINFECTED, FLUSHED, AND BACTERIA TESTED IN ACCORDANCE WITH EID'S TECHNICAL SPECIFICATION. ALL DISINFECTING SHALL BE ACCORDANCE WITH THE MOST RECENT AMERICAN WATER WORKS ASSOCIATION STANDARDS.
12. ALL LIDS SHALL BE MARKED "WATER".
13. CURBS SHALL BE WET STAMPED WITH A "W" BRAND WHERE WATER SERVICES INTERCEPT.
14. CONTRACTOR SHALL HAVE A COPY OF EID'S CONSTRUCTION STANDARDS ON THE JOB. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AT ALL TIMES ON SITE.
15. REVISIONS TO THE DRAWINGS MUST BE APPROVED IN WRITING BY EID
16. STAKING INFORMATION: MINIMUM SPACING SHALL BE 50 FEET (25 FEET IN RADIUS) UNLESS OTHERWISE DIRECTED BY EID. INFORMATION WILL INCLUDE OFFSET, TYPE OF FACILITY AND CUT TO FLOW LINE ON THE FRONT OF THE STAKE AND ELEVATION AND STATION NUMBER ON THE BACK. ANGLE POINTS AND APPURTENANCES TO BE STAKED INCLUDING LINE AND CURB STAKES AS NEEDED. CUT SHEETS REQUIRED WHERE SUBGRADE HAS NOT BEEN MADE.
17. AT A MINIMUM, ALL MATERIALS, CONSTRUCTION, AND TESTING SHALL COMPLY WITH CURRENT AMERICAN WATER WORKS ASSOCIATION STANDARDS, CALIFORNIA DIVISION OF DRINKING WATER STANDARDS, UNIFORM PLUMBING CODE, AND THE DISTRICT'S STANDARD SPECIFICATIONS, WHICH EVER IS MORE STRINGENT.

GENERAL SEWER NOTES

1. ALL WORK WILL BE SUBJECT TO INSPECTION AND APPROVAL BY THE EL DORADO IRRIGATION DISTRICT (EID). ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND EID'S LATEST VERSION OF THE TECHNICAL SPECIFICATIONS AND STANDARD DRAWINGS.
2. CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION CONFERENCE WITH EID INSPECTION 5 WORKING DAYS IN ADVANCE OF DOING WORK WITHIN THEIR JURISDICTION. CONSTRUCTION SHALL BE STARTED NO LATER THAN FIVE (5) DAYS AFTER THE PRECONSTRUCTION CONFERENCE.
3. LOCATION OF ALL UNDERGROUND FACILITIES ARE APPROXIMATE ONLY - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL FACILITIES PRIOR TO ANY EXCAVATION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND FACILITIES AFFECTED BY THE WORK AND SHALL CONTACT UNDERGROUND SERVICES ALERT (USA) 48 HOURS PRIOR TO ANY EXCAVATION WORK FOR DETERMINATION AND LOCATION OF UNDERGROUND UTILITIES (PHONE 1-800-642-2444).
5. CONNECTIONS TO EXISTING SEWER FACILITIES SHALL BE DONE BY A LICENSED CONTRACTOR IN ACCORDANCE WITH EID TIE-IN PROCEDURES PER TECHNICAL SPECIFICATIONS.
6. WHERE EXCAVATIONS FOR ANY FACILITIES CONSTRUCTION EXCEED 5 FEET IN DEPTH, CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM CAL/OSHA IN SACRAMENTO (PHONE 1-916-263-2800).
7. SERVICE INSTALLATIONS IN ROADWAYS WITH CUTS OR FILLS GREATER THAN 8 FEET IN HEIGHT AND SLOPES STEEPER THAN 3:1 SHALL HAVE THE CLEAN OUT SET AT FINISH GRADE NEXT TO THE ROAD IN THE LOCATION DIRECTED BY THE DISTRICT. THE SERVICE LINE SHALL THEN BE EXTENDED 5 FEET BEYOND THE SLOPE CATCH POINT WITH PVC SDR 35 SIZED TO MATCH THE SERVICE. PLACE STEEL T-POSTS PAINTED GREEN AT THE END OF THIS SERVICE LINE.
8. ALL LIDS SHALL BE MARKED "SEWER".
9. ALL CURBS SHALL BE WET STAMPED WITH AN "S" BRAND WHERE SEWER SERVICES INTERCEPT.
10. LINED MANHOLES REQUIRED.
11. CONTRACTOR SHALL HAVE A COPY OF THE EID'S CONSTRUCTION STANDARDS ON THE JOB.
12. ALL REVISIONS TO THESE DRAWINGS MUST BE APPROVED IN WRITING BY EID
13. THE CONTRACTOR SHALL NOTIFY THE EID INSPECTOR 48 HOURS PRIOR TO START OR RESTART OF WORK.
14. STAKING INFORMATION: MINIMUM SPACING SHALL BE 50 FEET (25 FEET IN RADIUS) UNLESS OTHERWISE DIRECTED BY EID. INFORMATION WILL INCLUDE OFFSET, TYPE OF FACILITY AND CUT TO FLOW LINE ON THE FRONT OF THE STAKE AND ELEVATION AND STATION NUMBER ON THE BACK. ANGLE POINTS AND APPURTENANCES TO BE STAKED INCLUDING LINE AND CURB STAKES AS NEEDED. CUT SHEETS REQUIRED WHERE SUBGRADE HAS NOT BEEN MADE.
15. ON REPLACEMENT PROJECTS, THE EXISTING FACILITY MUST REMAIN IN SERVICE UNTIL THE NEW UTILITY IS ACCEPTED AND PUT INTO SERVICE.

FIRE PROTECTION DISTRICT NOTES

1. ALL FIRE HYDRANTS INSTALLED SHALL BE FROM E.I.D.'S APPROVED MATERIALS LIST AND BE PAINTED WITH RUST INHIBITIVE, SAFETY WHITE ENAMEL. THERE SHALL BE A BLUE REFLECTIVE MARKER PLACED PERPENDICULAR TO CENTERLINE OF STREET PER EL DORADO HILLS FIRE DEPARTMENT STANDARDS.

INSPECTION REQUIREMENTS FOR CMU RETAINING WALLS

INSPECTION	SCOPE OF INSPECTION
1ST	FOOTING PAD AND SIZE, KEY SIZE, REINFORCEMENT, SOIL CONDITION AT TOE. DISCUSS SPECIAL INSPECTION PROCEDURES.
2ND	4 FOOT LIFT, PRIOR TO GROUT POUR. BLOCK, MORTAR JOINTS, REINFORCEMENT AND GROUT CELLS.
3RD	TOP LIFT, PRIOR TO LAST GROUT POUR. BLOCK, MORTAR JOINTS, REINFORCEMENT AND GROUT CELLS. ANCHOR BOLTS AND HARDWARE PLACEMENT.
4TH	DRAIN(S), WALL WATERPROOFING, RESTRAINED SUPPORT OR TEMPORARY SHORING PER DESIGN PROFESSIONAL. DISCUSS DRAIN ROCK AND BACKFILL COMPACTION PROCEDURES.
FINAL	DRAIN TO DAYLIGHT, WEEP HOLES, RESTRAINED SUPPORT, EROSION CONTROL, BACKFILL, COMPACTION REPORT, SPECIAL INSPECTION REPORT.

SPECIAL INSPECTIONS: AFTER EXCAVATION, THE FOLLOWING SPECIAL INSPECTIONS SHALL BE PERFORMED BY THE DESIGNER OR A CERTIFIED INSPECTOR ACCEPTABLE TO THE DIRECTOR; AND TESTING SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY ACCEPTABLE TO THE DIRECTOR.

SPECIAL INSPECTION AND TESTING		
SOIL COMPACTION		X
REINFORCED CONCRETE	X	
STRUCTURAL MASONRY	X	
SHOTCRETE	X	
SEGMENTAL WALL PLACE		X
GRIDS AND TIE BACKS		X
ICBO/ICC REPORT CRITERIA	AS SPECIFIED	AS SPECIFIED
STRUCTURAL OBSERVATION	AS SPECIFIED	AS SPECIFIED

A.P.N. 109-240-030

SHEET TITLE: GENERAL NOTES

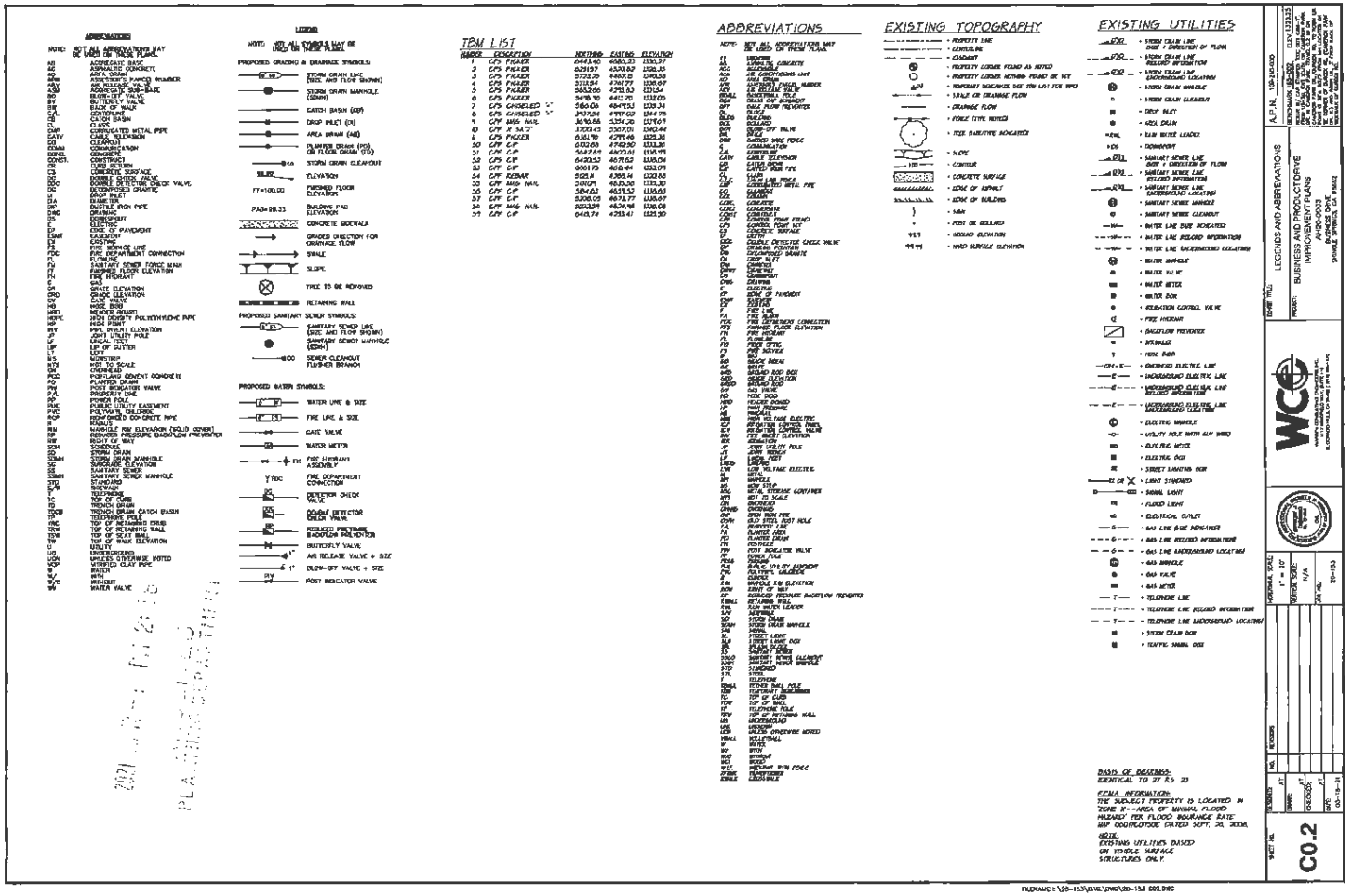
PROJECT: BUSINESS AND PRODUCT DRIVE IMPROVEMENT PLANS AN20-0003 BUSINESS DRIVE SHINGLE SPRINGS, CA 95682

WCE

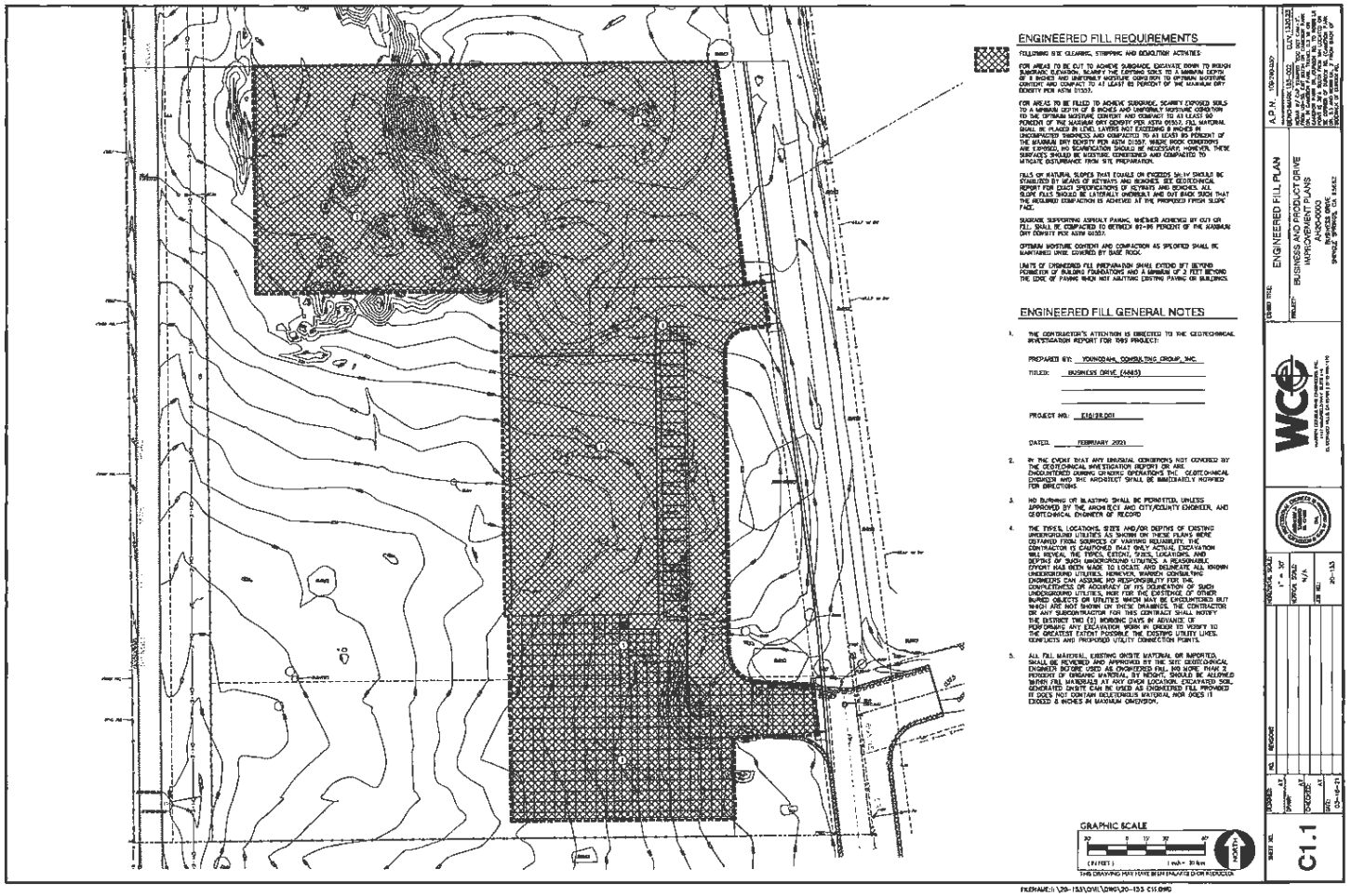
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: N/A
JOB NO: 20-153

DESIGNED: AT
DRAWN: AT
CHECKED: AT
DATE: 03-16-21

SHEET NO. C0.1



DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 10 - IMPROVEMENT PLANS



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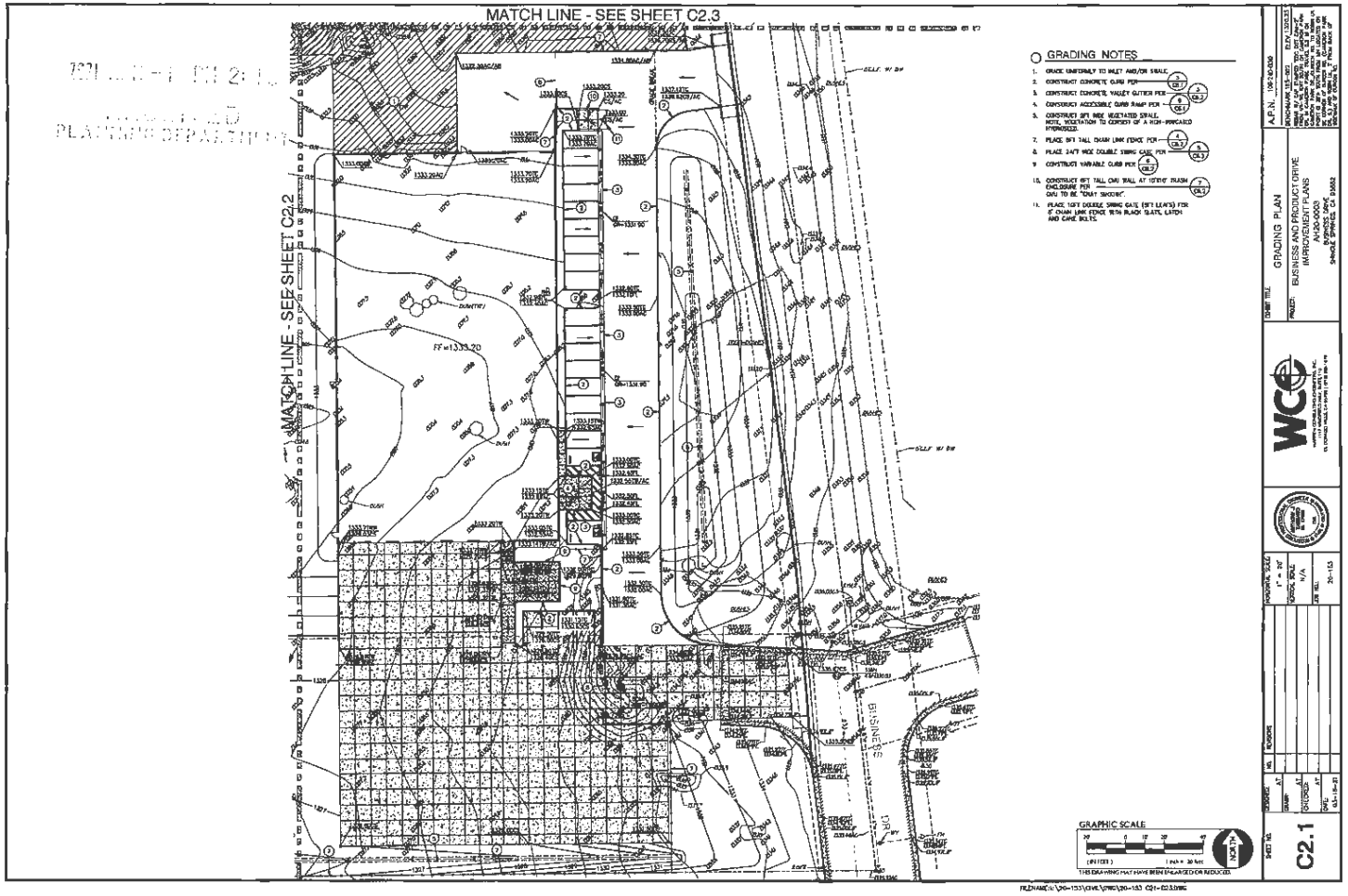

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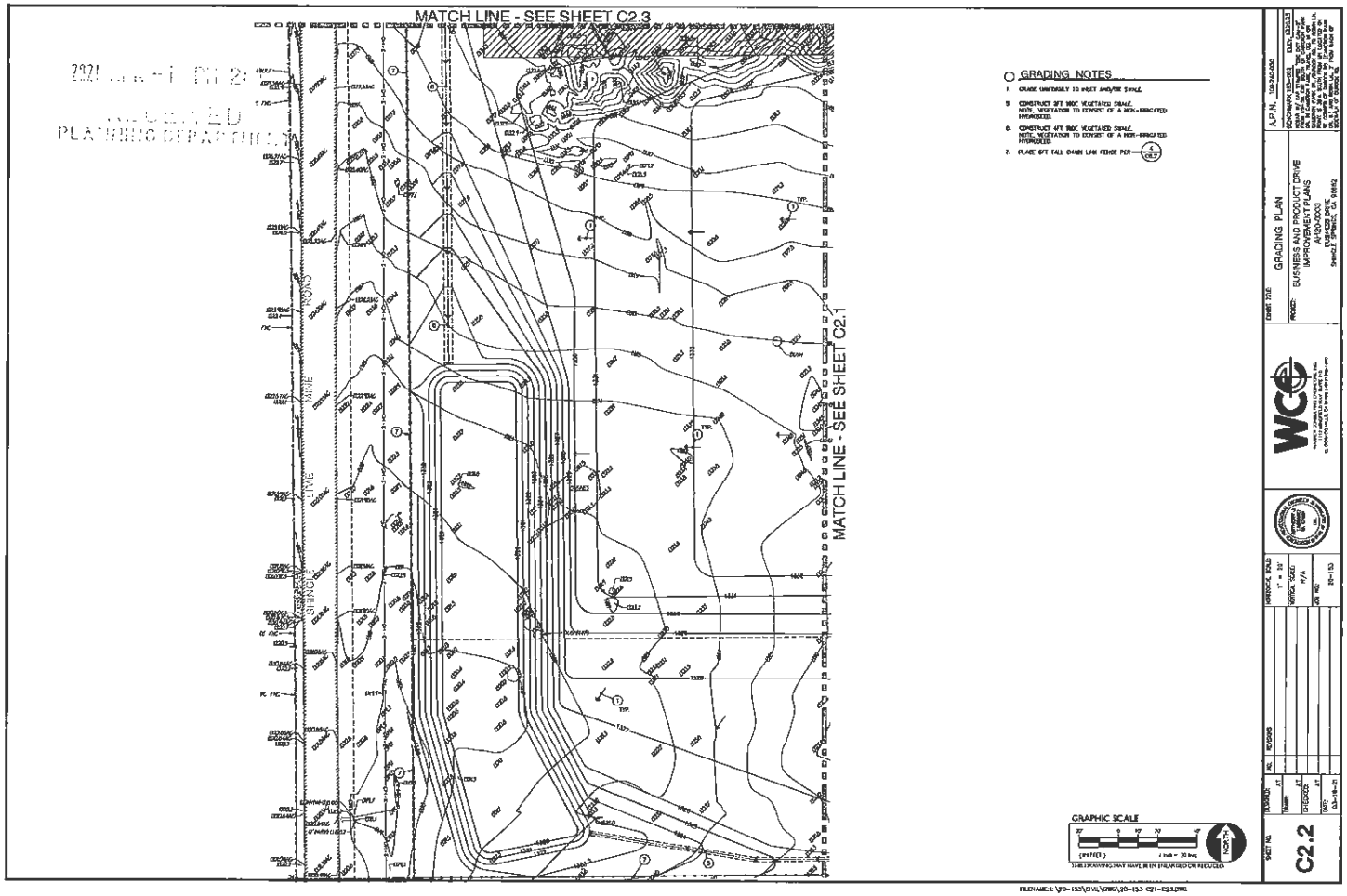

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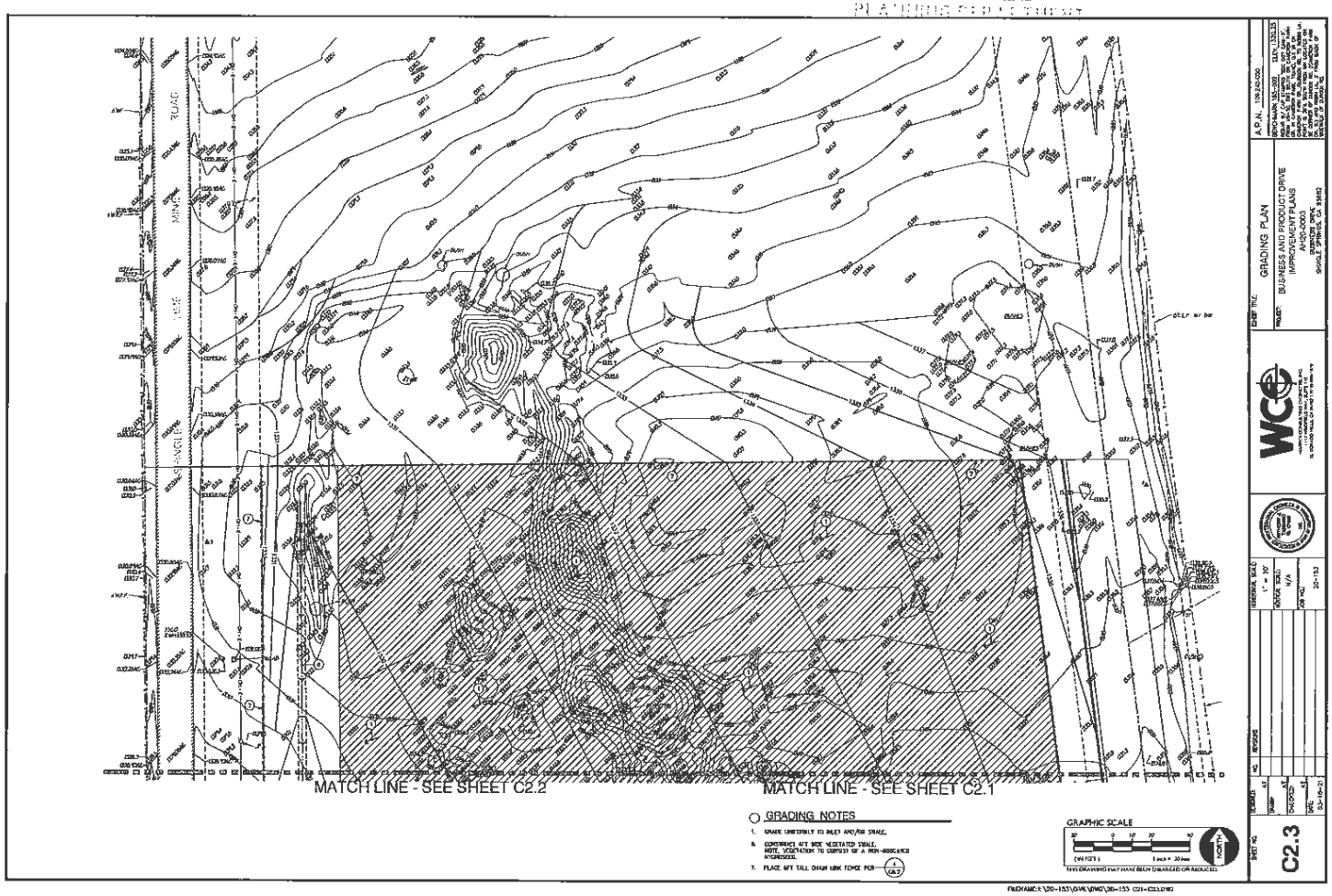

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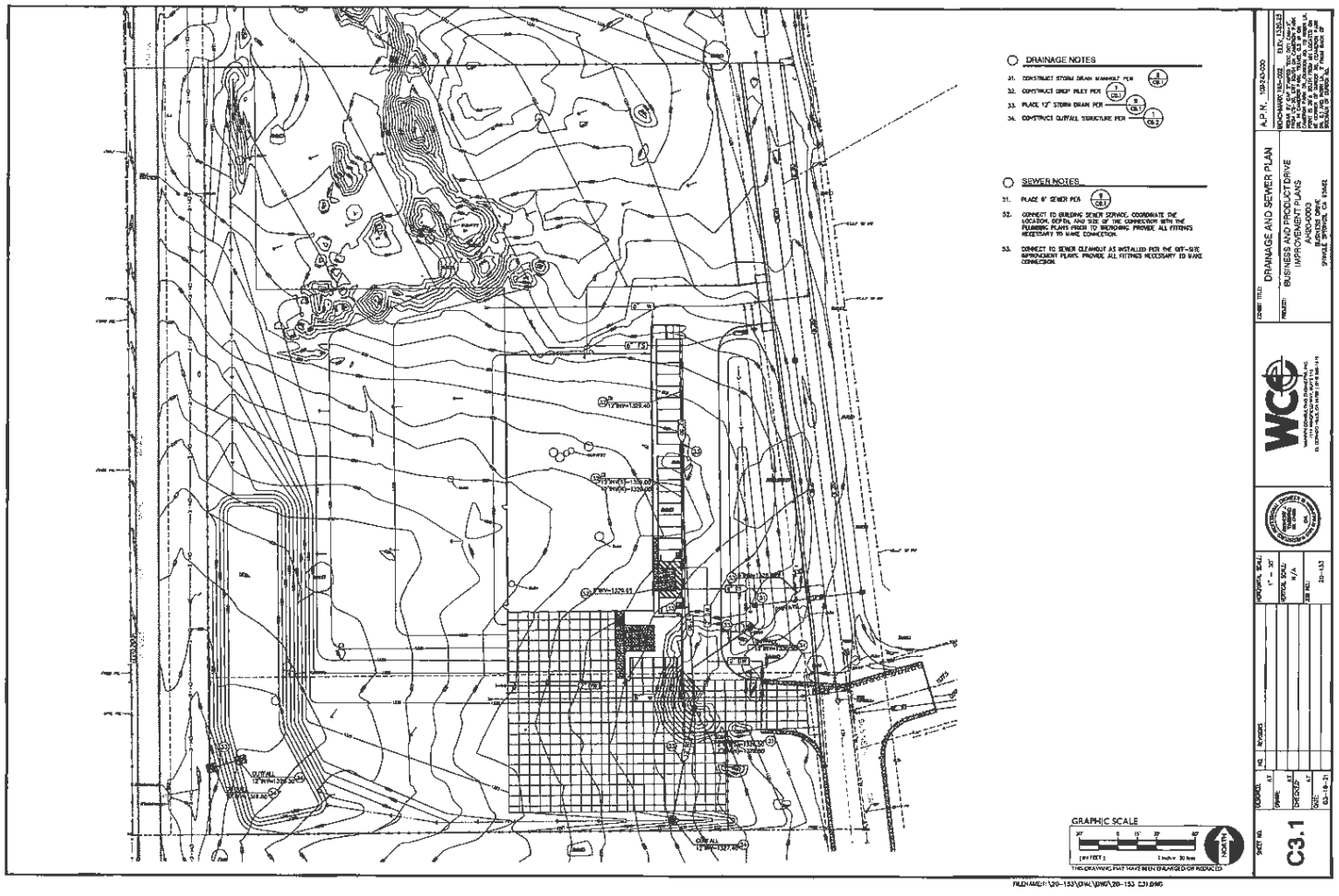

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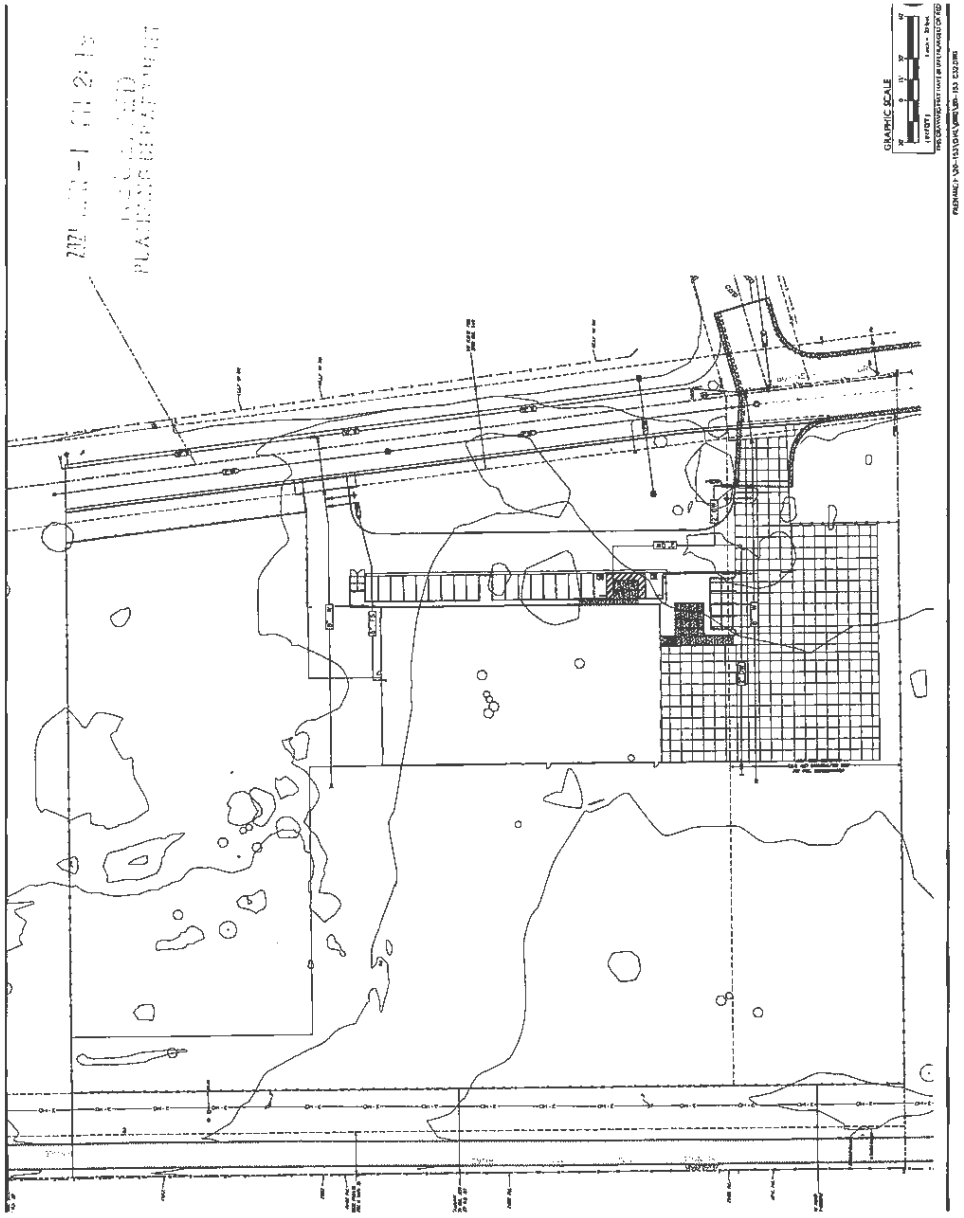
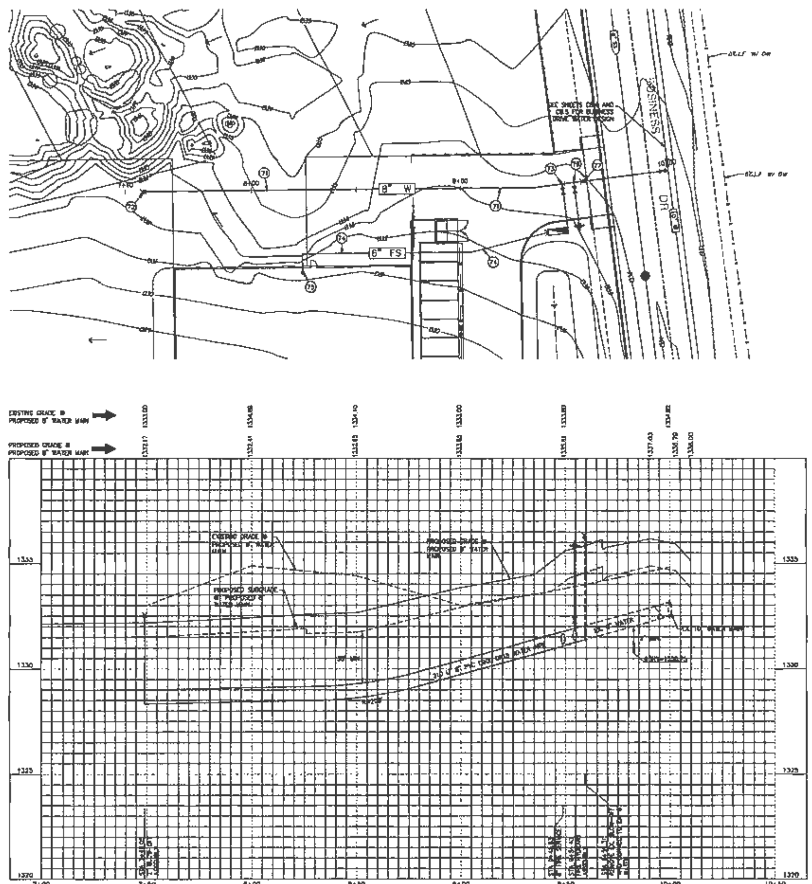


DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 10 - IMPROVEMENT PLANS

PLANNING DEPARTMENT



*WATER NOTES APPLY TO THIS SHEET ONLY.

WATER NOTES

71. PLACE 8" PVC, C900 DR18 WATER PIPE PER E.I.D. STD. DWG. NO. W10
72. STA. 7+18.05 – PLACE 2" DEAD-END BLOW OFF VALVE ASSEMBLY PER E.I.D. STD. DWG. NO. W15.
73. STA. 8+19.00 – PLACE 8" PRIVATE FIRE SERVICE (8"x8"x8" TEE) WITH RPDA AND MANIFOLD FIRE DEPARTMENT CONNECTION (FDC) PER E.I.D. STD. DWG. NO. W24. BOTH OS & Y VALVES SHALL HAVE TAMPER SWITCHING. CONTRACTOR SHALL PROVIDE ALL CONDUIT AND CONDUCTORS TO MAKE CONNECTION TO FIRE ALARM SYSTEM. COORDINATE WITH ELECTRICAL PLANS. PROVIDE FREEZE PROTECTIVE COVER FOR RPDA.
74. PLACE 8" PVC, C900 DR14 WATER PIPE (PRIVATE) PER E.I.D. STD. DWG. NO. W10.
75. CONNECT TO BUILDING FIRE PROTECTION SERVICE. REFER TO FIRE PROTECTION PLANS FOR EXACT DEPTH, LOCATION AND CONDITION PRIOR TO TRENCHING.
76. STA. 8+54.00 – PLACE 8"x8"x8" TEE PER E.I.D. STD. DWG. NO. W11. PROVIDE FIRE HYDRANT ASSEMBLY PER E.I.D. STD. DWG. NO. W12, W17 AND W18.
77. STA. 8+38.31 – REMOVE EXISTING 2" BLOW-OFF ASSEMBLY AND CONNECT TO EXISTING 8" WATER PER E.I.D. STANDARDS AND SPECIFICATIONS.

WATER MATERIAL LIST		
ITEM	UNIT	QUANTITY
8" C900 DR14	LF	170
8" C900 DR18	LF	210
8" GATE VALVE	EA.	(2)
2" BLOW-OFF ASSEMBLY	EA.	(1)
8" FIRE HYDRANT ASSEMBLY	EA.	(1)
8" FIRE PROTECTION SERVICE	EA.	(1)

GRAPHIC SCALE

1 inch = 20 feet

THIS DRAWING MAY HAVE BEEN ENLARGED OR REDUCED

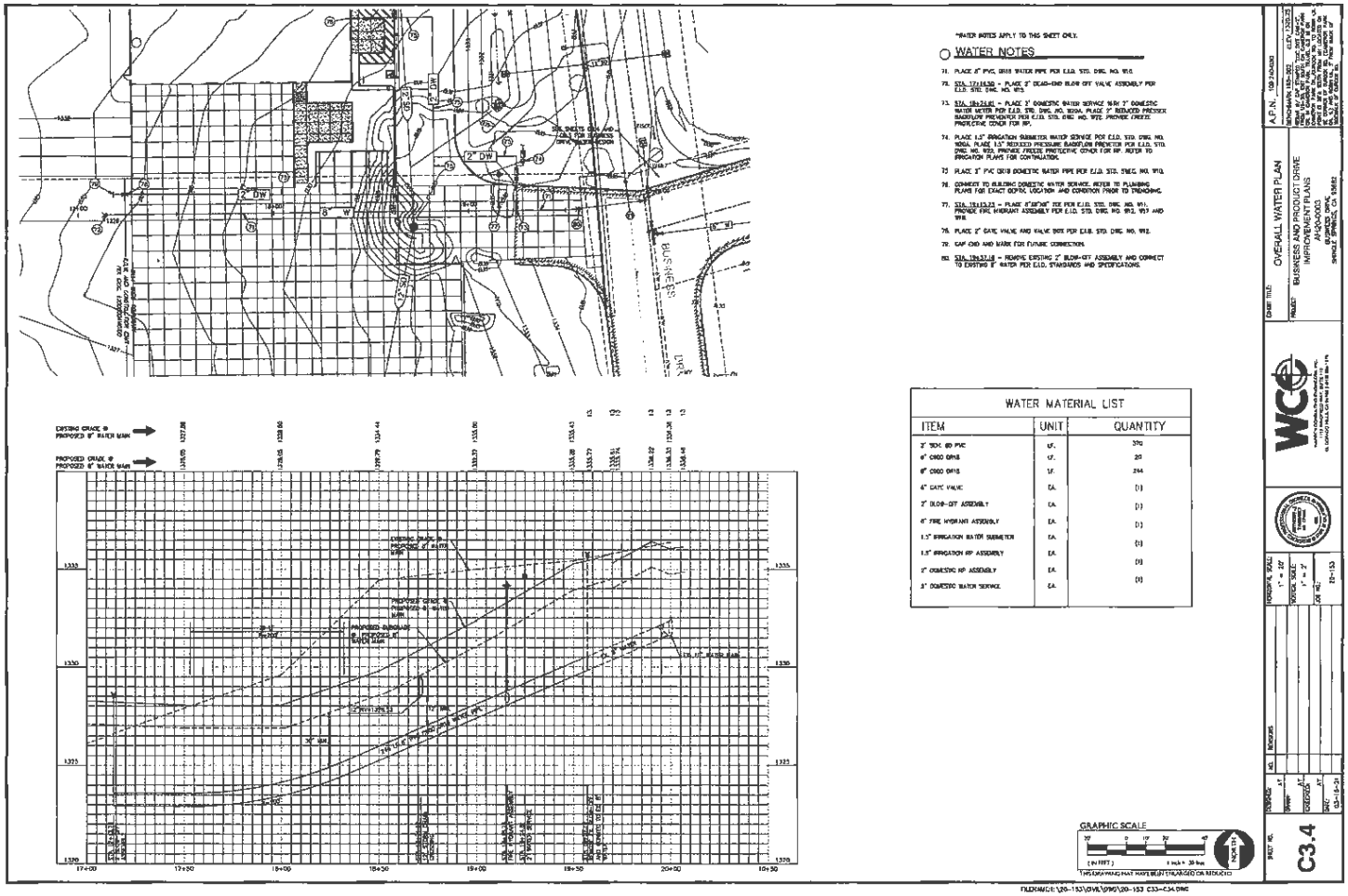
OVERALL WATER PLAN

BUSINESS AND PRODUCT DRIVE IMPROVEMENT PLANS

AH20-0003

WCE

C3.3



DR21-0005 BARSOTTI WAREHOUSE OFFICE
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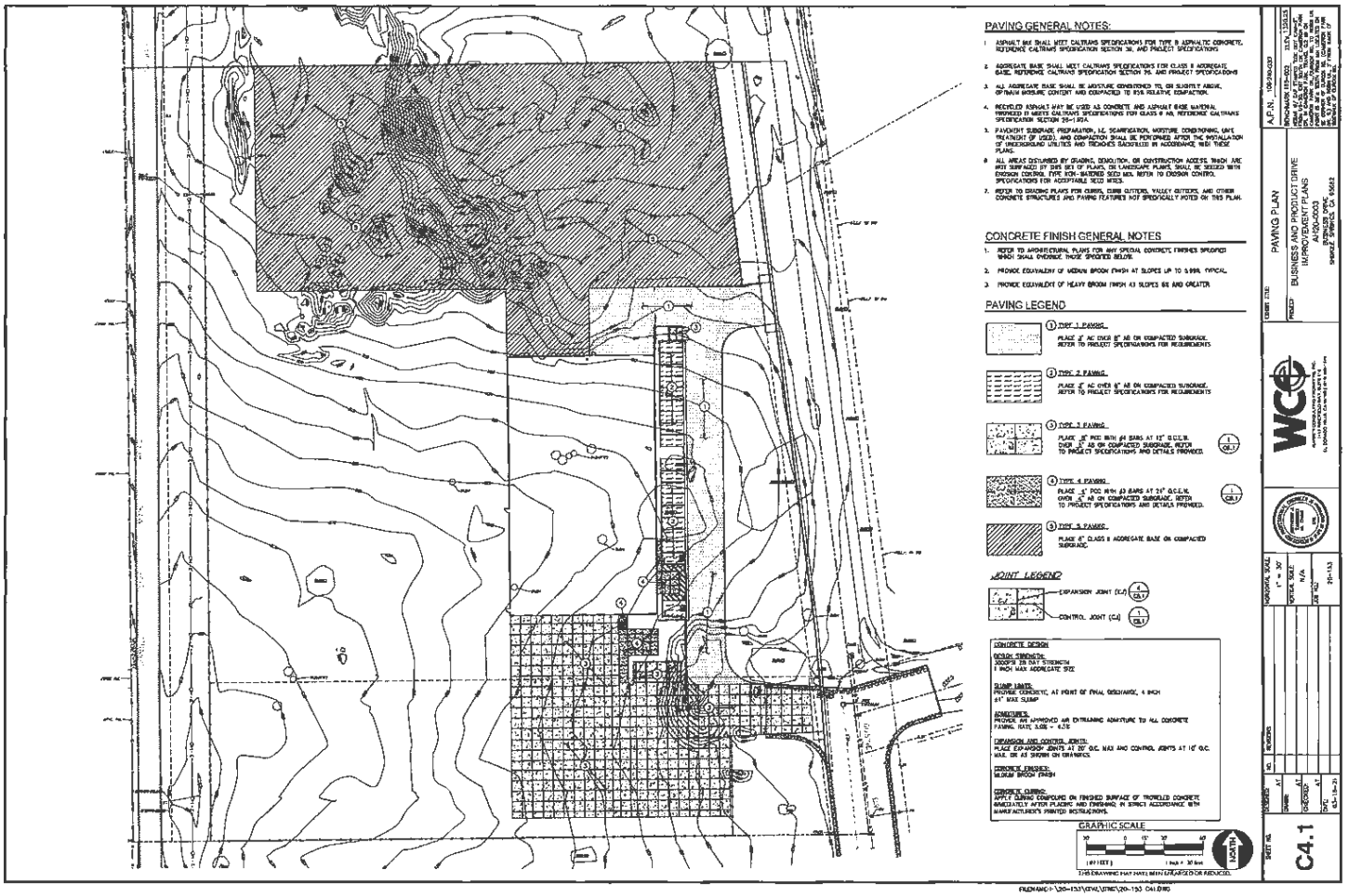
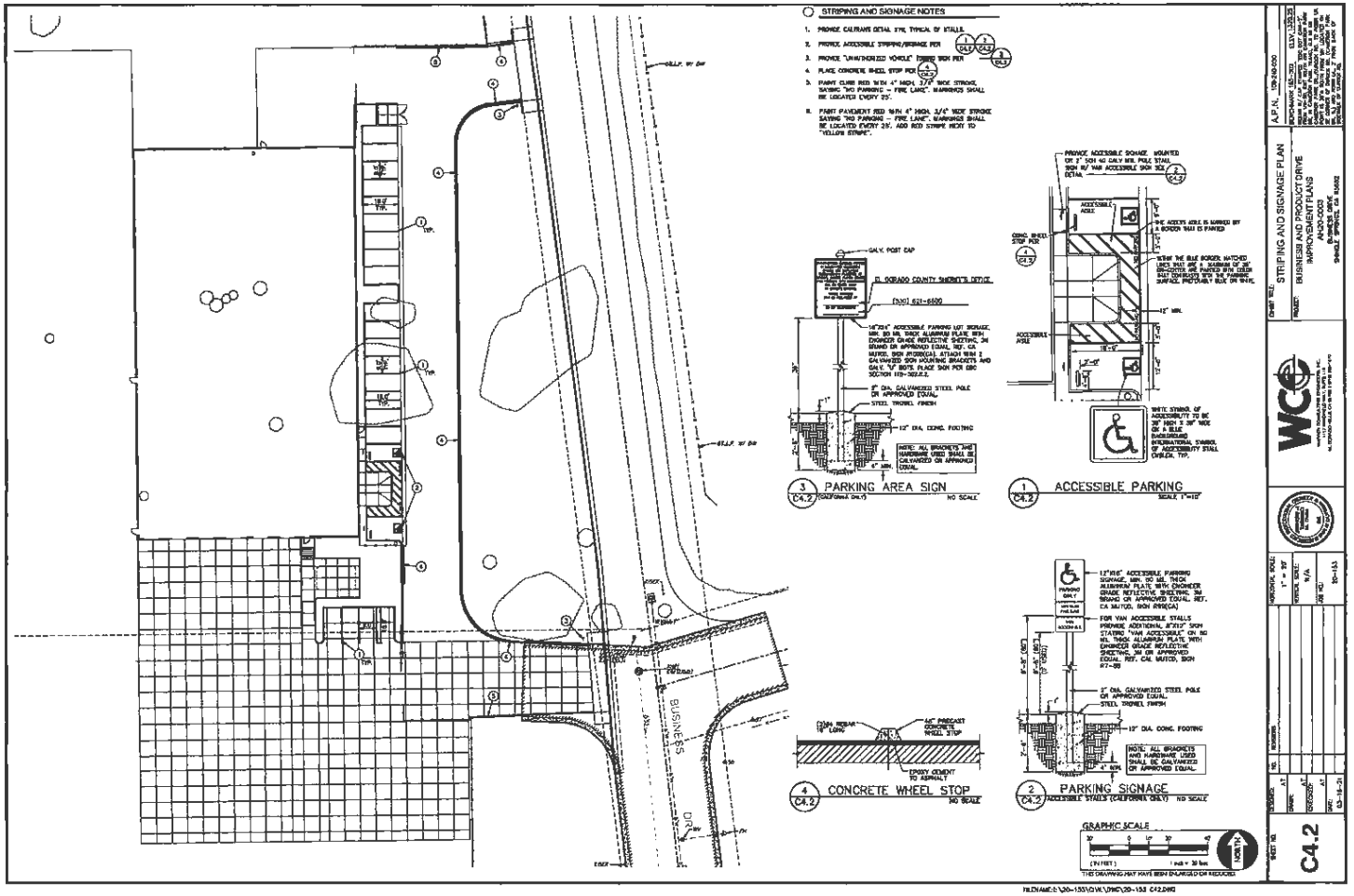
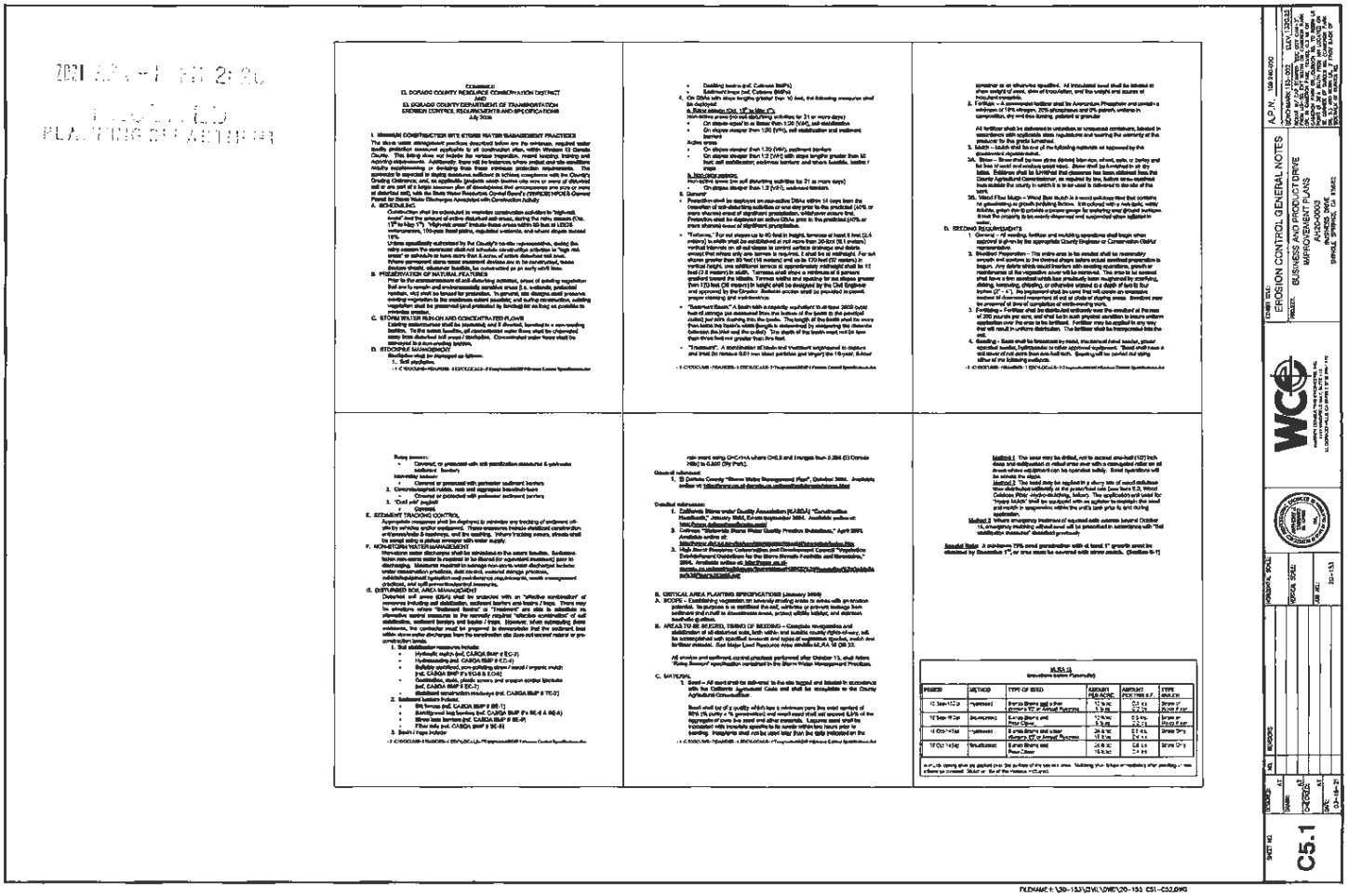


DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 10 - IMPROVEMENT PLANS

RECEIVED
PLANNING DEPARTMENT





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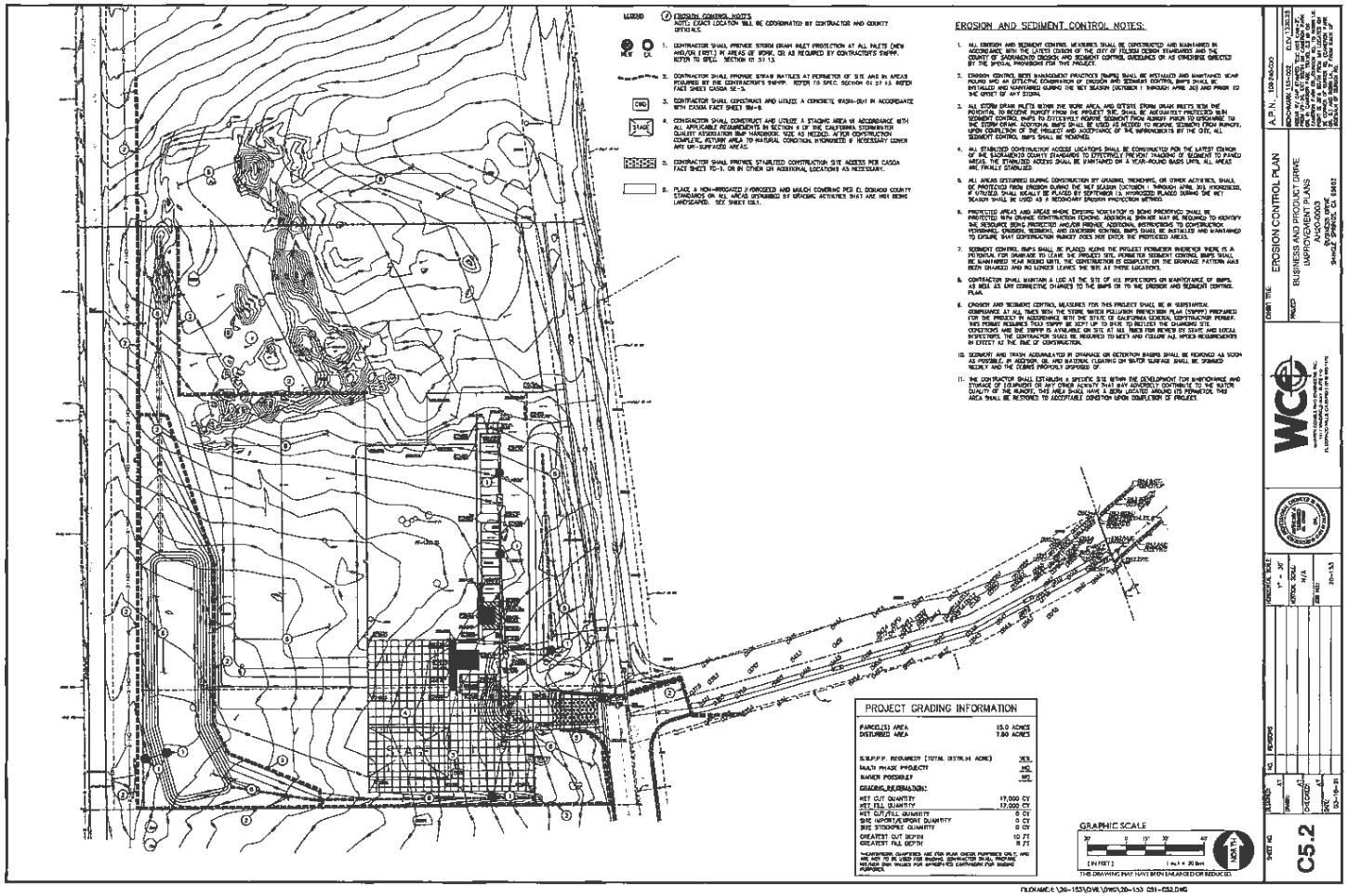

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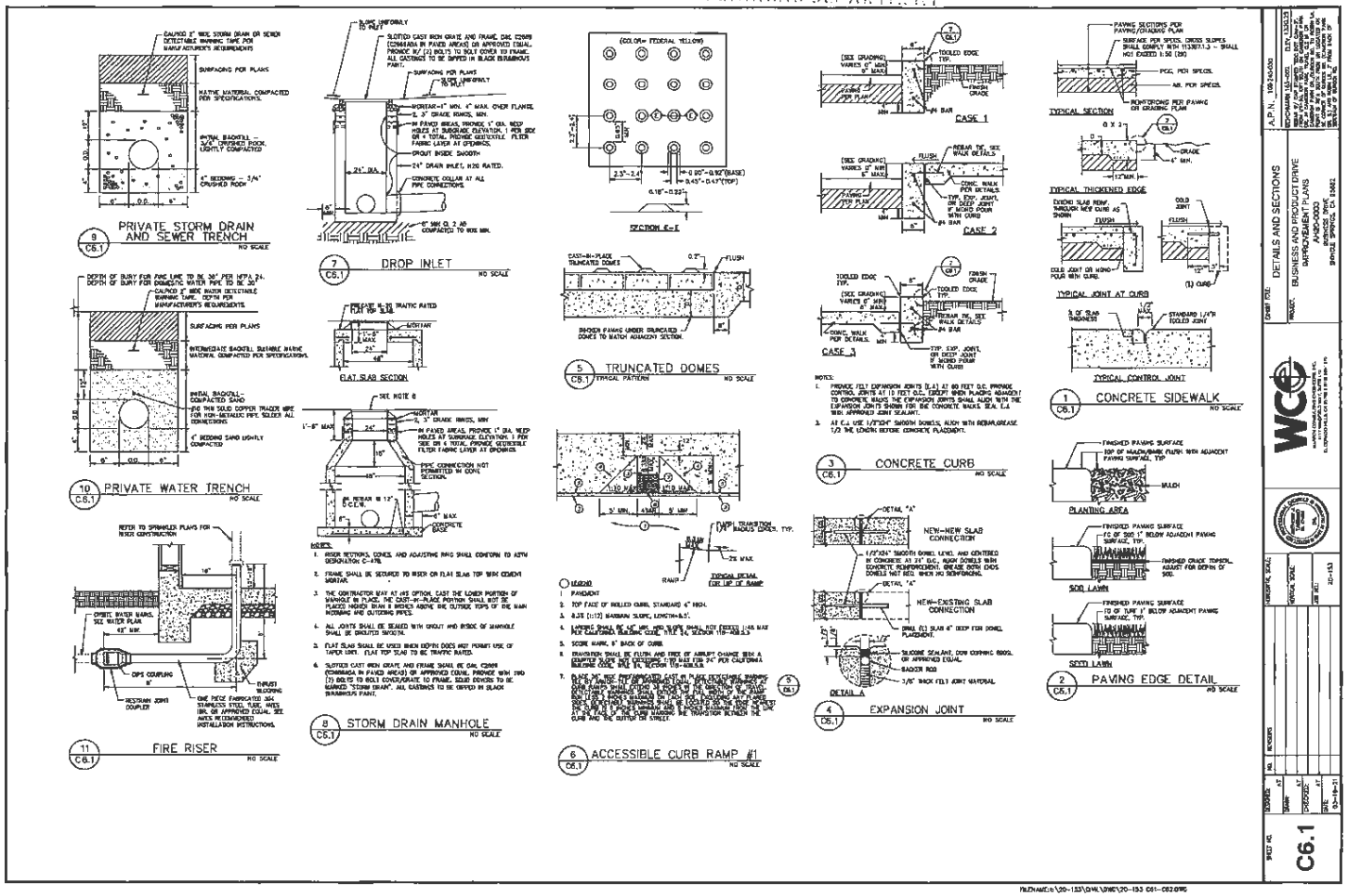
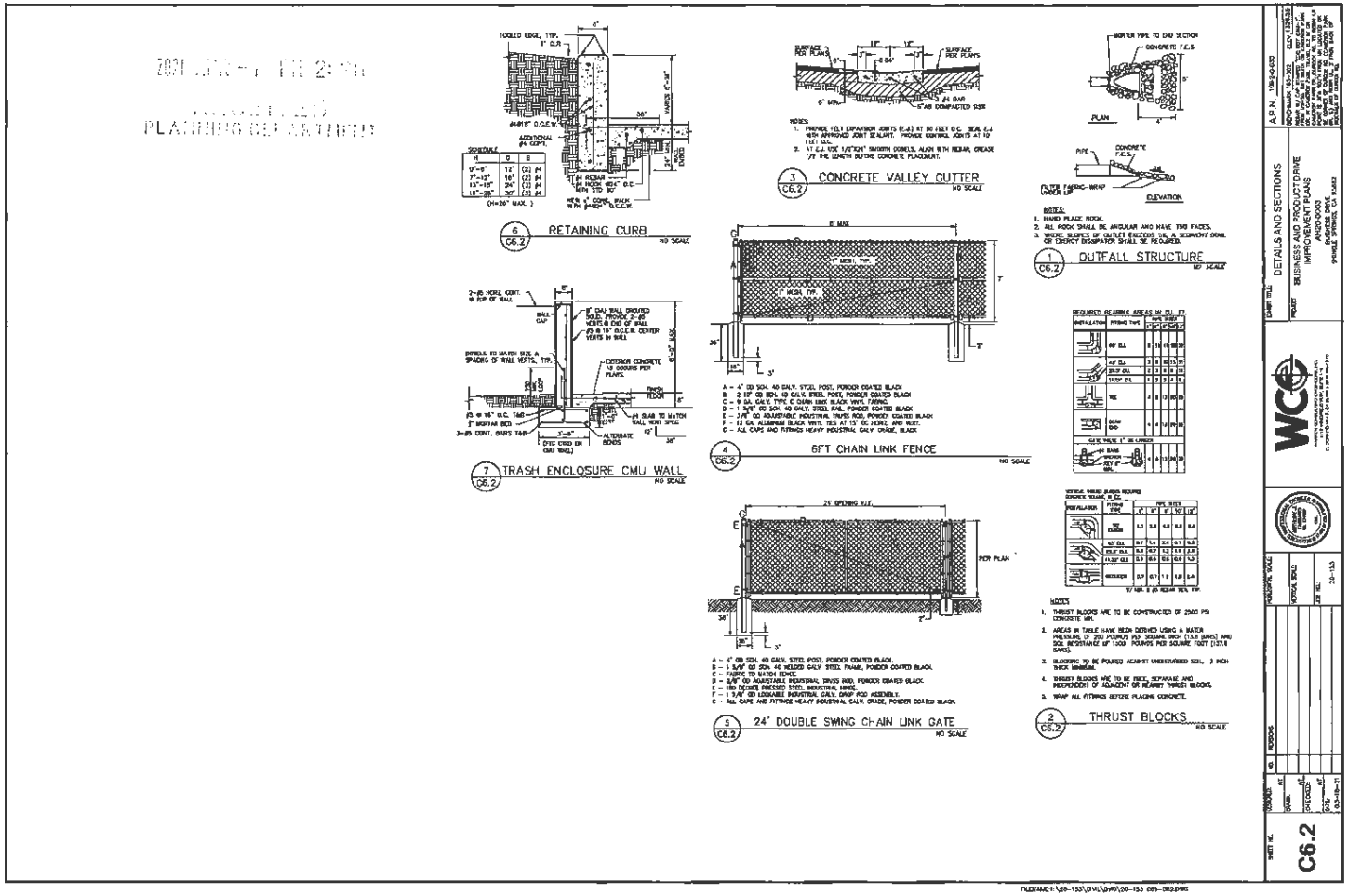



RETAINING CURB
CONCRETE VALLEY GUTTER
OUTFALL STRUCTURE
TRASH ENCLOSURE CMU WALL
6FT CHAIN LINK FENCE
24' DOUBLE SWING CHAIN LINK GATE
THRUST BLOCKS
DETAILS AND SECTIONS
BARSOTTI WAREHOUSE
C6.2

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 11 - STORMWATER COORDINATOR WEST SLOPE COMMENTS

Bianca Dinkler <bianca.dinkler@edcgov.us>

Project for Review & Comment - DR21-0005 - BARSOTTI WAREHOUSE AND OFFICE

Amy Phillips <amy.phillips@edcgov.us> Tue, Apr 27, 2021 at 9:32 AM
To: Bianca Dinkler <bianca.dinkler@edcgov.us>

Hi Bianca,

The County is subject to the State of CA Phase II MS4 Permit and thus the County's post construction water quality requirements follow those outlined in that Permit in Section E.12. Projects typically qualify as a "Regulated" project under the MS4 Permit / West Slope Development and Redevelopment Standards and Post Construction Stormwater Plan Requirements if improvements (i.e., parking lots, rooftops, driveways, etc.) create or replace 5,000 sf or more of impervious surface. Regulated Projects are required to provide treatment of stormwater from the 85th percentile/24-hour storm event prior to the water leaving the site or entering a waterbody. Submittal requirements for Regulated projects are provided here.

An Erosion and Sediment Control Plan will need to be included in the plan submittal. If the project will disturb an acre or more of land, the Legally Responsible Person (LRP) is required to obtain Construction General Permit (CGP) coverage through the State Water Resources Control Board. The CGP requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). CGP requirements can be found at the following link: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html

Thank you,
[Quoted text hidden]
--
Amy A. Phillips, CPSWQ, CPESC, QSD
Storm Water Coordinator - West Slope

County of El Dorado
Tahoe Planning and Stormwater Division
2850 Fairlane Court, Placerville, CA 95667
(530) 621-5921
amy.phillips@edcgov.us

Initial Consultation Letter_DR21-0005.pdf
218K

April 27, 2021

Bianca Dinkler
County of El Dorado
2850 Fairlane Ct
Placerville, CA 95667

Ref: Gas and Electric Transmission and Distribution

Dear Bianca Dinkler,

Thank you for submitting the Barsotti Warehouse and Office plans for our review. PG&E will review the submitted plans in relationship to any existing Gas and Electric facilities within the project area. If the proposed project is adjacent/or within PG&E owned property and/or easements, we will be working with you to ensure compatible uses and activities near our facilities.

Attached you will find information and requirements as it relates to Gas facilities (Attachment 1) and Electric facilities (Attachment 2). Please review these in detail, as it is critical to ensure your safety and to protect PG&E's facilities and its existing rights.

Below is additional information for your review:

1. This plan review process does not replace the application process for PG&E gas or electric service your project may require. For these requests, please continue to work with PG&E Service Planning: https://www.pge.com/en_US/business/services/building-and-renovation/overview/overview.page.

2. If the project being submitted is part of a larger project, please include the entire scope of your project, and not just a portion of it. PG&E's facilities are to be incorporated within any CEQA document. PG&E needs to verify that the CEQA document will identify any required future PG&E services.

3. An engineering deposit may be required to review plans for a project depending on the size, scope, and location of the project and as it relates to any rearrangement or new installation of PG&E facilities.

Any proposed uses within the PG&E fee strip and/or easement, may include a California Public Utility Commission (CPUC) Section 851 filing. This requires the CPUC to render approval for a conveyance of rights for specific uses on PG&E's fee strip or easement. PG&E will advise if the necessity to incorporate a CPUC Section 851filing is required.

This letter does not constitute PG&E's consent to use any portion of its easement for any purpose not previously conveyed. PG&E will provide a project specific response as required.

Sincerely,

Plan Review Team
Land Management

Attachment 1 – Gas Facilities

There could be gas transmission pipelines in this area which would be considered critical facilities for PG&E and a high priority subsurface installation under California law. Care must be taken to ensure safety and accessibility. So, please ensure that if PG&E approves work near gas transmission pipelines it is done in adherence with the below stipulations. Additionally, the following link provides additional information regarding legal requirements under California excavation laws: https://www.usanorth811.org/images/pdfs/CA-LAW-2018.pdf

1. Standby Inspection: A PG&E Gas Transmission Standby Inspector must be present during any demolition or construction activity that comes within 10 feet of the gas pipeline. This includes all grading, trenching, substructure depth verifications (potholes), asphalt or concrete demolition/removal, removal of trees, signs, light poles, etc. This inspection can be coordinated through the Underground Service Alert (USA) service at 811. A minimum notice of 48 hours is required. Ensure the USA markings and notifications are maintained throughout the duration of your work.

2. Access: At any time, PG&E may need to access, excavate, and perform work on the gas pipeline. Any construction equipment, materials, or spoils may need to be removed upon notice. Any temporary construction fencing installed within PG&E's easement would also need to be capable of being removed at any time upon notice. Any plans to cut temporary slopes exceeding a 1:4 grade within 10 feet of a gas transmission pipeline need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

3. Wheel Loads: To prevent damage to the buried gas pipeline, there are weight limits that must be enforced whenever any equipment gets within 10 feet of traversing the pipe.

Ensure a list of the axle weights of all equipment being used is available for PG&E's Standby Inspector. To confirm the depth of cover, the pipeline may need to be potholed by hand in a few areas.

Due to the complex variability of tracked equipment, vibratory compaction equipment, and cranes, PG&E must evaluate those items on a case-by-case basis prior to use over the gas pipeline (provide a list of any proposed equipment of this type noting model numbers and specific attachments).

No equipment may be set up over the gas pipeline while operating. Ensure crane outriggers are at least 10 feet from the centerline of the gas pipeline. Transport trucks must not be parked over the gas pipeline while being loaded or unloaded.

4. Grading: PG&E requires a minimum of 36 inches of cover over gas pipelines (or existing grade if less) and a maximum of 7 feet of cover at all locations. The graded surface cannot exceed a cross slope of 1:4.

5. Excavating: Any digging within 2 feet of a gas pipeline must be dug by hand. Note that while the minimum clearance is only 12 inches, any excavation work within 24 inches of the edge of a pipeline must be done with hand tools. So to avoid having to dig a trench entirely with hand tools, the edge of the trench must be over 24 inches away. (Doing the math for a 24 inch

wide trench being dug along a 36 inch pipeline, the centerline of the trench would need to be at least 54 inches [24/2 + 24 + 36/2 = 54] away, or be entirely dug by hand.)

Water jetting to assist vacuum excavating must be limited to 1000 psig and directed at a 40° angle to the pipe. All pile driving must be kept a minimum of 3 feet away.

Any plans to expose and support a PG&E gas transmission pipeline across an open excavation need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

6. Boring/Trenchless Installations: PG&E Pipeline Services must review and approve all plans to bore across or parallel to (within 10 feet) a gas transmission pipeline. There are stringent criteria to pothole the gas transmission facility at regular intervals for all parallel bore installations.

For bore paths that cross gas transmission pipelines perpendicularly, the pipeline must be potholed a minimum of 2 feet in the horizontal direction of the bore path and a minimum of 12 inches in the vertical direction from the bottom of the pipe with minimum clearances measured from the edge of the pipe in both directions. Standby personnel must watch the locator trace (and every ream pass) the path of the bore as it approaches the pipeline and visually monitor the pothole (with the exposed transmission pipe) as the bore traverses the pipeline to ensure adequate clearance with the pipeline. The pothole width must account for the inaccuracy of the locating equipment.

7. Substructures: All utility crossings of a gas pipeline should be made as close to perpendicular as feasible (90° +/- 15°). All utility lines crossing the gas pipeline must have a minimum of 12 inches of separation from the gas pipeline. Parallel utilities, pole bases, water line ‘kicker blocks’, storm drain inlets, water meters, valves, back pressure devices or other utility substructures are not allowed in the PG&E gas pipeline easement.

If previously retired PG&E facilities are in conflict with proposed substructures, PG&E must verify they are safe prior to removal. This includes verification testing of the contents of the facilities, as well as environmental testing of the coating and internal surfaces. Timelines for PG&E completion of this verification will vary depending on the type and location of facilities in conflict.

8. Structures: No structures are to be built within the PG&E gas pipeline easement. This includes buildings, retaining walls, fences, decks, patios, carports, septic tanks, storage sheds, tanks, loading ramps, or any structure that could limit PG&E’s ability to access its facilities.

9. Fencing: Permanent fencing is not allowed within PG&E easements except for perpendicular crossings which must include a 16 foot wide gate for vehicular access. Gates will be secured with PG&E corporation locks.

10. Landscaping: Landscaping must be designed to allow PG&E to access the pipeline for maintenance and not interfere with pipeline coatings or other cathodic protection systems. No trees, shrubs, brush, vines, and other vegetation may be planted within the easement area. Only those plants, ground covers, grasses, flowers, and low-growing plants that grow unsupported to a maximum of four feet (4’) in height at maturity may be planted within the easement area.

11. Cathodic Protection: PG&E pipelines are protected from corrosion with an “Impressed Current” cathodic protection system. Any proposed facilities, such as metal conduit, pipes, service lines, ground rods, anodes, wires, etc. that might affect the pipeline cathodic protection system must be reviewed and approved by PG&E Corrosion Engineering.

12. Pipeline Marker Signs: PG&E needs to maintain pipeline marker signs for gas transmission pipelines in order to ensure public awareness of the presence of the pipelines. With prior written approval from PG&E Pipeline Services, an existing PG&E pipeline marker sign that is in direct conflict with proposed developments may be temporarily relocated to accommodate construction work. The pipeline marker must be moved back once construction is complete.

13. PG&E is also the provider of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E’s facilities must be reviewed and approved by PG&E to ensure that no impact occurs which may endanger the safe operation of its facilities.

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 12 - PG&E COMMENTS

Attachment 2 – Electric Facilities

It is PG&E's policy to permit certain uses on a case by case basis within its electric transmission fee strip(s) and/or easement(s) provided such uses and manner in which they are exercised, will not interfere with PG&E's rights or endanger its facilities. Some examples/restrictions are as follows:

1. Buildings and Other Structures: No buildings or other structures including the foot print and eave of any buildings, swimming pools, wells or similar structures will be permitted within fee strip(s) and/or easement(s) areas. PG&E's transmission easement shall be designated on subdivision/parcel maps as "**RESTRICTED USE AREA – NO BUILDING."**

2. Grading: Cuts, trenches or excavations may not be made within 25 feet of our towers. Developers must submit grading plans and site development plans (including geotechnical reports if applicable), signed and dated, for PG&E's review. PG&E engineers must review grade changes in the vicinity of our towers. No fills will be allowed which would impair ground-to-conductor clearances. Towers shall not be left on mounds without adequate road access to base of tower or structure.

3. Fences: Walls, fences, and other structures must be installed at locations that do not affect the safe operation of PG&'s facilities. Heavy equipment access to our facilities must be maintained at all times. Metal fences are to be grounded to PG&E specifications. No wall, fence or other like structure is to be installed within 10 feet of tower footings and unrestricted access must be maintained from a tower structure to the nearest street. Walls, fences and other structures proposed along or within the fee strip(s) and/or easement(s) will require PG&E review; submit plans to PG&E Centralized Review Team for review and comment.

4. Landscaping: Vegetation may be allowed; subject to review of plans. On overhead electric transmission fee strip(s) and/or easement(s), trees and shrubs are limited to those varieties that do not exceed 15 feet in height at maturity. PG&E must have access to its facilities at all times, including access by heavy equipment. No planting is to occur within the footprint of the tower legs. Greenbelts are encouraged.

5. Reservoirs, Sumps, Drainage Basins, and Ponds: Prohibited within PG&E's fee strip(s) and/or easement(s) for electric transmission lines.

6. Automobile Parking: Short term parking of movable passenger vehicles and light trucks (pickups, vans, etc.) is allowed. The lighting within these parking areas will need to be reviewed by PG&E; approval will be on a case by case basis. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications. Blocked-up vehicles are not allowed. Carports, canopies, or awnings are not allowed.

7. Storage of Flammable, Explosive or Corrosive Materials: There shall be no storage of fuel or combustibles and no fueling of vehicles within PG&E's easement. No trash bins or incinerators are allowed.

8. Streets and Roads: Access to facilities must be maintained at all times. Street lights may be allowed in the fee strip(s) and/or easement(s) but in all cases must be reviewed by PG&E for proper clearance. Roads and utilities should cross the transmission easement as nearly at right angles as possible. Road intersections will not be allowed within the transmission easement.

9. Pipelines: Pipelines may be allowed provided crossings are held to a minimum and to be as nearly perpendicular as possible. Pipelines within 25 feet of PG&E structures require review by PG&E. Sprinklers systems may be allowed; subject to review. Leach fields and septic tanks are not allowed. Construction plans must be submitted to PG&E for review and approval prior to the commencement of any construction.

10. Signs: Signs are not allowed except in rare cases subject to individual review by PG&E.

11. Recreation Areas: Playgrounds, parks, tennis courts, basketball courts, barbecue and light trucks (pickups, vans, etc.) may be allowed; subject to review of plans. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications.

12. Construction Activity: Since construction activity will take place near PG&E's overhead electric lines, please be advised it is the contractor's responsibility to be aware of, and observe the minimum clearances for both workers and equipment operating near high voltage electric lines set out in the High-Voltage Electrical Safety Orders of the California Division of Industrial Safety (https://www.dir.ca.gov/Title8/sb5g2.html), as well as any other safety regulations. Contractors shall comply with California Public Utilities Commission General Order 95 (http://www.cpuc.ca.gov/gos/GO95/go_95_startup_page.html) and all other safety rules. No construction may occur within 25 feet of PG&E's towers. All excavation activities may only commence after 811 protocols has been followed.

Contractor shall ensure the protection of PG&E's towers and poles from vehicular damage by (installing protective barriers) Plans for protection barriers must be approved by PG&E prior to construction.

13. PG&E is also the owner of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs that may endanger the safe and reliable operation of its facilities.

County of El Dorado
Air Quality Management District

330 Fair Lane, Placerville Ca 95667
Tel. 530.621.7501 Email: AQMD@edcgov.us
www.edcgov.us/airqualitymanagement

Dave Johnston
Air Pollution Control Officer

May 26, 2021

Bianca Dinkler, County Planner
El Dorado County Planning Services
2850 Fairlane Court
Placerville, CA 95667

RE: DR21-0005 BARSOTTI WAREHOUSE AND OFFICE (Doug Granade/Barsotti Family LLC/GBDH Design Group) APN 109-240-030 – AQMD Comments

Dear Ms. Dinkler:

The El Dorado County Air Quality Management District (AQMD) has reviewed the subject Design Review request for a new 22,800 sq. ft. warehouse and office building and associated improvements, and has the following comments.

The following standard conditions would apply to the proposed project:

1. Fugitive Dust: The project construction will involve grading and excavation operations which will result in a temporary negative impact on air quality with regard to the release of particulate matter (PM10) in the form of dust. A Fugitive Dust Mitigation Plan (FDP) Application with appropriate fees shall be submitted to and approved by the AQMD prior to start of project construction if a Grading Permit is required from the Building Department. Mitigation measures for dust control shall comply with the requirements of AQMD Rule 223, Fugitive Dust – General Requirements and Rule 223.1 – Construction, Bulk Material Handling, Blasting, Other Earthmoving Activities and Trackout Prevention.

2. Paving: The project construction may involve road development and shall adhere to AQMD Rule 224, Cutback and Emulsified Asphalt Paving Materials.

3. Painting/Coating: The project construction may involve the application of architectural coatings which shall adhere to AQMD Rule 215, Architectural Coatings.

4. Open Burning: Burning of wastes that result from "Land Development Clearing" must be permitted through the AQMD. Only dry vegetation originating from the property may be disposed of using an open outdoor fire and burning shall adhere to AQMD Rule 300, Open Burning.

5. Construction Emissions: During construction, all self-propelled diesel-fueled engines greater than 25 horsepower shall be in compliance with the California Air Resources Board (CARB) Regulation for In-Use Off-Road Diesel Fueled Fleets (§ 2449 et al, title 13, article 4.8, chapter 9, California Code of Regulations (CCR)). The full text of the regulation can be found at ARB's website here: https://ww2.arb.ca.gov/our-work/topics/construction-earthmoving-equipment Questions on applicability should be directed to CARB at 1.866.634.3735. CARB is responsible for enforcement of this regulation.

6. New Point or Stationary Source: Prior to construction/installation of any new point/stationary source emissions units (e.g., emergency standby engine greater than 50 HP, boilers/water heaters aggregating to a total input capacity of > 1 MMBH etc.), Authority to Construct applications shall be submitted to the AQMD. Submittal of applications shall include facility diagram(s), equipment specifications and emissions estimates, and shall adhere to AQMD Rules 501, General Permit Requirements and 523, New Source Review.

7. Portable Equipment: All portable combustion engine equipment with a rating of 50 horsepower or greater shall be registered with the California Air Resources Board (CARB). A copy of the current portable equipment registration shall be with said equipment. The applicant shall provide a complete list of heavy-duty diesel-fueled equipment to be used on this project, which includes the make, model, year of equipment, daily hours of operations of each piece of equipment.

8. Electric Vehicle Charging – Non-Residential: The project shall comply with the Non-Residential Mandatory Measures identified in the 2019 Cal Green Building Code §5.106.5.3 concerning installation of electric vehicle supply equipment (EVSE). Plans shall include; the location(s) and type of EVSE, a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit originating at a service panel with sufficient capacity to accommodate a minimum 40A dedicated circuit, and terminating in a suitable enclosure in close proximity to the proposed location of the charging equipment. Plans, specifications and electrical calculations shall show the electrical system has sufficient capacity to simultaneously charge all required electric vehicles at their full rated amperage. Raceways shall be installed from the electrical service panel to the designated parking areas at the time of initial construction. Please refer to Cal Green Building Stds Code §5.106.5.3 for specific requirements[1]: https://www.edcgov.us/Government/building/pages/california_building_standards_in_effect.aspx

AQMD Rules and Regulations are available at the following internet address: https://ww2.arb.ca.gov/current-air-district-rules.

[1] Cal Green Building Code: https://codes.iccsafe.org/content/CAGBSC2019/chapter-5-nonresidential-mandatory-measures

AQMD thanks you for the opportunity to comment on this proposed project. If you have any questions regarding this letter, please contact our office at 530.621.7501.

Respectfully,

Lisa Petersen
Air Quality Engineer
Air Quality Management District

\\AQData\AQ-Shared\CEQA or AQMD COMMENTS\AQMD Comments\2021\DR21-0005 - BARSOTTI WAREHOUSE AND OFFICE.docx

El Dorado Irrigation District

2021 APR -1 PM 2:28
RECEIVED
PLANNING DEPARTMENT

Letter No.: DS1019-192

October 7, 2019

VIA EMAIL

Doug Granade
4420 Business Drive
Shingle Springs, CA 95682
Email: doug.granade@dggranade.com

Subject: Facility Improvement Letter (FIL) 3138FIL, DG Granade Barnett Business Park
Assessor's Parcel No. 109-240-030 (Shingle Springs)

Dear Mr. Granade:

This letter is in response to your request dated September 3, 2019 and is valid for a period of three years. If facility improvement plans for your project are not submitted to El Dorado Irrigation District (EID or District) within three years of the date of this letter, a new Facility Improvement Letter will be required.

Design drawings for your project must be in conformance with the District's *Water, Sewer and Recycled Water Design and Construction Standards.*

This proposed project is a 2-lot commercial subdivision on 14.62 acres. Water service, sewer service, private fire service and fire hydrants are requested. The property is within the District boundary.

This letter is not a commitment to serve, but does address the location and approximate capacity of existing facilities that may be available to serve your project.

Water Supply
As of January 1, 2019, there were 22,162 equivalent dwelling units (EDUs) of water supply available in the Western/Eastern Water Supply Region. Your project as proposed on this date would require 10 EDUs of water supply.

Water Facilities
An 8-inch water line is located south of the property to be developed in Business Drive. There is also an 8-inch water line located east of the project in Product Drive (see enclosed System Map). The El Dorado County Fire Protection District has determined that the minimum fire flow for this project ranges from 1,500 GPM for a 2-hour duration, up to 2,500 GPM for a 4-hour

duration while maintaining a 20-psi residual pressure. According to the District's hydraulic model, the existing system can only deliver a **1,500 GPM** fire flow.

In order to provide a 1,500 GPM fire flow and receive service, you must construct a water line extension looping the off-site 8-inch water lines previously identified. Per the District's Design Standards you will be required to construct a water main extension in Business Drive to a location that will be accessible to the parcels north and east of this project that are not yet served.

In order to provide a 2,500 GPM fire flow significant system upgrades will be required. The water main extension in Business Drive will ultimately need to be connected/looped to the water main(s) located near the intersection of Durock Road and Business Drive. The timing of this line extension north of your project will need to be determined by fire flow and access requirements for this parcel, as well as the schedule to improve the undeveloped parcels located adjacent to the project location. The District recommends having a meeting to discuss this project and how to coordinate the needs of the remaining adjacent undeveloped portions of Barnett Business Park.

The hydraulic grade line for the existing water distribution facilities is 1,673 feet above mean sea level at static conditions and 1,550 feet above mean sea level during fire flow (1,500 GPM) and maximum day demands. The operating hydraulic grade line during a 2,500 GPM fire flow will need to be determined when more specific information becomes available in regards to tie-in locations.

The flow predicted above was developed using a computer model and is not an actual field flow test.

Sewer Facilities

There is a 6-inch gravity sewer line located in Business Drive. This sewer line has adequate capacity at this time. In order to receive service from this line, an extension of facilities of adequate size must be constructed. As noted in the Water Facilities section, the sewer line extension for this project will need to take into account the remaining undeveloped parcels located adjacent to the project location. Your project as proposed on this date would require 10 EDUs of sewer service.

Easement Requirements

Proposed water lines, sewer lines and related facilities must be located within an easement accessible by conventional maintenance vehicles. When the water lines or sewer lines are within streets, they shall be located within the paved section of the roadway. No structures will be permitted within the easements of any existing or proposed facilities. The District must have unobstructed access to these easements at all times, and generally does not allow water or sewer facilities along lot lines.

Easements for any new District facilities constructed by this project must be granted to the District prior to District approval of water and/or sewer improvement plans, whether onsite or offsite. In addition, due to either nonexistent or prescriptive easements for some older facilities, any existing onsite District facilities that will remain in place after the development of this property must also have an easement granted to the District.

Environmental

The County is the lead agency for environmental review of this project per Section 15051 of the California Environmental Quality Act Guidelines (CEQA). The County's environmental document should include a review of both offsite and onsite water and sewer facilities that may be constructed by this project. You may be requested to submit a copy of the County's environmental document to the District if your project involves significant off-site facilities. If the County's environmental document does not address all water and sewer facilities and they are not exempt from environmental review, a supplemental environmental document will be required. This document would be prepared by a consultant. It could require several months to prepare and you would be responsible for its cost.

Summary

Service to this proposed development is contingent upon the following:

- The availability of uncommitted water supplies at the time service is requested;
- Approval of the County's environmental document by the District (if requested);
- Executed grant documents for all required easements;
- Approval of an extension of facilities application by the District;
- Approval of facility improvement plans by the District;
- Construction by the developer of all onsite and offsite proposed water and sewer facilities
- Acceptance of these facilities by the District; and
- Payment of all District connection costs.

Services shall be provided in accordance with El Dorado Irrigation District Board Policies and Administrative Regulations, as amended from time-to-time. As they relate to conditions of and fees for extension of service, District Administrative Regulations will apply as of the date of a fully executed Extension of Facilities Agreement.

If you have any questions, please contact Marc Mackay at (530) 642-4135.

Sincerely,

Michael J. Brink, P.E.
Supervising Civil Engineer

MB/MM:gp

Enclosure

cc w/ System Map:

Rommel Pabalinas, Principal Planner
El Dorado County Development Services Department
Via email - rommel.pabalinas@edcgov.us

Tiffany Schmid, Director
El Dorado County Development Services Department
Via email – tiffany.schmid@edcgov.us

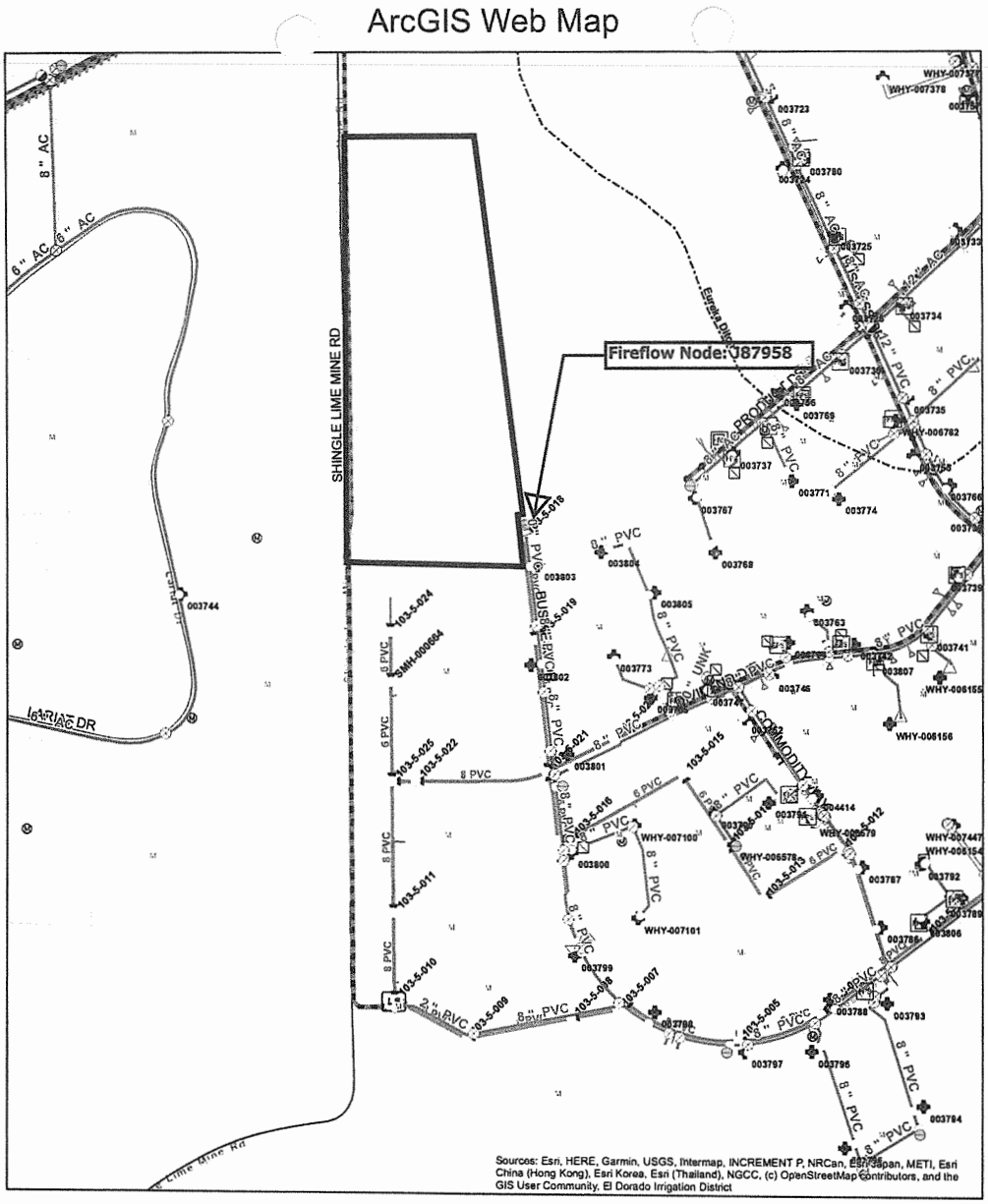
Brandon McKay, Deputy Fire Marshal
El Dorado County Fire District
Via email - McKayB@eldofire.com

Andrew Gaber
El Dorado County Department of Transportation
Via email - andrew.gaber@edcgov.us

Dave Spiegelberg
El Dorado County Department of Transportation
Via email- Dave.spiegelberg@edcgov.us

Anthony Tassano, P.E.
Warren Consulting Engineers
Via email- Anthony@wceinc.com

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 14 - EL DORADO IRRIGATION DISTRICT COMMENTS



Author: EID
9/30/2019 2:36:04 PM

WARNING: No accuracy of map implied until field checked by EID. Exact pipe locations must be field verified.

Date: October 1, 2019

Project: DG Granade Barnett Business Park

APN: 109-240-030

EID

Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, NGA, USGS | El Dorado Irrigation District |

ENVIRONMENTAL MANAGEMENT DEPARTMENT

http://www.edcgov.us/EMD/

PLACERVILLE OFFICE:
2850 Fairlane Court
Placerville, CA 95667
(530) 621-5300
(530) 626-7130 Fax

LAKE TAHOE OFFICE:
924 B Emerald Bay Road
South Lake Tahoe, CA 96150
(530) 573-3450
(530) 542-3364 Fax

INTEROFFICE MEMORANDUM

TO: **BIANCA DINKLER**, Project Planner
EDC Development Services Division

FROM: Environmental Management

SUBJECT: DR21-0005 BARSOTTI WAREHOUSE

DATE: MAY 26, 2021

CC:

Environmental Management Department staff have reviewed the subject application. The following reflects our concerns and requirements:

Environmental Health (Bryan Vyverberg x5924):

Public water and sewer services for this project will be provided by the El Dorado Irrigation District.

An annual health permit from this Department may be required if the facility meets the definition of a "food facility" as described in Section 113789 of the California Retail Food Code. This section defines a food facility as "An operation that stores, prepares, packages, serves, vends, or otherwise provides food for human consumption at the retail level." Current operations for Barsotti in Camino, CA are conducted at the wholesale level and are permitted and inspected by the State of California. Please provide more information describing any food-related operations at the proposed warehouse.

Hazardous Materials (Mark Moss x6665):

No comments or concerns for this project.

Solid Waste Division (Timothy Engle x6587)

Construction and Demolition (C&D) Debris Recycling

State Law mandates that a minimum of 65% of the waste materials generated from covered Construction and Demolition projects must be diverted from being landfilled by being recycled or reused on site. Please visit the following website to view El Dorado County's Construction & Demolition Debris Recycling Ordinance Program information and requirements. If after reviewing this information you still have questions, you're welcome to call Environmental Management at (530) 621-5300.

AB 341 - Mandatory Commercial Recycling (Non-Residential)

State law requires that all non-residential dwellings that generate at least two cubic yards of solid waste per week to have a recycling program for common recyclable materials such as bottles, cans, and paper.

AB 1826 - Mandatory Commercial Organics Recycling (Non-Residential)

State law requires that all non-residential dwellings that generate at least two cubic yards of solid waste per week to have an organics recycling program for the following types of organic wastes: green waste, landscape, and pruning waste, non-hazardous wood waste, food waste, and food-soiled paper.

Trash and Recycling Enclosures: CalGreen Section 5.410.1

Recycling by occupants requires that new projects provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive. Please direct questions about this provision to Building Services. Building Services can be reached at (530) 621-5315.

Bianca Dinkler <bianca.dinkler@edcgov.us>

Barsotti Warehouse and Office

1 message

Dave Spiegelberg <dave.spiegelberg@edcgov.us> Wed, Jun 2, 2021 at 3:11 PM
To: Bianca Dinkler <bianca.dinkler@edcgov.us>

Bianca -

DOT takes no exceptions to this application and offers no further comments or conditions.

Dave W. Spiegelberg, P.E.
Senior Civil Engineer

County of El Dorado
Community Development
Department of Transportation, Development Section
2850 Fairlane Court
Placerville, CA 95667
530-621-6077 / 530-957-3521 (cell) / 530-295-2655 (fax)
dave.spiegelberg@edcgov.us

2021 APR -1 PM 2:28
RECEIVED
PLANNING DEPARTMENT

COMMUNITY DEVELOPMENT SERVICES
LONG RANGE PLANNING

2850 Fairlane Court, Placerville, CA 95667
Phone (530) 621-4650, Fax (530) 642-0508

Transportation Impact Study (TIS) – Initial Determination

The information provided with this form will be used by County staff to determine if the proposed project will be required to complete a Transportation Impact Study (TIS) or an On-Site Transportation Review (OSTR). If one or both are required, County staff will contact the applicant with more information about the required studies. Both studies are described in the TIS Guidelines, which can be found on the County's website. ***An OSTR is typically required for all projects.***

Complete and submit this form along with a detailed project description and a site plan by mail, fax or email.

Mail: CDS, Long Range Planning
Attn: Natalie Porter
2850 Fairlane Court
Placerville, CA 95667

Fax: (530) 642-0508
Phone: (530) 621-5442
Email: natalie.porter@edcgov.us

Applicant Information:

Name: DOUG GRANADE
Phone #: 530-677-7484
Address: 4420 BUSINESS DRIVE SHINGLE SPRINGS CA. 95682
Email: doug.granade@dggranade.com

Project Information:

Name of Project: BARSOTTI Office and Warehouse
Project Location: 4684 BUSINESS DRIVE SHINGLE SPRINGS CA. 95682
APN(s): 109-240-030
Planning Number:
Bldg Size: 22,800 sf
Project Planner:
Number of units:

Description of Project: (Use, Number of Units, Building Size, etc.)

Warehouse and office space, 22,800 sf

Please attach a project site plan

If an OSTR is required, the following information shall be evaluated and the findings signed and stamped by a registered Traffic Engineer or Civil Engineer, and shall be included with the project submittal:

1. Existence of any current traffic problems in the local area such as a high-accident location, non-standard intersection or roadway, or an intersection in need of a traffic signal
2. Proximity of proposed site driveway(s) to other driveways or intersections
3. Adequacy of vehicle parking relative to both the anticipated demand and zoning code requirements
4. Adequacy of the project site design to fully satisfy truck circulation and loading demand on-site, when the anticipated number of deliveries and service calls may exceed 10 per day
5. Adequacy of the project site design to provide at least a 25 foot minimum required throat depth (MRTD) at project driveways, include calculation of the MRTD
6. Adequacy of the project site design to convey all vehicle types
7. Adequacy of sight distance on-site
8. Queuing analysis of "drive-through" facilities

Rev 8/20/18

DR21-0005

COMMUNITY DEVELOPMENT SERVICES
LONG RANGE PLANNING
2850 Fairlane Court, Placerville, CA 95667
Phone (530) 621-4650, Fax (530) 642-0508

Transportation Impact Study (TIS) – Initial Determination (Page 2)

TO BE COMPLETED BY COUNTY STAFF:

The following project uses are typically exempt from the preparation of a TIS:

- ☐ 4 or less single family homes
- ☐ 4 or less multi-family units
- ☐ 2,300 square feet or less for shopping center
- ☐ 8,600 square feet or less for general office
- ☐ 10,000 square feet or less for industrial
- ☒ 28,000 square feet or less for warehouse
- ☐ 38,000 square feet or less for mini-storage
- ☐ 20,000 square feet or less for churches
- ☐ 20 or less sites for campgrounds
- ☐ 20 or less rooms for hotel/motel/B&B

☐ **None apply – a TIS is required with applicable fee.**

County Staff Determination:

The TIS or OSTR may be waived if no additional vehicle trips will be generated by the proposed change, no up-zoning is requested, or no intensification of use is requested. Long Range Planning staff may waive the TIS requirement. The Transportation Director or his/her designee may waive the OSTR requirement.

☑ TIS and OSTR are both waived. No further transportation studies are required.

☐ On-Site Transportation Review is required. A TIS is not required. The OSTR shall address all items listed, unless otherwise noted.

☐ The TIS and OSTR are required. An initial deposit for TIS scoping and review is required by CDS Long Range Planning staff. See Attached TIS Initial Fund Request letter.

TIS waiver approved by:

CDS Long Range Planning Signature — May 11 2021 (Date) — ADH TS

OSTR waiver approved by:

Department of Transportation Director or Designee — 5/13/21 (Date)

In Business Park

PRINT

Rev 8/20/18

Barsotti Warehouse

ITE 150 Warehousing

ITE Trip Generation Manual Trip Generation Period	ITE Trip Generation Rate per KSF GFA	KSF of Facility	Trips Generated by Facility
daily	1.74	22.8	40
a.m. peak hour	0.17	22.8	4
p.m. peak hour	0.19	22.8	4

KSF = 1000 square feet

Policy TC- Xe (El Dorado County General Plan)

Policy TC-Xe
For the purposes of this Transportation and Circulation Element, "worsen" is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

A. A 2 percent increase in traffic during the a.m. peak hour, p.m. peak hour, or daily, or
B. The addition of 100 or more daily trips, or
C. The addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

COUNTY OF EL DORADO
OFFICE of COUNTY SURVEYOR

MEMO

DATE: June 7, 2021

TO: Bianca Dinkler, Project Planner

FROM: Brian Frazier Phone (530) 621-5325, brian.frazier@edcgov.us

SUBJECT: DR21-0005 – BARSOTTI WAREHOUSE AND OFFICE

We have looked over the application and have the following comments.

1. Applicant will be required to coordinate with the County Surveyor's Office to ensure that all buildings on the subject parcel are addressed in compliance with County Code, Chapter 110.04. Compliance is required with 30 days of approval.

2. All boundary monuments disturbed during project construction shall be reset by a Professional Land Surveyor or Qualified Engineer as defined by Section 8771 of the California Business and Professions Code (Land Surveyors Act).

3. Easement abandonment must be coordinated through the El Dorado County Surveyor's Office.

SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.
6355 Riverside Blvd., Suite C, Sacramento, CA 95831
916/ 427-0703 www.sycamoreenv.com

1 November 2019

Mr. Douglas G. Granade, President
D.G. Granade, Inc.
4420 Business Drive
Shingle Springs, CA 95682
Phone: 530/ 677-7484

Subject: 2019 Botanical Survey Results for the Shingle Lime Mine Road Parcel Split (APN 109-240-30), El Dorado County, CA

Dear Mr. Granade,

Sycamore Environmental completed a botanical survey of the Shingle Lime Mine Road Parcel Split site on 30 October 2019. The survey was conducted to update a botanical survey conducted on 18 June 2015. No special-status plants were observed during the 2015 or 2019 botanical surveys.

STUDY AREA
The 14.6-acre Biological Study Area (BSA) is located on the east side of Shingle Lime Mine Road south of Durock Road in the Barnett Business Park in El Dorado County, CA (APN 109-240-30; Doug Granade, Trustee, & Barsotti Family LLC). US Highway 50 and the communities of Cameron Park and Shingle Springs are located north of the project. An aerial photograph of the BSA is in Attachment A. Soils present in the BSA consist of Rescue clay, clayey variant on the north side of the property and Rescue sandy loam, 2 to 9 percent slopes in the central and southern portions of the property (NRCS 1974). The BSA is dominated by California annual grassland with many nonnative invasive plant species present. Portions of the BSA have been disturbed in the past by grading and spoils pile stockpiling. Open canopy mixed oak woodland is present on the northwest corner of the property. Old Mill Creek crosses Shingle Lime Mine Road north of the property and does not occur on the property. No chaparral occurs in the BSA.

METHODS
The botanical survey was conducted on 18 June 2015 by Sycamore Environmental botanist Mike Bower, M.S. The survey was conducted in accordance with the California Department of Fish and Wildlife protocol for surveying and evaluating impacts to special status native plant populations and natural communities (CDFW 2018), the U.S. Fish and Wildlife Service guidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants (USFWS 1996), and the California Native Plant Society botanical survey guidelines (CNPS 2001). Maps and aerial photographs of the BSA are in Attachment A.

A list was obtained from the U.S. Fish and Wildlife Service (USFWS), Sacramento Field Office (dated 30 October 2019). The list identifies federal-listed, candidate, or proposed species that potentially occur in or could be affected by the project. The California Natural Diversity Database (CNDDB) was queried for known occurrences of special-status species near the BSA (Shingle Springs and 8

surrounding quads; data dated 29 September 2019). The California Native Plant Society (CNPS) online inventory of rare and endangered plants was queried for known occurrences of special-status plants in or near the BSA (Shingle Springs and 8 surrounding quads; dated 30 October 2019). The results of the database queries (Attachment B) were used to assemble a table of special-status species with potential to occur (Table 1). Potential to occur was evaluated based on species habitat requirements and range (CNPS 2019; Baldwin, et al., eds. 2012), and habitat present in the BSA. Known CNDDB and herbarium records were reviewed (CDFW 2019; CNPS 2019; CCH 2019).

Table 1. Special-status plants with potential to occur

Special-Status Plant Species	Common Name	Federal Status [a]	State Status/ CNPS Rank [a,b]	Source [c]	Habitat Present? / Species Observed?
Allium jepsonii	Jepson's onion	--	--/ 1B.2	2, 3	Yes/ No
Balsamorhiza macrolepis var. *macrolepis*	Big-scale balsamroot	--	--/ 1B.2	2, 3	Yes/ No
Calystegia stebbinsii	Stebbins' morning-glory	E	E/ 1B.1	1, 2, 3	Yes/ No
Calystegia vanzuukiae	Van Zuuk's morning-glory	--	--/ 1B.3	2	Yes/ No
Carex xerophila	Chaparral sedge	--	--/ 1B.2	2, 3	Yes/ No
Ceanothus roderickii	Pine Hill ceanothus	E	R/ 1B.1	1, 2, 3	Yes/ No
Chlorogalum grandiflorum	Red Hills soaproot	--	--/ 1B.2	2, 3	Yes/ No
Crocanthemum (=*Helianthemum*) *suffrutescens*	Bisbee Peak rush-rose	--	--/ 3.2	2, 3	Yes/ No
Eryngium pinnatisectum	Tuolumne button-celery	--	--/ 1B.2	2, 3	Yes/ No
Galium californicum ssp. *sierrae*	El Dorado bedstraw	E	R/ 1B.2	1, 2, 3	Yes/ No
Packera (=*Senecio*) *layneae*	Layne's butterweed (ragwort)	T	R/ 1B.2	1, 2, 3	Yes/ No
Viburnum ellipticum	Oval-leaved viburnum	--	--/ 2B.3	2, 3	Yes/ No
Wyethia reticulata	El Dorado County mule ears	--	--/ 1B.2	2, 3	Yes/ No

[a] **Listing Status**
E = Endangered; **T** = Threatened; **P** = Proposed; **C** = Candidate; **CH** = Critical habitat designated; **R** = California Rare.

[b] **Other Codes**:
CNPS California Rare Plant Rank: **1A** = Presumed Extinct in CA; **1B** = Rare or Endangered (R/E) in CA and elsewhere; **2** = R/E in CA and more common elsewhere; **3** = Need more information; **4** = Plants of limited distribution.
CNPS Rank Decimal Extensions: **.1** = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); **.2** = Fairly endangered in CA (20-80% of occurrences threatened); **.3** = Not very endangered in CA (< 20% of occurrences threatened or no current threats known).

[c] **Sources** **1** = USFWS (2019) letter; **2** = CNDDB query; **3** = CNPS (2019).

Botanical surveys consisted of walking systematically through the BSA while looking for vascular plants. Approximately 2.5 person-hours were spent in the field surveying for special-status plants. The survey was floristic in nature (all plants were identified to the taxonomic level necessary to determine rarity and listing status). Natural communities were classified and mapped with a minimum mapping unit of 0.1 acre (Attachment A).

Precipitation preceding the 30 October 2019 survey was approximately 128% of normal based on historic (1905 to present) and observed precipitation data for 1 October 2018 through 1 October 2019 from the nearby Placerville Gauge (CDEC 2019).

Reference populations of Bisbee Peak rush-rose, Pine Hill ceanothus, Red Hills soaproot, chaparral sedge, and Layne's butterweed were visited in the nearby Cameron Park/Shingle Springs area on 15 October 2019 by Sycamore Environmental botanist Mike Bower, M.S. The Bisbee Peak rush-rose,

Pine hill ceanothus, chaparral sedge, and Layne's butterweed are perennials with persistent, distinctive, above-ground stems, inflorescences, and/or leaves. These species were evident and identifiable on 15 October, and would be expected to be evident and identifiable during the survey. The Red Hills soaproot was observed with brittle, dry inflorescences that were identifiable based on distinctive morphology, but were not clearly evident. The ability to detect Red Hills soaproot during the survey was therefore limited.

The survey was conducted in late October, at a time of year when some special-status plants might not have been detectable. The ideal time to survey for the plants species with potential to occur (i.e., those listed in Table 1) is May or June, when these species bloom (CNPS 2019; Baldwin et al. 2012). The BSA was recently surveyed on 18 June 2015 (Sycamore Environmental 2015). No special-status plants were observed in the BSA during the 2015 survey conducted during the evident and identifiable period.

RESULTS

No special-status plants were observed in the BSA during the botanical survey conducted on 30 October 2019. No special-status plants were observed during a previous botanical survey conducted on 18 June 2015. A list of plant species observed in the BSA is in Attachment C. There are no CNDDB or herbarium specimen records of special-status plants in the BSA (CDFW 2019; CCH 2019). A map of natural communities is in Attachment A. Natural communities in the BSA include mixed oak woodland (0.80 acre) and California annual grassland (11.61 acres).

Please contact me if you have any questions.

Yours truly,

Mike Bower, M.S.
Botanist/Biologist

Attachment A Figures 1-3
Attachment B USFWS, CNDDB and CNPS Lists
Attachment C Plant Species Observed List

Literature Cited

Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, eds. 2012. The Jepson manual: Vascular plants of California, 2nd ed. University of California Press, Berkeley, CA.

California Data Exchange Center (CDEC). Accessed 31 October 2019. Real-Time and historic average precipitation data from the Placerville Gauge (PCV). California Department of Water Resources, Sacramento, CA. http://cdec.water.ca.gov/cgi-progs/staMeta?station_id=PCV

California Department of Fish and Wildlife (CDFW). Accessed October 2019. Biogeographic Information and Observation System: BIOS viewer version 8.8 (9.3.1.2). http://www.dfg.ca.gov/biogeodata/bios/

California Department of Fish and Wildlife (CDFW). 20 March 2018. Protocols for surveying and evaluating impacts to special status native plant populations and natural communities. California Natural Resources Agency, California Department of Fish and Wildlife, Sacramento, CA. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline

California Invasive Plant Council (Cal-IPC). 2006. Invasive plant inventory. California Invasive Plant Council, Berkeley, CA. www.cal-ipc.org

California Native Plant Society (CNPS). Revised 2 June 2001. CNPS Botanical Survey Guidelines. California Native Plant Society, Sacramento, CA.

California Native Plant Society (CNPS). Accessed 30 October 2019. Inventory of rare and endangered plants (online edition; v.8-03 0.45). California Native Plant Society, Sacramento, CA. http://www.rareplants.cnps.org/simple.html

Consortium of California Herbaria (CCH). Accessed 30 October 2019. Herbarium specimen data provided by the participants of the Consortium of California Herbaria. http://ucjeps.berkeley.edu/consortium/

Natural Resources Conservation Service (NRCS). April 1974. Soil survey of El Dorado Area, California. USDA – Soil Conservation Service.

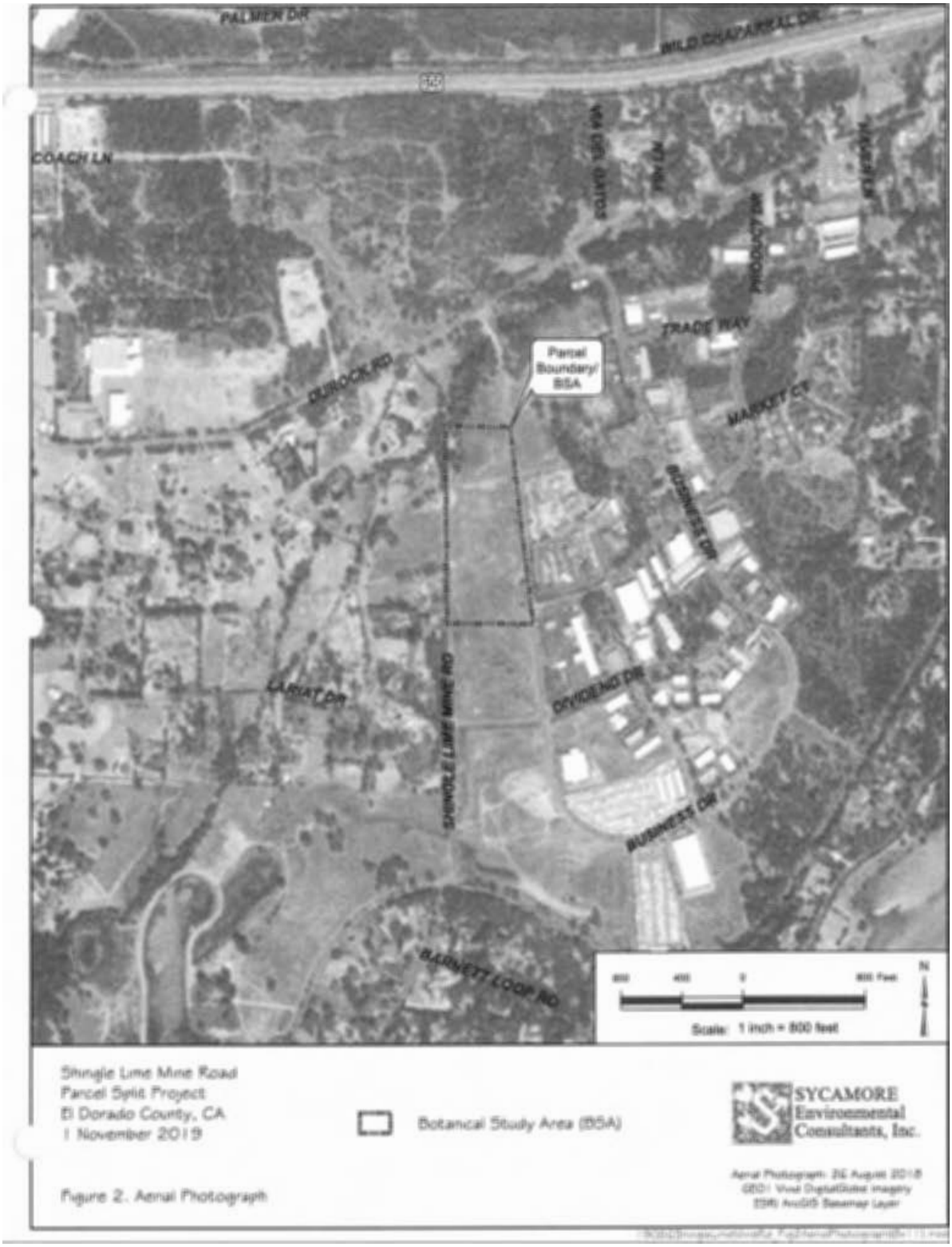
Sycamore Environmental Consultants, Inc. (Sycamore Environmental). 13 July 2015. Letter to Ken Wilkinson, Subject: Botanical Survey Results for the Shingle Lime Mine Road Project (APN 109-240-30), El Dorado County, CA. Sycamore Environmental, Sacramento, CA.

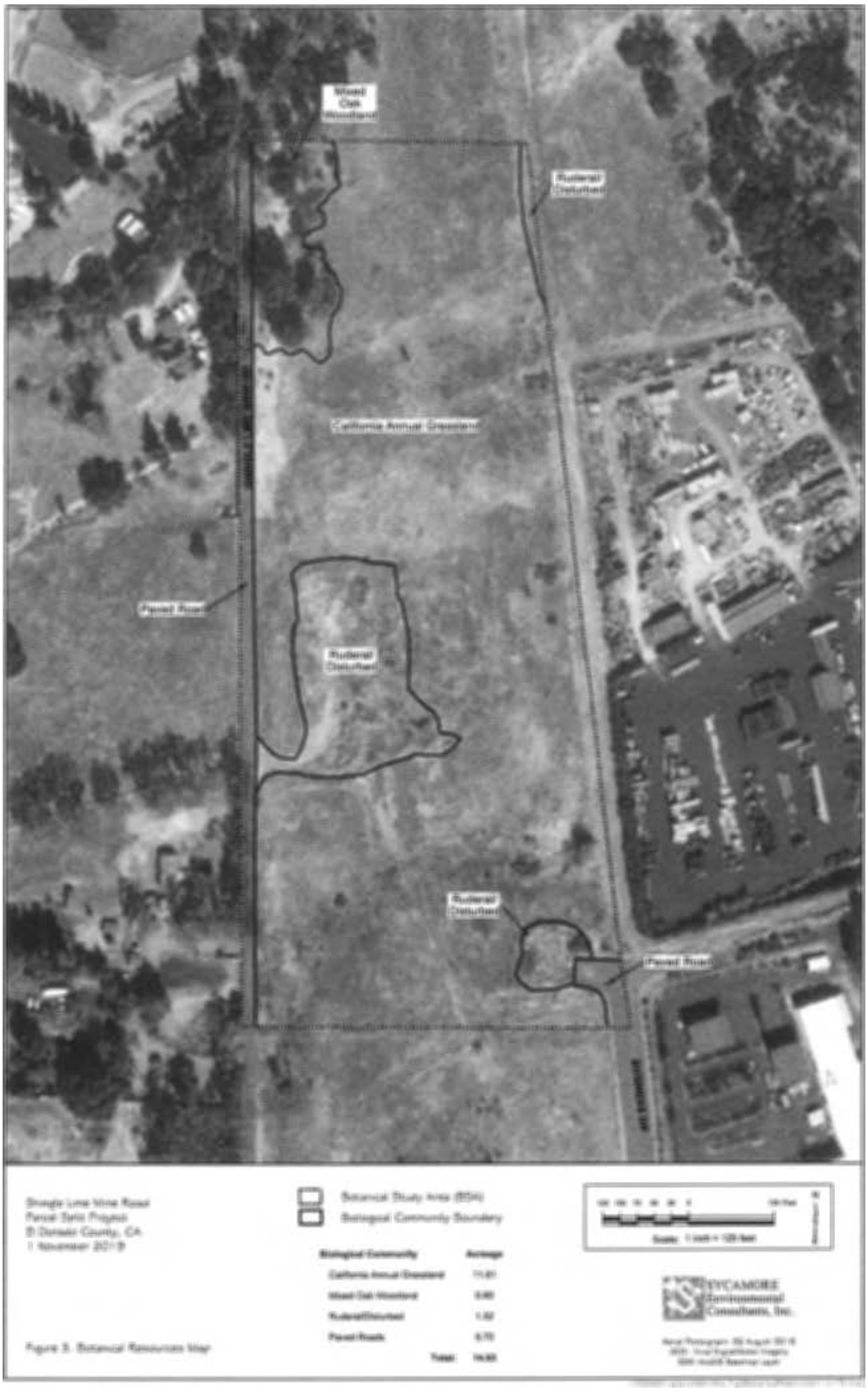
U.S. Fish and Wildlife Service (USFWS). 1996. Guidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants. Sacramento Fish and Wildlife Office, Sacramento, CA. http://sacramento.fws.gov/es/documents/Listed_plant_survey_guidelines.pdf

Attachment A

Figures 1-3

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 18 - BOTANICAL SURVEY, SYCAMORE ENVIRONMENTAL


PALMIEN DR
WILD GRAPEVINE DR
COACH LN
TRADE WAY
Parcel Boundary/ BSA
DUROCK RD
MARKET CT
BUSINESS DR
DIVIDEND DR
LARIAT DR
BARNETT LOOP RD
Scale: 1 inch = 800 feet
Shingle Lime Mine Road
Parcel Split Project
El Dorado County, CA
1 November 2019
Botanical Study Area (BSA)
SYCAMORE Environmental Consultants, Inc.
Figure 2. Aerial Photograph


Mixed Oak Woodland
Ruderal Disturbed
California Annual Grassland
Paved Road
Ruderal Disturbed
Ruderal Disturbed
Paved Road
Botanical Study Area (BSA)
Biological Community Boundary
SYCAMORE Environmental Consultants, Inc.

Attachment B

USFWS, CNDDB and CNPS Lists

IPaC U.S. Fish & Wildlife Service

Last login October 10, 2019 12:24 PM MDT

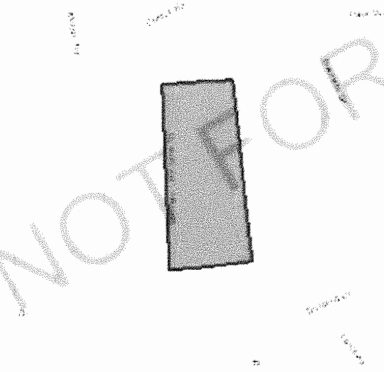
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

El Dorado County, California



Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/2891

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened

Flowering Plants

NAME	STATUS
El Dorado Bedstraw Galium californicum ssp. sierrae No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5209	Endangered
Layne's Butterweed Senecio layneae No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4062	Threatened
Pine Hill Ceanothus Ceanothus roderickii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3293	Endangered
Pine Hill Flannelbush Fremontodendron californicum ssp. decumbens No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4818	Endangered
Stebbins' Morning-glory Calystegia stebbinsii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3991	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS

ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1626

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Lewis's Woodpecker Melanerpes lewis — Breeds Apr 20 to Sep 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9408

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Song Sparrow Melospiza melodia This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 20 to Sep 5
Spotted Towhee Pipilo maculatus clementae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4243	Breeds Apr 15 to Jul 20
Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie Pica nuttalli This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▣)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week.

For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

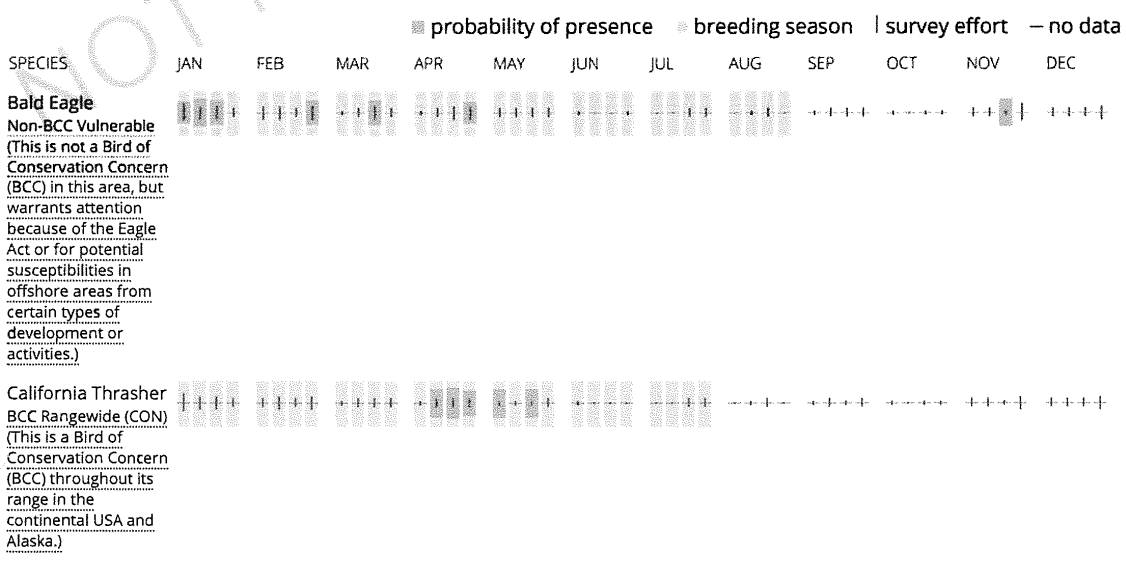
Breeding Season ( )
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

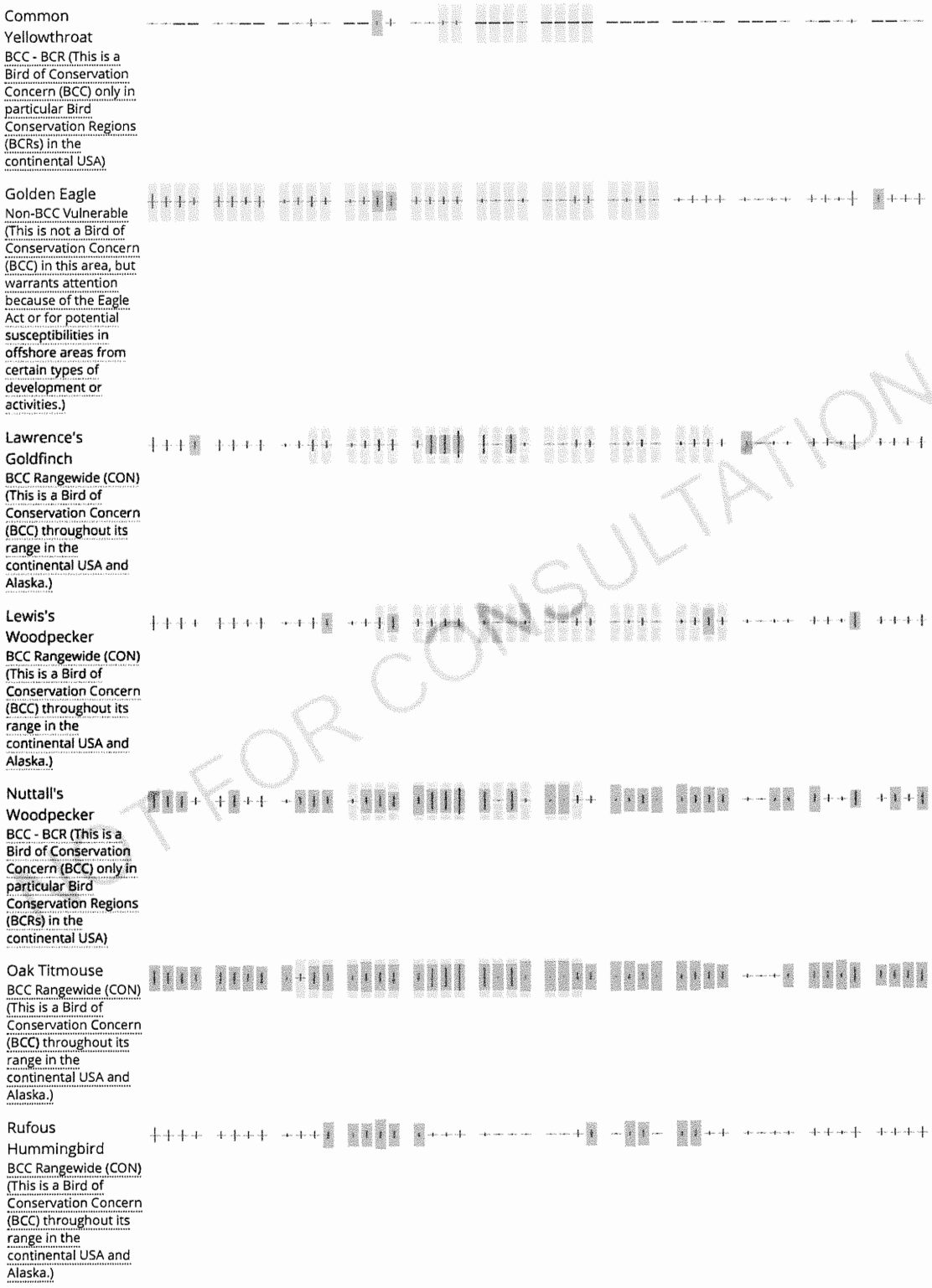
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

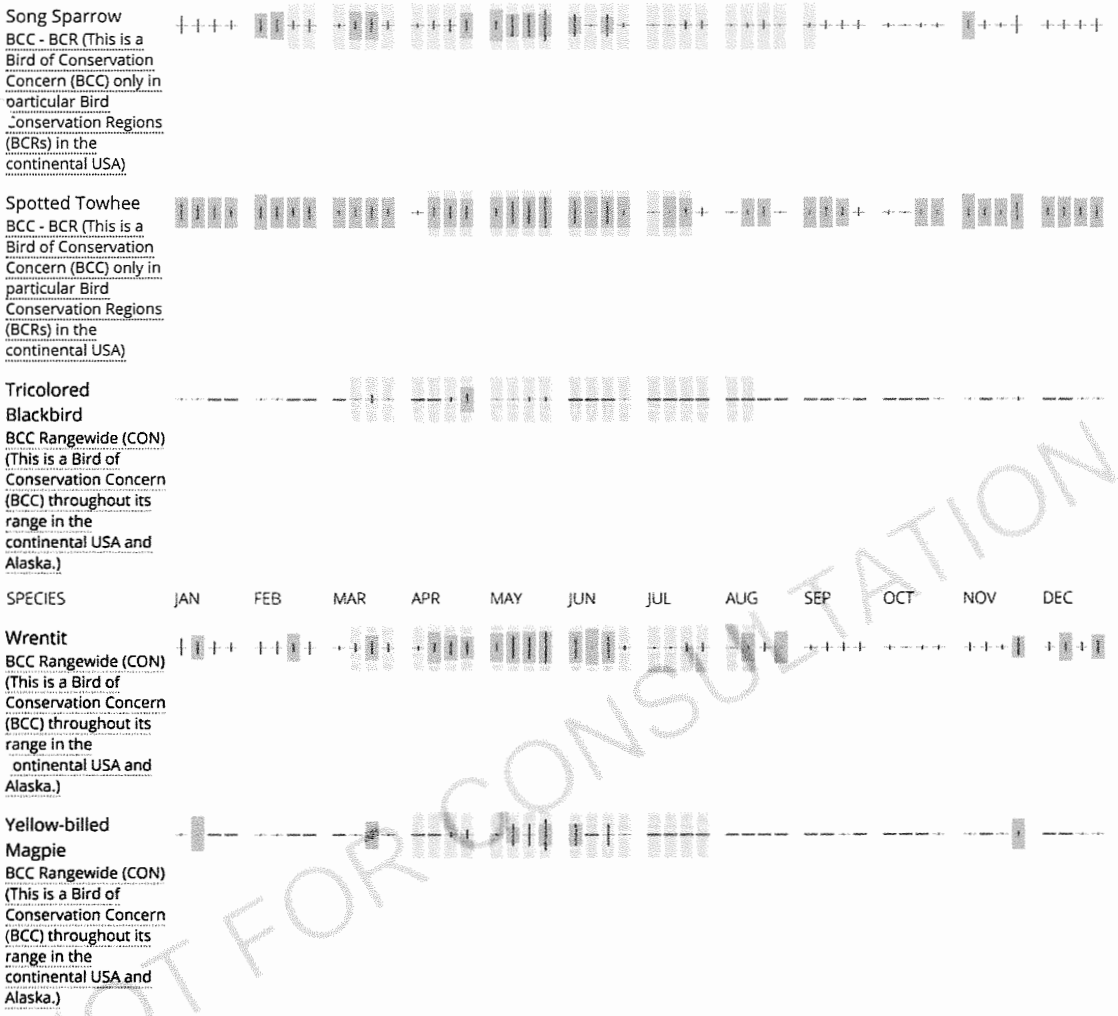
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects,

and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS 'ntegrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND
PSSC

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

y Criteria: Quad IS (Pilot Hill (3812171) OR Coloma (3812078) OR Garden Valley (3812077) OR Clarksville (3812161) OR Shingle Springs (3812068) OR Placerville (3812067) OR Folsom SE (3812151) OR Latrobe (3812058) OR Fiddletown (3812057))
 AND Taxonomic Group IS (Dune OR Scrub OR Herbaceous OR Marsh OR Riparian OR Woodland OR Forest OR Alpine OR Inland Waters OR Marine OR Estuarine OR Riverine OR Palustrine OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Allium jepsonii Jepson's onion	PMLIL022V0	None	None	G2	S2	1B.2
Arctostaphylos nissenana Nissenan manzanita	PDERI040V0	None	None	G1	S1	1B.2
Balsamorhiza macrolepis big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
Calystegia stebbinsii Stebbins' morning-glory	PDCON040H0	Endangered	Endangered	G1	S1	1B.1
Calystegia vanzuukiae Van Zuuk's morning-glory	PDCON040Q0	None	None	G2Q	S2	1B.3
Carex cyrtostachya Sierra arching sedge	PMCYP03M00	None	None	G2	S2	1B.2
Carex xerophila chaparral sedge	PMCYP03M60	None	None	G2	S2	1B.2
Ceanothus roderickii Pine Hill ceanothus	PDRHA04190	Endangered	Rare	G1	S1	1B.1
Central Valley Drainage Hardhead/Squawfish Stream Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	GNR	SNR	
Chlorogalum grandiflorum Red Hills soaproot	PMLIL0G020	None	None	G3	S3	1B.2
Clarkia biloba ssp. brandegeeae Brandegee's clarkia	PDONA05053	None	None	G4G5T4	S4	4.2
Crocanthemum suffrutescens Bisbee Peak rush-rose	PDCIS020F0	None	None	G2?Q	S2?	3.2
Eryngium pinnatisectum Tuolumne button-celery	PDAPI0Z0P0	None	None	G2	S2	1B.2
Fremontodendron decumbens Pine Hill flannelbush	PDSTE03030	Endangered	Rare	G1	S1	1B.2
Galium californicum ssp. sierrae El Dorado bedstraw	PDRUB0N0E7	Endangered	Rare	G5T1	S1	1B.2
Horkelia parryi Parry's horkelia	PDROS0W0C0	None	None	G2	S2	1B.2
Packera layneae Layne's ragwort	PDAST8H1V0	Threatened	Rare	G2	S2	1B.2
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Viburnum ellipticum oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3
Wyethia reticulata El Dorado County mule ears	PDAST9X0D0	None	None	G2	S2	1B.2

Record Count: 20

CNPS California Native Plant Society

Inventory of Rare and Endangered Plants

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

30 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3812171, 3812078, 3812077, 3812161, 3812068, 3812067, 3812151 3812058 and 3812057;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Allium jepsonii	Jepson's onion	Alliaceae	perennial bulbiferous herb	Apr-Aug	1B.2	S2	G2
Allium sanbornii var. congdonii	Congdon's onion	Alliaceae	perennial bulbiferous herb	Apr-Jul	4.3	S3	G4T3
Allium sanbornii var. sanbornii	Sanborn's onion	Alliaceae	perennial bulbiferous herb	May-Sep	4.2	S3S4	G4T3T4
Arctostaphylos mewukka ssp. truei	True's manzanita	Ericaceae	perennial evergreen shrub	Feb-Jul	4.2	S3	G4?T3
Arctostaphylos nissenana	Nissenan manzanita	Ericaceae	perennial evergreen shrub	Feb-Mar(Jun)	1B.2	S1	G1
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	4.2	S4	G4
Calystegia stebbinsii	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jul	1B.1	S1	G1
Calystegia vanzuukiae	Van Zuuk's morning-glory	Convolvulaceae	perennial rhizomatous herb	May-Aug	1B.3	S2	G2Q
Carex cyrtostachya	Sierra arching sedge	Cyperaceae	perennial herb	May-Aug	1B.2	S2	G2
Carex xerophila	chaparral sedge	Cyperaceae	perennial herb	Mar-Jun	1B.2	S2	G2
Ceanothus fresnensis	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	May-Jul	4.3	S4	G4
Ceanothus roderickii	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Apr-Jun	1B.1	S1	G1
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	May-Jun	1B.2	S3	G3
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Onagraceae	annual herb	May-Jul	4.2	S4	G4G5T4
Claytonia parviflora ssp. grandiflora	streambank spring beauty	Montiaceae	annual herb	Feb-May	4.2	S3	G5T3

Crocanthemum suffrutescens	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	Apr-Aug	3.2	S2?	G2?Q
Delphinium hansenii ssp. ewanianum	Ewan's larkspur	Ranunculaceae	perennial herb	Mar-May	4.2	S3	G4T3
Erigeron miser	starved daisy	Asteraceae	perennial herb	Jun-Oct	1B.3	S3?	G3?
Eriophyllum jepsonii	Jepson's woolly sunflower	Asteraceae	perennial herb	Apr-Jun	4.3	S3	G3
Eryngium pinnatisectum	Tuolumne button-celery	Apiaceae	annual / perennial herb	May-Aug	1B.2	S2	G2
Fremontodendron decumbens	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	Apr-Jul	1B.2	S1	G1
Galium californicum ssp. sierrae	El Dorado bedstraw	Rubiaceae	perennial herb	May-Jun	1B.2	S1	G5T1
Horkelia parryi	Parry's horkelia	Rosaceae	perennial herb	Apr-Sep	1B.2	S2	G2
Lilium humboldtii ssp. humboldtii	Humboldt lily	Liliaceae	perennial bulbiferous herb	May-Jul(Aug)	4.2	S3	G4T3
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	1B.2	S3	G3
Trichostema rubisepalum	Hernandez bluecurls	Lamiaceae	annual herb	Jun-Aug	4.3	S4	G4
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	G4G5
Wyethia reticulata	El Dorado County mule ears	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2

Suggested Citation

California Native Plant Society, Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 30 October 2019].

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Contributors
The Calflora Database
The California Lichen Society
California Natural Diversity Database
The Jepson Flora Project
The Consortium of California Herbaria
CalPhotos

Questions and Comments
rareplants@cnps.org

Attachment C

Plant Species Observed List

Plant Species Observed

Family [1]	Scientific Name [1]	Common Name	N/I [2]	Cal-IPC [3]	OBSERVED 18 June 2015	OBSERVED 30 Oct 2019
CONIFERS						
Pinaceae	*Pinus sabiniana* (sapling)	Gray, ghost, or foothill pine	N		x	x
EUDICOTS						
Anacardiaceae	*Toxicodendron diversilobum*	Western poison oak	N		x	x
Apiaceae	*Daucus* sp.	Daucus	--			x
	Torilis arvensis	Tall sock-destroyer	I	Moderate	x	x
Apocynaceae	*Asclepias fascicularis*	Narrow-leaf milkweed	N		x	x
	Vinca major	Greater periwinkle	I	Moderate	x	x
Asteraceae	*Agoseris grandiflora*	Agoseris	N		x	
	Ambrosia psilostachya	Western ragweed	N			x
	Anthemis cotula	Mayweed	I		x	
	Artemisia douglasiana	Mugwort	N		x	
	Baccharis pilularis	Coyote brush	N		x	x
	Calycadenia multiglandulosa	Calycadenia	N		x	
	Carduus pycnocephalus ssp. *pycnocephalus*	Italian thistle	I	Moderate	x	x
	Centaurea solstitialis	Yellow star-thistle	I	High	x	x
	Centromadia fitchii	Spikeweed	N		x	x
	Chondrilla juncea	Skeleton weed	I	Moderate	x	
	Cirsium vulgare	Bull thistle	I	Moderate	x	x
	Dittrichia graveolens	Stinkwort	I	Moderate	x	x
	Grindelia camporum	Gumplant	N		x	x
	Holocarpha virgata	Tarweed, tarplant	N		x	x
	Lactuca serriola	Prickly lettuce	I		x	x
	Lagophylla sp.	Hare-leaf	N		x	
	Leontodon saxatilis	Hairy hawkbit	I		x	x
	Madia elegans	Common madia	N		x	x
	Madia sp.	Tarweed, tarplant	N		x	
	Matricaria discoidea	Pineapple weed, rayless chamomile	I		x	
	Psilocarphus tenellus	Slender woolly-marbles	N		x	
	Senecio vulgaris	Common groundsel	I			x
	Sonchus asper ssp. *asper*	Prickly sow thistle	I		x	x
	Tragopogon dubius	Yellow salsify	I		x	x
	Wyethia angustifolia	Mule's ears	N		x	
	Xanthium strumarium	Cocklebur	N		x	x
Brassicaceae	*Hirschfeldia incana*	Perennial, shortpod, or summer mustard	I	Moderate	x	
Caryophyllaceae	*Silene gallica*	Small-flower catchfly, windmill pink	I		x	
	Spergularia sp.	Sand-spurrey	--		x	x
Convolvulaceae	*Calystegia occidentalis* ssp. *occidentalis*	Morning-glory	N		x	
	Convolvulus arvensis	Bindweed, orchard morning-glory	I		x	x
Euphorbiaceae	*Croton setigerus*	Turkey-mullein	N		x	x
Fabaceae	*Acmispon americanus* var. *americanus*	Deervetch, deerweed	N		x	x
	Lotus corniculatus	Bird's-foot trefoil	I		x	
	Lupinus sp.	Lupine	N		x	
	Melilotus albus	White sweetclover	I		x	

	Trifolium glomeratum	Clustered clover	I		x	
	Trifolium hirtum	Rose clover	I	Limited	x	x
	Vicia hirsuta	Vetch	I		x	x
	Vicia sativa	Vetch	I		x	
	Vicia villosa ssp. *villosa*	Hairy vetch, winter vetch	I		x	x
Fagaceae	*Quercus douglasii*	Blue oak	N		x	x
	Quercus lobata	Valley oak, roble	N		x	x
	Quercus wislizeni var. *wislizeni*	Interior live oak	N		x	x
Gentianaceae	*Zeltnera muehlenbergii*	Monterey centaury	N		x	x
Geraniaceae	*Erodium botrys*	Storksbill, filaree	I		x	x
	Erodium cicutarium	Redstem filaree	I	Limited	x	x
	Geranium molle	Cranesbill, geranium	I			x
Hypericaceae	*Hypericum perforatum* ssp. *perforatum*	Klamathweed	I	Moderate	x	x
Linaceae	*Linum* sp.	Flax	--		x	x
Lythraceae	*Lythrum hyssopifolia*	Loosestrife	I	Limited	x	x
Myrsinaceae	*Anagallis arvensis*	Scarlet pimpernel	I		x	
Onagraceae	*Clarkia purpurea* ssp. *quadrivulnera*	Four-spot	N		x	
	Epilobium sp.	Willowherb	--		x	x
Orobanchaceae	*Castilleja attenuata*	Valley tassels	N		x	
Plantaginaceae	*Kickxia* sp.	Kickxia	I		x	x
	Plantago erecta	Plantain	N		x	x
Polemoniaceae	*Navarretia intertexta* ssp. *intertexta*	Navarretia	N		x	x
	Navarretia pubescens	Navarretia	N		x	
Polygonaceae	*Rumex crispus*	Curly dock	I	Limited	x	x
	Rumex sp.	Dock	--		x	
Rhamnaceae	*Ceanothus cuneatus*	California-lilac	N		x	x
	Frangula californica ssp. *tomentella*	California coffee berry	N			x
Rosaceae	*Adenostoma fasciculatum*	Chamise, greasewood	N			X
	Drymocallis sp.	Drymocallis	N			x
	Poterium sanguisorba	Garden burnet	I		x	x
	Prunus cerasifera	Cherry plum	I	Limited	x	x
	Prunus persica	Peach	I		x	x
	Pyracantha sp.	Firethorn	I		x	x
	Rosa californica	California rose	N		x	x
	Rubus armeniacus	Himalayan blackberry	I	High	x	x
Rubiaceae	*Galium parisiense*	Wall bedstraw	I		x	
Salicaceae	*Populus fremontii* ssp. *fremontii*	Fremont cottonwood	N		x	x
	Salix gooddingii	Goodding's black willow	N		x	x
	Salix laevigata	Red willow	N		x	x
	Salix lasiolepis	Arroyo willow	N			x
Scrophulariaceae	*Verbascum blattaria*	Moth mullein	I		x	x
Viscaceae	*Phoradendron leucarpum* ssp. *tomentosum*	American mistletoe	N		x	x
MONOCOTS						
Agavaceae	*Chlorogalum pomeridianum* var. *pomeridianum*	Soaproot	N		x	x
Cyperaceae	*Carex tumulicola*	Foothill sedge	N		x	
	Cyperus eragrostis	Nutsedge	N		x	x
Iridaceae	*Sisyrinchium* sp.	Sisyrinchium	N			x
Juncaceae	*Juncus balticus* ssp. *ater*	Baltic rush	N			x
	Juncus xiphioides	Iris-leaved rush	N			x
	Luzula sp.	Hairy wood rush	N			x
Poaceae	*Aegilops triuncialis*	Barbed goat grass	I	High	x	x
	Aira caryophyllea	Silver hair grass	I		x	
	Avena fatua	Wild oat	I	Moderate	x	x
	Brachypodium distachyon	False brome	I	Moderate	x	x

	Bromus diandrus	Ripgut grass	I	Moderate	x	x
	Crypsis schoenoides	Swamp prickle grass	I			x
	Cynodon dactylon	Bermuda grass	I	Moderate		x
	Cynosurus echinatus	Bristly dogtail grass	I	Moderate	x	x
	Dactylis glomerata	Orchard grass	I	Limited	x	x
	Elymus caput-medusae	Medusa head	I	High	x	x
	Elymus triticoides	Beardless wild rye	N		x	
	Festuca myuros	Rattail sixweeks grass	I	Moderate	x	
	Festuca perennis	Rye grass	I	Moderate	x	x
	Gastridium phleoides	Nit grass	I		x	x
	Hordeum marinum ssp. *gussoneanum*	Mediterranean barley	I	Moderate	x	x
	Hordeum murinum ssp. *leporinum*	Hare barley	I	Moderate	x	x
	Muhlenbergia rigens	Deer grass	N			x
	Phalaris aquatica	Harding grass	I	Moderate	x	x
	Polypogon monspeliensis	Annual beard grass	I	Limited	x	x
	Stipa miliacea var. *miliacea*	Smilo grass	I	Limited	x	x
	Stipa sp. (likely *S. pulchra* or *S. cernua*)	Needle grass	N		x	x
Themidaceae	*Brodiaea elegans* ssp. *elegans*	Harvest brodiaea	N		x	x

[1] Taxonomy follows *The Jepson Manual: Vascular plants of California,* 2nd ed. (Baldwin et al. 2012).

[2] N = Native to CA; I = Introduced.

[3] Negative ecological impact (Cal-IPC 2006).

Drainage Study for Barsotti Warehouse

03-16-2021

WCE
WARREN CONSULTING ENGINEERS, INC.
1117 WINDFIELD WAY, SUITE 110
EL DORADO HILLS, CA 95672

DR21-0005

Table of Contents

Existing Parcel Description

The existing parcel of land in which this proposed development resides is roughly 14.62 acres in total size with the project area being approximately 6.74 acres of the total parcel area. It is located at the intersection of Business Drive and Product Drive, in Shingle Springs. The Parcel is undeveloped and covered with herbaceous (mix of grass, weeds, and brush). Along the west edge of the parcel there is exists Shingle Lime Mine Road. All of the existing site runoff sheds toward Shingle Lime Mine Road which eventually reaches Deer Creek southwest of the project site.

Proposed Improvements

The proposed project consists of a single-story warehouse building of approx. 22,800 sf. The building will have surrounding improvements consisting of the typical asphalt paved parking areas, drives isles, a aggregate base vehicle pad and concrete areas. The runoff of the proposed roof of the building, paved parking areas, and the aggregate base pad sheet flow towards or is collected into the proposed drainage system that releases into two vegetive swales that directs the runoff to a proposed detention basin located at the south western corner of the project site. The detention basin releases a controlled flow toward the existing drainage path along Shingle Lime Mine Road.

A portion of the proposed project will include the extension of Business Drive along the east side of the property. Approximately 480LF of road extension is proposed with associated utilities. Two driveways are proposed off of Business Drive to service the proposed site.

Scope of Study

The purpose of this study is to give evidence through accepted calculation methods that the proposed development has been designed to accept and transmit the anticipated run-off based on the County provided storm water run-off information. The study will also provide data supporting that there will be no increase or an insignificant increase in the drainage run-off from the site in the post-development condition, as compared to the pre-developed state.

In accordance with the County's Post Construction Storm Water Management Program Requirements, and based on the proposed impervious area of this project, this is a Regulated Project subject to Hydromodification Analysis. A storm water storage system has been implemented on this site to mitigate the increased runoff from the proposed impervious surface. This will both promote infiltration and also treatment of storm water runoff.

Location Map

From Google Maps

Aerial Photo

From Google Earth

Run-off Calculation Methodology

The County of El Dorado Drainage Manual has been utilized in development of the proposed drainage system. The El Dorado County Manual utilizes a "Peak Flow" method utilizing the traditional Rational Equation. It uses rainfall data and a calculated time of concentration. Based on this manual we have determined that the site is within the Mean annual Rainfall Zone of 32 (inches) per year. The overland roughness coefficient for the existing site condition a value of 0.24 per Table 2.4.3 of the EDC Manual was selected. This was selected based on the existing condition of the undeveloped parcel which is fairly covered in vegetation and brush. A roughness coefficient for the proposed site condition of 0.011 was selected for the new parking areas and roofs, also from Table 2.4.3, and the unpaved proposed areas will maintains the existing runoff coefficient. For determination of the runoff coefficient, A soil analysis was taken from the USDA soil survey to determine the soil classification. This survey showed class C and is mostly classified as "Rescue Sandy Loam (ReB)". We agree with the classification based on our observation of site conditions.

Curve Number Calculations

Using the soil classes as stated above, we can derive the following Curve Numbers for determining the Runoff Coefficient:

Curve Numbers
(From Appendix 2.3, SCS Curve Tables, EDC Drainage Manual)

Pre-Developed
99%→Herbaceous → *Fair* Hydrologic Cond. → Soil Group C → CN=81
1%→Pavement/Roofs → Soil Group C → CN=98
Total CN = 81

Post-Developed
53%→Pavement/Roofs → Soil Group C → CN=98
47%→ Open Space → *Good* Hydrologic Cond. → Soil Group C → CN=74
Total CN = 87

Run-off Coefficient Calculations

With these established curve numbers, we can derive the respective runoff coefficient using Figures 2.5.1 and 2.5.2 of the El Dorado County Drainage Manual. The Time of concentration for each of these shed areas has been established in accordance with Section 2.6 of the EDC Drainage Manual. Times of Concentration have been rounded to the nearest value that relates to the Runoff Coefficient charts within the El Dorado County Drainage Manual, and as updated and re-adopted on September 22, 2020.

Run-off Totals

With the variables established, the Pre-Development and Post Development Runoff totals can be calculated and summarized below:

The cumulative discharges from the site are shown below and also detailed in Exhibits in Appendix A within this report.

	10 Year Storm	100 Year Storm
Total Site Post-Developed	14.37 cfs	20.28 cfs
Total Site Pre-Developed	7.13 cfs	9.68 cfs
	(7.24 cfs)	(10.6 cfs)

Discharge Velocities

With the existing site being undeveloped there is no mitigation to the discharge velocity. The discharge total of the existing shed is calculated to be approx. 7.13 cfs in a 10-year event. The proposed development with result in a site runoff of approximately 14.37 cfs during 10-year event.

Mitigation measures will include vegetative swales and a detention basin to both treat and retain site runoff. From the detention basin a 12-inch diameter outfall pipe is proposed to reduce the site discharge to be below the pre-development conditions. The maximum discharge rate for a 10 year event will be 4.14cfs which is less than the pre-development discharge of 7.13cfs.

Drainage Networks

Within this report, we have provided an analysis of the proposed drainage network within proposed shed areas 1-11. Runoff has been calculated for each inlet structure to determine the appropriate pipe sizes and ensure the hydraulic grade line stays below the proposed grate elevations. Refer to Appendix A2 and A3 for drainage network analysis and hydraulic grade line calculations.

Offsite Run-On

The proposed offsite road improvements consist of approximately 480 feet of new road extending Business Drive past its intersection at Product Drive. The western portion of the new road's storm runoff is directed to and collected by the proposed curb and gutter, and drains towards the existing Business Drive and continues south on Business Drive. This portion of the road is approximately 13,606 square feet of new paving that creates 0.66 cfs of runoff. The eastern portion of the new road's storm runoff is directed to and collected in the landscaping along its edge. This runoff is then transferred to the onsite storm drain system by culvert and collected into the on-site storm drain system. Calculations are included in both the 10yr and 100yr Storm Drain Network Analyses. These areas are also illustrated in the Post Construction Shed Map exhibit, Shed 9 and 10 respectively.

Mitigation Measures

Vegetive Swale

The project will have 2 vegetive swales constructed to collect and treat the storm water runoff from the paved surfaces. The swales will direct the runoff to the proposed detention basin. The first vegetative swale is located along the southern edge of the property and the second vegetative swale is located along the western edge of property and collects the runoff from a portion of the building and the impervious aggregate base area. The calculations for the vegetative swales can be found in Appendix A6.

Detention Basin

The project is also going to implement a detention basin at the southwestern corner of the parcel as a mitigation measures for the post-development of the site. It is intended to capture the added runoff created from proposed added impervious surfaces. The required volume is based on the differences between the proposed and existing 10 year hydrographs. The existing hydraulic volume is calculated to 49,568 and the proposed volume 66,793 cuft following site development. The required storage volume is 17,225 cuft based on these values. The proposed detention basin will hold approximately 22,847 cuft, which is oversized for the possibility of future development. The hydrograph and the pond sizing calculation are in appendix A4.

Drainage System Maintenance

In order to ensure the ongoing performance of the retention basin, the owner will be charged with the following maintenance responsibilities related to the vegetive swales and drainage network. The maintenance instructions for the both

It is the owner's responsibility to perform the following:

Drainage Network

1. Remove significant deposits of debris and silt from Inlets and flush pipes as needed.
   a. Inspect frequency: once every 2 years.

Vegetated Swale

1. Remove significant deposits of debris and silt from base of the swale.
   a. Inspect frequency: Prior to any major storm event
2. Repair/replace vegetation as necessary to maintain full cover and prevent erosion.
   b. Inspect frequency: Prior to and after any major storm event.

Detention Basin

1. Remove significant deposits of debris and silt from base of the basin.
   a. Inspect frequency: Prior to any major storm event
2. Remove debris/sediment build-up at pipe discharge.
   c. Inspect frequency: Prior to and after any major storm event.

Hydromodification

The project is going to implement a detention basin at the southwestern corner of the parcel as a mitigation measures for the post-development of the site. It is intended to capture the added runoff created from proposed added impervious surfaces. The proposed detention basin has a storage volume of 22,847 cuft, which is oversized for the possibility of future development. The hydrograph and the pond sizing calculations can be found in Appendix A4.

Stormwater Run-on

The proposed project does not foresee having any stormwater run-on form neighboring properties other than what is already being accounted for with the Business Drive run-on.

Overall Conclusions

Based on these findings, the project design successfully mitigates the affects this project could potentially have on the existing downstream drainage networks.

Appendix A1

USGS Soil Survey Info

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for El Dorado Area, California

March 4, 2021

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Dorado Area, California
Survey Area Data: Version 12, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 8, 2019—May 12, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ReB	Rescue sandy loam, 2 to 9 percent slopes	10.2	99.5%
Rk	Rescue clay, clayey variant	0.1	0.5%
Totals for Area of Interest		**10.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Custom Soil Resource Report

El Dorado Area, California

ReB—Rescue sandy loam, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: hj0x
Elevation: 800 to 2,000 feet
Mean annual precipitation: 30 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 200 to 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Rescue and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rescue

Setting

Landform: Ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from granodiorite

Typical profile

H1 - 0 to 14 inches: sandy loam
H2 - 14 to 26 inches: sandy clay loam
H3 - 26 to 34 inches: sandy loam
H4 - 34 to 55 inches: coarse sandy loam
H5 - 55 to 66 inches: loamy coarse sand
H6 - 66 to 70 inches: weathered bedrock

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: 66 to 70 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: F018XI202CA - Deep Thermic Steep Hillslopes 28-35 PZ
Hydric soil rating: No

Minor Components

Argonaut
Percent of map unit: 8 percent
Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Rescue
Percent of map unit: 7 percent
Hydric soil rating: No

Rk—Rescue clay, clayey variant

Map Unit Setting
National map unit symbol: hj14
Elevation: 500 to 1,500 feet
Mean annual precipitation: 30 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 200 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Rescue variant and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rescue Variant

Setting
Landform: Drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources over igneous rock

Typical profile
H1 - 0 to 23 inches: clay
H2 - 23 to 36 inches: clay
H3 - 36 to 48 inches: clay loam
H4 - 48 to 52 inches: weathered bedrock

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: 48 to 52 inches to paralithic bedrock
Drainage class: Poorly drained

Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water capacity: Moderate (about 7.4 inches)

Interpretive groups
Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: R018XI111CA - Low Gradient, Concave Depressions
Hydric soil rating: Yes

Minor Components

Unnamed
Percent of map unit: 10 percent
Landform: Fan remnants
Hydric soil rating: Yes

Rescue
Percent of map unit: 2 percent
Hydric soil rating: No

Auburn
Percent of map unit: 1 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Delpiedra
Percent of map unit: 1 percent
Hydric soil rating: No

Unnamed
Percent of map unit: 1 percent
Landform: Drainageways
Hydric soil rating: Yes

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

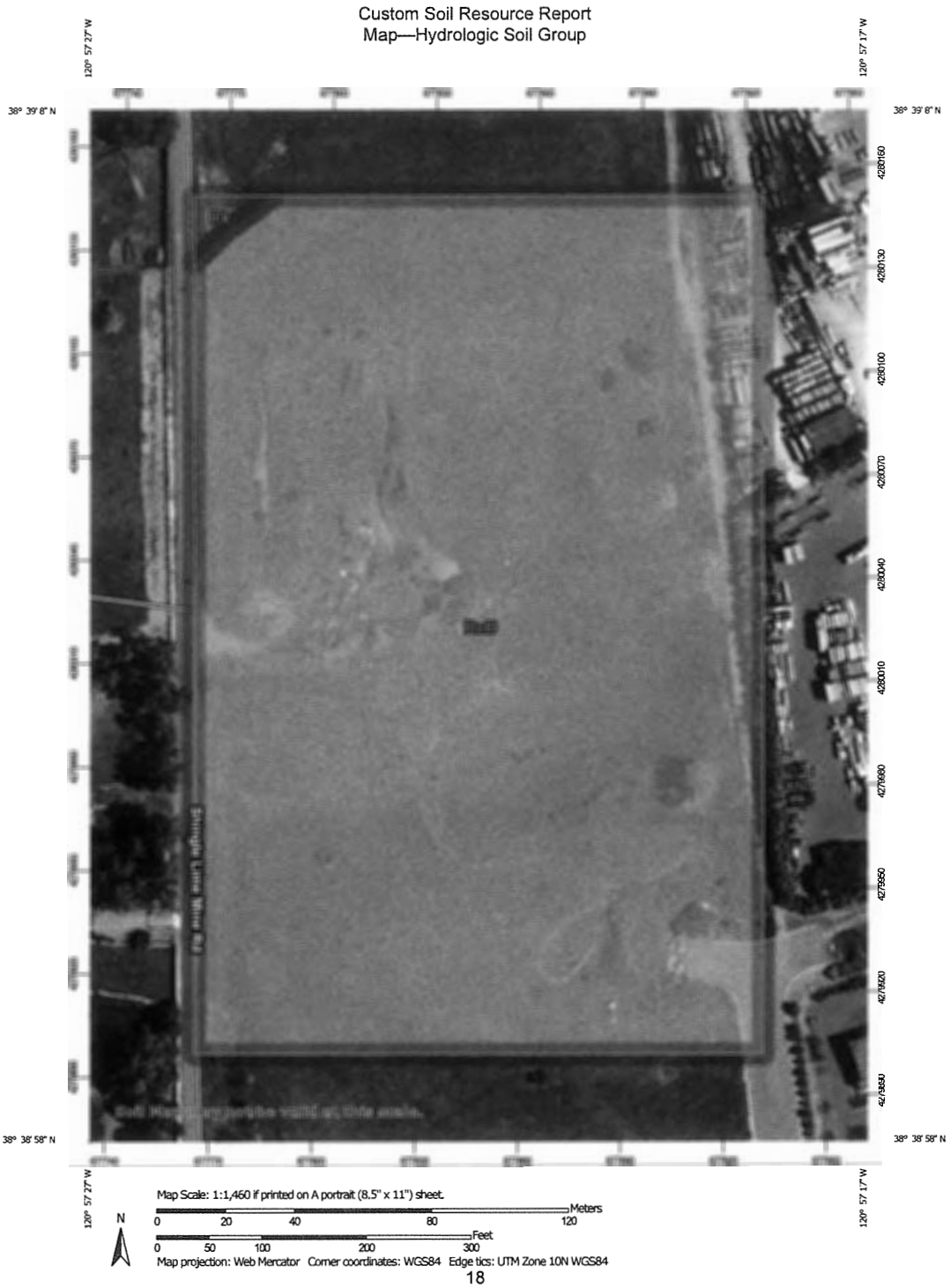
Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.


Custom Soil Resource Report
Map—Hydrologic Soil Group
120° 57' 27" W
120° 57' 17" W
38° 39' 8" N
38° 38' 58" N
Map Scale: 1:1,460 if printed on A portrait (8.5" x 11") sheet.
Meters
0 20 40 80 120
Feet
0 50 100 200 300
N
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Custom Soil Resource Report

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
ReB	Rescue sandy loam, 2 to 9 percent slopes	C	10.2	99.5%
Rk	Rescue clay, clayey variant	C/D	0.1	0.5%
Totals for Area of Interest			**10.2**	**100.0%**

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

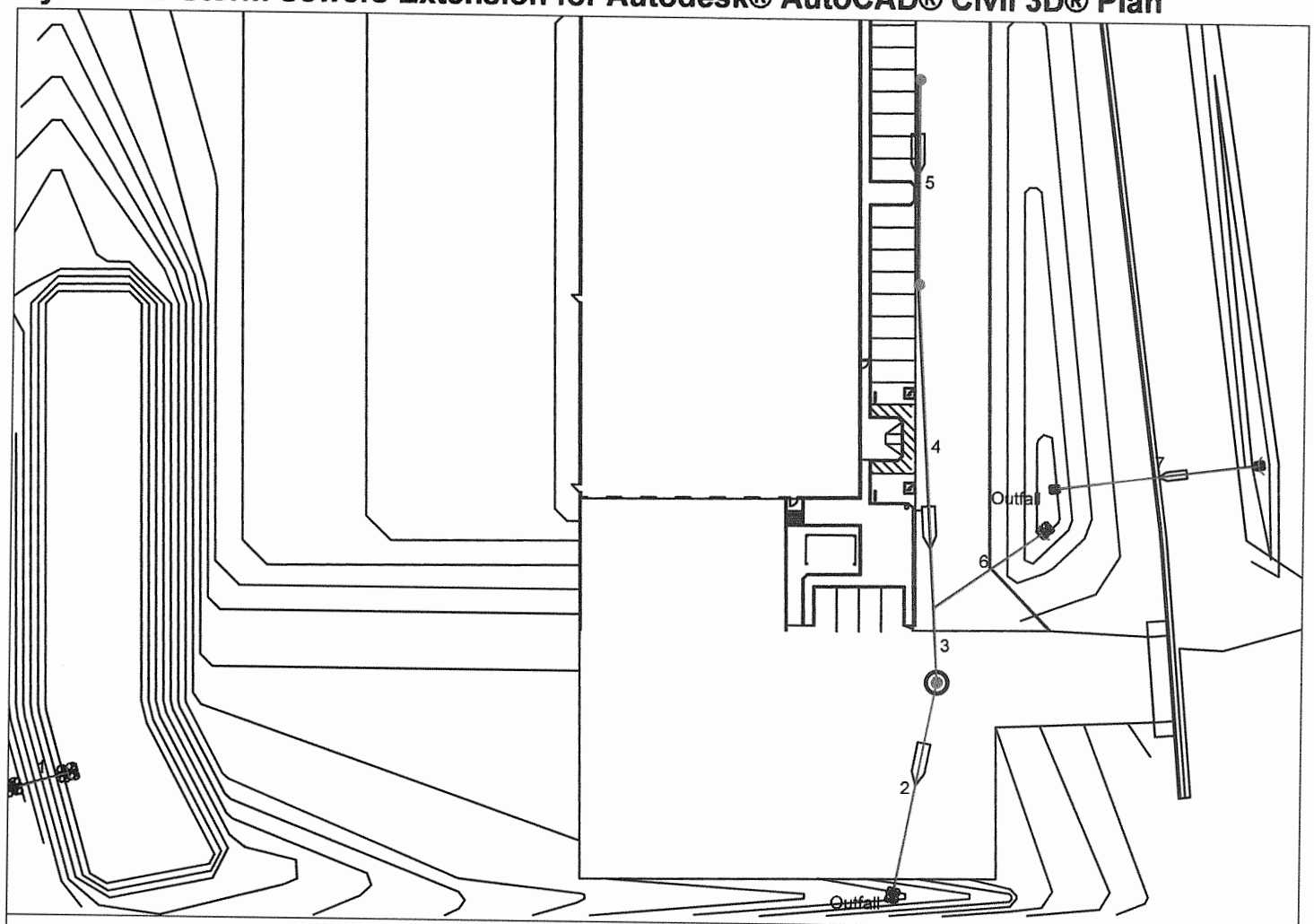
United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix A2

10yr Storm Drain Network Analysis

Hydraflow Storm Sewers Extension for Autodesk® AutoCAD® Civil 3D® Plan



Project File: 20-153 - Storm Sewer CAD - 10yr.stm	Number of lines: 7	Date: 3/16/2021

Storm Sewers v2018.30

Structure Report

Struct No.	Structure ID	Junction Type	Rim Elev (ft)	Structure			Line Out			Line In		
				Shape	Length (ft)	Width (ft)	Size (in)	Shape	Invert (ft)	Size (in)	Shape	Invert (ft)
1		OpenHeadwall	0.00	n/a	n/a	n/a	12	Cir	1323.05			
2		Manhole	0.00	Cir	4.00	4.00	12	Cir	1328.50	12	Cir	1328.50
3		None	0.00	n/a	n/a	n/a	12	Cir	1328.60	12 12	Cir Cir	1328.60 1328.60
4		DropGrate	1331.90	Cir	4.00	4.00	12	Cir	1329.00	12	Cir	1329.00
5		DropGrate	1331.90	Cir	4.00	4.00	12	Cir	1329.40			
6		OpenHeadwall	0.00	n/a	n/a	n/a	12	Cir	1330.50			
7		OpenHeadwall	0.00	n/a	n/a	n/a	12	Cir	1334.00			

Project File: 20-153 - Storm Sewer CAD - 10yr.stm | Number of Structures: 7 | Run Date: 3/16/2021

Storm Sewers v2018.30

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	23.000	6.74	6.74	0.98	6.61	6.61	10.0	10.0	2.1	28.47	5.25	36.25	12	2.17	1322.55	1323.05	1323.55	1338.26	0.00	0.00	
2	End	87.575	0.00	1.06	0.00	0.00	0.80	0.0	11.9	2.0	3.25	3.99	5.33	12	1.26	1327.40	1328.50	1328.09	1329.27	0.00	0.00	
3	2	30.326	0.00	1.06	0.00	0.00	0.80	0.0	11.8	2.0	3.26	2.04	4.15	12	0.33	1328.50	1328.60	1329.50	1329.75	0.00	0.00	
4	3	132.000	0.26	0.54	0.95	0.25	0.51	10.0	11.0	2.0	2.12	1.96	2.71	12	0.30	1328.60	1329.00	1329.99	1330.46	0.00	1331.90	
5	4	83.056	0.28	0.28	0.95	0.27	0.27	10.0	10.0	2.1	1.11	2.47	1.41	12	0.48	1329.00	1329.40	1330.51	1330.60	1331.90	1331.90	
6	3	53.272	0.52	0.52	0.55	0.29	0.29	10.0	10.0	2.1	1.22	6.73	2.48	12	3.57	1328.60	1330.50	1329.99	1330.97	0.00	0.00	
7	End	83.686	0.32	0.32	0.63	0.20	0.20	10.0	10.0	2.1	0.86	7.28	4.64	12	4.18	1330.50	1334.00	1330.73	1334.39	0.00	0.00	

Project File: 20-153 - Storm Sewer CAD - 10yr.stm | Number of lines: 7 | Run Date: 3/16/2021

NOTES:Intensity = 6.99 / (Inlet time + 0.20) ^ 0.51; Return period =Yrs. 10 ; c = cir e = ellip b = box

Storm Sewers v2018.30

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp Line No
							Ht (in)	L (ft)	Area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
1		28.47*	0.00	28.47	0.00	Hdwl	0.0	0.00	0.00	0.00	0.00	Sag	2.00	0.050	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
2		0.00	0.00	0.00	0.00	MH	0.0	0.00	0.00	0.00	0.00	Sag	2.00	0.050	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
3		0.00	0.00	0.00	0.00	None	0.0	0.00	0.00	0.00	0.00	Sag	2.00	0.050	0.020	0.013	0.00	0.00	0.00	0.00	0.0	2
4		1.07*	0.00	1.07	0.00	DrGrt	0.0	0.00	2.00	2.00	2.00	Sag	2.00	0.020	0.020	0.013	0.13	14.54	0.13	14.54	0.0	3
5		1.11*	0.00	1.11	0.00	DrGrt	0.0	0.00	2.00	2.00	2.00	Sag	2.00	0.020	0.020	0.013	0.13	14.85	0.13	14.85	0.0	4
6		1.22*	0.00	1.22	0.00	Hdwl	0.0	0.00	0.00	0.00	0.00	Sag	2.00	0.050	0.020	0.013	0.00	0.00	0.00	0.00	0.0	3
7		0.86*	0.00	0.86	0.00	Hdwl	0.0	0.00	0.00	0.00	0.00	Sag	2.00	0.050	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off

Project File: 20-153 - Storm Sewer CAD - 10yr.stm | Number of lines: 7 | Run Date: 3/16/2021

NOTES: Inlet N-Values = 0.016; Intensity = 6.99 / (Inlet time + 0.20) ^ 0.51; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

Storm Sewers v2018.30

FL-DOT Report

Line No	To Line	Type of struc	n - Value	Len	Drainage Area C1 = 0.2 C2 = 0.5 C3 = 0.9			Time of conc	Time of Flow in sect	Inten (I)	Total CA	Add Q / Total Flow	Inlet elev	Elev of HGL / Elev of Crown / Elev of Invert			Rise / Span	HGL / Pipe	ADD / Full Flow		Date: 3/16/2021 / Frequency: 10 yrs / Proj: 20-153 - Storm Sewer
					Increment	Sub-Total	Sum CA					Q		Up	Down	Fall	Size	Slope	Vel	Cap	
				(ft)	(ac)	(ac)		(min)	(min)	(in/hr)		(cfs)	(ft)	(ft)	(ft)	(ft)	(in)	(%)	(ft/s)	(cfs)	Line description
1	End	Hdwl	0.013	23.000	0.00	0.00	0.00	10.00	0.01	2.13	6.61	14.37	0.00	1338.26	1323.55	14.71	12	63.94	36.25	28.47	
					0.00	0.00	0.00					28.47		1324.05	1323.55		12	2.17	6.69	5.25	
					0.00	0.00	0.00							1323.05	1322.55	0.50	Cir				
2	End	MH	0.013	87.575	0.00	0.00	0.00	11.91	0.35	1.96	0.80	0.00	0.00	1329.27	1328.09	1.19	12	1.35	5.33	3.25	
					0.00	0.00	0.00					3.25		1329.50	1328.40		12	1.26	5.08	3.99	
					0.00	0.00	0.00							1328.50	1327.40	1.10	Cir				
3	2	None	0.013	30.326	0.00	0.00	0.00	11.79	0.12	1.97	0.80	0.00	0.00	1329.75	1329.50	0.25	12	0.84	4.15	3.26	
					0.00	0.00	0.00					3.26		1329.60	1329.50		12	0.33	2.60	2.04	
					0.00	0.00	0.00							1328.60	1328.50	0.10	Cir				
4	3	DrGrt	0.013	132.000	0.00	0.00	0.00	10.98	0.80	2.04	0.51	0.54	1331.90	1330.46	1329.99	0.47	12	0.36	2.71	2.12	
					0.00	0.00	0.00					2.12		1330.00	1329.60		12	0.30	2.50	1.96	
					0.00	0.00	0.00							1329.00	1328.60	0.40	Cir				
5	4	DrGrt	0.013	83.056	0.00	0.00	0.00	10.00	0.98	2.13	0.27	0.54	1331.90	1330.60	1330.51	0.08	12	0.10	1.41	1.11	
					0.00	0.00	0.00					1.11		1330.40	1330.00		12	0.48	3.15	2.47	
					0.00	0.00	0.00							1329.40	1329.00	0.40	Cir				
6	3	Hdwl	0.013	53.272	0.00	0.00	0.00	10.00	0.57	2.13	0.29	0.61	0.00	1330.97	1329.99	0.98	12	1.84	2.48	1.22	
					0.00	0.00	0.00					1.22		1331.50	1329.60		12	3.57	8.56	6.73	
					0.00	0.00	0.00							1330.50	1328.60	1.90	Cir				
7	End	Hdwl	0.013	83.686	0.00	0.00	0.00	10.00	1.27	2.13	0.20	0.43	0.00	1334.39	1330.73	3.66	12	4.37	4.64	0.86	
					0.00	0.00	0.00					0.86		1335.00	1331.50		12	4.18	9.27	7.28	
					0.00	0.00	0.00							1334.00	1330.50	3.50	Cir				

NOTES: Intensity = 6.99 / (Inlet time + 0.20) ^ 0.51 (in/hr) ; Time of flow in section is based on full flow.

Project File: 20-153 - Storm Sewer CAD - 10yr.stm

Storm Sewers v2018.30

MyReport

Line No.	Area Dn (sqft)	Area Up (sqft)	Byp Ln No	Coeff C1 (C)	Coeff C2 (C)	Coeff C3 (C)	Capac Full (cfs)	Crit Depth (ft)	Cross Sl, Sw (ft/ft)	Cross Sl, Sx (ft/ft)	Curb Len (ft)	Defl Ang (Deg)	Depth Dn (ft)	Depth Up (ft)	DnStm Ln No	Drng Area (ac)	Easting X (ft)	EGL Dn (ft)	EGL Up (ft)	Energy Loss (ft)
1	0.79	0.79	n/a	0.20	0.50	0.90	5.25	1.00	....	....	....	-16.928	1.00	1.00**	Outfall	6.74	4352.53	1343.98	1358.68	14.699
2	0.57	0.65	n/a	0.20	0.50	0.90	3.99	0.77	....	....	....	-79.066	0.69	0.77**	Outfall	0.00	4704.04	1328.48	1329.66	0.000
3	0.79	0.79	2	0.20	0.50	0.90	2.04	0.77	....	....	....	-13.703	1.00	1.00	2	0.00	4702.57	1329.77	1330.02	0.254
4	0.79	0.79	3	0.20	0.50	0.90	1.96	0.62	0.020	0.020	....	-0.422	1.00	1.00	3	0.26	4695.22	1330.10	1330.57	0.470
5	0.79	0.79	4	0.20	0.50	0.90	2.47	0.44	0.020	0.020	....	2.855	1.00	1.00	4	0.28	4694.74	1330.55	1330.63	0.080
6	0.36	0.36	3	0.20	0.50	0.90	6.73	0.47	....	....	....	57.476	1.00	0.47**	3	0.52	4746.05	1330.03	1331.15	0.191
7	0.14	0.28	n/a	0.20	0.50	0.90	7.28	0.39	....	....	....	-7.042	0.23	0.39**	Outfall	0.32	4833.99	1330.88	1334.53	0.000

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NOTES: ** Critical depth

Flow Rate (cfs)	Sf Ave (ft/ft)	Sf Dn (ft/ft)	Grate Area (sqft)	Grate Len (ft)	Grate Width (ft)	Gnd/Rim El Dn (ft)	Gnd/Rim El Up (ft)	Gutter Depth (ft)	Gutter Slope (ft/ft)	Gutter Spread (ft)	Gutter Width (ft)	HGL Dn (ft)	HGL Up (ft)	HGL Jnct (ft)	HGL Jmp Dn (ft)	HGL Jmp Up (ft)	Incr CxA	Incr Q (cfs)	Inlet Depth (ft)	
28.47	63.908	63.920	....	....	....	0.00	0.00	....	....	....	....	1323.55	1338.26	1358.68	....	....	6.61	28.47	....	
3.25	0.000	0.000	....	....	....	0.00	0.00	....	....	....	....	1328.09	1329.27	1329.27	....	....	0.00	0.00	....	
3.26	0.838	0.839	....	....	....	0.00	0.00	....	....	....	....	1329.50	1329.75	1329.99	....	....	0.00	0.00	....	
2.12	0.356	0.356	2.00	2.00	2.00	0.00	1331.90	0.13	Sag	14.54	2.00	1329.99	1330.46	1330.51	....	....	0.25	1.07	0.13	
1.11	0.097	0.097	2.00	2.00	2.00	1331.90	1331.90	0.13	Sag	14.85	2.00	1330.51	1330.60	1330.63	....	....	0.27	1.11	0.13	
1.22	0.359	0.117	....	....	....	0.00	0.00	....	....	....	....	1329.99	1330.97 j	1330.97	1330.00	1329.61	0.29	1.22	....	
0.86	0.000	0.000	....	....	....	0.00	0.00	....	....	....	....	1330.73	1334.39	1334.39	....	....	0.20	0.86	....	

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NOTES: ** Critical depth

My Report

Inlet Eff (%)	Inlet ID	Inlet Loc	(ft)	Inlet Time (min)	i Sys (in/hr)	i Inlet (in/hr)	Invert Dn (ft)	Invert Up (ft)	Jump Loc (ft)	Jump Len (ft)	Vel Hd Jmp Dn (ft)	Vel Hd Jmp Up (ft)	J-Loss Coeff	Junct Type	Known Q (cfs)	Cost RCP	Cost CMP	Cost PVC	Line ID
100		Sag		10.0	2.13	2.13	1322.55	1323.05	....	....	0.00	0.00	1.00	Hdwall	14.37	644	580	547	
....		Sag		0.0	1.96	0.00	1327.40	1328.50	....	....	0.00	0.00	0.28 z	MH	0.00	2,550	2,295	2,168	
....		Sag		0.0	1.97	0.00	1328.50	1328.60	....	....	0.00	0.00	0.87	None	0.00	940	846	799	
100		Sag		10.0	2.04	2.13	1328.60	1329.00	....	....	0.00	0.00	0.50	Dp-Grate	0.54	3,796	3,416	3,227	
100		Sag		10.0	2.13	2.13	1329.00	1329.40	....	....	0.00	0.00	1.00	Dp-Grate	0.54	2,424	2,182	2,060	
100		Sag		10.0	2.13	2.13	1328.60	1330.50	15.98	4.13	0.05	0.64	1.00 z	Hdwall	0.61	1,484	1,336	1,261	
100		Sag		10.0	2.13	2.13	1330.50	1334.00	....	....	0.00	0.00	1.00 z	Hdwall	0.43	2,338	2,104	1,987	

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NOTES: Intensity = 6.99 / (Inlet time + 0.20) ^ 0.51 -- Return period = 10 Yrs. ; ** Critical depth

MyReport

Line Length (ft)	Line Size (in)	Line Slope (%)	Line Type	Local Depr (in)	n-val Gutter	n-val Pipe	Minor Loss (ft)	Northing Y (ft)	Pipe Travel (min)	Q Byp (cfs)	Q Capt (cfs)	Q Carry (cfs)	Line Rise (in)	Runoff Coeff (C)	Line Span (in)	Area A1 (ac)	Area A2 (ac)	Area A3 (ac)	Tc (min)	Throat Ht (in)	Total Area (ac)	Total CxA
23.000	12	2.17	Cir	....	....	0.013	20.42	5183.50	0.01	0.00	28.47	0.00	12	0.98	12	0.00	0.00	0.00	10.0	....	6.74	6.61
87.575	12	1.26	Cir	....	....	0.013	0.11	5224.62	0.35	....	....	....	12	0.00	12	0.00	0.00	0.00	11.9	....	1.06	0.80
30.326	12	0.33	Cir	....	....	0.013	0.23	5254.91	0.12	....	....	....	12	0.00	12	0.00	0.00	0.00	11.8	....	1.06	0.80
132.000	12	0.30	Cir	....	....	0.013	0.06	5386.71	0.80	0.00	1.07	0.00	12	0.95	12	0.00	0.00	0.00	11.0	....	0.54	0.51
83.056	12	0.48	Cir	....	....	0.013	0.03	5469.76	0.98	0.00	1.11	0.00	12	0.95	12	0.00	0.00	0.00	10.0	....	0.28	0.27
53.272	12	3.57	Cir	....	....	0.013	n/a	5285.69	0.57	0.00	1.22	0.00	12	0.55	12	0.00	0.00	0.00	10.0	....	0.52	0.29
83.686	12	4.18	Cir	....	....	0.013	0.14	5314.52	1.27	0.00	0.86	0.00	12	0.63	12	0.00	0.00	0.00	10.0	....	0.32	0.20

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NOTES: ** Critical depth

Total Runoff (cfs)	Vel Ave (ft/s)	Vel Dn (ft/s)	Vel Hd Dn (ft)	Vel Hd Up (ft)	Vel Up (ft/s)	Cover Dn (ft)	Cover Up (ft)	Storage (cft)
14.10	36.25	36.25	20.43	20.42	36.24	n/a	n/a	18.06
1.56	5.33	5.66	0.39	0.39	5.00	n/a	n/a	53.68
1.57	4.15	4.15	0.27	0.27	4.15	n/a	n/a	23.81
1.04	2.71	2.71	0.11	0.11	2.71	n/a	1.90	103.65
0.57	1.41	1.41	0.03	0.03	1.41	1.90	1.50	65.22
0.61	2.48	1.55	0.04	0.18	3.41	n/a	n/a	37.12
0.43	4.64	6.22	0.14	0.14	3.05	n/a	n/a	17.43

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NOTES: ** Critical depth

Storm Sewer Inlet Time Tabulation

Line No.	Line ID	Tc Method	Sheet Flow					Shallow Concentrated Flow					Channel Flow							Total Travel Time (min)
			n-Value	flow Length (ft)	2-yr 24h P (in)	Land Slope (%)	Travel Time (min)	flow Length (ft)	Water Slope (%)	Surf Descr	Ave Vel (ft/s)	Travel Time (min)	X-sec Area (sqft)	Wetted Perim (ft)	Chan Slope (%)	n-Value	Vel	flow Length (ft)	Travel Time (min)	
1		User																		10.00
2		User																		0.00
3		User																		0.00
4		User																		10.00
5		User																		10.00
6		User																		10.00
7		User																		10.00

Project File: 20-153 - Storm Sewer CAD - 10yr.stm | Min. Tc used for intensity calculations = 5 min | Number of lines: 7 | Date: 3/16/2021

Storm Sewers v2018.3

Hydraulic Grade Line Computations

Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
			Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)		Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	Ave Sf (%)	Enrgy loss (ft)		
(1)	(in) (2)	(cfs) (3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(ft) (12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(K) (23)	(ft) (24)
1	12	28.47	1322.55	1323.55	1.00	0.79	36.25	20.43	1343.98	63.920	23.000	1323.05	1338.26	1.00**	0.79	36.24	20.42	1358.68	63.896	63.908	14.70	1.00	20.42
2	12	3.25	1327.40	1328.09	0.69*	0.57	5.66	0.39	1328.48	0.000	87.575	1328.50	1329.27	0.77**	0.65	5.00	0.39	1329.66	0.000	0.000	n/a	0.28	0.11
3	12	3.26	1328.50	1329.50	1.00*	0.79	4.15	0.27	1329.77	0.839	30.326	1328.60	1329.75	1.00	0.79	4.15	0.27	1330.02	0.838	0.838	0.254	0.87	0.23
4	12	2.12	1328.60	1329.99	1.00	0.79	2.71	0.11	1330.10	0.356	132.000	1329.00	1330.46	1.00	0.79	2.71	0.11	1330.57	0.356	0.356	0.470	0.50	0.06
5	12	1.11	1329.00	1330.51	1.00	0.79	1.41	0.03	1330.55	0.097	83.056	1329.40	1330.60	1.00	0.79	1.41	0.03	1330.63	0.097	0.097	0.080	1.00	0.03
6	12	1.22	1328.60	1329.99	1.00	0.36	1.55	0.04	1330.03	0.117	53.272	1330.50	1330.97 j	0.47**	0.36	3.41	0.18	1331.15	0.600	0.359	n/a	1.00	n/a
7	12	0.86	1330.50	1330.73	0.23*	0.14	6.22	0.14	1330.88	0.000	83.686	1334.00	1334.39	0.39**	0.28	3.05	0.14	1334.53	0.000	0.000	n/a	1.00	0.14

Project File: 20-153 - Storm Sewer CAD - 10yr.stm | Number of lines: 7 | Run Date: 3/16/2021

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

Storm Sewers v2018.30

Hydraflow HGL Computation Procedure

General Procedure:

Hydraflow computes the HGL using the Bernoulli energy equation. Manning's equation is used to determine energy losses due to pipe friction. In a standard step, iterative procedure, Hydraflow assumes upstream HGLs until the energy equation balances. If the energy equation cannot balance, supercritical flow exists and critical depth is temporarily assumed at the upstream end. A supercritical flow Profile is then computed using the same procedure in a downstream direction using momentum principles.

Col. 1 The line number being computed. Calculations begin at Line 1 and proceed upstream.

Col. 2 The line size. In the case of non-circular pipes, the line rise is printed above the span.

Col. 3 Total flow rate in the line.

Col. 4 The elevation of the downstream invert.

Col. 5 Elevation of the hydraulic grade line at the downstream end. This is computed as the upstream HGL + Minor loss of this line's downstream line.

Col. 6 The downstream depth of flow inside the pipe (HGL - Invert elevation) but not greater than the line size.

Col. 7 Cross-sectional area of the flow at the downstream end.

Col. 8 The velocity of the flow at the downstream end, (Col. 3 / Col. 7).

Col. 9 Velocity head (Velocity squared / 2g).

Col. 10 The elevation of the energy grade line at the downstream end, HGL + Velocity head, (Col. 5 + Col. 9).

Col. 11 The friction slope at the downstream end (the S or Slope term in Manning's equation).

Col. 12 The line length.

Col. 13 The elevation of the upstream invert.

Col. 14 Elevation of the hydraulic grade line at the upstream end.

Col. 15 The upstream depth of flow inside the pipe (HGL - Invert elevation) but not greater than the line size.

Col. 16 Cross-sectional area of the flow at the upstream end.

Col. 17 The velocity of the flow at the upstream end, (Col. 3 / Col. 16).

Col. 18 Velocity head (Velocity squared / 2g).

Col. 19 The elevation of the energy grade line at the upstream end, HGL + Velocity head, (Col. 14 + Col. 18) .

Col. 20 The friction slope at the upstream end (the S or Slope term in Manning's equation).

Col. 21 The average of the downstream and upstream friction slopes.

Col. 22 Energy loss. Average Sf/100 x Line Length (Col. 21/100 x Col. 12). Equals (EGL upstream - EGL downstream) +/- tolerance.

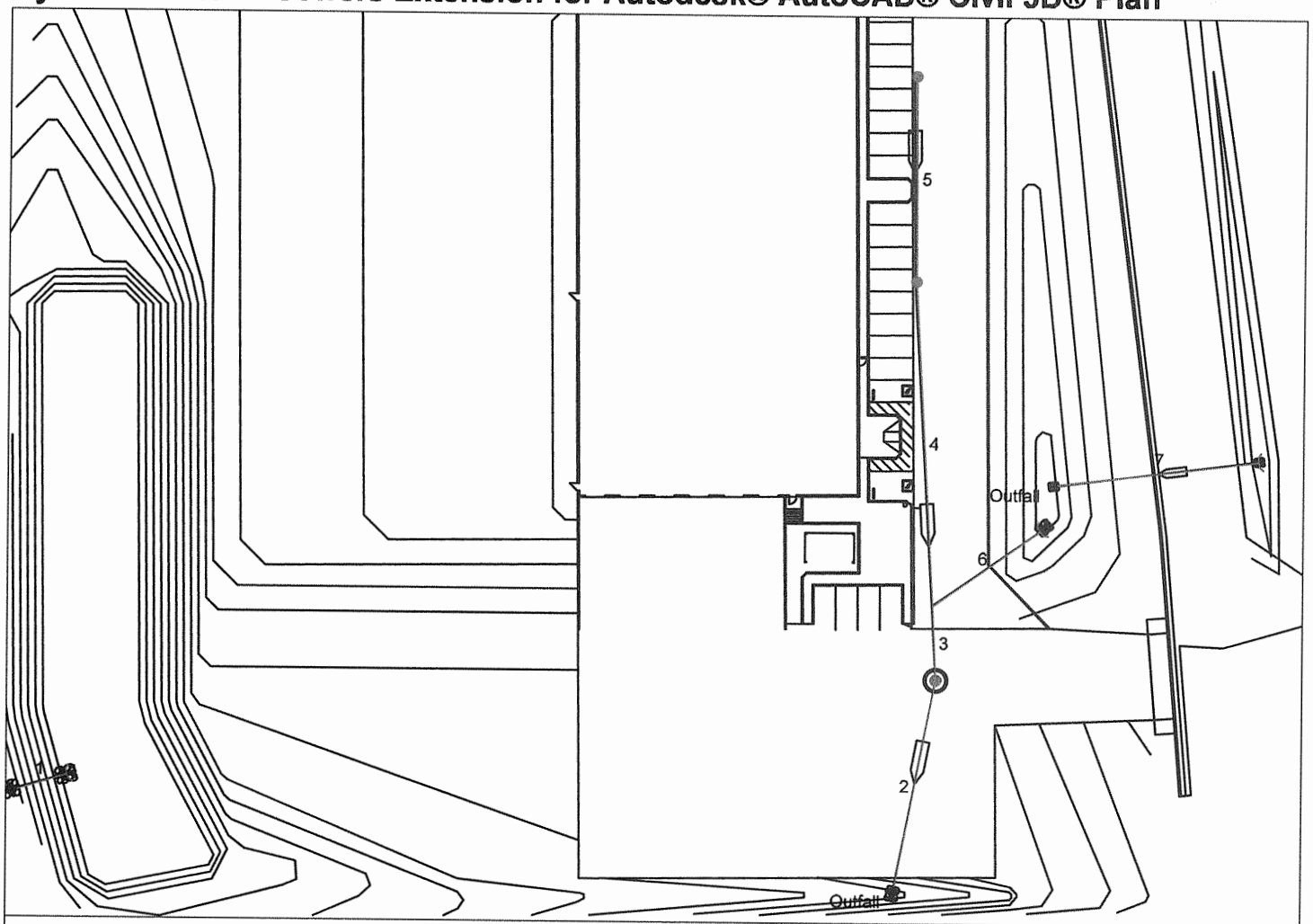
Col. 23 The junction loss coefficient (K).

Col. 24 Minor loss. (Col. 23 x Col. 18). Is added to upstream HGL and used as the starting HGL for the next upstream line(s).

Appendix A3

100yr Storm Drain Network Analysis

Hydraflow Storm Sewers Extension for Autodesk® AutoCAD® Civil 3D® Plan



Project File: 20-153 - Storm Sewer CAD - 100yr.stm	Number of lines: 7	Date: 3/16/2021

Storm Sewers v2018.30

Structure Report

Struct No.	Structure ID	Junction Type	Rim Elev (ft)	Structure			Line Out			Line In		
				Shape	Length (ft)	Width (ft)	Size (in)	Shape	Invert (ft)	Size (in)	Shape	Invert (ft)
1		OpenHeadwall	0.00	n/a	n/a	n/a	12	Cir	1323.05			
2		Manhole	0.00	Cir	4.00	4.00	12	Cir	1328.50	12	Cir	1328.50
3		None	0.00	n/a	n/a	n/a	12	Cir	1328.60	12 12	Cir Cir	1328.60 1328.60
4		DropGrate	1331.90	Cir	4.00	4.00	12	Cir	1329.00	12	Cir	1329.00
5		DropGrate	1331.90	Cir	4.00	4.00	12	Cir	1329.40			
6		OpenHeadwall	0.00	n/a	n/a	n/a	12	Cir	1330.50			
7		OpenHeadwall	0.00	n/a	n/a	n/a	12	Cir	1334.00			

Project File: 20-153 - Storm Sewer CAD - 100yr.stm | Number of Structures: 7 | Run Date: 3/16/2021

Storm Sewers v2018.30

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	23.491	6.74	6.74	0.98	6.61	6.61	10.0	10.0	3.0	40.26	5.20	51.27	12	2.13	1322.55	1323.05	1323.55	1353.60	0.00	0.00	
2	End	87.575	0.00	1.06	0.00	0.00	0.80	0.0	11.3	2.8	4.74	3.99	6.04	12	1.26	1327.40	1328.50	1328.40	1329.95	0.00	0.00	
3	2	30.326	0.00	1.06	0.00	0.00	0.80	0.0	11.2	2.8	4.75	2.04	6.05	12	0.33	1328.50	1328.60	1330.11	1330.65	0.00	0.00	
4	3	132.000	0.26	0.54	0.95	0.25	0.51	10.0	10.7	2.9	3.11	1.96	3.97	12	0.30	1328.60	1329.00	1331.15	1332.16	0.00	1331.90	
5	4	83.056	0.28	0.28	0.95	0.27	0.27	10.0	10.0	3.0	1.64	2.47	2.09	12	0.48	1329.00	1329.40	1332.28	1332.46	1331.90	1331.90	
6	3	53.272	0.52	0.52	0.55	0.29	0.29	10.0	10.0	3.0	1.72	6.73	2.47	12	3.57	1328.60	1330.50	1331.15	1331.24	0.00	0.00	
7	End	83.686	0.32	0.32	0.63	0.20	0.20	10.0	10.0	3.0	1.22	7.28	5.14	12	4.18	1330.50	1334.00	1330.78	1334.47	0.00	0.00	

Project File: 20-153 - Storm Sewer CAD - 100yr.stm

Number of lines: 7

Run Date: 3/16/2021

NOTES:Intensity = 9.75 / (Inlet time + 0.10) ^ 0.51; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewers v2018.30

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp Line No
							Ht (in)	L (ft)	Area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
1		40.26*	0.00	40.26	0.00	Hdwl	0.0	0.00	0.00	0.00	0.00	Sag	2.00	0.050	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
2		0.00	0.00	0.00	0.00	MH	0.0	0.00	0.00	0.00	0.00	Sag	2.00	0.050	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
3		0.00	0.00	0.00	0.00	None	0.0	0.00	0.00	0.00	0.00	Sag	2.00	0.050	0.020	0.013	0.00	0.00	0.00	0.00	0.0	2
4		1.52*	0.00	1.52	0.00	DrGrt	0.0	0.00	2.00	2.00	2.00	Sag	2.00	0.020	0.020	0.013	0.16	17.90	0.16	17.90	0.0	3
5		1.64*	0.00	1.64	0.00	DrGrt	0.0	0.00	2.00	2.00	2.00	Sag	2.00	0.020	0.020	0.013	0.17	18.70	0.17	18.70	0.0	4
6		1.72*	0.00	1.72	0.00	Hdwl	0.0	0.00	0.00	0.00	0.00	Sag	2.00	0.050	0.020	0.013	0.00	0.00	0.00	0.00	0.0	3
7		1.22*	0.00	1.22	0.00	Hdwl	0.0	0.00	0.00	0.00	0.00	Sag	2.00	0.050	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off

Project File: 20-153 - Storm Sewer CAD - 100yr.stm | Number of lines: 7 | Run Date: 3/16/2021

NOTES: Inlet N-Values = 0.016; Intensity = 9.75 / (Inlet time + 0.10) ^ 0.51; Return period = 100 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

Storm Sewers v2018.30

FL-DOT Report

Line No	To Line	Type of struc	n - Value	Len	Drainage Area C1 = 0.2 C2 = 0.5 C3 = 0.9			Time of conc	Time of Flow in sect	Inten (I)	Total CA	Add Q / Total Flow	Inlet elev	Elev of HGL / Elev of Crown / Elev of Invert			Rise / Span	HGL / Pipe	ADD / Full Flow		Date: 3/16/2021 Frequency: 100 yrs Proj: 20-153 - Storm Sewer
					Increment (ac)	Sub-Total (ac)	Sum CA					Q		Up	Down	Fall	Size	Slope	Vel	Cap	
				(ft)				(min)	(min)	(in/hr)		(cfs)	(ft)	(ft)	(ft)	(ft)	(in)	(%)	(ft/s)	(cfs)	Line description
1	End	Hdwl	0.013	23.491	0.00	0.00	0.00	10.00	0.01	3.01	6.61	20.38	0.00	1353.60	1323.55	30.05	12	127.90	51.27	40.26	
					0.00	0.00	0.00					40.26		1324.05	1323.55		12	2.13	6.62	5.20	
					0.00	0.00	0.00							1323.05	1322.55	0.50	Cir				
2	End	MH	0.013	87.575	0.00	0.00	0.00	11.30	0.24	2.83	0.80	0.00	0.00	1329.95	1328.40	1.55	12	1.77	6.04	4.74	
					0.00	0.00	0.00					4.74		1329.50	1328.40		12	1.26	5.08	3.99	
					0.00	0.00	0.00							1328.50	1327.40	1.10	Cir				
3	2	None	0.013	30.326	0.00	0.00	0.00	11.21	0.08	2.84	0.80	0.00	0.00	1330.65	1330.11	0.54	12	1.78	6.05	4.75	
					0.00	0.00	0.00					4.75		1329.60	1329.50		12	0.33	2.60	2.04	
					0.00	0.00	0.00							1328.60	1328.50	0.10	Cir				
4	3	DrGrt	0.013	132.000	0.00	0.00	0.00	10.66	0.55	2.91	0.51	0.78	1331.90	1332.16	1331.15	1.01	12	0.77	3.97	3.11	
					0.00	0.00	0.00					3.11		1330.00	1329.60		12	0.30	2.50	1.96	
					0.00	0.00	0.00							1329.00	1328.60	0.40	Cir				
5	4	DrGrt	0.013	83.056	0.00	0.00	0.00	10.00	0.66	3.01	0.27	0.84	1331.90	1332.46	1332.28	0.18	12	0.21	2.09	1.64	
					0.00	0.00	0.00					1.64		1330.40	1330.00		12	0.48	3.15	2.47	
					0.00	0.00	0.00							1329.40	1329.00	0.40	Cir				
6	3	Hdwl	0.013	53.272	0.00	0.00	0.00	10.00	0.41	3.01	0.29	0.86	0.00	1331.24	1331.15	0.10	12	0.18	2.47	1.72	
					0.00	0.00	0.00					1.72		1331.50	1329.60		12	3.57	8.56	6.73	
					0.00	0.00	0.00							1330.50	1328.60	1.90	Cir				
7	End	Hdwl	0.013	83.686	0.00	0.00	0.00	10.00	0.90	3.01	0.20	0.61	0.00	1334.47	1330.78	3.69	12	4.41	5.14	1.22	
					0.00	0.00	0.00					1.22		1335.00	1331.50		12	4.18	9.27	7.28	
					0.00	0.00	0.00							1334.00	1330.50	3.50	Cir				

NOTES: Intensity = 9.75 / (Inlet time + 0.10) ^ 0.51 (in/hr) ; Time of flow in section is based on full flow.

Project File: 20-153 - Storm Sewer CAD - 100yr.stm

Storm Sewers v2018.30

MyReport

Line No.	Area Dn (sqft)	Area Up (sqft)	Byp Ln No	Coeff C1 (C)	Coeff C2 (C)	Coeff C3 (C)	Capac Full (cfs)	Crit Depth (ft)	Cross Sl, Sw (ft/ft)	Cross Sl, Sx (ft/ft)	Curb Len (ft)	Defl Ang (Deg)	Depth Dn (ft)	Depth Up (ft)	DnStm Ln No	Drng Area (ac)	Easting X (ft)	EGL Dn (ft)	EGL Up (ft)	Energy Loss (ft)
1	0.79	0.79	n/a	0.20	0.50	0.90	5.20	1.00	....	....	....	-16.928	1.00	1.00**	Outfall	6.74	4353.00	1364.42	1394.45	30.031
2	0.79	0.79	n/a	0.20	0.50	0.90	3.99	0.90	....	....	....	-79.066	1.00	1.00	Outfall	0.00	4704.04	1328.97	1330.52	1.553
3	0.79	0.79	2	0.20	0.50	0.90	2.04	0.90	....	....	....	-13.703	1.00	1.00	2	0.00	4702.57	1330.68	1331.22	0.540
4	0.79	0.79	3	0.20	0.50	0.90	1.96	0.76	0.020	0.020	....	-0.422	1.00	1.00	3	0.26	4695.22	1331.39	1332.40	1.010
5	0.79	0.79	4	0.20	0.50	0.90	2.47	0.54	0.020	0.020	....	2.855	1.00	1.00	4	0.28	4694.74	1332.35	1332.52	0.176
6	0.79	0.62	3	0.20	0.50	0.90	6.73	0.56	....	....	....	57.476	1.00	0.74	3	0.52	4746.05	1331.22	1331.36	0.139
7	0.18	0.36	n/a	0.20	0.50	0.90	7.28	0.46	....	....	....	-7.042	0.28	0.46**	Outfall	0.32	4833.99	1330.96	1334.65	0.000

Project File: 20-153 - Storm Sewer CAD - 100yr.stm | Number of lines: 7 | Date: 3/16/2021

NOTES: ** Critical depth

Flow Rate (cfs)	Sf Ave (ft/ft)	Sf Dn (ft/ft)	Grate Area (sqft)	Grate Len (ft)	Grate Width (ft)	Gnd/Rim El Dn (ft)	Gnd/Rim El Up (ft)	Gutter Depth (ft)	Gutter Slope (ft/ft)	Gutter Spread (ft)	Gutter Width (ft)	HGL Dn (ft)	HGL Up (ft)	HGL Jnct (ft)	HGL Jmp Dn (ft)	HGL Jmp Up (ft)	Incr CxA	Incr Q (cfs)	Inlet Depth (ft)
40.26	127.838	127.863	....	....	....	0.00	0.00	....	....	....	....	1323.55	1353.60	1394.45	....	....	6.61	40.26	....
4.74	1.773	1.773	....	....	....	0.00	0.00	....	....	....	....	1328.40	1329.95	1330.11	....	....	0.00	0.00	....
4.75	1.779	1.780	....	....	....	0.00	0.00	....	....	....	....	1330.11	1330.65	1331.15	....	....	0.00	0.00	....
3.11	0.765	0.765	2.00	2.00	2.00	0.00	1331.90	0.16	Sag	17.90	2.00	1331.15	1332.16	1332.28	....	....	0.25	1.52	0.16
1.64	0.212	0.212	2.00	2.00	2.00	1331.90	1331.90	0.17	Sag	18.70	2.00	1332.28	1332.46	1332.52	....	....	0.27	1.64	0.17
1.72	0.261	0.234	....	....	....	0.00	0.00	....	....	....	....	1331.15	1331.24	1331.36	....	....	0.29	1.72	....
1.22	0.000	0.000	....	....	....	0.00	0.00	....	....	....	....	1330.78	1334.47	1334.47	....	....	0.20	1.22	....

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NOTES: ** Critical depth

MyReport

Inlet Eff (%)	Inlet ID	Inlet Loc	(ft)	Inlet Time (min)	I Sys (in/hr)	I Inlet (in/hr)	Invert Dn (ft)	Invert Up (ft)	Jump Loc (ft)	Jump Len (ft)	Vel Hd Jmp Dn (ft)	Vel Hd Jmp Up (ft)	J-Loss Coeff	Junct Type	Known Q (cfs)	Cost RCP	Cost CMP	Cost PVC	Line ID
100		Sag		10.0	3.01	3.01	1322.55	1323.05	....	....	0.00	0.00	1.00	Hdwall	20.38	644	580	547	
....		Sag		0.0	2.83	0.00	1327.40	1328.50	....	....	0.00	0.00	0.28	MH	0.00	2,550	2,295	2,168	
....		Sag		0.0	2.84	0.00	1328.50	1328.60	....	....	0.00	0.00	0.87	None	0.00	940	846	799	
100		Sag		10.0	2.91	3.01	1328.60	1329.00	....	....	0.00	0.00	0.50	Dp-Grate	0.78	3,796	3,416	3,227	
100		Sag		10.0	3.01	3.01	1329.00	1329.40	....	....	0.00	0.00	1.00	Dp-Grate	0.84	2,424	2,182	2,060	
100		Sag		10.0	3.01	3.01	1328.60	1330.50	....	....	0.00	0.00	1.00	Hdwall	0.86	1,484	1,336	1,261	
100		Sag		10.0	3.01	3.01	1330.50	1334.00	....	....	0.00	0.00	1.00 z	Hdwall	0.61	2,338	2,104	1,987	

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NOTES: Intensity = 9.75 / (Inlet time + 0.10) ^ 0.51 -- Return period = 100 Yrs. ; ** Critical depth

MyReport

Line Length (ft)	Line Size (in)	Line Slope (%)	Line Type	Local Depr (in)	n-val Gutter	n-val Pipe	Minor Loss (ft)	Northing Y (ft)	Pipe Travel (min)	Q Byp (cfs)	Q Capt (cfs)	Q Carry (cfs)	Line Rise (in)	Runoff Coeff (C)	Line Span (in)	Area A1 (ac)	Area A2 (ac)	Area A3 (ac)	Tc (min)	Throat Ht (in)	Total Area (ac)	Total CxA
23.491	12	2.13	Cir	....	....	0.013	40.85	5183.64	0.01	0.00	40.26	0.00	12	0.98	12	0.00	0.00	0.00	10.0	....	6.74	6.61
87.575	12	1.26	Cir	....	....	0.013	0.16	5224.62	0.24	....	....	....	12	0.00	12	0.00	0.00	0.00	11.3	....	1.06	0.80
30.326	12	0.33	Cir	....	....	0.013	0.49	5254.91	0.08	....	....	....	12	0.00	12	0.00	0.00	0.00	11.2	....	1.06	0.80
132.000	12	0.30	Cir	....	....	0.013	0.12	5386.71	0.55	0.00	1.52	0.00	12	0.95	12	0.00	0.00	0.00	10.7	....	0.54	0.51
83.056	12	0.48	Cir	....	....	0.013	0.07	5469.76	0.66	0.00	1.64	0.00	12	0.95	12	0.00	0.00	0.00	10.0	....	0.28	0.27
53.272	12	3.57	Cir	....	....	0.013	0.12	5285.69	0.41	0.00	1.72	0.00	12	0.55	12	0.00	0.00	0.00	10.0	....	0.52	0.29
83.686	12	4.18	Cir	....	....	0.013	n/a	5314.52	0.90	0.00	1.22	0.00	12	0.63	12	0.00	0.00	0.00	10.0	....	0.32	0.20

Project File: 20-153 - Storm Sewer CAD - 100yr.stm | Number of lines: 7 | Date: 3/16/2021

NOTES: ** Critical depth

MyReport

Total Runoff (cfs)	Vel Ave (ft/s)	Vel Dn (ft/s)	Vel Hd Dn (ft)	Vel Hd Up (ft)	Vel Up (ft/s)	Cover Dn (ft)	Cover Up (ft)	Storage (cft)
19.88	51.27	51.27	40.87	40.85	51.26	n/a	n/a	18.45
2.26	6.04	6.04	0.57	0.57	6.04	n/a	n/a	68.77
2.27	6.05	6.05	0.57	0.57	6.05	n/a	n/a	23.81
1.49	3.97	3.97	0.24	0.24	3.97	n/a	1.90	103.65
0.80	2.09	2.09	0.07	0.07	2.09	1.90	1.50	65.22
0.86	2.47	2.19	0.07	0.12	2.75	n/a	n/a	40.41
0.61	5.14	6.88	0.18	0.18	3.40	n/a	n/a	22.23

Project File: 20-153 - Storm Sewer CAD - 100yr.stm | Number of lines: 7 | Date: 3/16/2021

NOTES: ** Critical depth

Storm Sewer Inlet Time Tabulation

Line No.	Line ID	Tc Method	Sheet Flow					Shallow Concentrated Flow					Channel Flow							Total Travel Time (min)
			n-Value	flow Length (ft)	2-yr 24h P (in)	Land Slope (%)	Travel Time (min)	flow Length (ft)	Water Slope (%)	Surf Descr	Ave Vel (ft/s)	Travel Time (min)	X-sec Area (sqft)	Wetted Perim (ft)	Chan Slope (%)	n-Value	Vel	flow Length (ft)	Travel Time (min)	
1		User																		10.00
2		User																		0.00
3		User																		0.00
4		User																		10.00
5		User																		10.00
6		User																		10.00
7		User																		10.00

Project File: 20-153 - Storm Sewer CAD - 100yr.stm | Min. Tc used for intensity calculations = 5 min | Number of lines: 7 | Date: 3/16/2021

Storm Sewers v2018.3

Hydraulic Grade Line Computations

Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
			Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)		Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	Ave Sf (%)	Enrgy loss (ft)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(K) (23)	(ft) (24)
1	12	40.26	1322.55	1323.55	1.00	0.79	51.27	40.87	1364.42	127.863	23.491	1323.05	1353.60	1.00**	0.79	51.26	40.85	1394.45	127.814	127.838	30.03	1.00	40.85
2	12	4.74	1327.40	1328.40	1.00*	0.79	6.04	0.57	1328.97	1.773	87.575	1328.50	1329.95	1.00	0.79	6.04	0.57	1330.52	1.773	1.773	1.553	0.28	0.16
3	12	4.75	1328.50	1330.11	1.00	0.79	6.05	0.57	1330.68	1.780	30.326	1328.60	1330.65	1.00	0.79	6.05	0.57	1331.22	1.779	1.779	0.540	0.87	0.49
4	12	3.11	1328.60	1331.15	1.00	0.79	3.97	0.24	1331.39	0.765	132.000	1329.00	1332.16	1.00	0.79	3.97	0.24	1332.40	0.765	0.765	1.010	0.50	0.12
5	12	1.64	1329.00	1332.28	1.00	0.79	2.09	0.07	1332.35	0.212	83.056	1329.40	1332.46	1.00	0.79	2.09	0.07	1332.52	0.212	0.212	0.176	1.00	0.07
6	12	1.72	1328.60	1331.15	1.00	0.79	2.19	0.07	1331.22	0.234	53.272	1330.50	1331.24	0.74	0.62	2.75	0.12	1331.36	0.288	0.261	0.139	1.00	0.12
7	12	1.22	1330.50	1330.78	0.28*	0.18	6.88	0.18	1330.96	0.000	83.686	1334.00	1334.47	0.46**	0.36	3.40	0.18	1334.65	0.000	0.000	n/a	1.00	n/a

Project File: 20-153 - Storm Sewer CAD - 100yr.stm | Number of lines: 7 | Run Date: 3/16/2021

Notes: * Normal depth assumed; ** Critical depth. ; c = cir e = ellip b = box

Storm Sewers v2018.30

Hydraflow HGL Computation Procedure

General Procedure:

Hydraflow computes the HGL using the Bernoulli energy equation. Manning's equation is used to determine energy losses due to pipe friction. In a standard step, iterative procedure, Hydraflow assumes upstream HGLs until the energy equation balances. If the energy equation cannot balance, supercritical flow exists and critical depth is temporarily assumed at the upstream end. A supercritical flow Profile is then computed using the same procedure in a downstream direction using momentum principles.

Col. 1 The line number being computed. Calculations begin at Line 1 and proceed upstream.

Col. 2 The line size. In the case of non-circular pipes, the line rise is printed above the span.

Col. 3 Total flow rate in the line.

Col. 4 The elevation of the downstream invert.

Col. 5 Elevation of the hydraulic grade line at the downstream end. This is computed as the upstream HGL + Minor loss of this line's downstream line.

Col. 6 The downstream depth of flow inside the pipe (HGL - Invert elevation) but not greater than the line size.

Col. 7 Cross-sectional area of the flow at the downstream end.

Col. 8 The velocity of the flow at the downstream end, (Col. 3 / Col. 7).

Col. 9 Velocity head (Velocity squared / 2g).

Col. 10 The elevation of the energy grade line at the downstream end, HGL + Velocity head, (Col. 5 + Col. 9).

Col. 11 The friction slope at the downstream end (the S or Slope term in Manning's equation).

Col. 12 The line length.

Col. 13 The elevation of the upstream invert.

Col. 14 Elevation of the hydraulic grade line at the upstream end.

Col. 15 The upstream depth of flow inside the pipe (HGL - Invert elevation) but not greater than the line size.

Col. 16 Cross-sectional area of the flow at the upstream end.

Col. 17 The velocity of the flow at the upstream end, (Col. 3 / Col. 16).

Col. 18 Velocity head (Velocity squared / 2g).

Col. 19 The elevation of the energy grade line at the upstream end, HGL + Velocity head, (Col. 14 + Col. 18) .

Col. 20 The friction slope at the upstream end (the S or Slope term in Manning's equation).

Col. 21 The average of the downstream and upstream friction slopes.

Col. 22 Energy loss. Average Sf/100 x Line Length (Col. 21/100 x Col. 12). Equals (EGL upstream - EGL downstream) +/- tolerance.

Col. 23 The junction loss coefficient (K).

Col. 24 Minor loss. (Col. 23 x Col. 18). Is added to upstream HGL and used as the starting HGL for the next upstream line(s).

Appendix A4

Detention Pond Calculations

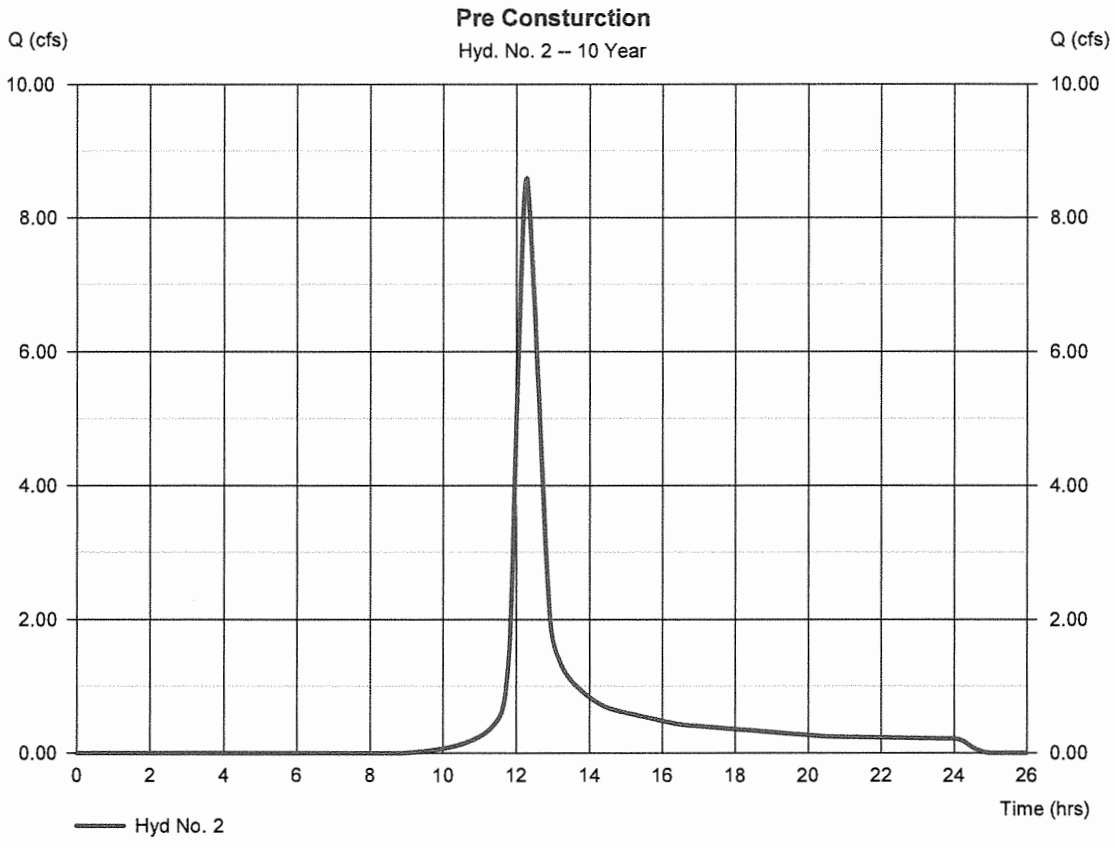
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v2018.3 — Tuesday, 03 / 16 / 2021

Hyd. No. 2

Pre Consturction

Hydrograph type	= SCS Runoff	Peak discharge	= 8.594 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.30 hrs
Time interval	= 2 min	Hyd. volume	= 42,020 cuft
Drainage area	= 6.740 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 40.00 min
Total precip.	= 3.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



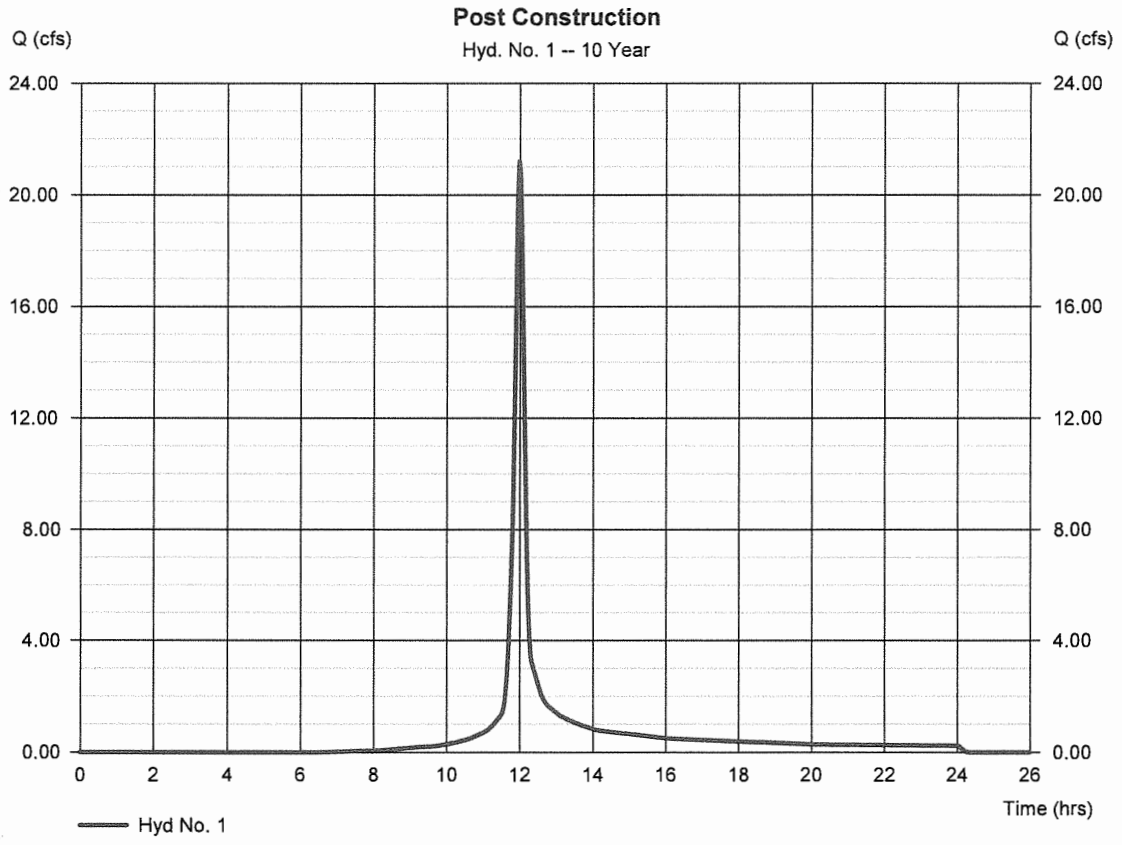
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v2018.3 — Tuesday, 03 / 16 / 2021

Hyd. No. 1

Post Construction

Hydrograph type	= SCS Runoff	Peak discharge	= 21.21 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 55,314 cuft
Drainage area	= 6.740 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 3.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Pond Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v2018.3 — Tuesday, 03 / 16 / 2021

Pond No. 1 - Drainage Storage

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 1320.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	1320.00	9,695	0	0
1.00	1321.00	11,422	10,546	10,546
2.00	1322.00	13,205	12,301	22,847

Culvert / Orifice Structures

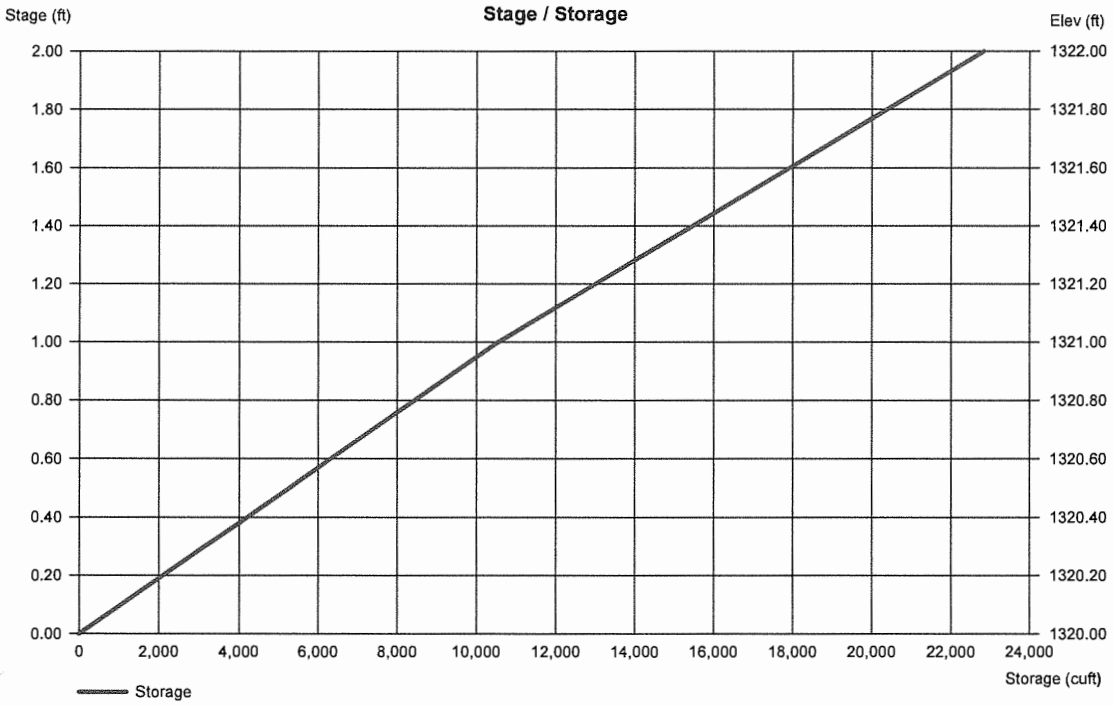
	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 0.00	0.00	0.00	0.00
Span (in)	= 0.00	0.00	0.00	0.00
No. Barrels	= 0	0	0	0
Invert El. (ft)	= 0.00	0.00	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .000	.000	.000	n/a
Orifice Coeff.	= 0.00	0.00	0.00	0.00
Multi-Stage	= n/a	No	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 0.00	0.00	0.00	0.00
Crest El. (ft)	= 0.00	0.00	0.00	0.00
Weir Coeff.	= 0.00	0.00	0.00	0.00
Weir Type	= ---	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)
TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Pond Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v2018.3 — Tuesday, 03 / 16 / 2021

Pond No. 1 - Drainage Storage

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 1320.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	1320.00	9,695	0	0
1.00	1321.00	11,422	10,546	10,546
2.00	1322.00	13,205	12,301	22,847

Culvert / Orifice Structures

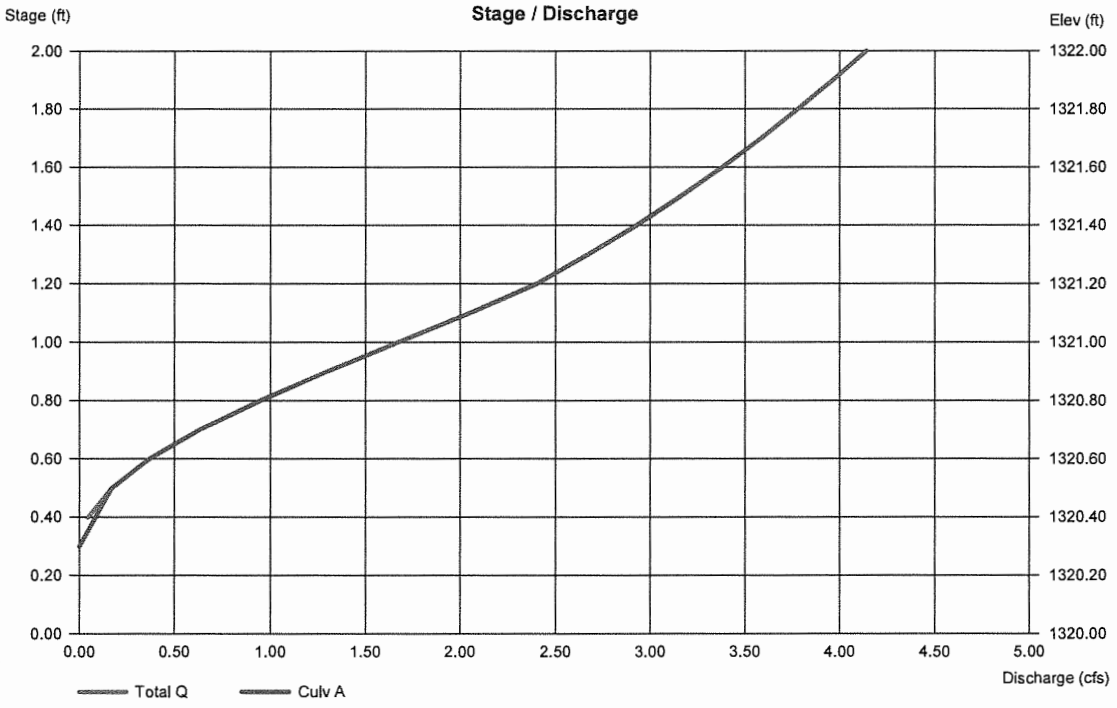
	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 12.00	0.00	0.00	0.00
Span (in)	= 12.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0
Invert El. (ft)	= 1320.30	0.00	0.00	0.00
Length (ft)	= 18.00	0.00	0.00	0.00
Slope (%)	= 2.77	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 0.00	0.00	0.00	0.00
Crest El. (ft)	= 0.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= ---	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)
TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Appendix A5

Project Shed Storm Water Runoff Calc.

WARREN CONSULTING ENGINEERS, INC.
1117 WINDFIELD WAY, SUITE 110
EL DORADO HILLS, CA 95672

JOB NAME	Business and Product Drive
FILE NAME	20-153 - Storm Water Runoff
JOB #	20-153
USED BY	GV
DATE	March 2, 2021

Storm Water Runoff - Pre Construction

Curve Number Soil Type = D

Total Project Area
A= 293,654 sqft

Impervious Area (CN=98)
Ai= 2,565 sqft

Pervious Area (CN=81)
Ap= 291,089 sqft

$$CN = \frac{(CN * Ai) + (CN * Ap)}{A}$$

CN= 81

Time of Concentration

Sheet Flow

$$T_t = \frac{0.007(nL)^{0.8}}{(P_2)^{0.5} * S^{0.4}} * (60)$$

Tt = 39.50 min

n = 0.24
S = 0.0183
P2 = 2.6 in
L = 300 ft

Unpaved Concentration Flow

$$V = 16.1345\sqrt{S_0}$$

$$T_{up} = V * L$$

V= 4.11 ft/sec
Tp= 1.68 min

So = 0.065
L = 415 ft

Paved Concentration Flow

$$V = 20.3283\sqrt{S_0}$$

$$T_p = L/V$$

V= 0.00 ft/sec
Tp= 0.00 min

So = 0
L = 0 ft

Total Time of Conentration

$$\sum T = T_t + T_{up} + T_p$$

T= 41.19 min

Runoff Coeffecient

Based on Runoff Coefficient Graph from El Dorado Hills - Drainage Manual

C = 0.92

Rainfall Intensity

Based on Rainfall Intensity Table from El Dorado Hills- Drainage Manual

10yr I = 1.15 in/hr

100yr I = 1.56 in/hr

Total Runoff

$$\boxed{Q = CiA}$$ $$\boxed{Q = CiA}$$

10yr Q = 7.13 cfs

100yr Q = 9.68 cfs

WARREN CONSULTING ENGINEERS, INC.
1117 WINDFIELD WAY, SUITE 110
EL DORADO HILLS, CA 95672

JOB NAME	Business and Product Drive
FILE NAME	20-153 - Storm Water Runoff
JOB #	20-153
USED BY	GV
DATE	March 2, 2021

Storm Water Runoff - Post Construction

Curve Number Soil Type = D

Total Project Area
A= 293,654 sqft

Impervious Area (CN=98)
Ai= 156,257 sqft

Pervious Area (CN=74)
Ap= 137,387 sqft

$$CN = \frac{(CN * Ai) + (CN * Ap)}{A}$$

CN= 87

Time of Concentration

Sheet Flow

$$T_t = \frac{0.007(nL)^{0.8}}{(P_2)^{0.5} * S^{0.4}} * (60)$$

n = 0.011
S_0 = 0.0133
P_2 = 2.6 in
L = 300 ft

Tt = 3.81 min

Unpaved Concentration Flow

$$V = 16.1345\sqrt{S_0}$$

$$T_{up} = V * L$$

S_0 = 0.029
L = 335 ft

V= 2.75 ft/sec
Tup= 2.03 min

Paved Concentration Flow

$$V = 20.3283\sqrt{S_0}$$

$$T_p = L/V$$

S_0 = 0.0144
L = 225 ft

V= 2.44 ft/sec
Tp= 1.54 min

Total Time of Conentration

$$\sum T = T_t + T_{up} + T_p$$

T= 7.38 min

Runoff Coeffecient

Based on Runoff Coefficient Graph from El Dorado Hills - Drainage Manual

C = 1.00

Rainfall Intensity

Based on Rainfall Intensity Table from El Dorado Hills- Drainage Manual

10yr I = 2.13 in/hr

100yr I = 3.01 in/hr

Total Runoff

$$\boxed{Q = CiA}$$

10yr Q = 14.37 cfs

100yr Q = 20.28 cfs

Appendix A6

Vegetive Swale Calculations

WARREN CONSULTING ENGINEERS, INC.

VEGETATIVE SWALE CALCULATOR v1.3

Project Information:

Date:	3/4/2021
Swale Number (if multiple):	1
Project Name:	Barsotti Warehouse
Address:	Business Drive
	Shingle Springs, CA 95682
Calculated by:	GV
Checked by:	GV

Swale Information:

Approx. Location on Site: Southern Edge
Captures runoff from Shed 4-8, Shed 10 and Shed 11

Catchment Area: 1.8764 in Acres = 81735.984 sf.

Catchment Surface Type: Asph/Conc./Pltr./Roofs. Runoff Coefficient = 0.95 (see selections)

Peak Flow Capacity Required: 0.5 cfs

Hazardous Material Impacts: 0 0=none
i.e. gasoline, auto maintenance, etc. 1=yes

Typical Runoff Coefficients	
Asphalt	0.95
Concrete	0.95
Brick	0.85
Drives/Walks	0.85
Roofs	0.95

Swale Alerts:

Contact Time	ACCEPTED (Minimum 7 min. Contact time has been met)
WQF Capacity	ACCEPTED (WQF Capacity has been met)
WQF Velocity	ACCEPTED (Velocity in swale is acceptable)
Depth of WQF	ACCEPTED (WQF Depth is within the acceptable range)
Bottom Width	ACCEPTED (Swale bottom width is acceptable)
Swale Slope	ACCEPTED (Swale is within acceptable slope range - NO additional features required)
Side Slopes	ACCEPTED (Side Slopes are acceptable)
Peak Flow	ACCEPTED (Swale has been sized to capacitate the Peak Flow)
Catchment Area	ACCEPTED (Catchment area is acceptable)
Check Dams	NOT REQUIRED (Check Dams NOT required - Swale slope is less than max. allowed)
Under drain	NOT REQUIRED (Underdrain NOT required - Slope of swale is greater then1%)
Liner Required	NOT REQUIRED (Liner NOT Required - hazardous materials NOT present)

Justification of "ERROR"

WARREN CONSULTING ENGINEERS, INC.

VEGETATIVE SWALE CALCULATOR v1.3

Introduction:

This calculator uses the methods outlined for a "Vegetative Swale", VS-1 as a Treatment Control Method, in the May 2007 Edition of the Storm water Quality Design Manual for the Sacramento County and South Placer Regions and Fact Sheet TC-30 "Vegetated swale", California Storm water Quality Association (CASQA). References have been made to sections in this document regarding the design methodology. The formulas have been re-organized to solve for the minimum Contact Time by manipulation of swale dimensions and parameters.

Step 1 - Water Quality Flow (WQF)

$$WQF = C\,i\,A$$

Where:	C = Rational Runoff Coefficient	0.95	Table E-1, Appendix E, page 3
	i = Rainfall Intensity (in./hr.)	0.18	0.20 Folsom/Roseville, 0.18 All other
	A = Drainage Area (acres)	1.88	shed area (acres= sf./43,560)
	WQF = flow (cfs)	0.321	

Step 2 - Water Quality Capacity

$$Q = [(1.486/n)(A^{5/3}/P^{2/3})] \times S^{1/2}$$

Time=Distance/Velocity

Q = WQF in cfs (see above)		0.390	Must be greater than calculated above
A = Cross sectional Area WQF (ft./ft.)		1.47	calculated below
	Side Slope (ft./ft.)	3.0	Horiz. to 1 vertical
	Bottom Width (ft.)	4.00	2' min.
	Depth of WQF flow (ft.)	0.30	No greater than 4" (2/3 grass ht.)
n = Manning's "n" (Roughness Coef.)		0.25	for WQF (use 0.20 Sac, 0.25 CASQA)
P = Wetted Perimeter of WQF (ft.)		4.95	based on "bottom width" entered above
S = Swale Slope in flow direction		0.0100	0.5%(0.005) min., 2.5% (0.025) max.)
V = Velocity in Swale (ft./sec.)		0.265	must be less than 1 ft./sec.
T = Contact Time (min.)		19.28	7 minutes min. SAC, 10 min. CASQA
	Swale Length (ft.)	307.00	

Step 3 - Peak Flow Conveyance Capacity (for information)

Q = Peak Flow Conveyance (cfs)		10.272	Peak Capacity
A = Cross sectional Area Swale (ft./ft.)		7.00	calculated below
	Side Slope (ft./ft.)	3.0	Horiz. to 1 vertical
	Bottom Width (ft.)	4.00	taken from above
	Depth of Swale (ft.)	1.00	used to calculate max. conveyance only
n = Manning's "n" (Roughness Coef.)		0.1	0.1 for Peak (0.2 for WQF, see above)
P = Wetted Perimeter of WQF (ft.)		7.16	based on "bottom width" entered above

WARREN CONSULTING ENGINEERS, INC.

VEGETATIVE SWALE CALCULATOR v1.3

Project Information:

Date:	3/4/2021
Swale Number (if multiple):	2
Project Name:	Barsotti Warehouse
Address:	Business Drive
	Shingle Springs, CA 95682
Calculated by:	GV
Checked by:	GV

Swale Information:

Approx. Location on Site:	Western Edge		
	Captures runoff from Shed 2 and 3		
Catchment Area:	1.8764	in Acres	= 81735.984 sf.
Catchment Surface Type:	Asph/Conc./Pltr./Roofs.	Runoff Coefficient =	0.95 (see selections)
Peak Flow Capacity Required:	0.5	cfs	
Hazardous Material Impacts: i.e. gasoline, auto maintenance, etc.	0	0=none 1=yes	

Typical Runoff Coefficients	
Asphalt	0.95
Concrete	0.95
Brick	0.85
Drives/Walks	0.85
Roofs	0.95

Swale Alerts:

Contact Time	ACCEPTED (Minimum 7 min. Contact time has been met)
WQF Capacity	ACCEPTED (WQF Capacity has been met)
WQF Velocity	ACCEPTED (Velocity in swale is acceptable)
Depth of WQF	ACCEPTED (WQF Depth is within the acceptable range)
Bottom Width	ACCEPTED (Swale bottom width is acceptable)
Swale Slope	ACCEPTED (Swale is within acceptable slope range - NO additional features required)
Side Slopes	ACCEPTED (Side Slopes are acceptable)
Peak Flow	ACCEPTED (Swale has been sized to capacitate the Peak Flow)
Catchment Area	ACCEPTED (Catchment area is acceptable)
Check Dams	NOT REQUIRED (Check Dams NOT required - Swale slope is less than max. allowed)
Under drain	NOT REQUIRED (Underdrain NOT required - Slope of swale is greater then1%)
Liner Required	NOT REQUIRED (Liner NOT Required - hazardous materials NOT present)

Justification of "ERROR"

WARREN CONSULTING ENGINEERS, INC.

VEGETATIVE SWALE CALCULATOR v1.3

Introduction:

This calculator uses the methods outlined for a "Vegetative Swale", VS-1 as a Treatment Control Method, in the May 2007 Edition of the Storm water Quality Design Manual for the Sacramento County and South Placer Regions and Fact Sheet TC-30 "Vegetated swale", California Storm water Quality Association (CASQA). References have been made to sections in this document regarding the design methodology. The formulas have been re-organized to solve for the minimum Contact Time by manipulation of swale dimensions and parameters.

Step 1 - Water Quality Flow (WQF)

$$WQF = C\,i\,A$$

Where:	C = Rational Runoff Coefficient	0.95	Table E-1, Appendix E, page 3
	i = Rainfall Intensity (in./hr.)	0.18	0.20 Folsom/Roseville, 0.18 All other
	A = Drainage Area (acres)	1.88	shed area (acres= sf./43,560)
	WQF = flow (cfs)	0.321	

Step 2 - Water Quality Capacity

$$Q = [(1.486/n)(A^{5/3}/P^{2/3})] \times S^{1/2}$$

$$Time = Distance/Velocity$$

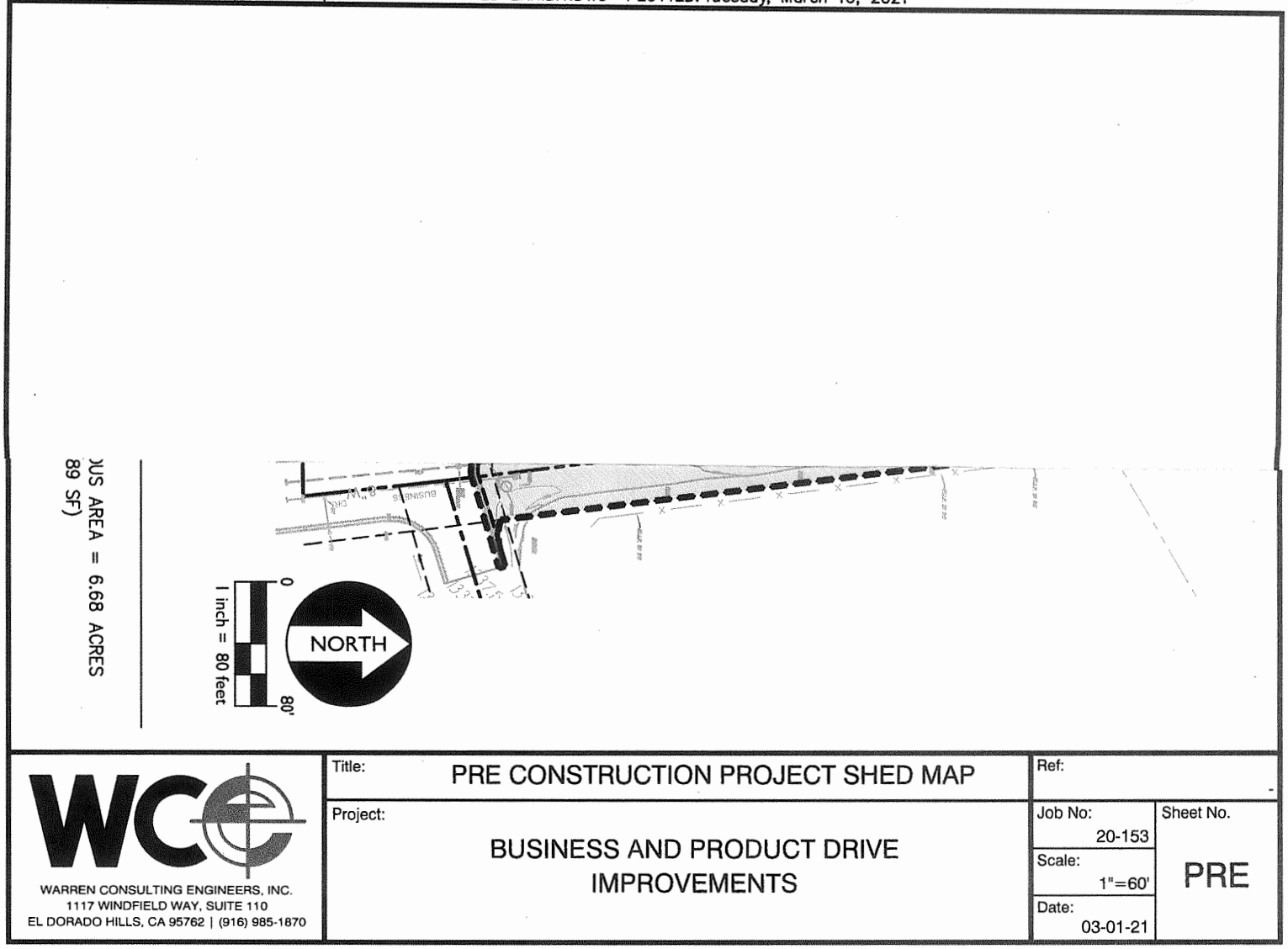
Q = WQF in cfs (see above)	0.390	Must be greater than calculated above	
A = Cross sectional Area WQF (ft./ft.)	1.47	calculated below	
Side Slope (ft./ft.)	3.0	Horiz. to 1	vertical
Bottom Width (ft.)	4.00	2' min.	
Depth of WQF flow (ft.)	0.30	No greater than 4" (2/3 grass ht.)	
n = Manning's "n" (Roughness Coef.)	0.25	for WQF (use 0.20 Sac, 0.25 CASQA)	
P = Wetted Perimeter of WQF (ft.)	4.95	based on "bottom width" entered above	
S = Swale Slope in flow direction	0.0100	0.5%(0.005) min., 2.5% (0.025) max.)	
V = Velocity in Swale (ft./sec.)	0.265	must be less than 1 ft./sec.	
T = Contact Time (min.)	19.79	7 minutes min. SAC, 10 min. CASQA	
Swale Length (ft.)	315.00		

Step 3 - Peak Flow Conveyance Capacity (for information)

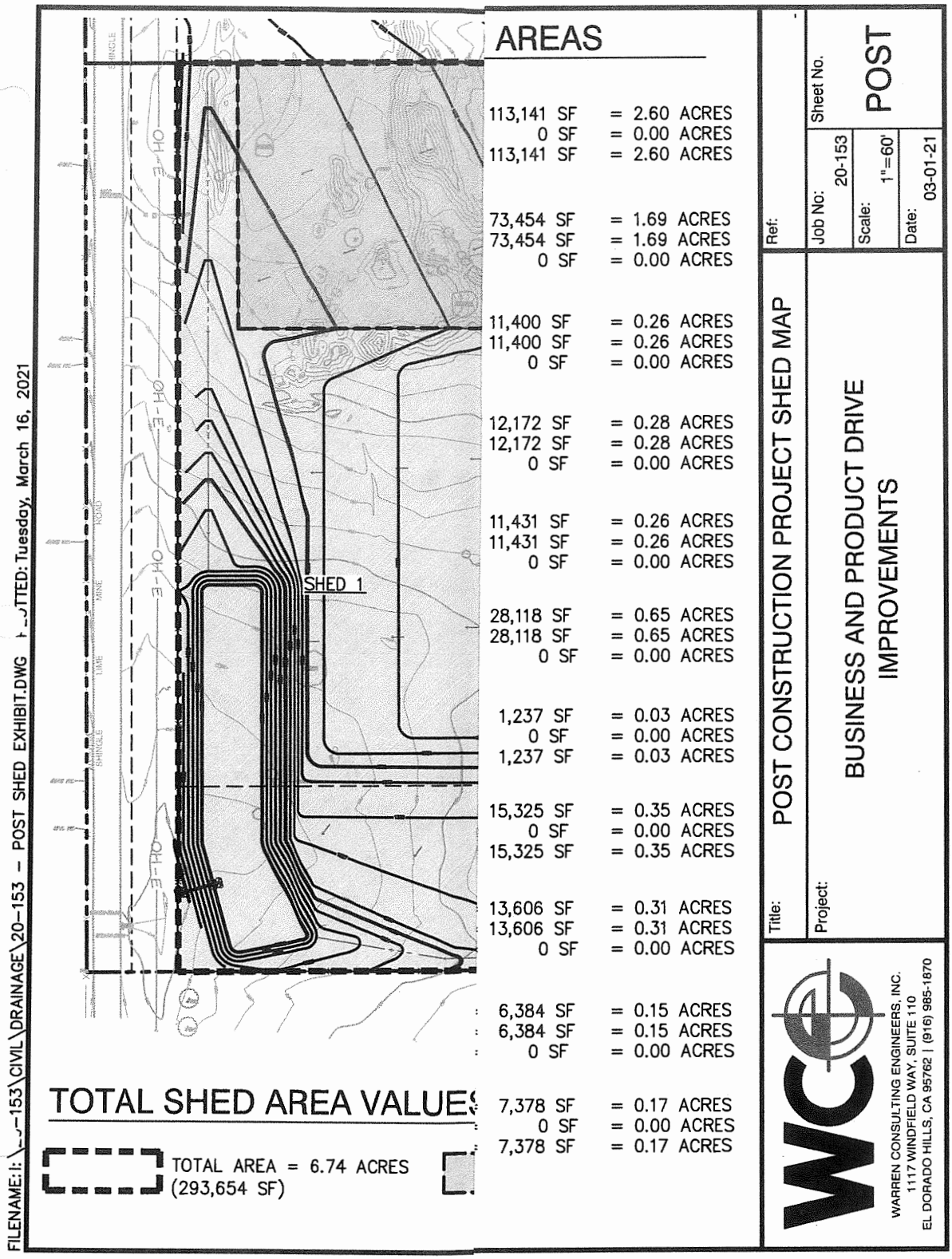
Q = Peak Flow Conveyance (cfs)	10.272	Peak Capacity	
A = Cross sectional Area Swale (ft./ft.)	7.00	calculated below	
Side Slope (ft./ft.)	3.0	Horiz. to 1	vertical
Bottom Width (ft.)	4.00	taken from above	
Depth of Swale (ft.)	1.00	used to calculate max. conveyance only	
n = Manning's "n" (Roughness Coef.)	0.1	0.1 for Peak (0.2 for WQF, see above)	
P = Wetted Perimeter of WQF (ft.)	7.16	based on "bottom width" entered above	

Exhibits

FILENAME: I: \ \ -153\CIVIL\DRAINAGE\20-153 - PER SHED EXHIBIT.DWG PL TED: Tuesday, March 16, 2021



WARREN CONSULTING ENGINEERS, INC. 1117 WINDFIELD WAY, SUITE 110 EL DORADO HILLS, CA 95762 | (916) 985-1870	Title: PRE CONSTRUCTION PROJECT SHED MAP	Ref:	
	Project: BUSINESS AND PRODUCT DRIVE IMPROVEMENTS	Job No: 20-153 Scale: 1"=60' Date: 03-01-21	Sheet No. PRE


SHED 1
AREAS
113,141 SF = 2.60 ACRES
0 SF = 0.00 ACRES
113,141 SF = 2.60 ACRES
73,454 SF = 1.69 ACRES
73,454 SF = 1.69 ACRES
0 SF = 0.00 ACRES
11,400 SF = 0.26 ACRES
11,400 SF = 0.26 ACRES
0 SF = 0.00 ACRES
12,172 SF = 0.28 ACRES
12,172 SF = 0.28 ACRES
0 SF = 0.00 ACRES
11,431 SF = 0.26 ACRES
11,431 SF = 0.26 ACRES
0 SF = 0.00 ACRES
28,118 SF = 0.65 ACRES
28,118 SF = 0.65 ACRES
0 SF = 0.00 ACRES
1,237 SF = 0.03 ACRES
0 SF = 0.00 ACRES
1,237 SF = 0.03 ACRES
15,325 SF = 0.35 ACRES
0 SF = 0.00 ACRES
15,325 SF = 0.35 ACRES
13,606 SF = 0.31 ACRES
13,606 SF = 0.31 ACRES
0 SF = 0.00 ACRES
6,384 SF = 0.15 ACRES
6,384 SF = 0.15 ACRES
0 SF = 0.00 ACRES
7,378 SF = 0.17 ACRES
0 SF = 0.00 ACRES
7,378 SF = 0.17 ACRES
TOTAL SHED AREA VALUES
TOTAL AREA = 6.74 ACRES
(293,654 SF)
FILENAME: I:\20-153\CIVIL\DRAINAGE\20-153 - POST SHED EXHIBIT.DWG PLOTTED: Tuesday, March 16, 2021
Ref:
Job No: 20-153
Scale: 1"=60'
Date: 03-01-21
Sheet No.
POST
Title: POST CONSTRUCTION PROJECT SHED MAP
Project: BUSINESS AND PRODUCT DRIVE IMPROVEMENTS
WARREN CONSULTING ENGINEERS, INC.
1117 WINDFIELD WAY, SUITE 110
EL DORADO HILLS, CA 95762 | (916) 985-1870

COMMUNITY DEVELOPMENT SERVICES
PLANNING AND BUILDING DEPARTMENT

2850 Fairlane Court, Placerville, CA 95667
Phone: (530) 621-5355 www.edcgov.us/Planning/

APPLICATION FOR: **DESIGN REVIEW** **FILE #** DR21-0005

ASSESSOR'S PARCEL NO.(s) 109-240-30

PROJECT NAME/REQUEST: (Describe proposed use) Barsotti
Warehouse and Office space 22,800 sf

RECEIVED
PLANNING DEPARTMENT
2021 MAY 1 PM 2:23

APPLICANT/AGENT Doug Granade
Mailing Address 4420 Business Drive (P.O. Box or Street) Shingle Springs, (City) CA 95682 (State & Zip)
Phone (530) 677-7484 EMAIL: doug.granade@dggranade.com

PROPERTY OWNER Barsotti Family LLC
Mailing Address 2239 Hidden Valley Lane (P.O. Box or Street) Camino, (City) CA 95709 (State & Zip)
Phone (916) 799-1128 EMAIL: mike.barsotti@barsottijuice.com

LIST ADDITIONAL PROPERTY OWNERS ON SEPARATE SHEET IF APPLICABLE

ENGINEER/ARCHITECT GBDH Design Group
Mailing Address 9806 Old Winery Road Ste 1 (P.O. Box or Street) Sacramento, (City) CA 95827 (State & Zip)
Phone (916) 854-9901 EMAIL: jcarver@gbdhdesign.com

LOCATION: The property is located on the SELECT ONE (N / E / W / S) side of Business Drive (street or road)
feet/miles SELECT ONE (N / E / W / S) of the intersection with Dividend Drive / Business Drive (major street or road)
in the SELECT ONE Barnett Business Park area. PROPERTY SIZE 15 Acres (acreage / square footage)

X _____ Date 3/30/21
signature of property owner or authorized agent

FOR OFFICE USE ONLY

Date 4/1/2021 Fee $1746.00 Receipt # R30299 Rec'd by MAA2 Census _____
Zoning _____ GPD _____ Supervisor Dist _____ Sec _____ Twn _____ Rng _____

ACTION BY _____ PLANNING COMMISSION
_____ ZONING ADMINISTRATOR
_____ PLANNING DIRECTOR

Hearing Date _____
Approved _____ Denied _____
findings and/or conditions attached

_____
Executive Secretary

ACTION BY BOARD OF SUPERVISORS

Hearing Date _____
Approved _____ Denied _____
findings and/or conditions attached
APPEAL:
Approved _____ Denied _____

DR21-0005

Application Revised 11/2017

Design Review Binder

Barsotti Office and Warehouse
APN #109 240 30

DR21-0005

4420 Business Drive, Shingle Springs, CA 95682 • Phone (530) 677-7484 • Fax (530) 677-7550 • CA LIC#581408
Serving El Dorado County and Surrounding Areas Since 1989 • *www.dggranade.com*

COMMUNITY DEVELOPMENT SERVICES
PLANNING AND BUILDING DEPARTMENT

2850 Fairlane Court, Placerville, CA 95667
Phone: (530) 621-5355 www.edcgov.us/Planning/

DESIGN REVIEW

REQUIRED SUBMITTAL INFORMATION

The following items 1 through 9 must be provided with all applications. The remaining items shall be required where applicable. **If all the required and applicable information is not provided, the application will be deemed incomplete and will not be accepted**. For your convenience, please use the check (☐ column on the left to be sure you have all the required and applicable information. **All** plans and maps MUST be folded to 8½" x 11".

FORMS AND MAPS REQUIRED

Check (√) Applicant	County		
X		1)	Application form, completed and signed.
X		2)	Letter of authorization from all property owners authorizing agent to act as applicant, when applicable.
X		3)	Proof of ownership (Grant Deed), if the property has changed title since the last tax roll.
X		4)	A copy of official Assessor's map, showing the property outlined in red.
X		5)	An 8 ½ x 11" vicinity map showing the location of the project in relation to the distance to major roads, intersections, and town sites.
X		6)	Environmental Questionnaire form, completed and signed.
X		7)	Provide name, mailing address and phone number of all property owners and their agents.
X		8)	A record search for archaeological resources shall be conducted through the North Central Information Center located at CSU-Sacramento, 6000 J Street, Adams Bldg., #103, Sacramento, CA 95819-6100, phone number (916) 278-6217. If the record search identifies a need for a field survey, a survey shall be required. (A list of Archaeological Consultants and survey requirements is available at the Planning Department.) Archaeological surveys shall meet the "Guidelines for Cultural Resource Studies" approved by the Board of Supervisors, available at the Planning Department.

DR21-0005

FORMS AND MAPS REQUIRED

Check (√) Applicant	County		
X		9)	A traffic impact determination shall be provided utilizing El Dorado County's "Transportation Impact Study (TIS) – Initial Determination Form, located on the Planning Services website under "Applications and Forms".
X		10)	If public sewer or water service is proposed, obtain and provide a Facilities Improvement Letter if the project is located within the EID service area, or a similar letter if located in another sewer/water district.
N/A		11)	If off-site sewer or water facilities are proposed to serve the project, provide four (4) copies of a map showing location and size of proposed facilities. If ground water is to be used for domestic water, submit a report noting well production data for adjacent parcels, or submit a hydrological report prepared by a geologist noting the potential for water based on the nature of project site geology.
N/A		12)	In an accompanying report, provide the following data for area on each proposed parcel which is to be used for sewage disposal:
N/A			a) The percolation rate and location of test on 4.5 acres or smaller
N/A			b) The depth of soil and location of test
N/A			c) The depth of groundwater and location of test
N/A			d) The direction and percent of slope of the ground
N/A			e) The location, if present, of rivers, streams, springs, areas subject to inundation, rock outcropping, lava caps, cuts, fills, and easements
N/A			f) Identify the area to be used for sewage disposal
N/A			g) Such additional data and information as may be required by the Division Director of Environmental Management to assess the source of potable water, the disposal of sewage and other liquid wastes, the disposal of solid wastes, drainage, and erosion control
N/A		13)	Preceding parcel map, final map, or record of survey, if any exists.
X		14)	Preliminary grading, drainage plan, and report. The plan should be of sufficient detail to identify the scope of grading, including quantities, depths of cut and fills (for roads and driveways where cuts/fills exceed 6 feet, and mass pad graded lots), location of existing drainage, proposed modifications, and impacts to downstream facilities. (See Section 110.14.200 of County Grading Ordinance for submittal detail)

FORMS AND MAPS REQUIRED

Check (√)
Applicant County

N/A ____ 15) If located within one of the five Ecological Preserve - EP overlay zones (Mitigation Area 0) or in gabbro soils areas (Mitigation Area 1), rare plants may exist on-site. The State Department of Fish & Wildlife will require an on-site biological plant survey to determine the extent and location of rare plants on the project site. Such a survey can only occur from March 15 through August 15 when plants are readily visible. Therefore, if the State Department of Fish & Wildlife requires the plant survey, a substantial delay in the processing of your application could result. To avoid potential delays, you may choose to provide this survey with application submittal. (A list of possible Botanical Consultants is available at Planning Services.)

N/A ____ 16) Name and address of Homeowner's Association, CSA 9 Zone of Benefit, or other road maintenance entity if it exists in the project area.

N/A ____ 17) A site-specific wetland investigation shall be required on projects with identified wetlands as delineated on the applicable U.S.G.S. Quadrangle and/or by site visit, when proposed improvements will directly impact the wetland (reduce the size of the wetland area) or lie near the wetlands. (Available from Planning Services are the U.S. Corps of Engineers requirements for a wetlands delineation study. A list of qualified consultants is also available.)

N/A ____ 18) An acoustical analysis shall be provided whenever a noise-sensitive land use (residences, hospitals, churches, libraries) are proposed adjacent to a major transportation source, or adjacent or near existing stationary noise sources. Such study shall define the existing and projected noise levels and define how the project will comply with standards set forth in the General Plan.

N/A ____ 19) Where potential for special status plant and/or animal habitats are identified on the parcel(s), an on-site biological study shall be required to determine if the site contains special status plant or animal species or natural communities and habitats.

N/A ____ 20) An air quality impact analysis shall be provided utilizing the El Dorado County Air Quality Management District's "Guide to Air Quality Assessment."

FORMS AND MAPS REQUIRED

Check (√) Applicant	County		
X	____	1)	An Oak Resources Code Compliance Certificate.
N/A	____	2)	Oak Resources Technical Report prepared by a Qualified Professional consistent with Section 2.5 (Oak Resources Technical Reports) of the Oak Resources Management Plan.
N/A	____	3)	Completed Oak Resources Technical Report Checklist, including supplemental data for impacted Individual Native Oak Trees within Oak Woodlands, as applicable.
N/A	____	4)	Security deposit for on-site oak tree/oak woodland retention and/or replacement planting (if proposed as part of project mitigation) consistent with Section 130.39.070.F (Security Deposit for On-Site Oak Tree/Oak Woodland Retention and Section 130.30.070.G (Security Deposit for On-Site Oak Tree/Oak Woodland Replacement Planting).
N/A	____	5)	Reason and objective for Impact to oak trees and/or oak woodlands.

OAK TREE/OAK WOODLAND REMOVAL

The following supplemental information shall be required if any Oak Woodlands, Individual Native Oak Trees, or Heritage Trees, as defined in Section 130.39.030 (Definitions) will be impacted by the project (i.e. cut down) consistent with Section 130.39.070 (Oak Tree and Oak Woodland Removal Permits – Discretionary Development Projects).

SITE PLAN REQUIREMENTS

Five copies plus an electronic copy (CD-ROM or other medium) of the site plan detailing what exists on the site at time of application shall be submitted on 24'" x 36" sheets or smaller, drawn to scale, and of sufficient size to clearly show all details and required data. **All plans MUST be folded to 8 ½" x 11", plus one 8½" x 11" reduction. NO ROLLED DRAWINGS WILL BE ACCEPTED.** For your convenience, please check the Applicant column on the left to be sure you have all the required submittal information.

FORMS AND MAPS REQUIRED

Check (√) Applicant	County		
X	____	1)	Project name (if applicable).
X	____	2)	Name, address of applicant and designer (if applicable).
X	____	3)	Date, north arrow, and scale.

FORMS AND MAPS REQUIRED

Check (√) Applicant	County		
X		4)	Entire parcel of land showing perimeter with dimensions.
X		5)	All roads, alleys, streets, and their names.
X		6)	Location of easements, their purpose and width.
X		7)	All existing and proposed uses (i.e. buildings, driveways, dwellings, utility transmission lines, etc.).
X		8)	Parking and loading stalls with dimensions (refer to Zoning Ordinance Chapter 130.35 – Parking and Loading, and the Community Design Standards – Parking and Loading Standards)).
X		9)	Trash and litter storage or collection areas, and propane tank location(s).
X		10)	Total gross square footage of proposed buildings.
X		11)	Proposed/existing fences or walls.
N/A		12)	Sign locations and sizes (if proposed). [Refer to Zoning Ordinance Chapter 130.16 - Signs – (Ordinance No. 5025)].
N/A		13)	Pedestrian walkways, courtyards, etc. (if proposed).
X		14)	Exterior lighting (if proposed). (Refer to Zoning Ordinance Chapter 130.34 and the Community Design Standards – Outdoor Lighting Standards).
X		15)	Existing/proposed water, sewer, septic systems, and wells (if applicable).
X		16)	Existing/proposed fire hydrants.
N/A		17)	Tentative subdivision or parcel map (if applicable).
N/A		18)	Adjacent parcel owner(s); Assessor's Parcel Number (unless this is included on tentative map).
N/A		19)	Public uses (schools, parks, etc.)

FORMS AND MAPS REQUIRED

Check (√)
Applicant County

N/A ____ 20) The location, if present, of rock outcropping, lava caps, drainage courses, lakes, canals, reservoirs, rivers, streams, spring areas subject to inundation and wetlands. (Show respective 100-foot and 50-foot septic system setbacks when a septic system is proposed.)

N/A ____ 21) Identify areas subject to a 100-year flood on perennial streams or creeks, and show high water level (100-year) on map. Where this data is not readily available, January 1997 flood level can be shown if known. (Refer to the Federal Emergency Management Agency (FEMA) website).

N/A ____ 22) Note any proposed trails within the project; and where applicable, connection to existing or proposed trail systems.

PRELIMINARY LANDSCAPE PLAN REQUIREMENTS

Required when parking facilities are proposed or otherwise at planner's discretion. (Refer to Zoning Ordinance Chapter 130.35). Five copies plus an electronic copy (CD-ROM or other medium), **folded to 8½" x 11", plus one 11" x 17" reduction.**

Check (√)
Applicant County

X ____ 1) Location, quantity, and a gallon size of proposed plant material (See Zoning Ordinance Section 130.33 – Landscaping Standards, and the Community Design Standards – Landscaping and Irrigation Standards)

X ____ 2) Note quantity/type of trees to be removed.

X ____ 3) Location, general type (pine, oak, etc.) and size of all existing trees, in those areas that are subject to grading or otherwise may be removed/affected by proposed improvements. Note quantity of trees to be removed.

X ____ 4) List of both common and botanical names of plant material (use of drought tolerant species is highly recommended). A recommended list of drought-tolerant species is available at Planning Services.

X ____ 5) Location of irrigation proposed. (NOTE: The final Landscape Plan will ultimately be required to meet the County's Water Conserving Landscape Standards. Copies are available at Planning Services).

PRELIMINARY GRADING AND DRAINAGE PLAN

Required whenever any grading is proposed. Five copies plus an electronic copy (CD-ROM or other medium), **folded to 8½" x 11", plus one 11" x 17" reduction.**

FORMS AND MAPS REQUIRED

Check (√) Applicant	County		
X		1)	Contours or slope data (pursuant to Chapter 110.14 of County Code Grading, Erosion, and Sediment Control Ordinance).
X		2)	Drainage improvements, culverts, drains, etc.
X		3)	Limits of cut and fill.

PLAN OF BUILDING ELEVATIONS

Required whenever a new structure or addition is proposed. Five copies plus an electronic copy (CD- ROM or other medium), **folded to 8½" x 11", plus one 11" x 17" reduction.**

Check (√) Applicant	County		
X		1)	Building design, elevations of all sides.
X		2)	Exterior materials, finishes, and colors.
X		3)	Existing/proposed signs showing location, height and dimensions. Include sign plan for project with multiple businesses.

Planning Services reserves the right to require additional project information as provided by Section 15060 of the California Environment Quality Act, or as required by the General Plan development policies, when such is necessary to complete the environmental assessment.

NOTE: APPLICATION WILL BE ACCEPTED BY APPOINTMENT ONLY. MAKE YOUR APPOINTMENT IN ADVANCE BY CALLING (530) 621-5355.

Table of Contents

DR21-0005

AUTHORIZATION TO ACT ON BEHALF OF OWNER

October 17, 2019

To: D.G. Granade, Inc.
4420 Business Drive
Shingle Springs, CA 95682

Project: Barsotti Family LLC

You are hereby authorized to act as the agent on behalf of and for Barsotti Family LLC regarding any and all procurements, submittals and EDC applications required for the parcel split of APN 109-240-030.

Sincerely,

Mike Barsotti
2239 Hidden Valley Lane
Camino, CA95709

DR21-0005

RECORDING REQUESTED BY:
Inter-County Title Co. Of El Dorado Co.
Order No. PV-228861-DT
Escrow No. PV-228861-CH
Parcel No. 109-240-030-000

AND WHEN RECORDED MAIL TO:

DOUGLAS G. GRANADE, TRUSTEE, ET AL
4420 BUSINESS DRIVE
SHINGLE SPRINGS, CA 95682

RECORDED ELECTRONICALLY
ID _____ County El Dorado
Date 04/08/2019 Time 11:33a.m.
simplifile www.simplifile.com 800.460.5657

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Grant Deed

(Please fill in document title(s) on this line)

☒ Exempt from fee per GC27388.1 due to being recorded in connection with concurrent transfer that is subject to the imposition of documentary transfer tax, or,

☐ Exempt from fee per GC27388.1 due to being recorded in connection with a transfer that was subject to documentary transfer tax which was paid on document recorded previously on _____(date) as document number _____ of Official Records, or,

☐ Exempt from fee per GC27388.1 due to the maximum fees being paid on documents in this transaction, or,

☐ Exempt from fee per GC27388.1 due to the maximum fees having been paid on documents in the transaction(s) recorded previously on _____ (date) as document number(s) _____ of Official Records, or

☐ Exempt from fee per GC27388.1 due to being recorded in connection with concurrent transfer that is a residential dwelling to an owner-occupier, or,

☐ Exempt from fee per GC27388.1 due to it being recorded in connection with a transfer of real property that is a residential dwelling to an owner-occupier. The recorded document transferring the dwelling to the owner-occupier was recorded on _____(date) as document number(s) _____, or,

☐ Exempt from the fee per GC 27388.1 (a) (1); Not related to real property, or,

☐ Exempt from fee under GC27388.1 for the following reasons:

THIS PAGE ADDED TO PROVIDE SENATE BILL 2 EXEMPTION INFORMATION
(Additional recording fee applies)

DR21-0005

RECORDING REQUESTED BY

Inter-County Title Co.
of El Dorado County

AND WHEN RECORDED MAIL DOCUMENT AND TAX STATEMENTS TO:

Name Douglas G. Granade, Trustee, et al

Street 4420 Business Drive

City & State Shingle Springs, CA 95682

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Order No. PV-228861-CH

GRANT DEED

A.P.N. 109-240-030-000

The undersigned grantor(s) declare(s):
Documentary transfer tax is $676.50
(X) computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at time of sale.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Olympia Mortgage Fund, LLC, a California limited liability company

hereby GRANT(S) to

Douglas G. Granade, as Trustee of The Granade Family Survivor's Trust, as to an undivided 50% interest and Barsotti Family LLC, a California limited liability company, as to an undivided 50% interest; as tenants in common

the following described real property situated in the unincorporated area of the County of El Dorado, State of California:

Tract 1, as said parcel is shown on that certain Record of Survey filed for record on March 10, 2004 in the office of the County Recorder of said El Dorado County in Book 27 of Record of Surveys, at Page 23 and as amended by Certificate of Correction recorded April 12, 2004, as Document No. 2004-0027595-00 of Official Records.

Dated: 3/22/2019

Olympia Mortgage Fund, LLC, a California limited liability company, By its Manager: Olympia Mortgage & Investment Company, Inc., a California corporation

By: Phillip L. Ruble, President

DR21-0005

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

. notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF Nevada } S.S.

On March 27, 2019, before me, Traci Arbogast, Notary Public
personally appeared Phillip L. Ruble
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Traci Arbogast (Seal)

TRACI ARBOGAST
COMM. #2195697
Notary Public - California
Nevada County
My Comm. Expires May 6, 2021

DR21-0005

RECORDING REQUESTED BY:
Inter-County Title Co. Of El Dorado Co.
Order No. PV-228861-DT
Escrow No. PV-228861-CH
Parcel No. 109-240-030-000

AND WHEN RECORDED MAIL TO:

DOUGLAS G. GRANADE, TRUSTEE, ET AL
4420 BUSINESS DRIVE
SHINGLE SPRINGS, CA 95682

RECORDED ELECTRONICALLY
ID _____ County El Dorado
Date 04/02/2019 Time 11:33a.m.
simplifile www.simplifile.com 800.460.5657

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Grant Deed

(Please fill in document title(s) on this line)

☒ Exempt from fee per GC27388.1 due to being recorded in connection with concurrent transfer that is subject to the imposition of documentary transfer tax, or,

☐ Exempt from fee per GC27388.1 due to being recorded in connection with a transfer that was subject to documentary transfer tax which was paid on document recorded previously on _____(date) as document number _____ of Official Records, or,

☐ Exempt from fee per GC27388.1 due to the maximum fees being paid on documents in this transaction, or,

☐ Exempt from fee per GC27388.1 due to the maximum fees having been paid on documents in the transaction(s) recorded previously on _____ (date) as document number(s) _____ of Official Records, or

☐ Exempt from fee per GC27388.1 due to being recorded in connection with concurrent transfer that is a residential dwelling to an owner-occupier, or,

☐ Exempt from fee per GC27388.1 due to it being recorded in connection with a transfer of real property that is a residential dwelling to an owner-occupier. The recorded document transferring the dwelling to the owner-occupier was recorded on _____(date) as document number(s) _____, or,

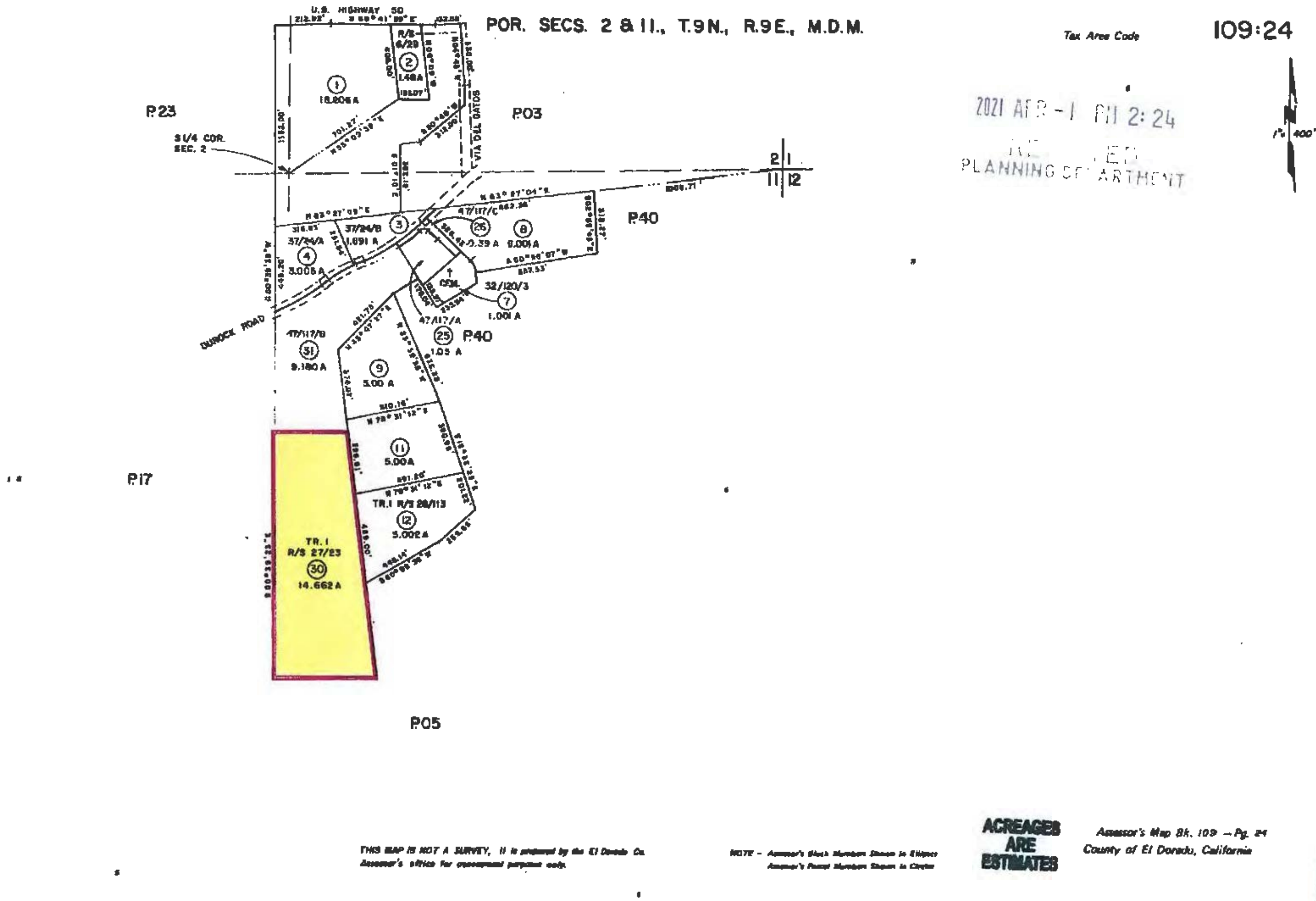
☐ Exempt from the fee per GC 27388.1 (a) (1); Not related to real property, or,

☐ Exempt from fee under GC27388.1 for the following reasons:

THIS PAGE ADDED TO PROVIDE SENATE BILL 2 EXEMPTION INFORMATION
(Additional recording fee applies)

DR21-0005

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 20 - APPLICATION PACKET



POR. SECS. 2 & 11., T.9N., R.9E., M.D.M.
Tax Area Code
109:24
U.S. HIGHWAY 50
P.23
P.03
P.40
P.17
P.05
S1/4 COR. SEC. 2
VIA DE GATOS
DUROCK ROAD
18.806 A
1.48A
37/24/A
3.008 A
37/24/B
1.891 A
47/117/C
8.001A
32/120/3
1.001 A
47/117/A
1.03 A
47/117/B
9.180 A
5.00 A
5.00A
TR. I R/S 28/113
5.002A
TR. I
R/S 27/23
14.662 A
THIS MAP IS NOT A SURVEY. It is prepared by the El Dorado Co. Assessor's office for assessment purposes only.
ACREAGES ARE ESTIMATES
Assessor's Map Bk. 109 – Pg. 24
County of El Dorado, California

2021 APR -1 PM 2:24
PLANNING DEPARTMENT

DR21-0005

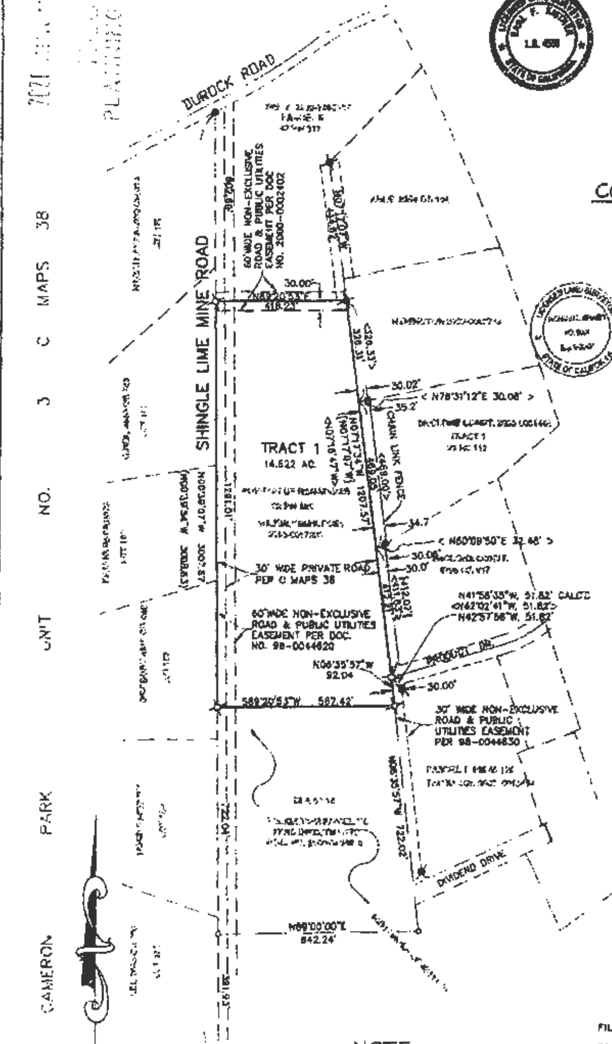
27-23

Cert of Correction 2004-0091690 12-3-2004

RECORD OF SURVEY

A PORTION OF THE NW 1/4 OF SECTION 11, TOWNSHIP 9 NORTH, RANGE 9 EAST OF M.D.M.
BEING A PORTION OF REMAINDER PARCEL OF PM 32-120

COUNTY OF EL DORADO STATE OF CALIFORNIA
DECEMBER, 2003 SCALE 1"=200'
DIMENSION CONTROL-LAND SURVEYORS
SHEET 1 OF 1 SHEETS



SURVEYOR'S STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYORS ACT AT THE REQUEST OF KFRD INVESTMENTS, INC. IN DECEMBER, 2003.

EARL F. KISTNER
L.S. 4558 LICENSE EXPIRATION DATE 9-30-2005

COUNTY SURVEYOR'S STATEMENT

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH SECTION 8766 OF THE PROFESSIONAL LAND SURVEYORS ACT THIS 8TH DAY OF MARCH, 2004.

DANIEL S. RUSSELL LS 5017 LICENSE EXPIRES 12-31-05
COUNTY SURVEYOR
COUNTY OF EL DORADO, CALIFORNIA

BY:
RICHARD L. BRINER L.S. 5084 LICENSE EXPIRES 06-30-07
DEPUTY SURVEYOR
COUNTY OF EL DORADO, CALIFORNIA

LEGEND

- SET 5/8" REBAR & ALUM CAP STAMPED LS 4558, 2003, DIMENSION CONTROL
- FOUND 3/4" C.I.P. STAMPED LS 4663, 1997
- FOUND 3/4" CIP STAMPED LS 4558
- FOUND 3/4" CIP STAMPED LS 2720
- FOUND 3/4" CIP STAMPED LS 5526, 2003
- DIMENSION POINT, NOTHING FOUND OR SET
- ( ) RECORD DATA PER C MAPS 38
- [ ] RECORD DATA PER DEEDS 1426 OR 220, 2000-0031443 AND 2000-0059160
- < > RECORD DATA PER RS 26-113
- { } RECORD DATA PER 4796 OR 617

BASIS OF BEARINGS

THE MERIDIAN OF THIS SURVEY IS IDENTICAL TO THAT CERTAIN RECORD OF SURVEY FILED FOR RECORD IN BOOK 24 OF SURVEYS AT PAGE 27, EL DORADO COUNTY RECORDS AND IS BASED ON THE MONUMENTS SHOWN AS FOUND ALONG THE WEST BOUNDARY LINE OF SAID SURVEY AND TAKEN AS N00°59'07"W.

REFERENCES

DEED - DOC. 2000-0018454
DEED - DOC. 2000-0031443
DEED - DOC. 2000-0059160
DEED - 2254 OR 104
DEED - 1426 OR 220
DEED - DOC. 2000-0034648
24 RS 27
46 PM 125
C MAPS 38
26 RS 113
32 PM 120
43 PM 70
47 PM 117

RECORDER'S STATEMENT

FILED THIS 10th DAY OF March 2004, AT 10:31:52
IN BOOK 27 OF RECORD OF SURVEYS AT PAGE 23
AT THE REQUEST OF KFRD INVESTMENTS, INC.

DOCUMENT NO. 2004-17688

WILLIAM E. SCHULTZ
COUNTY RECORDER, CLERK
COUNTY OF EL DORADO, CALIFORNIA

BY: DEPUTY

NOTE

THE PURPOSE OF THIS SURVEY IS TO DELINEATE THE DESCRIPTIONS OF THE REAL PROPERTY SHOWN HEREON AND THE MONUMENTATION THEREOF AS EFFECTED BY BLA 00-18 APPROVED 3-31-2000 BY THE EL DORADO PLANNING DEPARTMENT, AS REQUIRED BY SECTIONS 8762(b)(5) OF THE PROFESSIONAL LAND SURVEYOR'S ACT

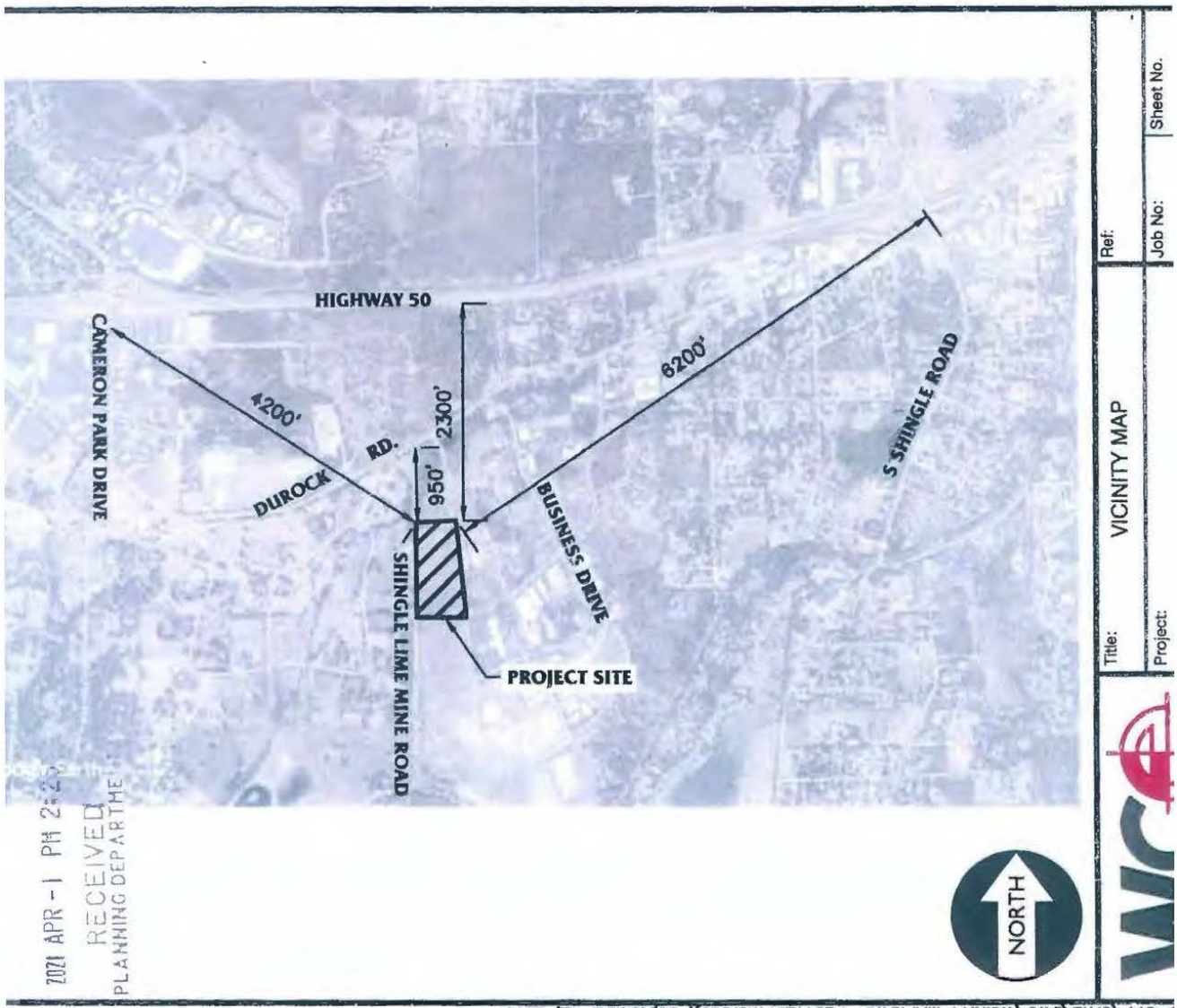
EXISTING ASSESSORS PARCEL NUMBER 109-240-20 & 21

27-23

27-23

Cert of Correction 2004-0027595 04-12-2004 AB

DR21-0005


HIGHWAY 50
CAMERON PARK DRIVE
4200'
DURROCK
RD.
2300'
950'
6200'
S SHINGLE ROAD
BUSINESS DRIVE
SHINGLE LIME MINE ROAD
PROJECT SITE
NORTH
Ref:
Job No:
Sheet No.
Title: VICINITY MAP
Project:
2021 APR -1 PM 2:20
RECEIVED
PLANNING DEPARTMENT
PLOTTED: Thursday, September 12, 2019
13,581

COMMUNITY DEVELOPMENT SERVICES
PLANNING AND BUILDING DEPARTMENT

2850 Fairlane Court, Placerville, CA 95667
Phone: (530) 621-5355 www.edcgov.us/Planning/

EL DORADO COUNTY PLANNING SERVICES
ENVIRONMENTAL QUESTIONNAIRE

File Number ____________________
Date Filed ____________________

Project Title	Barsotti Building	Lead Agency	
Name of Owner	Barsotti Family LLC	Telephone	
Address	2239 Hidden Valley Lane	Camino,	CA 95709
Name of Applicant	D.G. Granade, Inc	Telephone	530-677-7484
Address	4420 Business Drive	Shingle Springs,	CA 95682
Project Location	4665 Business Drive	Shingle Springs,	CA 95682

Assessor's Parcel Number(s) 109-240-30 Acreage 15 Acres Zoning Industrial

Please answer all of the following questions as completely as possible. Subdivisions and other major projects will require a Technical Supplement to be filed together with this form.

1. Type of project and description: Warehouse/Office, 22,800 sf

2. What is the number of units/parcels proposed? (1) Building

GEOLOGY AND SOILS

3. Identify the percentage of land in the following slope categories:

   ☒ 0 to 10% ☐ 11 to 15% ☐ 16 to 20% ☐ 21 to 29% ☐ over 30%

4. Have you observed any building or soil settlement, landslides, rock falls or avalanches on this property or in the nearby surrounding area? No

5. Could the project affect any existing agriculture uses or result in the loss of agricultural land? No

DR21-0005

DRAINAGE AND HYDROLOGY

6. Is the project located within the flood plain of any stream or river? No
   If so, which one?
7. What is the distance to the nearest body of water, river, stream or year-round drainage channel? 2 Miles Name of the water body? Deer Creek
8. Will the project result in the direct or indirect discharge of silt or any other particles in noticeable amount into any lakes, rivers or streams? No
9. Will the project result in the physical alteration of a natural body of water or drainage way? If so, in what way? No
10. Does the project area contain any wet meadows, marshes or other perennially wet areas?

VEGETATION AND WILDLIFE

11. What is the predominant vegetative cover on the site (trees, brush, grass, etc.)? Estimate percentage of each: 100% Grass
12. How many trees of 6-inch diameter will be removed when this project is implemented? None

FIRE PROTECTION

13. In what structural fire protection district (if any) is the project located? EDCFPD
14. What is the nearest emergency source of water for fire protection purposes (hydrant, pond, etc.)? Fire Hydrant
15. What is the distance to the nearest fire station? 1 mile +/-
16. Will the project create any dead-end roads greater than 500 feet in length? No
17. Will the project involve the burning of any material including brush, trees and construction materials? No

NOISE QUALITY

18. Is the project near an industrial area, freeway, major highway or airport? No
    If so, how far?
19. What types of noise would be created by the establishment of this land use, both during and after construction? No

AIR QUALITY

20. Would any noticeable amounts of air pollution, such as smoke, dust or odors, be produced by this project? No

WATER QUALITY

21. Is the proposed water source ☒ public or ☐ private, ☐ treated or ☐ untreated?

22. What is the water use (residential, agricultural, industrial or commercial)? Commercial

AESTHETICS

23. Will the project obstruct scenic views from existing residential areas, public lands, and/or public bodies of water or roads? No

ARCHAEOLOGY/HISTORY

24. Do you know of any archaeological or historical areas within the boundaries or adjacent to the project? (e.g., Indian burial grounds, gold mines, etc.) No

SEWAGE

25. What is the proposed method of sewage disposal? ☐ septic system ☒ sanitation district
Name of district: EID

26. Would the project require a change in sewage disposal methods from those currently used in the vicinity? No

TRANSPORTATION

27. Will the project create any traffic problems or change any existing roads, highways or existing traffic patterns? No

28. Will the project reduce or restrict access to public lands, parks or any public facilities?
No

GROWTH-INDUCING IMPACTS

29. Will the project result in the introduction of activities not currently found within the community?
No

30. Would the project serve to encourage development of presently undeveloped areas, or increases in development intensity of already developed areas (include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)? No

31. Will the project require the extension of existing public utility lines? No
If so, identify and give distances: No

GENERAL

32. Does the project involve lands currently protected under the Williamson Act or an Open Space Agreement? No

33. Will the project involve the application, use or disposal of potentially hazardous materials, including pesticides, herbicides, other toxic substances or radioactive material?
No

34. Will the proposed project result in the removal of a natural resource for commercial purposes (including rock, sand, gravel, trees, minerals or top soil)?

35. Could the project create new, or aggravate existing health problems (including, but not limited to, flies, mosquitoes, rodents and other disease vectors)? No

36. Will the project displace any community residents? No

DISCUSS ANY YES ANSWERS TO THE PREVIOUS QUESTIONS (attached additional sheets if necessary)

MITIGATION MEASURES (attached additional sheets if necessary)
Proposed mitigation measures for any of the above questions where there will be an adverse impact:

Form Completed by: _____ Date: 4/1/21

PROPERTY OWNERS INFORMATION

A.P.N. 109-240-030-000

December 2, 2019

#1 The Granade Family Survivor's Trust

Trustee: Douglas G. Granade
4420 Business Drive, Shingle Springs CA 95682
(530) 677-7484

#2 Barsotti Family LLC

Trustee: Mike Barsotti
2239 Hidden Valley Lane, Camino CA 95709
(530) 622-4629

DR21-0005

COMMUNITY DEVELOPMENT SERVICES
LONG RANGE PLANNING

2850 Fairlane Court, Placerville, CA 95667
Phone (530) 621-4650, Fax (530) 642-0508

Transportation Impact Study (TIS) – Initial Determination

The information provided with this form will be used by County staff to determine if the proposed project will be required to complete a Transportation Impact Study (TIS) or an On-Site Transportation Review (OSTR). If one or both are required, County staff will contact the applicant with more information about the required studies. Both studies are described in the TIS Guidelines, which can be found on the County's website. ***An OSTR is typically required for all projects.***

Complete and submit this form along with a detailed project description and a site plan by mail, fax or email.

Mail: CDS, Long Range Planning
Attn: Natalie Porter
2850 Fairlane Court
Placerville, CA 95667

Fax: (530) 642-0508
Phone: (530) 621-5442
Email: natalie.porter@edcgov.us

Applicant Information:

Name: DOUG GRANADE
Phone #: 530-677-7484
Address: 4420 BUSINESS DRIVE SHINGLE SPRINGS CA. 95682
Email: doug.granade@dggranade.com

Project Information:

Name of Project: BARSOTTI Office and Warehouse
Planning Number:
Project Location: 4665 BUSINESS DRIVE SHINGLE SPRINGS CA. 95682
Bldg Size: 22,800 sf
APN(s): 109-240-030
Project Planner:
Number of units:

Description of Project: (Use, Number of Units, Building Size, etc.)

Warehouse and office space, 22,800 sf

Please attach a project site plan

If an OSTR is required, the following information shall be evaluated and the findings signed and stamped by a registered Traffic Engineer or Civil Engineer, and shall be included with the project submittal:

1. Existence of any current traffic problems in the local area such as a high-accident location, non-standard intersection or roadway, or an intersection in need of a traffic signal
2. Proximity of proposed site driveway(s) to other driveways or intersections
3. Adequacy of vehicle parking relative to both the anticipated demand and zoning code requirements
4. Adequacy of the project site design to fully satisfy truck circulation and loading demand on-site, when the anticipated number of deliveries and service calls may exceed 10 per day
5. Adequacy of the project site design to provide at least a 25 foot minimum required throat depth (MRTD) at project driveways, include calculation of the MRTD
6. Adequacy of the project site design to convey all vehicle types
7. Adequacy of sight distance on-site
8. Queuing analysis of "drive-through" facilities

Rev 8/20/18

DR21-0005

COMMUNITY DEVELOPMENT SERVICES
LONG RANGE PLANNING

2850 Fairlane Court, Placerville, CA 95667
Phone (530) 621-4650, Fax (530) 642-0508

Transportation Impact Study (TIS) – Initial Determination (Page 2)

TO BE COMPLETED BY COUNTY STAFF:

The following project uses are typically exempt from the preparation of a TIS:

- ☐ 4 or less single family homes
- ☐ 4 or less multi-family units
- ☐ 2,300 square feet or less for shopping center
- ☐ 8,600 square feet or less for general office
- ☐ 10,000 square feet or less for industrial
- ☒ 28,000 square feet or less for warehouse
- ☐ 38,000 square feet or less for mini-storage
- ☐ 20,000 square feet or less for churches
- ☐ 20 or less sites for campgrounds
- ☐ 20 or less rooms for hotel/motel/B&B

☐ **None apply – a TIS is required with applicable fee.**

County Staff Determination:

The TIS or OSTR may be waived if no additional vehicle trips will be generated by the proposed change, no up-zoning is requested, or no intensification of use is requested. Long Range Planning staff may waive the TIS requirement. The Transportation Director or his/her designee may waive the OSTR requirement.

☐ TIS and OSTR are both waived. No further transportation studies are required.

☐ On-Site Transportation Review is required. A TIS is not required. The OSTR shall address all items listed, unless otherwise noted.

☐ The TIS and OSTR are required. An initial deposit for TIS scoping and review is required by CDS Long Range Planning staff. See Attached TIS Initial Fund Request letter.

TIS waiver approved by:

CDS Long Range Planning Signature	Date	ADH TS

OSTR waiver approved by:

Department of Transportation Director or Designee	Date

PRINT

Rev 8/20/18

El Dorado Irrigation District

2021 APR -1 PM 2:28

PLANNING DEPARTMENT

Letter No.: DS1019-192

October 7, 2019

VIA EMAIL

Doug Granade
4420 Business Drive
Shingle Springs, CA 95682
Email: doug.granade@dggranade.com

Subject: Facility Improvement Letter (FIL) 3138FIL, DG Granade Barnett Business Park
Assessor's Parcel No. 109-240-030 (Shingle Springs)

Dear Mr. Granade:

This letter is in response to your request dated September 3, 2019 and is valid for a period of three years. If facility improvement plans for your project are not submitted to El Dorado Irrigation District (EID or District) within three years of the date of this letter, a new Facility Improvement Letter will be required.

Design drawings for your project must be in conformance with the District's *Water, Sewer and Recycled Water Design and Construction Standards.*

This proposed project is a 2-lot commercial subdivision on 14.62 acres. Water service, sewer service, private fire service and fire hydrants are requested. The property is within the District boundary.

This letter is not a commitment to serve, but does address the location and approximate capacity of existing facilities that may be available to serve your project.

Water Supply
As of January 1, 2019, there were 22,162 equivalent dwelling units (EDUs) of water supply available in the Western/Eastern Water Supply Region. Your project as proposed on this date would require 10 EDUs of water supply.

Water Facilities
An 8-inch water line is located south of the property to be developed in Business Drive. There is also an 8-inch water line located east of the project in Product Drive (see enclosed System Map). The El Dorado County Fire Protection District has determined that the minimum fire flow for this project ranges from 1,500 GPM for a 2-hour duration, up to 2,500 GPM for a 4-hour

duration while maintaining a 20-psi residual pressure. According to the District's hydraulic model, the existing system can only deliver a **1,500 GPM** fire flow.

In order to provide a 1,500 GPM fire flow and receive service, you must construct a water line extension looping the off-site 8-inch water lines previously identified. Per the District's Design Standards you will be required to construct a water main extension in Business Drive to a location that will be accessible to the parcels north and east of this project that are not yet served.

In order to provide a 2,500 GPM fire flow significant system upgrades will be required. The water main extension in Business Drive will ultimately need to be connected/looped to the water main(s) located near the intersection of Durock Road and Business Drive. The timing of this line extension north of your project will need to be determined by fire flow and access requirements for this parcel, as well as the schedule to improve the undeveloped parcels located adjacent to the project location. The District recommends having a meeting to discuss this project and how to coordinate the needs of the remaining adjacent undeveloped portions of Barnett Business Park.

The hydraulic grade line for the existing water distribution facilities is 1,673 feet above mean sea level at static conditions and 1,550 feet above mean sea level during fire flow (1,500 GPM) and maximum day demands. The operating hydraulic grade line during a 2,500 GPM fire flow will need to be determined when more specific information becomes available in regards to tie-in locations.

The flow predicted above was developed using a computer model and is not an actual field flow test.

Sewer Facilities

There is a 6-inch gravity sewer line located in Business Drive. This sewer line has adequate capacity at this time. In order to receive service from this line, an extension of facilities of adequate size must be constructed. As noted in the Water Facilities section, the sewer line extension for this project will need to take into account the remaining undeveloped parcels located adjacent to the project location. Your project as proposed on this date would require 10 EDUs of sewer service.

Easement Requirements

Proposed water lines, sewer lines and related facilities must be located within an easement accessible by conventional maintenance vehicles. When the water lines or sewer lines are within streets, they shall be located within the paved section of the roadway. No structures will be permitted within the easements of any existing or proposed facilities. The District must have unobstructed access to these easements at all times, and generally does not allow water or sewer facilities along lot lines.

Easements for any new District facilities constructed by this project must be granted to the District prior to District approval of water and/or sewer improvement plans, whether onsite or offsite. In addition, due to either nonexistent or prescriptive easements for some older facilities, any existing onsite District facilities that will remain in place after the development of this property must also have an easement granted to the District.

Environmental

The County is the lead agency for environmental review of this project per Section 15051 of the California Environmental Quality Act Guidelines (CEQA). The County's environmental document should include a review of both offsite and onsite water and sewer facilities that may be constructed by this project. You may be requested to submit a copy of the County's environmental document to the District if your project involves significant off-site facilities. If the County's environmental document does not address all water and sewer facilities and they are not exempt from environmental review, a supplemental environmental document will be required. This document would be prepared by a consultant. It could require several months to prepare and you would be responsible for its cost.

Summary

Service to this proposed development is contingent upon the following:

- The availability of uncommitted water supplies at the time service is requested;
- Approval of the County's environmental document by the District (if requested);
- Executed grant documents for all required easements;
- Approval of an extension of facilities application by the District;
- Approval of facility improvement plans by the District;
- Construction by the developer of all onsite and offsite proposed water and sewer facilities
- Acceptance of these facilities by the District; and
- Payment of all District connection costs.

Services shall be provided in accordance with El Dorado Irrigation District Board Policies and Administrative Regulations, as amended from time-to-time. As they relate to conditions of and fees for extension of service, District Administrative Regulations will apply as of the date of a fully executed Extension of Facilities Agreement.

If you have any questions, please contact Marc Mackay at (530) 642-4135.

Sincerely,

Michael J. Brink, P.E.
Supervising Civil Engineer

MB/MM:gp

Enclosure

cc w/ System Map:

Rommel Pabalinas, Principal Planner
El Dorado County Development Services Department
Via email - rommel.pabalinas@edcgov.us

Tiffany Schmid, Director
El Dorado County Development Services Department
Via email – tiffany.schmid@edcgov.us

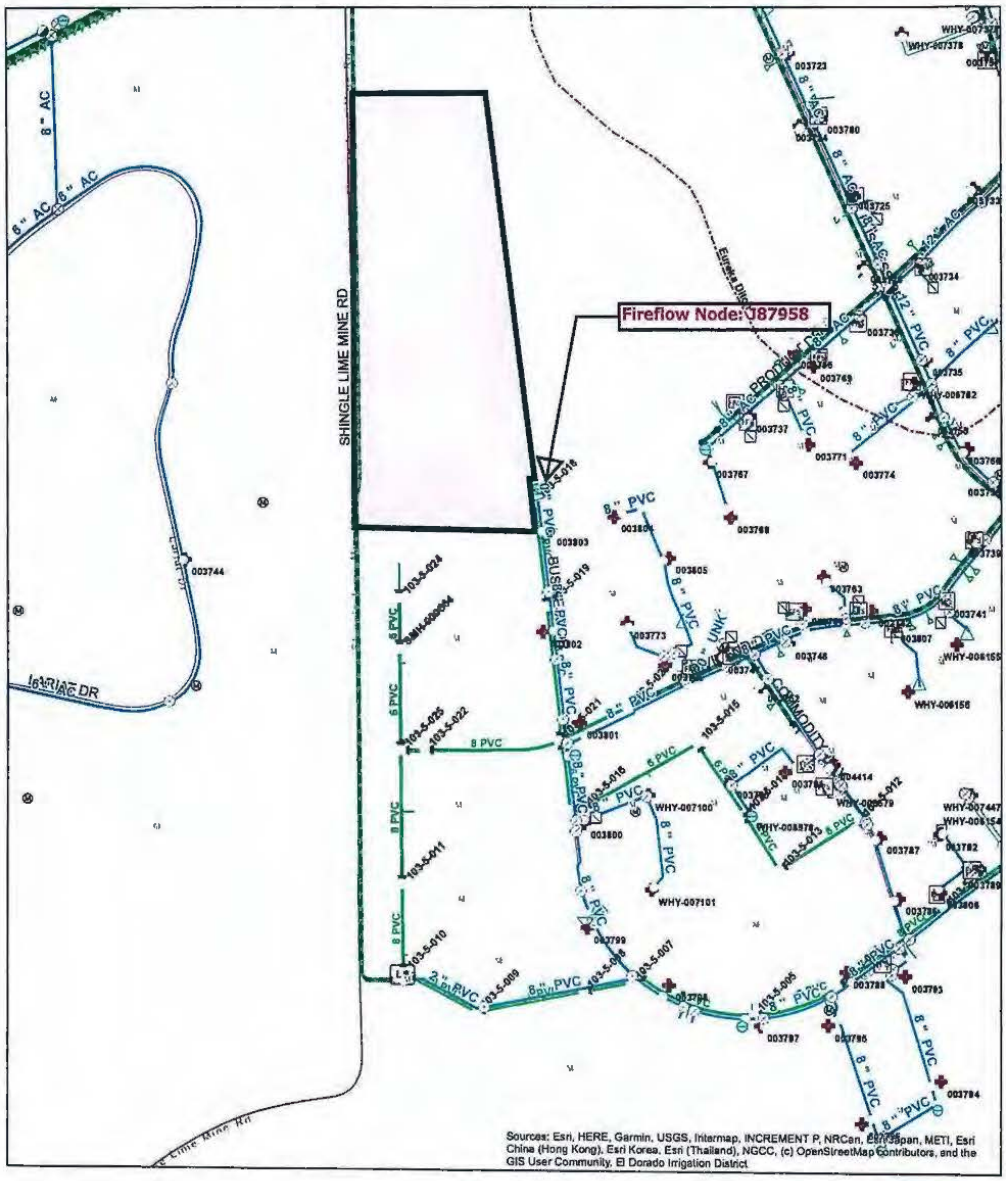
Brandon McKay, Deputy Fire Marshal
El Dorado County Fire District
Via email - McKayB@eldofire.com

Andrew Gaber
El Dorado County Department of Transportation
Via email - andrew.gaber@edcgov.us

Dave Spiegelberg
El Dorado County Department of Transportation
Via email- Dave.spiegelberg@edcgov.us

Anthony Tassano, P.E.
Warren Consulting Engineers
Via email- Anthony@wceinc.com

ArcGIS Web Map



WARNING: No accuracy of map implied until field checked by EID. Exact pipe locations must be field verified.

Date: October 1, 2019

Project: DG Granade Barnett Business Park

APN: 109-240-030

EID

PLANNING AND BUILDING DEPARTMENT

PLANNING DIVISION

https://www.edcgov.us/Government/Planning

2850 Fairlane Court, Placerville, CA 95667

OAK RESOURCES CODE COMPLIANCE CERTIFICATE

This Certification is required by the Oak Resources Conservation Ordinance (El Dorado County Code, Title 130, Chapter 130.39).

Assessment Number(s) (ANs): 109-240-030
[Attach additional pages if needed]

Address: 4665 Business Drive, Shingle Springs, CA 95682

Permit Number or Description (e.g. building/grading permit, discretionary project, other):
Office / Warehouse 22,800 sf

2021 APR -1 PM 2:28
PLANNING DEPARTMENT

Under penalty of perjury, I/we certify the following statement(s) (Check all that apply):

☒ No Oak Woodlands, Individual Native Oak Trees, or Heritage Trees, as defined in Section 130.39.030 (Definitions), have been impacted (i.e., cut down) on the above listed AN(s) for the current project or within two (2) years prior to the date of this certificate.

☐ Yes, Oak Woodlands, Individual Native Oak Trees, or Heritage Trees, as defined in Section 130.39.030 (Definitions), have been impacted (i.e., cut down) on the above listed AN(s) for the current project or within two (2) years prior to the date of this certificate.

- ☐ Oak Resources Technical Report is attached.
- ☐ Oak tree removal qualifies for exemption(s) under Section 130.39.050 (Exemptions and Mitigation Reductions) as documented in writing by a Qualified Professional. [Explain on separate attachment]
- ☐ Oak tree removal was previously permitted by the County. [Attach copies of prior permit(s)]
- ☐ No previous oak mitigation was required. [Explain on separate attachment]

Date: 4/1/21

By: _____ _____
Signature of Property Owner/Authorized Agent — Signature of Property Owner/Authorized Agent

DOUG GRANDE _____
Printed Name of Property Owner/Authorized Agent — Printed Name of Property Owner/Authorized Agent

County Use Only

Consistent with Chapter 130.39 (Oak Resources Conservation): ☐ Yes ☐ No

Accepted By Staff (Name): **Date:**

Revised 08/17/2020

DR21-0005

KAXW
LED Wall Luminaire

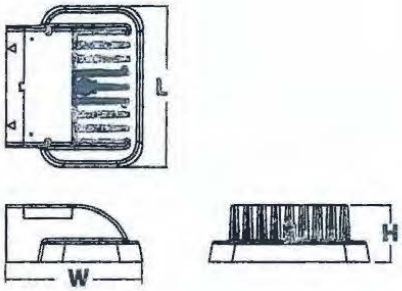
Catalog Number

Notes

Type

Specifications

Length:	14" (35.6 cm)
Width:	12" (31.6 cm)
Height:	5" (12.7 cm)
Weight (max):	19.7 lbs (8.9 kg)



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: KAXW LED P3 40K R3 MVOLT DDBXD

KAXW LED

Series	Performance package	Color temperature	Distribution	Voltage	Mounting	Control options	Other options	Finish
KAXW LED	P1 P2 P3	30K 3000 K 40K 4000 K 50K 5000 K	R3 Type 3 R4 Type 4	MVOLT [1] 120 [1] 208 [1] 240 [1] 277 [1] 347 [2] 480 [2]	**Shipped included** (blank) Surface mounting bracket	**Shipped installed** PER Five-wire twist-lock receptacle only (controls ordered separate) [3,4] PER5 Five-wire receptacle only (controls ordered separate) [3] PER7 Seven-wire receptacle only (controls ordered separate) [3] PIR 180° motion/ambient light sensor, <15' mtg ht [4] FAO Field adjustable output [5] PIRH [4] PIR1FC3V [6] PIRH1FC3V [6]	**Shipped installed** SF Single fuse (120, 277 or 347V) [8] DF Double fuse (208, 240 or 480V) [8] HS House-side shield [10] LCE Left Conduit Entry [11] RCE Right Conduit Entry [11] **Shipped separately** BSW Bird-deterrent spikes [10] EGS External glare shield [10]	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

NOTES

1. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
2. Not available in the P1 performance package.
3. Not available with ROAM®. See PER5 or PER7 option.
4. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See Accessories information.
5. If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls.
6. Specifies the Sensor Switch MSOD-7-ODP control; see Outdoor Control Technical Guide for details. Dimming driver standard. Not available with PER5 or PER7. Must specify 120V or 277V. Requires PER or separate on/off.
7. Not available with PER5 or PER7 options.
8. Must specify 120, 277, or 347V option.
9. Must specify 208, 240, or 480V option.
10. Also available as a separate accessory; see Accessories information.
11. Requires a contractor supplied ½" EMT raintight fitting.
12. Requires luminaire to be specified with PER, PER5 or PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [12]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [12]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [12]
DSHORT SBK U	Shorting cap
KAXWHS U	House-side shield
KAXWBSW U	Bird-deterrent spikes
KAXWEGS U	External glare shield

DR21-0005

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

P1	29W	R3	3,322	1	0	1	115	3,545	1	0	1	122	3,697	1	0	1	124
		R4	3,415	1	0	1	118	3,643	1	0	1	126	3,707	1	0	1	128
P2	49W	R3	5,731	1	0	1	117	6,115	1	0	1	125	6,222	1	0	1	127
		R4	5,891	1	0	1	120	6,285	1	0	1	128	6,396	1	0	1	131
P3	79W	R3	8,852	1	0	1	112	9,445	2	0	2	120	9,611	2	0	2	122
		R4	9,099	2	0	2	115	9,708	2	0	2	123	9,879	2	0	2	125

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).
* Shaded cells include active dynamic temperature sensing.

	P1	P2	P3
0°C	1.05	1.05	1.05
10°C	1.03	1.03	1.03
20°C	1.01	1.01	1.01
25°C	1	1	1
30°C	0.99	0.99	0.99
40°C	0.97	0.97	0.93
45°C	0.96	0.96	0.84
50°C	0.95	0.95	0.74

Electrical Load

P1	Current (A)	0.24A	0.14A	0.13A	0.11A		
	System Watts	29W	29W	29W	29W		
P2	Current (A)	0.41A	0.24A	0.21A	0.18A	0.14A	0.11A
	System Watts	49W	49W	48W	46W	47W	47W
P3	Current (A)	0.66A	0.38A	0.33A	0.29A	0.23A	0.17A
	System Watts	79W	78W	78W	76W	77W	76W

Projected LED Lumen Maintenance

	25,000	50,000	100,000
	>0.94	>0.89	>0.80

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

PER Table

Control	PER (3 wire)	PER (5 wire)		PER (7 wire)	
			Wire A Wire(s)		Wire A Wire(s)
Photocontrol Only (On/Off)	✓	▲	Wired to dimming leads on driver	▲	Wired to dimming leads on driver
ROAM	⊘	✓	Wired to dimming leads on driver	▲	Wired to dimming leads on driver
ROAM with Motion (ROAM on/off only)	⊘	▲	Wires Capped Inside fixture	▲	Wires Capped Inside fixture
Future-proof*	✓	▲	Wired to dimming leads on driver	✓	Wired to dimming leads on driver
Future-proof* with Motion	⊘	▲	Wires Capped Inside fixture	✓	Wires Capped Inside fixture

✓ Recommended
⊘ Not Available
▲ Alternate

*Future-proof means: Ability to change controls in the future.

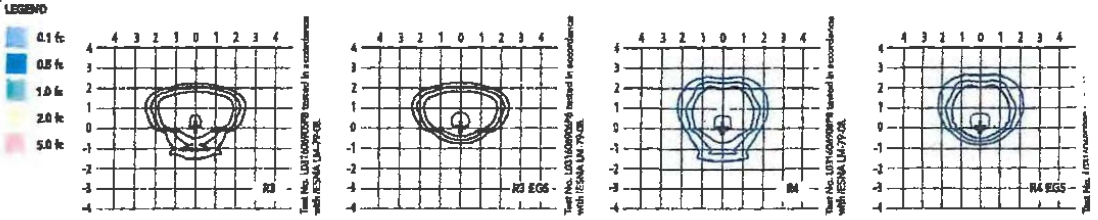
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's KAXW homepage.

Isofootcandle plots for the KAXW LED P3 40K. Distances are in units of mounting height (20').

LEGEND

0.1 fc
0.5 fc
1.0 fc
2.0 fc
5.0 fc



FEATURES & SPECIFICATIONS

INTENDED USE

This feature-rich luminaire embodies the highest level of functionality with extraordinary efficacy which maximizes your application efficiency providing high levels of light for minimal cost specifically for building-mounted doorway and pathway illumination on nearly any type of facility.

CONSTRUCTION

The die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. This modular design allows for ease of maintenance and future light engine upgrades. The LED driver is installed in a separate compartment to thermally isolate it from the light engines for low operating temperature and long life. The housing is completely sealed against moisture and environmental contaminants (IP65).

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS

Individually formed acrylic lenses are engineered for superior application efficiency which maximizes the light in the areas where it is most needed. Light engines are available in 3000 K, 4000 K or 5000 K (minimum 70 CRI) configurations. The KAXW has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to >L80/100,000 hours). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours.

INSTALLATION

Included wall mount plate facilitates a quick and easy installation. Mounting bolts feature a 1000-hour salt fog finish. Optional bi-level motion sensor and NEMA 3, 5 or 7 pin twist lock photocontrol receptacle are also available.

LISTINGS

CSA Listed for wet locations. Light engines and electrical compartment are IP66 rated. Rated for temperatures as low as -40°C minimum ambient.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY

5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

AWIP ALL WEATHER INSULATED PANELS

INNOVATIVE.
ADAPTABLE.
ENERGY EFFICIENT.

HE40

Product Data Sheet

Heavy Embossed Wall Panels

The distinctive pattern of our Heavy Embossed profile makes this panel ideal for exterior walls of industrial or commercial facilities where a non-profiled appearance is desired at an affordable price.

FEATURES AND BENEFITS

- Heavy embossment adds rigidity to the surface and maintains a patterned flat appearance.
- The panel can be installed with a pre-painted finish or may be field sprayed with a textured or stucco-style elastrometric coating to create further character.
- The panel's overlapping joint is self-aligning and allows for easy sealant application at the panel joinery.
- The standard exterior metal surface is 26ga G-90 galvanized steel with standard PVDF and SMP exterior coatings (other coatings may be available).
- The standard interior metal surface is 26ga Imperial White.
- The panel arrives on site in one piece and requires a simple one step installation reducing construction time and costs.

PRODUCT PARAMETERS

Panel Thickness:			
2"	2.5"	3"	4"
Insulating Values (R):**			
16	20	24	32

Panel Width: 40"

Panel Length: from 8' to 40' maximum.

Insulation Material: CFC-free foamed-in-place polyisocyanurate foam 2.1 to 2.5 pcf density.

Joint Configuration: offset tongue and groove with concealed fastener.

Metal facings: 26ga galvanized steel (24ga available).

Coatings: PVDF & SMP (other coatings available).

Accessories: fasteners, concealed fastener clips, sealants, brake formed flashings.

Available in fiRe 1-hour rated panel: HE40-F (4.5" R-32)

TESTED & APPROVED

All Weather Insulated Panels' products have been extensively tested under a variety of North American standards:

FM 4880: Class 1 Fire Rating
FM 4881: Class 1 Exterior Wall System
CAN/ULC S101: Fire Endurance
CAN/ULC S134: Fire Test of Exterior Wall Assemblies
ASTM C518/C1363: Thermal Transmission
ASTM E283: Air Infiltration
ASTM E331: Water Penetration
ASTM E72: Structural Strength
ASTM E84: Flame Spread
AAMA 501.1: Air/Water Infiltration

Miami-Dade County Product Control Approved

FLORIDA APPROVED

FM APPROVED

***R-Value tested in accordance with ASTM C518/C1363 at 40°F mean temperature, adjusted for a windspeed of 15 mph.*

U.S.A
929 Aldridge Rd. Vacaville, CA 95688
15000 Panatella Pkwy Little Rock, AR 72206
1-888-970-AWIP (2947)
awipanels.com

ALL WEATHER INSULATED PANELS

GENERAL NOTES:

Shop drawings prepared by ALL WEATHER INSULATED PANELS (AWIP) shc
details, panel layouts, wall elevations, roof plans and/or ceiling plans only and r
criteria listed on this cover page. The shop drawings are intended to be a guide
acceptable installation procedures and to indicate the quantity, size, and materi
of products furnished by AWIP for the referenced project. They do not replace
specifications or notes on structural drawings. It is the customer's responsibil
approve the design loads shown on the AWIP shop drawings and/or provide AV
additional design loads that need to be taken into consideration.

AWIP is only responsible for showing and providing materials that are included i
Order Acknowledgement. The materials furnished by AWIP have been approve
purposes shown in the AWIP shop drawings. Materials not provided by AWIP m
the AWIP shop drawings for informational or clarity purposes. The AWIP shop d
based off information provided to the AWIP detailing team. Details and dimensi
verified by the customer. AWIP shall not be responsible or liable for incorrect d
conditions after signed approved shop drawings are returned.

EMBOSSED

Unless noted otherwise, this project has been detailed based on ambient buildi
and not as a cooler or freezer building. If this is not the case, please notify your
manager immediately and provide the interior temperature(s).

DESIGN CRITERIA:

Design loads for insulated panels shall be in compliance with 2016 CBC requiren

Wind loads for insulated panels shall be in compliance with ASCE 7-10 code req

Insulated panels are designed to the following deflection limits:

Panel Type:	Deflection Limit:
Exterior Wall	L / 180
Roof	L / 240
Partition Wall	L / 120
Ceiling	L / 180
Exterior Wall (Mineral Fiber)	L / 240

FASTENERS:

Panels: Fastening systems have been selected to resist the design pressures this sheet with an appropriate safety factor applied. Refer to the cons of this drawing set for types and locations.

Trim: Refer to the connection details of this drawing set for trim fastener typ spacing.

Paint: Exposed fasteners shall have painted heads to match the color of the where they are used.

WIND LOAD CALCULATIONS:

Basic wind speed - LRFD (V)	110 mph
Basic wind speed - ASD (V)	86.96 mph
Risk category	II
Topographic factor	1.0
Least horizontal building dimension	75 ft
Roof pitch	1.5 : 12
Eave height (h)	16 ft
Effective width of panel	40 in
Exposure category	C
Enclosure classification	Enclosed
Wind directionality factor (Kd)	0.85
Internal pressure coefficient (GCpi)	0.18

DESIGN PRESSURES (ASD)

Zone 4 (interior)	= +15.29 / -16.57 psf
Zone 5 (corner)	= +15.29 / -20.39 psf
Zone 5 (edge panel)	= +15.29 / -20.39 psf

FASTENING SCHEDULE:

Wall at Zone 4: Use (2) ¼ - 14 fasteners per WC-01 wall clip assembly per panel per girt.

Wall at Zone 5: Use (3) ¼ - 14 fasteners per WC-01 wall clip assembly per panel per girt; use (2) ¼ - 14 through fasteners per girt at corner.

JOB NO. 0192618-963
DATE: 02/26/19
SHEET 1 OF 10
DRAWN BY: BAB
SCALE: NTS
PROJECT: LOT 33
CUSTOMER: D.G. GRANADE, INC
LOCATION: SHINGLE SPRINGS, CA
DRAWING SUBMITTAL STATUS:
X FOR CONSTRUCTION
FOR APPROVAL
FOR PERMIT ONLY
FOR PRELIMINARY
REVISE & RESUBMIT

ALL WEATHER INSULATED PANELS
329 ALDRIDGE ROAD
VACAVILLE, CA 95688
PHONE: (707) 359-2280
FAX: (707) 359-2285
WWW.AWIPANELS.COM

REV.	DATE	BY
FOR CONSTRUCTION	5-27-19	BAB

ALL WEATHER INSULATED PANELS

40" Wide Exterior Wall Panel Allowable Loads (PSF)

Panel Thickness	Span Condition	Fastening Pattern	Panel Span (ft)								
			5	6	7	8	9	10	11	12	13
2"	Single Span	FS-A	48	40	34	30	25	20	16	13	11
		FS-B	56	47	40	32	25	20	16	13	11
		FS-C	56	47	40	32	25	20	16	13	11
		FS-D	56	47	40	32	25	20	16	13	11
		FS-E	56	47	40	32	25	20	16	13	11
		FS-F	32	27	23	20	18	16	14	13	11
	Two Spans	FS-A	48	40	34	29	26	23	21	19	16
		FS-B	50	41	34	29	26	23	21	19	16
		FS-C	50	41	34	29	26	23	21	19	16
		FS-D	50	41	34	29	26	23	21	19	16
		FS-E	50	41	34	29	26	23	21	19	16
		FS-F	32	27	23	20	18	16	14	13	12
Weight = 2.22 PSF	Three or More Spans	FS-A	48	40	34	30	26	23	21	19	16
		FS-B	49	40	34	30	26	23	21	19	16
		FS-C	49	40	34	30	26	23	21	19	16
		FS-D	49	40	34	30	26	23	21	19	16
		FS-E	49	40	34	30	26	23	21	19	16
		FS-F	32	27	23	20	18	16	14	13	12
2.5"	Single Span	FS-A	48	40	34	30	27	24	22	19	16
		FS-B	60	50	43	38	33	29	23	19	16
		FS-C	70	59	50	44	35	29	23	19	16
		FS-D	70	59	50	44	35	29	23	19	16
		FS-E	70	59	50	44	35	29	23	19	16
		FS-F	32	27	23	20	18	16	14	13	12
	Two Spans	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	37	33	29	26	24	22
		FS-C	63	52	43	37	33	29	26	24	22
		FS-D	63	52	43	37	33	29	26	24	22
		FS-E	63	52	43	37	33	29	26	24	22
		FS-F	32	27	23	20	18	16	14	13	12
Weight = 2.34 PSF	Three or More Spans	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	37	33	30	27	24	22
		FS-C	62	51	43	37	33	30	27	24	22
		FS-D	62	51	43	37	33	30	27	24	22
		FS-E	62	51	43	37	33	30	27	24	22
		FS-F	32	27	23	20	18	16	14	13	12
3"	Single Span	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	22
		FS-C	85	71	60	53	46	38	31	26	22
		FS-D	73	61	52	45	40	36	31	26	22
		FS-E	85	71	60	53	46	38	31	26	22
		FS-F	32	27	23	20	18	16	14	13	12
	Two Spans	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	23
		FS-C	77	63	53	46	40	36	32	29	27
		FS-D	73	61	52	45	40	36	32	29	27
		FS-E	77	63	53	46	40	36	32	29	27
		FS-F	32	27	23	20	18	16	14	13	12
Weight = 2.41 PSF	Three or More Spans	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	23
		FS-C	75	62	52	45	40	36	32	30	27
		FS-D	73	61	52	45	40	36	32	30	27
		FS-E	75	62	52	45	40	36	32	30	27
		FS-F	32	27	23	20	18	16	14	13	12

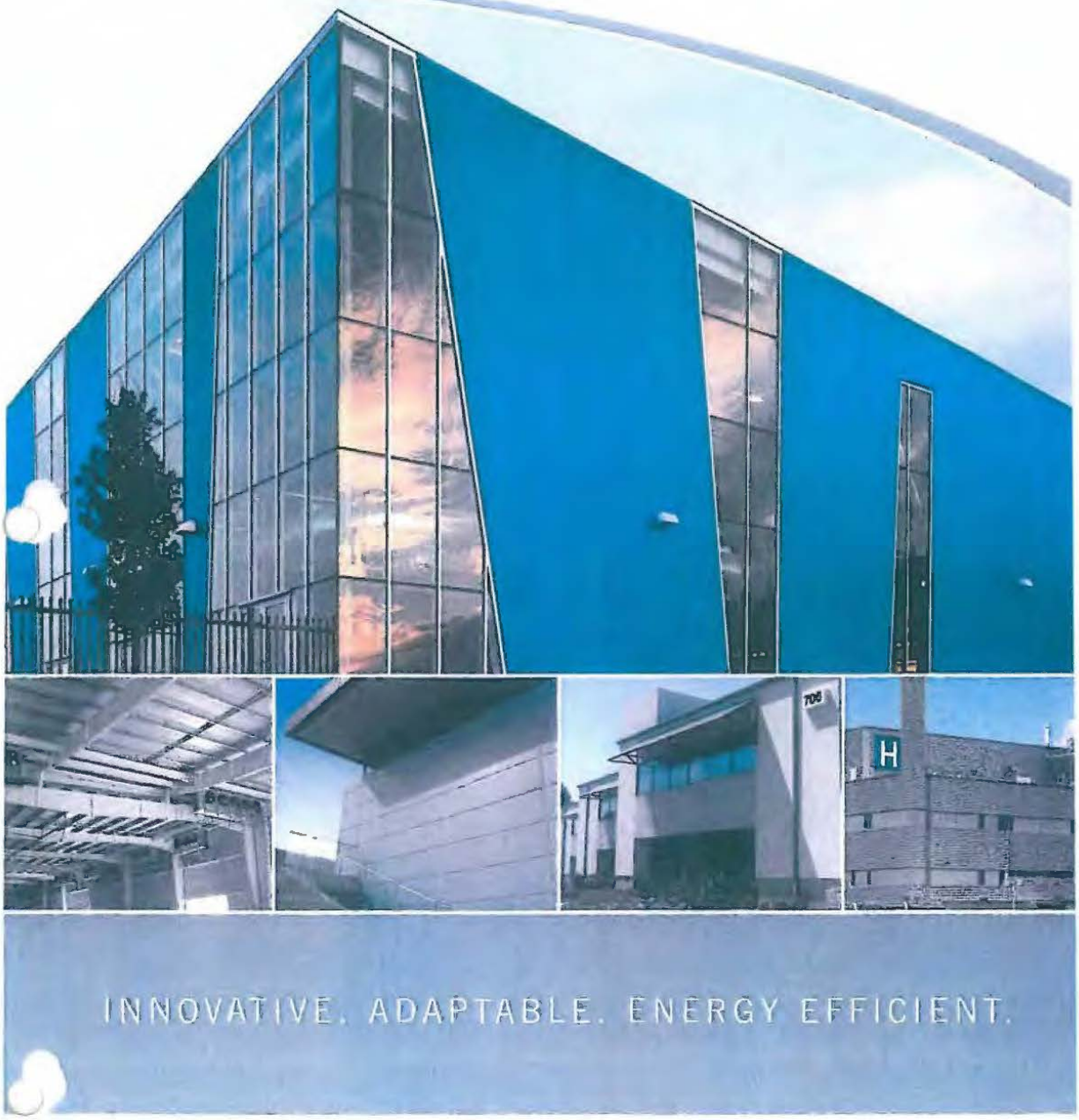
Panel Thickness	Span Condition	Fastening Pattern	Panel Span (ft)								
			5	6	7	8	9	10	11	12	13
4" Weight = 2.62 PSF	Single Span	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	23
		FS-C	85	71	61	53	47	42	37	32	28
		FS-D	73	61	52	45	40	36	33	30	28
		FS-E	97	81	69	61	52	44	37	32	28
		FS-F	32	27	23	20	18	16	14	13	12
	Two Spans	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	23
		FS-C	85	71	61	53	47	42	38	35	32
		FS-D	73	61	52	45	40	36	33	30	28
		FS-E	97	81	69	61	54	48	43	38	34
		FS-F	32	27	23	20	18	16	14	13	12
	Three or More Spans	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	23
		FS-C	85	71	61	53	47	42	38	35	32
		FS-D	73	61	52	45	40	36	33	30	28
		FS-E	97	81	69	61	54	48	43	38	34
		FS-F	32	27	23	20	18	16	14	13	12
5" Weight = 2.82 PSF	Single Span	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	23
		FS-C	85	71	61	53	47	42	38	35	32
		FS-D	73	61	52	45	40	36	33	30	28
		FS-E	97	81	69	61	54	48	44	40	37
		FS-F	32	27	23	20	18	16	14	13	12
	Two Spans	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	23
		FS-C	85	71	61	53	47	42	38	35	32
		FS-D	73	61	52	45	40	36	33	30	28
		FS-E	97	81	69	61	54	48	44	40	37
		FS-F	32	27	23	20	18	16	14	13	12
	Three or More Spans	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	23
		FS-C	85	71	61	53	47	42	38	35	32
		FS-D	73	61	52	45	40	36	33	30	28
		FS-E	97	81	69	61	54	48	44	40	37
		FS-F	32	27	23	20	18	16	14	13	12
6" Weight = 2.98 PSF	Single Span	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	23
		FS-C	85	71	61	53	47	42	38	35	32
		FS-D	73	61	52	45	40	36	33	30	28
		FS-E	97	81	69	61	54	48	44	40	37
		FS-F	32	27	23	20	18	16	14	13	12
	Two Spans	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	23
		FS-C	85	71	61	53	47	42	38	35	32
		FS-D	73	61	52	45	40	36	33	30	28
		FS-E	97	81	69	61	54	48	44	40	37
		FS-F	32	27	23	20	18	16	14	13	12
	Three or More Spans	FS-A	48	40	34	30	27	24	22	20	18
		FS-B	60	50	43	38	33	30	27	25	23
		FS-C	85	71	61	53	47	42	38	35	32
		FS-D	73	61	52	45	40	36	33	30	28
		FS-E	97	81	69	61	54	48	44	40	37
		FS-F	32	27	23	20	18	16	14	13	12

Notes:

1. Spans shown are based on transverse load testing per ASTM-E72 and strength of fastening patterns. Fastening is based on Tek 3 fasteners installed on minimum 16 gauge girts.
2. Spans calculated with 26 gauge exterior and interior facings.
3. Deflection Limit: L/180
4. Safety factor = 2.5 for buckling, 3.0 for shear, 3.0 for fastening
5. FS-A = WC-01 Wall Clip with (3) fasteners, FS-F = WC-01 with (2) fasteners
6. FS-B = WC-01 with (3) fasteners + (1) Fablok
7. FS-C = WC-01 with (3) fasteners + (3) Fablok
8. FS-D = WC-01 with (3) fasteners + (2) Fablok
9. FS-E = WC-01 with (3) fasteners + (4) Fablok
10. Thermal effect due to temperature differentials have not been considered.
11. For FIRe Panel, use load-span values for 4" wall. FIRe Panel weight is 5.5 PSF.
12. Consult your AWIP/Vicwest representative for project specific requirements.
13. Consult your AWIP/Vicwest representative for FM Global Loss Prevention Data Sheet 1-28 requirements.

Rev: July 01, 2015

AWIP
ALL WEATHER INSULATED PANELS
A Vicwest Company



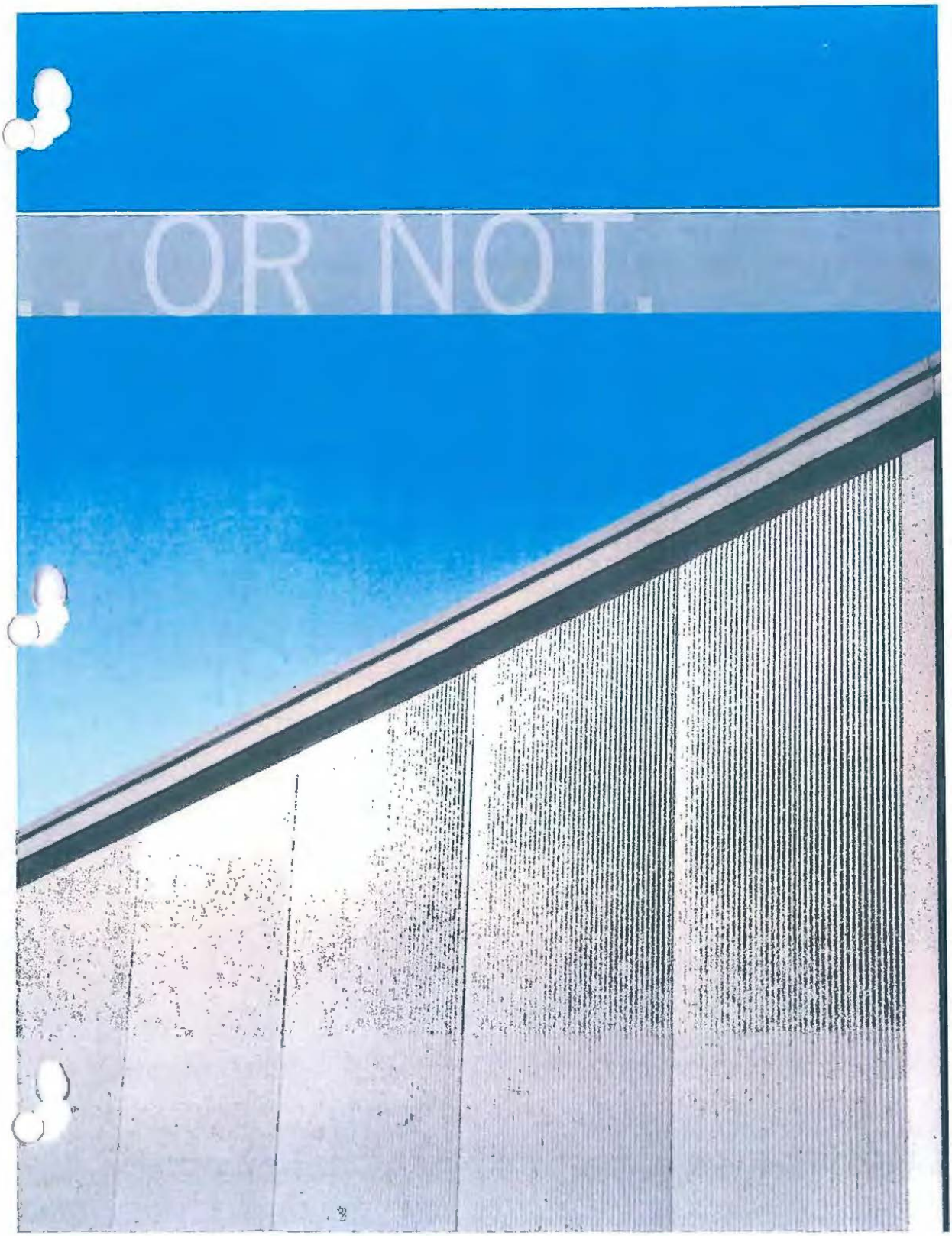
awipanels.com

ALL WEATHER INSULATED PANELS
A Vicwest Company

WEATHER

From freezing, sub-zero temperatures to dry heat or high humidity, Mother Nature continually tests the limits of building envelopes. That's why All Weather Insulated Panels are specifically engineered to maintain interior climate control regardless of external weather conditions. Discover the wide range of panel colors, finishes, dimensions, concealed fastening systems plus other options that will help you unleash your full design capabilities.

Contents


OR NOT.

INNOVATIVE. ADAPTABLE. ENERGY EFFICIEN

E.P Sauschuk Center photos courtesy: Murdock & Boyd Architects St. John, NB

All Weather Insulated Panels

Today's building projects require the perfect combination of energy efficiency, creative versatility and construction efficiency. All Weather Insulated Panels are the ideal choice to deliver the superior thermal capabilities and building performance that eco-conscious builders, designers and owners demand.

Advantages

More Energy Efficient:
- Superior thermal insulation capabilities compared to other insulating materials
- Closed cell polyisocyanurate insulation and self-aligning, double inter-locking tongue and groove joints with concealed fasteners create an air- and water-tight seal to stabilize interior environments

Single Component:
- Factory-injected insulation is continuously foamed-in-place and integrated with dual metal facing panels to create a single high strength unit

Measureable Savings:
- Fast one-pass, single component installation eliminates the inefficiencies of multi-piece, field assembled wall and roof systems saving in installation time and labor costs
- Panels have high strength-to-weight ratio that allow for longer spans and reduce structural costs

Versatile:
- Hidden fastener system with multiple profiles, colors, finishes, accessories and trims integrates into any building design
- Can be used in either vertical and horizontal applications
- Design vision is not compromised when doors, windows or other construction materials are incorporated into the design

Sustainable:
- Minimum of 30% Recycled steel content
- 100% recyclable and reusable at the end of its service life
- Contribute to LEED® credits and Net-Zero Energy targets

Durable & Economical:
- Last as long as typical buildings
- Reduces operational costs and maintenance

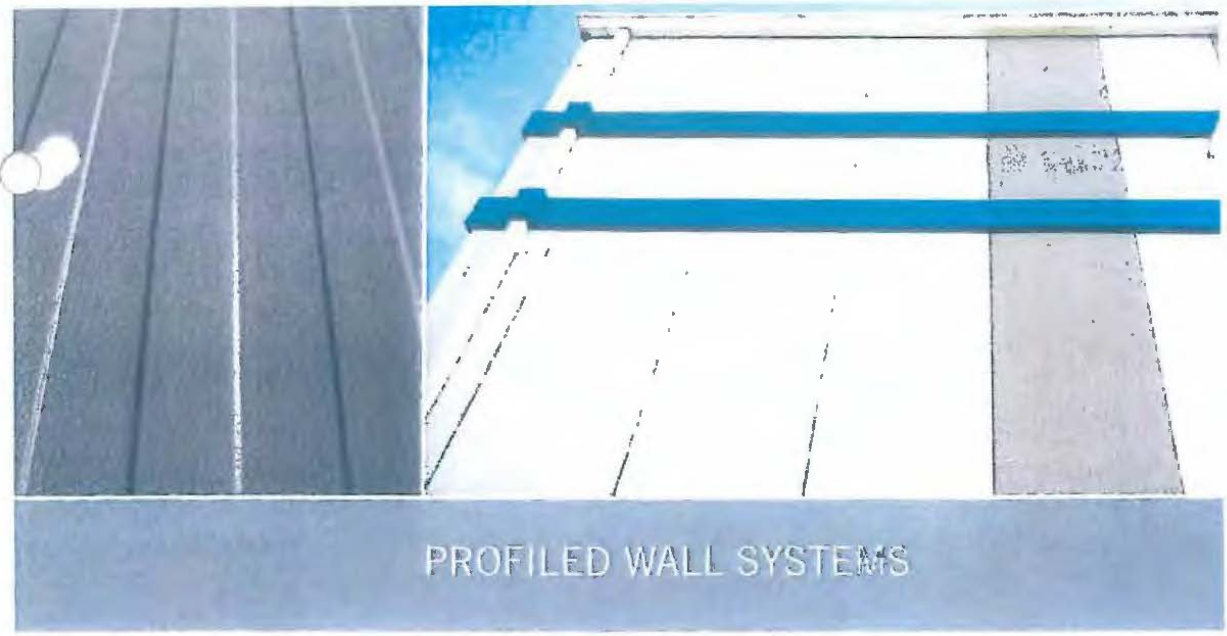
Tested & Approved:
- Tested for compliance with North American industry standards and codes
- Factory Mutual approved

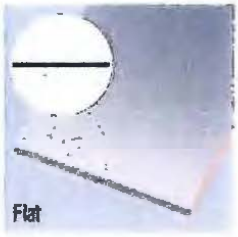
ADOBETEXTURE™ WALL SYSTEM

AdobeTexture™ wall panels offer a matte finish, multi-textured profile that simulates a precast or stucco-like appearance. Our unique proprietary process eliminates the need for additional factory- or field-applied stucco coatings offering an economical alternative that delivers superior adhesion and color retention when compared to other coating systems. Typical trim matching and finishing issues common to sprayed elastomeric applications (such as lengthly lead times) are also avoided due to our matching **AdobeTexture™** Trim and Finishing System.

- Proprietary breakthrough technology integrates a stucco look and texture into insulated wall panels
- Eliminates the need for sprayed elastomeric coating applications
- Eliminates multi-step field-applied or additional factory-applied stucco coating
- Matching AdobeTexture™ trim & finishing system for a clean, continuous look and feel
- No special storage or handling required
- Same easy, economical installation as standard IMP wall panels - Arrives on site in one piece for a simple one-step installation
- 25 year limited paint warranty against chalking, fading and loss of adhesion

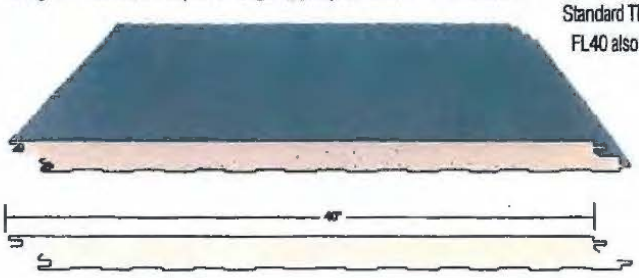
Standard Thicknesses: 2", 2.5", 3", 4"





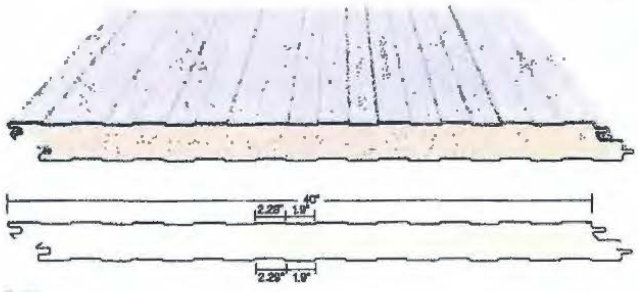
Flat (FL40): Installed either horizontally or vertically, our Flat wall panels are produced with a smooth or standard embossed exterior face and are perfect for designers seeking a high-end architectural look with all the thermal benefits that insulated metal panels offer. The horizontal assembly incorporates a clean, simple end joint design that utilizes a unique self-aligning pre-painted aluminum extrusion.

Standard Thicknesses: 2", 2.5", 3"
FL40 also available in 36" width*
**Only from Vacaville, CA and Little Rock, AR*



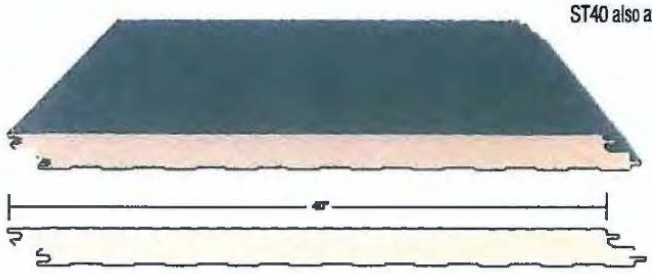
Mesa (DM40): Our Mesa profile panel is an economical choice that is perfect for exterior / interior wall and ceiling applications on industrial and cold storage use buildings. The low profile linear exterior surface simplifies flashing connections designed to inhibit moisture vapor transmission compared with other deep fluted products offered on the market. The additional mesa profile on the interior face makes this panel particularly suited for thicker, long-length walls.

Standard Thicknesses: 2", 2.5", 3", 4", 5", 6"



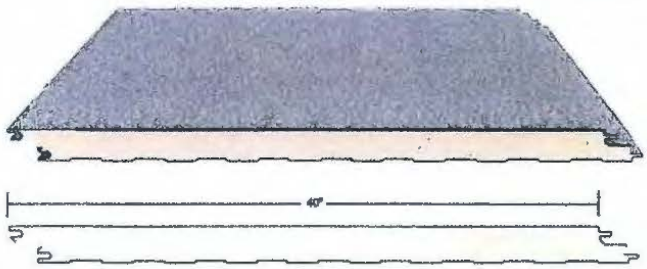
Striated (ST40): The Striated profile offers an extremely economical exterior or interior wall where a clean, flat appearance is desired. The nominal embossed striations add rigidity and ensure an acceptable flatness tolerance.

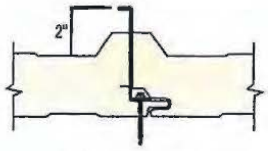
Standard Thicknesses: 2", 2.5", 3", 4"
ST40 also available in 36" width*
**Only from Vacaville, CA and Little Rock, AR*



Heavy Embossed (HE40): The distinctive pattern of our Heavy Embossed profile makes this panel ideal for exterior walls of industrial or commercial facilities where design character is desired. The heavy embossment adds rigidity to the surface and maintains a patterned flat appearance. The panel can be installed with a pre-painted finish or may be field sprayed with a textured or stucco-style elastomeric coating to create further character.

Standard Thicknesses: 2", 2.5", 3", 4"





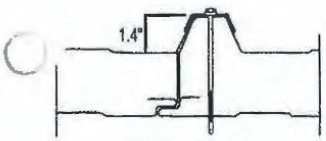
SR Roof Joint

Standing Seam (SR2): Get the look of a traditional metal standing seam roof with all the benefits of an insulated metal panel. Our Standing Seam roof profile offers a field seamed, hidden fastener joinery for maximum protection against the elements. The trapezoidal rib design provides added strength against potential foot traffic damage compared to other standing seam roof products. Because the joint design utilizes a rollformed steel base to support the attachment assembly, the thermally broken clip is only one piece.

Standard Thicknesses: 3.25", 4", 5", 6"

HR3

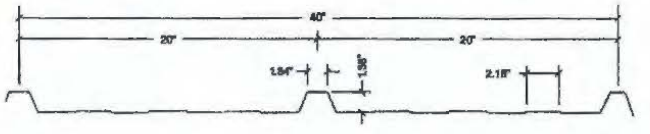
HR5



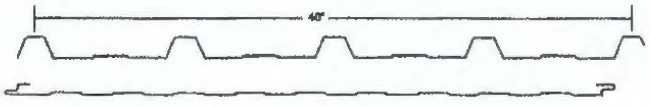
HR Roof Joint

HR Series (HR3 & HR5): Available in 3 Rib and 5 Rib models, our HR Series roof panel is an economical solution to field assembled metal roofing. This panel installs quickly and easily by through fastening at the standing ribs into supporting structural members. The 5 Rib model provides for long span requirements and/or severe loading conditions.

Standard Thicknesses: 2.5", 4", 5", 6"

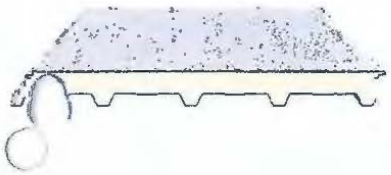


HR3



HR5

ROOF DECK SYSTEMS

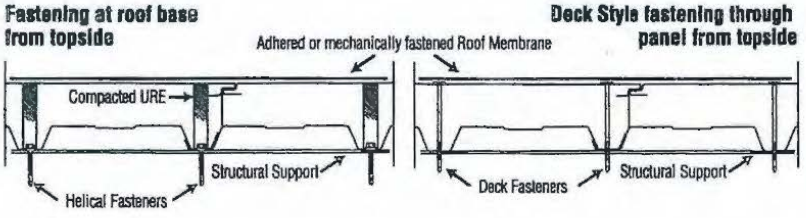


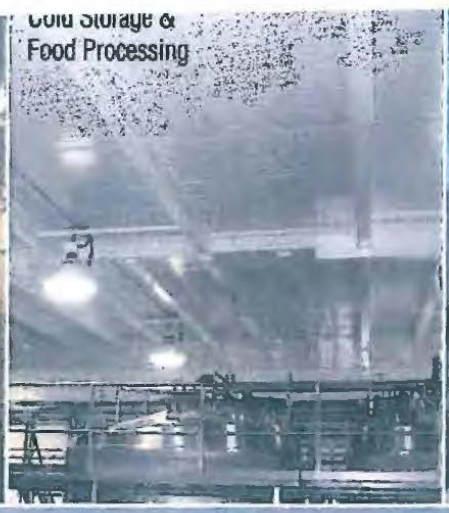
Roof Deck (RD5): Our Roof Deck panel combines into a single component the steel deck, insulation and substrate necessary for white single ply membrane or non-structural standing seam roof coverings – an economical alternative to rigorous and expensive field assembled roof deck systems. The top side substrate can be either primed steel or an approved flexible facer depending on the roof covering attachment requirements.

Advantages:

- Allows for longer spans between supports
- A working platform during installation
- Superior deflection resistance
- Pre-painted white reflective interior
- Easier installation with fewer required trades

Standard Thicknesses: 2.5", 4", 5", 6"





SPECIFICATIONS

Testing & Approvals:

All Weather Insulated Panels have been extensively tested under a variety of North American Standards to ensure compliance with various building codes and industry standards.

FM 4880: Class 1 Fire Rating

FM 4881: Class 1 Exterior Wall System

CAN/ULC S102: Flame Spread

CAN/ULC S101: Fire Endurance

CAN/ULC S138: Fire Endurance

CAN/ULC S127: Flammability

CAN/ULC S126: Flame Spread (Roof)

ASTM C518/C1363: Thermal Transmission

ASTM E283: Air Infiltration

ASTM E331: Water Infiltration

ASTM E72: Structural Strength

ASTM E84: Flame Spread

ASTM E119: Fire Endurance

AAMA 501.1: Air/Water Infiltration

FM 4471: (Roof)

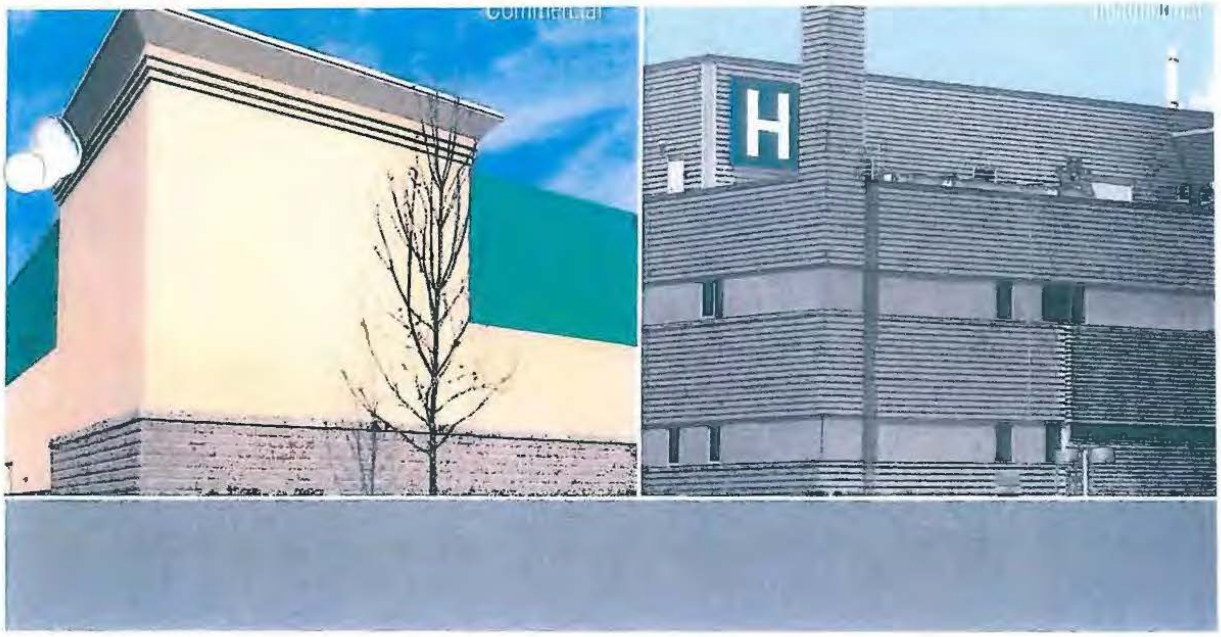
CAN/ULC S134: Fire Test of Exterior Wall Assemblies

Specifications for Wall & Roof Panels

R-Value* (per inch):	7.1 @ mean temperature of 75°F 7.9 @ mean temperature of 40°F
Thicknesses (inches):	**Wall System Standards:** Mesa: 2, 2.5, 3, 4, 5, 6 Striated: 2, 2.5, 3, 4 Flat: 2, 2.5, 3 Heavy Embossed & AdobeTexture™: 2, 2.5, 3, 4 **Roof and Roof Deck System Standards:** Standing Seam: 3.25, 4, 5, 6 HR Series: 2.5, 4, 5, 6 Roof Deck: 2.5, 4, 5, 6
Panel Width:	40" standard. Flat(FL) and Striated(ST) panels available in 36" width**.
Panel Length:	8' minimum to 50' maximum based on standard 48' flatbed trailer length Consult your sales representative for other available lengths.
Insulation:	CFC-free foamed-in-place Polyisocyanurate foam @ 2.2 to 2.5 pcf density
Metal Facings:	26ga standard galvanized or galvalume steel. (22ga, 24ga available. Consult your sales representative for availability)
Coatings:	Standard PVDF & SMP (other finishes may be available)
Joint & Fastening:	**Wall & Standing Seam Roof Panels:** Off-set tongue and groove with concealed fastener **HR Series Roof Panels:** Overlapping with through fastening at the standing rib

**R-Values shown is for general use only. They do not reflect system or specific end-use insulation values. Please consult with your All Weather Insulated Panels sales representative for project specific analysis.*

***Only from Vacaville, CA and Little Rock, AR*



Advancing the North American insulated metal panel market.

About ALL WEATHER

Vicwest owned All Weather Insulated Panels has 3 state of the art continuous line manufacturing facilities including Vacaville, CA, Little Rock, AR and Hamilton, Ontario, Canada. All Weather Insulated Panels is an innovator in the design, construction and advancement of insulated metal panels and is strategically positioned to meet the growing energy, environmental and economic challenges facing the North American building industry. All Weather Insulated Panels provides its customers with a broad line of insulated wall and roof panels and a full range of complementary trims, accessories and engineering services. For more information, visit **www.awipanels.com**

About VICWEST

Headquartered in Oakville, Ontario, Vicwest is one of North America's leading manufacturers and distributors of exterior building products, including metal roofing, siding, decking, and architectural panels. Founded in 1905, Vicwest offers a wide and trusted range of products for the residential, industrial, commercial, institutional and agricultural construction markets. VICWEST has 13 manufacturing facilities with more than 800,000 square feet of operations strategically located throughout Canada and approximately 700 dedicated employees committed to providing quality products and excellent service to its North American customers. For more information, visit **www.vicwest.com**

All Weather Insulated Panels

Committed to a sustainable environment.

All Weather Insulated Panels is committed to the future and the environment. Our insulated metal panels are manufactured to deliver superior thermal capabilities designed to minimize the use of energy required in the heating and cooling of buildings. We manufacture using blowing agents that meet or exceed regulatory standards for the reduction of global warming potential (GWP) and our panels have zero ozone depleting potential (ODP) and do not produce volatile organic compounds (VOC). We also use recyclable materials to produce 100% recyclable products and incorporate finishes that are engineered to reduce the carbon footprint and maximize solar reflectance and thermal emissivity.

All Weather Insulated Panels significantly contribute to credits toward LEED® certification of a building.

FM APPROVED

MCA Metal Construction Association

CSSBI

Note: For more information about building with steel, please refer to the CSSBI publication on the structural integrity of steel building panels.

In accordance with ongoing efforts to improve our products and their performance, Vicwest and All Weather Insulated Panels reserve the right to change without notice the specifications contained herein.

The contents herein are for general information and illustrative purposes only and are not intended to serve as any type of advice. Every effort is made to ensure the accuracy of the information included in this brochure and it is believed that the information contained herein is accurate and reliable as of the date of publication. Vicwest and All Weather Insulated Panels do not warrant or represent the accuracy or reliability of any information included in this brochure. Any reliance on any information without consultation with Vicwest, All Weather Insulated Panels or a duly authorized representative shall be at the user's own risk.

To locate a sales representative in your area, please visit our website (see below)

Or call:

U.S. 888 970-AWIP (2947)
Canada 800 265-6583
800 567-2582

awipanels.com

AWIP ALL WEATHER INSULATED PANELS
A Vicwest Company

awipanels.com

ALL WEATHER INSULATED PANELS
A Vicwest Company

Insulated Metal Panels

Color Availability Chart

The colors shown here are representative only and not necessarily true reproductions of actual coating colors. Coil coat color chips are available on request.

For information regarding color availability, please contact your sales representative.

PVDF In-stock Colors

Sandstone | Surrey Beige | Regal White

Royal Blue | Natural Green | Pearl Gray

SMP In-stock Colors

Imperial White | Sandstone | Surrey Beige

Available PVDF Non-stock Colors

Warm White | Slate Gray | Evergreen

Slate Blue | Colonial Red | Weathered Copper

Interior Colors

Imperial White

Insulated Metal Panels

Energy Efficient.
Innovative.
Adaptable.

- Embossed metal surfaces are offered as a standard on wall panels and non-embossed (smooth) for roof exterior surfaces. Non-embossed finishes may be available on wall panels upon request depending on color, gauge and end use.
- Complete paint system specifications are available upon request.
- The standard interior paint finish for all panels is Imperial White.
- AdobeTexture™ finish is available in Sandstone, Surrey Beige, Pearl Gray and Regal White only.
- Non-stock colors and paint systems and special orders are typically subject to higher pricing and may increase lead times from point of order.

FM APPROVED

MCA Metal Construction Association

FSSB

AWIP **ALL WEATHER INSULATED PANELS**
A Vicwest Company

awipanels.com

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PLANNING AND BUILDING DEPARTMENT

2850 Fairlane Court, Placerville, CA 95667
Phone: (530) 621-5355 www.edcgov.us/Planning/

Model Water Efficient Landscape Ordinance (MWELO) Submittal Form

2021 APR -1 PM 2:3
PLANNING DEPARTMENT
EL DORADO

Applicant Information:

Name: DG Granade Inc

Phone: 530-677-7484 Email: doug.granade@dggranade.com

Address: 4420 Business Drive Shingle Springs Ca. 95682

Project

Site Address: 4665 Business Drive Shingle Springs Ca. 95682

Assessor's Parcel Number(s) (APNs): 109-240-30

Project Type: office/warehouse 22,800 sf Permit # _____

Master Plan ☐ Yes ☐ No; Lot # _____ Landscape Design # L1

☐ Currently, this project does not include landscaping. I am aware that future landscape installations may be required to comply with the Model Water Efficient Landscape Ordinance (MWELO) requirements per California Code of Regulations, Title 23, Division 2, Chapter 2.7.

☒ This project does incorporate landscaping. Please provide the information below specific to the landscape area which will be completed as part of this project and specify the compliance method to be used:

Total Landscape Area (sq. ft.): 15,000sf Turf Area (sq. ft.): none

Non-Turf Plan Area (sq. ft.): 15,000sf Special Landscape Area (sq. ft.): none

Water Type *(potable, recycled, well)*: potable

Name of water purveyor *(If not served by private well)*: EID

Compliance Method

☐ Less than 500 square feet

☐ Prescriptive (500 - 2,500 square feet), See Prescriptive Compliance Appendix D Checklist.

☒ Performance (2,500 square feet or greater), See Performance Checklist.

Signature

I certify the above information is correct and agree to comply with the requirements of the MWELO.

Signature of property owner or authorized representative — Date: 4/1/21

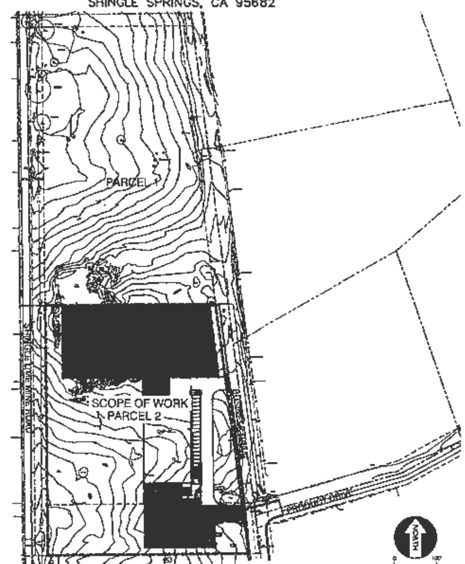
Revised 7/29/2019

DR21-0005

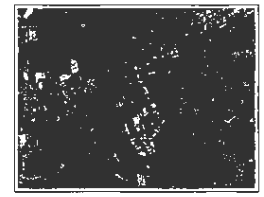
IMPROVEMENT PLANS FOR

BARSOTTI JUICE COMPANY WAREHOUSE

BUSINESS AND PRODUCT DRIVE
SHINGLE SPRINGS, CA 95682



SITE



VICINITY MAP
N.T.S.

AREA OF PARCEL(S)
7.31 ACRES
AREA OF DISTURBANCE
7.80 ACRES
W.O.I.D.# —
A.P.N. 109-240-030
BENCHMARK NO. 165-002 ELEV. 1320.23

EARTHWORK QUANTITIES IN CUBIC YARDS		
CUT (CY)	FILL (CY)	NET (CY)
17,000	17,000	0
A SEPARATE GRADING PERMIT WILL BE REQUIRED IF IMPORT SOIL IS TAKEN FROM LOCATIONS WITHIN EL DORADO COUNTY.		

PROJECT ADDRESS
BUSINESS AND PRODUCT DRIVE
SHINGLE SPRINGS, CA 95682

OWNER
DG GRANADE, INC.
4420 BUSINESS DRIVE
SHINGLE SPRINGS, CA 95682
PHONE: 530-677-7484
CONTACT: DOUG GRANADE

GEOTECHNICAL REPORT
YOUNGDAHL CONSULTING GROUP INC.
1234 GLENHAVEN COURT
EL DORADO HILLS, CA 95762
PROJECT NUMBER: E18129.001
DATE: FEBRUARY 2021
PHONE: 916-933-0633
FAX: 916-933-6482

UTILITY REPRESENTATIVES				
CABLE T.V.	COMCAST CABLE (AC SQUARE, INC.)	AVGUSTIN MARCHENKO	CONTACT	(916) 376-7783
SEWER	EL DORADO IRRIGATION DISTRICT	MARC MACKAY	ENGINEER	(530) 642-4135
GAS/ELEC.	P.G. & E.	KELLY MARSHALL	SVC. PLANNING DEPT.	KLMa@pge.com
WATER	EL DORADO IRRIGATION DISTRICT	MARC MACKAY	ENGINEER	(530) 642-4135
DRAINAGE	EL DORADO COUNTY	DEPT. OF TRANSPORTATION	ENGINEER	(530) 642-3250
TELEPHONE	AT&T	DARREN MORTENSEN	ENGINEER	(530) 621-6020
FIRE	EL DORADO COUNTY FIRE PROTECTION DIST.	BRANDON MCKAY	DEPUTY FIRE MARSHAL	(530) 644-9638
MISC.	UNDERGROUND SERVICE ALERT	N/A	N/A	(800) 642-2444 OR 811

GRADING AND GEOTECHNICAL SPECIFICATIONS

ALL GRADING SHALL BE DONE UNDER THE OBSERVATION AND TESTING OF A QUALIFIED CIVIL ENGINEER OR GEOTECHNICAL ENGINEER AND IF REQUIRED BOTH A CIVIL ENGINEER OR GEOTECHNICAL ENGINEER AND AN ENGINEERING GEOLOGIST. ALL GRADING MUST BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE COUNTY ORDINANCES AND THE RECOMMENDATIONS AND SPECIFICATION SET FORTH IN THE THE SOILS REPORT OR GEOLOGICAL/GEOTECHNICAL INVESTIGATION.

AS SHOWN

AT COMPLETION OF THE GRADING OPERATIONS, AN AS-GRADED SOILS AND GEOLOGICAL REPORT WILL BE PREPARED. ONE COPY OF THE REPORT WILL BE SUBMITTED TO EACH, THE DOT INSPECTOR AND DOT DEVELOPMENT SERVICES UNIT.

GEOTECHNICAL ENGINEERS STATEMENT

THESE GRADING PLANS HAVE BEEN REVIEWED BY THE UNDERSIGNED AND FOUND TO BE IN GENERAL CONFORMANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS IN THE REFERENCED SOILS REPORT ON GEOTECHNICAL INVESTIGATION PREPARED FOR THIS DEVELOPMENT.

________ GE# DATE: ______ EXPIRES: ______

________ RCE# DATE: ______ EXPIRES: ______

MATERIAL LIST (SEWER)

ITEM	MANUFACTURER	MODEL/TYPE/SIZE	QUANTITY
PIPE			
MANHOLES SERVICES			

MATERIAL LIST (WATER)

ITEM	MANUFACTURER	MODEL/TYPE/SIZE	QUANTITY
PIPE			
SERVICES			
FIRE HYDRANT			
VALVES (BY TYPE)			

SHEET INDEX

PROJECT DESCRIPTION

CONSTRUCTION OF A NEW WAREHOUSE BUILDING FOR BARSOTTI COMPANY. SITE WORK INCLUDES: GRADING ACTIVITIES, UTILITIES, ASPHALT AND CONCRETE PAVING AND EROSION CONTROL MEASURES.

RECORD DRAWING CERTIFICATION

THIS SET OF PLANS, HAVING BEEN REVIEWED BY ME, REFLECT ALL APPROVED REVISIONS TO THE PROJECT KNOWN TO ME, AND ALL FIELD DEVIATIONS TO THE PLANNED IMPROVEMENTS BY THE CONSTRUCTION CONTRACTOR, AS REPORTED TO ME AS OF ______. IT DOES NOT REPRESENT FIELD VERIFICATION OF PLANNED IMPROVEMENTS BY ME.

REGISTERED CIVIL ENGINEER ______ RCE NO. ______ DATE ______

WATER SERVICE CERTIFICATION

I HEREBY CERTIFY THAT THE WATER SYSTEM AS SHOWN ON DRAWING ______ HAS BEEN DESIGNED TO PROVIDE ALL OF THIS PROJECT WITH ADEQUATE WATER PRESSURE AND FIRE FLOW AS OF THE DATE SHOWN, BASE ON CRITERIA SUPPLIED BY THE EL DORADO IRRIGATION DISTRICT.

REGISTERED CIVIL ENGINEER ______ RCE NO. ______ DATE ______

SEWER SERVICE CERTIFICATION

I HEREBY CERTIFY THAT THE SEWER SYSTEM AS SHOWN ON DRAWING ______ HAS BEEN DESIGNED TO PROVIDE ALL OF THIS PROJECT EACH LOT (OR FACILITY) OF THIS TRACT (PROJECT) WITH SEWER SERVICE AS OF THE DATE SHOWN BASED ON CRITERIA SUPPLIED BY THE EL DORADO IRRIGATION DISTRICT.

REGISTERED CIVIL ENGINEER ______ RCE NO. ______ DATE ______

EL DORADO COUNTY FIRE DEPARTMENT
(FIRE PROTECTION DISTRICT ONLY)

APPROVED BY ______ DATE ______

EL DORADO IRRIGATION DISTRICT

COVER SHEET
BUSINESS AND PRODUCT DRIVE
IMPROVEMENT PLANS

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: N/A
JOB NO.: 20-153

C0.0

DR21-0005

STANDARD GENERAL NOTES - ROADWORK, GRADING AND DRAINAGE

1. MATERIALS, CONSTRUCTION QUALITY, AND METHODS FOR THIS PROJECT ARE SUBJECT TO THE COUNTY OF EL DORADO DESIGN AND IMPROVEMENT STANDARDS MANUAL, STANDARD PLANS, AND THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND STANDARD SPECIFICATIONS.
2. ALL REFERENCE TO TD SHALL MEAN THE CDA-TRANSPORTATION DIVISION DIRECTOR, OF EL DORADO COUNTY OR AUTHORIZED REPRESENTATIVE.
3. ALL WORK SHALL BE ACCOMPLISHED TO THE SATISFACTION OF THE TD OR AN AUTHORIZED REPRESENTATIVE.
4. ALL REFERENCE TO THE STANDARD SPECIFICATIONS SHALL MEAN THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2015.
5. THE CONTRACTOR SHALL HAVE A RESPONSIBLE PARTY, WHO SHALL HAVE FULL AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR ON SITE AT ALL TIMES DURING WORKING HOURS.
6. THE CONTRACTOR SHALL NOTIFY TD 48 HOURS IN ADVANCE OF COMMENCING WORK TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE AND INSPECTION WITH THE ENGINEER AND TD. NO WORK SHALL BEGIN UNTIL AFTER THE PRE-CONSTRUCTION CONFERENCE AND INSPECTION HAVE BEEN COMPLETED.
7. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 7, "LEGAL RELATIONS AND RESPONSIBILITY" OF THE STANDARD SPECIFICATIONS.
8. RIGHTS TO ENTER AND CONSTRUCT SHALL BE OBTAINED PRIOR TO CONSTRUCTING ANY OFF-SITE WORK SHOWN IN THESE PLANS. COPIES OF SUCH DOCUMENTS SHALL BE KEPT ON-SITE AT ALL TIMES DURING THE PERFORMANCE OF OFF-SITE WORK.
9. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) 811 OR 1-800-227-2600 PRIOR TO PERFORMING ANY EXCAVATION ON THE PROJECT SITE. THE OWNER(S) OF IDENTIFIED EXISTING UNDERGROUND FACILITIES SHALL ALSO BE CONTACTED PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR SHALL NOT CONSTRUCT ANY WORK WITHOUT ADEQUATE CONSTRUCTION STAKING. AS A MINIMUM, THE FOLLOWING STAKING SHALL BE REQUIRED: 1) CLEARING LIMITS, 2) SLOPE STAKES, 3) WATER LINE STAKES, 4) SEWER LINE STAKES, 5) STORM DRAIN STAKES, 6) FINISHED GRADE STAKES. ADDITIONAL STAKING MAY BE REQUIRED BY TD DUE TO THE NATURE AND/OR COMPLEXITY OF THE WORK. LOST OR DAMAGED STAKES SHALL BE REPLACED TO THE SATISFACTION OF TD WHETHER RESULTING FROM CONSTRUCTION PROCEDURES, VANDALISM, OR ANY OTHER CAUSE. SURVEY CUT SHEETS SHALL BE PROVIDED TO THE CONTRACTOR WITHIN ONE BUSINESS DAY OF COMPLETION OF THE SURVEY REQUEST. CONTRACTOR SHALL PROVIDE ALL CUT SHEETS TO THE TD INSPECTOR AND EID THE SAME DAY THEY ARE RECEIVED.
11. THE CONTRACTOR'S ATTENTION IS DIRECTED TO COUNTY OF EL DORADO RESOLUTION NO. 199-91, WHICH CONTAINS SPECIFIC REQUIREMENTS FOR THE PROTECTION AND PRESERVATION OF OAK TREES AND WETLANDS. THE CONTRACTOR SHALL REMOVE ONLY THOSE TREES SHOWN ON THE PLANS TO BE REMOVED. THE CONTRACTOR SHALL INSTALL PROTECTIVE FENCING AT THE DRIP LINE OF ALL REMAINING TREES WITHIN 30 FEET OF ANY GRADING, AND OTHERWISE COMPLY WITH THE PROVISIONS OF SAID ORDINANCE.
12. CONSTRUCTION HOURS SHALL BE LIMITED FROM 7:00AM TO 7:00PM (OR SUNSET), MONDAY THROUGH FRIDAY, AND 8:00AM TO 5:00PM WEEKENDS AND FEDERALLY RECOGNIZED HOLIDAYS, UNLESS OTHERWISE SPECIFIED BY SEPARATE AGREEMENT (SUBDIVISION GRADING AGREEMENT, SUBDIVISION IMPROVEMENT AGREEMENT, ROAD IMPROVEMENT AGREEMENT, ETC.). ALL HEAVY EQUIPMENT AND ANY INTERNAL COMBUSTION ENGINES SHALL BE FITTED WITH ADEQUATE MUFFLERS.
13. THE CONTRACTOR SHALL PROVIDE, PLACE AND MAINTAIN ALL LIGHTS, SIGNS, DELINEATORS, BARRICADES, TEMPORARY TRAFFIC STRIPING, FLAGMEN, DETOURS OR OTHER DEVICES NECESSARY TO PROVIDE FOR THE SAFE AND CONVENIENT PASSAGE OF PUBLIC VEHICLE AND PEDESTRIAN TRAFFIC THROUGH THE CONSTRUCTION SITE.
14. THE CONTRACTOR SHALL OBTAIN THE EXPRESS WRITTEN CONSENT OF TD PRIOR TO IMPLEMENTING ANY LANE CLOSURE OR DETOUR ON A COUNTY MAINTAINED STREET OR HIGHWAY. ALL LANE CLOSURES OR DETOURS SHALL CONFORM TO CHAPTER 5, "TRAFFIC CONTROL DEVICES FOR LOW VOLUME ROADS" OF THE CALIFORNIA MUTCD.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING CONSTRUCTION. AT LEAST ONE WATER TRUCK SHALL BE ON SITE AT ALL TIMES. ADDITIONAL EQUIPMENT MAY BE REQUIRED AS DETERMINED BY TD.
16. THE CONTRACTOR SHALL OBTAIN AN APPROVED FUGITIVE DUST CONTROL PLAN, INCLUDING PROVISIONS FOR ASBESTOS HAZARD MITIGATION, IF REQUIRED, FROM THE COUNTY OF EL DORADO ENVIRONMENTAL MANAGEMENT DEPARTMENT PRIOR TO BEGINNING OF WORK.
17. IF UNUSUAL AMOUNTS OF STONE, BONE, OR ARTIFACTS ARE UNCOVERED DURING CONSTRUCTION, ALL WORK SHALL BE STOPPED WITHIN ONE HUNDRED FEET (100') OF THE FIND, AND A QUALIFIED ARCHAEOLOGIST CONSULTED FOR AN ON-SITE EVALUATION.
18. IF THE PRESENCE OF SERPENTINE ROCK (SAT) IS DISCOVERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, TD AND THE COUNTY OF EL DORADO ENVIRONMENTAL MANAGEMENT DIVISION THAT SERPENTINE ROCK IS PRESENT ON THE SITE. ADDITIONALLY, THE CONTRACTOR SHALL IMPLEMENT THE ASBESTOS HAZARD MITIGATION PROVISIONS OF THE FUGITIVE DUST PLAN PRIOR TO CONTINUATION OF EARTHWORK IN AREAS WHERE SERPENTINE ROCK IS PRESENT.
19. UPON JOB COMPLETION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE INFORMATION TO ANTHONY BASSANO, WARREN CONSULTING ENGINEERS, INC. (ENGINEER), REGARDING ANY MATERIAL CHANGES MADE DURING CONSTRUCTION AS WELL AS ANY OTHER INFORMATION REQUIRED TO BE SHOWN ON THE RECORD DRAWINGS BY TD, THE EL DORADO IRRIGATION DISTRICT (EID), OTHER UTILITY COMPANIES, OR OTHER RESPONSIBLE AGENCIES.
20. CLEARING AND GRUBBING SHALL CONFORM TO THE PROVISIONS OF SECTION 16, "CLEARING AND GRUBBING" OF THE STANDARD SPECIFICATIONS. ROOTS, STUMPS, TREES, ROCKS OR OTHER DELETERIOUS SUBSTANCES SHALL BE DISPOSED OF OFF-SITE AND IN A LAWFUL MANNER.
21. EARTHWORK SHALL CONFORM TO THE PROVISIONS OF SECTION 19, "EARTHWORK" OF THE STANDARD SPECIFICATIONS. TRIMMING OF EMBANKMENTS AND FLATTENING OF SLOPES, WHICH RESULT IN AN INCREASED AREA OF GRADING, WILL NOT BE PERMITTED WITHOUT EXPRESS WRITTEN APPROVAL FROM TD.
22. AGGREGATE BASE SHALL CONFORM TO THE PROVISIONS OF SECTION 26, "AGGREGATE BASE" OF THE STANDARD SPECIFICATIONS FOR CLASS 2 AGGREGATE BASE, 3/4" MAXIMUM GRADATION. AGGREGATE BASE SHALL NOT BE PLACED UNTIL THE PRIOR GRADING PLANE HAS BEEN APPROVED BY TD.
23. ASPHALT CONCRETE SHALL CONFORM TO THE PROVISIONS OF SECTION 39, "ASPHALT CONCRETE" OF THE STANDARD SPECIFICATIONS. ASPHALT BINDER(S) SHALL BE PERFORMANCE GRADE 64-16. ASPHALT CONCRETE SHALL NOT BE PLACED UNTIL THE PRIOR GRADING PLANE HAS BEEN APPROVED BY TD, AND ALL UTILITIES WITHIN THE PAVED AREA HAVE BEEN PLACED, TESTED, AND APPROVED.
24. ALL ASPHALT CONCRETE OVERLAY(S) SHALL BE A MINIMUM OF 3 INCHES AND REPLACED IN KIND WITH ASPHALT CONCRETE AS DEFINED IN SECTION 39, OF THE STANDARD SPECIFICATIONS. IF AGGREGATE BASE IS NOT PRESENT IT SHALL BE REPLACED WITH A MINIMUM OF 8 INCHES OF CLASS 2 AGGREGATE BASE AND CONFORM TO THE PROVISIONS OF SECTION 26 OF THE STANDARD SPECIFICATIONS FOR CLASS 2 AGGREGATE BASE. ANY EXCEPTION TO THE 8 INCH MINIMUM OF CLASS 2 AGGREGATE BASE REPLACEMENT MUST BE PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER.
25. AFTER ACCEPTANCE OF THE FINAL LIFT OF ASPHALT CONCRETE, AND PRIOR TO THE END OF THE WARRANTY PERIOD, ALL ROADWAYS SHALL BE FOG SEALED IN ACCORDANCE WITH SECTION 37-2, "SEAL COATS" OF THE STANDARD SPECIFICATIONS. ASPHALTIC EMULSION SHALL BE SLOW-SETTING ANIONIC ASPHALTIC EMULSIONS TYPE, GRADE SS1, CONFORMING TO THE REQUIREMENTS OF SECTION 94, "ASPHALTIC EMULSIONS" OF THE STANDARD SPECIFICATIONS. ALL PROJECTS THAT HAVE RE-STRIPING DUE TO TRAFFIC STAGING OR NEW LANE LINES SHALL BE SEALED WITH A SLURRY SEAL CONFORMING TO THE REQUIREMENTS OF SECTION 37-3 "SLURRY SEAL AND MICRO-SURFACING" OF THE STANDARD SPECIFICATIONS AFTER THE EXISTING STRIPING IS REMOVED BY GRINDING, SANDBLASTING OR PAVEMENT OVERLAY.
26. SUBGRADE - WHEN ASPHALT CONCRETE OR ASPHALT CONCRETE BASE IS TO BE PLACED ON THE GRADING PLANE, THE GRADING PLANE AT ANY POINT SHALL NOT VARY MORE THAN 0.05 FOOT ABOVE OR BELOW THE GRADE ESTABLISHED BY THE ENGINEER. WHEN SUBBASE OR BASE MATERIAL (OTHER THAN ASPHALT CONCRETE BASE) IS TO BE PLACED ON THE GRADING PLANE, THE GRADING PLANE AT ANY POINT SHALL NOT VARY MORE THAN 0.05 FOOT ABOVE THE GRADE ESTABLISHED BY THE ENGINEER.
27. CONCRETE STRUCTURES SHALL CONFORM TO SECTION 90-2 "MINOR CONCRETE" OF THE STANDARD SPECIFICATIONS.
28. PRECAST CONCRETE STRUCTURES SHALL CONFORM TO SECTION 70-4 "PRECAST CONCRETE PIPE DRAINAGE FACILITIES" OF THE STANDARD SPECIFICATIONS.
29. WHERE TYPE B DROP INLETS EXCEED 5 FEET IN HEIGHT, REINFORCING STEEL SHALL BE INSTALLED AS SHOWN ON THE PLAN DETAIL. REINFORCING STEEL SHALL BE #4 BARS, INSTALLED IN THE VERTICAL WALLS AT 12" O.C. (BOTH DIRECTIONS). A 3" CLEARANCE SHALL BE MAINTAINED FROM THE OUTSIDE FACE OF THE WALLS. UNDER NO CIRCUMSTANCES WILL TYPE B DROP INLETS BE ALLOWED IN EXCESS OF 8 FEET IN HEIGHT.
30. WHERE ANY PORTION OF THE STRUCTURE EXCAVATION FOR VERTICAL CONCRETE STRUCTURES (MANHOLES, INLETS, VAULTS, ETC.) IS WITHIN THE STREET, MATERIAL USED TO BACKFILL SUCH STRUCTURES SHALL CONFORM TO SECTION 19-3.02D, "STRUCTURE BACKFILL" OF THE STANDARD SPECIFICATIONS. COMPACTION TESTS WILL BE TAKEN EVERY 2-3 FEET VERTICALLY. WHERE CAST-IN-PLACE STRUCTURES ARE PLACED AGAINST UNDISTURBED NATIVE MATERIAL, THIS REQUIREMENT SHALL NOT APPLY.
31. TRAFFIC STRIPING AND PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, CONFORMING TO SECTION 84-2 "TRAFFIC STRIPES AND PAVEMENT MARKINGS" OF THE STANDARD SPECIFICATIONS.
32. A GEOTECHNICAL ENGINEER AND A STRUCTURAL ENGINEER SHALL CERTIFY, RESPECTIVELY, THE GEOTECHNICAL AND STRUCTURAL ITEMS ON THE PLAN(S) WERE BUILT IN CONFORMANCE WITH THE RESPECTIVE GEOTECHNICAL AND STRUCTURAL RECOMMENDATIONS FOR THE PROJECT BEFORE FINALIZATION OF THE PROJECT.
33. IF BLASTING ACTIVITIES ARE TO OCCUR IN CONJUNCTION WITH DEVELOPMENT, THE DEVELOPER SHALL ENSURE THAT SUCH BLASTING ACTIVITIES ARE CONDUCTED IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
34. IF BURNING ACTIVITIES ARE TO OCCUR DURING CONSTRUCTION, THE DEVELOPER SHALL OBTAIN THE NECESSARY BURNING PERMITS AND AIR POLLUTION PERMITS FROM THE CALIFORNIA DEPARTMENT OF FORESTRY (CDF) AND FORM THE AIR QUALITY MANAGEMENT DISTRICT (AQMD) PRIOR TO SAID BURNING ACTIVITIES.
35. STORM DRAINS SHALL BE TELEVISED WHEN BACKFILL REACHES THE POINT OF 2 FOOT OF COMPACTED TRENCH FILL OVER THE PIPE. A COPY OF THE VIDEOTAPE WILL BE PROVIDED TO THE DOT INSPECTOR, AND NO PAVING OVER THE PIPE WILL BE DONE WITHOUT THE INSPECTOR'S AUTHORIZATION. COST OF TELEVISING WILL BE INCLUDED IN THE UNIT COST OF CONSTRUCTION.
36. STORM DRAINS IN PUBLIC RIGHT-OF-WAY, IN IRREVOCABLE OFFERS OF DEDICATIONS, OR THAT ARE TO BE MAINTAINED BY A ZONE OF BENEFIT (ZOB), SERVICE DISTRICT (CSD), SERVICE AREA (CSA), OR ANY OTHER PUBLICLY ADMINISTERED AGENCY WILL BE OF THE FOLLOWING MATERIALS:
    A. REINFORCED CONCRETE PIPE (RCP)
    B. HIGH DENSITY POLYETHYLENE PIPE (HDPE), 48" MAXIMUM
    C. CORRUGATED STEEL PIPE, BUT ONLY UNDER THE FOLLOWING CIRCUMSTANCES
        (1) 48" MAXIMUM
        (2) NON-EROSIVE FLOW VELOCITIES
        (3) ALUMINIZED
        (4) NOMINAL THICKNESS FOR 50 YEAR LIFE (AASHTO DESIGNATION M190)
        (5) 4 INCH REINFORCED CONCRETE PAD IN BOTTOM THIRD
        (6) IN NON-CORROSIVE SOILS (INCLUDING BACKFILL) (7). STEEL PLATE, OR
    D. STEEL ARCH WITH CONCRETE OR "SOFT" BOTTOM.
37. STREET NAME SIGNS SHALL BE INSTALLED AT EVERY INTERSECTION IN ACCORDANCE WITH LATEST APPROVED CALIFORNIA MUTCD.
38. THE CONTRACTOR SHALL FURNISH AND INSTALL TYPE F-2 MARKERS AT BOTH ENDS OF CULVERTS. THE CULVERT MARKERS SHALL HAVE A TWO INCH WIDE BLACK STRIP AT THE TOP OF THE MARKER. ABOVE ELEVATIONS 3,000 FEET, THE CONTRACTOR SHALL FURNISH AND INSTALL TYPE F MARKERS WITH SNOW POLE BRACKETS ON ALL DIKES AT 100 FOOT INTERVALS AND AT BOTH ENDS OF CULVERTS. ABOVE ELEVATION 3,000 FEET, THE CONTRACTOR SHALL INSTALL METAL MARKER POSTS WITH SNOW POLE BRACKETS NEAR EACH FIRE HYDRANT.
39. CONTRACTOR SHALL NOT START ANY UTILITY WORK UNTIL A JOINT TRENCH COMPOSITE PLAN HAS BEEN APPROVED BY THE TD (WATER AND SEWER EXCEPTED). ALL UTILITY WORK PERFORMED IN THE COUNTY RIGHT OF WAY SHALL REQUIRE AN ENCROACHMENT PERMIT.
40. WATER AND SEWER LINES SHALL BE TESTED AND APPROVED BY EID PRIOR TO PLACING PAVEMENT ON THE STREET.
41. OMISSIONS AND ERRORS ON PLANS SHALL NOT BE VALID, AND ALL CODES AND LAWS MUST BE COMPLIED WITH BY THE OWNER, ENGINEER AND CONTRACTOR.
42. ALL NEW OR RECONSTRUCTED DRAINAGE INLETS SHALL HAVE A STORM WATER QUALITY MESSAGE STAMPED INTO THE CONCRETE. ALL STAMPS SHALL BE APPROVED BY THE TD INSPECTOR PRIOR TO BEING USED.
43. IMPORT OR EXPORT OVER 250 CUBIC YARDS TO ANY OFF-SITE BORROW OR DISPOSAL SITE WILL REQUIRE A SEPARATE APPROVED GRADING PERMIT FOR THE OFF-SITE LOCATION PRIOR TO TD SIGNATURE APPROVAL OF PLANS.
44. IN THE EVENT OF THE DISCOVERY OF HUMAN REMAINS, ALL WORK IS TO STOP AND THE COUNTY CORONER SHALL BE IMMEDIATELY NOTIFIED PURSUANT TO SECTION 7050.5 OF THE HEALTH AND SAFETY CODE AND SECTION 5097.98 OF THE PUBLIC RESOURCES CODE. IF THE REMAINS ARE DETERMINED TO BE NATIVE AMERICAN, THE CORONER MUST CONTACT THE NATIVE AMERICAN HERITAGE COMMISSION WITHIN 24 HOURS. THE TREATMENT AND DISPOSITION OF HUMAN REMAINS SHALL BE COMPLETED CONSISTENT WITH GUIDELINES OF THE NATIVE AMERICAN HERITAGE COMMISSION.

GENERAL WATER NOTES

1. WORK SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION AND TO THE SATISFACTION OF THE EL DORADO IRRIGATION DISTRICT (EID). CONSTRUCTION SHALL CONFORM TO THESE PLANS AND EID's LATEST VERSION OF THE TECHNICAL SPECIFICATIONS, STANDARD DRAWINGS, AND CURRENT DRINKING WATER REGULATIONS OR THESE STANDARDS.
2. CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION CONFERENCE WITH EID INSPECTION 5 WORKING DAYS IN ADVANCE OF DOING WORK WITHIN THEIR JURISDICTION. CONSTRUCTION SHALL BE STARTED NO LATER THAN FIVE(5) DAYS AFTER THE PRECONSTRUCTION CONFERENCE.
3. LOCATION OF ALL UNDERGROUND FACILITIES ARE APPROXIMATE ONLY - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL FACILITIES PRIOR TO ANY EXCAVATION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND FACILITIES AFFECTED BY THE WORK AND SHALL CONTACT UNDERGROUND SERVICES ALERT (USA) 48 HOURS PRIOR TO ANY EXCAVATION WORK FOR DETERMINATION AND LOCATION OF UNDERGROUND UTILITIES (811 OR 800-227-2600)
5. CONNECTIONS TO EXISTING WATER FACILITY SHALL BE DONE BY A CLASS A LICENSED CONTRACTOR IN ACCORDANCE WITH EID TIE-IN PROCEDURES PER TECHNICAL SPECIFICATION.
6. WHERE EXCAVATIONS FOR ANY FACILITIES CONSTRUCTION EXCEED 5 FEET IN DEPTH, CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM CAL/OSHA IN SACRAMENTO (PHONE 1-916-263-2800) POST PERMIT AT THE CONSTRUCTION SITE AND COMPLY WITH ALL REQUIREMENTS.
7. THE CONTRACTOR SHALL NOTIFY EID INSPECTION 48 HOURS PRIOR TO START OR RESTART OF WORK, ADDITIONALLY IF WORK WILL BE STOPPED FOR MORE THAN ONE WORKING DAY.
8. ONLY EID PERSONNEL SHALL OPERATE ANY VALVES OR APPURTENANCES ON EXISTING WATER SYSTEM.
9. THE TOTAL SITE REQUIRED FIRE FLOW IS 1500 GPM AT 20 PSIG RESIDUAL.
10. BASED UPON A HYDRAULIC GRADE LINE OF --- FT AT STATIC CONDITIONS AND --- FT DURING FIRE FLOW AND MAXIMUM DAY DEMANDS, THE MAXIMUM AND MINIMUM PRESSURES ARE CALCULATED TO BE --- PSI AND --- PSI RESPECTIVELY.
11. PIPELINES SHALL BE CONTINUITY AND HYDROSTATICALLY TESTED, DISINFECTED, FLUSHED, AND BACTERIA TESTED IN ACCORDANCE WITH EID'S TECHNICAL SPECIFICATION. ALL DISINFECTING SHALL BE ACCORDANCE WITH THE MOST RECENT AMERICAN WATER WORKS ASSOCIATION STANDARDS.
12. ALL LIDS SHALL BE MARKED "WATER".
13. CURBS SHALL BE WET STAMPED WITH A "W" BRAND WHERE WATER SERVICES INTERCEPT.
14. CONTRACTOR SHALL HAVE A COPY OF EID'S CONSTRUCTION STANDARDS ON THE JOB. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AT ALL TIMES ON SITE.
15. REVISIONS TO THE DRAWINGS MUST BE APPROVED IN WRITING BY EID
16. STAKING INFORMATION: MINIMUM SPACING SHALL BE 50 FEET (25 FEET IN RADIUS) UNLESS OTHERWISE DIRECTED BY EID. INFORMATION WILL INCLUDE OFFSET, TYPE OF FACILITY AND CUT TO FLOW LINE ON THE FRONT OF THE STAKE AND ELEVATION AND STATION NUMBER ON THE BACK. ANGLE POINTS AND APPURTENANCES TO BE STAKED INCLUDING LINE AND CURB STAKES AS NEEDED. CUT SHEETS REQUIRED WHERE SUBGRADE HAS NOT BEEN MADE.
17. AT A MINIMUM, ALL MATERIALS, CONSTRUCTION, AND TESTING SHALL COMPLY WITH CURRENT AMERICAN WATER WORKS ASSOCIATION STANDARDS, CALIFORNIA DIVISION OF DRINKING WATER STANDARDS, UNIFORM PLUMBING CODE, AND THE DISTRICT'S STANDARD SPECIFICATIONS, WHICH EVER IS MORE STRINGENT.

GENERAL SEWER NOTES

1. ALL WORK WILL BE SUBJECT TO INSPECTION AND APPROVAL BY THE EL DORADO IRRIGATION DISTRICT (EID). ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND EID'S LATEST VERSION OF THE TECHNICAL SPECIFICATIONS AND STANDARD DRAWINGS.
2. CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION CONFERENCE WITH EID INSPECTION 5 WORKING DAYS IN ADVANCE OF DOING WORK WITHIN THEIR JURISDICTION. CONSTRUCTION SHALL BE STARTED NO LATER THAN FIVE (5) DAYS AFTER THE PRECONSTRUCTION CONFERENCE.
3. LOCATION OF ALL UNDERGROUND FACILITIES ARE APPROXIMATE ONLY - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL FACILITIES PRIOR TO ANY EXCAVATION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND FACILITIES AFFECTED BY THE WORK AND SHALL CONTACT UNDERGROUND SERVICES ALERT (USA) 48 HOURS PRIOR TO ANY EXCAVATION WORK FOR DETERMINATION AND LOCATION OF UNDERGROUND UTILITIES (PHONE 1-800-642-2444).
5. CONNECTIONS TO EXISTING SEWER FACILITIES SHALL BE DONE BY A LICENSED CONTRACTOR IN ACCORDANCE WITH EID TIE-IN PROCEDURES PER TECHNICAL SPECIFICATIONS.
6. WHERE EXCAVATIONS FOR ANY FACILITIES CONSTRUCTION EXCEED 5 FEET IN DEPTH, CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM CAL/OSHA IN SACRAMENTO (PHONE 1-916-263-2800).
7. SERVICE INSTALLATIONS IN ROADWAYS WITH CUTS OR FILLS GREATER THAN 8 FEET IN HEIGHT AND SLOPES STEEPER THAN 3:1 SHALL HAVE THE CLEAN OUT SET AT FINISH GRADE NEXT TO THE ROAD IN THE LOCATION DIRECTED BY THE DISTRICT. THE SERVICE LINE SHALL THEN BE EXTENDED 5 FEET BEYOND THE SLOPE CATCH POINT WITH PVC SDR 35 SIZED TO MATCH THE SERVICE. PLACE STEEL T-POSTS PAINTED GREEN AT THE END OF THIS SERVICE LINE.
8. ALL LIDS SHALL BE MARKED "SEWER".
9. ALL CURBS SHALL BE WET STAMPED WITH AN "S" BRAND WHERE SEWER SERVICES INTERCEPT.
10. LINED MANHOLES REQUIRED.
11. CONTRACTOR SHALL HAVE A COPY OF THE EID'S CONSTRUCTION STANDARDS ON THE JOB.
12. ALL REVISIONS TO THESE DRAWINGS MUST BE APPROVED IN WRITING BY EID
13. THE CONTRACTOR SHALL NOTIFY THE EID INSPECTOR 48 HOURS PRIOR TO START OR RESTART OF WORK.
14. STAKING INFORMATION: MINIMUM SPACING SHALL BE 50 FEET (25 FEET IN RADIUS) UNLESS OTHERWISE DIRECTED BY EID. INFORMATION WILL INCLUDE OFFSET, TYPE OF FACILITY AND CUT TO FLOW LINE ON THE FRONT OF THE STAKE AND ELEVATION AND STATION NUMBER ON THE BACK. ANGLE POINTS AND APPURTENANCES TO BE STAKED INCLUDING LINE AND CURB STAKES AS NEEDED. CUT SHEETS REQUIRED WHERE SUBGRADE HAS NOT BEEN MADE.
15. ON REPLACEMENT PROJECTS, THE EXISTING FACILITY MUST REMAIN IN SERVICE UNTIL THE NEW UTILITY IS ACCEPTED AND PUT INTO SERVICE.

FIRE PROTECTION DISTRICT NOTES

1. ALL FIRE HYDRANTS INSTALLED SHALL BE FROM E.I.D.'S APPROVED MATERIALS LIST AND BE PAINTED WITH RUST INHIBITIVE, SAFETY WHITE ENAMEL. THERE SHALL BE A BLUE REFLECTIVE MARKER PLACED PERPENDICULAR TO CENTERLINE OF STREET PER EL DORADO HILLS FIRE DEPARTMENT STANDARDS.

INSPECTION REQUIREMENTS FOR CMU RETAINING WALLS

INSPECTION	SCOPE OF INSPECTION
1ST	FOOTING PAD AND SIZE, KEY SIZE, REINFORCEMENT, SOIL CONDITION AT TOE. DISCUSS SPECIAL INSPECTION PROCEDURES.
2ND	4 FOOT LIFT, PRIOR TO GROUT POUR. BLOCK, MORTAR JOINTS, REINFORCEMENT AND GROUT CELLS.
3RD	TOP LIFT, PRIOR TO LAST GROUT POUR. BLOCK, MORTAR JOINTS, REINFORCEMENT AND GROUT CELLS. ANCHOR BOLTS AND HARDWARE PLACEMENT.
4TH	DRAIN(S), WALL WATERPROOFING, RESTRAINED SUPPORT OR TEMPORARY SHORING PER DESIGN PROFESSIONAL. DISCUSS DRAIN ROCK AND BACKFILL COMPACTION PROCEDURES.
FINAL	DRAIN TO DAYLIGHT, WEEP HOLES, RESTRAINED SUPPORT, EROSION CONTROL, BACKFILL COMPACTION REPORT, SPECIAL INSPECTION REPORT.

SPECIAL INSPECTIONS: AFTER EXCAVATION, THE FOLLOWING SPECIAL INSPECTIONS SHALL BE PERFORMED BY THE DESIGNER OR A CERTIFIED INSPECTOR ACCEPTABLE TO THE DIRECTOR; AND TESTING SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY ACCEPTABLE TO THE DIRECTOR.

SPECIAL INSPECTION AND TESTING		
SOIL COMPACTION		X
REINFORCED CONCRETE	X	
STRUCTURAL MASONRY	X	
SHOTCRETE	X	
SEGMENTAL WALL PLACE		X
GRIDS AND TIE BACKS		X
ICBO/ICC REPORT CRITERIA	AS SPECIFIED	AS SPECIFIED
STRUCTURAL OBSERVATION	AS SPECIFIED	AS SPECIFIED

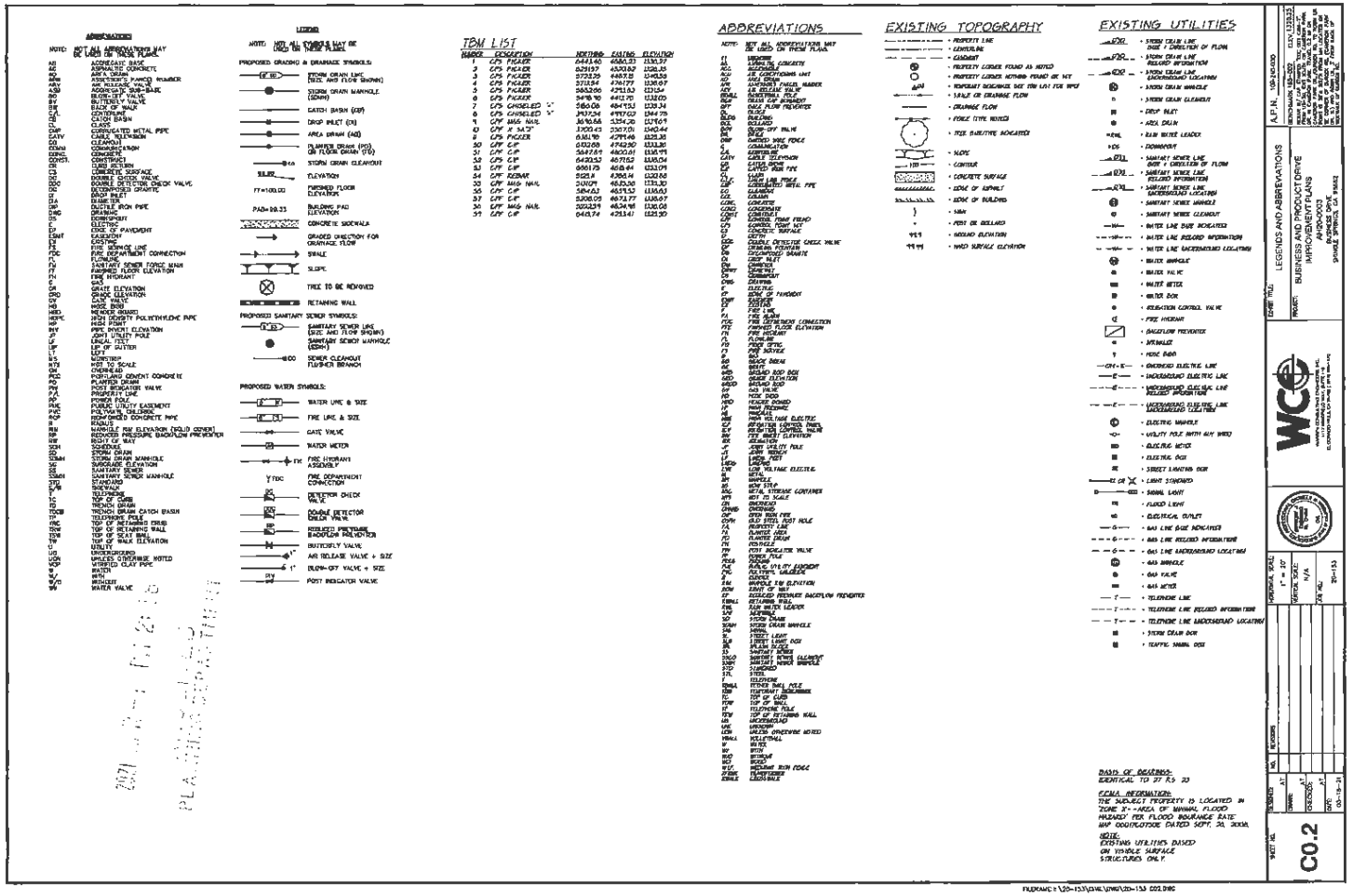
A.P.N. 109-240-030

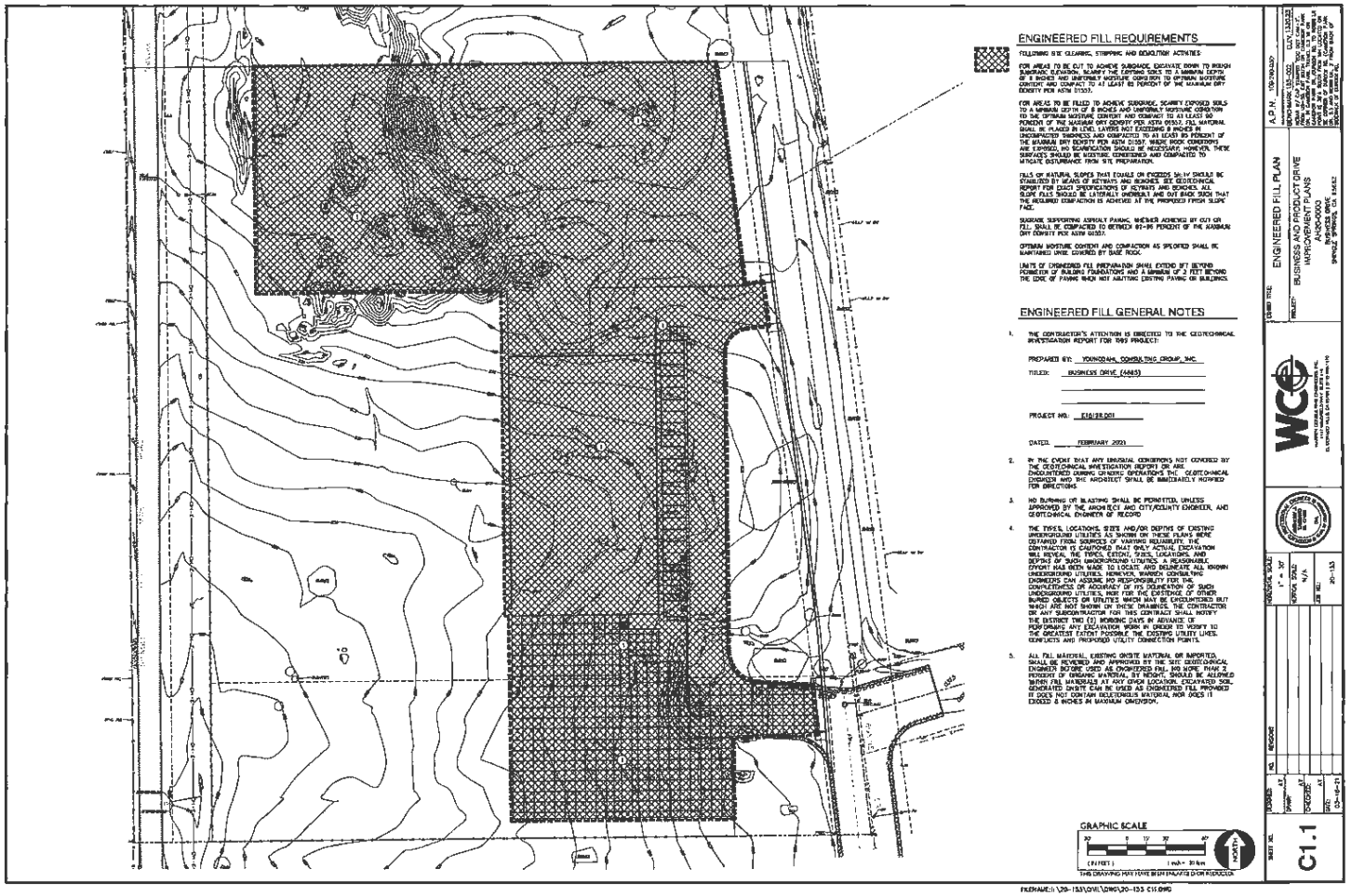
SHEET TITLE: GENERAL NOTES

BUSINESS AND PRODUCT DRIVE IMPROVEMENT PLANS

WCE

SHEET NO. C0.1

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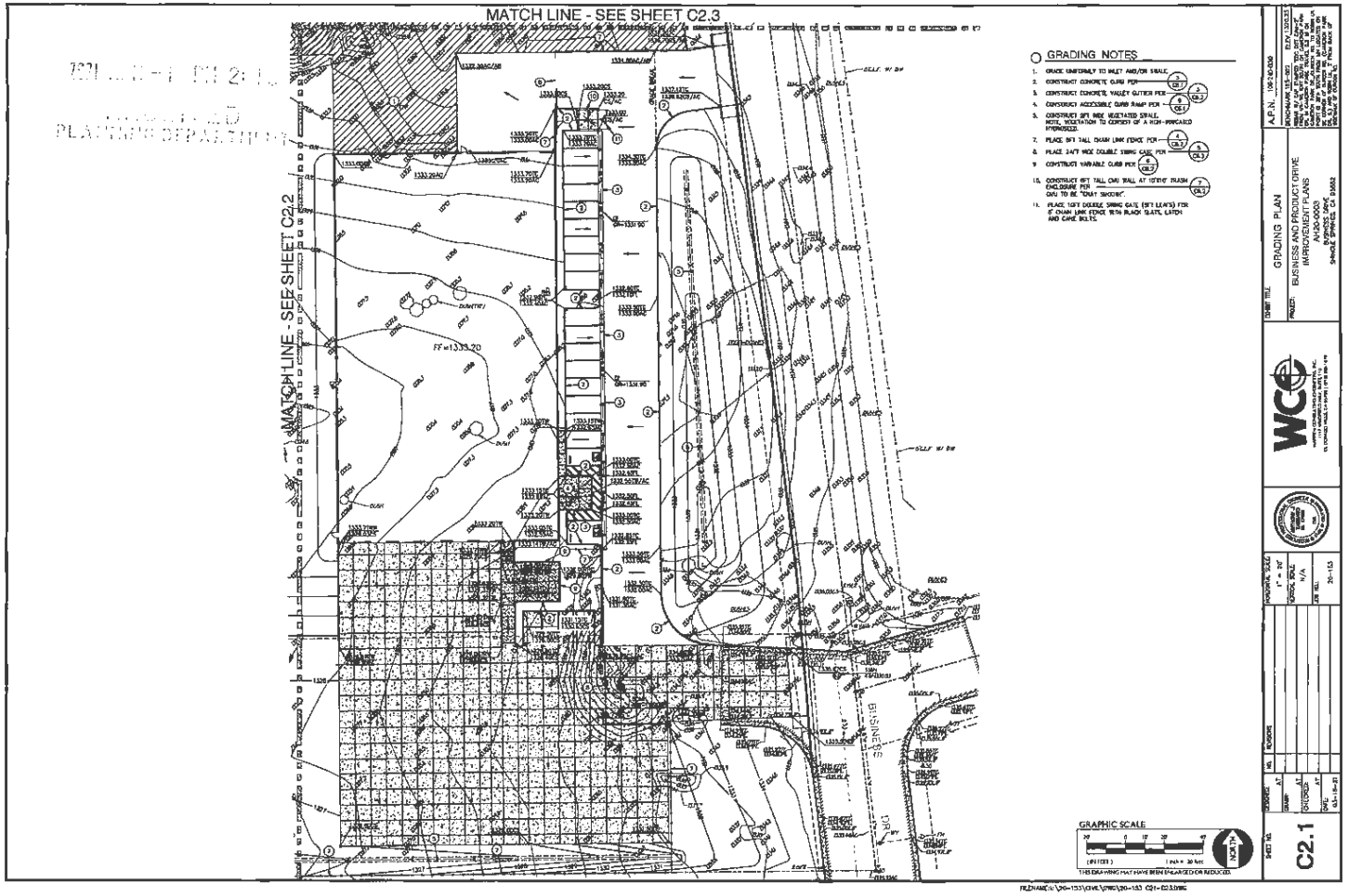
BUSINESS AND PRODUCT DRIVE
IMPROVEMENT PLANS
C1.1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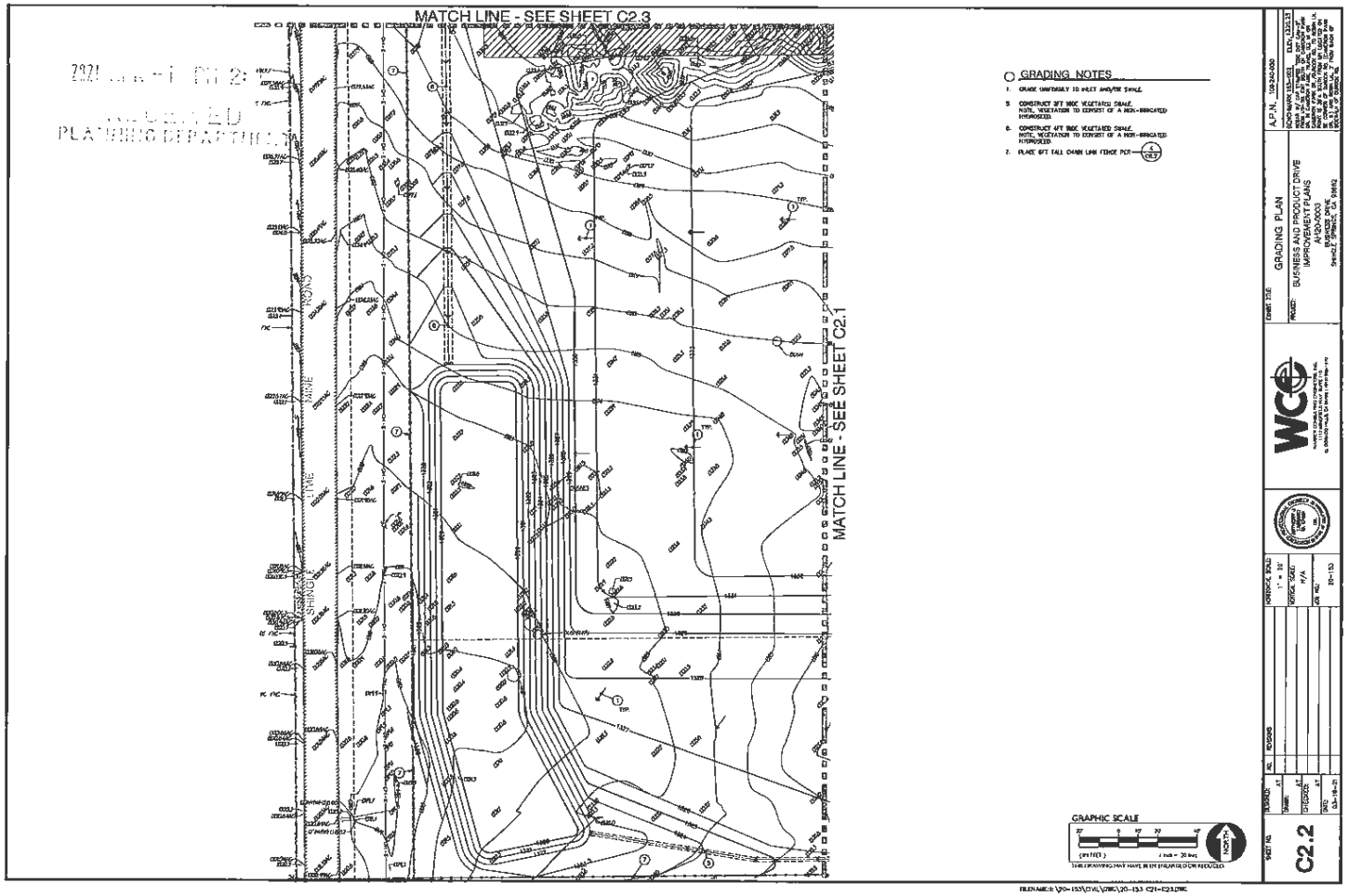
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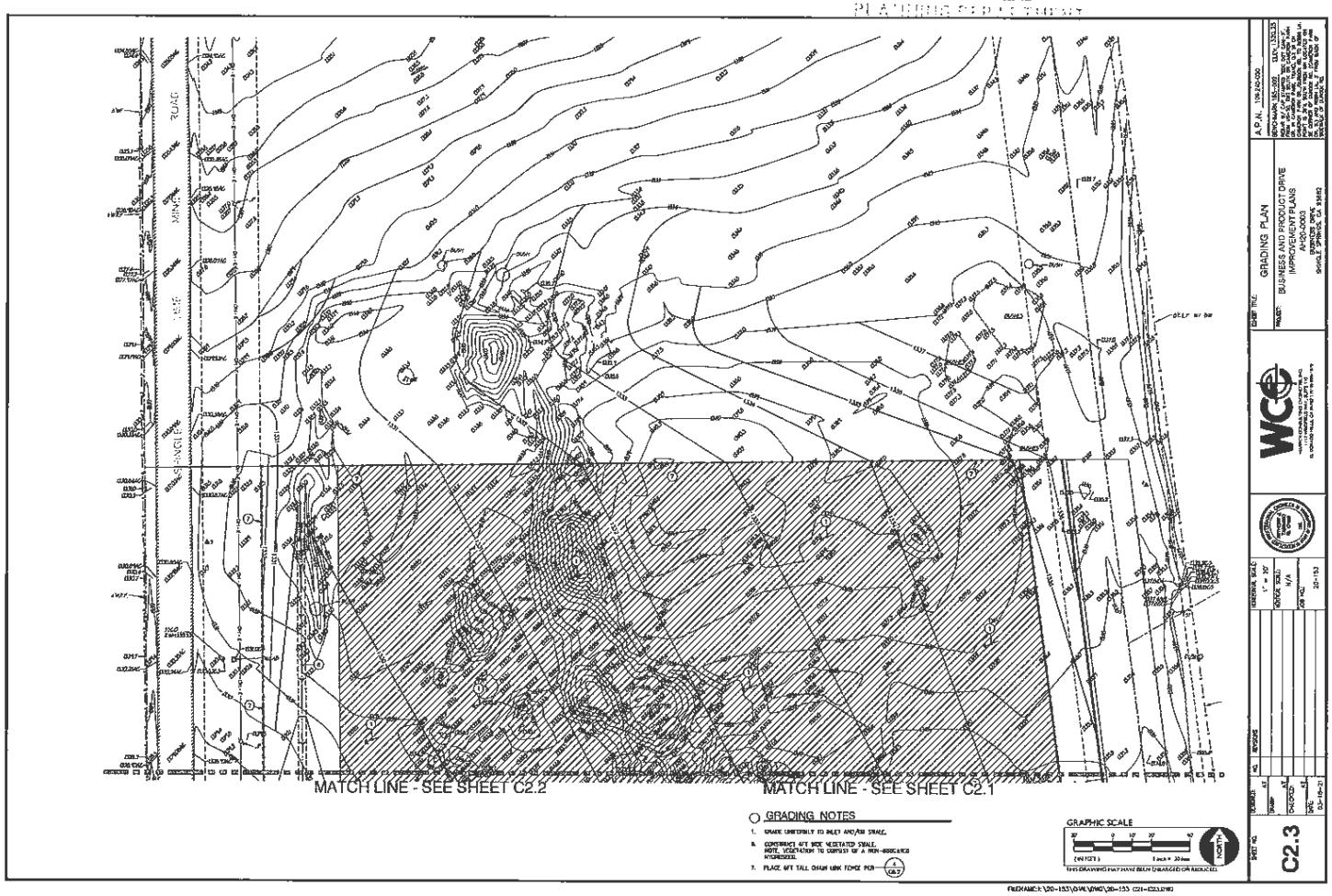
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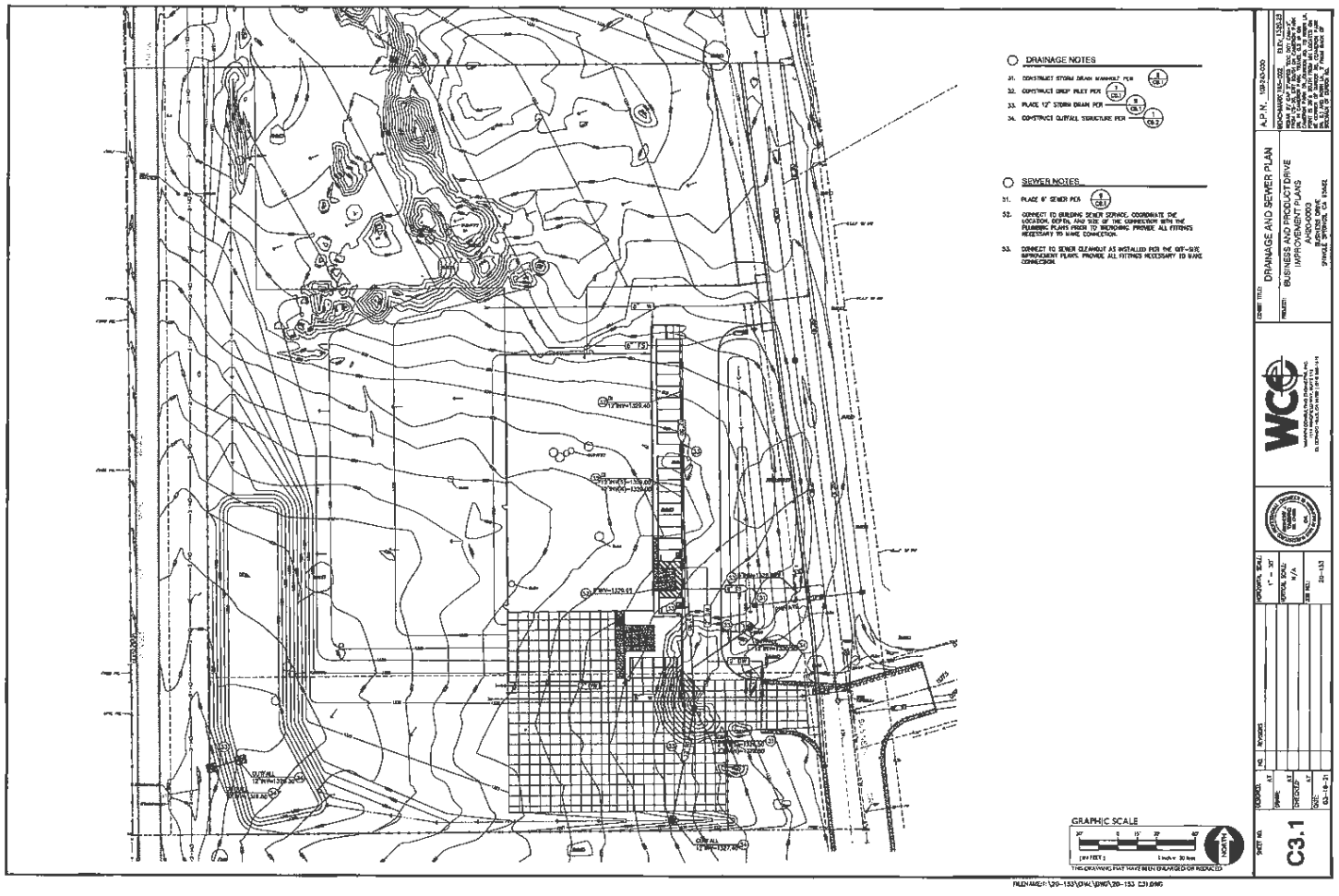
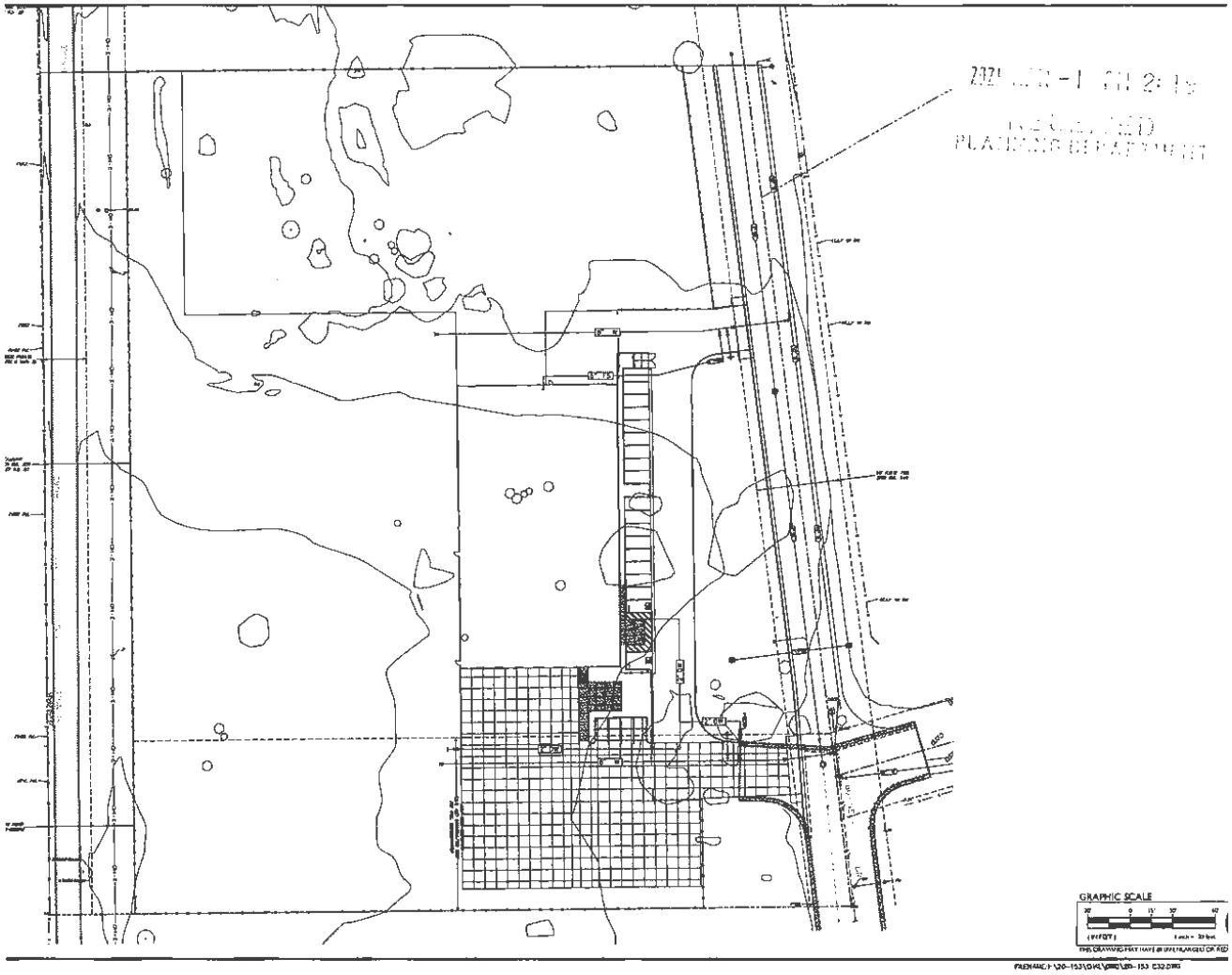
GRADING NOTES
GRAPHIC SCALE
GRADING PLAN
BUSINESS AND PRODUCT DRIVE
IMPROVEMENT PLANS
C2.3

DR21-0005 BARSOTTI WAREHOUSE OFFICE
ATTACHMENT 20 - APPLICATION PACKET

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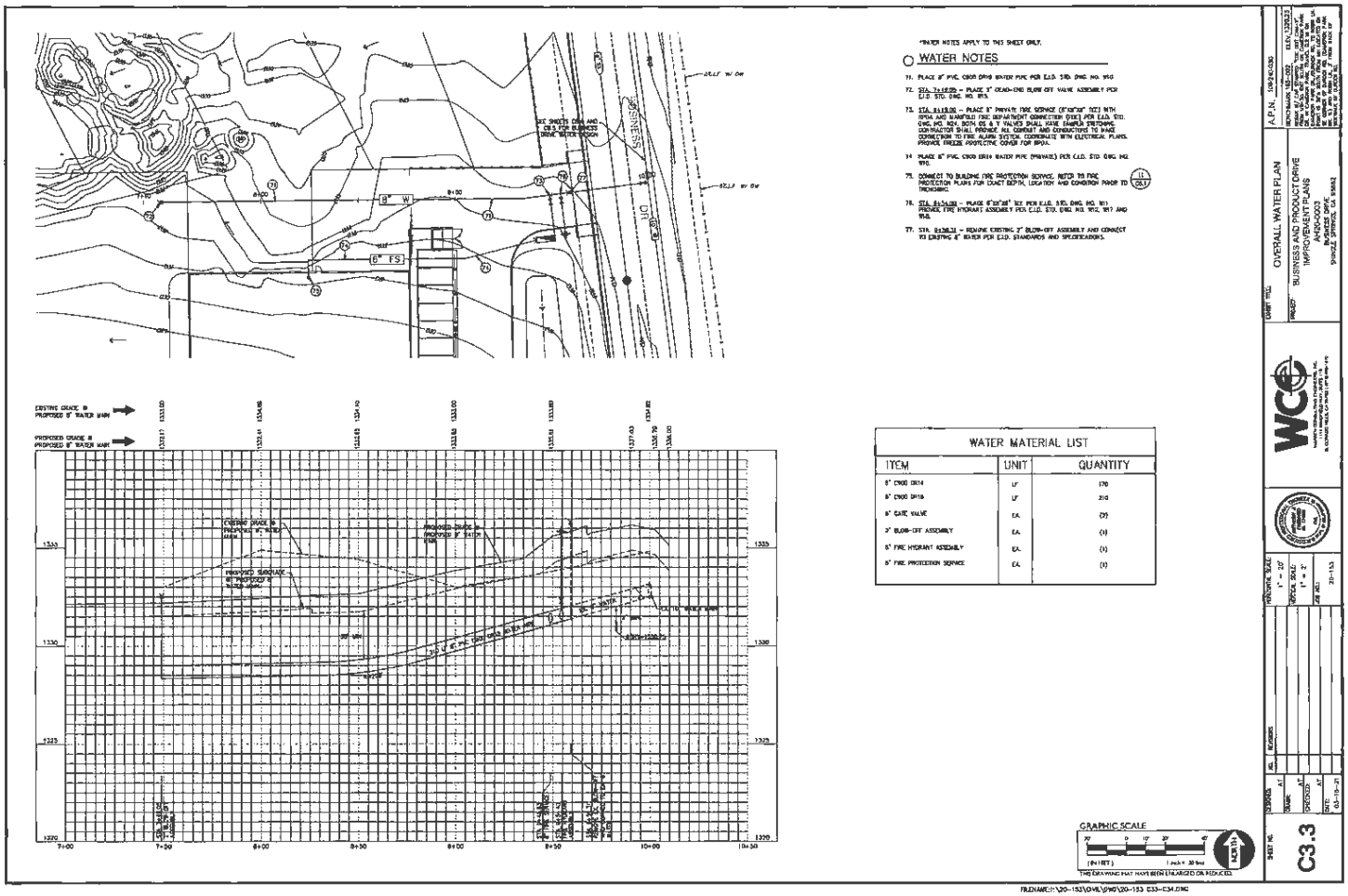

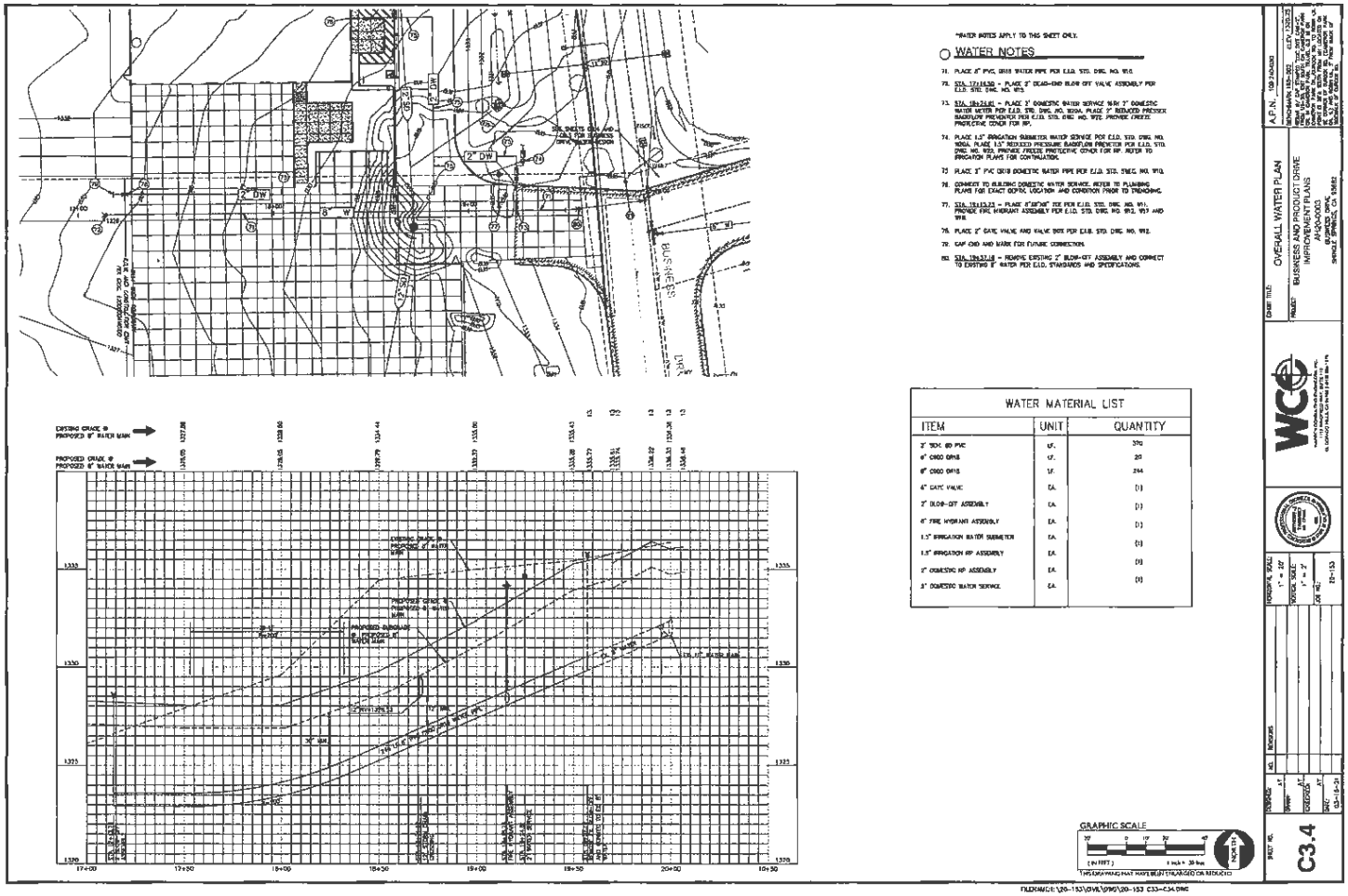

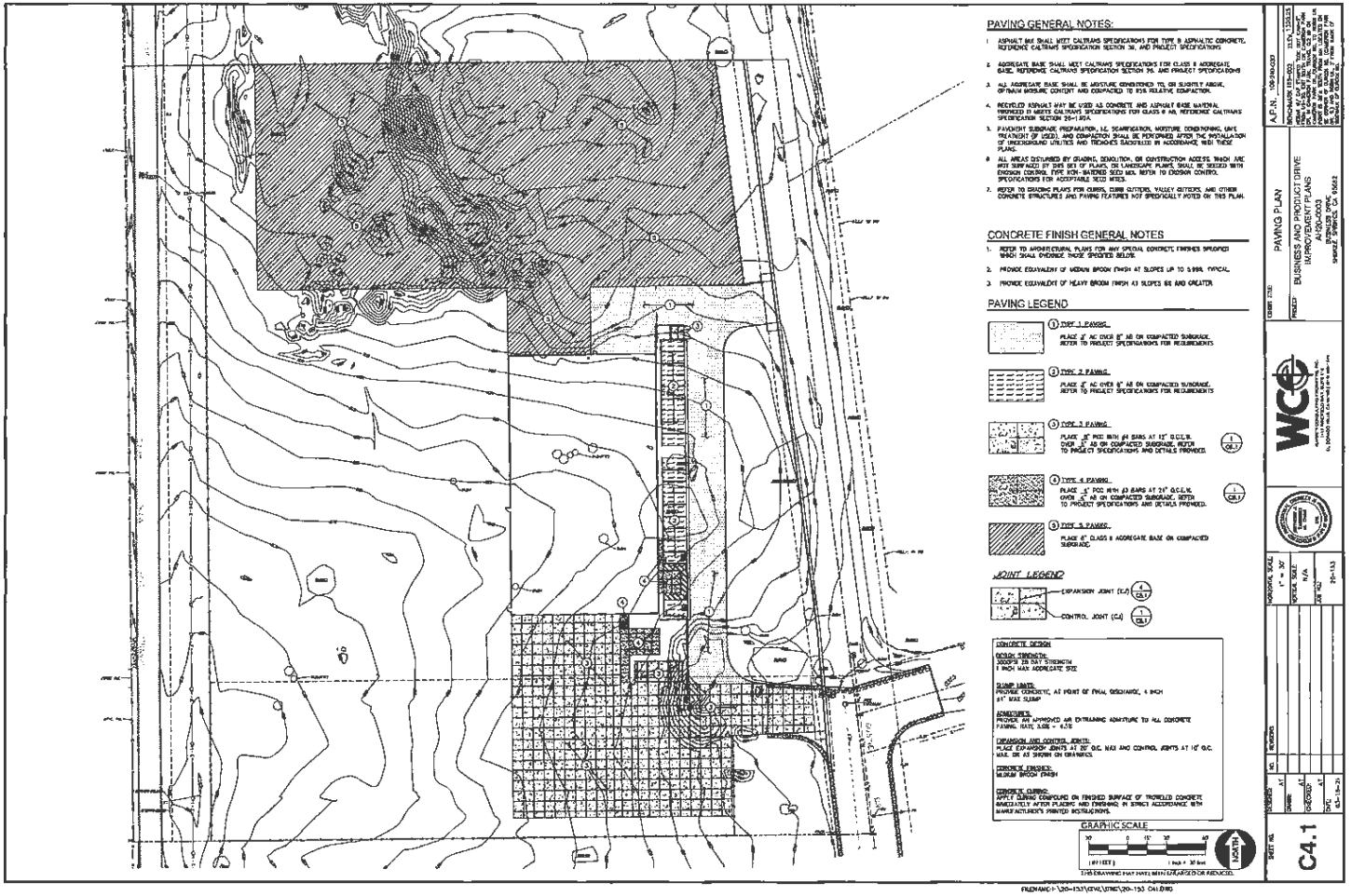
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CONCRETE FINISH GENERAL NOTES
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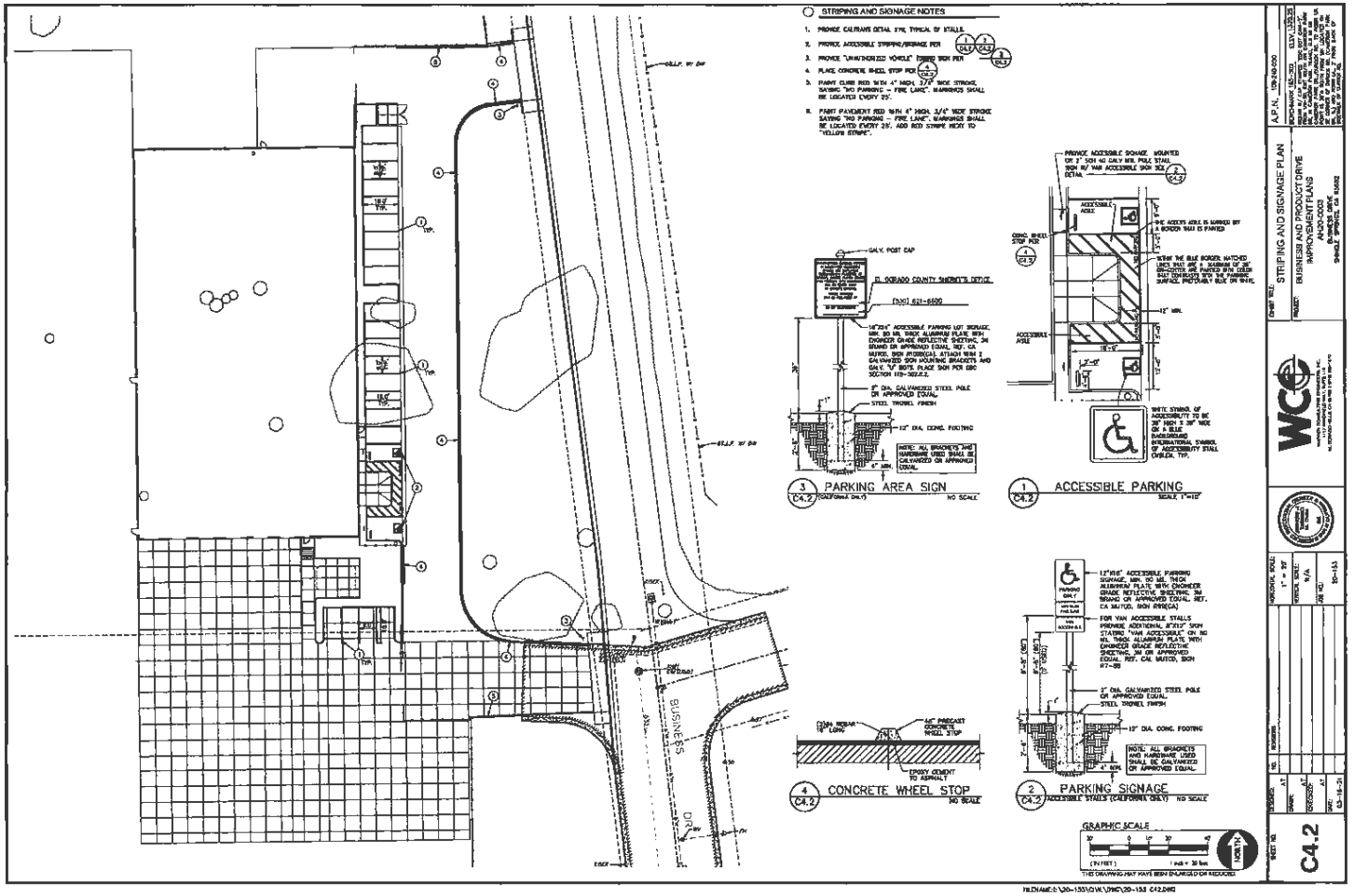
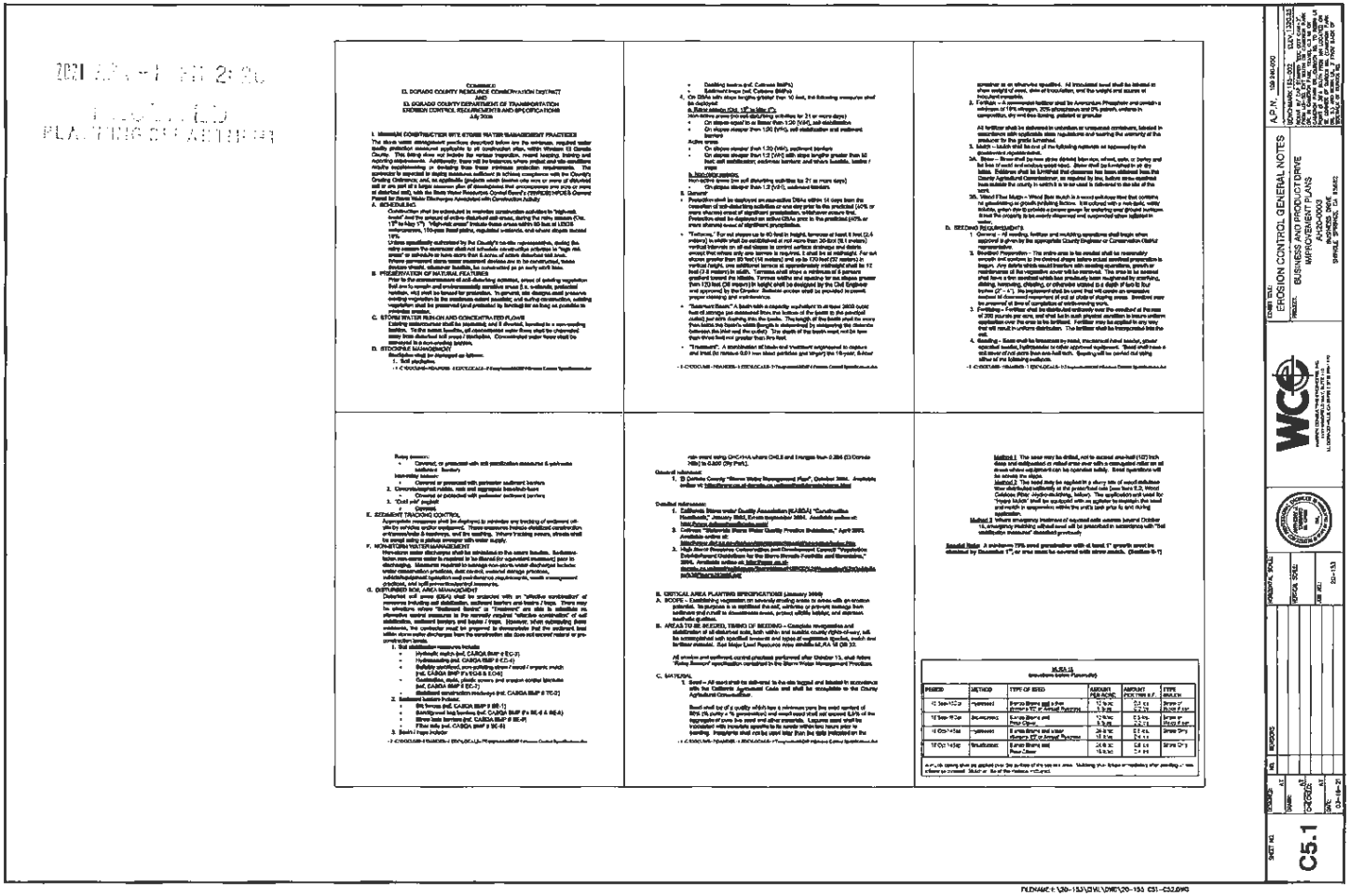
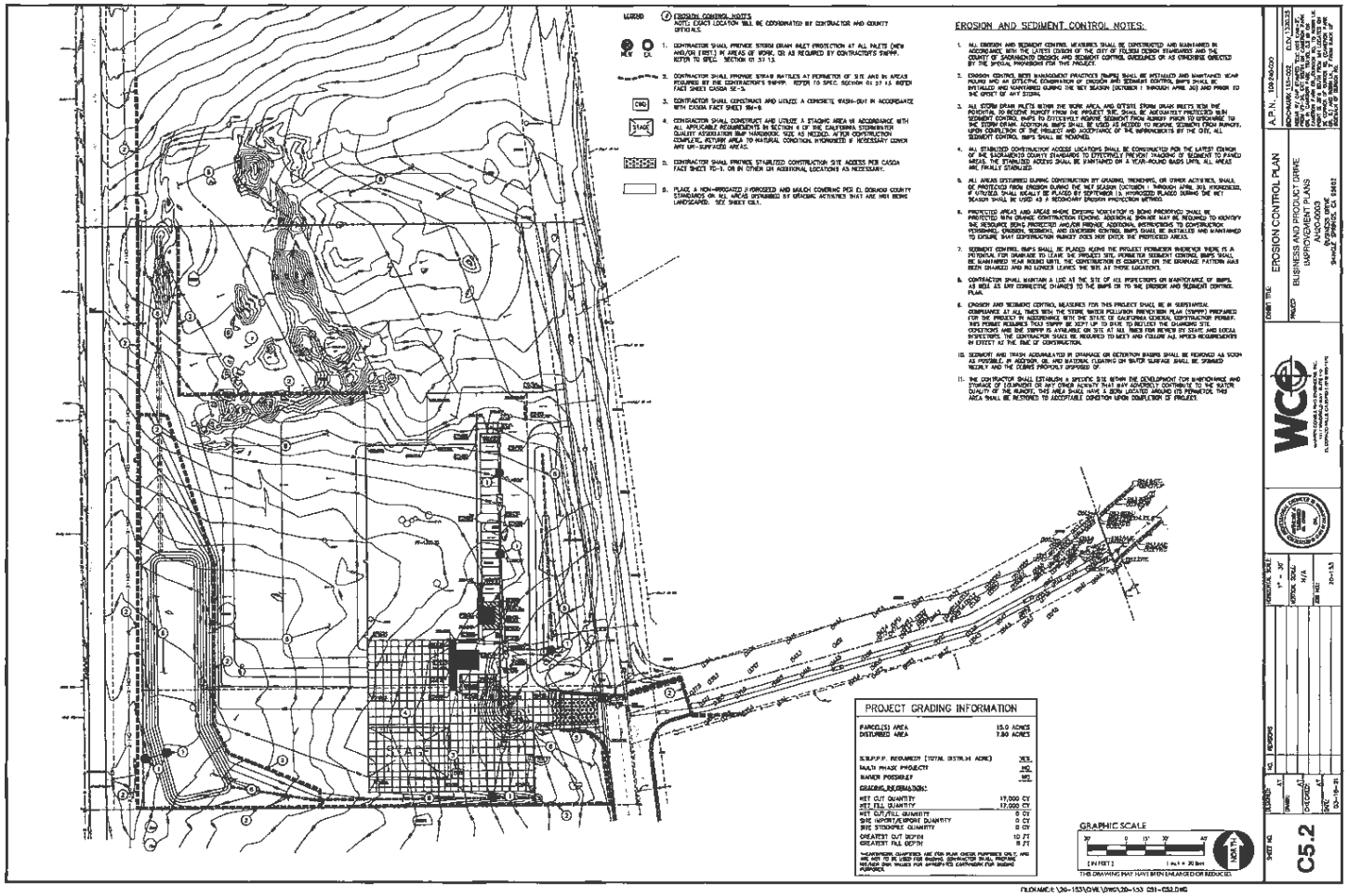
BUSINESS AND PRODUCT DRIVE IMPROVEMENT PLANS
C4.1



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EROSION CONTROL PLAN
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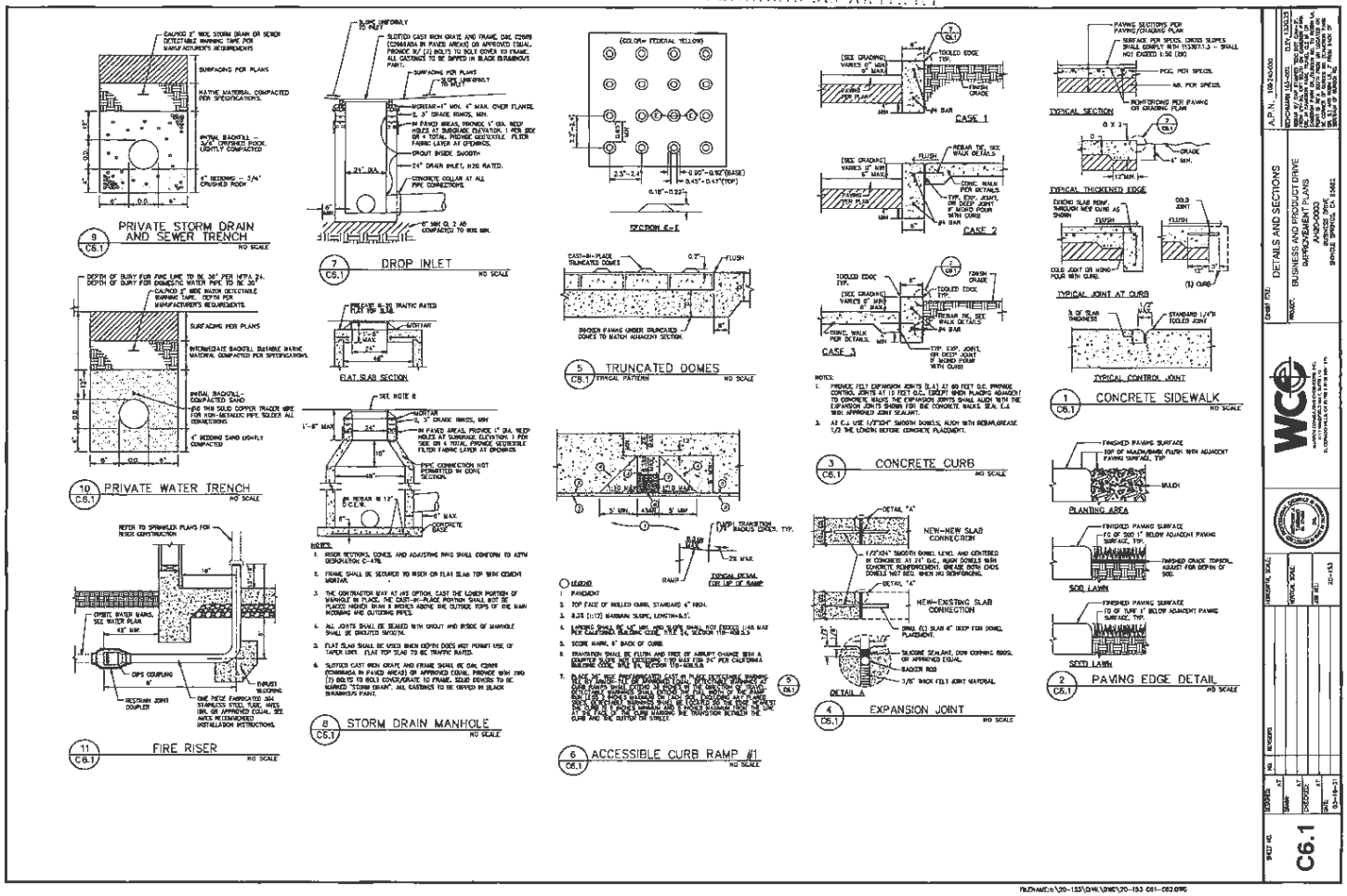
C5.2


PRIVATE STORM DRAIN AND SEWER TRENCH
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DROP INLET
NO SCALE
TRUNCATED DOMES
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PRIVATE WATER TRENCH
NO SCALE
FLAT SLAB SECTION
CONCRETE CURB
NO SCALE
PAVING EDGE DETAIL
NO SCALE
FIRE RISER
NO SCALE
STORM DRAIN MANHOLE
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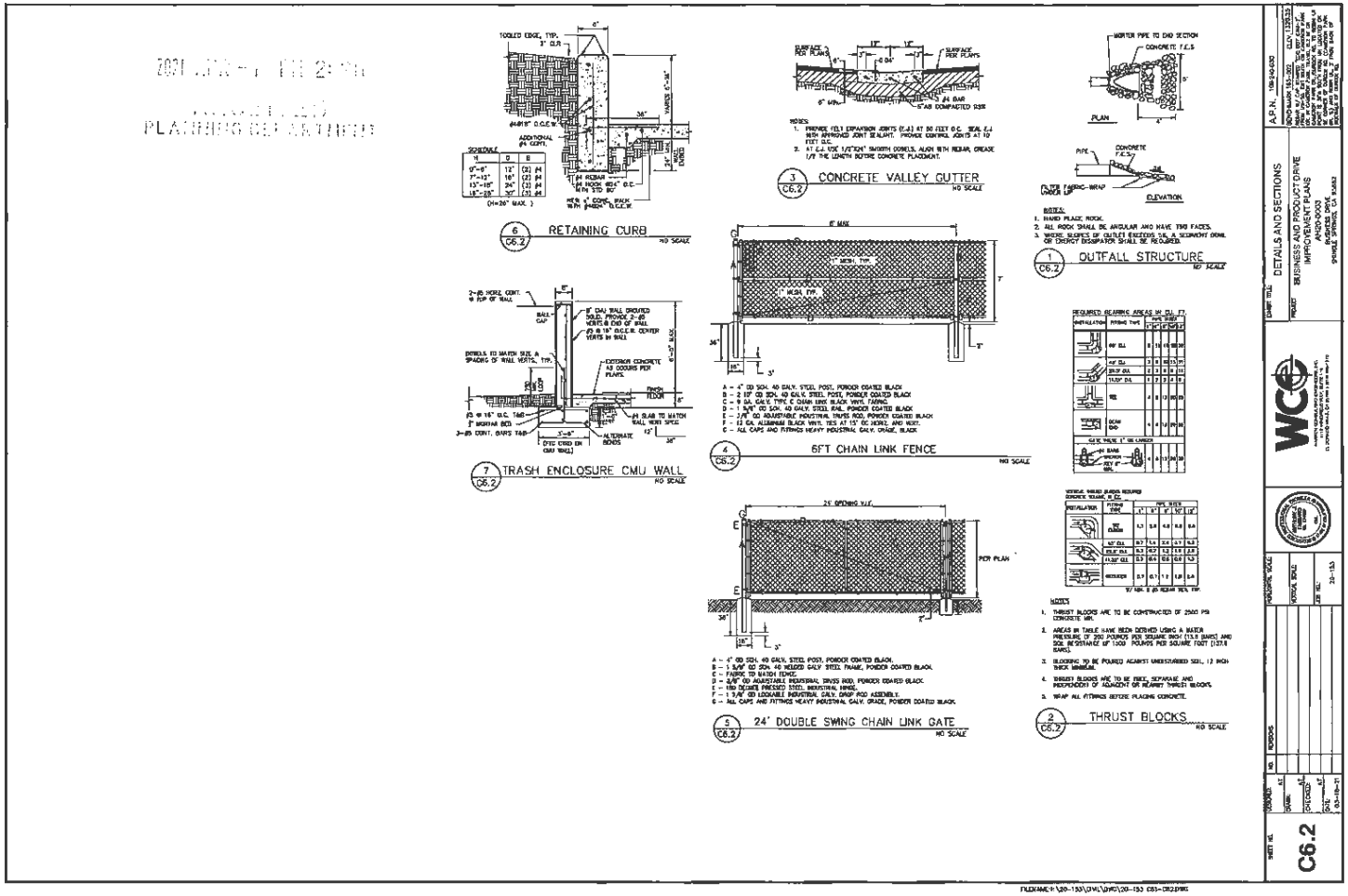
DETAILS AND SECTIONS
BUSINESS AND PRODUCT DRIVE IMPROVEMENT PLANS
C6.1


RETAINING CURB
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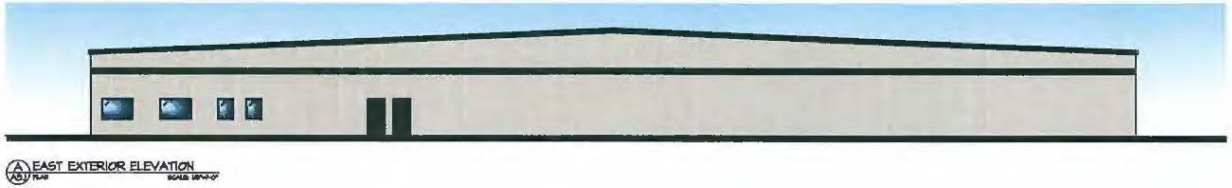
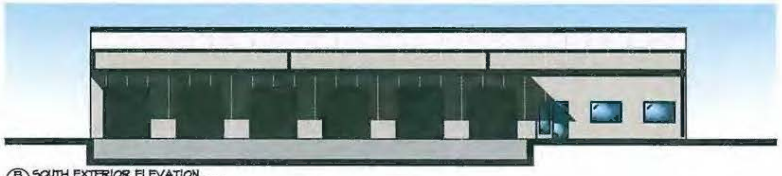
OUTFALL STRUCTURE
TRASH ENCLOSURE CMU WALL
6FT CHAIN LINK FENCE
24' DOUBLE SWING CHAIN LINK GATE
THRUST BLOCKS
DETAILS AND SECTIONS
BARSOTTI WAREHOUSE OFFICE
C6.2



A EAST EXTERIOR ELEVATION



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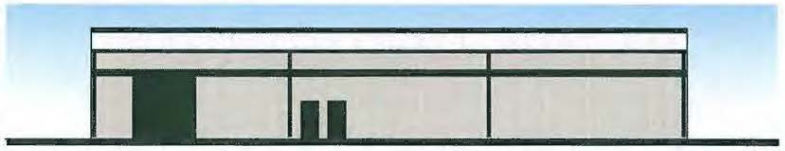

C NORTH EXTERIOR ELEVATION

D WEST EXTERIOR ELEVATION

COLOR LEGEND:

CBC STEEL BUILDINGS REFLECTIVE WHITE

CBC STEEL BUILDINGS SANDSTONE

CBC STEEL BUILDINGS BURNISHED SLATE

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PLANNING DEPARTMENT

D. G. GRANADE, INC.

BARSOTTI JUICE COMPANY WAREHOUSE

4665 BUSINESS DRIVE, SHINGLE SPRINGS CALIFORNIA

GBDH

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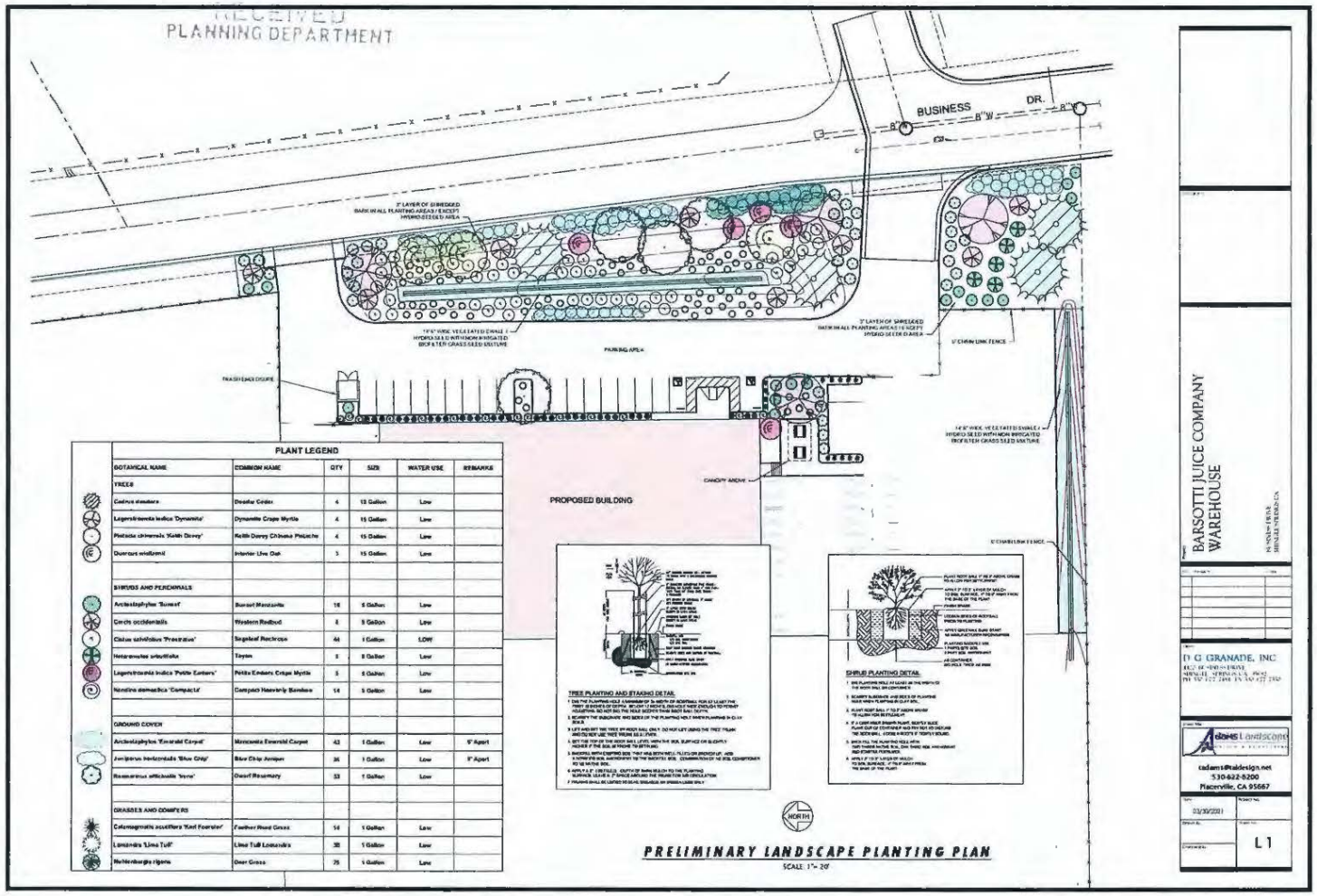

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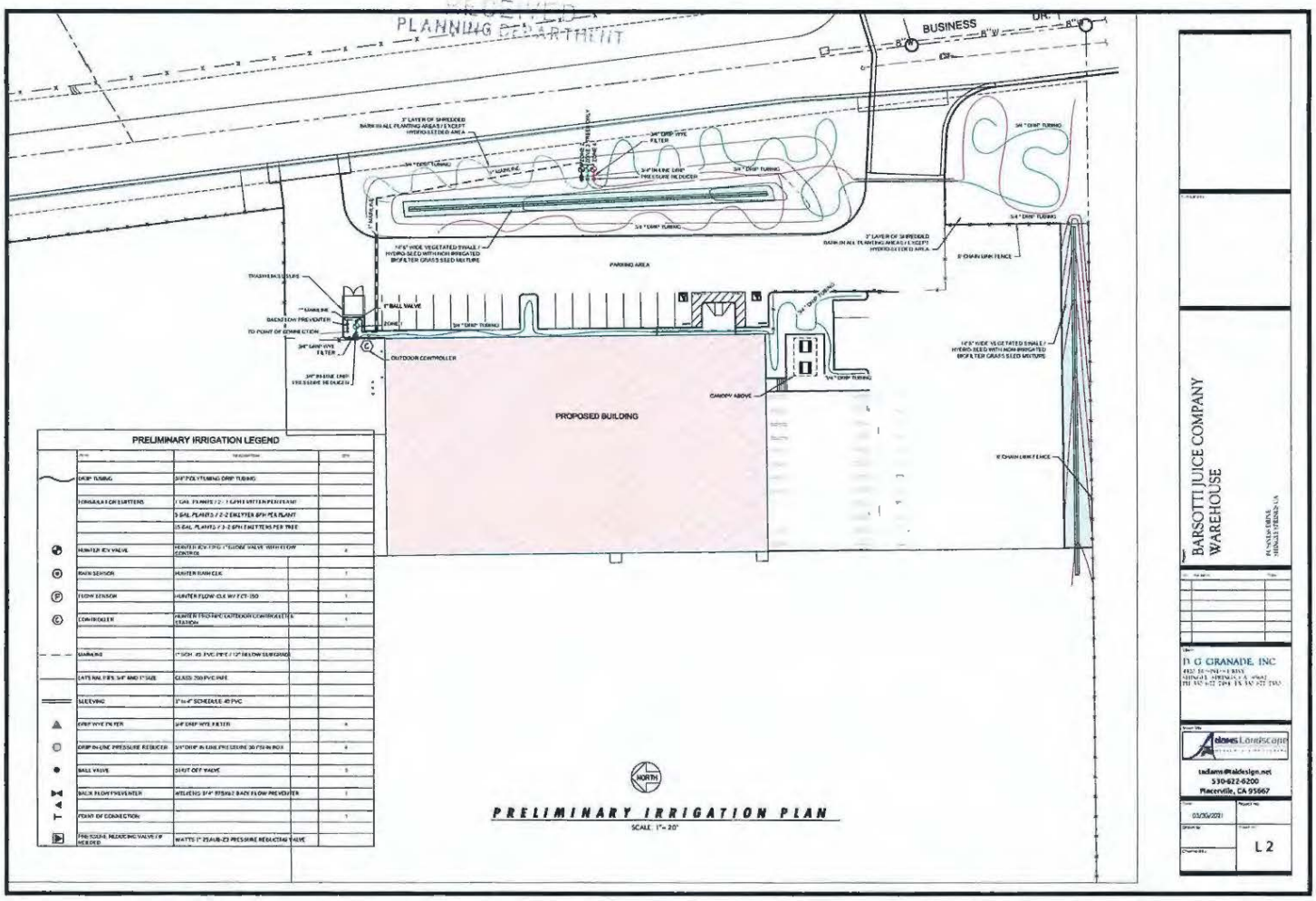
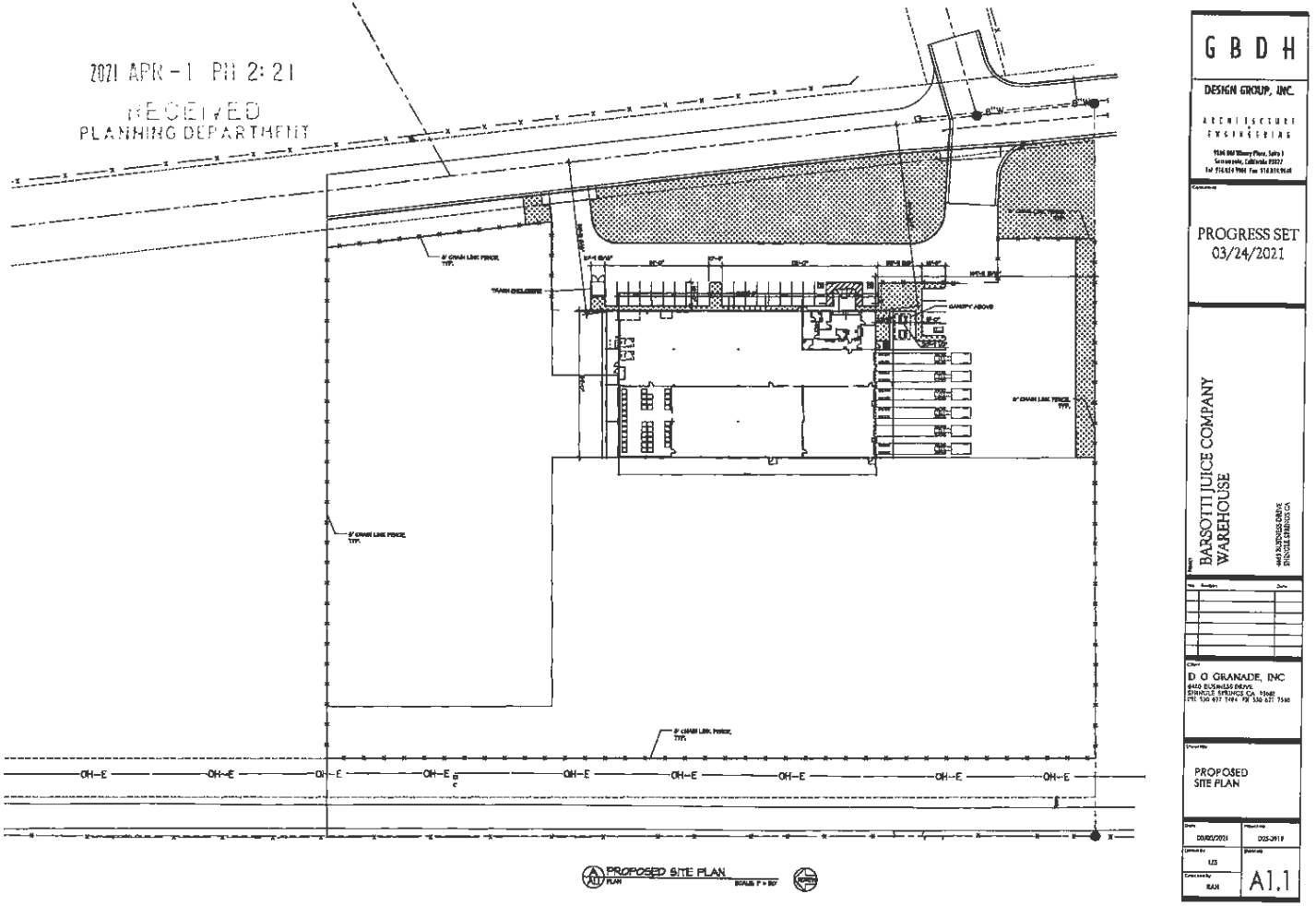




GBDH
DESIGN GROUP, INC.
ARCHITECTURE
ENGINEERING

PROGRESS SET
03/24/2021

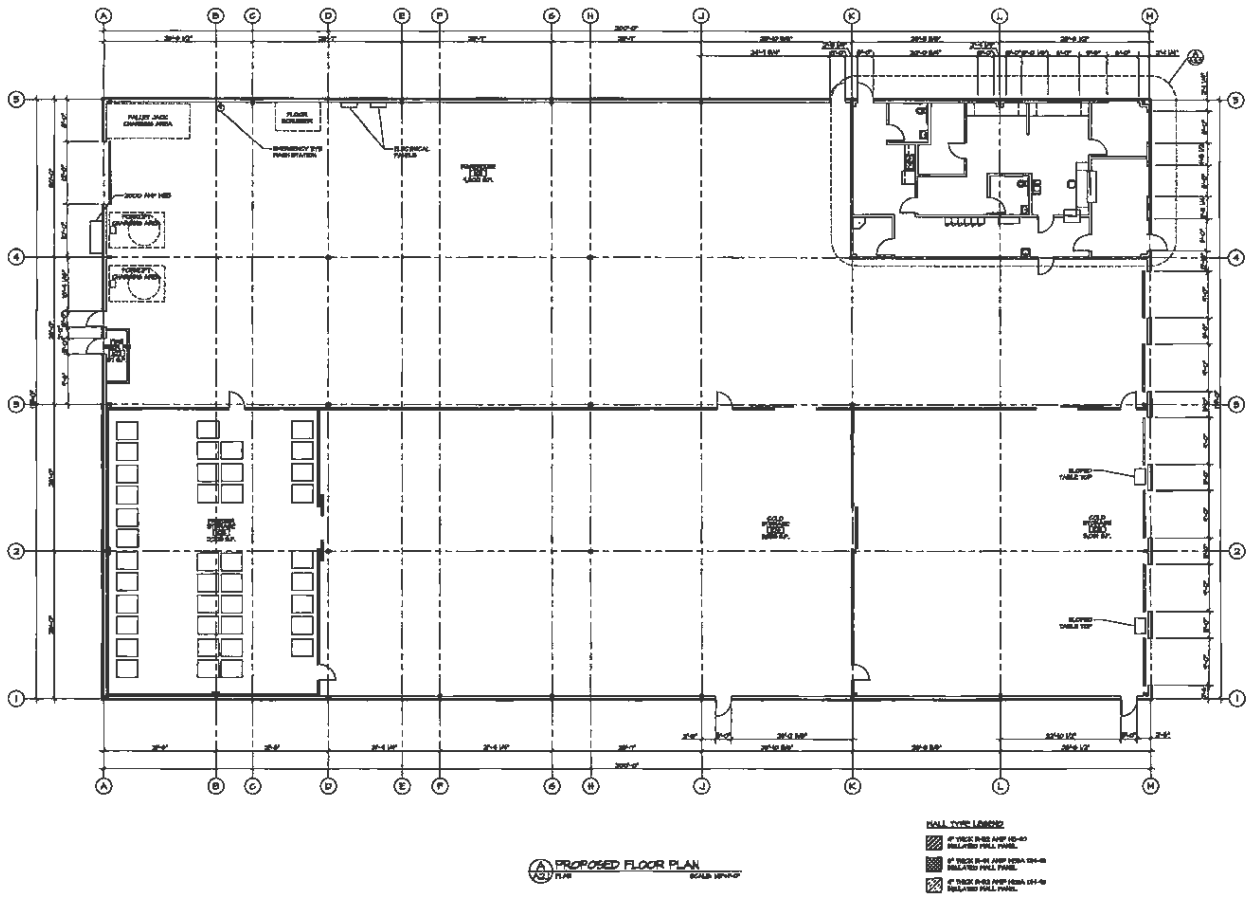
BARSOTTI JUICE COMPANY
WAREHOUSE

D O GRANADE, INC

PROPOSED
SITE PLAN

A1.1

DR21-0005



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DESIGN GROUP, INC.
ARCHITECTURE
ENGINEERING

PROGRESS SET
03/24/2021

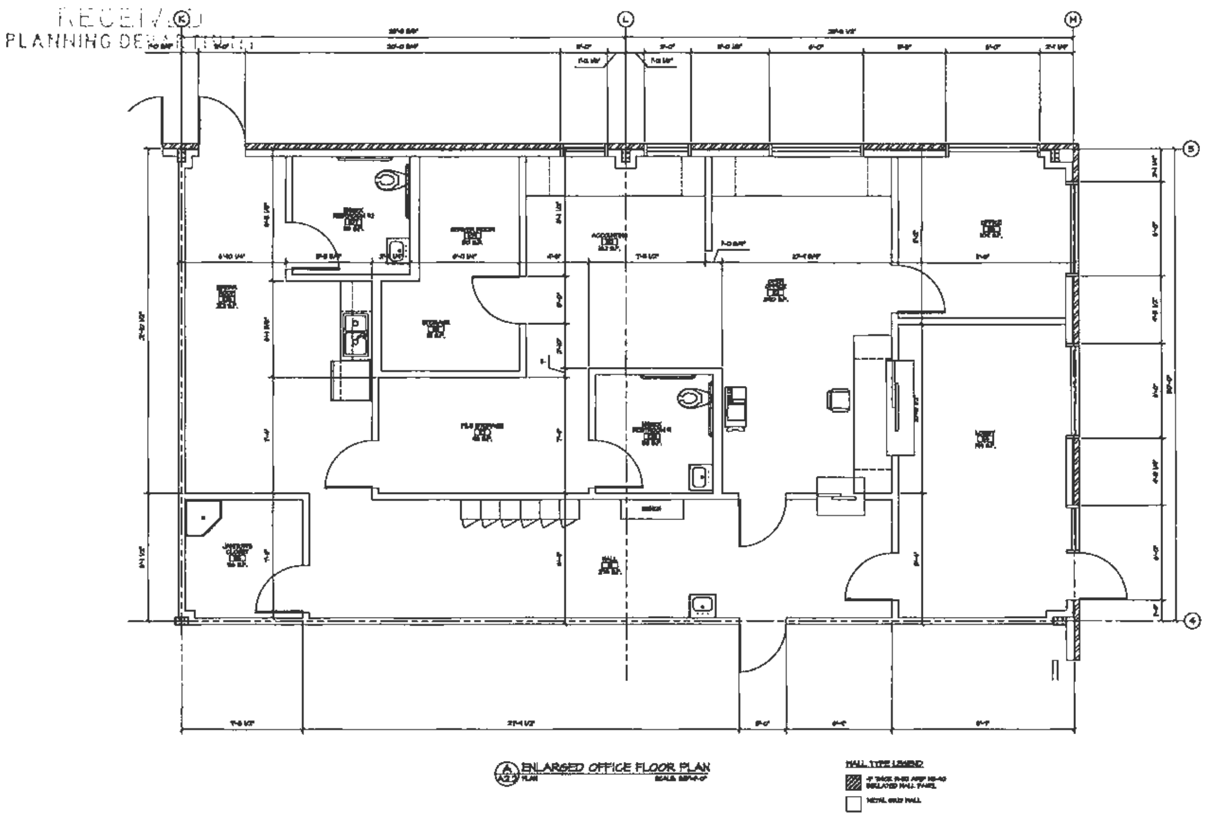
BARSOTTI JUICE COMPANY
WAREHOUSE

D G GRANADE, INC

PROPOSED
FLOOR PLAN

LES
RAH

A2.1



ENLARGED OFFICE FLOOR PLAN

GBDH
DESIGN GROUP, INC.
ARCHITECTURE
ENGINEERING

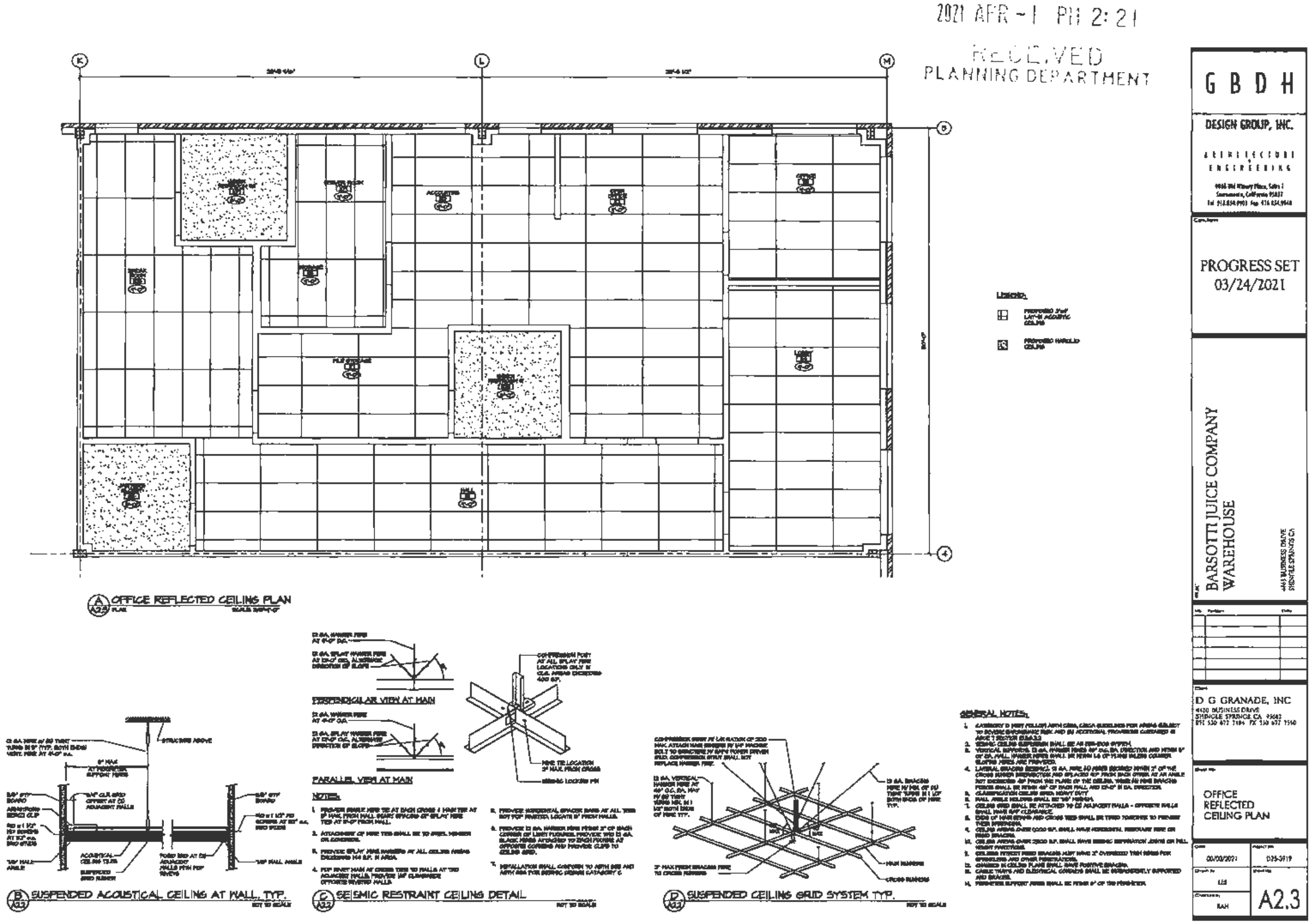
PROGRESS SET
03/24/2021

BARSOTTI JUICE COMPANY
WAREHOUSE

D G GRANADE, INC

ENLARGED
OFFICE
FLOOR PLAN

A2.2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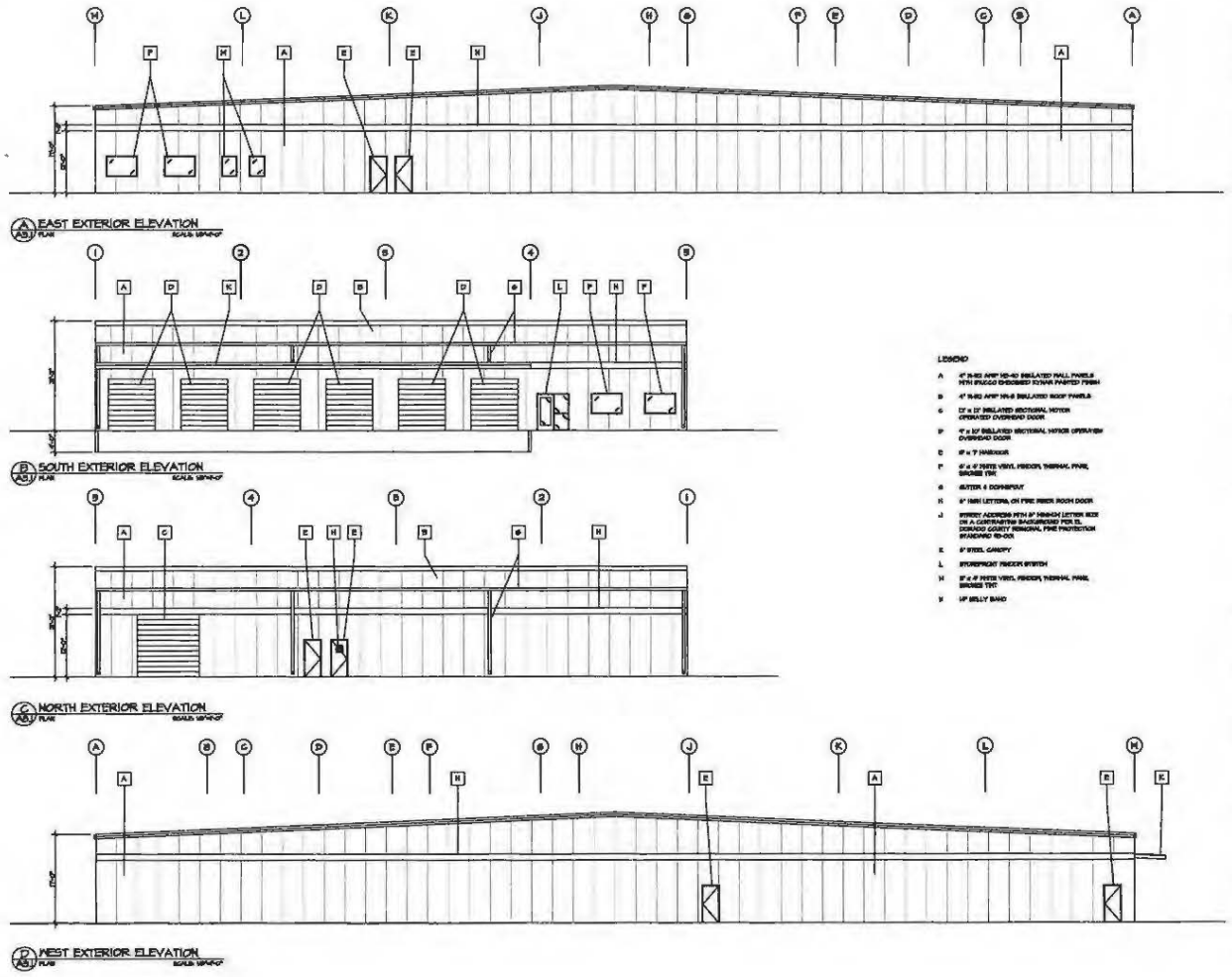
SUSPENDED ACOUSTICAL CEILING AT WALL, TYP.
SEISMIC RESTRAINT CEILING DETAIL
SUSPENDED CEILING GRID SYSTEM TYP.
GENERAL NOTES:
G B D H
DESIGN GROUP, INC.
ARCHITECTURE
ENGINEERING
PROGRESS SET
03/24/2021
BARSOTTI JUICE COMPANY
WAREHOUSE
D G GRANADE, INC
OFFICE
REFLECTED
CEILING PLAN
A2.3



GBDH
DESIGN GROUP, INC.
ARCHITECTURE
ENGINEERING

PROGRESS SET
03/24/2021

BARSOTTI JUICE COMPANY
WAREHOUSE

D G GRANADE, INC

EXTERIOR
ELEVATIONS

A3.1

ELECTRICAL ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A, AMP	AMPERE	KVA	KILO VOLT-AMPERE
AIC	AMPERE INTERRUPTING CAPACITY	KCMIL	KILO CIRCULAR MILS
AFC	AVAILABLE FAULT CURRENT	LCC	TITLE 24 COMPLIANT LIGHTING CONTROL CABINET - POLES AS REQUIRED FOR SYSTEM
AFF	ABOVE FINISHED FLOOR		
AIC, KAIC	AMPERE INTERRUPTING CAPACITY, KILO	LV	LOW VOLTAGE
AL	ALUMINUM	MH	METAL HALIDE
AWG	AMERICAN WIRE GAUGE	MLO	MAIN LUG ONLY
BC	BARE COPPER	MSB	MAIN SWITCH BOARD
BKR	CIRCUIT BREAKER	NTS	NOT TO SCALE
C	CONDUIT	OAN	OR AS NOTED
CKT	CIRCUIT	PFB	PROVISION FOR FUTURE BREAKER
CO	CONDUIT ONLY WITH PULL LINE	PH	PHASE
CU	COPPER	PVC	POLYVINYL CHLORIDE CONDUIT
(D)	DEMO	(R)	EXISTING TO BE RELOCATED
(E)	EXISTING TO REMAIN	TTB	TELEPHONE TERMINAL BOARD
EM	EMERGENCY	TTC	TELEPHONE TERMINAL CABINET
EMT	ELECTRICAL METALLIC TUBING	TYP	TYPICAL
FACP	FIRE ALARM CONTROL PANEL	UG	UNDER GROUND
FBO	FURNISHED BY OTHERS	V	VOLT, VOLTS
GFI	GROUND FAULT CIRCUIT INTERRUPTER (ALSO GFCI)	W	WIRE
		WP	WEATHERPROOF
GND, GRD	GROUND	(N)	EXISTING TO BE RELOCATED, NEW LOCATION
IG	ISOLATED GROUND		
J-BOX	JUNCTION BOX	XFMR	TRANSFORMER

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FIRE ALARM SYSTEM BELL PROVIDED BY ALARM CONTRACTOR, CONNECTED BY ELECTRICAL CONTRACTOR. INSTALL ON ADDRESS SIDE OF BUILDING. VERIFY LOCATION WITH FIRE MARSHAL		TELEPHONE AND/OR DATA DROP LOCATION. PROVIDE ACCESSIBLE CONDUIT FOR CABLE CONTRACTOR. WALL LOCATIONS MAY BE DONE WITH MUD RING AND STRING AT +18" AFF TO CENTER LINE OF DEVICE OAN
	FIRE ALARM SYSTEM FLOW AND TAMPER SWITCHES BY ALARM CONTRACTOR, CONNECTED BY ELECTRICAL CONTRACTOR TO ACTIVATE FIRE ALARM BELL AND/OR TROUBLE ALARM AS DIRECTED BY FIRE MARSHAL	S	SINGLE POLE TOGGLE SWITCH MOUNTED AT +42" AFF TO CENTER LINE OF DEVICE OAN
		S3	3-WAY TOGGLE SWITCH MOUNTED AT +42" AFF TO CENTER LINE OF DEVICE OAN
	DUCT SMOKE DETECTOR BY MECHANICAL CONTRACTOR, CONNECTED BY ELECTRICAL CONTRACTOR	SM	"M" INDICATES MOTOR RATED SWITCH
	SMOKE DETECTOR		LOW VOLTAGE OVERRIDE SWITCH FOR TITLE 24 AFTER HOURS CONTROL. CONNECT PER MANUFACTURERS REQUIREMENTS.
	JUNCTION BOX, SIZE AND TYPE AS INDICATED		DIMMER SWITCH, SEE CONTROLS DESCRIPTION AND WIRING DIAGRAMS. PROVIDE COMPATIBLE SYSTEM WITH BALLASTS AND DRIVERS.
	POWER POLE FURNISHED BY OWNER, INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR		EMERGENCY LIGHT "BUGEYES" WITH BATTERY BACK-UP AND POWER INDICATOR
	CONDUIT RUN ABOVE GRADE, NO CROSSBARS ON CONDUIT INDICATE 1/2" CONDUIT WITH TWO #12AWG CU CONDUCTORS		EXIT SIGN, SEE FIXTURE SCHEDULE FOR DETAILS
	CONDUIT RUN BELOW GRADE, AT LEVEL BELOW, OR BELOW RAISED COMPUTER FLOOR		SURFACE MOUNTED FIXTURE OVERHEAD, SEE FIXTURE SCHEDULE FOR DETAILS
	CROSSBARS DENOTE CONDUCTOR QUANTITY AND TYPE; TYPE THHN-2 OR AS NOTED		OPEN CHANNEL FIXTURE, SEE FIXTURE SCHEDULE FOR DETAILS
#10 3/4"C.	EXAMPLE: THREE #10 AWG PHASE CONDUCTORS, ONE #10 AWG COPPER GROUNDING CONDUCTOR, IN 3/4" CONDUIT APPROPRIATE FOR THE INSTALLATION		LIGHTING FIXTURE, SEE FIXTURE SCHEDULE FOR INFORMATION
			2' x 4' VOLUMETRIC TROFFER, SEE FIXTURE SCHEDULE
	DUPLEX NEMA 5-15R RECEPTACLE WITH PLASTIC IVORY COVER PLATE MOUNTED AT +18" AFF TO CENTER LINE OF DEVICE OAN	F	FACTORY LUMINAIRE WHIP FOR MASTER/SLAVE PAIRS
			SWITCHBOARD, SEE ONE LINE DIAGRAM
	DUPLEX RECEPTACLE WITH PLASTIC IVORY COVER PLATE OR AS NOTED. NEMA 5-15R MOUNTED SECURELY TO BOX IN CEILING		DISCONNECT, CIRCUIT BREAKER SIZE AS NOTED
			DISCONNECT, FUSED SWITCH SIZE AS NOTED
	DUPLEX NEMA 5-20R RECEPTACLE WITH PLASTIC IVORY COVER PLATE MOUNTED AT +18" AFF TO CENTER LINE OF DEVICE OAN		PANELBOARD, SEE PANEL SCHEDULES FOR TYPE AND CIRCUITS
			DISCONNECT SWITCH SIZED AS APPROPRIATE FOR THE LOAD. NO LETTER DENOTES NON-FUSED
	DOUBLE DUPLEX NEMA 5-15R RECEPTACLE WITH DOUBLE PLASTIC IVORY COVER PLATE MOUNTED AT +18" AFF TO CENTER LINE OF DEVICE OAN		FRACTIONAL HORSE POWER EXHAUST FAN, FURNISHED AND INSTALLED BY MECHANICAL, CONNECTED BY ELECTRICAL. SEE MECHANICAL PLANS FOR DETAILS
	DUPLEX RECEPTACLE WITH PLASTIC IVORY COVER PLATE, OR AS NOTED, NEMA 5-15R MOUNTED AT +42" AFF TO CENTER LINE OF DEVICE OAN		MECHANICAL EQUIPMENT INSTALLED BY OTHERS, CONNECTED BY ELECTRICAL CONTRACTOR
	SPECIAL RECEPTACLE WITH PLASTIC IVORY COVER PLATE MOUNTED AT +18" AFF TO CENTER LINE OF DEVICE OAN. TYPICALLY A TWIST-LOCK SIMPLEX WITH SPECIAL VOLTAGE (120V). CONFIRM WITH EQUIPMENT PRIOR TO INSTALLATION.		PANEL DESIGNATION
			NUMBERED NOTE FLAG FOR SAME SHEET
		2	INDICATES DETAIL "2" FOR SAME SHEET
	SPLIT WIRED NEMA 5-20R HALF CONTROLLED RECEPTACLE PER TITLE 24 SECTION 130.5(d) PERMANENT MARKING REQUIRED TO DIFFERENTIATE CONTROLLED RECEPTACLES FROM UN-CONTROLLED		TITLE 24 COMPLIANT LIGHTING CONTROL CABINET - POLES AS REQUIRED FOR SYSTEM
			LOW VOLTAGE CABLE, PLENUM RATED INSTALLED WITHOUT CONDUIT ABOVE ACCESSIBLE CEILING. FOR CONTROL AND COMMUNICATION PURPOSES.
	NEMA 5-20R FULLY CONTROLLED RECEPTACLE PER TITLE 24 SECTION 130.5(d) PERMANENT MARKING REQUIRED TO DIFFERENTIATE CONTROLLED RECEPTACLES FROM UN-CONTROLLED		OCCUPANCY SENSOR COMPATIBLE WITH CONTROL SCHEME DESCRIBED. DUAL TECH FOR MOST APPLICATIONS, ULTRASONIC FOR RESTROOMS. NARROW LONG BEAM FOR HALLWAYS. ROUND IS CEILING MOUNTED. 300 FOR DIMMING OCCUPANCY SENSOR.
	DUPLEX NEMA 5-15R FLOOR RECEPTACLE WITH METAL DOOR COVER PLATE		POWER AND DATA FLUSH FLOOR BOX. SEE INSTALLATION DETAIL AND COORDINATE EXACT LOCATION IN FIELD PRIOR TO BEGINNING WORK
	RECEPTACLE CONTROL CONTACTOR, SEE WIRING DIAGRAMS		
	ROOM CONTROLLER FOR PROVIDING DIMMING SIGNALS AND OUTPUTTING 0-10V CONTROL, SEE WIRING DIAGRAM		MOTION SENSOR COMPATIBLE WITH CONTROL SCHEME DESIGNED
	DAYLIGHT SENSOR FOR AUTOMATIC DIMMING, SEE WIRING DIAGRAM		

GENERAL ELECTRICAL NOTES

1. ALL EQUIPMENT SHOWN IS NEW UNLESS OTHERWISE INDICATED, AND SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LAB.
2. ALL ELECTRICAL WORK SHALL CONFORM WITH THE CURRENT EDITION OF THE CALIFORNIA ELECTRICAL CODE (CEC) AND ALL LOCAL ORDINANCES LEGALLY ADOPTED IN ACCORDANCE WITH CALIFORNIA HEALTH AND SAFETY CODE SECTION 17958.7.
3. ALL OF THE CONSTRUCTION DOCUMENTS ARE WRITTEN FOR THE PERFORMANCE OF WORK BY THE BUSINESS ENTITY CONTRACTED TO PERFORM THE WORK, USUALLY THE GENERAL CONTRACTOR. A COMPLETE AND OPERATIONAL SYSTEM IS ALWAYS REQUIRED BY THE CONSTRUCTION DOCUMENTS. EVEN ATTEMPTS TO DELINEATE SEPARATION OF SCOPE INTO "ELECTRICAL CONTRACTOR" OR "MECHANICAL CONTRACTOR" SCOPES SHALL NOT RELEASE THE CONTRACTED ENTITY FROM PROVIDING A COMPLETE AND OPERATIONAL SYSTEM COORDINATED BETWEEN SCOPES AT NO TIME.
4. WHEN USED, THE WORD "PROVIDE" SHALL HAVE AN ALL ENCOMPASSING MEANING WHICH INCLUDES "TO SUPPLY, MOUNT/SETUP, WIRE, TERMINATE, TEST, AND START-UP/COMMISSION" FOR ALL MATERIAL AND LABOR, BOTH DESCRIBED AND IMPLIED, IN THESE DOCUMENTS WHICH ARE ESSENTIAL TO A COMPLETE, FUNCTIONAL AND SAFE POWER SYSTEM, AUTOMATIC CONTROL SYSTEM, FA/SECURITY/VOICE/DATA SYSTEM. ALL EQUIPMENT AND MATERIAL MENTIONED AND/OR IMPLIED AS PART OF THE REQUIRED ELECTRICAL SYSTEM IN THESE DOCUMENTS SHALL BE CONSIDERED NEW (AND PROVIDED BY CONTRACTED ENTITY) UNLESS SPECIFICALLY INDICATED AS "EXISTING" OR "BY OTHERS".
5. PROVIDE SUPPORT FOR ALL FIXTURES AND ELECTRICAL EQUIPMENT TO COMPLY WITH SEISMIC AND WINDSTORM REQUIREMENTS OF THE CALIFORNIA BUILDING CODE AND ALL LOCAL CODES.
6. FOR PURPOSES OF CLEARNESS AND LEGIBILITY, THE ELECTRICAL DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC. THE SIZE AND LOCATION OF EQUIPMENT SHOWN IS TO SCALE WHEREVER POSSIBLE. VERIFY ALL POWER/CURRENT/VOLTAGE RATINGS AND CONTROL WIRING AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS SECTIONS WHERE ELECTRICAL WORK INTERFACES WITH OTHER TRADES. REVIEW SHOP DRAWINGS AND SUBMITTAL DATA AND PROVIDE THE SAME TO OTHER TRADES PRIOR TO BEGINNING OF CONDUIT INSTALLATION.
7. CONDUIT RUNS ARE SCHEMATIC ONLY. CONDUIT SHALL RUN SO AS TO REDUCE CONFLICTS WITH OTHER TRADES AND REDUCE THE LIKELIHOOD OF BEING DAMAGED OR AFFECTED BY POTENTIAL REMODEL. UNDERGROUND CONDUIT SHALL BE RUN IN JOINT TRENCHES WHERE POSSIBLE PER UTILITY COMPANY REQUIREMENTS.
8. LOCATIONS OF HVAC SHOWN ON THE STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER THOSE SHOWN ON THE ELECTRICAL DRAWINGS.
9. CONDUIT SHOWN ON THE PLANS IS EMT OR OTHER APPROVED RACEWAY INCLUDING MC ABOVE GRADE AND PVC SCH 40 BELOW GRADE. INSTALL ALL RACEWAYS TO BE MECHANICALLY AND ELECTRICALLY CONTINUOUS WITH RATED FITTINGS AT ALL POINTS TO BE PERMITTED AS AN EQUIPMENT GROUNDING CONDUCTOR IN ACCORDANCE WITH 250.118. ANY PVC CONDUIT OR ANY RACEWAY INSTALLED IN A PATIENT CARE AREA OF A HEALTHCARE FACILITY, SHALL HAVE A GROUND WIRE SIZED PER ARTICLE 250.122.
10. ALL CONDUIT CONNECTIONS TO MACHINES AND EQUIPMENT SUBJECT TO VIBRATION SHALL BE FLEX CONDUIT. PROVIDE SUFFICIENT SLACK TO ELIMINATE VIBRATION. ARRANGE CONNECTION TO PREVENT THE ENTRANCE OF MOISTURE. PROVIDE CONTINUOUS GROUND WIRE THROUGH ALL FLEX TO ASSURE GROUND CONTINUITY.
11. PROVIDE INSULATED CONNECTOR FITTINGS FOR RACEWAYS CONTAINING UNGROUNDED CONDUCTORS 4 AWG OR LARGER ENTERING A CABINET, BOX ENCLOSURE, OR RACEWAY. PROVIDE A SUBSTANTIAL FITTING PROVIDING A SMOOTHLY ROUNDED INSULATING SURFACE IN COMPLIANCE WITH 300.4(G).
12. ALL WIRE SHALL BE COPPER ONLY. ALL WIRE SHALL BE LISTED, RATED FOR 600 VOLTS, TYPE THHN/THWN-2 INSULATION AND #12 AWG MINIMUM SIZE EXCEPT FOR CONTROLS. INSULATION FOR ALUMINUM WIRE SHALL BE XHHW-2.
13. ALL UNDERGROUND BONDING CONDUCTORS SHALL BE COPPER.
14. PROVIDE HOME-RUN FOR UP TO 3 CIRCUITS PER HOME-RUN. COMBINED CIRCUITS SHARING A GROUNDED CIRCUIT CONDUCTOR (NEUTRAL) MUST THEN COMPLY WITH ARTICLE 210.4 BY PROVIDING CIRCUIT BREAKER HANDLE TIE CLIPS OR MULTI-POLE BREAKERS AS REQUIRED BY THE LOCAL AUTHORITY. INCREASE CONDUCTOR SIZE FOR RUNS OVER 100' TO PANEL.
15. TERMINATION PROVISIONS OF EQUIPMENT SHALL BE LISTED AND IDENTIFIED FOR USE WITH CONDUCTORS RATED 75°C, OR DUAL RATED TO INCLUDE 75°C.
16. ISOLATED GROUND OUTLETS: CONNECT ISOLATED GROUND WIRE TO SYSTEM GROUND AT MAIN SERVICE. RUN INSULATED GROUND WIRE IN SAME CONDUIT WITH CIRCUIT CONDUCTORS.
17. COMPLETE SYSTEM SHALL BE GROUNDED PER ARTICLE 250.
18. PROVIDE AN ENCLOSURE AND INSTALLATION METHOD OF EQUAL FIRE RESISTANT RATING AROUND ALL FIXTURES AND EQUIPMENT INSTALLED IN OR PENETRATING THROUGH FIRE RATED SEPARATIONS.
19. ALL DEVICES INSTALLED OUTSIDE OR IN DAMP LOCATIONS SHALL BE APPROVED WEATHERPROOF. CONDUIT RUNS IN SUCH LOCATIONS SHALL BE INSTALLED WITH APPROVED FITTINGS. SURFACE TYPE ENCLOSURES SHALL BE NEMA 3R AND MOUNTED WITH A 1/4" AIRSPACE BETWEEN THE ENCLOSURE AND THE WALL PER ARTICLE 312.2. RECEPTACLES MARKED WP (WEATHERPROOF) SHALL BE INSTALLED WITH A WEATHERPROOF WHILE-IN-USE TYPE COVER.
20. ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY RATED AND NEMA 3R WHERE INDICATED AS WP.
21. FUSES FOR MOTOR PROTECTION SHALL BE PER NAMEPLATE RATING OF EQUIPMENT SUPPLIED.
22. VERIFY FIXTURE TYPES AND QUANTITIES WITH OWNER PRIOR TO ORDERING. SUBMIT SHOP DRAWINGS FOR REVIEW. AN "AS SPECIFIED" ORDER STILL REQUIRES A SUBMITTAL. UNDER NO CIRCUMSTANCES ARE ORDERS TO BE PLACED DIRECTLY FROM THE DRAWINGS WITHOUT ENGINEER REVIEW.
23. LIGHTING SUBMITTAL MUST INCLUDE THE CONTROL COMPONENTS. INCLUDE WITH THE SUBMITTAL THE NAME OF THE MANUFACTURER'S REPRESENTATIVE THAT HAS CONFIRMED COMPATIBILITY OF ALL COMPONENTS AND BALLASTS/DRIVERS. AN "AS SPECIFIED" ORDER STILL REQUIRES A SUBMITTAL. THE ENGINEER WILL NOT REVIEW A SUBMITTAL THAT DOES NOT HAVE A VERIFIED REVIEW BEYOND THE CONTRACTOR OR WHOLESALE HOUSE.
24. VERIFY ALL OUTLET LOCATIONS AND HEIGHTS PRIOR TO ROUGH IN. COORDINATE OWNER/TENANT WALK-THROUGH PRIOR TO ALLOWING WALLS TO BE COVERED. ALLOW TWO DAYS IN THE SCHEDULE FOR THIS. THIS IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM.
25. COORDINATE EXACT LOCATIONS PRIOR TO ROUGH IN FOR: a) FIXED EQUIPMENT CONNECTIONS b) FURNITURE SYSTEMS POINT OF CONNECTION c) MILLWORK, INCLUDING ELEVATIONS.
26. PROVIDE COVERPLATES FOR ALL WIRING DEVICES. VERIFY FINISH COLOR. COVERPLATES SHALL BE EQUAL TO PASS & SEYMOUR.
27. MAINTAIN ELECTRICAL CIRCUIT TO ALL EXISTING ELECTRICAL LIGHT FIXTURES, RECEPTACLES, HVAC, ETC. THAT REMAIN, WHETHER SHOWN OR NOT. PROVIDE NEW CONDUIT, CONDUCTORS, BOXES, ETC. TO REPAIR ANY DAMAGE DUE TO DEMOLITION WORK.
28. COORDINATE DEMOLITION WORK WITH ARCHITECTURAL DRAWINGS. TRACE ALL EXISTING CIRCUITS TO CONFIRM THEY ARE STILL IN USE. ANY CIRCUIT THAT BECOMES UNUSED SHALL BE DISCONNECTED AND REMOVED. CHANGE THE PANEL SCHEDULE TO DENOTE THE CIRCUIT IS AVAILABLE.
29. PROVIDE TYPEWRITTEN SCHEDULES INDICATING LOAD DESCRIPTIONS FOR ALL CIRCUITS IN PANELBOARDS, ON PANEL DOOR. USE ROOM DESCRIPTIONS AS THEY RELATE TO THE BUILDING, NOT THE TENANT.
30. CONTRACTOR TO VERIFY UTILITY COMPANY REQUIREMENTS PRIOR TO ORDERING THE ELECTRICAL SERVICE. PROVIDE SHOP DRAWINGS AND SUBMITTALS OF ALL COMPONENTS. AN "AS SPECIFIED" ORDER STILL REQUIRES A SUBMITTAL. UNDER NO CIRCUMSTANCES ARE ORDERS TO BE PLACED DIRECTLY FROM THE DRAWINGS WITHOUT ENGINEER REVIEW.
31. ALL METER SPACES TO BE PROVIDED WITH METER SOCKET. PROVISION FULLY FOR FUTURE TENANT.
32. PROVIDE REAR LOAD RACEWAY WHERE REQUIRED FOR CONDUIT ROUTES FROM TOP OF SWITCHBOARD.
33. INSTALL SERVICE, PANELBOARDS, AUXILIARY EQUIPMENT, AND ROUTE CONDUITS SO THAT FUTURE ACCESS TO SWITCHBOARD, OR EXPANSION OF SWITCHBOARD IS NOT INHIBITED. COORDINATE WITH OTHER TRADES AND VENDORS TO PREVENT ADJACENT EQUIPMENT FROM BLOCKING EXPANSION. DESIGNATE WALL SPACE FOR EXPANSION TO BE KEPT CLEAR. IF PLANS DO NOT INDICATE AREA OF FUTURE EXPANSION, COORDINATE WITH ARCHITECT OR OWNER.
34. CONDUITS OR RACEWAYS THROUGH WHICH MOISTURE MAY CONTACT LIVE PARTS SHALL BE SEALED OR PLUGGED AT BOTH ENDS IN ACCORDANCE WITH ARTICLE 300.5(G). THIS INCLUDES PENETRATING MEMBRANES WHERE TEMPERATURE DIFFERENTIALS MAY CAUSE CONDENSATION SUCH AS PENETRATING WALK-IN REFRIGERATORS AND FREEZERS OR CLIMATE CONTROLLED ROOMS.
35. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION OF ELECTRICAL EQUIPMENT IN A DE-ENERGIZED STATE.
36. COMMUNICATION CABLES AND LOW VOLTAGE WIRING SHALL BE PLENUM RATED UNLESS SPECIFICALLY NOTED OTHERWISE ON THESE PLANS.
37. ONLY PERMITTED AND WET SIGNED PLANS SHALL BE USED FOR CONSTRUCTION OR BIDDING.
38. ALL CIRCUIT BREAKERS TO BE DUAL LISTED 60/75 DEGREE, WIRE RATED.

2021 APR -1 PM 2:22
PLANNING DEPARTMENT

Pittman ENGINEERING

NO. 16643
Signed on 3/31/2021

CONTRACTOR
DG GRANADE INC.
D.G. GRANADE INC.
4420 BUSINESS DRIVE
SHINGLE SPRINGS, CA 95682
(530) 677-7484
LICENSE #581408 CLASS B & A

APPROVAL STAMP

PROJECT
BARSOTTI JUICE COLD STORAGE
COMMERCE WAY
SHINGLE SPRINGS, EL DORADO COUNTY, CA

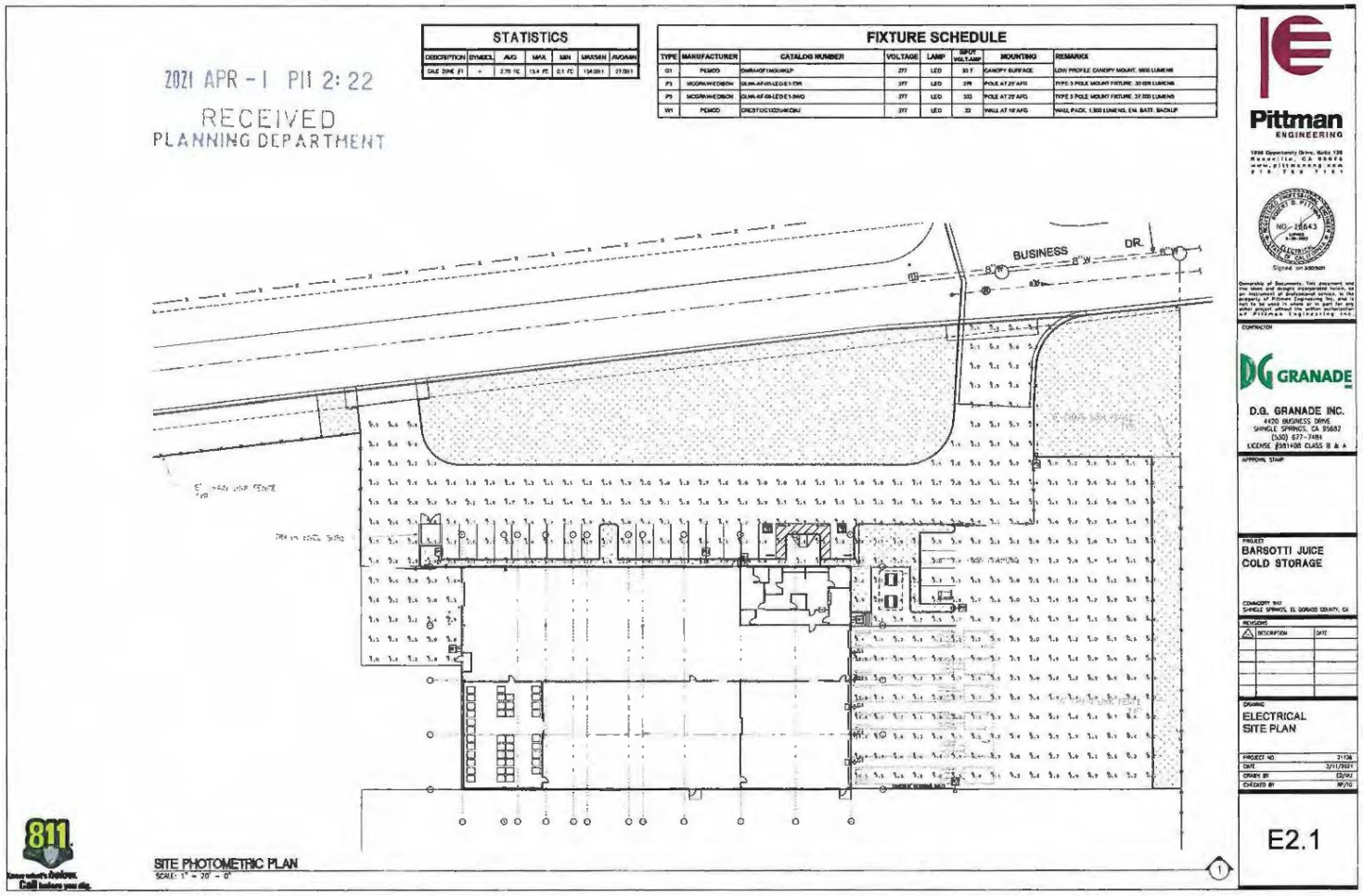
REVISIONS	DESCRIPTION	DATE

DRAWING
NOTES, LEGENDS, AND ABBREVIATIONS

PROJECT NO.	21136
DATE	3/11/2021
DRAWN BY	ED/MJ
CHECKED BY	RP/JC

E1.1

DR21-0005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SITE PHOTOMETRIC PLAN
Pittman ENGINEERING
D.G. GRANADE INC.
4430 BUSINESS DRIVE
SHINGLE SPRINGS, CA 95682
(530) 677-7484
BARSOTTI JUICE
COLD STORAGE
ELECTRICAL
SITE PLAN
E2.1