



Seaside Packaging Warehouse Project

Noise and Vibration Study

prepared for

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1 Project Description and Impact Summary

1.1 Introduction

This study analyzes the potential noise and vibration impacts of the proposed Seaside Packaging Warehouse Project (herein referred to as “proposed project” or “project”) in Santa Maria, California. Rincon Consultants, Inc. (Rincon) prepared this study under contract to Auxin Holdings LLC for the City of Santa Maria to use in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). The purpose of this study is to analyze the project’s noise and vibration impacts related to both temporary construction activity and long-term operation of the project.

1.2 Project Summary

1.2.1 Project Location

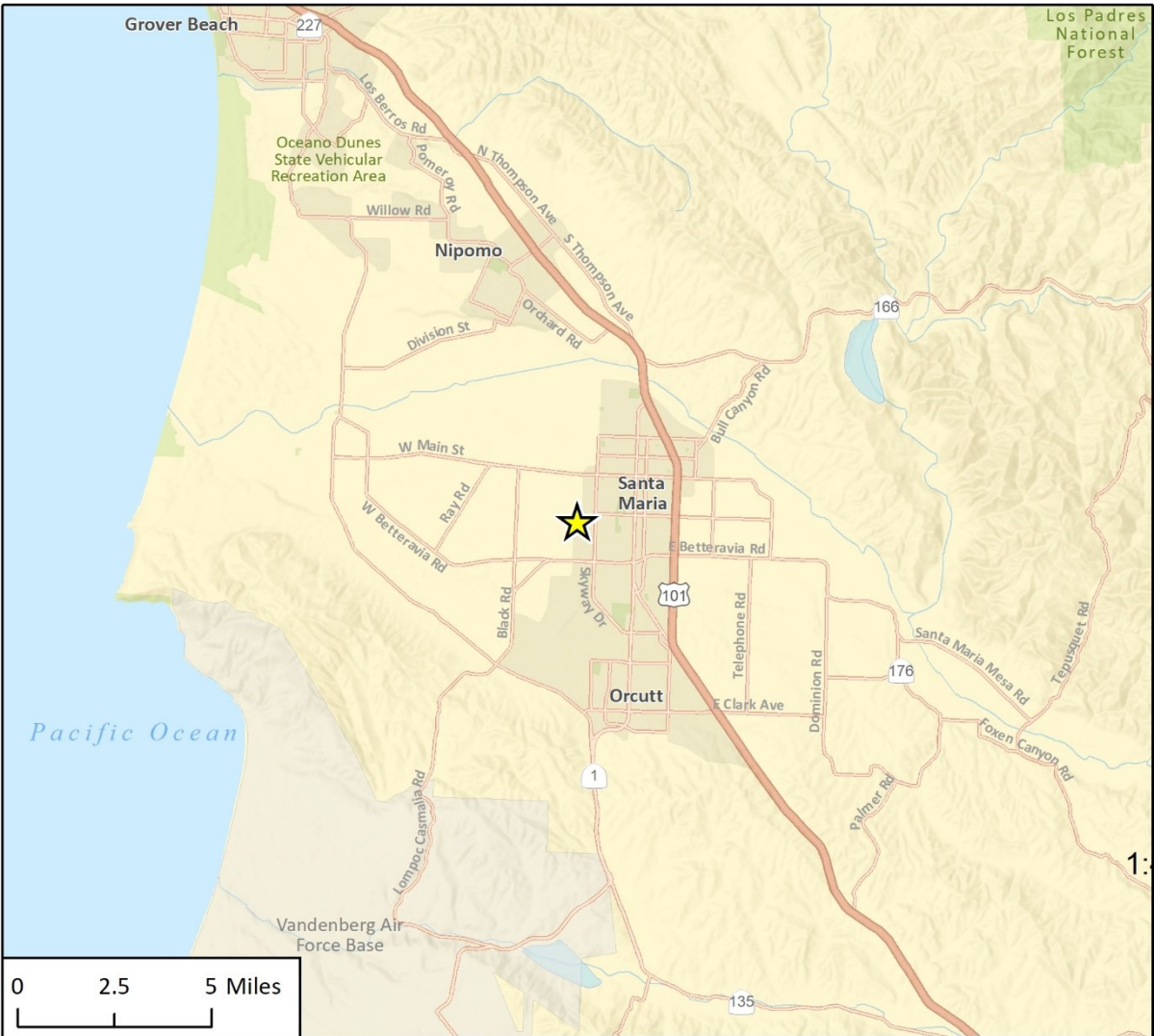
The project site encompasses an approximately 4.4-acre undeveloped parcel located at 1300 West La Brea Avenue (Assessor’s Parcel Number 117-240-034) in the city of Santa Maria. The site has a General Plan land use designation of GI (General Industrial) and is zoned M2 (General Manufacturing). Adjacent land uses include an existing drainage and flood control basin immediately to the west and a distribution facility immediately to the east. The Santa Maria Valley Railroad tracks bound the project site to the north, and a single-family residential neighborhood is located south of the project site across West La Brea Avenue. Figure 1 shows the project site’s regional location, and Figure 2 shows an aerial view of the project site and surrounding area. Project site plans are included in Appendix A.

1.2.2 Project Description

The project would involve construction of a warehouse facility that would be used to store and distribute agricultural pallets and boxes. The project would include construction of an approximately 40,854-square-foot unrefrigerated agricultural box warehouse facility with offices, 46 parking spaces, a truck loading area, approximately 27,040 square feet of landscaping and other site improvements. Approximately 56,416 square feet of the project site would be left as undisturbed open space. Project activities would involve receiving, storing, and distributing corrugated packaging (e.g., pallets, boxes) to customers from Monday through Saturday between the hours of 6:00 a.m. and 4:00 p.m. Forklifts would be utilized in the warehouse to move packaging materials, and approximately 10 truck deliveries would occur per day. Approximately eight full-time equivalent employees would be employed by the project. A vegetable cooler may be added to the project site in the future; however, this cooler is not currently contemplated as part of the proposed project and therefore is not included in the following analysis of project impacts.

Construction activities are anticipated to occur over the course of 11 months from January 2022 through November 2022. Construction would involve site preparation, grading, building construction, paving, and architectural coating. Soil material would be balanced on-site; therefore, no off-site soil hauling would be required.

Figure 1 Regional Location



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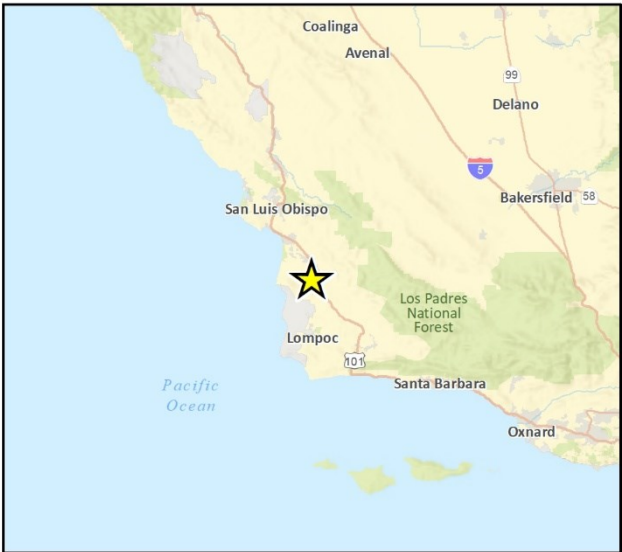
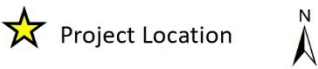


Fig 1 Regional Location

Figure 2 Project Site Location



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Fig 2 Project Location

2 Background

2.1 Overview of Sound Measurement

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., the human ear). Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (Hz) and less sensitive to frequencies around and below 100 Hz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as a doubling of traffic volume, would increase the noise level by 3 dB; similarly, dividing the energy in half would result in a decrease of 3 dB (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive an increase (or decrease) of up to 3 dBA in noise levels (i.e., twice [or half] the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud (10.5 times the sound energy) (Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in sound level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions. Noise levels from a point source (e.g., construction, industrial machinery, ventilation units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013).

The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result simply from the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver. Structures can substantially reduce occupants’ exposure to noise as well. Modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (Federal Highway Administration [FHWA] 2011).

The impact of noise is not a function of sound level alone. The time of day when noise occurs and the duration of the noise are also important. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. The L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, L_{eq} is summed over a one-hour period. L_{max} is the highest root mean squared (RMS) sound pressure level within the sampling period, and L_{min} is the lowest RMS sound pressure level within the measuring period (Crocker 2007). Normal conversational levels are in the 60 to 65 dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (DNL), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by DNL and CNEL usually differ by about 1 dBA. Quiet suburban areas typically have 24-hour noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range. The City of Santa Maria uses CNEL as its unit of measurement for 24-hour noise levels.

2.2 Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body is from a low of less than 1 Hz up to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2020). When a building is impacted by

vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (ppv) or RMS vibration velocity. The ppv and RMS velocity are normally described in inches per second (in/sec). The ppv is defined as the maximum instantaneous positive or negative peak of a vibration signal (Caltrans 2020). Table 1 summarizes the vibration limits recommended by the American Association of State Highway and Transportation Officials for structural damage to buildings.

Table 1 Maximum Vibration Levels for Preventing Damage

Type of Situation	Vibration Level (in/sec ppv)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5
in/sec = inches per second; ppv = peak particle velocity	
Source: Caltrans 2020	

In addition to the potential for building damage, the human body responds to vibration signals. However, unlike buildings, which are rigid, it takes some time for the human body to respond to vibration. In a sense, a building responds to the instantaneous movement while the human body responds to average vibration amplitude, which is measured as RMS. The averaging of the particle generally results in the rms conservatively being equivalent to 71 percent of the ppv. Thus, human annoyance usually results in a more restrictive vibration limit than structural damage limits.

Numerous studies have been conducted to characterize the human response to vibration. The general human response to different levels of groundborne vibration velocity levels is described in Table 2 and Table 3.

Table 2 Human Response to Steady State Vibration

Human Response	Vibration Level (in/sec ppv)
Very disturbing	3.6 (at 2 Hz) – 0.4 (at 20 Hz)
Disturbing	0.7 (at 2 Hz) – 0.17 (at 20 Hz)
Strongly perceptible	0.10
Distinctly perceptible	0.035
Slightly perceptible	0.012
in/sec = inches per second; ppv = peak particle velocity; Hz = Hertz	
Source: Caltrans 2020	

Table 3 Human Response to Transient Vibration

Human Response	Vibration Level (in/sec ppv)
Severe	2.0
Strongly perceptible	0.9
Distinctly perceptible	0.24
Barely perceptible	0.035
Source: Caltrans 2020	

2.3 Sensitive Receivers

Noise exposure goals for land use types reflect the varying noise sensitivities associated with those uses. According to the City of Santa Maria Noise Element, noise-sensitive land uses include residential uses (single and multi-family dwelling, mobile home parks, dormitories and similar uses); hospitals, nursing homes, convalescent hospitals and other facilities for long-term medical care; and public or private education facilities, libraries and churches (City of Santa Maria 2009). Sensitive receivers in the project site vicinity include single-family residences located to the south of the project site across West La Brea Avenue. The nearest single-family residence is approximately 160 feet south of the project site boundary.

2.4 Project Noise Setting

The most common sources of noise in the project site vicinity are vehicular traffic on West La Brea, truck idling at the loading docks at nearby warehouses, as well as loading and unloading operations at nearby facilities and passing railway traffic along the Santa Maria Valley Railroad.¹ Ambient noise levels are generally highest during daytime and rush hours. To characterize ambient sound levels at and near the project site, three 15-minute sound level measurements were conducted on Wednesday, August 25, 2021 between 9:52 a.m. and 10:55 a.m. An Extech, Model 407780A, ANSI Type 2 integrating sound level meter was used to conduct the measurements. Figure 3 shows the noise measurement locations, and Table 4 summarizes the results of the noise measurements. Detailed sound level measurement data are included in Appendix B.

¹ According to the City of Santa Maria General Plan (2009), noise levels along the SMVRR are not sufficient to create 60 dB CNEL extending beyond right of way. Therefore, it is not a primary source of noise at the project site and in the vicinity.

Table 4 Project Site Vicinity Sound Level Monitoring Results- Short-Term

	Measurement Location	Sample Times	Approximate Distance to Primary Noise Source	L _{eq} (dBA)	L _{min} (dBA)	L _{max} (dBA)
NM 1	Eastern portion of the project site adjacent to existing warehouse development	9:52 - 10:07 a.m.	Approximately 150 feet from loading docks at adjacent warehouse	50	44	62
NM 2	Northern portion of the project site adjacent to railroad tracks	10:16 - 10:31 a.m.	Approximately 15 to 20 feet from the train track	46	42	57
NM 3	Southern side of West La Brea Avenue near single-family residences	10:39 – 10:54 a.m.	Approximately 40 feet from La Brea Avenue	63	43	82
L_{eq} = average noise level equivalent; dBA = A-weighted decibel; L_{min} = minimum instantaneous noise level; L_{max} = maximum instantaneous noise level Detailed sound level measurement data are included in Appendix B.						

Figure 3 Noise Measurement Locations

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Fig X Noise Measurement Locations

2.5 Regulatory Setting

State

California Government Code Section 65302 encourages each local government entity to implement a noise element as part of its general plan. In addition, the Office of Planning and Research has developed guidelines for preparing noise elements, which include recommendations for evaluating the compatibility of various land uses as a function of community noise exposure.

Local

Santa Maria General Plan

The Santa Maria General Plan Noise Element, adopted in November 2009, identifies noise reduction standards to control noise within the community. Listed below are noise-related goals, policies, and objectives that would be applicable to the proposed project:

Goal N.1 To protect present and future Santa Maria residents and workers from the harmful and annoying effects of exposure to excessive noise levels

- **Policy N.1.a – Overall Noise Control in Santa Maria**
Protect and enhance the quality of the City’s noise environment by controlling noise at its source, along its transmission paths, and at the site of the ultimate receiver.
- **Policy N.1.b – Location of New Noise Generators**
Regulate the placement and construction of new noise generators, to avoid excessive interior and exterior noise level impacts on adjacent noise sensitive properties; and of new noise receptors (such as housing and schools), to minimize the negative effects of local noise generation.
- **Policy N.1.c – Noise Control with the Required Environmental Planning and Regulatory Process**
Control harmful or undesirable noise through the environmental planning and regulatory process with emphasis on noise/land use compatibility planning.
- **Policy N.1.d – Explore New Measures to Address Existing and Future Transportation Noise**
Explore possible strategies to control vehicular noise generation that would reduce noise impacts on existing noise sensitive land used (residential and schools) located within the 60+ dB CNEL contour.
- **Objective N.1.a – Existing Noise Levels**
To have mobile and stationary sources in compliance with the Santa Maria Noise Element and Noise Ordinance, and state and federal regulation.
- **Objective N.1.b**
To maintain and reduce noise to acceptable levels throughout the community.
- **Objective N.1.d – New Development Projects**
All new development projects will meet the acceptable exterior and interior noise level standards specified in Table N-4: “Interior and Exterior Noise Standards” (reproduced herein as Table 5).

Table 5 City of Santa Maria Interior and Exterior Noise Standards

Categories	Uses	Standard (dBA CNEL)	
		Interior	Exterior
Residential	Single Family, Duplex, Multiple Family, Mobile Home	45	60 ⁴
Commercial	Retail, Restaurant, Professional Offices	55	65 ^{1, 2}
Industrial	Manufacturing, Utilities, Warehousing, Agriculture	65	70 ³
Noise-Sensitive Land Uses	Motel, Hospital, School, Nursing Home, Church, Library, and Other	45	60
Open Space	Passive Outdoor Recreation	—	65

Source: City of Santa Maria General Plan Noise Element, Table N-4

Notes:

¹ The Commercial Exterior Noise Standard is a noise level of 65 dB CNEL or less, or which does not interfere with normal business activity.

² Where commercial development proposes outside activities such as patio dining, outside play and picnic areas, the noise standards shall not apply to those outdoor areas.

³ The Industrial Exterior Noise Standard is a noise level of 70 dB CNEL or less or which does not interfere with normal business activity.

⁴ Exception to allow elevated noise levels in outdoor living areas. Outdoor living areas such as patios and balconies may be incorporated into multifamily development projects (“Duplex” and “Multi Family”, and mixed-use projects which incorporate these uses) in such areas which experience elevated noise levels. These noise levels may not exceed the “Normally Unacceptable” Community Noise Exposure levels (75 dB and above) specified in Figure 2 of the “Noise Element Guidelines” (Appendix C of the California General Plan Guidelines). Furthermore, prospective buyers and future occupants of dwelling shall be provided the following notice:

This property is presently located in an urban area which periodically and regularly experiences elevated noise level. Potential sources of this noise may be automobile traffic, railroad operations, flying aircraft, industrial/commercial uses and general human activity in an urban environment. You may wish to consider what noise level annoyances, if any, are associated with the property before you complete you purchase and/or rental agreement and determine where they are acceptable to you.

Goal N.2 Protection of Economic Base

To protect the economic base of the city by preventing incompatible land uses from encroaching upon existing or planned noise-producing uses.

▪ Objective N.2 - Right of Commercial/Industrial uses to Continue Operation and Expansion of Facilities

To preserve the rights of existing and future commercial and industrial users to continue operating and to expand their facilities without creating a noise conflict with a noise-sensitive land use.

The following implementation programs under Goal N-1 would also apply to the project:

1. Review all development proposals, both public and private, for consistency with the policies of this Element.
2. In reviewing and approving new subdivisions, general plan amendments, rezones, specific plans, use permits, conditional use permits and planned development permits, the City may require applicants to evaluate potential noise impacts and require appropriate noise control measures. Noise evaluations may include the review and requirement of: site design criteria, additional setbacks, earthen berms, sound walls, and modification of roadway design.
4. Require discretionary development proposals to meet the interior and exterior noise standards specified in Table N-4 (reproduced herein as Table 5).

6. As part of project review, discourage the intrusion of commercial and industrial traffic onto local residential streets through the circulation planning process.
13. Control noise intrusion from stationary outdoor machinery, appliances, and air conditioners through effective site design and with site-specific mitigation measures.
14. As part of the planning process, evaluate stationary noise sources to identify potential noise impacts. Where appropriate, require mitigation of those impacts so they do not exceed the noise level standards specified in Table N-4 (reproduced herein as Table 5).
15. In reviewing development proposals, minimize traffic noise impacts on commercial and office buildings through effective site design and appropriate mitigation measures.
25. Limit the hours of construction activity in residential areas in order to reduce the intrusion of noise in the early morning and late evening hours, and on weekends and holidays.
26. Control noise at all construction sites through the provision of mufflers and the physical separation of machinery maintenance areas from adjacent residential and noise sensitive land uses.

Santa Maria Noise Ordinance

Chapter 5-5 of the Santa Maria Municipal Code (SMMC) establishes certain policies to control unnecessary, excessive, and annoying noise in the city in the interest of public health and welfare. SMMC Section 5-5.04(a) states that a violation of the Noise Ordinance exists when the noise level exceeds the ambient noise level or the ambient base noise level, whichever is higher, as follows:

- By any amount for 30 minutes for any given hour, measured cumulatively;
- By five dBA for 15 minutes for any given hour;
- By 10 dBA for five minutes for any given hour;
- By 20 dBA at any time.

Table 6 shows the ambient base noise levels for residential, commercial, and industrial zones.

Table 6 Range of Intensities – Ambient Base Noise Level (dBA L_{eq})

Zones	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Residential	55	45
Commercial	65	60
Industrial	75	70

dBA = A-weighted decibel; L_{eq} = equivalent sound level

Source: SMMC Section 5-5.05

SMMC Section 5-5.06(e) states that construction noise generated outside the hours of 7:00 a.m. and 6:00 p.m. on Monday through Friday or outside the hours of 8:00 a.m. and 6:00 p.m. on Saturdays and Sundays (unless otherwise allowed by permit issued by the Noise Control Officer) is considered nuisance noise.

SMMC Section 5-5.09 requires the acquisition of a construction noise permit from the Noise Control Officer for exterior construction work conducted within a residential zone or within 500 feet of a residential zone only if such activities exceed the noise standards set forth in SMMC Sections 5-5.03 and 5-5.05. The permit would cover short-term or occasional, non-routine operations.

SMMC Section 12-49.09(c) prohibits vibration above the perception threshold of an individual at or beyond the property boundary of the source for more than three minutes in any one hour of the day between the hours of 7:00 a.m. and 10:00 p.m. and for more than 30 seconds in any one hour between the hours of 10:00 p.m. and 7:00 a.m.

3 Impact Analysis

3.1 Methodology

Construction Noise

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise-sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6 dBA per doubling of distance for stationary equipment.

For construction noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. As a rule, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2018). Noise impacts from stationary equipment are assessed from the center of the equipment, while noise impacts from mobile construction equipment are assessed from the center of the equipment activity area (e.g., construction site).

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle, or percent of operational time, of the activity to determine the L_{eq} of the operation (FTA 2018).

Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some may have high-impact noise levels. The maximum hourly L_{eq} of each phase is determined by combining the L_{eq} contributions from each piece of equipment used in that phase (FTA 2018). In typical construction projects, grading activities generate the highest noise levels because grading involves the largest equipment and covers the greatest area.

Project construction is estimated to occur over 11 months. Construction phases would include site preparation, grading, building construction, paving and architectural coating at the project site. The construction equipment analyzed was based on applicant-provided information. It is assumed that diesel engines would power all construction equipment. For assessment purposes, and to be conservative, the loudest hour has been used for assessment. The loudest hour would include tractor, an excavator, and a large dozer operating simultaneously during the grading phase. Using the FHWA RCNM to estimate noise associated with construction equipment, maximum hourly noise levels are calculated to be approximately 66 dBA $L_{eq(8-hour)}$ at 380 feet during the grading phase. RCNM calculations are included in Appendix C.

On-site Operational Noise

Operation of the proposed project would generate noise primarily from heating, ventilation, and air conditioning (HVAC) equipment, loading and warehouse equipment (including the operation of four electric forklifts), and truck deliveries at the project site. The specific make and model of the future HVAC systems has not been selected at this stage of project design; therefore, based on applicant-provided information, this analysis assumes the use of a residential-type mini-split system similar to Fujitsu General Wall-Mounted ASU24RLF1 (see Appendix D for manufacturer's specifications). This HVAC unit has a sound power level (L_w) of 42 dBA, which is equivalent to 7 dBA L_{eq} at 50 feet. It was assumed that one HVAC unit would be installed in each of the four office-related rooms in the proposed warehouse building. To evaluate project impacts related to forklift operation, this analysis utilizes a reference noise level of 91 dBA L_w (sound power level), which equates to 56 L_{eq} at 50 feet assuming a directivity factor of 1. This reference noise level is based on the noise level measured for a small general purpose electric forklift maneuvering, contained in Appendix 18.11 of the Preliminary Environmental Information Report prepared for the proposed Rail Central Development project in Northamptonshire, England (Spectrum Acoustic Consultants 2015). To evaluate project impacts related to truck deliveries, this analysis utilizes a reference noise level of 68 dBA L_{max} at 30 feet from the source (Charles M. Salter 2017).

Off-site Traffic Noise

The proposed project would generate new vehicle trips that would utilize West La Brea Avenue to access the project site, which would increase off-site traffic noise levels. The existing traffic volume on West La Brea Avenue was estimated using typical roadway traffic volume data from the *Highway Capacity Manual* (HCM 6th Edition), as presented in Table 3.3 of the Sienna Solar Traffic Assessment prepared by GHD (2021). The HCM has published average daily traffic (ADT) based on roadway types and level of congestion. Based on knowledge of the local area, West La Brea Avenue can be classified as a two-lane local roadway operating at Level of Service A, which represents the least-congested traffic conditions. Based on this classification, existing traffic volumes on West La Brea Avenue are approximately 1,000 ADT. According to the project's Trip Generation Study, the project's trip generation is estimated to be 71 ADT (Associated Transportation Engineers 2021). Existing traffic volumes and project-related trips were used to analyze the project's potential off-site noise impacts.

Groundborne Vibration

The proposed project does not include any substantial vibration sources associated with operation. Thus, construction activities have the greatest potential to generate ground borne vibration affecting nearby receivers, especially during site preparation, grading of the project site. The greatest vibratory sources during construction would be dozers and loaded trucks. Construction vibration estimates are based on vibration levels reported by Caltrans and the FTA (Caltrans 2020; FTA 2018).

A quantitative assessment of potential vibration impacts from construction activities, such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation, may be conducted using the equations developed by Caltrans and the FTA (Caltrans 2020; FTA 2018). Table 7 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018).

Table 7 Vibration Levels Measured during Construction Activities

Equipment	Vibration Level at 25 feet (in/sec ppv)
Large Dozer	0.089
Excavator	0.076

Source: FTA 2018

3.2 Significance Thresholds

To determine whether a project would have a significant noise impact, Appendix G of the CEQA Guidelines requires consideration of whether a project would result in:

1. A substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
2. Generation of excessive groundborne vibration or groundborne noise levels; or
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels.

Construction Noise

Although the SMMC has established hours of construction in Section 5-5.06(e) and requirements for the acquisition of construction noise permits in Section 5-5.09, the City of Santa Maria has not adopted a quantitative threshold for evaluating construction noise impacts. Therefore, this analysis relies on the reasonable criteria provided by the FTA for assessing construction noise impacts based on the potential for adverse community reaction in its *Transit and Noise Vibration Impact Assessment Manual* (FTA 2018). For residential uses, the daytime noise threshold is 80 dBA L_{eq} for an 8-hour period.

On-site Operational Noise

The City has adopted noise standards in the Santa Maria General Plan Noise Element and the SMMC that regulate operational noise sources in the City. The proposed project would result in a significant impact if it generates noise from on-site sources in excess of the standards included in the Santa Maria General Plan and SMMC, as shown in Table 5 and Table 6 in Section 2.5, *Regulatory Setting*.

Off-site Traffic Noise

Off-site project noise (i.e., roadway noise) would result in a significant impact if the project would cause the ambient noise level measured at the property line of affected uses to increase by 3 dBA, which would be a perceptible increase in traffic noise.

Construction Vibration

SMMC Section 5.15.050 prohibits vibration above the perception threshold of an individual at or beyond the property boundary of the source but does not provide a numeric threshold. Therefore, the quantitative thresholds provided by Caltrans, as summarized in Section 2.2, *Vibration*, are utilized in this analysis to determine whether vibration levels would exceed the perception threshold of an individual. Caltrans has developed limits for the assessment of vibrations from

transportation and construction sources. The Caltrans vibration limits are reflective of standard practice for analyzing vibration impacts on structures from continuous and intermittent sources. For purposes of assessing impacts to humans, vibrations would potentially be significant if vibration levels exceeded the distinctly perceptible vibration levels of 0.035 in/sec ppv from project operation or 0.24 in/sec ppv from project construction in occupied off-site structures. For purposes of assessing impacts associated with structural damage regardless of occupancy, vibrations would be potentially significant if vibration levels exceed 1.5 in/sec ppv (the vibration level at which minor cosmetic [i.e., non-structural] damage may occur in engineered structures) at the nearest structure, which is an industrial building located approximately 180 feet to the east of the project site boundary.

3.3 Impact Analysis

Threshold 1 Would the proposed project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact N-1 CONSTRUCTION AND OPERATION OF THE PROPOSED PROJECT WOULD NOT GENERATE A SUBSTANTIAL TEMPORARY OR PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction Noise

The nearest sensitive receivers to the project site include single-family residences located to the south of the project site across West La Brea Avenue. Construction equipment would be continuously moving across the site, coming near and then moving further away from individual sensitive receivers at an average distance of approximately 380 feet (i.e., the distance between the nearest residences and the center of the project site). Noise levels during the loudest phase of construction activities (i.e., grading) would be approximately 66 dBA $L_{eq(8-hour)}$ at the nearest single-family residence to the south (see Appendix B for RCNM results). Therefore, noise levels during the loudest phase of construction would not exceed the FTA construction noise limit of 80 dBA $L_{eq(8-hour)}$ for residential land uses, and impacts would be less than significant.

On-site Operational Noise

The proposed project would include on-site operational noise sources, including (HVAC) equipment, loading and warehouse equipment including forklifts, truck deliveries, and trash hauling services. Each of these on-site noise sources is discussed below.

The project would include four small HVAC units to condition the proposed office space, which would be continuous noise sources. Based on the reference noise level of 7 dBA L_{eq} at 50 feet described in Section 3.1, *Methodology*, combined operation of the four HVAC units would generate an estimated noise level of 14 dBA L_{eq} at 50 feet. Assuming a standard distance attenuation of 6 dBA per doubling of distance, HVAC equipment noise levels would be approximately 6 dBA L_{eq} at the industrial property to the east and less than 1 dBA L_{eq} at the industrial property to the north, the industrial property to the west, and the nearest residence to the south across West La Brea Avenue. Estimated noise levels include a 5-dBA noise level reduction at the industrial property to the north that would be provided by the proposed building structure on site and a 5-dBA noise level reduction at residences to the south that would be provided by the existing wall located along the northern

property line of the residential subdivision, because these barriers would shield the proposed HVAC units from these receiving properties (FHWA 2011).

The project would include the operation of four electric forklifts to move deliveries to and from trucks. Most of the forklift activity would occur indoors, and the building structure would attenuate noise levels at nearby properties. However, conservatively assuming that all forklift activity occurs outdoors, operation of the four forklifts would generate a noise level of approximately 62 dBA L_{eq} at 50 feet. Assuming a standard distance attenuation of 6 dBA per doubling of distance, forklift noise levels would be approximately 61 dBA L_{eq} at the industrial property to the east, 46 dBA L_{eq} at the industrial property to the north, 37 dBA L_{eq} at the industrial property to the west, and 39 dBA L_{eq} at the nearest residence to the south across West La Brea Avenue. Estimated noise levels include a 5-dBA noise level reduction at the industrial property to the west that would be provided by the proposed building structure on site and a 5-dBA noise level reduction at residences to the south that would be provided by the existing wall located along the northern property line of the residential subdivision because these barriers would shield the proposed loading/unloading area from these receiving properties (FHWA 2011).

The proposed project would require daily truck deliveries, which would generate noise from idling, loading and unloading activities, and back-up alarms. The project site is located in an urbanized area and is adjacent to existing industrial uses and a railroad. Therefore, loading and truck deliveries are already a common occurrence in the project vicinity. According to the project site plans, a loading/unloading area would be developed adjacent to the proposed warehouse on the eastern side of the building. Delivery trucks would use this area for loading and unloading activities throughout which temporary noise would be generated. As discussed in Section 3.1, *Methodology*, delivery trucks are assumed to generate a noise level of 68 dBA L_{max} at 30 feet from the source (Charles M. Salter 2017). Assuming a standard distance attenuation of 6 dBA per doubling of distance and using the conservative assumption that maximum instantaneous noise levels (L_{max}) would be equivalent to average hourly noise levels (L_{eq}), delivery truck noise levels would be approximately 61 dBA L_{eq} at the industrial property to the east, 47 dBA L_{eq} at the industrial property to the north, 39 dBA L_{eq} at the industrial property to the west, and 41 dBA L_{eq} at the nearest residence to the south across West La Brea Avenue, as measured from the center of the proposed loading/unloading area. Estimated noise levels include a 5-dBA noise level reduction at the industrial property to the west that would be provided by the proposed building structure on site and a 5-dBA noise level reduction at residences to the south that would be provided by the existing wall located along the northern property line of the residential subdivision because these barriers would shield the proposed loading/unloading area from these receiving properties (FHWA 2011).

The combined noise levels from HVAC equipment, forklifts, and truck deliveries at the nearest receiving properties are summarized in Table 8 and compared to both the City's hourly daytime and nighttime noise level thresholds because the project's hours of operation would occur during daytime hours from 7:00 a.m. to 4:00 p.m. as well as during nighttime hours from 6:00 a.m. to 7:00 a.m. As shown therein, noise levels would not exceed the daytime or nighttime hourly exterior noise level limits established by SMMC Section 5-5.04 and 5-5.05 for residential and industrial land uses at the nearest receiving properties. Therefore, impacts would be less than significant.

Table 8 Hourly Operational Noise Levels

Receiving Property	HVAC Equipment (dBA L _{eq})	Forklifts (dBA L _{eq})	Truck Loading/ Unloading (dBA L _{eq})	Combined Hourly Noise Level (dBA L _{eq})	Daytime Hourly Noise Level Threshold (dBA L _{eq}) ¹	Threshold Exceeded?	Nighttime Hourly Noise Level Threshold (dBA L _{eq}) ¹	Threshold Exceeded?
Industrial Property to the East	6	61	61	64	75	No	70	No
Industrial Property to the North	<1	46	47	50	75	No	70	No
Industrial Property to the West	<1	37	39	41	75	No	70	No
Residences along West Durham Way, South of West La Brea Avenue	<1	39	41	43	55	No	45	No

dBA = A-weighted decibel; L_{eq} = average noise level equivalent

Note: The noise levels reported in the table account for the noise level reductions provided by the proposed warehouse building structure on site and the existing wall located along the northern property line of the residential subdivision located to the south of West La Brea Avenue, which would shield nearby receiving properties from some or all of the on-site operational noise sources.

¹ Source: SMMC Sections 5-5.04 and 5-5.05 (see Table 6 in Section 2.5, *Regulatory Setting*)

Table 9 summarizes 24-hour operational noise levels associated with the project, assuming project operation would occur from 6:00 a.m. to 4:00 p.m., and compares noise levels to the 24-hour exterior noise standards contained in Table N-4 of the Santa Maria General Plan Noise Element. As shown therein, the combined exterior 24-hour operational noise levels would not exceed the 24-hour exterior noise level thresholds at the nearest receiving properties. Therefore, operational noise impacts would be less than significant.

Table 9 24-Hour Operational Noise Levels

Receiving Property	Combined Exterior 24-Hour Noise Level (CNEL)	24-Hour Exterior Noise Level Threshold (CNEL) ¹	Threshold Exceeded?
Industrial Property to the East	63	70	No
Industrial Property to the North	49	70	No
Industrial Property to the West	36	70	No
Residences Along West Durham way, South of West La Brea Avenue	38	60	No

CNEL = Community Noise Equivalent Level

¹ Source: Table N-4 of the Santa Maria General Plan Noise Element (see Table 5 in Section 2.5, *Regulatory Setting*)

Off-Site Traffic Noise

The project would generate new vehicle trips that would contribute to existing off-site traffic noise, primarily on West La Brea Avenue, which has an estimated existing daily traffic volume of 1,000 ADT (see Section 3.1, *Methodology*). Based on the trip generation estimated in the Trip Generation Study, the proposed project would generate approximately 71 ADT on weekdays (Associated Transportation Engineers 2021). Therefore, the project would result in a net total of approximately 1,071 ADT (existing plus project ADT) on West La Brea Avenue. The project would increase existing traffic volumes and associated off-site traffic noise levels by approximately 7 percent, which equates to an increase of approximately 0.3 dBA. As stated in Section 3.2, *Significance Thresholds*, the project would have a significant impact if existing off-site traffic noise were increased by 3 dBA. Therefore, off-site traffic noise impacts would be less than significant.

Threshold 2 Would the proposed project generate excessive groundborne vibration or groundborne noise levels?

Impact N-2 CONSTRUCTION OF THE PROPOSED PROJECT WOULD EXPOSE NEARBY SENSITIVE RECEIVERS TO A TEMPORARY INCREASE IN VIBRATION. HOWEVER, VIBRATION LEVELS WOULD NOT EXCEED THE HUMAN ANNOYANCE OR STRUCTURAL DAMAGE THRESHOLDS. IN ADDITION, THE PROJECT WOULD NOT INCLUDE SIGNIFICANT STATIONARY SOURCES OF VIBRATION DURING OPERATION. THEREFORE, THE PROPOSED PROJECT WOULD HAVE A LESS THAN SIGNIFICANT VIBRATION IMPACT.

Certain types of construction equipment can generate high levels of groundborne vibration. Construction of the proposed project would utilize loaded trucks, front-end loader, and excavators. Vibration impacts are assessed from the edge of construction activity. Therefore, the use of a large bulldozer was assumed to occur at a distance of 135 feet from the nearest structures, which are industrial uses to the east of the project site, and loaded trucks were assumed to operate at a distance of 50 feet (i.e., the distance from the centerline of the nearest travel lane on West La Brea

Avenue to the nearest structure, which is a residence to the south along West Durham Way). As shown in Table 10, groundborne vibration from construction equipment would not exceed 0.24 in/sec ppv (the threshold for impacts to humans) or 1.5 in/sec ppv (the threshold for structural damage) at the nearest structures.

Table 10 Vibration Levels at Nearest Building

Equipment	Estimated Vibration Levels (in/sec ppv)
Large Bulldozer ¹	0.01
Loaded Truck	0.04
Threshold for Human Annoyance	0.24
Threshold Exceeded?	No
Threshold for Structural Damage	1.5
Threshold Exceeded?	No
¹ Measured at a distance of 135 feet (i.e., the distance from the project site boundary to the nearest structure to the east). ² Measured at a distance of 50 feet (i.e., the distance from the centerline of the nearest travel lane on West La Brea Avenue to the nearest structure to the south). See Appendix E for vibration analysis worksheets.	

The proposed project would not include significant stationary sources of vibration, such as heavy vibration-generating equipment operations. Therefore, no operational vibration impact would occur.

Threshold 3 For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the proposed project expose people residing or working in the project area to excessive noise levels?

Impact N-3 THE PROJECT WOULD BE LOCATED OUTSIDE THE AIRPORT INFLUENCE AREA FOR THE SANTA MARIA PUBLIC. THEREFORE, THE PROJECT WOULD NOT EXPOSE PEOPLE RESIDING OR WORKING IN THE PROJECT AREA TO EXCESSIVE NOISE LEVELS. NO IMPACT WOULD OCCUR.

The airport closest to the project site is the Santa Maria Public Airport located approximately four miles south of the project site. The project site is not located in an Airport Influence Area for this airport (Santa Barbara County Airport Land Use Commission 1993). In addition, the project site is not near a private airport. Therefore, the project would not expose people residing or working in the project area to excessive noise levels, and no impact would occur.

4 Conclusions

The project would generate both temporary construction-related noise and long-term noise associated with operation of the project. Construction noise levels at the nearest sensitive receivers (i.e., residences to the south across West La Brea Avenue) would not exceed the FTA construction noise threshold for residential properties, and construction-related noise impacts would be less than significant. Combined operational activities on the project site would generate noise levels that would not exceed the City's hourly daytime and nighttime noise level standards and 24-hour noise level standards at receiving residential and industrial properties. Therefore, operational noise impacts would be less than significant. Project-generated traffic would result in a noise level increase of up to 0.3 dBA on West La Brea Avenue, which would not exceed the threshold for off-site traffic noise impacts. Therefore, off-site traffic noise impacts would also be less than significant.

The project would generate groundborne vibration during construction. Groundborne vibration would not exceed the applicable vibration thresholds for human annoyance and structural damage at the nearest building, and construction-related vibration impacts would be less than significant. The project would not include operational sources of vibration, and no operational vibration impact would occur.

The project site is outside the noise contours for the Santa Maria Municipal Airport. Therefore, no substantial noise exposure would occur to construction workers or future employees of the project from aircraft noise.

5 References

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Spectrum Acoustic Consultants. 2015. Rail Central Development Preliminary Environmental Information Report - Appendix 18.11: Site operational noise assumptions and calculation procedures. http://www.railcentral.com/site/assets/files/2120/appendix_18_11_site_operational_noise_assumptions_and_calculation_procedures.pdf (accessed August 2021).

Appendix A

Project Site Plans

SEASIDE PACKAGING WAREHOUSE

CONDITIONAL USE PERMIT DRAWINGS

SANTA MARIA, CALIFORNIA



PROJECT:
Packaging Warehouse
1300 WEST LA BREA AVENUE
SANTA MARIA, CA 93458

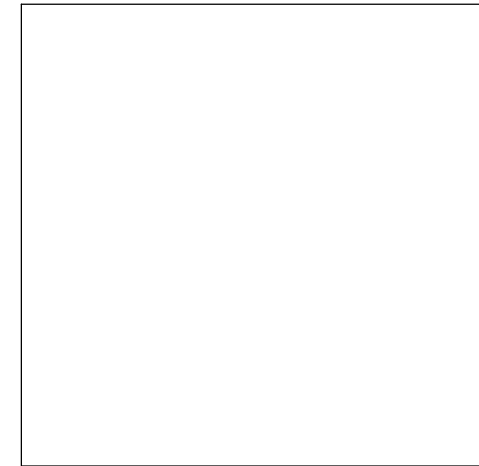
CLIENT:
Seaside Packaging
2115 SINTON ROAD
SANTA MARIA, CA 93458



Vicinity Map
Scale: Not to Scale

CONDITIONAL USE PERMIT DRAWINGS

No.	Revision	Date	By	



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PROJECT NUMBER: 1255-01

DATE: MAY 12, 2021

SHEET TITLE:
Cover Sheet and Existing Site Plan

SHEET NUMBER:

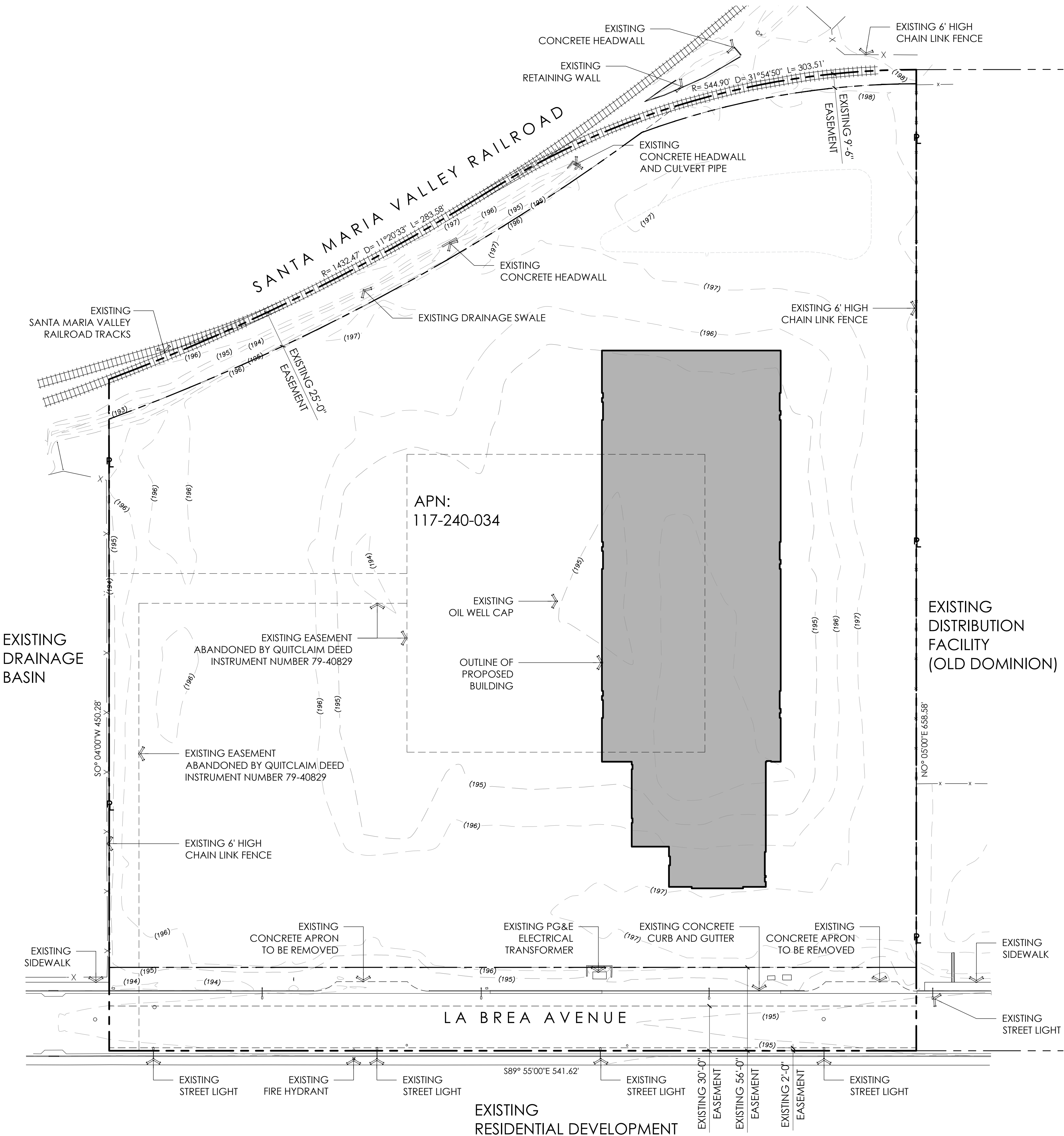
CUP1.0

- CUP1.0 Cover Sheet and Existing Site Plan
CUP2.0 Proposed Site Development Plan
CUP3.0 Proposed Floor Plans
CUP4.0 Exterior Elevations
CUP5.0 General Fire Safety Requirements
C1.0 Preliminary Grading, Drainage, and Utility Plans
L1.0 Preliminary Landscape Plan
SL1.0 Site Lighting Plan
SL2.0 Site Lighting Photometric Plan

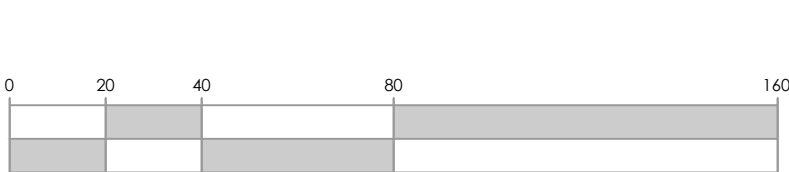
Sheet Index

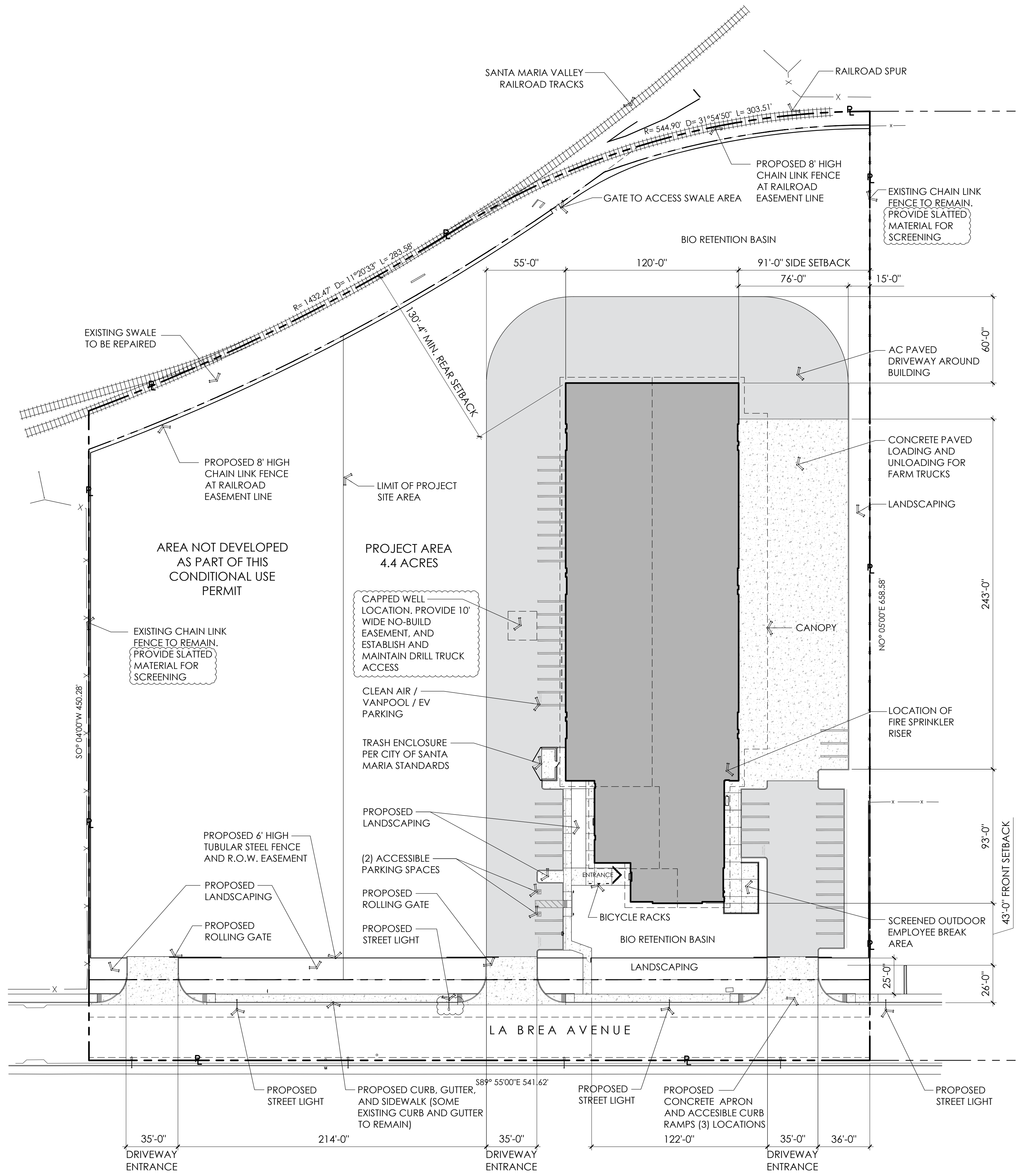
OWNERS / DESIGN TEAM	
PROPERTY OWNER:	BILLY OWGZARSKI SEASIDE PACKAGING 2115 SINTON ROAD SANTA MARIA, CALIFORNIA 93458 805.483.4240 billy@seasidepackaging.com
ARCHITECT:	THOMAS G. REAY C19442 OMNI DESIGN GROUP, INC. 711 TANK FARM ROAD SUITE 100 SAN LUIS OBISPO, CALIFORNIA 93401 805.544.9700 treay@odglo.com
CIVIL ENGINEER:	DAVID MARCHELL PE#65215 OMNI DESIGN GROUP, INC. 711 TANK FARM ROAD SUITE 100 SAN LUIS OBISPO, CALIFORNIA 93401 805.544.9700 dmarchell@odglo.com
LANDSCAPE ARCHITECT:	TERRY LEE, LANDSCAPE ARCHITECT RLA 4108, ARBORIST, LEED GR 319 NORTH HIGHWAY 1, SPC 54 GROVER BEACH, CALIFORNIA 93433 805.489.0774 terryleeaia@gmail.com
SITE INFORMATION	
PROJECT DESCRIPTION:	CONSTRUCT NEW INFILL PROJECT IN THE CITY OF SANTA MARIA, CONSISTING OF A 40,854 SQUARE FOOT AGRICULTURAL BOX WAREHOUSE AND DISTRIBUTION FACILITY WITH OFFICES, ASSOCIATED PARKING, TRUCK LOADING, LANDSCAPING, AND SITE IMPROVEMENTS ON 4.4 ACRES OF AN EXISTING 6.18 PARCEL. THERE WILL BE NO RETAIL SALES OR SERVICES ON THE PREMISES.
LOCATION:	1300 WEST LA BREA AVENUE, SANTA MARIA
A.P.N.:	117-240-034
GENERAL PLAN DESIGNATION:	GI - GENERAL INDUSTRIAL
ZONING:	M2 - GENERAL MANUFACTURING
SIZE OF PROJECT AREA:	4.4 ACRES (191,202 SF)
SIZE OF PARCEL:	6.18 ACRES GROSS (269,401 SF)
PRESENT USE:	UNDEVELOPED
ACCESS:	THREE DRIVEWAYS ARE LOCATED ON LA BREA AVENUE
SURROUNDING USES / ZONING:	
NORTH	SANTA MARIA VALLEY RAILROAD
SOUTH	SMALL LOT, SINGLE FAMILY RESIDENTIAL
EAST	OLD DOMINION DISTRIBUTION FACILITY; M2 - GENERAL MANUFACTURING
WEST	EXISTING DRAINAGE/FLOOD CONTROL BASIN
PARKING REQUIRED:	(46) 9' X 19' FULL SIZE SPACES INCLUSIVE OF (3) CLEAN AIR/VAN POOL/EV SPACES PER TABLE 5.106.52 INCLUSIVE OF (2) ACCESSIBLE SPACES (1 VAN, AND 1 STANDARD), PER TABLE 11B.208.2
PARKING PROVIDED:	(46) 9' X 19' FULL SIZE SPACES INCLUSIVE OF (3) CLEAN AIR/VAN POOL/EV SPACES PER TABLE 5.106.52 INCLUSIVE OF (2) ACCESSIBLE SPACES (1 VAN, AND 1 STANDARD), PER TABLE 11B.208.2
SETBACKS	FRONT - REQUIRED: 20 PROVIDED: 43' FROM ROW EASEMENT SIDES - REQUIRED: NONE PROVIDED: 91'-0" MINIMUM REAR - REQUIRED: NONE PROVIDED: 63'-4" MINIMUM
BUILDING COVERAGE:	BUILDING FOOTPRINT - 40,040 SQUARE FEET (21%)
PAVED AREA:	66,710 SQUARE FEET (35%)
LANDSCAPE AREA (INCLUDING STORMWATER BASINS)	32,805 SQUARE FEET (17%)
OPEN SPACE	51,647 SQUARE FEET (27%)
FENCING:	REFER TO SITE DEVELOPMENT PLAN
BUILDING DATA	
HEIGHT: SMMC 12-17.09	37'-3" PROPOSED 40' PERMITTED
PROPOSED AREA: CBC 507.5	40,854 SF PROPOSED UNLIMITED 40,040 SF - FIRST FLOOR, 814 SF - SECOND FLOOR
CONSTRUCTION TYPE:	TYPE VB, SPRINKLERED
OCCUPANCY GROUP:	S-1/B
HIGH PILE STORAGE:	YES
SPRINKLERED:	YES

Project Data



Existing Site Plan
Scale: 1" = 40'-0"





Proposed Site Development Plan
Scale: 1" = 40'-0"

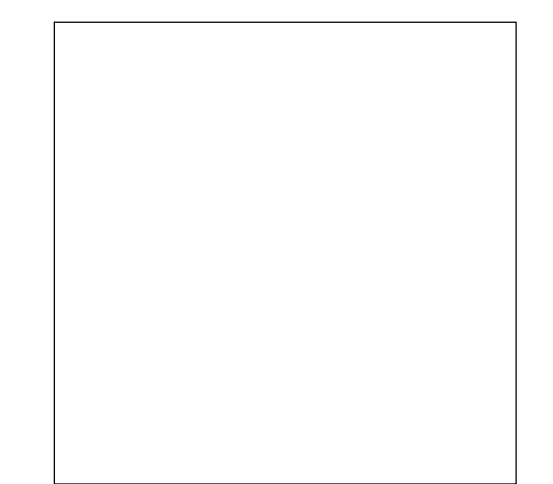


PROJECT:
Packaging Warehouse
1300 WEST LA BREA AVENUE
SANTA MARIA, CA 93458

CLIENT:
Seaside Packaging
2115 SINTON ROAD
SANTA MARIA, CA 93458

CONDITIONAL USE
PERMIT DRAWINGS

No.	Revision	Date	By	



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PROJECT NUMBER: 1255-01
DATE: MAY 12, 2021
SHEET TITLE:
Proposed Site Development Plan

SHEET NUMBER:
CUP2.0



NOTES:

ALL AREAS OF THE BUILDING SHALL BE PROVIDED WITH OUTSIDE AIR VENTILATION.

METAL BUILDING SHOP DRAWINGS ARE REQUIRED TO BE SUBMITTED WITH THE FOUNDATION AND FLOOR PLANS.

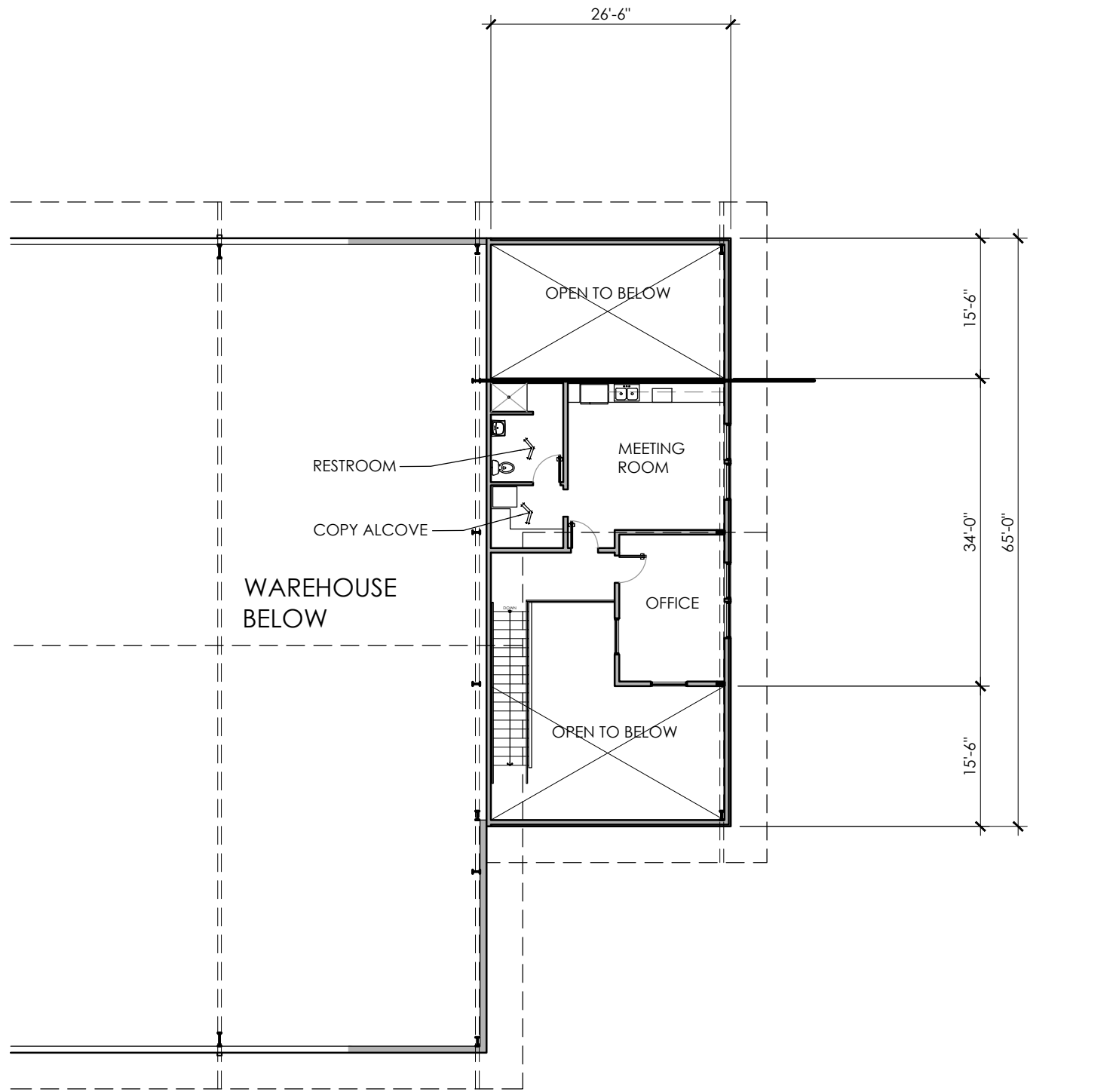
ALL EXTERIOR DOORS SHALL BE ACCESSIBLE AND INTERCONNECTED BY ACCESSIBLE PATHS OF TRAVEL.

THE SECOND FLOOR SINK IN THE MEETING ROOM, RESTROOM, AND SHOWER SHALL MEET DISABLED ACCESS REQUIREMENTS.

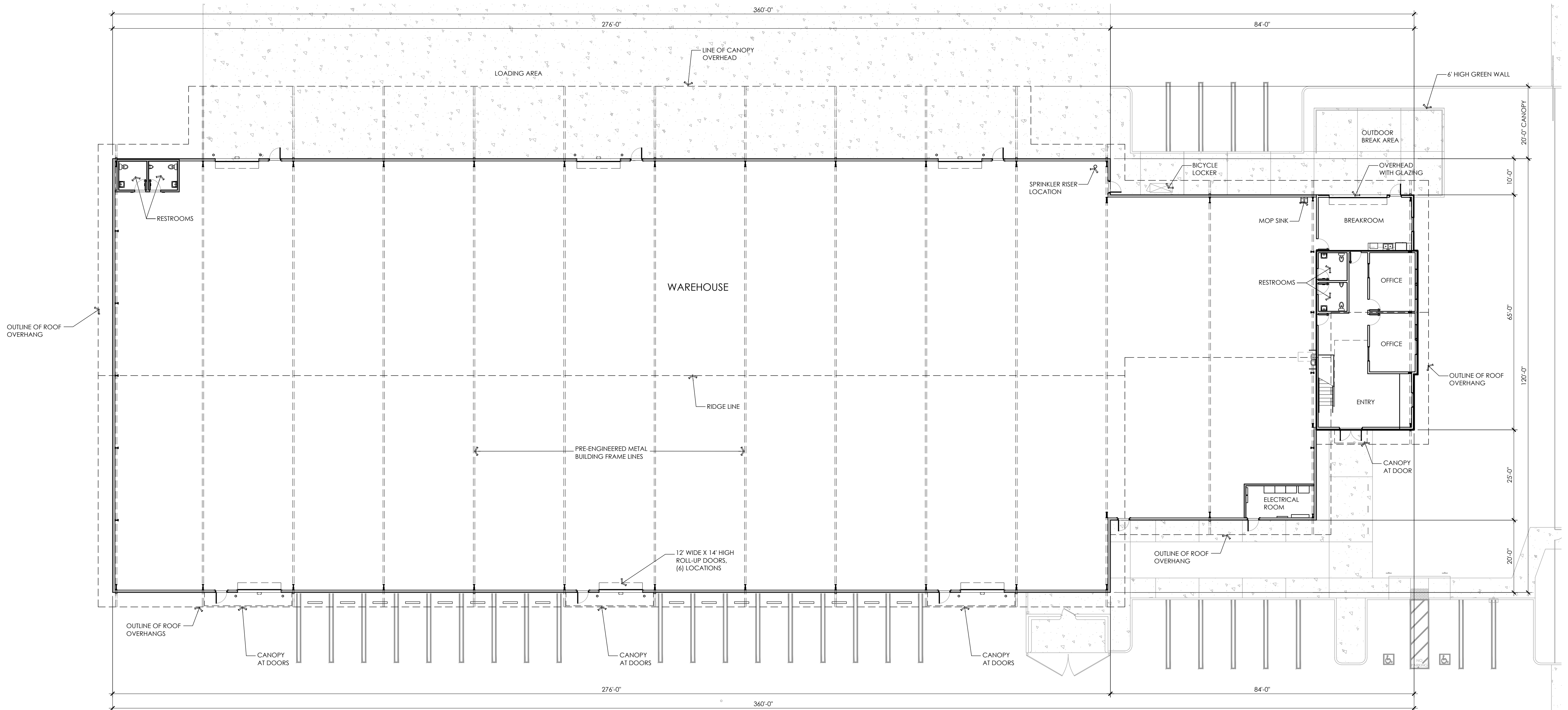
INTERIOR DOORS ON BOTH THE FIRST AND SECOND FLOOR LEVELS SHALL MEET WHEELCHAIR MANEUVERING REQUIREMENTS.

RESTROOMS AND BREAK ROOM ON THE FIRST FLOOR SHALL MEET DISABLE ACCESS REQUIREMENTS.

AN ACCESSIBLE ROUTE SHALL BE PROVIDED FROM THE ACCESSIBLE PARKING SPACES TO AND THROUGH THE ACCESSIBLE ENTRANCE.



Proposed Second Floor Plan
Scale: 1/16" = 1'-0"



Proposed First Floor Plan
Scale: 1/16" = 1'-0"



PROJECT:

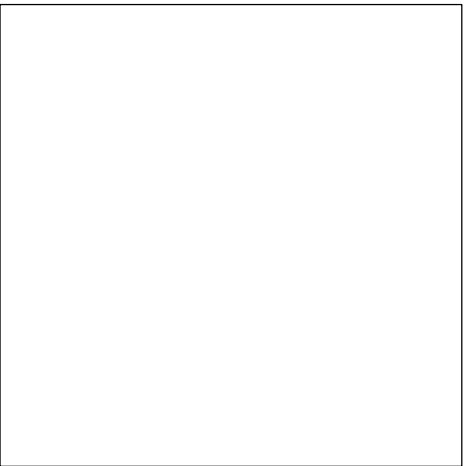
Packaging Warehouse
1300 WEST LA BREA AVENUE
SANTA MARIA, CA 93458

CLIENT:

Seaside Packaging
2115 SINTON ROAD
SANTA MARIA, CA 93458

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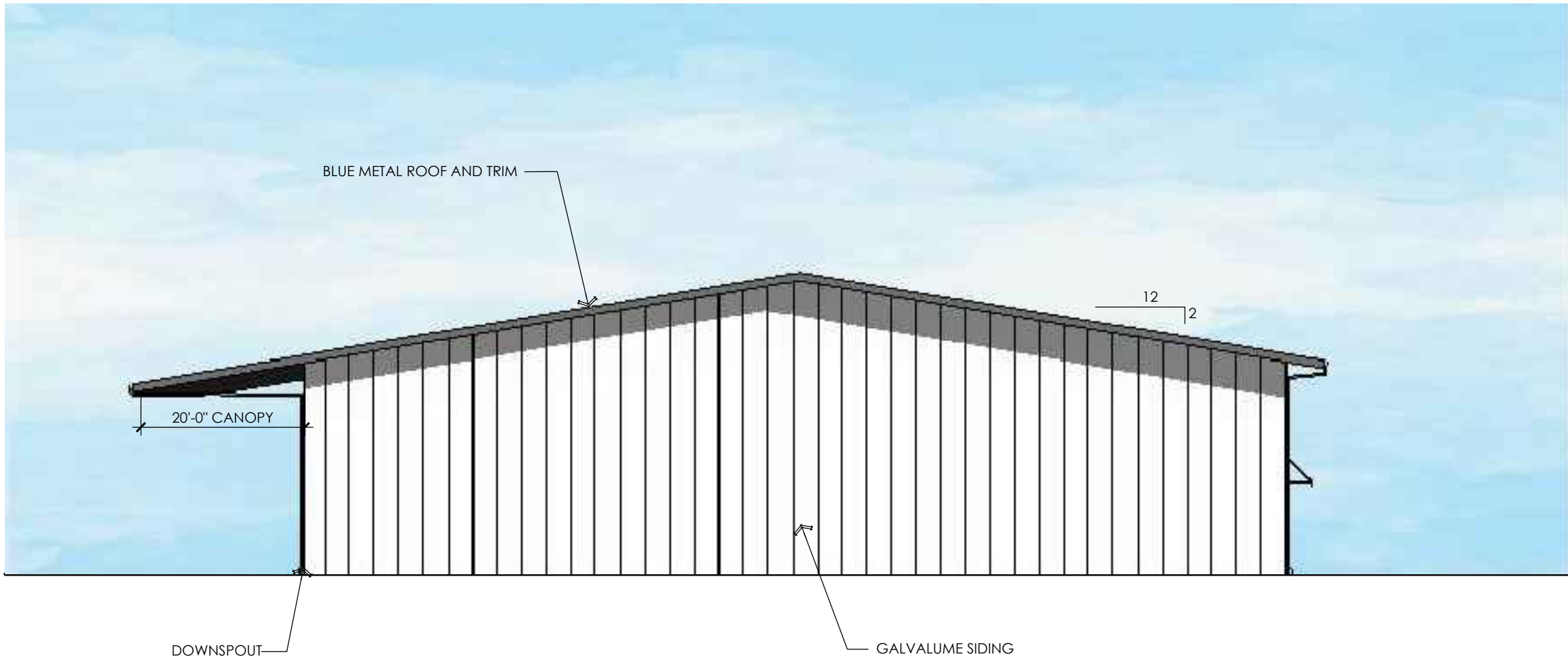
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SHEET TITLE:

Proposed Floor Plans

SHEET NUMBER:

CUP3.0



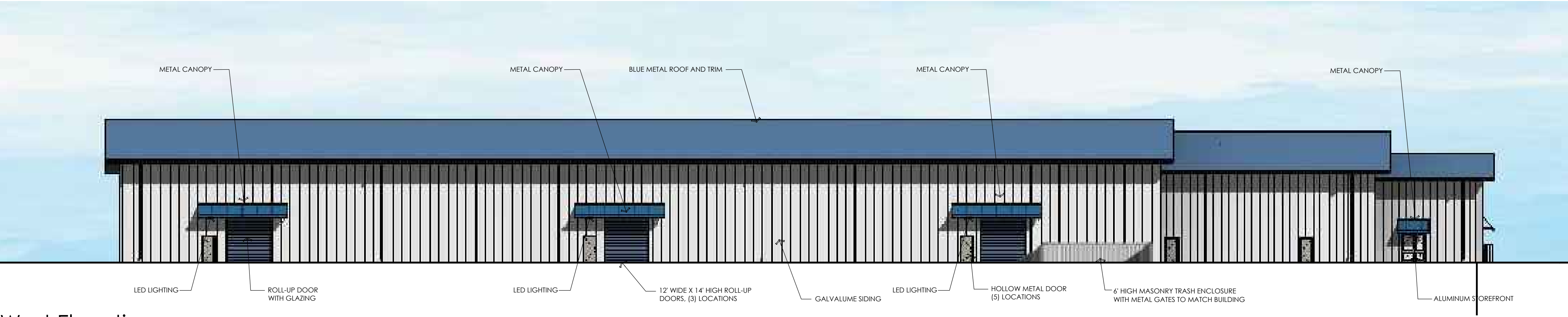
North Elevation
Scale: 1/16" = 1'-0"



South Elevation
Scale: 1/16" = 1'-0"



East Elevation
Scale: 1/16" = 1'-0"



West Elevation
Scale: 1/16" = 1'-0"



PROJECT:
Packaging Warehouse
1300 WEST LA BREA AVENUE
SANTA MARIA, CA 93458

CLIENT:
Seaside Packaging
2115 SINTON ROAD
SANTA MARIA, CA 93458

CONDITIONAL USE
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PROJECT NUMBER: 1255-01
DATE: MAY 12, 2021
SHEET TITLE:
Exterior Elevations

SHEET NUMBER:



C1.0



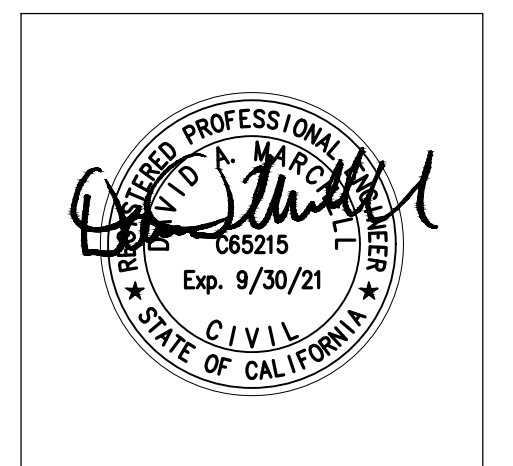
PROJECT:

Packaging
Warehouse
LA BREA AVENUE
SANTA MARIA, CA 93458

CLIENT:

Seaside
Packaging
2115 SINTON ROAD
SANTA MARIA, CA 93458

CUP DRAWINGS



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PROJECT NUMBER: 1255-01

DATE: MARCH 01, 2021

SHEET TITLE:

Preliminary Grading, Drainage and Utility Plan

SHEET NUMBER:

CENTRAL COAST

<u>SYMBOL</u>	<u>BOTANICAL NAME</u> <u>COMMON NAME</u>	<u>PLANT TYPE</u>	<u>CONTAINER SIZE</u>
	HETEROMELES ARBUTIFOLIA CALIFORNIA SAGEBRUSH	TALL ACCENT SHRUB	15 GALLON
	ARTEMISIA CALIFORNICA CALIFORNIA SAGEBRUSH	MEDIUM SHRUB	5 GALLON
	CEANOTHUS 'CONCHA' CALIFORNIA LILAC	MEDIUM SHRUB	5 GALLON
	ARCTOSTAPHYLOS HOOKERI MONTEREY MANZANITA	MEDIUM SHRUB	1 GALLON
	FESTUCA MARIE ATLAS FESCUE	ORNAMENTAL GRASS	1 GALLON
	LANTANA MONTEVIDENSIS PURPLE LANTANA	LOW SHRUB	1 GALLON
	COLEONEMA PULCHELLUM BREATH OF HEAVEN 'SUNSET GOLD'	LOW SHRUB	5 GALLON
	GAZANIA RIGENS 'BURGANDY' PINK TRAILING GAZANIA	LAWN SUBSTITUTES	FLATS
	DISTICTUS BUCCINATORIA RED TRUMPET VINE	VINE	5 GALLON

CENTRAL COAST

<u>SYMBOL</u>	<u>BOTANICAL NAME</u> <u>COMMON NAME</u>	<u>PLANT TYPE</u>	<u>CONTAINER SIZE</u>
	ARBUTUS MARINA COASTAL MADRONE 'STRAWBERRY TREE'	25' -30'	24" BOX
	OLEA EUROPEA 'Swan Hill' FRUITLESS OLIVE Multi-Upright	20' -25'	24" BOX
	PLATINUS ACERFOLIA LONDON PLANE	35' -40'	24" BOX

1. Plant material proposed is drought tolerant and meets the low water use requirements of the City's ordinances. The soil type as required by the City's Preliminary Conceptual Landscape Standards is Sorento Loam per pg. 3 of the Environmental Assessment, prepared by Padre Associates, and is compatible with the selected plant types.
2. WELO Irrigation Design Compliance and Preliminary Calculations are located this sheet.
3. There are no existing trees on site. Street trees will meet the requirements of the City of Santa Maria and will be will be 24" Box size.
4. The Bio-retention Facility area shown, will be planted with approved bio-retention plant material for appropriate ground water recharge.

APPENDIX A AND B WORKSHEET PRELIMINARY CALCULATION
Regular Landscape Areas Total 31,060 ft²

(6) Hydrozones for (32,805ft²) with an average PF of 0.35 and an ETo of 47.4 (Santa Maria)
MAWA = (47.4)(0.62)(0.35 x 32805) = 337,333 gals per yr.

(MAWA) Maximum Allowed Water Allowance = 337,333 gallons per year meeting the maximum water allowed use mandated by the State of California.

Hydrozone No.	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (P)(E)	Total Landscape Area sf#2	ETAF x Area	Est. Total Water Use (ETWU)
#1 TREES	.35	Drip	.81	.2835	0	0	0
#2 - #6 LOW	.35	Drip	.81	.2835	32805	9300	273240
					A = 32,805	B = 9300	
						TOTAL ETWU	227,240*
						TOTAL MAWA	337,333

*ETWU = $ETo \times 0.62 \times ETAF \times Area$.
ETAF Calculations - Regular Landscape Areas All Landscape Areas. The average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

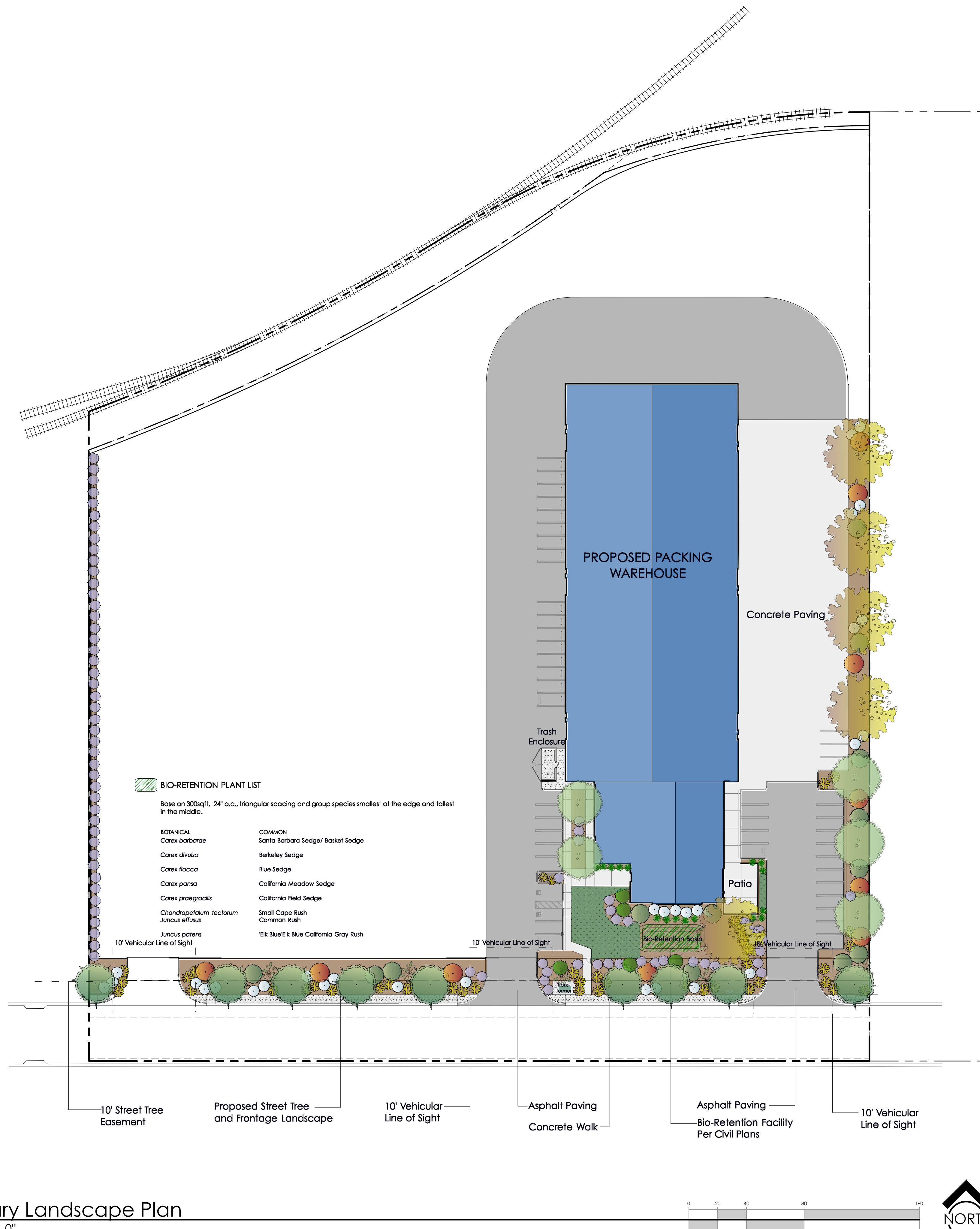
Total ETAF x Area	(B)	Total ETAF x Area	(B+D)
Total Area	(A)	Total Area	(A+C)
Average ETAF	B/A	Sitewide ETAF	(A+C)/(B+D)

Hydro-Zone/Pf	Type	PSI	GPM
1 Trees	Drip	35	16
2 Low	Drip	35	11
3 Low	Drip	35	11
4 Low	Drip	35	11
5 Low	Drip	35	11
6 Bio	Drip	35	11
Total P2	32,805		

This Landscape Plan, when installed, will comply with the City of Santa Maria's Municipal Code and the Water Conservation Mandate *"Water Efficient Landscape Ordinance"* (WELO) prepared in accordance with the water efficient landscape work sheets Appendix A and Appendix B. The WULCOLS values were from the State Guidelines will be used to determine final PF (plant factor) value in the final calculation in the construction document phase.

The water conservation method for the new landscape plant material will have a LOW PF (Plant Factor) rating and the ETWU (estimated total water use) per year is estimated to be within the Maximum Allowable Water Allocation (MAWA) which will be calculated for the project. Additionally, a 'Smart Controller' with a climate control weather station will be used to monitor the irrigation water and pro-rate daily water consumption to the minimum requirements for each hydrozone. All trees will be irrigated on separate systems so that once established, water can be regulated in a more efficient manner.

Terry Lee, Landscape Architect RLA#4108



PROJECT:

Packaging
Warehouse
1300 WEST LA BREA AVENUE
SANTA MARIA, CA 93458

CLIENT:

Seaside
Packaging
2115 SINTON ROAD
SANTA MARIA, CA 93458

CONDITIONAL USE
PERMIT DRAWINGS



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PROJECT NUMBER: 1255-01

DATE: APRIL 30, 2021

SHEET TITLE:
Preliminary
Landscape Plan

SHEET NUMBER:



L1.0

D-Series Size 0 LED Area Luminaire

Specifications

EPA: 0.5/0.5
Length: 26" H
Width: 13" W
Height: 13" H
Weight (each): 15 lbs

Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA DBBK

Order	Qty	Part Number	Description	Notes	Quantity
DSX0 LED	1	DSX0 LED	LED Area Luminaire		1
DSX0 LED	1	DSX0 LED	LED Area Luminaire		1
DSX0 LED	1	DSX0 LED	LED Area Luminaire		1
DSX0 LED	1	DSX0 LED	LED Area Luminaire		1

Ordering Information

Accessories

External Gaze Shield

Drilling

Photometric Diagrams

Technical Data

FULL CUT OFF, LED, PARKING LOT POLE LIGHT
MOUNTING HEIGHT: 18'
DARK BRONZE FINISH, SQUARE POLE

WDGE2 LED Architectural Wall Sconce

Specifications

Depth (D1): 7"
Depth (D2): 1.5"
Height: 4"
Width: 11.5"
Weight (each): 1.5 lbs

Ordering Information

EXAMPLE: WDGE2 LED P3 40K 80CRI WF MVOLT SRM DBBK

Order	Qty	Part Number	Description	Notes	Quantity
WDGE2 LED	1	WDGE2 LED	LED Architectural Wall Sconce		1
WDGE2 LED	1	WDGE2 LED	LED Architectural Wall Sconce		1
WDGE2 LED	1	WDGE2 LED	LED Architectural Wall Sconce		1
WDGE2 LED	1	WDGE2 LED	LED Architectural Wall Sconce		1

Accessories

Performance Data

Lumen Output

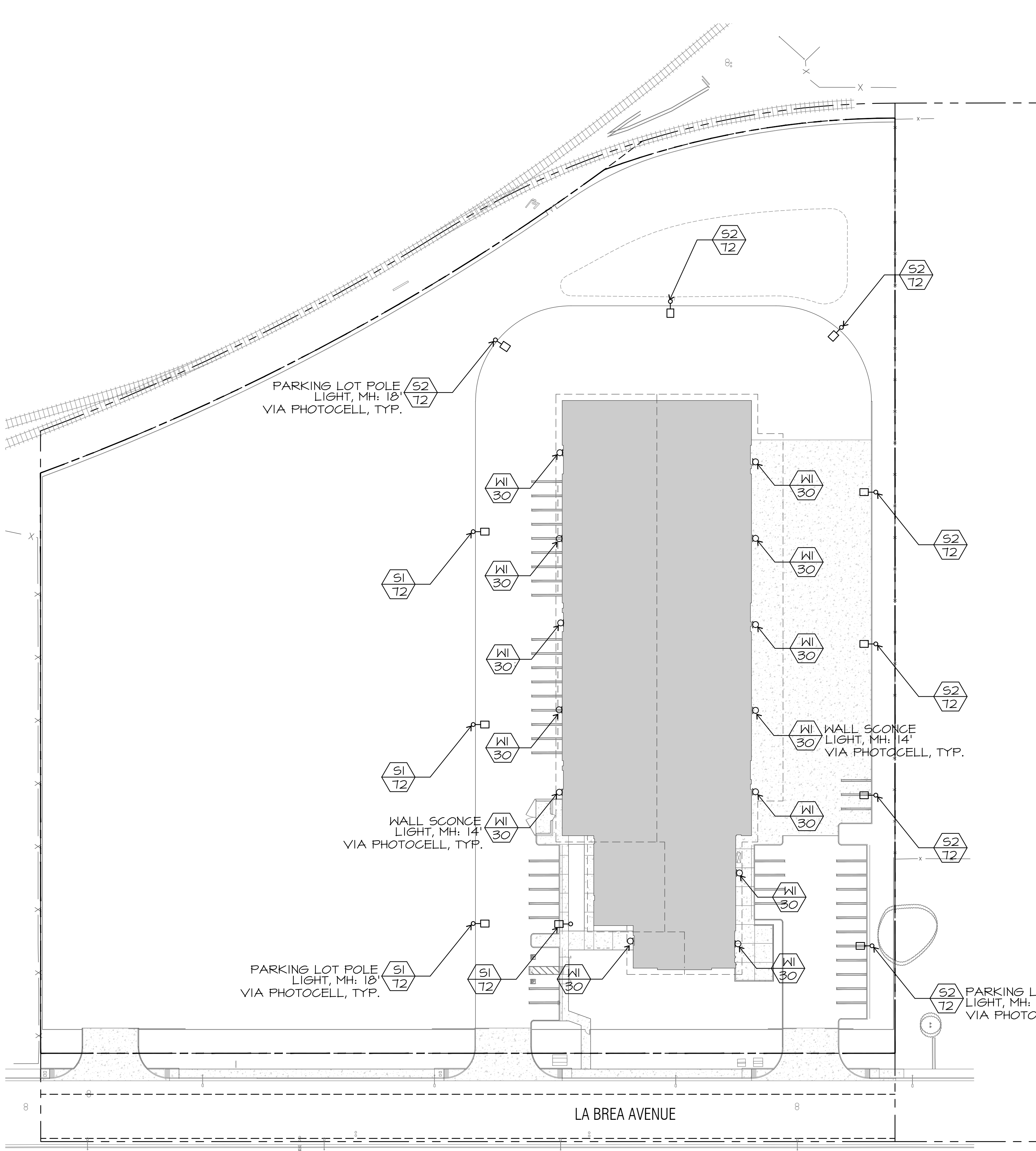
Electrical Load

Lumen Multiplier for 90CRI

Lumen Output in Emergency Mode (90CRI, 90min)

Projected LED Lumen Maintenance

FULL CUT OFF, LED, WALL SCONCE
MOUNTING HEIGHT: 14'
DARK BRONZE FINISH, COMFORT WIDE OPTIC



EXTERIOR LIGHT POLLUTION MUST COMPLY WITH CGC SECTION 5.106.8

ALL LIGHT FIXTURES ARE DARK SKY COMPLIANT

SITE LIGHTING PLAN

SCALE: 1" = 40'-0"



omni DESIGN GROUP

ARCHITECTURE
CIVIL ENGINEERING
SURVEYING

711 TANK FARM ROAD, SUITE 100
SAN LUIS OBISPO
CALIFORNIA, 93401
PHONE: (805) 544-9700
email: omni@omni.com



PROJECT:

Packaging Warehouse

1300 WEST LA BREA AVENUE
SANTA MARIA, CA 93458

CLIENT:

Seaside Packaging

2115 SINTON ROAD
SANTA MARIA, CA 93458

CONDITIONAL USE
PERMIT DRAWINGS

CLIP DRAWING UPDATES	05.13.2021	SDW
No. Revision	Date	By

JMPE

ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO. E13083

21240

627 OLIVE STREET
SANTA BARBARA, CA 93101
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PROJECT NUMBER: 1255-01

DATE: MAY 12, 2021

SHEET TITLE:

SITE LIGHTING PLAN

SHEET NUMBER:

SL1.0

Schedule										
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage
	S1	4	Lithonia Lighting	DSX0 LED P3 40K T2M MVOLT SSS 16' 4C DM19AS	DSX0 LED P3 40K T2M MVOLT 16' POLE ON 2' BASE	LED	1	8429	0.92	71
	S2	7	Lithonia Lighting	DSX0 LED P3 40K T4M MVOLT SSS 16' 4C DM19AS	DSX0 LED P3 40K T4M MVOLT, T 16' POLE ON 2' BASE	LED	1	8268	0.92	71
	W1	13	Lithonia Lighting	WDGE2 LED P4 40K 80CRI VW	WDGE2 LED WITH P4 - PERFORMANCE PACKAGE, 4000K, 80CRI, VISUAL COMFORT WIDE OPTIC	LED	1	4526	0.92	34.96

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
SITE	+	1.5 fc	6.7 fc	0.3 fc	22.3:1	5.0:1
SPILL LIGHT	+	0.1 fc	0.6 fc	0.0 fc	N/A	N/A

Luminaire Locations							
		Location					
No.	Label	X	Y	Z	MH	Tilt	Orientation
1	S1	1338.87	-480.47	18.00	18.00	0.00	270.00
8	S1	1277.57	-225.21	18.00	18.00	0.00	90.00
9	S1	1277.57	-347.53	18.00	18.00	0.00	90.00
1	S2	1402.18	-79.07	18.00	18.00	0.00	180.00
2	S2	1291.63	-103.84	18.00	18.00	0.00	123.76
3	S2	1510.95	-95.47	18.00	18.00	0.00	222.97
4	S2	1531.95	-392.26	18.00	18.00	0.00	270.00
5	S2	1529.58	-487.80	18.00	18.00	0.00	270.00
6	S2	1531.95	-296.29	18.00	18.00	0.00	270.00
7	S2	1531.95	-200.02	18.00	18.00	0.00	270.00
10	S1	1277.57	-473.78	18.00	18.00	0.00	90.00
1	W1	1333.17	-175.33	14.00	14.00	0.00	270.00
2	W1	1333.17	-229.64	14.00	14.00	0.00	270.00
3	W1	1334.12	-283.10	14.00	14.00	0.00	270.00
4	W1	1333.04	-338.35	14.00	14.00	0.00	270.00
5	W1	1333.04	-390.74	14.00	14.00	0.00	270.00
6	W1	1454.15	-175.33	14.00	14.00	0.00	90.00
7	W1	1454.15	-229.64	14.00	14.00	0.00	90.00
8	W1	1454.43	-283.71	14.00	14.00	0.00	90.00
9	W1	1454.28	-338.35	14.00	14.00	0.00	90.00
10	W1	1454.28	-390.74	14.00	14.00	0.00	90.00
11	W1	1444.52	-441.52	14.00	14.00	0.00	90.00
12	W1	1378.91	-485.00	14.00	14.00	0.00	270.00
13	W1	1443.42	-486.06	14.00	14.00	0.00	90.00



SITE LIGHTING PHOTOMETRIC PLAN

SCALE: 1" = 40'-0"



EXTERIOR LIGHT POLLUTION MUST COMPLY WITH
CGC SECTION 5.106.8

ALL LIGHT FIXTURES ARE DARK SKY COMPLIANT

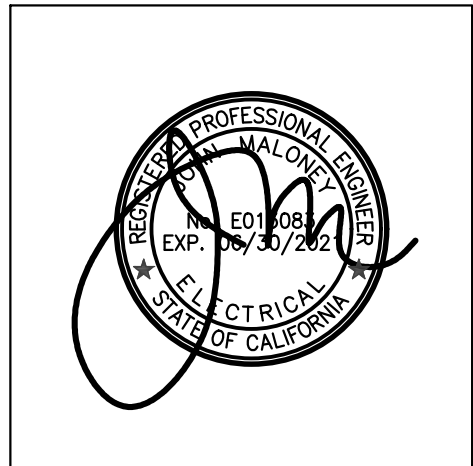
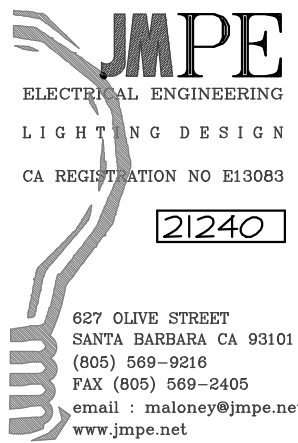


PROJECT:
**Packaging
Warehouse**
1300 WEST LA BREA AVENUE
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CLIENT:
**Seaside
Packaging**
2115 SINTON ROAD
SANTA MARIA, CA 93458

CONDITIONAL USE PERMIT DRAWINGS

	CLIP DRAWING UPDATES	05.13.2021	SDW
No.	Revision	Date	By



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PROJECT NUMBER: 1255-01

DATE: MAY 12, 2021

SHEET TITLE:

**SITE LIGHTING
PHOTOMETRIC PLAN**

SHEET NUMBER:

SL2.0

Appendix B

Noise Monitoring Data

Freq Weight : A
 Time Weight : SLOW
 Level Range : 40-100
 Max dB : 61.8 - 2021/08/25 10:06:17
 Level Range : 40-100
 SEL : 79.0
 Leq : 49.5

No. s	Date Time	(dB)				
1	2021/08/25 09:52:36	45.9	45.4	46.9	46.2	47.0
6	2021/08/25 09:52:51	51.6	46.3	45.1	46.4	45.0
11	2021/08/25 09:53:06	44.9	44.9	45.0	45.9	45.3
16	2021/08/25 09:53:21	45.2	45.8	46.1	45.4	46.3
21	2021/08/25 09:53:36	45.7	46.5	48.3	48.8	49.0
26	2021/08/25 09:53:51	48.3	47.7	47.7	47.4	47.9
31	2021/08/25 09:54:06	49.8	49.7	49.3	51.1	49.2
36	2021/08/25 09:54:21	48.1	48.7	49.7	49.8	48.2
41	2021/08/25 09:54:36	47.3	46.1	46.8	47.8	48.2
46	2021/08/25 09:54:51	47.8	47.4	46.5	45.3	46.4
51	2021/08/25 09:55:06	46.9	46.8	47.7	47.6	48.4
56	2021/08/25 09:55:21	47.3	46.2	46.9	46.8	49.3
61	2021/08/25 09:55:36	50.6	49.4	48.2	47.0	47.1
66	2021/08/25 09:55:51	45.3	44.6	44.8	45.5	44.1
71	2021/08/25 09:56:06	43.9	43.8	43.5	43.2	44.1
76	2021/08/25 09:56:21	44.0	43.2	44.1	44.9	43.9
81	2021/08/25 09:56:36	43.4	43.5	42.7	42.9	43.4
86	2021/08/25 09:56:51	44.1	43.3	44.7	46.3	46.8
91	2021/08/25 09:57:06	47.0	50.0	50.8	50.1	48.8
96	2021/08/25 09:57:21	49.0	48.6	47.2	47.8	49.3
101	2021/08/25 09:57:36	47.5	46.3	47.7	46.1	46.3
106	2021/08/25 09:57:51	46.9	47.1	47.2	48.1	48.0
111	2021/08/25 09:58:06	49.4	47.8	46.8	46.5	46.6
116	2021/08/25 09:58:21	47.4	48.1	46.7	46.6	47.1
121	2021/08/25 09:58:36	47.4	49.7	47.3	49.0	46.0
126	2021/08/25 09:58:51	45.1	45.8	46.3	45.7	45.4
131	2021/08/25 09:59:06	45.9	45.5	45.0	44.7	46.4
136	2021/08/25 09:59:21	45.4	44.3	49.2	44.8	44.6
141	2021/08/25 09:59:36	44.8	44.9	46.1	46.4	47.1
146	2021/08/25 09:59:51	49.1	49.6	48.2	46.6	45.8
151	2021/08/25 10:00:06	45.3	46.1	46.0	45.7	45.9
156	2021/08/25 10:00:21	45.4	45.0	45.2	45.6	45.5
161	2021/08/25 10:00:36	47.7	47.0	45.4	45.1	46.3
166	2021/08/25 10:00:51	44.9	44.9	44.3	45.6	45.1
171	2021/08/25 10:01:06	45.2	46.2	46.6	45.2	44.4
176	2021/08/25 10:01:21	44.7	43.9	44.3	43.8	44.6
181	2021/08/25 10:01:36	43.6	43.1	43.7	43.4	43.5
186	2021/08/25 10:01:51	43.6	44.1	44.4	43.5	43.4
191	2021/08/25 10:02:06	44.1	45.1	44.7	51.5	47.2
196	2021/08/25 10:02:21	45.7	46.9	49.7	54.3	54.9
201	2021/08/25 10:02:36	54.4	50.8	48.4	47.0	45.7
206	2021/08/25 10:02:51	45.0	44.4	44.5	45.2	54.0
211	2021/08/25 10:03:06	48.4	50.0	54.5	55.8	55.5
216	2021/08/25 10:03:21	51.5	55.5	57.4	60.6	58.2
221	2021/08/25 10:03:36	57.8	55.3	50.9	54.9	52.2
226	2021/08/25 10:03:51	51.4	48.3	49.4	56.8	48.0
231	2021/08/25 10:04:06	46.1	46.5	45.8	44.7	44.4
236	2021/08/25 10:04:21	44.2	43.8	43.6	45.4	46.1
241	2021/08/25 10:04:36	45.5	46.7	45.5	46.1	45.8
246	2021/08/25 10:04:51	54.5	46.6	50.6	45.5	45.8
251	2021/08/25 10:05:06	48.5	49.7	46.8	46.2	45.9
256	2021/08/25 10:05:21	45.5	45.1	46.0	45.5	44.4
261	2021/08/25 10:05:36	55.1	53.1	54.3	56.4	55.3
266	2021/08/25 10:05:51	55.1	52.2	54.1	52.5	49.2
271	2021/08/25 10:06:06	48.0	58.4	59.1	61.8	56.6
276	2021/08/25 10:06:21	56.7	56.6	55.7	54.4	53.5
281	2021/08/25 10:06:36	45.7	44.6	44.2	45.5	44.0
286	2021/08/25 10:06:51	44.1	44.6	44.2	44.4	44.7
291	2021/08/25 10:07:06	44.3	44.5	44.5	45.2	45.8
296	2021/08/25 10:07:21	45.6	45.1	45.2	49.5	48.5

Freq Weight : A
 Time Weight : SLOW
 Level Range : 40-100
 Max dB : 57.3 - 2021/08/25 10:23:30
 Level Range : 40-100
 SEL : 75.1
 Leq : 45.6

No. s	Date Time	(dB)					
1	2021/08/25 10:16:17	47.5	49.0	47.1	46.5	46.7	
6	2021/08/25 10:16:32	46.2	46.6	48.0	48.0	47.9	
11	2021/08/25 10:16:47	48.4	48.5	49.6	47.0	45.7	
16	2021/08/25 10:17:02	46.1	45.9	45.4	45.2	46.2	
21	2021/08/25 10:17:17	47.0	46.4	46.3	45.9	46.0	
26	2021/08/25 10:17:32	45.7	46.9	47.1	48.6	50.0	
31	2021/08/25 10:17:47	49.0	51.0	50.4	50.2	50.0	
36	2021/08/25 10:18:02	47.6	47.1	47.0	46.4	46.1	
41	2021/08/25 10:18:17	45.5	45.9	48.9	50.7	52.1	
46	2021/08/25 10:18:32	50.7	46.7	45.0	44.7	44.0	
51	2021/08/25 10:18:47	44.0	43.9	43.8	44.3	44.1	
56	2021/08/25 10:19:02	43.7	44.0	44.7	44.0	43.9	
61	2021/08/25 10:19:17	43.4	43.7	44.1	44.4	44.5	
66	2021/08/25 10:19:32	44.0	43.7	44.5	44.8	45.1	
71	2021/08/25 10:19:47	46.2	46.1	45.9	44.9	45.6	
76	2021/08/25 10:20:02	45.0	45.1	44.1	43.6	43.4	
81	2021/08/25 10:20:17	43.0	43.0	42.6	43.1	44.2	
86	2021/08/25 10:20:32	43.2	44.1	42.5	42.8	42.3	
91	2021/08/25 10:20:47	42.4	42.8	43.0	42.9	42.9	
96	2021/08/25 10:21:02	42.4	42.9	43.4	42.9	42.8	
101	2021/08/25 10:21:17	42.8	44.3	42.8	42.6	45.0	
106	2021/08/25 10:21:32	42.8	43.0	43.4	43.0	43.1	
111	2021/08/25 10:21:47	43.8	42.3	42.5	43.7	45.2	
116	2021/08/25 10:22:02	43.1	43.3	42.5	43.3	44.8	
121	2021/08/25 10:22:17	45.5	44.5	43.9	46.3	44.2	
126	2021/08/25 10:22:32	44.5	45.9	44.7	44.4	45.5	
131	2021/08/25 10:22:47	46.9	45.4	45.4	44.2	45.3	
136	2021/08/25 10:23:02	44.2	44.3	45.3	45.4	43.5	
141	2021/08/25 10:23:17	43.3	43.3	43.6	43.4	57.2	
146	2021/08/25 10:23:32	47.0	43.9	44.3	43.7	43.7	
151	2021/08/25 10:23:47	43.7	44.0	44.7	44.2	45.2	
156	2021/08/25 10:24:02	44.6	45.1	44.0	44.3	43.8	
161	2021/08/25 10:24:17	43.2	43.7	43.9	43.5	43.6	
166	2021/08/25 10:24:32	43.5	43.5	43.6	43.0	43.0	
171	2021/08/25 10:24:47	42.5	43.2	42.4	42.8	42.5	
176	2021/08/25 10:25:02	43.4	43.6	44.5	44.6	45.1	
181	2021/08/25 10:25:17	47.2	46.7	44.9	43.6	45.1	
186	2021/08/25 10:25:32	43.9	45.2	44.5	44.5	44.5	
191	2021/08/25 10:25:47	44.3	45.3	47.7	48.1	45.7	
196	2021/08/25 10:26:02	43.3	43.7	44.1	44.3	46.0	
201	2021/08/25 10:26:17	45.9	48.2	46.5	45.2	44.9	
206	2021/08/25 10:26:32	44.3	45.1	46.8	46.3	46.2	
211	2021/08/25 10:26:47	45.4	45.5	45.7	44.9	44.9	
216	2021/08/25 10:27:02	44.6	45.2	45.8	47.5	47.3	
221	2021/08/25 10:27:17	46.7	46.0	47.3	46.8	46.8	
226	2021/08/25 10:27:32	45.9	46.2	46.5	45.5	46.6	
231	2021/08/25 10:27:47	47.0	45.7	45.7	45.9	45.6	
236	2021/08/25 10:28:02	45.9	45.4	45.1	44.9	45.0	
241	2021/08/25 10:28:17	45.4	46.6	47.0	45.6	44.7	
246	2021/08/25 10:28:32	45.0	46.4	46.1	45.3	44.6	
251	2021/08/25 10:28:47	44.8	44.9	44.8	44.5	44.7	
256	2021/08/25 10:29:02	45.3	45.3	44.5	44.8	44.9	
261	2021/08/25 10:29:17	45.4	44.7	44.6	44.8	46.4	
266	2021/08/25 10:29:32	45.9	44.9	44.7	45.1	45.9	
271	2021/08/25 10:29:47	45.7	44.7	45.2	44.6	44.1	
276	2021/08/25 10:30:02	44.6	44.7	44.1	44.0	44.6	
281	2021/08/25 10:30:17	44.1	44.6	44.4	44.6	43.7	
286	2021/08/25 10:30:32	44.5	44.5	45.3	47.0	47.9	
291	2021/08/25 10:30:47	46.7	44.5	54.0	45.7	44.2	
296	2021/08/25 10:31:02	45.7	43.7	43.5	43.6	43.6	

Freq Weight : A
Time Weight : SLOW
Level Range : 40-100
Max dB : 82.4 - 2021/08/25 10:48:15
Level Range : 40-100
SEL : 92.6
Leq : 63.1

No. s	Date Time	(dB)					
1	2021/08/25 10:39:55	61.5	62.6	69.5	73.4	72.5	
6	2021/08/25 10:40:10	68.8	63.3	58.4	53.8	51.7	
11	2021/08/25 10:40:25	49.7	48.7	48.1	46.9	47.4	
16	2021/08/25 10:40:40	47.0	47.1	46.1	45.5	44.7	
21	2021/08/25 10:40:55	45.3	45.8	45.4	46.1	46.5	
26	2021/08/25 10:41:10	47.2	46.6	46.5	44.5	44.0	
31	2021/08/25 10:41:25	44.4	45.0	46.4	49.5	56.3	
36	2021/08/25 10:41:40	68.9	64.8	53.9	47.1	45.8	
41	2021/08/25 10:41:55	45.4	44.7	45.1	45.1	45.1	
46	2021/08/25 10:42:10	45.7	46.4	45.6	46.1	45.6	
51	2021/08/25 10:42:25	45.9	46.0	45.4	44.5	43.9	
56	2021/08/25 10:42:40	43.8	44.0	43.8	44.2	44.1	
61	2021/08/25 10:42:55	44.0	44.1	44.6	45.1	46.1	
66	2021/08/25 10:43:10	45.8	44.9	46.0	46.1	48.6	
71	2021/08/25 10:43:25	47.0	46.2	46.0	45.8	46.0	
76	2021/08/25 10:43:40	46.6	46.4	45.9	47.6	53.0	
81	2021/08/25 10:43:55	66.4	64.3	56.1	53.8	50.5	
86	2021/08/25 10:44:10	47.8	49.5	51.9	62.5	63.8	
91	2021/08/25 10:44:25	54.2	47.5	48.3	48.4	47.3	
96	2021/08/25 10:44:40	47.0	47.1	48.3	47.1	47.4	
101	2021/08/25 10:44:55	47.4	48.2	53.4	59.4	71.8	
106	2021/08/25 10:45:10	66.5	66.3	59.0	65.6	66.8	
111	2021/08/25 10:45:25	56.9	50.7	49.4	50.2	48.9	
116	2021/08/25 10:45:40	48.4	48.3	49.0	48.2	47.3	
121	2021/08/25 10:45:55	48.0	55.3	71.9	64.5	58.4	
126	2021/08/25 10:46:10	55.5	71.3	65.3	57.9	53.9	
131	2021/08/25 10:46:25	49.3	48.3	47.3	46.2	45.9	
136	2021/08/25 10:46:40	45.5	46.4	46.7	47.4	47.1	
141	2021/08/25 10:46:55	46.8	46.1	54.0	50.8	53.3	
146	2021/08/25 10:47:10	59.8	72.0	65.5	71.3	62.2	
151	2021/08/25 10:47:25	59.0	61.8	65.8	60.1	54.6	
156	2021/08/25 10:47:40	57.1	64.7	66.2	56.9	52.6	
161	2021/08/25 10:47:55	55.4	56.1	52.0	53.3	59.9	
166	2021/08/25 10:48:10	76.4	81.9	78.0	71.7	63.9	
171	2021/08/25 10:48:25	55.6	51.1	50.2	46.6	48.6	
176	2021/08/25 10:48:40	49.2	50.2	46.3	45.0	45.2	
181	2021/08/25 10:48:55	45.4	45.4	45.9	46.0	45.7	
186	2021/08/25 10:49:10	45.5	45.4	45.5	44.0	44.9	
191	2021/08/25 10:49:25	45.3	45.5	45.5	44.8	44.2	
196	2021/08/25 10:49:40	45.6	46.5	53.7	68.6	68.6	
201	2021/08/25 10:49:55	57.3	52.2	62.3	73.3	64.5	
206	2021/08/25 10:50:10	54.2	48.3	45.5	45.2	46.0	
211	2021/08/25 10:50:25	45.2	45.0	46.3	49.7	63.6	
216	2021/08/25 10:50:40	70.2	63.2	57.6	54.7	49.2	
221	2021/08/25 10:50:55	47.2	46.7	46.8	46.3	46.0	
226	2021/08/25 10:51:10	45.9	45.3	45.2	46.0	47.1	
231	2021/08/25 10:51:25	49.3	50.4	56.6	66.2	70.4	
236	2021/08/25 10:51:40	60.3	51.7	46.7	44.7	44.4	
241	2021/08/25 10:51:55	44.3	44.5	44.2	44.3	44.8	
246	2021/08/25 10:52:10	45.0	45.7	45.4	45.2	45.6	
251	2021/08/25 10:52:25	46.0	47.2	47.3	47.2	47.1	
256	2021/08/25 10:52:40	46.3	45.4	46.2	46.3	46.1	
261	2021/08/25 10:52:55	46.7	47.3	46.0	45.6	44.6	
266	2021/08/25 10:53:10	44.4	44.6	44.7	43.9	44.5	
271	2021/08/25 10:53:25	44.1	44.1	44.6	44.7	43.8	
276	2021/08/25 10:53:40	44.4	44.8	45.3	46.2	46.2	
281	2021/08/25 10:53:55	46.0	46.1	46.2	46.1	46.4	
286	2021/08/25 10:54:10	46.4	47.0	47.4	47.9	50.6	
291	2021/08/25 10:54:25	48.1	49.5	52.3	67.1	71.3	
296	2021/08/25 10:54:40	64.4	57.1	54.7	51.3	49.1	

Appendix C

Construction Noise Modeling

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 09/08/2021
Case Description: 1300 West La Brea Avenue - Grading

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single-Family Residences	Residential	65.0	50.0	50.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	380.0	0.0
Excavator	No	40		80.7	380.0	0.0
Tractor	No	40	84.0		380.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

[illegible]

Appendix D

Manufacturers' Specifications

Halcyon™ MULTI-ROOM MINI-SPLIT SYSTEMS

Specifications of Indoor Units

- Connectable Indoor unit line-up (2 to 5 Zones)
- Connectable Indoor unit line-up (2 to 8 Zones)



Wall Mounted ASU7/9/12/15RLF1



Model No.			ASU7RLF1	ASU9RLF1	ASU12RLF1	ASU15RLF1
Nominal Cooling		BTU/h	7,000	9,000	12,000	14,000
Nominal Heating			8,100	10,200	13,500	16,300
Power Source		Voltage/Frequency/Phase	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1
Noise Level	Hi	dB(A) (Clg/Htg)	36/36	37/37	40/40	42/42
	Medium		32/32	33/33	36/36	38/38
	Low		29/29	29/29	30/31	33/35
	Quiet		21/22	21/22	21/22	25/27
Air Circ.	Hi	Clg	330 (560)	353 (600)	388 (660)	430(730)
		Htg	330 (560)	353 (600)	388 (660)	430 (730)
	Medium	Clg	294 (500)	306 (520)	330 (560)	353 (600)
		Htg	294 (500)	306 (520)	330 (560)	362 (615)
	Low	Clg	253 (430)	253 (430)	265 (450)	312 (530)
		Htg	253 (430)	253 (430)	277 (470)	330 (560)
	Quiet	Clg	182 (310)	182 (310)	182 (310)	212 (360)
		Htg	194 (330)	194 (330)	194 (330)	221 (375)
Net Weight		lbs. (kg)	19 (8.5)	19 (8.5)	19 (8.5)	19 (8.5)
Dimension	Height	Inch (mm)	10-1/2 (268)	10-1/2 (268)	10-1/2 (268)	10-1/2 (268)
	Width		33-1/16 (840)	33-1/16 (840)	33-1/16 (840)	33-1/16 (840)
	Depth		8 (203)	8 (203)	8 (203)	8 (203)
Conn. Pipe Diameter		Inch	suc 3/8 dis 1/4	suc 3/8 dis 1/4	suc 3/8 dis 1/4	suc 1/2 dis 1/4



Wall Mounted ASU18/24RLF



Model No.			ASU18RLF	ASU24RLF	
Nominal Cooling		BTU/h	18,000	24,000	
Nominal Heating			20,000	27,000	
Power Source		Voltage/Frequency/Phase	208-230/60/1	208-230/60/1	
Noise Level	Hi	dB(A) (Clg/Htg)	43/44	49/48	
	Medium		37/37	42/42	
	Low		33/33	37/37	
	Quiet		31/31	33/33	
Air Circ.	Hi	Clg	C.F.M. (m³/h)	542 (920)	659 (1,120)
				Htg	542 (920)
	Medium	Clg	C.F.M. (m³/h)		436 (740)
				Htg	436 (740)
	Low	Clg	C.F.M. (m³/h)		365 (620)
				Htg	365 (620)
	Quiet	Clg	C.F.M. (m³/h)		324 (550)
				Htg	324 (550)
Net Weight		lbs. (kg)	31 (14)		31 (14)
Dimension	Height		Inch (mm)	12-5/8 (320)	12-5/8 (320)
	Width			39-1/4 (998)	39-1/4 (998)
	Depth			9 (228)	9 (228)
Conn. Pipe Diameter		Inch	suc 1/2 dis 1/4	suc 5/8 dis 1/4	



Floor Mount AGU9/12/15RLF



Model No.			AGU9RLF	AGU12RLF	AGU15RLF
Nominal Cooling		BTU/h	9,000	12,000	14,200
Nominal Heating			12,000	16,000	18,000
Power Source		Voltage/Frequency/Phase	208-230/60/1	208-230/60/1	208-230/60/1
Noise Level	Hi	dB(A) (Clg/Htg)	39/39	42/42	44/44
	Medium		34/34	36/38	31/33
	Low		28/28	30/32	31/33
	Quiet		22/22	22/22	22/22
Air Circ.	Hi	C.F.M. (m³/h)	312 (530)	353 (600)	383 (650)
	Medium		259 (440)	288 (490)	306 (520)
	Low		212 (360)	224 (380)	235 (400)
	Quiet		159 (270)	159 (270)	159 (270)
Net Weight		lbs. (kg)	31 (14)	31 (14)	31 (14)
Dimension	Height	Inch (mm)	23-5/8 (600)	23-5/8(600)	23-5/8 (600)
	Width		29-1/8 (740)	29-1/8(740)	29-1/8 (740)
	Depth		7-7/8(200)	7-7/8(200)	7-7/8(200)
Conn. Pipe Diameter		Inch	Suc. 3/8 Dis. 1/4	Suc. 3/8 Dis. 1/4	Suc. 1/2 Dis. 1/4



Compact Cassettes AUU7/9/12/18RLF



Model No.			AUU7RLF	AUU9RLF	AUU12RLF	AUU18RLF
Nominal Cooling		BTU/h	7,000	9,000	12,000	18,000
Nominal Heating			8,100	10,200	13,500	20,000
Power Source		Voltage/Frequency/Phase	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1
Noise Level	Hi	dB(A) (Clg/Htg)	33/34	33/34	37/37	42/44
	Medium		31/32	31/32	33/33	37/40
	Low		29/29	29/29	31/31	33/37
	Quiet		27/27	27/27	28/28	29/30
Air Circ.	Hi	Clg	318 (540)	318 (540)	359 (610)	441 (750)
		Htg	318 (540)	318 (540)	359 (610)	471 (800)
	Medium	Clg	288 (490)	288 (490)	312 (530)	359 (610)
		Htg	288 (490)	288 (490)	312 (530)	418 (710)
	Low	Clg	259 (440)	259 (440)	277 (470)	306 (520)
		Htg	259 (440)	259 (440)	277 (470)	241 (410)
	Quiet	Clg	230 (390)	230 (390)	241 (410)	241 (410)
		Htg	230 (390)	230 (390)	241 (410)	265 (450)
Net Weight		lbs. (kg)	33 (15)	33 (15)	33 (15)	33 (15)
Chassis Dimension	Height	Inch (mm)	9-11/16 (245)	9-11/16 (245)	9-11/16 (245)	9-11/16 (245)
	Width		22-7/16 (570)	22-7/16 (570)	22-7/16 (570)	22-7/16 (570)
	Depth		22-7/16 (570)	22-7/16 (570)	22-7/16 (570)	22-7/16 (570)
Grill Dimension	Height	Inch (mm)	1-15/16 (49)	1-15/16 (49)	1-15/16 (49)	1-15/16 (49)
	Width		27-9/16 (700)	27-9/16 (700)	27-9/16 (700)	27-9/16 (700)
	Depth		27-9/16 (700)	27-9/16 (700)	27-9/16 (700)	27-9/16 (700)
Conn. Pipe Diameter		Inch	suc 3/8 dis 1/4	suc 3/8 dis 1/4	suc 3/8 dis 1/4	suc 1/2 dis 1/4



Slim Duct ARU7/9/12/18/24RLF



Model No.			ARU7RLF	ARU9RLF	ARU12RLF
Nominal Cooling		BTU/h	7,000	9,000	12,000
Nominal Heating			8,100	10,200	13,500
Power Source		Voltage/Frequency/Phase	208-230/60/1	208-230/60/1	208-230/60/1
Noise Level	Hi	dB(A) (Clg/Htg)	28/28	28/28	29/29
	Medium		26/26	27/26	28/28
	Low		25/25	26/25	27/27
	Quiet		24/24	25/24	26/24
Air Circ.	Hi	C.F.M. (m³/h)	323 (550)	353 (600)	383 (650)
	Medium		288 (490)	324 (550)	353 (600)
	Low		276 (470)	294 (500)	324 (550)
	Quiet		259 (440)	265 (450)	283 (480)
Net Weight		lbs. (kg)	37 (17)	41 (19)	41 (19)
Dimension	Height	Inch (mm)	7-25/32(198)	7-25/32(198)	7-25/32(198)
	Width		27-9/16(700)	27-9/16(700)	27-9/16(700)
	Depth		5-15/16 (151)	24-13/32 (620)	24-13/32 (620)
Supply Duct Flange Dimension	Height	Inch (mm)	5-15/16 (151)	5-15/16 (151)	5-15/16 (151)
	Width		25-19/32 (650)	25-19/32 (650)	25-19/32 (650)
	Depth		3/4 (19)	3/4 (19)	3/4 (19)
Return Duct Dimension	Height	Inch (mm)	6 (152)	6 (152)	6 (152)
	Width		22 (559)	22 (559)	22 (559)
	Depth		3/4 (19)(Flat)	3/4 (19)(Flat)	3/4 (19)(Flat)
Conn. Pipe Diameter		Inch	suc 3/8dis 1/4	suc 3/8dis 1/4	suc 3/8 dis 1/4

Model No.			ARU18RLF	ARU24RLF
Nominal Cooling		BTU/h	18,000	24,000
Nominal Heating			20,000	27,000
Power Source		Voltage/Frequency/Phase	208-230/60/1	208-230/60/1
Noise Level	Hi	dB(A) (Clg/Htg)	32/33	33/35
	Medium		31/32	32/34



	Low		30/31	30/32
	Quiet		29/29	29/29
Air Circ.	Hi	C.F.M. (m³/h)	554 (940)	783 (1,330)
	Medium		518 (880)	730 (1,240)
	Low		442 (750)	648 (1,100)
	Quiet		442 (750)	607 (1,030)
Net Weight		lbs. (kg)	50 (23)	59 (27)
Dimension	Height	Inch (mm)	7-25/32(198)	7-25/32(198)
	Width		35-7/16(900)	43-5/16(1,100)
	Depth		24-13/32 (620)	24-13/32 (620)
Supply Duct Flange Dimension	Height	Inch (mm)	5-15/16 (151)	5-15/16 (151)
	Width		33-15/32 (850)	41-11/32 (1,050)
	Depth		3/4 (19)	3/4 (19)
Return Duct Dimension	Height	Inch (mm)	6 (152)	6 (152)
	Width		30 (762)	37-3/4 (959)
	Depth		3/4 (19)(Flat)	3/4 (19)(Flat)
Conn. Pipe Diameter		Inch	suc 1/2 dis 1/4	suc 5/8 dis 1/4

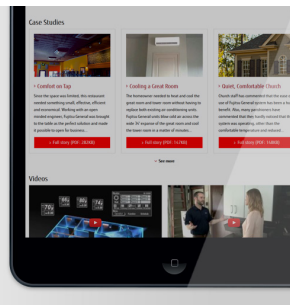
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Appendix E

Vibration Analysis

Groundborne Noise and Vibration Modeling

Notes

The reference distance is measured from the nearest anticipated point of construction equipment to the nearest structure.

	Reference Level Inputs			
Equipment	PPV _{ref} (in/sec)	Lv _{ref} (VdB)	RMS _{ref} (in/sec)	Reference Distance
Large bulldozer	0.089	87	0.022	25
Loaded trucks	0.076	83	0.014	25

	Vibration Level at Receiver			
Equipment	Distance (feet)	PPV _x (in/sec)	Lv _x (VdB)	RMS _x (in/sec)
Large bulldozer	135	0.0139	71	0.004
Loaded trucks	50	0.0355	76	0.007

Source

California Department of Transportation (Caltrans). 2013. Transportation and Construction
Last Updated: 4/11/2019