CITY OF ANTIOCH CALIFORNIA
OPPORTUNITY LIVES HERE

STAFF REPORT TO THE PLANNING COMMISSION

DATE: Regular Meeting of November 1, 2023

SUBMITTED BY: Zoe Merideth, Acting Planning Manager

APPROVED BY: Kevin Scudero, Acting Community Development Director

SUBJECT: Laurel Ranch Townhomes (PD-23-01, UP2023-0006, DR2023-0013)

RECOMMENDED ACTION

It is recommended that the Planning Commission:

1. Adopt the resolution approving the Addendum to the Environmental Impact Report (EIR) for the 2023-2031 Housing Element Update prior to acting on the other resolution for the project.

2. Adopt the resolution approving a Final Development Plan, Use Permit, and Design Review subject to conditions of approval (PD-23-01, UP2023-0006, DR2023-0013).

DISCUSSION

Requested Approvals and Project Overview

The applicant, Bright Sky Residential, requests a Final Development Plan, Use Permit, and Design Review approval for a 216-unit townhome project that spans 18.5 acres. The units would be accommodated within a series of 4-, 5-, and 6- plex buildings with one or two car private garages. The proposed project would include onsite amenities including parking, swimming pool, leasing center, community room, and landscaping. The project is located at the southeast corner of Laurel Road and Country Hills Drive (APNs 053-060-055, 056, 057 and 063).

The applicant is requesting the following approvals:

1. *Addendum*. Approve the Laurel Ranch Townhomes Addendum to the EIR for the 2023-2031 Housing Element Update.

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2. *Final Development Plan*. The project is located within the East Lone Tree Specific Plan (ELTSP). The ELTSP requires all projects to be rezoned to Planned Development. Due to changes in State law since the ELTSP was adopted, housing projects in the ELTSP cannot be required to rezone to Planned Development. These changes are discussed below. Therefore, this project is not subject to a Planned Development rezone, but is subject to a Final Development Plan, which is required by the Antioch Municipal Code for all projects in a Planned Development district.

3. *Use Permit*. The Zoning Ordinance requires that a use permit be approved prior to the construction of any phase of an approved Planned Development.

4. *Design Review*. Design review of the project's architecture, design and landscaping is required.

The proposed project consists of a 216-unit for-rent townhome project on an 18.5-acre site comprised of four parcels. The units would be distributed among 38 buildings. These

buildings would be comprised of 4-, 5-, and 6-plex structures, with a maximum height of 30 feet 8 inches. The residential units would offer either two or three bedrooms and two to 2.5 bathrooms, each equipped with a one or two-car private garage providing direct access to an individual unit. The size of each unit would range from approximately 941 to 1,504 square feet. Additionally, each unit would feature a porch spanning 40 to 52 square feet and a private yard space consisting of at least 100 square feet.

The project will provide a total of 88,291 square feet of open space, with 44,195 square feet designated as common usable open space and 44,096 square feet as private open space. The common open space would feature amenities such as a dog park, turf park and lawn areas, children's playground, recreation center, and pool area. The recreation center and pool area would include a barbeque pavilion with dining tables, pool restrooms and showers, fire pit lounge, club room, lawn area, lounge chairs and a table with a cabana structure.

The project would be professionally managed and include a staff of up to five full-time employees.

Environmental

An Addendum to the Environmental Impact Report (EIR) for the 2023-2031 Housing Element Update (Housing Element EIR) was prepared for the proposed project. Both the Addendum and the Housing Element EIR are available at: http://www.antiochca.gov/environmentaldocs

The California Environmental Quality Act (CEQA) and CEQA Guidelines establish the type of environmental documentation that is required when changes to a project occur after adoption or certification of an EIR. Section 15164(a) states, "The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred."

In order to give a degree of finality to CEQA documentation, Section 15162 of the CEQA Guidelines states that when an Environmental Impact Report (EIR) has been certified or a negative declaration has been adopted for a project, no subsequent EIR or Negative Declaration (ND) shall be prepared for the project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, that one or more of the following occur:

1. Substantial changes are proposed in the project, which will require major revisions of the previous EIR or ND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR or ND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, or the ND was adopted, shows any of the following:

    a. The project will have one or more significant effects not discussed in the previous EIR or ND,
    b. Significant effects previously examined will be substantially more severe than shown in the previous EIR or ND,
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative, or
    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or ND would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

As explained throughout the Addendum, these three "thresholds" for triggering a Subsequent EIR have not been met; therefore, a Subsequent EIR is not required. As a result, an addendum is the appropriate environmental document for the project.

The Housing Element EIR determined that there were significant and unavoidable impacts related to Vehicle Miles Traveled (VMT) but also stipulated that quantitative VMT analyses are to be prepared for each individual project (such as the proposed project) to be developed in accordance with the Housing Element.

The proposed project includes characteristics that would reduce VMT. Additionally, the proposed modified project is subject to the applicable VMT reducing mitigation measures included in the Housing Element EIR. Specifically, the Housing Element EIR Mitigation Measure TRANS-1 identifies the following potential VMT reduction measures:

- Unbundle parking costs (i.e., sell or lease parking separately from the housing unit). Effectiveness: up to 15.7 percent reduction in greenhouse gases (GHG) from VMT per the California Air Pollution Control Officers Association (CAPCOA) Handbook.

- Provide car-sharing, bike sharing, or scooter sharing programs. Effectiveness: 0.15 to 0.18 percent reduction in GHG from VMT for car share, 0.02 to 0.06 percent for bike share, and 0.07 percent for scooter share, per the CAPCOA Handbook. The higher car share and bike share values are for electric car and electric bike share programs.

- Subsidize transit passes for residents of affordable housing. Effectiveness: up to 5.5 percent reduction in GHG from VMT per the CAPCOA Handbook.

Based on the project, some of these mitigation measures are not feasible. The Housing Element EIR mitigation to subsidize transit passes for affordable housing residents would

not be applicable to the proposed modified project since the proposed modified project does not include affordable housing. In regard to car-sharing, bike sharing, or scooter sharing, there are currently no car sharing programs in use within the City. Given the size of the proposed modified project, a car-sharing program would not be feasible to implement at the individual project level, however the proposed modified project could implement a bike sharing program for use by residents. Scooter sharing would have limited utility given the proposed modified project's location and lack of destinations within a scooter-rideable distance.

The proposed project can provide some VMT mitigations. The project is providing one to two attached parking spaces with each unit, but all surface parking in excess of the required number of guest parking spaces will be unbundled from the rental cost and made available to residents for an additional cost. Given the proposed modified project's location, an electric bike (ebike) bikeshare program would provide residents an alternative to using a vehicle for short trips to nearby destinations. The project sponsor will provide residents with the opportunity to borrow a shared ebike to meet the required mitigation.

With the implementation of the applicable Housing Element EIR mitigation measures, the proposed modified project would still result in a significant and unavoidable impact related to VMT. However, the proposed project would not result in greater or worse impacts than those evaluated in the Housing Element EIR, and no additional mitigation measures would be required. As such, the impact finding would remain unchanged from the previous project.

Background

The project site is located within the ELTSP. The ELTSP was adopted in May 1996 and comprises roughly 800 acres in the southeast corner of the City. Its boundaries are Lone Tree Way on the south, Empire Avenue and Southern Pacific Railroad on the east, the Contra Costa Canal on the north and the Meadow Creek Estates, Canada Hills, and Hidden Glen neighborhoods on the west. The General Plan designation for the site is ELTSP Focus Area and relies on the land uses and policies in the ELTSP to guide development.

The largest of the four parcels (APN 053-060-063) is located at the southeast corner of Laurel Road and Country Hills Drive. This parcel was originally part of the Laurel Ranch subdivision and was reserved for a future commercial phase of the project, consist with the ELTSP designation of Community Retail (CN). No zoning actions, such as a Planned Development Rezone took place as part of the Laurel Ranch entitlements. The other three parcels (APNs 053-060-055, 056, and 057) are known as the Delizia Ranch parcels. As part of the Housing Element Update effort, all four parcels were analyzed in the Housing Element Final EIR. They are not included in the Housing Element sites inventory because the City received the current entitlement application prior to the publication of the Housing Element.

The applicant submitted a Preliminary Application under SB 330. Through the Preliminary Application process put in place under SB 330, housing developments may only be subject to the ordinances and policies in effect at the time when a completed Preliminary Application is submitted. The Preliminary Application requires information regarding site characteristics, planned project, certain environmental concerns, the locations of recorded public easements, facts related to any potential density bonuses, certain coastal zone concerns, and the number of units to be demolished. The developer has 180 days from the submittal of the preliminary application to submit the full development application. The applicant submitted a complete Preliminary Application on October 28, 2022. The applicant then provided owner authorization for an entitlement application on January 25, 2023, which is within the required 180-day timeframe.

ANALYSIS

General Plan, Zoning, and Land Use

As discussed above, the General Plan designation is ELTSP Focus Area. Within the ELTSP the project site is designated as CN which is defined as:

"Supermarket anchored retail oriented primarily to the day-to-day needs of local residents. Community retail in East Lone Tree Area is envisioned not merely as a generic strip center, but rather as an integral part of the community, with a scale and character that complements and enhances its single-family neighbors."

Additionally, the ELTSP allows for alternative uses of the CN designated sites, including medium-density residential (RH). The Specific Plan encourages RH as an alternative use for CN sites. As a result, use of the CN sites for residential development consistent with RH controls would conform to the Specific Plan and would not necessitate a change in designation.

The RH designation allows a maximum density of 2 dwelling units per acre. The project has a net density of 15.3 dwelling units per acre and a gross density of 11.6 dwelling units per acre. The RH require a minimum front yard setback of 25 feet, a corner setback of 25 feet, an interior side yard setback of 10 feet, and a rear yard setback of 20 feet. The proposed project meets or exceeds all of these setback requirements.

Currently, the project site is zoned Specific Plan (S-P). The S-P zoning district is defined in Antioch Municipal Code (AMC) § 9-5.301(Z) as follows:

"This District is intended to provide a base designation to further implement the goals, objectives, and policies of the General Plan with respect to specific areas and uses which, because of their unique character, require a more comprehensive and intense evaluation and planning effort. This district will apply to individual parcel(s) only after the adoption of a specific plan by the City Council, pursuant to Government Code § 65450 et seq. Within the S-P zoning district, permitted uses and development standards shall be as specified in the adopted Specific Plan."

The ELTSP requires projects to go through a Planned Development Rezone process, which includes a submittal and approval of a preliminary development plan, and then a Planned Development rezone request and Final Development Plan to establish the individual project's zoning standards. A use permit is required for each phase of a Planned Development as well per the AMC. Since the ELTSP was adopted, changes to State law have affected how housing applications can be processed. Specifically, the Housing Accountability Act clarifies that if the zoning standards applied to a site are inconsistent with the applicable objective General Plan standards for the site, and a proposed development project is consistent with the applicable objective General Plan standards for the site, then the local agency may not require rezoning prior to the housing development's project approval. In this case, the zoning is S-P, which is a broad, base zoning designation that does not have specific standards. The ELTSP's requirement to rezone to a Planned Development is not enforceable because the project does comply with the applicable standards found in the ELTSP, which is also the General Plan designation.

The surrounding land uses are noted below:

- North: Laurel Road and Highway 4 on- and off-ramps and the Laurel Ranch Subdivision Project (consisting of single-family homes).
- South: Country Hills Road and single-family developments.
- East: Highway 4, beyond which lies undeveloped land.
- West: Laurel Ranch Subdivision Project and single-family homes.

<u>Site Plan and Circulation</u>

The project site sits at the corner of Laurel Road and Country Hills Drive, which were both recently constructed. The site has two existing driveways off Country Hills Drive, one at the northern end of the site and one at the southern end of the site. The applicant is proposing two entrances. One entrance will be from a new right-in and right-out driveway located in the middle of the site off Country Hills Drive. The other entrance will be from the existing southern driveway at the intersection of Country Hills Drive and Canyon Ridge Way. The existing northern driveway would not be used. A recommended condition of approval would require the northern most driveway, which is proposed to not be used, to be removed and replaced with curb, gutter, sidewalk, and landscape planting to match the surrounding area. The eastern side of the project abuts Highway 4. The applicant is proposing retaining walls along the Laurel Road frontage and along Highway 4 and will be bringing in fill to create a relatively level project site.

The two entrance drives will lead to a main central internal road, which loops at the northern half of the site. Off this main road, the majority of the townhome buildings' garages abut alleyways. The front of these townhomes feature private patios facing onto

a shared pedestrian walkway between the buildings. Buildings 25, 28, and 31 garages front directly onto the main internal street. The project's recreation building and pool is at the end of the project's central drive aisle entrance and is centrally located at the site. A playground space is provided in the northeastern corner of the site. The southernmost part of the site includes a dog park. Other open spaces are provided at the backs of buildings and in between buildings throughout the site.

The proposed project would provide a total of 446 parking spaces. Most parking spaces would be available through one or two-car private garages for each residential unit. Additionally, 74 parking spaces would be designated as guest parking and provided as street parking stalls along the internal streets. The AMC requires 1.5 parking spaces per two-bedroom unit, two parking spaces per three-bedroom unit, and .2 spaces per unit for guest parking. Per these calculations, the project is required to provide 445 parking spaces and will be providing 446 parking spaces.

Traffic Study

The City's General Plan contains a Circulation element, which has policies on creating safe and convenient movement of people. To facilitate these policies, policy 7.3.2.h states, in relevant part, "Require traffic impact studies for all new developments that propose to increase the approved density or intensity of development or are projected to generate 50 peak hour trips or more at any intersection of Circulation Element roadways." As required in the General Plan, the traffic impact study evaluates the Level of Service (LOS) at the study intersections. LOS is a measure of how freely traffic and how much vehicle delay there is. LOS is designated A through F, with LOS A representing free-flowing conditions and LOS F representing severe congestion.

Historically, the traffic study and mitigations related to LOS have been included in the project's CEQA document, as allowed by CEQA Guidelines and the City's General Plan. On December 28, 2018, the California Office of Administrative Law cleared the revised CEQA Guidelines for use. Among the changes to the guidelines was removal of vehicle delay and LOS from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on VMT. Lead agencies were required to use the new guidelines starting July 1, 2020. Therefore, the Housing Element EIR and the project Addendum examined VMT and a standalone traffic study evaluates LOS. The traffic study is available at the following link: https://www.antiochca.gov/fc/community/announcements/rpt_laurel_ranch_townhomes_ta_20230915.pdf

The traffic study aides the City in determining compliance with the policies found in the Growth Management Element and Circulation Element of the General Plan. The Circulation Element contains policy 7.3.2.d. Vehicular Circulation Policies, which states, "Where feasible, design arterial roadways, including routes of regional significance, to provide better service than the minimum standards set forth in Measure C and the Growth Management Element. Thus, where feasible, the City will strive to maintain a "High D" level of service within regional commercial areas and at intersections within 1,000 feet of

a freeway interchange. The City will also strive where feasible to maintain Low-range "D' in all other areas of the City, including freeway interchanges."

The traffic study analyzed five signalized intersections, two unsignalized intersections, and the project's proposed access intersections with the following scenarios:

- Existing Conditions
- Cumulative Conditions (2025) without Project
- Cumulative Conditions (2025) with Project

The existing conditions scenario utilizes AM and PM peak hour traffic counts as well as 24-hour mid-block average daily traffic counts for key study area intersections and roadway segments. The counts were collected by a professional traffic data collection firm in August 2023.

The study found that all intersections are forecast to operate at an acceptable LOS D or better with the Project. The Project's primary access point is at the Country Hills Drive & Canyon Ridge Way intersection, the intersection is forecast to continue to operate at LOS B based on the existing side-street stop control. The Project's secondary access point, which would be configured as right-turn-in/right-turn-out only due to the existing Country Hills Drive raised median, is forecast to operate at LOS A with side-street stop control.

Based on the above outcomes, no transportation improvements are necessitated or recommended.

<u>Architecture</u>

The proposed project would include 4-, 5- and 6- plex buildings, with most of the proposed buildings being 6-plexes. The project is proposing two architectural elevation styles: farmhouse and modern farmhouse. All 4- plex buildings will feature the farmhouse elevation, all 5- plex buildings will feature the modern farmhouse elevation, and the 6-plex buildings will feature a mix of both elevations.

The building design creates a cohesive look to each building while using changes in the roof and wall planes to create visual interest and separate the individual units. The ELTSP prohibits large, unarticulated wall and roof planes in standard 8.2.3, and the proposed architecture meets these requirements. The ELTSP requires the subtle use of color, and not abrupt changes in style (8.2.3). The proposed color palettes feature a variety of muted tones that are used to highlight different portions of each building and add interest. 8.2.4 of the ELTSP requires the use of either clay or concrete tile and the use of plater, brick, or wood walls. The applicant is proposing concrete tile roofs with standing metal seam accents. The applicant is proposing stucco walls and board and batten siding, which meets the ELTSP requirements.

The farmhouse elevation features gabled and shed roofs with board and batten siding and stucco. The gabled roof features a concrete flat tile while the shed roof details over some of the windows and patio doors are made of a standing seam metal roof. The board and batten siding is used to highlight the different planes of the building. Decorative shutters help to complete the farmhouse design. Finally, some of the unit entrances feature stone veneer entry features.

The modern farmhouse elevation keeps many of the same details as the farmhouse elevation but with more contemporary detailing. The gable roof and board batten siding both remain. Instead of shed roofs, metal awnings are used. In place of shutters, windows feature board and batten siding beneath them. The stone veneer entryways have been replaced with wood supports.

Six color schemes are proposed. The schemes feature earth tones, grays, and cool colors. One scheme features cream, light grays, and darker gray trims and accents. Another scheme features brown stone, shades beige stuccos, with the option of a medium blue or dark brown door and shutters.

Open Space and Landscaping

The project consists of a variety of open spaces, both public and private. The applicant submitted preliminary landscaping plans as required in the Final Development Plan application checklist. The applicant is proposing a mix of plants with varying growth habits that are appropriate for the climate.

The multifamily development standards in effect at the time the SB 330 Preliminary Application was submitted required 200 square feet of total usable open space per unit, with at least 60 square feet of private open space per unit (former AMC § 9-5.706). Additionally, the ELTSP requirements for multifamily design in 8.2.2 require patios, decks and yards to have a dimension of at least 10 feet. For the 216 units, 43,200 square feet of open space is required. The project is proposing a total of 88,291 square feet of open space, with 44,195 square feet designated as common usable open space and 44,096 square feet as private open space.

Each unit features a private patio. The project plans also illustrate that the private yard space for each unit is at least 10 feet by 10 feet, as required by the ELTSP. The private yard spaces will be separated from the common areas by a low CMU wall with a vinyl patio gate. Outside the walls, accent plants including heavenly bamboo, flax, and red yucca, will fill planting areas between the walls and common walkways. The planters also include trees including fern pine, crepe myrtle, little gem magnolia, Idaho locusts, and shrubby yew pines.

The project includes a variety of common open space areas. The northeast corner of the property features a common open space area with a children's play structure and picnic table covered by a trellis. The area is surrounded by landscaping and features honey locusts, columnar red maples, and maidenhair trees.

Central to the site is the recreation and leasing office building includes a leasing office, bathrooms, recreation room with a sink, refrigerator, and ice machine, and an outdoor covered patio with seating. The recreation building is connected to a swimming pool and hot tub with seating areas. The area also features fire pits with seating around them and cabanas. The pool and seating area features plantings of agaves, aloes, blue grama grass and Berkeley sedge and southern magnolia and marina strawberry trees. Various types of maples are used to buffer the open space area from the drive aisles. The perimeter of the recreation area features plants including hawthorns, dwarf olives, sages, junipers, and a variety of groundcovers including rosemary, star jasmine, and juniper.

At the southern portion of the site, a fenced dog park with synthetic lawn is provided. This area also features a patio with seating. Thre are features camphor trees, olive trees, and southern live oak trees.

Other smaller common areas and open areas feature landscaping using the same plant palette as the rest of the site. The slope between the project site and Highway 4 is proposed to be hydroseeded. This treatment is consistent with the Laurel Ranch single family subdivision to the north and other projects in the city.

Entries, Street Frontages, and Walls

The main entry features a six-foot-tall masonry wall with a stone finish with the project name on the wall. This is placed outside the sight distance triangle. The entry driveway features enhanced concrete paving to create a welcoming environment. The area will include camphor trees, olives, and southern live oaks. The entry way will be highlighted with dense plantings of plants including rosemary, juniper, agaves, yucca, flax, hawthorn, and heavenly bamboo. Next to the signage wall, low ground covers including agave, aloe, and Berkeley sedge will be planted.

The Country Hills Drive and Laurel Road frontages include the planting of crepe myrtles Along the southern portion of Country Hills Drive an additional, off-set row of trees includes crepe myrtles interspersed with honey locust skylines, columnar red maples, and maiden hair trees. In the northern portion of the site, additional accent trees are also present to soften the buildings. Shrubs and groundcovers will be consistent with the plant palette found throughout the rest of the site. Country Hills Drive features street landscaping of red sunset maple trees and bearberry cotoneasters. A recommended condition of approval requires the applicant to remove the existing northern driveway that will not be used and replace it with curb, gutter, sidewalk and landscaping consistent with the rest of Country Hills Drive. Laurel Road features City maintained stormwater control facilities that would not be impacted by this development.

The Laurel Road frontage and eastern side of the site will include a retaining wall that varies in height from two feet tall to 11 feet tall. The wall will be a concrete block wall and feature a tubular steel and wire safety rail on top of the wall. To ensure the wall meets the requirements of the Citywide Design Guidelines in affect at the time of the project

submittal, a recommended condition of approval requires that the retaining wall be a color that corresponds to the entry wall's stone veneer and be made of an enhanced material, such as a split face block. The portion of the wall along Laurel Road is proposed to be planted with vines that will soften the look of the wall. A recommended condition of approval requires that the final landscaping plans show vines of a type that will eventually cover the height of the wall. With the recommended conditions of approval, the project will comply with applicable standards.

ATTACHMENTS

A. Resolution Adopting the Addendum to the Housing Element EIR
B. Resolution Adopting the Final Development Plan, Use Permit, and Design Review Exhibit A: Conditions of Approval
C. Project Plans
D. Contra Costa Fire Protection District Letter (July 13, 2023)

ATTACHMENT "A"

PLANNING COMMISSION
RESOLUTION NO. 2023-XX

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH ADOPTING THE ADDENDUM TO THE ENVIRONMENTAL IMPACT REPORT FOR THE 2023-2031 HOUSING ELEMENT UPDATE FOR LAUREL RANCH TOWNHOMES PROJECT AS ADEQUATE FOR ADDRESSING THE ENVIRONMENTAL IMPACTS OF THE PROPOSED PROJECT

WHEREAS, the City Council of the City of Antioch adopted Resolution No. 2023/15 Certifying the Environmental Impact Report (EIR) for the 2023-2031 Housing Element Update as adequate for addressing the environmental impacts of the project;

WHEREAS, the City received an application from application from Bright Sky Residential for a Final Development Plan, Use Permit, and Design Review approval for a 216-unit townhome project that spans 18.5 acres. The units would be accommodated within a series of 4-, 5-, and 6- plex buildings with one or two car private garages. The proposed project would include onsite amenities including parking, swimming pool, leasing center, community room, and landscaping. The project is located at the southeast corner of Laurel Road and Country Hills Drive (APNs 053-060-055, 056, 057 and 063);

WHEREAS, the City determined that the appropriate environmental document for the proposed Laurel Ranch Townhomes project is an Addendum to the EIR for the 2023-2031 Housing Element Update; and

WHEREAS, the Planning Commission, after notice, held a public hearing before said Commission on November 1, 2023,

NOW, THEREFORE, BE IT RESOLVED AND DETERMINED, as follows:

1. The foregoing recitals are true and correct.
2. **THE PLANNING COMMISSION** hereby finds that substantial changes are not proposed to the project that would require major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of a previously identified effect.
3. **THE PLANNING COMMISSION** hereby finds that substantial changes have not occurred with respect to the circumstances under which the project is undertaken requiring major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of a previously identified effect.
4. **THE PLANNING COMMISSION** hereby finds that there is no new information of substantial importance which was not known and could not have been known at the time the EIR for the 2023-2031 Housing Element Update was certified showing any of the following:

a. The project will have a new significant effect not previously discussed in the EIR.
b. The project will not cause any significant effect examined in the EIR to be substantially more severe.
c. The mitigation measures in the EIR and adopted in the CEQA Findings for the EIR remain feasible but some have been modified to reflect the proposed project. All mitigation measures identified in this Addendum and required for the proposed project as identified in the EIR that are necessary to reduce the potentially significant impacts to a level of insignificance will be made a requirement of the project and are acceptable by the project proponent.
d. There are no mitigation measures or alternatives which are considerably different from those analyzed in the EIR that would substantially reduce one or more significant effects on the environment.

BE IT FURTHER RESOLVED that the Addendum to the EIR for the 2023-2031 Housing Element Update for the Laurel Ranch Townhomes Project is hereby ADOPTED pursuant to the California Environmental Quality Act. All feasible mitigation measures for the project identified in the EIR, Addendum and accompanying studies are hereby incorporated into this approval.

* * * * * * * *

I HEREBY CERTIFY that the foregoing resolution was adopted by the Planning Commission of the City of Antioch at a regular meeting thereof held on the 1st day of November 2023, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Kevin Scudero
Secretary to the Planning Commission

ATTACHMENT "B"

PLANNING COMMISSION
RESOLUTION NO. 2023-XX

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH APPROVING A FINAL DEVELOPMENT PLAN, USE PERMIT, AND DESIGN REVIEW FOR THE LAUREL RANCH TOWNHOMES PROJECT (PD-23-01, UP2023-0006, DR2023-0013)

WHEREAS, the City of Antioch ("City") received an application from Bright Sky Residential for a Final Development Plan, Use Permit, and Design Review approval for a 216-unit townhome project that spans 18.5 acres. The units would be accommodated within a series of 4-, 5-, and 6- plex buildings with one or two car private garages. The proposed project would include onsite amenities including parking, swimming pool, leasing center, community room, and landscaping. The project is located at the southeast corner of Laurel Road and Country Hills Drive (APNs 053-060-055, 056, 057 and 063);

WHEREAS, the City determined an Addendum to 2023-2031 Housing Element Update Environmental Impact Report is the appropriate environmental document pursuant to Section 15164 of the Guidelines of the California Environmental Quality Act;

WHEREAS, on November 1, 2023, the Planning Commission adopted the Addendum;

WHEREAS, a public hearing notice was published in the East County Times and posted in three public places pursuant to California Government Code Section 65090 on October 20, 2023 for the Planning Commission public hearing held on November 1, 2023;

WHEREAS, on November 1, 2023, the Planning Commission duly held a public hearing on the matter, and received and considered evidence, both oral and documentary;

WHEREAS, the Planning Commission considered all public comments received, the presentation by City staff, the staff report, and all other pertinent documents regarding the proposed request.

NOW, THEREFORE BE IT RESOLVED, that the Planning Commission hereby makes the following findings for approval of a Final Development Plan:

1. Each individual unit of the development can exist as an independent unit capable of creating an environment of sustained desirability and stability, and the uses proposed will not be detrimental to present and potential surrounding uses but instead will have a beneficial effect which could not be achieved under another zoning district.

   The project is proposed to be constructed in one phase. The conditions of approval require a phasing plan be provided should the project become

phased in order to ensure individual units of the development can exist as an independent unit. The project is located in the East Lone Tree Specific Plan (ELTSP) area, which allows multifamily townhome project, and therefore the proposed use would not be detrimental to the surrounding single family uses. The ELTSP requires a Final Development Plan for all projects to ensure the ELTSP is implemented correctly.

2. The streets and thoroughfares proposed meet the standards of the city's Growth Management Program and adequate utility service can be supplied to all phases of the development.

   The project is not constructing any public streets. The private, interior drive aisles have been designed to meet City standards. The project fronts onto Laurel Road and Country Hills Drive, both of which have adequate utility capacity to serve the project.

3. Any commercial component is justified economically at the location(s) proposed.

   The project does not have a commercial component.

4. Any residential component will be in harmony with the character of the surrounding neighborhood and community and will result in densities no higher than that permitted by the General Plan.

   The residential component meets the design requirements of the ELTSP, which ensures harmony with the character of the surrounding neighborhood. The ELTSP governs the densities of the site, and the site does not exceed the permitted density of the ELTSP.

5. Any industrial component conforms to applicable desirable standards and will constitute an efficient, well-organized development with adequate provisions for railroad and/or truck access and necessary storage and will not adversely affect adjacent or surrounding development.

   The project does not have an industrial component.

6. Any deviation from the standard zoning requirements is warranted by the design and additional amenities incorporated in the final development plan which offer certain unusual redeeming features to compensate for any deviations that may be permitted.

   The project meets the development standards of the ELTSP and does not deviate from the standard requirements of the ELTSP.

7. The area surrounding the P-D District can be planned and zoned in coordination and substantial compatibility with the proposed development.

   The surrounding parcels are already developed with single family homes, as permitted by the ELTSP. The proposed project is in conformance with the ELTSP.

8. The P-D District conforms with the General Plan of the city.

   The Planned Development District is required in the ELTSP. The project conforms to the ELTSP, and therefore conforms to the General Plan.

NOW, THEREFORE BE IT FURTHER RESOLVED, that the Planning Commission makes the following findings for approval of the requested Use Permit:

1. The granting of such use permit will not be detrimental to the public health or welfare or injurious to the property or improvements in such zone or vicinity.

   The Antioch Municipal Code (AMC) requires the approval of a use permit for each phase of a Planned Development. The proposed project was designed to conform to the ELTSP and other applicable sections of the AMC and will not be detrimental to the public health or welfare or injurious to the property or improvements.

2. That the use applied for at the location indicated is properly one for which a use permit is authorized.

   The use applied for at the location indicated is authorized because the City of Antioch Zoning Ordinance requires a use permit for all Planned Development applications.

3. That the site for the proposed use is adequate in size and shape to accommodate such use, and all yard spaces, walls, fences, parking, loading, landscaping, and other features required, to other uses in the neighborhood.

   The site plan complies with the development standards in the ELTSP and the applicable standards in the AMC.

4. That the site abuts streets and highways adequate in width and pavement type to carry the kind of traffic generated by the proposed use.

   The site abuts Laurel Road and Country Hills Drive. Both streets were recently constructed and designed to accommodate development at the project site.

5. The granting of such use permit will not adversely affect the comprehensive General Plan.

The proposed uses and design are consistent with the General Plan. The General Plan designation is ELTSP, which allows for the type of residential development proposed at the site. The Conditions of Approval protect the public safety, health and general welfare of the users of the project and surrounding area. In addition, the conditions ensure the project is consistent with City standards.

NOW, THEREFORE, BE IT RESOLVED AND DETERMINED, that the Planning Commission of the City of Antioch does hereby APPROVE a Final Development Plan, Use Permit, and Design Review for a 216-unit townhome project that spans 18.5 acres. The units would be accommodated within a series of 4-, 5-, and 6- plex buildings with one or two car private garages. The proposed project would include onsite amenities including parking, swimming pool, leasing center, community room, and landscaping. The project is located at the southeast corner of Laurel Road and Country Hills Drive (APNs 053-060-055, 056, 057 and 063), subject to the conditions in Exhibit A.

* * * * * * * *

I HEREBY CERTIFY that the foregoing resolution was adopted by the Planning Commission of the City of Antioch at a regular meeting thereof held on the 1st day of November 2023, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____

KEVIN SCUDERO
Secretary to the Planning Commission

EXHIBIT A
CONDITIONS OF APPROVAL

	General Conditions	Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
1.	**Project Approval**. This Final Development Plan, Use Permit, and Design Review approval is for the parcels at the southeast corner of Country Hills Drive and Laurel Road (APNs 053-060-063, 053-060-057, 053-060-056, and 053-060-055), as substantially shown and described on the project plans, except as required to be modified by conditions. Plans date received June 6, 2023 as presented to the Planning Commission on November 1, 2023 ("Approval Date."). For any condition herein that requires preparation of a Final Plan where the project applicant has submitted a conceptual plan, the project applicant shall submit final plan(s) in substantial conformance with the conceptual plan, but incorporate the modifications required by the conditions herein for approval by the City.	City of Antioch	On-Going	Planning Department	
2.	**Project Approval Expiration**. This approval expires on November 1, 2025(two years from the date on which this approval becomes effective) or at an alternate time specified as a condition of approval, unless a building permit has been issued and construction diligently pursued. All approval extensions shall be processed as stated in the Antioch Municipal Code.	City of Antioch	On-Going	Planning Department	

3.	**City Fees**. The applicant shall pay any and all City and other related fees applicable to the property, as may be modified by conditions herein. Fees shall be limited to those applicable when the related SB 330 application was submitted and shall be based on the current fee structure in effect at the time provided that any increase since submittal of the project's SB 330 application reflects only the annual adjustments based on a published cost index. Fees shall be paid before issuance of said permit or before issuance of prorated certificates of occupancy. Notice shall be taken specifically of Plan Check, Engineering, Fire and Inspection Fees.The project applicant shall also reimburse the City for direct costs of planning; building and engineering plan check and inspection, as mutually agreed between the City and applicant. *Discretionary or ministerial permits/approvals will not be considered if the developer is not current on fees, balances, and reimbursement that are outstanding and owed to the City.*	City of Antioch	On-Going	Community Development Department	
4.	**Pass-Through Fees.** The developer shall pay all pass-through fees. Fees include but are not limited to: **a.** East Contra Costa Regional Fee and Financing Authority (ECCRFFA) Fee in effect at the time of building permit issuance. **b.** Contra Costa County Fire Protection District Fire Development Fee in place at the time of building permit issuance. **c.** Contra Costa County Map Maintenance Fee in affect at the time of recordation of the final map(s). **d.** Contra Costa County Flood Control District Drainage Area fee. **e.** School Impact Fees. **f.** Delta Diablo Sanitation Sewer Fees. **g.** Contra Costa Water District Fees.	City of Antioch	On-Going	Community Development Department	

5.	**Appeals**. Pursuant to Section 9-5.2509 of the Antioch Municipal Code, any decision made by the Planning Commission which would otherwise constitute final approval or denial may be appealed to the City Council. Such appeal shall be in writing and shall be filed with the City Clerk within five (5) working days after the decision. All appeals to the City Council from the Planning Commission shall be accompanied by a filing fee established by a resolution of the City Clerk.	City of Antioch	Within 5 Working Days of Planning Commission Action	Planning Department	
6.	**Requirement for Building Permit**. Approval granted by the Planning Commission does not constitute a building permit or authorization to begin any construction or demolition anexisting structure. An appropriate permit issued by the Community Development Department must be obtained beforeconstructing, enlarging, moving, converting, or demolishing any building or structure within the city.	City of Antioch	On-Going	Building Department	
7.	**Modifications to Approved Plans**. The project shall be constructed as approved and with any additional changes required pursuant to the Zoning Administrator or Planning Commission Conditions of Approval. Planning staff may approve minor modifications in the project design, but not the permitted land uses. A change requiring discretionary approvaland any other changes deemed appropriate by the Planning staff per Municipal Code Section 9-5.2311 shall require further Planning Commission approval through the discretionary review process.	City of Antioch	On-Going	Planning Department	
8.	**Hold Harmless Agreement/Indemnification**. The applicant (including any agent thereof) shall defend, indemnify, and hold harmless, the City of Antioch and its agents, and employees, from any claim, action, or proceeding against the City or its agents, officers or employees to attack, set aside, void, or annul the City's approvalconcerning this application. The city will promptly notify the applicant of any such claim action or proceeding and cooperate fully in the defense.	City of Antioch	On-Going	Planning Department	

	Public Works Standard Conditions	Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
9.	**City Standards**. All proposed public improvements shall be constructed to City standards or as otherwise approved by the City Engineer in writing. The developer shall file for a City Encroachment permit for all improvements within the public right of way, a grading permit for grading of the site, and a building permit for all buildings and utilities to be installed on the site.	City of Antioch	On-Going	Public Works Department	
10.	**Utility Construction.** Relocation of Public utilities and construction of new private utilities shall be constructed to their ultimate size and configuration within the existing parcel boundary of APN 053-060-062-67 and 053-060-057-6 as shown on these preliminary entitlement plan documents submitted to the City for review.	City of Antioch	On-Going	Public Works Department	
11.	**Utility Mapping.** Prior to acceptance of public utilities, the developer shall provide GPS coordinates of all below ground and above ground utilities. This includes all Water Distribution Utility features, sewer collection Utility features, Storm Water Utility features, and inverts associated with these features. Developer shall also include GPS coordinates of metal subdivision entryway signs, street signs, light poles, and irrigation controllers. These GPS coordinates must be taken on a survey-grade sub-meter GPS data receiver/collector and provided in GIS shapefile format using the NAVD 88 (with conversion information). Submittal of as-built drawings in CAD format shall satisfy this condition.	City of Antioch	Prior to Acceptance of Public Utilities	Public Works Department	
12.	**Sewer**. All sewage shall flow by gravity to the intersecting 12-inch sewer main located within the site that flows from the sewer trunk main in County Hills Drive as shown on the preliminary utility plan C-8, to the existing city sewer main line located offsite. The sewer connection shall be to a concrete manhole in compliance with City standard plans and specifications. All sewer lines and utility	City of Antioch	On-Going	Public Works Department	

	connections to the City sewer system shall be in accordance with city specifications. Proper backfill, compaction and road repair shall also be in accordance with City specifications and standard plans. The Developer shall install all sewage laterals from buildings to flow by gravity to the public street sewer main which will drain by gravity to existing City sewer trunk mains located close to the project per City standards.				
13.	**Storm Drain Design/Construction**. The developer shall design, and construct storm drain facilities (bioretention and pipelines) to adequately collect and convey stormwater entering or originating within the development to the nearest adequate man-made drainage facility without diversion of the watershed. a. All private utilities, including storm drainpipes and ditches, shall be installed throughout the site to drain all site low spots and landscape areas surrounding building, parking areas, driveways and sidewalks. Per City requirements drainage pipes should be installed in the sidewalk or curbs or made to flow under the sidewalk or curbs so not to cause a slippery hazardous condition in wet conditions. All proposed drainage facilities, including open ditches, drainage swales in parking lots shall be constructed of Portland Concrete Cement or as approved by the City Engineer. b. Storm drain system shall flow to the Bioretention Basins shown on the preliminary site plan and preliminary utility plans within the study and on the site plan with no diversion out of existing watershed(s), except as shown on the plan submittal package approved by the Planning Commission. c. All three Bioretention basins of the site and associated Storm drain improvements shall be constructed and operational	City of Antioch	At the Time of Building Permit Submittal except for (a), which would occur during construction and (c), which is required before issuance of Occupancy Permit	Public Works Department	

	prior to issuance of 1st occupancy permit of the residential apartment complex. d. Each Bioretention basin shall be designed to the satisfaction of the City Engineer with an emergency overflow inlet acting as a spillway to provide controlled overflow relief for large storm events over 2-year event. Pedestrian access to the bottom of the basin shall be installed with a minimum of 4'wide concrete stairway so owner can perform frequent landscaping maintenance to remove trash, check for clogging, and maintain vigorous and healthy vegetation. A minimum 10' wide access gates shall be installed along the top of each the bioretention basin with retaining walls so if needed equipment can be lowered into the basin for cleaning or small equipment used to lift debris or unwanted material out from the bottom of the bioretention basin. The Design of the bioretention basin shall include upstream pretreatment devices and a method for small amounts of material can be removed from basins. An Operations and Maintenance Manual (for the basins) shall be submitted for the basin prior to the issuance of the first building permit. The developer and the city staff shall review the operations and maintenance of each of the basins and if needed install additional devices or measures that will make maintenance of the facility possible to the satisfaction of the city engineer.				
14.	**Water Pressure**. The developer shall provide adequate water pressure and volume for fire flow and domestic use to serve this development. This will include a minimum residual pressure of 20 psi with all losses included at the highest sprinkler unit point in the Building and at water service and a minimum static pressure of 20 psi at the water service or as approved by the City Engineer. See Fire Requirements for additional water flow conditions.	City of Antioch	On-Going	Public Works Department	

15.	**Requirement for Water Line Looped System.** The onsite private water main shall be designed as a looped distribution system. If not already connected as a looped water system, developer shall be responsible for installing any additional off site water line improvements so the project has adequate fire flow and water supply to meet the requirement of the project at no cost to the City. Requirement for a looped Water Main System shall be waived if the developer can prove by sprinkler / water line calculations and analysis of a state approved sprinkler contractor or registered civil engineer that the proposed single line water main through the project can adequately provide enough pressure and fire flow to any of the building fire sprinkler systems shall meet minimum flow of 1000 gpm at 20 psi pressure requirements and supply minimum flow of 1500 gpm to the furthest fire hydrant from the public main. If minimum fire flow and pressure requirements for the building sprinkler system and minimum flow and pressure requirements to the farthest fire hydrant cannot be meet, the water system shall be designed as a looped private water main distribution system with the same above requirements. All the proposed fire hydrants shall be connected to this on-site private water line and all fire hydrants shall be privately maintained and connected to double detector check valve assembly per city requirements as approved by the City Engineer. The developer shall be responsible for installing this private water line from the public water main in the street to site and installing the required double detector check valve assemblies and water meters (domestic & Irrigation) at no cost to the City in accordance with City standards and City requirements.	City of Antioch	On-Going	Public Works Department	
16.	**Hydrology Analysis**. The developer shall submit a hydrology and hydraulic analyses and report of the proposed storm drainage system as part of the storm water control plans for 10 year and 100-year storm events. The analysis shall demonstrate adequacy of the on-site drainage system and that bioretention basins will have no flooding impacts to the downstream drainage system. The analysis shall be reviewed and approved by Contra Costa	City of Antioch	Prior to the issuance of first Certificate of Occupancy	Public Works Department	

	County Flood Control and the City of Antioch engineering departments.				
17.	**Retaining Walls** 1. **Public Right of Way.** Retaining walls shall not be constructed in City right-of-way or other City maintained parcels unless otherwise approved by the City Engineer. 2. **Materials.** All retaining walls shall be of concrete or masonry unit construction. 3. **Height**. All retaining walls shall be reduced in height to the maximum extent practicable and the walls shall meet the height requirements in the frontage setback and sight distance triangles as required by the City Engineer. A 0' to 16' high retaining wall can be installed along the public right of way of Laurel Road and extend around the north top of slope, along SR 4 right of way to the pool recreation area of the site or until the slope transitions in grade to the existing or proposed grades. 4. A 1.7' to 3' wide concrete lined drainage ditch shall be located behind every retaining wall abutting a retained slope for catching and removing surface drainage from the retaining slope behind the wall to a storm drain system. 5. The 2:1 maximum slope above the retaining wall shall be landscaped with trees, ground cover, grass or erosion control vegetation as shown on the preliminary landscape plans to control erosion.	City of Antioch	On-Going	Public Works Department	
18.	**Fences.** All perimeter fences shall be located at the top of slope or along the existing property parcel line as shown on the approved landscape plans as approved by the City Engineer. a. Along project frontage of County Hills Drive the project security fence shall be installed along the top of wall of the northwest	City of Antioch	Prior to Building Permit	Public Works Department	

	ROW and along the southwest bio-retention basin and extend to the south along state Highway 4 right of way to the west property lines. b. All fencing adjacent to bioretention basins shall be wrought iron, tubular steel, or as otherwise approved by the City Engineer in writing at the time of improvement plan approval and shall be located at the top of slope.				
	Conservation/NPDES	Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
19.	**C.3 Compliance**. Per State Regulations, all impervious surfaces including off-site roadways to be constructed as part of the project are subject to C.3 requirements.	State of California	On-Going	Public Works Department	
20.	**NPDES.** The project shall comply with all Federal, State, and City regulations for the National Pollution Discharge Elimination System (NPDES) (AMC§6-9). (Note: Per State Regulations, NPDES Requirements are those in affect at the time of the Final Discretional Approval.) Under NPDES regulations, the project is subject to provision C.3: "New development and redevelopment regulations for storm water treatment." a. **Requirements.** Provision C.3 requires that the project include storm water treatment and source control measures, as well run-off flow controls so that post-project runoff does not exceed estimated pre-project runoff. b. **Storm Water Control Plan**. C.3 regulations require the submittal of a Storm Water Control Plan (SWCP) that demonstrate plan compliance. The SWCP shall be submitted to the Building and City Engineering Department concurrently with site improvement plans.	Federal Government	At the Time of Building Permit Submittal	Public Works	

	c. **Operation and Maintenance Plan**. For the treatment and flow-controls identified in the approved SWCP, a separate Operation and Maintenance Plan (O&M) shall be submitted to the Building Department at the time of permit submittal.				
21.	**NPDES Plan Submittal Requirements**. The following requirements of the federally mandated NPDES program (National Pollutant Discharge Elimination System) shall be complied with as appropriate, or as required by the City Engineer: a. **Application.** Prior to issuance of permits for building, site improvements, or landscaping, the developer shall submit a permit application consistent with the developer's approved Storm Water Control Plan, and include drawings and specifications necessary for construction of site design features, measures to limit directly connected impervious areas, pervious pavements, self-retaining areas, treatment BMPs, permanent source control BMPs, and other features that control storm water flow and potential storm water pollutants. b. **Certified Professional.** The Storm Water Control Plan shall be certified by a registered civil engineer, or by a registered architect or landscape architect as applicable. Professionals certifying the Storm Water Control Plan shall be registered in the State of California on design of treatment measures for water quality, not more than three years prior to the signature date by an organization with storm water treatment measure design expertise (e.g., a university, American Society of Civil Engineers, American Society of Landscape Architects, American Public Works Association, or the California Water Environment Association), and verify understanding of groundwater protection principles applicable to the project site (see Provision C.3.i of Regional Water Quality Control Board Order R2 2003 0022).	Federal Government	At the Time of Building Permit Submittal except as specified for individual sub-requirements	Public Works	

	c. **Final Operation & Maintenance Plan.** Prior to building permit final and issuance of a Certificate of Occupancy, the developer shall submit, for review and approval by the City, a final Storm Water BMP Operation and Maintenance Plan in accordance with City of Antioch guidelines. This O&M plan shall incorporate City comments on the draft O&M plan and any revisions resulting from changes made during construction. The O&M plan shall be incorporated into the CC&Rs for the Project. d. **Long Term Management.** Prior to building permit final and issuance of a Certificate of Occupancy, the developer shall execute and record any agreements identified in the Storm Water Control Plan which pertain to the transfer of ownership and/or long-term maintenance of storm water treatment or hydrograph modification BMPs. e. **Design Details.** i. Prevent site drainage from draining across public sidewalks and driveways in a concentrated manner by installing drain pipes within or under the sidewalks per city details. ii. Install on all catch basins "No Dumping, Drains to River" decal buttons in curb at all new site curb inlets and drainage inlets. f. **Hydrology Calculations.** Collect and convey all storm water entering, and/or originating from, the site to an adequate downstream drainage facility without diversion of the watershed. Submit hydrologic and hydraulic calculations with the Improvement Plans to the City Engineering Department for review and approval and to Contra Costa County Flood Control District.				

	g. **Regional Water Quality Control.** Prior to issuance of the grading permit, submit proof of filing of a Notice of Intent (NOI) by providing the unique Waste Discharge Identification Number (WDID#) issued from the Regional Water Quality Control Board. h. **SWPPP**. Submit a copy of the Storm Water Pollution Prevention Plan (SWPPP) for review to the Engineering Department prior to issuance of a building and/or grading permit. The general contractor and all subcontractors and suppliers of materials and equipment shall implement these BMP's. Construction site cleanup and control of construction debris shall also be addressed in this program. Failure to comply with the approved construction BMP may result in the issuance of correction notices, citations, or a project stop work order. i. **BMP.** Install appropriate clean water devices at all private storm drain locations immediately prior to entering the public storm drain system and Implement Best Management Practices (BMP's) at all times to the project. j. **Erosion Control.** Include erosion control/storm water quality measures in the grading plan that specifically address measures to prevent soil, dirt, and debris from entering the storm drain system. Such measures may include, but are not limited to, hydro seeding, gravel bags and siltation fences or other measures that are subject to review and approval of the City Engineer. A grading plan will be required with the necessary erosion control/storm water quality measures shall be shown on the site plan submitted for an on-site permit, subject to review and approval of the City Engineer. The developer shall be responsible for ensuring that all contractors and subcontractors are aware of and implement such measures. k. **On-Going Maintenance.**				

	i. Sweep or vacuum the paved parking lot(s) a minimum of once a month and prevent the accumulation of silt, litter and debris on the site. Corners and hard to reach areas shall be swept manually. ii. If sidewalks are pressure washed, debris shall be trapped and collected to prevent entry into the storm drain system. No cleaning agent may be discharged into the storm drain. If any cleaning agent or degreaser is used, wash water shall be collected and discharged to the sanitary sewer, subject to the approval of the sanitary sewer District. iii. Ensure that the area surrounding the project such as the streets stay free and clear of construction debris such as silt, dirt, dust, and tracked mud coming in from the project construction. Areas that are exposed for extended periods shall be watered regularly to reduce wind erosion. Paved areas and access roads shall be swept on a regular basis. All loads in dump trucks shall be covered per City requirements. iv. Clean all on-site storm drain facilities a minimum of twice a year, once immediately prior to October 15 and once in January. Additional cleaning may be required if found necessary by City Inspectors and/or City Engineer. *Additional information regarding the project SWCP is necessary and modifications to the SWCP shown on the proposed Vesting Tentative Map may be required in order to comply with C.3 regulations.*				
	Fire Standards	Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)

22.	The applicant shall comply with the conditions provided by the Contra Costa County Fire Protection District in the letter dated July 13, 2023, and attached in the staff report.	Contra Costa Fire Protection District	On-Going	Contra Costa Fire Protection District	
	Building Permit Submittal	Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
23.	**Requirement for Phasing Plan.** The project shall be built continuously in one phase. If the project will become a phased project, then the developer shall provide a phasing plan to the Community Development Department and Engineering Department for review and approval. The developer shall install proper erosion control measures on any vacant land area so the future building site complies with state and local NPDES requirements.	City of Antioch	At the time of Building Permit Submittal	Community Development Department	
24.	**Final Landscape Plans.** The applicant shall submit final landscape plans that identify specific plant materials to be used, including all trees, shrubs and groundcover, providing both common and botanical names, sizes and quantities at the time of building permit submittal that are in substantial conformance with the Preliminary Landscape Plan. The project shall emphasize local and native species of plants in the final landscape plans. See City approved plant list for installing approved plants in the public right of way.	City of Antioch	At the time of Building Permit Submittal	Building Department	
25.	**Water Efficient Landscape Ordinance**. Landscaping for the project shall be designed to comply with the applicable requirements of City of Antioch Ordinance No. 2162-C-S The State Model Water Efficient Landscape Ordinance (MWELO). The applicant shall demonstrate compliance with the applicable requirements of the MWELO in the landscape and irrigation plans submitted to the City.	City of Antioch	At the time of Building Permit Submittal	Community Development Department	

26.	**Site Landscaping** All landscaping at the site, including on all slopes, medians, C.3 basins and open space areas shall be installed prior to issuance of final certificate of occupancy.	City of Antioch	Prior to Occupancy	Public Works Department	
27.	**Site Drainage.** All buildings in the site shall contain rain gutters and downspouts that catch rainwater from the roof and direct water into a storm drain system and away from the foundation towards the closest drainage inlet of the site in accordance with the international building code and as approved by the City Engineer. A detailed drainage plan shall be prepared to drain water away from the buildings into acceptable drainage system. Permanent soil erosion control measures shall be designed and installed to prevent control soil erosion on the site.	City of Antioch	At the Time of Building Permit Submittal	Public Works Department	
28.	**Utility Location on Private Property**. All existing improvements that are disturbed shall be relocated within (water meters, sewer cleanouts, etc.) the immediate area of site as defined by the preliminary utility plans and approved by the City Engineer.	City of Antioch	At the Time of Building Permit Submittal	Public Works Department	
Grading Improvements		Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
29.	**Requirement for Grading Permit.** A grading plan shall be submitted, grading permit processed and issued prior to commencement of any grading operations. The permit shall be obtained through the City's engineering and building departments subject to review and approval by the City Engineer. The submitted plans shall incorporate any modifications required by the Conditions of Approval, local and national building codes.	City of Antioch	At the time of Building Permit Submittal	Public Works	

30.	**Soils.** Prior to the approval of the grading plan(s), the City Engineer shall determine if a soils engineer is required to review the building permit plan set submitted for this project. If deemed necessary by the City Engineer, field inspections by such professionals will be required to verify compliance with the approved plans. Costs for these consulting services shall be incurred by the developer.	City of Antioch	At the time of Building Permit Submittal	Public Works	
31.	**Off-Site Grading**. All off-site grading is subject to the coordination and approval of the affected property owners and the City Engineer. The developer shall submit written authorization to "access, enter, and/or grade" adjacent properties prior to issuance of permit and performing any work.	City of Antioch	At the time of Building Permit Submittal	Public Works	
32.	**Grading Easements.** Any sale of a portion (or portions) of this project to another developer shall include the necessary CCR's , and/or grading easements to assure that project-wide grading conforms to the approved development conditions of approval.	City of Antioch	At the time of Building Permit Submittal	Public Works	
33.	**Grading Operation.** The grading operation shall take place at a time, and in a manner, so as not to allow erosion and sedimentation to occur into the public storm drain system. The slopes shall be landscaped and reseeded as soon as possible after the grading operation ceases and rain events. Erosion measures shall be implemented during all construction phases in accordance with an approved erosion and sedimentation control plan and implementing proper erosion control detail techniques.	City of Antioch	At the time of Building Permit Submittal	Public Works	
34.	**The grading plan** for this development shall be reviewed and approved by the City Engineer. Any changes to this plan shall be reviewed and approved by City Engineer prior to grading operations and the grading and plot plan updated.	City of Antioch	At the time of Building Permit Submittal	Public Works	
35.	**All elevations** shown on the grading and plot plans shall be based on NAVD 88 datum with conversion information, as approved by the City Engineer.	City of Antioch	At the time of Building Permit Submittal	Public Works	

36.	**Maximum slopes.** The maximum back-to-back or side-to-side natural grade transitions shall have a maximum slope of 3:1, and shall have proper drainage swales, benching and drainage ditches to adequately drain the slope so no ponding occurs on the site that could cause slope failures or erosion as approved by the City Engineer. If approved by the project soil engineer a slope of 2:1 slope may be approved for small grading transitions of 10 feet or less of slope is vegetated or larger areas with appropriate landscaping and erosion control measures incorporated.	City of Antioch	At the time of Building Permit Submittal	Public Works	
37.	**Minimum Longitudinal slope of concrete gutters and slopes.** The minimum longitudinal slope of concrete gutters shall be 0.35% unless approved by the City Engineer. The minimum slope of asphalt is 1.5% and the minimum slope of concrete is .5% unless approved by the City Engineer.	City of Antioch	At the time of Building Permit Submittal	Public Works	
38.	**The Developer shall implement Project-specific Geotechnical Recommendations** Prior to issuance of any grading permits, all recommendations and specifications set forth in the project specific Geotechnical Exploration Report prepared for the proposed project shall be reflected on the project grading and foundation plans (inclusive of seismic design parameters), subject to review and approval by the City of Antioch Engineer.	City of Antioch	At the time of Building Permit Submittal	Public Works	
39.	**A Grading and Foundation Plan Review and Construction inspection /Monitoring program** shall be completed prior to issuance of any grading permits. The developer/ project Applicant shall retain a design geotechnical engineering firm to review the final grading and foundation plans and specifications to evaluate whether recommendations have been implemented from the project-specific Geotechnical Exploration Report, and to provide additional or modified recommendations, as needed. Construction monitoring shall be performed by a California Registered Geologist and/or Engineer to check the validity of the assumptions made in the geotechnical investigation. Earthwork operations shall be performed under the observation of a California Registered Geologist and/or Engineer to check that the site is properly prepared, the selected fill materials are satisfactory, and that placement and compaction of the fills has been	City of Antioch	At the time of Building Permit Submittal	Public Works	

	performed in accordance with recommendations and the project specifications.				
40.	**The Development of a Storm Water Pollution Prevention Plan.** Prior to the issuance of grading permits, the project Applicant shall prepare and submit to the City Public Works Department and Central Valley Regional Water Quality Control Board (RWQCB), a Storm Water Pollution Prevention Plan (SWPPP) detailing measures to control soil erosion and waste discharges during construction. The SWPPP shall include an erosion control plan, a water quality monitoring plan, a hazardous materials management plan, and postconstruction Best Management Practices.	City of Antioch	At the time of Building Permit Submittal	Public Works	
41.	**Grading plans**. Locations of building exterior walls, fences and retaining walls and drainage swales, side slopes, top and bottom of slopes, parking lot drainage to catch basins with underground pipe drainage systems, pipe out falls shall be shown on the grading plans for review and approval. All the above features shall have proposed elevations shown on the grading plan so the grading of project will adequately drain to underground drainage system in an acceptable manor as approved by the City Engineer.	City of Antioch	At the time of Building Permit Submittal	Public Works	
At the Time of Building Permit Issuance		Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
42.	**Sewer System Requirements**. The site sewer system for the subject site shall be designed in accordance with City standard plans and requirements to the satisfaction of the City Engineer prior to issuance of building permit.	City of Antioch	At the time of Building Permit Issuance	Building Department	
43.	**Encroachment Permit**. The applicant shall obtain an encroachment permit from the Engineering Division before commencing any construction activities within any public right-of-way or easement.	City of Antioch	At the time of Building Permit Issuance	Community Development Department	

At the Time of Construction		Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
44.	**Collection of Construction Debris**. During construction the Developer shall place on site a Waste Management dumpster or other container to gather all construction debrison a regular basis and place them in a Waste Management dumpster or other container that is emptied on a regular basis consistent with the Construction and Demolition Debris Ordinance. When appropriate, use tarps on the ground tocollect fallen debris or splatters that could contribute to stormwater pollution.	City of Antioch	On-Going	Building Department	
45.	**Construction Hours**. Construction activity shall be as outlined in the Antioch Municipal Code. Construction activity is limited to 7:00 AM to 6:00 PM Monday-Friday except that activity within 300 feet of occupied dwelling space is limited to the hours of 8:00 AM to 5:00 PM on weekdays. On weekends and holidays, construction activity is allowed 9:00 AM to 5:00 PM, irrespective of the distance from an occupied dwelling. Extended hours may be approved in writing by the City Manager. Extended hours may be approved in writing by the City upon written request.	City of Antioch	On-Going	Building Department/ Public Works Department	
46.	**Demolition, Debris, Recycling.** All debris, garbage and unwanted vegetation shall be removed from the project site in accordance with City requirements. All materials that can be recycled shall be taken to an approved recycling facility. The project shall be in compliance with and supply all the necessary documentation for Antioch Municipal Code § 6-3.2: Construction and Demolition Debris Recycling.	City of Antioch	On-Going	Building Department/ Public Works Department	

47.	**Filter Materials at Storm Drain Inlet**. Install filter materials (such as sandbags, filter fabric, etc.) at the storm drain inlet nearest the downstream side of the project site prior to: a) start of the rainy season (October 1). b) site dewatering activities. c) street washing activities. d) saw cutting asphalt or concrete; and e) order to retain any debris or dirt flowing into the city storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding and erosion of soil on City streets and storm drain system. Dispose of used filter particles in the trash or at local approved landfill facility.	City of Antioch	On-Going	Building Department	
48.	**Archeological Remains**. In the event subsurface archeological remains are discovered during any construction or preconstruction activities on the site, all land alteration work within 100 feet of the find shall be halted, the Community Development Department notified, and a professional archeologist, certified by the Society of California Archeology and/or the Society of Professional Archeology, shall be notified. Site work in this area shall not occur until the archeologist has had an opportunity to evaluate the significance of the find and to outline appropriate mitigation measures, if deemed necessary. If prehistoric archeological deposits are discovered during development of the site, local Native American organizations shall be consulted and involved in making resource management decisions.	City of Antioch	On-Going	Community Development Department	
49.	**Erosion Control Measures.** The grading operation shall take place at a time, and in a manner, so as not to allow erosion and sedimentation. The slopes shall be landscaped and reseeded as soon as possible after the grading operation ceases. Erosion measures shall be implemented during all construction phases in accordance with an approved erosion and sedimentation control plan.	City of Antioch	On-Going	Community Development Department	

50.	**Dust Control.** Standard dust control methods and designs shall be used to stabilize the dust generated by construction activities. The developer shall post dust control signage with a contact number of the developer, City staff, and the air quality control board.	City of Antioch	On-Going	Community Development Department	
51.	**Debris Removal.** The site shall be kept clean of all debris (boxes, junk, garbage, etc.) at all times.	City of Antioch	On-Going	Community Development Department	
	Prior to Issuance of Occupancy Permit	Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
52.	**Planning Inspection**. Planning staff shall conduct a site visit to review exterior building elevations for architectural consistency with the approved plans and landscape installation (if required). All exterior finishing details including window trim, paint, gutters, downspouts, decking, guardrails, and driveway installation shall be in place prior to scheduling the final inspection.	City of Antioch	Prior to OccupancyPermit	Planning Department	
53.	**Debris Removal.** All mud, dirt or construction debris shall be carried off the construction site and shall be removed prior to scheduling the final Planning inspection. No materials shall be discharged onto a sidewalk, street, gutter, storm drain or creek.	City of Antioch	Prior to OccupancyPermit	Building Department	
54.	**Fire Prevention**. A final Fire inspection shall occur to inspect all fire prevention systems constructed as part of the project. Inspections shall occur prior to final occupancy permit issuance.	Contra Costa County Fire Protection District	Prior to Occupancy Permit	Fire Department	

55.	**Damage to Street Improvements**. Any damage to existing street and existing site improvements during construction or adjacent property improvements in the immediate area of the impacts of the project, shall be repaired and/or rebuilt to the satisfaction of the City Engineer at the full expense of the developer. This shall include sidewalks, asphalt and concrete pavement, slurry seal existing AC pavements, parking lot curb and gutter, landscaping, street reconstruction along the project frontage, as may be required by the City Engineer to make the developed area looking new.	City of Antioch	Prior to OccupancyPermit of the last home or ultimate tract acceptance/ bond release	Building Department	
56.	**Right-of-Way Construction Standards**. All improvements within the public right-of-way, including curb, gutter, sidewalks, driveways, paving and utilities, shall be constructed in accordance with approved standards and/or plans and shall comply with the standard plans and specification of the City Engineer.	City of Antioch	Prior to OccupancyPermit	Public Works	
	Special Conditions of Approval	Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
SP-1.	**Trash Receptacles:** City Park type three-sort trash receptables shall be placed in all common areas.	City of Antioch	Prior to OccupancyPermit	Public Works	

SP-2.	**Existing Utility Easements Vacated And New PUEs.** The topography survey of the project identifies an existing 15'wide and 20' wide utility easement across relocated Storm Drian Lines, sanitary sewer lines and other utilities. Other existing PUE and easements on parcel (APN 053-060-062-5 and APN 053-060-057-6) site shall be vacated. A new 10' wide public utility easement (PUE) shall be established, as needed, over the new underground dry utilities along Country Hills Drive and Laurel Road and under the existing overhead lines and new underground utilities that are to be constructed. If warranted, a new PUE shall be established on site over all new utility lines to be installed from the public right way to the various buildings.	City of Antioch	Prior to OccupancyPermit	Public Works	
SP-3.	**Construction Work Schedule.** The developer shall inform the City of the start of construction of the project, the construction schedule and provide the items listed below: - approximate area of disturbance, - time frames for anticipated inspections, - hours of work, - construction detours, and - flagging The developer shall provide the adjacent businesses and adjacent residents construction notice of construction with a flyer distributed 48 hours prior to start of construction of the following: Address of Work Start Date of Work End Date of Work Hours of Work Type of Work Contact Person Company Name Telephone	City of Antioch	Prior to issuance of building permit	Public Works	

SP-4.	**Double Detector Check Valve Assembly.** The developer shall install the required 2 sprinkler Double Detector Check Valve assemblies in an enclosed area screened by landscaping or small 3.5' high masonry walls or placed within the building or in a underground vault so it is not visible from public view.	City of Antioch	Prior to OccupancyPermit	Public Works	
SP-5.	**24' Driveway to Site.** The developer shall construct two 24' wide driveways along County Hills drive with 30'minimum radius curb returns and valley gutter along the project frontage in accordance with the approved site plan C-1 per City driveway standards to the satisfaction of the City Engineer. Each driveway entrance shall be stop controlled with proper stop signs, stop bar, stop legend, ADA ramps and cross walks and street drainage improvements in accordance with city details and city standards.	City of Antioch	Prior to OccupancyPermit	Public Works	
SP-6.	**Lot Line Adjustment.** The developer shall file a lot line adjustment that will adjust existing lots to the configuration of the lots as shown on sheet C2 the approved preliminary plans of Laurel Ranch Apartment development plan prepared by Wood Rodgers dated January 6, 2023 to the satisfaction of the City Engineer / Director of Public Works.	City of Antioch	Prior to issuance of building permit for future homes (grading permit and site development allowed)	Public Works	
SP-7.	**Vacation or Relocation of the Following Easements:** 1. Temporary construction easement in favor of Davidon Homes 2. 60' Access easement to Parcel B 170-PM-12 3. Centerline of 16' wide PG&E easement and Pacbell easement 857-OR-405, 1904-OR-600.	City of Antioch	Prior to issuance of building permit for future homes (grading permit and site development allowed)	Public Works	
SP-8.	**Dedication of the Following Easements:** 1. Public utility easements (PUE) shown on preliminary site plan C-3 and all water meters and water services to buildings. 2. Emergency vehicle access easements (EVAE) as shown on the preliminary Site plan C-3. 3. 10' wide existing sanitary Sewer lines through the site shown on preliminary site plan C-3	City of Antioch	Prior to issuance of building permit for future homes (grading permit and site development allowed)	Public Works	

SP-9.	**The Treatment Basins and Detention Basins**. The developer shall construct three (3) drainage treatment basins and drainage detention basins to handle drainage from project drainage. This includes installation of all needed storm drain lines, grading, drainage inlets and outlet structures, drainage treatment and detention basins, wears, pathways, maintenance access roads, fencing, gates, trash racks, and any other needed improvements for the parcel to function as drainage treatment and detention basins for the entire project.	City of Antioch	Prior to first certificate of occupancy	Public Works	
SP-10.	**Underground Storm Drain System Connected to Down Spouts.** All residential buildings and other structures shall have rain gutters and downspouts connected to an underground drainage collection system. The grading around the building will direct surface water away from the building foundation to an underground storm drain system as approved by the City Engineer.	City of Antioch	Prior to certificate of occupancy for each individual building	Public Works	
SP-11.	**Removal of Vacated Easements.** All existing easements of record that are no longer required and will affect parcels within this project shall be removed prior to or concurrently with the recordation of the final map or subsequent final maps or separate recorded documents as approved by City Engineer.	City of Antioch	Prior to issuance of building permit	Public Works	
SP-12.	**Postal Service**. Provisions for mail delivery and locations of mailbox facilities shall be reviewed by the USPS and approved by the City Engineer prior to the approval of building permit. The developer shall install approved mailbox facility for mail delivery of the future buildings at the central locations reviewed by the USPS and the City Engineer. These mailbox facilities shall be installed with the construction of residential buildings within each phase.	City of Antioch	Prior to first certificate of occupancy	Public Works	

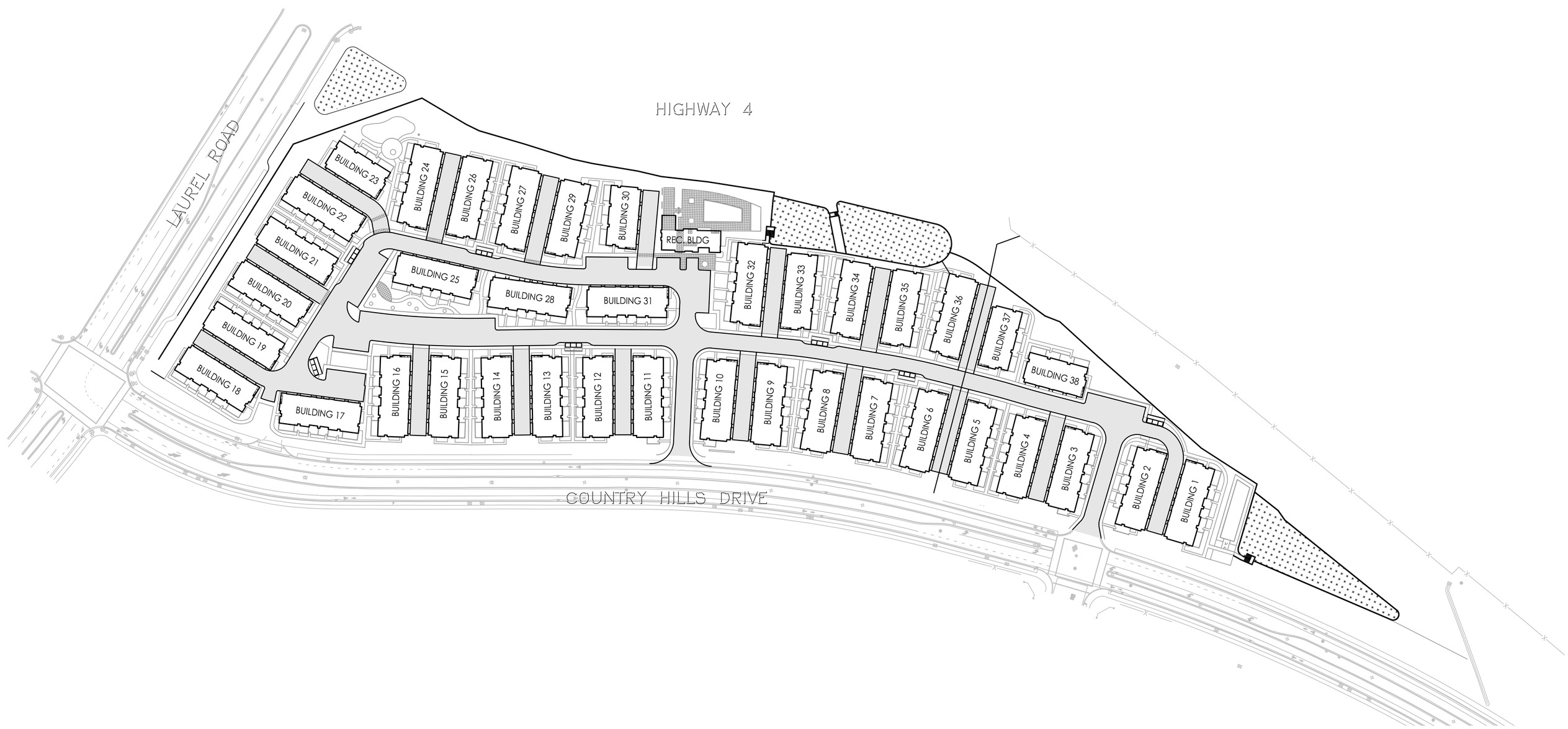
SP-13.	**Sight Distance.** As shown in the plan submittal, all intersections, street corners and driveways, and private street corners shall comply with city standard sight distance triangle requirements and landscaping shall be maintained per Antioch Municipal Code § 9-5.1101 Site Obstructions at Intersections, or as approved by the City Engineer. The developer shall make sure all landscaping and site plans are compliance with proper safe sight distance stopping distance requirements based on vehicle speeds in accordance with ASHTO standards.	City of Antioch	Prior to first occupancy	Public Works	
SP-14.	**Water Meters.** All water meters for each unit in each of the buildings (water meters, sewer cleanouts, etc.) shall be contained below ground surface, or inside an enclosure or within the building as approved by the City Engineer.	City of Antioch	Prior to occupancy of each building	Public Works	
SP-15.	**Undeveloped Areas.** The developer and/or the property owner shall maintain all undeveloped areas within this subdivision in an attractive manner, which shall also ensure fire safety, erosion control and proper drainage per city and state requirements.	City of Antioch	Ongoing	Public Works	
SP-16.	**Construction Traffic Control Plan.** A Construction Traffic Control Plan shall be submitted for approval with the improvement plans for approval by the City Engineer. All public street improvements for access to the first phase of building permits shall be fully constructed/improved prior to the first building permit along street alignments agreed to in writing by the City Engineer. The developer may need to submit a traffic control plans for all construction of improvements within the public right of way.	City of Antioch	Prior to issuance of building permit	Public Works	
SP-17.	**Signing and Striping Plan.** The applicant shall submit a Signing and Striping Plan using the latest version of the Caltrans Standard Plans Pavement Markers and Traffic Lines Typical Details as depicted in the A20 and A24 series of plan sheets and the latest version of the California MUTCD's Sign Chart. Accessible parking design shall be compliant with the latest version of Caltrans Standard Plans A90 series of plan sheets. Accessible parking lot design shall be compliant with the latest version of City parking standards.	City of Antioch	Prior to issuance of building permit	Public Works	

SP-18.	**Truck Turning Analysis.** The developer completed adequate truck turning analysis as part of the Final Development plan. With the improvement plan submittal, the applicant shall submit the approved truck turning analysis or any updates with a minimum size WB-50 vehicle for on-site entry, turnarounds, and overall circulation utilizing the AutoTurn add-on in AutoCAD software.	City of Antioch	Prior to issuance of building permit	Public Works	
SP-19.	**Compliance to City Water Master Plan.** The developer shall complete a peak domestic water demand analysis and fire flow analysis of the proposed project development in accordance with city requirements. This analysis for domestic water and fire flow for the project shall not exceed the water allocated for this site according to the City water master plan. If this demand for water exceeds this allocation previously determined then the developer shall fund analysis of the city master plan model to determine if the capacity of the existing city water system is being exceeded and require the project install new improvements to meet these demands. This analysis shall be reviewed and approved by the City Engineer.	City of Antioch	Prior to issuance of building permit	Public Works	
SP-20.	**Compliance to City Sewer Master Plan.** The developer shall complete a sewer peak flow sewer analysis of the proposed project development in accordance with city sewer requirements. These peak sewer flows from the project shall not exceed the anticipated sewer peak flow allocated for this site according to the City Sewer master plan. If this peak sewer flow exceeds this allocation previously determined by the master plan then the developer shall fund an analysis of the city master plan model to determine if the capacity of the existing downstream city sewer system is being exceeded and require the project to install new improvements to mitigate these higher sewer demands. This analysis shall be reviewed and approved by the City Engineer.	City of Antioch	Prior to issuance of building permit	Public Works	

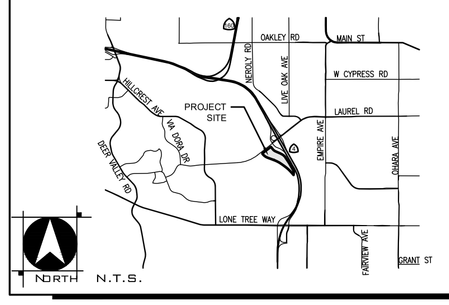
SP-21.	**Compliance to City Drainage Master Plan.** The developer shall complete a hydrology and hydraulic analysis of drainage flows of the proposed project development in accordance with city requirements for 10 year and 100-year drainage flows. This analysis for site drainage for the project shall not exceed the storm drainage flows allocated for this site according to the City drainage master plan. If this storm water flows exceeds the anticipated flows and retention downstream of the project previously determined in the city master plan then the developer shall fund an analysis of the city master plan model to determine downstream if there is capacity of the existing downstream drain system to handle this development. If the drainage system is being exceeded, the developer may be required to install new improvements or provide their fair share contribution to improvements to handle these increases in drainage downstream. This analysis shall be reviewed and approved by the City Engineer.	City of Antioch	Prior to issuance of building permit	Public Works	
SP-22.	**Encroachment Permit for Import of Earthwork.** With the import of engineered fill material to the site, the developer shall file an encroachment permit with the city for added cleanup of the truck route that may become excessively dirty due to the hauling of so much imported soil material along City streets leading to the development property. The developer shall pay for additional street sweeping and cleanup of dirt or soil material that may collect along the truck route after this high volume of hauling the material on city streets has ended. The City Engineer will inspect and evaluate such accumulation of material at the time of the import of material.	City of Antioch	Prior to issuance of building permit	Public Works	
SP-23.	**Police Services CFD.** The applicant shall annex into the existing Community Facilities District (CFD) 2018-02 (Police Protection).	City of Antioch	Prior to Occupancy Permit	Public Works	

SP-24.	**Fire Services CFD.** The applicant shall annex into CFD 2022-1 (Antioch Fire Protection and Emergency Response Services). This CFD is administered by the Contra Costa County Fire Protection District. To comply with this condition, the applicant must provide the City proof of annexation by furnishing a copy of the resolution passed by the County Board of Supervisors.	City of Antioch	Prior to Occupancy Permit	Public Works	
SP-25.	**Public Services CFD.** The applicant shall annex into the existing CFD 2022-01 (Public Services).	City of Antioch	Prior to Occupancy Permit	Public Works	
SP-26.	**Architectural Elevations and Colors.** No two of the same building elevation shall be constructed next to one another for buildings fronting either Laurel Road or Country Hills Drive. No two of the same paint scheme, regardless of building elevation shall be constructed next to one another. The elevation and paint scheme of each building shall be shown on the site plan of the building permit submittal.	City of Antioch	Prior to Issuance of Building Permit	Planning Division	
SP-27.	**Retaining Wall Vines.** The vines shown on sheet L-21 of the project plans shall be planted along the entire length of the retaining wall adjacent to Laurel Road. The locations, size, and species of vine shall be shown on the final landscaping plans. The final landscaping plan shall show vines of a type that will eventually cover the height of the wall.	City of Antioch	Prior to Issuance of Building Permit	Planning Division	
SP-28.	**Retaining Wall.** In conformance with the Citywide Design Guidelines, the retaining wall color shall coordinate with the entry wall's stone veneer and an enhanced material, such as a split face block, shall be used. The enhanced wall design shall be shown on the building permit plans for review and approval by the Planning Division prior to issuance.	City of Antioch	Prior to Issuance of Building Permit	Planning Division	

SP-29.	**East Lone Tree Specific Plan Benefit District 2016/147.** The developer shall contribute to the East Lone Tree Specific Plan Benefit District based on a total allocation of 108 Equivalent Residential Units (ERU) assigned to the Property on which the Project is located (consisting of former Assessor's Parcel Numbers 053-060-031 and 053-060-024). The contribution amount specified in the East Lone Tree Specific Plan Benefit District formation documents is $15,001 per ERU, which equates to a total contribution of $1,620,108 (or $7,500.50 per unit) for developer's 216-unit Project. If the developer elects to build the project in one phase, the full amount of the contribution shall be due at the time occupancy permits are issued for the full project. If developer elects to build the project in phases, developer shall pay an amount equal to $7,500.50 multiplied by the number of units in each phase, unless another allocation is agreed to by the Director of Public Works.	City of Antioch	Prior to Occupancy of Each Building	Public Works	
SP-30.	**Existing Northernly Driveway.** The developer shall remove the existing northernly driveway with the large 30 feet curb returns and concrete sidewalk aprons and paving from County Hills drive to the site(close to the intersection of Laurel Road and Country Hills drive) and install new curb and gutter, road base, asphalt pavement, concrete sidewalk, and topsoil for relandscaping in the area of the former driveway in the public right of way. The proposed improvements shall match the existing grade, northerly curb alignment, sidewalk width, street drainage, irrigation system, street trees and other landscaping improvements as the rest of the street to the satisfaction of the City Engineer. The developer shall include this work with all the other off- site improvements required to be constructed in the City right of way in accordance with City standard plans and specifications. The developer shall include this work in the City encroachment permit for all improvements to be completed within the City Right of way.	City of Antioch	Prior to Occupancy of Each Building	Public Works	



LOCATION MAP



PROJECT TEAM

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PE 93844
PHONE: (925) 398-7919

SHEET INDEX

C1	TITLE SHEET
C2	EXISTING CONDITIONS
C3	PRELIMINARY SITE PLAN
C4	STREET SECTIONS
C5	ENGINEERED & TRUE CROSS SECTIONS
C6	PRELIMINARY GRADING & DRAINAGE PLAN
C7	STORMWATER CONTROL PLAN
C8	PRELIMINARY UTILITY PLAN
C9	TRAFFIC SIGNING & STRIPING PLAN
C10	TRUCK TURNS

ATTACHMENT "C"

NORTH 0 100 200 400
SCALE: 1" = 100'

LAUREL RD & COUNTRY HILLS DR DEVELOPMENT

ANTIOCH, CALIFORNIA
JANUARY 2023 (REVISED MARCH 24, 2023)

TITLE SHEET
C1

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
4670 WILLOW ROAD, SUITE 125 Tel 925.847.1556
Pleasanton, CA. 94588 Fax 925.847.1557

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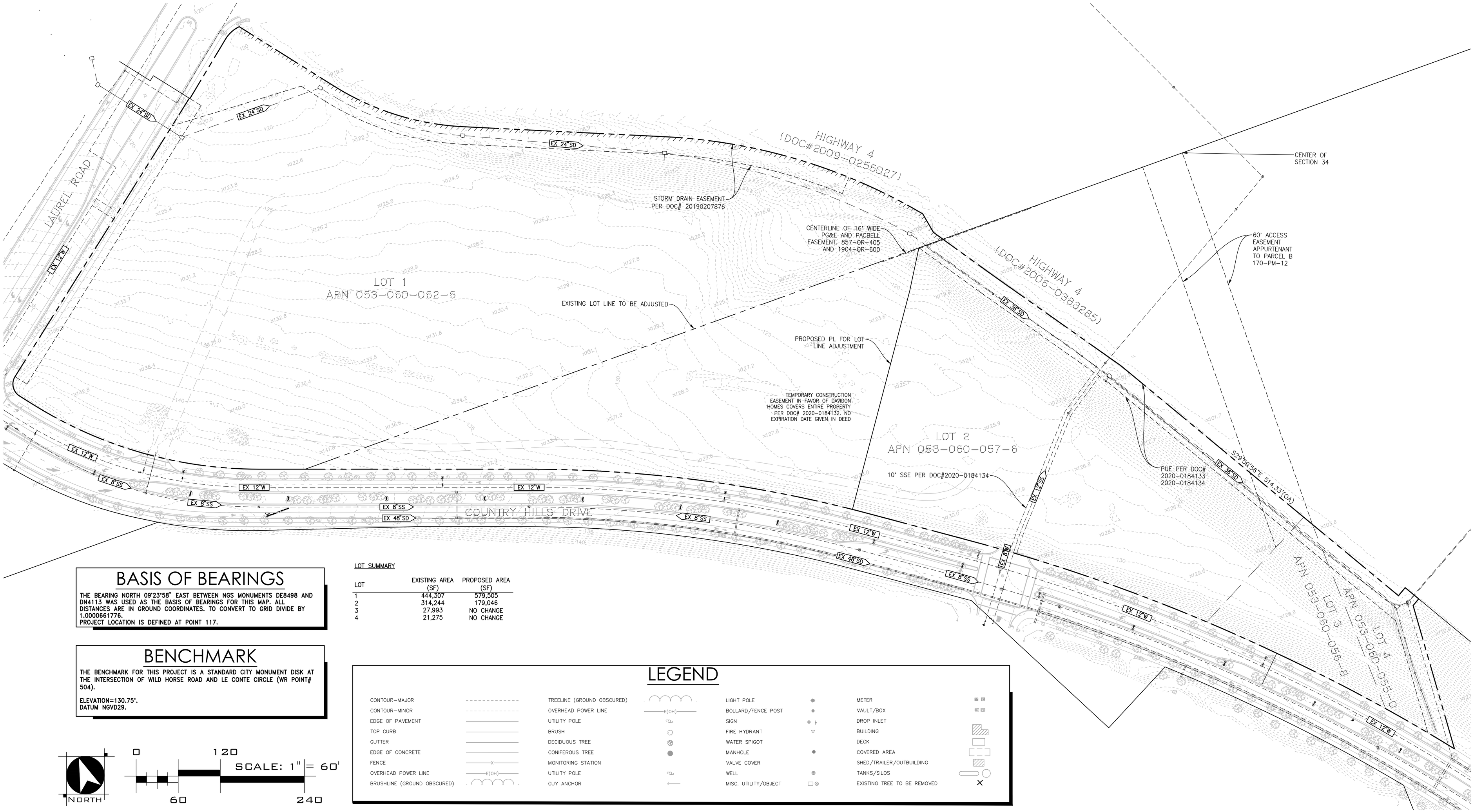

BASIS OF BEARINGS

THE BEARING NORTH 09°23'58" EAST BETWEEN NGS MONUMENTS DE8498 AND DN4113 WAS USED AS THE BASIS OF BEARINGS FOR THIS MAP. ALL DISTANCES ARE IN GROUND COORDINATES. TO CONVERT TO GRID DIVIDE BY 1.0000661776.
PROJECT LOCATION IS DEFINED AT POINT 117.

BENCHMARK

THE BENCHMARK FOR THIS PROJECT IS A STANDARD CITY MONUMENT DISK AT THE INTERSECTION OF WILD HORSE ROAD AND LE CONTE CIRCLE (WR POINT# 504).

ELEVATION=130.75'.
DATUM NGVD29.

LOT SUMMARY

LOT	EXISTING AREA (SF)	PROPOSED AREA (SF)
1	444,307	579,505
2	314,244	179,046
3	27,993	NO CHANGE
4	21,275	NO CHANGE

LEGEND

CONTOUR-MAJOR		TREELINE (GROUND OBSCURED)		LIGHT POLE		METER	
CONTOUR-MINOR		OVERHEAD POWER LINE	E(OH)	BOLLARD/FENCE POST		VAULT/BOX	
EDGE OF PAVEMENT		UTILITY POLE		SIGN		DROP INLET	
TOP CURB		BRUSH		FIRE HYDRANT		BUILDING	
GUTTER		DECIDUOUS TREE		WATER SPIGOT		DECK	
EDGE OF CONCRETE		CONIFEROUS TREE		MANHOLE		COVERED AREA	
FENCE	X	MONITORING STATION		VALVE COVER		SHED/TRAILER/OUTBUILDING	
OVERHEAD POWER LINE	E(OH)	UTILITY POLE		WELL		TANKS/SILOS	
BRUSHLINE (GROUND OBSCURED)		GUY ANCHOR		MISC. UTILITY/OBJECT		EXISTING TREE TO BE REMOVED	X

NORTH

0 60 120 240

SCALE: 1" = 60'

LAUREL RD & COUNTRY HILLS DR DEVELOPMENT

ANTIOCH, CALIFORNIA

JANUARY 2023 (REVISED MARCH 24, 2023)

EXISTING CONDITIONS

C2

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
4670 WILLOW ROAD, SUITE 125 Tel 925.847.1556
Pleasanton, CA. 94588 Fax 925.847.1557

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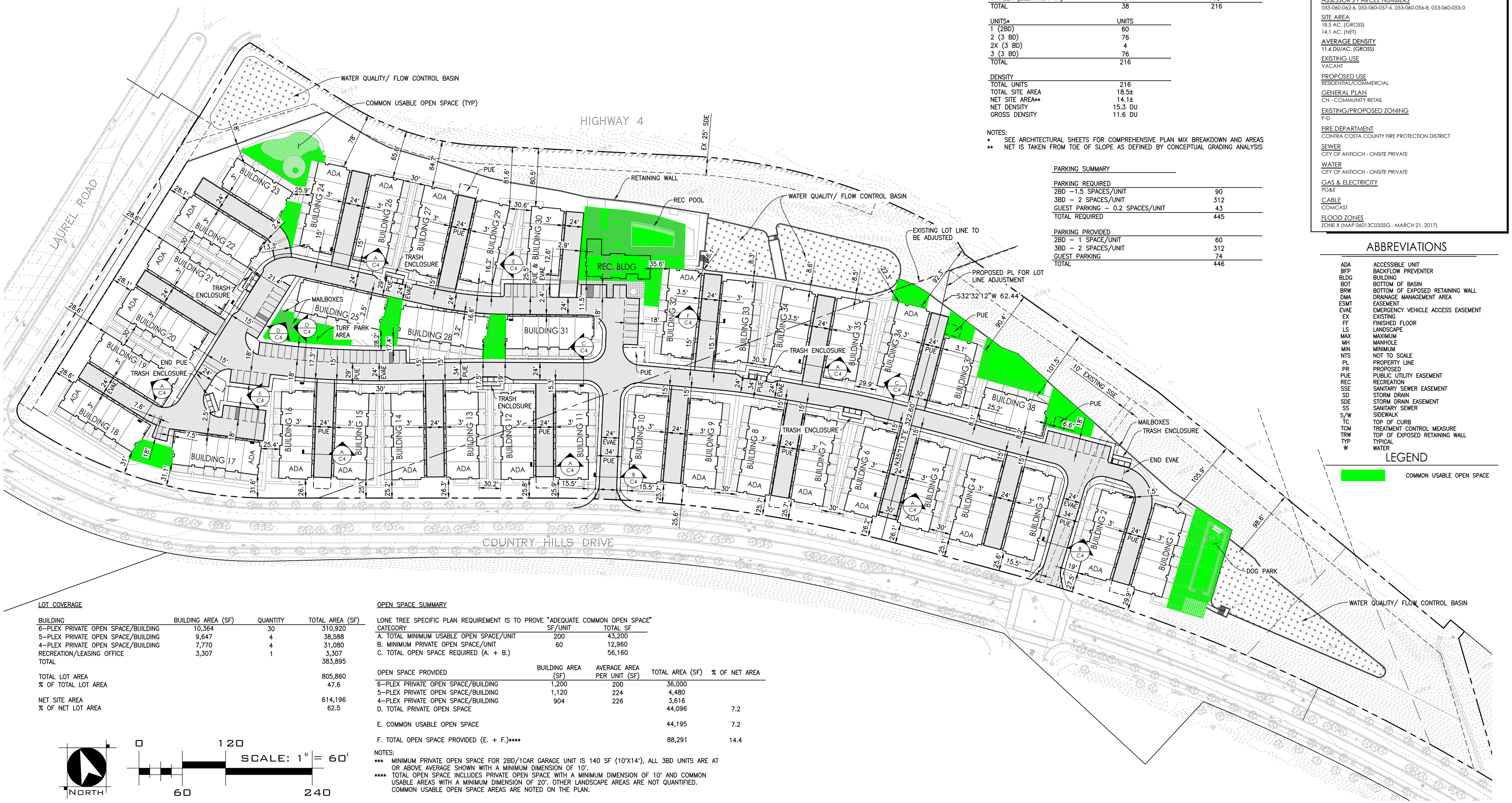


BUILDINGS*	BUILDINGS	TOTAL UNITS
6-PLEX (ELEVATION 1A)	5	30
6-PLEX (ELEVATION 1B)	3	18
6-PLEX (ELEVATION 2A)	11	66
6-PLEX (ELEVATION 2B)	11	66
5-PLEX (ELEVATION 3B)	4	20
4-PLEX (ELEVATION 4A)	4	16
TOTAL	38	216

UNITS*	UNITS
1 (2BD)	60
2 (3 BD)	76
2X (3 BD)	4
3 (3 BD)	76
TOTAL	216

DENSITY	
TOTAL UNITS	216
TOTAL SITE AREA	18.5±
NET SITE AREA**	14.1±
NET DENSITY	15.3 DU
GROSS DENSITY	11.6 DU

NOTES:
* SEE ARCHITECTURAL SHEETS FOR COMPREHENSIVE PLAN MIX BREAKDOWN AND AREAS
** NET IS TAKEN FROM TOE OF SLOPE AS DEFINED BY CONCEPTUAL GRADING ANALYSIS

PARKING SUMMARY

PARKING REQUIRED	
2BD -1.5 SPACES/UNIT	90
3BD - 2 SPACES/UNIT	312
GUEST PARKING - 0.2 SPACES/UNIT	43
TOTAL REQUIRED	445

PARKING PROVIDED	
2BD - 1 SPACE/UNIT	60
3BD - 2 SPACES/UNIT	312
GUEST PARKING	74
TOTAL	446

PROJECT NOTES

NUMBER OF LOTS
4 LOTS

ASSESSOR'S PARCEL NUMBERS
053-060-062-6, 053-060-057-6, 053-060-056-8, 053-060-055-0

SITE AREA
18.5 AC. (GROSS)
14.1 AC. (NET)

AVERAGE DENSITY
11.6 DU/AC. (GROSS)

EXISTING USE
VACANT

PROPOSED USE
RESIDENTIAL/COMMERCIAL

GENERAL PLAN
CN - COMMUNITY RETAIL

EXISTING/PROPOSED ZONING
P-D

FIRE DEPARTMENT
CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT

SEWER
CITY OF ANTIOCH - ONSITE PRIVATE

WATER
CITY OF ANTIOCH - ONSITE PRIVATE

GAS & ELECTRICITY
PG&E

CABLE
COMCAST

FLOOD ZONES
ZONE X (MAP 06013C0355G - MARCH 21, 2017)

ABBREVIATIONS

ADA	ACCESSIBLE UNIT
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
BOT	BOTTOM OF BASIN
BRW	BOTTOM OF EXPOSED RETAINING WALL
DMA	DRAINAGE MANAGEMENT AREA
ESMT	EASEMENT
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
EX	EXISTING
FF	FINISHED FLOOR
LS	LANDSCAPE
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
NTS	NOT TO SCALE
PL	PROPERTY LINE
PR	PROPOSED
PUE	PUBLIC UTILITY EASEMENT
REC	RECREATION
SSE	SANITARY SEWER EASEMENT
SD	STORM DRAIN
SDE	STORM DRAIN EASEMENT
SS	SANITARY SEWER
S/W	SIDEWALK
TC	TOP OF CURB
TCM	TREATMENT CONTROL MEASURE
TRW	TOP OF EXPOSED RETAINING WALL
TYP	TYPICAL
W	WATER

LEGEND

COMMON USABLE OPEN SPACE

LOT COVERAGE

BUILDING	BUILDING AREA (SF)	QUANTITY	TOTAL AREA (SF)
6-PLEX PRIVATE OPEN SPACE/BUILDING	10,364	30	310,920
5-PLEX PRIVATE OPEN SPACE/BUILDING	9,647	4	38,588
4-PLEX PRIVATE OPEN SPACE/BUILDING	7,770	4	31,080
RECREATION/LEASING OFFICE	3,307	1	3,307
TOTAL			383,895
TOTAL LOT AREA			805,860
% OF TOTAL LOT AREA			47.6
NET SITE AREA			614,196
% OF NET LOT AREA			62.5

OPEN SPACE SUMMARY

LONE TREE SPECIFIC PLAN REQUIREMENT IS TO PROVE "ADEQUATE COMMON OPEN SPACE"

CATEGORY	SF/UNIT	TOTAL SF
A. TOTAL MINIMUM USABLE OPEN SPACE/UNIT	200	43,200
B. MINIMUM PRIVATE OPEN SPACE/UNIT	60	12,960
C. TOTAL OPEN SPACE REQUIRED (A. + B.)		56,160

OPEN SPACE PROVIDED	BUILDING AREA (SF)	AVERAGE AREA PER UNIT (SF)	TOTAL AREA (SF)	% OF NET AREA
6-PLEX PRIVATE OPEN SPACE/BUILDING	1,200	200	36,000	
5-PLEX PRIVATE OPEN SPACE/BUILDING	1,120	224	4,480	
4-PLEX PRIVATE OPEN SPACE/BUILDING	904	226	3,616	
D. TOTAL PRIVATE OPEN SPACE			44,096	7.2
E. COMMON USABLE OPEN SPACE			44,195	7.2
F. TOTAL OPEN SPACE PROVIDED (E. + F.)****			88,291	14.4

NOTES:
*** MINIMUM PRIVATE OPEN SPACE FOR 2BD/1CAR GARAGE UNIT IS 140 SF (10'X14'), ALL 3BD UNITS ARE AT OR ABOVE AVERAGE SHOWN WITH A MINIMUM DIMENSION OF 10'.
**** TOTAL OPEN SPACE INCLUDES PRIVATE OPEN SPACE WITH A MINIMUM DIMENSION OF 10' AND COMMON USABLE AREAS WITH A MINIMUM DIMENSION OF 20'. OTHER LANDSCAPE AREAS ARE NOT QUANTIFIED. COMMON USABLE OPEN SPACE AREAS ARE NOTED ON THE PLAN.

NORTH

0 60 120 240
SCALE: 1" = 60'

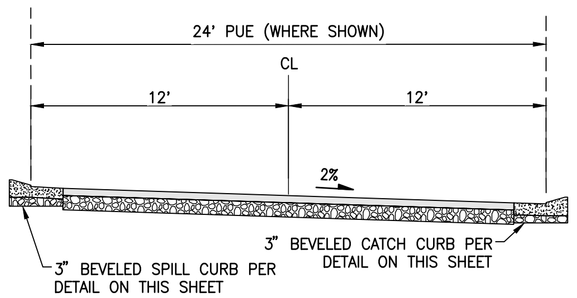
LAUREL RD & COUNTRY HILLS DR DEVELOPMENT

ANTIOCH, CALIFORNIA
JANUARY 2023 (REVISED MARCH 24, 2023)

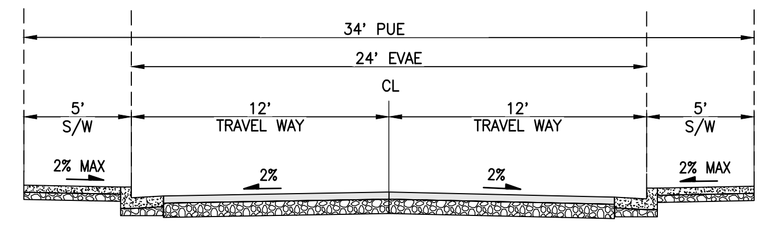
PRELIMINARY SITE PLAN
C3

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
4670 WILLOW ROAD, SUITE 125 Tel 925.847.1556
Pleasanton, CA. 94588 Fax 925.847.1557

J:\Jobs\3717_Laurel Ranch Antioch\Laurel Road & Country Hills Development\Planning\Exhibits\Tentative Map - PD\C03-SITE_LRC.dwg 3/24/2023 3:49 PM Camila Rodríguez-Castro



SECTION A
NTS



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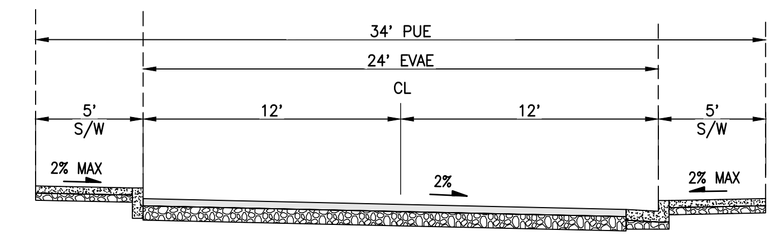

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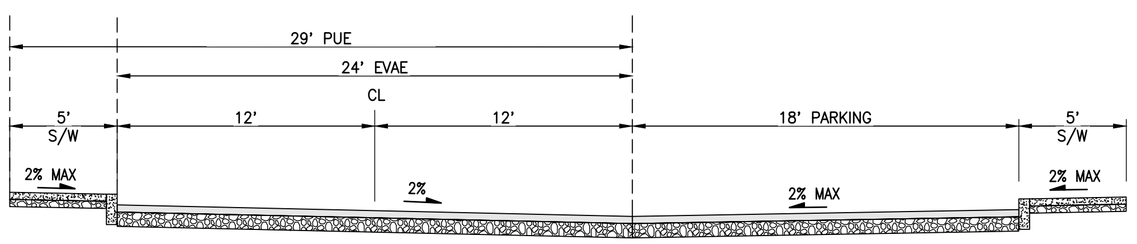

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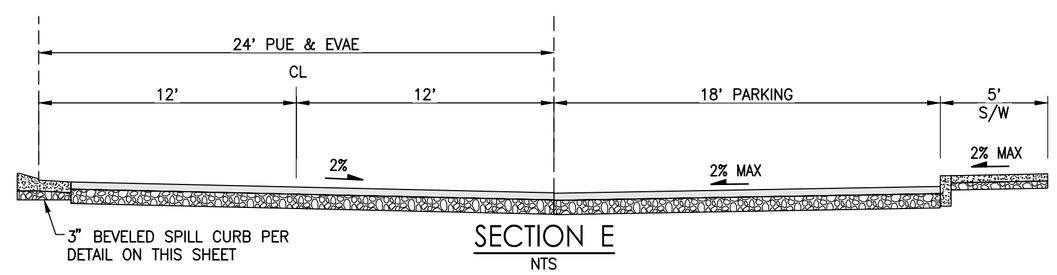

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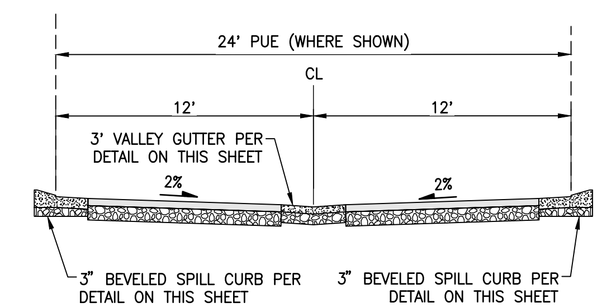

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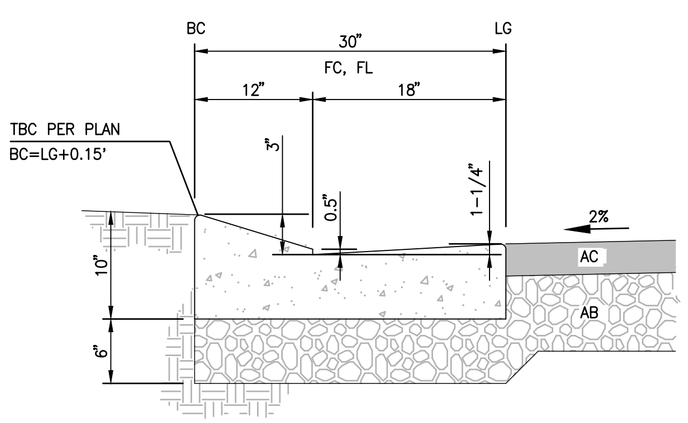
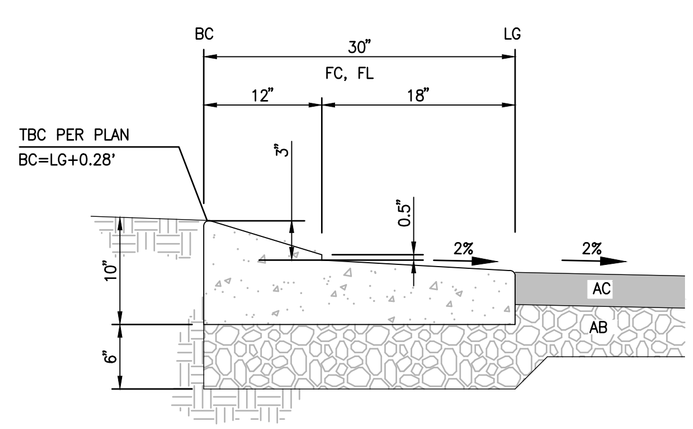
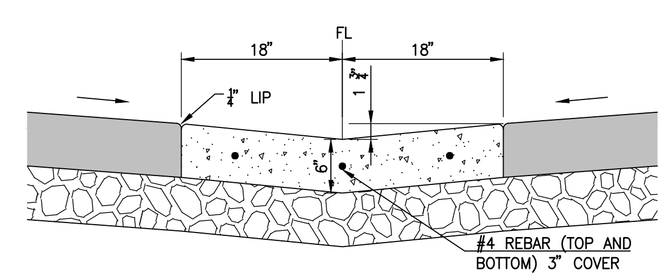


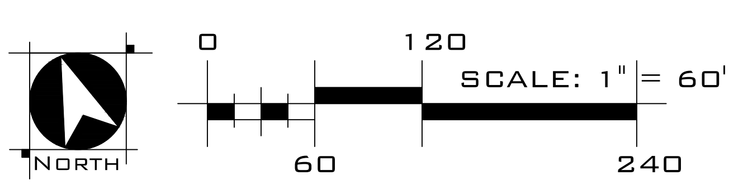
3" BEVELED SPILL CURB AT DRIVEWAYS
NTS



3" BEVELED CATCH CURB AT DRIVEWAYS
NTS



3' VALLEY GUTTER
NTS



LAUREL RD & COUNTRY HILLS DR DEVELOPMENT
ANTIOCH, CALIFORNIA
JANUARY 2023 (REVISED MARCH 24, 2023)

STREET SECTIONS
C4

WOOD RODGERS
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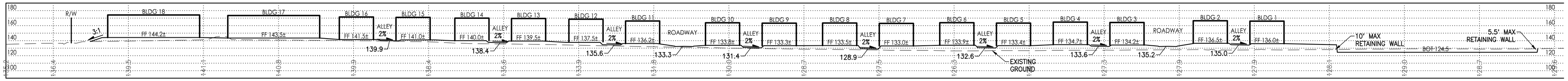
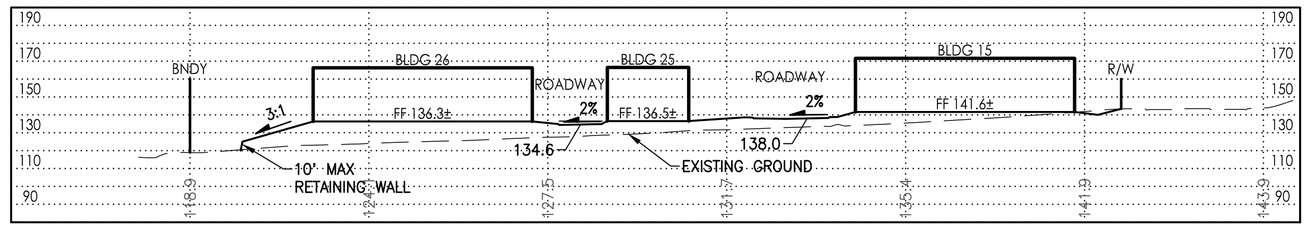
Pleasanton, CA. 94588 Fax 925.847.1557

C4



SECTION 1
SCALE: 1"=60'



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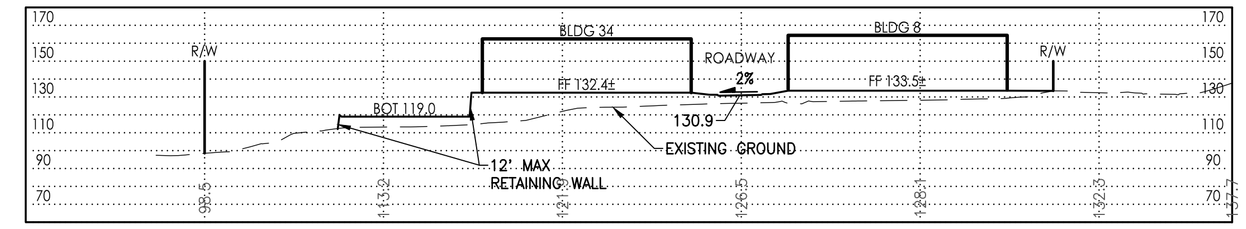
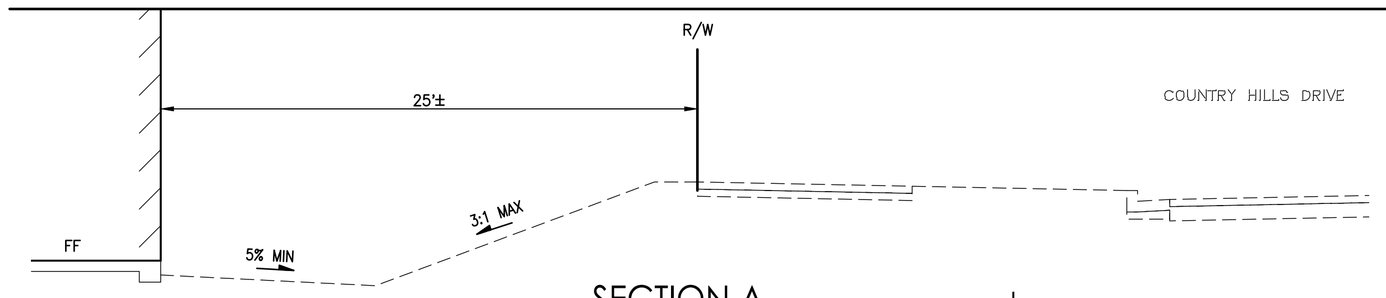
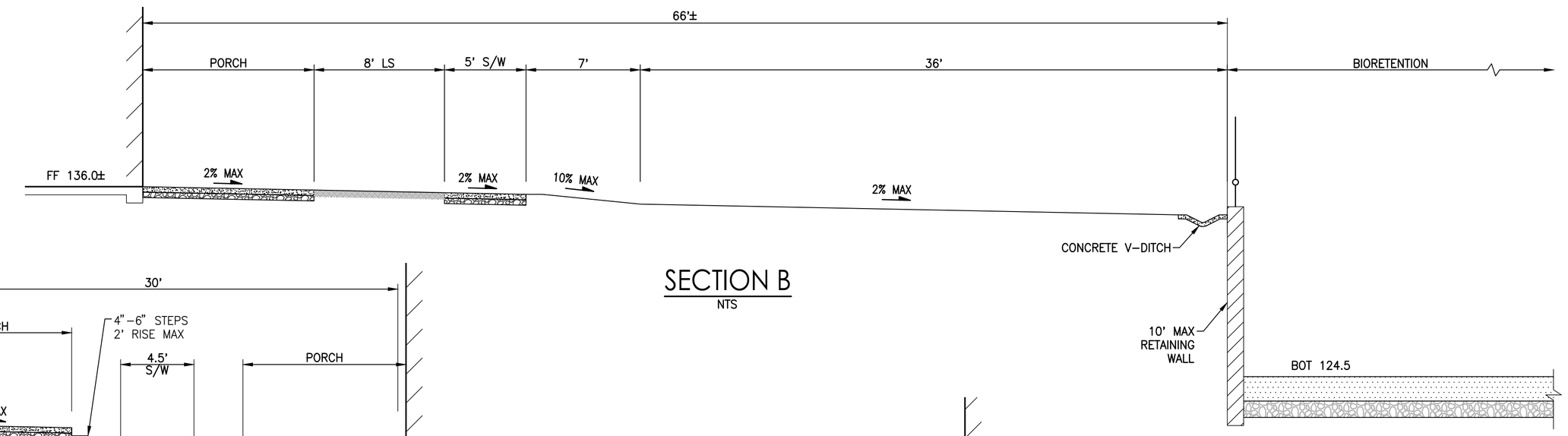


SECTION 3
SCALE: 1"=60'

TRUE CROSS SECTIONS



SECTION A
NTS



SECTION B
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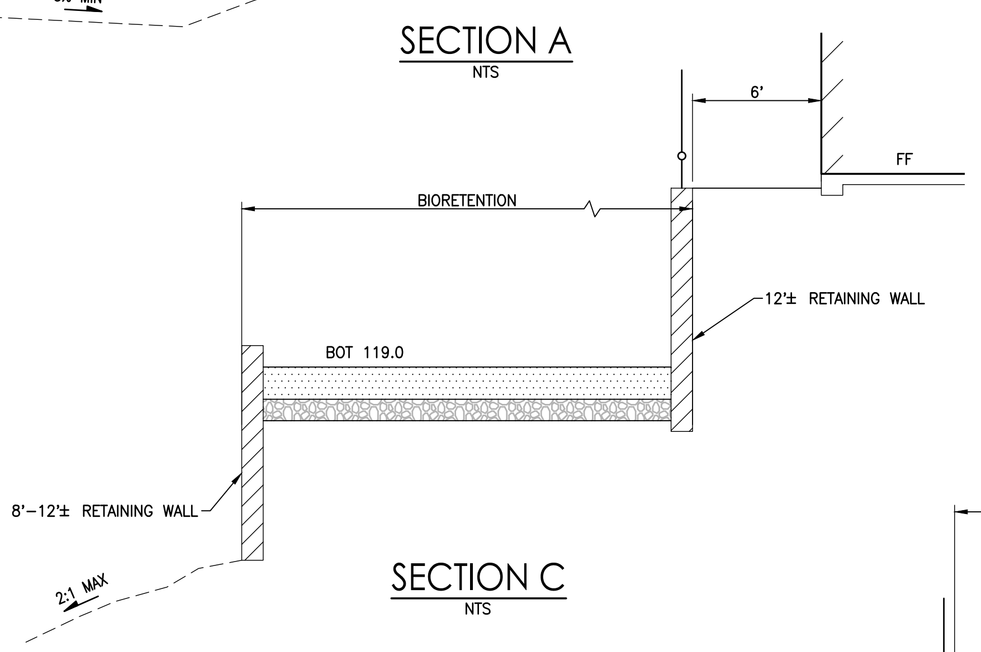

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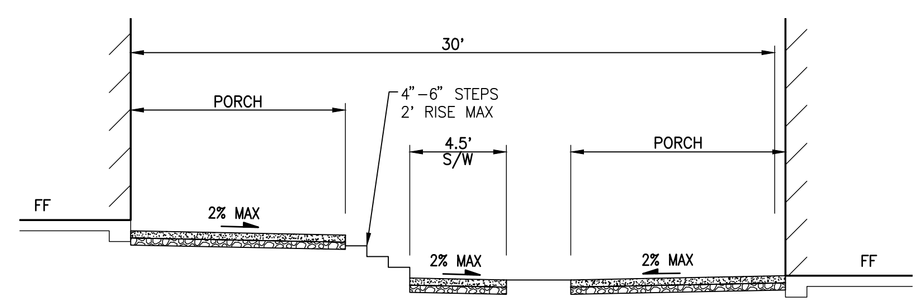

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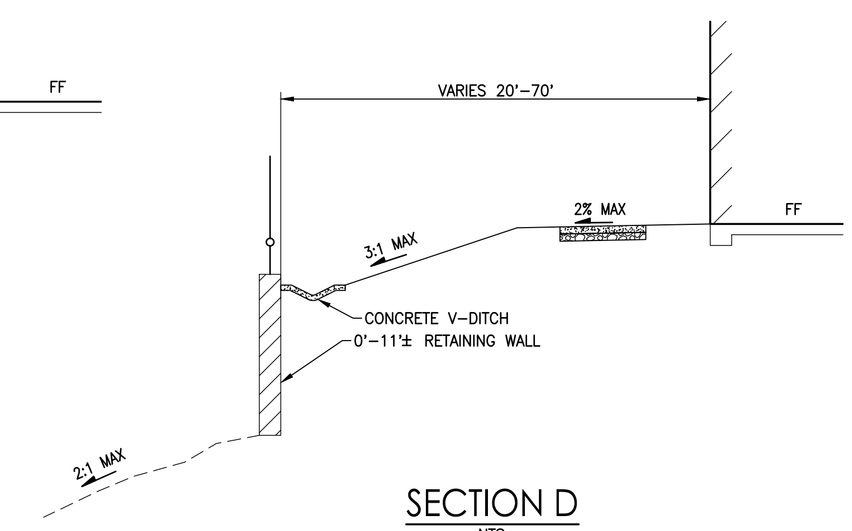

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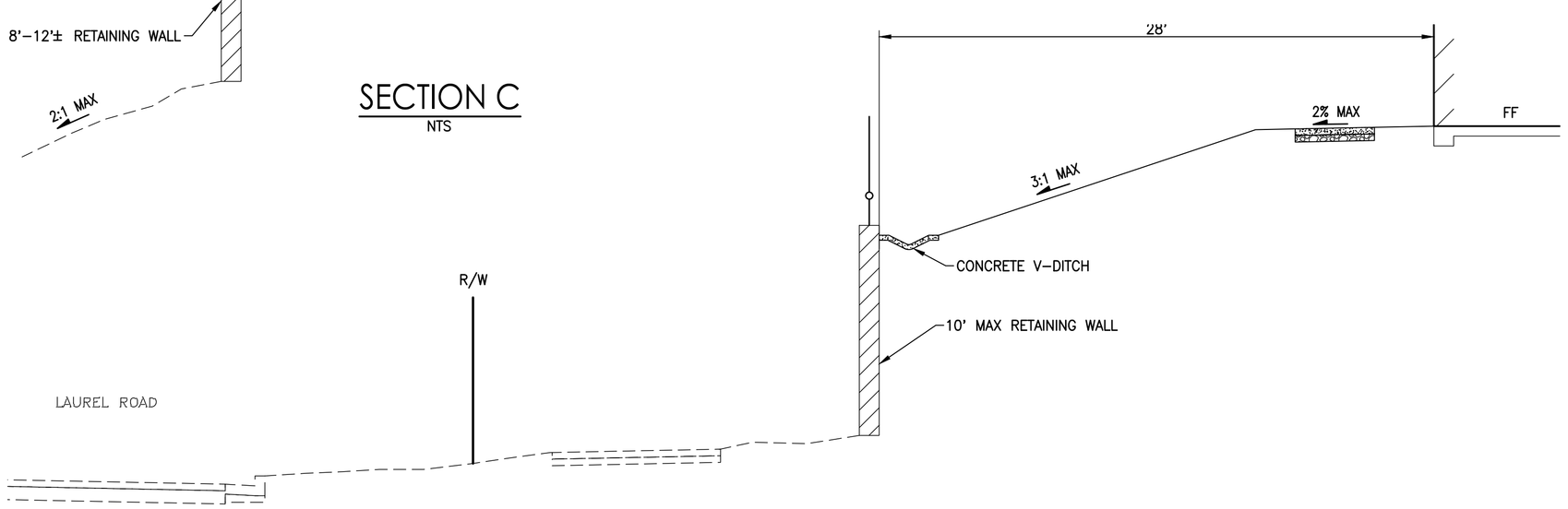

SECTION E
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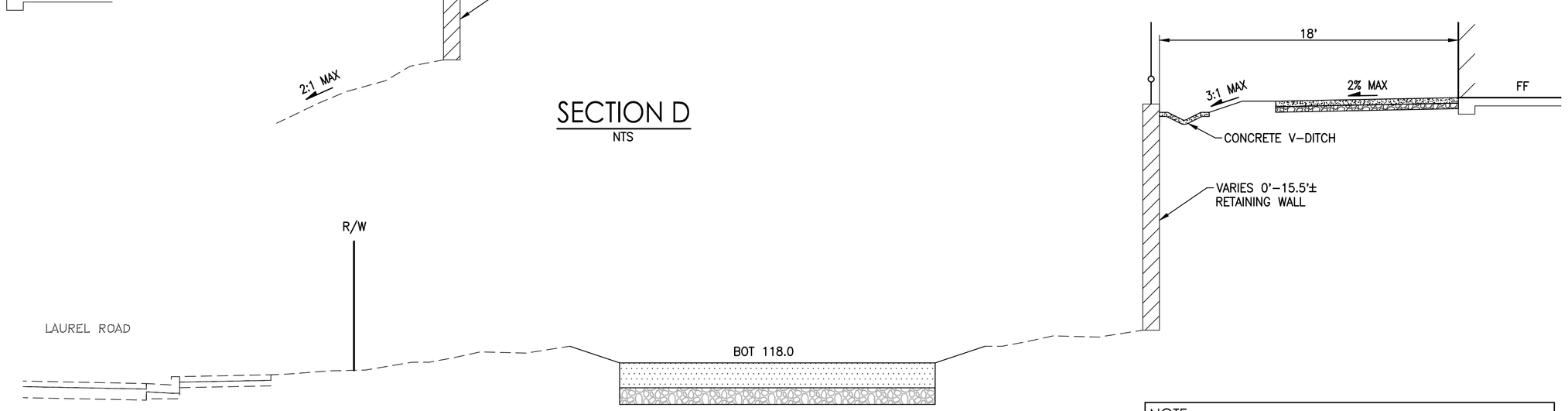

SECTION F
NTS

0 120 SCALE: 1" = 60' 60 240

ENGINEERED CROSS SECTIONS

NOTE:
ALL WALL ELEVATIONS AND HEIGHTS SHOWN ON SHEETS C5 & C6 REPRESENT THE EXPOSED PORTION OF THE WALL AND DO NOT INCLUDE BIORETENTION OR FOOTING EXTENSIONS

LAUREL RD & COUNTRY HILLS DR DEVELOPMENT
ANTIOCH, CALIFORNIA
JANUARY 2023 (REVISED MARCH 24, 2023)

ENGINEERED & TRUE CROSS SECTIONS
C5

WOOD RODGERS
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Pleasanton, CA. 94588 Fax 925.847.1557

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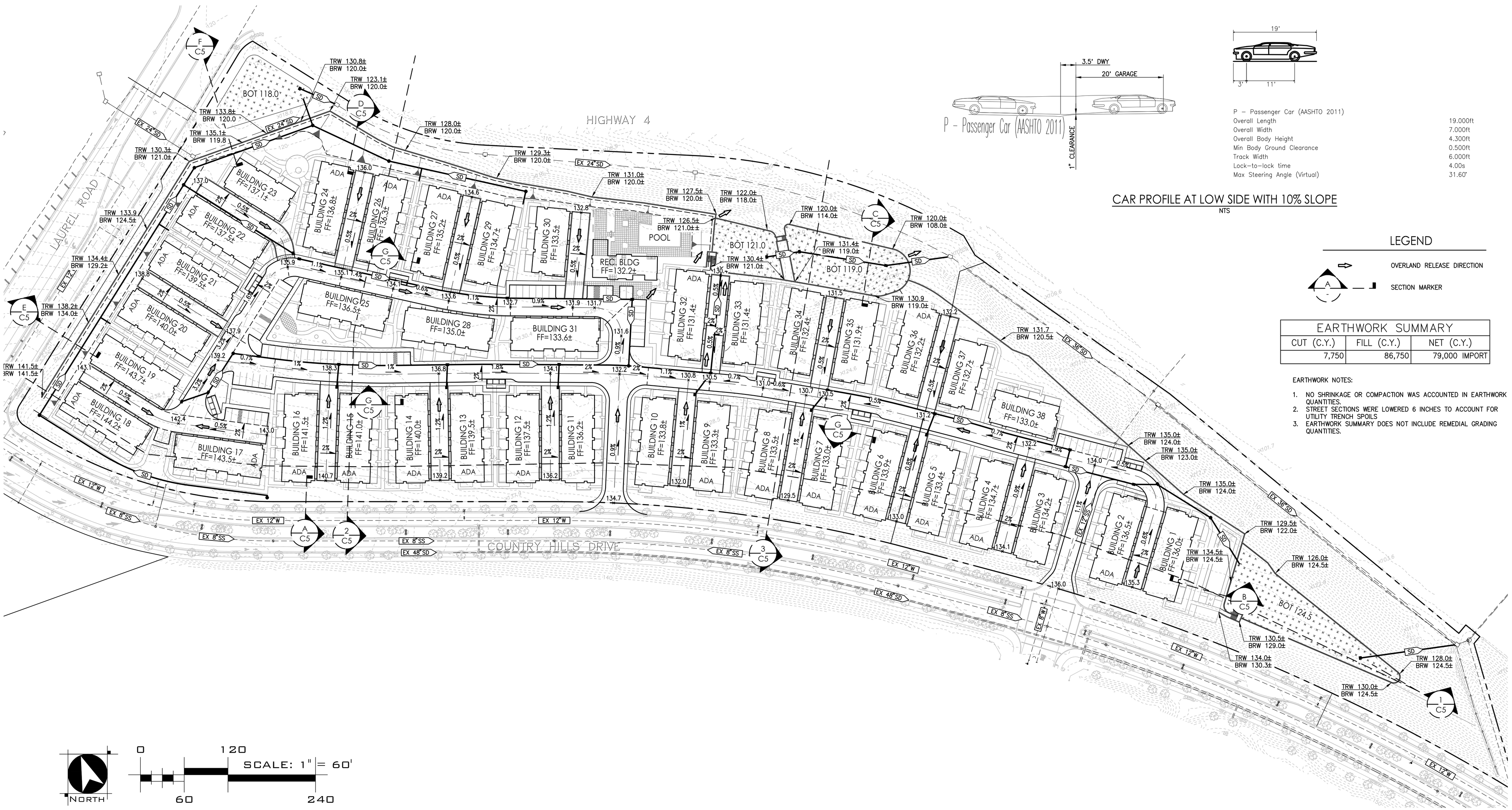

P – Passenger Car (AASHTO 2011)	
Overall Length	19.000ft
Overall Width	7.000ft
Overall Body Height	4.300ft
Min Body Ground Clearance	0.500ft
Track Width	6.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	31.60°

CAR PROFILE AT LOW SIDE WITH 10% SLOPE

NTS

LEGEND

OVERLAND RELEASE DIRECTION

SECTION MARKER

EARTHWORK SUMMARY		
CUT (C.Y.)	FILL (C.Y.)	NET (C.Y.)
7,750	86,750	79,000 IMPORT

EARTHWORK NOTES:

1. NO SHRINKAGE OR COMPACTION WAS ACCOUNTED IN EARTHWORK QUANTITIES.
2. STREET SECTIONS WERE LOWERED 6 INCHES TO ACCOUNT FOR UTILITY TRENCH SPOILS
3. EARTHWORK SUMMARY DOES NOT INCLUDE REMEDIAL GRADING QUANTITIES.

LAUREL RD & COUNTRY HILLS DR DEVELOPMENT

ANTIOCH, CALIFORNIA

JANUARY 2023 (REVISED MARCH 24, 2023)

PRELIMINARY GRADING & DRAINAGE PLAN

C6

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
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Pleasanton, CA. 94588 Fax 925.847.1557

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DRAINAGE MANAGEMENT AREA (DMA) SUMMARY									
DMA	TOTAL DRAINAGE AREA (SF)	TOTAL IMPERVIOUS AREA (ROOFS AND PAVEMENT) (SF)	TOTAL PERVIOUS AREA (SF)	EFFECTIVE IMPERVIOUS AREA (SF)	REQUIRED TREATMENT AREA (4%) (SF)	PROVIDED TREATMENT AREA (SF)	REQUIRED FLOW-CONTROL VOLUME (CF)	PROVIDED FLOW-CONTROL VOLUME (CF)	TREATMENT MEASURE
1	320,760	234,155	86,605	242,815	9,713	17,130	36,032	37,000	BIORETENTION
2	95,540	69,745	25,800	72,324	2,893	6,685	10,732	10,963	BIORETENTION
3	275,785	127,593	47,192	132,312	5,292	13,445	19,634	21,512	BIORETENTION
4	175,440	0	175,440	–	–	–	–	–	SELF–TREATING

NOTES:
1. ALL TREATMENT MEASURES AND TECHNICAL REQUIREMENTS FOR THIS PROJECT ARE BASED ON THE CONTRA COSTA CLEAN WATER PROGRAM C.3 GUIDEBOOK, 7TH EDITION
2. REQUIRED TREATMENT AREA WAS CALCULATED USING THE CONTRA COSTA CLEAN WATER PROGRAM IMP SIZING TOOL SOFTWARE.

LEGEND
- ASPHALT PAVING
- BIORETENTION
- DMA BOUNDARY
- DRAIN INLET
- STORM DRAIN MANHOLE

BIORETENTION BASIN DETAIL
NTS

LAUREL RD & COUNTRY HILLS DR DEVELOPMENT

ANTIOCH, CALIFORNIA

JANUARY 2023 (REVISED MARCH 24, 2023)

STORMWATER CONTROL PLAN

C7

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
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Pleasanton, CA. 94588 Fax 925.847.1557

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LEGEND

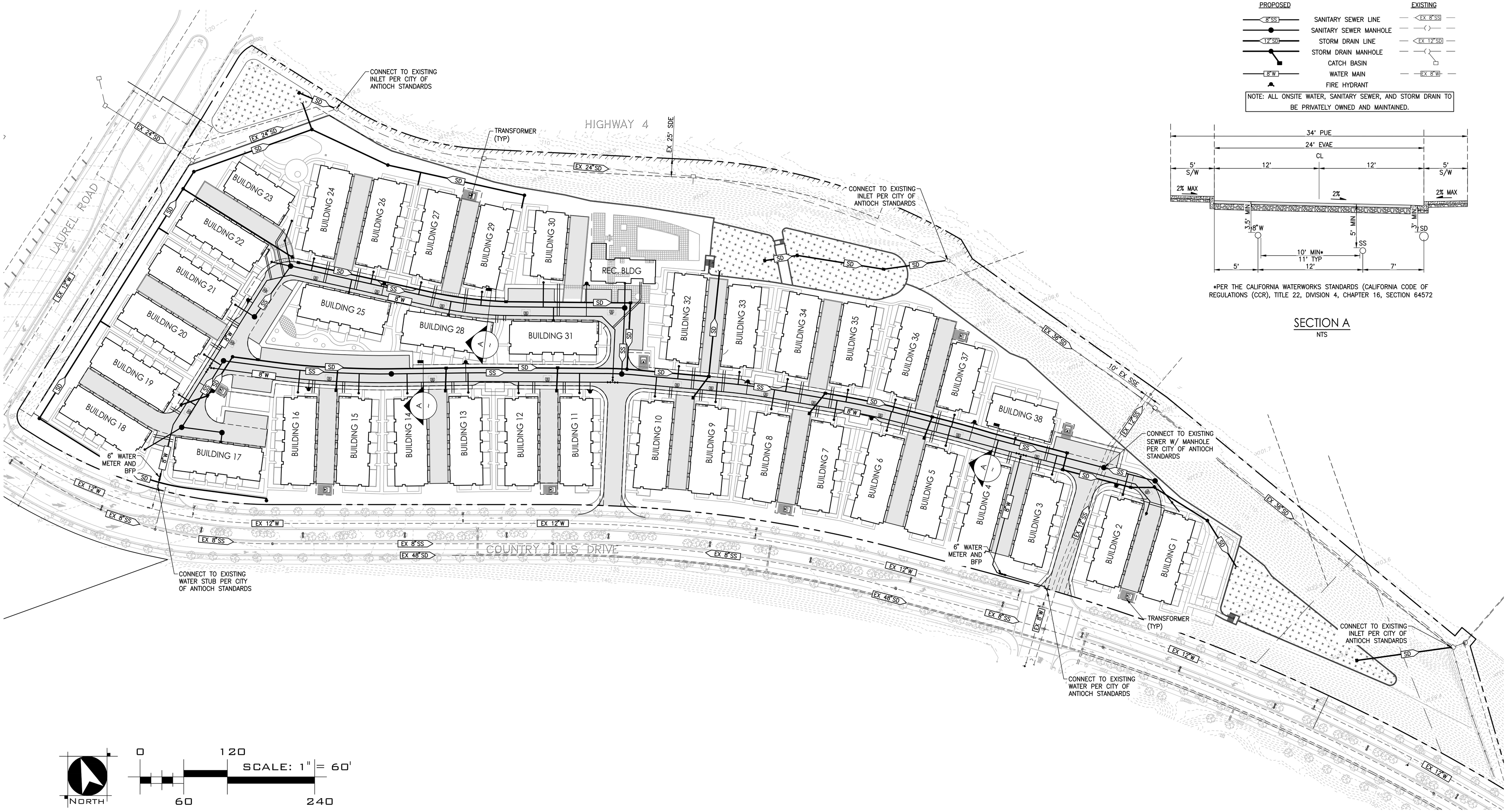
PROPOSED		EXISTING
8"SS	SANITARY SEWER LINE	EX 8"SS
	SANITARY SEWER MANHOLE	
12"SD	STORM DRAIN LINE	EX 12"SD
	STORM DRAIN MANHOLE	
	CATCH BASIN	
8"W	WATER MAIN	EX 8"W
	FIRE HYDRANT	

NOTE: ALL ONSITE WATER, SANITARY SEWER, AND STORM DRAIN TO BE PRIVATELY OWNED AND MAINTAINED.

*PER THE CALIFORNIA WATERWORKS STANDARDS (CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 22, DIVISION 4, CHAPTER 16, SECTION 64572

SECTION A

NTS



LAUREL RD & COUNTRY HILLS DR DEVELOPMENT

ANTIOCH, CALIFORNIA

JANUARY 2023 (REVISED MARCH 24, 2023)

PRELIMINARY UTILITY PLAN

C8

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
4670 WILLOW ROAD, SUITE 125 Tel 925.847.1556
Pleasanton, CA. 94588 Fax 925.847.1557

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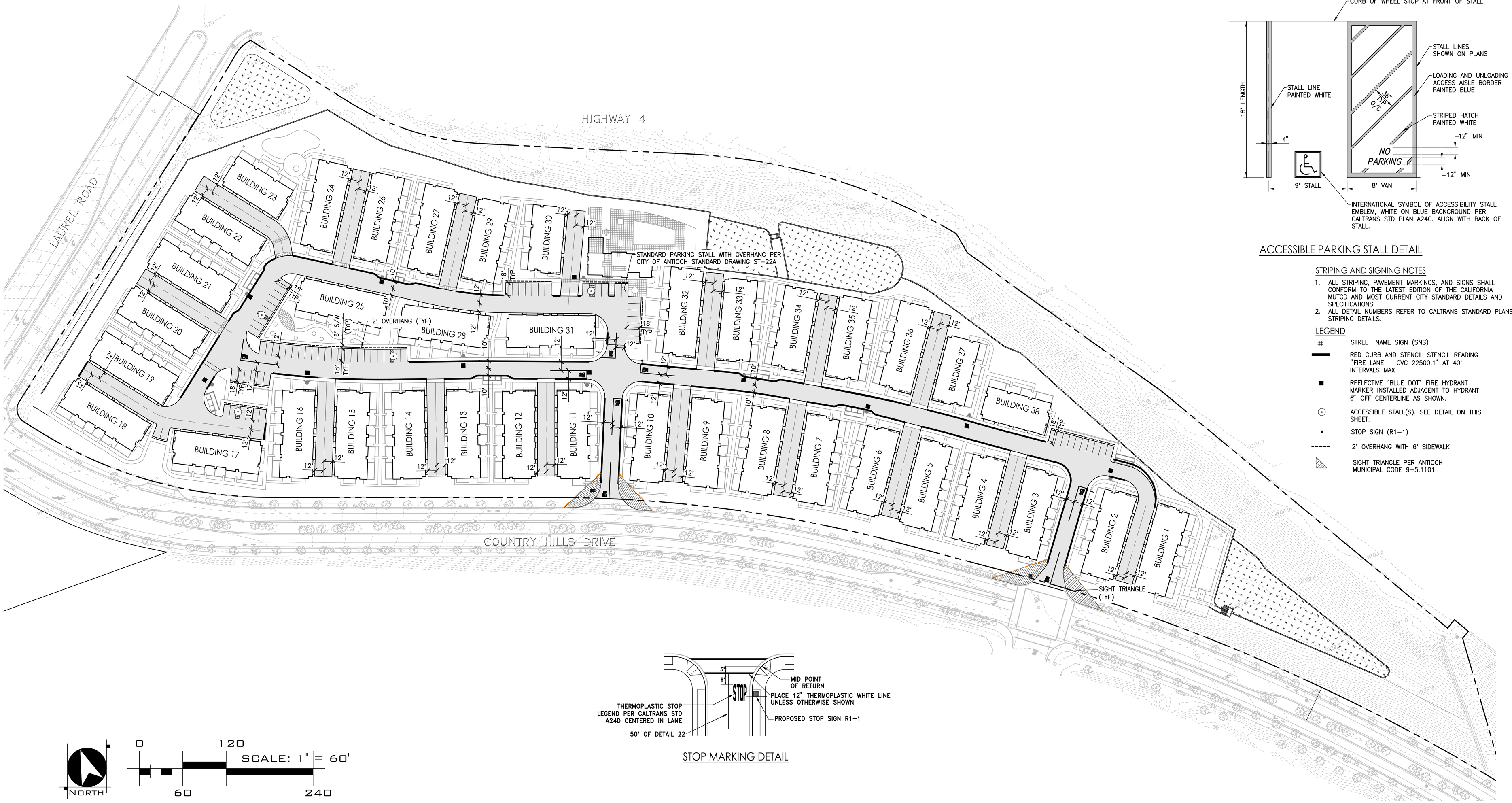

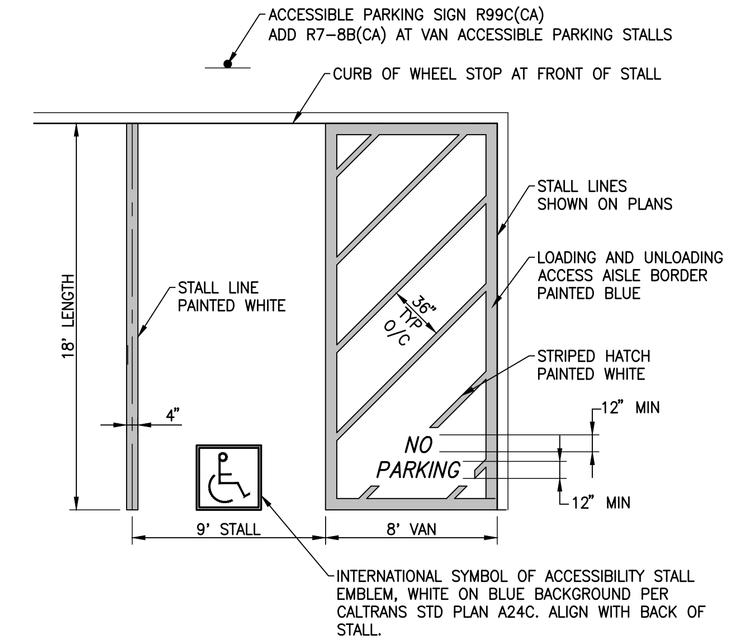

ACCESSIBLE PARKING STALL DETAIL

STRIPING AND SIGNING NOTES

1. ALL STRIPING, PAVEMENT MARKINGS, AND SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE CALIFORNIA MUTCD AND MOST CURRENT CITY STANDARD DETAILS AND SPECIFICATIONS.
2. ALL DETAIL NUMBERS REFER TO CALTRANS STANDARD PLANS STRIPING DETAILS.

LEGEND

- # — STREET NAME SIGN (SNS)
- RED CURB AND STENCIL STENCIL READING "FIRE LANE – CVC 22500.1" AT 40' INTERVALS MAX
- REFLECTIVE "BLUE DOT" FIRE HYDRANT MARKER INSTALLED ADJACENT TO HYDRANT 6" OFF CENTERLINE AS SHOWN.
- ACCESSIBLE STALL(S). SEE DETAIL ON THIS SHEET.
- STOP SIGN (R1-1)
- 2' OVERHANG WITH 6' SIDEWALK
- SIGHT TRIANGLE PER ANTIOCH MUNICIPAL CODE 9-5.1101.

STOP MARKING DETAIL

LAUREL RD & COUNTRY HILLS DR DEVELOPMENT

ANTIOCH, CALIFORNIA

JANUARY 2023 (REVISED MARCH 24, 2023)

TRAFFIC SIGNING & STRIPING PLAN

C9

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
4670 WILLOW ROAD, SUITE 125 Tel 925.847.1556
Pleasanton, CA. 94588 Fax 925.847.1557

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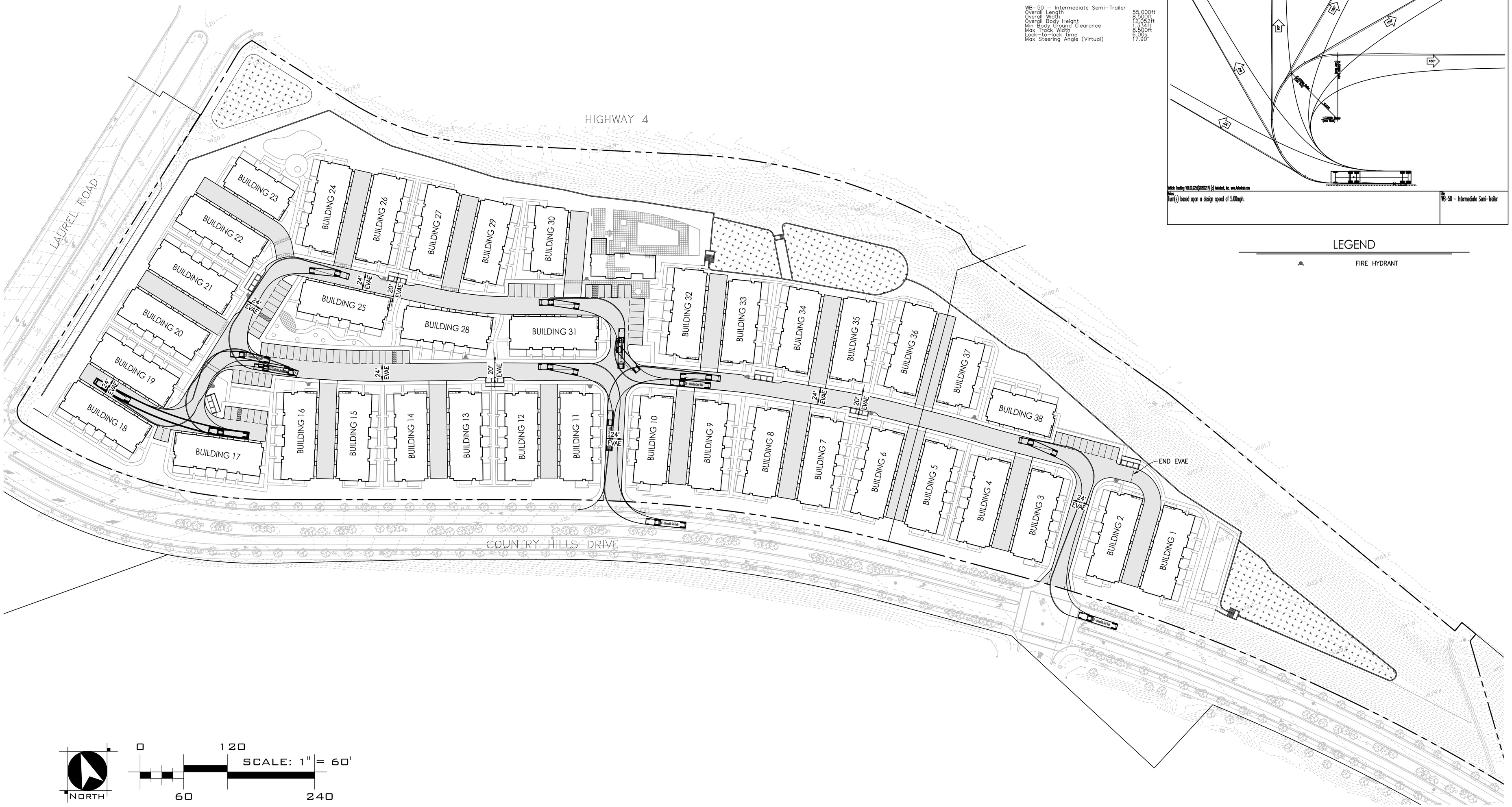
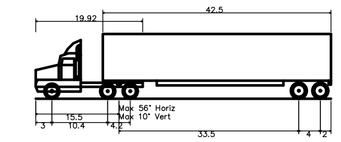
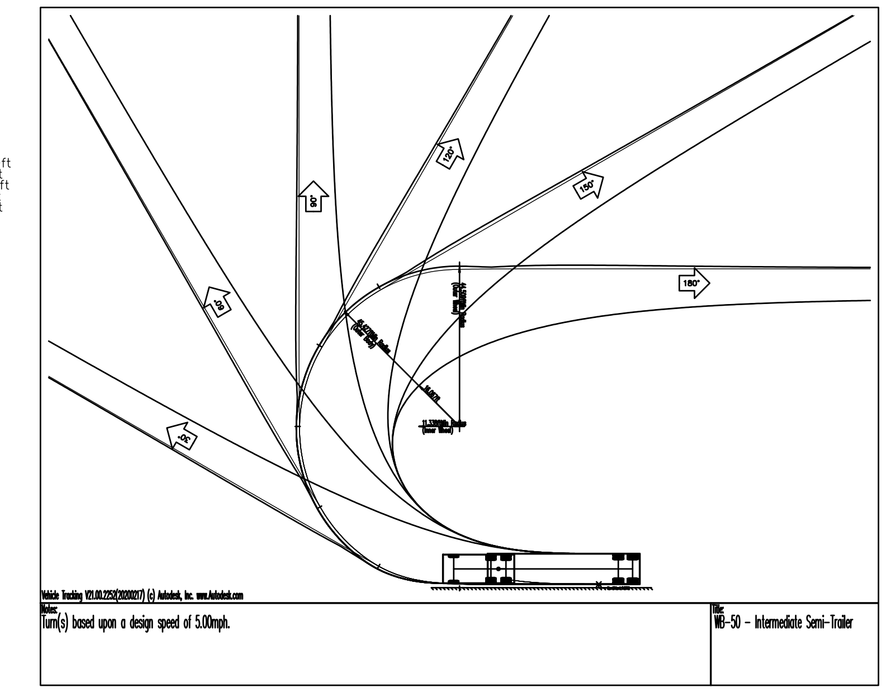




WB-50 – Intermediate Semi-Trailer

Overall Length	55.000ft
Overall Width	8.500ft
Overall Body Height	12.052ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	17.90°



LEGEND

FIRE HYDRANT

NORTH

0 60 120 240

SCALE: 1" = 60'

LAUREL RD & COUNTRY HILLS DR DEVELOPMENT

ANTIOCH, CALIFORNIA

JANUARY 2023 (REVISED MARCH 24, 2023)

TRUCK TURNS

C10

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C10

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GENERAL

1. ALL WORK SHALL COMPLY WITH CALIFORNIA CODE OF REGULATIONS 2022 TITLE 24, 2020 N.E.C., & 2022 C.E.C. AND LOCAL CODES. ELECTRICAL WORK SHALL COMPLY WITH CBC 2022 AND ALL EQUIPMENT AND SYSTEMS SHALL BE U.L. LISTED.
2. DRAWINGS ARE NECESSARILY DIAGRAMMATIC BY THEIR NATURE AND ARE NOT INTENDED TO SHOW EVERY CONNECTION IN DETAIL OR EVERY PIPE OR CONDUIT IN ITS EXACT LOCATION. CAREFULLY INVESTIGATE STRUCTURAL AND FINISH CONDITIONS AND COORDINATE THE SEPARATE TRADES IN ORDER TO AVOID INTERFERENCE BETWEEN THE VARIOUS PHASES OF WORK. ORGANIZE AND LAYOUT WORK SO THAT IT WILL BE CONCEALED IN WALLS, FURRED CHASES, AND CEILINGS, ETC., IN FINISHED PORTIONS OF THE BUILDING, UNLESS SPECIFICALLY NOTED TO BE EXPOSED. INSTALL ALL WORK PARALLEL OR PERPENDICULAR TO BUILDING LINES UNLESS OTHERWISE NOTED.
3. INSTALL THE ELECTRICAL SYSTEM USING CONSTRUCTION MEANS, METHODS, AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS / INSTRUCTIONS, TRADE "BEST PRACTICES" STANDARDS, AND APPLICABLE NATIONAL AND LOCAL CODES.
4. PROVIDE ALL LABOR, MATERIALS, TOOLS, PERMITS, FEES, TRANSPORTATION, ETC REQUIRED TO PROVIDE A COMPLETE AND FULLY-FUNCTIONING ELECTRICAL SYSTEM TO THE OWNER'S SATISFACTION.
5. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE NEW AND SUPPLIED WITH ALL THE NECESSARY FITTINGS, ATTACHMENTS, AND ACCESSORIES FOR A COMPLETE INSTALLATION.
6. CONTRACTOR TO PROVIDE SUBMITTALS FOR ALL ELECTRICAL EQUIPMENT, ELECTRICAL MATERIALS AND LIGHTING FIXTURES FOR APPROVAL PRIOR TO ORDERING.
7. SWITCHGEAR DIMENSIONS ARE BASED ON THE APPROXIMATE DIMENSIONS OF THE MANUFACTURER SPECIFIED IN THE PLANS. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THE EQUIPMENT WILL FIT IN THE ACTUAL SPACE PRIOR TO ORDERING THE EQUIPMENT.
8. CONTRACTOR SHALL REVIEW THE ELECTRICAL, AND OTHER CONSULTANTS DRAWINGS PRIOR TO STARTING ANY WORK AND INFORM THE ENGINEER OF ANY DISCREPANCIES, OMISSIONS, OR IF CLARIFICATIONS ARE REQUIRED TO COMPLETE THE INSTALLATION PRIOR TO COMMENCING THE WORK. CONTRACTOR, ENGINEER, ARCHITECT AND OWNER SHALL SCHEDULE A POST BID/PRECONSTRUCTION MEETING TO REVIEW AND DISCLOSE ALL DISCREPANCIES, OMISSIONS AND/OR CLARIFICATION RELATED TO THE CONSTRUCTION DOCUMENTS AND/OR SPECIFICATIONS NOTED BY CONTRACTOR AND OR/OWNER AS PART OF THE PRECONSTRUCTION COORDINATION PROCESS.
9. REFER AND REVIEW TO THE; PLUMBING, MECHANICAL/HVAC, LOW VOLTAGE, COMMUNICATION, ACCESS CONTROL, INTERIOR DESIGN, ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO, AND DURING, THE ELECTRICAL INSTALLATION TO ENSURE ALL ELECTRICAL EQUIPMENT AND ASSOCIATED DISTRIBUTION PATHWAY ARE CLEAR OF AND COORDINATED WITH THE OTHER TRADES INSTALLATION REQUIREMENTS.
10. ALL HORIZONTAL AND VERTICAL PIPING, CONDUITS, AND DUCTS IN/THROUGH ELEVATED OR ON GRADE SLABS SHALL BE INSTALLED PER THE MANUFACTURERS INSTALLATION MANUAL AND MEET THE CLEARANCES SHOWN ON DETAIL E-0.3 OR HAVE APPROVAL IN WRITING FROM THE STRUCTURAL ENGINEER OF RECORD. AVOID ANY HORIZONTIAL/VERTIAL PIPING, CONDUITS AND DUCTS IN AREAS OF CONGESTED REINFORCEMENT SUCH AS COLUMNS, COLUMN CAPS AND COLUMN STRIPS.
11. PROVIDE ALL REQUIRED CONTROL WIRES, RELAYS, DISCONNECTS, STARTERS, CONDUITS, TIME SWITCHES, AND OUTLETS REQUIRED BY THE OTHER TRADES SYSTEMS AS INDICATED ON THEIR DRAWINGS. ALL ELECTRICAL WORK AND MATERIALS INDICATED IN THE ABOVE CONSULTANT'S (NOTE 8) DRAWINGS SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNDER THIS SCOPE OF WORK.
12. ALL EQUIPMENT SHALL BE LISTED BY A RECOGNIZED TESTING AGENCY AND SUPPORTED ACCORDING TO APPLICABLE OSHA REQUIREMENTS.
13. CONTRACTOR TO WARRANTY ALL WORK COMPLETED FOR A PERIOD OF ONE YEAR AFTER THE OWNER'S ACCEPTANCE DATE. ANY LABOR OR MATERIALS REQUIRED TO CORRECT FAULTY OR DEFECTIVE WORK WITHIN THE WARRANTY PERIOD SHALL BE CORRECTED AT THE EXPENSE OF THE CONTRACTOR. ANY WORKMANSHIP OR EQUIPMENT FOUND TO BE FAULTY OR DEFICIENT DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.
14. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, "AS-BUILTS" CONSTRUCTION DRAWINGS, ETC., SHALL BE TURNED OVER TO THE OWNER WITHIN 30 DAYS OF THE COMPLETION OF THE JOB.
15. CONTRACTOR ELECTRICAL "AS-BUILTS DRAWINGS" ARE TO INDICATE THE FINAL EQUIPMENT/DEVICE LOCATIONS, CONDUIT ROUTING, PANEL SCHEDULES, SINGLE LINE DIAGRAMS, ETC. - IN CAD OR EQUIVALENT FORMAT FOR THE OWNER'S RECORD AT THE COMPLETION OF THE JOB.
16. PROVIDE THE OWNER WITH 1 COPY OF ALL OPERATION AND MAINTENANCE MANUALS FOR LIGHTING, LIGHTING CONTROL, AND ELECTRICAL SYSTEMS.
17. LABEL ELECTRICAL SERVICE EQUIPMENT WITH THE MAXIMUM AVAILABLE FAULT CURRENT AT THE INCOMING TERMINALS OF THE EQUIPMENT PER CEC 110.24.
18. PROPERLY LABEL ALL ELECTRICAL ROOMS / CABINETS, ELECTRICAL PANELS, TIME SWITCHES, PANEL SCHEDULES, AND MULTI-GANG METERS WITH LAMINATED PLACARDS. ADDITIONALLY, PROVIDE ALL LABELING AND PLACARDS AT SPECIFIC LOCATIONS INDICATED IN THE CONTRACT DOCUMENTS.
19. CONTRACTOR SHALL VISIT THE SITE, VERIFY THE EXACT CONDITIONS RELATING TO THE WORK AND SHALL OBTAIN SUCH INFORMATION AS MAY BE NECESSARY TO PRESENT A CONCLUSIVE BID. NO ALLOWANCE SHALL BE MADE FOR ANY EXTRA EXPENSE, DUE TO FAILURE OF THE CONTRACTOR TO MAKE SUCH A FIELD VERIFICATION. BY SUBMITTING A PROPOSAL FOR THE WORK INCLUDED IN THE CONTRACT, THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE THE FIELD VERIFICATION AND ACCEPTS ALL JOB SITE CONDITIONS.
20. FINAL LOCATIONS OF EQUIPMENT AND/OR DEVICES SHALL BE VERIFIED WITH THE OWNER/ARCHITECT PRIOR TO ROUGH-IN.
21. CONTRACTOR SHALL PROVIDE THE REQUIRED LABOR, MATERIAL, INSURANCE, EQUIPMENT, INSTALLATION PROCEDURES AND PRACTICES/ MEANS AND METHODS, CONSTRUCTION TOOLS AND STORAGE, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPERLY OPERATING ELECTRICAL SYSTEM.
22. ALL MATERIALS SHALL BE NEW, AND OF THE SAME MANUFACTURER FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES, AND SHALL BEAR THE INSPECTION LABEL WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH THE APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY, AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY A.N.S.I., U.L., N.E.M.A. AND N.B.F.U. INSTALL PER MANUFACTURERS' RECOMMENDATIONS.
23. CONTRACTOR SHALL SECURE ANY PAY FOR ALL NECESSARY BUILDING PERMITS. CONTRACTOR SHALL COORDINATE TEMPORARY CONSTRUCTION REQUIREMENTS INCLUDING POWER, SECURITY, STORAGE, SAFETY, ETC. WITH ALL TRADES PRIOR TO COMMENCING CONSTRUCTION. INCLUDE ALL OF THESE COSTS IN THE BID.
24. ALL TRADE LABOR SHALL BE DISCIPLINE TRAINED, COMPETENT AND SKILLED PERSONNEL. PERFORM ALL WORK CONSISTENT WITH THE BEST POSSIBLE TRADE PRACTICES WITH ADHERENCE TO ALL OSHA GUIDELINES.
25. WHERE A CONFLICT OCCURS BETWEEN THIS SPECIFICATION AND OTHER SPECIFICATIONS ISSUED AS A PART OF THE CONTRACT DOCUMENTS, THE MORE STRINGENT REQUIREMENT SHALL PREVAIL.
26. ALL ADDENDA AND CHANGE ORDERS MUST BE APPROVED BY THE OWNER IN ADVANCE OF STARTING THE WORK.
27. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL MAJOR PIECES OF ELECTRICAL EQUIPMENT INCLUDING, BUT NOT LIMITED TO; SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, ALL LIGHTING FIXTURES AND ASSOCIATED CONTROLS. SUBMITTALS SHALL BE MADE TO THE ARCHITECT AS SOON AS IS PRACTICABLE AFTER AWARD OF CONTRACT.

POWER

1. ALL EXTERIOR ELECTRICAL EQUIPMENT SHALL BE WEATHERPROOF (MIN. NEMA 3R).
2. ALL EXTERIOR JUNCTION BOXES SHALL BE LISTED AS WEATHERPROOF WITH WEATHERPROOF COVERS.
3. ALL LIGHTING SWITCHES SHALL BE RATED FOR 120-277V, “DECORA” STYLE, AND WHITE UNLESS OTHERWISE NOTED ON THE PLANS OR OWNER'S SPECIFICATIONS.
4. ALL GENERAL USE RECEPTACLES SHALL BE NEMA 5-15R, “DECORA” STYLE, AND WHITE UNLESS OTHERWISE NOTED ON THE PLANS OR OWNER'S SPECIFICATIONS.
5. ALL RECEPTACLES IN DWELLING UNITS, GUEST ROOMS AND GUEST SUITES IN HOTELS AND MOTELS, AND CHILD CARE FACILITIES SHALL BE TAMPER- RESISTANT TYPE (NEC 406.12).
6. PROVIDE COMBINATION A.F.C.I./G.F.C.I. TYPE BREAKERS FOR ALL CIRCUITS FEEDING OUTLETS AND LIGHTS IN DINING ROOM, KITCHEN, LIVING ROOM, ETC. PER SECTION 210.12.
7. ALL OUTDOOR RECEPTACLES SHALL BE GFCI PROTECTED AND LISTED AS “WR” WEATHER RESISTANT TYPE PER CEC 406.9. OUTDOOR RECEPTACLES IN DAMP LOCATIONS SHALL HAVE WEATHERPROOF COVERS. OUTDOOR RECEPTACLES IN WET LOCATIONS SHALL HAVE “IN-USE” TYPE WEATHERPROOF COVERS.
8. NO PLASTIC ELECTRICAL BOXES ARE TO BE USED. IT IS ACCEPTABLE FOR RESIDENTIAL PER ELECTRICAL CODE AND LOCAL JURISDICTION CODE.
9. PER 714.4.2 CBC ELECTRICAL OUTLET BOXES IN WALL OR CEILING SHALL NOT EXCEED 16 SQUARE INCHES PER ONE HUNDRED SQUARE FEET OF WALL.
10. RECESSED ELECTRICAL PANELS IN RATED ASSEMBLIES SHALL BE “FIREBOXED” AND CERTIFIED TO MAINTAIN THE ORIGINAL RATING OF THE WALL ASSEMBLY.
11. HALF SIZED OR TANDEM CIRCUIT BREAKERS MAY BE USED ONLY IF THE ELECTRICAL EQUIPMENT IS SPECIFICALLY LISTED TO RECEIVE SUCH DEVICES. ALL OTHER PANEL LOCATIONS - FULL SIZE CIRCUIT BREAKER MUST BE USED.
12. ALL BRANCH CIRCUIT BREAKERS SHALL BE NQOD (OR APPROVED EQUAL) AND HAVE MIN 75° RATED TERMINATION LUGS.
13. ALL BRANCH CIRCUIT BREAKERS FEEDING DWELLING UNIT LIGHTING AND POWER RECEPTACLES SHALL BE LISTED "COMBINATION TYPE AFCI" AND INSTALLED AT THE ORIGIN OF THE BRANCH CIRCUIT [210.12(A)(1)]
14. ALL PENETRATIONS (ELECTRICAL BOXES, CABLES, CONDUITS AND ETC…) THROUGH RATED ASSEMBLIES SHALL BE SEALED OR FIRE STOPPED TO MAINTAIN THE RATING OF THE ASSEMBLY WITH A LISTED FIRE STOPPING SYSTEM (I.E. 3M FIRE BARRIER OR EQUAL) IN COMPLIANCE WITH CBC SECTION 712. CONTRACTOR TO INSTALL FIRE STOPPING SYSTEM PER MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS.
15. REFER TO ACOUSTICAL ANALYSIS / SPECIFICATIONS; PROVIDE PUTTY PADS OR OTHER SYSTEMS AS REQUIRED FOR SOUND ATTENUATION.
16. FOR DEVICES WITH SIMILAR FIRE BARRIER REQUIREMENTS. IF THE DENSITY OF OUTLET OPENINGS EXCEEDS 100 SQ. IN. FOR ANY 100 SQ.FT. OF WALL, THEN PUTTY PADS ARE REQUIRED FOR THE ENTIRE WALL.
17. PROVIDE EXPANSION AND DEFLECTION FITTINGS, WITH BONDING JUMPERS AT ALL BUILDING EXPANSION OR SEISMIC JOINT CROSSING.
18. WIRING SIZE PER CIRCUIT BREAKER TRIP SETTING AND NEC TABLE 310-16. ALL CONDUCTORS ARE MINIMUM #12 THHN/THWN-CU UNLESS OTHERWISE NOTED. MINIMUM 3/4" CONDUIT FOR PVC UNDERGROUND CONDUIT.
19. ALL WIRING TO COMPLY WITH CEC ARTICLE 300. CONDUCTORS SHALL BE INSTALLED IN CODE APPROVED RACEWAYS AS REQUIRED.
20. INTERIOR WIRING PERMITTED TO BE TYPE NM CABLE IN ACCORDANCE WITH CEC ARTICLE 334 AND LOCAL CODES IN ONE- AND TWO- FAMILY AND MULTIFAMILY DWELLINGS OF TYPE III, IV, AND V CONSTRUCTION. IN OTHER TYPES OF TYPE III, IV, AND V CONSTRUCTION NM CABLE **MAY BE ACCEPTABLE**, EXCEPT FOR EXPOSED IN ACCESSIBLE DROPPED CEILINGS, EXPOSED CEILINGS OR WHERE PROHIBITED IN CEC 334.12. CONTRACTOR TO VERIFY NM CABLE WIRING METHOD WITH AUTHORITY HAVING JURISDICTION PRIOR TO BIDDING THE JOB. MINIMUM WIRING SIZE PER THE 60 DEGREE "C" COLUMN OF CEC TABLE 310.15(B)(16) (I.E. #12 CU FOR 20A CIRCUIT BREAKERS).
21. IT IS PROHIBITED TO SHARE NEUTRAL CONDUCTORS FOR THREE SINGLE PHASE CIRCUITS PER CEC 200.4.
22. AS REQUIRED, ALL OVERSIZED FEEDERS THAT WERE ADJUSTED IN SIZE TO COMPENSATE FOR VOLTAGE DROP SHALL BE PROVIDED WITH ADAPTER LUGS OR SPLICE BOX. ADAPTER LUGS SHALL BE PROVIDED IF SIZE IS AVAILABLE, OTHERWISE PROVIDE CABLE SPLICES IN THE SPLICE BOX TO REDUCE CABLES TO THE MAXIMUM SIZE THAT THE BREAKER LUGS CAN ACCOMMODATE.
23. CLASS 2 & 3 WIRING:
CABLES INSTALLED IN PLENUMS SHALL BE TYPE CL2P OR CL3P (CLASS 2 OR 3 RESPECTIVELY). CABLES INSTALLED AS RISERS (CABLES INSTALLED IN VERTICAL RUNS AND PENETRATING MORE THAN ONE FLOOR, OR CABLES INSTALLED IN VERTICAL RUNS IN A SHAFT) SHALL BE TYPE CL2R OR CL3R (CLASS 2 OR 3 RESPECTIVELY). CABLES INSTALLED IN CABLE TRAYS MAY BE TYPE PLTC, CL3P, CL3R, CL3, CL2P, CL2R, OR CL2.
24. WHERE MORE THAN TWO NM CABLES ARE INSTALLED THROUGH WOOD FRAMING, SUCH AS TOP OR BOTTOM PLATES WHERE THE OPENING IS SEALED WITH INSULATION OR SEALING (FIRE RATED) FOAM, ETC., THE ALLOWABLE AMPACITY OF EACH CONDUCTOR SHALL BE ADJUSTED IN ACCORDANCE WITH TABLE 310.15. REVIEW CEC 334.80.
25. ALL CABLE TRAYS CONTAINING TYPE SE, MC, MI, OR IGS SERVICE ENTRANCE CABLES MUST BE LABELED “CABLE TRAY CONTAINS SERVICE ENTRANCE CONDUCTORS”.
26. ALL ELECTRICAL CONDUCTORS WITHIN 6' OF THE ATTIC MUST BE PROTECTED AS PER CEC 320.23A, 330.23, 334.23
27. ALL ELECTRICAL EQUIPMENT, BREAKERS, HOUSE PANELS, AND TIME SWITCHES DIRECTORIES SHALL BE PROPERLY TYPED LABELED.

GROUNDING

1. THE ELECTRICAL SYSTEM SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH NEC ART. 250 AS ADOPTED AND AMENDED BY THE CEC AND THE ADOPTED EDITION OF THE N.E.C. AS IT RELATES TO OTHER APPLICABLE CODES.
2. SEPARATELY DERIVED SYSTEMS SHALL BE GROUNDED PER ART. 250.30 (A) FOR GROUNDED SYSTEMS OR 250.30(B) FOR UNGROUNDED SYSTEMS AND SHALL COMPLY WITH ART. 250.20, 250.21, 250.22, AND 250.26.
3. THE MAXIMUM RESISTANCE TO GROUND SHALL NOT EXCEED 5 OHMS TO GROUND.
4. CONTRACTOR SHALL PROVIDE ALL INSTRUMENTATION AND TESTS FOR MEASURING THE RESISTANCE OF EACH PHASE TO GROUND. A PROPERLY CALIBRATED "MEGGER" TYPE INSTRUMENT SHALL BE USED. IN THE EVENT THAT HIGH RESISTANCE TO GROUNDS ARE FOUND, THEY SHALL BE ISOLATED. MAKE PROPER CORRECTIONS TO RESTORE THE RESISTANCE TO AN ACCEPTABLE VALUE. THIS SHOULD BE PROVIDED BY AN INDEPENDENT, APPROVED TESTING COMPANY.
5. ONSITE INDEPENDANT TESTING OF EQUIPMENT SHALL BE REQUIRED FOR SWITCHGEAR OVER 1,000 AMPS.
6. PROVIDE BONDED GROUND TO ALL METALLIC PIPE WITHIN THE UNIT, WHEN THERE IS NON METALLIC PIPING FEEDING INTO EACH UNIT MAKING EACH UNIT ISOLATED FROM THE MAIN PIPING SYSTEM WITHIN BUILDING. COMPLY WITH C.E.C 250.104(A)(1); 250.104(A)(2); 250.122.
7. NEUTRAL BAR SHALL BE ISOLATED FROM THE GROUNDING BUSBAR AT ALL PANELBOARDS SERVING INDIVIDUAL UNITS.

LIGHTING FIXTURES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ACTUAL CEILING CONSTRUCTION TYPE AS DEFINED ON THE ARCHITECTURAL DRAWINGS AND FURNISH ALL LIGHTING FIXTURES WITH THE CORRECT MOUNTING DEVICES WHETHER OR NOT SUCH VARIATIONS ARE INDICATED BY THE FIXTURE CATALOG NUMBER. THE CONTRACTOR SHALL VERIFY DEPTH OF ALL RECESSED LIGHTING FIXTURES WITH ARCHITECTURAL DRAWINGS PRIOR TO ORDERING FIXTURES. ANY DISCREPANCIES THAT WOULD CAUSE RECESSED FIXTURES NOT TO FIT INTO CEILING SHALL BE REPORTED TO THE ARCHITECT PRIOR TO ORDERING FIXTURES. THE CONTRACTOR SHALL VERIFY THE FIXTURE VOLTAGE WITH THE LIGHTING PLAN AND ORDER FIXTURES WHICH WILL OPERATE AT THE VOLTAGE TO WHICH THEY ARE CONNECTED.
2. ALL HANDICAP UNIT LIGHTING SWITCHES, RECEPTACLES, THERMOSTATS, AND OTHER CONTROLS SHALL BE LOCATED NO HIGHER THAN +48" AND NO LOWER THAN +15". ON THE KITCHEN COUNTER OR BATHROOM LAVATORY MAXIMUM HEIGHT FOR RECEPTACLES SHALL BE +44". SEE MOUNTING DIAGRAM AS PART OF THIS SET.
3. RECESSED LIGHTING FIXTURES WITH DIRECT CONTACT WITH INSULATION SHALL BE TYPE IC (LISTED BY RECOGNIZED TESTING AGENCY). RECESSED NON-TYPE IC FIXTURES SHALL HAVE A MINIMUM OF 3” CLEAR FROM INSULATION AND 1” FROM COMBUSTIBLE MATERIALS (NON-TYPE IC RECESSED FIXTURES ARE NOT PERMITTED IN RESIDENTIAL UNITS).
4. RECESSED LIGHTING IN RATED ASSEMBLIES SHALL BE EITHER “FIREBOXED” TO MAINTAIN THE RATING OF THE ASSEMBLY OR UTILIZE A LISTED FIXTURE WITH ENCLOSURE THAT MAINTAINS THE ORIGINAL RATING OF THE ASSEMBLY.
5. LIGHT FIXTURE RECESSED IN CEILINGS WHICH HAVE A ONE HOUR OR MORE FIRE RATING SHALL BE ENCLOSED IN A BOX WHICH HAS A FIRE RATING (IC) EQUAL TO THAT OF THE CEILING. PROVIDE MINIMUM OF 3" CLEAR FROM ALL SIDES AND TOP OF ENCLOSURE TO CEILING. LIGHTING FIXTURES IN CONTACT WITH INSULATION TO BE U.L LISTED FOR THERMAL BARRIER "CHICAGO PLENM". ALL BALLASTS FOR INDOOR 4 FT. FLUORESCENT IN COMMON AREA SUCH AS RECREATION, MAINTENANCE BLDG., SHALL BE "ENERGY SAVING TYPE" CBM AND U.L. LISTED.
6. CEILING INSULATION SHALL BE INSTALLED TO ALLOW 3" MINIMUM CLEARANCE FROM SIDES AND TOP OF RECESSED LIGHT FIXTURES.
7. RECESSED LIGHTING FIXTURE IN 1 HR. RATED AREAS REQUIRE BOX BOARD SHELL MINIMIZE PENETRATIONS INTO 1 HR. WALL BETWEEN 2 DWELLING UNITS. INSTALL NMC IN CONDUIT AND SEAL WITH PLASTER, OR FIRE CAULK, INSIDE THE ENDS OF CONDUIT (TO PREVENT SPREAD OF SMOKE OR FIRE).
8. IT IS THE INTENT OF THIS PROJECT, TO USE THE HIGHEST EFFICACY LIGHTING PRODUCTS AVAILABLE AND TO USE LED (LIGHT EMITTING DIODE) TYPE LUMINARIES WITH 3000k LIGHT TEMPERATURES AS INDICATED ON THE LUMINARIES SCHEDULE.
9. WHERE SPECIFIED, FLUORESCENT BALLASTS SHALL BE ELECTRONIC TYPE. HARMONIC CONTENT SHALL NOT EXCEED 10% ADVANCE MARK V OR EQUAL.
10. WHERE SPECIFIED, FLUORESCENT AND HID BALLASTS SHALL BE HIGH POWER FACTOR BALLASTS AND FOUR PIN, 3000 DEGREE KELVIN LAMPS.
11. FLUORESCENT LAMP SHALL BE 32 WATT T8, 3000 DEGREE KELVIN, SYLVANIA OR EQUAL.
12. HIGH EFFICACY LUMINARIES SHALL BE DEFINED AS FOLLOWS: 30 LUMENS PER WATT (FOR LAMPS 5W OR LESS) 40 LUMENS PER WATT (FOR LAMPS 6W-15W) 50 LUMENS PER WATT (FOR LAMPS 16W-40W)
13. MEDIUM AND CANDELABRA BASED SCREW-IN LAMPS DO NOT QUALIFY AS HIGH EFFICACY. GU-24 PIN BASES QUALIFY AS HIGH EFFICACY
14. VERIFY MOUNTING HEIGHT OF ALL WALL MOUNTED FIXTURES WITH ARCHITECT PRIOR TO ROUGH-IN.
15. ALL WALL FIXTURES SHALL BE INSTALLED SUCH THAT THE LOWEST PORTION OF THE FIXTURE PROTRUDING > 4” IS 80” ABOVE THE FINISHED GRADE OR HIGHER.
16. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL LIGHT FIXTURES.
17. LUMINARIES FOR GENERAL LIGHTING IN KITCHEN SHALL HAVE LAMPS WITH AN EFFICACY OF NOT LESS THAN 40 LUMENS PER WATT. A LUMINAIRE WHICH IS THE ONLY LIGHTING IN A KITCHEN WILL BE CONSIDERED GENERAL LIGHTING. GENERAL LIGHTING SHALL BE CONTROLLED BY THE MOST ACCESSIBLE SWITCH(ES) IN THE KITCHEN. ADDITIONAL LUMINARIES TO BE USED ONLY FOR SPECIFIC DECORATIVE EFFECTS NEED NOT MEET THIS REQUIREMENT. U.N.O
18. EACH ROOM CONTAINING A WATER CLOSET SHALL HAVE AT LEAST ONE LUMINAIRE WITH LAMPS WITH AN EFFICACY OF NOT LESS THAN 40 LUMENS PER WATT. IF THERE IS MORE THAN ONE LUMINAIRE IN THE ROOM THE HIGH EFFICACY LUMINARIES SHALL BE SWITCHED AT AN ENTRANCE TO THE ROOM.
19. ALL RECESSED LUMINARIES IN INSULATED CEILINGS SHALL BE TESTED AND LISTED FOR ZERO CLEARANCE INSULATION COVER (IC) AND AIR TIGHT (AT) BY RECOGNIZED TESTING LABORATORIES. ELECTRICAL CONTRACTOR TO VERIFY THIS INFORMATION BEFORE PURCHASING DOWNLIGHT HOUSING.
20. WHERE LOW LEVEL EXIT SIGNS ARE SHOWN ON PLANS, THEY SHALL BE MOUNTED NOT LESS THAN 6" AND NO MORE THAN 8" FROM FINISH FLOOR TO BOTTOM OF SIGN AND 4" FROM DOOR FRAME TO CLOSEST EDGE OF SIGN. PROVIDE LOW LEVEL EXIT SIGNS AS REQUIRED PER CODE.
21. ALL FIXTURES INDICATED WITH "COLOR AS SELECTED BY THE ARCHITECT" SHALL BE PROVIDED WITH CUSTOM COLORS PER THE ARCHITECT. SUBMIT SAMPLE COLOR CHIPS TO THE ARCHITECTS PRIOR TO ORDERING FIXTURES. TRIM RINGS FOR RECESSED DOWNLIGHTS SHALL BE COLOR AS SELECTED BY THE ARCHITECT. VERIFY COLOR SELECTION WITH THE ARCHITECT.
22. FOR OUTDOOR LIGHTING BRANCH CIRCUITS FROM BUILDING, INSTALL A RECESSED 4S, 2 1/8" (MIN) DEEP J-BOX WITH 2-GANG SWITCH RING GASKET WEATHERPROOF BLANK METAL COVER AT +12" TYPICAL.
23. POLE LIGHT AND POLE BASE COVER SHALL BE PRIMED WITH ONE COAT OF IRON OXIDE RUST - INHIBITIVE PRIME BASE COVER SHALL BE TWO PIECE HYDRO FORMED ALUMINUM BAKED POWDER URETHANE FINISHED COAT SELECT BY OWNER AND PAINTED BY MANUFACTURER. REFER TO STRUCTURAL DRAWINGS FOR CONCRETE BASE POLE DIMENSIONS.
24. EXTERIOR LIGHTING SHALL BE "DARK/NIGHT SKY" COMPLIANT AS DEFINED AND ADOPTED BY THE LOCAL AHJ. AT A MINIMUM, THE LIGHT SOURCE SHALL BE SHIELDED AND NOT DIRECTLY VISIBLE AS DETERMINED BY THE AHJ.

MECHANICAL SYSTEM

1. VERIFY EXACT LOCATIONS AND ORIENTATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS. FIELD VERIFY CONDITIONS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
2. REFER TO THE MECHANICAL DRAWINGS FOR EXACT EQUIPMENT RATINGS AND ELECTRICAL REQUIREMENTS. COORDINATE WITH THE INSTALLER OF THE HVAC SYSTEMS AND PROVIDE ALL CONDUIT, WIRING, TIME CLOCKS, STARTERS, CONTROL DEVICES, RELAYS, DISCONNECT SWITCHES, FIRE SMOKE DAMPERS, ETC. FOR THE PROPER OPERATION OF THE MECHANICAL SYSTEMS. REFER TO THE MECHANICAL DRAWINGS AND ADDENDUMS FOR ADDITIONAL ELECTRICAL REQUIREMENTS.
3. INSTALL 8#14-CU CABLE FROM FAN COIL (FAU) TO HEAT PUMP (CONDENSING UNIT) AND INSTALL FUSIBLE DISCONNECT SWITCH NEMA -3R IN-LINE OF SIGHT OF EQUIPMENT. INSTALL FUSE(S) AS INDICATED ON NAME PLATE.
4. ALL EQUIPMENT, ENCLOSURES, DEVICES, DISCONNECT SWITCHES, CONNECTIONS, ETC. LOCATED ON THE ROOF SHALL BE WEATHERPROOF - NEMA 3R.
5. DISCONNECT SWITCHES SHALL BE HEAVY DUTY HORSEPOWER RATED. SIZE SWITCH AND FUSED PER THE NAMEPLATE VALUE ON THE MECHANICAL UNIT.

FIRE ALARM

1. SUBMIT A VARIANCE TO SEPARATE FIRE ALARM.

ADDITIONAL OTHER NOTES

1. ALL EQUIPMENT SHALL BE MOUNTED AND SUPPORTED ACCORDING TO THE OSHA REQUIREMENTS.
2. SWITCHGEAR IS BASED ON DIMENSIONAL INFORMATION PROVIDED BY EATON OR OTHER MANUFACTURER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SWITCHGEAR INTENDED FOR USE AT THIS FACILITY, FITS THE SPACES PROVIDED.
3. CONTRACTOR TO CONFIRM THE LOW VOLTAGE (<110v) CABLING REQUIREMENTS PRIOR TO BIDDING THE JOB. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL BELDEN CA. NO. 9248 RG6/U TYPE COAXIAL CABLE TRANSMISSION LINE (CONFIRM EXACT CABLE TYPE WITH COMMUNICATIONS VENDOR FOR THE PROJECT) WITH INDIVIDUAL HOMERUNS FROM COMMUNICATIONS MPOE ROOM TO CATV TERMINAL SERVICE BOX AT IDF ROOMS AND TO UNIT HSD BOX.
4. PROVIDE A MINIMUM OF A 4FT X 8FT X 3/4IN FIRE RATED PLYWOOD BACKBOARD IN EACH MPOE AND IDF ROOM, WITH A #6 COPPER (MIN) GROUND BONDED TO BUILDING GROUNDING SYSTEM. PROVIDE A DEDICATED QUAD PLEX RECEPTACLE PROTECTED BY A DEDICATED 20A/1P CIRCUIT IN THE MPOE AND EACH IDF ROOM, FOR THE CATV / PHONE PROVIDERS. FOR EXACT SIZE AND MORE DETAILS, REFER TO LOW VOLTAGE CONSULTANT.
5. CONTRACTOR TO VERIFY MIN. DIMENSIONS REQUIRED FOR EQUIPMENT SIZES & CLEARANCES IN THE ELECTRICAL ROOM WITH ACCOMMODATION FOR LOW VOLTAGE, GAS, ETC. WHEN APPLICABLE PRIOR TO PLACING THE ORDER FOR SUCH EQUIPMENT & REPORT ANY DISCREPANCY TO THE OWNER, ARCHITECT & ENGINEER. AN APPROVED EQUIPMENT SUBMITTAL IS NOT A CONTRACTOR VERIFICATION OF EQUIPMENT CLEARENCES AND DIMENSIONS AT THE ELECTRIC ROOM - AS REQUIRED ABOVE.
6. PENETRATIONS IN PARTY WALLS SHALL BE ACOUSTICALLY SEALED WITH "POLYCEL" AROUND NMC, CABLE, AND OTHER DEVICES SUCH AS RECEPTACLES, J-BOXES, ETC. ELECTRICAL DEVICES INSTALLED IN OPPOSITE FACES OF PARTY OR DIVISION WALL SHALL BE SEPARATED HORIZONTALLY NOT LESS THAN 24 INCHES. (IN DIFFERENT STUD BAYS FOR WOOD WALLS).

TYPICAL DWELLING NOTES

1. UTILIZE THE RESPECTIVE TYPICAL DWELLING ELECTRICAL PLANS FOR PRICING OF WIRING, DEVICES, AND EQUIPMENT IN EACH DWELLING UNIT. TYPICAL DWELLING ELECTRICAL PLANS INDICATE QUANTITIES OF ALL WIRING, DEVICES, AND EQUIPMENT IN EACH DWELLING UNIT (REGARDLESS OF EXACT DWELLING LAYOUT/DIMENSIONS). TYPICAL DWELLING ELECTRICAL PLANS INDICATE THE GENERAL ARRANGEMENT AND APPROXIMATE LOCATIONS OF ALL WIRING, DEVICES. AND EQUIPMENT IN EACH DWELLING UNIT AND MUST BE ADJUSTED FOR EXACT DWELLING LAYOUT/DIMENSIONS.
2. PROVIDE EXACT LOCATIONS AND LAYOUT OF ALL WIRING, DEVICES, AND EQUIPMENT IN EACH DWELLING UNIT AS PER THE ACTUAL DWELLING ARCHITECTURAL LAYOUT/DIMENSIONS. VERIFY. COORDINATE. AND ADJUST EXACT DEVICE/EQUIPMENT LOCATIONS TO SUIT THE EXACT LAYOUT AND CONFORM WITH ALL APPLICABLE NEC LAYOUT/LOCATION REQUIREMENTS.
3. ACTUAL DWELLING ARCHITECTURAL LAYOUT/DIMENSIONS FOR EACH TYPICAL DWELLING TYPE MAY VARY SLIGHTLY FROM UNIT TO UNIT. OVERALL FLOOR ELECTRICAL PLANS GENERALLY INDICATE EXACT LAYOUTS OF EACH INDIVIDUAL DWELLING UNIT. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT INDIVIDUAL DWELLING LAYOUTS AND DIMENSIONS.
4. LOCATE DEVICES IN SUCH A MANNER TO MAINTAIN ANY REQUIRED FIRE RATING AND SOUND TRANSMISSION INTEGRITY IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS. WHERE DEVICE BOXES ARE LOCATED ON OPPOSITE SIDES OF FIRE OR SOUND RATED WALLS, MAINTAIN MINIMUM SPACING BETWEEN BOXES AS PER THE NEC.
5. ADAPTABILITY, COMMUNICATIONS: ALL DWELLING UNITS ARE "COMMUNICATIONS ADAPTABLE", WHICH IS DEFINED AS CAPABLE OF BEING MADE “COMMUNICATIONS ACCESSIBLE” IN THE FUTURE (SEE BELOW FOR "COMMUNICATIONS ACCESSIBLE* UNITS). COMMUNICATIONS ADAPTABLE UNITS INCLUDE ALLOCATED SPACES FOR FUTURE DOORBELL DEVICES (PUSH-BUTTONS, CHIMES, AND STROBES) AND FUTURE FIRE ALARM VISUAL ONLY STROBES (THESE DEVICES ARE NOT IN CONTRACT [N.I.C.]). PROVIDE SUITABLE PATHWAYS AND/OR WIRING TO EACH “ADAPTABLE"LOCATION TO FACILITATE FUTURE DEVICES AS PER THE FOLLOWING OPTIONS.
   A. NOTE THAT OPTION "A" IS ONLY PERMITTED WHERE SPECIFICALLY ACCEPTABLE TO THE OWNER (OPTION "A" WILL BE REVIEWED ON AN INDIVIDUAL CASE-BY-CASE BASIS). OPTIONS "B” AND "C” MAY BE USED AT THE CONTRACTOR'S OPTION (EITHER OPTION "B” OR OPTION “C" MUST BE USED WHEREVER THE OWNER DOES NOT SPECIFICALLY ACCEPT OPTION "A’).
   B. WHERE BUILDING CONSTRUCTION READILY FACILITATES PULLING WIRING IN THE FUTURE (I.E. VIA ACCESSIBLE CEILING SPACES AND VIA FISHING HOLLOW WALL AND CEILING CAVITIES; PROVIDED CABLE CAN BE EASILY AND READILY PULLED INTO THE PATHWAYS ONCE CONSTRUCTED), ADDITIONAL WIRING PROVISIONS ARE NOT REQUIRED. THIS OPTION IS ONLY ACCEPTABLE WHERE THE ELECTRICAL CONTRACTOR DEMONSTRATES HOW WIRING CAN BE EASILY INSTALLED IN THE FUTURE AND WHERE THE OWNER ACCEPTS THE DEMONSTRATION.
   C. PROVIDE A SUITABLE PATHWAY (IN THE FORM OF CONDUITS AND SLEEVES IN BUILDING CONSTRUCTION) TO ALLOW INSTALLING CABLES IN THE FUTURE. PROVIDE CONTINUOUS PULL WIRES THE LENGTH OF ALL PATHWAYS. INSTALL IN SUCH A WAY THAT CABLE CAN BE PULLED IN USING THE PULL WIRE ALONE, WITHOUT RESORTING TO ANY OTHER MODIFICATIONS TO BUILDING CONSTRUCTION (OTHER THAN CUTTING OPENINGS FOR DEVICE OUTLET BOXES.

   INSTALL APPROPRIATE SPARE SYSTEMS CABLE IN CONSTRUCTION FROM THE COMMON CORRIDOR OUTSIDE OF THE DWELLING UNIT TO THE "ADAPTABLE" LOCATION AND COIL SUFFICIENT SLACK CABLE AT BOTH ENDS.

   WHERE DWELLING UNITS INCLUDE AUDIBLE-ONLY FIRE ALARM SIGNALING DEVICES, PROVIDE WIRING (INCLUDING VISUAL DEVICE CONTROLLING WIRING) AT EACH AUDI@LE FIRE ALARM SIGNALING DEVICE LOCATION TO FACILITATE REPLACING EACH AUDIBLE-ONLY FIRE ALARM DEVICE WITH AN AUDIO/VISUAL FIRE ALARM SIGNALING DEVICE.
6. ACCESSIBILITY, COMMUNICATIONS: VERIFY AND COORDINATE (WITH THE ARCHITECT) ALL DWELLING UNITS REQUIRED TO BE EQUIPPED WITH ACCESSIBLE COMMUNICATIONS FEATURES ("COMMUNICATIONS ACCESSIBLE”) IN COMPLIANCE WITH ANSI/ICC A117.7, THE AMERICANS WITH DISABILITIES ACT (ADA), AND ASSOCIATED ACCESSIBLE BUILDING CODES. ALL DWELLING UNITS SPECIFICALLY INDICATED ON ANY DRAWINGS (ARCHITECTURAL, ELECTRICAL, OR OTHERWISE) OR OTHERWISE DESIGNATED BY THE ARCHITECT FOR USE BY OCCUPANTS WITH VISUAL OR HEARING IMPAIRMENT SHALL BE CLASSIFIED AS "COMMUNICATIONS ACCESSIBLE”. FOR ALL "COMMUNICATIONS ACCESSIBLE” UNITS, FURNISH AND INSTALL ALL DOORBELL DEVICES (PUSH-BUTTONS, CHIMES, AND STROBES) AND FIRE ALARM VISUAL ONLY STROBES AT THE RESPECTIVE "ADAPTABLE" (I.E. DASHED ON DRAWINGS) LOCATIONS SHOWN ON TYPICAL DWELLING UNIT PLANS.

   FOR COMMUNICATIONS ACCESSIBLE DWELLING UNITS, PROVIDE AUDIO/VISUAL FIRE ALARM SIGNALING DEVICES AT EACH AUDIBLE FIRE ALARM SIGNALING DEVICE LOCATION SHOWN ON THE DRAWINGS.
7. ACCESSIBILITY, OPERABLE PARTS: WITH RESPECT TO OPERABLE PARTS, ALL DWELLING UNITS ARE CONSIDERED "OPERABLE PARTS ACCESSIBLE” UNITS. LOCATE EQUIPMENT AND DEVICES (LIGHTING CONTROLS, SWITCHES, RECEPTACLES, HVAC CONTROLS, INTERCOM CONTROLS, OTHER CONTROLS, ETC.) TO COMPLY WITH ACCESSIBLE MOUNTING HEIGHTS AND REACH RESTRICTIONS (SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION).

   FOR ALL RANGE HOODS INSTALLED IN DWELLING UNITS WHICH ARE DESIGNATED AS “ACCESSIBLE” OR WHERE ACCESSIBILITY OF OPERABLE ARTS IS OTHERWISE REQUIRED, PROVIDE A SEPARATE SWITCH LOCATED ABOVE THE COUNTER ADJACENT TO THE RANGE TO CONTROL THE RANGE HOOD.
8. ACCESSIBILITY, ARCHITECTURAL/MOBILITY: ELECTRICAL WORK ONLY INVOLVES ACCESSIBILITY OF COMMUNICATIONS FEATURES AND OPERABLE PARTS (WHICH ARE ADDRESSED ABOVE). ARCHITECTURAL ACCESSIBILITY AND ACCESSIBILITY ASSOCIATED WITH MOBILITY IMPAIRMENT DO NOT INVOLVE ELECTRICAL WORK. UNITS CLASSIFIED AS ACCESSIBLE FOR ARCHITECTURAL AND/OR MOBILITY PURPOSES DO NOT IMPACT ELECTRICAL WORK (ELECTRICAL WORK SPECIFIED IS CURRENTLY SUITABLE FOR SUCH CLASSIFICATION).

COMMON WALLS

1. ELECTRICAL OUTLETS, SWITCHES, PHONE JACKS, TELEVISION ANTENNAE BOXES AND COMPUTER OUTLET BOXES INSTALLED IN OPPOSITE SIDES OF A COMMON WALL SHALL BE OFFSET A MINIMUM OF 24" TO COMPLY WITH THE FIRE CODE. THIS OFFSET IS NOT NEEDED FOR ACOUSTICAL REASONS IF INSULATION IS USED IN THE FRAMING CAVITIES AND LOWRY'S #10 PUTTY PADS OR 3M FIRE PADS ARE APPLIED AROUND THE BACKS AND SIDES OF ALL OUTLETS, SWITCHES, PHONE JACKS, ETC.
2. ALL ELECTRICAL OUTLETS, SWITCHES, PHONE JACKS, TELEVISION ANTENNAE BOXES AND COMPUTER OUTLET BOXES INSTALLED IN COMMON WALLS SHALL BE BACKED BY AND LOWRY'S #10 PUTTY PADS, 3M FIRE PADS OR EQUIVALENT. PADS SHALL BE STAPLED TO THE STUDS TO INSURE THAT THEY REMAIN IN PLACE INDEFINITELY (THE ADHESIVE BACKING OF THE PADS DETERIORATES OVER TIME).
3. WIRING SHALL AVOID CROSSING OVER THE AIR GAP OF COMMON WALLS. WHERE UNAVOIDABLE, WIRING CROSSOVERS BETWEEN COMMON WALL STUDS SHALL INCLUDE A LOOP WHERE THE DEPTH IS EQUAL TO ITS WIDTH.
4. ELECTRICAL PANEL BOXES, FIXTURE BOXES OR OUTLET BOXES GREATER THAN 25 SQUARE INCHES SHALL BE SET IN RAISED BOXES THAT DO NOT TOUCH THE OPPOSITE SIDE OF THE COMMON WALL.

COMMON FLOOR/CEILINGS

1. RECESSED LIGHTING SHALL BE SET IN RECESSED AND AIRTIGHT BOXES MADE OF PLYWOOD OR DRYWALL.
2. ALL OTHER PRECAUTIONS APPLICABLE TO COMMON WALL INSTALLATIONS SHALL ALSO APPLY TO COMMON FLOOR/CEILING INSTALLATIONS.

ELECTRICAL SHEET INDEX

NO.	SHEET	DESCRIPTION
1	E-0.1	SHEET INDEX & GENERAL NOTES
2	E-0.2	ABBREVIATIONS & SYMBOL LIST
3	E-0.3	DETAILS
4	E-0.4	SINGLE LINE DIAGRAM - BUILDING 1 & 2
5	E-0.5	SINGLE LINE DIAGRAM - BUILDING 3 & 4
6	E-0.6	SINGLE LINE DIAGRAM - RECREATION/LEASING OFFICE
7	E-0.7	LOAD CALCULATIONS & EQUIPMENT SCHEDULES
8	E-0.8	PANEL SCHEDULES
9	E-0.9	PANEL SCHEDULES
10	E-1.0	SITE LIGHTING NOTES
11	E-1.1	SITE UTILITY PLAN - AREA A
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13	E-1.3	SITE LIGHTING PLAN - AREA A
14	E-1.4	SITE LIGHTING PLAN - AREA B
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18	E-2.1	BUILDING 1A & 1B - FIRST FLOOR PLAN
19	E-2.2	BUILDING 2A & 2B - SECOND FLOOR PLAN
20	E-2.3	BUILDING 3B - FIRST FLOOR PLAN
21	E-2.4	BUILDING 4A - FIRST FLOOR PLAN
22	E-2.5	RECREATION / LEASING OFFICE - LIGHTING PLAN
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28	E-3.5	UNIT 3XA-ACC & 3XB-ACC - FLOOR PLANS
29	E-4.1	TITLE 24 LTO OUTDOOR FORMS

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Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS		
NO.	DATE	DESCRIPTION

SHEET NAME:
SHEET INDEX & GENERAL NOTES

PROJECT NUMBER:
66235
ENGINEER:
DRAFTER:
SHEET NUMBER:
E-0.1

SHEET INDEX & GENERAL NOTES

C11

ISSUED DATE:8/17/2022

LIGHTING

- LIGHT (SURFACE MOUNT)
- LIGHT (SURFACE MOUNT) WITH 90 MINUTES BATTERY PACK
- LIGHT (RECESS MOUNT)
- LIGHT (RECESS MOUNT) WITH 90 MINUTES BATTERY PACK
- LIGHT (WALL MOUNT)
- PENDANT LED LIGHT
- UNDER CABINET LINEAR LIGHT FIXTURE
- 1' X 4' LIGHT
- 1' X 4' LIGHT WITH 90 MINUTES BATTERY PACK
- TRACK LIGHT
- EMERGENCY LIGHT(BUG EYE)
- EXIT SIGN (CEILING MOUNTED)
- EXIT SIGN (WALL MOUNTED)

SITE LIGHTING

- POLE LIGHT
- POST LIGHT
- BOLLARD LIGHT
- UPLIGHT LIGHT
- TREE LIGHT

NOTE: VERIFY ALL LIGHT FIXTURES WITH OWNER/ ARCHITECT PRIOR TO BID. LIGHTS AND PANEL SHALL NOT BE RECESSED IN FIRE RATED ASSEMBLIES UNLESS BOXED WITH EQUIVALENT CONSTRUCTION.

SWITCH

- $ab — SINGLE POLE, ab = CONTROL ZONES a & b
- $3ab — 3-WAY
- $4ab — 4-WAY
- DIMMER SWITCH
- OCCUPANCY SENSOR(WALL)
- VACANCY SENSOR(WALL)
- PUSH-BUTTON SWITCH
- DOOR BELL CHIME
- TELEPHONE OUTLET
- DATA OUTLET
- COMBINATION TELEPHONE AND DATA OUTLET BOX WALL
- TELEVISION OUTLET
- DAY LIGHT SENSOR(CEILING)
- OCCUPANCY SENSOR(CEILING)
- PP — POWER PACK

NOTE: LIGHT SWITCHES AND CONTROLS, WALL MOUNTED AT +48" AFF (MAX)
ALL WALL SWITCHES CONTROLLING EMERGENCY CIRCUITS SHALL BE ENGRAVED WITH "EMERGENCY" ON RED FACE PLATE

OUTLETS

- DUPLEX RECEPTACLE
- EC — DUPLEX RECEPTACLE, CONTROLLED
- QUAD RECEPTACLE
- SPECIAL RECEPTACLE
- DUPLEX USB
- GFCI DUPLEX RECEPTACLE
- GFCI DUPLEX RECEPTACLE WITH WEATHERPROOF COVER
- DUPLEX RECEPTACLE, BOTTOM HALF SWITCHED
- DUPLEX CEILING RECEPTACLE
- DUPLEX FLOOR RECEPTACLE
- QUAD FLOOR RECEPTACLE
- DUPLEX ABOVE COUNTER
- GFCI DUPLEX ABOVE COUNTER
- CONTROLLER ABOVE COUNTER
- DUPLEX W/USB (TYP. ABOVE COUNTER)
- CONTROLLER W/USB (TYP. ABOVE COUNTER)

NOTE: ALL WALL MOUNTED RECEPTACLE SHALL BE +18" AFF U.O.N.
ALL WALL COUNTER MOUNTED RECEPTACLE SHALL BE GFCI AND 6" ABOVE SPLASH. COORDINATE WITH ARCHITECTURAL DRAWINGS.

MECHANICAL

- F — FUSED DISCONNECT SWITCH
- NON-FUSED DISCONNECT SWITCH
- T — THERMALLY RATED 2P MOTOR SWITCH
- M — MANUAL MOTOR RATED SWITCH
- CU X — CONDENSING UNIT (CU) OR HP X — HEAT PUMP (HP)
- FAU X — FORCED AIR UNIT (FAU) OR FC X — FAN COIL UNIT (FC)
- EF X — EXHAUST FAN (EF)
- SDD X — SMOKE DUCT DETECTOR (SDD)

NOTE: ALL A.I.C. RATINGS OF ELECTRICAL DISTRIBUTION EQUIPMENT SHALL BE VERIFIED WITH LOCAL UTILITY COMPANY HAVING JURISDICTION PRIOR TO BID.

MISC

- SD — SMOKE DETECTOR HARDWIRED W/ BATTERY BACKUP
- SD CO — SMOKE DETECTOR AND CARBON MONOXIDE COMBO HARDWIRED W/ BATTERY BACKUP
- 1 — KEYED NOTE SYMBOL
- LIGHT MARK
- PANEL
- J — JUNCTION BOX (WALL MOUNTED)
- J — J-BOX (CEILING MOUNTED)

NOTE: ALL A.I.C.RATINGS OF ELECTRICAL DISTRIBUTION EQUIPMENT SHALL BE VERIFIED WITH LOCAL UTILITY COMPANY HAVING JURISDICTION PRIOR TO BID.

SINGLE LINE DIAGRAM

- CIRCUIT BREAKER
- DRAWOUT CIRCUIT BREAKER
- FUSED SWITCH
- TRANSFORMER
- AUTOMATIC TRANSFER SWITCH
- G — GENERATOR
- PANEL — PANELBOARD
- M — METER
- MOTOR OR EQUIPMENT AS NOTED
- UNDERGROUND PULL SECTION LANDING LUGS
- ST — SHUNT TRIP
- LSIG — ELECTRONIC TRIP UNIT:
  L - LONG-TIME TRIP
  S - SHORT-TIME TRIP
  I - INSTANTANEOUS TRIP
  G - GROUND-FAULT TRIP, GROUND FAULT SENSING INTEGRAL WITH CIRCUIT BREAKER.
- FUSE CUTOUT
- DRY TYPE TRANSFORMER
- WYE CONFIGURATION
- DELTA CONFIGURATION
- GROUND
- M — KWH — UTILITY COMPANY METER. PROVIDE CT'S & PT'S AS REQUIRED. REFER TO SINGLE LINE DIAGRAM.
- CURRENT TRANSFORMER
- DISCONNECT SWITCH FURNISHED W/ EQUIPMENT
- START-STOP CONTROL STATION
- H O A — HAND-OFF AUTO CONTROL STATION
- GF — GROUND FAULT RELAY
- GFP — GROUND FAULT PROTECTION

LOW VOLTAGE KEYED NOTES

- TV (CATV). PROVIDE OUTLET (1) RG6. RUN CABLE TO THE CATV BOX. VERIFY WITH TV SERVICE PROVIDER AND IT CONSULTANT BEFORE ROUGH-IN.
- COMBINATION PHONE AND DATA. PROVIDE (1) CAT 6 CABLE PHONE AND (1) CAT6 CABLE FOR DATA BACK TO STRUCTURED MEDIA ENCLOSURE. PROVIDE 2-PORT COVER PLATE MOUNTED WITHIN 2-FEET OF 120V RECEPTACLE.
- PHONE. PROVIDE (1) CAT 6 CABLE PHONE BACK TO STRUCTURED MEDIA ENCLOSURE. PROVIDE 1-PORT COVER PLATE MOUNTED +42" AFF.
- DATA. PROVIDE (1) CAT 6 CABLE BACK TO STRUCTURED MEDIA ENCLOSURE. PROVIDE 1-PORT COVER PLATE MOUNTED 2-FEET OF 120V RECEPTACLE.
- STRUCTURED MEDIA ENCLOSURE. COORDINATE WITH LOW VOLTAGE CONTRACTOR. PROVIDE DUPLEX RECEPTACLE OUTLET INSIDE ENCLOSURE. SURGE PROTECTED 15 AMP I.E. LEGRAND 5362WSP OR LEVITON 47605-ACS. IN-BOUND SERVICES SHALL TERMINATE IN THIS ENCLOSURE AND INDIVIDUAL CONNECTIONS SHALL BE PROVIDED TO TELEVISION, DATA AND TELEPHONE DEVICES. PROVIDE CONDUIT RUN FROM THE STRUCTURED ENCLOSURE TO THE TELEPHONE AND CABLE COMPANY "POC".

SYMBOLS LIST

ABS	ABOVE BACKSPLASH	IG	ISOLATED GROUND	T	TRANSFORMER
ADA	AMERICAN WITH DISABILITY ACT	IN OR "	INCHES	TC	TIME CLOCK
AFF	ABOVE FINISHED FLOOR	INCAD	INCANDESCENT	TELC	TELEPHONE CABINET
AFG	ABOVE FINISHED GROUND			TEL	TELEPHONE
AFCI	ARC FAULT CIRCUIT INTERRUPTER	JB/JBOX	JUNCTION BOX	TELCOM	TELECOMMUNICATIONS
AIC	AMPERE INTERRUPTING CAPACITY			TELE/DATA	TELEPHONE & DATA
AF/AT	AMP FRAME, AMP TRIP	K	DEGREE KELVIN	TV	TELEVISION
ANN	FIRE ALARM ANNUNCIATOR PANEL	KVA	KILOVOLT AMPERES	TP	TAMPER PROOF
AS/AF	AMP SWITCH, AMP FUSE	KW	KILOWATT	TYP	TYPICAL
AMP, A	AMPERE	KCMIL	THOUSAND CIRCULAR MILS	TSP	TWISTED SHIELDED PAIR
ARCH	ARCHITECTURAL				
ASYM	ASYMMETRICAL	LC	LIGHTING CONTACTOR	UBP	UTILITY BRANCH PANEL
ATS	AUTOMATIC TRANSFER SWITCH	LCL	LINE CONTINUOUS LOAD	UG	UNDERGROUND
AV	AUDIO VISUAL	LCP	LIGHTING CONTROL PANEL	UGPS	UNDERGROUND PULL SECTION
AWG	AMERICAN WIRE GAUGE	LF	LINEAR FEET	UON	UNLESS OTHERWISE NOTED
		LPS	LOW PRESSURE SODIUM	UPS	UNINTERRUPTIBLE POWER SUPPLY
BATT	BATTERY	LT	LIGHTING TRANSFORMER	UT	UTILITY POWER TRANSFORMER
BC	BARE COPPER	LTG/LTS	LIGHTING	UTP	UNSHIELDED TWISTED PAIR
BCG	BARE COPPER GROUND	LSI	LONG TIME, SHORT TIME, INSTANTANOUS		
BKR	BREAKER	LSIG	LONG TIME, SHORT TIME, INSTANTANOUS, GROUND	V	VOLTS
BLDG	BUILDING			VA	VOLTS AMPETERS
BOT	BOTTOM OF TRAY	M	METER	VD	VOLTAGE DROP
		MAX	MAXIMUM	VFD	VARIABLE FREQUENCY DRIVE
C	CONDUIT	MCA	MINIMUM CIRCUIT AMPACITY		
°C	CELSIUS	MCB	MAIN CIRCUIT BREAKER	W	WIRE
CAB	CABINET	MCC	MOTOR CONTROL CENTER	WP	WEATHERPROOF
CB	CIRCUIT BREAKER	MFR	MANUFACTURER		
CKT	CIRCUIT	MH	MOUNTING HEIGHT	XFMR	TRANSFORMER
CLCB	CURRENT LIMITING CIRCUIT BREAKER	MH	METAL HALIDE	XFR	TRANSFER
CLF	CURRENT LIMITING FUSE	MLO	MAIN LUGS ONLY		
CLG	CEILING	MOCP	MAXIMUM OVERCURRENT PROTECTION	Y	WYE CONNECTION
CM/GC	CONSTRUCTION MANAGER/GENERAL CONTRACTOR	M/TD	MOUNTED		
C.O.	CONDUIT ONLY, COMPLETE WITH PULL WIRE	MS	MAIN SWITCHBOARD		
COMM	COMMUNICATIONS	MV	MERCURY VAPOR		
CONN	CONNECTED	MW	MICROWAVE		
CONST	CONSTRUCTION				
CONT	CONTINUATION	N	NEUTRAL		
CPT	CONTROL POWER TRANSFORMER	NC	NORMALLY CLOSED		
CT	CURRENT TRANSFORMER	NEC	NATIONAL ELECTRICAL CODE		
CPT	CLEAN POWER TRANFORMER	NF	NON-FUSED		
		NIC	NOT IN CONTRACT		
Δ	DELTA CONNECTED	NL	NIGHT LIGHT		
DB	DISTRIBUTION BOARD	NO	NORMALLY OPEN		
DIA	DIAMETER	NO. OR #	NUMBER		
DISC SW	DISCONNECT SWITCH				
DIST	DISTRIBUTION	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED		
DEG	DEGREE				
DP	DISTRIBUTION PANELBOARD	P	POLE		
DT	DIRTY POWER TRANFORMER	PA	PUBLIC ADDRESS		
DWG	DRAWING	PB	PULL BOX		
DW	DISH WASHER	PC	PHOTOCELL		
		PH OR ϕ	PHASE		
EF	EXHAUST FAN	PL	POLE		
EG	EQUIPMENT GROUND	PR	PAIR		
(E)	EXISTING	PRI	PRIMARY		
EL	ELEVATION	PRIMARY	OVER 600 VOLTS		
ELEC	ELECTRICAL	PROVIDE	FURNISH, INSTALL, AND CONNECT		
ELEV	ELEVATOR	PT	POTENTIAL TRANSFORMER		
EMER	EMERGENCY	PWR	POWER		
EMS	ENERGY MANAGEMENT SYSTEM				
EMT	ELECTRICAL METALLIC TUBING	QTY	QUANTITY		
ENT	ELECTRICAL NON-METALLIC TUBING				
E.O.L.	END-OF-LINE CIRCUIT TERMINATOR	RECPT, REC	RECEPTACLE		
EP	EXPLOSION PROOF	REF	REFRIGERATOR		
EQPT	EQUIPMENT	REQD	REQUIRED		
EWC	ELECTRIC WATER COOLER	RGS	RIGID GALVANZED STEEL		
EXIST	EXISTING	RM	ROOM		
		RP	REC BUILDING PANEL		
FA	FIRE ALARM	ROIC	RESIDENT OFFICER IN CHARGE OF CONSTRUCTION		
FACP	FIRE ALARM CONTROL PANEL				
FATC	FIRE ALARM TERMINATION CABINET	SBG	STANDBY GENERATOR		
FDR	FEEDER	SDPB	STANDBY DISTRIBUTION PANELBOARD		
FIXT	FIXTURE	SEC	SECURITY		
FLA	FULL LOAD AMPS	SECONDARY	600 VOLTS AND LESS		
FLR	FLOOR	SECT	SECTION		
FLOUR	FLUORESCENT	SF/SQFT	SQUARE FOOT		
FT OR '	FEET	SN	SOLID NEUTRAL		
FP	FIRE PUMP	SPEC	SPECIFICATION		
		SP	SUMP PUMP		
G/GND	GROUND	SQ	SQUARE		
GEF	GARAGE EXHAUST FAN	SSG	SECONDARY SWITCHGEAR		
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	ST	SHUNT TRIP		
GFP	GROUND FAULT PROTECTION	SURF	SURFACE		
		SW	SWITCH		
H	HOT (UNSWITCHED)	SYM	SYMMETRICAL		
HID	HIGH INTENSITY DISCHARGE	SYS	SYSTEMS		
HOA	HAND OFF AUTO				
HP	HORSE POWER				
HPS	HIGH PRESSURE SODIUM				
HTR	HEATER				
HVAC	HEATING, VENTILATION, & AIR CONDITIONING				
H.W.D.L.	HEIGHT, WIDTH, DEPTH, LENGTH				

ABBREVIATIONS

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Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
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REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
ABBREVIATIONS & SYMBOL LIST

PROJECT NUMBER:
66235

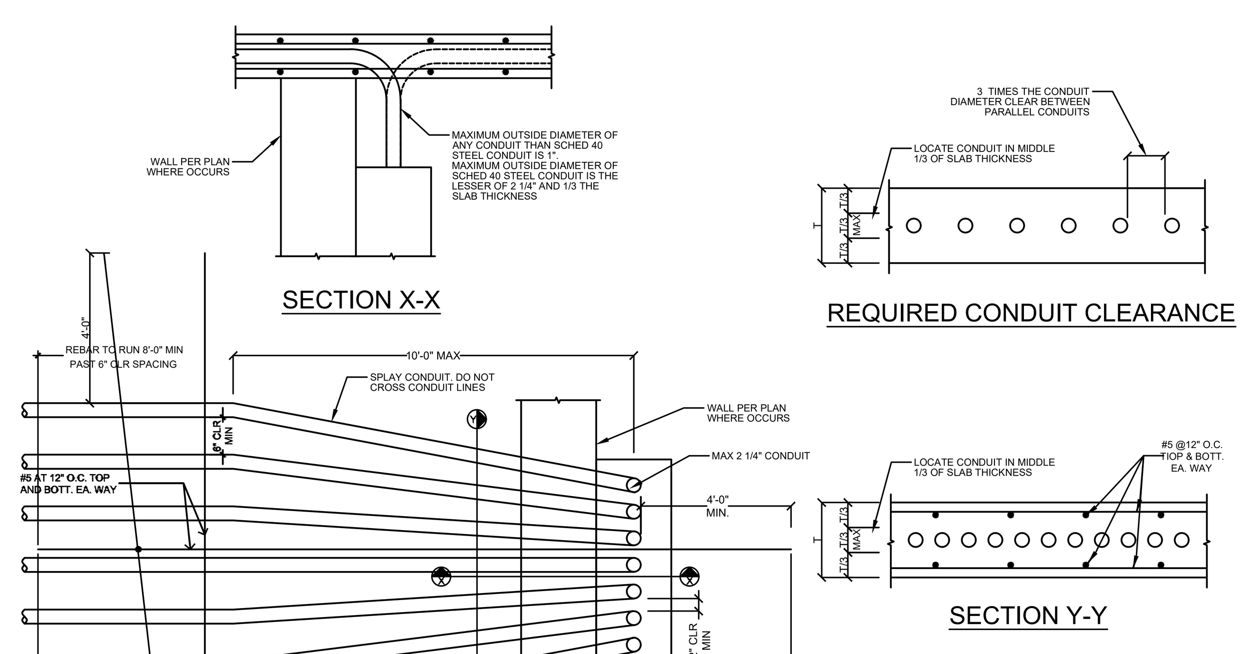
ENGINEER:

DRAFTER:

SHEET NUMBER:
E-0.2

C12

ISSUED DATE:8/17/2022



PLAN AT ELECTRICAL ROOM SWEEP

NOTES:
1. HORIZONTAL AND VERTICAL CONDUIT IS NOT ALLOWED WITHIN 4'-0" OF ANY COLUMN FACE.
2. NO ALUMINUM OF ANY KIND SHALL BE PLACED IN THE SLAB.
3. CONDUIT SHALL BE PLACED TO PROVIDE AT LEAST 3 TIMES THE CONDUIT DIAMETER CLEAR BETWEEN PARALLEL CONDUITS.
4. CONDUIT SHALL BE LAID OUT TO NOT CROSS OVER OTHER CONDUIT AND TO THE EXTENT POSSIBLE, BE AT LEAST 4" FROM ANY REBAR OR POST-TENSIONING TENDONS.
5. DO NOT TIE CONDUIT TO REBAR OR POST-TENSIONING TENDONS THAT RUN PARALLEL TO THE CONDUIT.

GENERAL NOTES:

PLASTIC OR METAL CONDUITS MAY BE EMBEDDED IN SLAB PROVIDING THAT THE FOLLOWING CRITERIA ARE MET:

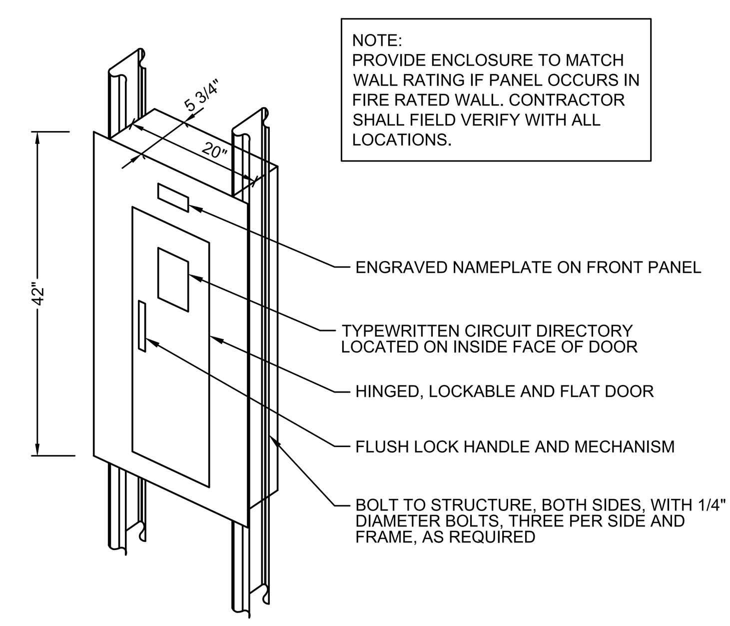
A - PIPES AND ELECTRICAL CONDUITS SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED BY THE ENGINEER. MAXIMUM PIPE SIZE SHALL BE 1" DIA. AND LOCATED WITHIN THE MIDDLE THIRD OF THE SLAB MINIMUM SPACING SHALL BE SIX (6) TIMES THE PIPE DIAMETER. PIPES SHALL NOT IMPAIR THE STRENGTH OF THE MEMBER. PROVIDE CONDUIT LAYOUT FOR ENGINEER REVIEW AND APPROVAL. ANY GROUP OF CONDUITS LARGER THAN 2" & CLOSER THAN 6" SHALL BE CONSIDERED AS AN OPENING AND SPECIALLY TRIM BARS ARE TO BE PLACED AROUND THEM.

B - CONDUITS MUST NOT INTERRUPT THE POST-TENSIONED CABLES.

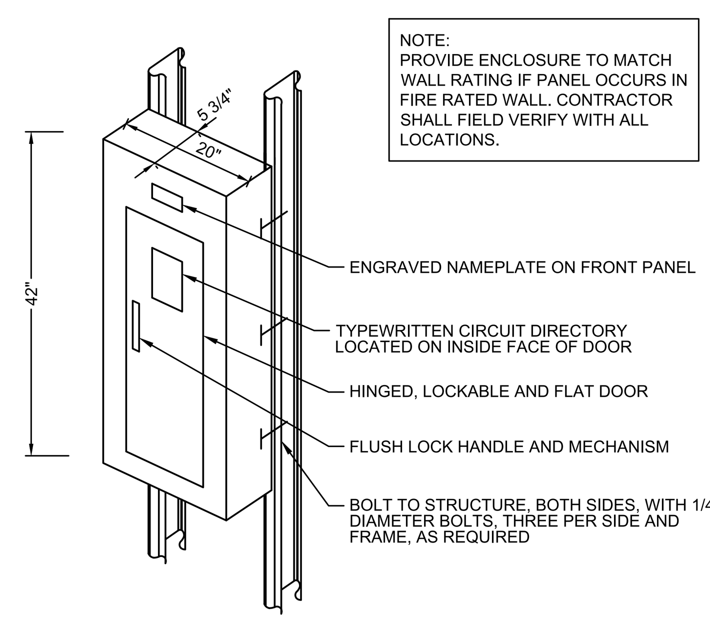
C - COLUMN CAPS SHOULD BE AVOIDED OR SPECIAL REINF. SHALL BE PROVIDED BY THE E.O.R.

D - IT IS UNDESIRABLE TO HAVE EXCESS AMOUNTS OF CONDUIT ENTERING THE SLAB AT ONE LOCATION. IF THIS CONDITION EXISTS, THE CONDUITS MUST BE FANNED OUT IMMEDIATELY.

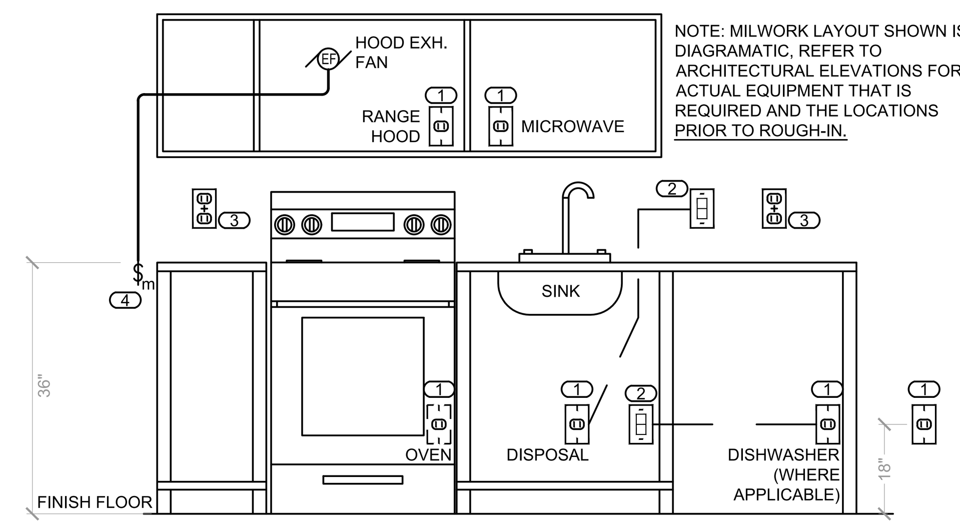
REINFORCING AND CLEARANCES AT CONDUIT IN SLAB 6



RECESSED MOUNTED PANEL 5



SURFACE MOUNTED PANEL 4



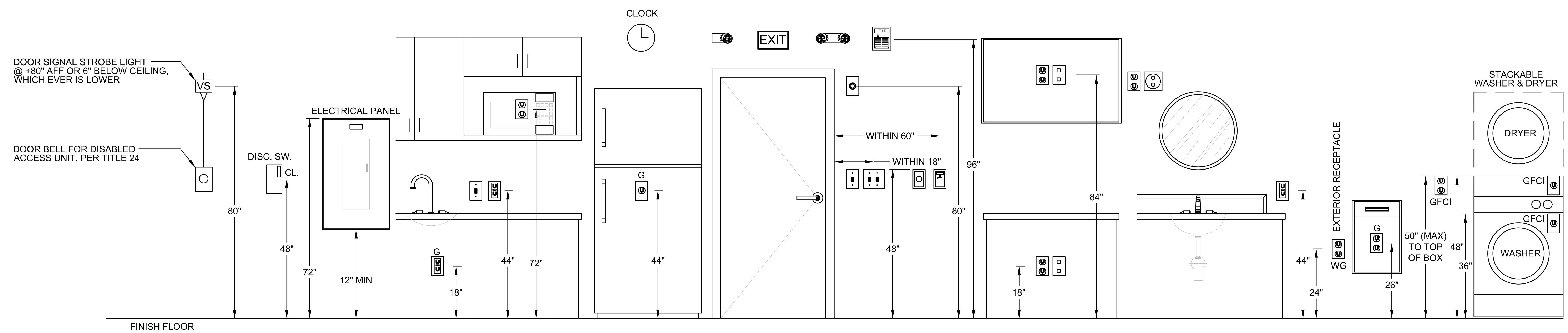
KEYED NOTES:

1. DEDICATED SIMPLEX RECEPTACLE MOUNTED IN CASEWORK FOR LOAD INDICATED RELATIVE LOCATIONS ARE DIAGRAMATIC, REFER TO ARCHITECTURAL PLANS FOR ACTUAL LOCATIONS.
2. DISCONNECT SWITCH FOR SIMPLEX RECEPTACLE SERVING DISPOSALS AND DISHWASHER, LABEL SWITCHES: "DISPOSAL" AND "DISHWASHER DISCONNECT".
3. GFCI/AFCI RECEPTACLE ON EACH COUNTER AND ON EITHER SIDE OF SINK. PROVIDE A MINIMUM OF TWO DEDICATED COUNTERTOP RECEPTACLES, CIRCUIT ALL OTHER COUNTERTOP RECEPTACLES TOGETHER ON A COMMON CIRCUIT.
4. SWITCH FOR CONTROLLING RANGE HOOD FAN, PER TITLE 24

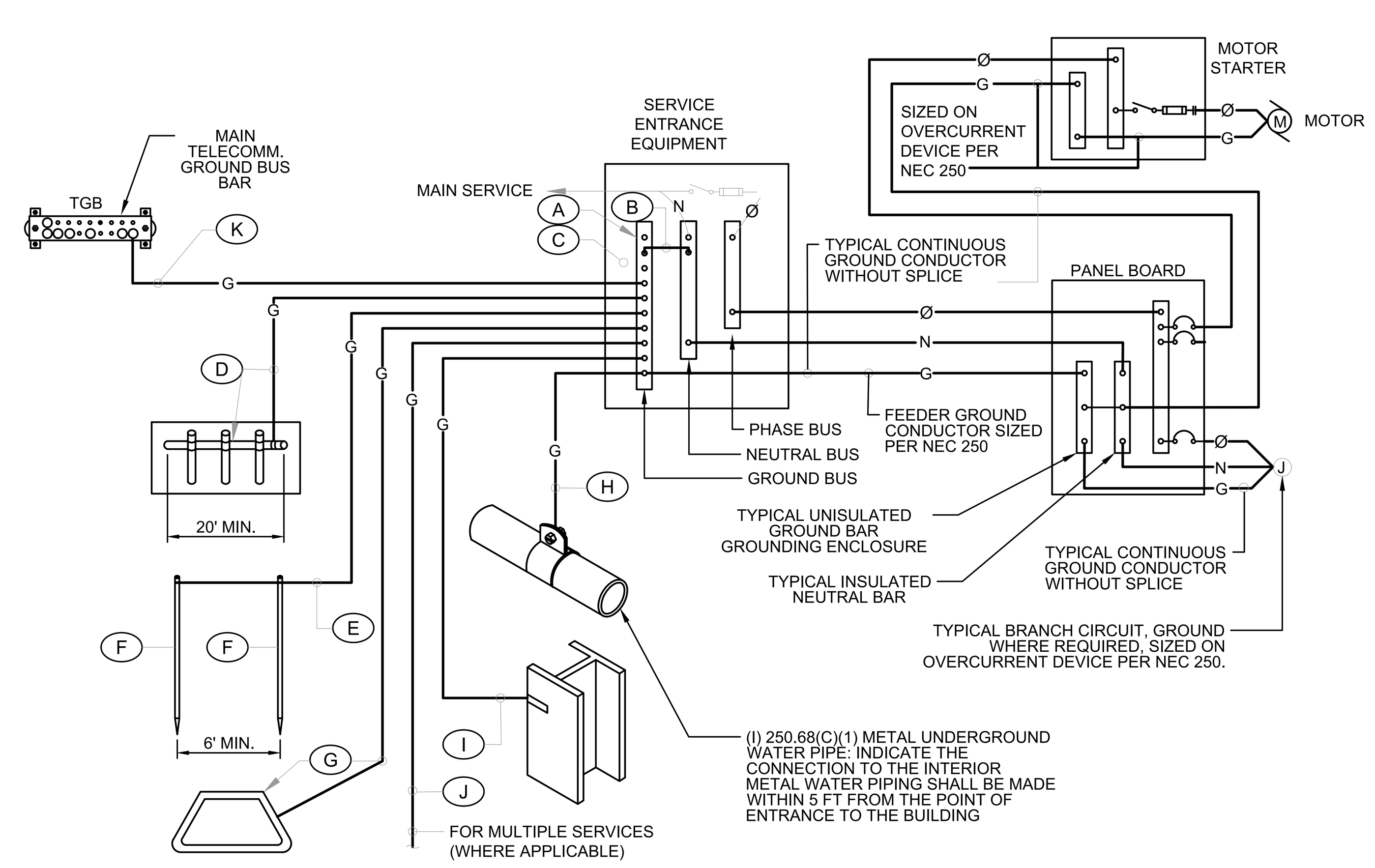
KITCHEN RECEPTACLE LAYOUT 3

NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL TELEVISION OUTLETS WITH THE ARCHITECT PRIOR TO INSTALLATION.
2. ALL DEVICES SHOWN ON THIS DETAIL ARE FOR REFERENCES OF MOUNTING HEIGHTS ONLY. THE ELECTRICAL CONTRACTOR SHALL FIELD ADJUST THE HEIGHTS OF THE DEVICES AS REQUIRED FOR PROPER MOUNTING OF THE DEVICES.
3. ALL DEVICES REQUIRED FOR THIS PROJECT MAY NOT APPEAR ON THIS DETAIL. ALL ITEMS SHOWN ON THIS DETAIL MAY NOT B REQUIRED OF THIS PROJECT.
4. FIRE ALARM HORN/STROBES ARE TO BE MOUNTED NO HIGHER THAN 96" AND NO LOWER THAN 80" ON CENTER.



TYPICAL ELECTRICAL DEVICE HEIGHT 2



GROUNDING SCHEDULE

CODE REFERENCE / AMPACITY	(A) FACTORY INSTALLED GROUND BUS BAR	(B) INTEGRATED BUS BAR MAIN BOND JUMPER	(C) INTEGRATED BUS BAR CASE BOND JUMPER	(D) CONCRETE ENCASED ELECTRODE (UFER)	(E) GROUDING ELECTRODE CONDUCTOR TO ROD, PIPE OR PLATE	(F) CU or CU-CLAD STEEL GROUND ROD	(G) COPPER GROUND RING CONDUCTOR	(H) METALLIC PIPING BONDING CONDUCTOR	(I) BUILDING STEEL BONDING CONDUCTOR	(J) MULTIPLE SERVICE BONDING CONDUCTOR	(K) TELEPHONE SYSTEM BONDING CONDUCTOR
		N.E.C 250.102	N.E.C 250.102	N.E.C 250.50(c) 250.66(b)	N.E.C Table 250.66	N.E.C 250.52(A)(S)	N.E.C 250.50(d) 250.66(c)	N.E.C 250.50(a) 250.66	N.E.C 250.50(b) 250.66	N.E.C 250.66	
200 AMP AND LESS	SHALL BE SIZED TO ACCOMMODATE ALL GROUND WIRE LUGS AS INDICATED ON GROUNDING DIAGRAM AND/OR REFERENCED ELSEWHERE ON PLANS OR SPECIFICATIONS	#4	#4	#4	#4	3/4" x 10'	#2	#4	#4	#4	#6
225 AMP		#2	#2	#4	#2	3/4" x 10'	#2	#2	#2	#2	#6
400 AMP		#1/0	#1/0	#4	#1/0	3/4" x 10'	#1/0	#1/0	#1/0	#1/0	#6
600 AMP		#2/0	#2/0	#4	#3/0	3/4" x 10'	#2/0	#2/0	#2/0	#2/0	#6
800 AMP		#3/0	#3/0	#4	#3/0	3/4" x 10'	#3/0	#3/0	#3/0	#3/0	#6
1000 AMP		#3/0	#3/0	#4	#3/0	3/4" x 10'	#3/0	#3/0	#3/0	#3/0	#6
1200 AMP		250kcMIL	250kcMIL	#4	#3/0	3/4" x 10'	#3/0	#3/0	#3/0	#3/0	#6
1600 AMP		350kcMIL	350kcMIL	#4	#3/0	3/4" x 10'	#3/0	#3/0	#3/0	#3/0	#6
2000 AMP		400kcMIL	400kcMIL	#4	#3/0	3/4" x 10'	#3/0	#3/0	#3/0	#3/0	#6
2500 AMP		500kcMIL	500kcMIL	#4	#3/0	3/4" x 10'	#3/0	#3/0	#3/0	#3/0	#6
3000 AMP		500kcMIL	500kcMIL	#4	#3/0	3/4" x 10'	#3/0	#3/0	#3/0	#3/0	#6

GROUNDING SYSTEM GENERAL NOTES

1. THE GROUNDING ELECTRODE SYSTEM SHALL CONSIST OF ITEMS A, B, C, D, E, F AND G WHERE APPLICABLE.
2 . ITEMS H, AND J MUST BE BONDED TOGETHER AND TO THE GROUNDING ELECTRODE SYSTEM WHEN THEY ARE PRESENT.
3. ITEM D CONCRETE ENCASED ELECTRODE (UFER) SHALL HAVE UFER SUPPORT CONSISTING OF 5/8 "x 10 'COPPER GROUND ROD CUT INT02 SECTIONS AND DRIVEN FOR SUPPORT OF UFER CONDUCTOR ONLY COPPER TO COPPER CONNECTIONS ARE ACCEPTABLE. DO NOT USE RE - BAR FOR UFER SUPPORT (THIS IS TO AVOID THE HARMFUL EFFECTS OF DISSIMILAR METALS IN CONTACT.) A UL.LISTED COPPER TO RE - BAR CLAMP (SUCH AS GRAVES JONES BOND "SYSTEM) IS AN APPROVED ALTERNATIVE.
4. THIS DETAIL IS PROVIDE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, ARTICLE 250, PERTAINING TO THE "GROUNDING ELECTRODE SYSTEM".
5. ALL SPLICING SHALL BE ACCOMPLISHED VIA EXOTHERMIC WELD (CAD - WELD) ONLY.
6. ALL CONDUCTOR SIZING INDICATED ON THE GROUNDING SCHEDULE ARE FOR COPPER CONDUCTORS, ALUMINUM IS NOT PERMITTED
7. ANY VARIANCES FROM THIS DIAGRAM AND ASSOCIATED SCHEDULE AND NOTES MUST BE REQUESTED AND APPROVED IN WRITING PRIOR TO INSTALLATION.
8. ALL INSTALLATIONS SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF N.E.C. ARTICLE 250 (ALL SUBPARAGRAPHS) AND ALL STATE AND LOCAL REQUIREMENTS.
9. THE GROUNDING SYSTEM SHALL PROVIDE LESS COAL (4) FOUR OHMS RESISTANCE TO GROUND AT THE SERVICE CONNECTION. THE RESULTS SHALL BE VERIFIED BY AN INDEPENDENT TESTING AGENCY VIA GROUND TEXT (FALL OF POTENTIAL) AND SUBMITTED TO. ELECTRICAL ENGINEER UPON COMPLETION OF PROJECT

TYPICAL SYSTEM GROUNDING AND BONDING 1

C13

ISSUED DATE:8/17/2022

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REGISTERED PROFESSIONAL ENGINEER MEHDI HOSSEINZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
DETAILS

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-0.3

KEYED NOTES

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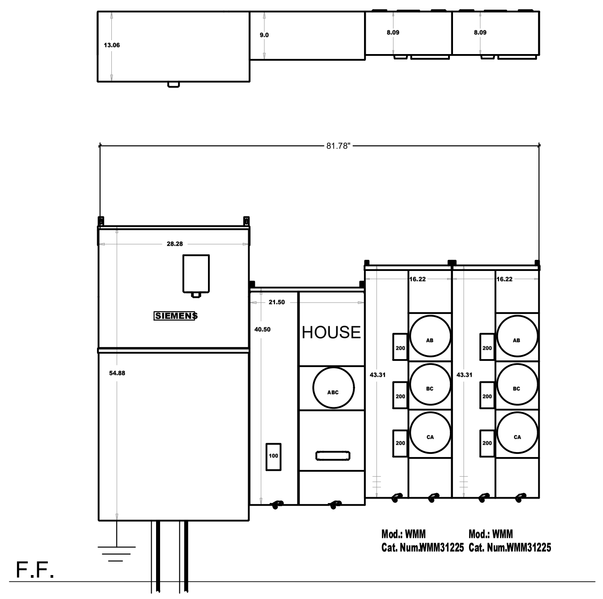
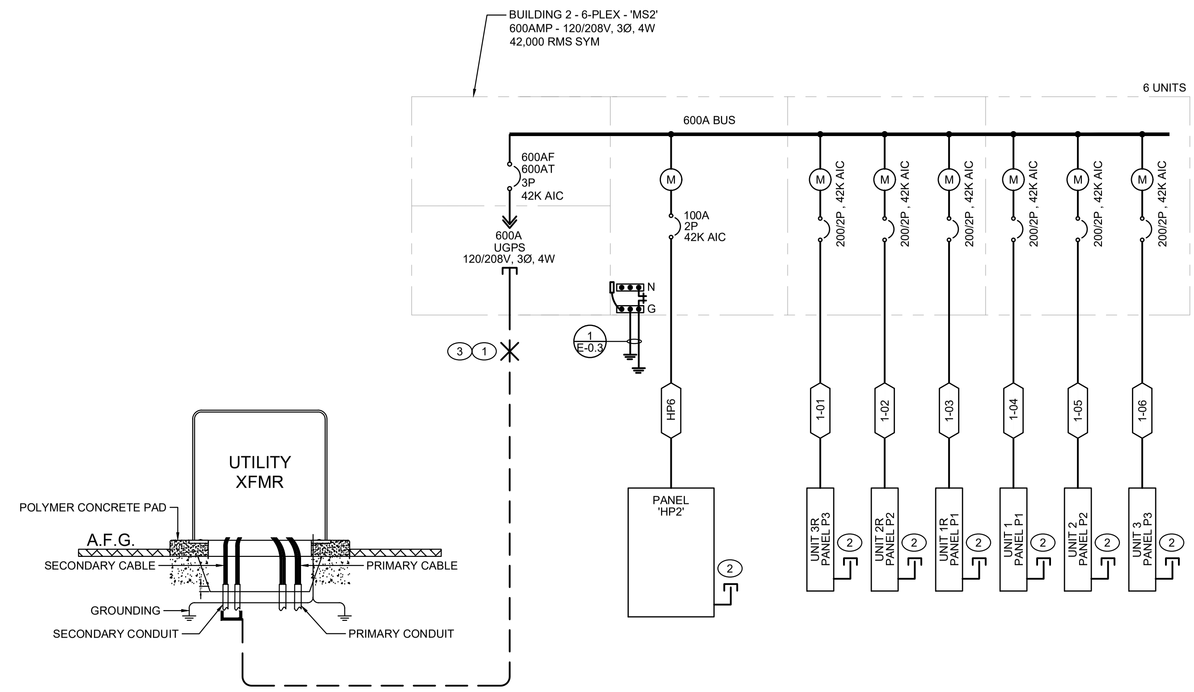
BUILDING 2 - 6-PLEX

600AMPS, MAIN BREAKER, THREE PHASE SWITCHBOARD
6 UNITS & 1 HOUSE METER



B ELECTRICAL EQUIPMENT ELEVATION - BUILDING 2 - 6-PLEX

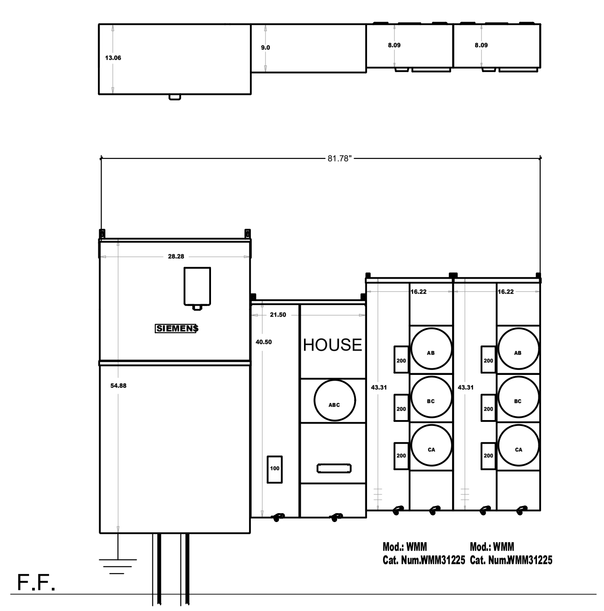
SCALE: 3/4" : 1'-0"



SINGLE LINE DIAGRAM - BUILDING 2 - 6-PLEX

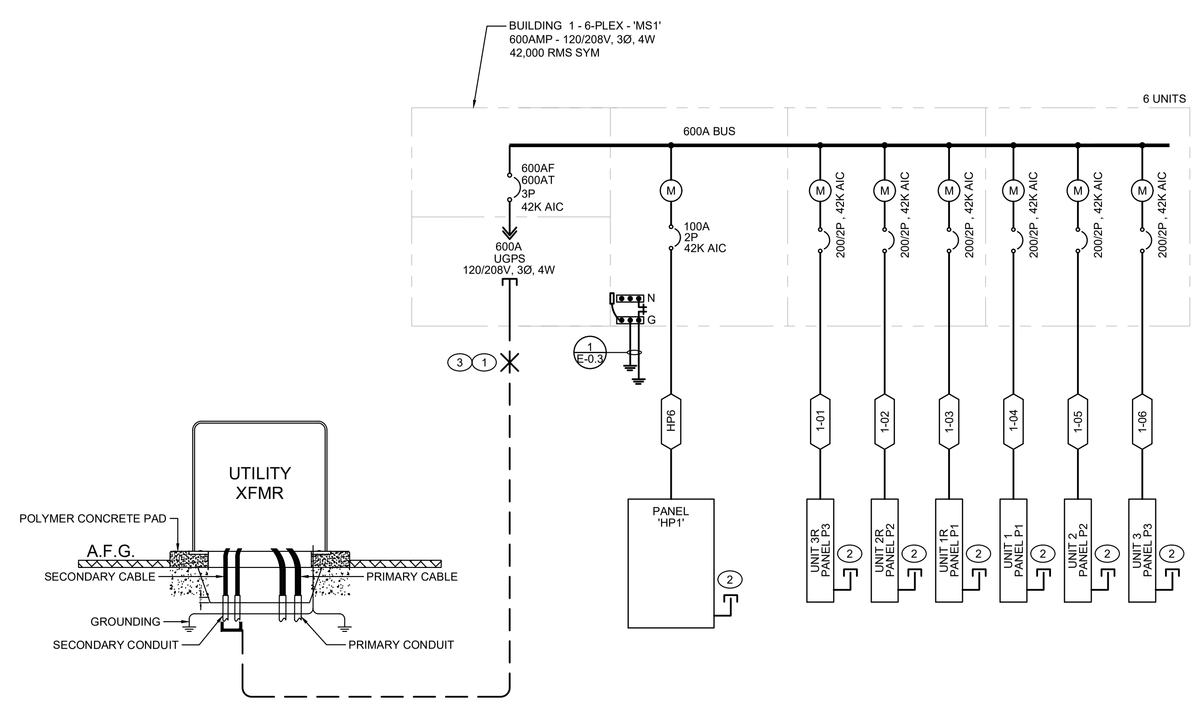
BUILDING 1 - 6-PLEX

600AMPS, MAIN BREAKER, THREE PHASE SWITCHBOARD
6 UNITS & 1 HOUSE METER



A ELECTRICAL EQUIPMENT ELEVATION - BUILDING 1 - 6-PLEX

SCALE: 3/4" : 1'-0"



SINGLE LINE DIAGRAM - BUILDING 1 - 6-PLEX

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REGISTERED PROFESSIONAL ENGINEER
MEHDI HOSSENZADEH
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ELECTRICAL
STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
SINGLE LINE DIAGRAM
BUILDING 1 & 2 - 6-PLEX

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-0.4

ISSUED DATE:8/17/2022

KEYED NOTES

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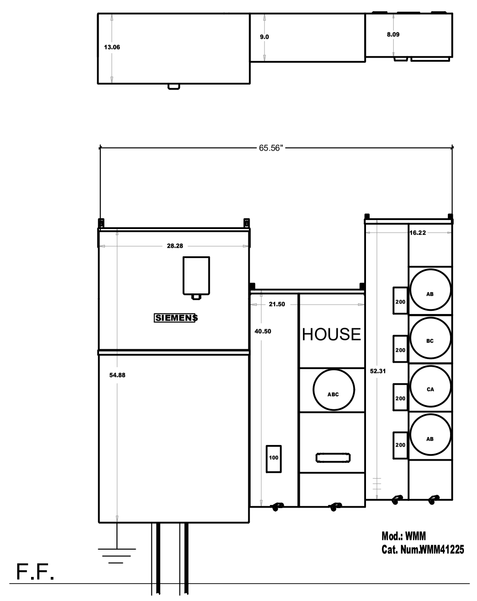
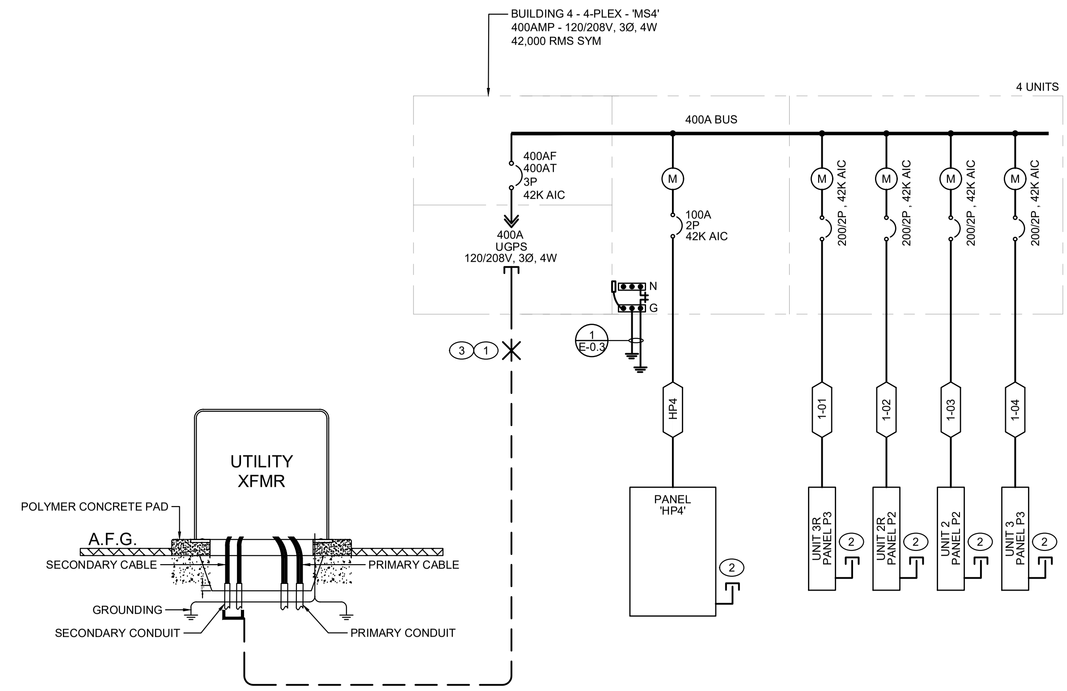
BUILDING 4 - 4-PLEX

400AMPS, MAIN BREAKER, THREE PHASE SWITCHBOARD
4 UNITS & 1 HOUSE METER





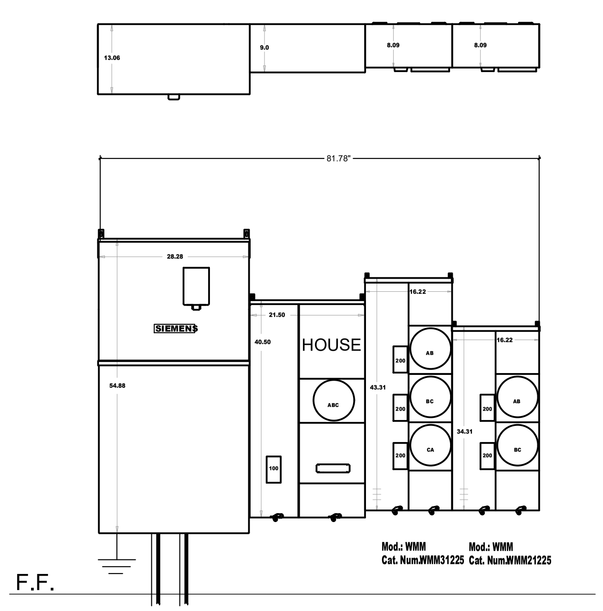
B ELECTRICAL EQUIPMENT ELEVATION - BUILDING C 4-PLEX

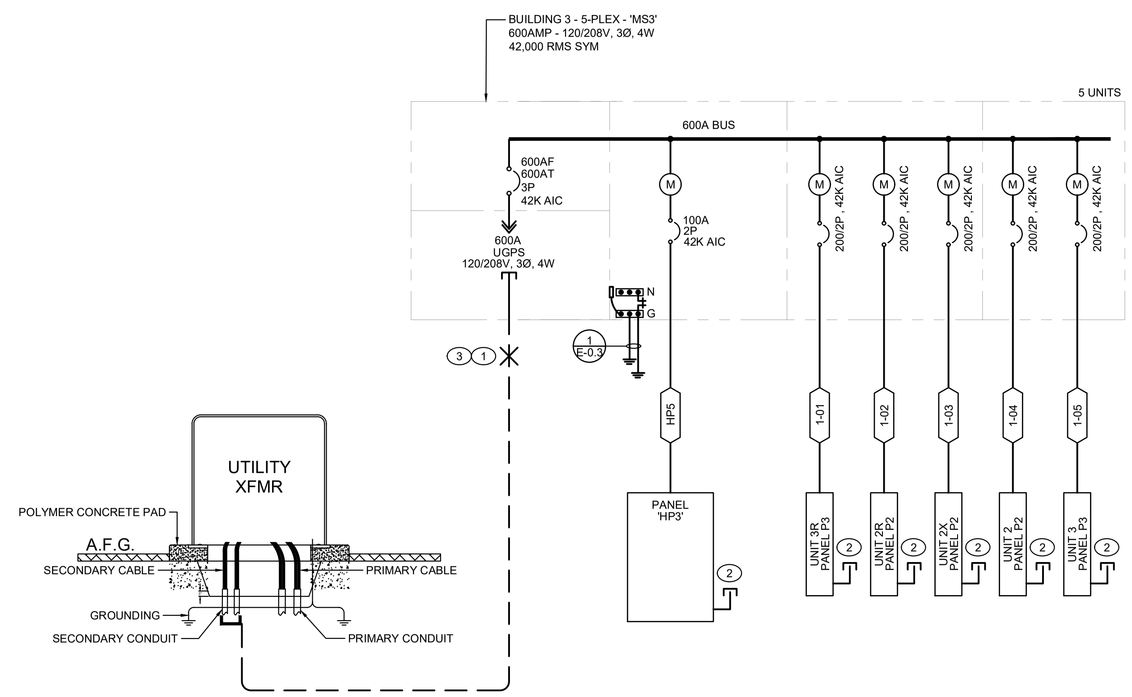
SCALE: 3/4" : 1'-0"

SINGLE LINE DIAGRAM - BUILDING 4 - 4-PLEX

BUILDING 3 - 5-PLEX

600AMPS, MAIN BREAKER, THREE PHASE SWITCHBOARD
5 UNITS & 1 HOUSE METER





A ELECTRICAL EQUIPMENT ELEVATION - BUILDING B 5-PLEX

SCALE: 3/4" : 1'-0"

SINGLE LINE DIAGRAM - BUILDING 3 - 5-PLEX

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REGISTERED PROFESSIONAL ENGINEER
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ELECTRICAL
STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
SINGLE LINE DIAGRAM
BUILDING 3 & 4

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-0.5

ISSUED DATE:8/17/2022

KEYED NOTES

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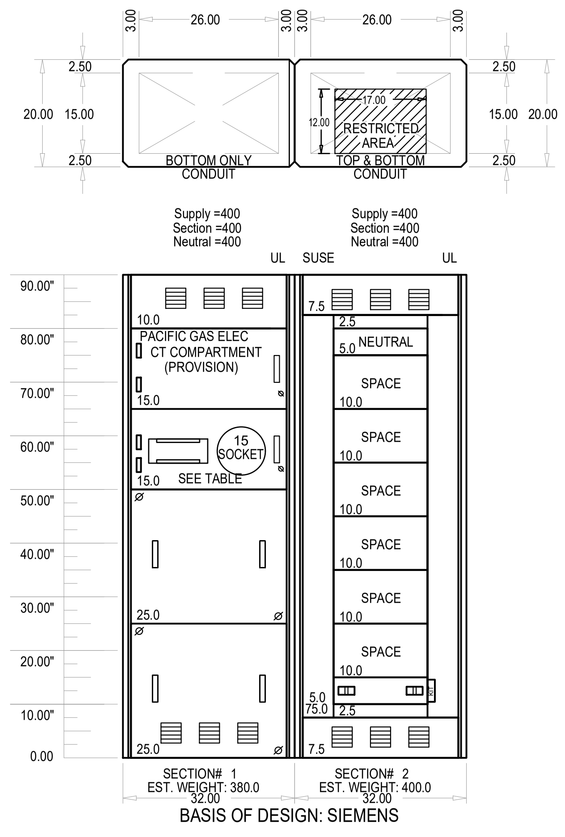
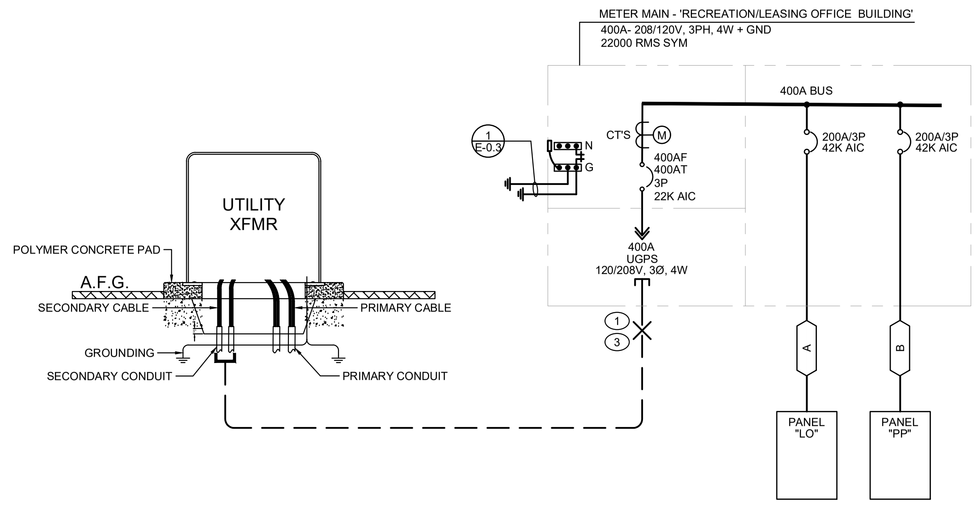
4. ALL NEW CIRCUIT BREAKERS, FUSIBLE SWITCHES AND ELECTRICAL EQUIPMENT SHALL BE FULLY RATED HAVING A SHORT-CIRCUIT (AIC) RATING EXCEEDING THE AVAILABLE SHORT-CIRCUIT CURRENT AT THE EQUIPMENT. SERIES RATING OF EQUIPMENT IS NOT ALLOWED.
5. ALL SWITCHBOARDS AND DISTRIBUTION BOARDS SHALL HAVE:
   - 5.1. TIN-PLATED ALUMINUM BUSSING WITH RECTANGULAR CROSS SECTION. HORIZONTAL AND VERTICAL BUSSING SHALL BE FULL LENGTH AND SHALL HAVE PROVISIONS FOR FUTURE EXTENSIONS. ALL BUSSING SHALL HAVE MINIMUM WITHSTAND RATING EQUAL TO THE AVAILABLE FAULT CURRENT INDICATED. ALL VERTICAL AND HORIZONTAL BUSSING SHALL BE RATED AT FULL CAPACITY IN ALL SWITCHBOARD AND DISTRIBUTION BOARD SECTIONS. PROVIDE 100% NEUTRAL BUSSING MINIMUM UNLESS OTHERWISE NOTED. PROVIDE FULL LENGTH GROUND BUS AND, WHERE INDICATED ON PLANS, ISOLATED GROUND BUSSING. PROVIDE REAR WIRE WAY IN ALL SWITCHBOARD SECTIONS.
   - 5.2. LUGS SUITABLE FOR USE WITH COPPER OR ALUMINUM CONDUCTORS LISTED FOR USE WITH 75 DEGREE CELSIUS AMPACITY CONDUCTORS.
   - 5.3. PERMANENT PLACARD(S) MARKED PER THE SPECIFICATIONS AND PER NEC (OR CEC-WHERE ADOPTED) SECTIONS 225.37, 230.2(E), 690.56, 692.56, 700.7, 701.7, 702.7, AND 705.10 DENOTING THE PRESENCE OF ADDITIONAL SERVICES, PHOTOVOLTAIC SYSTEMS, FUEL CELLS, EMERGENCY OR STAND-BY POWER SOURCES AS APPLICABLE.
   - 5.4. SINGLE LINE DIAGRAM SHOWN IS A "FULLY RATED SYSTEM" UNLESS NOTED. OTHERWISE.
   - 5.5. THE MAXIMUM COMBINED VOLTAGE DROP ON BOTH INSTALLED FEEDER CONDUCTORS AND BRANCH CONDUCTORS TO THE FARTHEST CONNECTED LOAD OR OUTLET SHALL NOT EXCEED 5 PERCENT.
   - 5.6. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE "UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION".



BASIS OF DESIGN: SIEMENS

A ELECTRICAL EQUIPMENT ELEVATION - RECREATION/LEASING OFFICE BUILDING

SCALE: 3/4" : 1'-0"



SINGLE LINE DIAGRAM - RECREATION/LEASING OFFICE

GOUVIS engineering consulting group, inc.®

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REGISTERED PROFESSIONAL ENGINEER MEHRI HOSSENZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:

Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:

Bassenian Lagoni

LOCATION:

Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:

SINGLE LINE DIAGRAM
RECREATION/LEASING OFFICE

PROJECT NUMBER:

66235

ENGINEER:

DRAFTER:

SHEET NUMBER:

E-0.6

MECHANICAL EQUIPMENT SCHEDULE GENERAL NOTES:

A. FUSED AS RECOMMENDED BY MANUFACTURER.

B. REFER TO MECHANICAL DRAWING FOR MORE INFORMATION ABOUT MECHANICAL EQUIPMENTS.

MECHANICAL EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	EQUIPMENT RATING					FUSED DISCONNECT	CIRCUIT DATA CONDUIT - WIRE
			MOTOR					
		VOLTS	HP	FLA	MCA	MOCP		
HP 24	HEAT PUMP	208	-	11.6	14.5	25	30AS-2P-25AF	P1-24,26 3/4"C-2#10, 1#10E.G.
HP 30	HEAT PUMP	208	-	14.56	18.2	30	30AS-2P-30AF	PX-24,26 3/4"C-2#10, 1#10E.G.
HP 48	HEAT PUMP	208	-	26.24	32.8	50	60AS-2P-50AF	LO-39,41 1"C-2#6, 1#10E.G.
FC 24	FAN COIL	208	-	4.24	5.3	15	$^{M}_{2}$	P1-23,25 3/4"C-2#12, 1#12E.G.
FC 30	FAN COIL	208	-	4.24	5.3	15	$^{M}_{2}$	PX-23,25 3/4"C-2#12, 1#12E.G.
FC 48	FAN COIL	208	-	6.08	7.6	15	$^{M}_{2}$	LO-43,45 3/4"C-2#12, 1#12E.G.
EF R	EXHAUST FAN	120	14.5 W	-	-	-	^{M}	PX-XX 3/4"C-2#12, 1#12E.G.
EF B	EXHAUST FAN	120	29.4 W	-	-	-	^{M}	PX-XX 3/4"C-2#12, 1#12E.G.
EF B1	EXHAUST FAN	120	29.4 W	-	-	-	^{M}	PX-XX 3/4"C-2#12, 1#12E.G.
EF R2	EXHAUST FAN	120	37.0 W	-	-	-	^{M}	PX-XX 3/4"C-2#12, 1#12E.G.
EF P	EXHAUST FAN	120	63.0 W	-	-	-	^{M}	PX-XX 3/4"C-2#12, 1#12E.G.
EF M	EXHAUST FAN	120	212.0 W	-	-	-	^{M}	PX-XX 3/4"C-2#12, 1#12E.G.

PLUMBING EQUIPMENT SCHEDULE

WH 1	ELECTRIC WATER HEATER	208	4992 W					PX-28,30 3/4"C-2#10, 1#10E.G.
TWH 1	TANKLESS WATER HEATER	120	180 W					LO-31 3/4"C-2#10, 1#10E.G.
CP 1	CIRCUIT PUMP	120	180 W					LO-35 3/4"C-2#10, 1#10E.G.

NOTE :

1. FUSED/FUSED SIZE PER MANUFACTURER'S RECOMMENDATION. ELECTRICAL CONTRACTOR SHALL VERIFY PRIOR TO ROUGH-IN.

2. PROVIDE (1) 3/4" C.O. WITH PULL WIRE FROM EQUIPMENT LOCATION TO RESPECTIVE EQUIPMENT CONTROL DEVICE FOR CONTROL WIRING AS REQUIRED. REFER TO MECHANICAL FOR EXACT CONTROL LOCATION AND ADDITIONAL REQUIREMENTS PRIOR TO ROUGH-IN.

C17

EQUIPMENTS SCHEDULES

UNIT SERVICE LOAD CALCULATION

NEC	LOAD GROUP	Unit 1	Unit 2	Unit 3
	Area SQ. FT.	941	1395	1504
	GENERAL LIGHTING			
220.82(B)(1)	3X Area	2823	4185	4512
220.82(B)(2)	Small Appliance	3000	3000	3000
	Laundry Load (Washer)	1500	1500	1500
	General Lighting Subtotal	7323	8685	9012
220.82(B)(3)a	OTHER FIXED APPLIANCES			
	Garbage Disposer	1200	1200	1200
	Dishwasher	1200	1200	1200
	Microwave	1500	1500	1500
	Garage Door Opener	1200	1200	1200
	Total Fixed Appliance	5100	5100	5100
220.82(B)(3)b	COOKING LOAD			
	Electric Range	8000	8000	8000
	Total Cooking Load	8000	8000	8000
220.82(B)(3)c	LAUNDRY LOADS			
	Electric Clothes Dryer	5000	5000	5000
	Total Laundry Load	5000	5000	5000
220.82(B)(3)d	WATER HEATERS			
	Water Heater	4992	4992	4992
	TOTAL GENERAL LOAD	30415	31777	32104
	First 10KVA at 100%	10000	10000	10000
	Remainder at 40%	8166	8710.8	8841.6
	Subtotal General Load	18166	18710.8	18841.6
220.82(C)	HEATING AND AIR-CONDITIONING LOAD			
	Total CU/HP Load	2414	3028	3028
	Fancoil Unit/Air Handling Unit	882	882	882
	Total	3296	3910	3910
	OTHER LOADS			
	ADF	180	180	180
	EV Charger	10400	10400	10400
	Total Other Load	10580	10580	10580
	CALCULATED LOAD WITH DEMAND FACTOR	32042	33200.8	33331.6
	AMPS CALCULATIONS			
	Volt	208	208	208
	Phase	1	1	1
	Amps	155	160	161

BUILDING 1 6-PLEX SERVICE LOAD CALCULATION

NEC	Name	Unit 1	Unit 2	Unit 3	TOTAL
	Number of Units	2	2	2	6
	General Lighting Loads	14646	17370	18024	50040
220.82(B)(3)a	Fixed Appliance Loads	10200	10200	10200	30600
220.82(B)(3)b	Cooking Loads	16000	16000	16000	48000
220.82(C)	Air Conditioning Loads	6592	7820	7820	22232
220.82(B)(3)c	Electric Clothes Dryer	10000	10000	10000	30000
220.82(B)(3)d	Water Heaters	9984	9984	9984	29952
	Other Load	360	360	360	1080
	SUBTOTAL	67782	71734	72388	211904
	TOTAL	211904			
	Demand Factor (Table 220-84)	0.44			
	Demand Load	93238			
	Other Load (EV Charger)	62400	10400 VA per unit		
	House Load	20000			
	TOTAL LOAD	175638			
	Volts	208			
	Phase	3			
	Amps	488	600A - 120/208v, 3Ø4W service required		

BUILDING 2 6-PLEX SERVICE LOAD CALCULATION

NEC	Name	Unit 1	Unit 2	Unit 3	TOTAL
	Number of Units	2	2	2	6
	General Lighting Loads	14646	17370	18024	50040
220.82(B)(3)a	Fixed Appliance Loads	10200	10200	10200	30600
220.82(B)(3)b	Cooking Loads	16000	16000	16000	48000
220.82(C)	Air Conditioning Loads	6592	7820	7820	22232
220.82(B)(3)c	Electric Clothes Dryer	10000	10000	10000	30000
220.82(B)(3)d	Water Heaters	9984	9984	9984	29952
	Other Load	360	360	360	1080
	SUBTOTAL	67782	71734	72388	211904
	TOTAL	211904			
	Demand Factor (Table 220-84)	0.44			
	Demand Load	93238			
	Other Load (EV Charger)	62400	10400 VA per unit		
	House Load	20000			
	TOTAL LOAD	175638			
	Volts	208			
	Phase	3			
	Amps	488	600A - 120/208v, 3Ø4W service required		

BUILDING 3 5-PLEX SERVICE LOAD CALCULATION

NEC	Name	Unit 2	Unit 3	TOTAL
	Number of Units	3	2	5
	General Lighting Loads	26055	18024	44079
220.82(B)(3)a	Fixed Appliance Loads	15300	10200	25500
220.82(B)(3)b	Cooking Loads	24000	16000	40000
220.82(C)	Air Conditioning Loads	11730	7820	19550
220.82(B)(3)c	Electric Clothes Dryer	15000	10000	25000
220.82(B)(3)d	Water Heaters	14976	9984	24960
	Other Load	540	360	900
	SUBTOTAL	107601	72388	179989
	TOTAL	179989		
	Demand Factor (Table 220-84)	0.45		
	Demand Load	80995		
	Other Load (EV Charger)	52000	10400 VA per unit	
	House Load	20000		
	TOTAL LOAD	152995		
	Volts	208		
	Phase	3		
	Amps	425	600A - 120/208v, 3Ø4W service required	

BUILDING 4 4-PLEX SERVICE LOAD CALCULATION

NEC	Name	Unit 2	Unit 3	TOTAL
	Number of Units	2	2	4
	General Lighting Loads	17370	18024	35394
220.82(B)(3)a	Fixed Appliance Loads	10200	10200	20400
220.82(B)(3)b	Cooking Loads	16000	16000	32000
220.82(C)	Air Conditioning Loads	7820	7820	15640
220.82(B)(3)c	Electric Clothes Dryer	10000	10000	20000
220.82(B)(3)d	Water Heaters	9984	9984	19968
	Other Load	360	360	720
	SUBTOTAL	71734	72388	144122
	TOTAL	144122		
	Demand Factor (Table 220-84)	0.45		
	Demand Load	64855		
	Other Load (EV Charger)	41600	10400 VA per unit	
	House Load	20000		
	TOTAL LOAD	126455		
	Volts	208		
	Phase	3		
	Amps	352	400A - 120/208v, 3Ø4W service required	

LOAD CALCULATIONS

GOUVIS engineering consulting group, inc.

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REGISTERED PROFESSIONAL ENGINEER MEHR HOSSENZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
LOAD CALCULATIONS & EQUIPMENT SCHEDULES

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-0.7

ISSUED DATE:8/17/2022

PANEL "LO"

MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	MLO
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	3	BUS	200
FEED THRU	NO	I/G BUS	NO	WIRE	4	A.I.C.	22000

Wire Size	CIRC	LOCATION	A	B	C	LTG	CONV	KIT	RECP	MISC	BKR	NOTES		NOTES	BKR	MISC	RECP	KIT	CONV	LTG	A	B	C	LOCATION	CIRC	Wire Size
#12CU	1	BUILDING LTG 1	500								20/1				20/1						1000			SITE LTG 1	2	#10CU
#12CU	3	BUILDING LTG 2		500							20/1				20/1							1000		SITE LTG 2	4	#10CU
#12CU	5	RECREATION RM LTG			207						20/1				20/1								369	MAINT./OFFICE RM LTG	6	#12CU
#12CU	7	BREEZEWAY/ REST RM LTG	511								20/1				20/1						42			ELECTRICAL RM LTG	8	#12CU
	9	SPARE		0							20/1				20/1							182		EXTERIOR LTG	10	#12CU
#12CU	11	FIRE PIT			720						20/1	G		G	20/1								360	BBQ REC.	12	#12CU
#12CU	13	RECREATION ROOM REC.	900								20/1				20/1						720			OFFICE REC. 1	14	#12CU
#12CU	15	KITCHEN REC. #1		1500							20/1				20/1							540		OFFICE REC. 2	16	#12CU
#12CU	17	KITCHEN REC. #2			1500						20/1				20/1								720	LEASING OFFICE REC.	18	#12CU
#12CU	19	DISHWASHER	1200								20/1				20/1						720			COVERED OUT DOOR REC.	20	#12CU
#12CU	21	GARBAGE DISPOSAL		1200							20/1				20/1							540		BREEZEWAY REC.	22	#12CU
#12CU	23	ICE			1000						20/1				20/1								1500	REST RM REC.	24	#12CU
#12CU	25	ROLL DOOR	1200								20/1				20/1						200			BUILDING TIME CLOCK	26	#12CU
#12CU	27	CART CHARGER		1800							20/1				20/1							180		IRRIGATION	28	#12CU
#12CU	29	DRINKING FOUNTAIN			180						20/1				20/1								360	CATV CAB	30	#12CU
#10CU	31	T.W.H	180								20/1				20/1						1080			EXTERIOR REC.	32	#12CU
	33	SPARE		0							20/1				20/1							200		FACP	34	#12CU
#10CU	35	C.P			180						20/1				20/1								720	TS/FS	36	#12CU
#12CU	37	MAINTENANCE REC.	540								20/1				20/1						360			ELECTRICAL RM REC.	38	#12CU
#6CU	39	HP-48		2729							50/2				20/1							300		EF-M	40	#12CU
	41	--			2729						--				20/2								1248	HP-12	42	#12CU
#12CU	43	FC-48	633								15/2				--						1248			--	44	
	45	--		633							--				20/1							0		SPARE	46	
	47	SPARE			0						20/1				20/1								0	SPARE	48	
	49	SPARE	0								20/1				20/1						0			SPARE	50	
*	51	EV CAPABLE #1		3328		•					40/2				40/2					•		3328		EV CAPABLE #2	52	*
	53	--			3328	•					--				--					•			3328	--	54	

A = 11034 B = 17960 C = 18449

W/LCL A = 11034 W/LCL B = 19624 W/LCL C = 20113

TOTAL VA =	47443	W/ LCL =	50771	W/ LCL AMPS =	141	TOTAL LCL =	13312	x 0.25 =	3328		
HIGH PHASE VA =	18449	W/ LCL =	20113	HIGH PH AMPS =	168	HIGH PHASE LCL =	6656	x 0.25 =	1664		

KITCHEN DEMAND PER NEC 220-56	0 VA	x 0.65 =	0 VA		
NON-KITCHEN LOAD	50771 VA			KITCHEN DEMAND PER PHASE	
TOTAL	50771 VA	=	141 A	AT 120/208V - 3PH - 4W	11034 19624 20113

* REFER TO MANUFACTURER SPEC SHEET FOR EXACT ELECTRICAL REQUIREMENTS, WIRE AND BREAKER SIZE.

** FOR BUILDING 10 **

PANEL "HP10"

MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	MLO
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	1	BUS	100
FEED THRU	NO	I/G BUS	NO	WIRE	3	A.I.C.	22000

Wire Size	CIRC	LOCATION	A	B	LTG	CONV	KIT	RECP	MISC	BKR	NOTES		NOTES	BKR	MISC	RECP	KIT	CONV	LTG	A	B	LOCATION	CIRC	Wire Size
#12CU	1	BUILDING LTG. 1	500		•					20/1				20/1					•	1000		SITE LTG. 1	2	#10CU
#12CU	3	BUILDING LTG. 2		500	•					20/1				20/1					•		1000	SITE LTG. 2	4	#10CU
	5	SPACE	0											20/1						1540		ELEC. RM LTG./REC.	6	#12CU
#10CU	7	BUILDING REC.		1080						20/1				20/1					•		700	SIGNAGE	8	#12CU
#12CU	9	BUILDING TS/FS	720							20/1										0		SPACE	10	
#12CU	11	BUILDING FACP		200						20/1											0	SPACE	12	
#12CU	13	BUILDING TIME CLOCK	200							20/1										0		SPACE	14	
#12CU	15	IRRIGATION CONTROLLER		200						20/1											0	SPACE	16	
	17	SPACE	0																	0		SPACE	18	
	19	SPACE		0																	0	SPACE	20	

A = 3960 B = 3680

W/LCL A = 4335 W/LCL B = 4230

TOTAL VA =	7640	W/ LCL =	8565	W/ LCL AMPS =	42	TOTAL LCL =	3700	x 0.25 =	925		
HIGH PHASE VA =	3960	W/ LCL =	4335	HIGH PH AMPS =	36	HIGH PHASE LCL =	1500	x 0.25 =	375		

PANEL "PP"

MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	MLO
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	3	BUS	200
FEED THRU	NO	I/G BUS	NO	WIRE	4	A.I.C.	22000

Wire Size	CIRC	LOCATION	A	B	C	LTG	CONV	KIT	RECP	MISC	BKR	NOTES		NOTES	BKR	MISC	RECP	KIT	CONV	LTG	A	B	C	LOCATION	CIRC	Wire Size
#12CU	1	POOL LTG	221								20/1				20/1						900			POOL REC.	2	#12CU
	3	SPARE		0							20/1				20/1							0		SPARE	4	
	5	SPARE			0						20/1				20/1								0	SPARE	6	
	7	SPARE	0								20/1				20/1						0			SPARE	8	
	9	SPARE		0							20/1				20/1							0		SPARE	10	
	11	SPARE			0						20/1				20/1								0	SPARE	12	
	13	SPARE	0								20/1				20/1						0			SPARE	14	
	15	SPARE		0							20/1				20/1							0		SPARE	16	
	17	SPARE			0						20/1				20/1								0	SPARE	18	
	19	SPARE	0								20/1				20/1						0			SPARE	20	
	21	SPARE		0							20/1				20/1							0		SPARE	22	
	23	SPARE			0						20/1				20/1								0	SPARE	24	
	25	SPARE	0								20/1				20/1						0			SPARE	26	
	27	SPARE		0							20/1				20/1							0		SPARE	28	
	29	SPARE			0						20/1				20/1								0	SPARE	30	

A = 1121 B = 0 C = 0

W/LCL A = 1121 W/LCL B = 0 W/LCL C = 0

TOTAL VA =	1121	W/ LCL =	1121	W/ LCL AMPS =	4	TOTAL LCL =	0	x 0.25 =	0		
HIGH PHASE VA =	1121	W/ LCL =	1121	HIGH PH AMPS =	9	HIGH PHASE LCL =	0	x 0.25 =	0		

** TYPICAL FOR ALL BUILDING EXCEPT 10**

PANEL "HPX"

MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	MLO
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	1	BUS	100
FEED THRU	NO	I/G BUS	NO	WIRE	3	A.I.C.	22000

Wire Size	CIRC	LOCATION	A	B	LTG	CONV	KIT	RECP	MISC	BKR	NOTES		NOTES	BKR	MISC	RECP	KIT	CONV	LTG	A	B	LOCATION	CIRC	Wire Size
#12CU	1	BUILDING LTG. 1	500		•					20/1				20/1					•	1000		SITE LTG. 1	2	#10CU
#12CU	3	BUILDING LTG. 2		500	•					20/1				20/1					•		1000	SITE LTG. 2	4	#10CU
	5	SPACE	0											20/1						1540		ELEC. RM LTG./REC.	6	#12CU
#10CU	7	BUILDING REC.		1080						20/1											0	SPACE	8	
#12CU	9	BUILDING TS/FS	720							20/1										0		SPACE	10	
#12CU	11	BUILDING FACP		200						20/1											0	SPACE	12	
#12CU	13	BUILDING TIME CLOCK	200							20/1										0		SPACE	14	
#12CU	15	IRRIGATION CONTROLLER		200						20/1											0	SPACE	16	
	17	SPACE	0																	0		SPACE	18	
	19	SPACE		0																	0	SPACE	20	

A = 3960 B = 2980

W/LCL A = 3960 W/LCL B = 2980

TOTAL VA =	6940	W/ LCL =	6940	W/ LCL AMPS =	34	TOTAL LCL =	0	x 0.25 =	0		
HIGH PHASE VA =	3960	W/ LCL =	3960	HIGH PH AMPS =	33	HIGH PHASE LCL =	0	x 0.25 =	0		

PANEL INDEX

LO	PP
HP10	HPX

PANEL NOTES

"A"	AFCI PROTECTION TYPE CIRCUIT BREAKER
"G"	GFCI PROTECTION TYPE CIRCUIT RECEPTACLE
"B"	BACKFEED TYPE CIRCUIT BREAKE
"DF"	DUAL-FUNCTION AFCI/GFCI PROTECTION TYPE CIRCUIT BREAKER
"P"	SPACE PROVISION ONLY. NO BREAKER REQUIRED.
"PV"	SOLAR READY BY OTHERS

PANEL SCHEDULES

GOUVIS engineering consulting group, inc.

15 Studebaker
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CA 92618

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tel 760.323.5090

REGISTERED PROFESSIONAL ENGINEER MEHDI HOSSENZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
PANEL SCHEDULES

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-0.8

ISSUED DATE: 8/17/2022

C18

PANEL "P3"

MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	MLO
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	1	BUS	200
FEED THRU	NO	I/G BUS	NO	WIRE	3	A.I.C.	22000

	Wire Size	CIRC	LOCATION	A	B	LTG	CONV	KIT	RECP	MISC	BKR	NOTES		NOTES	BKR	MISC	RECP	KIT	CONV	LTG	A	B	LOCATION	CIRC	Wire Size	
	#14CU	1	GENERAL LTG 1	1318		●					15/1	A		A	15/1					●	1284		GENERAL LTG 2	2	#14CU	
	#14CU	3	GENERAL LTG 3		1146	●					15/1	A		A	15/1							0	SPARE	4		
		5	SPARE	0							15/1				15/1						0		SPARE	6		
	#12CU	7	SMALL APPLIANCES		1500						20/1	A,G		G	20/1							540	GARAGE REC	8	#12CU	
	#12CU	9	SMALL APPLIANCES	1500							20/1	A,G		G	20/1						1200		GARAGE DOOR	10	#12CU	
	#12CU	11	DISHWASHER		1200						20/1	A,G		A	20/1							1500	MICROWAVE	12	#12CU	
	#12CU	13	GARBAGE DISPOSAL	1200							20/1	A,G		A,G	20/1						1500		WASHER	14	#12CU	
	#12CU	15	BATH REC		1500						20/1	A,G		A,G	30/2							2500	ELECTRIC DRYER	16	#10CU	
	#14CU	17	MEDIA CAB	180							15/1				--						2500		--	18		
	#12CU	19	EXT. LTG & REC		216						15/1	G		A	50/2							4000	ELECTRIC RANGE	20	#6CU	
		21	SPARE	0							15/1				--						4000		--	22		
	#12CU	23	FC-24		217						15/2				25/2							1207	HP-24	24	#10CU	
		25	--	217							--				--						1207		--	26		
		27	SPARE		0						15/1			G	30/2							2496	ELECTRIC W.H.	28	#10CU	
		29	SPARE	0							15/1				--						2496		--	30		
		31	SPARE		0						15/1				15/1							0	SPARE	32		
		33	SPARE	0							15/1				15/1						0		SPARE	34		
		35	SPARE		0						15/1				15/1							0	SPARE	36		
**		37	EV CAPABLE	4160		●					50/2			PV							0		SOLAR READY CONTROLLER	38		***
		39	--		4160	●					--											0	--	40		

REFER TO RESPECTIVE DWELLING UNIT LOAD CALCULATIONS FOR FEEDER/PANEL LOAD JUSTIFICATION
** REFER TO MANUFACTURER SPEC SHEET FOR EXACT ELECTRICAL REQUIREMENTS, WIRE AND BREAKER SIZE.
*** COORDINATE WITH SOLAR CONSULTANT FOR EXACT CIRCUIT BREAKER SIZE. CONTRACTOR IS RESPONSIBLE TO SIZE THE PANEL BUS BAR PER NEC 705.12.

PANEL "P3"

MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	MLO
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	1	BUS	200
FEED THRU	NO	I/G BUS	NO	WIRE	3	A.I.C.	22000

	Wire Size	CIRC	LOCATION	A	B	LTG	CONV	KIT	RECP	MISC	BKR	NOTES		NOTES	BKR	MISC	RECP	KIT	CONV	LTG	A	B	LOCATION	CIRC	Wire Size	
	#14CU	1	GENERAL LTG 1	1220		●					15/1	A		A	15/1					●	1200		GENERAL LTG 2	2	#14CU	
	#14CU	3	GENERAL LTG 3		1392	●					15/1	A		A	15/1					●		1116	GENERAL LTG 4	4	#14CU	
	#14CU	5	GENERAL LTG 5	882		●					15/1				15/1						0		SPARE	6		
	#12CU	7	SMALL APPLIANCES		1500						20/1	A,G		G	20/1							540	GARAGE REC	8	#12CU	
	#12CU	9	SMALL APPLIANCES	1500							20/1	A,G		G	20/1						1200		GARAGE DOOR	10	#12CU	
	#12CU	11	DISHWASHER		1200						20/1	A,G		A	20/1							1500	MICROWAVE	12	#12CU	
	#12CU	13	GARBAGE DISPOSAL	1200							20/1	A,G		A,G	20/1						1500		WASHER	14	#12CU	
	#12CU	15	BATH REC		1500						20/1	A,G		A,G	30/2							2500	ELECTRIC DRYER	16	#10CU	
	#14CU	17	MEDIA CAB	180							15/1				--						2500		--	18		
	#12CU	19	EXT. LTG & REC		456	●					20/1	G		A	50/2							4000	ELECTRIC RANGE	20	#6CU	
		21	SPARE	0							15/1				--						4000		--	22		
	#12CU	23	FC-30		217						15/2				30/2							1514	HP-30	24	#10CU	
		25	--	217							--				--						1514		--	26		
		27	SPARE		0						15/1			G	30/2							2496	ELECTRIC W.H.	28	#10CU	
		29	SPARE	0							15/1				--						2496		--	30		
		31	SPARE		0						15/1				15/1							0	SPARE	32		
		33	SPARE	0							15/1				15/1						0		SPARE	34		
		35	SPARE		0						15/1				15/1							0	SPARE	36		
**		37	EV CAPABLE	4160		●					50/2			PV							0		SOLAR READY CONTROLLER	38		***
		39	--		4160	●					--											0	--	40		

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PANEL "P3"

MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	MLO
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	1	BUS	200
FEED THRU	NO	I/G BUS	NO	WIRE	3	A.I.C.	22000

	Wire Size	CIRC	LOCATION	A	B	LTG	CONV	KIT	RECP	MISC	BKR	NOTES		NOTES	BKR	MISC	RECP	KIT	CONV	LTG	A	B	LOCATION	CIRC	Wire Size	
	#14CU	1	GENERAL LTG 1	1268		●					15/1	A		A	15/1					●	1440		GENERAL LTG 2	2	#14CU	
	#14CU	3	GENERAL LTG 3		1164	●					15/1	A		A	15/1					●		1062	GENERAL LTG 4	4	#14CU	
		5	SPARE	0							15/1				15/1						0		SPARE	6		
	#12CU	7	SMALL APPLIANCES		1500						20/1	A,G		G	20/1							540	GARAGE REC	8	#12CU	
	#12CU	9	SMALL APPLIANCES	1500							20/1	A,G		G	20/1						1200		GARAGE DOOR	10	#12CU	
	#12CU	11	DISHWASHER		1200						20/1	A,G		A	20/1							1500	MICROWAVE	12	#12CU	
	#12CU	13	GARBAGE DISPOSAL	1200							20/1	A,G		A,G	20/1						1500		WASHER	14	#12CU	
	#12CU	15	BATH REC		1500						20/1	A,G		A,G	30/2							2500	ELECTRIC DRYER	16	#10CU	
	#14CU	17	MEDIA CAB	180							15/1				--						2500		--	18		
	#12CU	19	EXT. LTG & REC		198	●					20/1	G		A	50/2							4000	ELECTRIC RANGE	20	#6CU	
		21	SPARE	0							15/1				--						4000		--	22		
	#12CU	23	FC-30		217						15/2				30/2					●		1514	HP-30	24	#10CU	
		25	--	217							--				--					●	1514		--	26		
		27	SPARE		0						15/1			G	30/2							2496	ELECTRIC W.H.	28	#10CU	
		29	SPARE	0							15/1				--						2496		--	30		
		31	SPARE		0						15/1				15/1							0	SPARE	32		
		33	SPARE	0							15/1				15/1						0		SPARE	34		
		35	SPARE		0						15/1				15/1							0	SPARE	36		
**		37	EV CAPABLE	4160		●					50/2			PV							0		SOLAR READY CONTROLLER	38		***
		39	--		4160	●					--											0	--	40		

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PANEL INDEX

P1	P2
P3	

PANEL NOTES

"A" AFCI PROTECTION TYPE CIRCUIT BREAKER
"G" GFCI PROTECTION TYPE CIRCUIT RECEPTACLE
"B" BACKFEED TYPE CIRCUIT BREAKE
"DF" DUAL-FUNCTION AFCI/GFCI PROTECTION TYPE CIRCUIT BREAKER
"P" SPACE PROVISION ONLY. NO BREAKER REQUIRED.
"PV" SOLAR READY BY OTHERS

C19

ISSUED DATE:8/17/2022

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STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
PANEL SCHEDULES

PROJECT NUMBER:
66235
ENGINEER:
DRAFTER:
SHEET NUMBER:
E-0.9

GENERAL NOTES - LIGHTING FIXTURE/SCHEDULE

1. ALL LIGHTING FIXTURES SHALL BE LABELED WITH THE APPROPRIATE UL LABEL (DAMP, WET, ETC) AS REQUIRED BY CODES AND LOCAL ORDINANCES.

2. SHOP DRAWING SUBMITTALS SHALL INCLUDE ALL FIXTURES, LAMPS, AND BALLAST INFORMATION. ANY SHOP DRAWINGS WHICH ARE SUBMITTED. WITHOUT ANY ONE OF THESE ITEMS WILL BE REJECTED AS INCOMPLETE AND WILL BE REQUIRED TO BE RESUBMITTED WITH THE REQUIRED INFORMATION.

3. ALL LIGHTING FIXTURE SPECIFIC INFORMATION (TYPE, CLAMP, BALLAST, COLOR, MOUNTING, ETC.) HAS BEEN SPECIFIED WITH THE CONSIDERATION OF SPECIFIC PERFORMANCE AND AESTHETIC REQUIREMENTS. ANY SUBSTITUTION OF THE SPECIFIED FIXTURES IS SUBJECT TO THE ARCHITECT AND ENGINEER OF RECORD'S FINAL APPROVAL AND ARE SUBJECT TO THE FOLLOWING CRITERIA:

   a. SUBMIT AN OPERABLE SAMPLE WITH THE SPECIFIED LAMP/BALLAST COMBINATION AND A 120V CORD AND PLUG.

   b. SITE LIGHTING FIXTURES - PROVIDE A COMPLETE PHOTOMETRIC REPORT WHICH INCLUDES THE FOLLOWING INFORMATION ON THE SITE PLAN, WHICH CLEARLY IDENTIFIES FOOT-CANDLE LEVELS. PLAN IS TO INCLUDE ALL INPUT DATA UTILIZED IN THE CALCULATION (LAMP/BALLAST TYPE, LAMP LUMENS, LIGHT LOSS FACTOR, ETC.). IN SITUATIONS WHERE SUBSTITUTIONS AFFECT FIXTURES EQUIPPED WITH EMERGENCY BATTERY, PACKS, OR OTHER EMERGENCY SOURCES OF POWER, PROVIDE ADDITIONAL PHOTOMETRIC REPORT(S) WHICH CLEARLY IDENTIFY A MINIMUM 1.0 FOOT-CANDLES ALONG THE PATH(S) OF EGRESS - THIS REPORT SHALL ALSO INCLUDE ALL INPUT DATA UTILIZED IN THE CALCULATIONS (FOR FIXTURES UTILIZING AN EMERGENCY BATTERY PACK INCLUDE THE LUMEN RATING AND QUANTITY OF LAMPS FOR THE EMERGENCY BATTERY PACK). SEE BELOW FOR PHOTOMETRIC PLAN GUIDELINES:

      1) POINT BY POINT SPACING IS NOT TO EXCEED 10'-0" IN ANY DIRECTION.
      2) PHOTOMETRIC STUDY IS TO BE BASED ON A MAINTAINED FOOT-CANDLE LEVEL USING MEAN LAMP LUMENS AND THE SAME LIGHT LOSS FACTORS USED IN THE ORIGINAL DESIGN CALCULATIONS PERFORMED BY THE ENGINEER OF RECORD.
      3) ASSOCIATED REPORT TO INCLUDE AN ENERGY COST MODEL WHICH IDENTIFIES ADDITIONAL ENERGY OR ENERGY COSTS FOR A 10-YEAR PERIOD AS COMPARED TO THE SPECIFIED ITEM. ALL ADDITIONAL EXPENSES WILL BE SUBTRACTED FROM THE CONTRACT COST.

   c. INTERIOR LIGHTING FIXTURES - SPECIFIC INTERIOR FIXTURES AS DETERMINED BY THE ENGINEER OF RECORD WILL REQUIRE SUPPLEMENTAL PHOTOMETRIC REPORTS CONFIRMING SUBSTITUTE FIXTURE LIGHT LEVELS EQUAL OR EXCEED DESIGNED LIGHT LEVELS IN SPACES IDENTIFIED. IF THE SUBSTITUTED FIXTURE IS AN EMERGENCY FIXTURE A PHOTOMETRIC REPORT SHALL BE SUBMITTED FOR ALL PATHS OF EGRESS WHICH CLEARLY IDENTIFIES 1.0 MINIMUM FOOT-CANDLES ALONG THE PATH. IN ADDITION, TEST SWITCH MOUNTING (INTEGRAL OR REMOTE) SHALL MATCH THE MOUNTING AS SPECIFIED ON THE DESIGN DOCUMENTS - CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED COVER PLATES, TRIMS, REFLECTORS, ETC NECESSARY FOR THE SPECIFIC TEST SWITCH MOUNTING. ALL REPORTS SHALL INCLUDE INPUT DATA UTILIZED IN THE CALCULATIONS (FOR FIXTURES UTILIZING AN EMERGENCY BATTERY PACK INCLUDE THE LUMEN RATING AND QUANTITY OF LAMPS FOR THE EMERGENCY BATTERY PACK).

      1) PHOTOMETRIC STUDY IS TO BE BASED ON A MAINTAINED FOOT-CANDLE LEVEL USING MEAN LAMP LUMENS AND THE SAME LIGHT LOSS FACTORS USED IN THE ORIGINAL DESIGN CALCULATIONS PERFORMED BY THE ENGINEER OF RECORD.

   d. MANUFACTURER'S CATALOG CUT SHEET WHICH INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING INFORMATION: 1) LAMP TYPES AND QUANTITIES; BALLAST OPTIONS; 3) VOLTAGES; 4) EPA RATING (WHERE APPLICABLE); 5) FIXTURE DIMENSIONS; 5) EMERGENCY BATTERY PACK AND TEST SWITCH OPTIONS (WHERE APPLICABLE); AND 6) FIXTURE FINISHES.

   e. FOR ALL SITE LIGHTING FIXTURES PROVIDE POLE SPECIFICATIONS WITH SUPPLEMENTAL DOCUMENTATION IDENTIFYING POLE SIZE IS RATED ACCORDINGLY BASED ON FIXTURE(S) EPA AND A WIND RATING FOR THE PROJECT ZONE.

   f. A SIGNED COPY OF THE "SUBSTITUTION COMPLIANCE FORM" LOCATED IN THE DIVISION 1 SPECIFICATION WHICH STATES THAT IF THE PROPOSED SUBSTITUTION IS ACCEPTED, THEN THE PROJECT SCHEDULE WILL NOT BE NEGATIVELY AFFECTED. IF THE COMPLETION OF THE PROJECT IS DELAYED DUE TO THE PROPOSED SUBSTITUTION THEN THE ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL ESTABLISHED LIQUIDATED DAMAGES.

   g. CONTRACTOR TO PROVIDE ARCHITECT AND ENGINEER OF RECORD WITH ALL SUBSTITUTE INFORMATION REFERENCED ABOVE NO LATER THAN TWO WORKING WEEKS PRIOR TO THE BID DEADLINE.

4. CATALOG NUMBERS AS REFERENCED ON THE FIXTURE SCHEDULE PROVIDE GENERAL FIXTURE INFORMATION. CONTRACTOR SHALL REVIEW LIGHTING PLANS AND SPECIFICATIONS TO VERIFY ALL FIXTURE ASSOCIATED DESIGN INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY PARTS AND PIECES REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION. ANY DISCREPANCIES BETWEEN DESCRIPTIONS, SPECIFICATIONS, AND CATALOG NUMBERS ARE TO BE PRESENTED TO THE ENGINEER OF RECORD PRIOR TO COMPLETION OF THE BID PROCESS FOR CLARIFICATION.

5. ALL COLOR SPECIFIC INFORMATION WHICH RELATES TO LIGHTING FIXTURES AND/OR THEIR RELATED PARTS ARE TO BE REVIEWED AND COMMENTED ON BY THE ARCHITECT. FIXTURES WHICH REQUIRE A CUSTOM COLOR WILL HAVE A CUSTOM COLOR PAINT WHICH WILL BE INCLUDED IN THE ARCHITECT'S SHOP DRAWING REVIEW COMMENTS.

6. ALL LIGHTING EQUIPMENT LOCATIONS ARE TO BE COORDINATED WITH THE ARCHITECTURAL REFLECTED CEILING PLAN PRIOR TO ORDERING AND INSTALLING.

7. ALL FIXTURES TO BE MOUNTED IN FIRE RATED CEILINGS ARE TO BE PROVIDED AND INSTALLED WITH AN APPROVED FIRE RATED ENCLOSURE.

8. ENSURE COMPATIBILITY OF ALL DIMMING SYSTEM AND INDIVIDUAL LIGHTING CONTROLS WITH LAMPS, BALLASTS, AND FIXTURES. ALL COMPONENTS ARE TO BE FACTORY CERTIFIED COMPATIBLE FOR A FULL RANGE OF DIMMING

9. LIGHTING FIXTURE CLEARANCES FROM COMBUSTIBLE MATERIALS ARE TO BE A MINIMUM OF 1/2" (OTHER THAN AT POINTS OF SUPPORT) AND 3" FROM INSULATION FOR NON-IC RATED RECESSED LIGHTING FIXTURES.

10. ALL LIGHTING FIXTURES TO BE MOUNTED IN A SUSPENDED CEILING ARE TO BE SUPPORTED BY T-BAR CLIPS AND (2)#12 SUPPORT WIRES ATTACHED TO THE BUILDING FRAME. IN ADDITION, LIGHTING FIXTURES ARE TO BE SECURED TO THE CEILING GRID WITH (4) SHEET METAL SCREWS ((1) AT EACH CORNER OF THE FIXTURE) - SCREWS SHALL BE NEITHER VISIBLE NOR IMPEDE THE INSTALLATION OF CEILING TILES.

11. ALL LIGHTING FIXTURES WHICH ARE TO BE MOUNTED IN FOOD SERVICE AREAS SHALL BE PROVIDED WITH THE FOLLOWING CHARACTERISTICS: DOOR TO FRAME GASKETS; LENS TO FRAME GASKETS; INVERTED LENS; AND A FOOD SERVICE RATING.

12. ALL FIXTURES, TRIMS, AND LAMPS SHALL BE CLEANED AND FREE FROM DIRT, DUST, LABEL/ADHESIVE, AND FINGER PRINTS.

13. FIXTURES REFERENCED ON THE PLANS TO BE WIRED IN TANDEM (MASTER/SATELLITE) ARE TO BE INSTALLED FOLLOWING THE GUIDELINES REFERENCED BELOW :

   a. FIXTURES ARE TO BE PROVIDED WITH MULTIPLE BALLASTS AS REQUIRED. FIXTURES TO BE PROVIDED WITH FACTORY SPECIFIED AND INSTALLED WIRING HARNESS OF LENGTHS SPECIFIED ON THE PLANS. ALL AREAS WITH TANDEM FIXTURES ARE TO BE PROVIDED WITH THE REQUIRED QUANTITY AND TYPE OF CONTROL DEVICES AS INDICATED ON PLANS.

   b. 3-LAMP FIXTURES TO BE TANDEM WIRED WITH ELECTRONIC BALLAST CONFIGURATIONS AS FOLLOWS:

      1) "M" REFERENCES A MASTER FIXTURE WHICH IS TO PROVIDED WITH (1) 4-LAMP BALLAST WHICH CONTROLS THE OUTBOARD LAMPS; AND (1) 2-LAMP BALLAST WHICH CONTROLS THE INBOARD LAMPS - OF BOTH THE MASTER ("M") AND THE SATELLITE ("S") FIXTURES.

      2) "S" REFERENCES A SATELLITE FIXTURE WHICH IS CONNECTED TO THE MASTER ("M") FIXTURE VIA FACTORY PROVIDED WIRING HARNESS OR WHIP.

      3) "O" REFERENCES AN ODD FIXTURE WHICH IS TO BE PROVIDED WITH (1) 2-LAMP BALLAST WHICH CONTROLS THE OUTBOARD LAMPS; AND (1) 1-LAMP BALLAST WHICH CONTROLS THE INBOARD LAMP.

      4) FIXTURES DESIGNATED AS "EMERGENCY" ARE TO BE PROVIDED WITH THE APPROPRIATE EMERGENCY BATTERY PACK (SEE EMERGENCY BATTERY PACK SPECS BELOW) AND ARE TO BE FED WITH SPECIFIED SWITCH LEGS, AS WELL AS A CONSTANT HOT CIRCUIT. EM BATTERY PACK IS TO BE MOUNTED IN THE MASTER FIXTURE.

      5) CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE APPROPRIATE LAMP AND BALLAST TYPE AND QUANTITY BASED ON THE FIXTURE SPECIFICATION AND SWITCHING CONFIGURATIONS.

14. EMERGENCY LIGHTING FIXTURES AND BATTERY PACKS ARE TO BE PROVIDED BASED ON FOLLOWING THE CRITERIA:

   a. FIXTURES SPECIFIED WITH INTEGRAL EMERGENCY BATTERY PACKS ARE TO BE FED USING THE FOLLOWING GUIDELINES:

      1a,1* - FOR EMERGENCY FIXTURES SPECIFIED WITH AN EMERGENCY BATTERY PACK REPRESENTS A FIXTURE WITH A NORMAL BALLAST TO BE CONNECTED TO SWITCH LEG "a" AND AN EMERGENCY BALLAST TO BE CONNECTED TO A CONSTANT HOT LEG "1" (CONSTANT HOT CIRCUITS ARE TO BE TAPPED AHEAD OF AN TIME CLOCK /PHOTO CELL CONTROLLED DEVICES).

      1* - REPRESENTS ONE OF THE FOLLOWING FIXTURE TYPES WHICH ARE TO BE CONNECTED TO A CONSTANT HOT CIRCUIT "1": a) NORMAL FIXTURE DESIGNATED AS A NIGHT LIGHT (NL); b) EXIT SIGN(S); AND/OR c) AN EMERGENCY FIXTURE EQUIPPED WITH AN EMERGENCY FIXTURE DESIGNATED AS A NIGHT LIGHT (NL); b) EXIT SIGN(S); AND/OR c) AN EMERGENCY FIXTURE EQUIPPED WITH AN EMERGENCY TIME-CLOCK/PHOTO-CELL CONTROLLED DEVICES)

   b. EMERGENCY BATTERY PACKS SHALL BE PROVIDED AND INSTALLED AS FOLLOWS:

LED LAMPS:

BODINE #BSL23 OR #BSL722 OR EQUAL IF AVAILABLE

NOTE: ALL LED FIXTURES EQUIPPED WITH EMERGENCY BATTERY PACKS SHALL HAVE THE BATTERY PACKS FACTORY INSTALLED AND TESTED AT THE FIXTURE MANUFACTURER'S FACILITY TO ENSURE UL LISTING OF THE FIXTURE IS MAINTAINED. FIELD INSTALLATION OF LED EMERGENCY BATTERY PACKS IS STRICTLY PROHIBITED. NOTIFY ENGINEER OF RECORD SHOULD SPECIFIED FIXTURE NOT HAVE ADEQUATE SPACE TO ACCOMMODATE THE EMERGENCY BATTERY PACK. CONTRACTOR TO MODIFY BASE BID TO INCLUDE ALL NECESSARY EQUIPMENT FOR A COMPLETE AND OPERATIONAL, ADEQUATELY SIZED MINIATURE INVERTER SYSTEM TO BE MOUNTED IN NEAREST ELECTRICAL ROOM IN THE EVENT THE BATTERY PACK CAN NOT BE INSTALLED IN THE FIXTURE.

NOTE: ALL BATTERY PACKS ARE TO BE FACTORY INSTALLED IN FIXTURE ASSEMBLIES WHEN APPLICABLE. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONTACTING FIXTURE MANUFACTURERS TO VERIFY SPECIFIED (OR APPROVED SUBSTITUTE) FIXTURE HAS ADEQUATE SPACE WITHIN THE FIXTURE TO MOUNT THE EMERGENCY BATTERY PACK. IF IT IS DETERMINED THE BATTERY PACK CANNOT BE MOUNTED IN THE FIXTURE THEN CONTRACTOR SHALL INCLUDE ALL COSTS REQUIRED FOR REMOTE MOUNTING THE EMERGENCY BATTERY PACK ABOVE NEAREST ACCESSIBLE CEILING. ENSURE DISTANCE FROM FIXTURE TO REMOTE BATTERY PACK LOCATION DOES NOT EXCEED THE MANUFACTURER'S RECOMMENDED DISTANCES. COORDINATE ALL ACCESS PANELS WITH ARCHITECT OF \ RECORD PRIOR TO INSTALL.

c. ALL LIGHTING FIXTURES WITH EMERGENCY BATTERY PACKS ARE TO BE PROVIDED WITH INTEGRAL TEST SWITCHES AND CHARGE LIGHTS UNLESS OTHERWISE NOTED OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION (AHJ). IN THE EVENT INTEGRAL TEST SWITCHES ARE NOT ALLOWED NOTIFY ENGINEER OF RECORD PRIOR TO INSTALLATION OF REMOTE TEST SWITCHES. TEST SWITCHES TO BE INSTALLED IN FIXTURES WITH A MINIMUM OF 18" OF ADDITIONAL WIRING TO ALLOW FOR GENERAL FIXTURE MAINTENANCE.

15. INSTALL ALL EXIT SIGNS IN ACCORDANCE WITH THE LOCAL AHJ AND FIRE AUTHORITY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED PARTS, PIECES, AND MOUNTING HARDWARE FOR EXIT SIGNS, AS WELL AS, ENSURING THE EXIT SIGNS ARE MOUNTED IN AN APPROVED VISIBLE LOCATION. VERIFY ALL REQUIRED CHEVRONS, MIRRORS, AND FACES AS REFERENCED ON THE ARCHITECTURAL REFLECTED CEILING PLAN. NOTIFY ARCHITECT AND ENGINEER OF RECORD OF ANY DISCREPANCIES BETWEEN ARCHITECTURAL AND ELECTRICAL DRAWINGS PRIOR TO ORDERING OF EQUIPMENT.

16. TRACK LIGHTING FIXTURE SPECIFICATIONS ARE TO BE COORDINATED, VERIFIED AND CONFIRMED WITH EQUIPMENT MANUFACTURER AND/OR DISTRIBUTOR PRIOR TO ORDERING AND INSTALLING CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY PARTS AND PIECES FOR A COMPLETE, FUNCTIONAL AND OPERATIONAL INSTALLATION. TRACK LENGTHS ARE AS SPECIFIED ON THE FIXTURE SCHEDULE.

17. CONTRACTOR SHALL INSTALL ALL LIGHTING FIXTURES PER LOCAL AND NATIONAL BUILDING, ELECTRICAL AND SEISMIC CODES. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED MOUNTING HARDWARE AND BRACING MATERIALS FOR COMPLETE AND CODE COMPLIANT INSTALLATION. COORDINATE REQUIREMENTS WITH AUTHORITY HAVING JURISDICTION PRIOR TO INSTALLATION.

18. CONTRACTOR SHALL COORDINATE ALL LIGHTING FIXTURE LOCATIONS AND QUANTITIES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. IN ADDITION, CONTRACTOR SHALL ALSO COORDINATE ANY FIXTURE SPECIFIC DIMENSIONS WITH ARCHITECTURAL RCP. NOTIFY ARCHITECT AND ENGINEER OF RECORD OF ANY DISCREPANCIES PRIOR TO FINALIZING FIXTURE ORDER WITH THE DISTRIBUTOR.

19. CONTRACTOR TO INCLUDE IN BASE BID A MINIMUM OF 2-HOURS FOR A ONE TIME AIMING AND ADJUSTMENT TIME OF ALL MULTI-HEAD AND DIRECTIONAL FIXTURE ASSEMBLIES. AIMING AND ADJUSTMENT TO BE SCHEDULED FOR AT NIGHT AND AFTER HOURS WITH THE ARCHITECT, ENGINEER, AND OWNER PRESENT. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AN APPROPRIATE TIME PRIOR TO ORDERING THE FINAL PUNCH WALK FOR THE PROJECT.

20. SUPPLEMENTARY OVERCURRENT PROTECTION PANEL FOR TRACK LIGHTING SYSTEMS TO BE PROMINENTLY LABELED AS FOLLOWS:

NOTICE: THIS PANEL FOR TRACK LIGHTING ENERGY CODE COMPLIANCE ONLY. THE OVERCURRENT PROTECTION DEVICES IN THIS PANEL SHALL ONLY BE REPLACED WITH THE SAME OR LOWER AMPERAGE. NO OTHER OVERCURRENT PROTECTIVE DEVICE SHALL BE ADDED TO THIS PANEL. ADDING TO, OR REPLACEMENT OF EXISTING OVERCURRENT PROTECTIVE DEVICE(S) WITH HIGHER CONTINUOUS AMPERE RATING, WILL VOID THE PANEL LISTING AND REQUIRE RESUBMITTAL AND RE-CERTIFICATION OF CALIFORNIA TITLE 24, PART 6 COMPLIANCE DOCUMENTATION.

LIGHTING CONTROL SYSTEM REQUIREMENTS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FURNISHING OF ALL MATERIAL, LABOR, EQUIPMENT, AND SERVICES, IN CONNECTION WITH THE INSTALLATION OF A COMPLETE LIGHTING CONTROL SYSTEM AND CODE COMPLIANT INSTALLATION.

2. IT IS THE INTENT OF THE CONTRACT DOCUMENTS, WHICH ARE PRESENTED IN A DIAGRAMMATIC FORMAT, TO PROVIDE CONTRACTOR INFORMATION THAT SUPPLEMENTS AND ENHANCES THE GENERALLY ACCEPTED CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES EMPLOYED IN CONNECTION WITH INSTALLATION OF THIS TYPE OF PRODUCT / SYSTEM.

3. THE CONTRACTOR SHALL ALSO INCORPORATE THE REQUIREMENTS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS / WARRANTY REQUIREMENTS AS PART OF THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS. IN THE EVENT OF A CONFLICT BETWEEN THE CONTRACT DOCUMENT REQUIREMENTS AND THE MANUFACTURERS INSTALLATION REQUIREMENTS, THE MORE STRINGENT REQUIREMENTS SHALL APPLY - UNLESS THE MORE STRINGENT REQUIREMENT VOIDS APPLICABLE WARRANTIES OR VIOLATES THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION. ANY SUCH CONFLICT SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING THROUGH THE FORMAL RFI PROCESS.

4. REFER TO THE ASSOCIATED SCHEDULES, SCHEMATICS, DRAWINGS, AND SPECIFICATIONS FOR DETAILED INFORMATION / REQUIREMENTS ON THIS PRODUCT / SYSTEM.

5. THE LIGHTING CONTROL PANEL (LCP) SYSTEM SHALL BE LEVITON.

6. LIGHTING CONTROL SYSTEM MUST INTEGRATE WITH DISTRICT APPROVED ENERGY MANAGEMENT SYSTEM.

GENERAL NOTES

PER SECTION 130.0 (C) ALL OUTDOOR LIGHTING SHALL BE HIGH EFFICACY AND CONTROLLED BY MANUAL ON/OFF SWITCH AND ONE OF THE CHOICES BELOW.

1. OUTDOOR PHOTOCELL (NOT REQUIRED IF TIME CLOCK DOES ASTRONOMICAL)
2. TIME CLOCK FOR SCHEDULING
3. MOTION SENSING CONTROLS FOR LIGHT LESS THAN OR EQUAL TO 24FIT

- CAPABLE OF REDUCING POWER BY 50% - 90%, AND SEPARATELY TURNING OFF
- 15 MINUTES MAX OF VACANCY, MUST GO TO DIMMER OR OFF STATE (HIGH / LOW)
- EXCEPTIONS: LUMINARIES LESS THAN OR EQUAL TO 40W; BUILDING FACADE, ORNAMENTAL, OUTDOOR DINING, OUTDOOR SALES FRONTAGE LIGHTING

EXCEPTIONS: PER SECTION 140.7 LIGHTING FOR PUBLIC STREET.

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REGISTERED PROFESSIONAL ENGINEER
MERIO HOSSENZADEH
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ELECTRICAL
STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
SITE LIGHTING NOTES

PROJECT NUMBER:
66235

ENGINEER:
DRAFTER:

SHEET NUMBER:
E-1.0

C20

ISSUED DATE:8/17/2022

KEYED NOTES

1. DENOTES APPROXIMATE LOCATION OF JUNCTION BOX OR CHRISTY N09 PULL BOX FOR CONNECTION TO ELECTRIC VEHICLE CHARGING STATION. VERIFY EXACT LOCATION WITH ARCHITECTURAL PLANS AND OWNER BEFORE ROUGH-IN.
2. DENOTES APPROXIMATE LOCATION OF JUNCTION BOX OR CHRISTY N09 PULL BOX FOR CONNECTION TO GATE MOTOR/CALL POST. VERIFY EXACT LOCATION WITH ARCHITECTURAL PLANS AND OWNER BEFORE ROUGH-IN.

GENERAL NOTES

(TYPICAL) CONDUIT DEPTH SHALL BE A MINIMUM 3'-6" BFG (I.E. BELOW FROSTLINE) U.O.N., COORDINATE DEPTH WITH PAVING DETAILS.

REFER TO SITE-CIVIL DRAWINGS FOR TELEPHONE AND COMMUNICATIONS COMPANY CONTACT INFORMATION

USE RIGID GALVANIZED SLEEVES UNDER VEHICLE TRAFFIC AREAS. EXTEND SLEEVES 5'-0" BEYOND THE PAVED VEHICLE TRAFFIC AREAS.

CONTRACTOR SHALL FIELD COORDINATE (ON-SITE) PRIOR TO CONSTRUCTION WITH ELECTRIC UTILITY, TELEPHONE UTILITY AND CABLE TV UTILITY TO FIELD COORDINATE EXACT UTILITY REQUIREMENTS.

ROUTINGS ARE DIAGRAMMATIC. FIELD COORDINATE EXACT ROUTINGS WITH SITE CIVIL CONTRACTOR, PRIOR TO CONSTRUCTION, TO AVOID UNDERGROUND UTILITIES, OBSTACLES, ETC. AS REQUIRED.

REFER TO SITE CIVIL PLANS FOR UNDERGROUND UTILITIES, PIPING, STRUCTURES, RIGHT OF WAYS, PROPERTY LINES, ETC. CONTRACTOR SHALL PATCH AND REPAIR ALL SURFACES DISTURBED TO MATCH NEW, ADJACENT SURFACES UNLESS OTHERWISE NOTED. FIELD COORDINATE UNDERGROUND ROUTINGS WITH STIE CIVIL CONTRACTOR, PRIOR TO CONSTRUCTION, TO MINIMIZE PATCH AND REPAIR WORK.

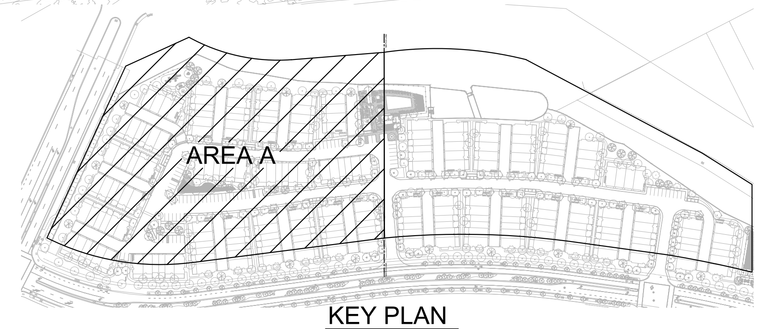
BURY GROUNDING ELECTRODE CABLE A MINIMUM OF 30" B.F.G. PER NEC.

BURY COMMUNICATIONS CONDUITS A MINIMUM OF 3'-0" BFG (I.E. BELOW FROSTLINE) U.O.N.

PRIOR TO CONSTRUCTION, COORDINATE WITH CIVIL CONTRACTOR WHERE NECESSARY TO PROVIDE FINAL GRADING COVER AT POLE BASE FOUNDATIONS, BURIED CONDUITS, ETC. FOR SUFFICIENT GROUND COVER WHERE TOPOGRAPHY DROPS OFF STEEPLY AT EDGES OF ROADWAYS FOR DETENTION BASINS, ETC.

ORIENT LIGHTING POLES HANDHOLES ON THE OPPOSITE SIDE (NON-TRAFFIC SIDE) OF PAVED ROADWAYS/PARKING AREAS U.O.N.

CONTRACTOR SHALL USE LONG RADIUS BENDS FOR ALL COMMUNICATION/SECURITY ELECTRONICS (I.E. FIBER OPTIC CABLING) CONDUITS. MINIMIZE BENDS BETWEEN PULL POINTS TO NO MORE THAN THREE (3) 90 DEGREE BENDS; COORDINATE/COMPLY WITH CABLING MANUFACTURERS PULLING TENSION REQUIREMENTS PRIOR TO INSTALLATION.



KEY PLAN

NORTH

0 15' 30' 60' 90'
1/30" = 1'-0"

SITE UTILITY PLAN - AREA A

GOUVIS engineering consulting group, inc.

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REGISTERED PROFESSIONAL ENGINEER MEHRI HOSSENZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
SITE UTILITY PLAN AREA A

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-1.1

C21

ISSUED DATE 8/17/2022

KEYED NOTES

1. DENOTES APPROXIMATE LOCATION OF JUNCTION BOX OR CHRISTY N09 PULL BOX FOR CONNECTION TO ELECTRIC VEHICLE CHARGING STATION. VERIFY EXACT LOCATION WITH ARCHITECTURAL PLANS AND OWNER BEFORE ROUGH-IN.
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(TYPICAL) CONDUIT DEPTH SHALL BE A MINIMUM 3'-6" BFG (I.E. BELOW FROSTLINE) U.O.N., COORDINATE DEPTH WITH PAVING DETAILS.

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USE RIGID GALVANIZED SLEEVES UNDER VEHICLE TRAFFIC AREAS. EXTEND SLEEVES 5'-0" BEYOND THE PAVED VEHICLE TRAFFIC AREAS.

CONTRACTOR SHALL FIELD COORDINATE (ON-SITE) PRIOR TO CONSTRUCTION WITH ELECTRIC UTILITY, TELEPHONE UTILITY AND CABLE TV UTILITY TO FIELD COORDINATE EXACT UTILITY REQUIREMENTS.

ROUTINGS ARE DIAGRAMMATIC. FIELD COORDINATE EXACT ROUTINGS WITH SITE CIVIL CONTRACTOR, PRIOR TO CONSTRUCTION, TO AVOID UNDERGROUND UTILITIES, OBSTACLES, ETC. AS REQUIRED.

REFER TO SITE CIVIL PLANS FOR UNDERGROUND UTILITIES, PIPING, STRUCTURES, RIGHT OF WAYS, PROPERTY LINES, ETC. CONTRACTOR SHALL PATCH AND REPAIR ALL SURFACES DISTURBED TO MATCH NEW, ADJACENT SURFACES UNLESS OTHERWISE NOTED. FIELD COORDINATE UNDERGROUND ROUTINGS WITH STIE CIVIL CONTRACTOR, PRIOR TO CONSTRUCTION, TO MINIMIZE PATCH AND REPAIR WORK.

BURY GROUNDING ELECTRODE CABLE A MINIMUM OF 30" B.F.G. PER NEC.

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PRIOR TO CONSTRUCTION, COORDINATE WITH CIVIL CONTRACTOR WHERE NECESSARY TO PROVIDE FINAL GRADING COVER AT POLE BASE FOUNDATIONS, BURIED CONDUITS, ETC. FOR SUFFICIENT GROUND COVER WHERE TOPOGRAPHY DROPS OFF STEEPLY AT EDGES OF ROADWAYS FOR DETENTION BASINS, ETC.

ORIENT LIGHTING POLES HANDHOLES ON THE OPPOSITE SIDE (NON-TRAFFIC SIDE) OF PAVED ROADWAYS/PARKING AREAS U.O.N.

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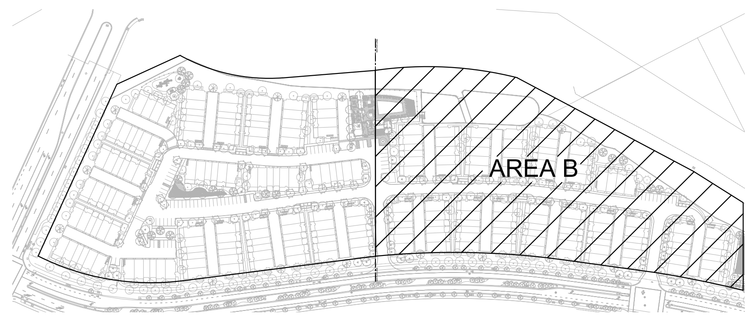

KEY PLAN

NORTH

0 15' 30' 60' 90'
1/30" = 1'-0"

SITE UTILITY PLAN - AREA B

C22

ISSUED DATE:8/17/2022

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REGISTERED PROFESSIONAL ENGINEER
MEHRI HOSSENZADEH
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ELECTRICAL
STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
SITE UTILITY PLAN
AREA B

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-1.2

KEYED NOTES

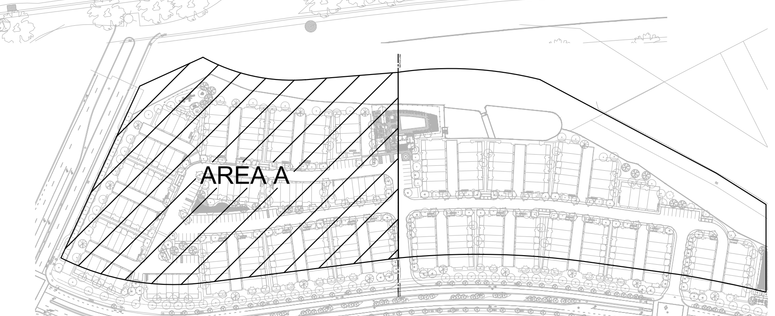
1. PER SECTION 130.2(C),ALL OUTDOOR LIGHTING SHALL BE CONTROLLED BY:
   1. OUTDOOR PHOTOCELL (NOT REQUIRED IF TIME CLOCK DOES ASTRONOMICAL)
   2. TIME CLOCK
   3. MOTION SENSOR FOR POLE LIGHT <= 24' AND LUMINAIRES MORE THAN 40W.
2. REFER TO LANDSCAPE PLAN FOR SIGN DETAIL(S) AND EXACT LOCATION.

LIGHTING LUMINAIRE SCHEDULE

NOTES: VERIFY WITH OWNER OR ARCHITECT BEFORE PURCHASING THE LIGHTING FIXTURES.

MARK	LEGEND	VOLT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LAMPS	INPUT WATTS	NOTES
SA		120	WALL	EXTERIOR WALL LIGHT	TERON LIGHTING	RL-L18-0-ZE700-UNIV-40K	LED	23.3W	HEIGHT: 7'-0"
SB		120	POLE	LED POLE LIGHT SINGLE HEAD	LSI INDUSTRIES, INC.	MRM-LED-09L-SIL-FT-40-70CRI	LED	69W	HEIGHT: 15'-0"
SC		120	POST	LED POST LIGHT	LSI INDUSTRIES, INC.	OPS-PL-10L-4F-40K8	LED	70W	HEIGHT: 12'-0"
SD		120	BOLLARD	LED BOLLARD LIGHT	LSI INDUSTRIES, INC.	MRB-LED-25L-ACR-S-40	LED	30.5W	HEIGHT: 3'-6"

REFER TO PHOTOMETRIC PLAN FOR EXACT HEIGHT OF EACH LIGHT



KEY PLAN

NORTH

0 15' 30' 60' 90'
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SITE LIGHTING PLAN - AREA A

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DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
SITE LIGHTING PLAN AREA A

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-1.3

C23

ISSUED DATE:8/17/2022

KEYED NOTES

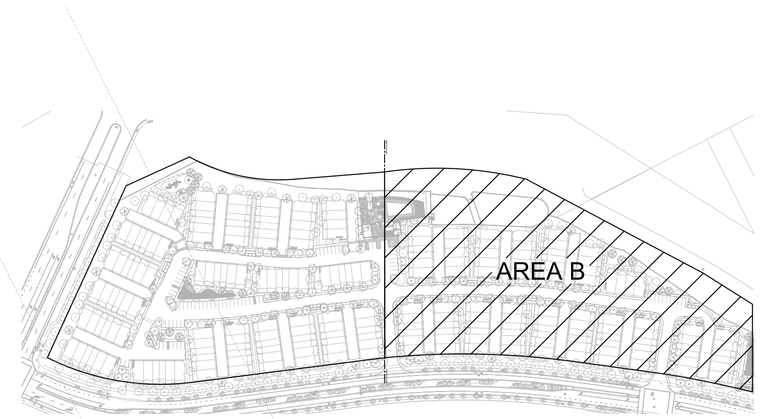
1. PER SECTION 130.2(C) ALL OUTDOOR LIGHTING SHALL BE CONTROLLED BY:
   1. OUTDOOR PHOTOCELL (NOT REQUIRED IF TIME CLOCK DOES ASTRONOMICAL)
   2. TIME CLOCK
   3. MOTION SENSOR FOR POLE LIGHT <= 24' AND LUMINAIRES MORE THAN 40W.
2. REFER TO LANDSCAPE PLAN FOR SIGN DETAIL(S) AND EXACT LOCATION.

LIGHTING LUMINAIRE SCHEDULE

NOTES: VERIFY WITH OWNER OR ARCHITECT BEFORE PURCHASING THE LIGHTING FIXTURES.

MARK	LEGEND	VOLT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LAMPS	INPUT WATTS	NOTES
SA		120	WALL	EXTERIOR WALL LIGHT	TERON LIGHTING	RL-L18-0-ZE700-UNIV-40K	LED	23.3W	HEIGHT: 7'-0"
SB		120	POLE	LED POLE LIGHT SINGLE HEAD	LSI INDUSTRIES, INC.	MRM-LED-09L-SIL-FT-40-70CRI	LED	69W	HEIGHT: 15'-0"
SC		120	POST	LED POST LIGHT	LSI INDUSTRIES, INC.	OPS-PL-10L-4F-40K8	LED	70W	HEIGHT: 12'-0"
SD		120	BOLLARD	LED BOLLARD LIGHT	LSI INDUSTRIES, INC.	MRB-LED-25L-ACR-S-40	LED	30.5W	HEIGHT: 3'-6"

REFER TO PHOTOMETRIC PLAN FOR EXACT HEIGHT OF EACH LIGHT



KEY PLAN

SITE LIGHTING PLAN - AREA B

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REGISTERED PROFESSIONAL ENGINEER MEHRI HOSSENZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
SITE LIGHTING PLAN AREA B

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-1.4

ISSUED DATE: 8/17/2022

C24

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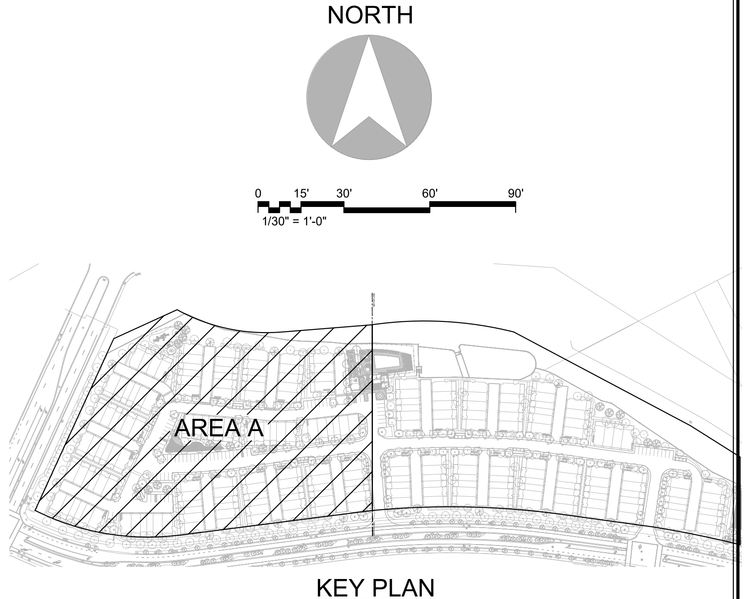

KEY PLAN

PHOTOMETRIC SITE PLAN - AREA A

GOUVIS engineering consulting group, inc.

15 Studebaker
Irvine
CA 92618

Irvine
tel 949.752.1612
fax 949.752.5321

Palm Springs
tel 760.323.5090

REGISTERED PROFESSIONAL ENGINEER MEHDI HOSSEINZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
PHOTOMETRIC SITE PLAN AREA A

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

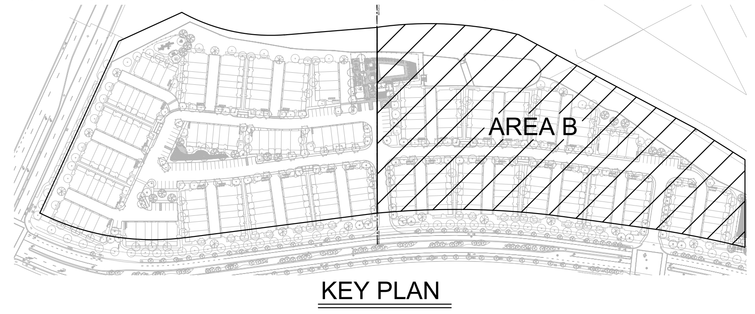
SHEET NUMBER:
E-1.5

C25

ISSUED DATE:8/17/2022

PHOTOMETRIC PLAN DISCLAIMER

RESULTS GENERATED BY THIS TOOL ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY, WITHOUT ANY WARRANTY AS TO ACCURACY, COMPLETENESS, RELIABILITY OR OTHERWISE. THE CALCULATED RESULTS MAY BE DEPENDENT ON USER PROVIDED DATA OR DATA PROVIDED FROM PUBLICLY AVAILABLE SOURCES AND DO NOT TAKE INTO ACCOUNT ALL FACTORS AND CIRCUMSTANCES. PHOTOMETRIC VALUES HAVE BEEN CALCULATED USING METHODS RECOMMENDED BY THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) AND/OR STANDARD INDUSTRY PRACTICE. PHOTOMETRIC CALCULATIONS PERFORMED USING THIS TOOL ARE BASED ON PHOTOMETRIC DATA PROVIDED BY THE MANUFACTURER, AND THE ACCURACY OF THE CALCULATED PHOTOMETRIC PERFORMANCE IS DEPENDENT ON THE ACCURACY OF THE DATA PROVIDED, END-USER ENVIRONMENT AND APPLICATION (INCLUDING, BUT NOT LIMITED TO, VOLTAGE VARIATION AND DIRT ACCUMULATION) CAN CAUSE ACTUAL PHOTOMETRIC PERFORMANCE TO DIFFER FROM THE PERFORMANCE CALCULATED USING THE DATA PROVIDED BY THE MANUFACTURER.



KEY PLAN

NORTH

0 15' 30' 60' 90'
1/30" = 1'-0"

PHOTOMETRIC SITE PLAN - AREA B

C26

ISSUED DATE:01/7/2022

GOUVIS engineering consulting group, inc.

15 Studebaker
Irvine
CA 92618

Irvine
tel 949.752.1612
fax 949.752.5321

Palm Springs
tel 760.323.5090

REGISTERED PROFESSIONAL ENGINEER
MEHDI HOSSENIZADEH
E 22037
ELECTRICAL
STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
PHOTOMETRIC SITE PLAN AREA B

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-1.6

Mirada Bollard - MRB
LED Architectural Bollard

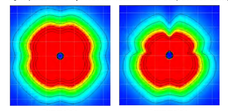
Performance

DELIVERED LUMENS*

Lumen Package	Lens Type	Distribution	CRI	2700K CCT Delivered Lumens	2700K CCT Efficacy	3000K CCT Delivered Lumens	3000K CCT Efficacy	4000K CCT Delivered Lumens	4000K CCT Efficacy	5000K CCT Delivered Lumens	5000K CCT Efficacy	Wattage
25L	ACR	S	70	1713	56	2242	74	2156	71	2487	82	30.5
30L	ACR	S	70	2110	55	2761	71.9	2655	69	3063	80	38.4
25L	ACR	A	70	1327	58	1736	75.5	1670	73	1926	84	23.0
30L	ACR	A	70	1634	56	2138	73.5	2056	71	2372	82	29.1

*LED Chips are frequently updated therefore values are nominal.

All published luminaire photometric testing performed to IESNA LM-79 standards. ISO footcandle plots below demonstrate the (MRB) light patterns only. Not for total fixture output. For complete specifications and IES files, see website.



Symmetric Asymmetric

Luminaire Ordering Information

TYPICAL ORDER EXAMPLE: **MRB LED 30L ACR S UNV DIM 40 PCI120 BB BRZ HSS**

Prefix	Source	Lumen Package	Lens	Distribution	Voltage	Driver
MRB (Mirada Bollard)	LED	25L - 2,500 lm 30L - 3,000 lm Custom Lumen Package*	ACR - Acrylic	A - Asymmetric S - Symmetrical	UNV - Universal Voltage (120-277V) HV - High Voltage (347 - 480v)	DIM - 0-10v Dimming (10-100%)

Color Temp	CRI	Controls (Choose one)	Battery Backup†	Finish	Options
50 - 5,000K 40 - 4,000K 30 - 3,000K 27 - 2,700K AMB - Phosphor Converted Amber†	(Blank) - 70CRI	Button Type Photocells PCI120 - 120V PCI208-277 - 208-277V PCI347 - 347V	BB - Battery Backup CWBB - Cold Weather Battery Backup	BRZ - Bronze BLK - Black WHT - White PLP - Platinum Plus SVG - Satin Verde Green GPT - Graphite MSV - Metallic Silver	H - XX (Specify Height)* GFR - GFI Duplex Receptacle LAB - Lens Anchor Bolts RW - Roughneck Heavy Duty Mig Plate HSS - House Side Shield

Accessory Ordering Information[3]

Description	Order Number
HSS - House Side Shield	686168
Galvanized anchor Bolt kit	285060

FOOTNOTES:
1 - Consult factory for availability.
2 - Standard height is 44". Non Standard heights are available in 6" increments. Minimum height is 26". 30" with battery backup option. Maximum height is 62".
3 - Accessories are shipped separately and field installed.
4 - Not available in HV Voltage.
5 - Custom lumen and wattage packages available consult factory. Values are within industry standard tolerances but not DLC listed.

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Mirada Bollard - MRB
LED Architectural Bollard

Features & Specifications (Cont.)

Construction
- Precision 2pc die-cast aluminum head maintains durability and consistency while providing vandal resistance, effective heat dissipation, and superior aesthetics.
- 9-5/8" OD one-piece extruded aluminum heavy wall .322 inch thick seamless shaft. Various heights are available in 6" increments starting at a minimum of 26" (maximum height is 62").
- Lower housing attaches to cast aluminum universal base plate with four stainless steel roll pins. Accommodates 4.5" - 8" bolt circles.
- Optional roughneck zinc plated steel base plate (.375" thick) with welded U shaped reinforcement. 3/8" diameter 302 stainless steel roll pins with 10,000 lb. shear load.
- IP66 rated Optical and Driver compartment protects integral components from harsh environments.
- Luminaire is proudly manufactured in the U.S. of U.S. and imported parts.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 40 lbs in carton.

Controls
- Electronic Button photocell available in dedicated voltages (120v, 277v, 347v).

Installation
- Easy leveling even in uneven areas and full 360-degree rotation for precise alignment during installation.
- Base plate installs with four heavy-duty 3/8" x 10" galvanized steel anchor bolts.
- Base plate attaches to lower extruded housing via four stainless steel roll pins.

Warranty
- LSI LED Fixtures carry a 5-year warranty.
- 1 Year warranty on optional Battery Back Up. Test regularly in accordance with local codes.

Listings
- Listed to UL 1598 and UL 8750.
- RoHS Compliant.
- Lighting Facts Approved.
- Suitable For wet Locations.
- IP66 rated luminaire environment and IP66 rated optical chamber per IEC 60598.
- IDA compliant; with 3000K or 2700K color temperature selection.

Performance

ELECTRICAL DATA (Amps)*

Lumen Package	Distribution	120V	208V	240V	277V	347V	480V
25L	S	0.25	0.15	0.13	0.11	0.09	0.06
30L	S	0.32	0.18	0.16	0.14	0.11	0.08
25L	A	0.19	0.11	0.10	0.08	0.07	0.05
30L	A	0.24	0.14	0.12	0.10	0.08	0.06

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

Recommended Lumen Maintenance[1]

AMBIENT TEMP C	INITIAL†	25K HR†	50K HR†	75K HR†	100K HR†
0 C	100%	98%	95%	93%	90%
10 C	100%	98%	95%	93%	90%
20 C	100%	98%	95%	93%	91%
25 C	100%	98%	96%	93%	91%
30 C	99%	96%	93%	91%	88%
40 C	99%	95%	91%	88%	83%
50 C	99%	94%	89%	84%	80%

1- Lumen maintenance values at 25C are calculated per TM-21 based on LM-80 data and in-situ testing.
2- In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times the IESNA LM-80-08 total test duration for the device under testing.
3- In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times the IESNA LM-80-08 total test duration for the device under testing

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Catalog # : SD	Project : 66235
Prepared By :	Date :

Mirada Bollard - MRB
LED Architectural Bollard

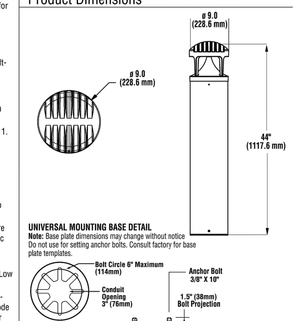
The Mirada Bollard combines superior engineering with purity of design & attention to detail. The durable construction, universal mounting base plate & two photometric distributions make it ideal for illuminating low level mounting heights, such as entryways, pathways and most pedestrian-scale applications, requiring unique aesthetics in tandem with outstanding performance.

Features & Specifications

Optical System
- Available in two optical distributions, symmetrical and asymmetrical.
- High transmission clear flat acrylic lens seals the luminaire's optical chamber to IP66.
- Available in 5000K, 4000K, 3000K, and 2700K color temperatures per ANSI C78.377. Also available in Phosphor Converted Amber. Consult Factory for other color temperature requirements.
- Minimum CRI of 70. Consult Factory for Higher CRI requirements.

Electrical
- High-performance programmable driver features over-voltage, under-voltage, short-circuit and over temperature protection. Custom lumen and wattage packages available.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz. Optional High Voltage 347-480 Vac Input available.
- L91 Calculated Life: >100k Hours calculated @ 25°C per IESNA TM-21-11.
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F); Cold-weather emergency battery backup rated for -20°C minimum ambient.
- Power factor: > .90
- Input power stays constant over life.
- High-efficacy LEDs with integrated circuit board mount to the housing to maximize heat dissipation and promote long life.
- Driver components are fully encased in potting long material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.
- Electrical components are mounted on a removable power tray.
- Field replaceable surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- Optional 120v-277v integral emergency battery pack is available. The 90-minute batteries provide constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed on the housing for ease of maintenance.

Product Dimensions



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ROYAL LED
Architectural Outdoor

PROJECT:
TYPE:
PO#: QTY:
COMMENTS:

Fixture Core

PROD/CCT CODE	SOURCE/WATTAGE	VOLTAGE	DIMMING DRIVER
RL - Royal	L15.0-TE600 - 15.0W @ 600mA ELV Dimming Driver L18.0-TE700 - 18.0W @ 700mA ELV Dimming Driver L18.0-ZE700 - 18.0W @ 700mA Line Voltage 4-Wire Dimming Driver (Dimmable 0 - 10V)	120V 277V (50 / 60Hz)	Not Applicable

ORDER INFO

RL	L18.0-TE600	120V	Not Applicable

Example * (may not represent a manufacturable product)

Aesthetics & Options

TRIM	FINISH	COLOR TEMP	OPTIONS
Not Applicable	AC - Antique Copper AS - Antique Silver BT - Bronze Mat BN - Brushed Nickel SM - Matte Silver SN - Sand SW - Swedish Steel TB - Textured Black (Standard) BZ - Textured Bronze TW - Textured White	30K - 3000K Color Temp 35K - 3500K Color Temp 40K - 4000K Color Temp	F - Fused TP - Tamper Resistant Screws

ORDER INFO

Not Applicable	AC	27K	F

Example * (may not represent a manufacturable product)

PROD	SOURCE	30K SPECS
RL	L15.0	• 30K - 3000K Color Temp • 2048 LED Source Lumens • 136.5 LED Source Lumens Per Watt
	L18.0	• 30K - 3000K Color Temp • 2390 LED Source Lumens • 132.8 LED Source Lumens Per Watt

REPLACEMENT PART	PART NO	NOTES
White 75% DR Acrylic Lens	3051060	Don't see the configuration you are looking for? Call us today at (513) 858-6004

TERON LIGHTING
TERONLIGHTING.COM
33 DONALD DR, FAIRFIELD, OH 45014
P: 513.858.6004 F: 513.858.6038
E: SALES@TERONLIGHT.COM

BUY AMERICAN SINCE 1978
We reserve the right to revise the design components of any product due to parts availability or change in UL standards, without assuming any obligation or liability to modify any products previously manufactured, and without notice. 2

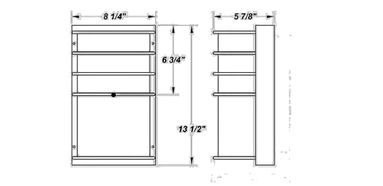
ROYAL LED
Architectural Outdoor

PROJECT: 66235
TYPE: SA
PO#: QTY:
COMMENTS:

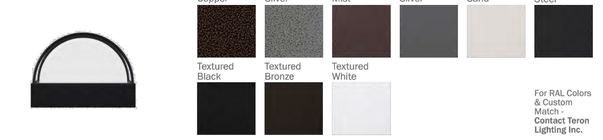
FEATURES
- Aluminum Reflector
- CSA Listed Wet Location
- LED Light Fixture
- Luminous White 75% DR Acrylic Diffuser
- Mounting Hardware Included
- Mounts Directly to 4" Junction Box (By Others)
- Steel Fascia w/ Textured Black Polyester Powder Coat Finish
- Steel Mounting Pan w/ Hi-Reflectance White Powder Coat Finish

LINE DRAWING

LINE DRAWING NOT TO SCALE



FINISHES



For RAL Colors & Custom Match - Contact Teron Lighting Inc.

TERON LIGHTING
TERONLIGHTING.COM
33 DONALD DR, FAIRFIELD, OH 45014
P: 513.858.6004 F: 513.858.6038
E: SALES@TERONLIGHT.COM

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REGISTERED PROFESSIONAL ENGINEER MEHRI HOSSEINZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
LIGHTING SPECIFICATIONS

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-1.7

LIGHTING SPECIFICATIONS

Type: _____

Mirada Medium Outdoor LED Area Light

PERFORMANCE

Back to Quick Links

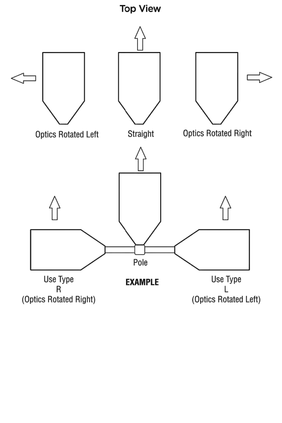
Delivered Lumens*

Lumen Package	Distribution	CRI	3000K CCT Delivered Lumens	3000K CCT Efficacy	3000K CCT BUG Rating	4000K CCT Delivered Lumens	4000K CCT Efficacy	4000K CCT BUG Rating	5000K CCT Delivered Lumens	5000K CCT Efficacy	5000K CCT BUG Rating	Wattage
7L	2	70	6711	127	B2-U0-G1	7206	137	B2-U0-G2	7396	144	B2-U0-G2	53
	3		6889	130	B1-U0-G2	7400	140	B1-U0-G2	7596	148	B1-U0-G2	
	SW		6557	124	B3-U0-G1	7043	133	B3-U0-G2	7422	141	B3-U0-G2	
	FT		6701	127	B1-U0-G2	7197	136	B1-U0-G2	7584	144	B2-U0-G2	
	FTA		6798	128	B2-U0-G1	7303	138	B2-U0-G1	7696	146	B2-U0-G1	
	AM		7225	136	B1-U0-G1	7822	149	B2-U0-G1	8239	155	B2-U0-G1	
9L	2	70	8576	125	B2-U0-G2	9396	137	B2-U0-G2	9784	143	B2-U0-G2	68
	3		8804	129	B1-U0-G2	9646	141	B2-U0-G2	10044	147	B2-U0-G2	
	SW		8380	122	B3-U0-G2	9181	134	B3-U0-G2	9560	140	B3-U0-G2	
	FT		8563	125	B2-U0-G2	9382	137	B2-U0-G2	9769	143	B2-U0-G2	
	FTA		8689	127	B2-U0-G2	9520	139	B2-U0-G2	9913	145	B2-U0-G2	
	AM		9422	137	B2-U0-G1	10242	150	B2-U0-G2	10755	156	B2-U0-G2	
13L	2	70	11461	122	B2-U0-G2	12556	134	B2-U0-G2	13075	139	B2-U0-G2	93
	3		11766	125	B2-U0-G2	12890	137	B2-U0-G2	13423	143	B2-U0-G2	
	SW		11199	119	B4-U0-G2	12269	131	B4-U0-G2	12775	136	B4-U0-G2	
	FT		11444	122	B2-U0-G2	12538	133	B2-U0-G3	13055	139	B2-U0-G3	
	FTA		11612	124	B2-U0-G2	12722	135	B2-U0-G2	13247	141	B2-U0-G2	
	AM		12582	134	B2-U0-G2	13796	147	B2-U0-G2	14348	153	B2-U0-G2	
18L	2	70	17168	115	B3-U0-G3	18809	126	B3-U0-G3	19586	131	B3-U0-G3	149
	3		17625	118	B2-U0-G3	19310	129	B3-U0-G3	20107	134	B3-U0-G3	
	SW		16776	112	B4-U0-G2	18379	123	B4-U0-G2	19138	128	B4-U0-G2	
	FT		17143	115	B3-U0-G3	18781	126	B3-U0-G3	19557	131	B3-U0-G3	
	FTA		17395	116	B3-U0-G3	19058	127	B3-U0-G3	19844	133	B3-U0-G3	
	AM		18863	127	B3-U0-G2	20683	139	B3-U0-G2	21511	149	B3-U0-G2	
24L	2	70	22701	121	B4-U0-G3	24276	130	B4-U0-G3	24784	133	B4-U0-G3	189
	3		23636	126	B3-U0-G4	25275	135	B3-U0-G4	25804	138	B3-U0-G4	
	SW		22422	120	B5-U0-G3	23988	128	B5-U0-G3	24490	131	B5-U0-G3	
	FT		23498	126	B3-U0-G4	25126	134	B3-U0-G4	25652	137	B3-U0-G4	
	FTA		23371	125	B3-U0-G3	24992	134	B3-U0-G3	25515	136	B3-U0-G3	
	AM		24322	131	B3-U0-G3	26227	140	B3-U0-G3	26751	143	B3-U0-G3	
30L	2	70	28900	117	B4-U0-G3	30905	125	B4-U0-G3	31561	128	B4-U0-G3	249
	3		30088	122	B3-U0-G4	32178	130	B3-U0-G4	32850	133	B3-U0-G4	
	SW		28557	116	B5-U0-G3	30538	124	B5-U0-G4	31317	126	B5-U0-G4	
	FT		29912	121	B3-U0-G4	31987	130	B3-U0-G4	32668	132	B3-U0-G5	
	FTA		29752	120	B4-U0-G3	31816	129	B4-U0-G3	32482	132	B4-U0-G3	
	AM		31061	126	B3-U0-G3	33221	134	B3-U0-G3	33885	137	B3-U0-G3	
36L	2	70	35025	111	B4-U0-G3	37454	118	B4-U0-G3	38238	121	B4-U0-G4	318
	3		36466	115	B3-U0-G5	38996	123	B3-U0-G5	39812	126	B3-U0-G5	
	SW		34609	108	B5-U0-G4	37010	117	B5-U0-G4	37785	119	B5-U0-G4	
	FT		36251	114	B3-U0-G5	38766	122	B4-U0-G5	39557	125	B4-U0-G5	
	FTA		36058	114	B4-U0-G4	38559	122	B4-U0-G4	39366	124	B4-U0-G5	
	AM		37429	118	B3-U0-G3	40030	126	B3-U0-G3	40831	129	B3-U0-G3	

Type: _____

Mirada Medium Outdoor LED Area Light

OPTICS ROTATION



ACCESSORIES/OPTIONS

Integral Louver (IL) and House-Side Shield (IH)
Accessory louver and shield available for improved backlight control without sacrificing street side performance. LSI's Integral Louver (L) and Integral House-Side Shield (IH) options deliver backlight control that significantly reduces spill light behind the poles for applications with pole locations close to adjacent properties. The design maximizes forward reflected light while reducing glare, maintaining the optical distribution selected, and most importantly eliminating light trespass. Both options rotate with the optical distribution.

Luminaire Shown with Integral Louver (IL)

Luminaire Shown with IHSBT Option

7 Pin Photoelectric Control
7-pin ANSI C136.41-2013 control receptacle option available for twist lock photocontrols or wireless control modules. Control accessories sold separately. Dimming leads from the receptacle will be connected to the driver dimming leads (Consult factory for alternate wiring).

Luminaire Shown with PCR 7P

Type: __SB__

Mirada Medium Outdoor LED Area Light

ORDERING GUIDE

Back to Quick Links

TYPICAL ORDER EXAMPLE: **MRM LED 36L SIL FTA UNV DIM 50 70CRI ALSCS04 BRZ IL**

Luminaire Prefix	Light Source	Lumen Package	Light Output	Distribution	Orientation*	Voltage	Driver
MRM - Mirada	LED	7L - 7,000 lm 9L - 9,000 lm 13L - 12,000 lm 18L - 18,000 lm 24L - 24,000 lm 30L - 30,000 lm 36L - 36,000 lm 42L - 42,000 lm 48L - 48,000 lm Custom Lumen Package*	SIL - Silicone	2 - Type 2 3 - Type 3 SW - Type 5 Wide FT - Forward Throw FTA - Forward Throw Automotive AM - Automotive Merchandise	(blank) - standard L - Optics rotated left 90° R - Optics rotated right 90°	UNV - Universal Voltage (120-277v) HV - High Voltage (347-480v)	DIM - 0-10v Dimming (0-10%)

Color Temp	Color Rendering	Finish	Options
50 - 5,000 CCT 40 - 4,000 CCT 30 - 3,000 CCT AMB - Phosphor Converted Amber†	70CRI - 70 CRI	BRZ - Bronze BLK - Black GPT - Graphite MSV - Metallic Silver WHT - White PLP - Platinum Plus SVG - Satin Verde Green	(Blank) - None IH - Integral Houseside Shield† IL - Integral Louver (Sharp Split Light Cutoff)†

Controls (Choose One)

(Blank) - None

Button Type Photocells
PCI120 - 120V
PCI208-277 - 208 -277V
PCI347 - 347V

Stand-Alone Controls
ALBC01 - Acuity Synapse Control System with 10-32' Motion Sensor
ALSCS02 - AirLink Synapse Control System with 10-32' Motion Sensor
ALSCS04 - AirLink Synapse Control System with 20-40' Motion Sensor
ALBC20 - AirLink Blue Wireless Motion & Photo Sensor Controller (8-24' mounting height)
ALBC21 - AirLink Blue Wireless Motion & Photo Sensor Controller (25-40' mounting height)
ALBC2 - AirLink Blue Wireless Motion & Photo Sensor Controller (25-40' mounting height)

Gulcron Limelight Controls
LLC - LimeLight Integral Wireless Radio Control by Lutron†
LLCS1 - Limelight Integral Wireless Radio Control and PIR Motion/ Daylight Sensor by Lutron 8-10' mt height†
LLCS2 - Limelight Integral Wireless Radio Control and PIR Motion/ Daylight Sensor by Lutron 11-24' mt height†
LLCS3 - Limelight Integral Wireless Radio Control and PIR Motion/ Daylight Sensor by Lutron 31-40' mt height†

Mounting Accessories*

Description	Order Number**
Universal Mounting Bracket	684816DLR
Adjustable Slip Fitter (2" - 2 3/8" Tenon)	686138DLR
Horizontal Slip Fitter (2" - 2 3/8" Tenon)	692161DLR
Quick Mount Pole Bracket (Square Pole)	687973DLR
Quick Mount Pole Bracket (4-5" Round Pole)	688983DLR
13 TR Quick Mount Pole Bracket (4-5" Square Pole)	688993DLR
Wall Mount Bracket	382132DLR
Wall Pack Bracket (8" Minimum Pole Diameter)	751316DLR

Fusing Accessories*

Description	Order Number
Single Fusing (120V)	FK120
Single Fusing (208V)	FK277
Double Fusing (208V, 240V)	DFK240
Double Fusing (480V)	DFK480
Double Fusing (347V)	DFK347

Miscellaneous Accessories

Description	Order Number
IL - Integral Louver Shield*	686881
IH - Integral House Side Shield*	742415
19" Linear Brit Spike Kit (2' Recommended per Luminaire)	756795

FOOTNOTES:
1 - Custom lumen and wattage packages available, consult factory. Values are within industry standard tolerances but not DLC listed.
2 - Not available in HV Voltage option
3 - Consult Factory for availability.
4 - Not available in HV.
5 - IHSBT is field configurable via the LSI app that can be downloaded from your smartphone's native app store
6 - Fusing, surge or shorting cap must be ordered separately. See Accessory Ordering Information.
7 - Accessories are shipped separately and field installed.
8 - Factory installed CRITP option required. See Options.
9. "CLR" denotes finish. See Finish options.
10. Not available with Integral Louver (IL) options.
11. Fusing must be located in hand hole of pole.
12. Only available in 9L and 13L Lumen Packages. Consult factory for lead time and availability.

Catalog # : _____	Project : 66235 - SB
Prepared By: _____	Date: _____ Type: _____

Mirada Medium (MRM)
Outdoor LED Area Light

OVERVIEW	
Lumen Package	7,000 - 48,000
Wattage Range	53 - 401
Efficacy Range (LPW)	93 - 148
Weight lbs(kg)	30 (13.6)

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction
- Rugged die-cast aluminum housing contains factory preweired driver and optical unit. Cast aluminum wiring access door located underneath.
- Designed to mount to square or round poles.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.

Optical System
- High density LED optical system delivers industry leading optical performance and visual comfort.
- 7 distribution types 3W, 4F, 5Q, 5C, 5R, 5D & AD
- Diffused lens version provides maximum visual comfort with reduced brightness and LED pixelization
- Available in 5000K, 4000K, 3500K, 3000K and 2700K color temperatures per ANSI C78.377.
- Minimum CRI of 80
- External Shield available for field installation (see accessory ordering information and dimensions for details).

Electrical
- High-performance driver features overvoltage, under-voltage, short-circuit and over temperature protection (6kV surge standard).
- 0-10V dimming driver (optional extended leads).
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +40°C (-40°F to +104°F).
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls
- Integral passive infrared Bluetooth™ motion and photocell sensor options. Fixtures operate independently and can be commissioned via an iOS or Android configuration app.
- LSI's AirLink™ Blue lighting control system is a simple feature rich wireless Bluetooth mesh network. The integrated fixture sensor module provides wireless control of grouped fixtures based on motion sensors, daylight or a fully customizable schedule. Updates and modifications to the control strategy are easily implemented via an intuitive iOS app.

Installation
- Designed to mount directly to a 2 3/8" - 3" outer diameter tenon (4" tall).
- Optional flush mount accessory slips inside the top of a 4" round pole for a virtually seamless transition from pole to luminaire.

Warranty
- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings
- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant; with 3000K and warmer color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- IP66 rated Luminaire per IEC 60598.
- 3G rated for ANSI C136.31 high vibration applications are qualified.

Type: _____

Opulence Small Post Top

PHOTOMETRICS

Back to Quick Links

OPS-PT-14L-4F-40K8

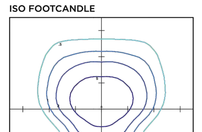
LUMINAIRE DATA

Type 4 Distribution	
Description	4000 Kelvin, 80 CRI
Delivered Lumens	12,868
Watts	100
Efficacy	129
IES Type	Type IV - Very Short
BUG Rating	B2-U3-G2

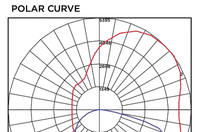
Zonal Lumen Summary

Zone	Lumens	%Lumaire
Low (0-30)°	2329	15%
Medium (30-60)°	10634	55%
High (60-80)°	5246	26%
Very High (80-90)°	208	2%
Uplight (90-180)°	0	2%
Total Flux	18417	100%

ISO FOOTCANDLE



POLAR CURVE



15' Mounting Height/15' Grid Spacing
5 FC | 2 FC | 1 FC | 0.5 FC

OPS-PT-14L-5Q-40K8

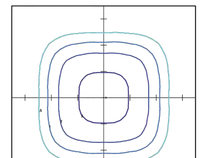
LUMINAIRE DATA

Type 5 Square Distribution	
Description	4000 Kelvin, 80 CRI
Delivered Lumens	13,197
Watts	100
Efficacy	132
IES Type	Type VS - Short
BUG Rating	B3-U3-G2

Zonal Lumen Summary

Zone	Lumens	%Lumaire
Low (0-30)°	1472	11%
Medium (30-60)°	7284	55%
High (60-80)°	3972	30%
Very High (80-90)°	183	1%
Uplight (90-180)°	286	2%
Total Flux	13198	100%

ISO FOOTCANDLE



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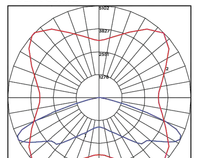

15' Mounting Height/15' Grid Spacing
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Type: _____

Opulence Small Post Top

PERFORMANCE

Back to Quick

LIGHTING LUMINAIRE SCHEDULE

MARK	LEGEND	VOLT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	INPUT WATTS	NOTES
BA		120	RECESSED	LED DOWN LIGHT	COOPER LIGHTING	SLD606930WH-CA	13.2	
BB		120	WALL	EXTERIOR WALL LIGHT	TERON LIGHTING	RL-18-0-ZE700-UNV-XX-40K	23.3	
BC		120	SURFACE	STRIP LIGHT, NARROW 4-FEET LED	VISCOR	LCOMN48-LED840L040LUNV-P95	33.5	
BD		120	BUG EYES	LED BUG EYES WITH MIN. OF 90 MIN BATTERY BACK-UP	LSI INDUSTRIES, INC.	EAR-LED-UNV-SD-WHT-RC	6.6	
BE		120	SURFACE/WALL	EXIT SIGN, EDGE LIT ACRYLIC, GREEN LETTERS WITH MIN. OF 90 MIN BATTERY BACK-UP	EMERGI-LITE	LXN1NGC	2.3	
BX		120	SURFACE	REMOTE EMERGENCY LIGHT PACK WITH MIN. OF 90 MIN BATTERY BACK-UP	SELECT BY OWNER	SELECT BY OWNER	20.0	

NOTES:

1) VERIFY WITH OWNER OR ARCHITECT BEFORE PURCHASING THE LIGHTING FIXTURES.

ELECTRICAL KEYED NOTES

1. PROVIDE W.P. G.F.I. SERVICE RECEPTACLE WITHIN 25 FEET OF CONDENSING UNIT
2. PROVIDE W.P. J-BOX FOR CU MOTOR RATED SWITCH FOR CONNECTION TO THE OUTSIDE CONDENSING UNIT. VERIFY WITH MECHANICAL PLAN FOR HVAC UNIT DESIGNATION AND MANUFACTURER SPECS BEFORE ROUGH IN.
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1. MAIN CATV BKBD, "MCTV/MTBB" 2'X2'X3'X3/4" PLYWOOD. PROVIDE1#6CU. GROUND WIRE CONNECTION TO NEAREST APPROVED GROUND ELECTRODE.
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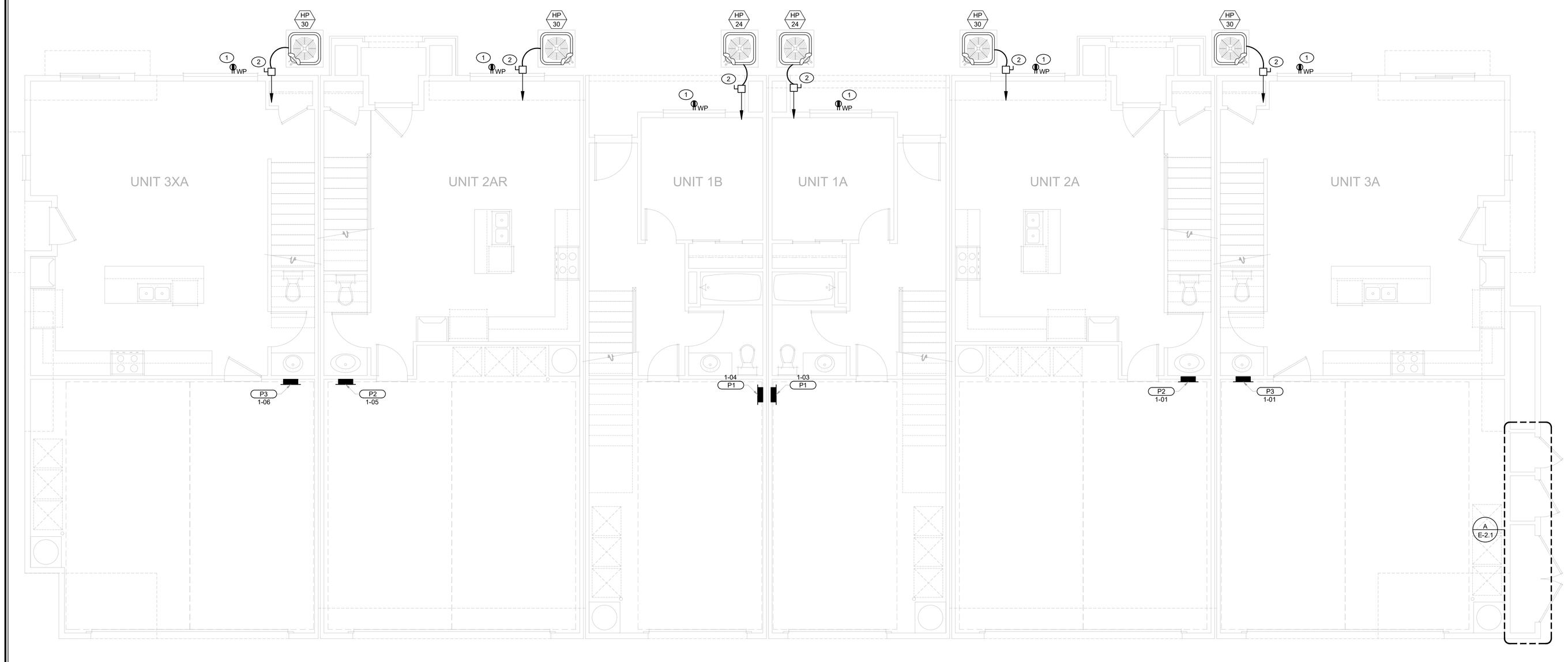

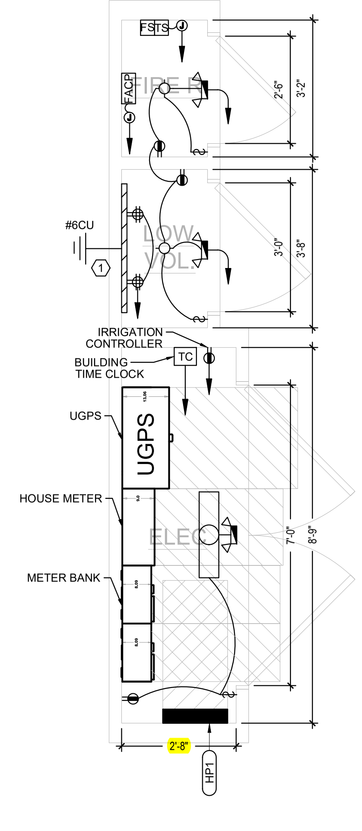

A UTILITY CLOSET
SCALE: 1/2" : 1'-0"

0 2' 4' 8' 12'
1/4" = 1'-0"

FIRST FLOOR PLAN 1

C28

ISSUED DATE:8/17/2022

GOUVIS engineering consulting group, inc.

15 Studebaker
Irvine
CA 92618

Irvine
tel 949.752.1612
fax 949.752.5321

Palm Springs
tel 760.323.5090

REGISTERED PROFESSIONAL ENGINEER MERR HOSSENLOPP E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
BUILDING 1A & 1B FIRST FLOOR PLAN

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-2.1

LIGHTING LUMINAIRE SCHEDULE

MARK	LEGEND	VOLT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	INPUT WATTS	NOTES
BA		120	RECESSED	LED DOWN LIGHT	COOPER LIGHTING	SLD606930WH-CA	13.2	
BB		120	WALL	EXTERIOR WALL LIGHT	TERON LIGHTING	RL-18-0-ZE700-UNV-XX-40K	23.3	
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BD		120	BUG EYES	LED BUG EYES WITH MIN. OF 90 MIN BATTERY BACK-UP	LSI INDUSTRIES, INC.	EAR-LED-UNV-SD-WHT-RC	6.6	
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BX		120	SURFACE	REMOTE EMERGENCY LIGHT PACK WITH MIN. OF 90 MIN BATTERY BACK-UP	SELECT BY OWNER	SELECT BY OWNER	20.0	

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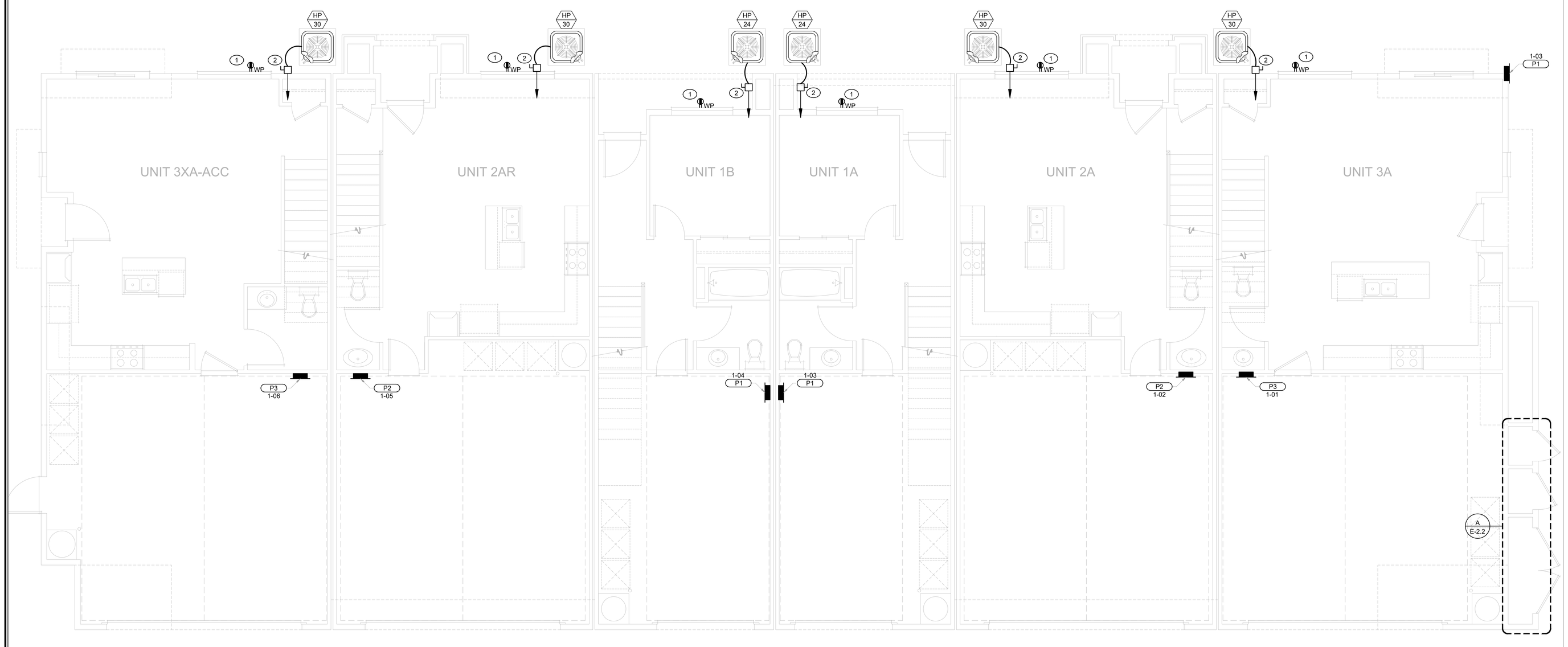

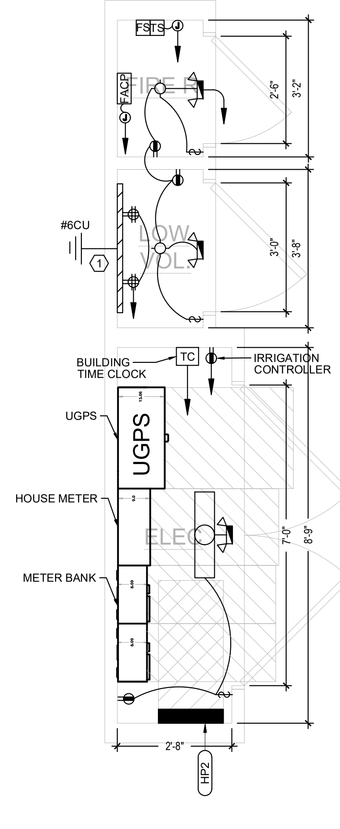

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NO.	DATE	DESCRIPTION

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BUILDING 2A & 2B FIRST FLOOR PLAN

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-2.2

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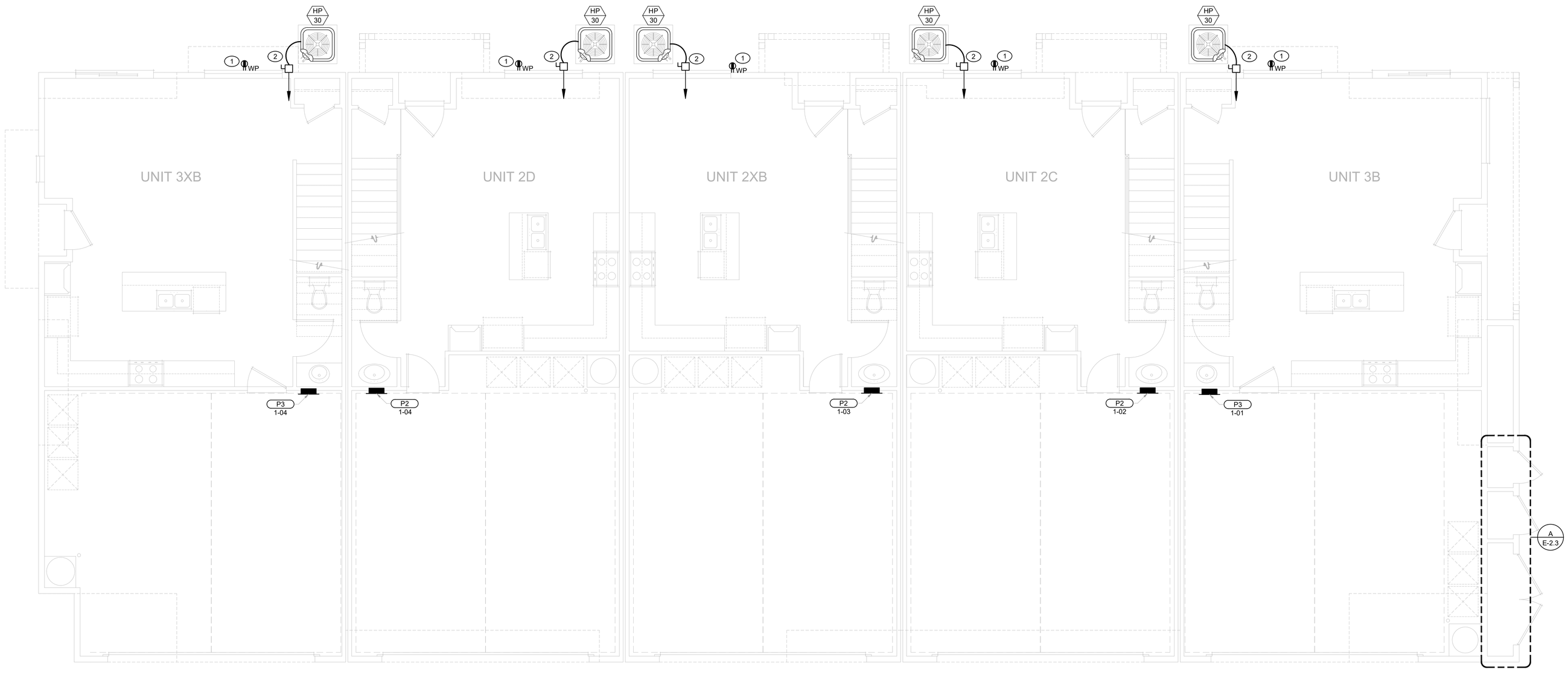

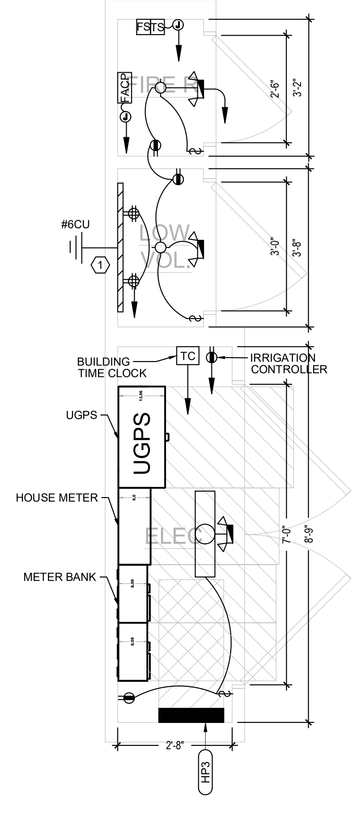

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DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
BUILDING 3B
FIRST FLOOR PLAN

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-2.3

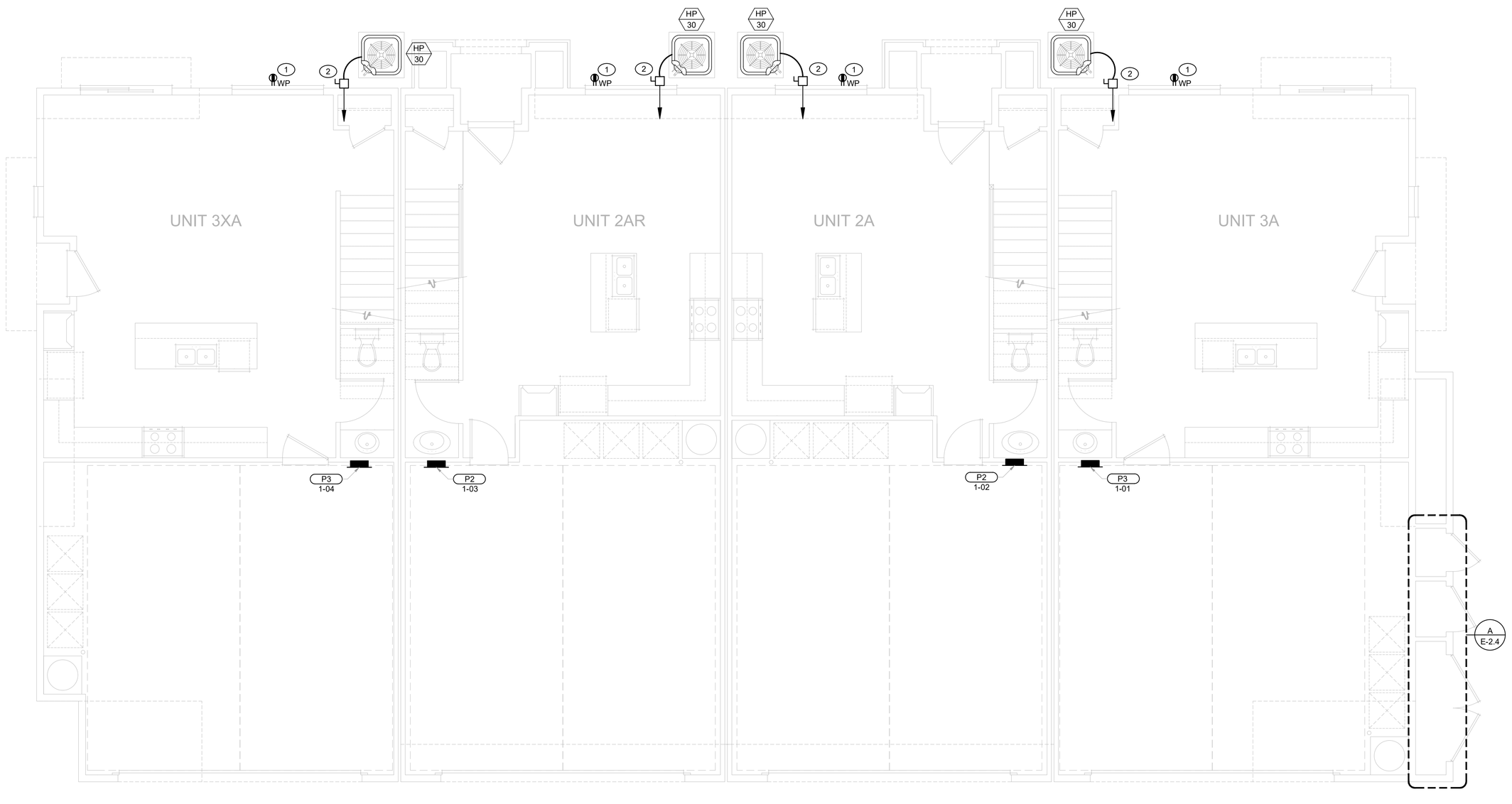
ISSUED DATE:8/17/2022

LIGHTING LUMINAIRE SCHEDULE

MARK	LEGEND	VOLT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	INPUT WATTS	NOTES
BA		120	RECESSED	LED DOWN LIGHT	COOPER LIGHTING	SLD606930WH-CA	13.2	
BB		120	WALL	EXTERIOR WALL LIGHT	TERON LIGHTING	RL-18-0-ZE700-UNV-XX-40K	23.3	
BC		120	SURFACE	STRIP LIGHT, NARROW 4-FEET LED	VISCOR	LCOMN48-LED840L040LUNV-P95	33.5	
BD		120	BUG EYES	LED BUG EYES WITH MIN. OF 90 MIN BATTERY BACK-UP	LSI INDUSTRIES, INC.	EAR-LED-UNV-SD-WHT-RC	6.6	
BE		120	SURFACE/WALL	EXIT SIGN, EDGE LIT ACRYLIC, GREEN LETTERS WITH MIN. OF 90 MIN BATTERY BACK-UP	EMERGI-LITE	LXN1NGC	2.3	
BX		120	SURFACE	REMOTE EMERGENCY LIGHT PACK WITH MIN. OF 90 MIN BATTERY BACK-UP	SELECT BY OWNER	SELECT BY OWNER	20.0	

NOTES:

1) VERIFY WITH OWNER OR ARCHITECT BEFORE PURCHASING THE LIGHTING FIXTURES.

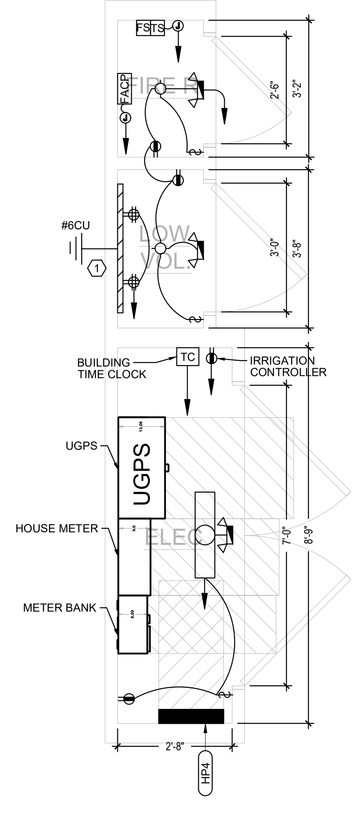


ELECTRICAL KEYED NOTES

1. PROVIDE W.P. G.F.I. SERVICE RECEPTACLE WITHIN 25 FEET OF CONDENSING UNIT
2. PROVIDE W.P. J-BOX FOR CU MOTOR RATED SWITCH FOR CONNECTION TO THE OUTSIDE CONDENSING UNIT. VERIFY WITH MECHANICAL PLAN FOR HVAC UNIT DESIGNATION AND MANUFACTURER SPECS BEFORE ROUGH IN.
3. LOW VOLTAGE BOX RESERVED FOR TELE/CABLE. REFER TO LOW VOLTAGE PLANS FOR DETAILS.
4. LIGHTED ADDRESS SIGN @ 5'-0" ABOVE FINISH GRADE.
5. PER SECTION 150.0(K)(3) ALL OUTDOOR LIGHTING SHALL BE HIGH EFFICACY AND CONTROLLED BY MANUAL ON/OFF SWITCH AND ONE OF THE CHOICES BELOW:
   1. PHOTOCELL AND MOTION CENSOR
   2. PHOTOCELL AND AUTOMATIC TIME SWITCH
   3. ASTRONOMIC TIME CLOCK
6. ROUTE UNIT PANEL FEEDER AT UNDERGROUND TO EACH PANEL LOCATION IN GARAGE. VERIFY WITH CONTRACTOR BEFORE ROUGH IN
7. ROUTE UNIT PANEL FEEDER AT GARAGE CEILING, IN RATED SOFFIT, TO UNIT PANEL LOCATION IN GARAGE. VERIFY WITH CONTRACTOR BEFORE ROUGH IN.

ELECT. CLOSET KEYED NOTES

1. MAIN CATV BKBD, "MCTV/MTBB" 2'X2'X3'X3/4" PLYWOOD. PROVIDE1#6CU. GROUND WIRE CONNECTION TO NEAREST APPROVED GROUND ELECTRODE.
2. COORDINATE WITH FIRE ALARM CONSULTANT FOR ALL REQUIREMENT.



A UTILITY CLOSET

SCALE: 1/2" : 1'-0"

0 2' 4' 8' 12'

1/4" = 1'-0"

FIRST FLOOR PLAN 1

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REGISTERED PROFESSIONAL ENGINEER MEHR HOSSENZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:

Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:

Bassenian Lagoni

LOCATION:

Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:

BUILDING 4A
FIRST FLOOR PLAN

PROJECT NUMBER:

66235

ENGINEER:

DRAFTER:

SHEET NUMBER:

E-2.4

C31

ISSUED DATE:8/17/2022

LIGHTING LUMINAIRE SCHEDULE

MARK	LEGEND	VOLT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	INPUT WATTS	NOTES
BA		120	SURFACE	LED DOWN LIGHT	COOPER LIGHTING	SLD606930WH-CA	13.2	
BB		120	WALL	EXTERIOR WALL LIGHT	TERON LIGHTING	RL-18-0-ZE700-UNV-XX-40K	23.3	
BC		120	SURFACE	STRIP LIGHT, NARROW 4-FEET LED	VISCOR	LCOMN48-LED840L040LUNV-P95	33.5	
BD		120	BUG EYES	LED BUG EYES WITH MIN. OF 90 MIN BATTERY BACK-UP	LSI INDUSTRIES, INC.	EAR-LED-UNV-SD-WHT-RC	6.6	
BE		120	SURFACE/WALL	EXIT SIGN, EDGE LIT ACRYLIC, GREEN LETTERS WITH MIN. OF 90 MIN BATTERY BACK-UP	EMERGI-LITE	LXN1NGC	2.3	
BX		120	SURFACE	REMOTE EMERGENCY LIGHT PACK WITH MIN. OF 90 MIN BATTERY BACK-UP	SELECT BY OWNER	SELECT BY OWNER	20.0	

NOTES:
1) VERIFY WITH OWNER OR ARCHITECT BEFORE PURCHASING THE LIGHTING FIXTURES.

LIGHTING CONTROL SEQUENCE

OFFICES:
1. CONTROLLED BY OCCUPANCY SENSORS WITH MANUAL OVERRIDE SWITCH WITH DIMMER.
2. LIGHTS AT FULL BRIGHTNESS WITH ACTIVITY IN OCCUPANCY SENSOR AREA OR OVERRIDE SWITCH ENGAGED.
3. LIGHTS OFF WITH NO ACTIVITY.

LOUNGE/OPEN OFFICE AREA:
1. CONTROLLED BY OCCUPANCY SENSORS.
2. LIGHTS AT FULL BRIGHTNESS WITH ACTIVITY IN OCCUPANCY SENSOR AREA.
3. LIGHTS AT 30% BRIGHTNESS WITH NO ACTIVITY DURING HOURS OF OPERATION.
4. LIGHTS OFF AFTER HOURS.

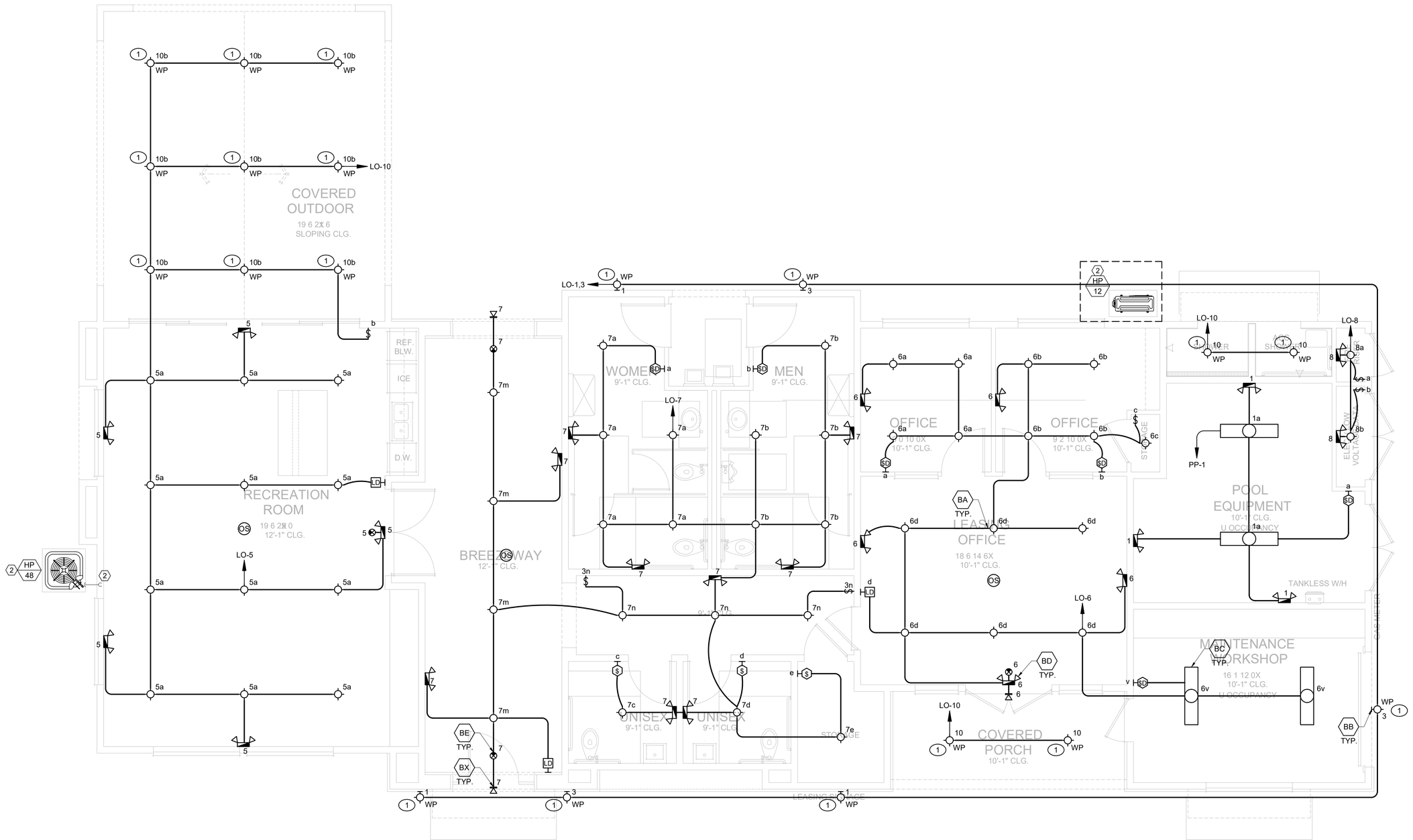
LAUNDRY/WORK AREAS:
1. CONTROLLED BY TIME CLOCK AND OCCUPANCY SENSORS.
2. LIGHTS AT FULL BRIGHTNESS DURING HOURS OF OPERATIONS WITH ACTIVITY IN MOTION SENSOR AREA. TIME TO BE DETERMINED BY COR.
3. LIGHTS AT 30% BRIGHTNESS DURING HOURS OF OPERATION WITH NO ACTIVITY IN MOTION SENSOR AREA. TIME TO BE DETERMINED BY COR.
4. LIGHTS WITH DAYLIGHT SENSORS SHALL BE DIMMABLE WITH RESPECT TO NATURAL LIGHT PROPER OPERATION DETERMINED BY COR.
5. LIGHTS AT FULL BRIGHTNESS AFTER HOURS WITH ACTIVITY IN OCCUPANCY SENSOR AREA.
6. LIGHTS OFF AFTER HOURS WITH NO ACTIVITY IN OCCUPANCY SENSOR AREA.

RESTROOMS AND STORAGE AREAS:
1. CONTROLLED BY OCCUPANCY SENSORS.
2. LIGHTS OFF WITH NO ACTIVITY AFTER AN ALLOTTED TIME DETERMINED BY COR.
3. LIGHTS AT FULL BRIGHTNESS WITH ACTIVITY IN OCCUPANCY SENSOR AREA.

EXTERIOR:
1. CONTROLLED BY PHOTO CELL ON ROOF.
2. LIGHTS OFF DURING DAYLIGHT.
3. UGHTS AT FULL BRIGHTNESS DURING LOW LIGHT.

EXTERIOR UNDER NEW ADDITION:
1. CONTROLLED BY INDIVIDUAL DAYLIGHT SENSOR ON LIGHT FIXTURE AND MANUAL "ON" OVER RIDE SWITCHES.
2. LIGHTS OFF DURING DAYLIGHT.
3. LIGHTS AT FULL BRIGHTNESS DURING LOW LIGHT OR MANUAL SWITCH ENGAGED.

TRANSFORMER, FIRE ALARM, AND TELEPHONE ROOMS:
1. CONTROLLED BY MANUAL SWITCH.



GENERAL NOTES

1. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND ELEVATION OF ALL LIGHTING FIXTURES AND ALL DEVICES. ALL WALL MOUNTED DEVICE SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO ROUGH-IN.
2. VERIFY EXACT CEILING CONSTRUCTION WITH ARCHITECTURAL REFLECTED CEILING PLAN AND PROVIDE LIGHTING FIXTURES WITH ALL NECESSARY MOUNTING HARDWARE.
3. ALL RECESSED FIXTURES SHALL BE PROVIDED WITH ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY THE CURRENTLY ADOPTED ISSUE OF THE UNIFORM BUILDING CODE, AS WELL AS ANY LOCAL CODES.
4. ALL COVE MOUNTED FIXTURES SHALL EXTEND THE FULL LENGTH OF THE COVE.
5. ALL DIMMING BRANCH CIRCUITS SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE/CHANNEL.
6. REFER TO ARCHITECTURAL PLANS FOR EXIT SIGN AND NUMBER OF FACTS PER EXIT SIGN.
7. WHEN EXPOSED CEILINGS OR OPEN GRID CONDITIONS OCCUR, THE CONTRACTOR WILL NEED TO PROVIDE THE FOLLOWING ITEMS:
   - ALL BRANCH CIRCUITS SHALL BE IN EMT.
   - ALL BRANCH CIRCUITS SHALL BE ROUTED NEATLY AND IN PARALLEL TO STRUCTURES OR DUCT WORK. THE TERM "TRAINED" MEANS ALL PARALLEL CONDUITS SHALL MAINTAIN THE SAME SPATIAL RELATIONSHIP WITH EACH OTHER FOR ENTIRE RUN TO INCLUDE RADIUS BENDS AND SWEEPS.
8. CONTRACTOR TO INCLUDE AN ALLOWANCE TO CORE AND SEAL PENETRATIONS THROUGH STRUCTURAL CONCRETE WALLS. COORDINATE LOCATIONS AND REQUIREMENTS WITH ARCHITECTURAL AND STRUCTURAL DRAWING.
9. COORDINATE ALL PENETRATIONS WITH STRUCTURAL PLANS AND DETAILS. NO PENETRATIONS ARE PERMITTED UNLESS SPECIFICALLY NOTED ON STRUCTURAL DRAWINGS.
10. EMERGENCY/EGRESS FIXTURES SHALL BE CONNECTED TO LOCAL CIRCUIT SERVING RESPECTIVE AREA AND AHEAD OF ALL CONTROLS.
11. ALL LIGHT FIXTURES ARE SHOWN WITH "EM" SHOULD BE EQUIPPED WITH UL924 LISTED 90 MINUTES EMERGENCY BATTERY BACKUP. PROVIDE ADDITIONAL UN-SWITCHED HOT CONDUCTOR TO BATTERY BACKUP. WHEN NORMAL SWITCH IS LOST, "EM" FIXTURE SHALL TURN "ON" FOR A MINIMUM OF 90 MINUTES.
12. EXIT SIGN ARE UN-SWITCHED. PROVIDE INTEGRATED BATTERY BACKUP WITH TEST SWITCH FOR ALL EXIT SIGNS.

KEYED NOTES

1. PER SECTION 150.0(K)(3) ALL OUTDOOR LIGHTING SHALL BE HIGH EFFICACY AND CONTROLLED BY MANUAL ON/OFF SWITCH AND ONE OF THE CHOICES BELOW:
   1. PHOTOCELL AND MOTION CENSOR
   2. PHOTOCELL AND AUTOMATIC TIME SWITCH
   3. ASTRONOMIC TIME CLOCK
2. CEILING FAN OR LIGHTING FIXTURE TO BE DETERMINED BY SOLA. VERIFY W/ OWNER FOR ACTUAL TO LOCATION. OUTLET BOX/SYSTEMS SHALL BE LISTED AND MARKED BY THE OEM AS SUITABLE FOR THIS PURPOSE. CEILING -SUSPENDED (PADDLE) FANS SHALL NOT WEIGH MORE THAN 70 LBS. FOR OUTLET BOX/SYSTEMS DESIGNED TO SUPPORT CEILING-SUSPENDED FANS THAT WEIGH MORE THAN 35 LBS, THE REQUIRED MARKING SHALL INCLUDE THE MAXIMUM WEIGHT TO BE SUPPORTED.
3. DENOTES THE CONTROL FOR THE CEILING FAN CONNECTED TO THE J-BOX PER NOTE #1. VERIFY W/ SUPPLIER AND PROVIDE DIMMER CONTROL IF THE LIGHTS ARE INCANDESCENT.

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STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
RECREATION / LEASING OFFICE LIGHTING PLANS

PROJECT NUMBER:
66235

ENGINEER:

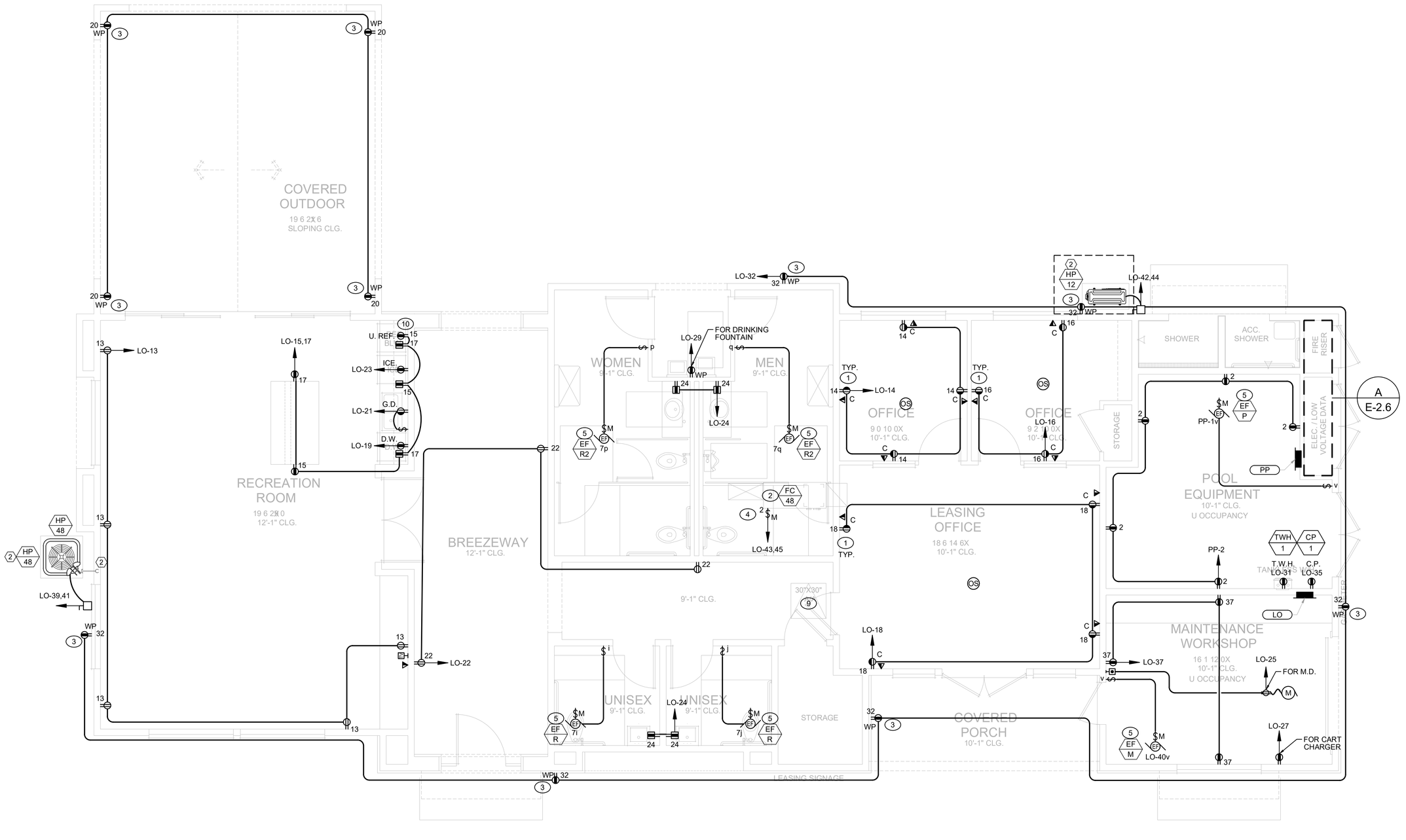
DRAFTER:

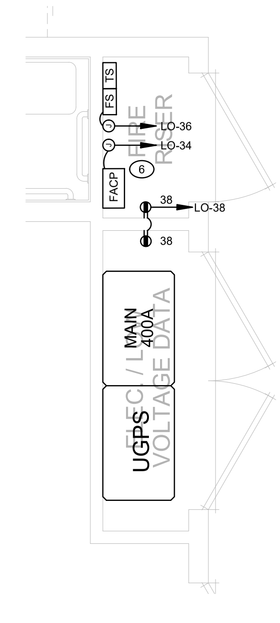
SHEET NUMBER:
E-2.5

RECREATION / LEASING OFFICE - LIGHTING PLAN | 1

C32

ISSUED DATE:8/17/2022





A UTILITY SERVICE
SCALE: 1/2" : 1'-0"

0 2' 4' 8' 12'
1/4" = 1'-0"

RECREATION / LEASING OFFICE - POWER PLAN | 1

GENERAL NOTES

1. COORDINATE LOCATION AND MOUNTING HEIGHT OF DEVICES WITH ARCHITECTURAL FLOOR PLANS AND ELEVATIONS.
2. COORDINATE ALL EQUIPMENT REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH IN.
3. ALL CONDUIT SHALL BE CONCEALED. IN EXPOSED CEILING AREAS, EXPOSED AND SURFACE MOUNTED CONDUIT SHALL BE EMT AND SHALL BE ROUTED ORTHOGONAL TO THE STRUCTURE AND SHALL BE INSTALLED IN NEAT AND WORKMAN LIKE MANNER.
4. ALL DEVICES INCLUDING OUTLETS AND SWITCHES SHALL BE WHITE FINISH WITH WHITE COVER PLATES. COORDINATE ALL FINISHES WITH ARCHITECT.
5. INSTALL ALL DEVICES PER ADA REQUIREMENTS.
6. ALL BRANCH CIRCUITS OVER 50' SHALL USE #10 CONDUCTORS.
7. ALL DEVICE PENETRATIONS AT COMMON WALLS SHALL BE STAGGERED AND SEPARATED BY A VERTICAL STUD. ALL OPENINGS SHALL BE WRAPPED WITH SOUND INSULATION AND SEALED TIGHT WITH ACOUSTICAL SEALANT.
8. LABEL ALL OUTLETS WITH PANEL NAME AND CIRCUIT NUMBER USING CLEAR LABEL WITH BLACK PRINTED LETTERS.
9. OUTLETS IN LOUNGE AREA SHALL BE TAMPER RESISTANT.

KEY NOTES

1. "C" INDICATES CIRCUIT IS CONTROLLED BY OCCUPANCY SENSOR. COORDINATE WITH OCCUPANCY SENSOR MANUFACTURER FOR ALL REQUIREMENTS. THE CONTROLLED OUTLET MUST BE CLEARLY LABELED TO BE DISTINGUISHED FROM THE UNCONTROLLED PART. PROVIDE SEPARATE WIRE FOR CONTROLLED RECEPTACLE.
2. DENOTES APPROXIMATE LOCATION OF FC UNIT. VERIFY WITH MECHANICAL DRAWINGS FOR EXACT LOCATION.
3. PROVIDE GFCI PROTECTED RECEPTACLE OUTLET WITH ENCLOSURE THAT IS WEATHERPROOF (WP) WHETHER OR NOT THE ATTACHMENT PLUG CAP IS INSERTED. AN OUTLET BOX HOOD SHALL BE LISTED AND SHALL BE IDENTIFIED AS "EXTRA DUTY". RECEPTACLE SHALL BE LISTED AND SO IDENTIFIED AS WEATHER-RESISTANT (WR) TYPE.
4. PROVIDE 15A/2P MOTOR RATED SWITCH FOR CONNECTION TO THE FC.
5. PROVIDE 15A/1P MOTOR RATED SWITCH FOR CONNECT TO THE EXHAUST FAN. REFER TO MECHANICAL PLAN FOR DETAIL.
6. FIRE ALARM CONTROL PANEL (FACP). E.C. TO VERIFY EXACT LOCATION AND REQUIREMENTS PRIOR TO ROUGH-IN.
7. CABLE TV BACKBOARD (CATV). E.C. TO VERIFY EXACT LOCATION AND REQUIREMENTS PRIOR TO ROUGH-IN.
8. PROVIDE ALL ELECTRICAL AND DATA REQUIREMENTS PER MANUFACTURER SPEC SHEET FOR FITNESS EQUIPMENT.
9. PROVIDE POWER, LIGHTING, AND OCCUPANCY SENSOR TO ATTIC SPACE.
10. REFRIGERATOR RECEPTACLE CONNECTED TO LINE SIDE OF KITCHEN SMALL APPLIANCE GFI PROTECTED COUNTER MOUNTED RECEPTACLE TO COMPLY WITH NEC SECTION 210.52(B)(1).

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STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
RECREATION / LEASING OFFICE POWER PLAN

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-2.6

C33

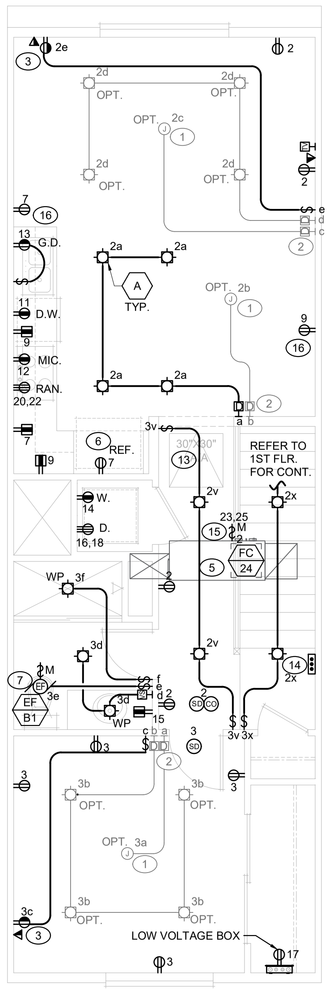
ISSUED DATE:8/17/2022

LIGHTING LUMINAIRE SCHEDULE

MARK	LEGEND	VOLT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LAMPS	INPUT WATTS	NOTES
A		120	RECESS	LED DOWNLIGHT	SELECT BY OWNER	SELECT BY OWNER	LED	18	OR APPROVED EQUAL
B		120	WALL	LED LIGHT (WALL)	SELECT BY OWNER	SELECT BY OWNER	LED	48	OR APPROVED EQUAL
C		120	SURFACE	LED TRIP LIGHT	SELECT BY OWNER	SELECT BY OWNER	LED	50	OR APPROVED EQUAL

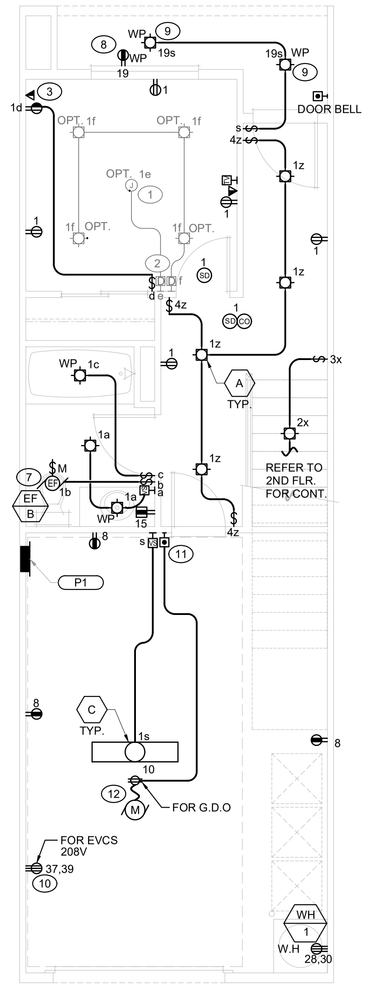
NOTES:

1) VERIFY WITH OWNER OR ARCHITECT BEFORE PURCHASING THE LIGHTING FIXTURES.



SECOND FLOOR PLAN 2

1/4" = 1'-0"



FIRST FLOOR PLAN 1

1/4" = 1'-0"

GENERAL NOTES

1. PROVIDE VACANCY SENSOR/DIMMER TO ALL LUMINAIRES REQUIRED BY SECTION 150.0 OF 2019 TITLE 24 PART 6.
2. THIS DRAWING IS FOR REFERENCE ONLY. WIRE CKT 20 ON THE PLAN TO ALL DETECTORS FOR A COMPLETE AND OPERATIONAL SYSTEM. VERIFY W/LOCAL JURISDICTION FOR ALARM DETECTOR REQUIREMENT BEFORE ROUGH-IN.
3. IN DWELLING AREA SPECIFIED IN CEC 2019 SECTION 210.52; (A) WALL SPACE, (B) SMALL-APPLIANCE CIRCUIT, (C) COUNTERTOP SPACE, (D) BATHROOM AREA, (E) OUTDOORS, (F) LAUNDRY AREA, (G) GARAGE, AND (H) HALLWAYS; ALL 125-VOLT, 15- AND 20- AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
4. OUTLETS INSTALLED IN KITCHENS, FAMILY ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS OR SIMILAR ROOMS OR AREAS WILL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
5. ALL NEW CARBON MONOXIDE ALARM ARE 120V HARD-WIRED WITH BATTERY BACKUP, INTERCONNECTED WITH OC SENSOR, AND ARE AUDIBLE IN ALL SLEEPING ROOMS.
6. ELECTRICAL CONTRACTOR MUST VERIFY MECHANICAL EQUIPMENT INFORMATION FOR MECHANICAL DRAWING BEFORE ISSUING ANY BID. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCY OCCUR.
7. THE HEIGHT OF THE OUTLETS AND SWITCHES ARE NOT NOTED ON THE LEGEND OR IN THE UNIT PLANS. REFER TO "TYPICAL ELECTRICAL DEVICE HEIGHT ON E-0.3"
8. ALL DWELLING UNIT LUMINAIRES SHALL BE HIGH EFFICACY IN ACCORDANCE WITH TABLE 150.0 OF 2019 BUILDING ENERGY EFFICIENCY STANDARDS, TITLE 24 PART 6.
9. A DEDICATED 125-VOLT (V) ELECTRICAL RECEPTACLE THAT IS WITHIN 3 FEET OF THE WATER HEATER AND ACCESSIBLE TO THE WATER HEATER WITH NO OBSTRUCTIONS, AND BE CONNECTED TO A THREE CONDUCTOR, 10 AWG BRANCH CIRCUIT. IN ADDITION, THE UNUSED CONDUCTOR MUST BE LABELED AS "SPARE" AND ELECTRICALLY ISOLATED AND HAVE RESERVED CIRCUIT BREAKER SPACE.

KEYED NOTES

1. CEILING FAN OR LIGHTING FIXTURE TO BE DETERMINED. VERIFY W/ OWNER FOR ACTUAL TO LOCATION. OUTLET BOX/SYSTEMS SHALL BE LISTED AND MARKED BY THE OEM AS SUITABLE FOR THIS PURPOSE. CEILING -SUSPENDED (PADDLE) FANS SHALL NOT WEIGH MORE THAN 70 LBS. FOR OUTLET BOX/SYSTEMS DESIGNED TO SUPPORT CEILING-SUSPENDED FANS THAT WEIGH MORE THAN 35 LBS, THE REQUIRED MARKING SHALL INCLUDE THE MAXIMUM WEIGHT TO BE SUPPORTED.
2. DENOTES THE CONTROL FOR THE CEILING FAN CONNECTED TO THE J-BOX PER NOTE #1. VERIFY W/ SUPPLIER AND PROVIDE DIMMER CONTROL IF THE LIGHTS ARE INCANDESCENT.
3. DENOTES HALF-HOT RECEPTACLE ON SWITCH LEG 'b' IN THIS AREA.
4. SPLIT CIRCUITED HALF-SWITCHED DUPLEX RECEPTACLE FOR GARBAGE DISPOSER AND DISHWASHER BELOW KITCHEN SINK. CONNECT THE SWITCHED SIDE OF THE RECEPTACLE TO A MOTOR RATED WALL SWITCH AND PROVIDE A DEDICATED CIRCUIT FOR EACH APPLIANCE WITH A COMMON TRIP DEVICE AT THE CIRCUIT BREAKER.
5. DENOTES APPROXIMATE LOCATION OF FC/FAU UNIT. VERIFY WITH MECHANICAL DRAWINGS FOR EXACT LOCATION.
6. REFRIGERATOR RECEPTACLE CONNECTED TO LINE SIDE OF KITCHEN SMALL APPLIANCE GFI PROTECTED COUNTER MOUNTED RECEPTACLE TO COMPLY WITH NEC SECTION 210.52(B)(1).
7. PROVIDE 15A/1P MOTOR RATED SWITCH FOR CONNECT TO THE EXHAUST FAN. REFER TO MECHANICAL PLAN FOR DETAIL.
8. PROVIDE GFCI PROTECTED RECEPTACLE OUTLET WITH ENCLOSURE THAT IS WEATHERPROOF (WP) WHETHER OR NOT THE ATTACHMENT PLUG CAP IS INSERTED. AN OUTLET BOX HOOD SHALL BE LISTED AND SHALL BE IDENTIFIED AS "EXTRA DUTY". RECEPTACLE SHALL BE LISTED AND SO IDENTIFIED AS WEATHER-RESISTANT (WR) TYPE.
9. PER SECTION 150.0(K)(3) ALL OUTDOOR LIGHTING SHALL BE HIGH EFFICACY AND CONTROLLED BY MANUAL ON/OFF SWITCH AND ONE OF THE CHOICES BELOW:
   1. PHOTOCELL AND MOTION SENSOR
   2. PHOTOCELL AND AUTOMATIC TIME SWITCH
   3. ASTRONOMIC TIME CLOCK
10. PROVIDE 1"C TO ACCOMMODATE A DEDICATED 208/240V "EV CAPABLE". THE PANEL SHALL PROVIDE THE CAPACITY TO INSTALL A 40-AMPERE MINIMUM. THE INSTALLATION OF "EV CAPABLE", INCLUDES THE WIRING, CIRCUIT BREAKER SIZE, CONFIGURATION OF RECEPTACLE, AND FINAL TERMINATION SHOULD BE PROVIDED BY THE CONTRACTOR.
11. DENOTES GARAGE DOOR OPENER CONTROLLER.
12. DENOTES CEILING MOUNTED RECEPTACLES FOR GARAGE DOOR OPENER ON THE SWITCH LEG AS SHOWN.
13. PROVIDE POWER, LIGHTING, AND OCCUPANCY SENSOR TO ATTIC SPACE.
14. CHIME UNIT WITH INTERGRAL TRANSFORMER MOUNTED AT +7'-0" A.F.F. TO BOTTOM OF CHIME.
15. PROVIDE 15A/2P MOTOR RATED SWITCH FOR CONNECTION TO THE FC.
16. DINING RECEPTACLE CONNECTED TO LINE SIDE OF KITCHEN SMALL APPLIANCE GFI PROTECTED COUNTER MOUNTED RECEPTACLE TO COMPLY WITH NEC SECTION 210.52(B)(1).

SMOKE DETECTORS NOTES

1. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE LOCATED WHERE AMBIENT CONDITION, INCLUDING HUMIDITY AND TEMPERATURE, ARE OUTSIDE THE LIMITS SPECIFIED BY THE MANUFACTURER'S PUBLISHED INSTRUCTIONS.
2. SMOKE ALARMS OR SMOKE DETECTORS SHALL BE INSTALLED A MINIMUM OF 20 FOOT HORIZONTAL DISTANCE FROM A PERMANENTLY INSTALLED COOKING APPLIANCE, EXCEPTION IONIZATION SMOKE ALARMS OR PHOTOELECTRIC SMOKE ALARMS PER CODE.
3. INSTALLATION NEAR BATHROOMS. SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN A 3 FOOT HORIZONTAL DISTANCE FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM REQUIRED BY OTHER SECTION OF THE CODE.
4. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITH A 36 INCH HORIZONTAL PATH FROM THE SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOLING SYSTEM AND SHLLE BE INSTALLED OUTSIDE OF THE DIRECT AIR FLOW FROM THOSE REGISTERS.
5. CARBON MONOXIDE/ SMOKE DETECTORS SHALL BE PERMANENTLY WIRED AND PROVIDED WITH BATTERY BACK-UP. SMOKE DETECTORS ARE TO BE INTERCONNECTED WITH-IN EACH UNIT SO THAT ALL DETECTORS WITH-IN THE UNIT WILL SOUND THEIR ALARMS ON ACTIVATION OF ANY DETECTOR IN THE UNIT.
6. WHERE THE HIGHEST POINT OF A CEILING IN A ROOM THAT OPENS TO THE HALLWAY SERVING THE BEDROOMS EXCEEDS THAT OF THE OPENING INTO THE HALLWAY BE 24 INCHES OR MORE, SMOKE DETECTORS SHALL BE INSTALLED IN THE HALLWAY AND IN THE ADJACENT ROOM WITHIN 12 INCHES FROM THE HIGHEST POINT OF THE CEILING.
7. CARBON MONOXIDE/ SMOKE DETECTORS INTERCONNECTED SHALL BE INSTALLED WITHIN EACH DWELLING UNIT BEFORE APPROVAL BY THE FIRE DEPARTMENT.

2019 CAL GREEN EV CAPABLE NOTES

THE 2019 CALGREEN CODES BECOME EFFECTIVE ON JANUARY 1, 2020, AND REQUIRES THE FOLLOWING:

- ALL RESIDENTIAL CONSTRUCTION INCLUDES SINGLE-FAMILY, TOWNHOMES, & DUPLEXES MUST BE EV CAPABLE.
- EACH DWELLING UNIT MUST HAVE A LISTED RACEWAY TO ACCOMMODATE A DEDICATED 208/240-VOLT BRANCH CIRCUIT.
- IN MULTI-FAMILY DWELLINGS THE "EV CAPABLE" IS BASED ON THE PERCENT OF TOTAL PARKING SPACES.
- IN HOTEL AND NONRESIDENTIAL CONSTRUCTION, "EV CAPABLE" SPACES ARE REQUIRED BASE ON THE TOTAL NUMBER OF PARKING SPACES AT ALL TYPES OF PARKING FACILITIES (E.G., GARAGES, FLAT LOTS, VALET).
- THE RACEWAY SHALL NOT BE LESS THAN 1 INCH, SHALL ORIGINATE AT THE MAIN SERVICE OR SUBPANEL, AND SHALL TERMINATE INTO A LISTED CABINET BOX, OR OTHER ENCLOSURE INCLOSE PROXIMITY TO THE PROPOSE LOCATION OF AN EV CHARGER.
- THE PANEL OR SUBPANEL SHALL PROVIDE CAPACITY TO INSTALL A 40-AMPERE MINIMUM DEDICATED BRANCH CIRCUIT AND SPACE(S) RESERVED TO PERMIT INSTALLATION OF A BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE.
- THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR EV CHARGING AS "EV CAPABLE".
- THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENTLY AND VISIBLY MARKED AS "EV CAPABLE.

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REGISTERED PROFESSIONAL ENGINEER MEHDI HOSSENZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:

Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:

Bassenian Lagoni

LOCATION:

Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:

UNIT 1A, 1B & 1C FLOOR PLANS

PROJECT NUMBER:

66235

ENGINEER:

DRAFTER:

SHEET NUMBER:

E-3.1

C34

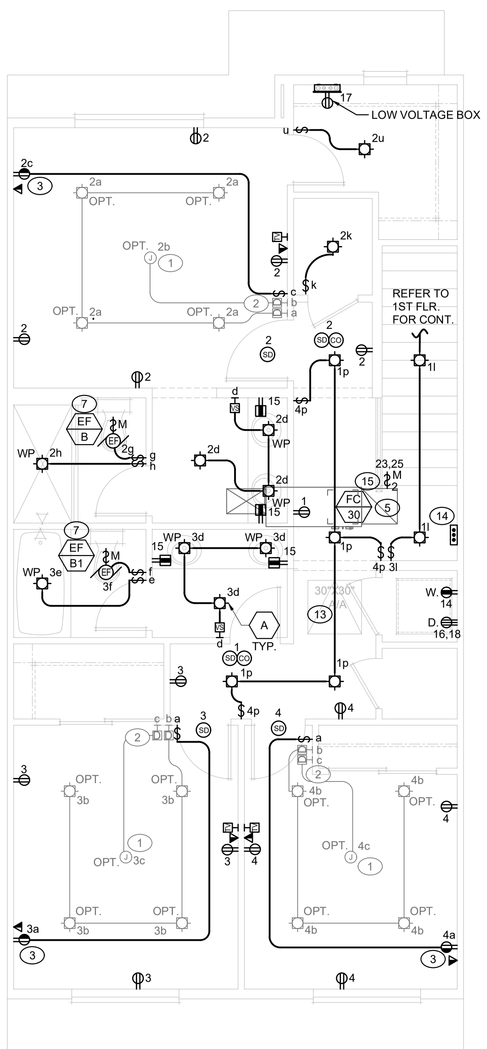
ISSUED DATE:8/17/2022

LIGHTING LUMINAIRE SCHEDULE

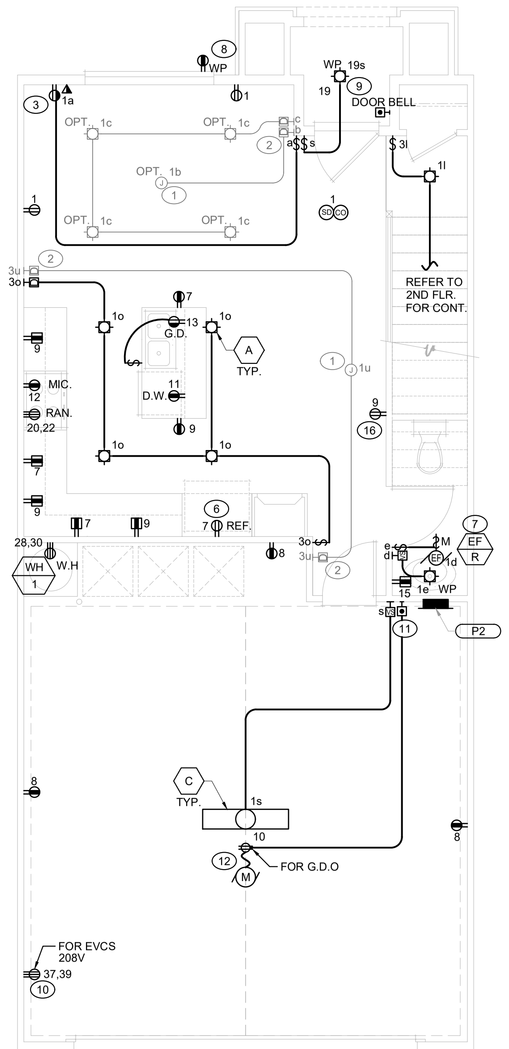
MARK	LEGEND	VOLT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LAMPS	INPUT WATTS	NOTES
A		120	RECESS	LED DOWNLIGHT	SELECT BY OWNER	SELECT BY OWNER	LED	18	OR APPROVED EQUAL
B		120	WALL	LED LIGHT (WALL)	SELECT BY OWNER	SELECT BY OWNER	LED	48	OR APPROVED EQUAL
C		120	SURFACE	LED TRIP LIGHT	SELECT BY OWNER	SELECT BY OWNER	LED	50	OR APPROVED EQUAL

NOTES:

1) VERIFY WITH OWNER OR ARCHITECT BEFORE PURCHASING THE LIGHTING FIXTURES.



SECOND FLOOR PLAN 2



FIRST FLOOR PLAN 1

GENERAL NOTES

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2. THIS DRAWING IS FOR REFERENCE ONLY. WIRE CKT 20 ON THE PLAN TO ALL DETECTORS FOR A COMPLETE AND OPERATIONAL SYSTEM. VERIFY W/LOCAL JURISDICTION FOR ALARM DETECTOR REQUIREMENT BEFORE ROUGH-IN.
3. IN DWELLING AREA SPECIFIED IN CEC 2019 SECTION 210.52; (A) WALL SPACE, (B) SMALL-APPLIANCE CIRCUIT, (C) COUNTERTOP SPACE, (D) BATHROOM AREA, (E) OUTDOORS, (F) LAUNDRY AREA, (G) GARAGE, AND (H) HALLWAYS; ALL 125-VOLT, 15- AND 20- AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
4. OUTLETS INSTALLED IN KITCHENS, FAMILY ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS OR SIMILAR ROOMS OR AREAS WILL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
5. ALL NEW CARBON MONOXIDE ALARM ARE 120V HARD-WIRED WITH BATTERY BACKUP, INTERCONNECTED WITH OC SENSOR, AND ARE AUDIBLE IN ALL SLEEPING ROOMS.
6. ELECTRICAL CONTRACTOR MUST VERIFY MECHANICAL EQUIPMENT INFORMATION FOR MECHANICAL DRAWING BEFORE ISSUING ANY BID. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCY OCCUR.
7. THE HEIGHT OF THE OUTLETS AND SWITCHES ARE NOT NOTED ON THE LEGEND OR IN THE UNIT PLANS. REFER TO "TYPICAL ELECTRICAL DEVICE HEIGHT ON E-0.3"
8. ALL DWELLING UNIT LUMINAIRES SHALL BE HIGH EFFICACY IN ACCORDANCE WITH TABLE 150.0 OF 2019 BUILDING ENERGY EFFICIENCY STANDARDS, TITLE 24 PART 6.
9. A DEDICATED 125-VOLT (V) ELECTRICAL RECEPTACLE THAT IS WITHIN 3 FEET OF THE WATER HEATER AND ACCESSIBLE TO THE WATER HEATER WITH NO OBSTRUCTIONS, AND BE CONNECTED TO A THREE CONDUCTOR, 10 AWG BRANCH CIRCUIT. IN ADDITION, THE UNUSED CONDUCTOR MUST BE LABELED AS "SPARE" AND ELECTRICALLY ISOLATED AND HAVE RESERVED CIRCUIT BREAKER SPACE.

KEYED NOTES

1. CEILING FAN OR LIGHTING FIXTURE TO BE DETERMINED. VERIFY W/ OWNER FOR ACTUAL TO LOCATION. OUTLET BOX/SYSTEMS SHALL BE LISTED AND MARKED BY THE OEM AS SUITABLE FOR THIS PURPOSE. CEILING -SUSPENDED (PADDLE) FANS SHALL NOT WEIGH MORE THAN 70 LBS. FOR OUTLET BOX/SYSTEMS DESIGNED TO SUPPORT CEILING-SUSPENDED FANS THAT WEIGH MORE THAN 35 LBS, THE REQUIRED MARKING SHALL INCLUDE THE MAXIMUM WEIGHT TO BE SUPPORTED.
2. DENOTES THE CONTROL FOR THE CEILING FAN CONNECTED TO THE J-BOX PER NOTE #1. VERIFY W/ SUPPLIER AND PROVIDE DIMMER CONTROL IF THE LIGHTS ARE INCANDESCENT.
3. DENOTES HALF-HOT RECEPTACLE ON SWITCH LEG 'b' IN THIS AREA.
4. SPLIT CIRCUITED HALF-SWITCHED DUPLEX RECEPTACLE FOR GARBAGE DISPOSER AND DISHWASHER BELOW KITCHEN SINK. CONNECT THE SWITCHED SIDE OF THE RECEPTACLE TO A MOTOR RATED WALL SWITCH AND PROVIDE A DEDICATED CIRCUIT FOR EACH APPLIANCE WITH A COMMON TRIP DEVICE AT THE CIRCUIT BREAKER.
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REGISTERED PROFESSIONAL ENGINEER MEHDI HOSSENZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:

Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:

Bassenian Lagoni

LOCATION:

Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:

UNIT 2A, 2B, 2C, 2D & 2XB FLOOR PLANS

PROJECT NUMBER:

66235

ENGINEER:

DRAFTER:

SHEET NUMBER:

E-3.2

C35

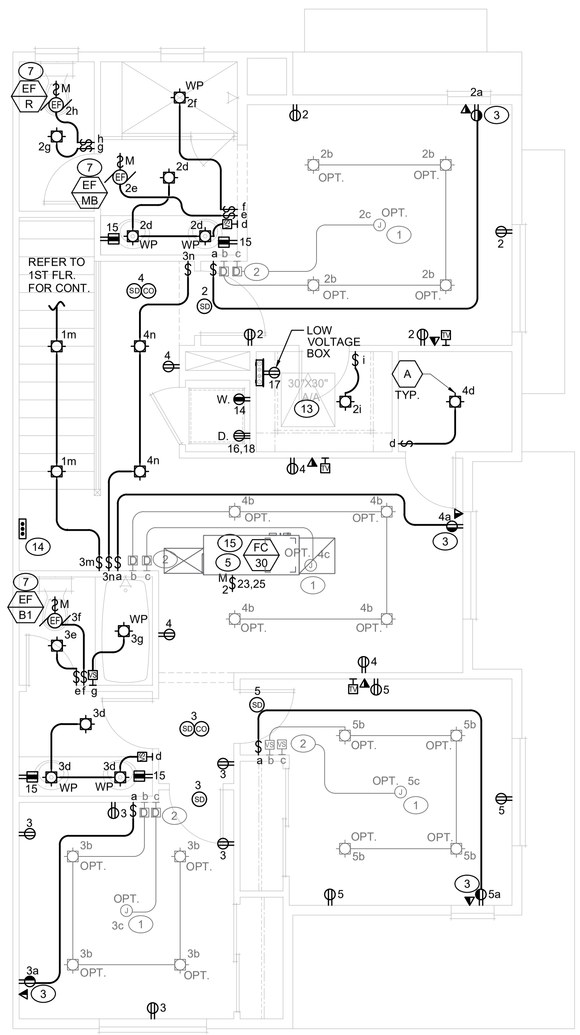
ISSUED DATE:8/17/2022

LIGHTING LUMINAIRE SCHEDULE

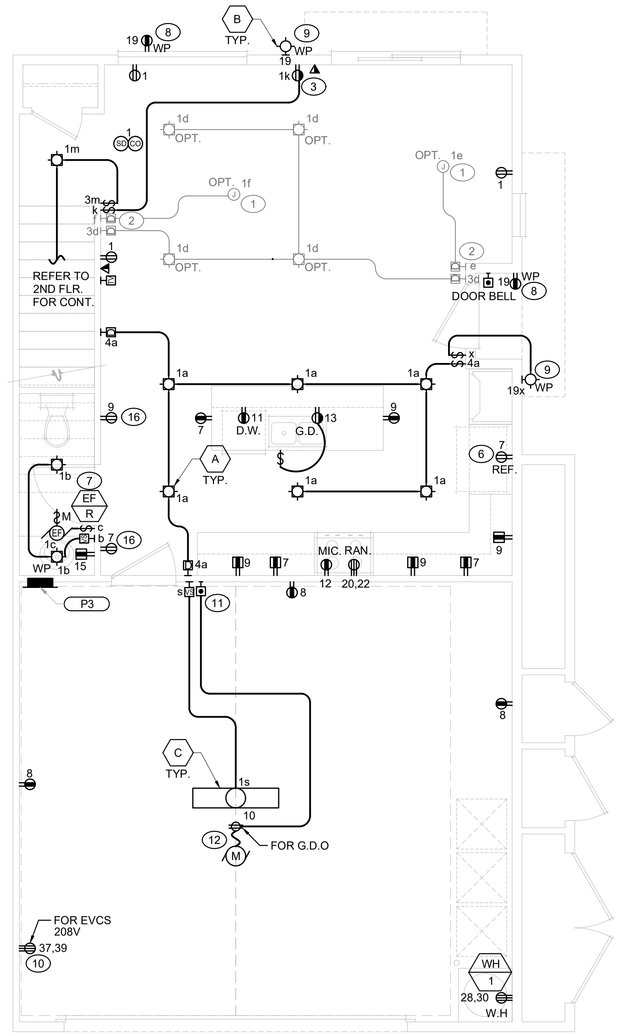
MARK	LEGEND	VOLT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LAMPS	INPUT WATTS	NOTES
A		120	RECESS	LED DOWNLIGHT	SELECT BY OWNER	SELECT BY OWNER	LED	18	OR APPROVED EQUAL
B		120	WALL	LED LIGHT (WALL)	SELECT BY OWNER	SELECT BY OWNER	LED	48	OR APPROVED EQUAL
C		120	SURFACE	LED TRIP LIGHT	SELECT BY OWNER	SELECT BY OWNER	LED	50	OR APPROVED EQUAL

NOTES:

1) VERIFY WITH OWNER OR ARCHITECT BEFORE PURCHASING THE LIGHTING FIXTURES.



SECOND FLOOR PLAN 2



FIRST FLOOR PLAN 1

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3. INSTALLATION NEAR BATHROOMS. SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN A 3 FOOT HORIZONTAL DISTANCE FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM REQUIRED BY OTHER SECTION OF THE CODE.
4. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITH A 36 INCH HORIZONTAL PATH FROM THE SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOLING SYSTEM AND SHLLE BE INSTALLED OUTSIDE OF THE DIRECT AIR FLOW FROM THOSE REGISTERS.
5. CARBON MONOXIDE/ SMOKE DETECTORS SHALL BE PERMANENTLY WIRED AND PROVIDED WITH BATTERY BACK-UP. SMOKE DETECTORS ARE TO BE INTERCONNECTED WITH-IN EACH UNIT SO THAT ALL DETECTORS WITH-IN THE UNIT WILL SOUND THEIR ALARMS ON ACTIVATION OF ANY DETECTOR IN THE UNIT.
6. WHERE THE HIGHEST POINT OF A CEILING IN A ROOM THAT OPENS TO THE HALLWAY SERVING THE BEDROOMS EXCEEDS THAT OF THE OPENING INTO THE HALLWAY BE 24 INCHES OR MORE, SMOKE DETECTORS SHALL BE INSTALLED IN THE HALLWAY AND IN THE ADJACENT ROOM WITHIN 12 INCHES FROM THE HIGHEST POINT OF THE CEILING.
7. CARBON MONOXIDE/ SMOKE DETECTORS INTERCONNECTED SHALL BE INSTALLED WITHIN EACH DWELLING UNIT BEFORE APPROVAL BY THE FIRE DEPARTMENT.

2019 CAL GREEN EV CAPABLE NOTES

THE 2019 CALGREEN CODES BECOME EFFECTIVE ON JANUARY 1, 2020, AND REQUIRES THE FOLLOWING:

- ALL RESIDENTIAL CONSTRUCTION INCLUDES SINGLE-FAMILY, TOWNHOMES, & DUPLEXES MUST BE EV CAPABLE.
- EACH DWELLING UNIT MUST HAVE A LISTED RACEWAY TO ACCOMMODATE A DEDICATED 208/240-VOLT BRANCH CIRCUIT.
- IN MULTI-FAMILY DWELLINGS THE "EV CAPABLE" IS BASED ON THE PERCENT OF TOTAL PARKING SPACES.
- IN HOTEL AND NONRESIDENTIAL CONSTRUCTION, "EV CAPABLE" SPACES ARE REQUIRED BASE ON THE TOTAL NUMBER OF PARKING SPACES AT ALL TYPES OF PARKING FACILITIES (E.G., GARAGES, FLAT LOTS, VALET).
- THE RACEWAY SHALL NOT BE LESS THAN 1 INCH, SHALL ORIGINATE AT THE MAIN SERVICE OR SUBPANEL, AND SHALL TERMINATE INTO A LISTED CABINET BOX, OR OTHER ENCLOSURE INCLOSE PROXIMITY TO THE PROPOSE LOCATION OF AN EV CHARGER.
- THE PANEL OR SUBPANEL SHALL PROVIDE CAPACITY TO INSTALL A 40-AMPERE MINIMUM DEDICATED BRANCH CIRCUIT AND SPACE(S) RESERVED TO PERMIT INSTALLATION OF A BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE.
- THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR EV CHARGING AS "EV CAPABLE".
- THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENTLY AND VISIBLY MARKED AS "EV CAPABLE.

GOUVIS engineering consulting group, inc.

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CA 92618

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REGISTERED PROFESSIONAL ENGINEER MEHDI HOSSENZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
UNIT 3A & 3B FLOOR PLANS

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-3.3

ISSUED DATE:8/17/2022

C36

LIGHTING LUMINAIRE SCHEDULE

MARK	LEGEND	VOLT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LAMPS	INPUT WATTS	NOTES
A		120	RECESS	LED DOWNLIGHT	SELECT BY OWNER	SELECT BY OWNER	LED	18	OR APPROVED EQUAL
B		120	WALL	LED LIGHT (WALL)	SELECT BY OWNER	SELECT BY OWNER	LED	48	OR APPROVED EQUAL
C		120	SURFACE	LED TRIP LIGHT	SELECT BY OWNER	SELECT BY OWNER	LED	50	OR APPROVED EQUAL

NOTES:

1) VERIFY WITH OWNER OR ARCHITECT BEFORE PURCHASING THE LIGHTING FIXTURES.

GENERAL NOTES

1. PROVIDE VACANCY SENSOR/DIMMER TO ALL LUMINAIRES REQUIRED BY SECTION 150.0 OF 2019 TITLE 24 PART 6.
2. THIS DRAWING IS FOR REFERENCE ONLY. WIRE CKT 20 ON THE PLAN TO ALL DETECTORS FOR A COMPLETE AND OPERATIONAL SYSTEM. VERIFY W/LOCAL JURISDICTION FOR ALARM DETECTOR REQUIREMENT BEFORE ROUGH-IN.
3. IN DWELLING AREA SPECIFIED IN CEC 2019 SECTION 210.52; (A) WALL SPACE, (B) SMALL-APPLIANCE CIRCUIT, (C) COUNTERTOP SPACE, (D) BATHROOM AREA, (E) OUTDOORS, (F) LAUNDRY AREA, (G) GARAGE, AND (H) HALLWAYS; ALL 125-VOLT, 15- AND 20- AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
4. OUTLETS INSTALLED IN KITCHENS, FAMILY ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS OR SIMILAR ROOMS OR AREAS WILL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
5. ALL NEW CARBON MONOXIDE ALARM ARE 120V HARD-WIRED WITH BATTERY BACKUP, INTERCONNECTED WITH OC SENSOR, AND ARE AUDIBLE IN ALL SLEEPING ROOMS.
6. ELECTRICAL CONTRACTOR MUST VERIFY MECHANICAL EQUIPMENT INFORMATION FOR MECHANICAL DRAWING BEFORE ISSUING ANY BID. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCY OCCUR.
7. THE HEIGHT OF THE OUTLETS AND SWITCHES ARE NOT NOTED ON THE LEGEND OR IN THE UNIT PLANS. REFER TO "TYPICAL ELECTRICAL DEVICE HEIGHT ON E-0.3"
8. ALL DWELLING UNIT LUMINAIRES SHALL BE HIGH EFFICACY IN ACCORDANCE WITH TABLE 150.0 OF 2019 BUILDING ENERGY EFFICIENCY STANDARDS, TITLE 24 PART 6.
9. A DEDICATED 125-VOLT (V) ELECTRICAL RECEPTACLE THAT IS WITHIN 3 FEET OF THE WATER HEATER AND ACCESSIBLE TO THE WATER HEATER WITH NO OBSTRUCTIONS, AND BE CONNECTED TO A THREE CONDUCTOR, 10 AWG BRANCH CIRCUIT. IN ADDITION, THE UNUSED CONDUCTOR MUST BE LABELED AS "SPARE" AND ELECTRICALLY ISOLATED AND HAVE RESERVED CIRCUIT BREAKER SPACE.

KEYED NOTES

1. CEILING FAN OR LIGHTING FIXTURE TO BE DETERMINED. VERIFY W/ OWNER FOR ACTUAL TO LOCATION. OUTLET BOX/SYSTEMS SHALL BE LISTED AND MARKED BY THE OEM AS SUITABLE FOR THIS PURPOSE. CEILING -SUSPENDED (PADDLE) FANS SHALL NOT WEIGH MORE THAN 70 LBS. FOR OUTLET BOX/SYSTEMS DESIGNED TO SUPPORT CEILING-SUSPENDED FANS THAT WEIGH MORE THAN 35 LBS, THE REQUIRED MARKING SHALL INCLUDE THE MAXIMUM WEIGHT TO BE SUPPORTED.
2. DENOTES THE CONTROL FOR THE CEILING FAN CONNECTED TO THE J-BOX PER NOTE #1. VERIFY W/ SUPPLIER AND PROVIDE DIMMER CONTROL IF THE LIGHTS ARE INCANDESCENT.
3. DENOTES HALF-HOT RECEPTACLE ON SWITCH LEG 'b' IN THIS AREA.
4. SPLIT CIRCUITED HALF-SWITCHED DUPLEX RECEPTACLE FOR GARBAGE DISPOSER AND DISHWASHER BELOW KITCHEN SINK. CONNECT THE SWITCHED SIDE OF THE RECEPTACLE TO A MOTOR RATED WALL SWITCH AND PROVIDE A DEDICATED CIRCUIT FOR EACH APPLIANCE WITH A COMMON TRIP DEVICE AT THE CIRCUIT BREAKER.
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7. PROVIDE 15A/1P MOTOR RATED SWITCH FOR CONNECT TO THE EXHAUST FAN. REFER TO MECHANICAL PLAN FOR DETAIL.
8. PROVIDE GFCI PROTECTED RECEPTACLE OUTLET WITH ENCLOSURE THAT IS WEATHERPROOF (WP) WHETHER OR NOT THE ATTACHMENT PLUG CAP IS INSERTED. AN OUTLET BOX HOOD SHALL BE LISTED AND SHALL BE IDENTIFIED AS "EXTRA DUTY". RECEPTACLE SHALL BE LISTED AND SO IDENTIFIED AS WEATHER-RESISTANT (WR) TYPE.
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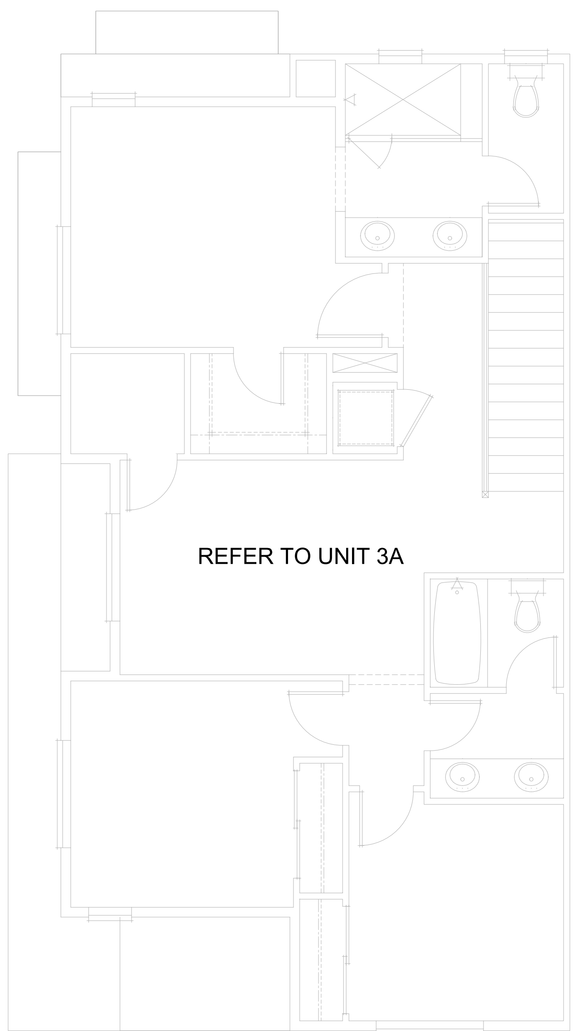
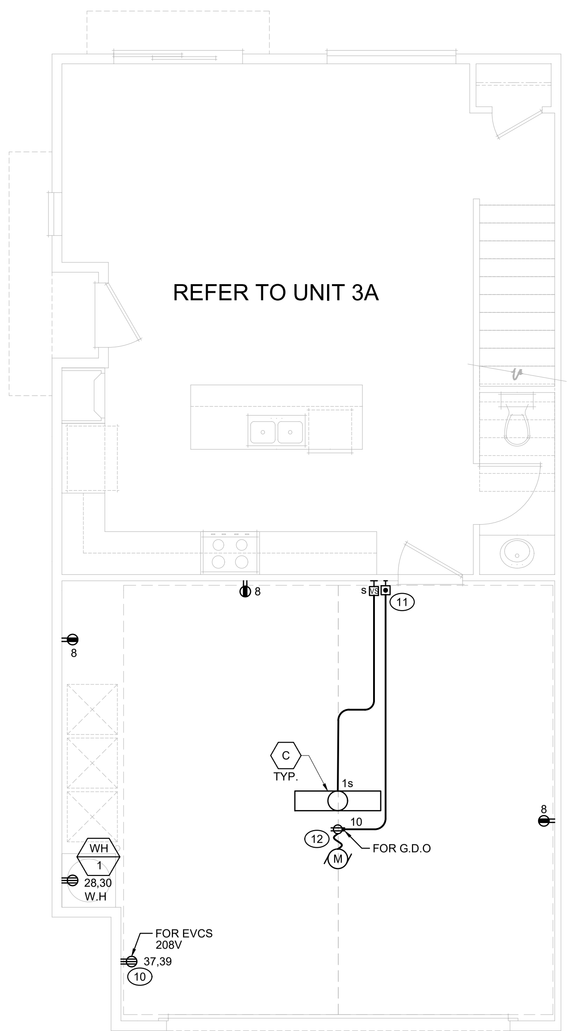


SECOND FLOOR PLAN 2



FIRST FLOOR PLAN 1

GOUVIS engineering consulting group, inc.

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Palm Springs
tel 760.323.5090

REGISTERED PROFESSIONAL ENGINEER
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E 22037
ELECTRICAL
STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
UNIT 3XA & 3XB FLOOR PLANS

PROJECT NUMBER:
66235

ENGINEER:

DRAFTER:

SHEET NUMBER:
E-3.4

ISSUED DATE: 8/17/2022

C37

LIGHTING LUMINAIRE SCHEDULE

MARK	LEGEND	VOLT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LAMPS	INPUT WATTS	NOTES
A		120	RECESS	LED DOWNLIGHT	SELECT BY OWNER	SELECT BY OWNER	LED	18	OR APPROVED EQUAL
B		120	WALL	LED LIGHT (WALL)	SELECT BY OWNER	SELECT BY OWNER	LED	48	OR APPROVED EQUAL
C		120	SURFACE	LED TRIP LIGHT	SELECT BY OWNER	SELECT BY OWNER	LED	50	OR APPROVED EQUAL

NOTES:

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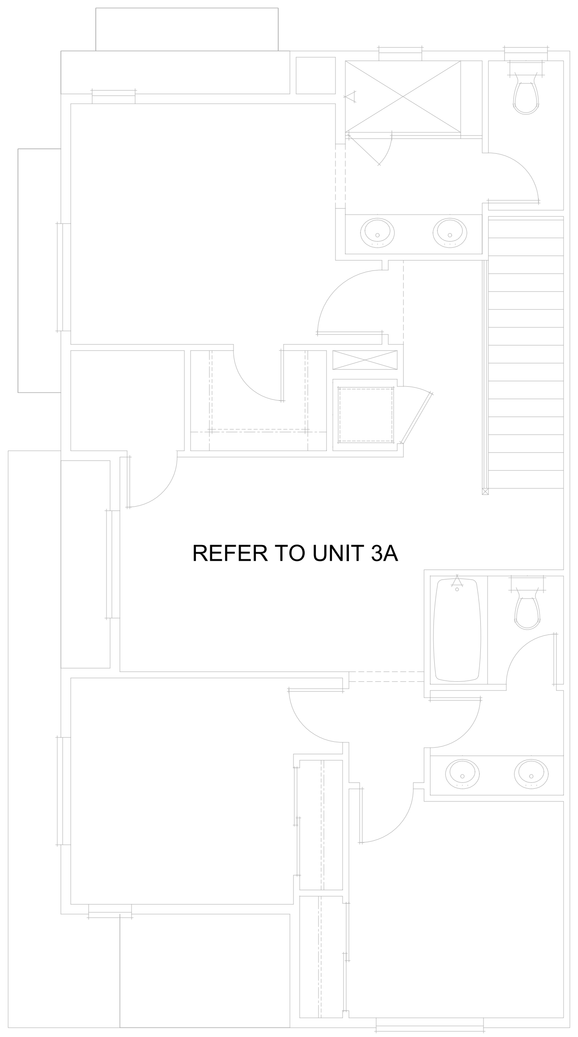

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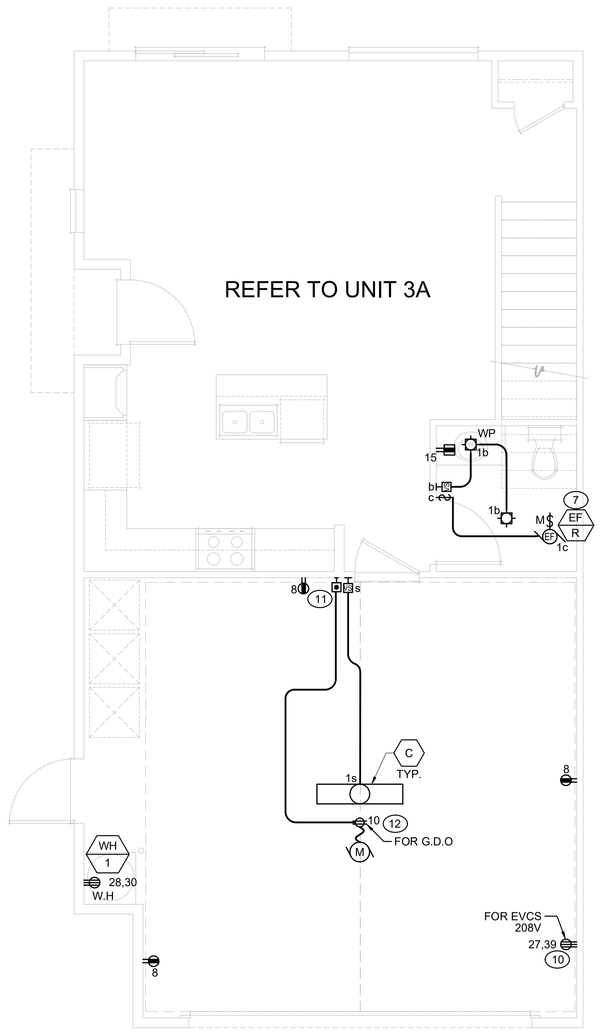

FIRST FLOOR PLAN 1

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4. OUTLETS INSTALLED IN KITCHENS, FAMILY ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS OR SIMILAR ROOMS OR AREAS WILL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
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- EACH DWELLING UNIT MUST HAVE A LISTED RACEWAY TO ACCOMMODATE A DEDICATED 208/240-VOLT BRANCH CIRCUIT.
- IN MULTI-FAMILY DWELLINGS THE "EV CAPABLE" IS BASED ON THE PERCENT OF TOTAL PARKING SPACES.
- IN HOTEL AND NONRESIDENTIAL CONSTRUCTION, "EV CAPABLE" SPACES ARE REQUIRED BASE ON THE TOTAL NUMBER OF PARKING SPACES AT ALL TYPES OF PARKING FACILITIES (E.G., GARAGES, FLAT LOTS, VALET).
- THE RACEWAY SHALL NOT BE LESS THAN 1 INCH, SHALL ORIGINATE AT THE MAIN SERVICE OR SUBPANEL, AND SHALL TERMINATE INTO A LISTED CABINET BOX, OR OTHER ENCLOSURE INCLOSE PROXIMITY TO THE PROPOSE LOCATION OF AN EV CHARGER.
- THE PANEL OR SUBPANEL SHALL PROVIDE CAPACITY TO INSTALL A 40-AMPERE MINIMUM DEDICATED BRANCH CIRCUIT AND SPACE(S) RESERVED TO PERMIT INSTALLATION OF A BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE.
- THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR EV CHARGING AS "EV CAPABLE".
- THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENTLY AND VISIBLY MARKED AS "EV CAPABLE.

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15 Studebaker
Irvine
CA 92618

Irvine
tel 949.752.1612
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Palm Springs
tel 760.323.5090

REGISTERED PROFESSIONAL ENGINEER
MEHDI HOSSENZADEH
E 22037
ELECTRICAL
STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:

Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:

Bassenian Lagoni

LOCATION:

Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:

UNIT 3XA_ACC & 3XB_ACC FLOOR PLANS

PROJECT NUMBER:

66235

ENGINEER:

DRAFTER:

SHEET NUMBER:

E-3.5

C38

ISSUED DATE: 8/17/2022

STATE OF CALIFORNIA
Outdoor Lighting
NRCC-LTO-E — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-LTO-E**
Project Name:	Laurel Ranch Townhomes	**Report Page:**	**(Page 3 of 8)**
Project Address:	Antioch Country, CA	**Date Prepared:**	3/23/2023

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

For new or altered lighting systems demonstrating compliance with §140.7 all new luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per §141.0(b)2L only new luminaires being installed and replacement luminaires being installed as part of the project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included).

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire[1, 2]	How is Wattage determined	Total number luminaires[2]	Luminaire Status[3]	Excluded per §140.7(a)	Design Watts	Cutoff Req. > 6,200 initial lumen output §130.2(b) [4]	Field Inspector Pass	Fail
SA	SA 23.3W LED Wall Light	☐ Linear	23.3	Mfr. Spec	442	New	☐	10,298.6	NA: < 6200 lumens	☐	☐
SB	SB 69W LED Pole Light	☐ Linear	69	Mfr. Spec	33	New	☐	2,277	Yes	☐	☐
SC	SC 70W LED Post Light	☐ Linear	70	Mfr. Spec	4	New	☐	280	Yes	☐	☐
SD	SD 30.5W LED Bollard Light	☐ Linear	30.5	Mfr. Spec	65	New	☐	1,982.5	NA: < 6200 lumens	☐	☐
							Total Design Watts:	14838.1			

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.
EX: Luminaire is lighting a statue; EXCEPTION 2 to §130.2(b)

[1] FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c)
[2] For linear luminaires, wattage should be indicated as W/ft instead of Watts/luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires.
[3] Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope.
[4] Compliance with mandatory cutoff requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by §130.2(b)

STATE OF CALIFORNIA
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CERTIFICATE OF COMPLIANCE			**NRCC-LTO-E**
Project Name:	Laurel Ranch Townhomes	**Report Page:**	**(Page 2 of 8)**
Project Address:	Antioch Country, CA	**Date Prepared:**	3/23/2023

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through I. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

Calculations of Total Allowed Lighting Power (Watts) §140.7 or §141.0(b)2L											Compliance Results		
01		02		03		04		05	06		07	08	09
General Hardscape Allowance §140.7(d)1 (See Table I)	+	Per Application §140.7(d)2 (See Table J)	+	Sales Frontage §140.7(d)2 (See Table K)	+	Ornamental §140.7(d)2 (See Table L)	+	Per Specific Area §140.7(d)2 (See Table M)	OR Existing Power Allowance §141.0(b)2L (See Table N)	=	**Total Allowed** (Watts)	≥ **Total Actual** (Watts)	**07 must be >= 08**
16,803.76	+	---	+	---	+	---	+	---	OR ---	=	16,803.76	≥ 14,838.1	COMPLIES
Cutoff Compliance (See Table G for Details)													COMPLIES
Controls Compliance (See Table H for Details)													COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA
Outdoor Lighting
NRCC-LTO-E — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-LTO-E**
Project Name:	Laurel Ranch Townhomes	**Report Page:**	**(Page 1 of 8)**
Project Address:	Antioch Country, CA	**Date Prepared:**	3/23/2023

A. GENERAL INFORMATION

01	Project Location (city)	Antioch Country, CA	04	Total Illuminated Hardscape Area (ft²)	174792
02	Climate Zone	12			
03	Outdoor Lighting Zone per Title 24 Part 1 §10,114 or as designated by Authority Having Jurisdiction (AHJ):				
☐	LZ-0: Very Low - Undeveloped Parkland	☐ LZ-2: Moderate - Rural Areas	☐	LZ-4: High - Must be reviewed by CA Energy Commission for Approval	
☐	LZ-1: Low - Developed Parkland	☒ LZ-3: Moderately High - Urban Areas			

B. PROJECT SCOPE

This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.7 or §141.0(b)2L for alterations.

My Project Consists of:

01	02
☒ New Lighting System	Must Comply with Allowances from §140.7
☐ Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)? ○ Yes ○ No

03	04	05
% of Existing Luminaires Being Altered[1]	Sum Total of Luminaires Being Added or Altered	Calculation Method
☐ < 10% ☐ >= 10% and < 50% ☐ >= 50%		

Please proceed to Table F. Outdoor Lighting Fixture Schedule to define the project's luminaires.

[1] FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.

STATE OF CALIFORNIA
Outdoor Lighting
NRCC-LTO-E — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-LTO-E**
Project Name:	Laurel Ranch Townhomes	**Report Page:**	**(Page 6 of 8)**
Project Address:	Antioch Country, CA	**Date Prepared:**	3/23/2023

I. LIGHTING POWER ALLOWANCE (per §140.7)

This table includes areas using allowance calculations per §140.7. General Hardscape Allowance is per Table 140.7-A while "Use it or lose it" Allowances are per Table 140.7-B. Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance.

01				
☒ General Hardscape Allowance Table I (below)	"Use it or lose it" Allowance (select all that apply) (select all that apply)			
	☐ Per Application Table J	☐ Sales Frontage Table K	☐ Ornamental Table L	☐ Per Specific Area Table M

Calculated General Hardscape Lighting Power Allowance per Table 140.7-A (LZ 0, 1 & 4)
This section does not apply to this project.
Calculated General Hardscape Lighting Power Allowance per Table 140.7-A (LZ 2 & 3)

02	03	04	05	06	07	08	09	10
Area Description	Surface Type	Area Wattage Allowance (AWA)			Area Wattage Allowance (AWA)			Total General AWA + LWA (Watts)
		Illuminated Area (ft²)	Allowed Density (W/ft²)	Area Allowance (Watts)	Perimeter Length (lf)	Allowed Density (W/lf)	Linear Allowance (Watts)	
Automotive Hardscape	Concrete	130108	0.03	3903.24	10870	0.4	4348	8251.24
Pedestrian Hardscape	Concrete	44684	0.03	1340.52	17155	0.4	6862	8202.52
						Initial Wattage Allowance for Entire Site (Watts):		350
						Total General Hardscape Allowance (Watts):		16803.76

J. LIGHTING ALLOWANCE: PER APPLICATION
This section does not apply to this project.

K. LIGHTING ALLOWANCE: SALES FRONTAGE
This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL
This section does not apply to this project.

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA
This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting
NRCC-LTO-E — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-LTO-E**
Project Name:	Laurel Ranch Townhomes	**Report Page:**	**(Page 5 of 8)**
Project Address:	Antioch Country, CA	**Date Prepared:**	3/23/2023

H. OUTDOOR LIGHTING CONTROLS

This table demonstrates compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.
*When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.*

Mandatory Controls

01	02	03	04	05	
Area Description	Shut-Off §130.2(c)1	Auto-Schedule §130.2(c)2	Motion Sensor §130.2(c)3	Field Inspector Pass	Fail
Parking, Walkway	Photocontrol	Yes	Yes	☐	☐
Parking, Walkway	Astronomical Timer	Yes	Yes	☐	☐

** NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.*
EX: Not permitted by health & safety to be turned off: EXCEPTION 1 to §130.2(c)

STATE OF CALIFORNIA
Outdoor Lighting
NRCC-LTO-E — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-LTO-E**
Project Name:	Laurel Ranch Townhomes	**Report Page:**	**(Page 4 of 8)**
Project Address:	Antioch Country, CA	**Date Prepared:**	3/23/2023

G. CUTOFF REQUIREMENTS (BUG)

This table includes fixtures of >=6,200 initial lumens indicated on Table F as needing to comply with Cutoff Requirements. Maximum lumens can be found in Title 24, Part 11, Section 5.106.8.

true	02	03	04	05	06	07	08	09	10	11	12	
Name or Item Tag	Complete Luminaire Description	Backlight Rating[2]			Uplight Rating[2]			Glare Rating (Lumens)[2]			Field Inspector Pass	Fail
		Mounting Height[1]	Max Allowable Backlight Rating[3]	Backlight Rating Per Design	Lighting type	Max Allowable Uplight Rating[3]	Uplight Rating Per Design	Mounting Height[1]	Max Allowable Glare Rating[3]	Glare Rating Per Design		
SB	SB 69W LED Pole Light	2 MH from property line	No Limit	B2	All other outdoor lighting, including decorative	U3	U0	2 MH from property line	G3	G2	☐	☐
SC	SC 70W LED Post Light	2 MH from property line	No Limit	B2	All other outdoor lighting, including decorative	U3	U3	2 MH from property line	G3	G2	☐	☐

[1] FOOTNOTES: Mounting Height is labeled MH in this table.
[2] Authority Having Jurisdiction may ask for Luminaire cut sheets or other documentation to confirm luminaire type, uplight ratings and glare ratings used for compliance per §130.2(b)
[3] BUG ratings with a lower number than the 'Max Allowable' are compliant. Ex. If Max Allowable is Bug Rating B4, then B0, B1, B2 and B3 are all compliant.

STATE OF CALIFORNIA
Outdoor Lighting
NRCC-LTO-E — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-LTO-E**
Project Name:	Laurel Ranch Townhomes	**Report Page:**	**(Page 8 of 8)**
Project Address:	Antioch Country, CA	**Date Prepared:**	3/23/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature: Mehdi
Company: Gouvis Engineering Consulting Group, Inc.	Signature Date: 2023-03-23
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: MEHDI HOSSEINZADEH	Responsible Designer Signature: Mehdi
Company: GOUVIS ENGINEERING CONSULTING GROUP, INC.	Date Signed: 2023-03-23
Address: 15 Studebaker	License: E 22037
City/State/Zip: Irvine CA 92618	Phone: 949-752-1612

STATE OF CALIFORNIA
Outdoor Lighting
NRCC-LTO-E — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-LTO-E**
Project Name:	Laurel Ranch Townhomes	**Report Page:**	**(Page 7 of 8)**
Project Address:	Antioch Country, CA	**Date Prepared:**	3/23/2023

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)
This section does not apply to this project.

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Yes	No	Form/Title	Field Inspector Pass	Fail
●	○	NRCI-LTO-01-E - Must be submitted for all buildings	☐	☐
●	○	NRCI-LTO-02-E- Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐	☐

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Yes	No	Form/Title	Field Inspector Pass	Fail
●	○	NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.	☐	☐

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REGISTERED PROFESSIONAL ENGINEER MEHDI HOSSEINZADEH E 22037 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 3/28/23

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PROJECT:
Laurel Ranch Townhomes

DEVELOPER:

ARCHITECT:
Bassenian Lagoni

LOCATION:
Antioch County
CA

REVISIONS

NO.	DATE	DESCRIPTION

SHEET NAME:
TITLE 24 LTO OUTDOOR FORMS

PROJECT NUMBER:
66235

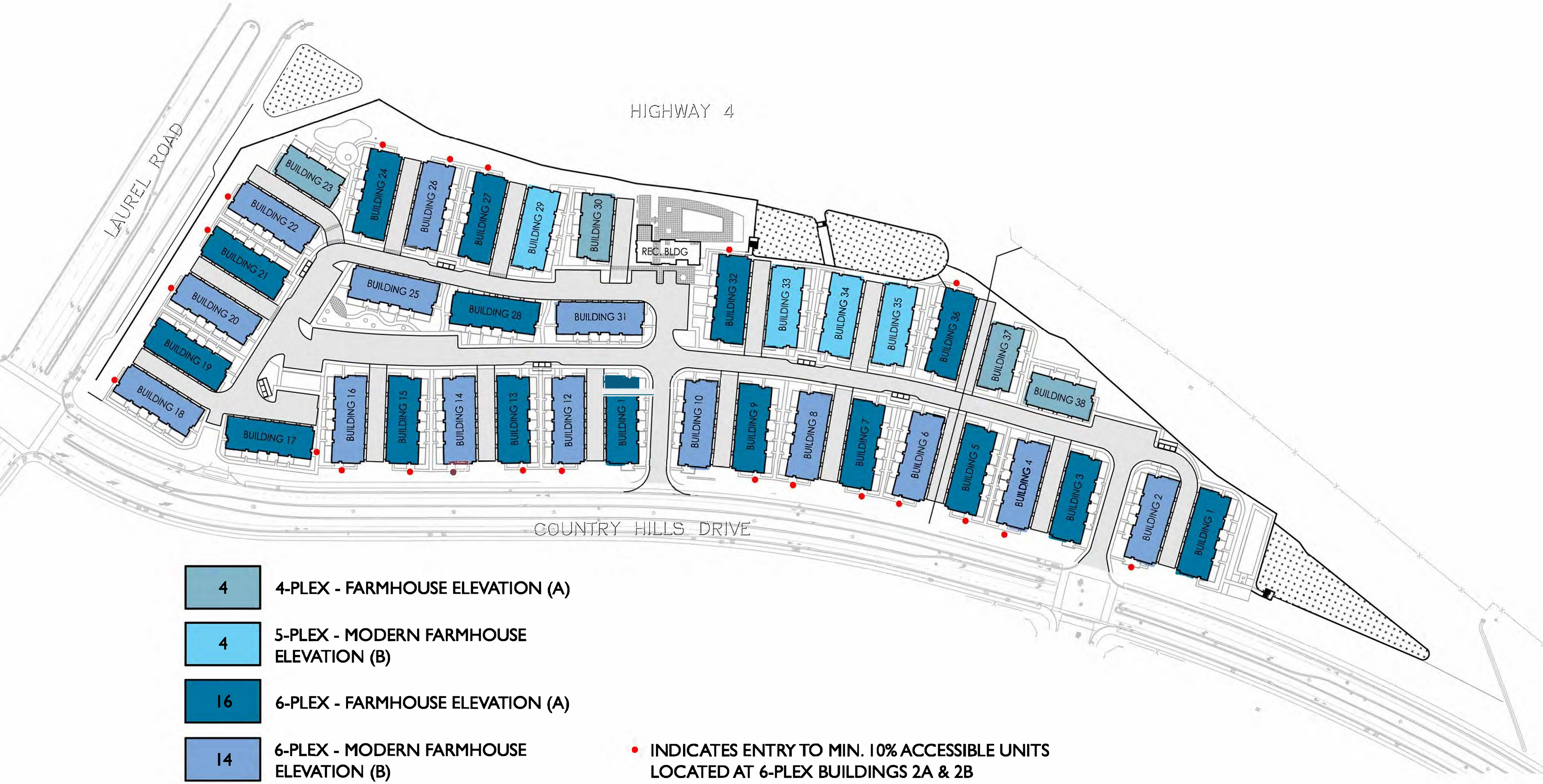
ENGINEER:
DRAFTER:

SHEET NUMBER:
E-4.1

ISSUED DATE: 8/17/2022

C39

TITLE 24 LTO OUTDOOR FORMS



4	4-PLEX - FARMHOUSE ELEVATION (A)
4	5-PLEX - MODERN FARMHOUSE ELEVATION (B)
16	6-PLEX - FARMHOUSE ELEVATION (A)
14	6-PLEX - MODERN FARMHOUSE ELEVATION (B)

• INDICATES ENTRY TO MIN. 10% ACCESSIBLE UNITS LOCATED AT 6-PLEX BUILDINGS 2A & 2B

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Newport Beach, CA USA 92660
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fax +1 949 553 0545

ELEVATION PLOTTING MAP

LAUREL RANCH

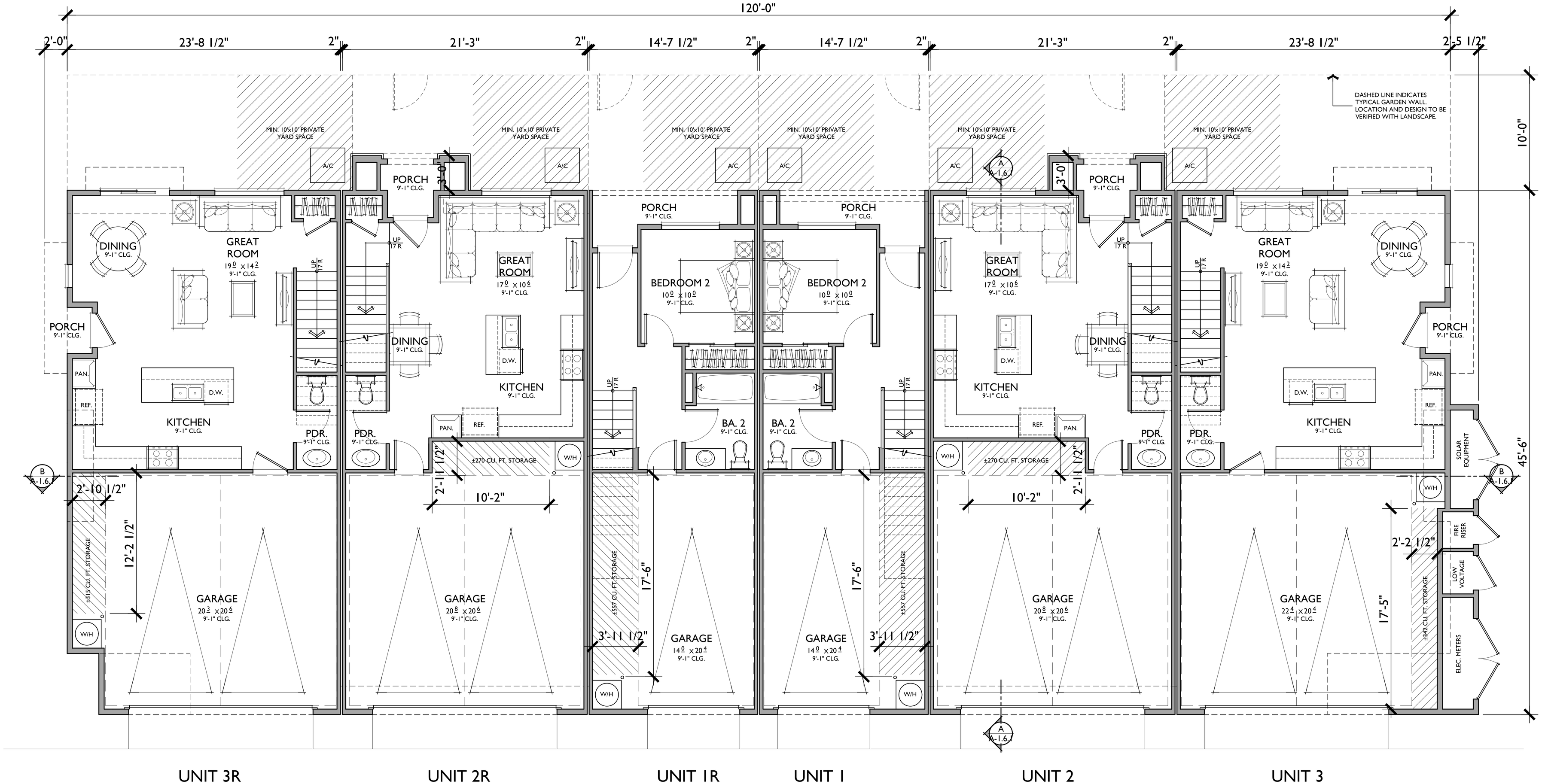
Antioch , California

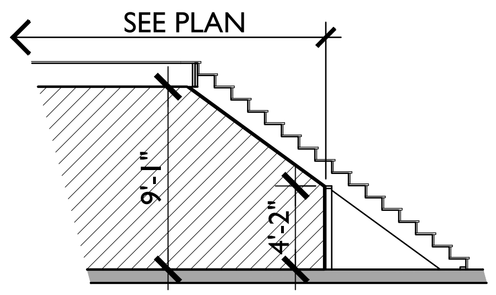
A25.22240

03.30.23

SP-1

BrightSky RESIDENTIAL





PLAN 1 - SECTION (3/16"=1'-0")

- UNDER STAIR STORAGE AT GARAGE

UNIT 1

2 BEDROOMS / 2 BATHS
SINGLE CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	344 SQ. FT.
2ND FLOOR	597 SQ. FT.
TOTAL	**941 SQ. FT.**
SINGLE CAR GARAGE	304 SQ. FT.
PORCH	52 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

UNIT 2

3 BEDROOMS / 2.5 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	516 SQ. FT.
2ND FLOOR	847 SQ. FT.
TOTAL	**1,362 SQ. FT.**
2 - CAR GARAGE	442 SQ. FT.
PORCH	40 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

UNIT 3

3 BEDROOMS / 2.5 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	577 SQ. FT.
2ND FLOOR	927 SQ. FT.
TOTAL	**1,504 SQ. FT.**
2 - CAR GARAGE	493 SQ. FT.
PORCH	43 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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BUILDING 'IA' 6-PLEX

First Floor - Reflects Farmhouse Elevation

LAUREL RANCH

Antioch , California

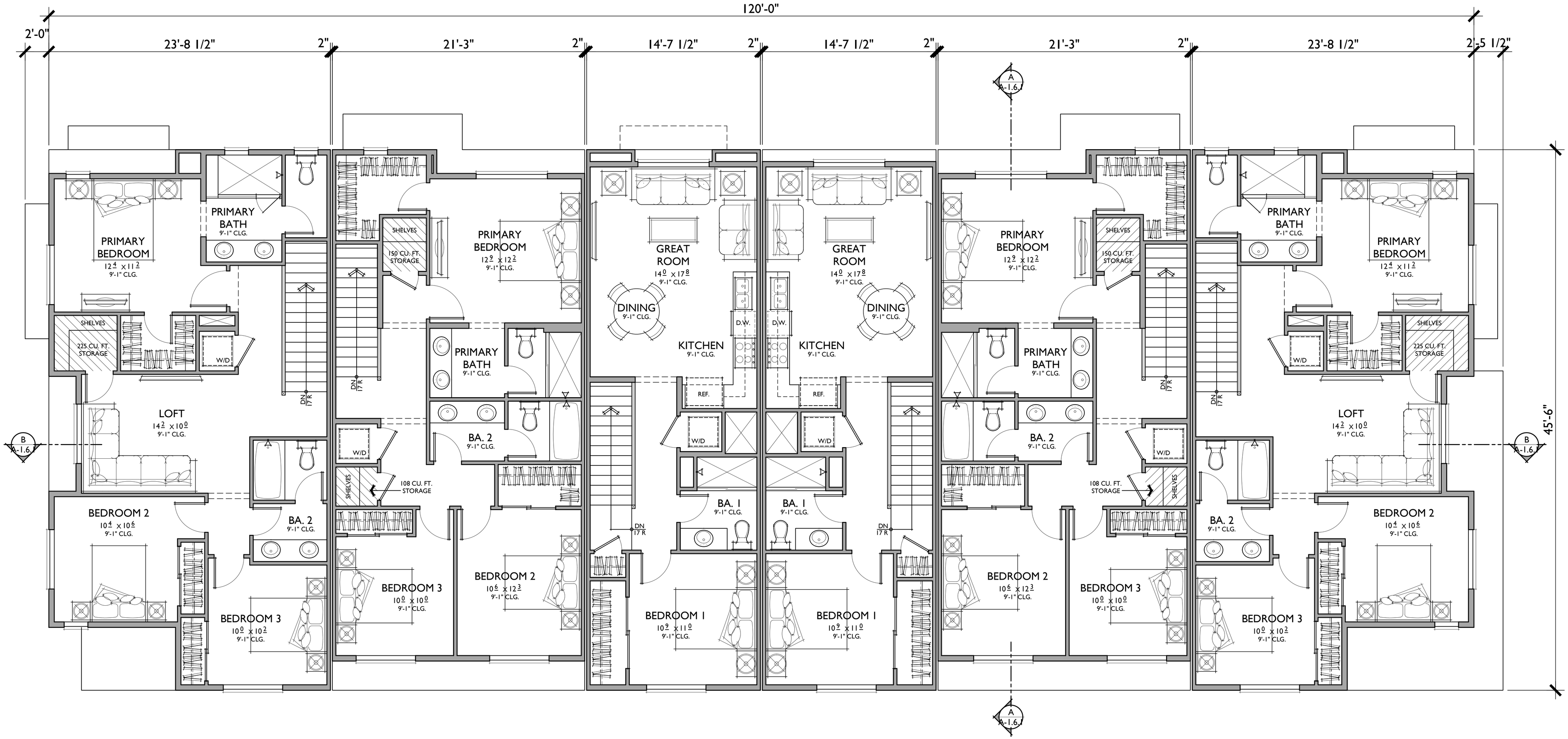
0 2 4 8

A25.22240

03.30.23

A-1.1

BrightSky RESIDENTIAL



UNIT 3R UNIT 2R UNIT 1R UNIT 1 UNIT 2 UNIT 3

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BUILDING 'IA' 6-PLEX

Second Floor - Reflects Farmhouse Elevation

LAUREL RANCH

Antioch , California

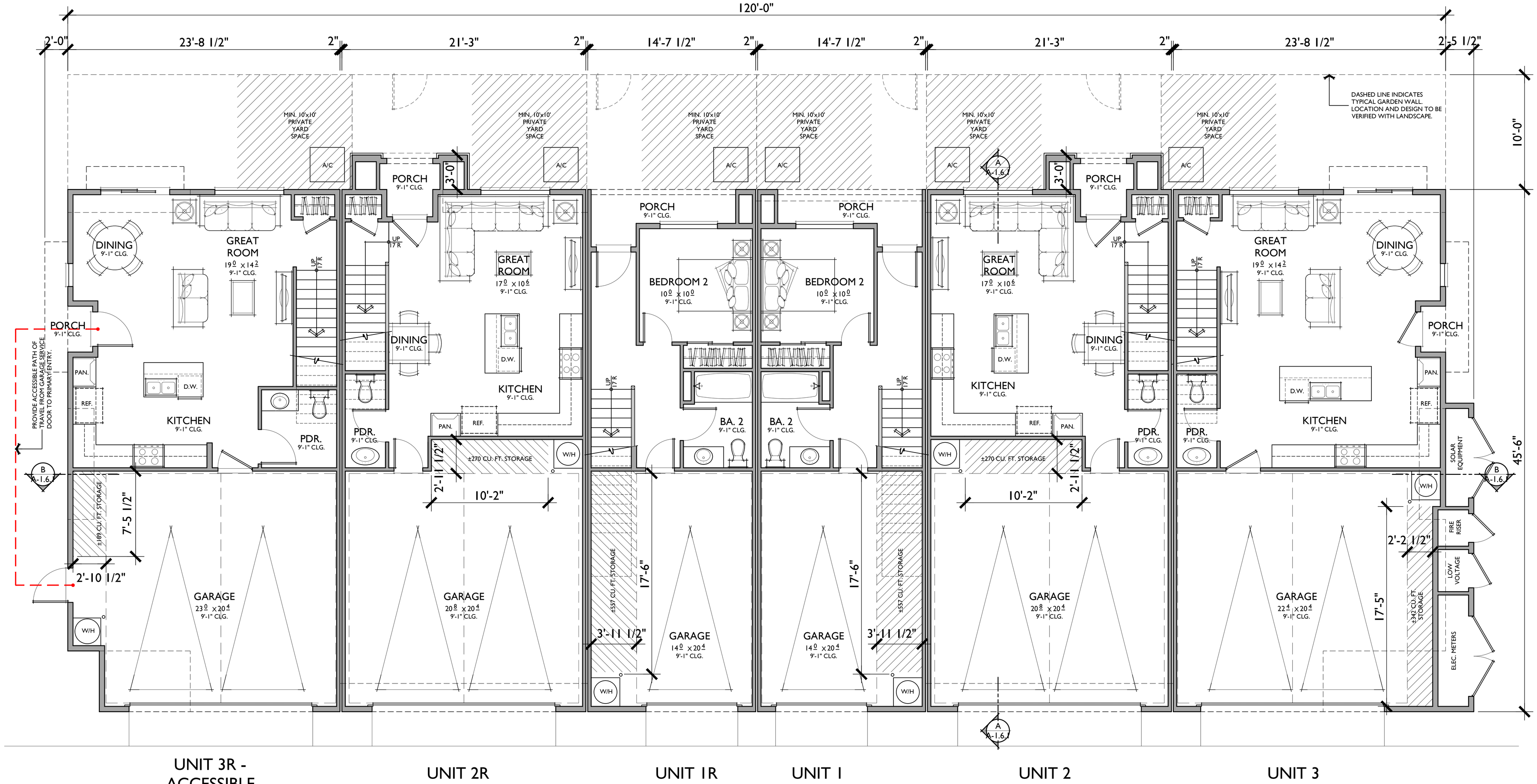
0 2 4 8

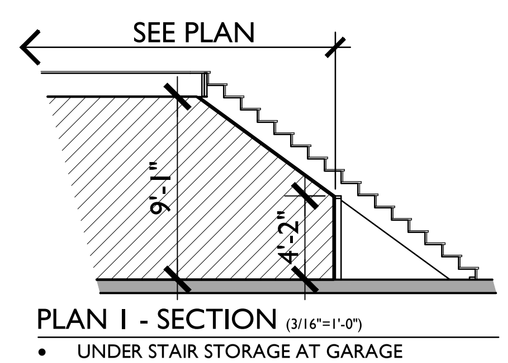
A25.22240

03.30.23

A-1.2

BrightSky RESIDENTIAL





PLAN 1 - SECTION (3/16"=1'-0")

- UNDER STAIR STORAGE AT GARAGE

UNIT 1

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NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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BUILDING '2A' 6-PLEX (ACCESSIBLE PLAN 3R)

First Floor - Reflects Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-1.3

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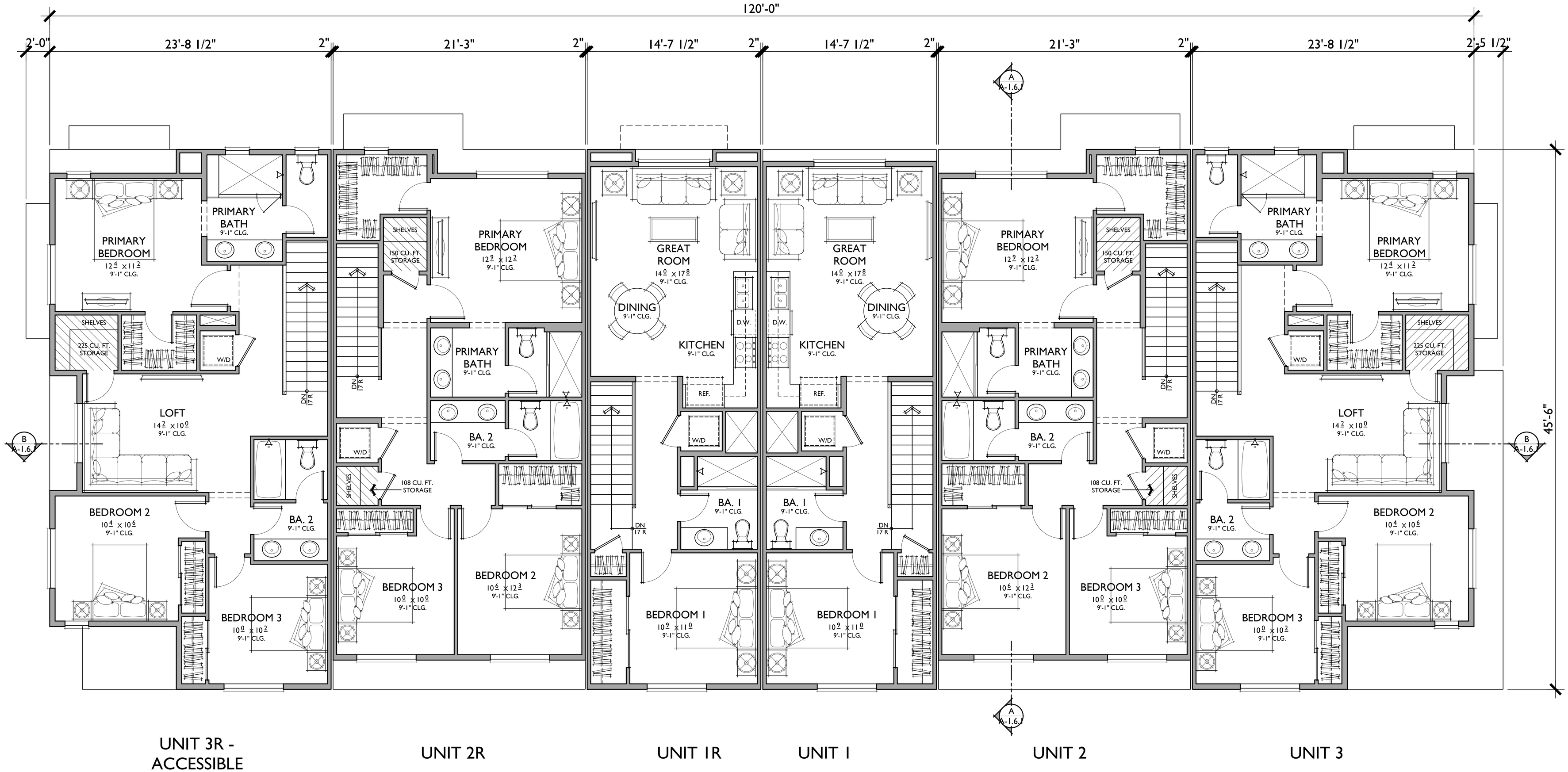

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BUILDING '2A' 6-PLEX (ACCESSIBLE PLAN 3R)

Second Floor - Reflects Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-1.4

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BUILDING '1A' & '2A' 6-PLEX

Farmhouse Elevations

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

MATERIAL LEGEND

A. CONCRETE FLAT TILE
B. STANDING SEAM METAL ROOF
C. STUCCO (COLOR VARIES)
D. METAL SECTIONAL GARAGE DOOR
E. CEMENTITIOUS BOARD AND BATTEN SIDING
F. CEMENTITIOUS HORIZONTAL SIDING
G. CEMENTITIOUS TRIM
H. LIGHT FIXTURE
I. VINYL WINDOW
J. STUCCO OVER FOAM TRIM
K. WROUGHT IRON GATE
L. DECORATIVE SHUTTERS
M. SHED ROOF w/ WOOD BRACES
N. FABRICATED METAL AWNING
O. STONE VENEER

03.30.23

A-1.5

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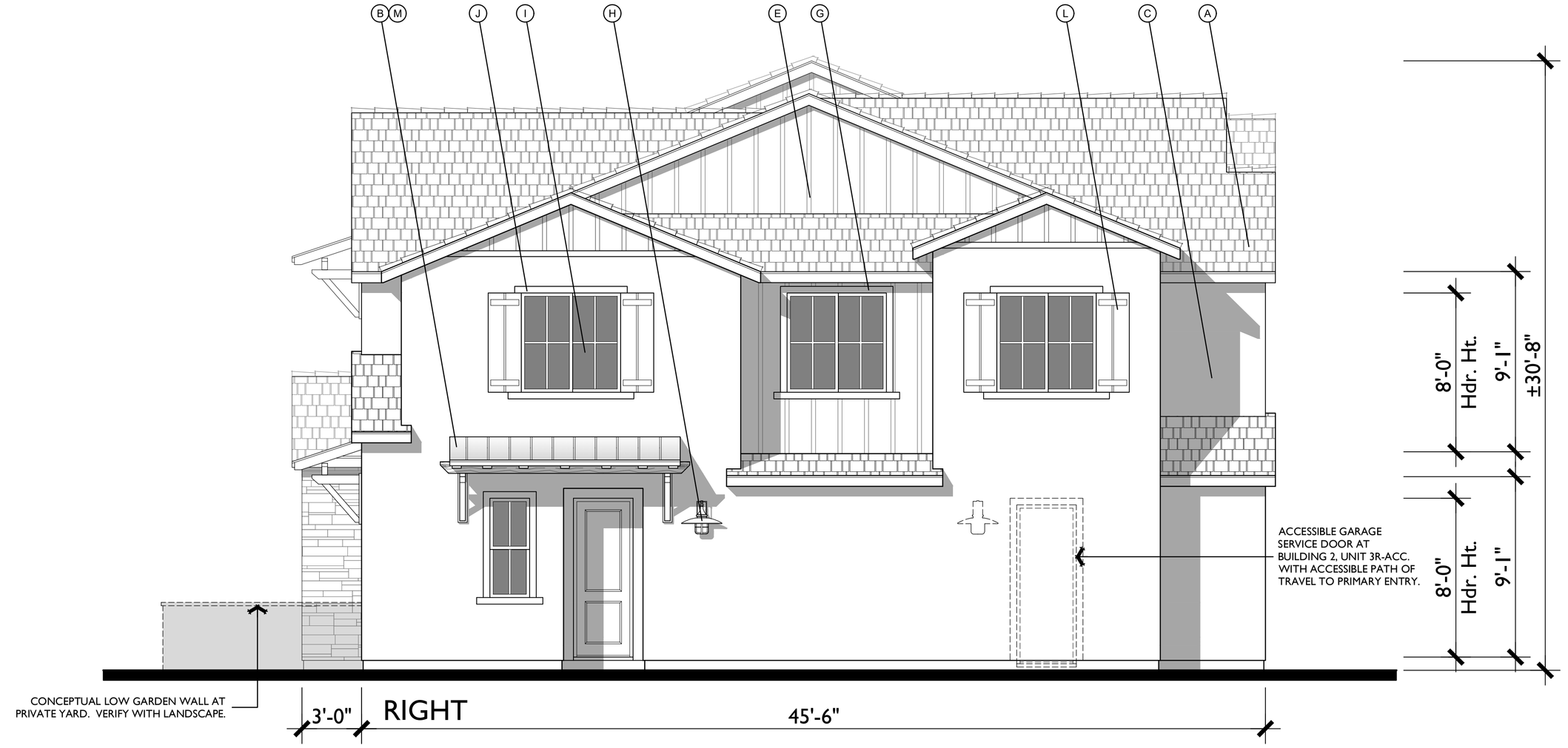

MATERIAL LEGEND

A. CONCRETE FLAT TILE
B. STANDING SEAM METAL ROOF
C. STUCCO (COLOR VARIES)
D. METAL SECTIONAL GARAGE DOOR
E. CEMENTITIOUS BOARD AND BATTEN SIDING
F. CEMENTITIOUS HORIZONTAL SIDING
G. CEMENTITIOUS TRIM
H. LIGHT FIXTURE
I. VINYL WINDOW
J. STUCCO OVER FOAM TRIM
K. WROUGHT IRON GATE
L. DECORATIVE SHUTTERS
M. SHED ROOF w/ WOOD BRACES
N. FABRICATED METAL AWNING
O. STONE VENEER

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BUILDING '1A' & '2A' 6-PLEX

Farmhouse Elevations

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-1.6

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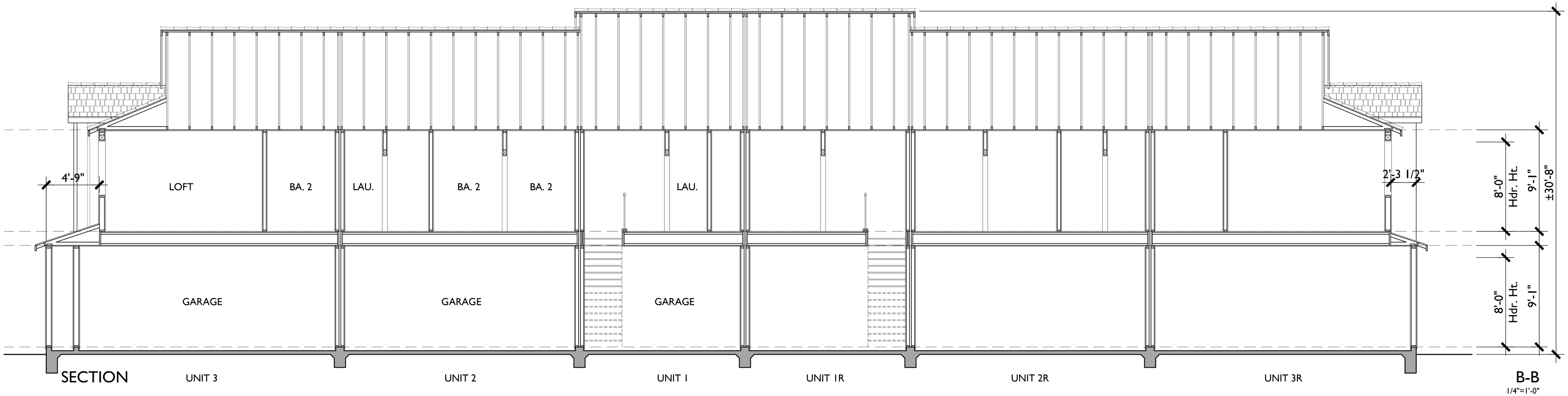
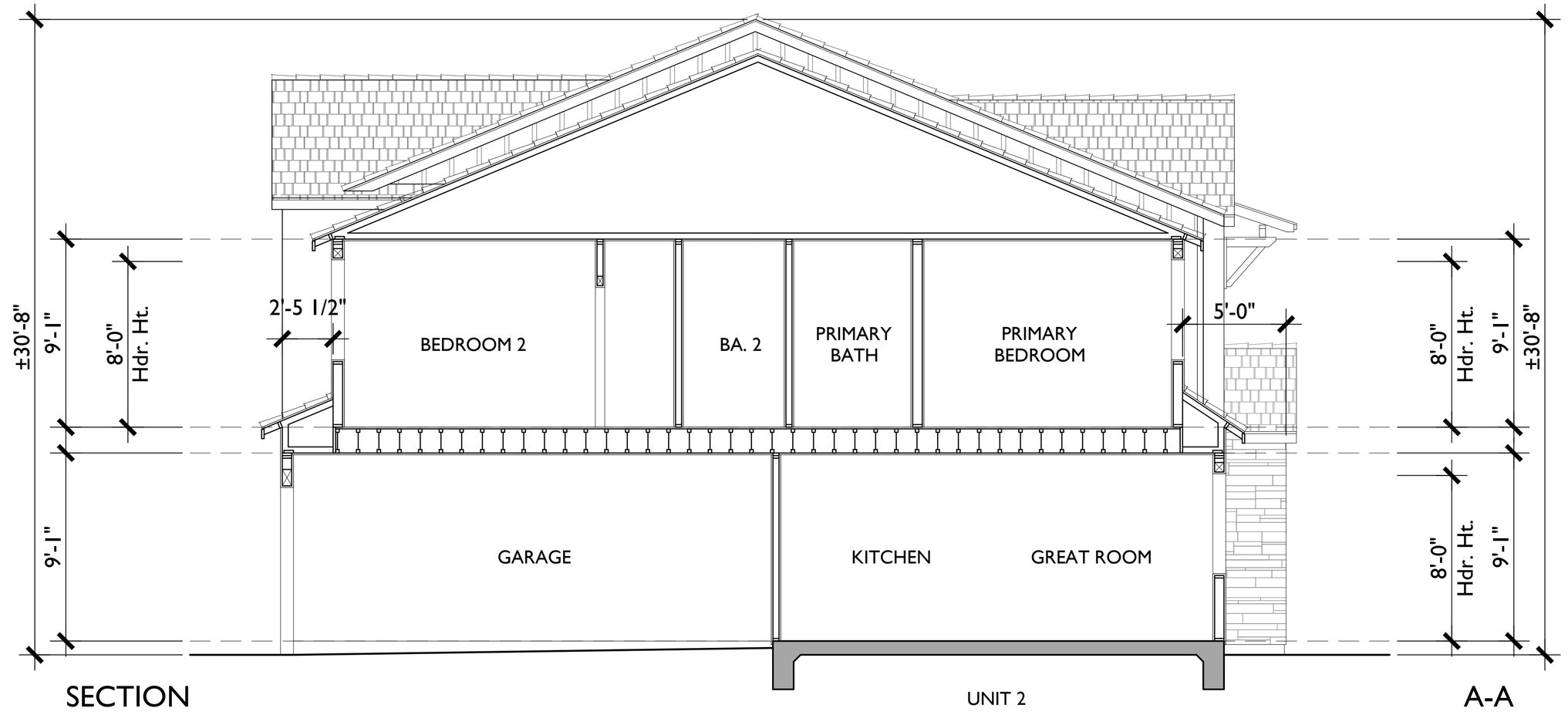


SECTION

B-B
1/4"=1'-0"



SECTION

A-A
1/4"=1'-0"

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BUILDING '1A' & '2A' 6-PLEX

Sections

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-1.6.1

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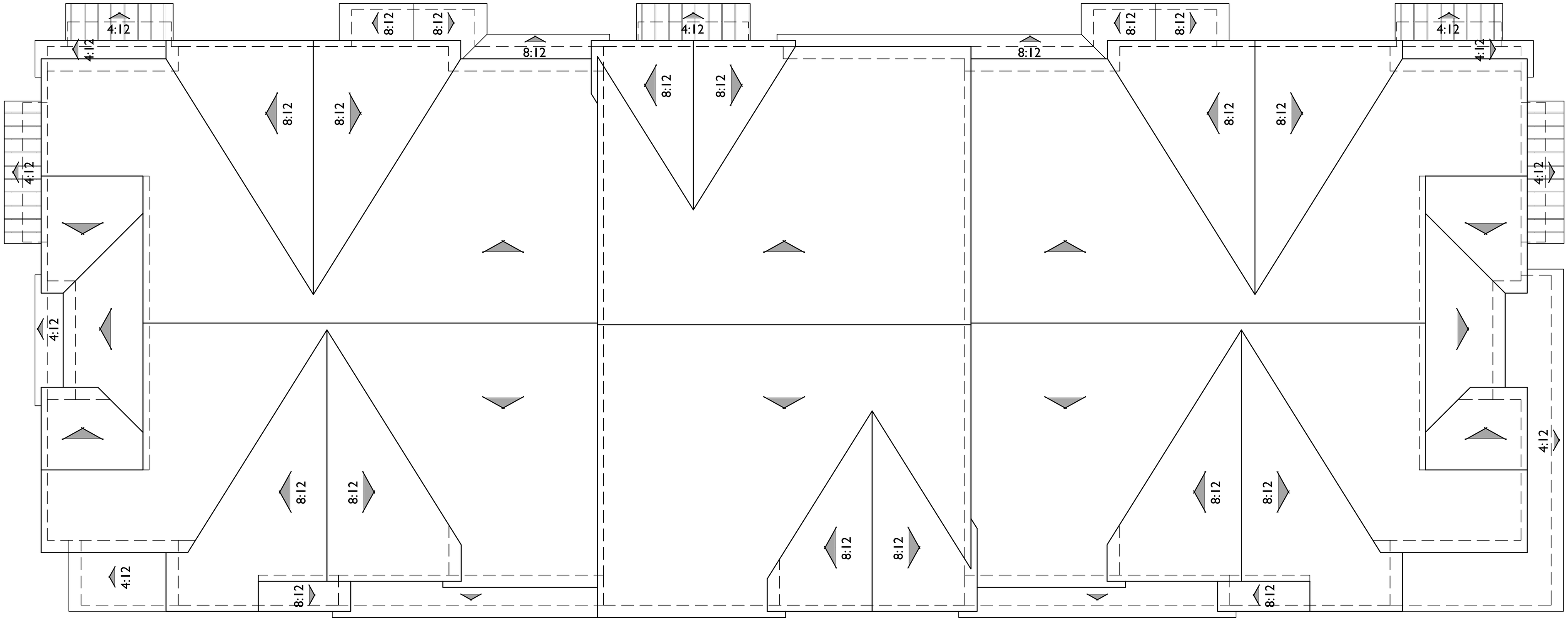

ROOF PLAN

FARMHOUSE

PITCH: 5:12 U.N.O.
RAKE: 6"
EAVE: 12"
ROOF MATERIAL: CONCRETE FLAT TILE / STANDING SEAM METAL

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BUILDING '1A'&'2A' 6-PLEX

Farmhouse Roof Plan

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-1.7

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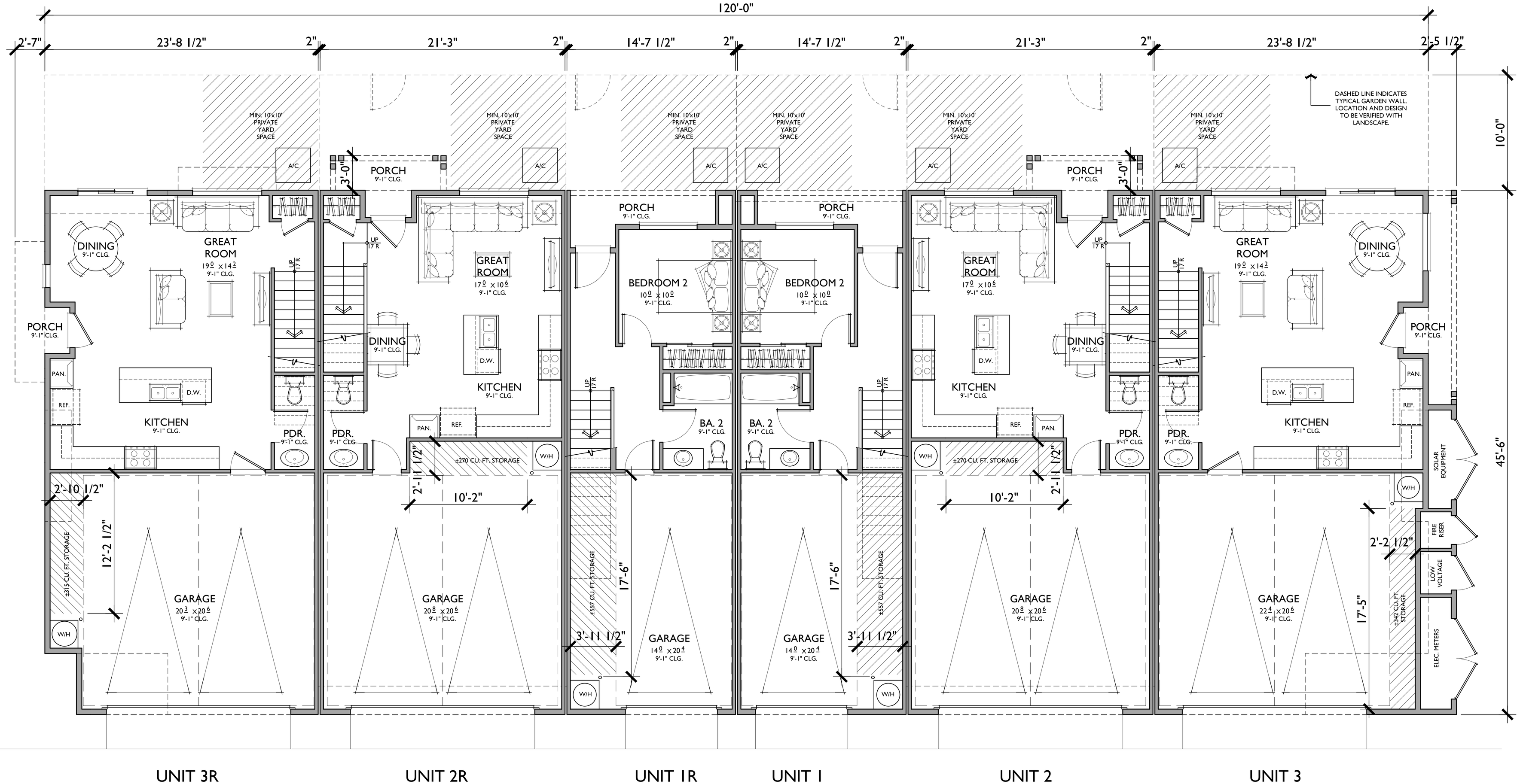

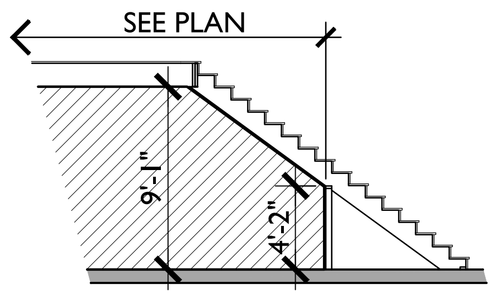

PLAN 1 - SECTION (3/16"=1'-0")

- UNDER STAIR STORAGE AT GARAGE

UNIT 1

2 BEDROOMS / 2 BATHS
SINGLE CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	344 SQ. FT.
2ND FLOOR	597 SQ. FT.
TOTAL	**941 SQ. FT.**
SINGLE CAR GARAGE	304 SQ. FT.
PORCH	52 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

UNIT 2

3 BEDROOMS / 2.5 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	516 SQ. FT.
2ND FLOOR	847 SQ. FT.
TOTAL	**1,362 SQ. FT.**
2 - CAR GARAGE	442 SQ. FT.
PORCH	40 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

UNIT 3

3 BEDROOMS / 2.5 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	577 SQ. FT.
2ND FLOOR	927 SQ. FT.
TOTAL	**1,504 SQ. FT.**
2 - CAR GARAGE	493 SQ. FT.
PORCH	43 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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BUILDING 'IB' 6-PLEX

First Floor - Reflects Modern Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-1.8

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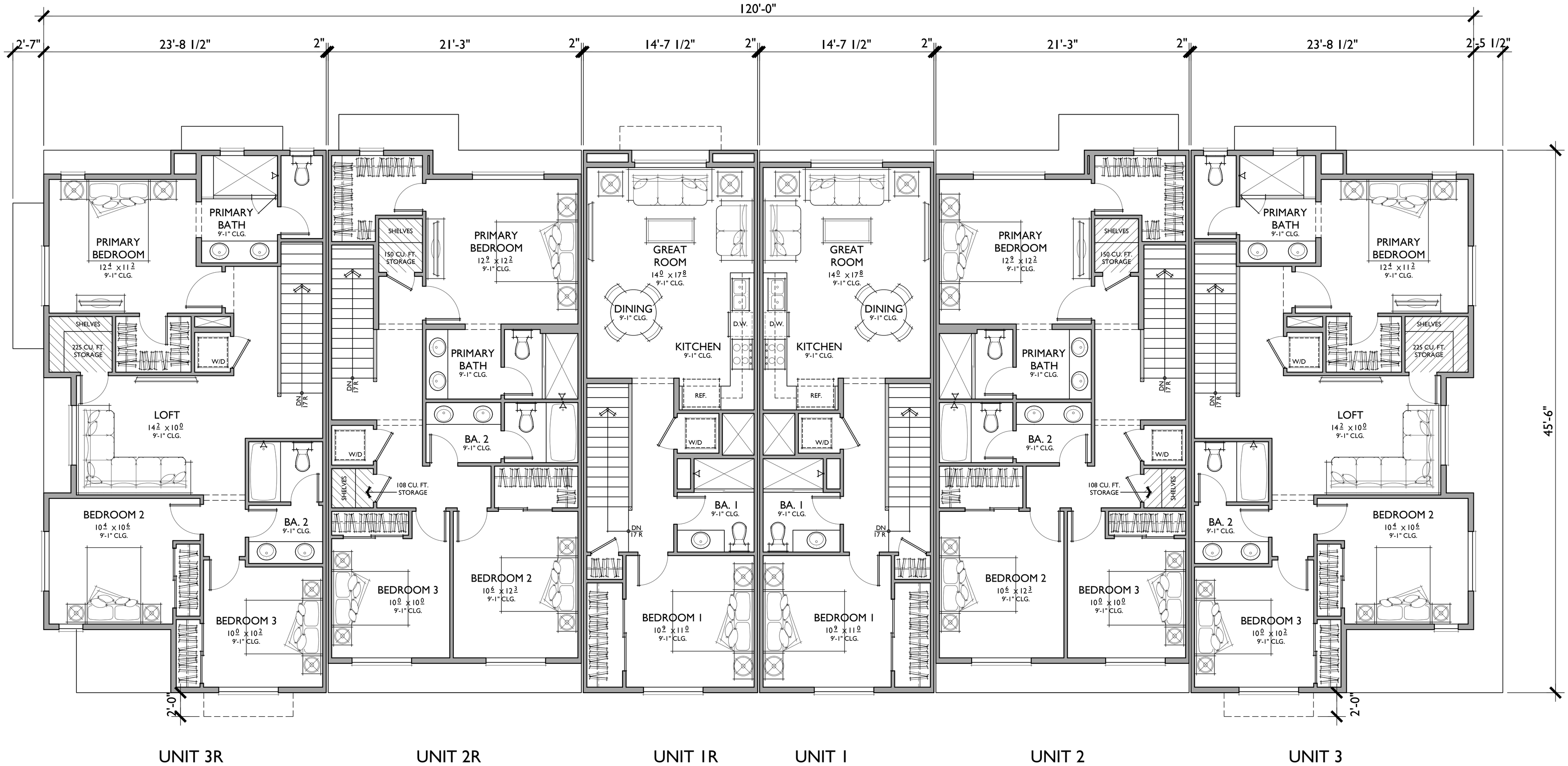

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BUILDING 'IB' 6-PLEX

Second Floor - Reflects Modern Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-1.9

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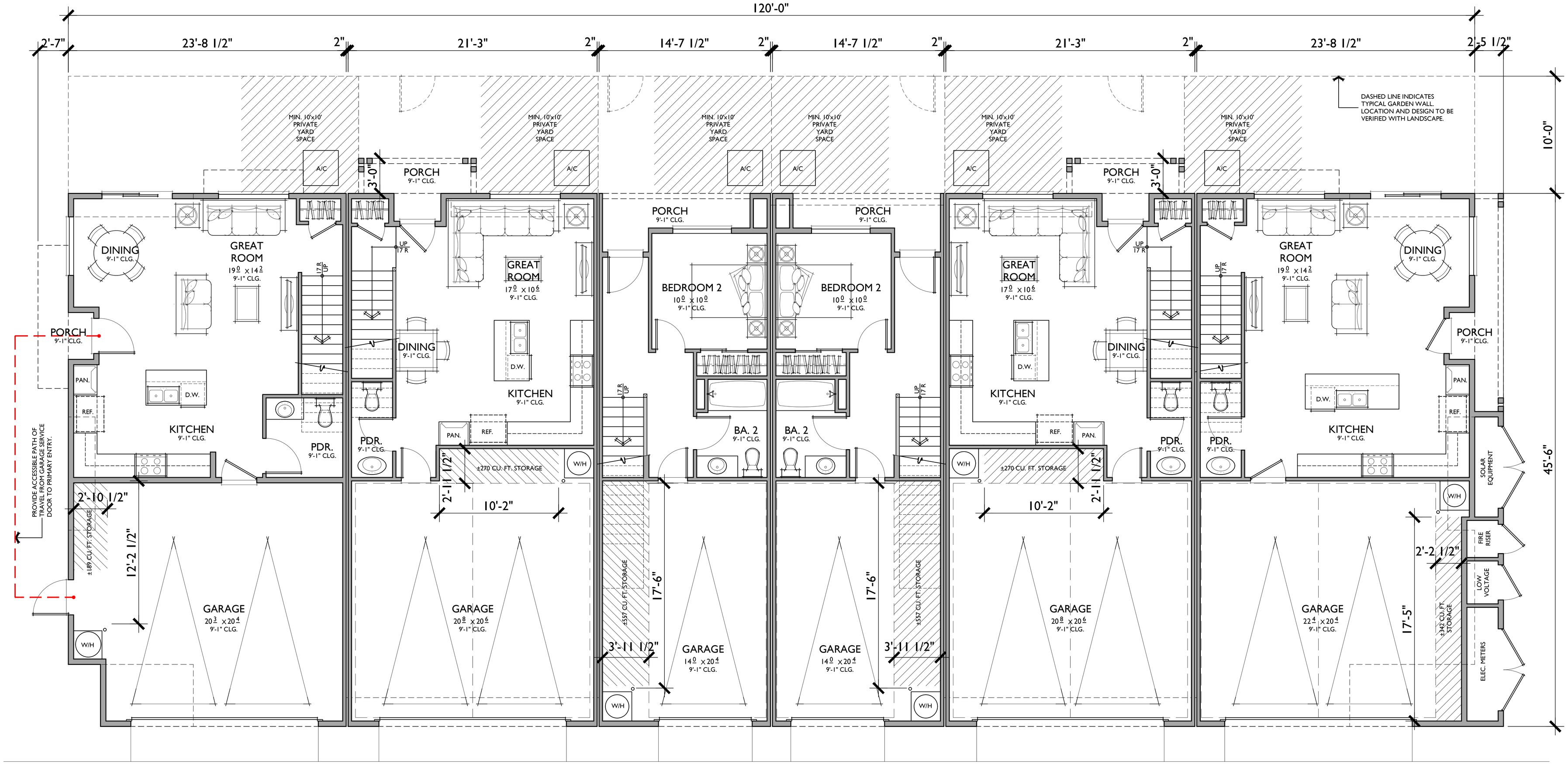

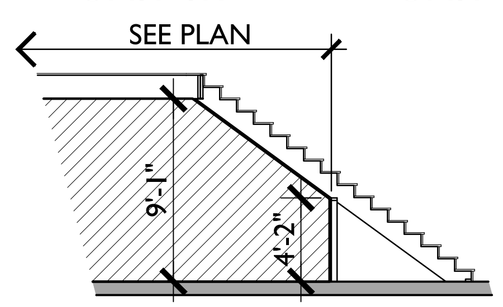

PLAN 1 - SECTION (3/16"=1'-0")

- UNDER STAIR STORAGE AT GARAGE

UNIT 1

2 BEDROOMS / 2 BATHS
SINGLE CAR GARAGE

FLOOR AREA TABLE	
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2ND FLOOR	597 SQ. FT.
TOTAL	**941 SQ. FT.**
SINGLE CAR GARAGE	304 SQ. FT.
PORCH	52 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

UNIT 2

3 BEDROOMS / 2.5 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	516 SQ. FT.
2ND FLOOR	847 SQ. FT.
TOTAL	**1,362 SQ. FT.**
2 - CAR GARAGE	442 SQ. FT.
PORCH	40 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

UNIT 3

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2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	577 SQ. FT.
2ND FLOOR	927 SQ. FT.
TOTAL	**1,504 SQ. FT.**
2 - CAR GARAGE	493 SQ. FT.
PORCH	43 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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BUILDING '2B' 6-PLEX (ACCESSIBLE PLAN 3R)

First Floor - Reflects Modern Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-1.10

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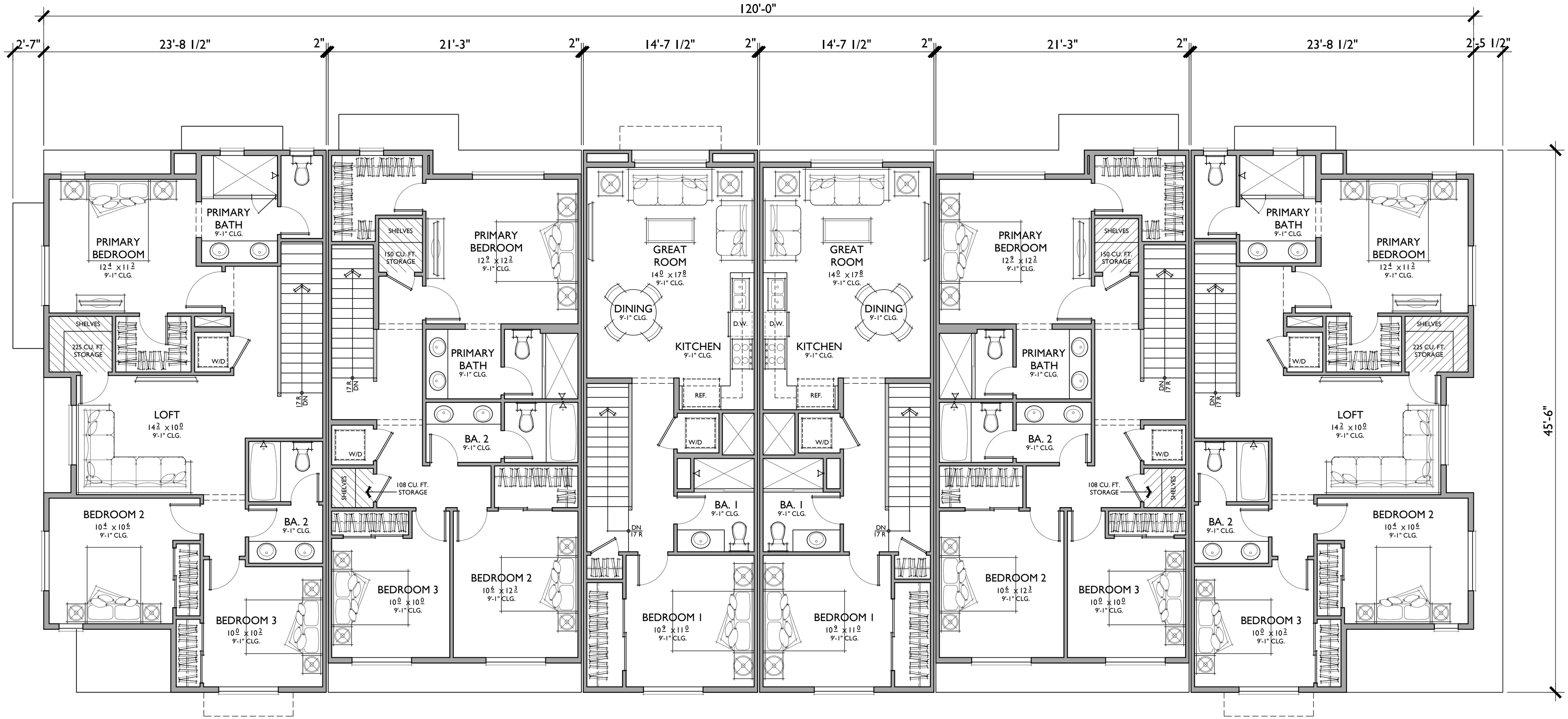

UNIT 3R - ACCESSIBLE

UNIT 2R

UNIT 1R

UNIT 1

UNIT 2

UNIT 3

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BUILDING '2B' 6-PLEX (ACCESSIBLE PLAN 3R)

Second Floor - Reflects Modern Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-1.11

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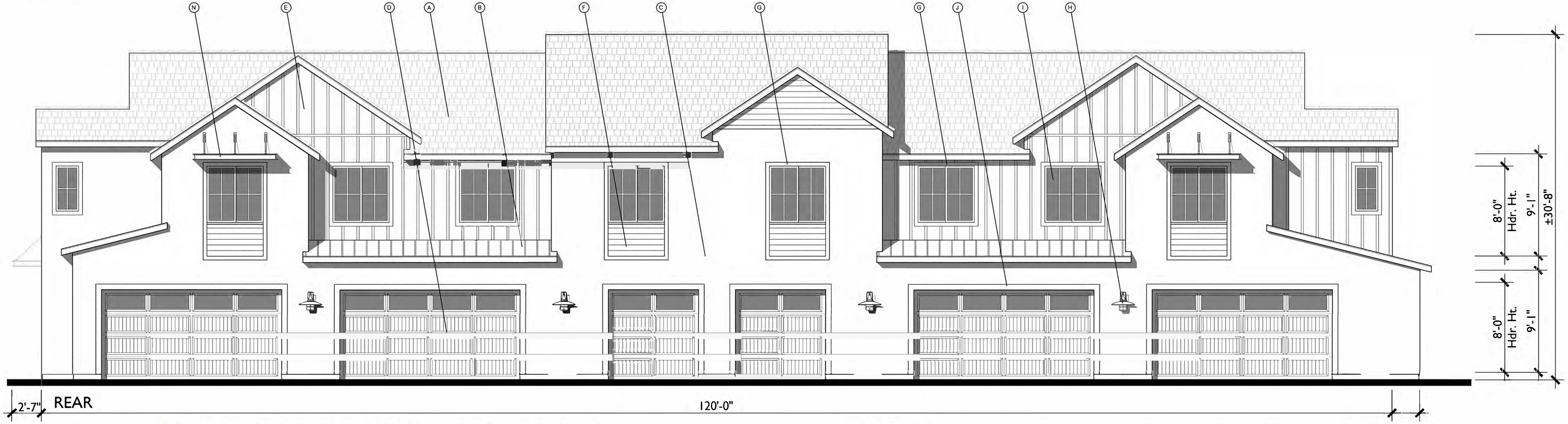

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BUILDING '1B' & '2B' 6-PLEX

Modern Farmhouse Elevations

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

MATERIAL LEGEND

A. CONCRETE FLAT TILE
B. STANDING SEAM METAL ROOF
C. STUCCO (COLOR VARIES)
D. METAL SECTIONAL GARAGE DOOR
E. CEMENTITIOUS BOARD AND BATTEN SIDING
F. CEMENTITIOUS HORIZONTAL SIDING
G. CEMENTITIOUS TRIM
H. LIGHT FIXTURE
I. VINYL WINDOW
J. STUCCO OVER FOAM TRIM
K. WROUGHT IRON GATE
L. DECORATIVE SHUTTERS
M. SHED ROOF w/ WOOD BRACES
N. FABRICATED METAL AWNING
O. STONE VENEER

03.30.23

A-1.12

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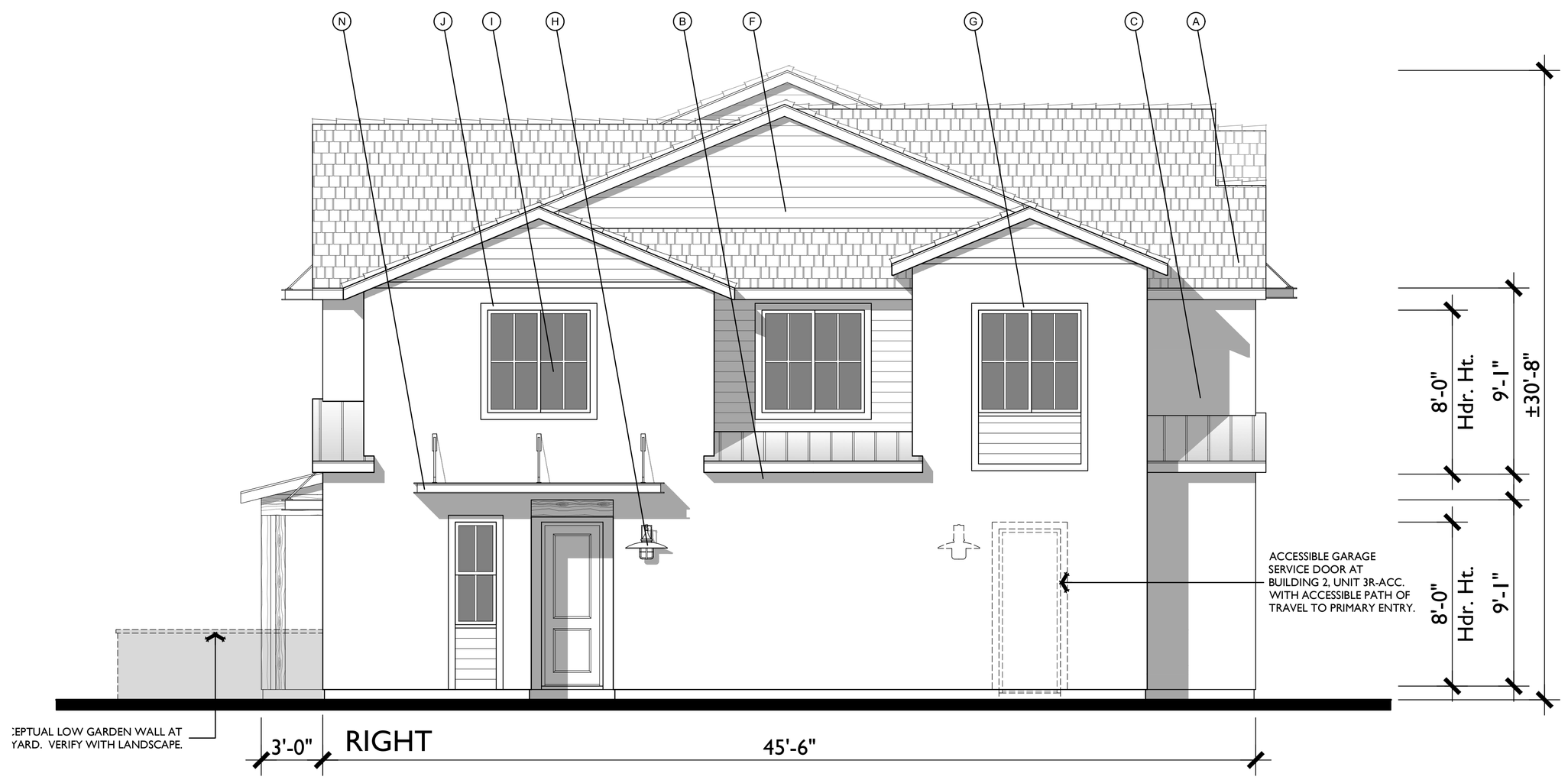

MATERIAL LEGEND

A. CONCRETE FLAT TILE
B. STANDING SEAM METAL ROOF
C. STUCCO (COLOR VARIES)
D. METAL SECTIONAL GARAGE DOOR
E. CEMENTITIOUS BOARD AND BATTEN SIDING
F. CEMENTITIOUS HORIZONTAL SIDING
G. CEMENTITIOUS TRIM
H. LIGHT FIXTURE
I. VINYL WINDOW
J. STUCCO OVER FOAM TRIM
K. WROUGHT IRON GATE
L. DECORATIVE SHUTTERS
M. SHED ROOF w/ WOOD BRACES
N. FABRICATED METAL AWNING
O. STONE VENEER

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BUILDING '1B' & '2B' 6-PLEX

Modern Farmhouse Elevations

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-1.13

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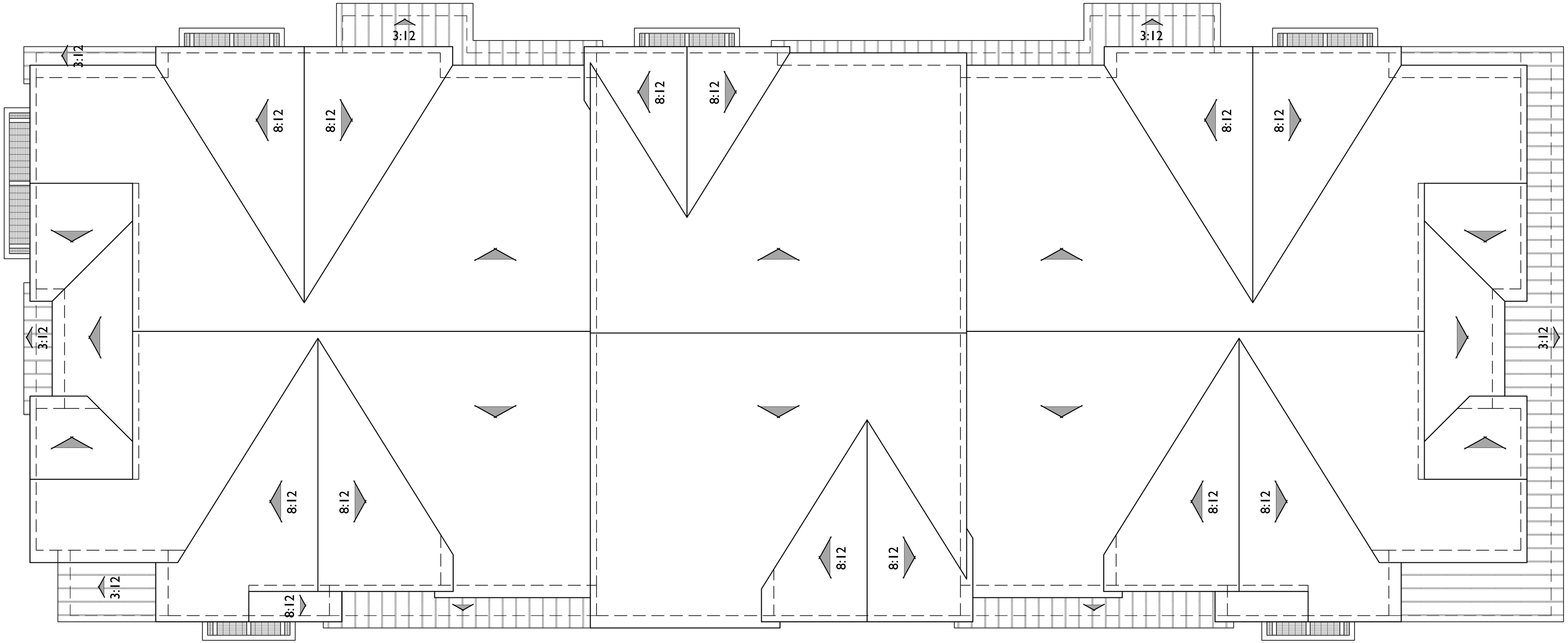

ROOF PLAN

MODERN FARMHOUSE

PITCH: 5:12 U.N.O.
RAKE: 6"
EAVE: 12"
ROOF MATERIAL: CONCRETE FLAT TILE / STANDING SEAM METAL

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BUILDING '1B' & '2B' 6-PLEX

Modern Farmhouse Roof Plan

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-1.14

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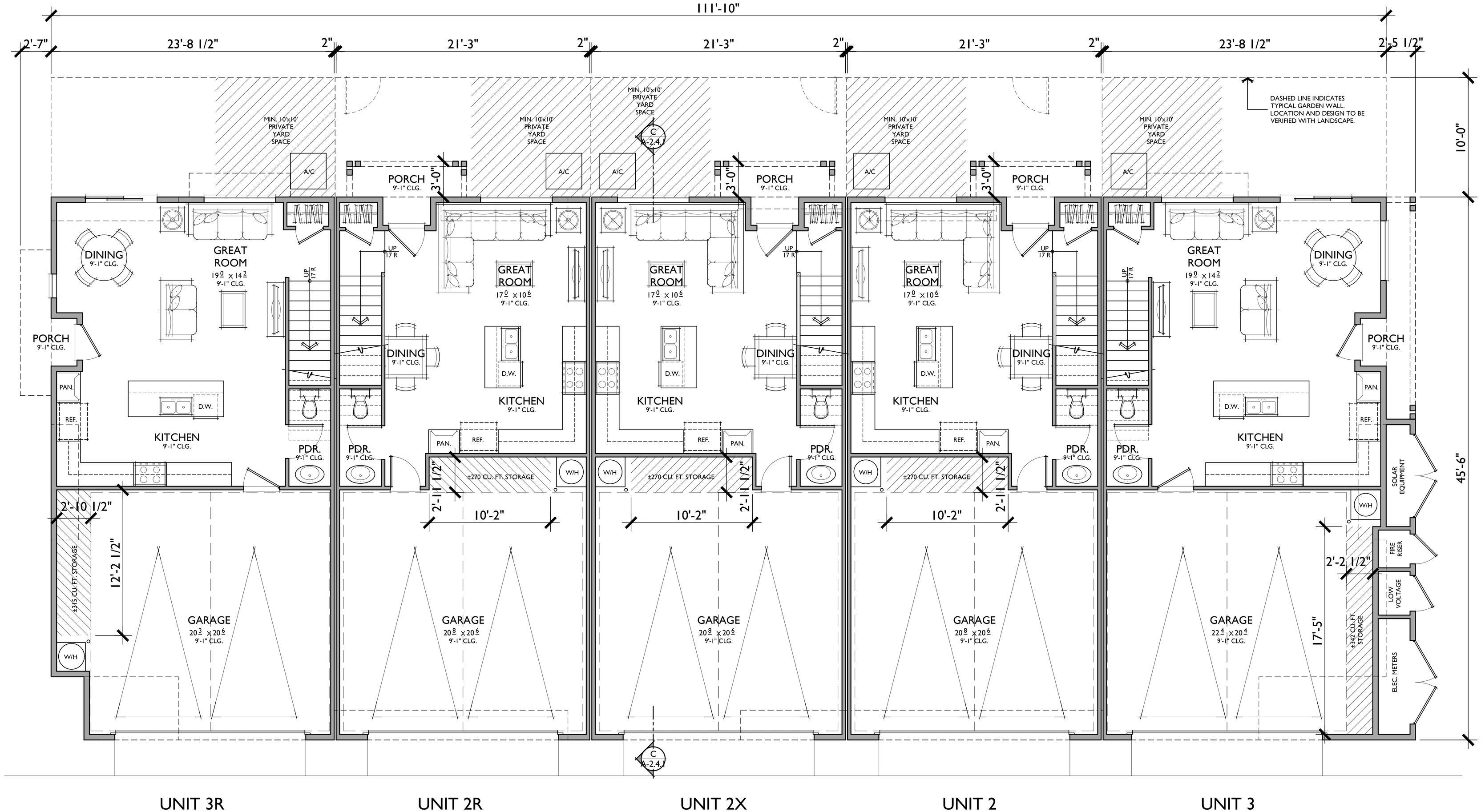

UNIT 2

3 BEDROOMS / 2.5 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	516 SQ. FT.
2ND FLOOR	847 SQ. FT.
TOTAL	**1,362 SQ. FT.**
2 - CAR GARAGE	442 SQ. FT.
PORCH	40 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

UNIT 2X

3 BEDROOMS / 2.5 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	516 SQ. FT.
2ND FLOOR	879 SQ. FT.
TOTAL	**1,395 SQ. FT.**
2 - CAR GARAGE	442 SQ. FT.
PORCH	40 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

UNIT 3

3 BEDROOMS / 2.5 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	577 SQ. FT.
2ND FLOOR	927 SQ. FT.
TOTAL	**1,504 SQ. FT.**
2 - CAR GARAGE	493 SQ. FT.
PORCH	43 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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BUILDING '3B' 5-PLEX

First Floor - Reflects Modern Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-2.1

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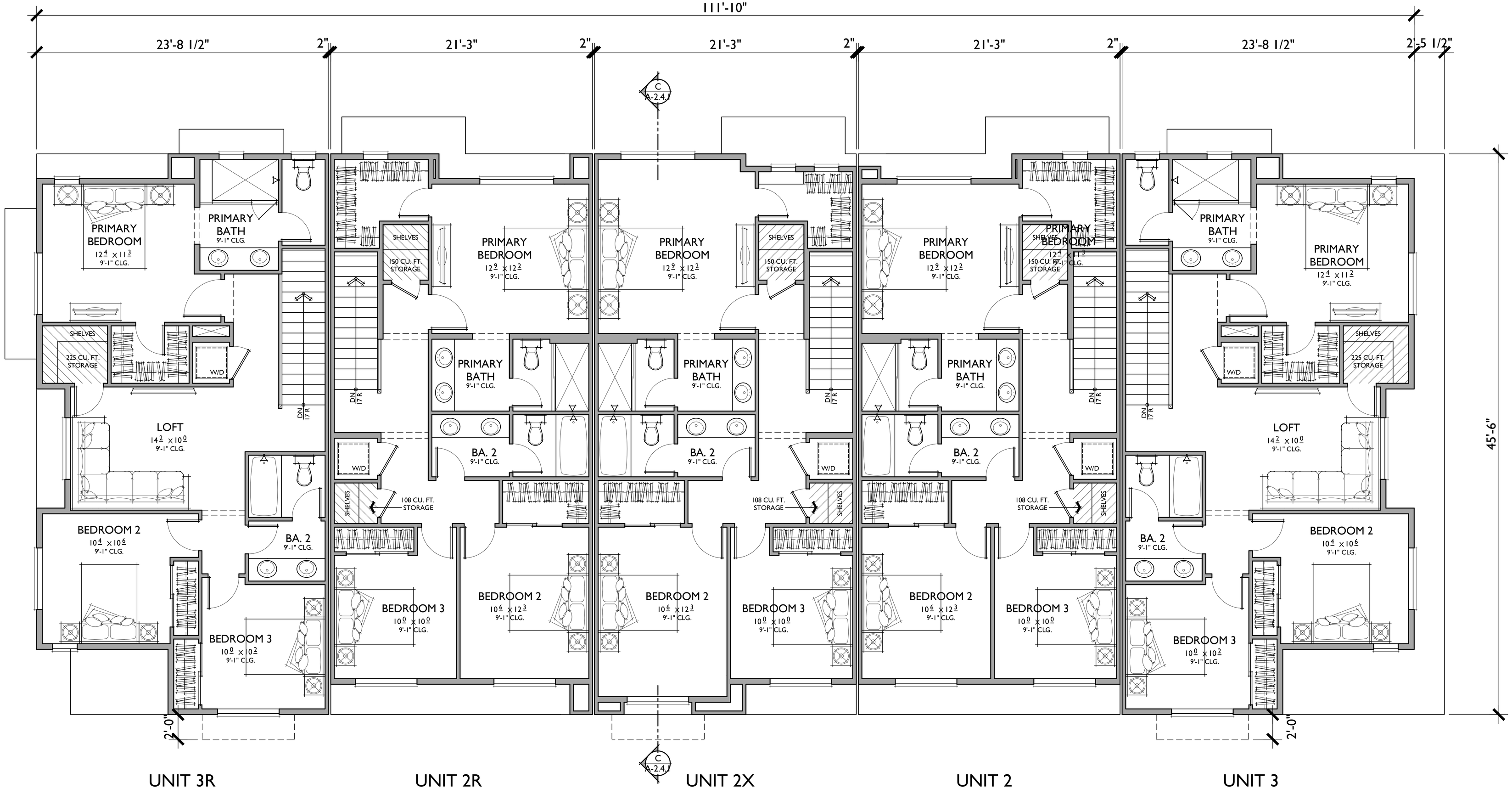

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BUILDING '3B' 5-PLEX

Second Floor - Reflects Modern Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-2.2

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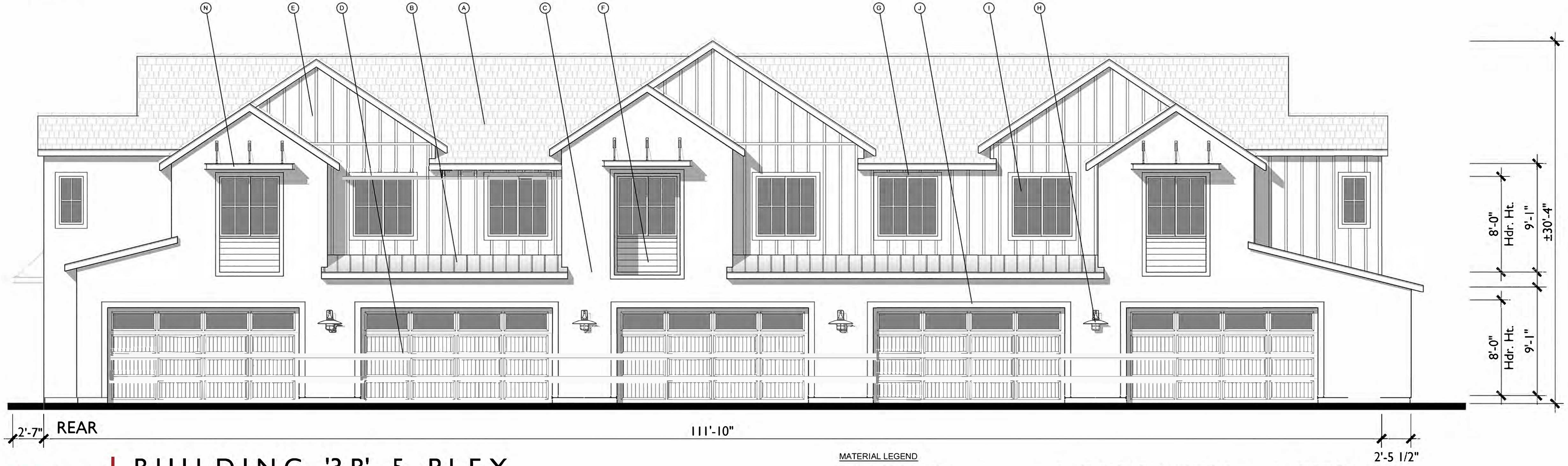

MATERIAL LEGEND

A. CONCRETE FLAT TILE
B. STANDING SEAM METAL ROOF
C. STUCCO (COLOR VARIES)
D. METAL SECTIONAL GARAGE DOOR
E. CEMENTITIOUS BOARD AND BATTEN SIDING
F. CEMENTITIOUS HORIZONTAL SIDING
G. CEMENTITIOUS TRIM
H. LIGHT FIXTURE
I. VINYL WINDOW
J. STUCCO OVER FOAM TRIM
K. WROUGHT IRON GATE
L. DECORATIVE SHUTTERS
M. SHED ROOF w/ WOOD BRACES
N. FABRICATED METAL AWNING
O. STONE VENEER

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BUILDING '3B' 5-PLEX

Modern Farmhouse Elevations

LAUREL RANCH

Antioch , California

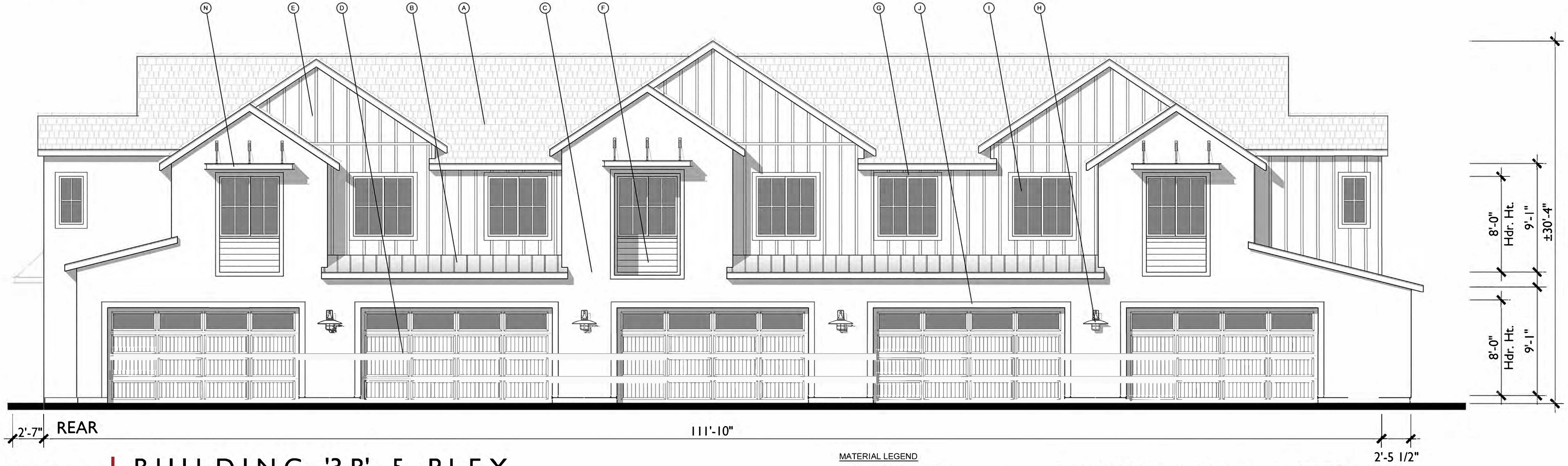
0 2 4 8

A25.22240

03.30.23

A-2.3

BrightSky RESIDENTIAL



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BUILDING '3B' 5-PLEX

Modern Farmhouse Elevations

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

MATERIAL LEGEND

A. CONCRETE FLAT TILE
B. STANDING SEAM METAL ROOF
C. STUCCO (COLOR VARIES)
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E. CEMENTITIOUS BOARD AND BATTEN SIDING
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M. SHED ROOF w/ WOOD BRACES
N. FABRICATED METAL AWNING
O. STONE VENEER

03.30.23

A-2.3

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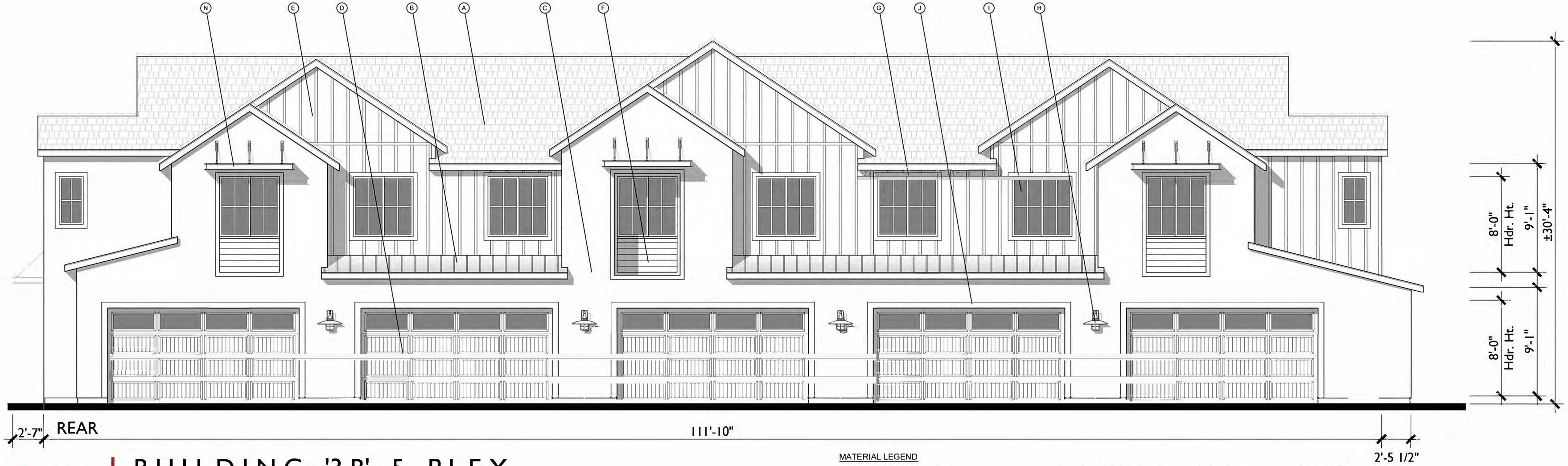

MATERIAL LEGEND

A. CONCRETE FLAT TILE
B. STANDING SEAM METAL ROOF
C. STUCCO (COLOR VARIES)
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BUILDING '3B' 5-PLEX

Modern Farmhouse Elevations

LAUREL RANCH

Antioch , California

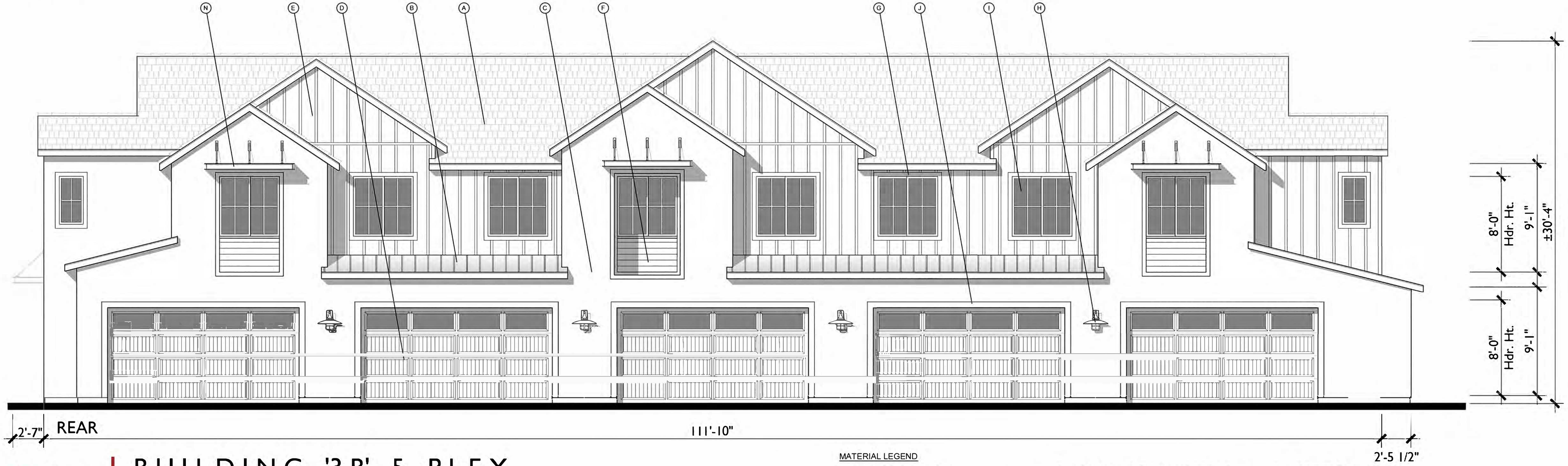
0 2 4 8

A25.22240

03.30.23

A-2.3

BrightSky RESIDENTIAL



MATERIAL LEGEND

A. CONCRETE FLAT TILE
B. STANDING SEAM METAL ROOF
C. STUCCO (COLOR VARIES)
D. METAL SECTIONAL GARAGE DOOR
E. CEMENTITIOUS BOARD AND BATTEN SIDING
F. CEMENTITIOUS HORIZONTAL SIDING
G. CEMENTITIOUS TRIM
H. LIGHT FIXTURE
I. VINYL WINDOW
J. STUCCO OVER FOAM TRIM
K. WROUGHT IRON GATE
L. DECORATIVE SHUTTERS
M. SHED ROOF w/ WOOD BRACES
N. FABRICATED METAL AWNING
O. STONE VENEER

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BUILDING '3B' 5-PLEX

Modern Farmhouse Elevations

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-2.3

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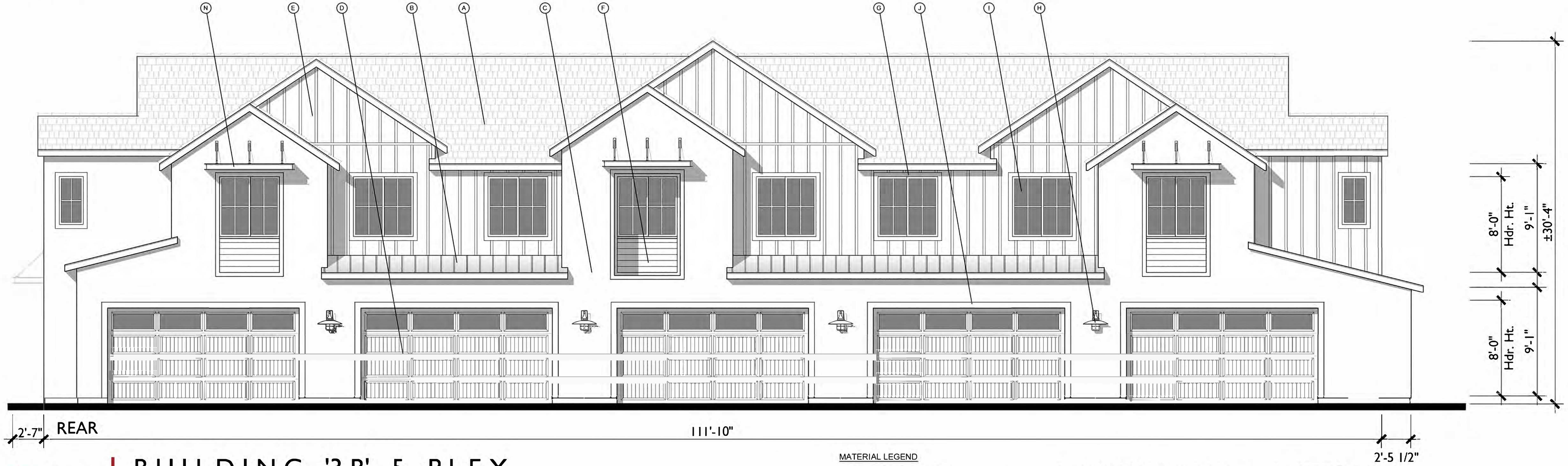

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BUILDING '3B' 5-PLEX

Modern Farmhouse Elevations

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

MATERIAL LEGEND

A. CONCRETE FLAT TILE
B. STANDING SEAM METAL ROOF
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O. STONE VENEER

03.30.23

A-2.3

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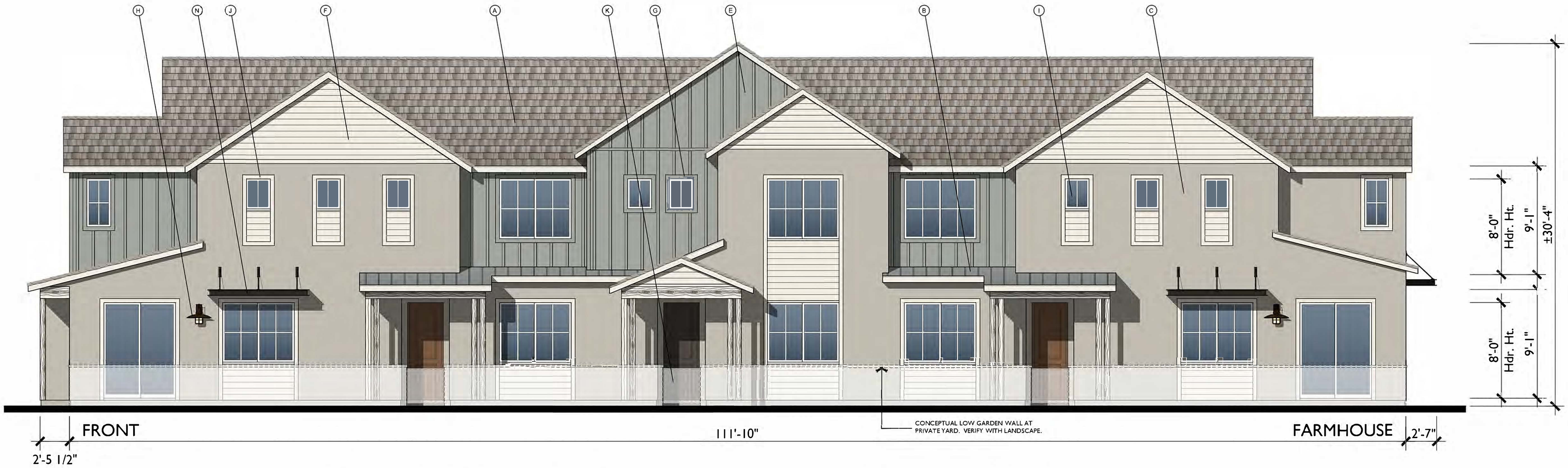

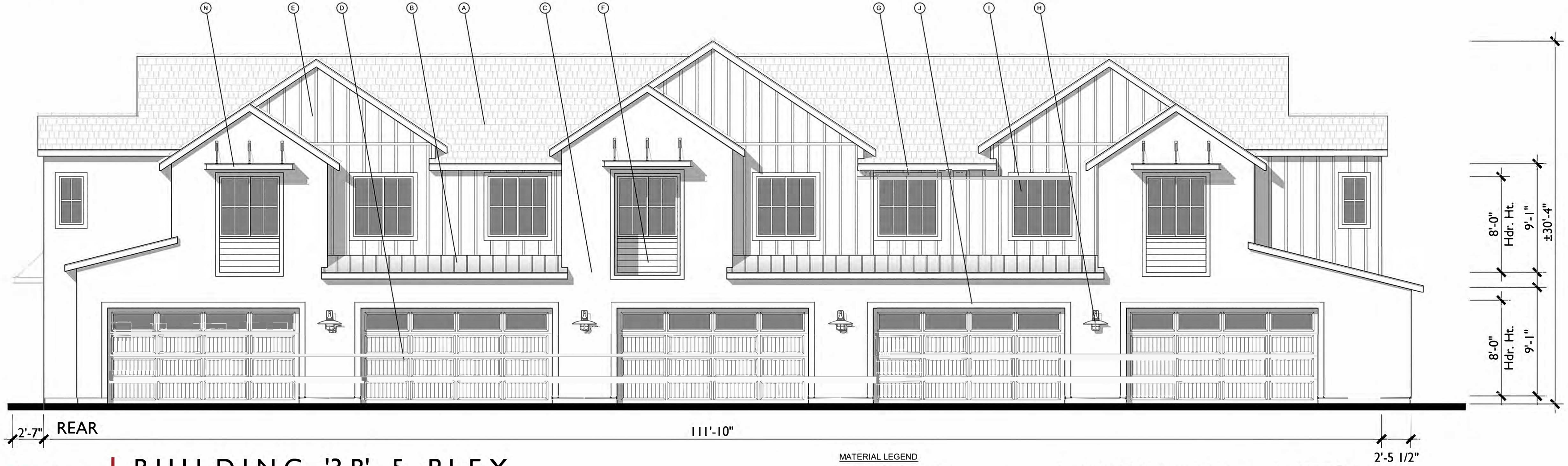

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BUILDING '3B' 5-PLEX

Modern Farmhouse Elevations

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

MATERIAL LEGEND

A. CONCRETE FLAT TILE
B. STANDING SEAM METAL ROOF
C. STUCCO (COLOR VARIES)
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O. STONE VENEER

03.30.23

A-2.3

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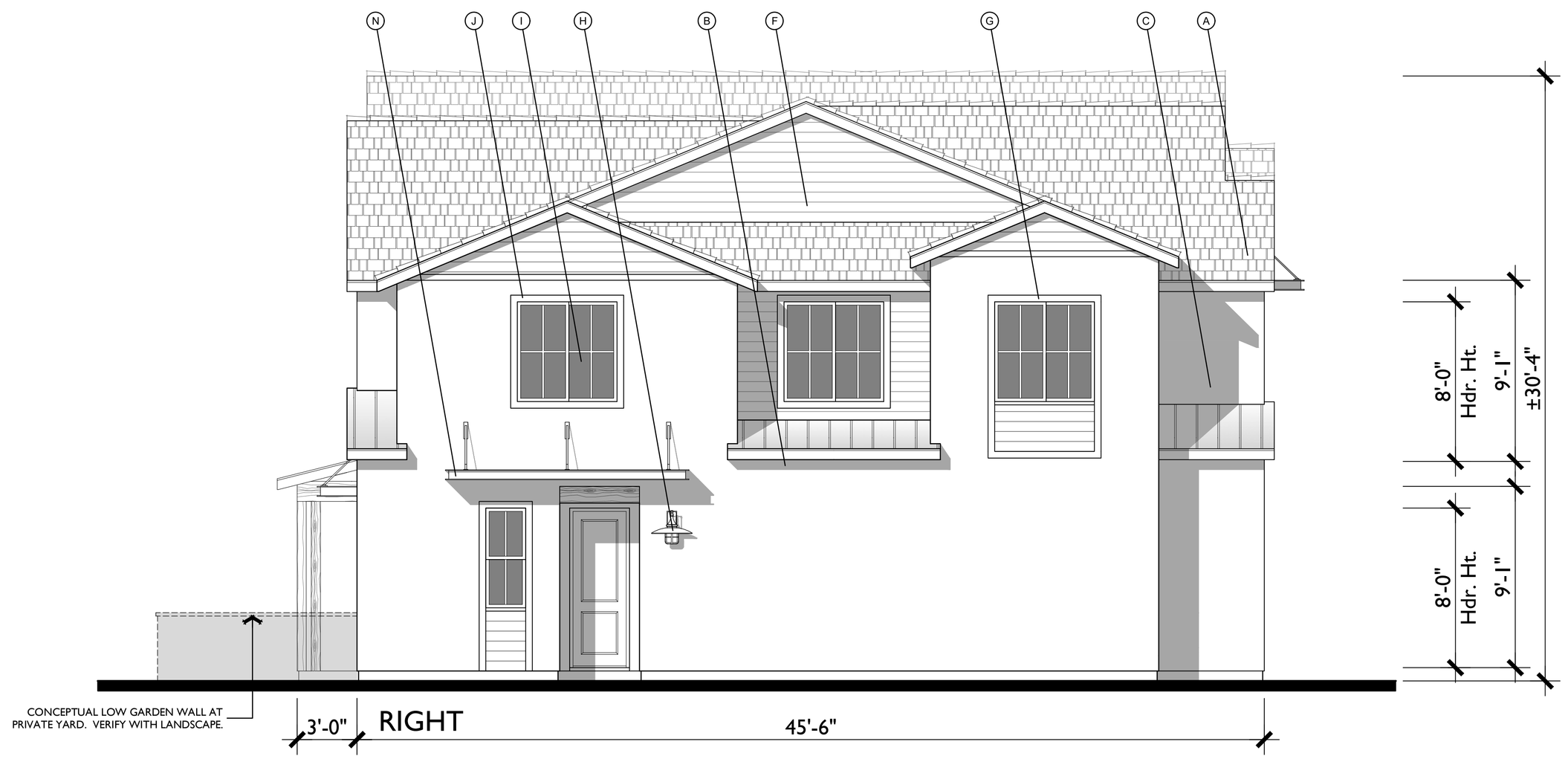

MATERIAL LEGEND

A. CONCRETE FLAT TILE
B. STANDING SEAM METAL ROOF
C. STUCCO (COLOR VARIES)
D. METAL SECTIONAL GARAGE DOOR
E. CEMENTITIOUS BOARD AND BATTEN SIDING
F. CEMENTITIOUS HORIZONTAL SIDING
G. CEMENTITIOUS TRIM
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BUILDING '3B' 5-PLEX

Modern Farmhouse Elevations

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-2.4

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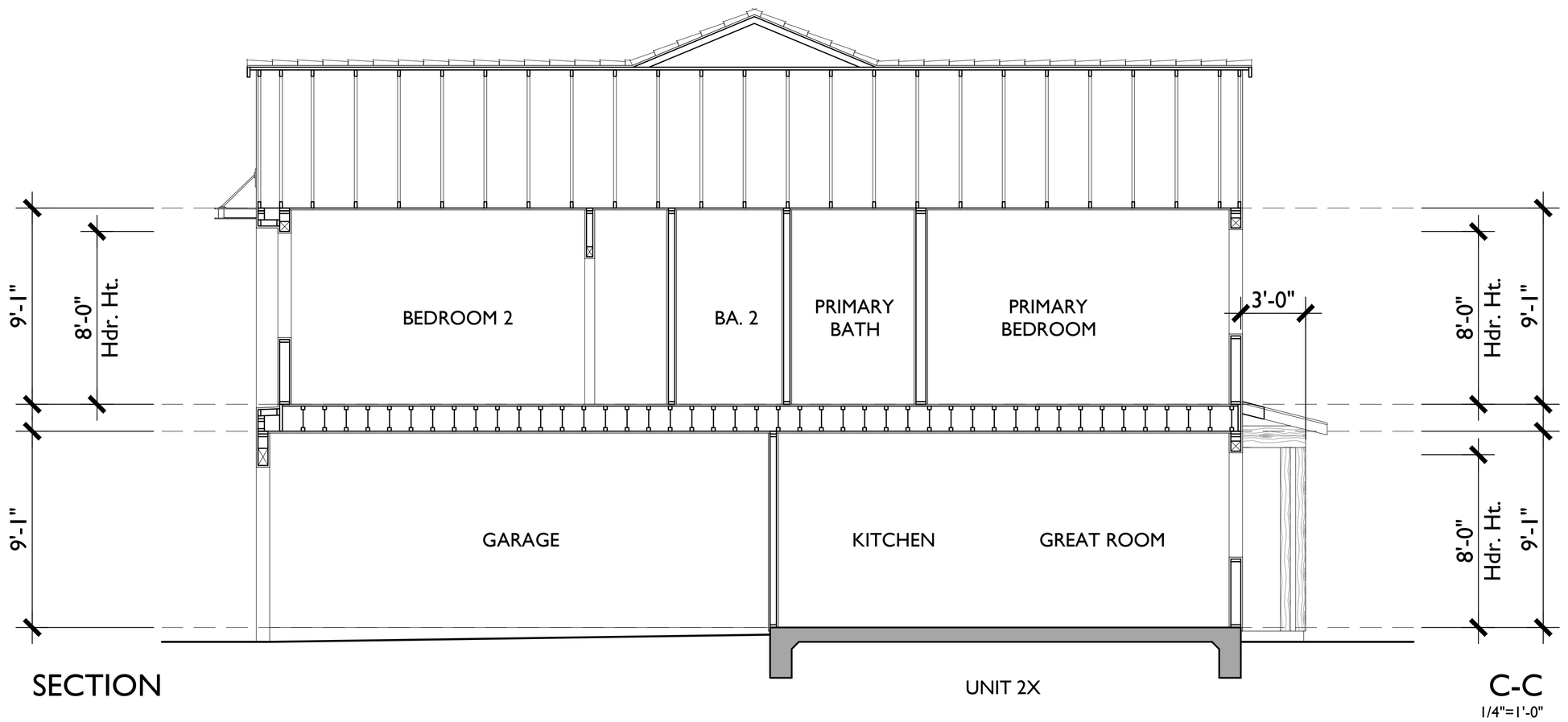

SECTION

C-C
1/4"=1'-0"

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BUILDING '3B' 5-PLEX

Section

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-2.4.1

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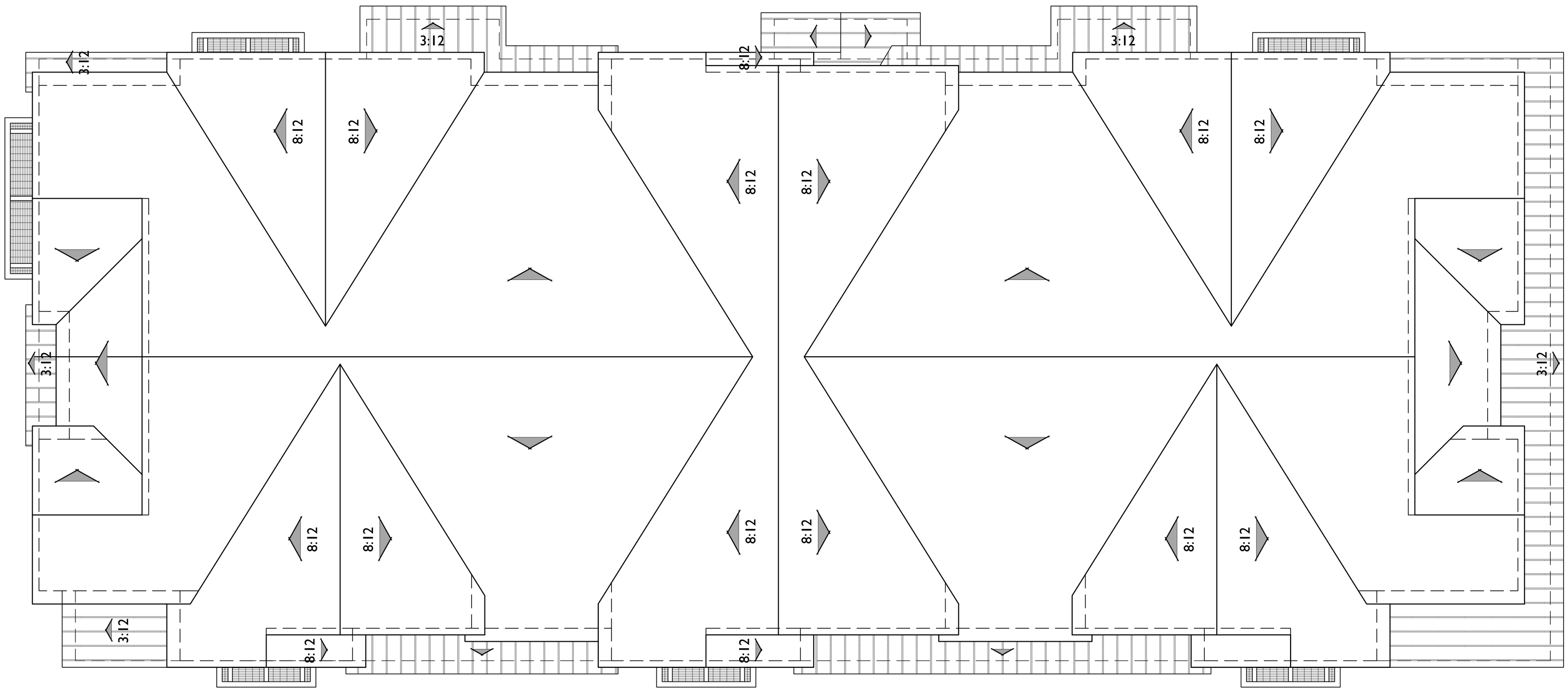

ROOF PLAN

FARMHOUSE

PITCH: 5:12 U.N.O.
RAKE: 6"
EAVE: 12"
ROOF MATERIAL: CONCRETE FLAT TILE

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BUILDING '3B' 5-PLEX

Modern Farmhouse Roof Plan

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-2.5

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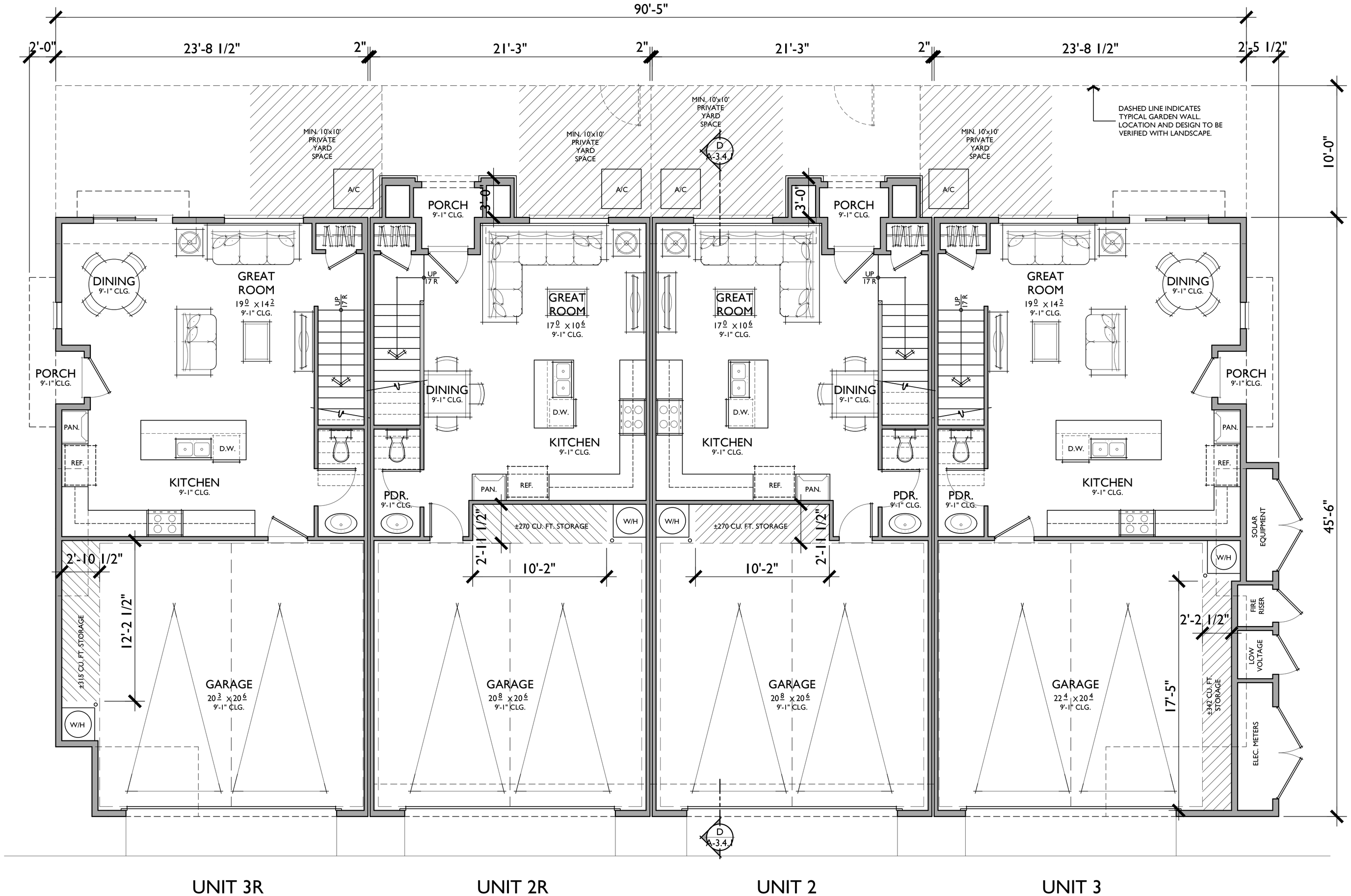

UNIT 2

3 BEDROOMS / 2.5 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	516 SQ. FT.
2ND FLOOR	847 SQ. FT.
TOTAL	**1,362 SQ. FT.**
2 - CAR GARAGE	442 SQ. FT.
PORCH	40 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

UNIT 3

3 BEDROOMS / 2.5 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	577 SQ. FT.
2ND FLOOR	927 SQ. FT.
TOTAL	**1,504 SQ. FT.**
2 - CAR GARAGE	493 SQ. FT.
PORCH	43 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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BUILDING '4A' 4-PLEX

First Floor - Reflects Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-3.1

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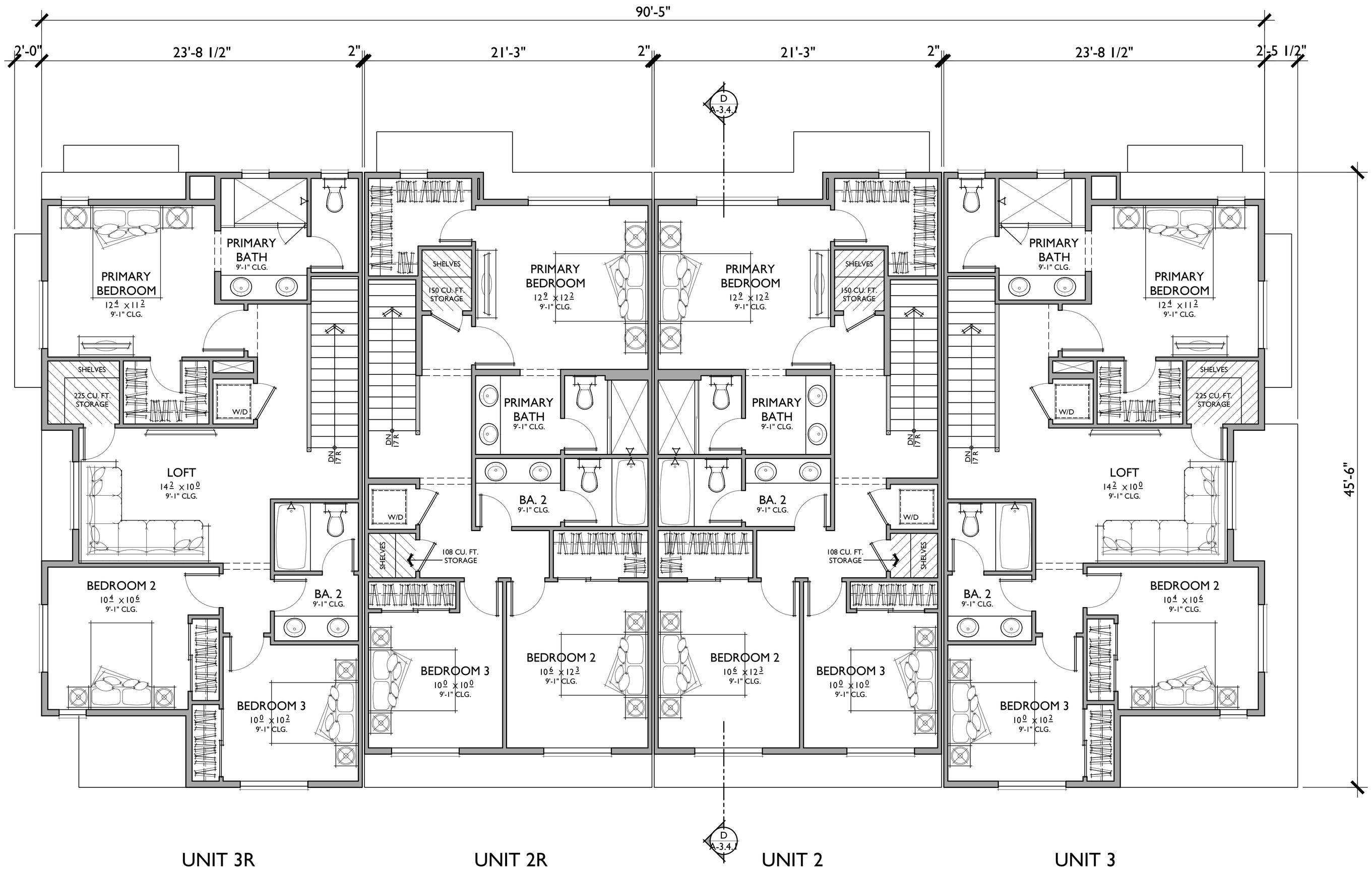

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BUILDING '4A' 4-PLEX

Second Floor - Reflects Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-3.2

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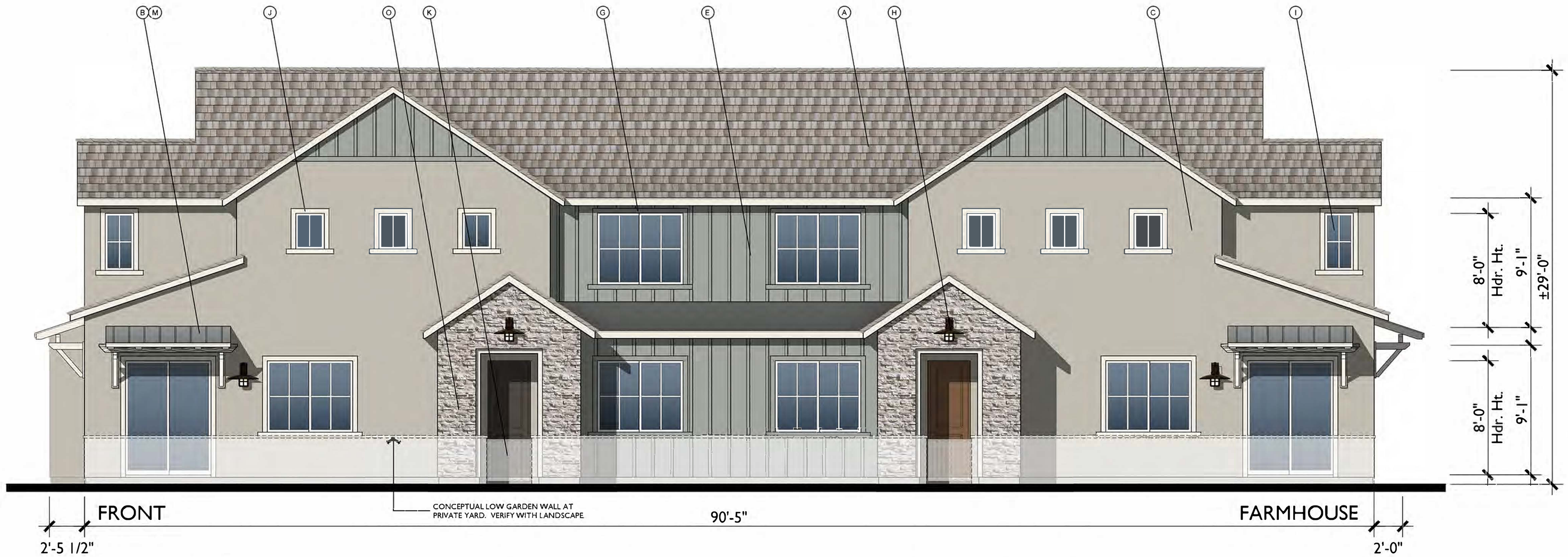

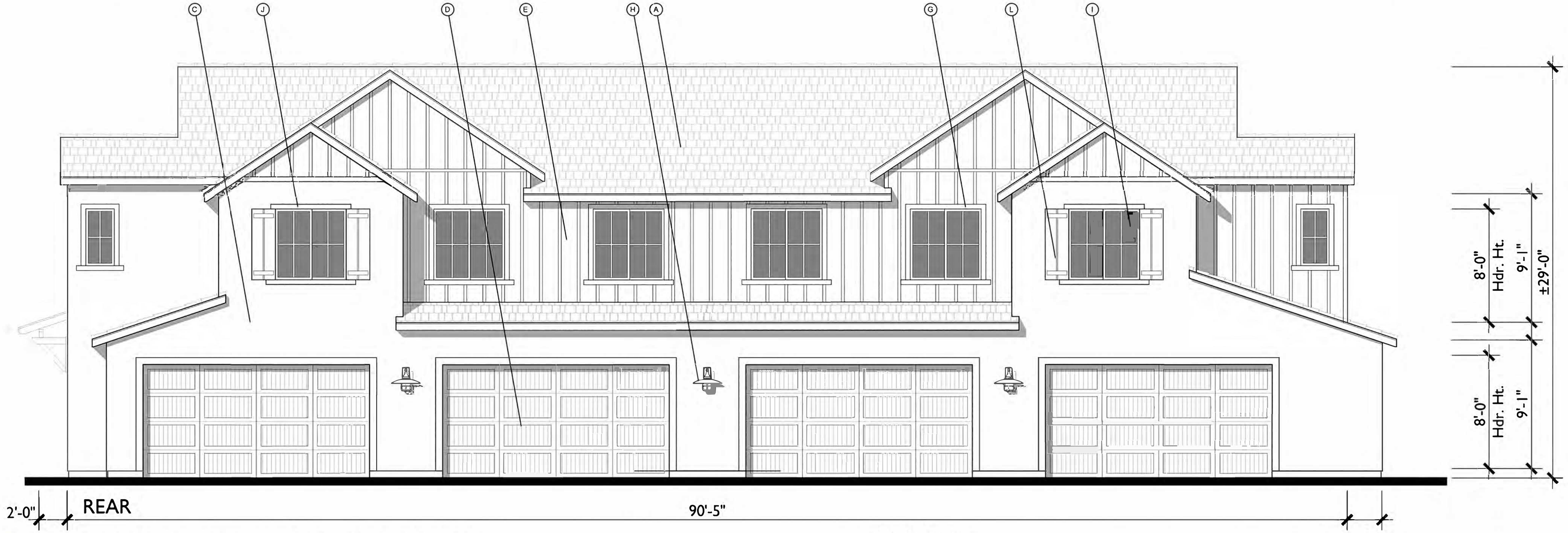

MATERIAL LEGEND

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C. STUCCO (COLOR VARIES)
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O. STONE VENEER

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BUILDING '4A' 4-PLEX

Farmhouse Elevations

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-3.3

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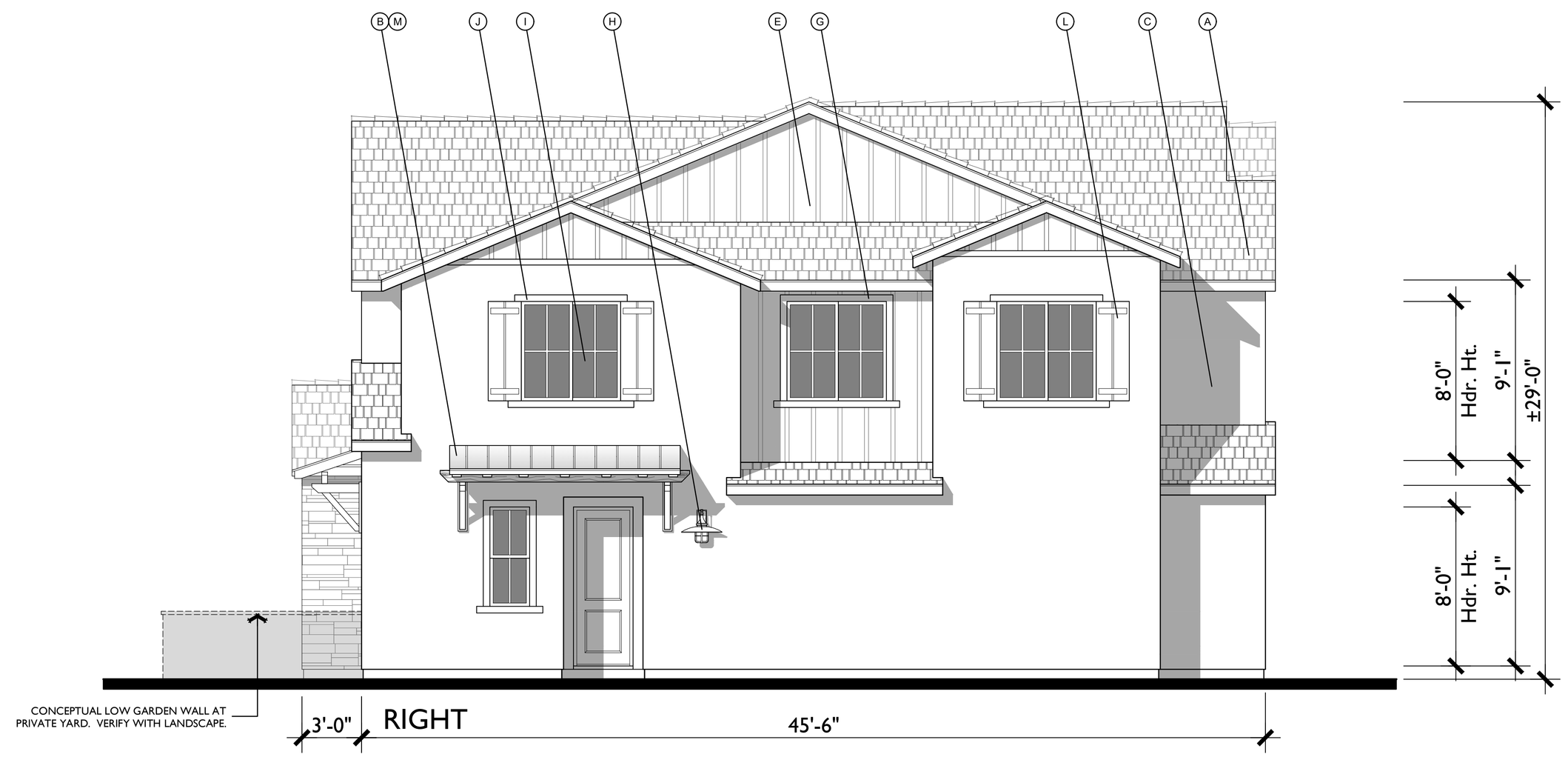

MATERIAL LEGEND

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N. FABRICATED METAL AWNING
O. STONE VENEER

03.30.23

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BUILDING '4A' 4-PLEX

Farmhouse Elevations

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

A-3.4

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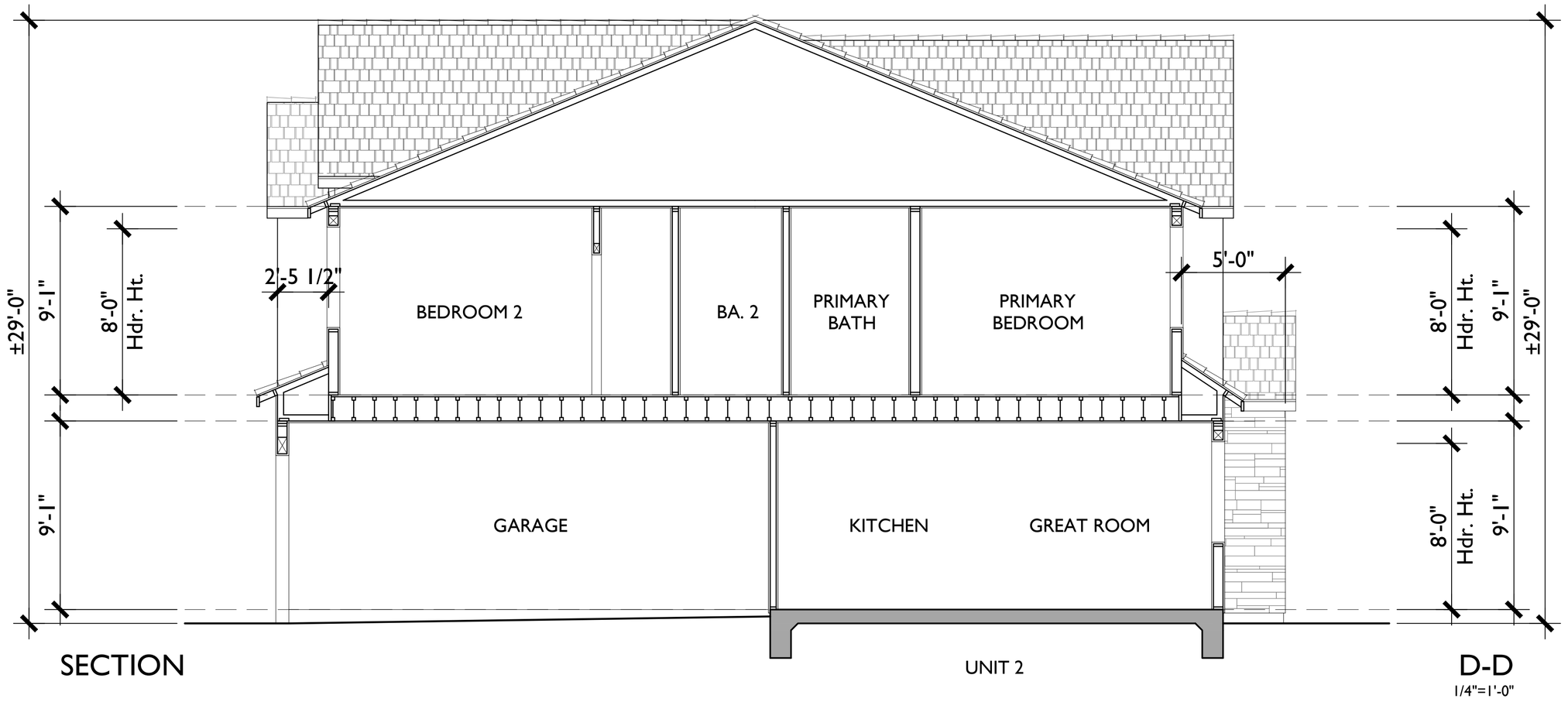

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BUILDING '4A' 4-PLEX

Section

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-3.4.1

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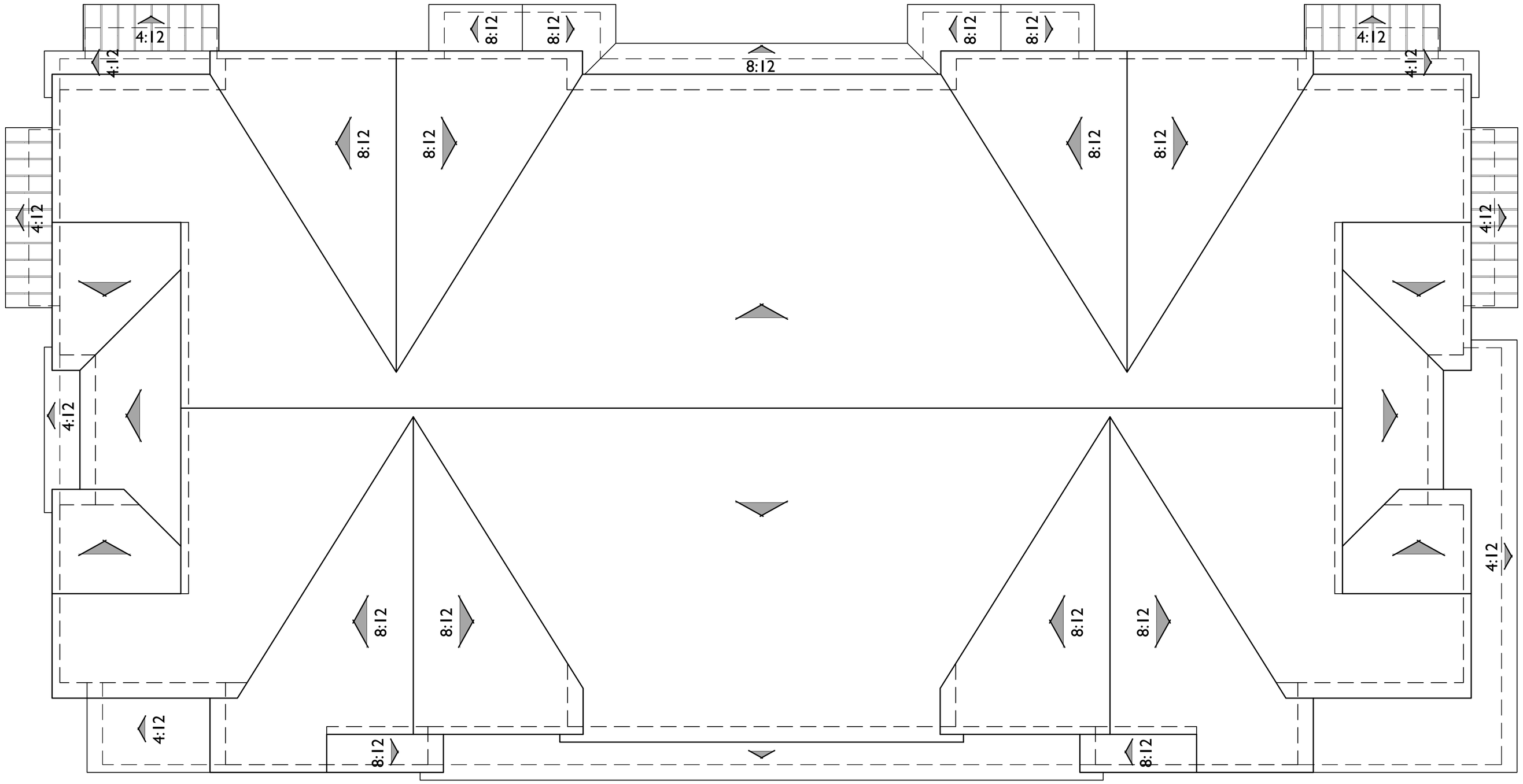

ROOF PLAN

FARMHOUSE

PITCH: 5:12 U.N.O.
RAKE: 6"
EAVE: 12"
ROOF MATERIAL: CONCRETE FLAT TILE

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BUILDING '4A' 4-PLEX

Farmhouse Roof Plan

LAUREL RANCH

Antioch , California

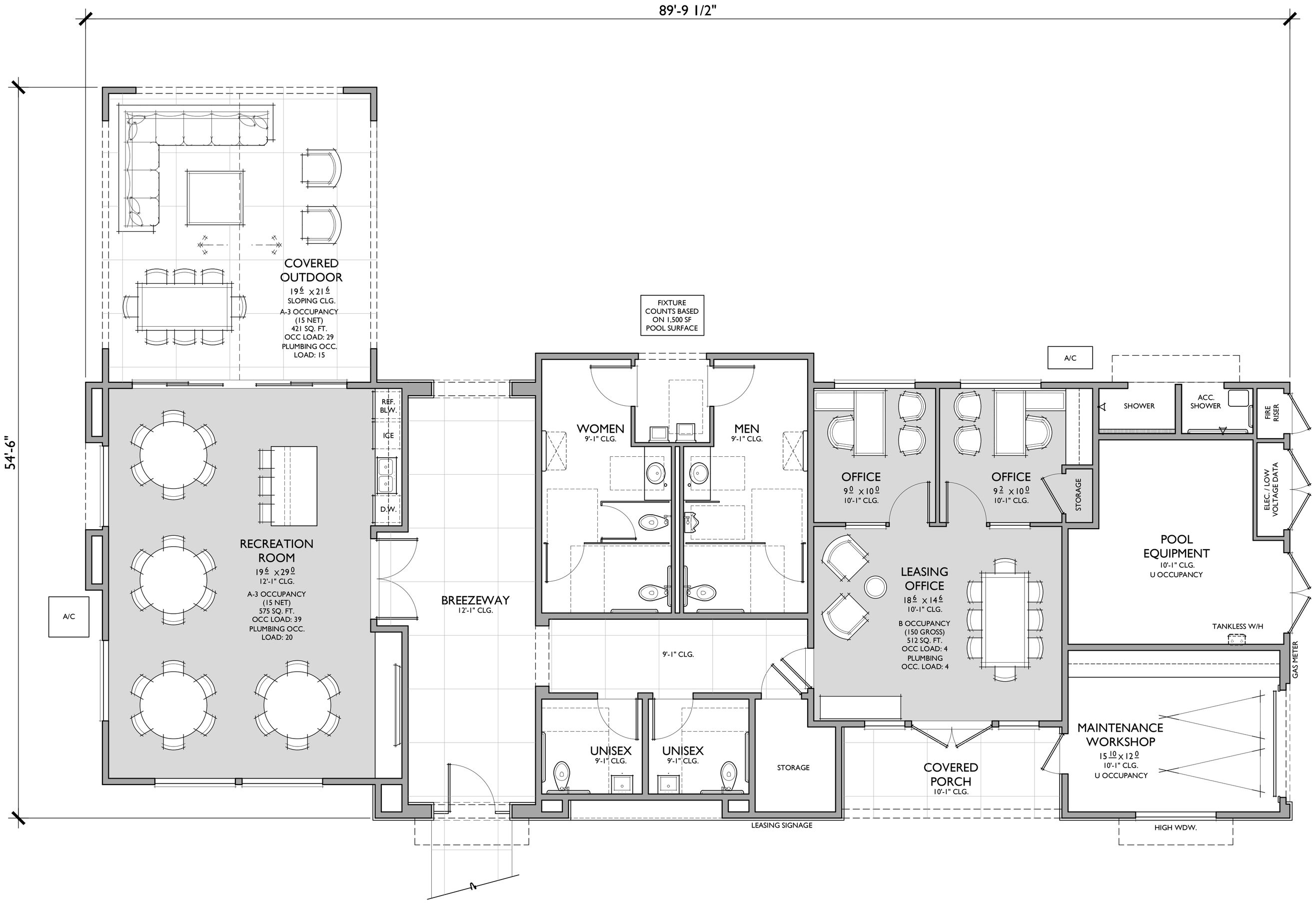
0 2 4 8

A25.22240

03.30.23

A-3.5

BrightSky RESIDENTIAL



FLOOR AREA TABLE	
RECREATION ROOM	668 SQ. FT.
LEASING OFFICE	524 SQ. FT.
TOTAL	**1192 SQ. FT.**
RESTROOMS	535 SQ. FT.
BREEZEWAY	446 SQ. FT.
POOL EQUIPMENT / SHOWERS / MAINTENANCE / UTILITIES	516 SQ. FT.
STORAGE	57 SQ. FT.
COVERED OUTDOOR	450 SQ. FT.
COVERED PORCH	111 SQ. FT.
TOTAL BUILDING	**3,307 SQ. FT.**

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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RECREATION / LEASING OFFICE

Reflects Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22375

03.30.23

A-4.1

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FRONT

REAR

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RECREATION / LEASING OFFICE

Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22375

03.30.23

A-4.2

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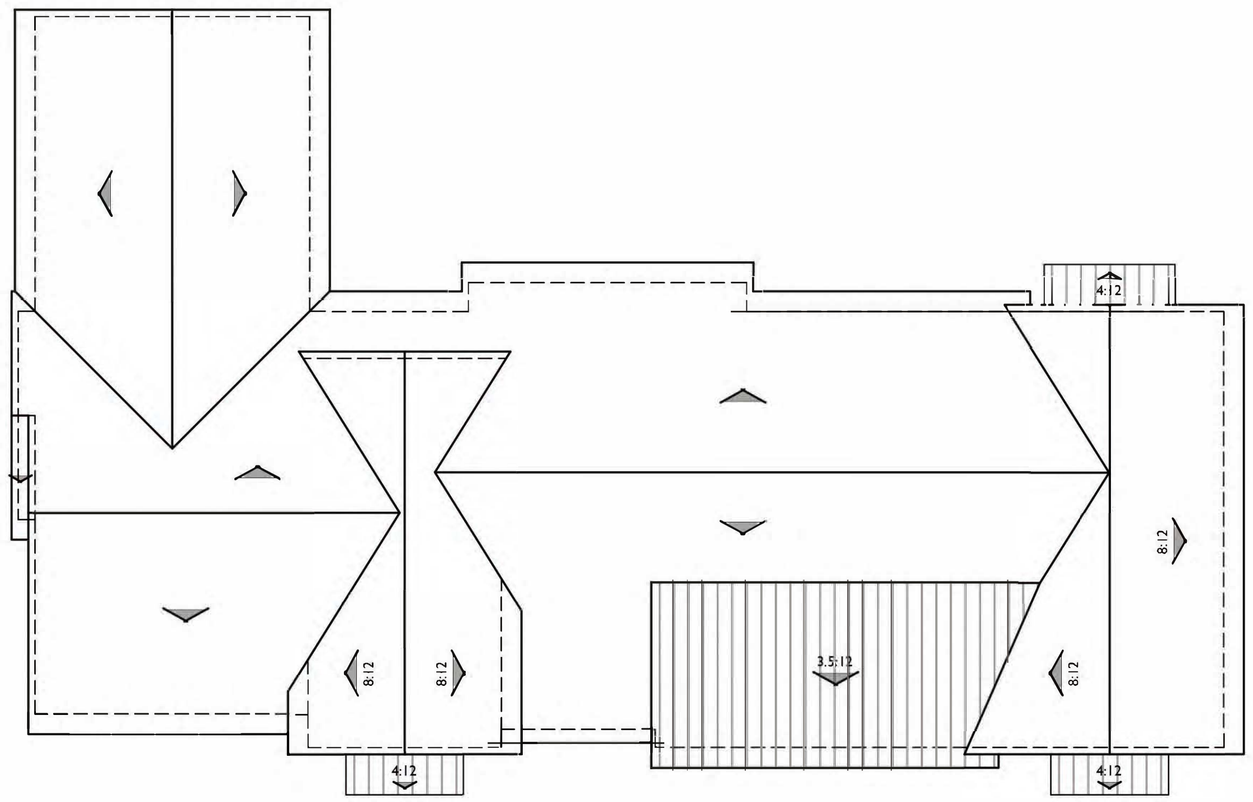

ROOF PLAN

1/16" = 1'0"

PITCH: 5:12 U.N.O.
RAKE: 6"
EAVE: 18"
ROOF MATERIAL: CONCRETE FLAT TILE / STANDING SEAM METAL

LEFT

RIGHT

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RECREATION / LEASING OFFICE

Farmhouse Elevation

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22375

03.30.23

A-4.3

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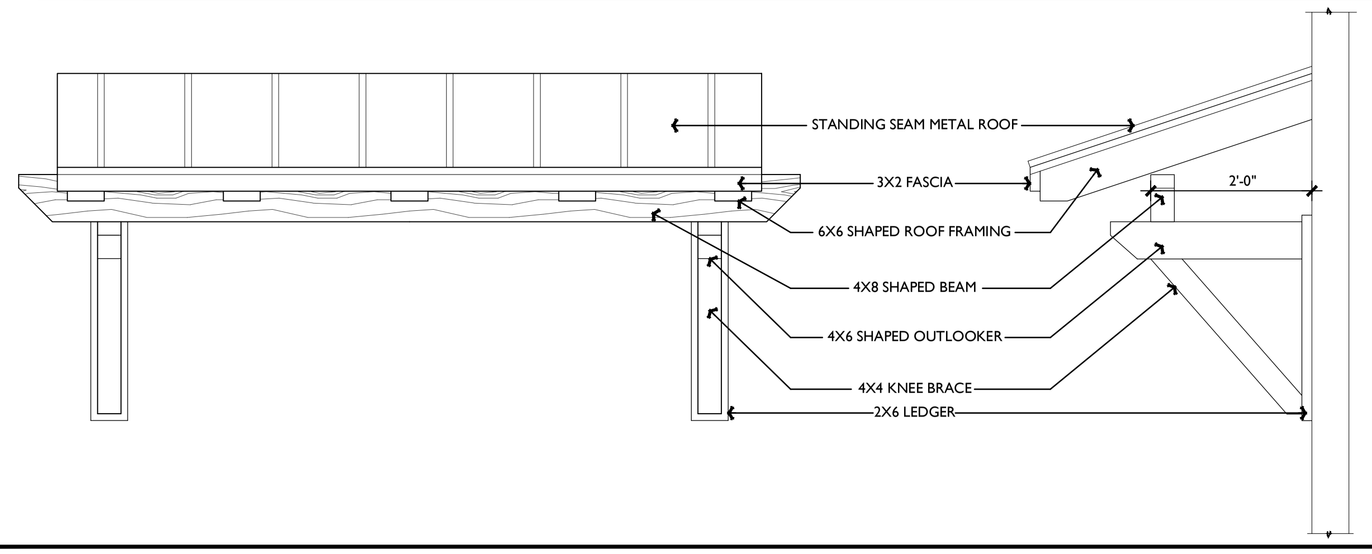
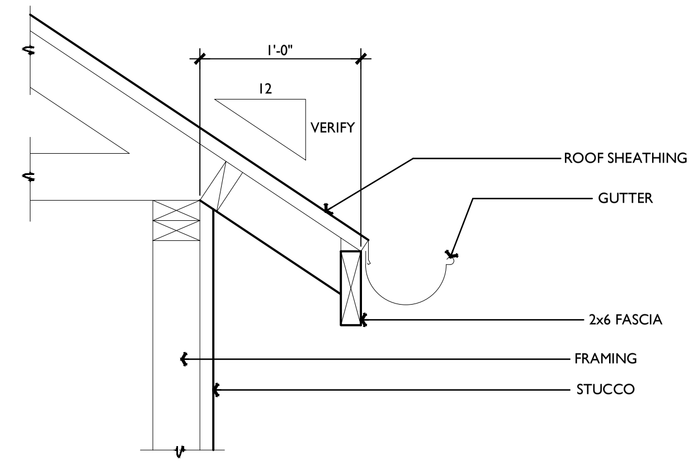


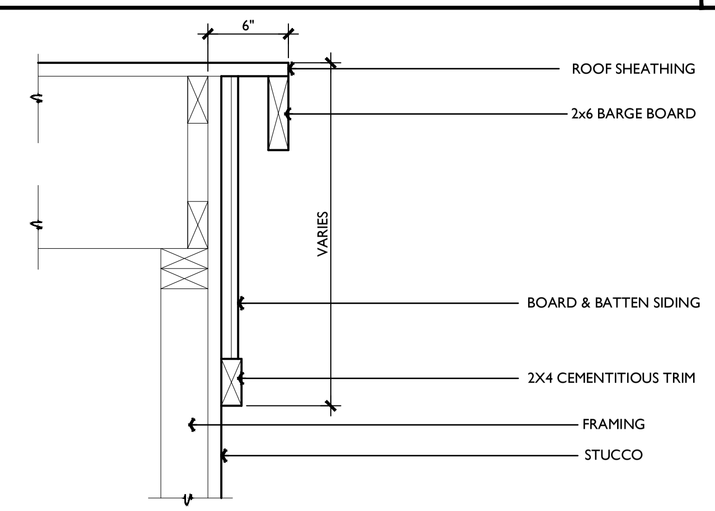
3/4"=1'-0'

SHED ROOF AWNING w/ WOODEN BRACE — 4



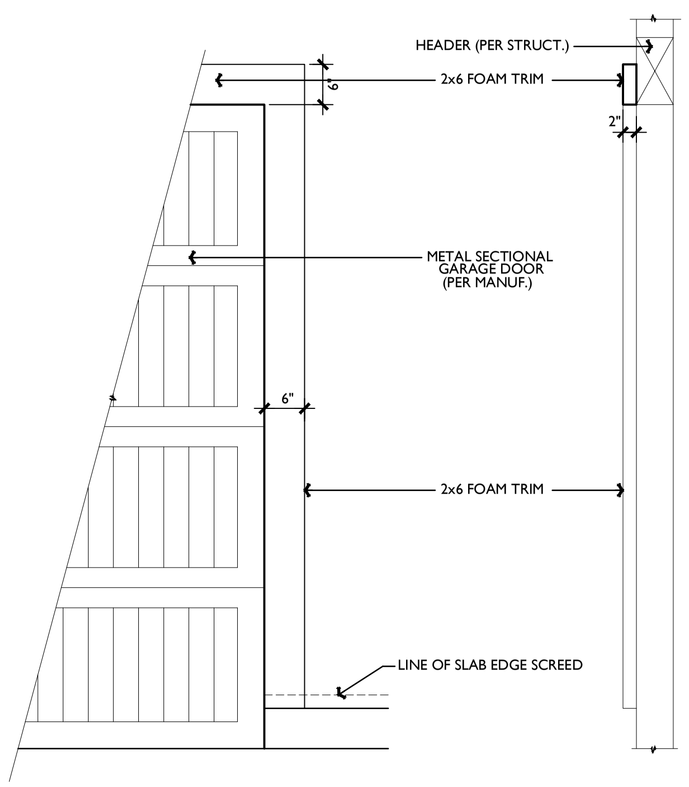
1-1/2"=1'-0'

TYPICAL EAVE — 1



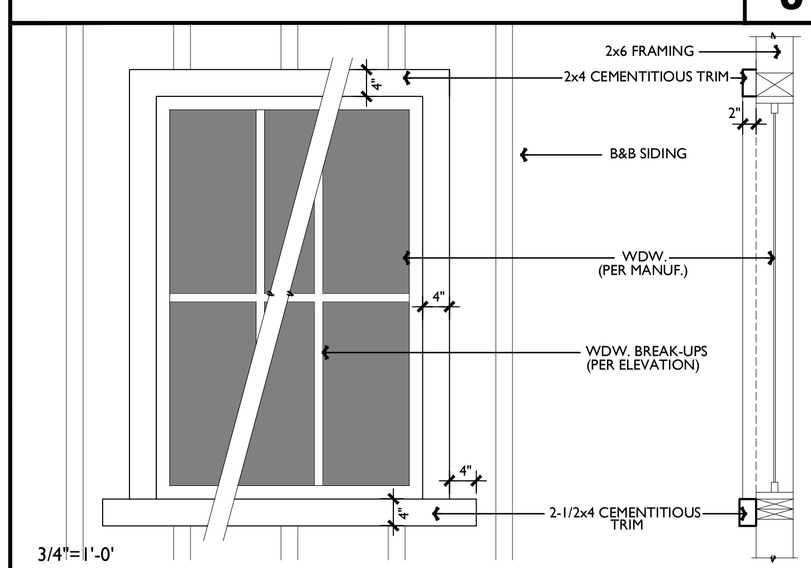
1-1/2"=1'-0'

TYPICAL RAKE — 2



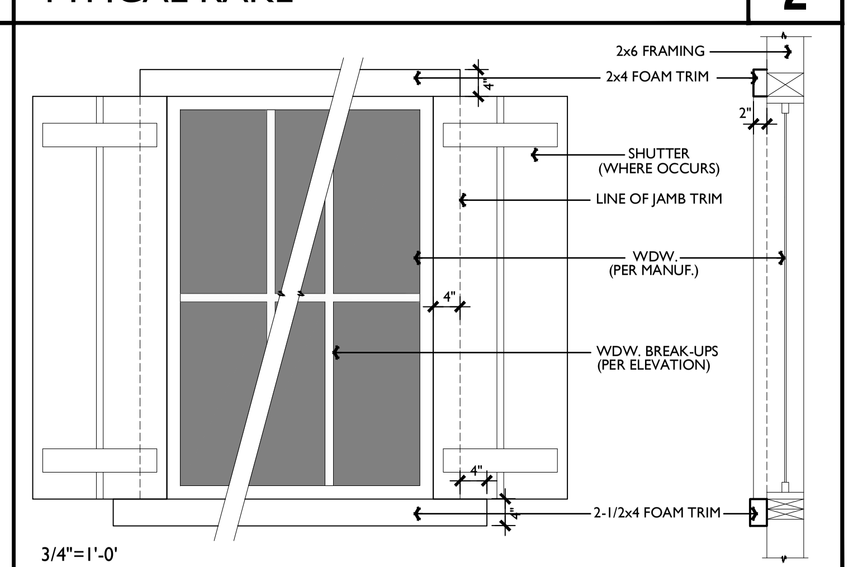
3/4"=1'-0'

GARAGE DOOR TRIM — 9



3/4"=1'-0'

WINDOW TRIM (BOARD & BATTEN SIDING) — 6



3/4"=1'-0'

WINDOW TRIM & SHUTTER (STUCCO) — 3

1/16"=1'-0'

ELEVATIONS

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FARMHOUSE DETAILS

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-D.1

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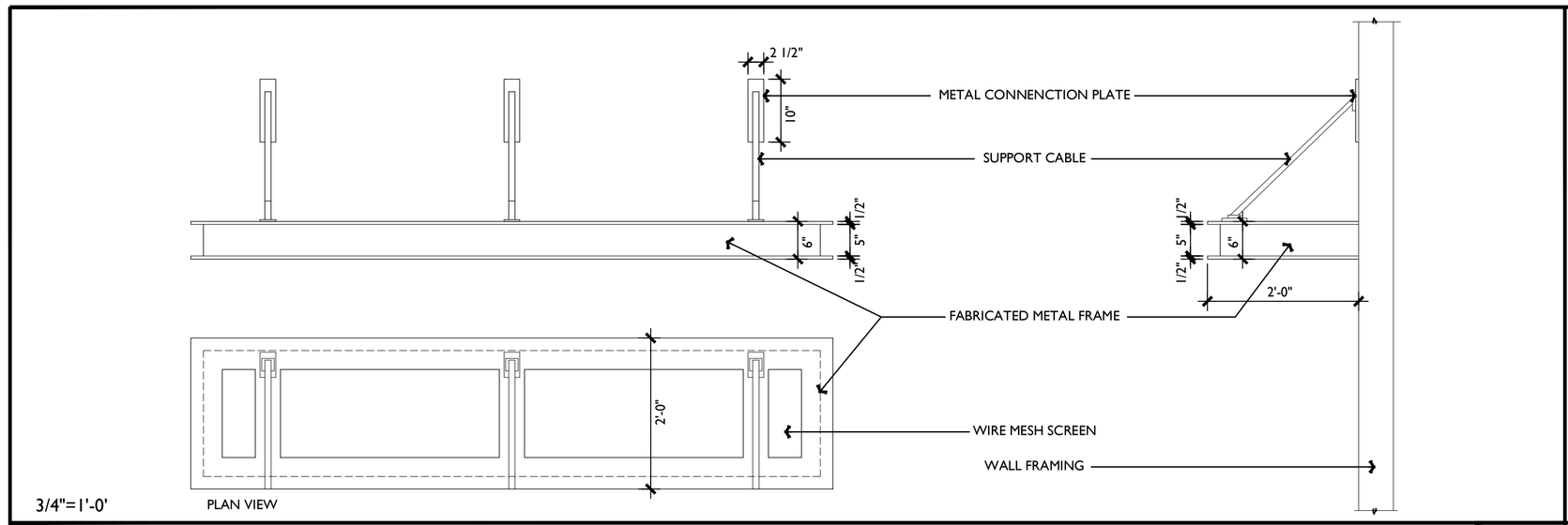
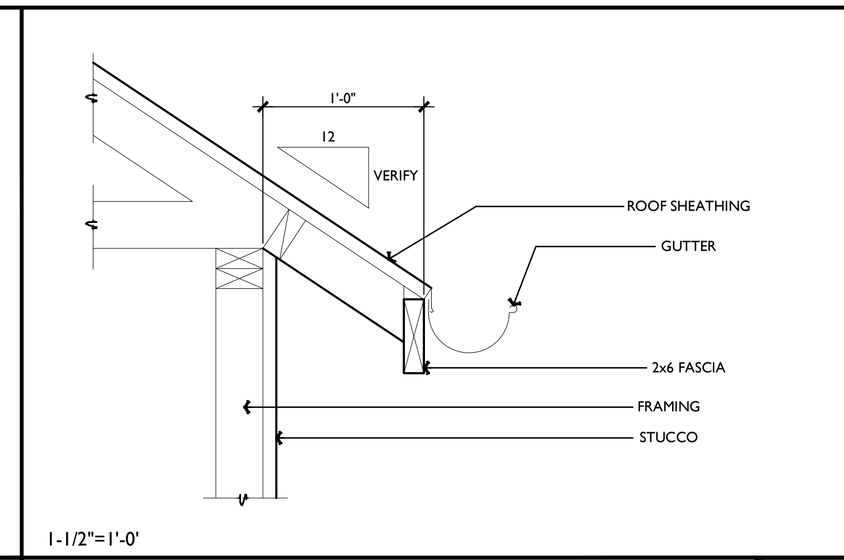
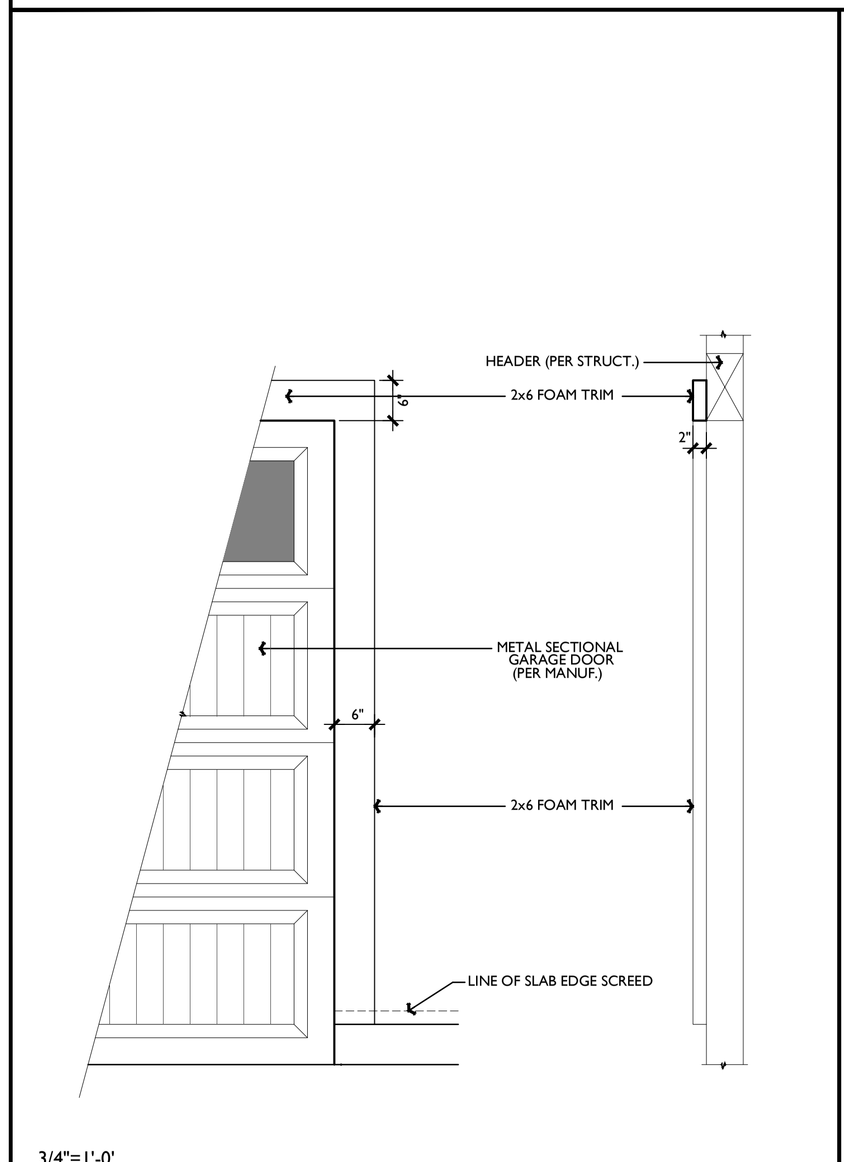


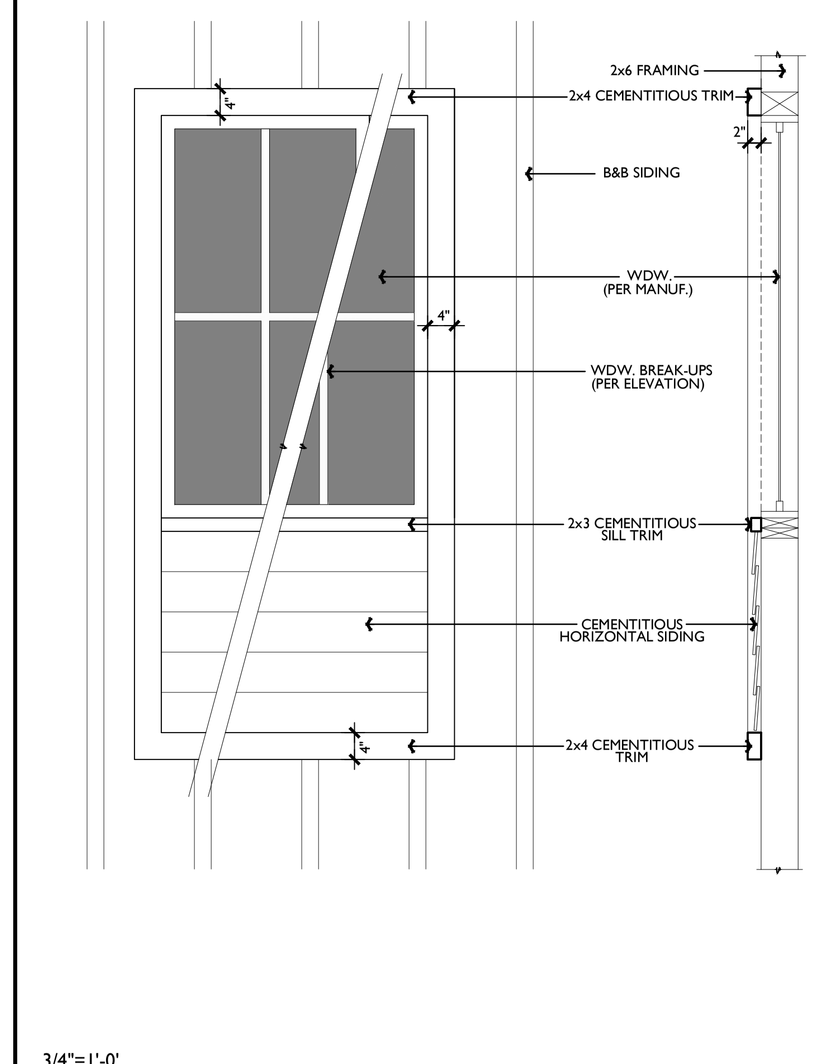
FABRICATED METAL AWNING / SUN SHADE **4**



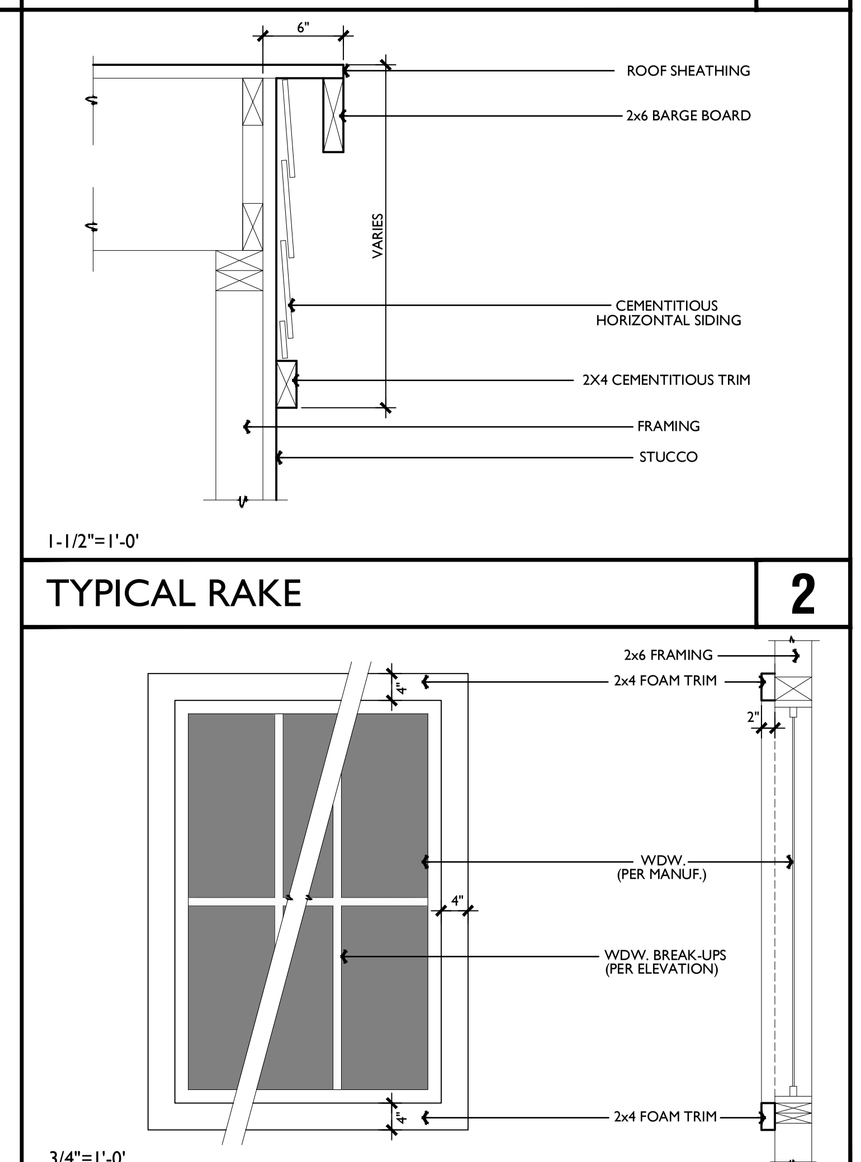
TYPICAL EAVE **1**



GARAGE DOOR TRIM **9**



WINDOW TRIM (BOARD & BATTEN SIDING) **6**



TYPICAL RAKE **2**

WINDOW TRIM (STUCCO) **3**

ELEVATIONS

Bassenian | Lagoni
ARCHITECTURE • PLANNING • INTERIORS
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2031 Orchard Drive, Suite 100
Newport Beach, CA USA 92660
tel. +1 949 553 9100
fax +1 949 553 0548

MODERN FARMHOUSE DETAILS

LAUREL RANCH

Antioch , California

0 2 4 8

A25.22240

03.30.23

A-D.2

BrightSky RESIDENTIAL

SCHEME 1

ROOF
EAGLE 4679

BASE STUCCO
SW 7005 PURE WHITE

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 7649 SILVERPLATE

FRONT DOORS & SHUTTERS #1
SW 6989 DOMINO

SIDING
SW 7649 SILVERPLATE

FRONT DOORS & SHUTTERS #2
SW 7665 WALL STREET

STONE
SEA CLIFF EUROPEAN LEDGE

SCHEME 2

ROOF
EAGLE 4588

BASE STUCCO
SW 7042 SHOJI WHITE

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 9172 STUDIO CLAY

FRONT DOORS & SHUTTERS #1
SW 6181 SECRET GARDEN

SIDING
SW 7638 JOGGING PATH

FRONT DOORS & SHUTTERS #2
SW 9149 INKY BLUE

STONE
SEA CLIFF EUROPEAN LEDGE

SCHEME 3

ROOF
EAGLE 4883

BASE STUCCO
SW 6183 CONSERVATIVE GRAY

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 7566 WESTHIGHLAND WHITE

FRONT DOORS & SHUTTERS #1
SW 7602 INDIGO BATIK

SIDING
SW 7566 WESTHIGHLAND WHITE

FRONT DOORS & SHUTTERS #2
SW 2838 POLISHED MAHOGANY

STONE
SIDEWALK EUROPEAN LEDGE

SCHEME 4

ROOF
EAGLE 4804

BASE STUCCO
SW 7565 OYSTER BAR

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 2841 WEATHERED SHINGLE

FRONT DOORS & SHUTTERS #1
SW 6048 TERRA BRUN

SIDING
SW 6171 CHATROOM

FRONT DOORS & SHUTTERS #2
SW 7620 SEAWORTHY

STONE
SIDEWALK EUROPEAN LEDGE

SCHEME 5

ROOF
EAGLE SCB 8805

BASE STUCCO
SW 7064 PASSIVE

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 7566 WESTHIGHLAND WHITE

FRONT DOORS & SHUTTERS #1
SW 7076 CYBERSPACE

SIDING
SW 9152 LET IT RAIN

FRONT DOORS & SHUTTERS #2
SW 6083 SABLE

STONE
GLACIER EUROPEAN LEDGE

SCHEME 6

ROOF
EAGLE 4810

BASE STUCCO
SW 7029 AGREEABLE GRAY

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 0077 CLASSIC FRENCH GRAY

FRONT DOORS & SHUTTERS #1
SW 7630 RAISIN

SIDING
SW 7017 DORIAN GRAY

FRONT DOORS & SHUTTERS #2
SW 6194 BASIL

STONE
GLACIER EUROPEAN LEDGE

SCHEME 7

ROOF
EAGLE 4884

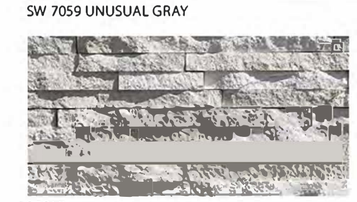
BASE STUCCO
SW 2844 ROYCROFT MIST GRAY

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 7566 WESTHIGHLAND WHITE

FRONT DOORS & SHUTTERS #1
SW 7020 BLACK FOX

SIDING
SW 7059 UNUSUAL GRAY

FRONT DOORS & SHUTTERS #2
SW 7523 BURNISHED BRANDY



STONE
SEA CLIFF EUROPEAN LEDGE

SCHEME 8

ROOF
EAGLE SCB 8802

BASE STUCCO
SW 7547 SANDBAR

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 7010 WHITE DUCK

FRONT DOORS & SHUTTERS #1
SW 6229 TEMPE STAR

SIDING
SW 7025 BACKDROP

FRONT DOORS & SHUTTERS #2
SW 2837 AURORA BROWN

STONE
IRON MILL EUROPEAN LEDGE

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fax: +1 949 553 0548

COLOR & MATERIAL BOARDS

LAUREL RANCH

Antioch , California

A25.22240

03.30.23

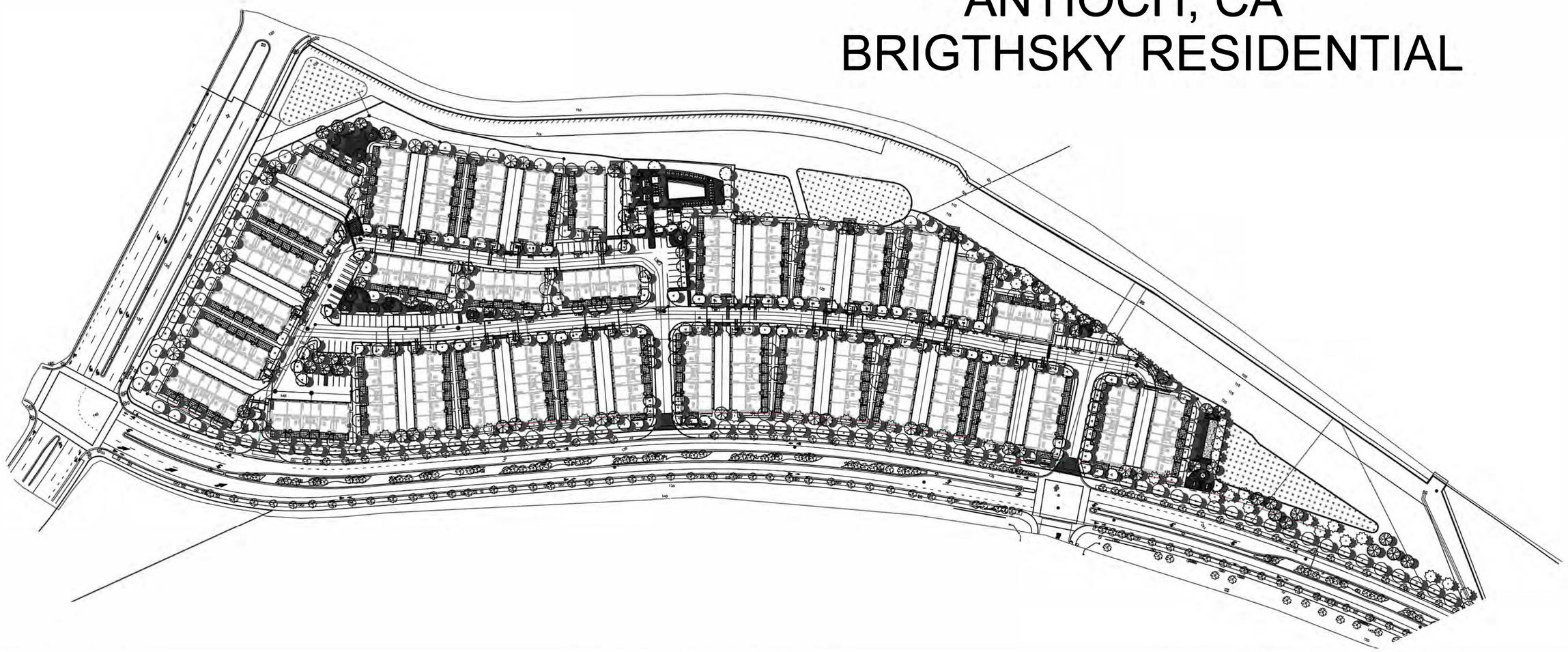
A-C.1

BrightSky RESIDENTIAL

Landscape Preliminary Plan For:

LAUREL RANCH

ANTIOCH, CA
BRIGTHSKY RESIDENTIAL



SITE PLAN
NOT TO SCALE
NORTH

MASTER DEVELOPER

OWNER

BRIGHTSKY RESIDENTIAL
9160 IRVINE CENTER DRIVE, SUITE 100
IRVINE, CA, 92618
PHONE: (949) 418-1143
EMAIL: SHARRIS@BRIGHTSKYRESIDENTIAL.COM
CONTACT: SONDRA HARRIS

MANAGMENT TEAM

TIERRA CONSULTING FIRM
PHONE: (909) 816 - 4091
EMAIL: Chris.Courtney@tierraconsultingfirm.com
CONTACT: CHRIS COURTNEY

CONSULTANTS

ARCHITECTURE

BASSENIAN | LAGONI
2031 ORCHARD DRIVE, SUITE 100
NEWPORT BEACH, CA 92660
PHONE: (714) 501-7551
CONTACT: RYAN DECKER, NCARB

CIVIL ENGINEER

WOOD RODGERS, INC.
4670 WILLOW ROAD, STE 125
PLEASANTON, CA 94588
PHONE: (925) 895 - 2214
CONTACT: SANDEEP VANGARI

LANDSCAPE ARCHITECT

SUMMERS MURPHY & PARTNERS, INC.
34197 COAST HIGHWAY, SUITE 200
DANA POINT, CA 92629
PHONE: 949.443.1446
FAX: 949.443.1631
CONTACT: TRENT NOLL

IRRIGATION CONSULTANT

SUMMERS MURPHY & PARTNERS, INC.
34197 COAST HIGHWAY, SUITE 200
DANA POINT, CA 92629
PHONE: 949.443.1446
FAX: 949.443.1631
CONTACT: MIKE McMILLAN

VICINITY MAP

VICINITY MAP
NOT TO SCALE
NORTH

SHEET INDEX

NO.	SHEET NAMES
L-1	COVER SHEET
L-2	OVERALL ILLUSTRATIVE PLAN
L-3	LANDSCAPE PLAN
L-4	LANDSCAPE PLAN
L-5	LANDSCAPE PLAN
L-6	LANDSCAPE PLAN
L-7	LANDSCAPE PLAN
L-8	LANDSCAPE PLAN
L-9	LANDSCAPE PLAN
L-10	REC CENTER ENLARGEMENT
L-11	MAILBOX - BOCCE BALL ENLARGEMENTS
L-12	CHILDREN'S PLAY AREA
L-13	WALL AND FENCE PLAN A
L-14	WALL AND FENCE PLAN B
L-15	MAIN ENTRY
L-16	WALL AND FENCE DETAILS
L-17	RETAINING WALL ELEVATION AND DETAIL

REVISIONS

REV.	SHEET	DESCRIPTION	DATE	BY
1				
2				
3				
4				
5				
6				
7				

SUBMITTED FOR APPROVAL _____ DATE
APPROVED _____ DATE
RELEASED FOR BID _____ DATE
CONSTRUCTION SET ISSUED _____ DATE

LAUREL RANCH | Preliminary Imagery | COVER SHEET

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.

L-1

SMP ENVIRONMENTAL DESIGN
SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446

LEGEND

1. LAWN OPEN SPACE
2. MAIL BOX TERRACE
3. RECREATION CENTER AND POOL AREA
4. DOG PARK PAVILION TRELLIS & PICNIC AREA
5. DOG PARK
6. WATER QUALITY BASIN
7. RESIDENTIAL BUILDING
8. ALLEY DRIVE
9. RETAINING WALL PER CIVIL
10. MAIN ENTRY
11. SECONDARY ENTRY
12. EXISTING ROAD (NOT A PART)
13. HYDRO SEED SLOPE AREA
14. CHILDREN'S PLAYGROUND STRUCTURE

CERTIFICATION FOR IRRIGATION DESIGN

Summers Murphy & Partners is an landscape architecture firm with in-house Irrigation design. SMP is appropriately licensed in the State and are members of the Irrigation Association with a CLIA (California Landscape Irrigation Auditor) maintained certification.

All landscaped areas will be automatically irrigated by implementing the latest technology and design practices in water efficiency.

- The design process includes:
- Design process with Hydro-zones
- ET0 Weather based controllers
- Dedicated irrigation water service
- Master Valves, Flow Sensors, Point Source / Drip line irrigation, fertigation, Matched Precipitation Heads, Pressure Regulating Valves.

The construction documents will include a maintenance schedule with suggested weekly, monthly and yearly water audits to maintain the irrigation system.

The landscape design will also include water use calculations that will comply with the requirements of the State Water Efficient Landscape Ordinance MWELO, AB1881, and the City/ local agencies standards.

PERCENTAGE OF LANDSCAPE AREA

SHRUB AREA: TOTAL: 3.69 ACRE OR 161,060.00 SQ. FT
TURF AREA TOTAL: 0.105 ACRES OR 4,422.00 SQ. FT
DETENTION BASIN AREA: 0.86 ACRES OR 37,628 SQ. FT
HYDRO SEED AREA: 4.11 ACRES OR 179,350 SQ. FT

TOTAL LANDSCAPE AREA: 8.78 ACRES OR 382,460 SQ. FT
TOTAL SITE AREA: 18.28 ACRES OR 796,637.00 SQ. FT.

PERCENTAGE OF LANDSCAPE AREA PROPOSED: 48%

SHRUB PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	SPACING	WUCOLS	QTY
GREEN LANDSCAPE					
					-
					-
	AGAVE 'BLUE FLAME' BLUE FLAME AGAVE	5 GAL.	36" O.C.	VL	-
	ALOE STRIATA CORAL ALOE	1 GAL.	24" O.C.	L	-
	ARBUTUS UNEDO 'COMPACTA' DWARF STRAWBERRY TREE	5 GAL.	36" O.C.	L	-
	BERBERIS T. 'ATROPURPUREA' JAPANESE BARBERRY	5 GAL.	24" O.C.	M	-
	BOUTELOUA G. 'BLONDE AMBITION' BLUE GRAMA GRASS	5 GAL.	18" O.C.	L	-
	* BUXUS MICROPHYLA JAPONICA JAPANESE BOXWOOD	5 GAL.	18" O.C.	M	-
	CHONDROPETALUM TECTORUM SMALL CAPE RUSH	5 GAL.	36" O.C.	L	-
	COLEONEMA PULCHELLUM SUNSET GOLD GOLDEN BREATH OF HEAVEN	5 GAL.	36" O.C.	L	-
	CORDYLINE A. TORBAY DAZZLER' TORBAY DAZZLER GRASS PALM	15 GAL.	48" O.C.	M	-
	COTONEASTER HORIZONTALIS 'PERPUSILLUS' CREEPING COTONEASTER	5 GAL.	5' O.C.	L	-
	ELYMUS ARENARIUS 'BLUE DUNE' BLUE DUNE LYME GRASS	1 GAL.	12" O.C.	L	-
	FEIJOA SELLOWIANA PINEAPPLE GUAVA	15 GAL.	36" O.C.	M	-

SHRUB PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	SPACING	WUCOLS	QTY
	HESPERALOE 'BREAK LIGHTS' RED YUCCA	5 GAL.	24" O.C.	L	-
	* ILEX VOMITORIA STOKES' STOKES DWARF HOLLY	5 GAL.	18" O.C.	L	-
	JUNIPERUS HORIZONTALIS 'BLUE CHIP' BLUE CHIP JUNIPER	5 GAL.	18" O.C.	L	-
	JUNIPERUS CHINENSIS 'GOLD COAST' GOLD COAST JUNIPER	5 GAL.	18" O.C.		-
	MAHONIA AQUIFOLIUM 'ORANGE FLAME' OREGON GRAPE	5 GAL.	18" O.C.	M	-
	MUHLENBERGIA RIGENS DEER GRASS	5 GAL.	30" O.C.	M	-
	MUHLENBERGIA C. 'REGAL MIST' PINK MUHLY	5 GAL.	18" O.C.	L	-
	* NANDINA 'GULF STREAM' G. STREAM HEAVENLY BAMBOO	5 GAL.	18" O.C.	L	-
	OLEA EUROPEA 'MONTRA' LITTLE OLLIE DWARF OLIVE	5 GAL.	36" O.C.	M	-
	PHORMIUM 'YELLOW WAVE' YELLOW WAVE FLAX	5 GAL.	36" O.C.	M	-
	PRUNUS CAROLINIANA 'COMPACTA' COMPACT CHERRY LAUREL	15 GAL.	36" O.C.	M	-
	ROSMARINUS OFFICINALIS 'HUNTINGTON CARPET' HUNTINGTON CARPET ROSEMARY	5 GAL.	36" O.C.	M	-
	* RHAPHOILEPIS UMBELLATA 'MINOR' DWARF YEDDO HAWTHORN	5 GAL.	36" O.C.	L	-
	TRACHELOSPERMUM JASMINOIDES STAR JASMINE	5 GAL.	24" O.C.	M	-
	* WESTRINGIA FRUTICOSA 'BLUE GEM' BLUE GEM COAST ROSEMARY	5 GAL.	24" O.C.	M	-
BASIN AREA					
	CAREX DIVULSA BERKELEY SEDGE	1 GAL.	24" O.C.	M	-
	CAREX SUBFUSCA RUSTY SEDGE	1 GAL.	12" O.C.	M	-
	CAREX PRAEGRACILIS CLUSTERED FIELD SEDGE	1 GAL.	24" O.C.	M	-
	MUHLENBERGIA RIGENS DEERGRASS	# GAL.	#" O.C.	L	-
	SALVIA CLEVELANDII CLEVELAND SAGE	# GAL.	#" O.C.	L	-
	ROSMARINUS OFFICINALIS ROSEMARY	# GAL.	#" O.C.	L	-
	WESTRINGIA FRUTICOSA COAST ROSEMARY	# GAL.	#" O.C.	L	-
	HETEROMELES ARBUTIFOLIA TOYON	# GAL.	#" O.C.	L	-
	RIBES SPECIOSUM FUCHSIA-FLOWERED GOOSEBERRY	# GAL.	#" O.C.	L	-
					-
					-

NOTES:

-ALL SHRUB & GROUND COVER AREA SHALL BE COVER WITH 3" ORGANIC WOOD MULCH.

-FINAL PLANTING PLAN WILL BE SUBMITTED WITH WORKING DRAWINGS THAT SHOW SHRUB LAYOUT

-A FULLY AUTOMATIC IRRIGATION SYSTEM WILL BE PROVIDED.

* UTILITY METERS, TRANSFORMERS AND OTHER SERVICES ELEMENTS TO BE SCREEN WITH HEDGES SHOWN IN THE WORKING DRAWINGS PACKAGE

ANTIOCH NATIVE EROSION CONTROL MIX

LBS./AC	SPECIES
25.0	BROMUS CARINATUS, CALIFORNIA BROME
10.0	ELYMUS GLAUCUS, BLUE WILDRYE
6.00	FESTUCA MICROSTACHYS, SMALL FESCUE
4.00	TRIFOLIUM WILDENOVII, TOMCAT CLOVER
1.50	ERIOGONUM FASCICULATUM, CALIFORNIA BUCKWHEAT
0.20	BACCHARIS PILULARIS, COYOTE BUSH

TREE PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
	LAGESTROMIA INDICA CREPE MYRTLE	36" BOX	M	71
	CINNAMOMUM CAMPHORA CAMPHOR TREE	24" BOX	M	63
	OLEA EUROPAEA 'FIELD DUG' EUROPAEA OLIVE	36" BOX	VL	-
	QUERCUS VIRGINIANA SOUTHERN LIVE OAK	36" BOX	M	-
	PODOCARPUS 'MONMAL' ICEE-BLUE YELLOW WOOD	36" BOX COLUMNAR	L	11
	GLEDITSIA TRIACANTHOS INERMIS 'SUNBURST' HONEYLOCUST SKYLINE	36" BOX	M	27
	ACER RUBRUM 'COLUMNAR' COLUMNAR RED MAPLE	36" BOX	M	-
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	FRAXINUS AMERICANA 'AUTUMN PURPLE' ASH AUTUMN PURPLE	36" BOX	M	-
	JUNIPER SCOPULORUM 'SKYROCKET' SKYROCKET JUNIPER	36" BOX	L	49
	TAXUS BACCATA 'FASTIGIATA' IRISH YEW	36" BOX	M	-
	PISTACIA CHINENSIS 'RED PUSH' RED PUSH CHINESE PISTACHE	36" BOX	L	15
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	PODOCARPUS GRACILIOR FERN PINE	24" BOX	M	39
	MAGNOLIA GRANDIFLORA'LITTLE GEM' LITTLE GEM MAGNOLIA	24" BOX	M	36
	LAGERSTROEMIA INDICA 'NACHEZ' CREPE MYRTLE	24" BOX	L	-
	ROBINIA A. 'IDAHOENSIS' IDAHO LOCUST	24" BOX	VL	-
	PODOCARPUS MACROPHYLLUS 'MAKI' SHRUBBY YEW PINE	24" BOX	M	-
	FRAXINUS GREGGI LITTLE LEAF ASH	36" BOX	L	60
	KOELREUTERIA BIPINNATA CHINESE FLAME TREE	36" BOX	M	-
	QUERCUS ILEX HOLLY OAK	36" BOX	L	-
	ULMUS WILSONII 'PROSPECTOR' PROSPECTOR ELM	36" BOX	L	-
	ACER RUBRUM 'COLUMNAR' CANADIAN MAPLE	36" BOX	L	3
	ACER RUBRUM 'PALMATUM' JAPANESE MAPLE	36" BOX	L	-
	KOELREUTERIA PANICULATA GOLDEN RAIN TREE	36" BOX	M	-
	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	48" BOX	M	7
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	48" BOX	M	-

LAUREL RANCH | Preliminary Landscape Plan /Overall Illustrative Plan

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.

L-2

NORTH

SCALE: 1" = 80' - 0"

0 80 160 240 320

SMP ENVIRONMENTAL DESIGN

SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446

LEGEND

1. RESIDENTIAL UNITS
2. TURF PARK AREA
3. WALKWAYS
4. UNIT PATIOS (NATURAL POUR IN PLACE CONCRETE W/SAW CUT JOINTS & TOP CAST #3 FINISH
5. PATIO LOW WALL
6. ALLEY DRIVEWAY
7. VEHICULAR ENHANCED CONCRETE
8. ALLEY DRIVE
9. WATER QUALITY BASIN
10. HYDROSEED SLOPE
11. CPU MAILBOX UNIT
12. CHILDREN'S PLAYGROUND STRUCTURE
13. PLAYGROUND RUBBER SURFACE
14. PICNIC TABLE W/TRELLIS
15. ENHANCED PAVING
16. OVERHEAD SHADE SAIL STRUCTURE

TREE PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
	LAGESTROMIA INDICA CREPE MYRTLE	36" BOX	M	71
	CINNAMOMUM CAMPHORA CAMPHOR TREE	24" BOX	M	63
	OLEA EUROPAEA 'FIELD DUG' EUROPAEA OLIVE	36" BOX	VL	-
	QUERCUS VIRGINIANA SOUTHERN LIVE OAK	36" BOX	M	-
	PODOCARPUS 'MONMAL' ICEE-BLUE YELLOW WOOD	36" BOX COLUMNAR	L	11
	GLEDITSIA TRIACANTHOS INERMIS 'SUNBURST' HONEYLOCUST SKYLINE	36" BOX	M	27
	ACER RUBRUM 'COLUMNAR' COLUMNAR RED MAPLE	36" BOX	M	-
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	FRAXINUS AMERICANA 'AUTUMN PURPLE' ASH AUTUMN PURPLE	36" BOX	M	-
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	PISTACIA CHINENSIS 'RED PUSH' RED PUSH CHINESE PISTACHE	36" BOX	L	15
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	PODOCARPUS GRACILIOR FERN PINE	24" BOX	M	39
	MAGNOLIA GRANDIFLORA'LITTLE GEM' LITTLE GEM MAGNOLIA	24" BOX	M	36
	LAGERSTROEMIA INDICA 'NACHEZ' CREPE MYRTLE	24" BOX	L	-
	ROBINIA A. 'IDAHOENSIS' IDAHO LOCUST	24" BOX	VL	-
	PODOCARPUS MACROPHYLLUS 'MAKI' SHRUBBY YEW PINE	24" BOX	M	-
	FRAXINUS GREGGI LITTLE LEAF ASH	36" BOX	L	60
	KOELREUTERIA BIPINNATA CHINESE FLAME TREE	36" BOX	M	-
	QUERCUS ILEX HOLLY OAK	36" BOX	L	-
	ULMUS WILSONII 'PROSPECTOR' PROSPECTOR ELM	36" BOX	L	-
	ACER RUBRUM 'COLUMNAR' CANADIAN MAPLE	36" BOX	L	3
	ACER RUBRUM 'PALMATUM' JAPANESE MAPLE	36" BOX	L	-
	KOELREUTERIA PANICULATA GOLDEN RAIN TREE	36" BOX	M	-
	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	48" BOX	M	7
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	48" BOX	M	-

LAUREL RANCH | Preliminary Landscape Plan | Landscape Plan

Brightsky Residential | Antioch, CA | June 01, 2023

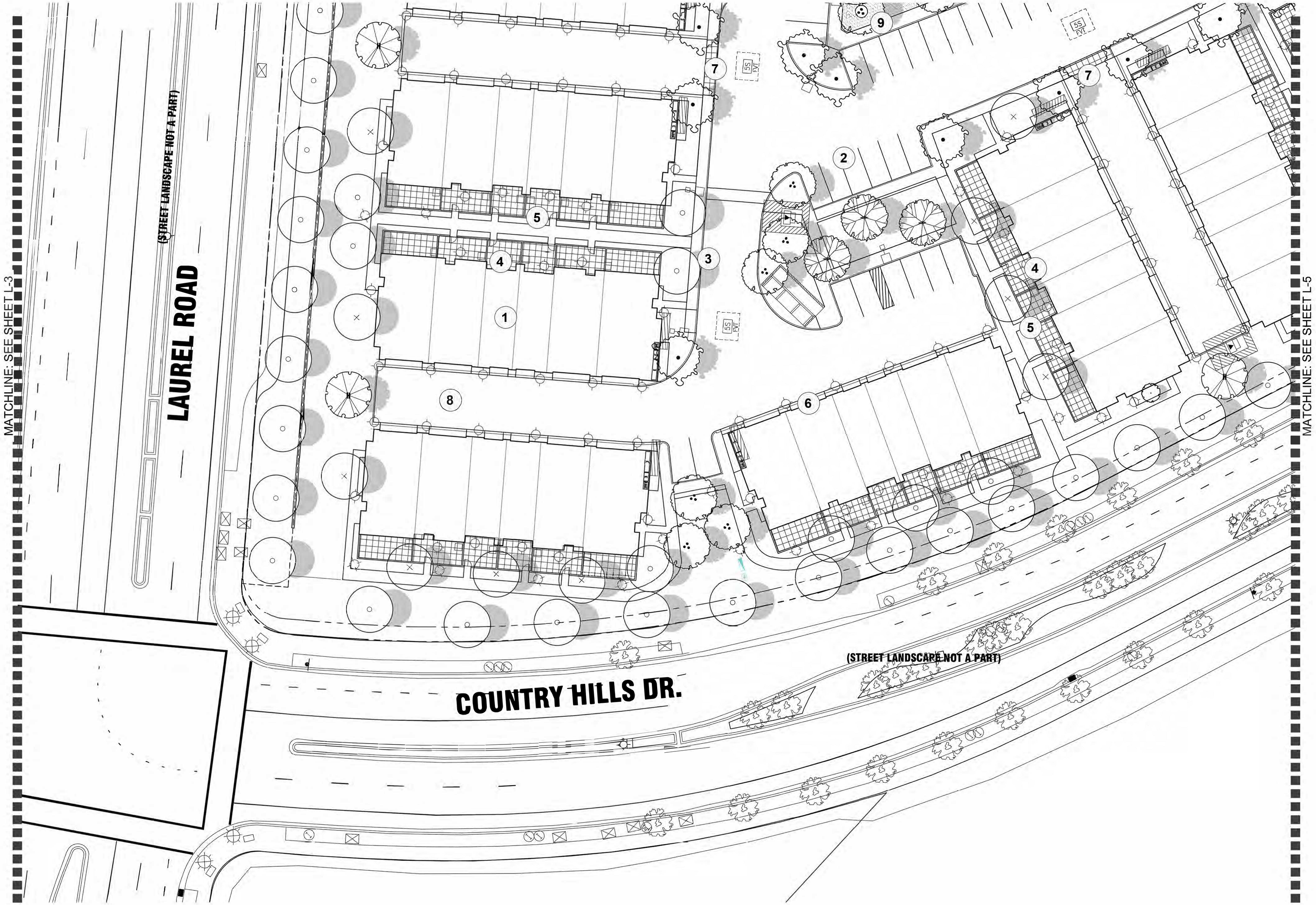
APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063. **L-3**

NORTH

SCALE: 1" = 20' - 0"

0 20 40 60 80

SMP ENVIRONMENTAL DESIGN
SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446



LEGEND

1. RESIDENTIAL UNITS
2. PARKING
3. WALKWAYS
4. UNIT PATIOS (NATURAL POUR IN PLACE CONCRETE W/SAW CUT JOINTS & TOP CAST #3 FINISH
5. PATIO LOW WALL
6. DRIVEWAY APRON
7. VEHICULAR ENHANCED CONCRETE
8. ALLEY DRIVE
9. OPEN SPACE LAWN

TREE PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
	LAGESTROMIA INDICA **CREPE MYRTLE**	36" BOX	M	71
	CINNAMOMUM CAMPHORA CAMPHOR TREE	24" BOX	M	63
	OLEA EUROPAEA 'FIELD DUG' EUROPAEA OLIVE	36" BOX	VL	-
	QUERCUS VIRGINIANA SOUTHERN LIVE OAK	36" BOX	M	-
	PODOCARPUS 'MONMAL' ICEE-BLUE YELLOW WOOD	36" BOX COLUMNAR	L	11
	GLEDITSIA TRIACANTHOS INERMIS 'SUNBURST' HONEYLOCUST SKYLINE	36" BOX	M	27
	ACER RUBRUM 'COLUMNAR' COLUMNAR RED MAPLE	36" BOX	M	-
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	FRAXINUS AMERICANA 'AUTUMN PURPLE' ASH AUTUMN PURPLE	36" BOX	M	-
	JUNIPER SCOPULORUM 'SKYROCKET' SKYROCKET JUNIPER	36" BOX	L	49
	TAXUS BACCATA 'FASTIGIATA' IRISH YEW	36" BOX	M	-
	PISTACIA CHINENSIS 'RED PUSH' RED PUSH CHINESE PISTACHE	36" BOX	L	15
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	PODOCARPUS GRACILIOR FERN PINE	24" BOX	M	39
	MAGNOLIA GRANDIFLORA'LITTLE GEM' LITTLE GEM MAGNOLIA	24" BOX	M	36
	LAGERSTROEMIA INDICA 'NACHEZ' CREPE MYRTLE	24" BOX	L	-
	ROBINIA A. 'IDAHOENSIS' IDAHO LOCUST	24" BOX	VL	-
	PODOCARPUS MACROPHYLLUS 'MAKI' SHRUBBY YEW PINE	24" BOX	M	-
	FRAXINUS GREGGI LITTLE LEAF ASH	36" BOX	L	60
	KOELREUTERIA BIPINNATA CHINESE FLAME TREE	36" BOX	M	-
	QUERCUS ILEX HOLLY OAK	36" BOX	L	-
	ULMUS WILSONII 'PROSPECTOR' PROSPECTOR ELM	36" BOX	L	-
	ACER RUBRUM 'COLUMNAR' CANADIAN MAPLE	36" BOX	L	3
	ACER RUBRUM 'PALMATUM' JAPANESE MAPLE	36" BOX	L	-
	KOELREUTERIA PANICULATA GOLDEN RAIN TREE	36" BOX	M	-
	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	48" BOX	M	7
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	48" BOX	M	-

LAUREL RANCH | Preliminary Landscape Plan | Landscape Plan

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063. **L-4**

NORTH

SCALE: 1" = 20' - 0"

0 20 40 60 80

SMP ENVIRONMENTAL DESIGN
SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446

LEGEND

1. RESIDENTIAL UNITS
2. PARKING
3. WALKWAYS
4. UNIT PATIOS (NATURAL POUR IN PLACE CONCRETE W/SAW CUT JOINTS & TOP CAST #3 FINISH
5. PATIO LOW WALL
6. DRIVEWAY APRON
7. VEHICULAR ENHANCED CONCRETE
8. ALLEY DRIVE
9. WATER QUALITY BASIN
10. HYDRO SEED SLOPE
11. REC CENTER AND POOL AREA

TREE PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
	LAGESTROMIA INDICA **CREPE MYRTLE**	36" BOX	M	71
	CINNAMOMUM CAMPHORA CAMPHOR TREE	24" BOX	M	63
	OLEA EUROPAEA 'FIELD DUG' EUROPAEA OLIVE	36" BOX	VL	-
	QUERCUS VIRGINIANA SOUTHERN LIVE OAK	36" BOX	M	-
	PODOCARPUS 'MONMAL' ICEE-BLUE YELLOW WOOD	36" BOX COLUMNAR	L	11
	GLEDITSIA TRIACANTHOS INERMIS 'SUNBURST' HONEYLOCUST SKYLINE	36" BOX	M	27
	ACER RUBRUM 'COLUMNAR' COLUMNAR RED MAPLE	36" BOX	M	-
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	FRAXINUS AMERICANA 'AUTUMN PURPLE' ASH AUTUMN PURPLE	36" BOX	M	-
	JUNIPER SCOPULORUM 'SKYROCKET' SKYROCKET JUNIPER	36" BOX	L	49
	TAXUS BACCATA 'FASTIGIATA' IRISH YEW	36" BOX	M	-
	PISTACIA CHINENSIS 'RED PUSH' RED PUSH CHINESE PISTACHE	36" BOX	L	15
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	PODOCARPUS GRACILIOR FERN PINE	24" BOX	M	39
	MAGNOLIA GRANDIFLORA'LITTLE GEM' LITTLE GEM MAGNOLIA	24" BOX	M	36
	LAGERSTROEMIA INDICA 'NACHEZ' CREPE MYRTLE	24" BOX	L	-
	ROBINIA A. 'IDAHOENSIS' IDAHO LOCUST	24" BOX	VL	-
	PODOCARPUS MACROPHYLLUS 'MAKI' SHRUBBY YEW PINE	24" BOX	M	-
	FRAXINUS GREGGI LITTLE LEAF ASH	36" BOX	L	60
	KOELREUTERIA BIPINNATA CHINESE FLAME TREE	36" BOX	M	-
	QUERCUS ILEX HOLLY OAK	36" BOX	L	-
	ULMUS WILSONII 'PROSPECTOR' PROSPECTOR ELM	36" BOX	L	-
	ACER RUBRUM 'COLUMNAR' CANADIAN MAPLE	36" BOX	L	3
	ACER RUBRUM 'PALMATUM' JAPANESE MAPLE	36" BOX	L	-
	KOELREUTERIA PANICULATA GOLDEN RAIN TREE	36" BOX	M	-
	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	48" BOX	M	7
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	48" BOX	M	-

LAUREL RANCH | Preliminary Landscape Plan | Landscape Plan

NORTH

SCALE: 1" = 20' - 0"

0 20 40 60 80

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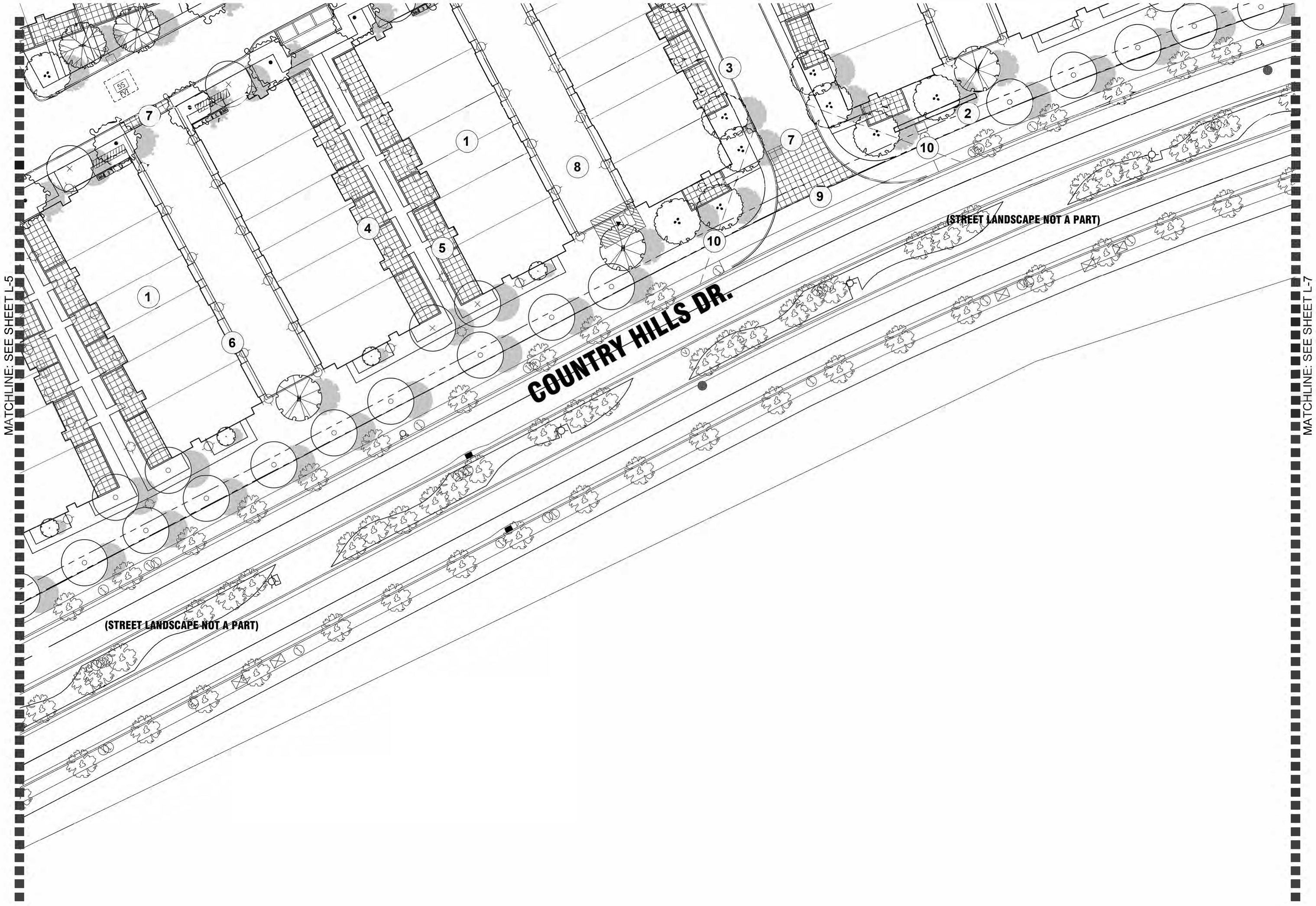
SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.



LEGEND

1. RESIDENTIAL UNITS
2. MAIN ENTRY MONUMENT
3. WALKWAYS
4. UNIT PATIOS (NATURAL POUR IN PLACE CONCRETE W/SAW CUT JOINTS & TOP CAST #3 FINISH
5. PATIO LOW WALL
6. DRIVEWAY APRON
7. VEHICULAR ENHANCED CONCRETE
8. ALLEY DRIVE
9. MAIN ENTRY
10. SITE VISIBILITY TRIANGLE

TREE PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
	LAGESTROMIA INDICA **CREPE MYRTLE**	36" BOX	M	71
	CINNAMOMUM CAMPHORA CAMPHOR TREE	24" BOX	M	63
	OLEA EUROPAEA 'FIELD DUG' EUROPAEA OLIVE	36" BOX	VL	-
	QUERCUS VIRGINIANA SOUTHERN LIVE OAK	36" BOX	M	-
	PODOCARPUS 'MONMAL' ICEE-BLUE YELLOW WOOD	36" BOX COLUMNAR	L	11
	GLEDITSIA TRIACANTHOS INERMIS 'SUNBURST' HONEYLOCUST SKYLINE	36" BOX	M	27
	ACER RUBRUM 'COLUMNAR' COLUMNAR RED MAPLE	36" BOX	M	-
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	FRAXINUS AMERICANA 'AUTUMN PURPLE' ASH AUTUMN PURPLE	36" BOX	M	-
	JUNIPER SCOPULORUM 'SKYROCKET' SKYROCKET JUNIPER	36" BOX	L	49
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	MAGNOLIA GRANDIFLORA'LITTLE GEM' LITTLE GEM MAGNOLIA	24" BOX	M	36
	LAGERSTROEMIA INDICA 'NACHEZ' CREPE MYRTLE	24" BOX	L	-
	ROBINIA A. 'IDAHOENSIS' IDAHO LOCUST	24" BOX	VL	-
	PODOCARPUS MACROPHYLLUS 'MAKI' SHRUBBY YEW PINE	24" BOX	M	-
	FRAXINUS GREGGI LITTLE LEAF ASH	36" BOX	L	60
	KOELREUTERIA BIPINNATA CHINESE FLAME TREE	36" BOX	M	-
	QUERCUS ILEX HOLLY OAK	36" BOX	L	-
	ULMUS WILSONII 'PROSPECTOR' PROSPECTOR ELM	36" BOX	L	-
	ACER RUBRUM 'COLUMNAR' CANADIAN MAPLE	36" BOX	L	3
	ACER RUBRUM 'PALMATUM' JAPANESE MAPLE	36" BOX	L	-
	KOELREUTERIA PANICULATA GOLDEN RAIN TREE	36" BOX	M	-
	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	48" BOX	M	7
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	48" BOX	M	-

LAUREL RANCH | Preliminary Landscape Plan | Landscape Plan

Brightsky Residential | Antioch, CA | June 01, 2023

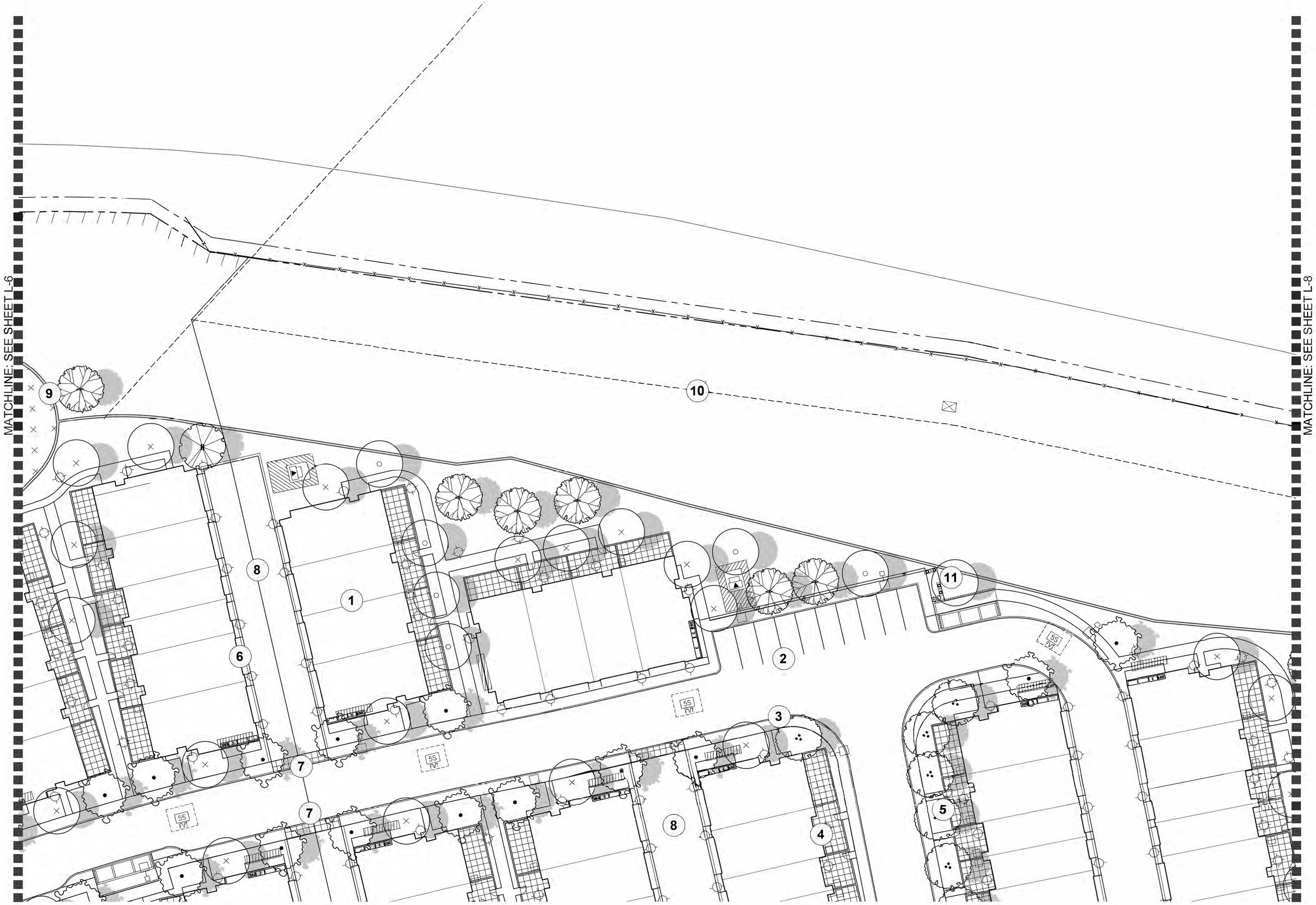
APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063. **L-6**

NORTH

SCALE: 1" = 20' - 0"

0 20 40 60 80

SMP ENVIRONMENTAL DESIGN
SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446



LEGEND

1. RESIDENTIAL UNITS
2. PARKING
3. WALKWAYS
4. UNIT PATIOS (NATURAL POUR IN PLACE CONCRETE W/SAW CUT JOINTS & TOP CAST #3 FINISH
5. PATIO LOW WALL
6. DRIVEWAY APRON
7. VEHICULAR ENHANCED CONCRETE
8. ALLEY DRIVE
9. WATER QUALITY BASIN
10. HYDRO SEED SLOPE
11. CPU MAILBOX UNIT

TREE PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
	LAGESTROMIA INDICA **CREPE MYRTLE**	36" BOX	M	71
	CINNAMOMUM CAMPHORA CAMPHOR TREE	24" BOX	M	63
	OLEA EUROPAEA 'FIELD DUG' EUROPAEA OLIVE	36" BOX	VL	-
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	ACER RUBRUM 'COLUMNAR' COLUMNAR RED MAPLE	36" BOX	M	-
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	FRAXINUS AMERICANA 'AUTUMN PURPLE' ASH AUTUMN PURPLE	36" BOX	M	-
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	MAGNOLIA GRANDIFLORA'LITTLE GEM' LITTLE GEM MAGNOLIA	24" BOX	M	36
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	KOELREUTERIA PANICULATA GOLDEN RAIN TREE	36" BOX	M	-
	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	48" BOX	M	7
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	48" BOX	M	-

LAUREL RANCH | Preliminary Landscape Plan | landscape Plan

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.

L-7

NORTH

SCALE: 1" = 20' - 0"

0 20 40 60 80

SMP
ENVIRONMENTAL DESIGN
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34197 COAST HWY SUITE 200
DANA POINT CA 92629
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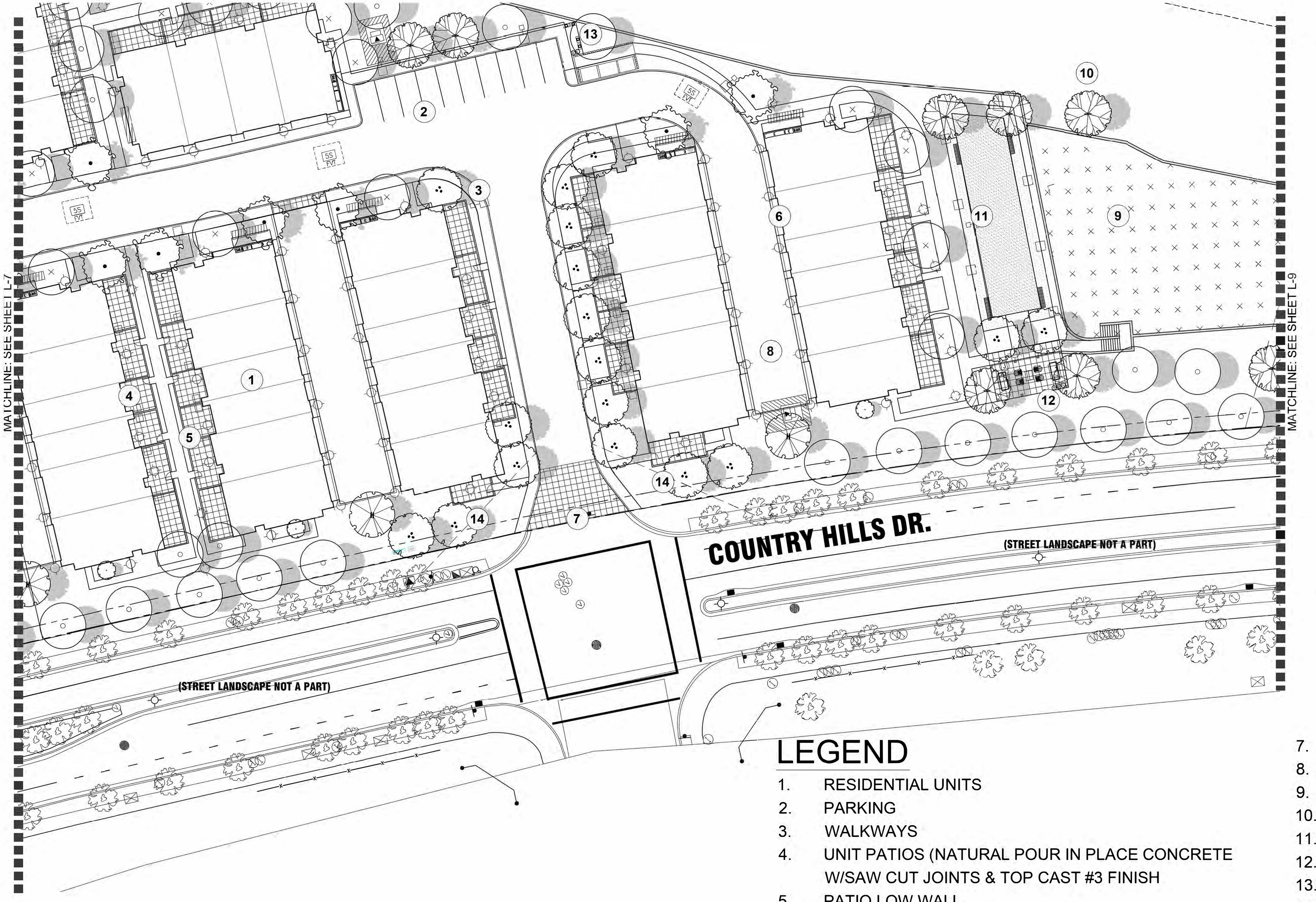

TREE PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
	LAGESTROMIA INDICA CREPE MYRTLE	36" BOX	M	71
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	MAGNOLIA GRANDIFLORA'LITTLE GEM' LITTLE GEM MAGNOLIA	24" BOX	M	36
	LAGERSTROEMIA INDICA 'NACHEZ' CREPE MYRTLE	24" BOX	L	-
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	PODOCARPUS MACROPHYLLUS 'MAKI' SHRUBBY YEW PINE	24" BOX	M	-
	FRAXINUS GREGGI LITTLE LEAF ASH	36" BOX	L	60
	KOELREUTERIA BIPINNATA CHINESE FLAME TREE	36" BOX	M	-
	QUERCUS ILEX HOLLY OAK	36" BOX	L	-
	ULMUS WILSONII 'PROSPECTOR' PROSPECTOR ELM	36" BOX	L	-
	ACER RUBRUM 'COLUMNAR' CANADIAN MAPLE	36" BOX	L	3
	ACER RUBRUM 'PALMATUM' JAPANESE MAPLE	36" BOX	L	-
	KOELREUTERIA PANICULATA GOLDEN RAIN TREE	36" BOX	M	-
	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	48" BOX	M	7
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	48" BOX	M	-

LEGEND

1. RESIDENTIAL UNITS
2. PARKING
3. WALKWAYS
4. UNIT PATIOS (NATURAL POUR IN PLACE CONCRETE W/SAW CUT JOINTS & TOP CAST #3 FINISH
5. PATIO LOW WALL
6. DRIVEWAY APRON
7. VEHICULAR ENHANCED CONCRETE
8. ALLEY DRIVE
9. WATER QUALITY BASIN
10. HYDROSEED SLOPE
11. DOG PARK
12. TRELLIS PAVILION
13. CPU MAILBOX UNIT
14. SITE VISIBILITY TRIANGLE

LAUREL RANCH | Preliminary Landscape Plan | Landscape Plan

NORTH

SCALE: 1" = 20' - 0"

0 20 40 60 80

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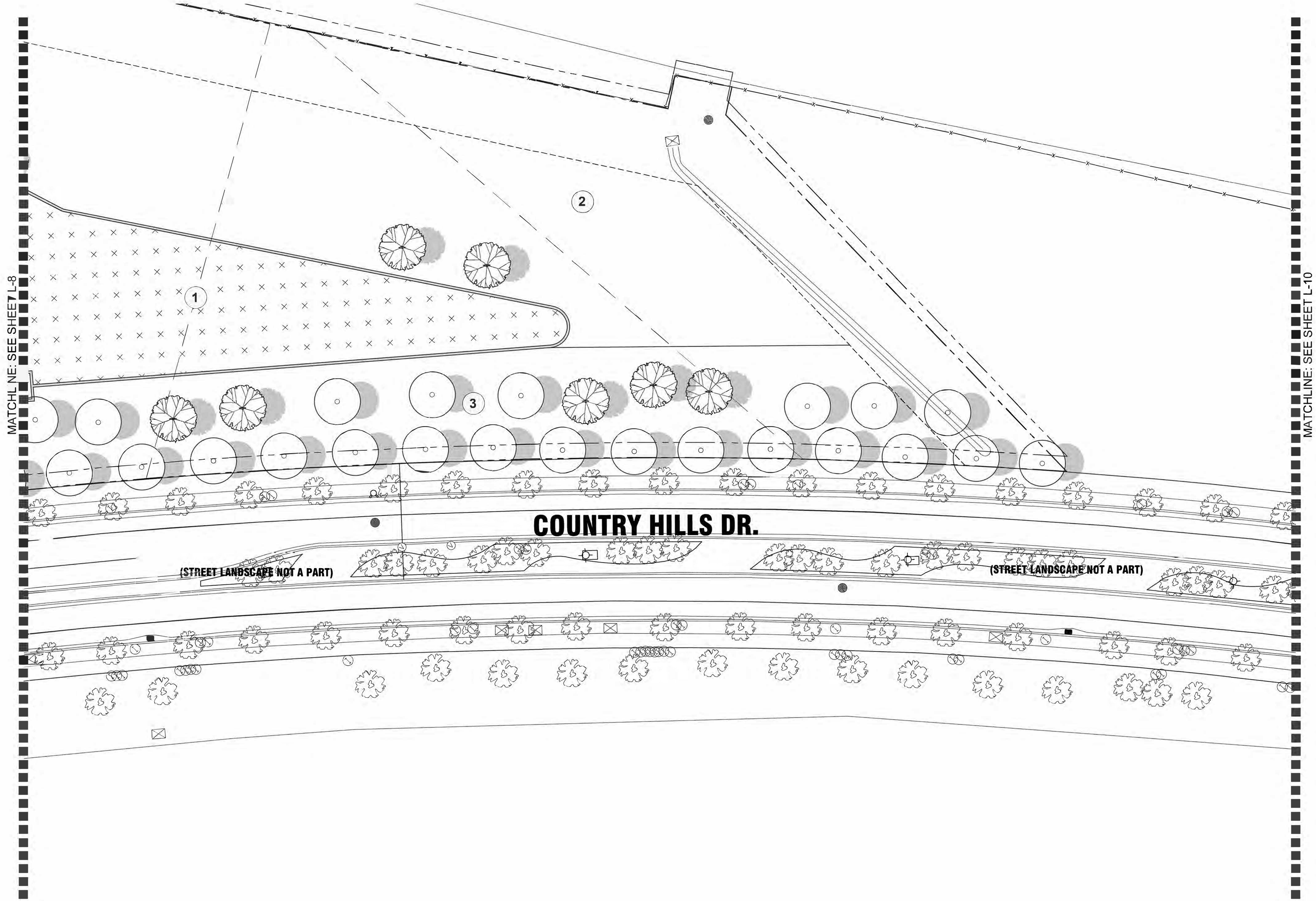
Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.



LEGEND

1. WATER QUALITY BASIN
2. HYDROSEED SLOPE
3. PLANTED SLOPE

NORTHERN CALIFORNIA

TREE PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
	LAGESTROMIA INDICA CREPE MYRTLE	36" BOX	M	71
	CINNAMOMUM CAMPHORA CAMPHOR TREE	24" BOX	M	63
	OLEA EUROPAEA 'FIELD DUG' EUROPAEA OLIVE	36" BOX	VL	-
	QUERCUS VIRGINIANA SOUTHERN LIVE OAK	36" BOX	M	-
	PODOCARPUS 'MONMAL' ICEE-BLUE YELLOW WOOD	36" BOX COLUMNAR	L	11
	GLEDITSIA TRIACANTHOS INERMIS 'SUNBURST' HONEYLOCUST SKYLINE	36" BOX	M	27
	ACER RUBRUM 'COLUMNAR' COLUMNAR RED MAPLE	36" BOX	M	-
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	TAXUS BACCATA 'FASTIGIATA' IRISH YEW	36" BOX	M	-
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	MAGNOLIA GRANDIFLORA'LITTLE GEM' LITTLE GEM MAGNOLIA	24" BOX	M	36
	LAGERSTROEMIA INDICA 'NACHEZ' CREPE MYRTLE	24" BOX	L	-
	ROBINIA A. 'IDAHOENSIS' IDAHO LOCUST	24" BOX	VL	-
	PODOCARPUS MACROPHYLLUS 'MAKI' SHRUBBY YEW PINE	24" BOX	M	-
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	ACER RUBRUM 'PALMATUM' JAPANESE MAPLE	36" BOX	L	-
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	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	48" BOX	M	7
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LAUREL RANCH | Preliminary Landscape Plan | Landscape Plan

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063. **L-9**

NORTH

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0 20 40 60 80

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ENVIRONMENTAL DESIGN
SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
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NORTHERN CALIFORNIA

TREE PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
	LAGESTROMIA INDICA CREPE MYRTLE	36" BOX	M	71
	CINNAMOMUM CAMPHORA CAMPHOR TREE	24" BOX	M	63
	OLEA EUROPAEA 'FIELD DUG' EUROPAEA OLIVE	36" BOX	VL	-
	QUERCUS VIRGINIANA SOUTHERN LIVE OAK	36" BOX	M	-
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	ULMUS WILSONII 'PROSPECTOR' PROSPECTOR ELM	36" BOX	L	-
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	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	48" BOX	M	7
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	48" BOX	M	-

LEGEND

1. LAP / REC POOL
2. BBQ PAVILION WITH DINING TABLE
3. POOL DECK
4. POOL RESTROOMS
5. PUMP ROOM AND SHOWERS
6. POOL ENTRY GATE
7. FIRE COURT LOUNGE
8. PARKING
9. RESIDENTIAL UNITS
10. LOOP STREET
11. SALES OFFICE
12. CLUB ROOM
13. SPA
14. LOUNGE CHAIR
15. TABLE W/ CABANA STRUCTURE
16. ENHANCED CONCRETE PAVING
17. LOUNGE SEATING
18. POOL VIEW FENCE
19. GROUP TABLE
20. WATER QUALITY BASIN
21. HAYDROSEED SLOPE
22. ALLEY DRIVE
23. DRIVEWAY APRON
24. ENHANCED VEHICULAR CONCRETE
25. WALKWAY
26. T=TRASH RECEPTACLE; O=ORGANIC RECEPTACLE; R=RECYCLE RECEPTACLE

LAUREL RANCH | Preliminary Landscape Plan | Rec Center Enlargement

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.

L-10

NORTH

SCALE: 1" = 10' - 0"

0 10 20 30 40

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SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446

Dog Park

Mail Box Terrace

NORTHERN CALIFORNIA

TREE PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
	LAGESTROMIA INDICA **CREPE MYRTLE**	36" BOX	M	71
	CINNAMOMUM CAMPHORA CAMPHOR TREE	24" BOX	M	63
	OLEA EUROPAEA 'FIELD DUG' EUROPAEA OLIVE	36" BOX	VL	-
	QUERCUS VIRGINIANA SOUTHERN LIVE OAK	36" BOX	M	-
	PODOCARPUS 'MONMAL' ICEE-BLUE YELLOW WOOD	36" BOX COLUMNAR	L	11
	GLEDITSIA TRIACANTHOS INERMIS 'SUNBURST' HONEYLOCUST SKYLINE	36" BOX	M	27
	ACER RUBRUM 'COLUMNAR' COLUMNAR RED MAPLE	36" BOX	M	-
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	FRAXINUS AMERICANA 'AUTUMN PURPLE' ASH AUTUMN PURPLE	36" BOX	M	-
	JUNIPER SCOPULORUM 'SKYROCKET' SKYROCKET JUNIPER	36" BOX	L	49
	TAXUS BACCATA 'FASTIGIATA' IRISH YEW	36" BOX	M	-
	PISTACIA CHINENSIS 'RED PUSH' RED PUSH CHINESE PISTACHE	36" BOX	L	15
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	PODOCARPUS GRACILIOR FERN PINE	24" BOX	M	39
	MAGNOLIA GRANDIFLORA'LITTLE GEM' LITTLE GEM MAGNOLIA	24" BOX	M	36
	LAGERSTROEMIA INDICA 'NACHEZ' CREPE MYRTLE	24" BOX	L	-
	ROBINIA A. 'IDAHOENSIS' IDAHO LOCUST	24" BOX	VL	-
	PODOCARPUS MACROPHYLLUS 'MAKI' SHRUBBY YEW PINE	24" BOX	M	-
	FRAXINUS GREGGI LITTLE LEAF ASH	36" BOX	L	60
	KOELREUTERIA BIPINNATA CHINESE FLAME TREE	36" BOX	M	-
	QUERCUS ILEX HOLLY OAK	36" BOX	L	-
	ULMUS WILSONII 'PROSPECTOR' PROSPECTOR ELM	36" BOX	L	-
	ACER RUBRUM 'COLUMNAR' CANADIAN MAPLE	36" BOX	L	3
	ACER RUBRUM 'PALMATUM' JAPANESE MAPLE	36" BOX	L	-
	KOELREUTERIA PANICULATA GOLDEN RAIN TREE	36" BOX	M	-
	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	48" BOX	M	7
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	48" BOX	M	-

LEGEND

1. TRELLIS PAVILION WITH PICNIC TABLE
2. PARKING
3. RESIDENTIAL UNITS
4. DOG PARK W/ SYNTHETIC LAWN
5. FENCE ENCLOSURE
6. ENHANCED CONCRETE
7. BENCH
8. LOUNGE CHAIR W/ COFFEE TABLE
9. DOUBLE GATE CONTROL AREA
10. UNIT PATIO (NATURAL POUR IN PLACE CONCRETE W/SAW CUT JOINTS & TOP CAST #3 FINISH
11. PATIO LOW WALL
12. WALKWAYS
13. DRIVEWAY APRON
14. T=TRASH RECEPTACLE; O=ORGANIC RECEPTACLE; R=RECYCLE RECEPTACLE
15. CPU MAILBOX UNITS
16. WATER QUALITY BASIN

LAUREL RANCH | Preliminary Landscape Plan | Mailbox & Bocce Ball Enlargements

NORTH

SCALE: 1" = 10' - 0"

0 10 20 30 40

SMP
ENVIRONMENTAL DESIGN
SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.

L-11

NORTHERN CALIFORNIA

TREE PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
	LAGESTROMIA INDICA **CREPE MYRTLE**	36" BOX	M	71
	CINNAMOMUM CAMPHORA CAMPHOR TREE	24" BOX	M	63
	OLEA EUROPAEA 'FIELD DUG' EUROPAEA OLIVE	36" BOX	VL	-
	QUERCUS VIRGINIANA SOUTHERN LIVE OAK	36" BOX	M	-
	PODOCARPUS 'MONMAL' ICEE-BLUE YELLOW WOOD	36" BOX COLUMNAR	L	11
	GLEDITSIA TRIACANTHOS INERMIS 'SUNBURST' HONEYLOCUST SKYLINE	36" BOX	M	27
	ACER RUBRUM 'COLUMNAR' COLUMNAR RED MAPLE	36" BOX	M	-
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	FRAXINUS AMERICANA 'AUTUMN PURPLE' ASH AUTUMN PURPLE	36" BOX	M	-
	JUNIPER SCOPULORUM 'SKYROCKET' SKYROCKET JUNIPER	36" BOX	L	49
	TAXUS BACCATA 'FASTIGIATA' IRISH YEW	36" BOX	M	-
	PISTACIA CHINENSIS 'RED PUSH' RED PUSH CHINESE PISTACHE	36" BOX	L	15
	GINKGO BILOBA MAIDENHAIR TREE	36" BOX	M	-
	PODOCARPUS GRACILIOR FERN PINE	24" BOX	M	39
	MAGNOLIA GRANDIFLORA'LITTLE GEM' LITTLE GEM MAGNOLIA	24" BOX	M	36
	LAGERSTROEMIA INDICA 'NACHEZ' CREPE MYRTLE	24" BOX	L	-
	ROBINIA A. 'IDAHOENSIS' IDAHO LOCUST	24" BOX	VL	-
	PODOCARPUS MACROPHYLLUS 'MAKI' SHRUBBY YEW PINE	24" BOX	M	-
	FRAXINUS GREGGI LITTLE LEAF ASH	36" BOX	L	60
	KOELREUTERIA BIPINNATA CHINESE FLAME TREE	36" BOX	M	-
	QUERCUS ILEX HOLLY OAK	36" BOX	L	-
	ULMUS WILSONII 'PROSPECTOR' PROSPECTOR ELM	36" BOX	L	-
	ACER RUBRUM 'COLUMNAR' CANADIAN MAPLE	36" BOX	L	3
	ACER RUBRUM 'PALMATUM' JAPANESE MAPLE	36" BOX	L	-
	KOELREUTERIA PANICULATA GOLDEN RAIN TREE	36" BOX	M	-
	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	48" BOX	M	7
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	48" BOX	M	-

LEGEND

1. RESIDENTIAL UNITS
2. WALKWAYS
3. UNIT PATIOS (NATURAL POUR IN PLACE CONCRETE W/SAW CUT JOINTS & TOP CAST #3 FINISH
4. PATIO LOW WALL
5. ALLEY DRIVEWAY
6. VEHICULAR ENHANCED CONCRETE
7. ALLEY DRIVE
8. WATER QUALITY BASIN
9. HYDROSEED SLOPE
10. CHILDREN'S PLAYGROUND STRUCTURE
11. PLAYGROUND RUBBER SURFACE
12. PICNIC TABLE W/TRELLIS
13. ENHANCED PAVING
14. OVERHEAD SHADE SAIL STRUCTURE
15. TOT LOT SAFETY ENCLOSURE FENCE
16. T=TRASH RECEPTACLE; O=ORGANIC RECEPTACLE; R=RECYCLE RECEPTACLE

LAUREL RANCH | Preliminary Landscape Plan | Children's Play Area

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.

L-12

NORTH

SCALE: 1" = 20' - 0"

0 20 40 60 80

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ENVIRONMENTAL DESIGN
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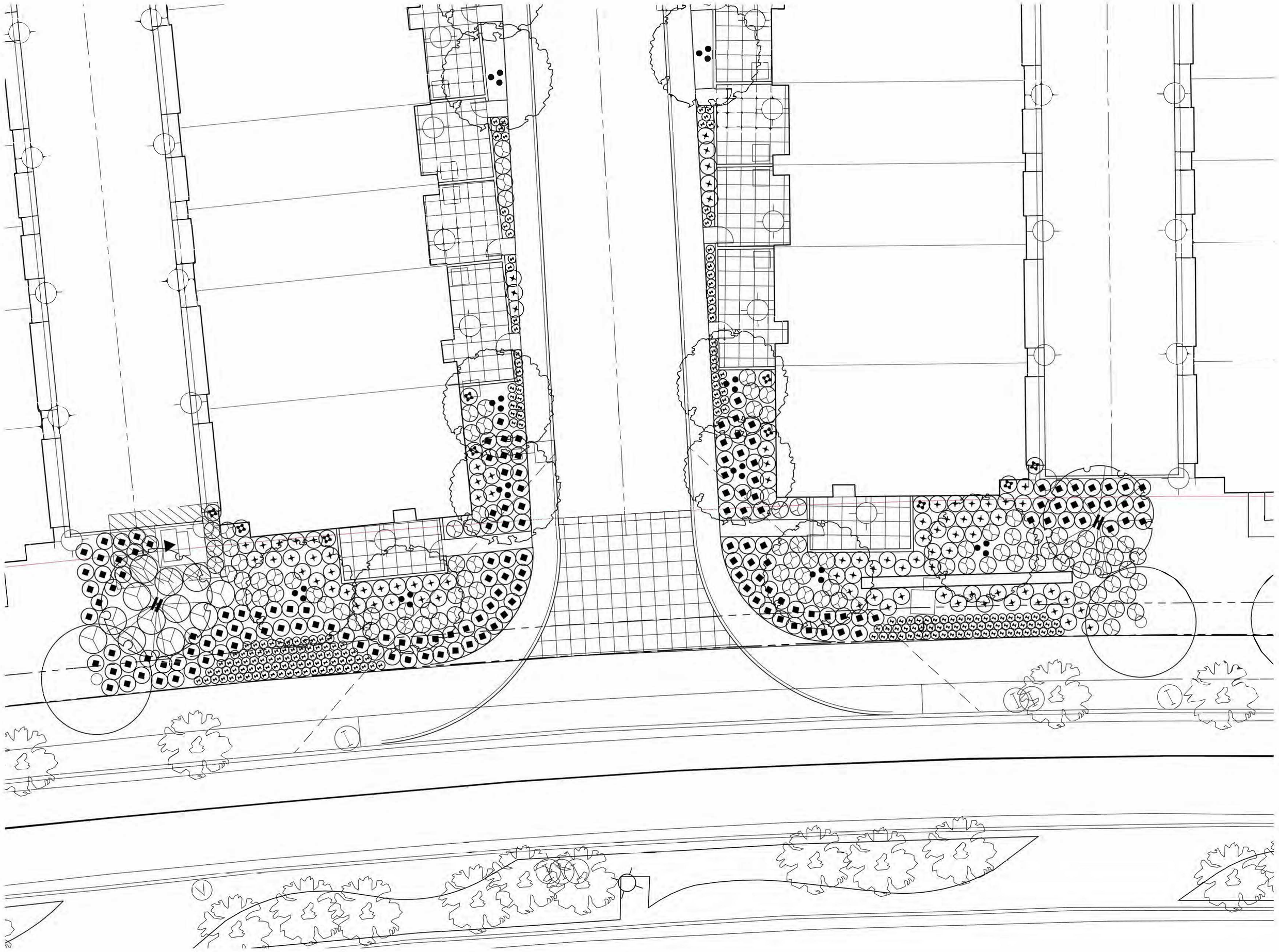
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446



SHRUB PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	SPACING	WUCOLS	QTY
COLUMNAR					
	JUNIPERUS 'BLUE ARROW' BLUE ARROW JUNIPER	15 GAL COLUMNAR	30" O.C.	L	
	PRUNUS CAROLINIANA 'COMPACTA' COMPACT CAROLINA CHERRY	15" GAL COLUMNAR	30" O.C.	M	
	PITTOSPORUM TENUIFOLIUM 'OLIVER TWIST' OLIVER TWIST KOHUHU PITTOSPORUM	15 GAL	24" O.C.	M	
FOUNDATION					
5-6'	WESTRINGIA FRUTICOSA 'BLUE GEM' BLUE GEM COAST ROSEMARY	5 GAL	30" O.C.	L	
	OLEA EUROPEA 'MONTRA' LITTLE OLLIE DWARF OLIVE	5 GAL.	36" O.C.	VL	
	PHILOTHECA MYOPOROIDES 'PROFUSION' LONG-LEAF WAX FLOWER	5 GAL.	48" O.C.	M	
	LEUCOPHYLLUM LANGMANIAE 'LYNN'S LEGACY' LYNN LOWERY'S RAIN SAGE	5 GAL.	48" O.C.	M	
	LEUCOPHYLLUM FRUTESCENS TEXAS SAGE	5 GAL.	36" O.C.	L	
FOUNDATION ACCENT					
3-4'	WESTRINGIA FRUTICOSA 'GREY BOX' DWARF COAST ROSEMARY	5 GAL	30" O.C.	L	
	RHAPHOILEPIS UMBELLATA 'MINOR' DWARF YEDDO HAWTHORN	5 GAL.	36" O.C.	L	
	PITTOSPORUM TENUIFOLIUM 'ELFIN' PP#21822 ELFIN KOHUHU PITTOSPORUM	5 GAL	24" O.C.	M	
	COLEONEMA PULCHELLUM 'SUNSET GOLD' GOLDEN BREATH OF HEAVEN	5 GAL.	36" O.C.	L	
	NANDINA 'GULF STREAM' G. STREAM HEAVENLY BAMBOO	5 GAL.	18" O.C.	L	
ACCENT					
	CHONDROPETALUM TECTORUM SMALL CAPE RUSH	5 GAL.	36" O.C.	L	
	MUHLENBERGIA DUBIA PINE MUHLY	5 GAL.	30" O.C.	M	
	AGAVE 'BLUE GLOW' BLUE GLOW AGAVE	5 GAL.	36" O.C.	VL	
	HESPERALOE 'BREAK LIGHTS' RED YUCCA	5 GAL.	24" O.C.	L	
	PHORMIUM 'CREAM DELIGHT' CREAM DELIGHT FLAX	5 GAL.	36" O.C.	M	
GC					
	ROSMARINUS OFFICINALIS 'HUNTINGTON CARPET' HUNTINGTON CARPET ROSEMARY	5 GAL.	36" O.C.	M	
	TRACHELOSPERMUM JASMINOIDES STAR JASMINE	5 GAL.	36" O.C.	M	
	TEUCRIUM CHAMAEDRYS WALL GERMANDER	1 GAL.	30" O.C.	L	
	JUNIPERUS HORIZONTALIS 'BLUE CHIP' BLUE CHIP JUNIPER	**5 GAL**	**36" O.C.**	**L**	
GC ACCENT					
	AGAVE VICTORIAE-REGINAE QUEEN VICTORIA AGAVE	5 GAL.	24" O.C.	VL	
	AGAPANTHUS 'PETER PAN' QUEEN VICTORIA AGAVE	1 GAL.	18"" O.C.	M	
	ALOE 'BLUE ELF' CALIFORNIA ALOE	1 GAL.	18" O.C.	L	
	BOUTELOUA G. 'BLONDE AMBITION' BLUE GRAMA GRASS	5 GAL.	18" O.C.	L	
	CAREX DIVULSA BERKELEY SEDGE	1 GAL.	24" O.C.	M	

LAUREL RANCH | Preliminary Landscape Plan / TYP Entry Shrub Plan

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.

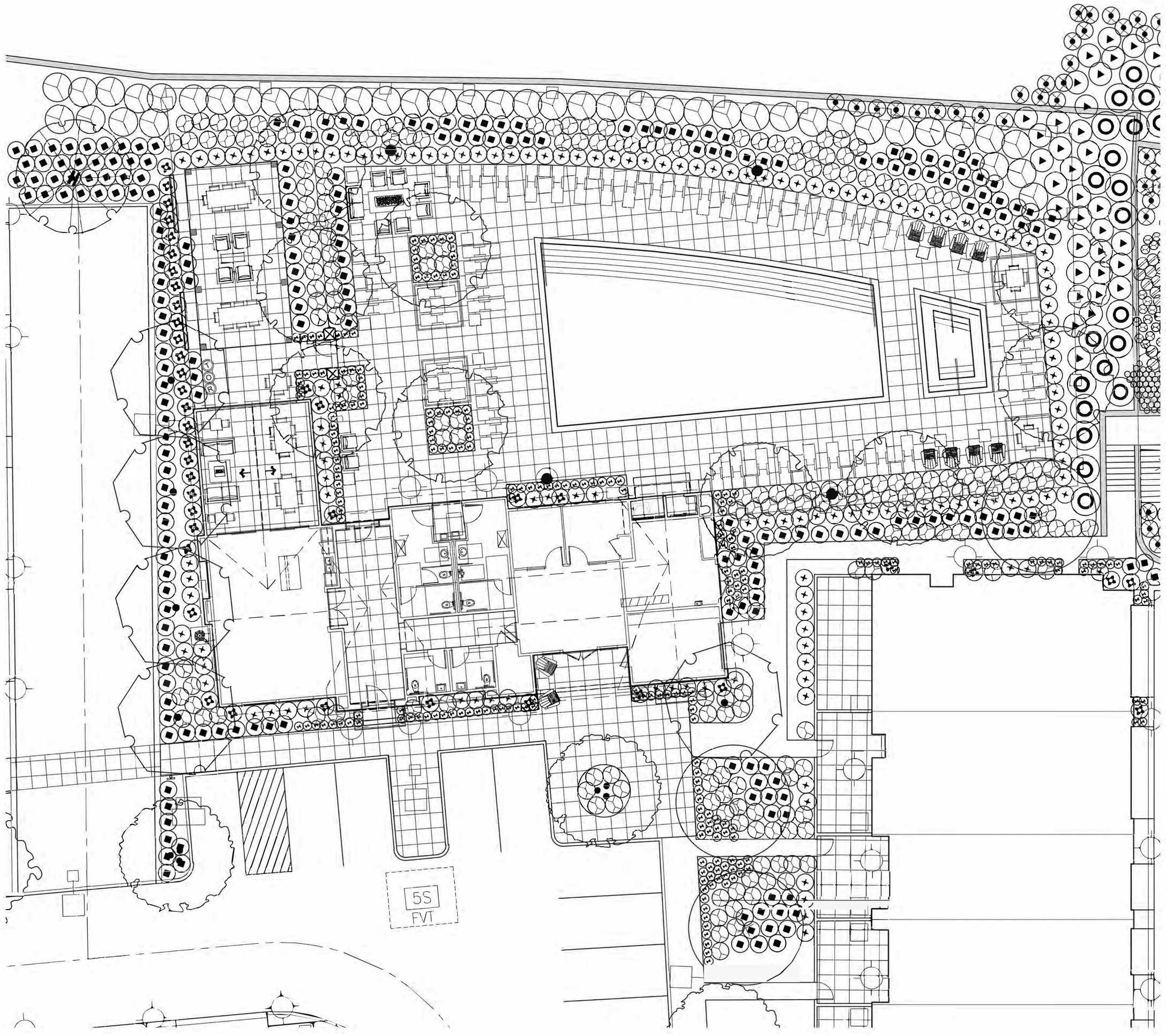
L-13

NORTH

SCALE: 1" = 10' - 0"

0 10 20 30 40

SMP
ENVIRONMENTAL DESIGN
SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446



SHRUB PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	SPACING	WUCOLS	QTY
COLUMNAR					
	JUNIPERUS 'BLUE ARROW' BLUE ARROW JUNIPER	15 GAL COLUMNAR	30" O.C.	L	
	PRUNUS CAROLINIANA 'COMPACTA' COMPACT CAROLINA CHERRY	15" GAL COLUMNAR	30" O.C.	M	
	PITTOSPORUM TENUIFOLIUM 'OLIVER TWIST' OLIVER TWIST KOHUHU PITTOSPORUM	15 GAL	24" O.C.	M	
FOUNDATION					
5-6'	WESTRINGIA FRUTICOSA 'BLUE GEM' BLUE GEM COAST ROSEMARY	5 GAL	30" O.C.	L	
	OLEA EUROPEA 'MONTRA' LITTLE OLLIE DWARF OLIVE	5 GAL.	36" O.C.	VL	
	PHILOTHECA MYOPOROIDES 'PROFUSION' LONG-LEAF WAX FLOWER	5 GAL.	48" O.C.	M	
	LEUCOPHYLLUM LANGMANIAE 'LYNN'S LEGACY' LYNN LOVERY'S RAIN SAGE	5 GAL.	48" O.C.	M	
	LEUCOPHYLLUM FRUTESCENS TEXAS SAGE	5 GAL.	36" O.C.	L	
FOUNDATION ACCENT					
3-4'	WESTRINGIA FRUTICOSA 'GREY BOX' DWARF COAST ROSEMARY	5 GAL	30" O.C.	L	
	RHAPHOILEPIS UMBELLATA 'MINOR' DWARF YEDDO HAWTHORN	5 GAL.	36" O.C.	L	
	PITTOSPORUM TENUIFOLIUM 'ELFIN' PP#21822 ELFIN KOHUHU PITTOSPORUM	5 GAL	24" O.C.	M	
	COLEONEMA PULCHELLUM 'SUNSET GOLD' GOLDEN BREATH OF HEAVEN	5 GAL.	36" O.C.	L	
	NANDINA 'GULF STREAM' G. STREAM HEAVENLY BAMBOO	5 GAL.	18" O.C.	L	
ACCENT					
	CHONDROPETALUM TECTORUM SMALL CAPE RUSH	5 GAL.	36" O.C.	L	
	MUHLENBERGIA DUBIA PINE MUHLY	5 GAL.	30" O.C.	M	
	AGAVE 'BLUE GLOW' BLUE GLOW AGAVE	5 GAL.	36" O.C.	VL	
	HESPERALOE 'BREAK LIGHTS' RED YUCCA	5 GAL.	24" O.C.	L	
	PHORMIUM 'CREAM DELIGHT' CREAM DELIGHT FLAX	5 GAL.	36" O.C.	M	
GC					
	ROSMARINUS OFFICINALIS 'HUNTINGTON CARPET' HUNTINGTON CARPET ROSEMARY	5 GAL.	36" O.C.	M	
	TRACHELOSPERMUM JASMINOIDES STAR JASMINE	5 GAL.	36" O.C.	M	
	TEUCRIUM CHAMAEDRYS WALL GERMANDER	1 GAL.	30" O.C.	L	
	JUNIPERUS HORIZONTALIS 'BLUE CHIP' BLUE CHIP JUNIPER	**5 GAL**	**36" O.C.**	**L**	
GC ACCENT					
	AGAVE VICTORIAE-REGINAE QUEEN VICTORIA AGAVE	5 GAL.	24" O.C.	VL	
	AGAPANTHUS 'PETER PAN' QUEEN VICTORIA AGAVE	1 GAL.	18"" O.C.	M	
	ALOE 'BLUE ELF' CALIFORNIA ALOE	1 GAL.	18" O.C.	L	
	BOUTELOUA G. 'BLONDE AMBITION' BLUE GRAMA GRASS	5 GAL.	18" O.C.	L	
	CAREX DIVULSA BERKELEY SEDGE	1 GAL.	24" O.C.	M	

LAUREL RANCH | Preliminary Landscape Plan / Rec Center Shrub Plan

NORTH

SCALE: 1" = 10' - 0"

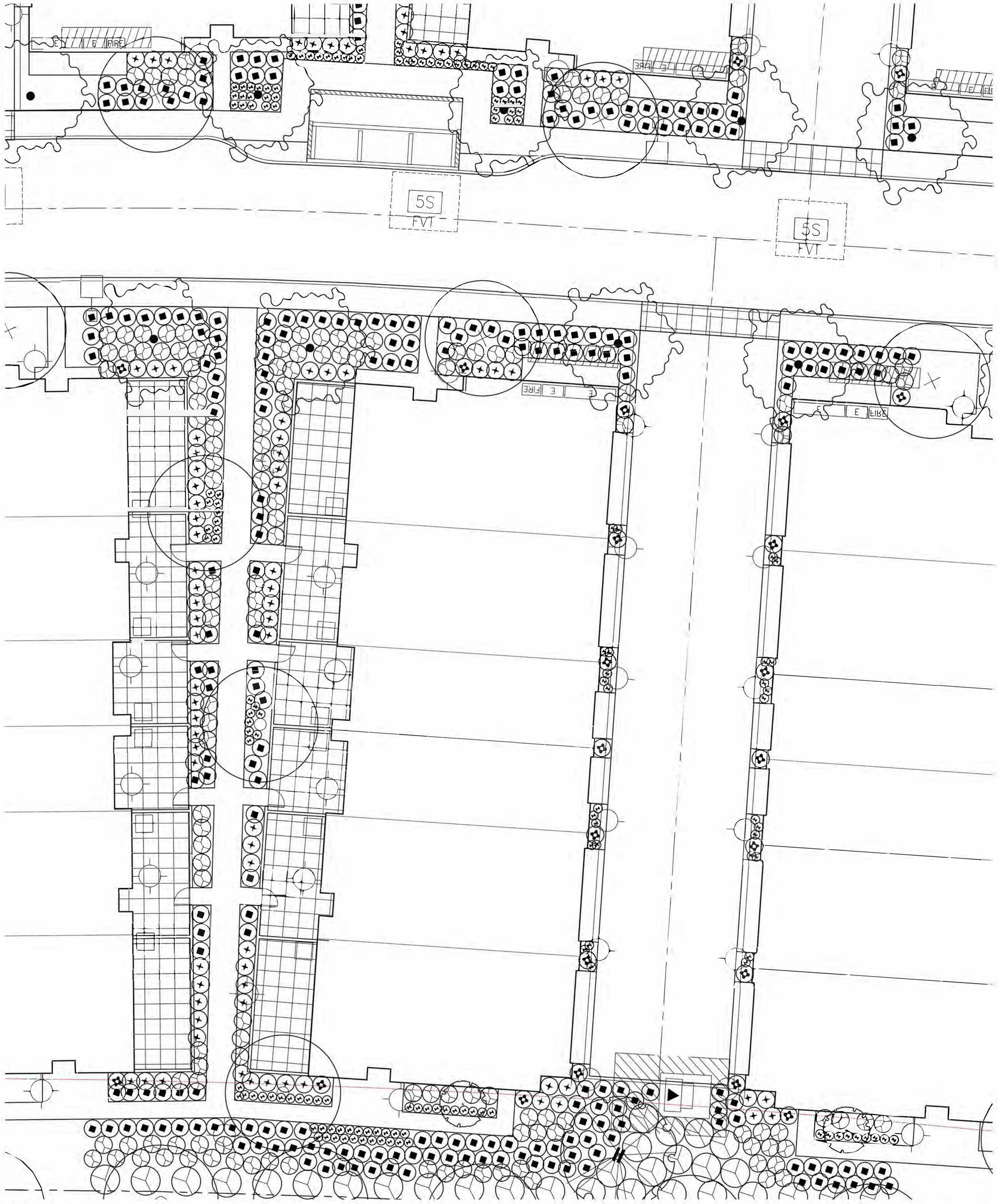
0 10 20 30 40

SMP ENVIRONMENTAL DESIGN

SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.



SHRUB PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	SPACING	WUCOLS	QTY
COLUMNAR					
	JUNIPERUS 'BLUE ARROW' BLUE ARROW JUNIPER	15 GAL COLUMNAR	30" O.C.	L	
	PRUNUS CAROLINIANA 'COMPACTA' COMPACT CAROLINA CHERRY	15" GAL COLUMNAR	30" O.C.	M	
	PITTOSPORUM TENUIFOLIUM 'OLIVER TWIST' OLIVER TWIST KOHUHU PITTOSPORUM	15 GAL	24" O.C.	M	
FOUNDATION					
5-6'	WESTRINGIA FRUTICOSA 'BLUE GEM' BLUE GEM COAST ROSEMARY	5 GAL	30" O.C.	L	
	OLEA EUROPEA 'MONTRA' LITTLE OLLIE DWARF OLIVE	5 GAL.	36" O.C.	VL	
	PHILOTHECA MYOPOROIDES 'PROFUSION' LONG-LEAF WAX FLOWER	5 GAL.	48" O.C.	M	
	LEUCOPHYLLUM LANGMANIAE 'LYNN'S LEGACY' LYNN LOWERY'S RAIN SAGE	5 GAL.	48" O.C.	M	
	LEUCOPHYLLUM FRUTESCENS TEXAS SAGE	5 GAL.	36" O.C.	L	
FOUNDATION ACCENT					
3-4'	WESTRINGIA FRUTICOSA 'GREY BOX' DWARF COAST ROSEMARY	5 GAL	30" O.C.	L	
	RHAPHOILEPIS UMBELLATA 'MINOR' DWARF YEDDO HAWTHORN	5 GAL.	36" O.C.	L	
	PITTOSPORUM TENUIFOLIUM 'ELFIN' PP#21822 ELFIN KOHUHU PITTOSPORUM	5 GAL	24" O.C.	M	
	COLEONEMA PULCHELLUM 'SUNSET GOLD' GOLDEN BREATH OF HEAVEN	5 GAL.	36" O.C.	L	
	NANDINA 'GULF STREAM' G. STREAM HEAVENLY BAMBOO	5 GAL.	18" O.C.	L	
ACCENT					
	CHONDROPETALUM TECTORUM SMALL CAPE RUSH	5 GAL.	36" O.C.	L	
	MUHLENBERGIA DUBIA PINE MUHLY	5 GAL.	30" O.C.	M	
	AGAVE 'BLUE GLOW' BLUE GLOW AGAVE	5 GAL.	36" O.C.	VL	
	HESPERALOE 'BREAK LIGHTS' RED YUCCA	5 GAL.	24" O.C.	L	
	PHORMIUM 'CREAM DELIGHT' CREAM DELIGHT FLAX	5 GAL.	36" O.C.	M	
GC					
	ROSMARINUS OFFICINALIS 'HUNTINGTON CARPET' HUNTINGTON CARPET ROSEMARY	5 GAL.	36" O.C.	M	
	TRACHELOSPERMUM JASMINOIDES STAR JASMINE	5 GAL.	36" O.C.	M	
	TEUCRIUM CHAMAEDRYS WALL GERMANDER	1 GAL.	30" O.C.	L	
	JUNIPERUS HORIZONTALIS **'BLUE CHIP'** BLUE CHIP JUNIPER	**5 GAL**	**36" O.C.**	**L**	
GC ACCENT					
	AGAVE VICTORIAE-REGINAE QUEEN VICTORIA AGAVE	5 GAL.	24" O.C.	VL	
	AGAPANTHUS 'PETER PAN' QUEEN VICTORIA AGAVE	1 GAL.	18"" O.C.	M	
	ALOE 'BLUE ELF' CALIFORNIA ALOE	1 GAL.	18" O.C.	L	
	BOUTELOUA G. 'BLONDE AMBITION' BLUE GRAMA GRASS	5 GAL.	18" O.C.	L	
	CAREX DIVULSA BERKELEY SEDGE	1 GAL.	24" O.C.	M	

LAUREL RANCH | Preliminary Landscape Plan / TYP Neighborhood Shrub Plan

NORTH

SCALE: 1" = 10' - 0"

0 10 20 30 40

SMP
ENVIRONMENTAL DESIGN
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34197 COAST HWY SUITE 200
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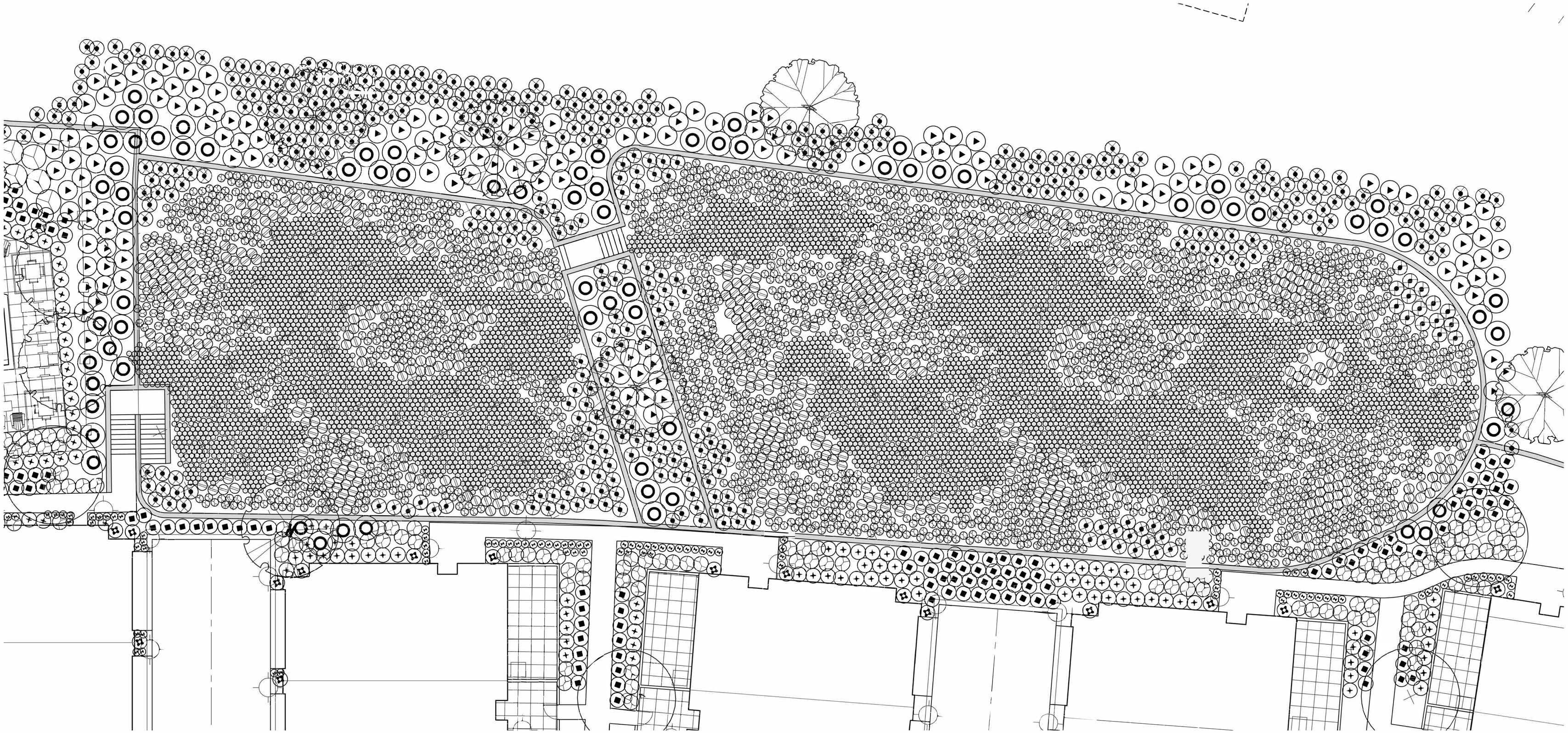
Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.



SHRUB PLANTING LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	SPACING	WUCOLS	QTY
COLUMNAR					
	JUNIPERUS 'BLUE ARROW' BLUE ARROW JUNIPER	15 GAL. COLUMNAR	30" O.C.	L	
	PRUNUS CAROLINIANA 'COMPACTA' COMPACT CAROLINA CHERRY	15" GAL COLUMNAR	30" O.C.	M	
	PITTOSPORUM TENUIFOLIUM 'OLIVER TWIST' OLIVER TWIST KOHUHU PITTOSPORUM	15 GAL	24" O.C.	M	
FOUNDATION					
5-6'	WESTRINGIA FRUTICOSA 'BLUE GEM' BLUE GEM COAST ROSEMARY	5 GAL	30" O.C.	L	
	OLEA EUROPEA 'MONTRA' LITTLE OLLIE DWARF OLIVE	5 GAL.	36" O.C.	VL	
	PHILOTHECA MYOPOROIDES 'PROFUSION' LONG-LEAF WAX FLOWER	5 GAL.	48" O.C.	M	
	LEUCOPHYLLUM LANGMANIAE 'LYNN'S LEGACY' LYNN LOWERY'S RAIN SAGE	5 GAL.	48" O.C.	M	
	LEUCOPHYLLUM FRUTESCENS TEXAS SAGE	5 GAL.	36" O.C.	L	
FOUNDATION ACCENT					
3-4'	WESTRINGIA FRUTICOSA 'GREY BOX' DWARF COAST ROSEMARY	5 GAL	30" O.C.	L	
	RHAPHOILEPIS UMBELLATA 'MINOR' DWARF YEDDO HAWTHORN	5 GAL.	36" O.C.	L	
	PITTOSPORUM TENUIFOLIUM 'ELFIN' PP#21822 ELFIN KOHUHU PITTOSPORUM	5 GAL	24" O.C.	M	
	COLEONEMA PULCHELLUM 'SUNSET GOLD' GOLDEN BREATH OF HEAVEN	5 GAL.	36" O.C.	L	
	NANDINA 'GULF STREAM' G. STREAM HEAVENLY BAMBOO	5 GAL.	18" O.C.	L	
ACCENT					
	CHONDROPETALUM TECTORUM SMALL CAPE RUSH	5 GAL.	36" O.C.	L	
	MUHLENBERGIA DUBIA PINE MUHLY	5 GAL.	30" O.C.	M	
	AGAVE 'BLUE GLOW' BLUE GLOW AGAVE	5 GAL.	36" O.C.	VL	
	HESPERALOE 'BREAK LIGHTS' RED YUCCA	5 GAL.	24" O.C.	L	
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GC					
	ROSMARINUS OFFICINALIS 'HUNTINGTON CARPET' HUNTINGTON CARPET ROSEMARY	5 GAL.	36" O.C.	M	
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	JUNIPERUS HORIZONTALIS 'BLUE CHIP' BLUE CHIP JUNIPER	**5 GAL**	**36" O.C.**	**L**	
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	AGAVE VICTORIAE-REGINAE QUEEN VICTORIA AGAVE	5 GAL.	24" O.C.	VL	
	AGAPANTHUS 'PETER PAN' QUEEN VICTORIA AGAVE	1 GAL.	18"" O.C.	M	
	ALOE 'BLUE ELF' CALIFORNIA ALOE	1 GAL.	18" O.C.	L	
	BOUTELOUA G. 'BLONDE AMBITION' BLUE GRAMA GRASS	5 GAL.	18" O.C.	L	
	CAREX DIVULSA BERKELEY SEDGE	1 GAL.	24" O.C.	M	

LAUREL RANCH | Preliminary Landscape Plan / TYP Detention Basin Shrub Plan

NORTH

SCALE: 1" = 10' - 0"

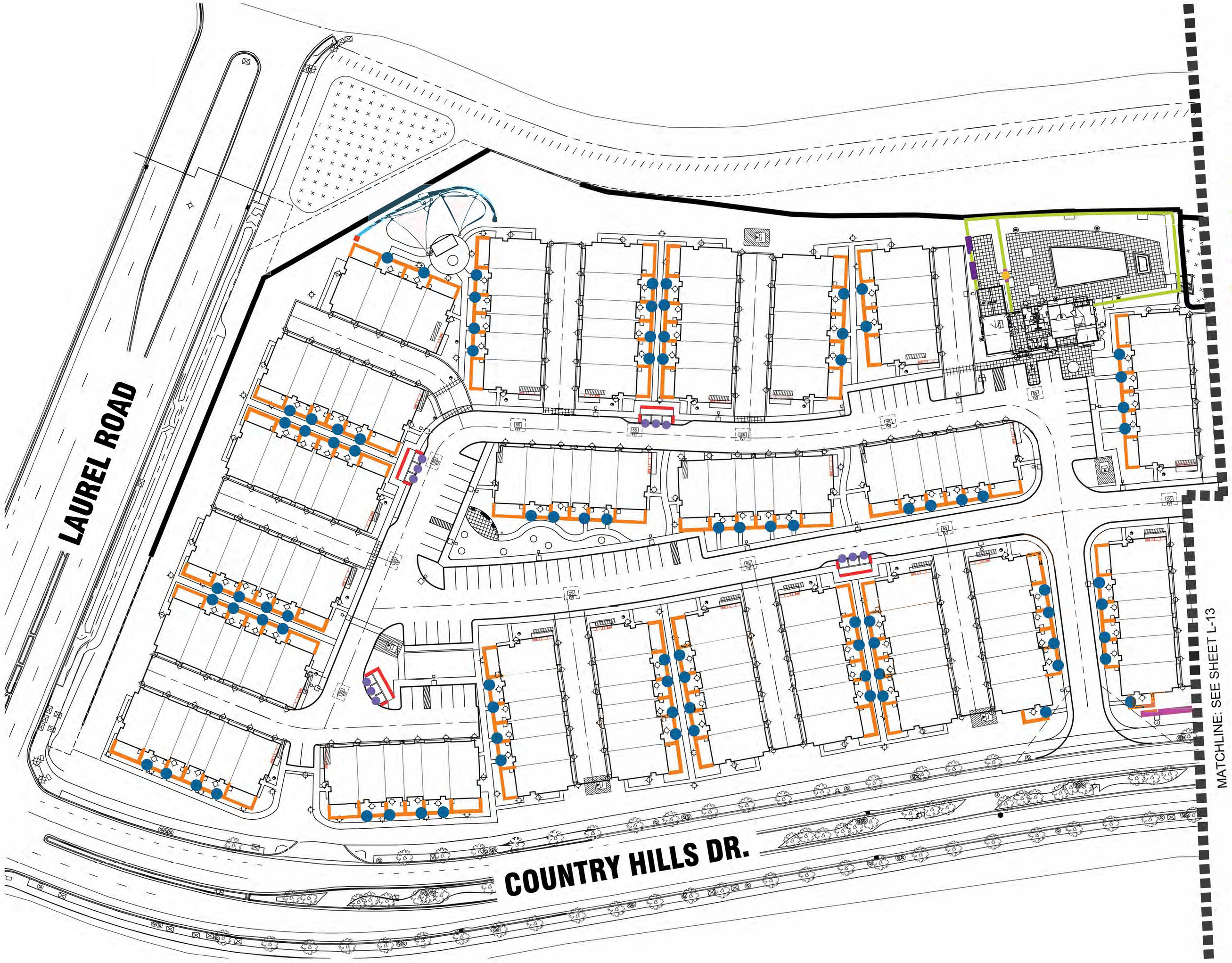
0 10 20 30 40

SMP ENVIRONMENTAL DESIGN
SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.

L-16



WALL AND FENCE LEGEND:

- 2' TO 10' HIGH RETAINING WALLS PER CIVIL ENGINEER
- 6'-0" HIGH SOLID MASONRY ENTRY WALL W/ STONE FINISH
- 42" CMU PATIO WALL W/ MISSION SLUMP BLOCK W/ SLURRY FINISH
- 5'-6" HIGH TUBULAR STEEL POOL VIEW FENCE
- 5'-6" LEGI DOG PARK FENCE
- 42" HIGH TOT LOT SAFETY ENCLOSURE FENCE
- 5' HIGH WALL @ POOL W/ MISSION SLUMP BLOCK W/ SLURRY FINISH
- 6' HIGH TRASH ENCLOSURE WALL W/ MISSION SLUMP BLOCK W/ SLURRY FINISH
- 6' HIGH TRASH ENCLOSURE GATE
- 5'-6" LEGI DOG PARK GATE
- 5'-6" VINYL PATIO GATE
- 5'-6" HIGH TUBULAR STEEL POOL GATE
- 48" HIGH TOT LOT SAFETY ENCLOSURE PILASTER
- 5'-6" HIGH POOL FENCE PILASTER

LAUREL RANCH | Preliminary Landscape Plan | WALL & FENCE PLAN

NORTH

SCALE: 1" = 40' - 0"

0 40 80 120 160

SMP ENVIRONMENTAL DESIGN
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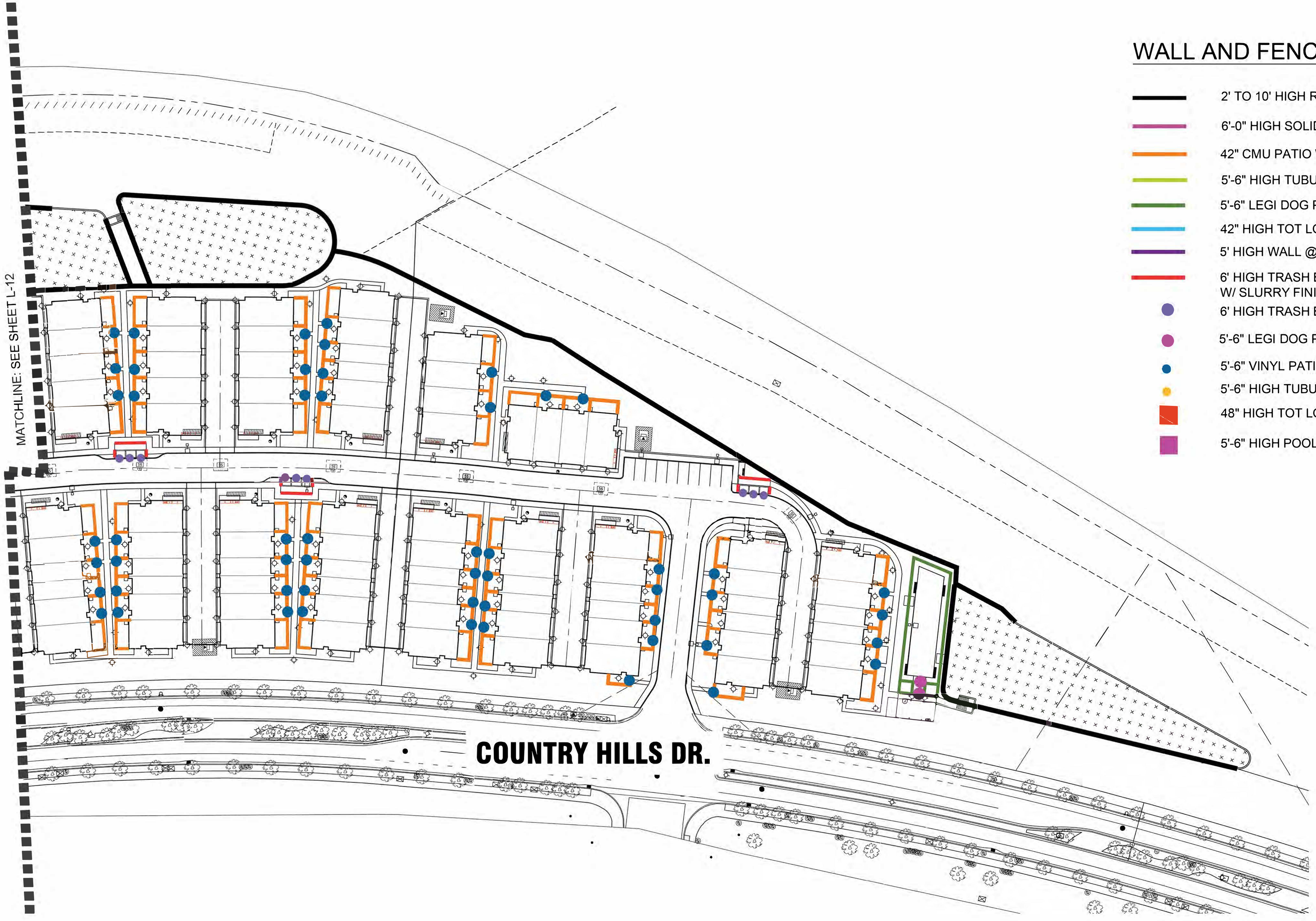

WALL AND FENCE LEGEND:

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LAUREL RANCH | Preliminary Landscape Plan | WALL & FENCE PLAN

NORTH

SCALE: 1" = 40' - 0"

0 40 80 120 160

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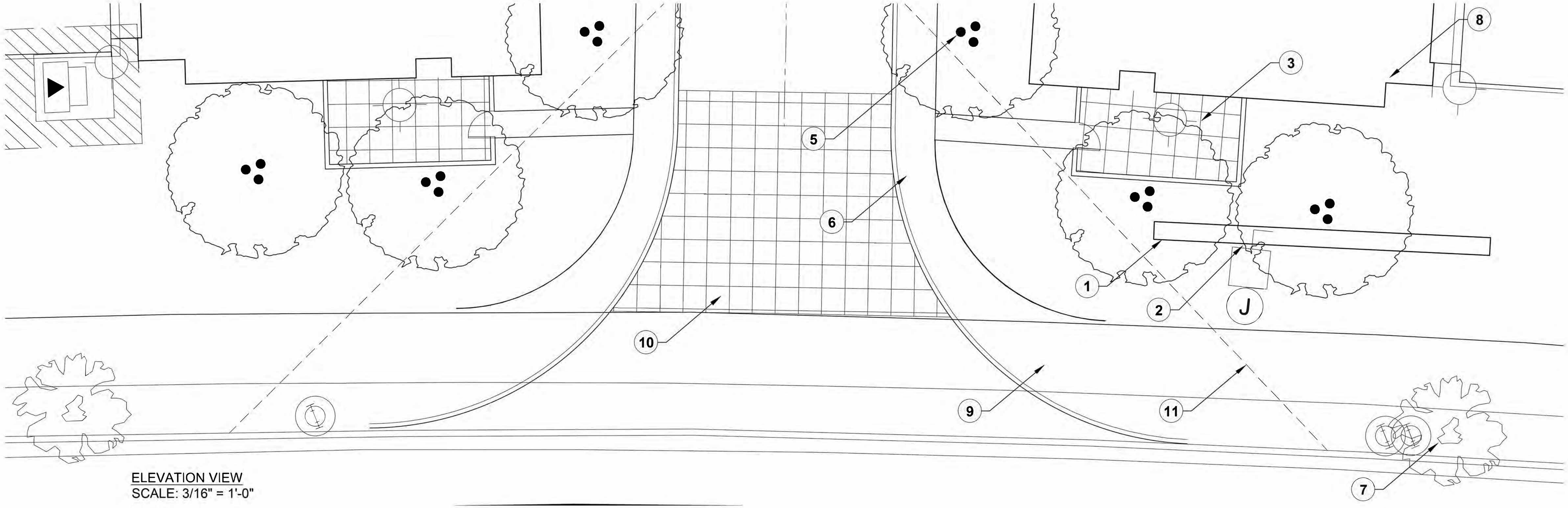
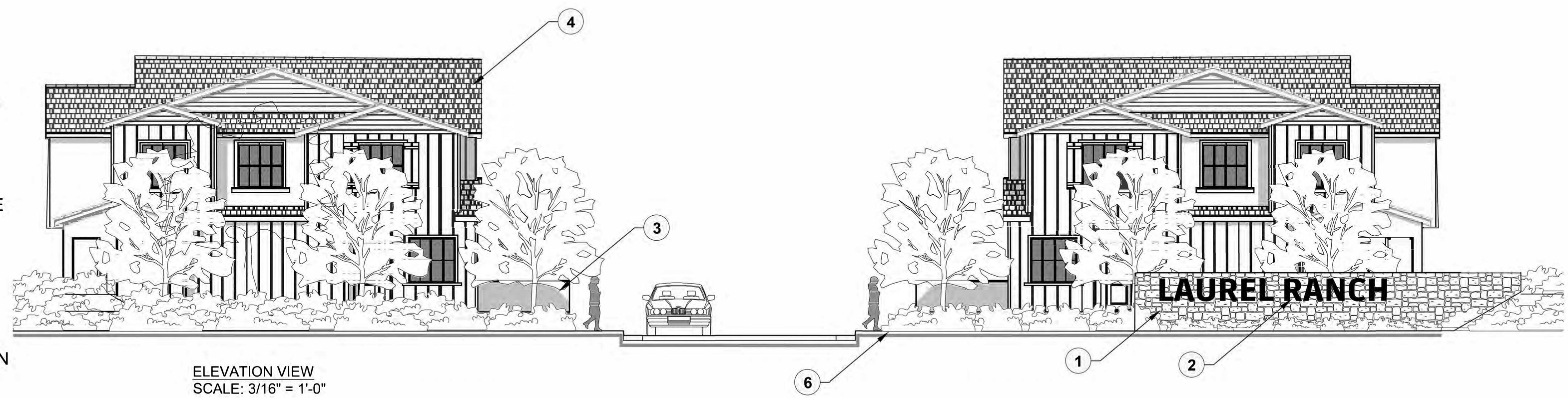


ELEVATION VIEW
SCALE: 3/16" = 1'-0"

LEGEND

1. 6'-0" TALL MASONRY WALL W/STONE FINISH
2. PROJECT SIGNAGE W/SIGN LETTER WILL BE INNER ILLUMINATIVE OR UP LIT.
3. UNIT PATIO
4. APARTMENT BUILDING SIDE ELEVATION
5. ENTRY ACCENT TREES
6. WALKWAY
7. EXISTING STREET TREES(NOT A PART)
8. APARTMENT BUILDING PLAN
9. EXISTING SIDE WALK
10. ENTRY VEHICULAR ENHANCED CONCRETE PAVING
11. SITE VISIBILITY TRIANGLE



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

LAUREL RANCH | Preliminary Imagery | Main Entry Elevation

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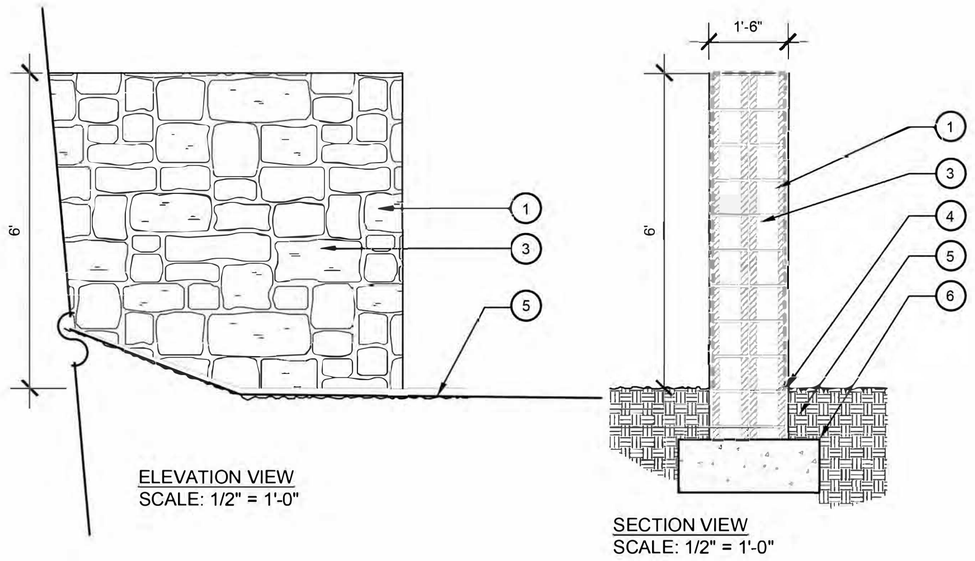


ELEVATION VIEW
SCALE: 1/2" = 1'-0"

SECTION VIEW
SCALE: 1/2" = 1'-0"

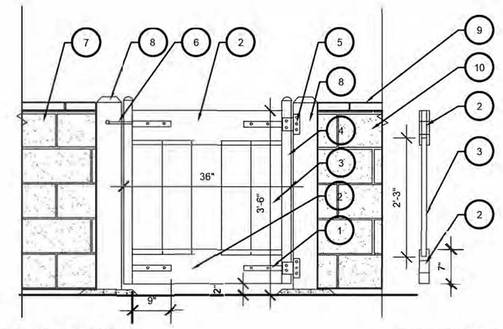
LEGEND

1. STONE VENEER RAP AROUND CAP AND ENDS.
2. NOT USED
3. 8"x8"x16" CMU BLOCK -GROUT FILL SOLID ALL VOIDS
4. FINISH GRADE, TYP.
5. COMPACTED SUB-GRADE
6. CONCRETE FOOTING

STONE VENEER

ENTRY MONUMENT SOLID MASONRY WALL W/ STONE FINISH

SCALE: 1/2" = 1'-0"



SECTION VIEW
SCALE: 1/2" = 1'-0"

SECTION VIEW
SCALE: 1/2" = 1'-0"

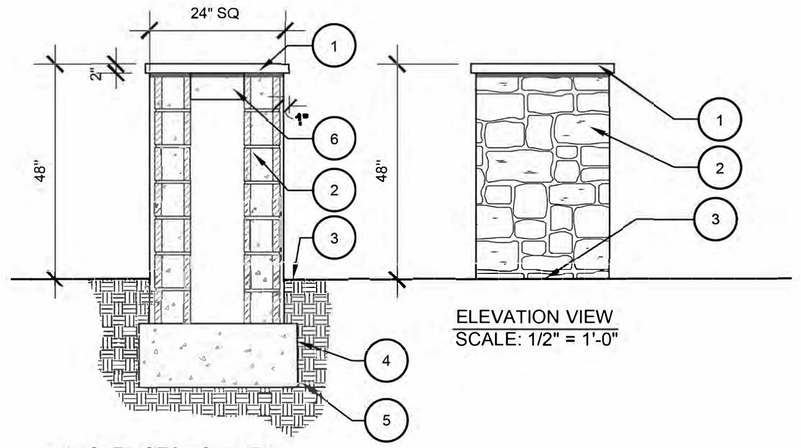
LEGEND

1. SQ MERAL INSERT WELDED TO UPRIGHT AND TEX SCREWED AT RAILS
2. 2"x 7" OR 1-1/2" x 5-1/2" PVC TOP AND BOTTOM RAILS-
3. 1"x 6" T&G PVC BOARD
4. 2" 16GA PREGALV POWDER COATED UPRIGHT OR 2"x6" PVC UPRIGHT
5. T-HINGE
6. LATCH
7. ADJACENT VINYL FENCING
8. 5"x 5" VINYL POST W/ DOMED CAP
9. CMU CONCRETE WALL CAP
10. 6X6X16 CMU BLOCK WALL WITH SLUMP FINISH

BEIGE GATE

PATIO ENTRY VINYL GATE

SCALE: 1/2" = 1'-0"



PILASTER SECTION VIEW
SCALE: 1/2" = 1'-0"

ELEVATION VIEW
SCALE: 1/2" = 1'-0"

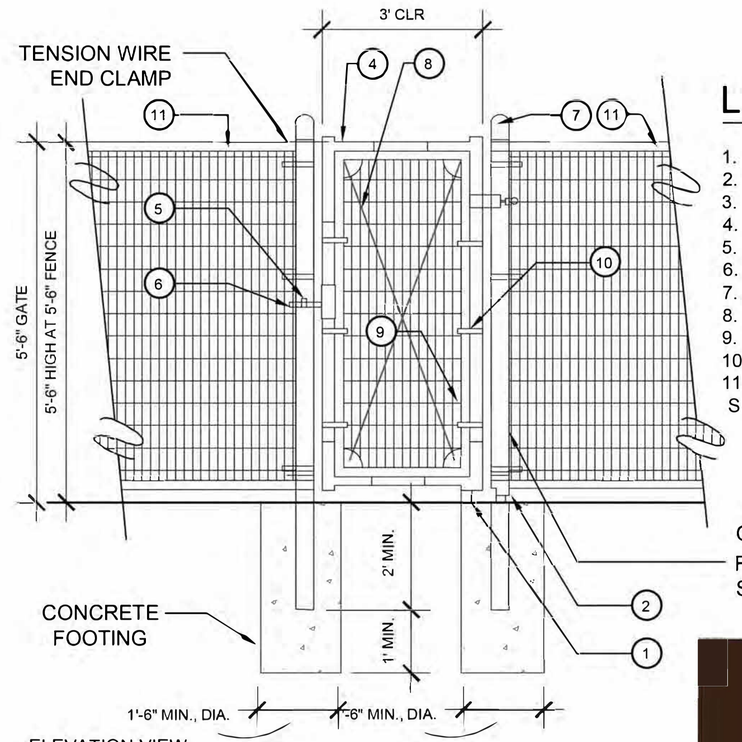
LEGEND

1. 2" PRECAST CONCRETE WALL CAP
2. ENHANCED SOLID MASONRY PILASTER
3. FINISH GRADE
4. CONCRETE FOOTING
5. COMPACT SUBGRADE
6. PIP CONCRETE CAP SUPPORT BLOCK

STONE VENEER

TOT LOT ENCLOSURE FENCE PILASTER

SCALE: 1/2" = 1'-0"



ELEVATION VIEW
SCALE: 1/2" = 1'-0"

LEGEND

(QUANTITIES IN PARENTHESES)

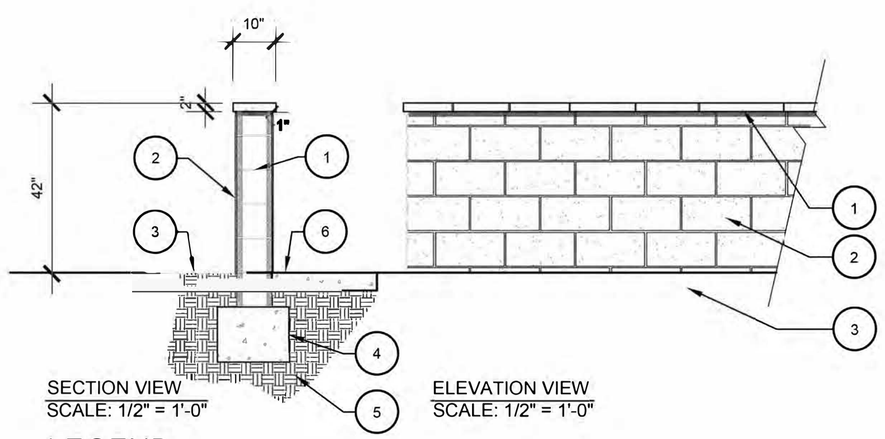
1. STRAIGHT PLUG (1)
2. BOTTOM HINGE (1)
3. TOP HINGE (1)
4. CORNER ELBOW (4)
5. LATCH FORK (1)
6. FORK CATCH (1)
7. ORNAMENTAL TOPS (4)
8. TRUSS RODS (2)
9. STRETCHER BAR (2)
10. HOOK BOLTS (6)
11. LEGI FENCE PER SEPARATE DETAIL

GATE POST & END POST FOR FENCE- 2 7/8" OD, SPACED 10' OC

BRONZE FENCE

LEGI DOG PARK GATE

SCALE: 1/2" = 1'-0"



SECTION VIEW
SCALE: 1/2" = 1'-0"

ELEVATION VIEW
SCALE: 1/2" = 1'-0"

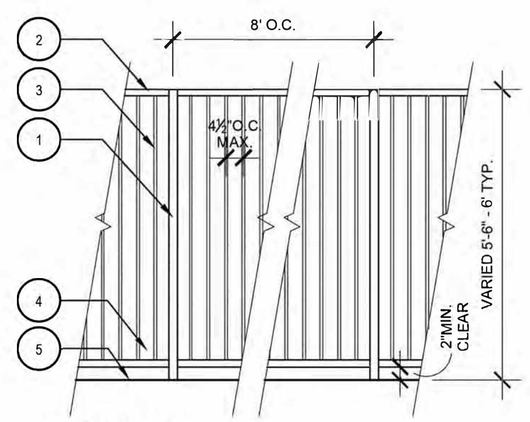
LEGEND

1. CMU CONCRETE WALL CAP W/ MISSION SLUMP BLOCK W/ SLURRY FINISH
2. 6X6X16 CMU BLOCK WALL W/ MISSION SLUMP BLOCK W/ SLURRY FINISH
3. FINISH GRADE
4. CONCRETE FOOTING
5. COMPACT SUBGRADE
6. PATIO FINISH SURFACE

MISSION SLUMP BLOCK W/ SLURRY FINISH

PATIO BLOCK WALL W/ MISSION SLUMP BLOCK W/ SLURRY FINISH

SCALE: 1/2" = 1'-0"



ELEVATION VIEW
SCALE: 1/2" = 1'-0"

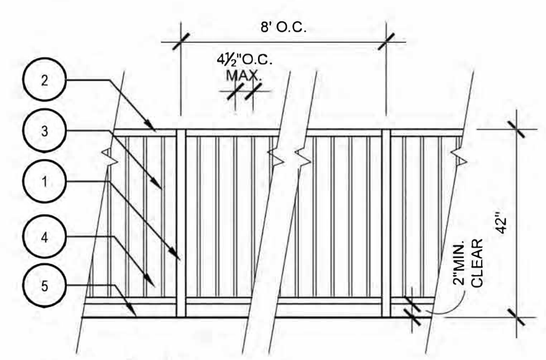
LEGEND

1. 2"SQ. TUBULAR STEEL POST
2. 1½"SQ. TUBULAR STEEL TOP RAIL
3. ⅝"SQ. TUBULAR STEEL PICKETS @ 4 ½" MAXIMUM O.C.
4. 1½"SQ. TUBULAR STEEL BOTTOM RAIL
5. COMPACTED SUBGRADE
6. FINISH GRADE
7. SINK POST INTO FOOTING
8. CONCRETE FOOTING

BRONZE FENCE

POOL STEEL VIEW FENCE

SCALE: 1/2" = 1'-0"



ELEVATION VIEW
SCALE: 1/2" = 1'-0"

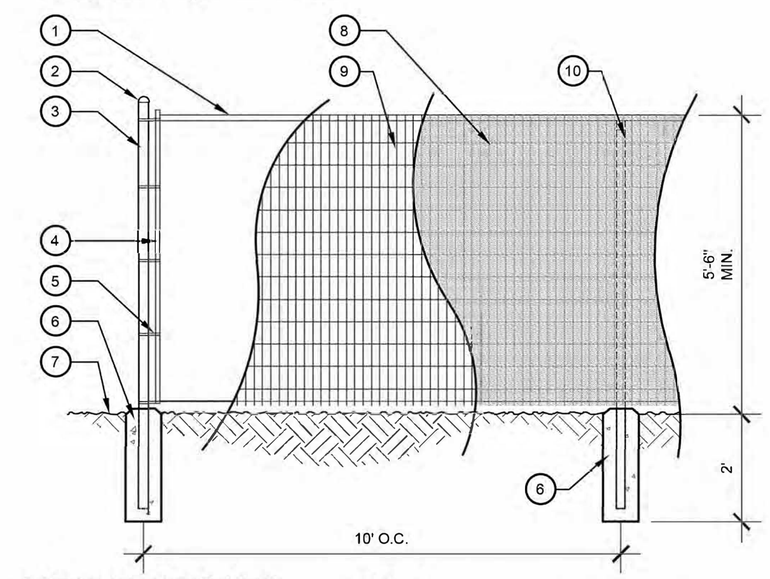
LEGEND

1. 2"SQ. TUBULAR STEEL POST
2. 1½"SQ. TUBULAR STEEL TOP RAIL
3. ⅝"SQ. TUBULAR STEEL PICKETS @ 4 ½" MAXIMUM O.C.
4. 1½"SQ. TUBULAR STEEL BOTTOM RAIL
5. COMPACTED SUBGRADE
6. FINISH GRADE
7. SINK POST INTO FOOTING
8. CONCRETE FOOTING

BRONZE FENCE

TOT LOT SAFETY ENCLOSURE FENCE

SCALE: 1/2" = 1'-0"



SECTION / ELEVATION VIEW
SCALE: 1/2" = 1'-0"

NOTES:
- ALL MATERIAL TO BE VINYL COATED

LEGEND

1. 1-3/8" GALVANIZED TOP RAIL
2. TERMINAL GALVANIZED DOME CAP
3. 2-3/8" GALVANIZED TERMINAL POST
4. GALVANIZED TENSION BAR
5. GALVANIZED TENSION BAND
6. 8"x24" DOMED CONCRETE FOOTING
7. FINISH GRADE, TYP.
8. NYLON GREEN MESH PRIVACY FABRIC, TYP.
9. LEGI, TYP.
10. 1-7/8" LINE POST & CAP

BRONZE FENCE

LEGI DOG PARK FENCE

SCALE: 1/2" = 1'-0"

LAUREL RANCH | Preliminary Landscape Details | WALL AND FENCE DETAILS

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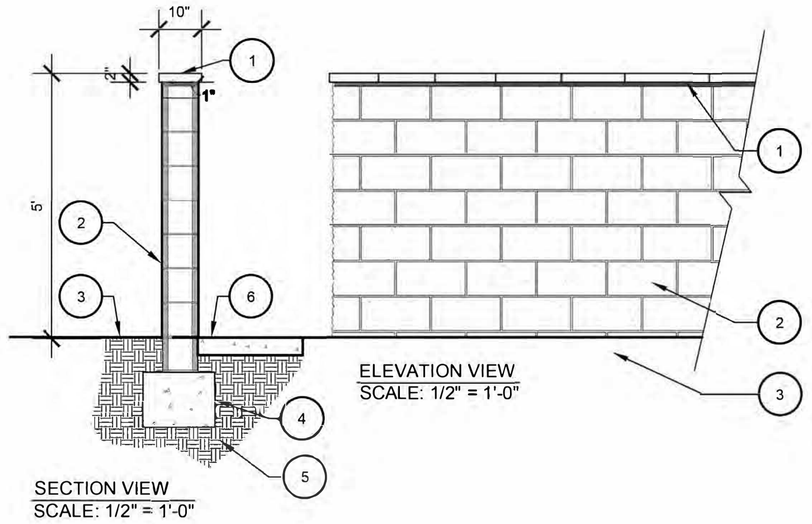


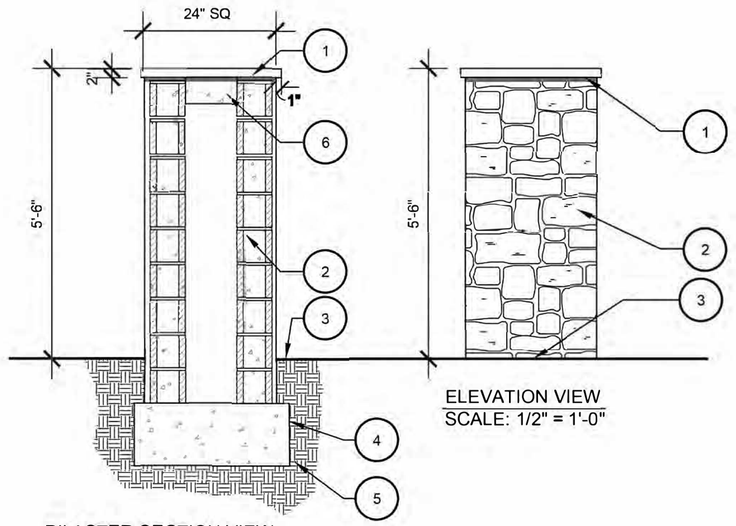
LEGEND

1. CMU CONCRETE WALL CAP W/ MISSION SLUMP BLOCK W/ SLURRY FINISH
2. 6X6X16 CMU BLOCK WALL W/ MISSION SLUMP BLOCK W/ SLURRY FINISH
3. FINISH GRADE
4. CONCRETE FOOTING
5. COMPACT SUBGRADE
6. PATIO FINISH SURFACE

MISSION SLUMP BLOCK W/ SLURRY FINISH

5' HIGH WALL @ POOL W/MISSION SLUMP BLOCK W/ SLURRY FINISH

ELEVATION VIEW
SCALE: 1/2" = 1'-0"



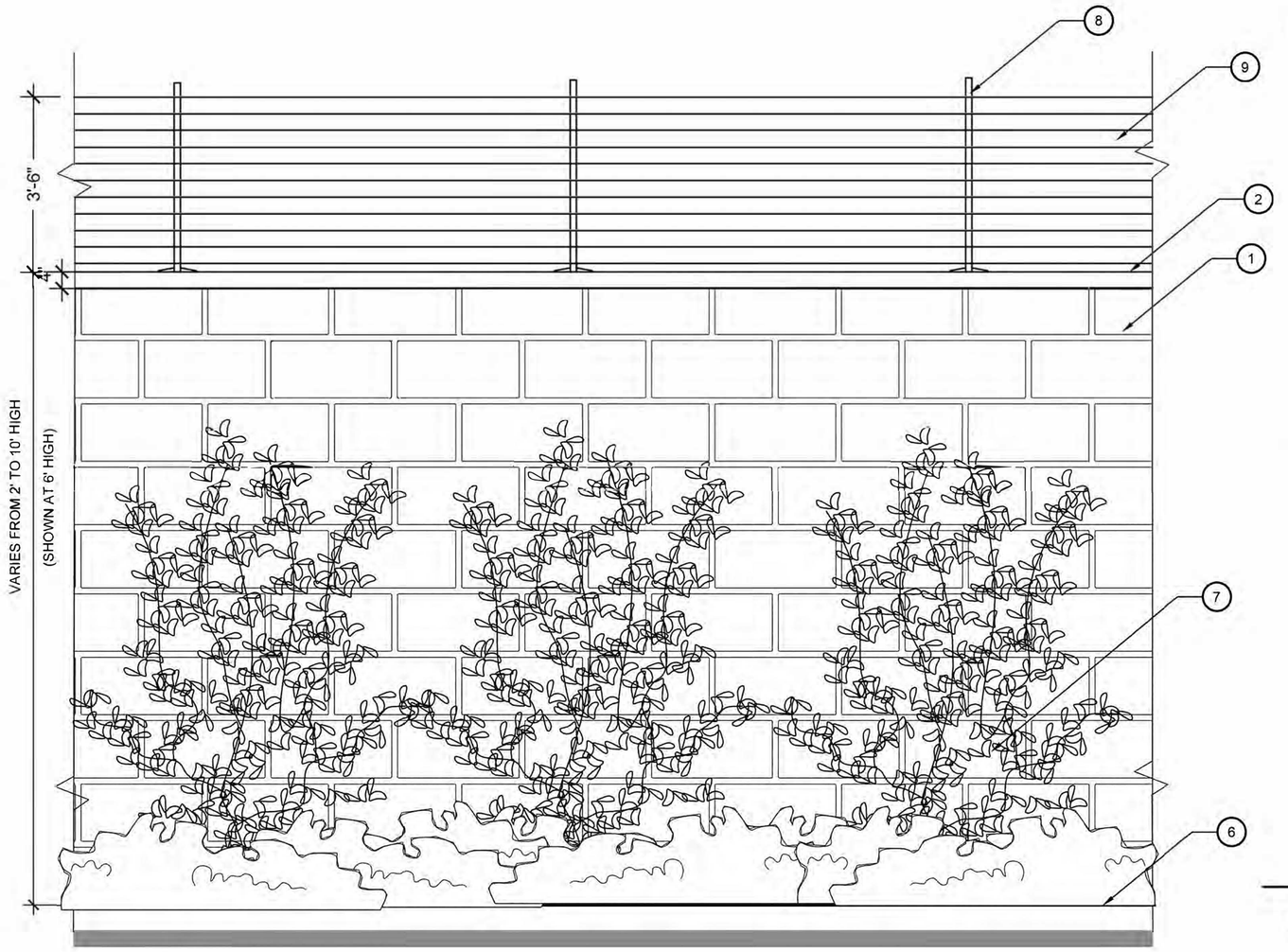
LEGEND

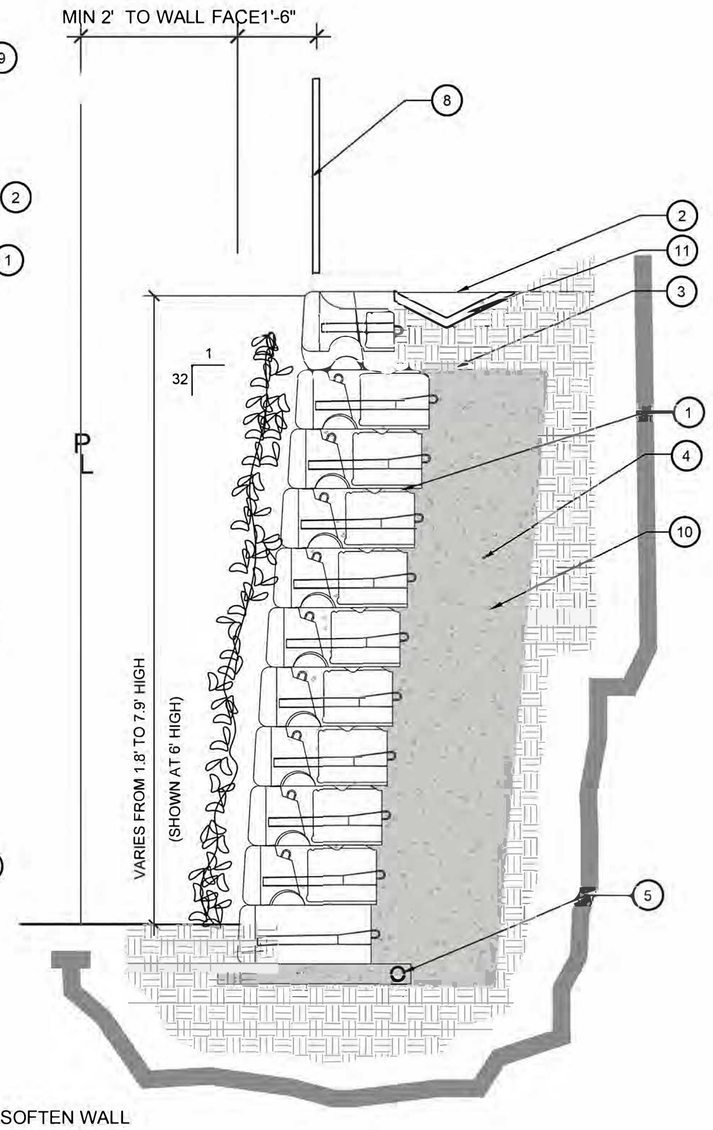
1. 2" PRECAST CONCRETE WALL CAP
2. ENHANCED SOLID MASONRY PILASTER
3. FINISH GRADE
4. CONCRETE FOOTING
5. COMPACT SUBGRADE
6. PIP CONCRETE CAP SUPPORT BLOCK

STONE VENEER

5'-6" HIGH POOL FENCE PILASTER

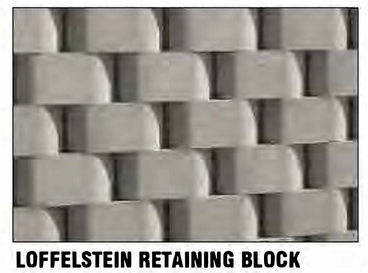
ELEVATION VIEW
SCALE: 1/2" = 1'-0"





LEGEND

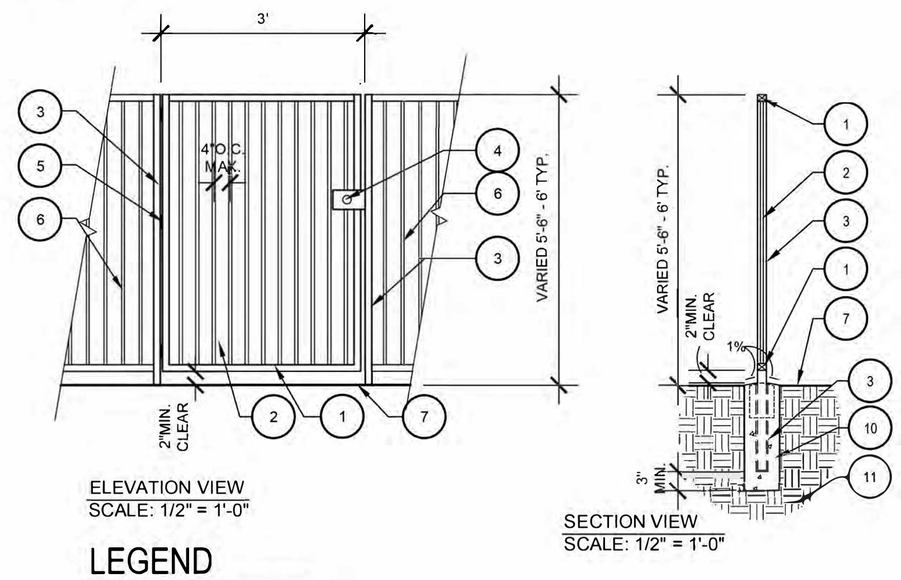
1. RETAINING CONCRETE BLOCK WALL PER CIVIL ENGINEER
2. FINISH SURFACE PER CIVIL ENGINEER
3. FILTER FABRIC PER CIVIL ENGINEER
4. STRUCTURAL BACKFILL PER CIVIL ENGINEER
5. 4" DIA DRAIN PIPE PER CIVIL ENGINEER
6. FINISH GRADE PER CIVIL ENGINEER
7. VINES PLANTED AT BOTTOM OF WALL TO SOFTEN WALL
8. 2" SQ. TUBULAR STEEL POSTS @ 8' 0.C. - PER CIVIL ENGINEER
9. 5/8" SQ. STEEL PICKETS@ 4-1/2" O.C. - PER CIVIL ENGINEER PLANS
10. ANCHORPLEX SYSTEM
11. 2' WIDE CONCRETE DRAINAGE SWALE



LOFFELSTEIN RETAINING BLOCK

2' TO 10' RETAINING WALL ON LAUREL ROAD PER CIVIL ENGINEER

ELEVATION VIEW
SCALE: 1/2" = 1'-0"



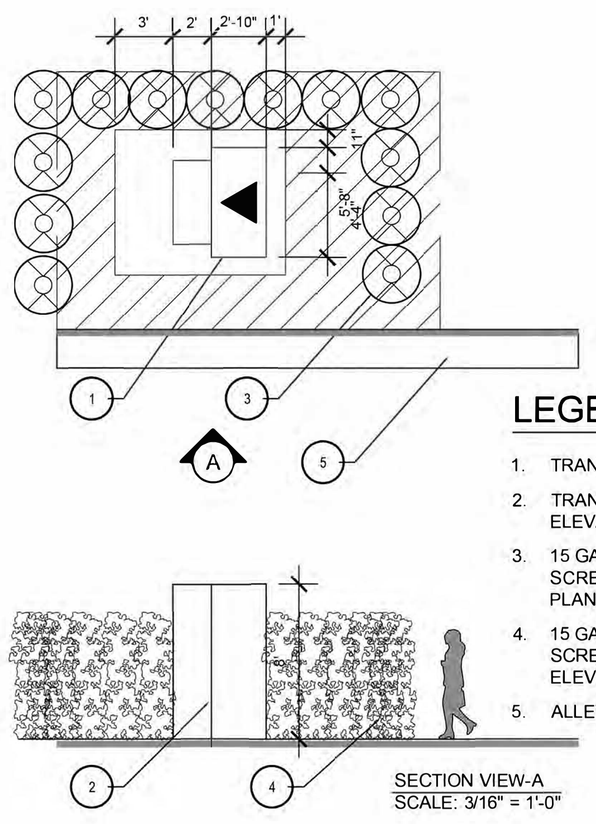
LEGEND

1. 1-1/2" x 2" x 16 GA. METALIZED TUBULAR STEEL GATE FRAME.
2. 3/4" SQ. x 16 GA. METALIZED TUBULAR STEEL PICKETS EQUALLY SPACED AT 4" MAXIMUM ON CENTER.
3. 2" SQ GATE POST
4. LOCKABLE HANDLE / LATCH
5. SELF CLOSING GATE HINGES
6. WALL / FENCING
7. FINISH GRADE
8. PRECAST CONCRETE WALL CAP- REFER TO FINISH SCHEDULE
9. 8X8X16 ONE SIDED SPLIT FACE BLOCK- REFER TO FINISH SCHEDULE
10. CONCRETE FOOTING
11. COMPACTED SUBGRADE

BRONZE FENCE

5'-6" HIGH TUBULAR STEEL POOL GATE

ELEVATION VIEW
SCALE: 1/2" = 1'-0"



LEGEND

1. TRANSFORMER ON PLAN
2. TRANSFORMER ON ELEVATION
3. 15 GAL COLUMNAR SCREENING SHRUBS ON PLAN
4. 15 GAL COLUMNAR SCREENING SHRUBS ON ELEVATION
5. ALLEY ROAD

TRANSFORMER ELEVATION W/SCREENING SHRUBS

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

LAUREL RANCH | Preliminary Landscape Details | WALL AND FENCE DETAILS

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.

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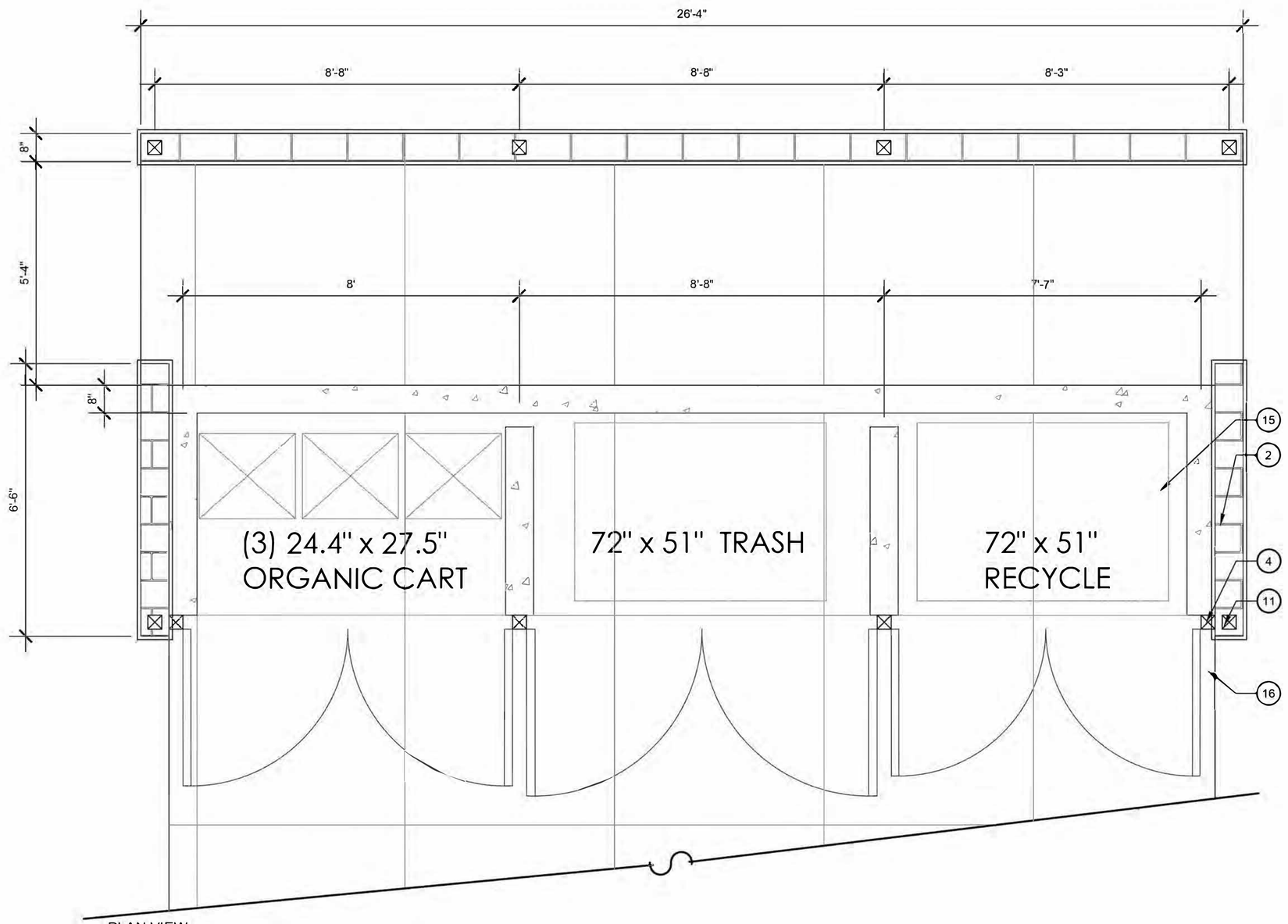


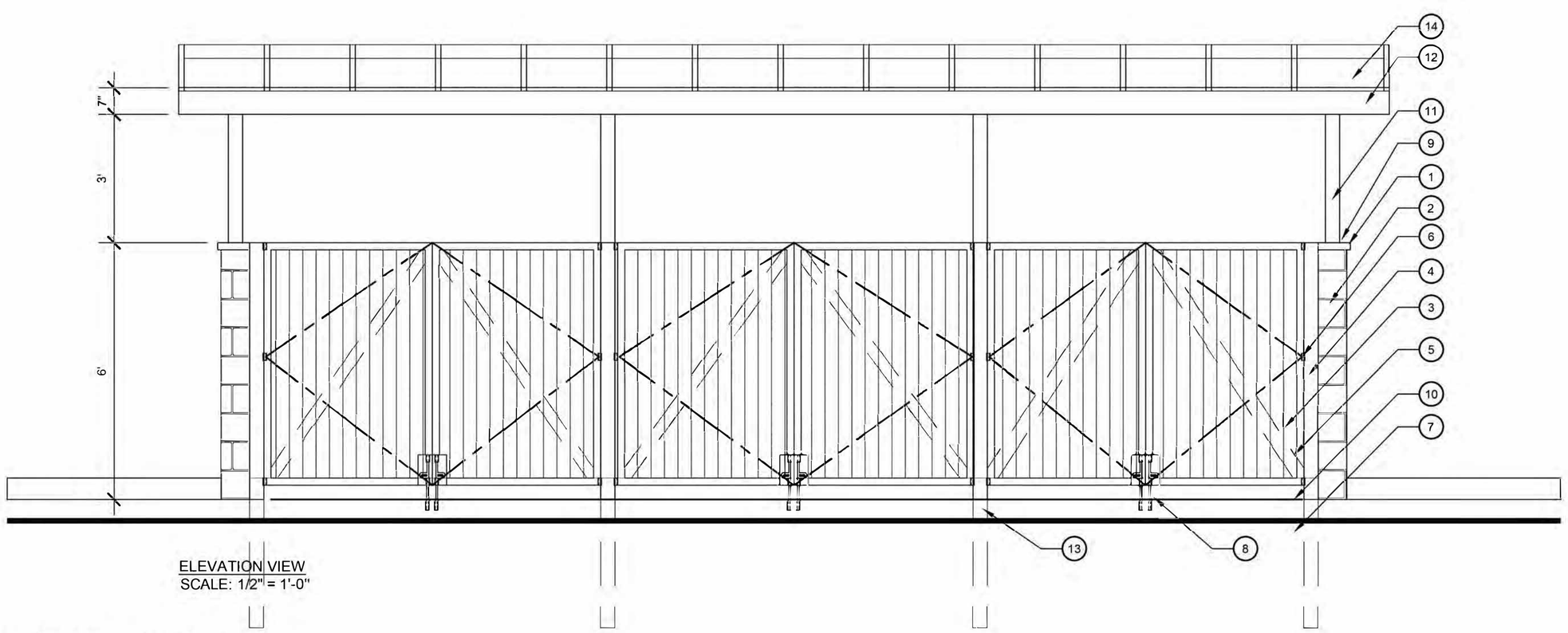
PLAN VIEW
SCALE: 1/2" = 1'-0"

LEGEND

1. CMU CONCRETE WALL CAP W/ MISSION SLUMP BLOCK W/ SLURRY FINISH
2. 6X6X16 CMU BLOCK WALL W/ MISSION SLUMP BLOCK W/ SLURRY FINISH
3. ANGLE STEEL GATE WITH CORRUGATED METAL DECKING PANEL, PER CONTRACTOR SHOP DRAWINGS.
4. 4"x4" STRUCTURAL STEEL POST SET IN CONCRETE FOOTING, PER SHOP DRAWINGS.
5. DIAGONAL BRACE BAR, PER SHOP DRAWINGS.
6. HEAVY-DUTY ROUND BARREL HINGE, PER SHOP DRAWINGS.
7. SUBGRADE
8. HEAVY-DUTY CANE BOLT, PER SHOP DRAWINGS.
9. POST
10. 4" X 4" TUBULAR STEEL SUPPORT
11. 4" X 6" STEEL BEAM
12. 3" X 4" STEEL TRELLIS
13. CONCRETE FOOTING
14. SOLID STEEL ROOF
15. TRASH CONTAINER: TRASH/REFUSE, RECYCLING, ORGANIC SIGNAGE PER SHOP DRAWINGS
16. CONCRETE PAD

MISSION SLUMP BLOCK W/ SLURRY FINISH

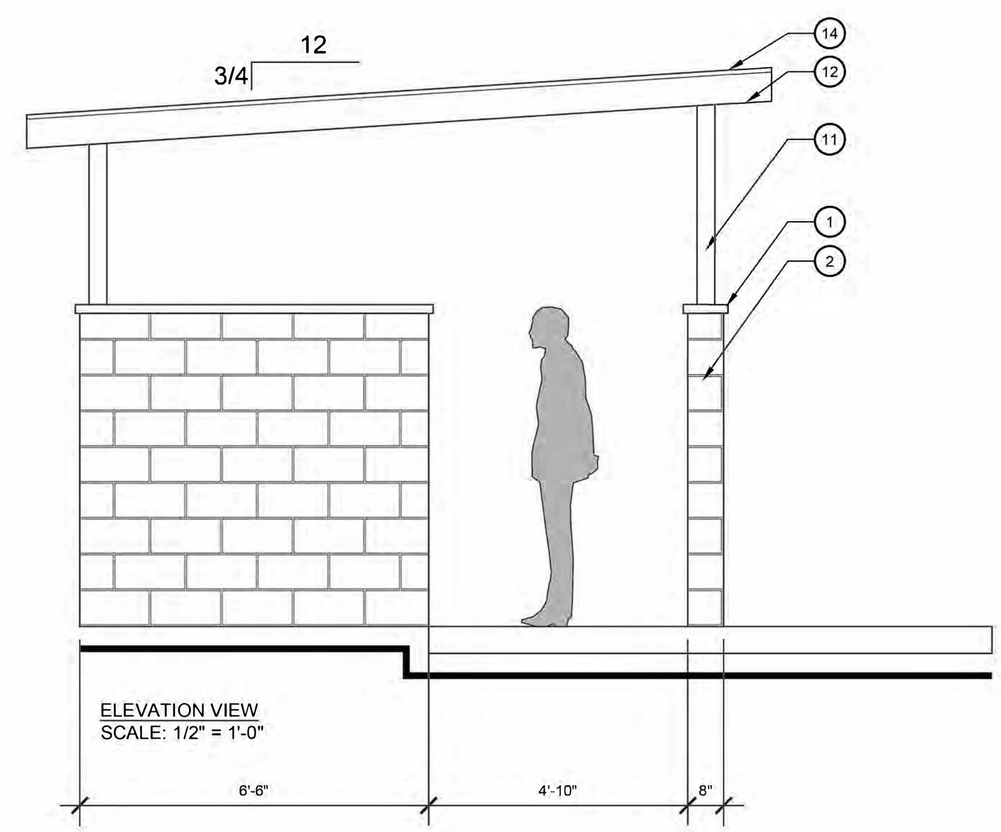
BRONZE GATE



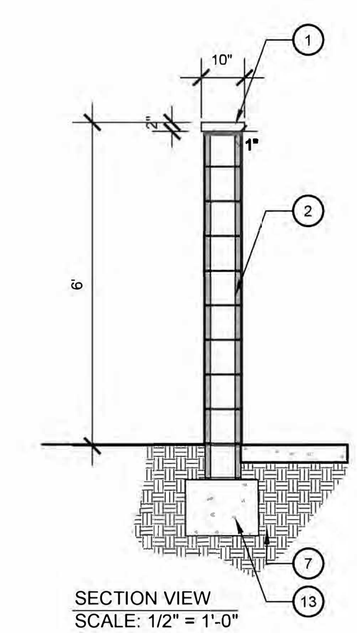
ELEVATION VIEW
SCALE: 1/2" = 1'-0"

6' HIGH TRASH ENCLOSURE

ELEVATION VIEW
SCALE: 1/2" = 1'-0"



ELEVATION VIEW
SCALE: 1/2" = 1'-0"



SECTION VIEW
SCALE: 1/2" = 1'-0"

LAUREL RANCH | Preliminary Landscape Details | WALL AND FENCE DETAILS

C100

Brightsky Residential | Antioch, CA | June 01, 2023

APN's: 053-060-055, 053-060-056, 053-060-057, 053-060-063.

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BrightSky RESIDENTIAL

LAUREL RANCH TOWNHOMES

JOB# A25-22240

COLOR SELECTION CHART

Bassenian | Lagoni ARCHITECTURE • PLANNING • INTERIORS

PAINT: SHERWIN WILLIAMS (OR APPROVED EQUAL)
ROOF: EAGLE (OR APPROVED EQUAL)
WINDOWS: MILGARD VINYL - WHITE (OR APPROVED EQUAL)
STONE: ELDORADO (OR APPROVED EQUAL)
METAL ROOF: CUSTOM BILT - OLD TOWNE GRAY (OR APPROVED EQUAL)

DECEMBER 20, 2022
REVISED FEBRUARY 14, 2023 (PER CLIENT COMMENTS)
***REVISED MAY 15, 2023(REDUCED TO 6 TOTAL SCHEMES)**

	SCHEMES 1-6 ARE FOR ALL ELEVATION STYLES					
	1	**2**	**3**	**4**	**5**	**6**
FASCIA, EAVES, TRIM, KICKERS, GABLE SIDING & GARAGE DOORS	SW 7649 SILVERPLATE	SW 9172 STUDIO CLAY	SW 7566 WESTHIGHLAND WHITE	SW 7566 WESTHIGHLAND WHITE	SW 0077 CLASSIC FRENCH GRAY	SW 7566 WESTHIGHLAND WHITE
SHUTTERS & FRONT DOORS #1	SW 6989 DOMINO	SW 6181 SECRET GARDEN	SW 7602 INDIGO BATIK	SW 7076 CYBERSPACE	SW 7630 RAISIN	SW 7020 BLACK FOX
SHUTTERS & FRONT DOORS #2	SW 7665 WALL STREET	SW 9149 INKY BLUE	SW 2838 POLISHED MAHOGANY	SW 6083 SABLE	SW 6194 BASIL	SW 7523 BURNISHED BRANDY
BASE STUCCO	SW 7005 PURE WHITE	SW 7072 SHOJI WHITE	SW 7565 OYSTER BAR	SW 7064 PASSIVE	SW 7029 AGREEABLE GRAY	SW 2844 ROYCROFT MIST GRAY
SIDING	SW 7649 SILVERPLATE	SW 7638 JOGGING PATH	SW 7566 WESTHIGHLAND WHITE	SW 9152 LET IT RAIN	SW 7017 DORIAN GRAY	SW 7059 UNUSUAL GRAY
STONE 'A' ONLY	SEA CLIFF EUROPEAN LEDGE	COTTONWOOD EUROPEAN LEDGE	SIDEWALK EUROPEAN LEDGE	GLACIER EUROPEAN LEDGE	ZINC EUROPEAN LEDGE	SEA CLIFF EUROPEAN LEDGE
ROOF	4679	4588	4883	SCB 8805	4810	4884

C101

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SCHEME 1

ROOF
EAGLE 4679

BASE STUCCO
SW 7005 PURE WHITE

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 7649 SILVERPLATE

FRONT DOORS & SHUTTERS #1
SW 6989 DOMINO

SIDING
SW 7649 SILVERPLATE

FRONT DOORS & SHUTTERS #2
SW 7665 WALL STREET

STONE
SEA CLIFF EUROPEAN LEDGE

BrightSky RESIDENTIAL

SCHEME 2

ROOF
EAGLE 4588

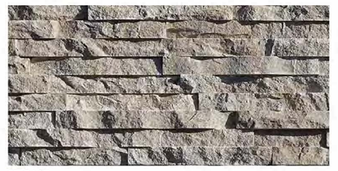
BASE STUCCO
SW 7042 SHOJI WHITE

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 9172 STUDIO CLAY

FRONT DOORS & SHUTTERS #1
SW 6181 SECRET GARDEN

SIDING
SW 7638 JOGGING PATH

FRONT DOORS & SHUTTERS #2
SW 9149 INKY BLUE



STONE
SEA CLIFF EUROPEAN LEDGE

BrightSky RESIDENTIAL

SCHEME 3

ROOF
EAGLE 4883

BASE STUCCO
SW 7565 OYSTER BAR

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 7566 WESTHIGHLAND WHITE

FRONT DOORS & SHUTTERS #1
SW 7602 INDIGO BATIK

SIDING
SW 7566 WESTHIGHLAND WHITE

FRONT DOORS & SHUTTERS #2
SW 2838 POLISHED MAHOGANY

STONE
SIDEWALK EUROPEAN LEDGE

BrightSky RESIDENTIAL

SCHEME 4

ROOF
EAGLE SCB 8805

BASE STUCCO
SW 7064 PASSIVE

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 7566 WESTHIGHLAND WHITE

FRONT DOORS & SHUTTERS #1
SW 7076 CYBERSPACE

SIDING
SW 9152 LET IT RAIN

FRONT DOORS & SHUTTERS #2
SW 6083 SABLE

STONE
GLACIER EUROPEAN LEDGE

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SCHEME 5

ROOF
EAGLE 4810

BASE STUCCO
SW 7029 AGREEABLE GRAY

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 0077 CLASSIC FRENCH GRAY

FRONT DOORS & SHUTTERS #1
SW 7630 RAISIN

SIDING
SW 7017 DORIAN GRAY

FRONT DOORS & SHUTTERS #2
SW 6194 BASIL

STONE
GLACIER EUROPEAN LEDGE

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SCHEME 6

ROOF
EAGLE 4884

BASE STUCCO
SW 2844 ROYCROFT MIST GRAY

FASCIA, EAVES, TRIM, GABLE SIDING & GARAGE
SW 7566 WESTHIGHLAND WHITE

FRONT DOORS & SHUTTERS #1
SW 7020 BLACK FOX

SIDING
SW 7059 UNUSUAL GRAY

FRONT DOORS & SHUTTERS #2
SW 7523 BURNISHED BRANDY

STONE
SEA CLIFF EUROPEAN LEDGE

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COLOR & MATERIAL BOARDS

LAUREL RANCH

Antioch , California

A25.22240

03.30.23

A-C.1

BrightSky RESIDENTIAL

ATTACHMENT "D"

CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT

4005 PORT CHICAGO HWY, STE 250, CONCORD, CA 94520 • (925) 941-3300 • CCCFPD.ORG

July 13, 2023

Ms. Monique Villagrana
City of Antioch - Planning

Subject: Laurel Ranch Townhomes
0 Laurel and Country Hills St
Project # Antioch
CCCFPD Project No.: P-2023-003056

Dear Ms. Villagrana:

We have reviewed the development plan application to establish 216 townhomes in 38 buildings and a recreation center at the subject location. The following is required for Fire District approval in accordance with the 2022 California Fire Code (CFC), the 2022 California Building Code (CBC), the 2022 California Residential Code (CRC), and Local and County Ordinances and adopted standards:

1. Access as shown on plans appears comply with Fire District requirements.

   Provide emergency apparatus access roadways with all-weather (paved) driving surfaces of not less than 20-feet unobstructed width, and not less than 13 feet 6 inches of vertical clearance, to within 150 feet of travel distance to all portions of the exterior walls of every building. Access shall have a minimum outside turning radius of 45 feet, and must be capable of supporting the imposed fire apparatus loading of 37 tons. Access roadways shall not exceed 20% grade. Grades exceeding 16% shall be constructed of grooved concrete per the attached Fire District standard. (503) CFC

   Aerial Fire Apparatus Access is required where the vertical distance between grade plane and the highest roof surface exceeds 30 feet as measured in accordance with Appendix D, Section 105 of the 2019 CFC. Aerial access roads shall have a minimum unobstructed width of 26 feet, exclusive of shoulders, in the immediate vicinity of the building or portion thereof. At least one of the required routes shall be located within a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building. Overhead utility and power lines shall not be located over the aerial fire apparatus access road or between the aerial fire apparatus road and building.

2. Access roadways of **less than 28-feet** unobstructed width shall have signs posted or curbs painted red with the words: ***NO PARKING – FIRE LANE*** clearly marked. (22500.1) CVC, (503.3) CFC

   Access roadways of **28 feet or greater, but less than 36-feet** unobstructed width shall have ***NO PARKING – FIRE LANE*** signs posted, allowing for parking on one side only or curbs painted red with the words ***NO PARKING – FIRE LANE*** clearly marked. (22500.1) CVC, (503.3) CFC

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3. Access gates for Fire District apparatus shall be a minimum of 20-feet wide. Access gates shall slide horizontally or swing inward and shall be located a minimum of 30 feet from the street. Electrically operated gates shall be equipped with a Knox Company key-operated switch. Manually operated gates shall be equipped with a non-casehardened lock or approved Fire District lock. Contact the Fire District for information on ordering the key-operated switch. (D103.5) CFC.

4. The developer shall provide an adequate and reliable water supply for fire protection as set forth in the California Fire Code. (507.1) CFC

5. The developer shall provide hydrants of the East Bay type in compliance with Chapter 5 and Appendix B and C of the California Fire Code. (C103.1) CFC

6. Provide emergency escape and rescue openings in Group R occupancies of type V construction. Basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening. Such openings shall open directly into a public way or to a yard or court that opens to a public way.

   Landscaping, signage and other obstructions must not hinder the positioning of firefighting ground ladders from apparatus access to the rescue windows.

7. A land development permit is required for access and water supply review and approval prior to submitting building construction plans.

   The developer shall submit a minimum of two (2) copies of full size, scaled site improvement plans indicating:

   All existing or proposed hydrant locations,
   Fire apparatus access to include slope and road surface
   Aerial fire apparatus access,
   Elevations of building,
   Size of building and type of construction,
   Gates, fences, retaining walls, bio-retention basins, any obstructions to access.
   Detail showing the lowest level of fire department vehicle access and the floor level of the highest occupied floor,
   Striping and signage plan to include "NO PARKING-FIRE LANE" markings
   Provide drawings for paths from the public way to under emergency escape and rescue openings showing a proposed clear path and clear space under these openings that allow for the placement of ground ladders at a climbing angle of 70 to 75 degrees and a minimum of 18" clearance from the base of the ladder to any obstruction (see attached ground ladder access standard) for review and approval prior to obtaining a building permit.

   This is a separate submittal from the building construction plans. These plans shall be approved prior to submitting building plans for review. (501.3) CFC

8. ***Emergency apparatus access roadways and hydrants shall be installed, in service, and inspected by the Fire District prior to construction or combustible storage on site.*** (501.4) CFC

   Note: A temporary aggregate base or asphalt grindings roadway is not considered an all-weather surface for emergency apparatus access. The first lift of asphalt concrete paving shall be installed as the minimum roadway material and must be engineered to support the designated gross vehicle weight of 37 tons.

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9. The homes, if true townhomes, as proposed shall be protected with an approved automatic fire sprinkler system complying with the 2016 edition of NFPA 13D or Section R313.3 of the 2022 California Residential Code. Submit a minimum of two (2) sets of plans to this office for review and approval prior to installation. (903.2) CFC, (R313.3) CRC, Contra Costa County General Plan / Contra Costa County Ordinance 2019-37.

10. The developer shall provide traffic signal pre-emption systems (Opticom) on any new or modified traffic signals installed with this development. (21351) CVC

11. Flammable or combustible liquid storage tanks shall ***not*** be located on the site without obtaining approval and necessary permits from the Fire District. (3401.4) CFC

12. The owner shall cut down and remove all weeds, grass, vines, or other growth that is capable of being ignited and endangering property. (304.1.2) CFC

13. The owner or the owner's authorized agent shall be responsible for the development, implementation and maintenance of a written plan in compliance with NFPA 241, establishing a fire prevention program at the project site applicable throughout all phases of the construction. The plan shall be made available for review by the fire code official upon request. (Ch.33) CFC

    The fire prevention program superintendent shall develop and maintain an approved prefire plan in cooperation with the fire chief. The fire chief and fire code official shall be notified of changes affecting the utilization of information contained in such prefire plans. (Ch.33) CFC

14. The developer shall submit a minimum of two (2) complete sets of building construction plans, for any buildings not R3, and specifications for the subject project to the Fire District. After the new construction / tenant improvement plans are approved, plans and specifications for all deferred submittals shall be submitted, including, but not limited to the following.

    - Private underground fire service water mains
    - Fire sprinklers
    - Standpipe
    - Fire alarm
    - Fire pump if required
    - Photovoltaic
    - Commercial kitchen hood extinguishing systems
    - Emergency Responder Radio Coverage System (ERRCS)

    Plans shall be submitted to the Fire District for review and approval ***prior to*** construction of the building or installation of the systems to ensure compliance with minimum requirements related to fire and life safety. Plan review and inspection fees shall be submitted at the time of plan review submittal. (105.4.1) CFC, (901.2) CFC, (107) CBC

CONTACT THE FIRE DISTRICT (MINIMUM 2 WORKING DAYS IN ADVANCE) AT 925-941-3300 EXT 3902 TO SCHEDULE AN INSPECTION OF THE ACCESS AND HYDRANT INSTALLATION PRIOR TO CONSTRUCTION OR THE STORAGE OF COMBUSTIBLE MATERIALS ON THE JOB SITE.

Our preliminary review comments shall not be construed to encompass the complete project. Additional plans and specifications may be required after further review.

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If you have any questions regarding this matter, please contact this office at (925) 941-3300 or email mcame@cccfpd.org.

Sincerely,

Michael Cameron
Fire Inspector

File: 0 LAUREL AND COUNTRY HILLS ST-PLN-P-2023-003056

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