RECIRCULATED CEQA ENVIRONMENTAL CHECKLIST FORM

1.	**Project Title:**	Alves Lane Apartments (County File #CDDP20-03011)
2.	**Lead Agency Name and Address:**	Contra Costa County Department of Conservation and Development 30 Muir Rd. Martinez, CA 94553
3.	**Contact Person and Phone Number:**	Syd Sotoodeh, Planner II (925) 655-2877 syd.sotoodeh@dcd.cccounty.us
4.	**Project Location:**	Two parcels (±3.81 acres) located on Alves Lane & Canal Road in Bay Point (Assessor's Parcel Numbers: 093-100-059, 093-100-060)
5.	**Project Sponsor's Name and Address:**	Chris Maffris, Vice President Alves Lane, L.P. 11150 W. Olympic Boulevard, Suite 620 Los Angeles, CA 90064
6.	**General Plan Designation:**	Multi-Family Medium Density (MM)
7.	**Zoning:**	Bay Point Planned Unit (P-1)

8. Description of Project: The applicant seeks approval of a Development Plan to allow the construction of a new apartment complex. Designed as family housing, the project proposes approximately 15 one-bedroom units, 15 two-bedroom units, 36 three-bedroom units, and 34 four-bedroom units. Vehicular access is provided around three sides of the building with surface parking at the ground floor. Site access is consolidated through a driveway on the eastern side of the subject property. The building creates an interior courtyard that will be a public outdoor amenity for the community residents. The courtyard will feature a play area, community gardens, seating areas, and community room access for an indoor/outdoor living experience for residents.

The project consists of the following elements:

- One multiple-family residential building consisting of three- and four-story elements and approximately 125,350 square feet of living, common/amenity, circulation, and utility areas;
- 100 one-, two-, three-, and four-bedroom units (13 of which are reserved for lower income households);
- A density bonus of 20% (17 units) beyond the 83 units allowed under the applicable density standards, as a result of the proposed affordable units and as permitted under the County's Residential Density Bonus Ordinance;

- 203 uncovered off-street parking spaces;
- An approximately 16,000 square-foot interior courtyard with family play area, outdoor dining area, and passive seating areas;
- An approximately 1,800 square-foot fenced dog park with dog drinking fountains, and pet waste stations;
- Approximately 47,486 square feet of landscaping;
- Perimeter fence;
- An ungated driveway near the eastern side and a gated driveway at the western side of the property;
- One monument sign identifying the development;
- 8-inch water and fire protection lateral extensions from the project site to a new, 8-inch water main located within the Alves Lane right-of-way;
- New 8-inch water main within the Alves Lane right-of-way extending approximately 2,500 linear feet from the intersection of Alves Lane and Virginia Drive to the intersection of Canal Road and Chadwick Lane. The new main extension will cross the Contra Costa Canal at locations east and west of the project site, and will do so via two existing roadway bridges and using one of three location options: 1) within split/multiple 4-inch services within the annular structure of the bridge, 2) attached to the bottom of the bridge with Unistrut fittings (similar to existing storm drain pipes), or 3) attached to side of bridge with Unistrut fittings;
- 8-inch sanitary sewer lateral connection extending approximately 400 linear feet from the project site to an existing sanitary sewer main within the Alves Lane right-of-way;
- Seven on-site bio-retention areas for drainage totaling 5,188 square feet;
- Utility connections for electrical, gas, cable, and telecommunications to existing extensions within the public right-of-way, via underground joint trenches;
- Construction of curb, gutter, and 5-foot-wide monolithic public sidewalk on the north side of Alves Lane fronting the subject property and extending approximately ~~750~~ 700 linear feet ~~to the~~ east of the easterly subject property line of APN 093-100-060 ~~along the Contra Costa Canal frontage~~ to connect to the existing public sidewalk;
- Street lighting and pavement widening along the subject property frontage of Canal Road with a curb face a minimum of 17 feet from the road centerline;
- Cut and fill grading activities consisting of approximately: 8,000 cubic yards of cut and 13,000 cubic yards of fill, for a net total 5,000 cubic yards of soil; and
- A lot merger of the two parcels, approximately 3.81 acres in area.

The project requests the following concession, deviations, and exception:

- A density bonus concession for a project height up to 45 feet (where 30 feet is the maximum pursuant to the Pittsburg/Bay Point BART Station Area Specific Plan);

- A deviation for a 6-foot front setback (where 10 feet is required) to allow parking spaces within the setback;
- A deviation for a 7-foot side yard (where 20 feet is required) to allow parking spaces within the side yard;
- A deviation for a 9-foot side yard (where 20 feet is required) to allow the construction of a trash enclosure;
- A deviation for a 1-foot side yard (where 20 feet is required) to allow the construction of retaining walls over 3 feet in height;
- A deviation to allow front setbacks as small as 2-feet (where 10 feet is required) to allow the construction of retaining walls over 3 feet in height; and
- An exception to collect and convey requirements (Chapter 914) to allow a diversion from drainage area (DA) 48B to DA 48D.

In the event that future analysis of DA 48D finds that it is inadequate, the applicant has proposed an alternative drainage plan to use the existing drainage system in DA 48B to the west. The proposed alternative consists of the following elements:

- Underground storm drain lift station vault with electric, duplex 10 horsepower (HP) ejector pumps (final size/capacity of vault to be determined);
- Lift station sump pit;
- Natural gas-powered emergency generator within an approximately 2.5-foot tall, 8-square-foot screened enclosure (location to be determined);
- 60-inch underground storm drain line with ±10,600 cubic feet storage capacity;
- Six storm drain manholes on the subject property for access to 60-inch storm drain line;
- 6-inch underground force main line on the subject property;
- One private storm drain manhole and transition force main on the subject property to connect to gravity storm drain in County right-of-way;
- New, 12-inch storm drain pipe located within the Alves Lane right-of-way extending ±450 linear feet northwest to tie-in to the existing storm drain drain inlet (SDDI) on Alves Lane.

9. **Surrounding Land Uses and Setting:** The project site consists of two, vacant parcels approximately 3.81 acres in area, located along the northern boundary of Alves Lane approximately 700 feet east of Virginia Drive and approximately 950 feet west of Chadwick Lane. The California Delta Highway, also known as State Route 4 (SR-4), is approximately 100 feet south of the project site. The project site has a natural downward slope to the north with existing elevations ranging from approximately 119 feet to 130 feet above sea level for an average 5% slope gradient. Areas of the lot with the greatest slope are those immediately adjacent to Alves

Lane, ranging between a 6% and 16% slope gradient. The lot is currently devoid of trees or any significant vegetation.

The subject property is located within a developed, urban area of Bay Point, in unincorporated Contra Costa County. Existing land uses in the vicinity consist of medium-density single-family residential development and related uses such as churches, schools, and commercial uses nearby to the west, east, and north. The Contra Costa Canal (Canal) is north of and adjacent to the project site. The Canal is an engineered, raw-water aqueduct that was constructed in the 1930s to divert surface water from the Sacramento-San Joaquin Delta to Contra Costa Water District (CCWD) water treatment plants, local water agencies, and other East Bay cities for agricultural, industrial, and municipal uses.

~~and the California Delta Highway, also known as State Route 4 (SR-4), is approximately 100 feet south of the project site.~~ The subject property is within the Pittsburg/Bay Point BART Station Area Specific Plan area and is located approximately 800 feet northwest of the BART station. The Delta de Anza Regional Trail is located north of the subject property and a connection to the trail at Bailey Road is approximately 1/2-mile walking or cycling distance. The subject property fronts Alves Lane, a 2-lane road with existing curbs, sidewalks, and storm drain improvements to the east of the property.

10. Other public agencies whose approval may be required (e.g., permits, financing, approval, or participation agreement). Please be advised that this may not be an exhaustive list and that approval may be required from other public agencies not listed here:

- Contra Costa County Public Works Department
- Contra Costa County Building Inspection Division
- Contra Costa County Fire Protection District
- Contra Costa County Health Services Department, Environmental Health Division
- Contra Costa Water District
- Golden State Water Company
- Delta Diablo Sanitary District
- Caltrans
- California Department of Fish & Wildlife
- U.S. Bureau of Reclamation

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

A Notice of Opportunity to Request Consultation was sent on January 14, 2021, to Wilton Rancheria. As of the writing of this Initial Study, Wilton Rancheria has not responded to the Opportunity to Request Consultation. Therefore, consultation with Native American tribes has not occurred in relation to this project. As a courtesy, the County will provide a copy of this environmental document for the Tribe's comments.

Environmental Factors Potentially Affected

The environmental factors checked below would have been potentially affected by this project, but have been mitigated in a manner as to not result in a significant effect on the environment:

☒ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☐ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☒ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☒ Noise	☒ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Services Systems	☐ Wildfire	☐ Mandatory Findings of Significance

Environmental Determination

On the basis of this initial evaluation:

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

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

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

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

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

Syd Sotoodeh — 11/23/2021

Syd Sotoodeh
Project Planner
Contra Costa County
Department of Conservation & Development

Date

ENVIRONMENTAL CHECKLIST

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. *AESTHETICS –* *Except as provided in Public Resources Code Section 21099,* **would *the project*:**				
a) Have a substantial adverse effect on a scenic vista?	☐	☒	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

SUMMARY:

a) Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact With Mitigation Incorporated: The Open Space Element of the County General Plan identifies major scenic ridges and waterways within the County. The project site is located in a low-lying area of Bay Point approximately one mile south of the Bay Point shoreline where Suisun Bay and the San Joaquin/Sacramento River delta converge. These northerly waterways are identified as scenic resources in the General Plan (Figure 9-1) and there is a potential impact of northerly views of these waterways from the project site or surrounding properties.

The project site and the majority of the adjacent properties including those to the north and east are relatively flat with gradual elevation changes. In addition, the fairly dense structural development in this area of Bay Point reduces the number of locations where views of scenic resources such as Suisun Bay or the San Joaquin/Sacramento River Delta are available. Thus, few of the adjacent and nearby properties to the north of the project site have scenic views of the northern shoreline.

The section of the California Delta Highway (SR-4) that is located approximately 100 feet south of the project site is identified in Figure 5-4 of the County General Plan as a "connecting" highway between County-designated scenic routes or highways and thus has scenic potential. Scenic views from SR-4 in this vicinity of Bay Point include short range views of grass covered hillsides and long-range views of the northern shoreline where the California Delta meets Suisun Bay when not blocked by highway berms or soundwalls. In addition, industrial developments with tall smokestacks near the shoreline may be considered by some to have scenic qualities.

BART passengers waiting for trains on an elevated platform between the east- and west-bound lanes of SR-4 may enjoy distant views of the northern shoreline. However, the elevated platform of the BART station is of a sufficient distance from the project site that the proposed 45-foot height of the proposed residential development would have little to no impact on those view. West of the BART station and fronting W. Leland Road are large, vacant properties with the potential for future residential development. Due to the proposed maximum height of the Alves Lane apartments, the upper story and rooftops of the building may be visible from the properties in this area of W. Leland Road, and thus, may impact their scenic vistas. However, there are differences in elevation ranging between 120 feet above sea level at the proposed project site and 230 feet above sea level at the vacant properties along W. Leland Road which would ensure that there would be no or less than significant impacts on scenic views from any future residences fronting W. Leland Road.

The applicant has proposed a landscaping plan which consists of installing large canopy shade trees along the project site frontage and throughout the proposed development. The proposed trees include species such as Arbutus 'Marina' and Japanese zelkova which grow to heights ranging from 45 feet to 80 feet when mature. The mature height and location of the proposed trees will partially obscure, or "break-up" views of the proposed building as seen from surrounding properties. As a result, the appearance and bulk of the proposed building within the development will be reduced, including for those properties to the south that may have northerly scenic views.

Potential Impact:

There is a potential for the proposed 45-foot maximum height of the proposed residential development to impact northerly views of the northern shoreline and waterways. Although trees and landscaping proposed for installation throughout the property would break up views of the proposed buildings as seen from adjacent and nearby properties, enhance the aesthetics of the property, and reduce adverse impacts on views from other properties, it is important to ensure that the proposed landscaping is properly irrigated and maintained for the life of the proposed use. Thus, implementation of the following mitigation measure will ensure that the proposed project's adverse effects on scenic vistas will be less than significant.

AES-1: **Prior to Department of Conservation and Development, Community Development Division (CDD) stamp-approval of plans for issuance of a building or grading permit, whichever occurs first**, a final landscape and irrigation plan that is compliant with the State Model Water Efficient Landscape Ordinance, or the County's water conservation ordinance if one has been adopted, shall be submitted to the CDD for review and approval. The plans shall be designed in general accord with the preliminary landscape plans received by the CDD on August 7, 2020. The purpose of the final landscaping plan is to enhance the aesthetics of the property and to help screen the building from adjacent properties and from northerly viewpoints towards the Suisun Bay and Sacramento/San Joaquin River Delta.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?

Less Than Significant Impact: SR-4, otherwise known as the California Delta Highway, is located approximately 100 feet south of the project site. As mentioned above, this nearby section of SR-4 is considered to be a "connecting highway" between County designated scenic routes or

highways. Connecting routes are considered by the County to have scenic potential. However, there are no trees, rock outcroppings, or existing buildings on the subject property that will be impacted as a result of the project. Thus, the project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway.

c) *In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Less Than Significant Impact: Generally speaking, the intent of the General Plan and Pittsburg/Bay Point BART Station Area Specific Plan (Specific Plan) Multi-Family Medium Density (MM) land use designation, in which the property resides, is to provide for residential infill development in the Specific Plan area at a density which is supportive of transit usage. In general, the project has been designed pursuant to the guidelines for development within the Bay Point (P-1) Planned Unit zoning district and the Specific Plan area (including, specifically, Zone III Development Zone). The proposed project has been designed to be compatible with the existing residential developments in the area, including orienting the main entrance towards the Alves Lane frontage, incorporating sloped roof elements, and breaking up the building into smaller visual segments by alternating the height between 3- and 4-stories along Alves Lane. The Bay Point P-1 zoning district allows a maximum 45-foot height for residential buildings in the MM land use designation, however, the Specific Plan limits building height for residential development within MM designated areas to a maximum of 30 feet. Therefore, the applicant has requested, and the Department of Conservation and Development has preliminary accepted for purposes of continuing staff's review of the application, one density bonus concession for a 45-foot maximum height. If approved, the proposed 45-foot maximum height would allow the project proponent to construct 100 new housing units within 1/2-mile of the BART station and as such are supportive of transit usage. Therefore, the proposed project would not be in conflict with the intent of the Specific Plan.

Along with proposed driveway improvements for ingress and egress, the project approval would be conditioned to require the replacement of any existing, cracked or displaced curbs or gutters, and the construction of new sidewalk along the site's Alves Lane frontage. The sidewalk, curb, and gutter improvements would extend to the east beyond the subject property and connect to the existing right-of-way improvements just west of Chadwick Lane.

The applicant has proposed an alternative drainage plan to use the existing drainage system in drainage area (DA) 48B to the west of the project site in the event that future analysis indicates the capacity of DA 48D is inadequate and a diversion to that drainage area is not feasible. The majority of the elements of the proposed alternative, including the storm drain lines, lift station vault, and pumps, would be installed on the site underground. However, one element of the proposed alternative has the potential to impact the visual quality and character of the site. If the alternative drainage system is installed, the project proposes an emergency generator to be located onsite within an approximately 8 square-foot above ground enclosure that would be approximately 2-1/2 feet in height. The proposed lift station vault would be located under the parking area in the northwestern area of the project site. Although the location of the emergency generator and its enclosure is to-be-determined, it would be near the proposed lift station vault. Two potential

locations for the emergency generator have been identified within landscaped areas, including one adjacent to the proposed dog park. Implementation of mitigation measures AES-3 and AES-4 in subsection-d below would ensure that, if installed, any potential impacts of the emergency generator and its enclosure on the visual character of the site would be reduced to less than significant levels.

In order to provide water and fire protection services to the project, the applicant will be required to extend an 8-inch water mains approximately 2,500 linear feet from the intersection of Alves Lane and Virginia Drive to the intersection of Canal Road and Chadwick Lane. The water main extension will be entirely within the existing Alves Lane/Canal Road right-of-way; however, it will cross the Canal at two off-site locations. The extended water service pipelines would utilize existing roadway bridges and thus, would remain within the County right-of-way. Three potential design options involve attaching the water pipes to the bottom of the bridge, installing the pipe conveyances below the paved driving surface, or attaching the water pipe to the side of the bridge behind the existing railing and chain link fence. Thus, none of the three potential water service bridge crossing options would have a significant impact on the visual character of the bridges, Alves Lane, or the surrounding area.

In its current state, the visual character of the project site is relatively low due to its lack of development juxtaposed with its built-out surroundings. The project is consistent with Zoning, General Plan, and Specific Plan regulations that promote the visual character of the Specific Plan Development Zone, Alves Lane, and the Bay Point area in general. Consequently, approval of the residential development is likely to significantly improve the visual character of the project site.

d) *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Less Than Significant With Mitigation: As required by ordinance, the proposed project will include the installation of lighting fixtures mounted to the exterior walls of the buildings to illuminate the parking areas and to allow for safe circulation around the subject property during times of low natural light. Design Guidelines for the Bay Point area include regulations for exterior lighting that are intended to minimize light intrusion from the development onto nearby properties. The applicant has submitted a preliminary lighting plan, consistent with these guidelines, detailing the location and type of proposed exterior lighting. Lighting fixtures would include pole-top luminaires for walkway lighting, LED area luminaires for parking lot lighting, and wall-mounted light fixtures mounted on the proposed buildings. Due to the proposed landscaping including trees and shrubs throughout the property, the location of the Contra Costa Canal adjacent to the northern property line, and SR-4 immediately south of Alves Lane, the potential for light spillover significantly affecting neighboring parcels is limited. Nevertheless, without mitigation, the introduction of new light sources could result in potentially significant impacts on nighttime views. The façade of the buildings, with stucco finish and standard-sized windows, would not create substantial glare, therefore, upon implementation of mitigation measures for the proposed lighting the project would have a less than significant impact on daytime views in the vicinity of the project site.

Potential Impacts:

Without adequate design and correct installation, project lighting could spill off-site and could result in a potentially significant adverse environmental impact due to substantial new light and

glare on neighboring properties. Additionally, although a stucco finish would not create substantial new glare, other building finishes (e.g., metal) could potentially result in a new substantial impact on neighboring properties due to sunlight and daytime glare. Thus, the following mitigation measures ensure such impacts from project lighting would have a less than significant impact on nighttime views and daytime glare in the area.

AES-2: All outdoor lighting, including façade, yard, security, and streetlights, shall be oriented down towards building and parking areas on the subject property.

AES-3: External illumination shall be shielded, where necessary to avoid glare and to ensure that lighting is contained within the subject property.

AES-4: The use of highly reflective materials, including, but not limited to, glass and unfinished metals, shall be prohibited from use.

AES-5: All exterior components of the proposed residential buildings, trash and other enclosures, and structures within the private recreational area and dog park shall be finished with paints or other materials with a reflectivity of less than 55 percent.

Sources of Information

Dahlin; KPFF; R3 Studios. Revised Project Plans. Received on 7 August 2020 and 30 October 2020.

Caltrans. "Scenic Highways: California State Scenic Highways." Website and map. Accessed 29 January 2021. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways

City of Pittsburg, Contra Costa County, & Bay Area Rapid Transit District. "Pittsburg/Bay Point BART Station Area Specific Plan." Adopted 18 June 2002

Contra Costa County General Plan. "Chapter 3: Land Use Element." 2005 – 2020. http://www.co.contra-costa.ca.us/DocumentCenter/View/30913/Ch3-Land-Use-Element?bidId=.

Contra Costa County General Plan. "Chapter 5: Transportation and Circulation Element." 2005-2020. http://www.co.contra-costa.ca.us/DocumentCenter/View/30915/Ch5-Transportation-and-Circulation-Element?bidId=.

Contra Costa County General Plan. "Chapter 9: Open Space Element." 2005-2020. http://www.co.contra-costa.ca.us/DocumentCenter/View/30919/Ch9-Open-Space-Element?bidId=.

KPFF. Typical bridge section plan, water service crossing options. Received on 1 November 2021.

Staff Site Visit, 24 June 2020.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2. *AGRICULTURAL AND FOREST RESOURCES – Would the project:*				

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

***SUMMARY**:*

a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

No Impact: The project site, located in the Bay Point P-1 Planned Unit zoning district and the Multiple Family Medium Density (MM) General Plan Land use designation, is within an "Urban and Built-Up Land" area as shown on the California Department of Conservation's *Contra Costa County Important Farmland 2016* map. Neither the subject property, nor those in the vicinity, are zoned for agricultural use. The site is not under a Williamson Act contract with the County. Additionally, the project site is not considered forest land as defined by California Public Resources Code Section 12220(g) or timberland as defined by California Public Resources Code Section 4526. Development of the proposed residential project would not involve substantial changes to the existing urban environment. Therefore, the project will have no impact on agricultural or forest resources.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact: Please see discussion in subsection-a above.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g) or conflict with existing zoning for, or cause rezoning of, forest land (as defined

in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?

No Impact: Please see discussion in subsection-a above.

d) *Would the project involve or result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact: Please see discussion in subsection-a above.

e) *Would the project involve other changes in the existing environment, which due to their location or nature, could result in conversion of farmland, to non-agricultural use?*

No Impact: Please see discussion in subsection-a above.

Sources of Information

Contra Costa County Code. "Title 8 – Zoning." Accessed in 2020. https://library.municode.com/ca/contra_costa_county/codes/ordinance_code?nodeId=TIT8ZO.

California Department of Conservation. "California Important Farmland Finder." Accessed in 2020. https://maps.conservation.ca.gov/DLRP/CIFF/.

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

***SUMMARY**:*

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Less Than Significant Impact: Contra Costa County is within the San Francisco Bay air basin, which is regulated by the Bay Area Air Quality Management District (BAAQMD) pursuant to the *Spare the Air, Cool the Climate Final 2017 Clean Air Plan*. The purpose of the *Clean Air Plan* is to bring the air basin into compliance with the requirements of Federal and State air quality standards and to protect the climate through the reduction of criteria pollutants and greenhouse gases. BAAQMD has prepared CEQA Guidelines to assist lead agencies in air quality analysis,

as well as to promote sustainable development in the region. The potential air quality impacts for this project were evaluated using the BAAQMD 2017 CEQA guidelines screening criteria, Pursuant to these guidelines, if a project does not exceed the screening criteria size it is expected to result in less than significant impacts to air quality.

The operational criteria pollutant screening size for the land use type "Apartment, Mid-Rise" is 494 dwelling units, and the construction-related screening size is 240 dwelling units. The proposed 100 dwelling unit apartment complex is below the residential screening criteria for a mid-rise apartment complex for both operational (i.e., occupancy of the residential units) and construction-related pollutants. Furthermore, the screening criteria developed by BAAQMD generally represent new development on greenfield sites. The proposed project is proximate to regional transit service (i.e., BART) and could be considered an infill project in the otherwise developed, surrounding area of Bay Point. In addition, increased density, integrating below market rate housing, and improving pedestrian networks as proposed by this project are considered by California Air Districts to be acceptable mitigation measures to reduce operational impacts on air quality or greenhouse gases (California Emissions Estimator Model (CalEEMod)). According to BAAQMD, the expected emissions for operation or construction of infill or transit-proximate projects would be less than for those constructed in a previously undisturbed, greenfield site.

The County's Climate Action Plan (CAP) is designed to reduce local greenhouse gas (GHG) emissions while improving community health through consistency with the BAAQMD's guidance on preparing a qualified GHG reduction strategy and State Assembly Bill (AB) 32 GHG reduction targets. To assist staff and developers with implementation of the GHG reduction strategy, the CAP includes a development checklist (Appendix E) with strategies for project consistency with the CAP. Such strategies include the installation of high-efficiency appliances, insulation, electric vehicle (EV) charging stations, and locating new development within one half-mile of a BART, Amtrak, or bus station. Staff will recommend conditions of approval to require verification by staff of the County Building Inspection (BID) and Community Development Division (CDD) of the project's compliance with Appendix E standards prior to issuance of building permits.

Therefore, the potential for the project to conflict with or obstruct implementation of BAAQMD's Clean Air Plan or the County's Climate Action Plan is less than significant.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact: As mentioned above, the proposed 100-unit apartment complex is less than the criteria pollutant screening size determined by the BAAQMD, and thus would not result in significant emissions of criteria air pollutants during the construction period or during project operation. In addition, by implementing the strategies of the County CAP to reduce GHG emissions, although the proposed project would contribute incrementally to the level of criteria air pollutants in the atmosphere, the project would have a less than significant impact on the level of any criteria pollutant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant With Mitigation Incorporated: The project site is bounded on the south by SR-4 and otherwise located within an area of Bay Point that is primarily residential with auxiliary uses such as churches. The nearest sensitive receptors (including residences and church uses) are approximately 100 feet to the northeast, north, and northwest of the project site. The BAAQMD's 2017 CEQA Guidelines is a guidance document to provide lead agencies with uniform procedures for assessing air quality impacts and preparing the air quality and greenhouse gas sections of environmental documents for projects subject to CEQA. The CEQA Guidelines describe the quantitation thresholds for use in determining whether operational and construction-related activities would have significant environmental impacts, including those related to substantial pollutant concentrations. Table 2-1 of the CEQA Guidelines identifies the air quality thresholds of significance for project operations and construction.

CalEEMod is a statewide land use emissions computer model designed in collaboration with the air districts of California to provide a uniform platform for quantifying potential criteria pollutants and GHG emissions associated with construction and operational activities of land use projects. Thus, the project, including the proposed alternative drainage plan consisting of an electric ejector pump and a natural gas emergency generator, was evaluated using this tool. Proposed mitigation measures and project characteristics such as the proximity of the project to regional transit service (i.e., BART), increased density, integrating below market rate housing, and improving pedestrian networks were considered. Based on project specific data, the proposed improvements, mitigation measures, and default data of the CalEEMod computer model, the 100-unit apartment complex's projected operational emissions levels will be well below the BAAQMD's thresholds for Reactive Organic Gases (ROG), Nitrogen Oxides (NO_X), and Particulate Matter (PM_{10}) as shown in the chart below.

Emissions Type	Significant Emissions Rate (tons/year)	Project Emissions (tons/year)*
ROG	10	0.5874
NO_X	10	0.4506
PM_{10} (exhaust)	15	0.3313
$PM_{2.5}$ (exhaust)	10	0.0963

*Project Emissions calculated using CalEEMod emissions computer model version 2016.3.2

Construction activities would result in localized emissions of dust and diesel exhaust that could result in temporary impacts to sensitive receptors (e.g., nearby residences, churches). Construction and grading activities would produce combustion emissions from various sources, including heavy equipment engines and motor vehicles used by the construction workers. Dust would be generated during site clearing, grading, and construction activities. The amount of dust generated would be highly variable and would be dependent on the size of the area disturbed, amount of activity, soil conditions, and meteorological conditions. Exhaust emissions and particulate matter produced during construction activities are considered by the BAAQMD as less than significant if certain control measures are implemented.

Potential Impact:

Although temporary, grading and construction activities could have a potentially significant adverse environmental impact on sensitive receptors during project construction. Consequently, the applicant is required to implement the following BAAQMD, Basic Construction Mitigation Measures during construction, as recommended by the BAAQMD to reduce construction dust and exhaust impacts.

The following mitigations shall be included on all construction plans and implemented throughout the construction phase of the project:

AIR-1: All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

AIR-2: All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

AIR-3: All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

AIR-4: All vehicle speeds on unpaved roads shall be limited to 15 mph.

AIR-5: All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

AIR-6: Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

AIR-7: All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.

AIR-8: The property owner or site contractor shall post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

AIR-9: Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.

AIR-10: All contractors shall use equipment that meets the California Air Resources Board' s (CARB) most recent certification standard for off-road heavy duty diesel engines.

Implementation of these mitigation measures would reduce the impact on the sensitive receptors during project construction to a less than significant level.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact: The BAAQMD's 2017 CEQA guidelines indicate that odor impacts can occur from two different situations: 1) siting a new odor source, or 2) siting a new sensitive receptor (e.g., residents). Although not absolute, screening level distances between sources and receptors are utilized by BAAQMD to identify potentially significant impacts from malodors. Depending on the type of land use, the identified screening distance is between one and two miles as shown on Table 3-3 of the CEQA Guidelines. These distances are to be used in conjunction with available complaint history. For example, any odor source with five or more confirmed complaints per year, averaged over three years, is considered to have a significant impact on receptors within the applicable screening distance. Examples of land uses which may potentially generate significant odors include wastewater treatment plants, landfills/composting stations, refineries, chemical plants, etc.

Based on available County GIS data, the project site is located within two miles of land uses that may fall under the Chemical Manufacturing land use category for odors, including, but not limited to, the Henkel Corporation (adhesive technologies) and Criterion Catalyst Company (production of catalyst materials for refining applications). BAAQMD is the agency that monitors and enforces air quality regulations in the Contra Costa County area, and thus, is the agency that receives and responds to complaints regarding odors. Although the proposed project will be located within the screening distance of potential odor sources, the potential for the new sensitive receptor (i.e., residents) of the proposed development being subjected to significant objectionable odors is less than significant. This is partially due to the fact that the potential odor sources mentioned above would be subject to the air quality regulations of the BAAQMD, who place general limitations on odorous substances and specific emission limitations on certain odorous compounds. Therefore, if any of the potential odor sources located within two miles of the project site do produce odorous emissions or compounds, the BAAQMD' s enforcement of their odorous substances standards would reduce potential objectionable odor exposure to a less than significant level.

Sources of Information

California Emission Estimator Model (CalEEMod). 2016

Bay Area Air Quality Management District. "California Environmental Quality Act, Air Quality Guidelines." May 2017. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

Bay Area Air Quality Management District. "Spare the Air, Cool the Climate Final, 2017 Clean Air Plan." Adopted 19 April 2017. http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en.

Contra Costa County. "Climate Action Plan." Adopted by the Contra Costa County Board of Supervisors on 15 December 2015. http://www.co.contra-costa.ca.us/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4. *BIOLOGICAL RESOURCES – Would the project:*				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

SUMMARY:

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact With Mitigation Incorporated: The Alves Lane corridor in Bay Point is an urbanized area consisting primarily of single-family residential and auxiliary land uses. The subject 3.85-acre site is currently vacant and is surrounded by other vacant lots, single-family developments, churches, and SR-4. A portion of the Contra Costa Canal (Canal), which is an engineered, raw-water aqueduct owned by the U.S. Bureau of Reclamation and operated and maintained by the Contra Costa Water District (CCWD), runs north of and adjacent to the subject property. Although the CCWD indicates birds and aquatic species use the Canal because it is an

open waterway, as a man-made raw water aqueduct for the conveyance of water from the Delta to urban areas, it is neither a natural watercourse nor a refuge for sensitive habitats.

A Biological Resources Assessment (Assessment) was prepared by Olberding Environmental, Inc. (Olberding), Wetland Regulatory Consultants, for the project site. Preparation of this report included a review of pertinent data sources, including a query of the California Natural Diversity Database (CNDDB) and literature on relevant background information and habitat characteristics of the project area. In addition, a reconnaissance-level (field) survey of the property was conducted on May 26, 2020 to assess and record the current site conditions and adjacent lands for potential biological resources. The field survey observed existing conditions, plants and wildlife species, adjacent land uses, soils, and potential biological resource constraints. The objectives of the field survey were to determine the potential presence or absence of special-status species habitat and wetland areas. The Assessment came to the following conclusions:

Special-status Plants: A query of the California Natural Diversity Database (CNDDB) showed that seventeen special status plant species have been recorded within a 5-mile radius of the subject property with the majority of those species occurring approximately 2.0 to 4.0 miles north of the property within the marshland habitat surrounding Suisun Bay. Suitable habitats for these species include alkaline and serpentine environments, chaparral, freshwater wetlands and riparian habitats, and brackish marsh habitat, none of which are found on the subject property. The subject property contains non-native annual grassland habitat that is frequently disturbed by property management practices such as disking for weed abatement. This, along with the clay soils present throughout the subject property, makes it unlikely that these special status plant species would occur. For these reasons, a rare plant survey is not needed.

Special-status Wildlife:

Foraging or Nesting Raptor/Passerine Species – A total of seven bird species were identified as having potential to occur on the Property in a foraging capacity only. Four species including red-shouldered hawk, red-tailed hawk, white-tailed kite, and American kestrel had a high potential to occur in a foraging capacity only. Ferruginous hawk, northern harrier, and Cooper's hawk had a moderate potential to occur in a foraging capacity only. The white-tailed kite and American kestrel were observed foraging on the Property during the time of the survey.

Special-Status Mammals – Given the absence of suitable onsite habitat; the hoary bat and western red bat have a low potential to occur on the Property in a foraging capacity only. No immediate signs were present during the initial survey and although suitable roosting trees were located on adjacent property, the lack of recent and nearby occurrences makes it unlikely that these species will occur on the Property.

Special-Status Amphibians – Several CNDDB occurrences of California red-legged frog (CRLF) are recorded in the vicinity of the Property. The Property lacks suitable breeding, dispersal and foraging habitat. There were no active ground squirrels or extensive burrow complexes on the Property that would provide suitable upland refuge habitat for these species. Additionally, the Property is surrounded by developments and SR-4, making dispersal from known occurrences unlikely. For these reasons CRLF is presumed absent from the Property.

Special-Status Reptiles – The western pond turtle was identified as having a low potential to occur on the Property. The lack of aquatic habitat within the Property, along with the absence of

sandy soils for nesting made the Property unsuitable for western pond turtle. Additionally, the fencing bordering the Property and adjacent land act as barriers to movement which would prevent potential dispersal from the nearby Contra Costa Canal. For these reasons, western pond turtle is presumed absent.

Special-Status Invertebrates – Two historical CNDDB occurrences of western bumble bee were recorded within the vicinity of the Property. Due to lack of floral resources, recent nearby occurrences, and small mammal burrows for nesting and overwintering within the Property, the western bumble bee is presumed absent.

Potential Impacts – Special Status Birds:

According to the Assessment prepared by Olberding, the potential for the proposed project to have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or US Fish and Wildlife Service is unlikely or of low probability. However, construction, grading, and excavation activities ~~during construction periods~~ have the potential to impact potentially occurring nesting birds ~~and to adversely affect aquatic life or reduce wildlife habitat within the adjacent Contra Costa Canal due to runoff during grading and excavation activities~~.

Thus, implementation of the following mitigation measure~~s~~ would bring potential project-related impacts on special status birds ~~biological resources and aquatic organisms~~ to less than significant levels:

BIO-1: **Pre-Construction Avian Survey** – If project construction-related activities would take place during the nesting season (February through August), preconstruction surveys for nesting passerine birds and raptors (birds of prey) within the Property and the large trees within the adjacent area should be conducted by a competent biologist **no more than five (5) days prior to the commencement of site grading or construction activities**. If any bird listed under the Migratory Bird Treaty Act is found to be nesting within the project site or within the area of influence, an adequate protective buffer zone should be established by a qualified biologist to protect the nesting site. This buffer shall be a minimum of 75 feet from the project activities for passerine birds, and a minimum of 200 feet for raptors. The distance shall be determined by a competent biologist based on the site conditions (topography, if the nest is in a line of sight of the construction and the sensitivity of the birds nesting). The nest site(s) shall be monitored by a competent biologist periodically to see if the birds are stressed by the construction activities and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), the project can proceed without further regard to the nest site(s).

Potential Impacts – Aquatic Life/Habitat:

While birds and aquatic species use the Canal because it is an open waterway, as a man-made raw water aqueduct it is neither a natural watercourse nor a refuge for sensitive habitats. However, there is the potential for the project to adversely affect aquatic life or raw water quality within the adjacent Canal due to runoff or debris during construction, grading, and excavation activities.

In addition to implementation of mitigation measures **HYD-1** through **HYD-3**, implementation of the following mitigation measure would bring potential project-related impacts on biological resources and raw water quality to less than significant levels:

BIO-2: **Erosion Control – Prior to any ground disturbance**, the appropriate best management practices (BMPs) for erosion and sediment control including, but not limited to, a silt construction fence, hay bales, and placement of straw mulch shall be installed around the construction site. No drainage, project runoff, or debris may enter the Contra Costa Canal or U.S. Bureau of Reclamation property. After construction, hydro seeding of exposed soils shall be completed as identified in the Storm Water Pollution Prevention Plan (SWPPP).

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact With Mitigation Incorporated: Please see discussion in subsection-a above.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact: The U.S. Army Corp of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) are two of the primary Federal agencies which enforce the Clean Water Act and administer the associated permitting program. As such, these agencies define wetland as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Although a portion of the Contra Costa Canal runs north of and adjacent to the subject property, there are no streams or creeks on the subject property. The Canal is an engineered (man-made) raw water aqueduct for the conveyance of water from the Delta to urban areas and thus is neither a natural watercourse nor a state or federally protected wetland environment. Additionally, according to the assessment by Olberding Environmental, Inc., the subject property lacks evidence of all three parameters (wetland soils, hydrology, and vegetation) that are used to determine the existence of wetlands. Therefore, the subject property does not ~~appear to~~ contain wetlands/waters that may be considered jurisdictional by the Corps, the EPA, the California Department of Fish & Wildlife, or the Regional Water Quality Control Board ~~because the site lacks evidence of all three parameters (wetland soils, hydrology, and vegetation) that are used to indicate wetlands;~~ . ~~Thus~~and thus, the proposed project would have no impact or substantial adverse effect on a federally protected wetland.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

Less Than Significant Impact With Mitigation Incorporated: Please see discussion in subsection-a above.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact: The Contra Costa County Tree Protection and Preservation Ordinance provides for the protection of certain trees by regulating tree removal while allowing for reasonable development of private property. There are no trees on the subject property, therefore, the project will have no impact relating to tree resources and has no potential to conflict with the County Tree Ordinance.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact: The East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCC HCP/NCCP) was adopted by the County in October of 2006. The purpose of this plan is to provide a framework to protect natural resources while streamlining the environmental permitting process for impacts to covered special status species within the rapidly expanding region of Eastern Contra Costa. The proposed project site is located within an area of Contra Costa County that is covered by the ECCC HCP/NCCP, however, the project is exempt from HCP/NCCP Ordinance No. 2007-53 because the area is mapped as urban and no further action is deemed necessary. Thus, the project would not conflict with any conservation plan.

Sources of Information

Contra Costa Water District. "Comments on the Alves Lane Apartments Project Initial Study (CDDP20-03011)." Letter. 25 June 2021.

East Contra Costa County Habitat Conservancy. "Proposed project, County File Number DP20-3011." Agency Comment Response Letter. 2 June 2020.

Olberding Environmental, Inc. "Biological Resources Analysis Report for the Alves Lane Property." Prepared for Meta Housing Corporation. June 2020

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
5. *CULTURAL RESOURCES – Would the project:*				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

SUMMARY:

a) Would the project *cause a substantial adverse change in the significance of a historical resource pursuant to* California *Environmental Quality Act Guidelines Section 15064.5?*

Less Than Significant With Mitigation Incorporated: A prior EIR prepared for the Pittsburg/Bay Point BART Station Area Specific Plan indicates that no specific cultural resources

are known to occur within the Specific Plan area. In addition, Study # 11896 (Morgan and Zimmerman), covering approximately 30% of the proposed project area, identified no cultural resources, and, according to comments received from the California Historical Resources Information System (CHRIS), there is a low possibility that the proposed project area contains unrecorded resources. Thus, no further study of archeological resources is recommended at this time. In addition, according to CHRIS, the 1953 USGS Honker Bay 7.5' quad map depicts an unrecorded building in the project area, which, if present, would meet the Office of Historical Preservation's minimum age standard (45 years or older) for considering historical value. However, staff observed during a site visit on June 24, 2020 that the project site is completely devoid of buildings and structures, and the County has no records of any building being present on the subject property.

Potential Impacts:

Although prior studies indicate that there are no specific cultural resources known either in the Specific Plan area or on the project site, there is nevertheless a potential for previously unknown cultural resources to be uncovered during the construction phase of the project.

The following mitigation measures will ensure that in the event cultural resources are discovered, the proper actions are taken to reduce the adverse environmental impacts to cultural resources to a less than significant level:

CUL-1: Should archaeological materials be uncovered during grading, trenching, or other on-site excavation(s), all earthwork within 50 feet, or a larger distance as determined necessary by a qualified archaeologist, of the materials shall be stopped until a qualified archeologist certified by the Society for California Archaeology (SCA) and/or the Society of Professional Archaeology (SOPA), and the Native American Tribe that has requested consultation and/or demonstrated interest in the project has had an opportunity to evaluate the significance of the find, and, if deemed necessary, suggest appropriate mitigation(s).

CUL-2: If any significant cultural materials such as artifacts, human burials, or the like are encountered during construction operations, such operations shall cease within 10 feet of the find, the Community Development Division (CDD) shall be notified within 24 hours, and a qualified archaeologist contacted and retained for further recommendations. Significant cultural materials include, but are not limited to, aboriginal human remains, chipped stone, groundstone, shell and bone artifacts, concentrations of fire cracked rock, ash, charcoal. Historical materials can include wood, stone, concrete, or adobe footings, walls and other structural remains; debris-filled wells or privies; and deposits of wood, glass ceramics, and other refuse.

CUL-3: Appropriate mitigation of any discovered cultural resources may include monitoring of further construction and/or systematic excavation of the resources. Any artifacts or samples collected as part of the initial discovery, monitoring, or mitigation phases shall be properly conserved, catalogued, evaluated, and curated, and a report shall be prepared documenting the methods, results, and recommendations. The report shall be submitted to the Northwest Information Center and appropriate Contra Costa County agencies.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to California Environmental Quality Act Guidelines Section 15064.5?

Less Than Significant With Mitigation Incorporated: Please see discussion in subsection-a above.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant With Mitigation Incorporated: The project record does not have any prior cultural resource studies being conducted at the subject property which indicates that human remains exist at the subject property.

Potential Impact:

Nevertheless, there is a possibility that human remains could be present, and that accidental discovery could occur.

Implementation of the following mitigation measure would reduce the potential to disturb any human remains, including those outside of formal cemeteries, to a less than significant level:

CUL-4: Should human remains be uncovered during grading, trenching, or other on-site excavation(s), earthwork within 30 yards of these materials shall be stopped until the County coroner has had an opportunity to evaluate the significance of the human remains and determine the proper treatment and disposition of the remains. Pursuant to California Health and Safety Code Section 7050.5, if the coroner determines the remains may be those of a Native American, the coroner is responsible for contacting the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code Section 5097.98, the NAHC will then determine a Most Likely Descendant (MLD) tribe and contact them. The MLD tribe has 48 hours from the time they are given access to the site to make recommendations to the land owner for treatment and disposition of the ancestor's remains. The land owner shall follow the requirements of Public Resources Code Section 5097.98 for the remains.

Sources of Information

California Historical Resources Information System. "DP20-3011 / APNs 093-100-059 & 093-100-060, Alves / Alves Lane Apartments." Correspondence. 29 June 2020.

Contra Costa County General Plan. "Chapter 9: Open Space Element." 2005-2020. http://www.co.contra-costa.ca.us/DocumentCenter/View/30919/Ch9-Open-Space-Element?bidId=.

Contra Costa County. "Historic Resources Inventory." Revised 2019. Accessed in 2020. https://www.contracosta.ca.gov/DocumentCenter/View/1116/Historic-Resources-Inventory-HRI?bidId=.

Contra Costa County & City of Pittsburg In Conjunction with The San Francisco Bay Area Rapid Transit District. "Pittsburg/Bay Point BART Station Area Specific Plan, Environmental Impact Report (Recirculated)" July 2001

Staff Site Visit, 24 June 2020.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
6. *ENERGY – Would the project:*				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

***SUMMARY**:*

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact: In December 2015, a Climate Action Plan (CAP) was adopted by the Contra Costa County Board of Supervisors in order to identify and achieve a reduction in greenhouse gas (GHG) emissions by the year 2020 as mandated by the State under AB32. The design and operation strategies set forth in the CAP for reducing GHG emissions include measures such as installing energy efficient appliances that would also reduce the project's consumption of energy resources during operation. The residential project will be required to comply with all California Code Title 24 (CalGreen) building energy efficiency standards for a mid-rise multifamily residential building that are in effect at the time that building permit applications are submitted, including any standards regarding the provision of solar energy. If approved, the project will be reviewed under all current energy standards as part of the plan check process. Compliance with all applicable regulations will ensure this development will not have a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy. During construction, the project may require temporary electrical power. The General Contractor would be required to apply for a temporary power permit from the County and to comply with all applicable building standards for a temporary power connection. Therefore, the impact of construction or operation on electrical energy resources is anticipated to be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact: As mentioned in subsection-a above, the residential project will be required to comply with all California Code Title 24 (CalGreen) building energy efficiency standards for a mid-rise multifamily residential building that are in effect at the time that building permit applications are submitted, including any standards regarding the provision of solar energy. In addition, the design and operation strategies set forth in Table E.1 *Standards for CAP Consistency – New Development* (Appendix E of the County's CAP) include measures such as installing energy efficient appliances that would also reduce the project's consumption of energy

resources. Therefore, the project will not conflict with a state or local plan for renewable energy or energy efficiency.

Sources of Information

Contra Costa County. "Climate Action Plan." Adopted by the Contra Costa County Board of Supervisors on 15 December 2015. http://www.co.contra-costa.ca.us/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=.

MCE "My Community. My Choice." Website. Accessed 29 January 2021 https://www.mcecleanenergy.org/

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. *GEOLOGY AND SOILS – Would the project:*				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

***SUMMARY**:*

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:

i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*
ii) Strong seismic ground shaking?
iii) Seismic-related ground failure, including liquefaction?
iv) Landslides?

Less Than Significant With Mitigation Incorporated: TRC conducted three subsurface test borings of the project site on October 7, 2019 to depths of between 29.5 and 35 feet. The boring samples were tested, and the October 24, 2019 geotechnical report provided an assessment of the findings. The findings were peer-reviewed by the County Peer Review Geologist with recommended mitigations. A summary of the potential impacts is below:

- Faulting: The assessment of the risk of surface fault rupture focuses on the distance of the site from known active and potentially active faults. The report identifies the distance to faults considered active by the California Geological Survey (CGS), and states that the Concord - Green Valley fault is indicated to pass approximately 2¼ miles from the project site; and the potentially active Greenville fault (also known as the Clayton fault) and the Rio Vista fault pass within 3 and 2¾ miles of the site, respectively. Because the site is not within an Alquist-Priolo Earthquake Fault Zone and because no faults are mapped through the site, TRC concludes that the risk of fault rupture on the site is low and does not require further evaluation.

- Seismicity/Ground Shaking: The project site is vulnerable to strong to violent ground shaking, dependent on the earthquake magnitude, distance to seismic source, duration of strong shaking and other factors. TRC points out that compliance with building codes does not guarantee satisfactory performance under conditions of strong to violent earthquake shaking. Codes are intended to keep earthquake risks to an acceptable minimum, and they assume that the ground is stable. Ground failure can result in greater damage. Nevertheless, compliance with the operative provisions of the California Building Code (CBC) along with (i) compliance with the County Grading Ordinance (ii) conservative design and (iii) quality construction are the best means of controlling the life loss and damage potential of earthquakes. Current CBC (2019) requires the use of seismic parameters in the design of all structures requiring building permits. These parameters are based on soil profile types and proximity of faults deemed capable of generating strong/violent earthquake shaking. Design level geotechnical reports routinely provide CBC seismic design parameters, and upon implementation of the mitigations below, adverse effects due to strong seismic ground shaking would be reduced to a less than significant level.

- Seismically Induced Dry Sand Densification: TRC's borings encountered irregularly interbedded medium dense to dense, clayey sands (SC) and stiff to very stiff clays (CL). Based on the properties of these alluvial deposits, they are not candidates for densification and associated settlement.

- Liquefaction: TRC cites the official Seismic Hazard Zone (SHZ) map of the Honker Bay Quadrangle, issued by the CGS. According to that map, the project site is not within an area where seismically induced liquefaction is anticipated. TRC also points out that their investigation provides site-specific data on subsurface conditions that are consistent with the preliminary findings of the CGS. Specifically, the TRC auger borings, which ranged up to 35 feet deep, penetrated clayey alluvial deposits that were stiff, with relatively thin interbedded layers of poorly sorted sands. The “blow count” as part of the penetration test found that the sands contained a substantial amount of fines or fine particles indicating that these deposits are hard. TRC concludes the alluvial deposits on the site are too cohesive and too well consolidated to be candidates for liquefaction. Additionally, no groundwater was encountered in the borings, and a CGS report indicates that the water table in the site vicinity is at depths of 50 ft. or more. Finally, a Quaternary Geology Map of Contra Costa County issued by the U.S Geological Survey indicates that alluvial deposits on the site are of Pleistocene age. According to the County Peer Review Geologist, no evidence of potentially liquefiable sands of Pleistocene age has been confirmed by previous geotechnical investigations submitted to the County. Hence the risk of liquefaction was rated "low," by TRC, and does not require further evaluation.

- Landslides: The Seismic Hazard Zone (SHZ) Map of the Honker Bay Quadrangle did not confirm the presence of any landslides within ½ mile of the site. According to that map, the project site is not within a SHZ for earthquake triggered landslides. Based on the relatively level topography of the majority of the site and the absence of slide planes in the borings logged by TRC, the risk of slope failure can be considered "low” and does not require further evaluation.

- Corrosivity: Appendix B of the TRC report provides preliminary data on the corrosion hazard of site soils. But the text of the report does not provide an interpretation of the data gathered and does not indicate if additional testing is needed to confirm/modify the results of the two samples tested; nor does it indicate if a California licensed corrosion engineer should be retained by the project proponent to evaluate the data gathered and determine if additional testing is needed or if recommendations should be provided by the corrosion engineer to underground contractors. In the opinion of the County's Peer Review Geologist, this subject should be revisited by the project geotechnical engineers prior to requesting building permits. Conceivably, supplemental corrosion potential testing is needed. If corrosive soils are confirmed to be present, the project proponent should be directed to retain the services of a corrosion protection engineer to provide recommendations.

Potential Impacts

The consulting geotechnical engineer indicates potentially corrosive soils exist on the subject property which can be detrimental to concrete and buried metal such as those used for utilities or reinforcing steel. In addition, conditions in the field may vary from those expected based on field investigation, laboratory tests, and engineering analysis performed by the consulting engineer. Thus, it is critically important that adequate geotechnical monitoring be provided during clearing and earthwork to ensure that any existing fill is over-excavated, and that all engineered fill placed on the site is compacted in accordance with the geotechnical recommendations.

Accordingly, staff recommends that the following mitigation measures be incorporated as part of the project to reduce the potential hazards resulting from corrosive soils and other onsite conditions to a less than significant level.

GEO-1: A corrosion engineer licensed in California shall be retained to review the data gathered during preliminary corrosion potential testing to determine if additional testing is warranted, and/or if special design and construction recommendations can be provided. This report of the Corrosion Engineer shall be submitted for peer review by the CDD and the County Peer Review Geologist **prior to CDD stamp-approval of plans for issuance of a building permit**.

GEO-2: **Prior to CDD stamp-approval of plans for issuance of a building or grading permit, whichever is first**, the project proponent shall submit an updated, wet-signed and stamped geotechnical report to the County for review by the CDD and the County Peer Review Geologist which includes the following: a) a review of the soil corrosion testing results and an evaluation of the adequacy of that testing to draw design-level recommendations; b) recommendations to mitigate the long-term effect of corrosive soil or an evaluation and recommendation of a corrosion engineer licensed in the State of California; c) a review of the grading, drainage, and foundation plans, and the foundation details component of the construction drawings and specifications, to verify they conform to the intent of the geotechnical recommendations; d) a response regarding issues of existing fill; and e) recommendations to ensure that the rate of sediment accumulation in the bio-retention basins are kept to an absolute minimum.

GEO-3: Geotechnical observation and testing shall be administered during construction activities. The monitoring shall commence during clearing, and extend through grading, placement of fill and aggregate base, installation of drainage facilities, and foundation related work. These observations will allow the project geotechnical engineer to compare actual exposed conditions with anticipated conditions, and to verify that the contractor's work conforms with the geotechnical aspects of the plans and specifications. **Prior to requesting a final grading inspection**, the project proponent shall submit a report from the project geotechnical engineer that documents their observation and testing services to that stage of construction, including monitoring, and testing of backfill required for utility and drainage facilities.

Similarly, **prior to requesting a final building inspection** for all buildings for human occupancy in the project as defined by the building code (2,000 person hrs./year), the project proponent shall submit a letter or report from the geotechnical engineer documenting the monitoring services associated with implementation of final grading, drainage, paving and foundation-related work. If the final inspection of all buildings is to be performed at one time, the geotechnical engineer's final report may address the entire project; if final inspections are to be staged over a period of time, there shall be geotechnical letters for each building/grouping of buildings at the time that the final building inspection is requested.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact: Any areas that are disturbed during construction of the project would be covered by the proposed improvements or landscaping. Since all areas of the property

that will be disturbed will be covered by new structures, pervious and impervious surfaces, or landscaping, the potential for soil erosion or loss of topsoil is less than significant. Additionally, a routine provision for grading permits in Contra Costa County is a requirement for submittal of an erosion control plan. This plan is subject to technical review by inspectors of the County Grading Section. Normally there are refinements to erosion control plans as the winter rainy season approaches. Additional details are included in the refined erosion control plan, including such items as provisions for (a) storage of extra erosion control materials on site and (b) monitoring of the performance of disturbed areas on the site during/immediately following significant rainstorms. If erosion control facilities are damaged or failing to perform as intended, the erosion control measures being implemented on the site are refined to correct the deficiency. Implementation of an erosion control plan would further ensure that the project results in less than significant impacts due to erosion or the loss of topsoil.

c) *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Less Than Significant Impact with Mitigations Incorporated: The majority of the site is relatively level with slope gradients ranging between 1.5% and 5% and no groundwater was encountered in TRC's borings (which ranged up to 35 feet deep). The alluvial deposits penetrated in the borings were confirmed to be too cohesive and too dense to liquefy. On that basis, the risk of lateral spreading failure is low and does not require further evaluation.

Although there is no direct evidence of previous grading on the site, according to the County's Peer Review Geologist, historical aerial photographs indicate tonal changes which suggest disturbed ground. The borehole logs included with TRC's geotechnical report did not identify fill materials, however, TRC indicates a potential for artificial fill or unsuitable fill on the subject property.

The County's Peer Review Geologist is concerned that there are potentially significant impacts due to the proximity of the bio-retention basins to the planned improvements (e.g., foundations). Bio-retention basins are designed to slow runoff, trap pollutants and sediment, and encourage transpiration by plants. In doing so, the water quality of stormwater runoff is improved before it exits the site. According to the County's Peer Review Geologist, from a geotechnical perspective, the primary concerns regarding bio-retention basins and stormwater control are (a) providing suitable support for foundations, curbs, flatwork, etc. that are constructed near the bio-retention facility, and (b) potential for subsurface water from the bio-retention area to migrate (and possibly buildup) beneath pavements and other improvements, and (c) provide any recommendations to ensure that the rate of sediment accumulation in the basin is kept to an absolute minimum.

<u>Potential Impacts</u>

There is a potentially significant impact for the project to be located on artificial fill or unstable soil that is not suitable for supporting the proposed improvements. Additionally, there is a potential for the design of the bio-retention basins to have a significant impact on soil stability as a result of the potential for stormwater to migrate or buildup beneath improvements.

Accordingly, staff recommends that mitigation measures be incorporated as part of the project to reduce the potential hazards resulting from undocumented fill and the design of stormwater

controls to a less than significant level. Implementation of mitigation measures **GEO-2** and **GEO-3** in subsection-a above would ensure that any potential impacts on soil stability are reduced to less than significant levels.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact: The soils on the site are considered to be expansive by the project geotechnical engineer. Expansive soils can also be subject to slope creep, which typically occurs on slopes underlain by expansive clays, and the downslope movement includes both lateral and vertical components. Slope creep is a slow process, typically involving a small fraction of an inch per year; however, this movement accumulates over the years and can result in several inches of lateral and vertical movement over the life of a structure. Due to the limited amount of relief of the site, creep is not expected to be a substantial hazard, provided that the specific geotechnical design criteria (including grading, drainage, and foundation design) take this potential hazard into account.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact: The project site is located within the service area of the Delta Diablo Sanitary District. The proposed development will be connected to the existing public sewer service within the Alves Lane right-of-way. There will be no septic system within the project.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact With Mitigations Incorporated: The geotechnical report has not identified any unique geologic features which would be directly or indirectly destroyed by the project. The project site is consists of soils and other geologic features which are typical in the surrounding Bay Point area. In addition, there are no known paleontological resources located at the project site that would be designated as unique. The Cultural Resources chapter (Chapter 16) of the EIR prepared for the Pittsburg/Bay Point BART Station Area Specific Plan indicates that previous surveys of the plan area have not revealed the presence of prehistoric paleontological resources.

Potential Impact

Ground disturbance during the project's construction phase has the potential for disturbing previously unknown unique paleontological resources. In addition to the mitigation measures for Cultural Resources, the following mitigation measures will ensure that in the event unique paleontological resources are discovered, the proper actions are taken to reduce the adverse environmental impacts to unique paleontological resources to a less than significant level.

GEO-4: Should unique paleontological materials be uncovered during grading, trenching, or other on-site excavation(s), all earthwork within 30 yards of the materials shall be stopped until the Community Development Division (CDD) has been notified, and a qualified paleontologist contacted and retained to evaluate the significance of the find, and, if deemed necessary, suggest appropriate mitigation(s).

Sources of Information

California Building Code, 2019.

Contra Costa County & City of Pittsburg In Conjunction with The San Francisco Bay Area Rapid Transit District. "Pittsburg/Bay Point BART Station Area Specific Plan, Environmental Impact Report (Recirculated)" July 2001

Darwin Meyers Associates. "Geologic Peer Review – 30 Day Comments" 24 June 2020.

TRC. "Geotechnical Investigation, 100-Unit Apartment Development, Alves Lane, Bay Point, CA" Prepared for Meta Housing Corporation. 24 October 2019

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

SUMMARY*:*

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact: As discussed in the Air Quality section of this study, the Bay Area Air Quality Management District (BAAQMD) adopted the *Bay Area 2017 Clean Air Plan* that, in addition to various criteria air pollutants, addresses GHG emissions at a regional scale. The 2017 Thresholds of Significance include an analysis and screening criteria for determining if a project would contribute to a significant impact to the environment due to the projected greenhouse gas (GHG) emissions. As is done with the regulated air pollutants, if the proposed project would generate GHG emissions above the identified threshold, then the project would be seen as having the potential for a significant impact. The Air Quality CEQA Thresholds of Significance (Table 2-1) of the BAAQMD CEQA Guidelines indicates that a project with total Operational-Related GHG emissions from other than stationary sources[1] that are at a minimum 1,100 metric tons (MT) of CO_{2e} per year level or otherwise are not in compliance with a qualified GHG Reduction Strategy would have a significant impact on the environment.

As previously discussed, CalEEMod is a statewide land use emissions computer model designed in collaboration with the air districts of California to provide a uniform platform for quantifying potential GHG emissions associated with construction and operational activities of land use projects. Based on project specific data, the proposed improvements, and default data of the

[1] Stationary sources include, e.g., emergency generators (diesel or natural gas); stationary-source projects are those land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate.

CalEEMod computer model; the proposed development would result in GHG emissions levels as shown in the table below.

Operational-Related GHGs (Non-Stationary Sources) Emissions Levels	
Emissions Type	**Project Emissions (MT/yr.)***
Total CO_2 ($Bio\text{-}CO_2$ + $NBio\text{-}CO_2$)	537.67
CH_4	0.78
N_2O	0.01
CO_{2e}	559.44
Projected Project Total	**1,097.89**

*Project Emissions calculated using CalEEMod emissions computer model version 2016.3.2

Two drainage plans are proposed, including an alternative plan that would utilize a storm drain lift station with electric ejector pumps during storms and, in the event of power outages during storm events, a natural gas emergency generator. The emergency generator is considered a stationary source when quantifying emissions levels. The alternative drainage plan was evaluated as part of the project. According to the default data in the CalEEMod computer model, the emergency generator is anticipated to produce negligible amounts of criteria pollutants or GHG emissions. Thus, based on the total projected GHG emissions levels shown above, the potential for the project having a significant impact on the environment due to generating GHG emissions during operation-related activities is less than significant.

Whether or not construction-related emissions exceed the applicable thresholds of significance, BAAQMD recommends that projects implement basic best management practices for construction to reduce potential environmental impacts especially due to exhaust from diesel and other fossil-fuel burning engines, the release of dust from the project, and improperly operating equipment. Implementation of mitigation measures **AIR-1** through **AIR-10** would ensure that these construction-related best management practices are followed. Thus, there may be some increase in greenhouse gases due to the construction phase of the project, but they would be considered less than significant due to the temporary nature of construction activities. Therefore, upon implementation of the best management practice mitigation measures during the construction phase, the proposed project will have a less than significant impact on the generation of greenhouse gas emissions. In addition, the proposed project would not conflict with any applicable plan, policy, or regulation pertaining to the reduction of GHG.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact: As discussed above in subsection-a and in accordance with the Contra Costa County Climate Action Plan, any impacts of the proposed project to the amount of greenhouse gas emissions in the County would be negligible. The emissions generated as a result of the operational activities of the proposed 100-unit apartment complex will be far less than the 1,100 MT carbon dioxide threshold and will not result in significant levels of GHG that will conflict with any applicable plan, policy, or regulation pertaining to the reduction of GHG. There may be some increase in greenhouse gases as a result of the project, but they would be considered less than significant due to the temporary nature of the construction phase of the project.

Sources of Information

California Emission Estimator Model (CalEEMod). 2016

Bay Area Air Quality Management District. "California Environmental Quality Act, Air Quality Guidelines." May 2017. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

Bay Area Air Quality Management District. "Spare the Air, Cool the Climate Final, 2017 Clean Air Plan." Adopted 19 April 2017. http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en.

Contra Costa County. "Climate Action Plan." Adopted by the Contra Costa County Board of Supervisors on 15 December 2015. http://www.co.contra-costa.ca.us/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
9. *HAZARDS AND HAZARDOUS MATERIALS – Would the project:*				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

***SUMMARY**:*

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact: The proposed project consists of constructing a new 100-unit apartment complex. The proposed improvements and overall project site will be utilized for residential-related improvements and activities. Although small quantities of commercially available hazardous materials may be used for household or common-area cleaning or for landscape maintenance, these materials would not be used in sufficient quantities to pose a threat to human or environmental health.

There would be associated use of fuels and lubricants, paints, and other construction materials during the construction period. The use and handling of hazardous materials during construction would be subject to applicable federal, state, and local laws, including California Occupational Health and Safety Administration (Cal/OSHA) requirements. With compliance with existing regulations, the project would have a less than significant impact from construction.

Therefore, the potential for impacts associated with handling, storing, and dispensing of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment from project construction or operation would be less than significant.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?

Less Than Significant Impact: Please see discussion in subsection-a above.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact: There are no schools located within a quarter mile of the project site. The nearest school is Bel Air Elementary School, located approximately 0.40-miles northeast of the site. Additionally, there is no anticipated use of significant quantities of hazardous materials for either the construction or operation of the project. Therefore, the project will have no impact in this respect.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact: Pursuant to the Hazardous Waste and Substances Site List (Cortese List) maintained by the California Department of Toxic Substances Control (DTSC), the subject property is not identified as a hazardous materials site.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact: The project is not located within the vicinity of any public airport or public use airport and will not conflict with an airport land use plan. The nearest airport facility to the project site is the Buchanan Field Airport, which is approximately 6 miles southwest of the project site. Thus, the proposed project would not present any safety hazard to airports or excessive noise for people residing or working in the project area.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact: The proposed project is multi-family residential complex on Alves Lane approximately 700 feet east of Virginia Drive and approximately 950 feet west of Chadwick Lane. Alves Lane is a 2-lane corridor that would be used in the event of an emergency requiring evacuation of the local neighborhood. The proposed project would add 100 residential units to this portion of Alves Lane; however, the project would facilitate driveway improvements to the Alves Lane right-of-way along the site frontage and would extend sidewalk improvements along Alves Lane to connect to the existing sidewalk near Chadwick Lane. As such, the project would be required to maintain minimum sight distances for vehicles entering and exiting the developed site. The proposed project will not impact any existing communication/utility structures such as power poles or telecommunications towers which may be necessary for an existing emergency response or evacuation plan. Although project construction would primarily occur onsite, the required water main extensions may require temporary road closures or reduced lanes. Additionally, in the event that the alternative drainage plan would be necessary, extension of a new storm drain pipe may require temporary or partial road closures. The nature and duration of those road closures would be subject to review by the County Public Works Department for compliance with applicable transportation regulations, and require issuance of an encroachment permit. Accordingly, the project would have a less than significant impact on emergency response and emergency evacuation plans.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact: The project site is characterized as "urban unzoned" on the California Department of Forestry and Fire Protection's Fire Hazard Severity Zone Map for local responsibility areas and thus, would not be considered to have a high hazard risk due to wildfires. However, nearby areas west and southwest of the subject property are classified as having a moderate fire hazard severity. The project site is in a developed area within the service area of the Contra Costa County Fire Protection District (CCCFPD). Development projects are generally referred to the Fire District for review and comment to ensure that the proposal does not conflict with applicable fire codes. There was no indication from the CCCFPD review of the project that the proposed development poses a significant fire risk. Based on their review, the project proponent will be required to provide adequate and reliable water supply for fire protection and hydrants in accordance with Chapter 5 and appendix C of the California Fire Code. The project will be required to comply with current building codes, including those requiring the installation of automatic fire sprinklers in new multi-family residential buildings. Therefore, there is no impact or significant direct or indirect risk of exposing people to loss, injury, or death involving wildland fire.

Sources of Information

California Building Standards Commission. "2019 California Fire Code, California Code of Regulations, Title 24, Part 9." Accessed in 2020. https://codes.iccsafe.org/content/CAFC2019.

California Department of Toxic Substances Control. "Hazardous Waste and Substances Site List (Cortese)." Accessed in 2020. https://dtsc.ca.gov/dtscs-cortese-list/

California State Geoportal. "California Fire Hazard Severity Zone Viewer." Accessed in 2020. https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414.

Contra Costa County Fire Protection District. "3 and 4 Story Apartment Building, Alves Lane, Bay Point." Agency Comment Response Letter. 18 June 2020.

Contra Costa County General Plan. "Chapter 5: "Transportation and Circulation Element." 2005-2020. http://www.co.contra-costa.ca.us/DocumentCenter/View/30915/Ch5-Transportation-and-Circulation-Element?bidId=.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
10. *HYDROLOGY AND WATER QUALITY – Would the project:*				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) Result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

***SUMMARY**:*

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact with Mitigation Incorporated: The proposed development is residential in nature, and will not consist of any manufacturing, processing, industrial, or other commercial activities which would generate by-products or waste that would pose a significant risk for impacting water quality or waste discharge requirements within the County. The project site is located within the service area of the Delta Diablo Sanitary District and will have access to public sewage disposal services. ~~Additionally, because~~As the project would create approximately 102,927 square feet of new impervious area, the applicant submitted a Preliminary Stormwater Control Plan (SWCP) for the proposed stormwater management facilities and controls as required by the Contra Costa Clean Water Program. According to the submitted SWCP, storm water generated at the site will be collected and treated on-site via seven bio-retention areas. The bioretention basins and vegetated areas would serve as soil filtration facilities prior to the discharge of storm water to storm drains.

A portion of the Contra Costa Canal (Canal), which is an engineered, uncovered aqueduct owned by the U.S. Bureau of Reclamation and operated and maintained by the Contra Costa Water District (CCWD), runs north of and adjacent to the subject property. The Canal was constructed in the 1930s to divert raw surface water from the Sacramento-San Joaquin Delta to Contra Costa Water District (CCWD) water treatment plants, local water agencies, and other East Bay cities for agricultural, industrial, and municipal uses. In addition, the Water District owns and maintains a 42-inch pipeline that parallels the Canal on the north side and crosses the Alves Lane and Canal Road right-of-way. This multi-purpose pipeline connects two water treatment plants that CCWD operates (Randall Bold in Oakley and the Bollman Water Treatment Plant in Concord).

The project site is located in the service area of the Golden State Water Company (GSWC). According to the GSWC, the project proponent will be required to install a new, 8-inch water main within the Alves Lane right-of-way, to which the proposed development will connect to via new laterals for water service. The main extension will span approximately 2,500 linear feet from the intersection of Alves Lane and Virginia Drive to the intersection of Canal Road and Chadwick Lane. This alignment requires the water main to cross two existing bridges over the Canal. The project proponent has identified three potential methods of extending the water main across the Canal utilizing each bridge:

1) Utilization of two 4-inch pipes which will be installed within the existing, annular structure of the bridge below the paved roadway surface;
2) Attaching the 8-inch pipe to the bottom of the bridge using Unistrut fittings (similar to the existing storm drain pipes attached to each bridge); or

3) Attaching the 8-inch pipe to the side of bridge behind the existing concrete barrier at the sidewalk edge using Unistrut fittings.

The water main extension would remain within the public right-of-way in each of the proposed bridge-crossing methods. The applicant's Public Improvements Exhibit indicates that the new 8-inch water main would also cross the path of an existing 42-inch CCWD multi-purpose pipeline adjacent to both bridges. As shown on the Public Improvements Exhibit, the existing multi-purpose pipeline is approximately 7 feet below grade, and the applicant would ensure that the proposed main extension maintains a minimum 12-inch clearance from the existing pipeline. Although the project includes sidewalk, curb, and gutter improvements extending east beyond the subject property to the existing right-of-way improvements just west of Chadwick Lane, this work would be within the right-of-way and would not cross into any adjacent U.S. Bureau of Reclamation property.

Potential Impacts:

The project site naturally slopes downward at an average 5% slope gradient along its northern boundary; thus, there is a potential for stormwater, project runoff, and debris to drain towards the raw-water Canal and thereby affecting water quality standards. By utilizing a public wastewater system and a County-approved SWCP which complies with the California Regional Water Quality Board C.3 requirements, and upon implementation of the mitigation measures below, the potential for the proposed project violating any water quality standards or waste discharge requirements is less than significant.

The likelihood for environmental impacts due to the water main extension is low because all physical improvements would be within the previously disturbed right-of-way. However, without the appropriate best management practices, there is a potential for construction equipment and/or debris from the installation of the 8-inch water main extension to enter the Canal or impact the CCWD's existing 42-inch multi-purpose pipeline; thus, significantly impacting water quality. Therefore, implementation of the mitigation measures below will ensure that the project would have a less than significant potential for impacting water quality.

HYD-1: No drainage (e.g., runoff, debris, stormwater) from the project site may drain into the Contra Costa Canal or U.S. Bureau of Reclamation property at any time during construction or operation.

HYD-2: **Prior to any trenching for water main pipelines or installation of pipelines**, the applicant shall coordinate all activities with the Contra Costa Water District (CCWD) and submit evidence (e.g., permit or letter) for CDD review that the CCWD consents to trenching, construction, or installation of pipelines across the CCWD multi-purpose pipeline or U.S. Bureau of Reclamation property.

HYD-3: **Prior to any trenching for water main pipelines or installation of pipelines**, netting, a silt construction fence, and/or other sufficient barriers shall be installed along and below the bridges to prevent debris from entering the Contra Costa Canal. At no time shall construction equipment be allowed to enter the Canal or U.S. Bureau of Reclamation property without consent of the CCWD.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact: The project site is located in the service area of the Golden State Water Company. Since the project proposes to utilize a public water supply, no groundwater wells would be required. The proposed project includes bioretention basins for storm water control that would facilitate groundwater recharge and help offset the increased impervious surface area on the project site. Therefore, there is less than significant potential for the project to substantially decrease groundwater supplies, interfere with groundwater recharge, or impede sustainable groundwater management of the basin.

c) Would the project substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site?
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
iv) Impede or redirect flood flows?

Less Than Significant Impact (*i-iv*): Division 914 of the County Ordinance Code requires that all storm water entering and/or originating on this property to be collected and conveyed, without diversion and within an adequate storm drainage system, to an adequate natural watercourse having a definable bed and banks or to an existing adequate public storm drainage system which conveys the storm water to an adequate natural watercourse. A preliminary stormwater control plan (SWCP) prepared for the project indicates storm drain improvements for this development would collect stormwater and convey it to existing drainage infrastructure within the Alves Lane right of way. Staff of the County Public Works Department has indicated that the ~~project site~~subject property, which is vacant, lies entirely within the Formed Watershed Drainage Area (DA) 48B and generally drains north towards the Contra Costa Canal with no drainage improvements present which would collect and convey stormwater in DA 48B. According to the Diversion Drainage Report submitted by the project proponent, the nearest stormdrain improvements downstream of the project site are located in DA 48D, Line AA, approximately 200 feet west. Thus, the applicant has requested an exception for a diversion to Formed Watershed DA 48D. According to the applicant, adequate freeboard is available to meet the collect and convey requirements of Division 914. Based on comments received from staff of the County Public Works Department (April 28, 2021), Public Works is not opposed to the granting of an exception to collect and convey requirements provided that the applicant verifies adequacy of the facility to which the stormwater would be directed. Accordingly, staff of the Public Works Department recommends a condition of approval requiring the submittal of a drainage report with hydrology and hydraulic calculations, prior to issuance of a grading permit, to verify the adequacy of DA 48D. In addition, the recommended condition of approval would require the applicant to be responsible for all costs related to the construction and/or right-of-way acquisition related to any necessary improvements to make the system adequate if the off-site conveyance system or

ultimate drainage facility or natural watercourse to which stormwater is proposed to be diverted is inadequate.

In the event that future analysis of DA 48D finds that the system is not adequate, the applicant has proposed an alternative drainage plan which would use the existing drainage system in DA 48B to the west of the project site (Preliminary Drainage and Utility Plan Alternative, May 9, 2021). The proposed alternative would utilize 60-inch storm drain lines and an underground lift station vault onsite. A force line would then convey drainage to a drainage structure prior to entering the County right-of-way, transitioning to a gravity system, and connection to an existing storm drain inlet (SDDI) located within the Alves Lane right-of-way approximately 450 linear feet northwest of the project site. The sizing of the pipes and vault allows for additional storage in the event the lift station malfunctions. As with the proposed exception request to divert stormwater drainage to DA 48D, if the alternative drainage plan is utilized, the applicant would be required to provide a hydrology and hydraulics report for the western drainage system (DA 48B) prior to issuance of a grading permit.

In complying with California Regional Water Quality Board C.3 requirements for storm water design elements, a completed and County-approved SWCP ensures that the project will regulate surface runoff in a manner that prevents erosion, siltation and on- or off-site flooding. The proposed project is not located within a flood plain or special flood hazard area, and thus will not impede or redirect flood flows in the area. In addition, through the implementation of mitigation measures **BIO-2**, **HYD-1**, and **HYD-3** ~~would reduce~~ potential runoff to ~~and siltation of~~ the Contra Costa Canal during grading and construction activities, or during operation, would be prohibited.~~,~~ This restriction would ensur~~e~~~~ing~~ that impacts on the adjacent waterway, including potential siltation, would be less than significant. Therefore, the potential for the proposed project significantly altering drainage patterns in a manner that would result in substantial erosion, polluted runoff, or flooding is less than significant.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact: Seiche, tsunami, and mudflow events are generally associated with large bodies or large flows of water. The project site is not located within a 100-year or 500-year flood plain, nor is the Bay Point area included in any tsunami inundation area identified by the California Geological Survey (CGS) hazard maps. According to the Safety Element of the County General Plan, the project site is not located in a hazard zone for mudflows. A seiche is a water wave in a standing body of water such as a large lake or reservoir that is caused by an earthquake, a major landslide, or strong winds. This hazard does not exist within the Bay Point area as there are no large lakes or reservoirs in the area. As such, there would be no risk of pollutants being released from the site due to inundation through flooding, tsunamis, mudflows, or seiche, therefore, there would be no impact in this regard.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact: As discussed above in subsection-b, the project site is located in the service area of the Golden State Water Company (GSWC). Although the GSWC has indicated that there are no water mains in the vicinity of the project on Alves Lane, it is a public utility regulated by the California Public Utilities Commission (CPUC), which allows the extension of

services to new customers within its service area in compliance with CPUC Rule 15. As discussed above in subsection-a, ~~According to the GSWC,~~ the project proponent will be required to install a new, 8-inch water main within the Alves Lane right-of-way extending approximately 2,500 linear feet from the intersection of Alves Lane and Virginia Drive to the intersection of Canal Road and Chadwick Lane. The project would then tie-in to this extension for water service. Since the project proposes to utilize a public water supply, no groundwater wells would be required. In addition, implementation of mitigation measures **HYD-1** through **HYD-3** will ensure that the project would have a less than significant impact on the water quality of the adjacent Canal or CCWD's 42-inch multi-purpose pipeline. Furthermore, there is no indication that the project would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Sources of Information

California Department of Conservation. "Contra Costa County Tsunami Inundation Maps." Accessed in 2020. https://www.conservation.ca.gov/cgs/Pages/Tsunami/Maps/ContraCosta.aspx.

Contra Costa Water District. "Comments on the Alves Lane Apartments Project Initial Study (CDDP20-03011)." Letter. 25 June 2021.

KPFF. "Drainage Diversion Report, Alves Lane Apartments." Received on 30 October 2020.

KPFF. Revised Civil Project Plans. Received on 30 October 2020.

KPFF. Revised Utility Plan. Received on 28 January 2021.

KPFF. Preliminary Drainage and Utility Plan Alternative. Received on 9 May 2021.

KPFF. Public Improvements Exhibit. Received on 12 August 2021.

KPFF. Typical bridge section plan, water service crossing options. Received on 1 November 2021.

Golden State Water Company. "Comments on Alves Lane Apartments (DP20-3011) Review" Agency Comment Response Letter. 12 June 2020.

Golden State Water Company (U 133 W). "Rule No. 15 Main Extensions." Effective 10 March 2017. Accessed in 2021. https://www.gswater.com/sites/main/files/file-attachments/rule-15b.pdf?1603410416

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
11. *LAND USE AND PLANNING – Would the project:*				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

SUMMARY:

a) Would the project physically divide an established community?

No Impact: The subject property consists of two vacant lots located within a developed, urban area of Bay Point, in unincorporated Contra Costa County. Existing land uses in the vicinity primarily consists of medium-density single-family residential development and related uses such as churches, schools, and commercial uses nearby to the west, east, and north. The Contra Costa Canal is north of and adjacent to the project site and SR-4, adjacent to Alves Lane, is approximately 100 feet south of the project site. The project site is approximately 3.81 acres in area and is not large enough to constitute an independent, established "community" within its boundaries. Furthermore, the proposed project does not consist of a new roadway, wall structure, or other improvements that would physically divide, or impede or disrupt the manner in which people enter and exit the Bay Point area.

b) Would the project cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact:

Land Use: The project site is located within a Multiple-Family Residential, Medium Density (MM) General Plan Land Use designation. Generally speaking, the intent of the MM designation is to allow for residential uses such as apartments, condominiums, townhouses, duplexes, and accessory structures and buildings normally auxiliary to the primary uses. The designation also allows for secondary uses such as churches, group care/child care facilities, and home occupations.

The proposed project would construct a 100-unit apartment complex on a parcel intended for medium density residential uses. The proposed apartment development will be residential in nature, and as a result will be compatible with other residential uses that surround the site. As part of the proposed project and pursuant to California State government code Chapter 4.3, the applicant requested a density bonus which allows incentives in the form of concessions. Due to the inconsistencies regarding maximum height between the Specific Plan policies for the MM land use designation (which allows a maximum 30-foot height) and the Bay Point P-1 zoning district standards (which allows a maximum 45-foot height for multi-family residential developments), the applicant has requested a density bonus concession for a 45-foot maximum height. Given that the Bay Point P-1 zoning district, which encompasses the subject property and various properties beyond, allows a maximum height of 45 feet, the concession for an increase in height would not have a significant conflict with any land use policy with the purpose of avoiding or mitigating an environmental effect.

Finally, the project includes an exception to the collect and convey requirements pursuant to Chapter 914 to divert drainage from drainage area (DA) 48B to an adequate natural watercourse or to an existing adequate public storm drainage system (DA 48D).

General Plan Policies for the Bay Point Area: Generally speaking, the majority of the General Plan Policies for the Bay Point Area that are intended for particular regions in Bay Point (i.e., Bay Point Waterfront, Pittsburg/Bay Point BART Station, Willow Pass Road Mixed Use Corridor), circulation or urban design, focus on guiding development rather than avoiding or mitigating an environmental effect. However, there are General Plan policies for the Bay Point area regarding toxic materials (3- 78(d)) and water quality (3-82), which aim to mitigate environmental effects,

and regarding the assembly of acreage in order to develop multiple-family residential projects on small parcels (3-79), that would apply to the proposed project.

Policy 3-78(d) of the Bay Point Specific Area Policies requires that a healthy environment for people and wildlife be maintained by minimizing the health hazards caused by the production, storage, transport, and disposal of toxic materials. As no element of the proposed development will involve hazardous materials, there is no potential for the project to conflict with this policy.

Policy 3-82 directs discretionary review of project proposals to consider how to upgrade Bay Point water quality, including increased regulation of the system, facility improvements or, potentially, public acquisition. The Golden State Water District reviewed this project as part of the initial review process and indicated that the project proponent will be required to construct a water main in Alves Lane from the intersection of Alves Lane and Virginia Drive to the intersection of Canal Road and Chadwick Lane. The likelihood for environmental impacts from extending the water main is low because all physical improvements would be within the previously disturbed right-of-way and mitigations have been incorporated as part of the project to reduce any potential impacts on water quality due to the water main extension crossing the bridges over the Contra Costa Canal (**BIO-2**, **HYD-2**, and **HYD-3**). In addition, the project utilizes various design elements, such as dispersion to vegetated areas and bioretention basins, and treating stormwater from the project site before it is discharged into the public storm drain system. Such water treatment measures are required by the Contra Costa Clean Water Plan and provide soil filtration as a means of reducing waterborne contaminants discharged from the project site. The project's compliance with the Contra Costa Clean Water Plan ensures that it is consistent with General Plan Policy 3-82.

Policy 3-79 recognizes that many areas which are designated for multiple-family residential uses in the Bay Point area were originally designed for less intensive uses and may have property characteristics that would interfere with a successful conversion to a higher-intensity use (e.g., small parcel sizes, or antiquated or inadequate drainage facilities). Thus, policy 3-79 incentivizes the assembly of acreage to increase project feasibility for a quality residential environment and adequate infrastructure by making such projects eligible for the maximum number of housing units in the applicable density range. The proposed project would merge two parcels in order to ensure feasibility of the addition of new, quality housing units near a BART/commuter train station, in a complex with on-site parking for automobiles and bicycles, and residential amenities including picnic/recreation areas and a dog park/relief area.

Conservation Element: The Conservation Element of the General Plan lists three overall conservation goals (8A-8C):

- Conservation Goal 8A: To preserve and protect the ecological resources of the County.
- Conservation Goal 8B: To conserve the natural resources of the County through control of the direction, extent, and timing of urban growth.
- Conservation Goal 8C: To achieve a balance of uses of the County's natural and developed resources to meet the social and economic needs of the County's residents.

The subject property is not located within an area of known ecological sensitivity and the entire project site has been previously disturbed, primarily through maintenance of the vacant parcels (i.e., periodically clearing grasses, discarded trash, etc.). There is also evidence on the 1953 USGS Honker Bay 7.5' quad map indicating that a building previously existed on the subject property

but has since been removed. The project proposes infill development of two vacant lots in an urbanized area of the County, which is consistent with Goal 8B due to the use of existing infrastructure with existing capacity to accommodate the project, as opposed to greenfield development projects requiring the construction of new infrastructure. The project does not affect any known gas or mineral resources and would not significantly affect air, water, or aesthetic resources in Contra Costa County. Thus, the project is consistent with the County's overall conservation goals.

Although the project consists of requests for a concession to allow an increased maximum height, and an exception to collect and convey drainage requirements, the project substantially conforms to the design guidelines and General Plan Policies for the Bay Point area as well as other General Plan policies and goals for unincorporated Contra Costa County (e.g., the Conservation Element). Therefore, the project has a less than significant potential for conflicting with any applicable land use, policy, General Plan, Specific Plan, or zoning ordinance adopted for the purpose of avoiding or mitigating an environmental effect.

Sources of Information

Dahlin; KPFF; R3 Studios. Revised Project Plans. Received on 7 August 2020 and 30 October 2020.

Contra Costa County General Plan. "Chapter 3: Land Use Element." 2005 – 2020. http://www.co.contra-costa.ca.us/DocumentCenter/View/30913/Ch3-Land-Use-Element?bidId=.

Contra Costa County General Plan. "Chapter 8: Conservation Element." 2005-2020. http://www.co.contra-costa.ca.us/DocumentCenter/View/30918/Ch8-Conservation-Element?bidId=.

Contra Costa County Code. "Title 8 – Zoning." Accessed in 2020. https://library.municode.com/ca/contra_costa_county/codes/ordinance_code?nodeId=TIT8ZO.

Golden State Water Company. "Comments on Alves Lane Apartments (DP20-3011) Review" Agency Comment Response Letter. 12 June 2020.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. *MINERAL RESOURCES – Would the project:*				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

SUMMARY:

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact: According to Figure 8-4 (Mineral Resource Areas) of the Contra Costa County General Plan, the subject property is not located within an area identified as a significant mineral resource area and staff is unaware of any prior studies done at the subject property that indicate the presence of mineral resources. TRC performed three exploratory borings on site in October of 2019 to a maximum depth of 35 feet. No known mineral resources were identified by TRC within the project vicinity, and there is no reason to believe that they exist at the project site. Thus, the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact: According to the Conservation Element of the General Plan, the project site is not within an area of locally-important mineral importance. Therefore, the project would not impact any mineral resource recovery site.

Sources of Information

Contra Costa County General Plan. "Chapter 8: Conservation Element." 2005-2020. http://www.co.contra-costa.ca.us/DocumentCenter/View/30918/Ch8-Conservation-Element?bidId=.

TRC. "Geotechnical Investigation, 100-Unit Apartment Development, Alves Lane, Bay Point, CA" Prepared for Meta Housing Corporation. 24 October 2019

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
13. *NOISE – Would the project result in:*				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

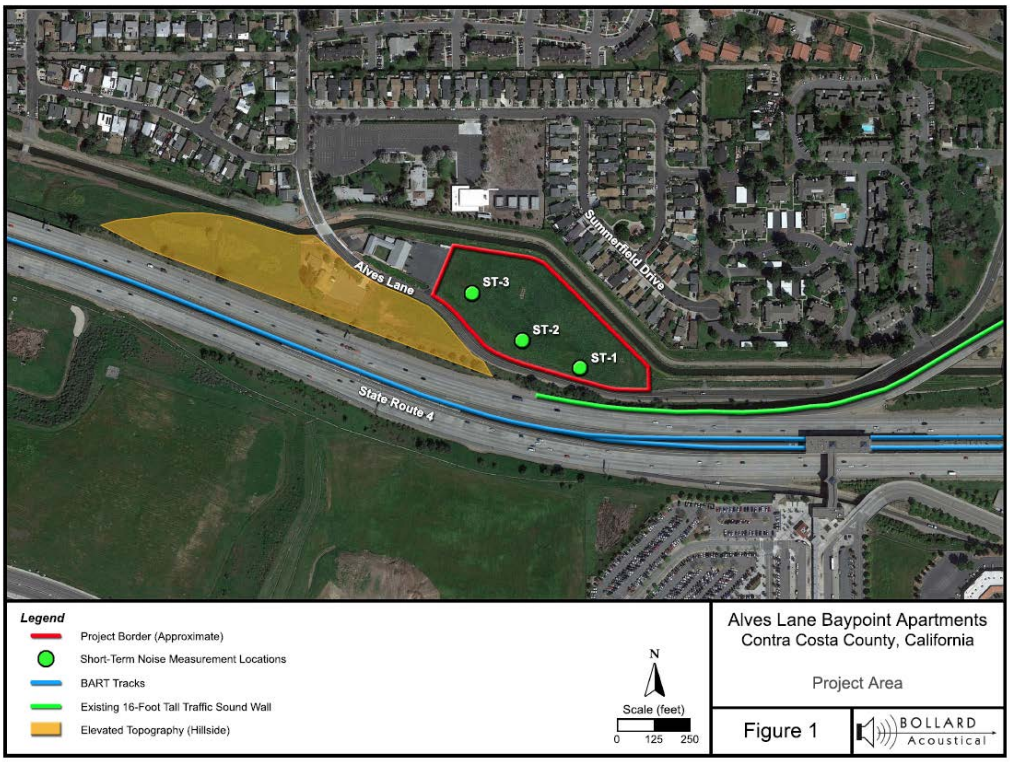
SUMMARY:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant With Mitigation Incorporated: The subject property which fronts Alves Lane is located approximately 100 feet north of SR-4 and the BART train tracks located in the median of SR-4. The project site is within an area of Bay Point that is generally flat except for highway berms and is surrounded primarily by lands designated for residential and auxiliary uses.

Figure 11-5D of the Noise Element of the Contra Costa County General Plan (2005 -2020, reprinted July 2010) does not indicate that the subject property is within an area of the County where 2005 DNL and CNEL Noise Levels range above 60 decibels (dB), however, based on the County's GIS data, the subject property is within an area of Bay Point that is subject to noise levels above 60dB. Although Contra Costa County's threshold for residential uses is a DNL of 60dB as shown on Figure 11-6 (Land Use Compatibility for Community Noise Environments) of the County General Plan's Noise Element, the County requires new multiple-family residential projects to have an interior standard of 45dBA DNL or less. According to Table 11-2 (Future Noise Levels Along Freeways and Major Arterials) of the Noise Element, noise along SR-4 in the vicinity of the project site is projected to be 78dB at a distance of 2,000 feet from the roadway, which is in excess of the levels that would be considered normally acceptable for the operation of the proposed residential units. Accordingly, an environmental noise assessment of the project site was conducted for the project by Bollard Acoustical Consultants, Inc. (BAC) on May 7, 2020 and their findings provided in a May 22, 2020 report.

As shown in Figure 1 below, BAC performed short-term (15-minute) noise level measurements at three areas within the subject property in order to determine the difference in noise levels from traffic, train, and other sources. The surveys were conducted at elevated building façade positions (e.g., 5-, 15-, and 25-feet above ground) to simulate noise exposure levels at the ground floor and upper floors of the proposed apartment building.



According to BAC's report, vehicular traffic on SR-4 was the predominant ambient noise source at the project site, with traffic on Alves Lane contributing a lesser extent to ambient noises. BAC staff noted four BART train passbys adjacent to the project site during the noise survey. However, the report indicates that the noise levels generated from the train passbys, as well as noise levels associated with vehicles on Alves Lane, were not measurable over SR-4 traffic noise. Thus, because SR-4 traffic is determined to be the dominant noise source at the project site, the BAC noise assessment focuses on the quantification of future SR-4 traffic noise level exposure at the noise-sensitive locations of the proposed development. The ambient noise level results of BAC's noise measurements are summarized in Table 2, below:

Table 2
Summary of Short-Term Ambient Noise Measurement Results – May 7, 2020

Site[1]	Microphone Height (feet)	Time	Average Measured Noise Level (dBA) L_{eq}	Average Measured Noise Level (dBA) L_{max}
ST-1	5	10:51 a.m.	59.9	69.1
	15		64.1	74.7
	25		68.3	77.9
ST-2	5	11:22 a.m.	59.1	64.9
	15		64.2	70.2
	25		69.3	74.6
ST-3	5	11:51 a.m.	52.3	60.6
	15		57.6	66.6
	25		61.5	73.5

[1] Ambient noise level measurement locations are identified on Figure 1.
Source: Bollard Acoustical Consultants, Inc. (2020)

As shown in Table 2, the measured, maximum ambient daytime noise levels exceed 65dB L_{eq} at survey locations ST-1 and ST-2, and at 15- and 25- feet above ground at survey location ST-3.

In order to provide recommendations for mitigating noise impacts on future residents, BAC modeled future day-night (DNL) noise levels at the project site using the Federal Highway Administration Traffic Noise Prediction Model (FHWA Model) which provides noise predictions under "ideal" roadway conditions, including unimpeded views of the roadway from the measurement location. As such, BAC found that although the FHWA Model predicted future DNL noise levels at the project site may exceed the County General Plan exterior noise level standard of 65 dB DNL for multi-family residential projects, the noise levels from SR-4 at all survey sites were overpredicted. Thus, BAC calibrated the model to account for the existing 16-foot-tall traffic noise barrier and the intervening topography in the form of a highway berm between the project site and SR-4. Table 4 of the noise report, below, summarizes the calibrated, predicted future traffic noise levels at the project site:

Table 4
Predicted Future State Route 4 Exterior Traffic Noise Levels at the Project Site[1]

Building Area	Description	Distance from Roadway Centerline (feet)[2]	Predicted Future Noise Level, DNL (dB)[3]
Courtyard	Common outdoor area	380	56
Southeast	First-floor building facade	260	66
	Second-floor building facade		70
	Third-floor building facade		74
	Fourth-floor building facade		76
South	First-floor building facade	300	65
	Second-floor building facade		70
	Third-floor building facade		76
	Fourth-floor building facade		79
Southwest	First-floor building facade	320	61
	Second-floor building facade		66
	Third-floor building facade		70

[1] A complete listing of FHWA Model inputs and results are provided as Appendix D.
[2] Distances measured from the centerline of SR 4 to the building facades and effective noise-center of the primary common outdoor area.
[3] Offsets were applied based on measured ambient noise measurements at the project site. An additional -7 dB offset was applied to predicted traffic noise levels at the proposed common outdoor area to account for shielding that would be provided by the proposed intervening building.

Source: FHWA Traffic Noise Prediction Model (FHWA-RD-77-108) and Bollard Acoustical Consultants, Inc.

As shown in Table 4, the future SR-4 traffic noise level at the primary common outdoor area (interior courtyard) of the development is predicted to satisfy the County General Plan normally acceptable exterior noise level standard of 65 dB DNL. In addition, the acoustical consultant performed additional analysis in February of 2021 of future traffic noise level exposure at the dog park area. Based on the results of that analysis, future SR-4 traffic noise exposure at the dog park is predicted to be 58 dB DNL due to the screening provided by intervening topography as quantified by the noise survey at the project on May 7, 2020. Thus, further consideration of exterior noise mitigation measures for the interior courtyard or the dog park are not warranted for the project.

General Plan policies and implementation measures exist to ensure that potential impacts of temporary or permanent increases in ambient noise levels in the vicinity of projects due to construction or operation are less than significant, including those intending to minimize noise impacts of proposed development projects through proper site planning, architectural layout, noise barriers, or construction modifications (Policy 11-c). Typically, according to the noise report, standard residential construction (stucco siding, dual-pane STC 28 windows, door weatherstripping, exterior wall insulation, composition plywood roof), results in exterior to interior noise levels reduction of at least 25 dB with windows closed and approximately 15 dB with windows open. Assuming future traffic noise levels do not exceed 70 dB DNL at exterior building facades, standard construction would normally be adequate to ensure compliance with the Contra Costa County General Plan 45 dB DNL interior noise level standard. However, as shown in Table 4, the future traffic noise exposure at the portions of the upper floors that would be located nearest to SR-4 are predicted to exceed 70 dB DNL, and BAC has provided recommendations for upgrades to the proposed exterior façade construction, including windows, balcony/patio doors, and mechanical ventilation (e.g., air conditioning) systems as mitigations to ensure impacts from increased noise levels on future occupants are reduced to less than significant levels.

As discussed in the Hydrology and Water Quality Section of this report, the applicant has requested an exception to storm water collect and convey requirements to divert storm water to

drainage area (DA) 48D. However, in the event that DA 48D is inadequate for storm water runoff, the applicant proposes an alternative drainage plan which would use an existing drainage system in DA 48B northwest of the project site. In order to use DA 48B, the alternative drainage plan would require the utilization of electric pumps during storm (rain) events, and a natural gas-powered emergency generator in the event of a power outage during storm events. Although use of either equipment would be intermittent and temporary, the electric pumps and emergency generator could potentially create impacts due to an increase in noise levels.

The proposed electric pumps would be located in a sealed underground vault beneath the parking area in the northwestern area of the project site. Thus, if installed, due to the fact that the pumps would be located underground and would run only during storm events, it is not expected that the use of the pumps would generate noise in excess of the observed noise levels for the vicinity or in excess of the normally acceptable exterior noise levels.

In the event of a power outage during storm events, the alternative drainage plan proposes a natural gas emergency generator to support the electric pumps. The emergency generator would be located onsite within an approximately 8 square-foot enclosure. The applicant has indicated two potential locations for the generator, one of which would be adjacent to the parking area and the other would be adjacent to the proposed dog park. Both locations would be a minimum 100-feet from adjacent properties, a minimum 70-feet northwest of the proposed residential units, and a minimum 150-feet from the public right-of-way (Alves Lane). According to the applicant's engineer, the proposed emergency generator is rated for noise levels between 55dBA and 65dBA, which would satisfy the County General Plan normally acceptable exterior noise level standard of 65 dB DNL. Therefore, if installed, given that the proposed natural gas generator would run only during intermittent power outages during storm events, it is not expected to generate noise in excess of the standards established by the County General Plan.

Potential Impacts – Permanent Noise Levels: Based on existing conditions associated with topographical interventions, an existing soundwall, and the proximity to SR-4 and the BART train tracks, the common outdoor areas (interior courtyard and dog park) of the proposed 100-unit apartment complex are predicted to be exposed to future traffic and BART noise levels that are in compliance with the applicable Contra Costa County General Plan exterior noise level standards. However, based on existing conditions associated with traffic and the proximity of the building to SR-4 and the BART train tracks, a portion of the residential units within the development is predicted to be exposed to future traffic noise exposure in excess of the applicable General Plan interior noise level criteria.

As a result, the following specific noise mitigation measures shall be incorporated as part of the project to reduce the potential impact from SR-4 traffic and BART train noise to a less than significant level:

NOI-1: Window and balcony/patio door assembly upgrades are recommended for portions of the residences of the development. All upgrades, as shown in Figures 4 through 7 of the approved environmental noise assessment study, shall be implemented to achieve recommended minimum STC ratings.

NOI-2: Mechanical ventilation (air conditioning) shall be provided for all residences in this development to allow occupants to close doors and windows as desired to achieve compliance with the applicable interior noise level criteria.

Potential Impacts – Temporary noise levels due to construction: During project construction of the future buildings, a temporary increase in ambient noise levels would occur, and there may be periods of time when there would be ground borne vibrations or loud noise from construction equipment, vehicles, and tools. The temporary activities during the construction phase of the project have the potential for generating noise levels in excess of standards described in the Noise Element of the County General Plan.

Implementation of the following noise mitigation measures throughout the construction phase would reduce impacts from ground borne vibrations and temporary increases in ambient noise levels to less than significant levels:

NOI-3: A pre-construction meeting with the job inspectors and the general contractor/onsite manager shall be held **at least one week in advance of ground disturbance** to confirm that all noise mitigation measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed prior to beginning construction.

NOI-4: The applicant shall notify neighbors within 300 feet of the subject property **at least one week in advance of grading and construction activities**.

NOI-5: The applicant shall designate a construction noise coordinator who will be responsible for implementing the noise control measures and responding to complaints. This person's name and contact information shall be posted clearly on a sign at the project site and shall also be included in the notification to properties within 300 feet of the project site. The construction noise coordinator shall be available during all construction activities and shall maintain a log of complaints, which shall be available for review by County staff upon request.

NOI-6: The following construction restrictions shall be implemented during project construction and shall be included on all construction plans.

1. The applicant shall make a good faith effort to minimize project-related disruptions to adjacent properties. This shall be communicated to project-related contractors.

2. The applicant shall require their contractors and subcontractors to fit all internal combustion engines with mufflers which are in good condition and shall locate stationary noise-generating equipment such as air compressors as far away from existing residences as possible.

3. Large trucks and heavy equipment are subject to the same restrictions that are imposed on construction activities, except the hours for transportation to and from the site are limited to 9:00 am to 4:00 pm.

4. All construction activities shall be limited to the hours of 8:00 am to 5:00 pm, Monday through Friday, and are prohibited on state and federal holidays on the calendar dates that these holidays are observed by the state or federal government as listed below:

    - New Year's Day (State and Federal)
    - Birthday of Martin Luther King, Jr. (State and Federal)

- Washington's Birthday (Federal)
- Lincoln's Birthday (State)
- President's Day (State and Federal)
- Cesar Chavez Day (State)
- Memorial Day (State and Federal)
- Independence Day (State and Federal)
- Labor Day (State and Federal)
- Columbus Day (State and Federal)
- Veterans Day (State and Federal)
- Thanksgiving Day (State and Federal)
- Day after Thanksgiving (State)
- Christmas Day (State and Federal)

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact: The proposed project for a 100-unit apartment complex is a type of use that will not consist of any manufacturing, processing, or other activities that would typically result in excessive ground borne vibration as a result of its daily use and operation. Any ground borne vibration or ground borne noise that may be created as part of the project would be produced during the construction phase. Therefore, any possible ground borne vibrations or ground borne noise would be temporary in nature and would be limited to the restricted construction hours as typically conditioned for development permits approved by the County. According to the Geotechnical Investigation by TRC, shallow foundations (slab-type or shallow footings) are recommended. Thus, there would be no impacts from groundborne vibrations due to pile or pier driving activities during construction. Additionally, the distance of the project site to the residential homes across the canal to the north and east would help reduce any construction-related impacts from groundborne vibrations or groundborne noise. Thus, based on the nature of the proposed improvements and the limited hours and overall anticipated duration for the construction phase of the project in addition to implementation of mitigation measures **NOI-3** through **NOI-6**, the probability for excessive ground borne vibration or ground borne noise levels is less than significant.

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

No Impact: The project site is not located within two miles of a public airport or private airstrip, nor is it located within an area covered by the County's Airport Land Use Compatibility Plan. The nearest airport facility is the Buchanan Field Airport, approximately 6 miles southwest of the project site. Thus, the proposed project would not expose people residing or working in the project area to excessive noise levels from either Buchanan Field or a private airstrip and there is no impact.

Sources of Information

Contra Costa County General Plan. "Chapter 11: Noise Element." 2005-2020. http://www.co.contra-costa.ca.us/DocumentCenter/View/30921/Ch11-Noise-Element?bidId=.

Bollard Acoustical Consultants, Inc. "Environmental Noise Assessment, Alves Lane Bay Point Apartments." Prepared for Meta Housing Corporation. 22 May 2020

Bollard Acoustical Consultants, Inc. "RE: DP20-3011 Alves Lane – BAC Noise Assessment." Email. 1 March 2021

KPFF. Preliminary Drainage and Utility Plan Alternative. Received on 9 May 2021.

TRC. "Geotechnical Investigation, 100-Unit Apartment Development, Alves Lane, Bay Point, CA" Prepared for Meta Housing Corporation. 24 October 2019

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
14. *POPULATION AND HOUSING – Would the project:*				
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☒	☐	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

***SUMMARY**:*

a) Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

Less Than Significant Impact With Mitigation Incorporated: The proposed project would develop a vacant lot with 100 apartment units which will induce a population increase as a result. The most recent demographic data for population and housing compiled by the US Census Bureau for the Bay Point area is based on the 2019 American Community Survey (2019 ACS). Based on the proposed unit count and 2019 estimates of 3.73 people per household in Bay Point, it is anticipated that the development will result in a population increase of approximately 373 persons. The U.S. Census Bureau estimates that, between 2014 and 2019, the population of Bay Point has increased approximately 16% to 25,808 persons. Available data for 2019 also indicates that of the 7,174 housing units in Bay Point, 6,917 or 96% of those units are occupied. Based on the population growth and dwelling unit occupancy data, it can be said that there is an accelerating population growth trend and high housing demand for the Bay Point area. A "worst case" scenario of an increase of 373 new residents to the Bay Point area as a result of the proposed project would mean a negligible 0.99% increase in population. In addition, given the low vacancy rate in the Bay Point area, the potential for a population increase resulting from the project is further reduced because it is very likely that a portion of the future residents within the proposed residential development will be persons who already reside in Bay Point. Furthermore, the direct population growth in the area due to the project is not unplanned. In 2002, the City of Pittsburg, Contra Costa County, and the Bay Area Rapid Transit District adopted the Pittsburg/Bay Point BART Station

Area Specific Plan (Specific Plan). The Specific Plan area includes the subject property which has been identified for Multi-Family Medium Density (MM) land uses. Thus, due to the built-out nature of the project sites' surroundings, combined with the fact that all major transportation/utility infrastructure currently exists, the project would not induce substantial unplanned population growth in the area, either directly or indirectly. Based on the above, the potential for the proposed project inducing a substantial population growth in the Bay Point area and County is less than significant.

Due to the number of units proposed under the project, an assessment of the estimated child care needs caused by the proposed project was administered in compliance with the County' s Child Care Facilities ordinance. The May of 2020 report completed by CoCoKids, (formerly known as the Contra Costa Child Care Council) found that vacancy rates in child care centers in the Bay Point area are currently much higher than normal due to the Covid-19 pandemic shelter-in-place (SIP). The report acknowledges that many families are either unemployed or working at home, which in turn keeps children at home rather than in child care. According to the report, before the pandemic, child care centers in Bay Point were operating at close to capacity. When recovery begins, CoCoKids expects that the community will have less accessibility to quality child care due to some child care programs having to close due to financial impacts. CoCoKids projects that the addition of 100 multi-family homes would bring an additional 24 children in need of licensed child care to the Bay Point area. Based on this project, the report found that a minimum of 24 spaces in child care centers and family child care homes will need to be made available.

Potential Impact:

Available data indicates that child care centers in the Bay Point area were operating near full capacity prior to the Covid-19 pandemic and may face additional capacity pressures once recovery begins due to the anticipated closures of child care programs that may not weather financial pressures during shelter-in-place (SIP). That coupled with the fact that Bay Point has a high rate of single parents and two parent working families means that the additional 100 units created by the proposed project would exceed the capacity of the existing child care facilities in the area.

Implementation of the following project-specific mitigation will ensure that the additional child care demand created as a result of the proposed project can be accommodated.

POP-1: The project sponsor shall mitigate the need for the additional child care created by the proposed development via one or a combination of the following methods:

- At the time of building permit issuance for the residential building, the developer shall pay a fee of $200 per unit to the County, to contribute towards expanding and improving child care in the geographical region. The fee amount shall be equal to the in-lieu fee amounts as adopted by the County Board of Supervisors for residential projects between 1 and 29 units pursuant to County Code Section 82-22. 806(d). For the Project, this fee would total $20,000.00.

- The developer may contract with CocoKids to recruit and train additional family child care providers, with a special focus on recruiting providers to provide infant/toddler and school-age care. The contract shall be subject to review by the Community development Division.

- The developer may contribute funds directly to child care centers located adjacent to elementary schools in the area to improve and expand facilities to provide care for school-age children. The fund contribution amount shall be sufficient enough to substantially accommodate the additional child care need created by the project and shall be subject to review and approval of CocoKids and the Community Development Division.

- The developer may contribute funds directly to family child care providers in Bay Point to encourage providers to care for infants, toddlers, and school-age children. These funds may be used for training or the purchase of infant equipment. The fund contribution amount shall be sufficient to train a sufficient number of additional staff or to purchase enough equipment to substantially meet the additional child care demand created by the proposed development. The fund amount shall be subject to review and approval of the Contra Cost a Child Care Council and the Community Development Division.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact: The prosed residential development will be constructed on a vacant lot that has been previously zoned for multi-family residential development. There is no need to alter or remove any of the surrounding residential units in order to establish the proposed development. Thus, the construction and establishment of the proposed 100-unit apartment complex would not displace any person, nor necessitate the construction of replacement housing elsewhere.

Sources of Information

City of Pittsburg, Contra Costa County, & Bay Area Rapid Transit District. "Pittsburg/Bay Point BART Station Area Specific Plan." Adopted 18 June 2002

CoCoKids. "Child Care Needs Assessment and Mitigation Plan." May, 2020

United States Census Bureau. "2014 American Community Survey, Bay Point CDP, California." Accessed in 2021. https://data.census.gov/

United States Census Bureau. "2019 American Community Survey, Bay Point CDP, California." Accessed in 2021. https://data.census.gov/

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
15. ***PUBLIC SERVICES – Would the project*** *result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*				
a) Fire Protection?	☐	☐	☐	☒
b) Police Protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

***SUMMARY**:*

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) *Fire Protection?*

No Impact: The proposed project for a 100-unit apartment complex has been reviewed by the Contra Costa County Fire Protection District. In a comment letter dated June 18, 2020, there was no indication that new fire protection facilities would be needed as a result of this project. The Public Facilities/Services Element of the County General Plan requires fire stations to be located within 1.5 miles of developments in urban areas. The Bay Point area is served by Fire Station 86, currently located on Willow Pass Road less than 1 mile north of the project site. Thus, the project would meet this General Plan policy and no new or physically altered fire protection facilities are required as a result of the proposed project.

b) *Police Protection?*

No Impact: Police protection and patrol services in the Bay Point area and the project vicinity are provided by the Contra Costa County Sheriff's office. The Public Facilities/Services Element of the County General Plan requires 155 square feet of station area per 1,000 population in unincorporated Contra Costa County. As discussed earlier in this study, the proposed project would not significantly increase the population within this area of the County. In addition, a police services assessment would be required as a condition of approval. Therefore, the addition of 100 new dwelling units on the project site would not impact the County's ability to maintain the General Plan standard of having 155 square feet of station area and support facilities for every 1,000 members of the population. Thus, the proposed project will not result in the need for new or expanded police protection facilities or services in the County.

c) *Schools?*

Less Than Significant Impact: The project site is located within the jurisdiction of the Mt. Diablo Unified School District (MDUSD) and would induce a student increase to their classroom numbers. At the time of the completion of this study, no indication was received from the school district that expansion of existing school facilities would be necessary. However, to address student growth in school districts as a result of residential developments in the County, a per-square-foot school fee amount is determined by the MDUSD. Prior to issuing building permits, the County Building Inspection Division collects the school fees on behalf of the respective school district as part of the overall building permit fees, or requires a receipt showing payment of the applicable fee to the school district. Payment of the development fees pursuant to State regulations for school services would reduce impacts to neighborhood schools to less than significant levels.

d) *Parks?*

Less Than Significant Impact: The policy for Parks and Recreation in the Growth Management element of the County General Plan indicates that a standard of 3 acres of neighborhood parks per 1,000 persons should be maintained within the County. In order to achieve this standard, the County's Park Dedication Ordinance (Section 920) requires that developers of land for residential uses either dedicate land on the project site or pay a fee in lieu thereof for neighborhood and community park or recreation purposes. Based on these standards and the residential nature of the proposed development, expanded or additional park resources are required as part of the project.

The applicant has proposed a private, 15,138 square-foot recreational area to be centrally located as an interior courtyard of the proposed development. This recreational area will include a barbeque/picnic area, playground, and open turf for the use of future residents, which will reduce the number of residents that will use nearby public parks such as Ambrose Park. In addition, the applicant has proposed a private, 1,800 square-foot dog park with pet fountains, pet waste stations, and K9 grass for play and pet relief. However, due to the substandard size of the total recreational area (less than 2 acres), the proposed private recreational area cannot be credited towards the applicant's land or fee dedication as required by the County Park Dedication Ordinance. As a result, the applicant will still be required to pay a per-dwelling-unit fee (comprised of Park Dedication and Park Impact fees adopted by the County Board of Supervisors) to the County, which will be used to acquire park land and develop parks and recreation facilities to serve new residential development in the unincorporated County. Therefore, as the applicant has elected to pay an in-lieu fee instead of constructing new park areas in order to comply with the County Park Dedication Ordinance, there is no potential for the proposed project resulting in a substantial adverse environmental impact as a result of the construction of new or expanded parks.

e) Other public facilities?

Less Than Significant Impact: During staff's initial review of the proposed development and prior to deeming the project complete, project-specific comments were solicited from various local agencies and other interested parties in order to alert County staff and the applicant to any additional permitting, improvements, etc., that may be required as part of the project. Among the groups solicited for this project were the Delta Diablo Sanitary District, Golden State Water Company (GSWC) ~~Contra Costa Water District~~, and the County Environmental Health Division. No indication of a need for new or expanded facilities was provided in the comments received from ~~these agencies~~Delta Diablo or the County Environmental Health Division. However, GSWC indicated that there are no water mains in the vicinity of the project on Alves Lane, therefore, the project proponent will be required to install a new, 8-inch water main within the Alves Lane right-of-way extending approximately 2,500 linear feet from the intersection of Alves Lane and Virginia Drive to the intersection of Canal Road and Chadwick Lane. As discussed in Section 10, above, the likelihood for environmental impacts from extending the water main is low because all physical improvements would be within the previously disturbed right-of-way, and mitigations have been incorporated as part of the project to reduce any environmental impacts on the Contra Costa Canal to less than significant levels (**BIO-2** and **HYD-1** through **HYD-3**).~~.~~ The proposed development will require ~~water,~~ sewer, electrical, gas, cable, and telecommunication services, and the provided plans indicate that existing mains and extensions for these utilities and services currently exist within the Alves Lane roadway area. Based on the above, the impact of the project on other local public facilities agencies would be less than significant.

Sources of Information

Contra Costa County Fire Protection District. "3 and 4 Story Apartment Building, Alves Lane, Bay Point." Agency Comment Response Letter. 18 June 2020.

Contra Costa County General Plan. "Chapter 4: Growth Management Element." 2005-2020. https://www.contracosta.ca.gov/DocumentCenter/View/30914/Ch4-Growth-Management-Element?bidId=.

Contra Costa County. "Title 9, Division 920 – Park Dedication." Accessed in 2021. https://library.municode.com/ca/contra_costa_county/codes/ordinance_code?nodeId=TIT9SU_DIV920PADE

Dahlin; KPFF; R3 Studios. Revised Project Plans. Received on 7 August 2020 and 30 October 2020.

KPFF. Revised Utility Project Plan. Received on 28 January 2021.

KPFF. Public Improvements Exhibit. Received on 12 August 2021.

KPFF. Typical bridge section plan, water service crossing options. Received on 1 November 2021.

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

***SUMMARY**:*

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact: The proposed development will induce a small population increase in the area, and as a result it is anticipated that the use of neighborhood and regional parks in the area will also increase. However, as mentioned in the Public Services section above, the applicant will be providing a private recreational area and dog park within the development, and Park Dedication in-lieu fees as part of the project. The establishment of the private recreational area and the payment of the in-lieu fees, which will be used toward acquiring parkland and developing parks and recreation facilities, will lessen any impacts to the use of neighborhood and regional parks as a result of the proposed project to a less than significant level.

The private recreational area proposed as part of the project will not impact any additional parcels within the County as it will be constructed in the geographical center of the project site, and thus has been analyzed for environmental impacts as part of the overall project. Although the applicant will also be paying an in-lieu fee towards parkland acquisition and development, it is not known at this time when or how those funds will be used. Therefore, any environmental impacts resulting from the construction or expansion of recreational facilities via the funds collected from this project will need to be evaluated for potential impacts and mitigated (if necessary) as a separate project.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Less Than Significant Impact: Please see discussion in subsection-a above.

Sources of Information

Contra Costa County. "Title 9, Division 920 – Park Dedication." Accessed in 2021. https://library.municode.com/ca/contra_costa_county/codes/ordinance_code?nodeId=TIT9SU_DIV920PADE

Dahlin; KPFF; R3 Studios. Revised Project Plans. Received on 7 August 2020 and 30 October 2020.

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

***SUMMARY**:*

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less Than Significant Impact: The subject property fronts on Alves Lane, a two-lane roadway with a 35-mph speed limit. Access to the residential development from Alves Lane would be through two driveways, one at the west end and the other at the east end of the site. Regional access to the project site would be via SR-4, located just south of the project site. Two full interchanges to SR-4 are nearby, with one at Willow Pass Road to the west and the other at Bailey Road to the east. The Bay Area Rapid Transit (BART) mass transit rail system, located less than a mile from the project site, provides regional transportation connection in the Bay Area with

trains running approximately every 15 minutes on a weekday. There are existing bicycle lanes on Willow Pass Road and Bailey Road. The applicant proposes the construction of a public sidewalk on the northside of Alves Lane the length of the property frontage and extending approximately 750 linear feet to the east to connect to the existing public sidewalk along Alves/Canal Road.

Policy 4-c of the Growth Management Element of the General Plan requires a traffic impact analysis of any project that is estimated to generate 100 or more AM or PM peak-hour trips. In order to determine if the project would require a traffic impact analysis, Stantec Consulting Services, Inc. (Stantec) prepared "A Trip Generation Analysis and VMT Assessment" (Assessment, dated June 2, 2020) on behalf of the project applicant. Utilizing standard Institute of Transportation Engineers (ITE) 10th Edition trip generation rates for projects in the mid-rise, multi-family housing category, Stantec estimates that the project is expected to generate approximately 544 average daily vehicle trips, with approximately 36 trips occurring during the AM peak hour and 44 trips occurring during the PM peak hour.

Chapter 82-32 of the County Code requires the preparation of a "Transportation Demand Management" (TDM) program, for all residential projects with 13 or more dwelling units. The TDM Ordinance Guide encourages the use of creative and effective ways to reduce motor vehicle trips and their associated impacts created by new development projects. To minimize parking demand and reduce vehicle trips, the applicant may consider, but should not be limited to, reducing the number of parking spaces, providing bicycle and pedestrian infrastructure, providing transit passes, unbundling the price of parking from rent, providing emerging mobility options (e.g., electric scooters, bike share, etc.), and other strategies commonly used to minimize parking demand and automobile trips. Thus, Stantec prepared a draft TDM program (dated September 1, 2020) for the Alves Lane housing project which recommends similar TDM measures. Since the proposed development would generate additional pedestrian and bicycle traffic in the area, Stantec recommends that a bicycle lane be added to Alves Lane to connect to the existing Class II bicycle lane on Bailey Road. Bicycle lanes combined with the 58 long- and short-term bicycle parking spaces proposed with this development ensures the proposed project would comply with adopted policies, plans, or programs supporting alternative transportation. Staff of the County's Transportation Planning division further recommends that a final TDM Program and a TDM Coordinator be required as conditions of approval.

Since the proposed project would generate less than 100 peak hour trips, a traffic impact analysis is not required in accordance with General Plan Policy 4-c. In addition, as recommended by County Transportation Planning staff, requiring a final TDM program and a TDM Coordinator as conditions of approval would ensure that the project results in a less than significant impact on programs, plans, ordinances or policies regarding transit, roadway, bicycle, and pedestrian facilities.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?

Less Than Significant Impact: CEQA provides guidelines for analyzing transportation impacts relating to vehicle miles travelled (VMT) resulting from the project. The Governor's Office of Planning and Research (OPR) established recommendations for identifying and mitigating transportation impacts within CEQA and published a final Technical Advisory in December of 2018 that advises lead agencies to conduct a screening process to "quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study." As mentioned above, Stantec prepared "A Trip Generation Analysis and VMT Assessment" on

behalf of the project applicant to identify whether the project would be expected to cause a significant impact and, thus, require a detailed VMT study. Stantec identified the following project screening criteria as part of their Assessment:

Category	Screening Criteria
Trip generation screening	Small Projects can be screened out from completing a full VMT analysis.
Map-based screening	Projects that are located in areas with low VMT can be screened out from completing a full VMT analysis.
Proximity to transit	Projects within ½ mile of a major transit stop or a stop located along a high-quality transit corridor reduce VMT and therefore can be screened out from completing a full VMT analysis.
Affordable residential development	Affordable housing in infill locations can be screened out from completing a full VMT analysis.

According to the OPR's Technical Advisory, a project which meets one or more of the above screening criteria is assumed to have a less than significant impact. Stantec concludes that since the proposed project consists of entirely affordable infill housing, it can be assumed to have a less than significant VMT impact and would not require a full VMT analysis. The applicant has indicated that they intend to offer all 100 units for rent as below-market value (i.e., 100% affordable housing), however, only 15 units have been identified for inclusion in a housing affordability agreement with the County. Despite this, staff of the County Transportation Planning Division have indicated that they agree with Stantec's assessment that the project is an affordable housing infill project. In addition, the project is within a ½ mile radius of a BART station and would therefore be exempt from further VMT analysis. Therefore, the project does not conflict with CEQA guidelines section 15064.3(b).

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact: The subject property fronts a two-lane roadway with a 35-mph speed limit which is known as Alves Lane to the west of the project site and Canal Road to the east. For purposes of this study, Alves Lane is used as the common roadway name. Alves Lane has an existing pavement width from 26 feet to 30 feet within a 50-foot right-of-way. As shown on Figure 5-2 (Roadway Network Plan) of the General Plan Transportation and Circulation Element, Alves Lane is not considered to be an existing or proposed arterial, expressway, or freeway, but connects to two existing arterials within the area: Willow Pass Road and Bailey Road. Vehicles and bicycles would use new curb cuts to access the project site from Alves Lane through two driveways. According to the project plans, site access has been consolidated to the driveway located at the eastern side of the project site. An access gate is proposed at the western driveway to limit traffic entering or exiting the project from this steep driveway to emergency response vehicles. As required by the Department of Public Works, the applicant would submit an encroachment permit prior to construction of the proposed driveways, sidewalks, and other right-of-way improvements. No substantial changes to the existing transportation system are proposed with this application. Therefore, the project will have less than significant impact on the Alves Lane right-of-way and is not expected to substantially increase hazards due to geometric design features or incompatible uses.

d) Would the project result in inadequate emergency access?

No Impact: The project was referred to the Contra Costa County Fire Protection District for agency comments. No concerns with the adequacy of existing emergency vehicle access were identified within their response dated June 18, 2020. All construction plans will be subject to the applicable Fire Code that is in effect at the time when the application for a building permit is submitted. Therefore, the routine review of construction plans will ensure that the proposed project has no potential for adversely impacting existing emergency access to the subject property or other properties within the County.

Sources of Information

California Office of Planning and Research. "Technical Advisory on Evaluating Transportation Impacts in CEQA". December 2018. http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

Contra Costa County Conservation and Development Department and Public Works Department. "Transportation Analysis Guidelines." 23 June 2020. https://www.contracosta.ca.gov/DocumentCenter/View/69374/FINAL-CCC-Transportation-Analysis-Guidelines-v2-12-15-20?bidId=

Contra Costa County Fire Protection District. "3 and 4 Story Apartment Building, Alves Lane, Bay Point." Agency Comment Response Letter. 18 June 2020.

Contra Costa County General Plan. "Chapter 5: Transportation and Circulation Element." 2005-2020. http://www.co.contra-costa.ca.us/DocumentCenter/View/30915/Ch5-Transportation-and-Circulation-Element?bidId=.

Contra Costa County Public Works Department. "Development Permit DP20-3011, 30-Day Comments" Dated 28 October 2020.

Contra Costa County Transportation Division "DP20-3011 Alves Lane, Response to PW Comments" Dated 1 December 2020. Agency Comment Response Correspondence.

Stantec Consultants, Inc. "Trip Generation Analysis and VMT Assessment for the Alves Lane Affordable Housing Project in the Unincorporated Community of Bay Point, CA" 2 June 2020

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
18. ***TRIBAL CULTURAL RESOURCES – Would the project*** *cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?	☐	☐	☒	☐

***SUMMARY**:*

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

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Less Than Significant Impact: As discussed above in the Cultural Resources section of this study, there are no known existing structures located at the project site that would be designated as historical resources. The Cultural Resources chapter (Chapter 16) of the EIR prepared for the Pittsburg/Bay Point BART Station Area Specific Plan indicates that no specific cultural or prehistoric resources are known to occur within the Specific Plan area. Additionally, there is no evidence in the record at the time of completion of this study that indicates the presence of human remains at the project site. A Notice of Opportunity to Request Consultation for Land Use/Development Permit for the Alves Lane Apartments Project was sent to the Wilton Rancheria on January 14, 2021. No requests for consultation or responses regarding tribal cultural resources have been received from California Native American tribes at the time of completion of this study. Regardless, there is a possibility of cultural resources to be found within the vicinity of the project and upon implementing mitigation measures CUL-1 through CUL-4, impacts to tribal cultural resources will be less than significant.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

Less Than Significant Impact: Please see discussion in subsection-a above.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
19. *UTILITIES AND SERVICE SYSTEMS – Would the project:*				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

SUMMARY:

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact: The project site is located in a developed, urbanized area which is served by existing water, sewer, storm drain, electric power, natural gas, and telecommunications services. There is no indication from any utility service provider that the proposed residential complex would result in a need to relocate, expand, or construct new facilities in such a way as to cause significant environmental effects.

Water: The new development is located within the service area of the Golden State Water Company (GSWC), a public utility regulated by the California Public Utilities Commission (CPUC), which allows the extension of services to new customers within its service area in compliance with CPUC Rule 15. Project plans have been sent to the Golden State Water Company as part of the initial review process. GSWC indicated that the project proponent will be required to install a new, 8-inch water main within the Alves Lane right-of-way extending approximately 2,500 linear feet from the intersection of Alves Lane and Virginia Drive to the intersection of Canal Road and Chadwick Lane. The project would then tie-in to this extension for water service.

Golden State Water staff has reviewed the project application documents regarding the provision of new water service pursuant to their water service regulations and there has been no indication from the water company that the proposed project would exceed the capacity of the existing public water infrastructure.

Although the likelihood for significant environmental impacts from the water main extension is low because all physical improvements would be within the previously disturbed right-of-way, as discussed in the Hydrology and Water Quality section above, extending the water main would require crossing the Canal. The 8-inch water pipes would cross the Canal via two existing bridges. Three potential methods and locations have been indicated on the applicant's Water Service Crossing Options exhibit: 1) utilization of two 4-inch pipes installed within the existing annular structure of the bridge below the roadway surface, 2) attached to the bottom of the bridge using Unistrut fittings (similar to the existing storm drain pipes attached to the bridges), or 3) attached to the side of bridge behind the existing concrete barrier at the sidewalk edge using Unistrut fittings. Thus, there is a potential for the water main extension across the bridges to significantly impact the quality of the water in the Canal. In addition, the water main extension would cross the path of an existing 42-inch pipeline which connects two water treatment plants operated by CCWD. Upon implementation of mitigation measures **BIO-2** and **HYD-1** through **HYD-3**, the project would have a less than significant impact on the distribution of water, or on water quality standards, due to the installation of the 8-inch water main.

Any potential impacts to traffic that would result from extending the water main would be temporary in nature. In addition, the ~~requirement~~ applicant would be required to obtain right-of-way encroachment permits from the Contra Costa County Public Works Department ~~will ensure~~ ensuring that traffic impacts due to construction are analyzed and addressed.

Wastewater treatment: The project is within the service area of Delta Diablo (formerly known as the Delta Diablo Sanitary District), which is the agency responsible for ensuring that applicable wastewater treatment requirements of the Regional Water Quality Control Board are met and maintained. The wastewater generated by the 100 new dwelling units would incrementally increase wastewater flows in the Delta Diablo system. Project plans have been sent to Delta Diablo as part of the initial review process, and there is no indication that the proposed project would exceed their ability to provide sewer services with the currently available facilities, nor is there any indication that the project would require expansion of the wastewater treatment system.

Storm water drainage: As discussed in the Hydrology and Water Quality section above, the applicant has submitted a preliminary Storm Water Control Plan (SWCP) designed with project storm water controls including dispersion to vegetated areas, bioretention basins, and storm drains. The bioretention basins and vegetated areas would collect storm water, allow percolation into the ground, and convey excess runoff to the storm drains located along Alves Lane. The preliminary SWCP has been reviewed by the County Public Works department, which has provided final comments and recommendations for conditions of approval for the formal entitlement recommendation being made. Prior to any grading permit being issued, the applicant will be required to verify, through a hydrology and hydraulics report, that the receiving storm drain has adequate capacity to accept the runoff from the site prior to the issuance of building permits. In the event that the receiving storm drain has inadequate capacity, the applicant has proposed an alternative drainage and utility plan which, similar to the water main extension, would require the extension of a storm drain pipe approximately 450 linear feet northwest from the project site

within the previously disturbed right-of-way to connect to a storm drain inlet near the Contra Costa Canal (Canal). Based on the incorporation of a SWCP to control the increased runoff, and the review by the County agency responsible for enforcing drainage standards, and upon implementation of mitigation measures **BIO-2**, **HYD-1** and **HYD-2** which would limit or prohibit runoff from the project site to the Canal, the proposed project would have a less than significant adverse environmental impact on stormwater or wastewater drainage treatment facilities.

Electric/Natural Gas: The project is within the service territory of PG&E for electric and natural gas service. It is anticipated that the project will connect to underground electric and/or natural gas connections. There is no indication that the construction of new or expanded electric or natural gas services is required for the ongoing operation of the project. Temporary power for construction activities would also be provided by PG&E. The applicant will be required to apply for temporary power and follow the permitting process for connecting to the electrical grid.

Telecommunications services:, including Existing telephone, cellular, internet, and cable television are available within the project site's vicinity. The project site would connect to existing these services provided by several different providers, and there is no indication that the 100 new residential units would result in the need for expanded services such as new or larger wireless facilities.

By following the processes required to connect to existing water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the impacts of the project concerning these utilities and services would be less than significant. In addition, staff will recommend, as a condition of approval, that the existing chain link fence at the shared property line with the Canal shall not be altered or removed.

b) *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

Less Than Significant Impact: As discussed in subsection-a above, the new development is located within the service area of the Golden State Water Company (GSWC), a public utility regulated by the California Public Utilities Commission (CPUC), which allows the extension of services to new customers within its service area in compliance with CPUC Rule 15. Golden State Water staff has reviewed the project application documents regarding the provision of new water service pursuant to their water service regulations and there has been no indication from the water company that the existing public water infrastructure would have insufficient water supplies to serve the project, or that the project would have a significant impact on the public water infrastructure during dry, and multiple dry years.

c) *Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Less Than Significant Impact: The project is As discussed in subsection-a above, the new development is within the service area of the Delta Diablo Sanitary District (Delta Diablo), which is the agency responsible for ensuring that applicable wastewater treatment requirements of the Regional Water Quality Control Board are met and maintained. The wastewater generated by the 100 new dwelling units would incrementally increase wastewater flows in the Delta Diablo system. Project plans have been were sent to the Delta Diablo Sanitary District as part of the initial

review process, and there ~~is~~ has been no indication from them that the proposed project would exceed their ability to provide sewer services with the currently available facilities. Nor is there any indication that the project would require expansion of the wastewater treatment system. Delta Diablo would connect the dwelling units to its facilities after processing the residential sewer service application and collecting the applicable connection fees, completing a building plan review, and issuing a permit for sewer work. By following this process, the impacts related to the wastewater treatment requirements of the Regional Water Quality Control Board for the San Francisco Bay Region or the Delta Diablo facilities would be less than significant.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact: The proposed project would generate construction solid waste and post-construction residential solid waste. Construction on the project site would be subject to the CalGreen Construction and Demolition Debris Recovery Program administered by the Department of Conservation and Development at the time of application for a building permit. The Debris Recovery Program requires that at least 65% of construction job site debris (by weight) for all new residential buildings requiring permits that would otherwise be sent to landfills be recycled, reused, or otherwise diverted to appropriate recycling facilities. Thus, although future construction of the apartment buildings would incrementally add to the construction waste, the impact of the project-related increase would be considered to be less than significant.

The proposed project would be comprised of residential apartment units, which would generate the type of solid waste similar to that of other medium density residential uses in the vicinity. Regular solid waste removal for households in the Bay Point area is provided by Republic Services, which also provides recycling and green waste removal services. Household waste is ultimately destined for the Keller Canyon Landfill, which has enough approximate capacity to continue accepting waste for the next 50 years. Household waste from the 100-unit apartment project would incrementally add to the household waste headed to the landfill. However, the potential for the proposed project to exceed the capacity of the currently utilized landfill is minimal, and the impact of the project-related waste would be considered to be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact: As mentioned above, construction at the project site would be subject to the CalGreen Construction and Demolition Debris Recovery Program administered by the Department of Conservation and Development. The Debris Recovery Program requires that at least 65% of construction job site debris (by weight) for most construction types, that would otherwise be sent to landfills, be recycled, reused, or otherwise diverted to appropriate recycling facilities. The proposed project is not expected to produce significant amounts of waste that would present a greater conflict with laws and regulations regarding solid waste than similar multiple- and single-family residences in the vicinity. Furthermore, the owner, construction contractor, and future tenants would be subject to applicable federal, state, and local laws related to solid waste. Therefore, the potential for conflict with Federal, State, and local management and reduction statutes and regulations related to solid waste is less than significant.

Sources of Information

Contra Costa County. "CalGreen / Construction & Demolition (C&D) Debris Recovery Program." Accessed in 2020. https://www.contracosta.ca.gov/4746/CalGreen-Construction-Demolition-Debris-

Contra Costa Water District. "Comments on the Alves Lane Apartments Project Initial Study (CDDP20-03011)." Letter. 25 June 2021.

Golden State Water Company. "Comments on Alves Lane Apartments (DP20-3011) Review" Agency Comment Response Letter. 12 June 2020.

KPFF. Revised Utility Plan. Received on 28 January 2021.

KPFF. Preliminary Drainage and Utility Plan Alternative. Received on 9 May 2021.

KPFF. Public Improvements Exhibit. Received on 12 August 2021.

Republic Services. "Welcome to Republic Services of Unincorporated Contra Costa County, CA". website, accessed 5 February 2021. https://www.republicservices.com/municipality/unincorporated-ccc-ca

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
20. *WILDFIRE –* *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones,* ***would the project:***				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

SUMMARY*:*

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

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact: The project site is located in an area classified as a *Non-Very High Fire Hazard Severity Zone* on the California Department of Forestry and Fire Protection's Very High Fire Hazard Severity Zone map and is not located near any state responsibility lands classified as a *Very High Fire Hazard Severity Zone*. The project site is in a developed area within the service area of the Contra Costa County Fire Protection District (CCCFPD). The project was routed to the CCCFPD, who did not indicate any concerns with an elevated risk of wildfires for the site. The project will be required to comply with current fire codes, including those pertaining to fire sprinklers in new buildings, and driveway and roadway access for firefighting apparatus, and would not require the installation or maintenance of additional infrastructure such as roads or fuel breaks that may exacerbate fire risk. Likewise, the majority of the project site is relatively flat and within an urbanized area and, thus, would not expose people or structures to significant risks as a result of post-fire slope instability or runoff. Therefore, it would have no impact on emergency response or evacuation plans or project occupants due to wildfire. Likewise, the 100-unit apartment complex would not result in exacerbated wildfire risks or expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Additionally, there will be no impact to project occupants or other people due to downstream flooding, or landslides due to post-fire downslope instability, runoff, or drainage changes.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact: See discussion in subsection-a above.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact: See discussion in subsection-a above.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact: See discussion in subsection-a above.

Sources of Information

California State Geoportal. "California Fire Hazard Severity Zone Viewer." Accessed in 2020. https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414.

Contra Costa County Fire Protection District. "3 and 4 Story Apartment Building, Alves Lane, Bay Point." Agency Comment Response Letter. 18 June 2020.

Staff Site Visit, 24 June 2020.

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

***SUMMARY**:*

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact: Although development of the proposed multi-family residential complex would be contained within the 3.58-acre project site, due to the undeveloped nature of the project site, it has the potential for impacting the environment in relation to undiscovered biological or cultural resources. However, the project would not substantially degrade the quality of the natural environment because the potentially significant impacts regarding aesthetics, biological resources, cultural/tribal resources, and geology/soils as identified throughout this initial study, can be mitigated to less than significant levels. Where mitigation measures are enforced as proposed in this Initial Study, the measures will be conditions of approval of the proposed project and the applicant will be responsible for implementation of the measures. Therefore, the potential for substantial impacts to biological, historical, cultural or other resources as a result of the proposed project is reduced to a less than significant level.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable

when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less Than Significant Impact: The project site is located within the Urban Limit Line in an area that has been designated for medium-density multiple-family residential development. The number of housing units in the Bay Point area would increase by 100 units with the proposed project, which, based on data from the U.S. Census Bureau, would be approximately 1.4 percent of the estimated 7,174 housing units in Bay Point as of 2019.

The project site is one of the few in the immediate vicinity of Bay Point that is vacant. Across Alves Lane and adjacent to SR-4 is an underutilized, approximately 1.5-acre property which is zoned for single-family residential land uses and could potentially be subdivided for additional residential units. In addition, to the west of the subject property is an approximately 14.5-acre vacant property that is also zoned for single-family residential land uses and could potentially be subdivided for additional residential units. The County is not currently processing any applications for development of the adjacent underutilized or vacant parcels.

Staff is aware of four additional, substantial development projects in the nearby Bay Point area that are under review. Staff is unaware of any substantial development projects in the nearby Bay Point area that have recently been approved. The projects under review are as follows:

1. (County File #CDPR19-00004) The project includes construction of five buildings consisting of 27,000-square-feet of commercial space and 347 residential apartment units and will include three-story walk-up apartments and three- and four-story podium apartments. The approximately 8-acre property comprises forty-four vacant lots and is located on Bailey Road and W. Leland Road. The BART station is located 800 feet east of the project site. A pre-application review was conducted in October of 2019 during which agency comments were collected. A developer was chosen in 2019 by the property owner, the Contra Costa County former redevelopment agency, through the RFP process.

2. (County File #CDLP20-02034): The project as currently submitted is for a new O-Reilly's auto parts store on four lots approximately 1.5 acres which are designated for multi-family residential – low density land uses, and mixed-use residential land uses for the Willow Pass Corridor. Additionally, pursuant to State Government Code §65863 and SB 166, the property has been identified in the County's Housing Element Land Inventory as having capacity for units with Low or Very Low affordability. Therefore, the applicants have indicated that they would submit a revised proposal for multi-family housing. At the time of this study, the number of proposed units is unknown, however based on the land use designations for the parcels, potential densities range between 7.3 units and 29 units per net acre. The development would be on an approximately 1.5-acre site located at the northeast corner of the intersection of N. Broadway Avenue and Willow Pass Road (APN: 096-032-011, -016, -028, and -032). The project is currently under 30-day application review.

3. (County File #CDLP20-02056): The project consists of establishing a contractor's yard with boat and RV storage, and a mobile trailer. The project is located on an approximately 37-acre lot on Port Chicago Highway and adjacent to the Union Pacific and Burlington Northern Santa Fe railroad tracks (APN: 098-250-020). The project is currently under 30-day application review.

4. (County File #CDDP18-03005): The project involves a development plan to expand an existing auto storage yard to increase capacity to store up to approximately 1,230 theft recovered vehicles, and the removal of 5 trees. The project site is located at 2770 Willow Pass Road (098-240-031). The project was recommended for denial before the Zoning Administrator (ZA); however, the applicants have since changed the proposed design and an Initial Study is currently being prepared prior to returning to the ZA.

Population/Housing: Two of the projects listed above are residential developments or have residential development components that will increase the amount of available housing in the area. These projects will not contribute to an increased demand for housing as they are contributing towards additional housing. When considered cumulatively with the Alves Lane multi-family residential project, the residential project which would add 347 units (project #1 above) has the potential to increase the population within the Bay Point area by up to 1,294 persons, or approximately 5% of the 2019 population. However, the population increase would not result in a direct or indirect housing shortage in the Bay Point area, and any environmental mitigations proposed or required for these developments, including those regarding child care, schools, and parks/recreation, would result in a less than significant cumulative impact when considered with the Alves Lane Apartments project.

Transportation: Any analysis of potential traffic and transportation impacts for the above listed projects is pending. The Bay Point area is well served by public transportation, including the Pittsburg/Bay Point BART Station. Project #1 has potentially the greatest cumulative impact through development of 347 residential units and up to 26,000 square feet of office or commercial space. However, Project #1 is located approximately 800 feet from BART station and thus could be considered transit-oriented development. The potential multi-family housing project that would be located on Willow Pass Road and N. Broadway (Project #2) would be well-served by existing public transportation routes in that part of Bay Point, many of which directly connect to the BART station for regional commuters. Projects #3 and #4 to develop a contractor's yard and expand an auto storage yard would be expected to have little to no impact on transportation in the Bay Point area. When considered cumulatively with the Alves Lane Apartments project, with any environmental mitigations proposed or required for these developments, there would be a less than significant cumulative impact on traffic and transportation.

Drainage: In addition to the proposed Alves Lane residential project, all of the projects listed above are located within the urban and previously developed area of Bay Point, which has an existing regional drainage system. Furthermore, due to the size of each project, it is reasonable to expect that a drainage plan and stormwater control plan would be required to ensure that additional storm water runoff generated at the sites is discharged in a manner that is consistent with the current and applicable code. Lastly, all of the projects listed above are within one of Bay Point's two drainage areas (DA 48C & 48D) and are subject to a per-square-foot drainage fee collected by the County for new development. Thus, the potential for significant cumulative drainage impacts for the projects listed above when considered with the proposed Alves Lane multi-family residential project is less than significant.

Public Services/Utilities: Public services and utilities such as water, power, sanitary sewer, and fire protection in the Bay Point area fall under the jurisdiction of outside agencies (e.g., Golden State Water Company, EBMUD, Delta Diablo, etc.). The Community Development Division (CDD) generally solicits project specific comments from these agencies as part of the application

review process, and design modifications are made based on the advice of each respective agency. The consulted agencies are the governing bodies with proficient knowledge of the needs of their existing infrastructure, and no indication of potential impacts or the need for new or expanded services was noted for the project proposal. Therefore, County CDD staff's consultation with outside agencies for each project reduces the potential for significant cumulative environmental impacts related to new or expanded utilities to a less than significant level.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact: This Initial Study has disclosed potential impacts on human beings that would be less than significant with the implementation of mitigation measures. All identified mitigation measures will be included as conditions of approval for the proposed project, and the applicant will be responsible for implementation of the measures. As a result, there would not be any environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

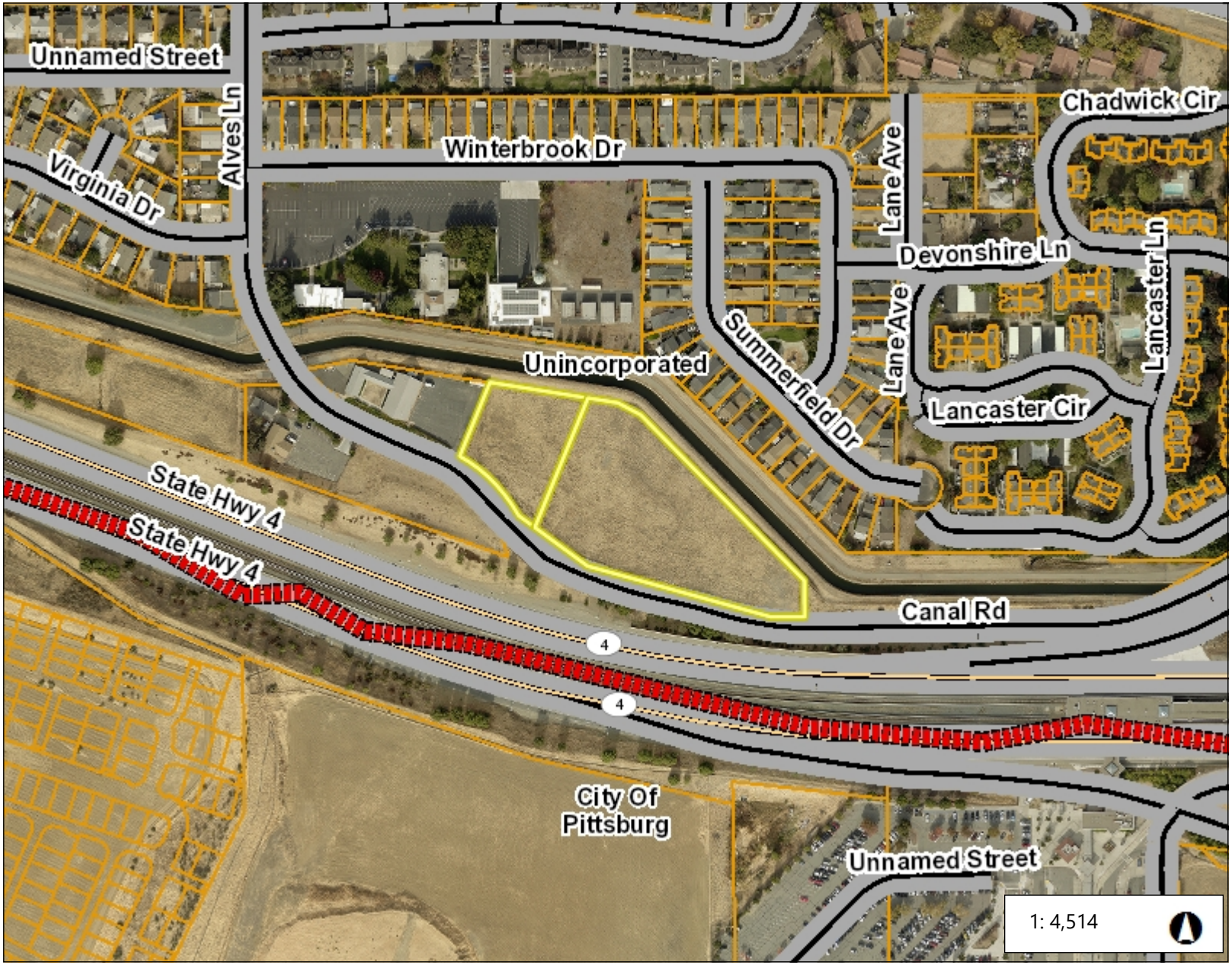
REFERENCES

In the process of preparing the Initial Study Checklist and conduction of the evaluation, the above cited references were consulted. Reference materials are available for review by contacting Syd Sotoodeh, Contra Costa County Department of Conservation and Development, by email at syd.sotoodeh@dcd.cccounty.us or by phone at (925) 655-2877.

ATTACHMENTS

1) Vicinity Map/Aerial View
2) Project Plans
3) Revised Mitigation Monitoring and Reporting Program

Vicinity Map/Aerial View



0.1 0 0.07 0.1 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Legend

- City Limits
- Unincorporated
- Highways
- Highways Bay Area
- Streets
- County Boundary
- Bay Area Counties
- Assessor Parcels
- Aerials 2019
  - Red: Band_1
  - Green: Band_2
  - Blue: Band_3
- World Imagery
- Low Resolution 15m Imagery
- High Resolution 60cm Imagery
- High Resolution 30cm Imagery
- Citations

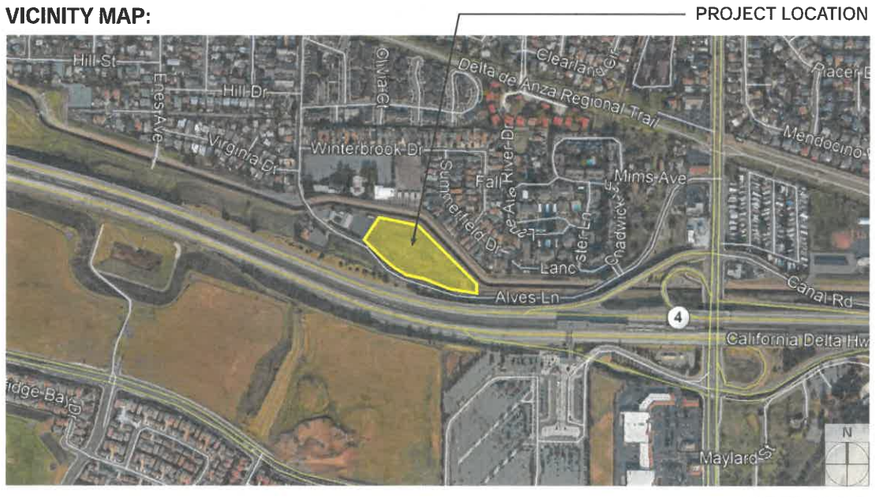
Notes

SECOND DEVELOPMENT PLAN SUBMITTAL FOR:

ALVES LANE APARTMENTS

BAY POINT, CA

VICINITY MAP:



NOT TO SCALE

PROJECT TEAM INFO:

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ryan.beaton@kpff.com

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Tel: (818) 242-2800
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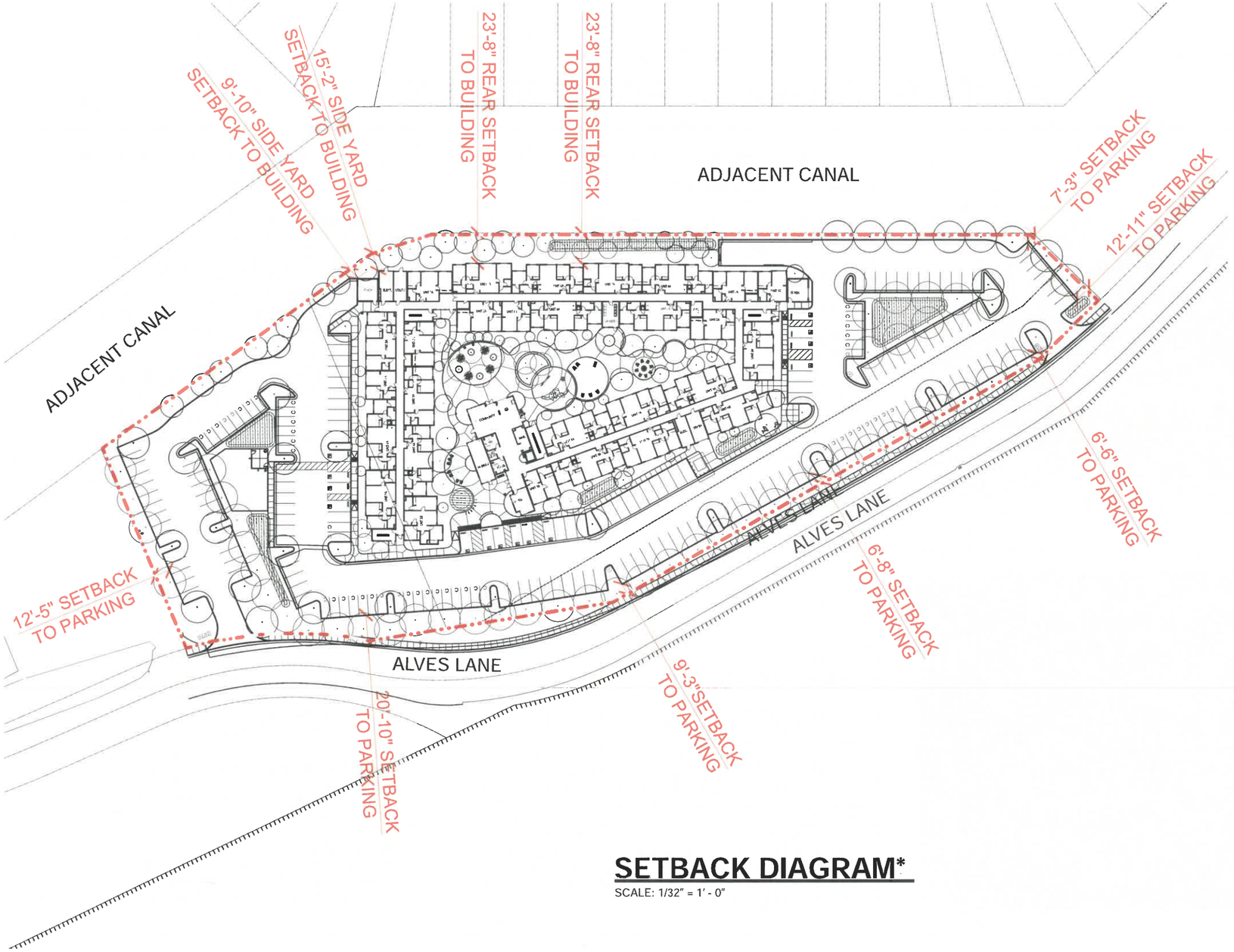
sotholr@sylinc.com

PROJECT DESCRIPTION

The project, located at 544-595 Alves Lane in Bay Point, CA, is walking distance to the Bay Point BART Station. It is a three to four-story, affordable housing project with 100 units. Designed as family housing, the project proposes approximately 15% one bedroom units, 15% two bedroom units, 36% three bedroom units, and 34% four bedroom units. Vehicular access is provided around three sides of the building with surface parking at the ground floor. The fourth elevation is adjacent the canal. The building nestles into the site, creating an interior courtyard protected from the noise of Highway 4 that will be a public outdoor amenity for the community residents. The courtyard will feature a play area, community gardens, seating areas, and community room access for an indoor/ outdoor living experience for residents.

SHEET INDEX:

TITLE SHEET



SETBACK DIAGRAM*

SCALE: 1/32" = 1' - 0"

PROJECT DATA SUMMARY		DATE: 07/31/2020
PROJECT NAME:		Alves Lane, Bay Point
LOCATION:		Bay Point, CA
PROJECT NUMBER:		1318.011
CLIENT:		Meta Housing Corporation
CONSTRUCTION TYPE:		Type VA
GENERAL:		
APN:		093-100-059; 093-100-060
ZONING DESIGNATION		P-1
GENERAL PLAN LAND USE:		MM - MULTIPLE FAMILY RESIDENTIAL - MEDIUM
ACREAGE:	Acres	Square Feet
TOTAL:	3.81	165,964
GROSS SITE AREAS (SF)		
BUILDING COVERAGE:		38,639
LANDSCAPE:		47,486
HARDSCAPE:		79,839
TOTAL:		165,964
MAX BUILDING HEIGHT:		45'
MAX PROPOSED HEIGHT:		4TH FLOOR MAX. HEIGHT NOT TO EXCEED 45'
GROSS BUILDING AREA TOTALS (SF)		
RESIDENTIAL:		99,413
COMMON / AMENITY:		4,159
CIRCULATION:		20,039
UTILITY:		1,739
TOTAL:		125,350
GROSS BUILDING AREAS PER FLOOR (SF)		
GROUND LEVEL:		
RESIDENTIAL:		28,053
COMMON / AMENITY:		3,587
CIRCULATION:		5,892
UTILITY:		1,107
TOTAL:		38,639
SECOND LEVEL:		
RESIDENTIAL:		30,377
COMMON / AMENITY:		286
CIRCULATION:		5,897
UTILITY:		316
TOTAL:		36,876
THIRD LEVEL:		
RESIDENTIAL:		30,377
COMMON / AMENITY:		286
CIRCULATION:		5,897
UTILITY:		316
TOTAL:		36,876
FOURTH LEVEL:		
RESIDENTIAL:		10,606
COMMON / AMENITY:		0
CIRCULATION:		2,353
UTILITY:		0
TOTAL:		12,959
UNIT MIX:		
1-BD:		15
2-BD:		15
3-BD:		36
4-BD:		34
TOTAL:		100

PARKING REQUIRED (SPACES) - BASED ON STATE DENSITY BONUS LAW	Ratio	# of units	Total
1-BD:	1	15	15.0
2-BD:	2	15	30.0
3-BD:	2	36	72.0
4-BD:	2.5	34	85.0
TOTAL:			202
PARKING PROVIDED (SPACES)			
TOTAL:			203
BICYCLE PARKING REQUIRED (SPACES)			
	Ratio	# of Bedrooms	Total
LONG TERM:	0.15	289	43
SHORT TERM:	0.05	289	14
TOTAL:			58
BICYCLE PARKING PROVIDED (SPACES)			
LONG TERM:			44
SHORT TERM:			14
TOTAL:			58
OPEN SPACE PROVIDED (SF)			
COMMON - INTERIOR COURTYARD			15,138
TOTAL:			15,138

*SETBACKS PROPOSED AS NOTED - DEVIATION REQUESTED FROM PUD SETBACK REQUIREMENTS

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META HOUSING CORPORTION

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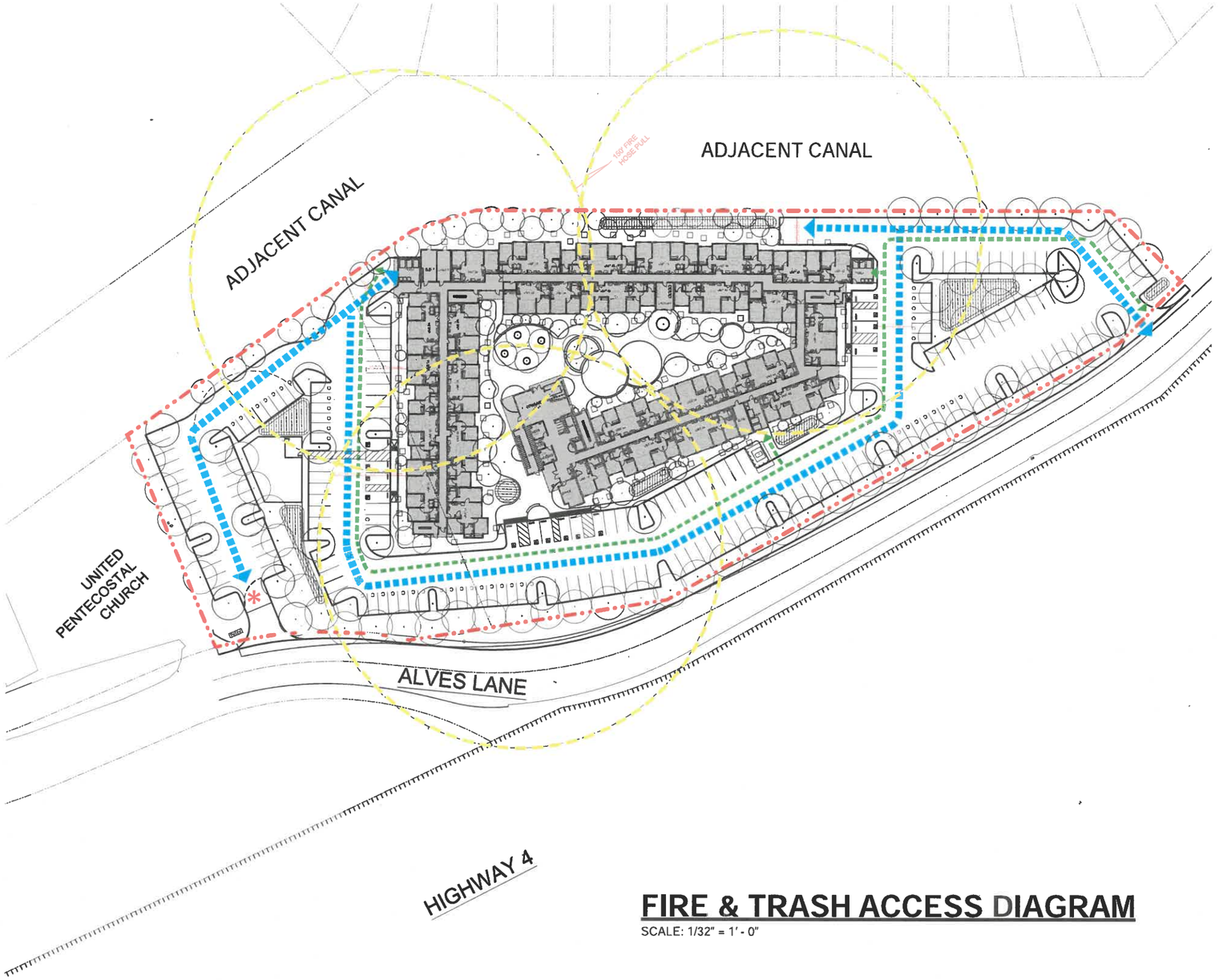
SETBACK PLAN & BUILDING SUMMARY

SCALE: 1/32" = 1'-0"
0 32 64 128

JOB NO. 1318.011
DATE 07.31.20

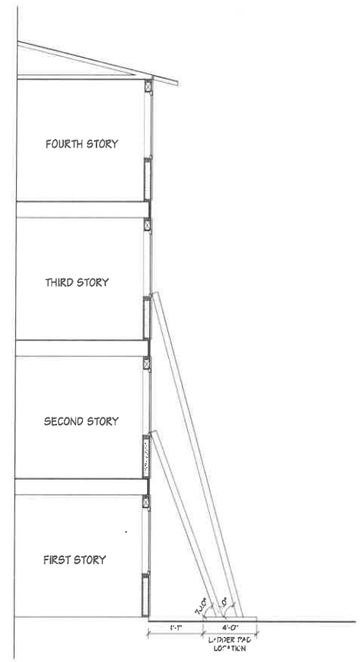
N

A1.2



FIRE & TRASH ACCESS DIAGRAM

SCALE: 1/32" = 1' - 0"



EGRESS ACCESS DIAGRAM

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

SITE CALCULATIONS

- BUILDING COVERAGE
- POTENTIAL FIRE ACCESS
- POTENTIAL TRASH ACCESS
- 150' FIREHOSE PULL
- PROPERTY LINE
- * SITE ACCESS GATE - ACCESS TO BE PROVIDED FOR FIRE

FIRE & TRASH ACCESS PLAN

SCALE: 1/32" = 1'-0"

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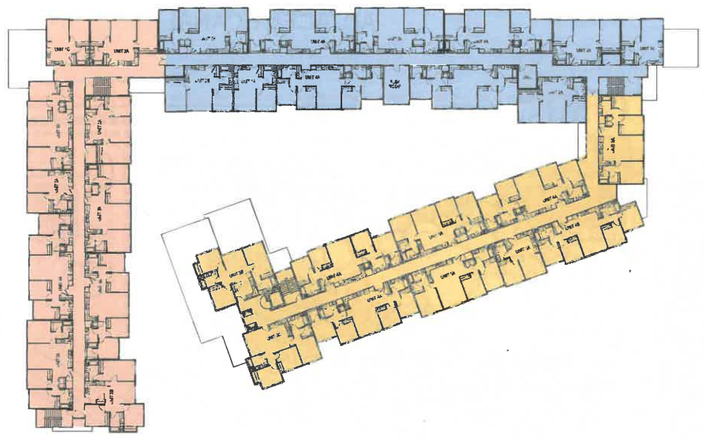
A1.3

4 FOURTH FLOOR PLAN



2 SECOND FLOOR PLAN

3 THIRD FLOOR PLAN

1 FIRST FLOOR PLAN

BUILDING A

ALLOWABLE AREA CALCULATION - BUILDING A — MULTISTORY
SINGLE OCCUPANCY, TYPE VA CONSTRUCTION, SPRINKLERED (SM)

Residential (R2) 1st-4th Floors (Using *R-2 Type VA construction* row on table)

At =	36,000 s.f.	(area from Table 506.2)
NS =	12,000 s.f.	(area from Table 506.2)
Sa =	2	
F =	0 ft.	(actual frontage or 0)
P =	1 ft.	(actual perimeter or 1)
W =	0 ft.	(use 0, 20 to 30)
# stories =	4 (R2)	(use 2 to 4)

If = 0.0000
[F/P - 0.25] W/30

Aa = 36,000 s.f.
[At + [NS x If] x Sa]

	BUILDING A	Actual		Allowable	
	First Floor	15,045	<	36,000	complies
	Second Floor	12,667	<	36,000	complies
	Third Floor	12,667	<	36,000	complies
	Fourth Floor	12,957	<	36,000	complies
OK	**Total**	**53,336**	<	**72,000**	complies

BUILDING B

ALLOWABLE AREA CALCULATION - BUILDING B — MULTISTORY
SINGLE OCCUPANCY, TYPE VA CONSTRUCTION, SPRINKLERED (SM)

Residential (R2) 1st-4th Floors (Using *R-2 Type VA construction* row on table)

At =	36,000 s.f.	(area from Table 506.2)
NS =	12,000 s.f.	(area from Table 506.2)
Sa =	2	
F =	0 ft.	(actual frontage or 0)
P =	1 ft.	(actual perimeter or 1)
W =	0 ft.	(use 0, 20 to 30)
# stories =	4 (R2)	(use 2 to 4)

If = 0.0000
[F/P - 0.25] W/30

Aa = 36,000 s.f.
[At + [NS x If] x Sa]

	BUILDING B	Actual		Allowable	
	First Floor	13,274	<	36,000	complies
	Second Floor	12,839	<	36,000	complies
	Third Floor	12,839	<	36,000	complies
	Fourth Floor	0	<	36,000	complies
OK	**Total**	**38,952**	<	**72,000**	complies

BUILDING C

ALLOWABLE AREA CALCULATION - BUILDING C — MULTISTORY
SINGLE OCCUPANCY, TYPE VA CONSTRUCTION, SPRINKLERED (SM)

Residential (R2) 1st-4th Floors (Using *R-2 Type VA construction* row on table)

At =	36,000 s.f.	(area from Table 506.2)
NS =	12,000 s.f.	(area from Table 506.2)
Sa =	2	
F =	0 ft.	(actual frontage or 0)
P =	1 ft.	(actual perimeter or 1)
W =	0 ft.	(use 0, 20 to 30)
# stories =	4 (R2)	(use 2 to 4)

If = 0.0000
[F/P - 0.25] W/30

Aa = 36,000 s.f.
[At + [NS x If] x Sa]

	BUILDING C	Actual		Allowable	
	First Floor	12,263	<	36,000	complies
	Second Floor	11,411	<	36,000	complies
	Third Floor	11,411	<	36,000	complies
	Fourth Floor	0	<	36,000	complies
OK	**Total**	**35,085**	<	**72,000**	complies

ALLOWABLE AREA CALCULATIONS

NOT TO SCALE

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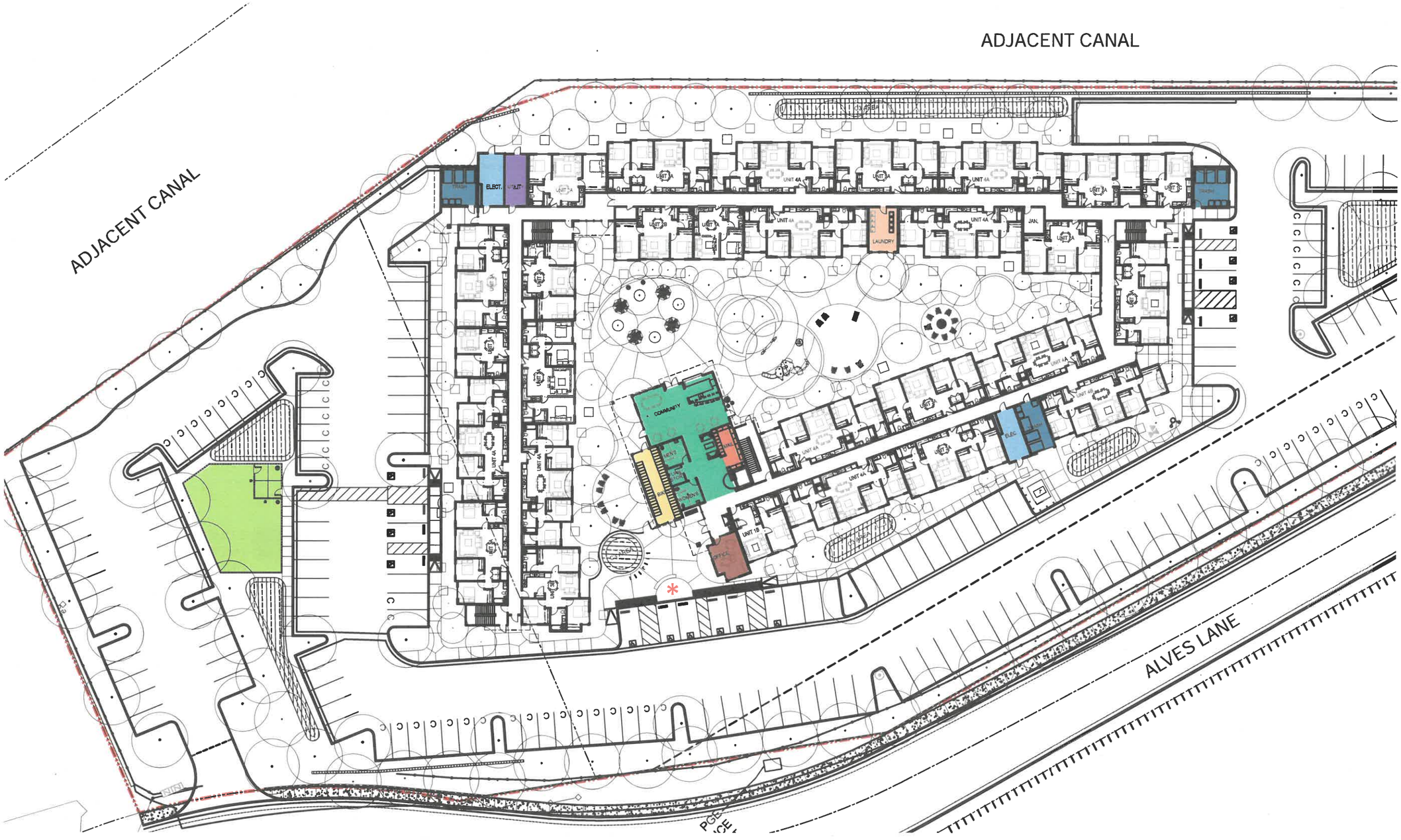
N

A1.4



LEGEND:

* Monument Sign to be located in this general location - Final design TBD

- Offices
- Mail Area
- Laundry Room
- Bike Room
- Fenced Dog Park
- Community Room
- Electrical Room
- Trash Room
- Utility Room

AMENITIES SITE PLAN

SCALE: 1/32" = 1'-0"

0 8 16 32

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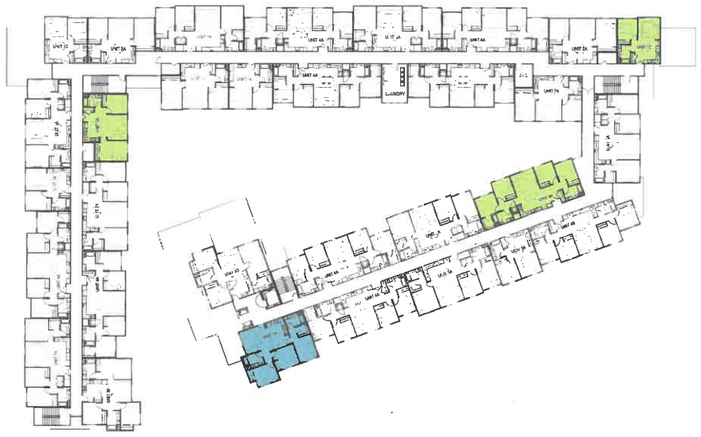
N

A1.5

RECEIVED on 03/02/2021
By Contra Costa County
Department of Conservation and Development
CDDP20-03011
REVISED

4 FOURTH FLOOR PLAN

2 SECOND FLOOR PLAN



3 THIRD FLOOR PLAN

1 FIRST FLOOR PLAN

INCLUSIONARY UNITS:

13 OF 100 UNITS TO BE PROVIDED AS INCLUSIONARY UNITS

PROPOSED # OF IHO UNITS AT VERY LOW INCOME (50%AMI):

ONE BEDROOM UNITS -	1 UNITS
TWO BEDROOM UNITS -	1 UNITS
THREE BEDROOM UNITS -	1 UNITS
FOUR BEDROOM UNITS -	0 UNITS
TOTAL:	3 UNITS

PROPOSED # OF IHO UNITS AT LOW INCOME (60% AMI):

ONE BEDROOM UNITS -	2 UNITS
TWO BEDROOM UNITS -	2 UNITS
THREE BEDROOM UNITS -	3 UNITS
FOUR BEDROOM UNITS -	3 UNITS
TOTAL:	10 UNITS

COLOR SIGNIFIES ANTICIPATED LOCATION OF IHO UNITS (3) UNITS PROVIDED AT VERY LOW INCOME*

COLOR SIGNIFIES ANTICIPATED LOCATION OF IHO UNITS (10) PROVIDED AT LOW INCOME*

*LOCATIONS SHOWN ARE APPROXIMATE AND MAY BE SUBJECT TO RELOCATION AT A LATER DATE

INCLUSIONARY HOUSING UNIT LOCATION PLAN

NOT TO SCALE

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DATE 12.14.20

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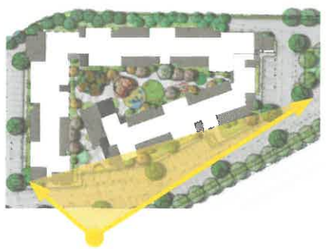
N

A1.6

KEYPLAN:



BUILDING PERSPECTIVE

ALVES LANE | BAY POINT, CA

META HOUSING CORPORTION

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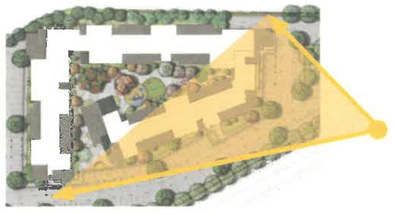
DATE 07.31.20

KEYPLAN:



BUILDING
PERSPECTIVE

ALVES LANE | BAY POINT, CA
META HOUSING CORPORTION

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KEYPLAN:

BUILDING
PERSPECTIVE

ALVES LANE | BAY POINT, CA
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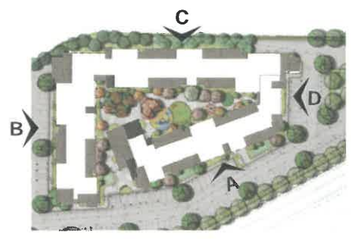
A2.3

A SOUTH (ALVES LANE) ELEVATION

ELEVATION KEYNOTE LEGEND: #

1. COMPOSITION SHINGLE SHED ROOF
2. PAINTED STUCCO WITH CONTROL JOINTS TYP.
3. HORIZONTAL LAP SIDING - 4" EXPOSURE SMOOTH CEMENTITIOUS SIDING
4. HORIZONTAL LAP SIDING - 10.75" EXPOSURE SMOOTH CEMENTITIOUS SIDING
5. SMOOTH CEMENTITIOUS TRIM, TYP.
6. VINYL FRAME WINDOW TYP.
7. METAL GUARD RAIL - FINAL DESIGN T.B.D.
8. EXPOSED BEAM
9. EXPOSED BRACKET
10. AWNING
11. METAL ROLL UP DOOR
12. METAL PARAPET CAP
13. EXPOSED RAFTER TAIL

KEYPLAN:



ELEVATIONS - EXTERIOR PERIMETER

NOT TO SCALE TO FIT ON SHEET

ALVES LANE | BAY POINT, CA

META HOUSING CORPORTION

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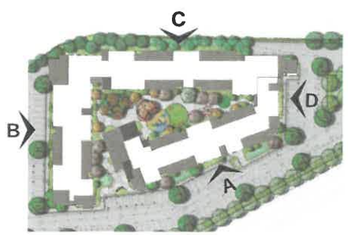
A3.1

B WEST ELEVATION

ELEVATION KEYNOTE LEGEND: #

1. COMPOSITION SHINGLE SHED ROOF
2. PAINTED STUCCO WITH CONTROL JOINTS TYP.
3. HORIZONTAL LAP SIDING - 4" EXPOSURE SMOOTH CEMENTITIOUS SIDING
4. HORIZONTAL LAP SIDING - 10.75" EXPOSURE SMOOTH CEMENTITIOUS SIDING
5. SMOOTH CEMENTITIOUS TRIM, TYP.
6. VINYL FRAME WINDOW TYP.
7. METAL GUARD RAIL - FINAL DESIGN T.B.D.
8. EXPOSED BEAM
9. EXPOSED BRACKET
10. AWNING
11. METAL ROLL UP DOOR
12. METAL PARAPET CAP
13. EXPOSED RAFTER TAIL

KEYPLAN:



ELEVATIONS - EXTERIOR PERIMETER

SCALE: 1/8" = 1'-0"

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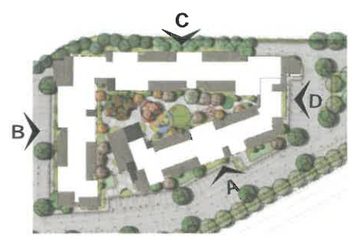
A3.2

C NORTH CANAL ELEVATION

ELEVATION KEYNOTE LEGEND: #

1. COMPOSITION SHINGLE SHED ROOF
2. PAINTED STUCCO WITH CONTROL JOINTS TYP.
3. HORIZONTAL LAP SIDING - 4" EXPOSURE SMOOTH CEMENTITIOUS SIDING
4. HORIZONTAL LAP SIDING - 10.75" EXPOSURE SMOOTH CEMENTITIOUS SIDING
5. SMOOTH CEMENTITIOUS TRIM, TYP.
6. VINYL FRAME WINDOW TYP.
7. METAL GUARD RAIL - FINAL DESIGN T.B.D.
8. EXPOSED BEAM
9. EXPOSED BRACKET
10. AWNING
11. METAL ROLL UP DOOR
12. METAL PARAPET CAP
13. EXPOSED RAFTER TAIL

KEYPLAN:



ELEVATIONS - EXTERIOR PERIMETER

SCALE: 1" = 10'
0 10 20 40

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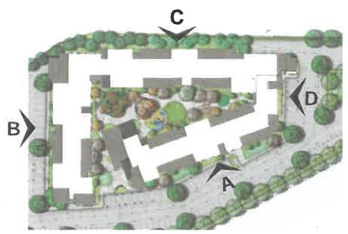
A3.3

D EAST ELEVATION

ELEVATION KEYNOTE LEGEND: #

1. COMPOSITION SHINGLE SHED ROOF
2. PAINTED STUCCO WITH CONTROL JOINTS TYP.
3. HORIZONTAL LAP SIDING - 4" EXPOSURE SMOOTH CEMENTITIOUS SIDING
4. HORIZONTAL LAP SIDING - 10.75" EXPOSURE SMOOTH CEMENTITIOUS SIDING
5. SMOOTH CEMENTITIOUS TRIM, TYP.
6. VINYL FRAME WINDOW TYP.
7. METAL GUARD RAIL - FINAL DESIGN T.B.D.
8. EXPOSED BEAM
9. EXPOSED BRACKET
10. AWNING
11. METAL ROLL UP DOOR
12. METAL PARAPET CAP
13. EXPOSED RAFTER TAIL

KEYPLAN:



ELEVATIONS - EXTERIOR PERIMETER

SCALE: 1/8" = 1'-0"

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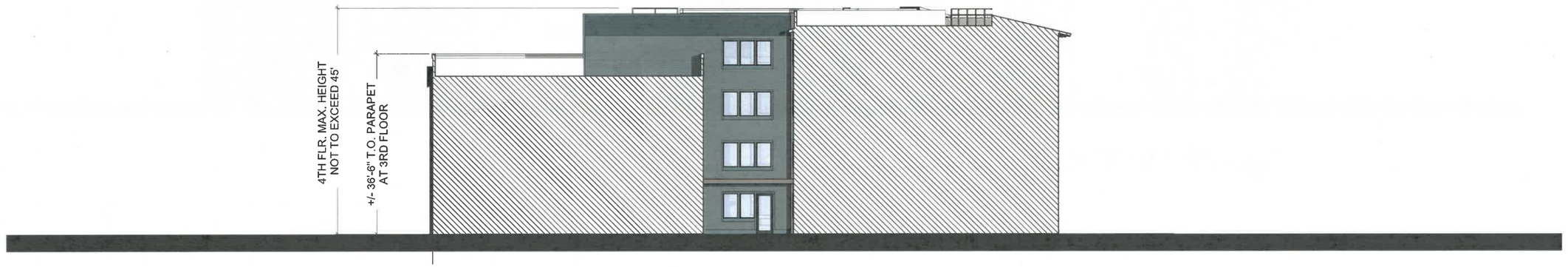
A3.4

A **SOUTH COURTYARD ELEVATION**



B **EAST COURTYARD ELEVATION**

KEYPLAN:

ELEVATIONS - INTERIOR COURTYARD

SCALE: 1/8" = 1'-0"
0 8 16 32

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A3.5

C **NORTH COURTYARD ELEVATION**

D **WEST COURTYARD ELEVATION**

KEYPLAN:

ELEVATIONS - INTERIOR COURTYARD

SCALE: 1/8" = 1'-0"
0 8 16 32

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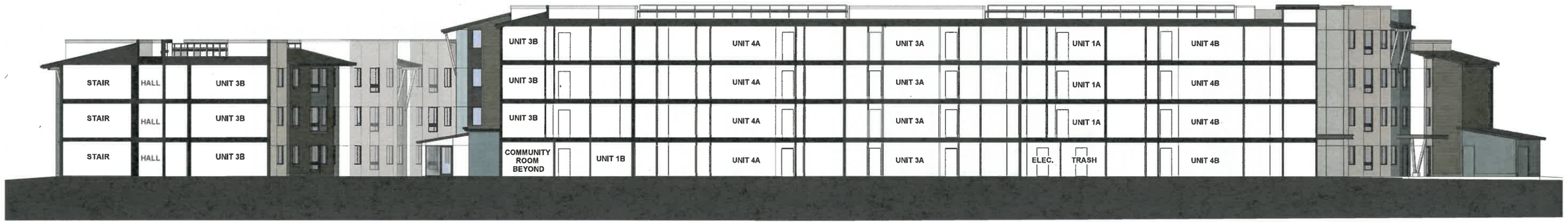
A3.6

A SECTION A-A

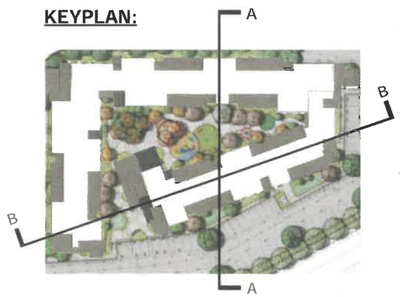
SCALE 1/8" = 1'



B SECTION B-B

SCALE: 1" = 10'

KEYPLAN:



BUILDING SECTIONS

SCALED AS NOTED ABOVE

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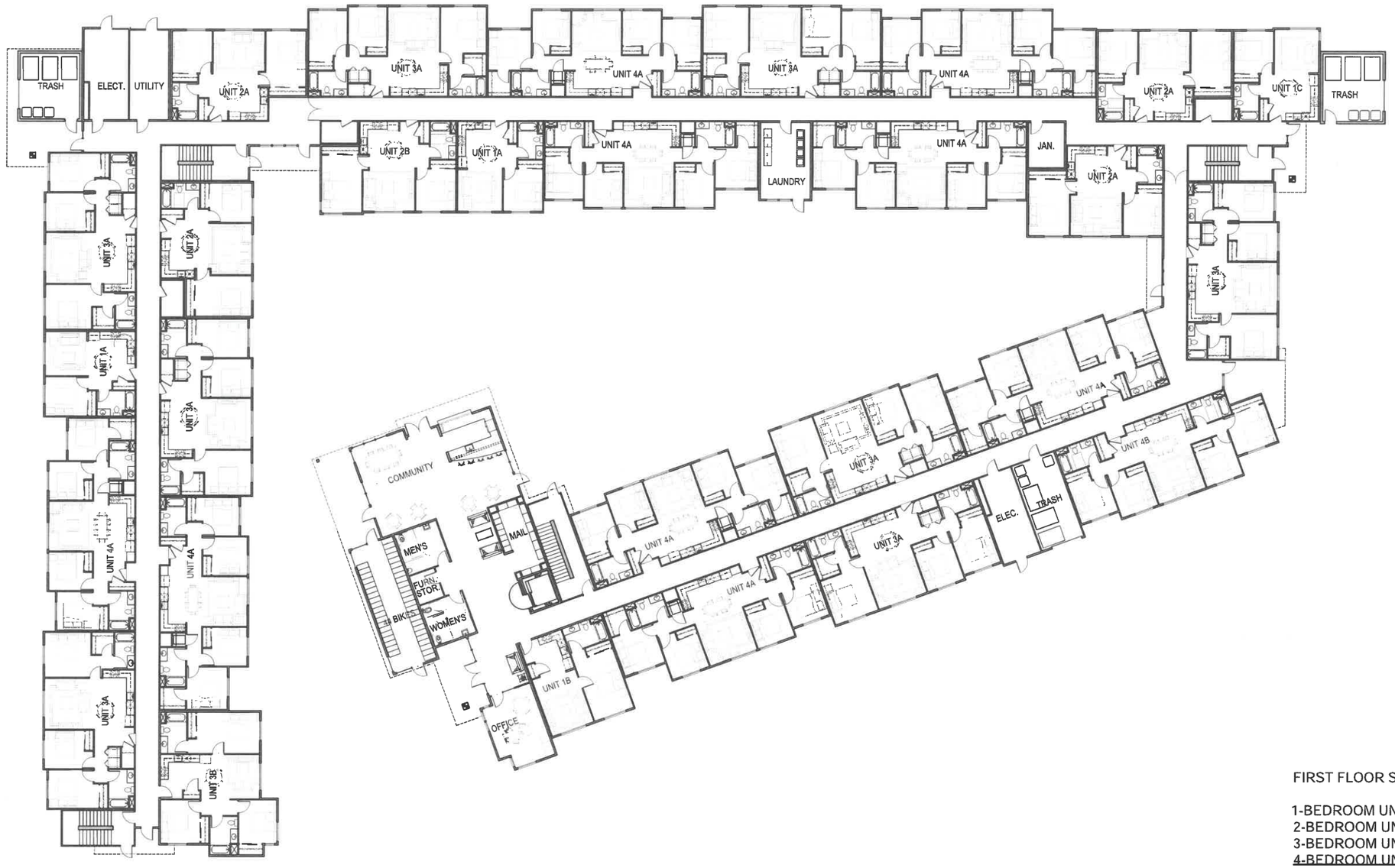
A4.1



FIRST FLOOR SUMMARY:

1-BEDROOM UNITS:	4 UNITS
2-BEDROOM UNITS:	5 UNITS
3-BEDROOM UNITS:	9 UNITS
4-BEDROOM UNITS:	10 UNITS
TOTAL:	**28 UNITS**

BUILDING FIRST FLOOR PLAN

SCALE: 3/32" = 1'-0"

0 10 20 30

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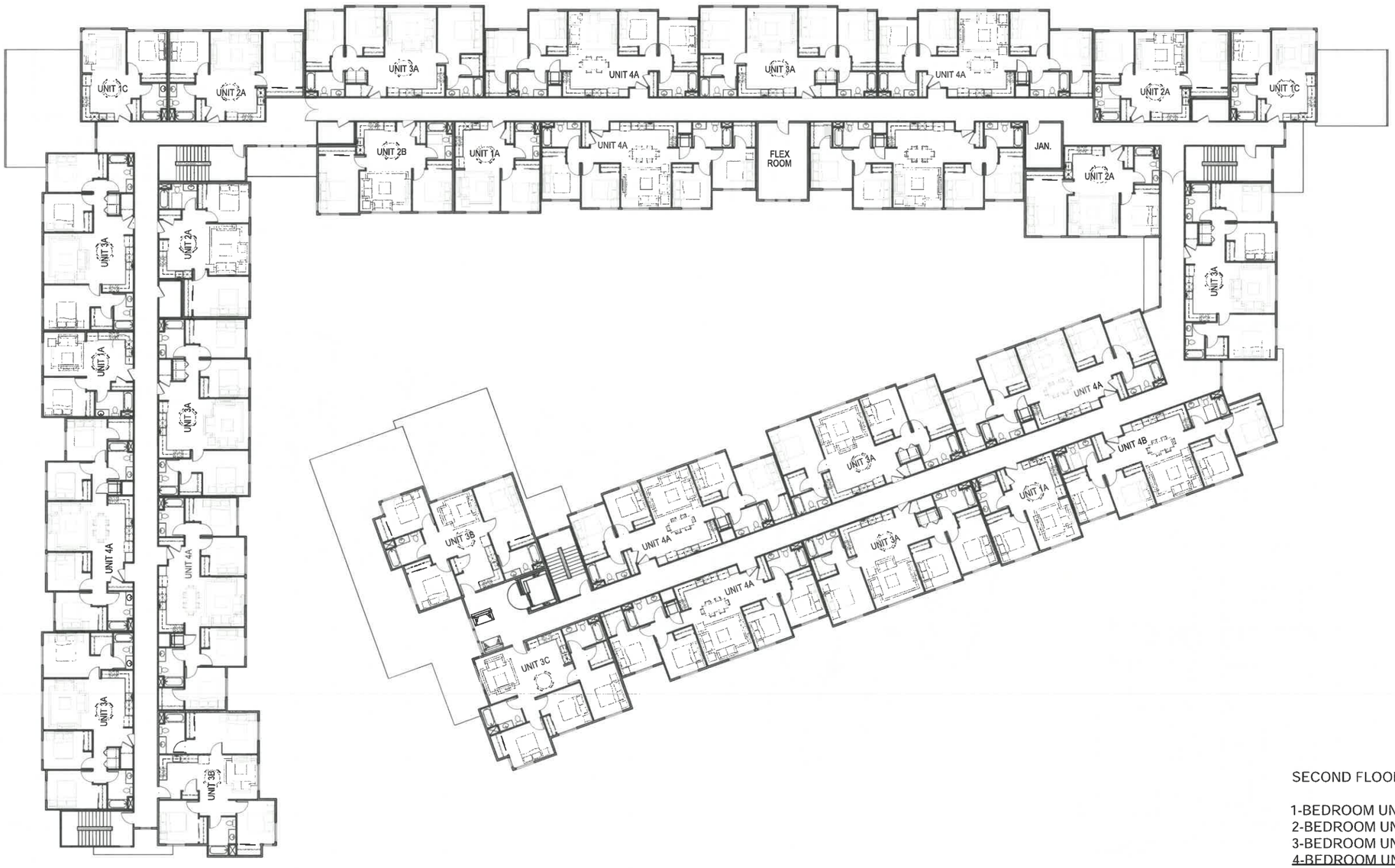
N

A5.1



SECOND FLOOR SUMMARY:

1-BEDROOM UNITS:	5 UNITS
2-BEDROOM UNITS:	5 UNITS
3-BEDROOM UNITS:	11 UNITS
4-BEDROOM UNITS:	10 UNITS
TOTAL:	**31 UNITS**

BUILDING SECOND FLOOR PLAN

SCALE: 3/32" = 1'-0"

0 10 20 30

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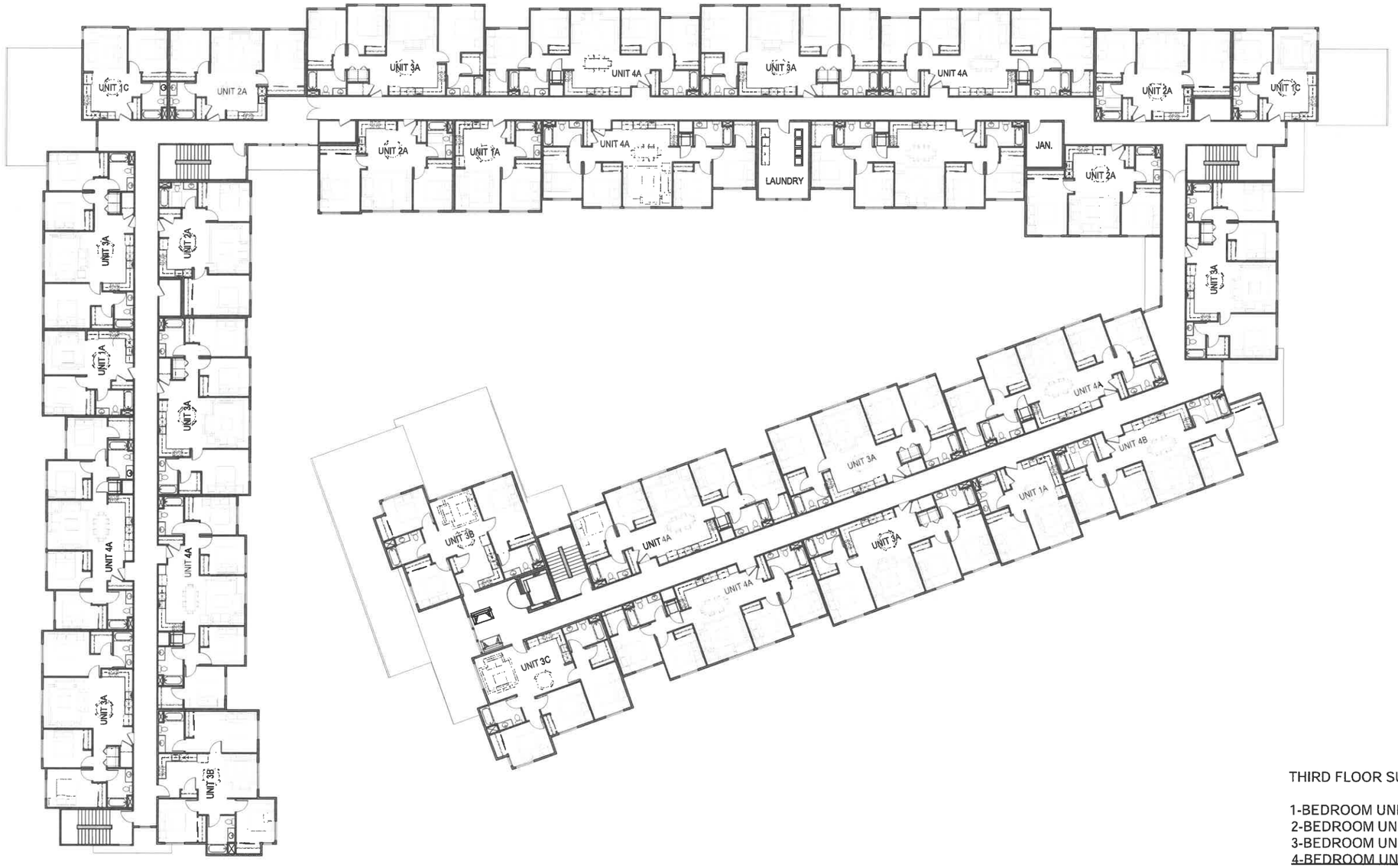
N

A5.2



THIRD FLOOR SUMMARY:

1-BEDROOM UNITS:	5 UNITS
2-BEDROOM UNITS:	5 UNITS
3-BEDROOM UNITS:	11 UNITS
4-BEDROOM UNITS:	10 UNITS
TOTAL:	**31 UNITS**

BUILDING THIRD FLOOR PLAN

SCALE: 3/32" = 1'-0"

0 10 20 30

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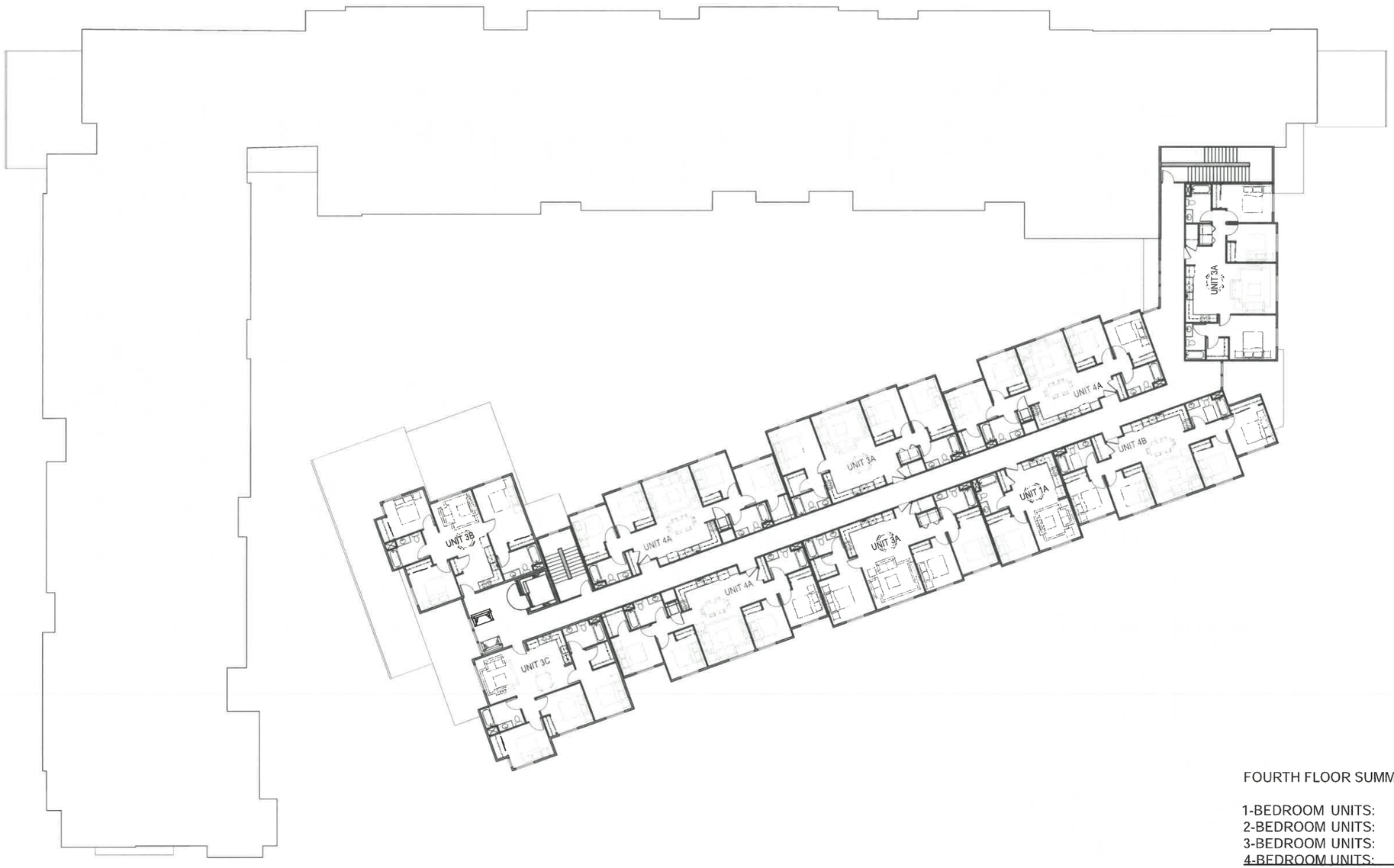
N

A5.3



FOURTH FLOOR SUMMARY:

1-BEDROOM UNITS:	1 UNITS
2-BEDROOM UNITS:	0 UNITS
3-BEDROOM UNITS:	5 UNITS
4-BEDROOM UNITS:	4 UNITS
TOTAL:	**10 UNITS**

BUILDING FOURTH FLOOR PLAN

SCALE: 3/32" = 1'-0"
0 10 20 30

ALVES LANE | BAY POINT, CA

META HOUSING CORPORTION

Meta Housing Corporation

DAHLIN

JOB NO. 1318.011
DATE 07.31.20

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925-251-7200

N

A5.4

BUILDING ROOF PLAN

SCALE: 3/32" = 1'-0"
0 10 20 30

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DATE 07.31.20

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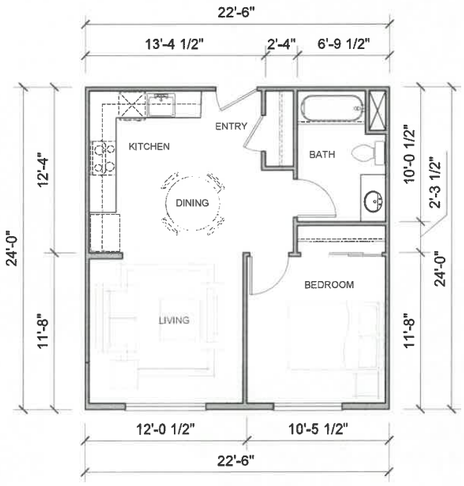
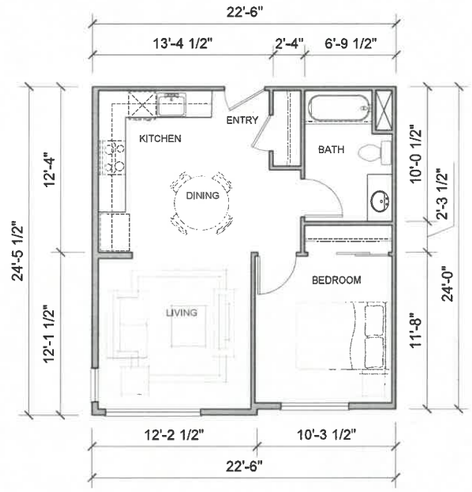
A5.5



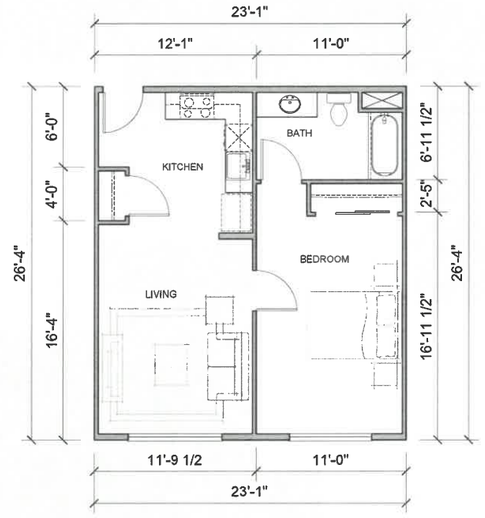
UNIT 1A TYPICAL
1 BEDROOM / 1 BATH

GROSS AREA: 540 SF
NET AREA: 505 SF



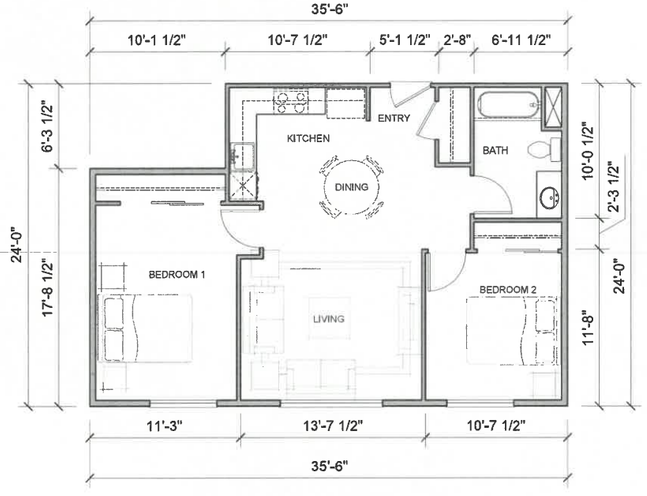
UNIT 1A MODIFIED
1 BEDROOM / 1 BATH

GROSS AREA: 546 SF
NET AREA: 506 SF



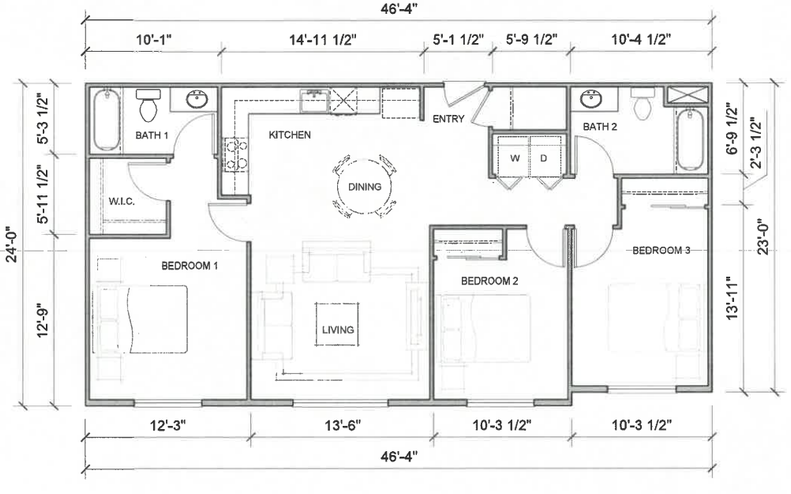
UNIT 1B
1 BEDROOM / 1 BATH

GROSS AREA: 608 SF
NET AREA: 567 SF



UNIT 2A
2 BEDROOM / 1 BATH

GROSS AREA: 788 SF
NET AREA: 734 SF



UNIT 3A
3 BEDROOM / 2 BATH

GROSS AREA: 1102 SF
NET AREA: 1046 SF

TYPICAL UNIT PLANS

SCALE: 1/4" = 1'-0"
0 4 8 16

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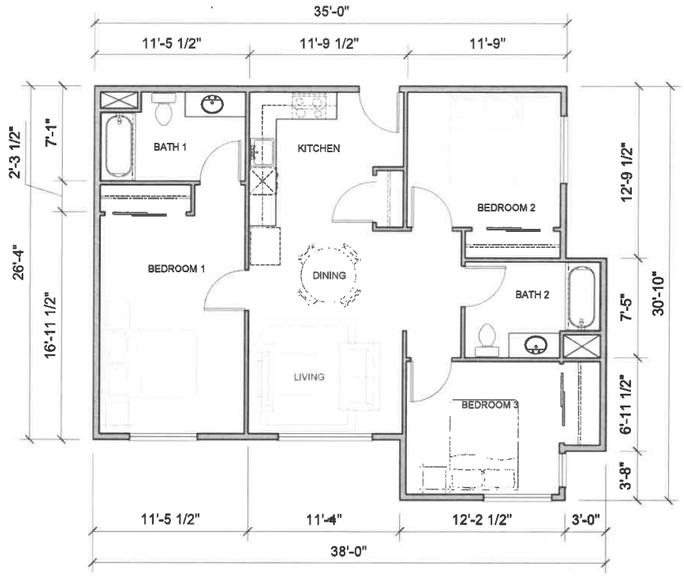
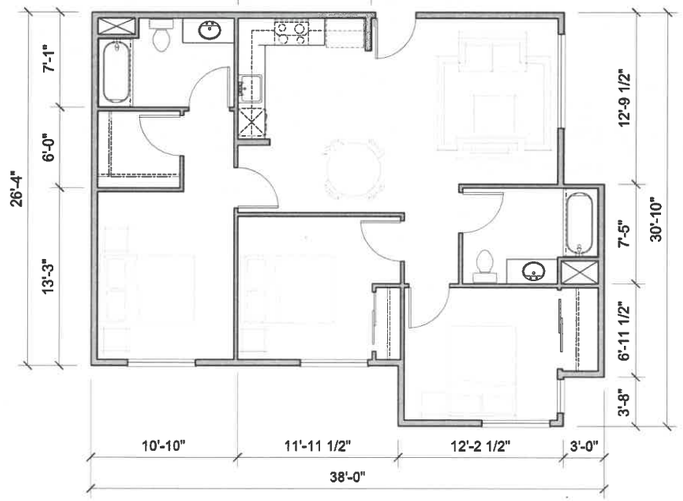


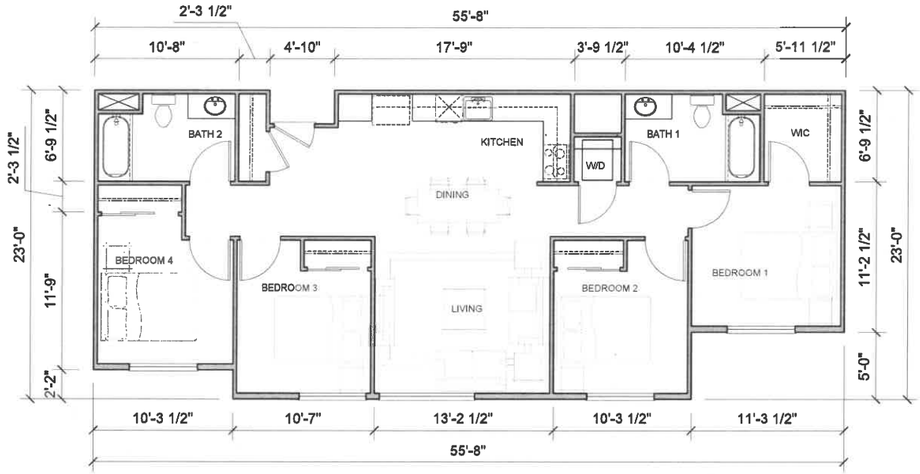
UNIT 3B
3 BEDROOM / 2 BATH

GROSS AREA: 1020 SF
NET AREA: 951 SF



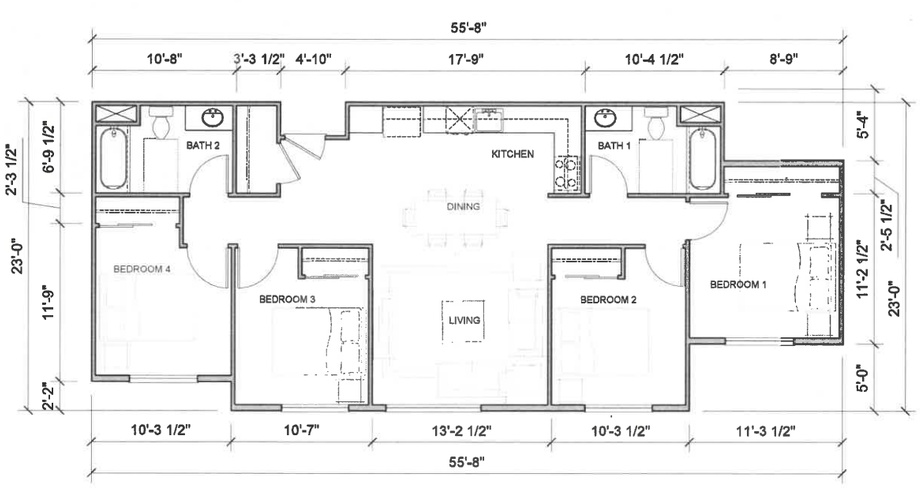
UNIT 3C
3 BEDROOM / 2 BATH

GROSS AREA: 1020 SF
NET AREA: 951 SF



UNIT 4A
4 BEDROOM / 2 BATH

GROSS AREA: 1190 SF
NET AREA: 1025 SF



UNIT 4B
4 BEDROOM / 2 BATH

GROSS AREA: 1152 SF
NET AREA: 1086 SF

TYPICAL UNIT PLANS

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

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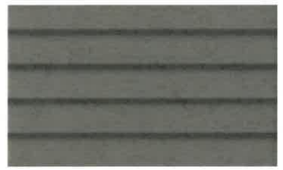
A6.2

COLOR AND MATERIALS

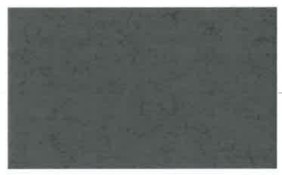
1 BODY COLOR 1
EXTERIOR WALL MATERIAL - STUCCO
Alabaster SW 7008 by Sherwin Williams



2 BODY COLOR 2
EXTERIOR WALL MATERIAL - SMOOTH FIBER CEMENT SIDING 10.75" REVEAL
Muddled Basil SW 7745 by Sherwin Williams

3 BODY COLOR 3
EXTERIOR WALL MATERIAL - SMOOTH FIBER CEMENT SIDING - 4" REVEAL
Tempe Star SW 6229 by Sherwin Williams

4 BODY COLOR 4
EXTERIOR WALL MATERIAL - STUCCO
Calico SW 0017 by Sherwin Williams



5 ACCENT & TRIM
EXTERIOR WALL MATERIAL - TRIM, FASCIA, RAFTER TAILS, GUTTERS, WALL DETAILS
Tricorn Black SW 6258 by Sherwin Williams

6 ROOFING 1
COMPOSITION SHINGLE ROOF
Driftwood by Owens Corning

COLORS AND MATERIALS

NOTE: Color Samples may vary from their true color with different printers and computer monitors.

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JOB NO. 1318.011
DATE 07.31.20

A7.1

PRELIMINARY
LANDSCAPE PLAN

ALVES LANE | BAY POINT, CA

META HOUSING CORPORATION

Meta Housing Corporation

DAHLIN

R3 STUDIOS

DATE 07.31.2020
JOB NO. 400-78

201 Fourth Street
Suite 101B
Oakland, CA 94607
510-452-4190

L1.0

CONCRETE PAVING WITH ALTERNATING FINISH

FINISH TO BE LIGHT BROOM AND ACID ETCHED

CONCRETE SEATWALL

COLOR TO BE NATURAL GRAY WITH SMOOTH TROWEL FINISH

BACKLESS BENCH

PANELS TO BE CHARCOAL FINISH WITH SILVER FINISH FRAME

WASTE RECEPTACLE

PANELS TO BE CHARCOAL FINISH WITH SILVER FINISH FRAME

BICYCLE RACK

FINISH TO BE SILVER

TABLE AND CHAIRS WITH UMBRELLA

PANELS TO BE CHARCOAL FINISH WITH SILVER FINISH FRAME, ALUMINUM UMBRELLA TO HAVE SILVER FINISH AND TO BE ATTACHED TO TABLE

PROPERTY LINE FENCE

6'-0" HIGH FENCE AT PERIMETER

FINISH TO BE SW 7048 URBANE BRONZE BY SHERWIN WILLIAMS

CONCEPT

PLAY AND CLIMBING STRUCTURES

MIXED AGE GROUP

CONCEPT

MULTI-COLORED RUBBERIZED SURFACE WITH MOUNDS

SITE FURNISHINGS

ALVES LANE | BAY POINT, CA

META HOUSING CORPORATION

Meta Housing Corporation

DAHLIN

R3 STUDIOS

DATE 07.31.2020

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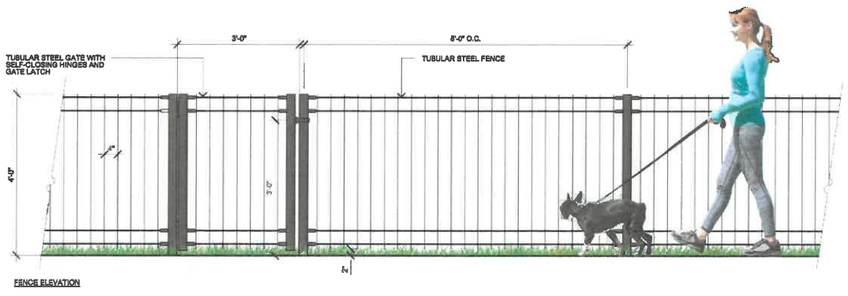
510-452-4190

L2.0



DOG PARK FENCE AND GATE

4'-0" HIGH FENCE AND GATE

FINISH TO BE SW 7048 URBANE BRONZE BY SHERWIN WILLIAMS

PET WASTE STATION

COLOR TO BE BLACK

DOG DRINKING FOUNTAIN

COLOR TO BE QUICKSILVER

SITE FURNISHINGS

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META HOUSING CORPORATION

Meta Housing Corporation

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R3 STUDIOS

201 Fourth Street
Suite 1018
Oakland, CA 94607
510-452-4190

DATE 07.31.2020
JOB NO. 400-78

L3.0

PROPOSED PLANT PALETTE

BOTANICAL NAME	COMMON NAME	MINIMUM CONTAINER SIZE	EXPOSURE	COMMENTS	WUCOLS
PARKING LOT TREES:					
ARBUTUS 'MARINA'	NCN	24" BOX	N/A	STANDARD	M
LAGERSTROEMIA X FAUREI SPECIES	CRAPE MYRTLE	24" BOX	SUN/SHADE	STANDARD	L
ZELKOVA SERRATA 'VILLAGE GREEN'	SAW LEAF ZELKOVA	24" BOX	SUN/SHADE	STANDARD	M
TREES:					
ACER PALMATUM 'SANGO KAKU'	JAPANESE MAPLE	24" BOX	SUN/SHADE	STANDARD	M
CERCIS CANANDENSIS SPECIES	EASTERN REDBUD	24" BOX	SUN/SHADE	STANDARD	M
CHIONANTHUS RETUSUS	NCN	24" BOX	SUN/SHADE	STANDARD	L
LAGERSTROEMIA X FAUREI SPECIES	CRAPE MYRTLE	24" BOX	SUN/SHADE	STANDARD	L
MAGNOLIA 'TEDDY BEAR'	MAGNOLIA	24" BOX	SUN/SHADE	STANDARD	M
PODOCARPUS SPECIES	FERN PINE	24" BOX	SUN/SHADE	STANDARD	M
PRUNUS CAROLINIANA	CAROLINA LAUREL CHERRY	24" BOX	SUN/SHADE	STANDARD	L
RHUS LANCEA	AFRICAN SUMAC	24" BOX	SUN/SHADE	STANDARD	L
TRISTANIA LAURINA	NCN	24" BOX	N/A	STANDARD	L
FOUNDATION SHRUBS:					
COPROSMA SPECIES	COPROSMA	5 GALLON	SUN/ PART SHADE		L
CORREA SPECIES	AUSTRALIAN FUCHSIA	5 GALLON	SUN/ PART SHADE		L
EURYOPS PECTINATUS	EURYOPS	5 GALLON	SUN		L
PITTOSPORUM SPECIES	NCN	5 GALLON	PART SHADE		M
RAPHIOLEPIS INDICA SPECIES	INDIAN HAWTHORN	5 GALLON	SUN/ PART SHADE		L
TEUCRIUM COMPACTUM	COMPACT BUSH GERMANDER	5 GALLON	SUN/ PART SHADE		L
INTERMEDIATE SHRUBS:					
ABELIA SPECIES	NCN	5 GALLON	SHADE/SUN		M
DIANELLA SPECIES	FLAX LILY	5 GALLON	SUN		M
DIETES BICOLOR	FORTNIGHT LILY	5 GALLON	SHADE/SUN		L
GALVEZIA 'FIRE CRACKER'	SNAP DRAGON	5 GALLON	SHADE/SUN		L
LIROPE GIGANTEA	LIRIOPE	5 GALLON	SHADE/SUN		L
PHORMIUM SPECIES	NEW ZEALAND FLAX	5 GALLON	SUN		L
PITTOSPORUM SPECIES	NCN	5 GALLON	SUN		M
ROSA SPECIES	SHRUB ROSE	5 GALLON	SUN		M
FOREGROUND SHRUBS:					
AGAPANTHUS SPECIES	LILY OF THE NILE	1 GALLON	SHADE/SUN		M
ANIGOZANTHUS SPECIES	KANGAROO PAWS	1 GALLON	SUN		L
DIANELLA SPECIES	FLAX LILY	1 GALLON	SUN		M
HEMEROCALLIS HYBRIDS	EVERGREEN DAYLILY	1 GALLON	SUN		M
LIRIOPE 'MUSCARI 'BIG BLUE'	BIG BLUE LILY	1 GALLON	SHADE		M
NANDINA SPECIES	HEAVENLY BAMBOO	1 GALLON	SHADE/SUN		L
PHORMIUM SPECIES (DWARF)	NEW ZEALAND FLAX	1 GALLON	SUN		L
SALVIA GREGGII SPECIES	AUTUMN SAGE	1 GALLON	SUN		L
GROUNDCOVERS:					
CISTUS SUNSET	ROCKROSE	1 GALLON	SUN		L
COPROSMA SPECIES	MIRROR BUSH	1 GALLON	SUN		M
GERANIUM SPECIES	CRANESBILL	1 GALLON	SUN/SHADE		M
GREVILLEA LANIGERA 'COASTAL GEM'	NCN	1 GALLON	SUN/SHADE		L
LANTANA SPECIES	LANTANA	1 GALLON	SUN		L
MYOPORIUM SPECIES	MYOPORIUM	1 GALLON	SUN		L
TEUCRIUM SPECIES	GERMANDER	1 GALLON	SUN/SHADE		L
ZAUSCHNERIA SPECIES	CALIFORNIA FUCHSIA	1 GALLON	SUN		L
GRASSES:					
FESTUCA MAIREI	ATLAS FESCUE	1 GALLON	SUN		L
LOMANDRA SPECIES	MAT RUSH	1 GALLON	SUN		L
MUHLENBERGIA SPECIES	MUHLY GRASS	1 GALLON	SUN		L
PENNISETUM SETACEUM	FOUNTAIN GRASS	1 GALLON	SUN		L
VINES:					
PARTHENOCISSUS TRICUSPIDATA	BOSTON IVY	5 GALLON	SUN/SHADE		M
CAMPSIS SPECIES	TRUMPET CREEPER	5 GALLON	SUN		M
HARDENBERGIA SPECIES	NCN	5 GALLON	SUN		M
ROSA SPECIES	ROSE	5 GALLON	SUN		M
STORM WATER TREATMENT SHRUBS AND GRASSES:					
CHONDROPETALUM SPECIES	CAPE RUSH	1 GALLON	MIX EVENLY		L
JUNCUS SPECIES	RUSH	1 GALLON	MIX EVENLY		L
MIMULUS SPECIES	MONKEYFLOWER	1 GALLON	MIX EVENLY		L

NOTES

WATER CONSERVATION STATEMENT:

PLANT MATERIAL HAS SEEN CHOSEN FOR WATER CONSERVING AND REDUCED MAINTENANCE CHARACTERISTICS. A MAXIMUM OF 25% OF NON-TURF PLANS WILL HAVE A MODERATE IRRIGATION WATER REQUIREMENT AND A MINIMUM OF 50% OF NON-TURF PLANTS WILL HAVE A LOW TO VERY LOW IRRIGATION WATER REQUIREMENT.

IRRIGATION NOTE:

A FULLY AUTOMATIC IRRIGATION SYSTEM SHALL BE PROPOSED FOR THE PROJECT UTILIZING WATER CONSERVING METHODS. IRRIGATION SHALL BE INSTALLED THROUGHOUT THE BIO-RETENTION AREAS TO PROVIDE SUPPLEMENTAL IRRIGATION IN THE DRY MONTHS WITH REDUCED IRRIGATION DURING SEASONAL RAINFALL OR WET MONTHS.

MINIMUM TREE CLEARANCE NOTE:

1. 5' MINIMUM FROM JOINT TRENCH, WATER LINES, WATER METERS AND FIRE HYDRANTS.
2. 8' MINIMUM FROM SANITARY SEWER AND STORM DRAINS.
3. ALL TREES PLANTED WITHIN 5'-0" OF FUTURE CURBS, SIDEWALK, WALLS AND ALL UTILITIES, SHALL INCLUDE A ROOT BARRIER.

LANDSCAPE NOTES:

PLANT PALETTE IS FOR REFERENCE ONLY. NOT ALL TREES, SHRUBS, GRASSES, AND GROUNDCOVER LISTED WILL BE UTILIZED IN THE PREPARATION OF CONSTRUCTION DOCUMENTS. ADDITIONAL PLANTS MAY BE SUBSTITUTED DUE TO AVAILABILITY AND CONTAINER SIZE. PLANT MATERIAL SHALL BE SELECTED AT THE DESCRETION OF THE LANDSCAPE ARCHITECT.

ALL TRANSFORMERS AND UTILITY BOXES TO BE SCREENED WITH EVERGREEN SHRUBS.

ALVES LANE | BAY POINT, CA

META HOUSING CORPORATION

Meta Housing Corporation

DAHLIN

R3 STUDIOS

PROPOSED PLANT PALETTE

DATE 07.31.2020

JOB NO. 400-78

201 Fourth Street
Suite 101B
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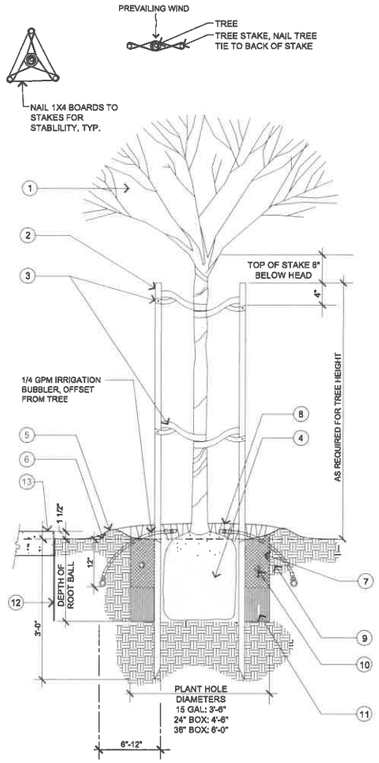
510-452-4190

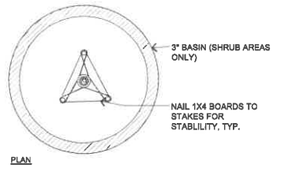
L4.0



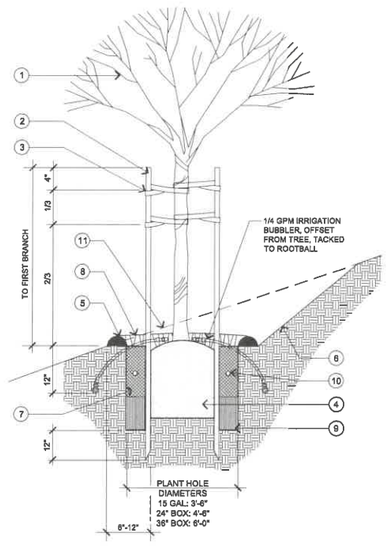
1. TREE: REFER TO PLANTING PLAN AND LEGEND FOR SIZE, TYPE, AND LOCATION
2. LODGE POLE PINE TREE STAKES: 3"X10' LONG TREE STAKES FOR WINDY CONDITIONS AND 36" BOX AND LARGER TREES
3. TREE TIE: WONDER TREE-TIE(800-910-2810) MODEL# W14-46, W24-84 OR APPROVED EQUAL. LOOP IN A FIGURE EIGHT AND NAIL TO BACK OF STAKE WITH GALVANIZED THREADED NAILS. ALLOW 3 INCHES OF MOVEMENT OF TREE IN ALL DIRECTIONS.
4. TREE ROOTBALL SET ON 12" LAYER UNDISTURBED NATIVE SOIL. DO NOT PENETRATE ROOTBALL WITH STAKES. TAMP SOIL TO 85% RELATIVE COMPACTION. SET CROWN OF ROOTBALL 2" ABOVE FINISH GRADE.
5. 4 INCH TALL EARTH BERM FOR WATER BASIN:
6. FINISH GRADE, SET 3" BELOW FINISH SURFACE.
7. BACK FILL MIX: (TOP 12 INCHES ONLY): 70% PULVERIZED NATIVE SOIL, 30% NITROGEN FORTIFIED FIR OR REDWOOD SAWDUST.
8. BARK MULCH: 3 INCH DEPTH, KEEP CLEAR FROM TRUNK OF TREE
9. NATIVE SOIL
10. FERTILIZER TABS (21 GRAM, 20-10-5): 15 GALLON - 4 TABS
11. PLANTING HOLE, PULVERIZED NATIVE SOIL BELOW 12 INCHES FROM FINISHED GRADE; SCARIFY WALLS
12. ROOT BARRIER: REFER TO SPECIFICATIONS
13. PAVING: REFER TO PLAN

PLANTING NOTES:
1. ALL PLANTING AREAS TO BE TREATED WITH PRE-EMERGENT.

1 TREE STAKING N.T.S.



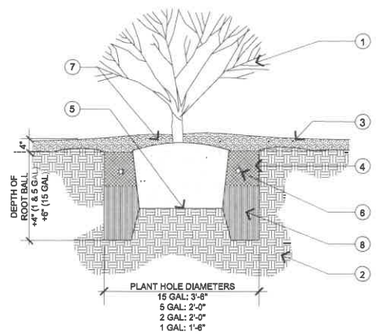
PLAN



1. TREE: REFER TO PLANTING PLAN AND LEGEND FOR SIZE, TYPE, AND LOCATION
2. LODGE POLE PINE TREE STAKES: 3"X10' LONG TREE STAKES FOR WINDY CONDITIONS AND 36" BOX AND LARGER TREES
3. TREE TIE: WONDER TREE-TIE(800-910-2810) MODEL# W14-46, W24-84 OR APPROVED EQUAL. LOOP IN A FIGURE EIGHT AND NAIL TO BACK OF STAKE WITH GALVANIZED THREADED NAILS. ALLOW 3 INCHES OF MOVEMENT OF TREE IN ALL DIRECTIONS.
4. TREE ROOTBALL SET ON 12" LAYER UNDISTURBED NATIVE SOIL. DO NOT PENETRATE ROOTBALL WITH STAKES. TAMP SOIL TO 85% RELATIVE COMPACTION. SET CROWN OF ROOTBALL 2" ABOVE FINISH GRADE.
5. 4" EARTH BERM FOR WATER BASIN
6. FINISH GRADE (ON SLOPE)
7. BACK FILL MIX: (TOP 12 INCHES ONLY): 70% PULVERIZED NATIVE SOIL, 30% NITROGEN FORTIFIED FIR OR REDWOOD SAWDUST.
8. BARK MULCH: 3" DEPTH, SHRUB AREAS ONLY, KEEP CLEAR FROM TRUNK OF TREE
9. PLANTING HOLE, PULVERIZED NATIVE SOIL BELOW 12 INCHES FROM FINISHED GRADE; SCARIFY WALLS
10. FERTILIZER TABS (21 GRAM, 20-10-5). 15 GALLON - 4 TABS
11. EXISTING SLOPE

PLANTING NOTES:
1. ALL PLANTING AREAS TO BE TREATED WITH PRE-EMERGENT.

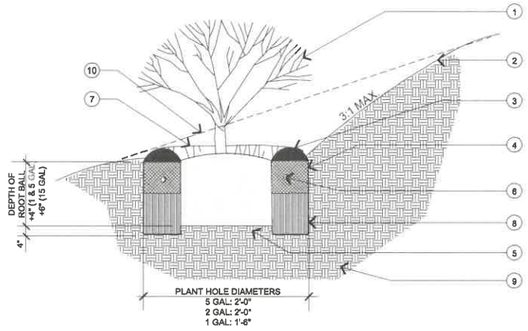
2 TREE PLANTING (ON SLOPE) N.T.S.



1. SHRUB: REFER TO PLANTING PLAN AND LEGEND FOR SIZE, TYPE, AND LOCATION
2. COMPACTED SUBGRADE OR ENGINEERED FILL
3. FINISH GRADE.
4. BACK FILL MIX: (1/2 DEPTH OF ROOT BALL HT.): 70% PULVERIZED NATIVE SOIL, 30% NITROGEN FORTIFIED FIR OR REDWOOD SAWDUST.
5. SHRUB ROOTBALL SET ON LIGHTLY TAMPED SOIL. SET CROWN OF ROOTBALL 1" ABOVE FINISH GRADE.
6. FERTILIZER TABS (21 GRAM, 20-10-5): 1 GAL. - 1 TAB, 2 GAL. - 2 TABS 5 GAL - 3 TABS, 15 GAL - 5 TABS
7. BARK MULCH: 3 INCH DEPTH, KEEP CLEAR FROM BASE OF PLANT
8. PULVERIZED NATIVE SOIL

NOTE:
1. CURRENT STANDARD DETAIL AT CITY ENGINEERING DIVISION SHALL PREVAIL.
2. ALL PLANTING AREAS TO BE TREATED WITH PRE-EMERGENT

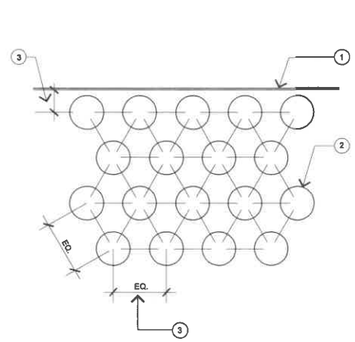
3 SHRUB PLANTING N.T.S.



1. SHRUB: REFER TO PLANTING PLAN AND LEGEND FOR SIZE, TYPE, AND LOCATION
2. FINISH GRADE (SLOPE)
3. 3" EARTH BERM FOR WATER BASIN
4. BACK FILL MIX: (1/2 DEPTH OF ROOT BALL HT.): 70% PULVERIZED NATIVE SOIL, 30% NITROGEN FORTIFIED FIR OR REDWOOD SAWDUST.
5. SHRUB ROOTBALL SET ON LIGHTLY TAMPED SOIL. SET CROWN OF ROOTBALL 1" ABOVE FINISH GRADE.
6. FERTILIZER TABS (21 GRAM, 20-10-5): 1 GAL. - 1 TAB, 2 GAL. - 2 TABS 5 GAL - 3 TABS, 15 GAL - 5 TABS
7. BARK MULCH: 3" DEPTH, KEEP CLEAR FROM BASE OF PLANT
8. PULVERIZED NATIVE SOIL
9. COMPACTED SUBGRADE OR ENGINEERED FILL PER SOILS REPORT
10. EXISTING SLOPE

NOTE:
1. ALL PLANTING AREAS TO BE TREATED WITH PRE-EMERGENT

4 SHRUB PLANTING (ON SLOPE) N.T.S.



1. EDGE OF PAVING, HEADER, FACE OF BUILDING, WALL, ETC.
2. GROUNDCOVER OR SHRUB: REFER TO PLANTING PLAN AND LEGEND FOR SIZE, TYPE, AND LOCATION
3. GROUNDCOVER AND SHRUB SPACING PER PLANTING PLAN AND LEGEND

NOTES:
1. ALL PLANTS SHALL BE PLANTED AT EQUAL SPACING(TRIANGULAR) UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2. CENTERLINE OF PLANTS SHALL BE 1/2 OF EQUAL SPACING MINIMUM FROM EDGE OF PLANTING AREA.
3. INFILL PLANTS AS REQUIRED TO MAINTAIN SPACING AT IRREGULAR EDGES.
4. KEEP MULCH CLEAR OF PLANT BASE.
5. ALL PLANTING AREAS TO BE TREATED WITH PRE-EMERGENT.

5 GROUNDCOVER PLANTING N.T.S.

PLANTING DETAILS

ALVES LANE | BAY POINT, CA

META HOUSING CORPORATION

Meta Housing Corporation

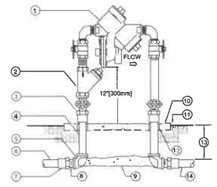
DAHLIN

R3 STUDIOS

DATE 07.31.2020
JOB NO. 400-78

201 Fourth Street
Suite 101B
Oakland, CA 94607
510-452-4190

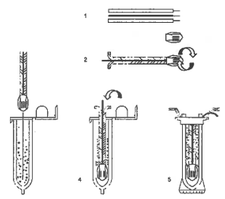
L5.0



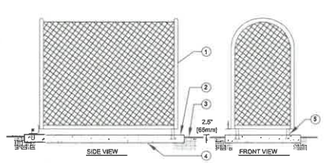
1. REDUCED PRESSURE BACKFLOW ASSEMBLY.
2. YB "Y" STRAINER SYSTEM (AS REQUIRED).
3. WROUGHT COPPER MALE ADAPTER-2 TOTAL (SOLDER x THREAD CONNECTION).
4. COPPER TYPE "K" PIPE (LENGTH AS REQUIRED).
5. WROUGHT COPPER 90° ELBOW-2 TOTAL (SOLDER x THREAD CONNECTION).
6. PVC MAIN LINE TO POINT OF CONNECTION.
7. BUSH AS NECESSARY FOR SIZE TRANSITION.
8. SCHEDULE 40 PVC MALE ADAPTER-2 TOTAL.
9. CONCRETE SUPPORT BLOCK.
10. CONCRETE PAD-SEE ENCLOSURE DETAIL.
11. FINISH GRADE.
12. PVC SLEEVE BOTH SIDES.
13. REFER TO IRRIGATION LEGEND
14. PVC MAIN LINE TO IRRIGATION SYSTEM.

NOTES:
1. INSTALL A FREEZE PREVENTATIVE BLANKET AROUND BACKFLOW ASSEMBLY. BLANKET SHALL BE GREEN.
2. DO NOT SOLDER CONNECT FITTINGS WHILE THREADED INTO BACKFLOW ASSEMBLY. THIS MAY CAUSE DAMAGE TO DEVICE.
3. NIPPLES AND FITTINGS TO BE SAME IPT SIZE AS BACKFLOW ASSEMBLY.
4. PROVIDE A STAINLESS STEEL ENCLOSURE TO COMPLETELY ENCLOSE DEVICE. INSTALL ENCLOSURE TO CONCRETE BASE AS DIRECTED BY MANUFACTURER.

1 REDUCED PRESSURE BACKFLOW ASSEMBLY
SCALE: NONE
DET: RPB-1

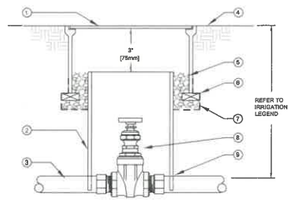


INSTRUCTIONS:
1. STRIP WIRES APPROXIMATELY 1/2" (13 mm) TO EXPOSE WIRE.
2. TWIST CONNECTOR AROUND WIRES CLOCKWISE UNTIL HAND TIGHT, DO NOT OVERTIGHTEN.
3. INSERT WIRE ASSEMBLY INTO PLASTIC TUBE UNTIL WIRE CONNECTOR SNAPS PAST LIP IN BOTTOM OF TUBE.
4. PLACE WIRES WHICH EXIT TUBE IN WIRE EXIT HOLES AND CLOSE CAP UNTIL IT SNAPS.
5. INSPECT FINAL SPLICE ASSEMBLY TO BE SECURE AND FINISHED.

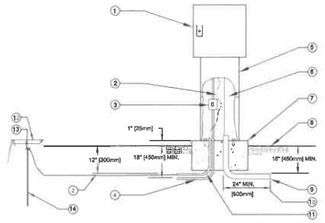


1. STAINLESS STEEL ENCLOSURE TO COMPLETELY ENCLOSE DEVICE
2. SET PAD 1/2" [13MM] ABOVE FINISH GRADE
3. FINISH GRADE
4. 6" [150mm] THICK CONCRETE PAD FOR ENCLOSURE SUPPORT TO EXTEND 6" [150mm] BEYOND ENCLOSURE ON ALL SIDES. CONCRETE TO HAVE MEDIUM BROOM FINISH.
5. MOUNTING BRACKETS (STANDARD WITH ENCLOSURE) TO BE SET INTO CONCRETE PAD. PROVIDE LOCKING TAB TO ACCEPT PADLOCK PER MANUFACTURER'S INSTRUCTION.

2 BACKFLOW ASSEMBLY ENCLOSURE
SCALE: NONE
DET: ENC-SMOOTH

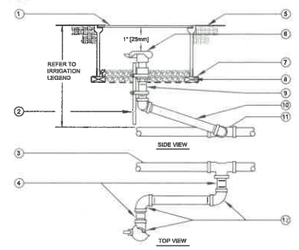


1. 10" ROUND PLASTIC VALVE BOX WITH BOLT DOWN LID.
2. 8" [200mm] CLASS 160 OR SCHEDULE 40 PVC PIPE (NOTCH TO FIT OVER MAIN LINE PIPE).
3. PVC MAIN LINE.
4. FINISH GRADE.
5. PEA GRAVEL OR 3/4" [20mm] DRAIN ROCK - 4" [100mm] DEEP (NO SOIL IN VALVE BOX).
6. BRICK-2 TOTAL.
7. 19 GAUGE 1/2" [13mm] SQUARE WIRE MESH.
8. GATE VALVE.
9. MALE ADAPTER. REFER TO LEGEND FOR FITTING TYPE.



1. IRRIGATION CONTROLLER.
2. #6 BARE COPPER GROUND WIRE.
3. 120 VOLT LOCKABLE WEATHERPROOF ON/OFF SWITCH PROVIDED UNDER IRRIGATION CONTRACT.
4. 120 VOLT A.C. ELECTRICAL SERVICE FROM SOURCE TO CONTROLLER LOCATION PROVIDED BY CONTRACTOR. IRRIGATION CONTRACTOR TO PROVIDE RIGID STEEL CONDUIT FROM SERVICE STUB-OUT TO CONTROLLER OCP/ SWITCH AND COMPLETE ELECTRICAL SERVICE TO CONTROLLER.
5. PEDESTAL ENCLOSURE.
6. LOW VOLTAGE CONTROL WIRING.
7. CONCRETE PAD-4" [150mm] THICK (MIN.) EXTEND 6" [150mm] BEYOND EACH SIDE AND BACK. 24" [600mm] IN FRONT AND 1" [25mm] ABOVE FINISH GRADE.
8. FINISH GRADE.
9. SCHEDULE 40 GREY PVC ELECTRICAL CONDUIT WITH SWEEP ELL FOR LOW VOLTAGE WIRE.
10. 24" MIN. [600mm] AND OR 12" [300mm] BEYOND HARDSCAPE.
11. 1 1/2" [40mm] PVC SWEEP ELL FOR GROUND WIRE.
12. 6" ROUND BLACK PLASTIC BOX WITH T-LID FOR GROUND ROD.
13. CADWELD CONNECTIONS
14. 8' LONG COPPER GROUND ROD, LOCATE A MINIMUM OF 10' AWAY FROM CONTROLLER.

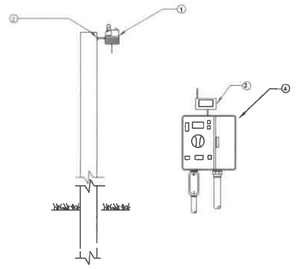
3 CONTROLLER - PEDESTAL MOUNT
SCALE: NONE
DET: PED-CONT



1. 10" ROUND PLASTIC VALVE BOX WITH BOLT DOWN LID.
2. 1 1/4" x 1 1/4" x 3/16" [30mm x 30mm x 5mm] ANGLE IRON 30" [760mm] LONG W/2 STAINLESS STEEL STRAPS (ONE AROUND GCV).
3. PVC MAIN LINE.
4. 3" [75mm] LONG SCHEDULE 80 PVC THREADED NIPPLE.
5. FINISH GRADE.
6. QUICK COUPLING VALVE.

NOTE:
NIPPLES AND FITTINGS TO BE SAME SIZE AS VALVE IPT INLET THREAD SIZE.

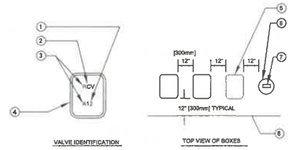
7. 19 GAUGE 1/2" [13mm] SQUARE WIRE MESH.
8. BRICK - 2 TOTAL.
9. SCHEDULE 80 PVC THREADED NIPPLE.
10. 10" [250mm] LONG SCHEDULE 80 PVC THREADED NIPPLE.
11. UPC APPROVED SCHEDULE 40 PVC TEE OR ELBOW.
12. SCHEDULE 80 PVC THREADED 90° ELL.



NOTE: MAXIMUM LINE OF SIGHT FROM SENSOR TO RECEIVER IS 1000 FT. DISTANCE IS LESS IF OBSTRUCTIONS EXIST. SENSOR MUST BE INSTALLED IN "CLEAR SPACE" WHERE IT IS EXPOSED TO UNOBSTRUCTED RAINFALL AND IS CLEAR OF IRRIGATION SPRAY.

1. WIRELESS CLIMATE SENSOR TRANSMITTER
2. SUITABLE POST, POLE, OR GUTTER MOUNT. MOUNT IN LOCATION WHERE SENSOR CAN RECEIVE FULL SUN, IS OPEN TO RAINFALL AND OUT OF SPRINKLER SPRAY PATTERN
3. SENSOR RECEIVER
4. CONTROLLER

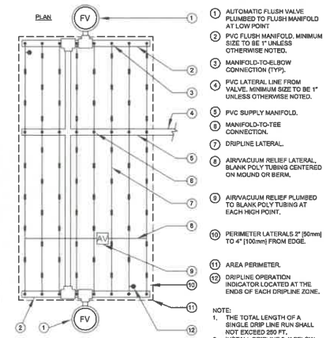
4 WIRELESS WEATHER SENSOR
SCALE: NONE
DET: CLAW



1. CONTROLLER AND STATION
2. VALVE TYPE
3. HEAT BRAND LETTERS AND NUMBERS INTO LID.
4. VALVE BOX COVER
5. RECTANGULAR VALVE BOX
6. ROUND VALVE BOX FOR GCV AND GATE VALVE.
7. HEAT BRAND LETTERS AND NUMBERS INTO LID (TYPICAL).
8. EDGE OF LAWN, WALK, FENCE, CURB, ETC.

INSTRUCTIONS:
1. CENTER VALVE BOX OVER REMOTE CONTROL VALVE TO FACILITATE SERVICING VALVE.
2. SET BOXES 1" [25mm] ABOVE FINISH GRADE OR MULCH COVER IN GROUND COVER/SHRUB AREA AND FLUSH WITH FINISH GRADE IN TURF AREA.
3. SET RCV AND VALVE BOX ASSEMBLY IN GROUND COVER/SHRUB AREA WHERE POSSIBLE. INSTALL IN LAWN ONLY IF GROUND COVER DOES NOT EXIST ADJACENT TO LAWN.
4. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE OF LAWN, WALK, FENCE, CURB, ETC.
5. AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOXES TO PREVENT COLLAPSE AND DEFORMATION OF VALVE BOX SIDES.
6. INSTALL EXTENSION BY VALVE BOX MANUFACTURER AS REQUIRED TO COMPLETELY ENCLOSE ASSEMBLY FOR EASY ACCESS.

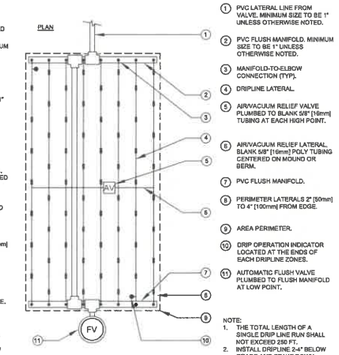
5 REMOTE CONTROL VALVE
SCALE: NONE
DET: RCV-UHBV



1. AUTOMATIC FLUSH VALVE PLUMBED TO FLUSH MANIFOLD AT LOW POINT
2. PVC FLUSH MANIFOLD. MINIMUM SIZE TO BE 1" UNLESS OTHERWISE NOTED.
3. MANIFOLD-TO-ELBOW CONNECTION (TYP).
4. PVC LATERAL LINE FROM VALVE. MINIMUM SIZE TO BE 1" UNLESS OTHERWISE NOTED.
5. PVC SUPPLY MANIFOLD.
6. MANIFOLD-TO-TEE CONNECTION.
7. DRIPLINE LATERAL.
8. AIR/VACUUM RELIEF LATERAL. BLANK POLY TUBING CENTERED ON MOUND OR BERM.
9. AIR/VACUUM RELIEF PLUMBED TO BLANK POLY TUBING AT EACH HIGH POINT.
10. PERIMETER LATERALS 2" [50mm] TO 4" [100mm] FROM EDGE.
11. AREA PERIMETER.
12. DRIPLINE OPERATION INDICATOR LOCATED AT THE ENDS OF EACH DRIPLINE ZONE.

NOTE:
1. THE TOTAL LENGTH OF A SINGLE DRIP LINE RUN SHALL NOT EXCEED 250 FT.
2. INSTALL DRIPLINE 2-4" BELOW GRADE AND STAKE DOWN EVERY 4' OR AS REQUIRED.

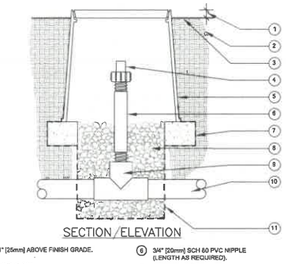
6 REMOTE CONTROL VALVE (DRIPZONE)
SCALE: NONE
DET: RCV-FILTER4



1. PVC LATERAL LINE FROM VALVE. MINIMUM SIZE TO BE 1" UNLESS OTHERWISE NOTED.
2. PVC FLUSH MANIFOLD. MINIMUM SIZE TO BE 1" UNLESS OTHERWISE NOTED.
3. MANIFOLD-TO-ELBOW CONNECTION (TYP).
4. DRIPLINE LATERAL.
5. AIR/VACUUM RELIEF VALVE PLUMBED TO BLANK 5/8" [16mm] TUBING AT EACH HIGH POINT.
6. AIR/VACUUM RELIEF LATERAL. BLANK 5/8" [16mm] POLY TUBING CENTERED ON MOUND OR BERM.
7. PVC FLUSH MANIFOLD.
8. PERIMETER LATERALS 2" [50mm] TO 4" [100mm] FROM EDGE.
9. AREA PERIMETER.
10. DRIP OPERATION INDICATOR LOCATED AT THE ENDS OF EACH DRIPLINE ZONES.
11. AUTOMATIC FLUSH VALVE PLUMBED TO FLUSH MANIFOLD AT LOW POINT.

NOTE:
1. THE TOTAL LENGTH OF A SINGLE DRIP LINE RUN SHALL NOT EXCEED 250 FT.
2. INSTALL DRIPLINE 2-4" BELOW GRADE AND STAKE DOWN EVERY 4' OR AS REQUIRED.

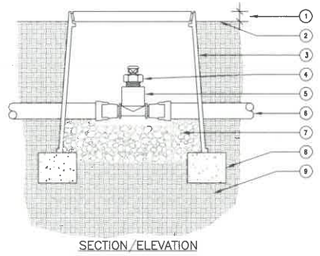
7 WEATHERPROOF WIRE SPLICE ASSEMBLY
SCALE: NONE
DET: WIRE-SPL



1. 1" [25mm] ABOVE FINISH GRADE.
2. NATIVE SOIL.
3. FINISH GRADE.
4. FLUSH VALVE.
5. ROUND PLASTIC VALVE BOX. REFER TO IRRIGATION SPECS FOR BOX SIZE. HEAT BRAND "FV" ON LID IN 2" [50mm] HIGH CHARACTERS.
6. 3/4" [20mm] SCH 80 PVC NIPPLE (LENGTH AS REQUIRED).
7. BRICK - 2 TOTAL
8. PEA GRAVEL 18" (450mm) DEEP.
9. PVC TEE (5x5x7) WITH 3/4" [20mm] THREADED OUTLET.
10. PVC PIPING.
11. 19 GAUGE 1/2" [13mm] SQUARE WIRE MESH.

NOTE:
USE ONE FLUSH VALVE FOR EVERY 7 GPM PER ZONE. LOCATE AT LOW POINTS. FLUSH RATE IS 0.8 GPM. FLUSH PRESSURE IS 2 PSI.

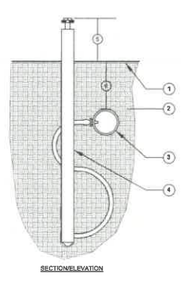
8 GATE VALVE
SCALE: NONE
DET: SGVD



1. 1" ABOVE FINISH GRADE.
2. FINISH GRADE.
3. 8" ROUND PLASTIC VALVE BOX. HEAT BRAND "AR" ON LID IN 1" HIGH CHARACTERS.
4. TORO DL2000 AIR/VACUUM RELIEF VALVE (YD-800-34).
5. TORO LOC-EZE X 1/2" FPT TEE (FTF16).
6. TORO DL2000 TUBING (ROP-XX-XXX) OR TORO BLUE STRIPE POLY TUBING (DHD1645-XXX) AIR/RELIEF LATERAL.
7. PEA GRAVEL SUMP (6" DEEP).
8. BRICK SUPPORTS (2 COMMON BRICKS REQUIRED).
9. NATIVE SOIL PER SPECIFICATIONS.

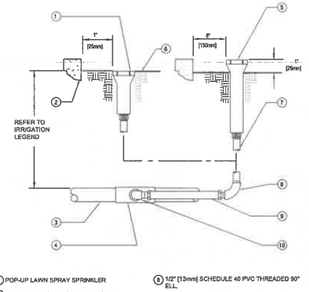
NOTE:
USE ONE AIR/RELIEF VALVE FOR EVERY 7 GPM PER ZONE. LOCATE AT HIGH POINTS.

9 QUICK COUPLING VALVE
DET: QUICK-C2



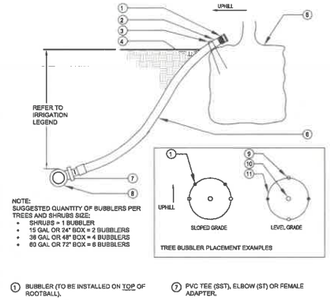
1. FINISH GRADE.
2. SOIL BACKFILL.
3. DRIPLINE.
4. OPERATION INDICATOR. USE ONE PER ZONE AND LOCATED AT FLUSH END OF ZONE.
5. 2"-3" [50mm - 75mm] ABOVE FINISH GRADE.
6. REFER TO IRRIGATION LEGEND.

10 VALVE BOX INSTALLATION
DET: VALVE-B1



1. POP-UP LAWN SPRAY SPRINKLER
2. WALL, WALK, CURB OR BUILDING
3. PVC LATERAL LINE
4. UPC APPROVED SCHEDULE 40 PVC TEE OR ELBOW
5. POP-UP SHRUB SPRAY SPRINKLER OR BUBBLER
6. FINISH GRADE
7. 1/2" [13mm] SCHEDULE 80 PVC THREADED NIPPLE (LENGTH AS REQUIRED).
8. 1/2" [13mm] SCHEDULE 40 PVC THREADED 90° ELL.
9. 1/2" [13mm] FLEXIBLE IPS HOSE 6" [150mm] LONG WITH MALE ADAPTERS OR 1/2" [13mm] FLEXIBLE SWING JOINT (1/2" x 6") [13mm x 150mm] WITH A MINIMUM PRESSURE RATING OF 100 PSI (690kPa).
10. 1/2" [13mm] SCHEDULE 40 PVC STREET ELL.

11 TORO DL 2000 CENTER FEED LAYOUT
SCALE: NONE

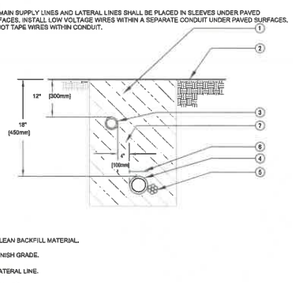


NOTE:
SUGGESTED QUANTITY OF BUBBLERS PER TREES AND SHRUBS SIZE:
- SHRUBS = 1 BUBBLER
- 15 GAL OR 24" BOX = 2 BUBBLERS
- 36 GAL OR 48" BOX = 4 BUBBLERS
- 60 GAL OR 72" BOX = 6 BUBBLERS

1. BUBBLER (TO BE INSTALLED ON TOP OF ROOTBALL).
2. 1/2" [13mm] SCH. 40 MALE ADAPTER.
3. 6" [150mm] STEEL STAPLE.
4. FINISH GRADE.
5. TREE OR SHRUB ROOTBALL.
6. 1/2" [13mm] IPS FLEXIBLE PVC.
7. PVC TEE (SST), ELBOW (ST) OR FEMALE ADAPTER.
8. PVC LATERAL LINE.
9. TREE STAKES.
10. TREE OR SHRUB.
11. EDGE OF ROOTBALL (TYPICAL).

12 TORO DL 2000 END FEED LAYOUT
SCALE: NONE

NOTES:
1. ALL MAIN SUPPLY LINES AND LATERAL LINES SHALL BE PLACED IN SLEEVES UNDER PAVED SURFACES. INSTALL LOW VOLTAGE WIRES WITHIN A SEPARATE CONDUIT UNDER PAVED SURFACES. DO NOT TAPE WIRES WITHIN CONDUIT.



1. CLEAN BACKFILL MATERIAL.
2. FINISH GRADE.
3. LATERAL LINE.
4. MAIN LINE.
5. LOW VOLTAGE CONTROL WIRE. TAPE AND BUNDLE TUBING OR WIRING AT 10 FT. INTERVALS. WIRING SHALL BE LAID OUT LOOSELY IN THE TRENCH.
6. DETECTABLE WARNING TAPE OVER MAIN LINE - 3" [75mm] ABOVE PIPE.
7. TYPICAL DISTANCE BETWEEN PIPES.

13 TORO DL 2000 FLUSH VALVE (PVC TEE)
SCALE: NONE

14 TORO DL 2000 AIR VACUUM RELIEF VALVE
SCALE: NONE

15 TORO DL 2000 OPERATION INDICATOR
SCALE: NONE

16 POP-UP SPRAY SPRINKLER RISER
SCALE: NONE
DET: SHULW-POPSP

17 TREE AND SHRUB BUBBLER
SCALE: NONE
DET: TREE-SBUB

18 TRENCHING
SCALE: NONE
DET: TRENCH

IRRIGATION DETAILS

ALVES LANE | BAY POINT, CA

META HOUSING CORPORATION

Meta Housing Corporation

DAHLIN | R3 STUDIOS

DATE	07.31.2020
JOB NO.	400-78

201 Fourth Street
Suite 101B
Oakland, CA 94607
510-452-4190

L6.0

LANDS OF UNITED PENTECOSTAL CHURCH
APN 097-100-055-9
3928 O.R. 443

LANDS OF CONTRA COSTA COUNTY
487 O.R. 214

LANDS OF CONTRA COSTA COUNTY
487 O.R. 214

LANDS OF CHATHAM
APN 097-100-0050

LANDS OF THE STATE OF CALIFORNIA
STATE ROUTE 4

ALVES LANE

10' UTILITY EASEMENT (487 O.R. 214)

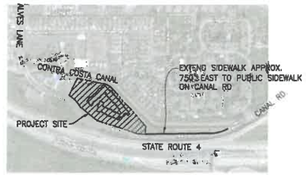
EVA ACCESS GATE

RUBBERIZED PLAY SURFACE

INSTALL CURB & GUTTER ALONG PROJECT FRONTAGE

ELECTRIC POWER AND TRANSMISSION EASEMENT (17389 O.R. 309) SEE NOTE 1

EXTEND SIDEWALK, CURB & GUTTER TO SIDEWALK ON CANAL RD. SEE PUBLIC SIDEWALK EXTENSION ABOVE.



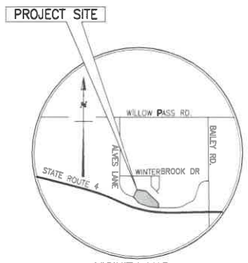
PUBLIC SIDEWALK EXTENSION
N.T.S.

LEGEND:

FS 12.00	PROPOSED ELEVATION
EG (12.00)	EXISTING ELEVATION
1.0%	PROPOSED SLOPE
(1.0%)	EXISTING SLOPE
127.0 FF	FINISH FLOOR ELEVATION
	ASPHALT PAVEMENT
	PERVIOUS ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	ARTIFICIAL TURF SURFACE
	BIORETENTION AREA
	BUILDING FOOTPRINT
	RETAINING WALL
	GRADE BREAK
	PROPERTY LINE
	EASEMENT LINE
	6" CURB
	8" CURB & GUTTER

ABBREVIATIONS:

BW	BOTTOM OF WALL
EG	EXISTING GRADE
EXIST. OR EX.	EXISTING
FF	FINISHED FLOOR
FG	FINISHED GRADE
FS	FINISHED SURFACE
TC	TOP OF CURB
TW	TOP OF WALL



VICINITY MAP
NOT TO SCALE

SITE INFORMATION:

APN:	097-100-059-1 & 097-100-060-9	
ADDRESS:	ALVES LANE, BAY POINT, CA 94565	
AREA:	TOTAL AREA:	3.86 AC
	BUILDINGS:	39,279 SF
	VEHICULAR PAVING (IMPERVIOUS):	56,889 SF
	VEHICULAR PAVING (PERVIOUS):	9,833 SF
	PEDESTRIAN PAVING:	5,813 SF
	LANDSCAPING:	36,373 SF
TREES:	THERE ARE NO QUALIFYING TREES ON SITE OR WITHIN 50 FEET OF THE PROPOSED DEVELOPMENT.	

PARKING COUNT

TYPE	DIMENSIONS	NUMBER
STANDARD	8.5'X18'	141
COMPACT	7.5'X16'	48
ACCESSIBLE	9'X18'	14
TOTAL		203

NOTE: WHERE STANDARD AND COMPACT STALLS ABUT LOW LANDSCAPING, STALL SHORTENED BY 2.0' AND 1.5' RESPECTIVELY TO ACCOMMODATE OVERHANG.

NOTES:

1. ELECTRIC POWER AND TRANSMISSION EASEMENT ALONG ALVES LANE BENEFITS CONTRA COSTA COUNTY. OWNER IS ENGAGING REAL ESTATE DIVISION TO VACATE EASEMENT.
2. SITE ACCESS IS DESIGNED TO MEET THE MINIMUM REQUIREMENTS SET BY THE 2019 CALIFORNIA FIRE CODE, APPENDIX D, AS AMENDED BY COUNTY ORDINANCE.
3. AERIAL FIRE APPARATUS ROADS PER 2019 CALIFORNIA FIRE CODE, SECTION D105 PROVIDED ALONG EAST, SOUTH AND WEST FACE OF BUILDING.
4. EXISTING TWO PARCELS TO BE MERGED.

PLAN
SCALE: 1" = 20'-0"
0 10' 20' 40'
GRAPHIC SCALE

PRELIMINARY SITE AND GRADING PLAN

ALVES LANE | BAY POINT, CA

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Meta Housing Corporation

DAHLIN
5865 Owens Drive
Pleasanton, CA 94588
925-251-7200

DATE 07.31.20
JOB NO. 1318.011

C1.1

PUBLIC UTILITY EXTENSION

N.T.S.

LEGEND:

- PROPERTY LINE
- W/FW — SEPARATE DOMESTIC & FIRE WATER PIPE
- SS — SANITARY SEWER PIPE
- SD — STORM DRAIN PIPE
- 6" PERFORATED DRAIN LINE
- FIRE DEPARTMENT CONNECTION
- BACKFLOW PREVENTOR
- POST INDICATOR VALVE
- FIRE HYDRANT
- CLEANOUT
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE
- DRAIN INLET

KEY NOTES:

SS1	INSTALL SANITARY SEWER PIPE AND EXTEND TO EXISTING MAIN. SEE PUBLIC UTILITY EXTENSION, ABOVE.
SD1	INSTALL STORM DRAIN PIPE AND EXTEND TO EXISTING MAIN ON ALVES LANE.
SD2	INSTALL COUNTY STANDARD STORM DRAIN INLET.
W1	INSTALL WATER/FIREWATER PIPE AND EXTEND TO EXISTING MAIN. SEE PUBLIC UTILITY EXTENSION, ABOVE.

NOTES:

1. PROVIDE TRASH CAPTURE DEVICES AT EACH CATCH BASIN.

PLAN

SCALE: 1" = 20'-0"

0 10' 20' 40'

GRAPHIC SCALE

PRELIMINARY UTILITY PLAN

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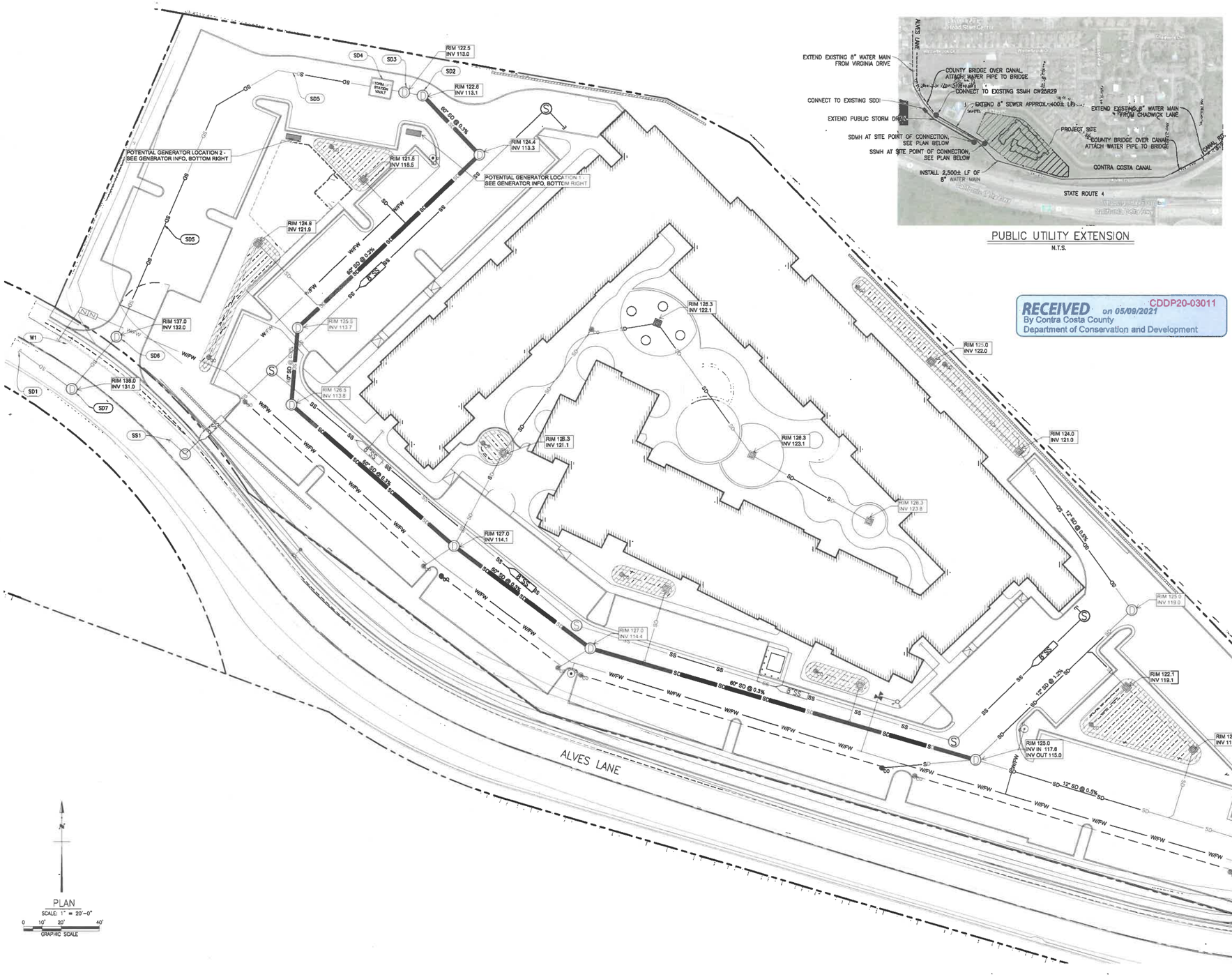
JOB NO. 1318.011

C1.2



PLAN
SCALE: 1" = 20'-0"
0 10' 20' 40'
GRAPHIC SCALE

PUBLIC UTILITY EXTENSION
N.T.S.

LEGEND:

- PROPERTY LINE
- W/FW — SEPARATE DOMESTIC & FIRE WATER PIPE
- SS — SANITARY SEWER PIPE
- SD — STORM DRAIN PIPE
- 60" — 60" DIAMETER STORM DRAIN PIPE
- 6" PERFORATED DRAIN LINE
- FIRE DEPARTMENT CONNECTION
- BFP — BACKFLOW PREVENTOR
- POST INDICATOR VALVE
- FIRE HYDRANT
- CLEANOUT
- S — SANITARY SEWER MANHOLE
- D — STORM DRAIN MANHOLE
- DRAIN INLET

KEY NOTES:

- SS1 — INSTALL SANITARY SEWER PIPE AND EXTEND TO EXISTING MAIN. SEE PUBLIC UTILITY EXTENSION, ABOVE.
- W1 — INSTALL WATER/FIREWATER PIPE AND EXTEND TO EXISTING MAIN. SEE PUBLIC UTILITY EXTENSION, ABOVE.
- SD1 — INSTALL STORM DRAIN PIPE AND EXTEND TO EXISTING MAIN ON ALVES LANE.
- SD2 — INSTALL STORM DRAIN MANHOLE WITH WEIR ORIFICE STRUCTURE TO MANAGE STORM FLOW DISCHARGE.
- SD3 — STORM DRAIN LIFT STATION SUMP PIT.
- SD4 — STORM DRAIN LIFT STATION VAULT WITH DUPLEX 10 HP PUMPS. FINAL SIZE TO BE DETERMINED PRIOR TO IMPROVEMENT PLAN SUBMITTAL. PROVIDE EMERGENCY GENERATOR POWER IN A SCREENED ENCLOSURE. LOCATION TBD.
- SD5 — INSTALL 6" PVC C900 STORM FORCE MAIN.
- SD6 — PRIVATE STORM DRAIN MANHOLE. TRANSITION FORCE MAIN TO GRAVITY STORM DRAIN.
- SD7 — PUBLIC STORM DRAIN MANHOLE.

NOTES:

1. PROVIDE TRASH CAPTURE DEVICES AT EACH CATCH BASIN.
2. OVERSIZED STORM DRAIN PIPE INTENDED FOR STORM WATER STORAGE TO MANAGE FLOW TO STORM DRAIN LIFT STATION. PRELIMINARY CAPACITY REQUIREMENT = 10,600 CUBIC FEET.

LIFT STATION EMERGENCY GENERATOR INFORMATION

- ABOVE GROUND GENERATOR WITH ENCLOSURE
- APPROXIMATE FOOTPRINT: 4' x 2' x 2.5'
- DECIBEL RATING: 55 - 65 dB
- GENERATOR WOULD BE USED AS A MEANS OF EMERGENCY BACK-UP POWER ONLY. THE GENERATOR IS PROPOSED AS NATURAL GAS POWERED, NOT DIESEL.

PRELIMINARY UTILITY PLAN
ALTERNATIVE

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JOB NO. 1318.011

C1.2A

STORMWATER DRAINAGE MANAGEMENT SUMMARY

DMA NAME	DMA AREA (SF)	POST PROJECT SURFACE TYPE
1A	15444	PAVEMENT
1B	2190	LANDSCAPE
2A	26990	ROOF/PAVEMENT
2B	2482	LANDSCAPE
3A	13617	PAVEMENT
3B	6048	LANDSCAPE
3C	1557	ARTIFICIAL TURF
4A	26661	PAVEMENT
4B	4226	LANDSCAPE
5A	13779	ROOF/PAVEMENT
5B	1832	LANDSCAPE
6A	3365	PAVEMENT
6B	85	LANDSCAPE
7A	6376	PAVEMENT
7B	7246	LANDSCAPE
7C	2120	ARTIFICIAL TURF
7D	977	RUBBERIZED PLAY AREA
8C	9914	PERVIOUS PAVEMENT
9B	11114	LANDSCAPE
10B	7594	LANDSCAPE

STORMWATER SELF RETAINING AREAS

DMA NAME	DMA AREA (SF)
3C	1557
7C	2120
7D	977
8C	9914

STORMWATER SELF-TREATING AREAS

DMA NAME	DMA AREA (SF)
1B	2190
2B	2482
3B	7605
4B	4226
5B	1832
6B	85
7B	7246
9B	11114
10B	7594

**NOTE: DMA 9B SHEET FLOWS INTO PUBLIC PROPERTY, MATCHING EXISTING CONDITIONS.

STORMWATER IMP TREATMENT AREA SUMMARY

IMP NAME	DMAs DRAINING TO IMP	TOTAL AREA DRAINING TO IMP (SF)	IMP SIZING FACTOR	MIN IMP SIZE (SF)	IMP SIZE PROVIDED (SF)
IMP 1	1A	15444	0.04	618	674
IMP 2	2A	26990	0.04	1080	1165
IMP 3	3A	13617	0.04	545	692
IMP 4	4A	26661	0.04	1066	1516
IMP 5	5A	13779	0.04	551	656
IMP 6	6A	3365	0.04	135	160
IMP 7	7A	6376	0.04	255	255

NOTES:

1. CALCULATIONS ASSUME THE PROJECT IS IN A WATERSHED THAT DRAINS TO PIPES OR HARDENED CHANNELS, AND IS THEREFORE EXEMPT FROM HYDROMODIFICATION MANAGEMENT REQUIREMENTS. IF ASSUMPTION IS INCORRECT, IMP'S WILL BE DESIGN AS BIORETENTION + VAULT.

LEGEND:

- ASPHALT PAVEMENT
- PERVIOUS ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- ARTIFICIAL TURF SURFACE
- BIORETENTION AREA
- DRAINAGE DIRECTION
- GB GRADE BREAK
- DRAINAGE MANAGEMENT AREA LIMIT
- BUILDING FOOTPRINT
- RETAINING WALL
- PROPERTY LINE

PLAN
SCALE: 1" = 20'-0"
0 10' 20' 40'
GRAPHIC SCALE

PRELIMINARY STORMWATER CONTROL PLAN

ALVES LANE | BAY POINT, CA

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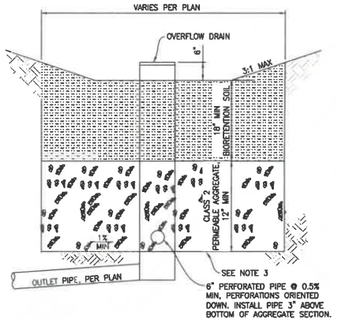
DATE 05.20.20
JOB NO. 1318.011

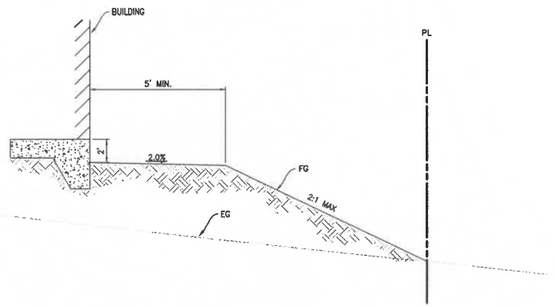
C1.3



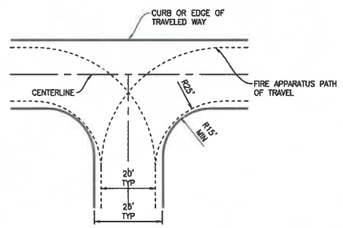
NOTES:

1. BIORETENTION SOIL: 60%–70% SAND, 30%–40% COMPOST WITH A LONG–TERM MINIMUM PERCOLATION RATE OF 5 IN/HR.
2. LAY PERFORATED PIPE ALONG FULL LENGTH OF BIORETENTION AREA AND CONNECT TO OVERFLOW DRAIN.

6 TYP. BIORETENTION AREA
N.T.S.



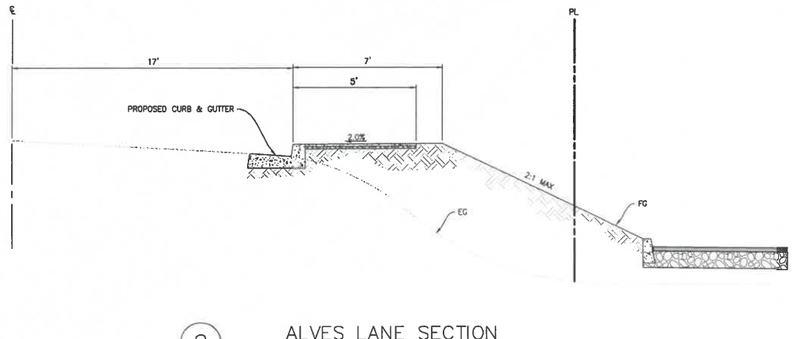
3 NORTH PL SECTION
N.T.S.



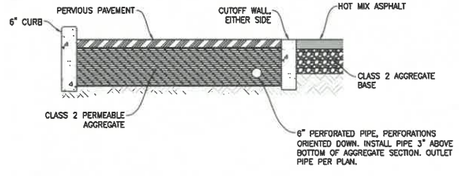
NOTES:

1. DRIVE AISLES SHALL COMPLY WITH 2019 CALIFORNIA FIRE CODE, APPENDIX D, AS AMENDED BY COUNTY ORDINANCE.

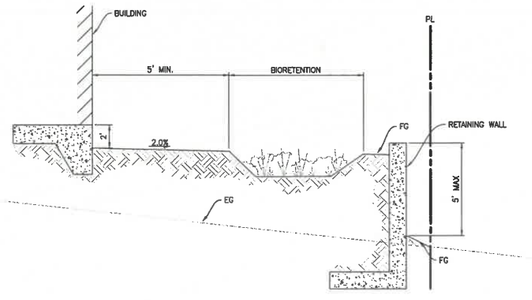
5 FIRE ACCESS
N.T.S.



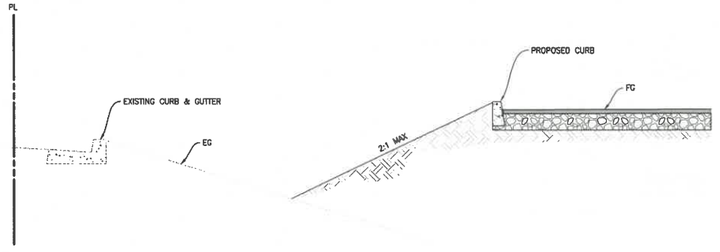
2 ALVES LANE SECTION
N.T.S.



7 PERVIOUS PAVEMENT
N.T.S.



4 NORTH PL SECTION
N.T.S.



1 WEST PL SECTION
N.T.S.

PRELIMINARY CIVIL DETAILS

ALVES LANE | BAY POINT, CA

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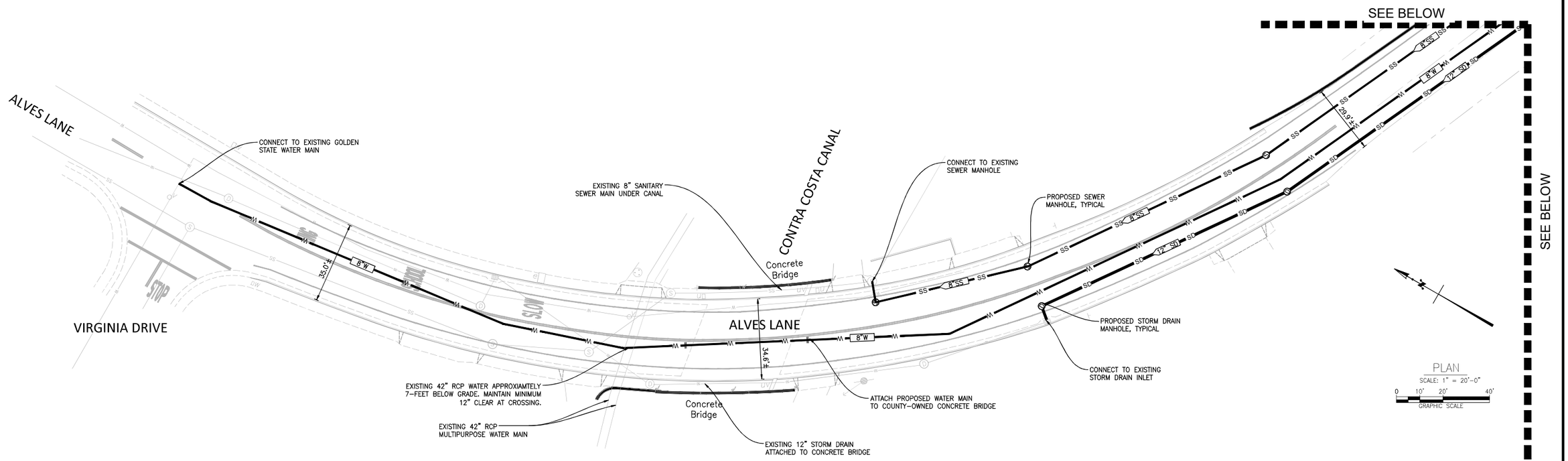
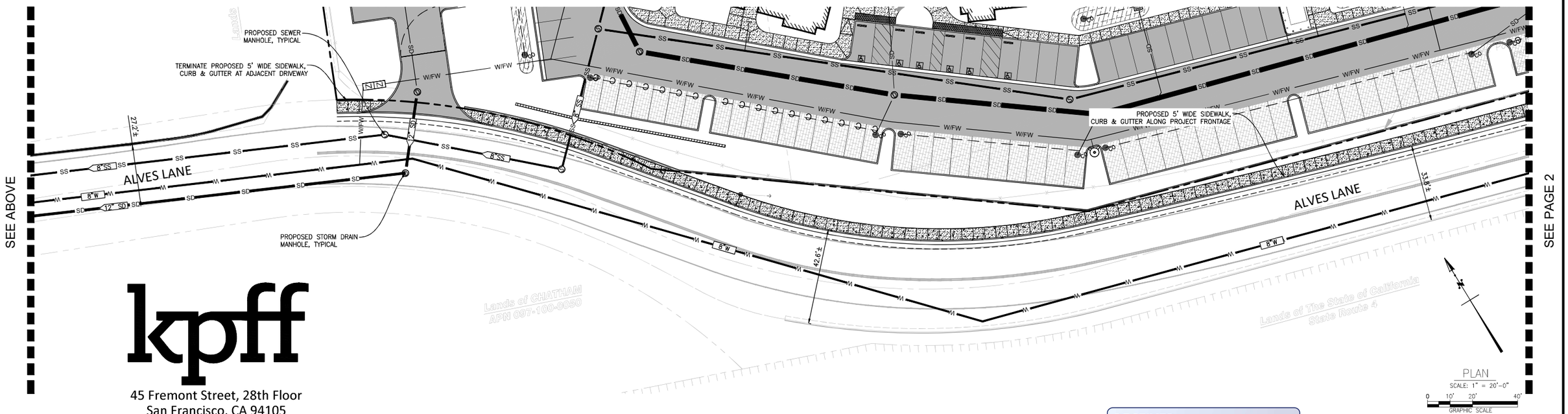
DATE 07.31.20
JOB NO. 1318.011

C1.4





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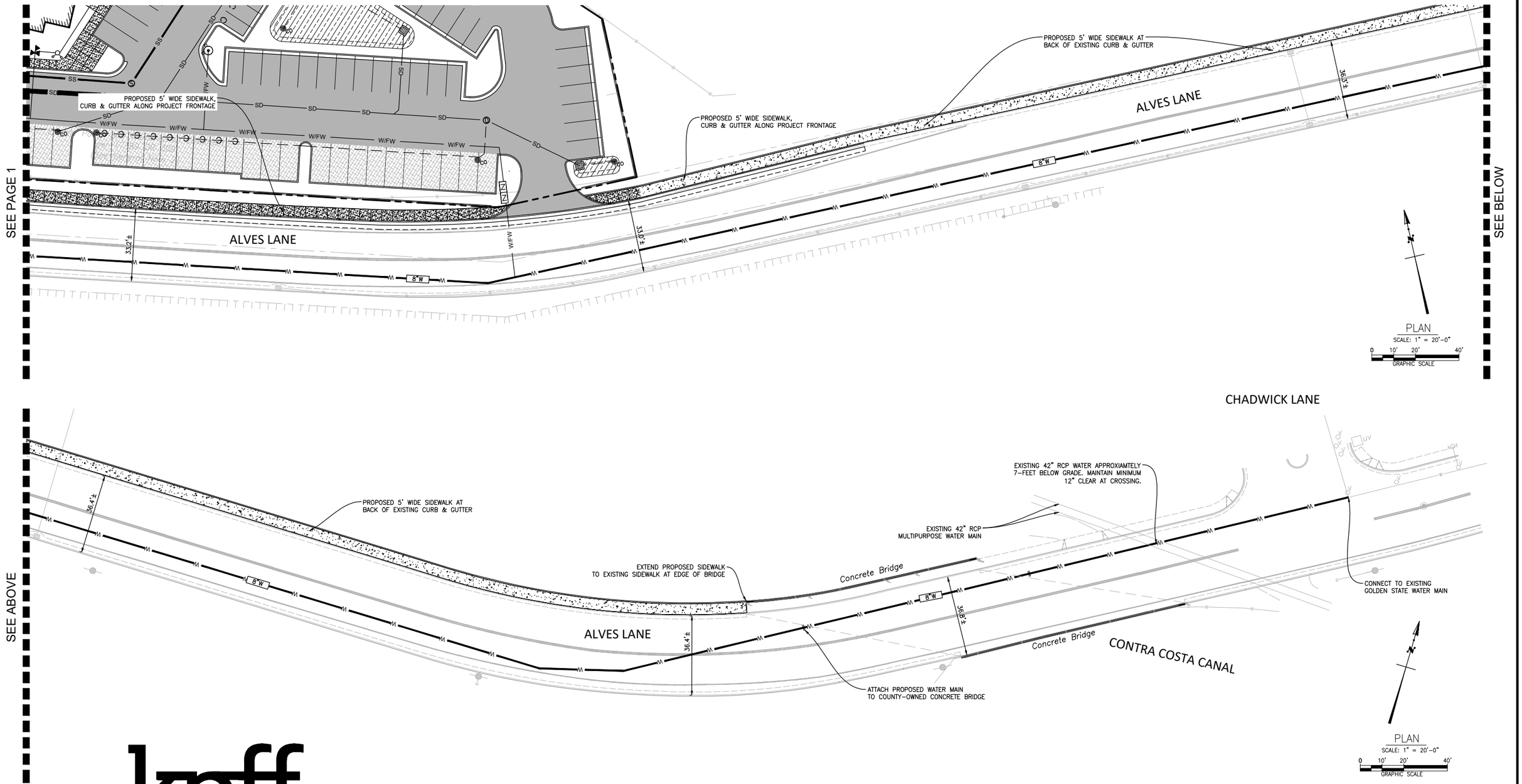
PUBLIC IMPROVEMENTS EXHIBIT

ALVES LANE APARTMENTS

JOB NUMBER: 2000023 DATE: 7.26.2021

RECEIVED on 08/12/2021 CDDP20-03011
By Contra Costa County
Department of Conservation and Development



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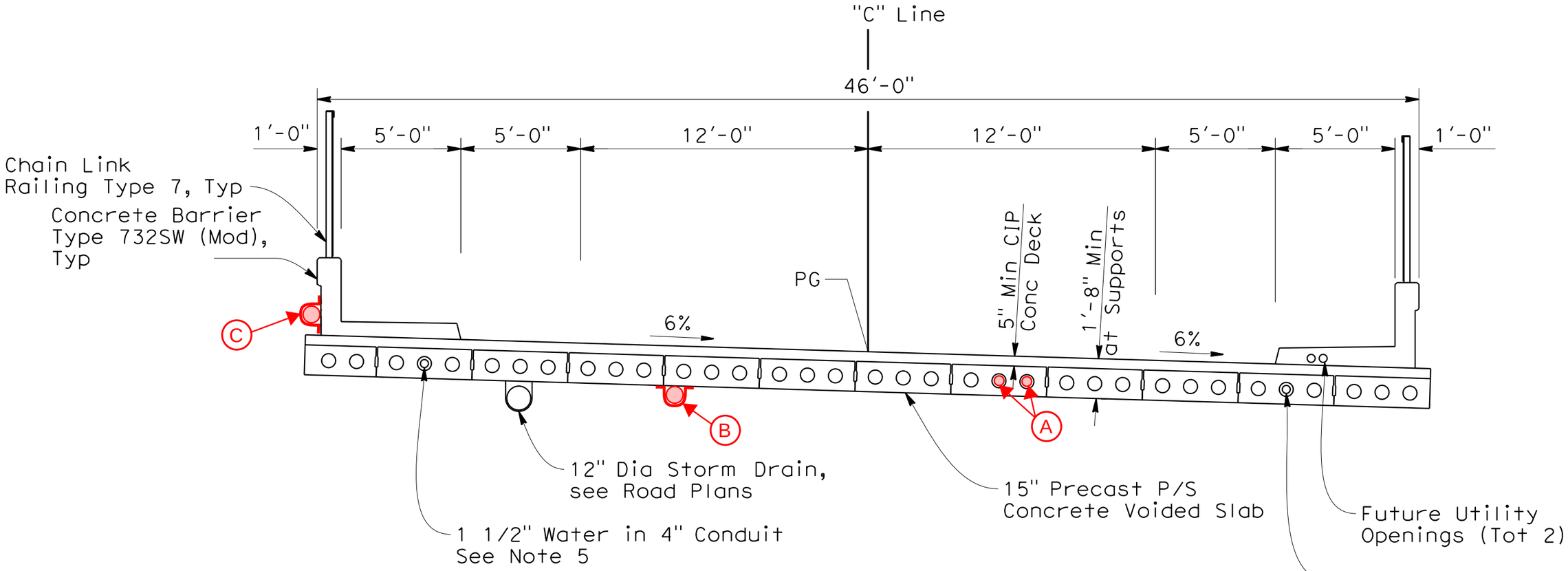
PUBLIC IMPROVEMENTS EXHIBIT

ALVES LANE APARTMENTS

JOB NUMBER: 2000023 DATE: 7.26.2021

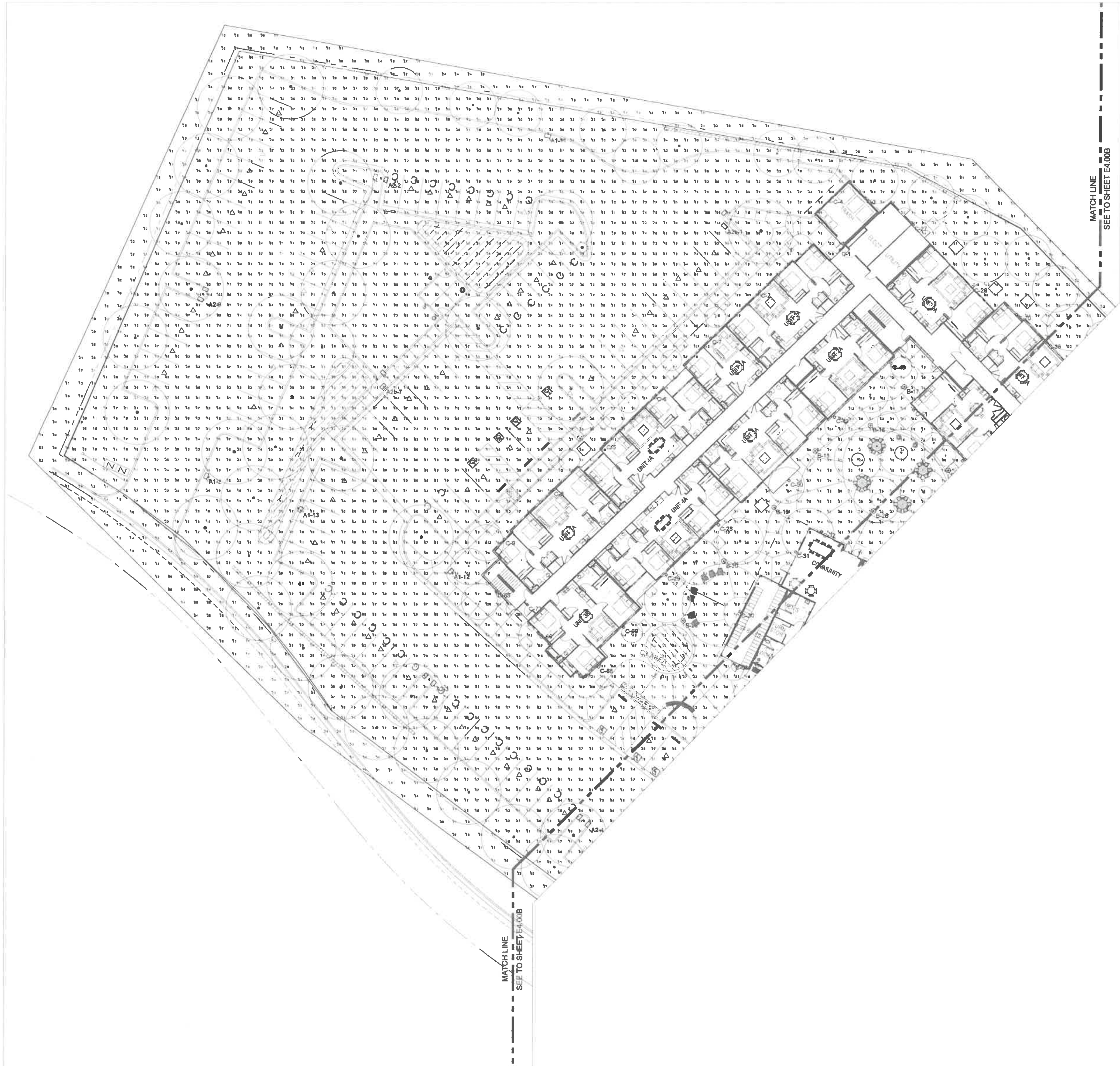


TYPICAL SECTION

1/4"=1'-0"

OPTION	DESCRIPTION	PROS	CONS
A	EXTEND WATER SERVICE ACROSS THE BRIDGE WITHIN THE ANNULAR STRUCTURE OF THE BRIDGE. PIPE DIAMETER IS LIMITED BY OPENINGS IN STRUCTURE, SO WOULD NEED TO SPLIT INTO MULTIPLE 4" SERVICES.	- PIPE NOT EXPOSED TO ELEMENTS	- WOULD SPLIT WATER INTO MULTIPLE PIPES, NON-STANDARD APPROACH - GS WATER MAY WANT PIPES TO BE PRIVATELY OWNED & MAINTAINED
B	ATTACH WATER TO BOTTOM OF BRIDGE WITH UNISTRUT FITTINGS, SIMILAR TO EXISTING CONDITION OF STORM DRAIN PIPE. PIPE WOULD BE SMALLER THAN STORM DRAIN, SO NO REDUCTION IN CANAL HEAD CLARANCE.	- STANDARD APPROACH TO PIPE CROSSING	- REQUIRES ACCESS TO CANAL AND ADDITIONAL PERMITTING WITH CCWD
C	ATTACH WATER TO SIDE OF BRIDGE WITH UNISTRUT FITTINGS. PIPE WOULD COME OUT OF GROUND ON EITHER SIDE OF BRIDGE, BEHIND THE SIDEWALK AND AVOIDING ACCESS ROADS.	- STANDARD APPROACH TO PIPE CROSSING - NO ACCESS TO CANAL NEEDED, INSTALL FROM MANLIFT ON ROAD	- PIPE IS EXPOSED WHERE COMING OUT OF GROUND

CONTRA COSTA CANAL
WATER SERVICE CROSSING OPTIONS
KPFF - 10/25/2021



Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Wattage
	A1	5	Lithonia Lighting	DSX0 LED P5 40K T3M MVOLT	DSX0 LED P5 40K T3M MVOLT	LED	1	DSX0_LED_P5_40K_T3M_MVOLT.ies	11346	89
	A2	8	Lithonia Lighting	DSX0 LED P5 40K T3M MVOLT	DSX0 LED P5 40K T3M MVOLT	LED	2	DSX0_LED_P5_40K_T3M_MVOLT.ies	11346	178
	A2b	5	Lithonia Lighting	DSX0 LED P5 40K T3M MVOLT	DSX0 LED P5 40K T3M MVOLT	LED	2	DSX0_LED_P5_40K_T3M_MVOLT.ies	11346	178
	B	21	BEGA Converted by LUMCat V 18.09.2017 / H.R.		84810K3	LED	1	84810_BEGA_IES.ies	1694	41
	C	74	Lithonia Lighting	WSR LED P2 SR2 40K MVOLT	WSR LED WITH P2-PERFORMANCE PACKAGE, 4000K, AND SR2 OPTIC TYPE	LED	1	WSR_LED_P2_SR2_40K_MVOLT.ies	3138	29.17

Statistics

Description	Symbol	Avg	Max	Min
site lighting	+	5.1 fc	20.7 fc	0.1 fc

SITE LIGHTING PHOTOMETRIC | SCALE 1/16"=1'-0" | 1

ALVES LANE | BAY POINT, CA

META HOUSING CORPORATION

RECEIVED on 08/07/2020 By Contra Costa County Department of Conservation and Development DP20-3011 Revised

Meta Housing Corporation

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DATE 05.20.20
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E4.00A

Schedule										
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Wattage
	A1	5	Lithonia Lighting	DSX0 LED P5 40K T3M MVOLT	DSX0 LED P5 40K T3M MVOLT	LED	1	DSX0_LED_P5_40K_T3M_MVOLT.ies	11346	89
	A2	8	Lithonia Lighting	DSX0 LED P5 40K T3M MVOLT	DSX0 LED P5 40K T3M MVOLT	LED	2	DSX0_LED_P5_40K_T3M_MVOLT.ies	11346	178
	A2b	5	Lithonia Lighting	DSX0 LED P5 40K T3M MVOLT	DSX0 LED P5 40K T3M MVOLT	LED	2	DSX0_LED_P5_40K_T3M_MVOLT.ies	11346	178
	B	21	BEGA Converted by LUMCat V 18.09.2017 / H.R.		84610K3	LED	1	84610_BEGA_IES.ies	1694	41
	C	74	Lithonia Lighting	WSR LED P2 SR2 40K MVOLT	WSR LED WITH P2-PERFORMANCE PACKAGE, 4000K, AND SR2 OPTIC TYPE	LED	1	WSR_LED_P2_SR2_40K_MVOLT.ies	3138	29.17

Statistics				
Description	Symbol	Avg	Max	Min
Site lighting	+	5.1 fc	20.7 fc	0.1 fc

SITE LIGHTING PHOTOMETRIC | SCALE 1/16"=1'-0" | 1

ALVES LANE | BAY POINT, CA

META HOUSING CORPORATION

Meta Housing Corporation

DAHLIN

DATE 05.20.20
JOB NO. 1318.011

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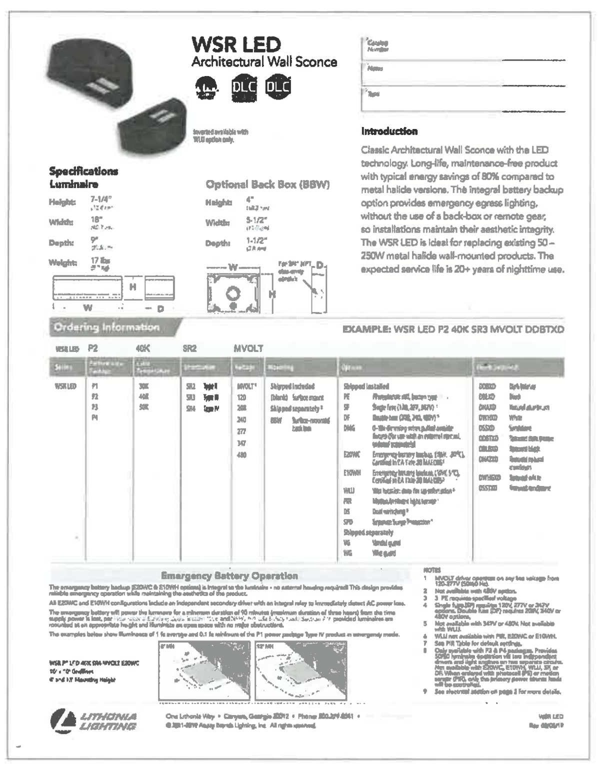
Pleasanton, CA 94588
925-251-7200

E4.00B

TYPE - C
WALL MOUNTED BUILDING LIGHT FIXTURE


WSR LED
Architectural Wall Sconce

Introduction

Classic Architectural Wall Sconce with the LED technology. Long-life, maintenance-free product with typical energy savings of 80% compared to metal halide versions. The integral battery backup option provides emergency egress lighting, without the use of a back-box or remote gear, so installations maintain their aesthetic integrity. The WSR LED is ideal for replacing existing 50 – 250W metal halide wall-mounted products. The expected service life is 20+ years of nighttime use.

Specifications

Optional Back Box (BBW)

Ordering Information

EXAMPLE: WSR LED P2 40K SR3 MVOLT DDBTXD

Emergency Battery Operation

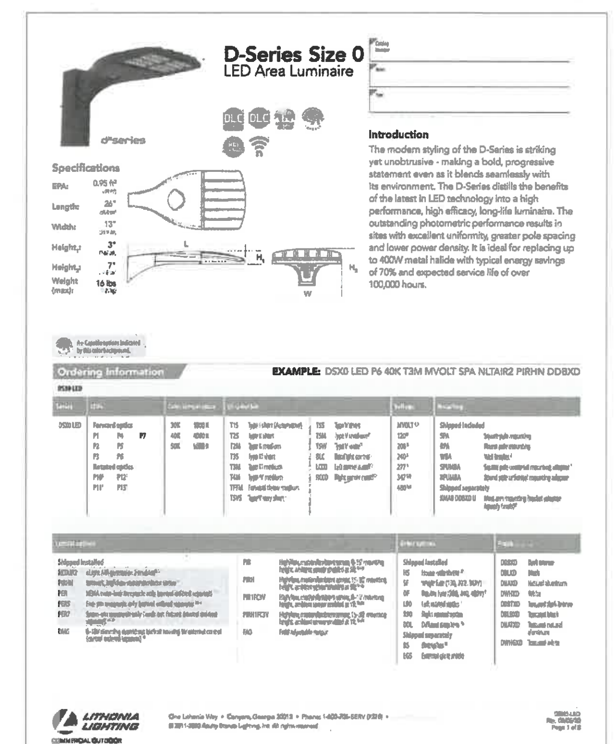
TYPE - B
WALK WAY LIGHT FIXTURE


Pole top luminaires
with symmetrical light distribution

Type:
BEGA Product:
Project:
Voltage:
Color:
Options:
Modified:

Luminaire Lumens: 2085

TYPE - A1, A2, A2b
PARKING LIGHT FIXTURE


D-Series Size 0
LED Area Luminaire

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

Specifications

Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

LIGHTING FIXTURE CUT SHEETS | SCALE N.T.S | 1

ALVES LANE | BAY POINT, CA
META HOUSING CORPORATION

S Y LEE ASSOCIATES, INC.
CONSULTING ENGINEERS
216 SOUTH JACKSON ST., SUITE 101 GLENDALE, CA 91205
OFFICE: (818) 242-2800 FAX: (818) 244-4341

Meta Housing Corporation

DAHLIN

DATE 05.20.20
JOB NO. 8781
SCALE AS SHOWN
5865 Owens Drive
Pleasanton, CA 94588
925-251-7200

NORTH

E4.00C

Mitigation Monitoring and Reporting Program
County File #CDDP20-03011
Alves Lane Apartments

Alves Lane near Chadwick Lane
Bay Point, CA 94565

~~**June 3, 2021**~~
Revised November 18, 2021

SECTION 1: AESTHETICS

Potentially Significant Impacts: *There is a potential for the proposed 45-foot maximum height of the proposed residential development to impact northerly views of the northern shoreline and waterways. Although trees and landscaping proposed for installation throughout the property would break up views of the proposed buildings as seen from adjacent and nearby properties, enhance the aesthetics of the property, and reduce adverse impacts on views from other properties, it is important to ensure that the proposed landscaping is properly irrigated and maintained for the life of the proposed use. Additionally, without adequate design and correct installation, the introduction of new light sources could result in potentially significant impacts on nighttime views. Project lighting could spill off-site and result in a potentially significant adverse environmental impact due to substantial new light and glare on neighboring properties. Building finishes (e.g., unfinished metal, glass) could potentially result in a new substantial impact on neighboring properties due to sunlight and daytime glare.*

Mitigation Measures(s):

AES-1: **Prior to Department of Conservation and Development, Community Development Division (CDD) stamp-approval of plans for issuance of a building or grading permit, whichever occurs first**, a final landscape and irrigation plan that is compliant with the State Model Water Efficient Landscape Ordinance, or the County's water conservation ordinance if one has been adopted, shall be submitted to the CDD for review and approval. The plans shall be designed in general accord with the preliminary landscape plans received by the CDD on August 7, 2020. The purpose of the final landscaping plan is to enhance the aesthetics of the property and to help screen the building from adjacent properties and from northerly viewpoints towards the Suisun Bay and Sacramento/San Joaquin River Delta.

AES-2: All outdoor lighting, including façade, yard, security, and streetlights, shall be oriented down towards building and parking areas on the subject property.

AES-3: External illumination shall be shielded, where necessary to avoid glare and to ensure that lighting is contained within the subject property.

AES-4: The use of highly reflective materials, including, but not limited to, glass and unfinished metals, shall be prohibited from use.

AES-5: All exterior components of the proposed residential buildings, trash and other enclosures, and structures within the private recreational area and dog park shall be finished with paints or other materials with a reflectivity of less than 55 percent.

Implementing Action:	COA

Timing of Verification:	Prior to CDD approval of construction documents.
Party Responsible for Verification:	Project proponent and CDD staff.
Compliance Verification:	Review of Construction Drawings.

SECTION 3: AIR QUALITY

Potentially Significant Impacts: *Future grading and construction activities on the project site would result in localized emissions of dust, diesel exhaust, and combustion emissions that could result in potential, if temporary, air quality impacts to sensitive receptors (e.g., nearby residences, schools) from the project site during project construction.*

Mitigation Measure(s):

AIR-1: All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

AIR-2: All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

AIR-3: All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

AIR-4: All vehicle speeds on unpaved roads shall be limited to 15 mph.

AIR-5: All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

AIR-6: Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

AIR-7: All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.

AIR-8: The property owner or site contractor shall post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This

person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

AIR-9: Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.

AIR-10: All contractors shall use equipment that meets the California Air Resources Board's (CARB) most recent certification standard for off-road heavy duty diesel engines.

Implementing Action:	COA
Timing of Verification:	Prior to CDD approval of construction documents and throughout construction-related activity.
Party Responsible for Verification:	Project proponent and CDD staff.
Compliance Verification:	Review of Construction Drawings. Photographic evidence of posted sign. Onsite inspection and monitoring of construction vehicles, equipment, and project site.

SECTION 4: BIOLOGICAL RESOURCES

Potentially Significant Impacts: *The potential for the proposed project to have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or US Fish and Wildlife Service is unlikely or of low probability. However, future grading and excavation activities during construction periods have the potential to impact potentially occurring nesting birds, and there is the potential for the project to adversely affect aquatic life or ~~reduce wildlife habitat~~raw water quality within the adjacent Contra Costa Canal due to runoff during construction, grading, and excavation activities.*

Mitigation Measure(s):

BIO-1: **Pre-Construction Avian Survey** – If project construction-related activities would take place during the nesting season (February through August), preconstruction surveys for nesting passerine birds and raptors (birds of prey) within the Property and the large trees within the adjacent area should be conducted by a competent biologist **no more than five (5) days prior to the commencement of site grading or construction activities**. If any bird listed under the Migratory Bird Treaty Act is found to be nesting within the project site or within the area of influence, an adequate protective buffer zone should be established by a qualified biologist to protect the nesting site. This buffer shall be a minimum of 75 feet from the project activities for passerine birds, and a minimum of 200 feet for raptors. The distance shall be determined by a competent biologist based on the site conditions (topography, if the nest is in a line of sight of the construction and the sensitivity of the birds nesting). The nest site(s) shall

be monitored by a competent biologist periodically to see if the birds are stressed by the construction activities and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), the project can proceed without further regard to the nest site(s).

BIO-2: **Erosion Control – Prior to any ground disturbance**, the appropriate best management practices (BMP's) for erosion and sediment control including, but not limited to, a silt construction fence, hay bales, and placement of straw mulch shall be installed around the construction site. No drainage, project runoff, or debris may enter the Contra Costa Canal or U.S. Bureau of Reclamation property. After construction, hydro seeding of exposed soils shall be completed as identified in the Storm Water Pollution Prevention Plan (SWPPP).

Implementing Action:	COA
Timing of Verification:	After CDD approval of construction documents, but at least 5 days prior to earthmoving or construction activities (BIO-1 surveys); Prior to CDD stamp approval of plans for issuance of building permits (BIO-2 BMPs); Prior to Final Inspection (hydro seeding).
Party Responsible for Verification:	Project proponent, CDD staff, Consulting Biologist
Compliance Verification:	Submittal and review of Biologist's pre-construction surveys (if necessary) or other verification provided to CDD staff; Photographic evidence of hydro seeding.

SECTION 5: CULTURAL RESOURCES

Potentially Significant Impacts: *Construction activities requiring excavation or earth movement could uncover previously unrecorded significant cultural resources and/or human remains.*

Mitigation Measure(s):

CUL 1: Should archaeological materials be uncovered during grading, trenching, or other on-site excavation(s), all earthwork within 50 feet, or a larger distance as determined necessary by a qualified archaeologist, of the materials shall be stopped until a qualified archeologist certified by the Society for California Archaeology (SCA) and/or the Society of Professional Archaeology (SOPA), and the Native American Tribe that has requested consultation and/or demonstrated interest in the project has had an opportunity to evaluate the significance of the find, and, if deemed necessary, suggest appropriate mitigation(s).

CUL 2: If any significant cultural materials such as artifacts, human burials, or the like are encountered during construction operations, such operations shall cease within 10 feet of the find, the Community Development Division (CDD) shall be notified within 24 hours, and a

qualified archaeologist contacted and retained for further recommendations. Significant cultural materials include, but are not limited to, aboriginal human remains, chipped stone, groundstone, shell and bone artifacts, concentrations of fire cracked rock, ash, charcoal. Historical materials can include wood, stone, concrete, or adobe footings, walls and other structural remains; debris-filled wells or privies; and deposits of wood, glass ceramics, and other refuse.

CUL-3: Appropriate mitigation of any discovered cultural resources may include monitoring of further construction and/or systematic excavation of the resources. Any artifacts or samples collected as part of the initial discovery, monitoring, or mitigation phases shall be properly conserved, catalogued, evaluated, and curated, and a report shall be prepared documenting the methods, results, and recommendations. The report shall be submitted to the Northwest Information Center and appropriate Contra Costa County agencies.

CUL-4: Should human remains be uncovered during grading, trenching, or other on-site excavation(s), earthwork within 30 yards of these materials shall be stopped until the County coroner has had an opportunity to evaluate the significance of the human remains and determine the proper treatment and disposition of the remains. Pursuant to California Health and Safety Code Section 7050.5, if the coroner determines the remains may be those of a Native American, the coroner is responsible for contacting the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code Section 5097.98, the NAHC will then determine a Most Likely Descendant (MLD) tribe and contact them. The MLD tribe has 48 hours from the time they are given access to the site to make recommendations to the land owner for treatment and disposition of the ancestor's remains. The land owner shall follow the requirements of Public Resources Code Section 5097.98 for the remains.

Implementing Action:	COA
Timing of Verification:	Upon discovery of archaeological materials or human remains
Party Responsible for Verification:	Project proponent, CDD staff, consulting Archaeologist
Compliance Verification:	Submittal of archaeologist’s report to CDD.

SECTION 7: GEOLOGY AND SOILS

Potentially Significant Impacts: *The consulting geotechnical engineer indicates potentially corrosive soils exist on the subject property which can be detrimental to concrete and buried metal such as those used for utilities or reinforcing steel. In addition, conditions in the field may vary from those expected based on field investigation, laboratory tests, and engineering analysis*

performed by the consulting engineer. Thus, it is critically important that adequate geotechnical monitoring be provided during clearing and earthwork to ensure that any existing fill is over-excavated, and that all engineered fill placed on the site is compacted in accordance with the geotechnical recommendations. Additionally, Ground disturbance during the project's construction phase has the potential for disturbing previously unknown unique paleontological resources.

Mitigation Measure(s):

GEO-1: A corrosion engineer licensed in California shall be retained to review the data gathered during preliminary corrosion potential testing and to determine if additional testing is warranted, and/or if special design and construction recommendations can be provided. This report of the Corrosion Engineer shall be submitted for peer review by the CDD and the County Peer Review Geologist **prior to CDD stamp-approval of plans for issuance of a building permit**.

GEO-2: Prior to CDD stamp-approval of plans for issuance of a building or grading permit, whichever is first, the project proponent shall submit an updated, wet-signed and stamped geotechnical report to the County for review by the CDD and the County Peer Review Geologist which includes the following: a) a review of the soil corrosion testing results and an evaluation of the adequacy of that testing to draw design-level recommendations; b) recommendations to mitigate the long-term effect of corrosive soil or an evaluation and recommendation of a corrosion engineer licensed in the State of California; c) a review of the grading, drainage, and foundation plans, and the foundation details component of the construction drawings and specifications, to verify they conform to the intent of the geotechnical recommendations; d) a response regarding issues of existing fill; and e) recommendations to ensure that the rate of sediment accumulation in the bio-retention basins are kept to an absolute minimum.

GEO-3: Geotechnical observation and testing shall be administered during construction activities. The monitoring shall commence during clearing, and extend through grading, placement of fill and aggregate base, installation of drainage facilities, and foundation related work. These observations will allow the project geotechnical engineer to compare actual exposed conditions with anticipated conditions, and to verify that the contractor's work conforms with the geotechnical aspects of the plans and specifications. **Prior to requesting a final grading inspection**, the project proponent shall submit a report from the project geotechnical engineer that documents their observation and testing services to that stage of construction, including monitoring, and testing of backfill required for utility and drainage facilities.

Similarly, prior to requesting a final building inspection for all buildings for human occupancy in the project as defined by the building code (2,000 person hrs./year), the project proponent shall submit a letter or report from the geotechnical engineer documenting the monitoring services associated with implementation of final grading, drainage, paving and foundation-related work. If the final inspection of all buildings is to be performed at one time, the geotechnical engineer's final report may address the entire project; if final inspections are to be staged over a period of time, there shall be geotechnical letters for each building/grouping of buildings at the time that the final building inspection is requested.

GEO-4: Should unique paleontological materials be uncovered during grading, trenching, or other on-site excavation(s), all earthwork within 30 yards of the materials shall be stopped until the Community Development Division (CDD) has been notified, and a qualified paleontologist contacted and retained to evaluate the significance of the find, and, if deemed necessary, suggest appropriate mitigation(s).

Implementing Action:	COA
Timing of Verification:	Prior to CDD approval of construction documents (GEO-1 &-2); throughout construction-related activity, and prior to final inspections (GEO-3); In the event of paleontological materials being discovered (GEO-4)
Party Responsible for Verification:	Project proponent, CDD staff, Consulting Geotechnical Engineer, County Peer Review Geologist
Compliance Verification:	Review of Construction Drawings, review of Geotechnical Engineer's report, Submittal of paleontologist report to CDD.

SECTION 10: HYDROLOGY AND WATER QUALITY

Potentially Significant Impacts: *The project site naturally slopes downward at an average 5% slope gradient along its northern boundary; thus, there is a potential for stormwater, project runoff, and debris to drain towards the raw-water Contra Costa Canal (Canal) and thereby affecting water quality standards. In addition, without the appropriate best management practices, there is a potential for construction equipment and/or debris from the installation of the 8-inch water main extension to enter the Canal or impact the CCWD's existing 42-inch multi-purpose pipeline; thus, significantly impacting water quality.*

Mitigation Measure(s):

HYD-1: No drainage (e.g., runoff, debris, stormwater) from the project site may drain into the Contra Costa Canal or U.S. Bureau of Reclamation property at any time during construction or operation.

HYD-2: **Prior to any trenching for water main pipelines or installation of pipelines**, the applicant shall coordinate all activities with the Contra Costa Water District (CCWD) and submit evidence (e.g., permit or letter) for CDD review that the CCWD consents to trenching, construction, or installation of pipelines across the CCWD multi-purpose pipeline or U.S. Bureau of Reclamation property.

HYD-3: **Prior to any trenching for water main pipelines or installation of pipelines**, netting, a silt construction fence, and/or other sufficient barriers shall be installed along and below the bridges to prevent debris from entering the Contra Costa Canal. At no time shall construction equipment be allowed to enter the Canal or U.S. Bureau of Reclamation property without consent of the CCWD.

Implementing Action:	COA
Timing of Verification:	Prior to trenching or installation of pipelines; throughout construction-related activity.
Party Responsible for Verification:	Project proponent and CDD staff.
Compliance Verification:	Submittal of pre-construction evidence of coordination with CCWD; field investigation (in the event of a complaint).

SECTION 13: NOISE

Potentially Significant Impacts: *Based on existing conditions associated with traffic and the proximity of the building to SR 4 and the BART train tracks, a portion of the residential units within the development is predicted to be exposed to future traffic noise exposure in excess of the applicable General Plan interior noise level criteria. Any production of noise levels or ground borne vibrations in excess of established standards would be associated with the construction phase of the proposed project. However, the noise and ground borne vibrations produced during these aspects of the proposed project would be temporary in nature and mitigations exist to reduce these temporary impacts on area residents.*

Mitigation Measure(s):

NOI-1: Window and balcony/patio door assembly upgrades are recommended for portions of the residences of the development. All upgrades, as shown in Figures 4 through 7 of the

approved environmental noise assessment study, shall be implemented to achieve recommended minimum STC ratings.

NOI-2: Mechanical ventilation (air conditioning) shall be provided for all residences in this development to allow occupants to close doors and windows as desired to achieve compliance with the applicable interior noise level criteria.

NOI-3: A pre-construction meeting with the job inspectors and the general contractor/onsite manager shall be held **at least one week in advance of ground disturbance** to confirm that all noise mitigation measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed prior to beginning construction.

NOI-4: The applicant shall notify neighbors within 300 feet of the subject property **at least one week in advance** of grading and construction activities.

NOI-5: The applicant shall designate a construction noise coordinator who will be responsible for implementing the noise control measures and responding to complaints. This person's name and contact information shall be posted clearly on a sign at the project site and shall also be included in the notification to properties within 300 feet of the project site. The construction noise coordinator shall be available during all construction activities and shall maintain a log of complaints, which shall be available for review by County staff upon request.

NOI-6: The following construction restrictions shall be implemented during project construction and shall be included on all construction plans.

1. The applicant shall make a good faith effort to minimize project-related disruptions to adjacent properties, including, but not limited to noise. This shall be communicated to project-related contractors.

2. The applicant shall require their contractors and subcontractors to fit all internal combustion engines with mufflers which are in good condition and shall locate stationary noise-generating equipment such as air compressors as far away from existing residences as possible.

3. Large trucks and heavy equipment are subject to the same restrictions that are imposed on construction activities, except the hours for transportation to and from the site are limited to 9:00 am to 4:00 pm.

4. All construction activities shall be limited to the hours of 8:00 am to 5:00 pm, Monday through Friday, and are prohibited on state and federal holidays on the calendar dates that these holidays are observed by the state or federal government as listed below:

- New Year's Day (State and Federal)
- Birthday of Martin Luther King, Jr. (State and Federal)
- Washington's Birthday (Federal)
- Lincoln's Birthday (State)
- President's Day (State and Federal)
- Cesar Chavez Day (State)
- Memorial Day (State and Federal)
- Independence Day (State and Federal)
- Labor Day (State and Federal)
- Columbus Day (State and Federal)
- Veterans Day (State and Federal)
- Thanksgiving Day (State and Federal)
- Day after Thanksgiving (State)
- Christmas Day (State and Federal)

Implementing Action:	COA
Timing of Verification:	Prior to CDD approval of construction documents; no less than one week prior to ground disturbance (NOI-3 and NOI-4); throughout construction-related activity and prior to final inspections; upon receipt of noise complaint(s).
Party Responsible for Verification:	Project proponent and CDD staff.
Compliance Verification:	Review of Construction Drawings; submittal of pre-construction meeting date to CDD staff (NOI-3); submittal of a copy of notice and distribution list to the CDD (NOI-4); field investigation (in the event of a noise complaint).

SECTION 14: POPULATION AND HOUSING

Potentially Significant Impacts: *Available data indicates that child care centers in the Bay Point area were operating near full capacity prior to the Covid-19 pandemic and may face additional capacity pressures once recovery begins due to the anticipated closures of child care programs that may not weather financial pressures during shelter-in-place (SIP). That coupled with the fact that Bay Point has a high rate of single parents and two parent working families means that the additional 100 units created by the proposed project would exceed the capacity of the existing child care facilities in the area.*

Mitigation Measure(s):

POP-1: The project sponsor shall mitigate the need for the additional child care created by the proposed development via one or a combination of the following methods:

- At the time of building permit issuance for the residential building, the developer shall pay a fee of $200 per unit to the County, to contribute towards expanding and improving child care in the geographical region. The fee amount shall be equal to the in-lieu fee amounts as adopted by the County Board of Supervisors for residential projects between 1 and 29 units pursuant to County Code Section 82-22. 806(d). For the Project, this fee would total $20,000.00.

- The developer may contract with CocoKids to recruit and train additional family child care providers, with a special focus on recruiting providers to provide infant/toddler and school-age care. The contract shall be subject to review by the Community development Division.

- The developer may contribute funds directly to child care centers located adjacent to elementary schools in the area to improve and expand facilities to provide care for school-age children. The fund contribution amount shall be sufficient enough to substantially accommodate the additional child care need created by the project and shall be subject to review and approval of CocoKids and the Community Development Division.

- The developer may contribute funds directly to family child care providers in Bay Point to encourage providers to care for infants, toddlers, and school-age children. These funds may be used for training or the purchase of infant equipment. The fund contribution amount shall be sufficient to train a sufficient number of additional staff or to purchase enough equipment to substantially meet the additional child care demand created by the proposed development. The fund amount shall be subject to review and approval of the Contra Cost a Child Care Council and the Community Development Division.

Implementing Action:	COA
Timing of Verification:	Prior to CDD approval of construction documents and issuance of a building permit.
Party Responsible for Verification:	Project proponent and CDD staff.
Compliance Verification:	Submittal of mitigation proposal to the CDD or receipt of payment of in-lieu fees prior to issuance of a building permit.