Inspiration Drive Memory Care and Assisted Living Facility Project

Initial Study

November 11, 2021
PLPA-2020-00044 & PLPA-2020-00045

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Inspiration Drive Memory Care and Assisted Living Facility Project Initial Study

Project Information

Project Title

Inspiration Drive Memory Care and Assisted Living Facility Project (PLPA-2020-00044 and PLPA-2020-00045)

Lead Agency Name and Address

City of Dublin
Community Development Department
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Dublin, CA 94568

Contact Person and Phone Number

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Project Location

The project site is located at 7500 Inspiration Drive in the City of Dublin, Alameda County, California. The site consists of four parcels, totaling 50.6 acres (Assessor Parcel Number [APN] 941-0022-003, 941-0022-004, 941-0022-005 and 941-0022-006), which are part of the larger Valley Christian Center (VCC) site. Regional access to the project site is provided by Interstate 580 (I-580), which is located just south of the project site. Local access to the project site is provided by Dublin Boulevard.

Project Applicant's/Sponsor's Name and Address

Steven Ring
Fulcrum Real Estate Development
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General Plan Designation

Public/Semi-Public and Open Space

Zoning

Planned Development (PD) Ordinance No. 07-03

Project Description

The following describes the proposed Inspiration Drive Memory Care and Assisted Living Facility Project (project) that is the subject of this Initial Study prepared pursuant to the California Environmental Quality Act (CEQA). The proposed project would result in the construction of two buildings, consisting of a Memory Care Facility and an Assisted Living Facility at the project site. The City of Dublin (City) is the Lead Agency for review of the proposed project under CEQA.

Project Site

The following section describes the project location, existing conditions, surrounding land uses, and regulatory setting.

Project Location

The project site is located at 7500 Inspiration Drive in the City of Dublin, Alameda County, California. The project site includes four parcels, totaling 50.6 acres (Assessor Parcel Number [APN] 941-0022-003 [Parcel 1A], 941-0022-004 [Parcel 1], 941-0022-005 [Parcel 2] and 941-0022-006 [Parcel 3]), which are part of the larger Valley Christian Center (VCC) site. Parcels 1 and 1A include the developed portion of the VCC site and consist of a church and associated school as further described below in Section 2.1.3. Parcel 2 is generally located south of the main VCC complex and is vacant. Parcel 3 wraps around the northern, eastern, and southern boundaries of the VCC and is part of a conservation easement.

Development of the project site as part of the proposed project is limited to Parcel 2 and Parcel 3. However, an amendment to the General Plan land use designation is requested for a portion of Parcel 1 and, therefore, included as part of the project site.

The project site is bounded by single-family residential uses (California Highlands) and open space to the west, single-family residential uses to the north, Interstate 580 (I-580) to the south, and single-family residential uses to the east along Las Palmas Way, Hansen Drive and Bay Laurel Street. Figure 1 shows the regional and local context of the project site. Figure 2 depicts an aerial photograph of the project site and surrounding land uses.

Circulation and Access

Inspiration Drive provides direct vehicular access to the project site. Access to Inspiration Drive is provided via Dublin Boulevard. Regional access to the project site is provided by I-580, which is located just south of the project site. The closest on- and off-ramps to the project site are located along Foothill Road/San Ramon Road, approximately one mile to the east.

Project Background and Regulatory Setting

The VCC was approved under a Conditional Use Permit issued by Alameda County in 1978, prior to the incorporation of Dublin in 1982. Following incorporation, the City granted approval for an elementary school in 1994, and expansion of a playfield in 1995. In 1998, the City approved a Site Design Review (SDR) application for placement of two temporary classrooms.

In 2003, the City certified an Environmental Impact Report for the Valley Christian Center Expansion Project (VCC EIR).[1] The VCC EIR evaluated proposed improvements to the existing VCC to include an expanded church, as well as a private school. The following improvements were evaluated as part of the VCC EIR:

- Expansion of the building area on the site to include the following: 90,000 square feet of additional building area to the existing sanctuary building, a new pre-school, a new three-story fellowship hall and administration building, a 1,000-square-foot expansion to an existing pre-school, construction of a 45,000-square-foot junior and senior high school administration building, construction of a 15,000-square-foot sports building, construction of a 30,000-square-foot senior activity center, and construction of a 6,000-square-foot chapel building, resulting in a total of approximately 187,000 square feet of additional floor space for VCC. Approximately 20 new employees would be added to the existing 145 employees at VCC.
- Construction of up to 22 multi-family units on the northwest corner of Dublin Boulevard and Inspiration Drive (Parcel 2), resulting in an increase of 59 persons at the project site.
- Construction of paved parking areas along the west side of Inspiration Drive near existing parking areas.
- Installation of an LED-readout changeable message board sign on the south side of the administration building and mounted on the building.

As part of the project approvals, the VCC site was subdivided into four smaller parcels. Parcel 1 (APN 941-0022-004) and Parcel 1-A (APN 941-0022-003) encompass approximately 37 acres of land and include all of the existing improvements associated with the VCC. Parcel 2 (APN 941-0022-005) consists of approximately 1.4 acres of land at the northwest corner of Dublin Boulevard and Inspiration Drive and was designated for future residential use in the VCC EIR; however, the residential development was not part of the final project approvals and, therefore, never constructed. Parcel 3 (APN 941-0022-006) consists of approximately 13 acres of land on the east side of Inspiration Drive. In the VCC EIR, this parcel was included for master planning purposes, but no specific land use was proposed. Parcel 3 includes approximately

[1] *City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.*

eight acres of land that has been dedicated as a conservation easement, which precludes development on that portion of the parcel.

In 2018, the City adopted a Supplemental Mitigated Negative Declaration supported by an Initial Study[2] (2018 Supplemental IS/MND) to evaluate proposed changes to the VCC Expansion Project, including conversion of the softball field to a football athletic field, expansion of an existing athletic field to accommodate the relocated softball field, construction of a central plaza, and associated parking and landscape improvements.

Per *State CEQA Guideline*s Section 15152, "where an EIR [or negative declaration] has been prepared and certified [or adopted] for a program, plan, policy or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy or ordinance should limit the EIR or negative declaration on the later project to effects which: (1) were not examined as significant effects on the environment in the prior EIR; or (2) are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means." The analysis provided in this Initial Study tiers from the VCC EIR, as appropriate. The Mitigation Monitoring and Reporting Program (MMRP) prepared for the VCC EIR is included as Appendix A to this Initial Study. The MMRP lists each of the mitigation measures identified in the VCC EIR, as well as any modifications required for the proposed project identified in this Initial Study.

Proposed Project

The proposed project would result in development of a 55-bed memory care facility on Parcel 2 and an 84-bed assisted living facility on Parcel 3, with associated landscaping, parking, and utility improvements. Both facilities are considered Residential Care Facilities for the Elderly (RCFE). As part of the proposed project entitlements, the boundary of the existing conservation easement on Parcel 3 would be adjusted and the development of the assisted living facility on Parcel 3 would require a General Plan Amendment from Open Space to Public/Semi-Public. In addition, a General Plan Amendment is required to convert a portion of Parcel 1 from the Public/Semi-Public land use designation to Open Space. Figure 3 shows the proposed parcel layout.

Individual project components are described below. Table A provides a summary overview and comparison of the proposed project as it relates to the development evaluated as part of the VCC EIR and 2018 Supplemental IS/MND.

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[2] *City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration / Initial Study, Planning Application Number: PLPA-2014-00052. June 18.*

Table A: Proposed Project Compared to Development Evaluated in Prior Environmental Documents

Parcel	Acreage	Development Evaluated in the VCC EIR and 2018 Supplemental IS/MND			Proposed Project		
		Land Use	Number of Units/ Building Size	Population/ Employment	Land Use	Number of Units/ Building Size	Population/ Employment
1/1-A	37	VCC campus	188,300 square feet[1] 230 parking spaces sports fields central plaza	200 students 20 employees 1,500 worshipers	VCC campus	N/A	N/A
2	1.4	Multi-family Residential[2]	22 units	59 residents	Memory Care	35,000 square feet	55 beds 36 staff
3	13	Not specified	N/A	N/A	Assisted Living	75,112 square feet	84 beds 41 staff

Source: Compiled by LSA. 2021

[1] This includes 187,000 square feet of additional building area approved as part of the VCC EIR and 1,300 square feet of additional area approved as part of the 2018 Supplemental IS/MND.

[2] As described above, these units were part of the project evaluated in the VCC EIR, but were not constructed.

Memory Care Facility

The various components of the proposed memory care facility on Parcel 2, including the proposed building program, landscaping, circulation and parking and utilities, are discussed below.

Building Program

The proposed memory care facility would be a two-story (approximately 32-foot-tall), approximately 35,000-square-foot building. A total of 51 private units and two shared units (a total of 55 beds) would be provided. Private units would be either 289 square feet or 335 square feet in size; shared units would be 451 square feet. In addition to the residential units, the first and second floor of the facility would provide a range of amenities and support facilities for residents and staff, including a courtyard, kitchen, lobby area, offices, medical facilities, living area, TV room, activity area, dining room and reception. Figure 4 shows the conceptual site plan for the proposed project. Typical building elevations are shown in Figures 5 and 6.

In addition to the 55 residents, the proposed memory care facility is anticipated to require 36 staff, who would be present at the site throughout the day. Six employee shifts are anticipated as shown in Table B.

Table B: Estimated Employee Shift Times – Memory Care Facility

Shift	Shift Time	Number of Employees
Shift 1	5:30 a.m. to 1:30 p.m.	6 associates
Shift 2	6:30 a.m. to 2:30 p.m.	6 associates
Shift 3	10:45 a.m. to 6:45 p.m.	4 associates
Shift 4	11:00 a.m. to 7:00 p.m.	2 associates
Shift 5	3:00 p.m. to 11:00 p.m.	11 associates
Shift 6	10:30 p.m. to 6:30 a.m.	7 associates

Source: Fulcrum Real Estate Development, 2020

Open Space and Landscaping

As shown on Figure 4, the memory care facility would provide approximately 35,911 square feet of private open space on Parcel 2, including preservation of the riparian area associated with the ephemeral stream area in the northwestern portion of the project site.

A landscape buffer would be provided around the perimeter of the project site (five feet wide at the rear and 10 feet wide on all other sides). Landscaping would include various evergreen and ornamental trees, shrubs, grasses, perennials, ground cover, and vines. Existing street trees and perennials along Inspiration Drive would be retained. In addition, the proposed project would include two landscaped detention basins, as further described below, which would be approximately 1,640 square feet in size. A total of approximately 34 trees would be planted as part of the proposed project. Figure 7 shows the proposed landscape plan for the memory care facility.

A three-foot tall retaining wall with a six-foot-high wooden screening fence would be installed along the western boundary of the project site. Additionally, a three-foot-tall retaining wall would be installed along the northern boundary of the proposed parking area. A rail fence would be provided to prevent intrusion into the riparian area associated with the ephemeral drainage in the northwestern portion of the project site.

Access, Circulation, and Parking

As shown on Figure 4, access to the project site would be provided via a new driveway on Inspiration Drive. A total of 25 parking spaces would be provided, including two accessible spaces, two electric vehicle (EV) ready spaces, and two clean air/vanpool spaces. In addition, six short-term and two long-term bike parking spaces would be provided just north of the vehicle parking lot.

Utilities and Infrastructure

The project site is located in a developed area that is currently served by existing utilities, including water, sanitary sewer, storm drainage, electricity, gas, and telecommunications infrastructure. Existing and proposed utility connections are discussed below.

Water. Water service is provided by the Dublin San Ramon Services District (DSRSD). The proposed project would include the installation of new water lines on the site that would connect to the existing water main in Inspiration Drive.

Wastewater. DSRSD maintains existing sanitary sewer lines within the vicinity of the project site, including the existing sanitary sewer main located within Dublin Boulevard, just south of the project site. New lines would be installed within the project site and would tie into the existing sanitary sewer main. A new sanitary sewer manhole would be installed within Dublin Boulevard at the sewer main connection.

Stormwater. The project site is currently undeveloped and covered in non-native grassland and, therefore, does not contain any impervious surfaces. Upon construction of the proposed project, approximately 50 percent (33,917 square feet) of the project site would be covered with impervious surfaces, and the remaining 50 percent (35,911 square feet) would be covered by pervious surfaces, consisting of the landscaped areas. The proposed project would include approximately 1,640 square feet of bioretention space on the project site that would be used for stormwater control. The proposed project would include catch basins and storm drains throughout the project site, which would connect to the bioretention basin and existing stormwater pipes. Full trash capture devices are also required per Provision C.10 of the Municipal Regional Permit.

Electricity and Gas. Electricity is provided to the project site by East Bay Community Energy and is distributed by Pacific Gas & Electric Company (PG&E). Gas service is currently provided to the project site by PG&E. The City is in the process of preparing a new Construction All Electric Reach Code, which will require that new construction minimize and/or eliminate the use of gas appliances and other equipment. As needed, connections to the existing electricity and natural gas lines (if required) that run adjacent to the project site, including the lines within Dublin Boulevard and Inspiration Drive would serve the proposed project.

Assisted Living Facility

The various components of the proposed assisted living facility, including the proposed building program, landscaping, circulation and parking and utilities, are discussed below.

Building Program

The assisted living facility would be a three-story (approximately 40-foot-tall), approximately 75,112-square-foot building, providing 84 beds consisting of studios, and one bedroom units.

Approximately 24 studios ranging from 403 to 460 square feet, and 60 one-bedroom units ranging from 552 to 684 square feet would be provided. Like the memory care facility, the assisted living facility would also provide communal spaces for the use of residents and staff, including a courtyard, kitchen, lobby area, offices, medical facilities, living area, dining room, activity area, café, theater and wellness spa/salon. Figure 8 shows the conceptual site plan for the proposed project. Typical building elevations are shown in Figure 9.

In addition to the 84 residents, the proposed assisted living facility is anticipated to require up to 41 staff, who would be present at the site throughout the day. Six employee shifts are anticipated as shown in Table C.

Table C: Estimated Employee Shift Times – Assisted Living Facility

Shift	Shift Time	Number of Employees
Shift 1	5:30 a.m. to 1:30 p.m.	8 associates
Shift 2	6:30 a.m. to 2:30 p.m.	8 associates
Shift 3	10:45 a.m. to 6:45 p.m.	4 associates
Shift 4	11:00 a.m. to 7:00 p.m.	6 associates
Shift 5	3:00 p.m. to 11:00 p.m.	9 associates
Shift 6	10:30 p.m. to 6:30 a.m.	6 associates

Source: Fulcrum Real Estate Development, 2020

Open Space and Landscaping

As shown on Figure 10, the assisted living facility would provide approximately 122,178 square feet of private open space on Parcel 3. Landscaping would be installed around the perimeter of the project site. Landscaping would include various evergreen and ornamental trees, shrubs, grasses, perennials, ground cover, and vines. Existing street trees along Inspiration Drive would be retained. A total of approximately 211 trees would be planted as part of the proposed project. Figure 10 shows the proposed landscape plan for the assisted living facility.

A series of 12-foot tall terraced retaining walls would be installed to the north of the proposed facility in order to restrain the existing slope.

Access, Circulation, and Parking

As shown on Figure 8, access to the project site would be provided via a new driveway on Inspiration Drive. A total of 37 parking spaces would be provided, including two accessible spaces, four electric vehicle (EV) ready spaces, and two clean air/vanpool spaces. In addition, six short-term and two long-term bike parking spaces would be provided on the north side of the building.

Utilities and Infrastructure

The project site is located in a developed area that is currently served by existing utilities, including water, sanitary sewer, storm drainage, electricity, gas, and telecommunications infrastructure. Existing and proposed utility connections are discussed below.

Water. Water service is provided by DSRSD. The proposed project would include the installation of new water lines on the site that would connect to the existing water main in Inspiration Drive.

Wastewater. DSRSD maintains existing sanitary sewer lines within the vicinity of the project site, including the existing sanitary sewer main located within Dublin Boulevard, just west of the project site. New lines would be installed within the project site and would tie into the existing sanitary sewer main.

Stormwater. The project site is currently undeveloped and covered in non-native grassland and, therefore, does not contain any impervious surfaces. Upon construction of the proposed project, approximately 32 percent (65,655 square feet) of the project site would be covered with impervious surfaces, and the remaining 68 percent (138,206 square feet) would be covered by pervious surfaces, consisting of the landscaped areas. The proposed project would include approximately 6,000 square feet of bioretention space on the project site that would be used for stormwater control. The proposed project would include catch basins and storm drains throughout the project site, which would connect to existing stormwater facilities.

Electricity and Gas. Electricity is provided to the project site by East Bay Community Energy and is distributed by Pacific Gas & Electric Company (PG&E). Gas service is provided to the project site by PG&E. The City is in the process of preparing a new Construction All Electric Reach Code, which would require the project applicant to minimize/eliminate gas infrastructure proposed as part of the project. As needed, connections to the existing electricity and natural gas lines that run adjacent to the project site, including the lines within Dublin Boulevard and Inspiration Drive would serve the proposed project.

Construction

Development of the assisted living facility on Parcel 3 would require approximately 17,000 cubic yards of cut and 300 cubic yards of fill, resulting in a net export of approximately 16,700 cubic yards. Development of Parcel 2 would require approximately 500 cubic yards of cut and 1,600 cubic yards of fill, some of which would come from Parcel 3. Overall, project construction would result in off haul of approximately 15,600 cubic yards of material from the project site.

Construction of the proposed project is anticipated to begin in late 2022 or early 2023 and would occur over an approximately 20-month period.

Project Approvals

The City is the CEQA Lead Agency for the proposed project and will consider the environmental impacts of the project as part of the project approval. Permits and approvals required for the proposed project are described below. In addition, subsequent ministerial actions would be required for implementation of the project including issuance of building permits, grading, encroachment, watercourse protection permit and site improvements.

General Plan Amendment and Parcel Map/Lot Line Adjustment

A General Plan Amendment is being requested for approximately 4.7 acres of Parcel 3 along Inspiration Drive to accommodate the proposed assisted living facility. The existing General Plan land use designation for this portion of the site is "Open Space," which limits development to areas where slopes are under 30 percent. The proposed land use designation is "Public/Semi-Public," which would allow residential care facilities for the elderly. In addition, a General Plan Amendment would be required to convert a portion of Parcel 1 from the Public/Semi-Public land use designation to Open Space to compensate for the loss of open space area on Parcel 3.

Consistent with the proposed General Plan Amendment several lot line adjustments are being requested, including the boundary of the existing conservation easement on Parcel 3, the boundary between Parcel 1 and Parcel 2 and the southern boundary of Parcel 2 to include a remainder parcel of the City's right-of-way adjacent to Dublin Boulevard. Figure 3 shows the proposed parcel layout.

The proposed General Plan Amendment must be acted upon by the Dublin City Council at a public hearing following a recommendation made at a public hearing by the Planning Commission.

Planned Development Rezone (Stage 1 and 2 Development Plans)

The applicant has requested approval of a Stage 1 and Stage 2 Planned Development for approximately 6.3 acres, consisting of Parcel 2 proposed for development of the memory care facility and the portion of Parcel 3 proposed for development of the assisted living facility. Development of these two areas were not included in the original Planned Development approvals for the VCC project and, therefore, subsequent Stage 1 and 2 Planned Development Rezoning must be approved for these two parcels prior to development. As part of the Planned Development Rezoning, a Stage 1 and Stage 2 Development Plan has been prepared describing in detail the proposed development program for the proposed project. Details of the development plan are described above.

The proposed Planned Development Rezoning, including the proposed Stage 1 and Stage 2 Development Plan, must be acted upon by the Dublin City Council at a public hearing following a recommendation made at a public hearing by the Planning Commission.

Site Development Review Permit

Approval of a Site Development Review Permit is also required as part of the entitlement process for the project, pursuant to Chapter 8.104 of the Dublin Zoning Ordinance. The purpose of Site Development Review is to promote orderly, attractive and harmonious development within the City and to ensure compliance with all applicable development regulations of the Zoning Ordinance.

The proposed Site Development Review Permit must be acted upon by the Dublin City Council at a public hearing following a recommendation made at a public hearing by the Planning Commission.

Environmental Setting

Project Site and Existing Facilities

As previously described, the proposed project includes development of two parcels of land (Parcels 2 and 3 within the larger VCC site, and collectively referred to herein as the "project site"), which are divided by Inspiration Drive. Parcel 2 (APN 941-0022-005) is located on the northwest corner of Inspiration Drive and Dublin Boulevard and contains 1.4 acres of land. Parcel 3 (APN 941-0022-006) contains approximately 12.7 acres of land located east of Inspiration Drive. This parcel includes approximately 8.02 acres of land that has been dedicated as a conservation easement that precludes development. Both Parcels 2 and 3 are currently undeveloped.

Parcel 2 is generally flat, sloping from east to west. Site elevations range from approximately 580 to 560 feet above mean sea level. Parcel 2 is currently vacant and generally consists of non-native annual grassland and ruderal vegetation. An existing ephemeral drainage terminates into a box culvert in the northwestern portion of the parcel. This ephemeral drainage appears to be the result of a culvert system that drains the hillside to the north. The channel flows down the south-facing hill and into a rock-lined trapezoidal ditch, which parallels the adjacent VCC school property boundary and feeds into a culvert where it flows into Dublin Creek further downstream.

The ephemeral drainage has a riparian woodland canopy that includes coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), arroyo willow (*Salix lasiolepis*), and red willow (*Salix laevigata*). Coyote brush (*Baccharis pilularis*) is a common understory shrub species along the channel. Several invasive non-native species such as pampas grass (*Cortedaria jubata*), poison hemlock (*Conium maculatum*) and Himalayan blackberry (*Rubus armeniacus*) occur as understory vegetation. No herbaceous wetland plants, with the exception of a small patch of tall flat sedge (*Cyperus eragrostis*), were observed within the channel on Parcel 2, 95 feet north of the headwall culvert.

Site elevations within the proposed development area on Parcel 3 range from approximately 550 feet above mean sea level near the Dublin Boulevard/Inspiration Drive intersection at the southwest corner of the site to 650 feet above mean sea level in the northeastern corner of the proposed development area. Parcel 3 generally consists of non-native annual grassland and ruderal vegetation. As shown on Figure 3, Parcel 3 includes approximately eight acres of land that has been dedicated as a conservation easement, which currently precludes development in that portion of the parcel.

Surrounding Land Uses

As shown in Figure 2, the project site is generally surrounded by existing residential uses and the existing VCC complex. To the north, Parcels 2 and 3 are generally bounded by the existing VCC complex, which consists of a church and a pre-school through grade 12 private school, with associated parking, landscaping, sports and play fields, lighting and other infrastructure. Further north of the VCC complex and portions of Parcel 3 is a single-family residential neighborhood with two-story homes. Parcel 3 is bordered to the east by a single-family residential neighborhood with one- and two-story homes. Further east are residential uses and commercial development along Dublin Boulevard. To the south of both parcels is I-580, across which are residential uses and two churches, Pleasant View Church of Christ and Kingdom Hall of Jehovah's Witnesses. Parcel 2 is bound to the west by multi-family residential development and undeveloped open space.

Environmental Checklist

Environmental Factors Potentially Affected by the Project

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

	Aesthetics		Agricultural 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 / Traffic		Tribal Cultural Resources
	Utilities / Service Systems		Wildfire		Mandatory Findings of Significance

Instructions

1. A brief explanation is required for all answers. Certain “No New Impact” answers are supported by the information sources a lead agency cites in the parentheses following each question (see Source List, attached). A "No New Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone), or, in this case, there is no impact of the proposed project beyond that which was considered previously in the certified VCC EIR (see explanation under Project Background and Regulatory Setting). A "No New Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially

Significant Impact" is appropriate if there is substantial evidence that any effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated: applies where incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier Analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case a discussion should identify the following on attached sheets:
    a. Earlier analysis used. Identify earlier analyses and state where they are available for review.
    b. Impacts adequately addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
    d. A "No New Impact" finding means that there would be no new or substantially more severe significant impacts to the impact area beyond what has been analyzed in the VCC EIR, and no other CEQA standards for supplemental review are met. Therefore, no further environmental review is required for the impact area.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:

- The significance criteria or threshold, if any, used to evaluate each question; and
- The mitigation measure identified, if any, to reduce the impact to less than significance

10. Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

    In January 2021, the City provided formal notification to the California Native American tribe that has requested notification under Assembly Bill 52 and under Senate Bill 18 related to the proposed General Plan Amendment. In response to the notifications, two responses were received. Ms. Katherine Perez, Chairperson of the Northern Valley Yokut/Ohlone/Bay Mewuk Tribe, responded via email on January 27, 2021, requesting additional information related to the proposed project. Corrina Gould, Chairperson of the Confederated Villages of Lisjan Tribe requested information on the Sacred Lands Files and requested to be kept informed with any new details as it pertains to the Confederated Villages of Lisjan Tribe. No formal tribal consultation was requested.

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.	X
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 or a 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.	

CITY OF DUBLIN

_____ _____

Amy E. Million, Principal Planner Date

Explanation of Environmental Checklist Responses

Aesthetics

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

Environmental Setting

The project site is located on a large knoll in western Dublin, just north of I-580 and Dublin Boulevard. The site is characterized by steeply sloping hillsides facing Dublin Boulevard and I-580. Site elevations within the proposed development area on Parcel 3 range from approximately 550 feet above mean sea level near the Dublin Boulevard/Inspiration Drive intersection at the southwest corner of the site to 650 feet above mean sea level in the northeastern corner of the proposed development area.

Built features on the project site include the existing VCC campus, which consists of a church and a pre-school through grade 12 private school, with associated parking, landscaping, sports and play fields, lighting and other infrastructure. Although these facilities are located at the top of the knoll, they are generally screened from public vantage points (e.g., along I-580 and Dublin Boulevard) due to intervening topography and mature vegetation.

Parcels 2 and 3, which are located in the lower portion of the project site are more visible from adjacent roadways. These parcels are currently undeveloped. Parcel 2 generally consists of non-native annual grassland and ruderal vegetation with a small portion of riparian woodland in the northwestern portion of the parcel. Parcel 3 generally consists of non-native annual grassland and ruderal vegetation. Street trees line Inspiration Drive, which borders the project site.

No designated State scenic highways are located near the project site. However, I-580 located just south of the project is an eligible State scenic highway and a designated Alameda County scenic route.

The project site is located in a developed area. Streetlights, vehicle head and tail lights on area roadways, and lighting associated with adjacent development, including the VCC campus, are the existing sources of light and glare in the project area.

Regulatory Framework

State Regulations

State Scenic Highways Program

The California Department of Transportation's (Caltrans) Landscape Architecture Program administers the Scenic Highway Program contained in the Streets and Highways Code, Sections 260–263. The purpose of the program is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special classifications. State Highways are classified as either Officially Listed or Eligible. A highway may be designated scenic based on the visibility of the natural landscape to travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. According to Caltrans' California Scenic Highway Mapping System, the closest officially designated State scenic highways to the project area and project site is I-680. I-580, located just south of the project site, is an eligible State scenic highway.

Local Regulations

Alameda County General Plan

The Scenic Route Element of the Alameda County General Plan includes a scenic routes plan that identifies a countywide scenic route system and ensures that new projects approved along a scenic route are reviewed to maintain their scenic potential. I-580, located just south of the project site, is designated as a "Scenic Freeway and Expressway." The Scenic Route Element identifies Scenic Route Corridor Development Standards to preserve and enhance views and vistas from designated scenic routes. Development Standards that apply to the proposed project include:

- Within the scenic corridors in residential areas, residential structures should have a setback of at least 50 feet from the right-of-way to provide sufficient open space to permit scenic views and to provide a space buffer from traffic above normal volumes using the scenic route.

- In corridors along scenic routes with outstanding distant views above the roadbed, no building structure of more than one story in height should be permitted where it would obstruct views, excepting within an immediately adjacent to central business district

locations. on lots where the building structure is higher than the roadbed in corridors along routes with outstanding distance views, the combined width of sideyards should equal or exceed the widths of the building structure as measured parallel to the roadbed.

City of Dublin General Plan

As described in the Circulation and Scenic Highways Element of the City of Dublin General Plan, I-580, I-680, and Tassajara Road were designated as scenic routes by Alameda County in 1966. Per the City of Dublin General Plan policies, design review would be required for all projects visible from a designated scenic route in order to enhance a positive image of Dublin as seen by through travelers. The following policies related to visual resources are applicable to the proposed project:

> **Implementing Policy 5.7.1.A.1.** Incorporate County-designated scenic routes, and the Fallon Road extension, in the General Plan as adopted City-designated scenic routes, and work to enhance a positive image of Dublin as seen by through travelers.
>
> **Implementing Policy 5.7.1.B.1.** Exercise design review of all projects visible from a designated scenic route.

In addition, the Community Design and Sustainability Element of the City of Dublin General Plan contains goals and policies that provide a framework for community development and guidelines for new construction and improvements. The following policies are applicable to the proposed project:

> **Policy 10.5.3.A.** Incorporate distinctive design features along regional corridors that reinforce a positive image of Dublin. Both within the right-of-way and on adjacent private development, utilize features such as gateway elements, street trees, median planting, special lighting, separated and ample sidewalks, crosswalks, seating, special signs, street names, landscape, decorative paving patterns, and public art. Consider undergrounding utilities along these roadways (reference: Streetscape Master Plan).
>
> **Policy 10.5.3.B.** Maintain views through development to distant vistas (i.e. foothills) and view corridors along regional corridors, wherever feasible (reference: East Dublin Scenic Corridor Policies and Standards).
>
> **Policy 10.5.3.C.** Incorporate visual screening techniques such as berms, dense and/or fast-growing landscaping, and appropriately designed fencing where feasible, to ensure that visually challenging features, such as parking lots, loading docks, storage areas, etc. are visually attractive as seen from regional corridors.

Policy 10.5.3.D. Provide landscaping and articulated design to soften the visual appearance of existing and new walls and fences that are adjacent to regional corridors, wherever feasible (reference: Streetscape Master Plan).

Policy 10.5.3.E. Encourage attractive and high-quality landscaping along the edge of the freeways and development surrounding on- and off-ramps to provide softer and more attractive views both to and from the freeways. Landscaping on private property should complement the buildings and overall site design.

Policy 10.7.3.1.A. Encourage diverse, high quality, attractive, and architecturally appealing buildings that create distinctive visual reference points, enrich the appearance of functional gathering spaces, and convey an excellence in architecture, workmanship, quality, and durability in building materials.

Policy 10.7.3.1.B. Encourage buildings with varied massing, heights, articulation techniques, and architectural and signage treatments to create visual interest and ensure compatibility with adjacent uses, in commercial, office, industrial, and mixed use areas.

Policy 10.7.3.1.C. Ensure that building height, scale and design are compatible with the character of the surrounding natural and built environment, and are varied in their massing, scale and articulation.

Policy 10.7.3.1.D. Encourage a variety of site and building designs that are compatible and consistent with surrounding development, especially where larger scale development is adjacent to smaller scale and/or more sensitive land uses (i.e. residential, schools, and churches) to the greatest extent feasible.

Policy 10.7.3.1.E. Avoid the use of long, continuous, straight (building) walls along roadways by designing appropriate articulation, massing, and architectural features.

Policy 10.7.3.1.F. Create distinctive neighborhoods that exemplify high-quality and varied design while reinforcing Dublin as one integrated community, in residential areas.

Policy 10.7.3.1.G. Encourage the diversity of garage orientation and setbacks, architectural styles, building materials, color and rooflines, and other design features, on all sides of all buildings, in residential areas.

Policy 10.7.3.1.H. Orient buildings toward major thoroughfares, sidewalks, pedestrian pathways, and gathering spaces, and incorporate clear and identifiable entries where feasible, in campus office areas.

Policy 10.7.3.1.I. Cluster and connect buildings through a series of pedestrian pathways designed to work with each other to form a unified design character and create larger functional spaces, in campus office and commercial areas.

Policy 10.7.3.1.K. Minimize the visual impacts of service/loading areas, storage areas, trash enclosures, and ground mounted mechanical equipment. When feasible, these elements should be located behind or to the sides of buildings and screened from views through a combination of walls/ fencing, and/or landscaping.

Policy 10.7.3.2.A. Utilize more formal landscaping treatments in more densely developed (urban) areas and utilize more natural landscaping treatments in less dense (suburban) areas, as appropriate.

Policy 10.7.3.2.C. Incorporate setbacks and landscaped buffers for development along collector and arterial roadways to minimize the impacts from roadway noise, where appropriate.

Policy 10.7.3.2.D. Ensure that landscaping along and adjacent to the public realm is well maintained and retains a natural appearance.

Policy 10.7.3.2.E. Encourage distinctive landscaping and signage that is aesthetically appealing from the public realm (reference: Streetscape Master Plan).

Policy 10.7.3.2.F. Encourage the use of landscaping on walls to soften and screen their visual appearance (reference: Streetscape Master Plan).

Policy 10.7.3.2.G. Increase the width of existing narrow parkway strips when the opportunity arises and encourage all new development and redevelopment projects to provide appropriately sized landscaped parkway strips (reference: Streetscape Master Plan).

Policy 10.7.3.2.H. Preserve mature trees and vegetation, with special consideration given to the protection of groups of trees and associated undergrowth and specimen trees (reference: Heritage Tree Ordinance).

Policy 10.7.3.2.I. Preserve views of creeks, hillsides, skylines, or other natural or man made landmarks during site planning of new developments, whenever feasible.

Policy 10.7.3.2.J. Integrate development with natural features and land forms.

City of Dublin Municipal Code

Chapter 8.104, Site Development Review, of the City of Dublin Municipal Code establishes the procedure for approving, conditionally approving, or denying Site Development Review Permits to promote orderly, attractive and harmonious development for new development projects that are compatible with surrounding properties and neighborhoods. Adopted Site Development Review Guidelines are used to guide Site Development Review Permit applications.

Previous CEQA Documents

VCC EIR

The VCC EIR concluded that construction of the VCC expansion would result in significant impacts with regard to views of the site from the I-580 freeway and from Dublin Boulevard, since new buildings on the periphery of the core complex would be out of scale with existing development in the western Dublin area. The VCC EIR also found that construction of new buildings and other uses within the VCC complex would increase the amount of light and glare due to additional parking lot and building lights, as well as potential future lighting of playing fields, which would spillover on surrounding residential areas.

The VCC EIR contains the following mitigation measures to reduce anticipated visual resource impacts from the VCC project:

> **Mitigation Measure 4.1-1 (aesthetics and views):** Consideration shall be given during the Site Development Review process to:
>
> a. The proposed senior center and chapel buildings should be restricted to one story construction, consistent with the County Scenic Route Element, and set back from the top of slope the distance of the building height to reduce visibility from the I-580 freeway. Consideration should also be given to reducing the apparent heights of the two buildings by designing low rooflines, using earth tone building colors, using non-reflective surfaces and appropriate landscape screening.
>
> b. For the residential component of the proposed project, consideration shall be given to providing a greater building setback from the Dublin Boulevard/Inspiration Drive intersection, limiting the buildings on the south side of the complex to a single story, using intensive landscaping on the comer to screen the residences and using earth tone colors and non-reflective surfaces.
>
> **Mitigation Measure 4.1-2 (light and glare):** The following measures shall be taken during the Site Development Review process to:

a. Ensure that all exterior light fixtures be equipped with cut-off lenses, directed downward, and limited in height to the maximum necessary for adequate illumination to minimize excess light and glare.

b. Require that any future proposals to light the playing fields be subject to Planning Commission approval following a notice public hearing.

The VCC EIR determined that with implementation of the mitigation measures identified above, visual impacts would be reduced to a less-than-significant level.

2018 Supplemental IS/MND

The 2018 Supplemental IS/MND determined that lighted playfields on the northeast portion of the main campus, which were not included in the VCC Expansion Project, could impact residences just east of the project site. Mitigation Measure AES-1, which would augment Mitigation Measure 4.1-2 identified in the VCC EIR was identified to reduce light and glare impacts to a less-than-significant level.

> **Mitigation Measure AES-1.** In addition to the requirements contained in 2003 EIR Mitigation Measure 4.1-2 to equip all exterior lighting with cut-off lenses, directed downward, limited in height and that lighting of playfields, the following shall also apply:
>
> a. Submittal of final playfield lighting plans to the City of Dublin Community Development Department prior to issuance of a building permit for the sports stadium to include detailed photometric drawings documenting that no spillover of light or glare would occur off the VCC project site. The photometric drawings shall be approved prior to the issuance of the building permit.

Project Impacts and Mitigation Measures

(a) Scenic vistas, views

Less Than Significant Impact. A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Aesthetic components of a scenic vista generally include: 1) scenic quality; 2) sensitivity level; and 3) view access. The City of Dublin General Plan identifies the visually sensitive ridgelines located in the open space areas in the Western and Eastern Extended Planning Areas of the City as scenic resources. I-580 provides scenic views of these ridgeline areas and is an Alameda County-designated scenic route. Per the City of Dublin General Plan policies, design review would be required for all projects visible from a designated scenic route in order to enhance a positive image of Dublin as seen by through travelers.

Construction of the proposed project would include the construction of a two-story, approximately 35,000-square-foot building on Parcel 2, at the corner of Dublin Boulevard and

Inspiration Drive and a three-story, approximately 75,112-square-foot building further east on Inspiration Drive. Both of these facilities would be visible from public vantage points, including Inspiration Drive, Dublin Boulevard and I-580. To illustrate the degree of anticipated change that would result from the proposed project, photographs of existing conditions were taken from two representative viewpoints (Figures 11 and 12) along I-580 and photographic simulations were prepared to represent anticipated views from these locations.

In addition to the viewpoints from I-580 and Dublin Boulevard, the VCC EIR included a viewpoint and simulation of the VCC Expansion Project as seen from Downtown Dublin. While the sanctuary and other buildings would be visible, the VCC EIR determined that due to distance and intervening features, impacts from this view would be less than significant. As illustrated in Figure 13, due to the location of the memory care and assisted living facilities in the southern portion of the project site, these facilities would not be visible from Downtown Dublin; therefore, a photographic simulation was not prepared from this viewpoint and no impact to this view would occur as a result of the proposed project.

View from Eastbound I-580.Figure 11 shows the view from the perspective of a motorist traveling eastbound on I-580 from a location west of the project site. From this view, Inspiration Drive can be seen extending up from Dublin Boulevard to the top of the ridge, bisecting the project site. As shown in Figure 11 (existing view), existing foreground views are dominated by I-580. The upper stories/rooflines of the existing multi-family residential development located to the west of the project site and the sound wall along I-580 are also visible in the foreground. The middle ground view is comprised primarily of the undeveloped hillside/ridgeline and Inspiration Drive, lined with mature trees. Landscaping associated with existing development to the north and west can also be seen. Blue skies form the background view.

The visual simulation provided in Figure 11 shows the view condition following the completion of project construction. As shown, the roofline of the proposed memory care facility would be visible in the foreground view; however, because proposed architectural features (e.g., mass, height, color and materials) would be similar to and consistent with the adjacent multi-family residential development, the visual change to the foreground view would be minor. In addition, proposed landscaping, including mature trees around the perimeter of the facility, would provide additional screening.

Construction of the proposed assisted living facility would alter the middle ground view, replacing the undeveloped hillside to the south of Inspiration Drive with a three-story building. However, as shown in Figure 11, the building is designed to complement the existing site topography so that the roofline would not extend above the top of the existing knoll and the majority of the building would sit below an existing ridgeline/berm. In addition, earth-tone colors (e.g., tan, cream, light gold, and brown) would be used to complement the colors of the surrounding hillside and help the structure blend into the environment. Landscaping around the

perimeter would also provide additional screening. Background views would remain unchanged.

As shown in Figure 11, implementation of the proposed project would not significantly change the existing view from eastbound I-580. Although project elements would be visible from this viewpoint, proposed structures have been designed using natural materials and colors that blend into the existing visual environment. The mass and scale of proposed facilities would be consistent with adjacent development and site topography, so as not to obstruct or impair scenic vistas of the ridgelines and hillsides in the project area. Landscaping would provide further screening of proposed built features.

View from Westbound I-580. Figure 12 shows the view from the perspective of a motorist traveling westbound on I-580 from a location east of the project site. As shown in Figure 12 (existing view), existing foreground views are dominated by I-580 and the roadside berm that separates I-580 from Dublin Boulevard. The undeveloped hillsides of the project site, sloping down to Dublin Boulevard, as well as the undeveloped ridgeline associated with open space further to the west, are the prominent visual features in this view. The mature trees associated with existing development and riparian areas dot the landscape. Blue skies form the background view.

The visual simulation provided in Figure 12 shows the view condition following the completion of project construction. As shown, the roofline of the proposed memory care facility on Parcel 2 would be visible at the base of the hill; however, because proposed architectural features (e.g., mass, height, color and materials) would be similar to and consistent with the adjacent multi-family residential development, the visual change would be negligible.

As shown in Figure 12, from this view, the assisted living facility appears to sit atop the rise and would be visually prominent for motorists on I-580 and Dublin Boulevard. However, the building would be set back from I-580, features a low-slung roofline to minimize visual intrusion, uses earth tone colors and non-reflective surfaces to blend with the surrounding visual landscape, and provides perimeter landscaping to screen the building from public views. These design features are consistent with Mitigation Measure 4.2-1, identified in the VCC EIR. Scenic views of the hillsides and ridgelines to the west would be retained.

The VCC EIR determined that implementation of the VCC Expansion Project would result in significant impacts with regard to views of the site from the I-580 freeway and from Dublin Boulevard, since new buildings on the periphery of the core complex, including the residential development on Parcel 2, would be out of scale with existing development in the western Dublin area (Impact 4.1-1). With implementation of Mitigation Measure 4.1-1, which requires that the City give consideration during the Site Development Review process to establishing sufficient setbacks, designing low rooflines, using earth tone building colors, using non-reflective surfaces and appropriate landscape screening for the proposed VCC campus

development and the residential development on Parcel 2, this impact was reduced to a less-than-significant level.

As described further below, the VCC EIR did not evaluate any visual changes to Parcel 3, as no specific development was proposed for Parcel 3 at that time. Therefore, development of the assisted living facility on Parcel 3 would result in a change in visual conditions as compared to the project evaluated in the VCC EIR and would result in impacts that were not identified in the VCC EIR. However, the mitigation measures identified in the VCC EIR and the visual policies in the City of Dublin General Plan would apply to the proposed project, including development of Parcel 3. In addition, the proposed project would be required to undergo site-specific design review to ensure the project is consistent with City of Dublin design standards, property development regulations and performance standards related to aesthetics and to lessen the severity of visual changes resulting from the proposed project. Further, as described above, the assisted living facility proposed for Parcel 3 incorporates design features outlined in Mitigation Measure 4.2-1 to minimize visual impacts (e.g., setback from the roadway, use of earth tone colors and non-reflective surfaces) and would largely preserve existing scenic views to the west. Therefore, impacts associated with the proposed project would be less than significant. No additional mitigation is required.

(b) Scenic resources

Less Than Significant Impact. As described above, I-580 located just south of the project site, is an eligible State scenic highway and an Alameda County designated scenic route. The VCC EIR found that implementation of the VCC Expansion Project would result in significant impacts with regard to views of the site from I-580; however, with implementation of Mitigation Measure 4.1-1, this impact was reduced to a less-than-significant level.

Existing scenic resources on the project site include grassy hillside areas and some riparian woodland vegetation associated with the ephemeral drainage on Parcel 2. Parcel 3 generally consists of non-native annual grassland and ruderal vegetation and does not support any scenic resources (e.g., trees, rock outcroppings, and historic buildings). In order to accommodate proposed development, the natural terrain of Parcels 2 and 3 would be modified; however, to the extent feasible, the proposed project is designed to conform to existing site topography and retain existing ridgeline features and site vegetation. New landscaping would be provided as part of project improvements.

As described in Section 1.a, the proposed project would alter views from I-580 and result in a change in visual conditions on Parcel 3 as compared to the project evaluated in the VCC EIR, which would result in impacts that were not identified in the VCC EIR. However, development of the proposed project would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings, as these resources are not currently present on the project site. Further, the mitigation measures identified in the VCC EIR and the

visual policies in the City of Dublin General Plan would apply to the proposed project, including development of Parcel 3, and the proposed project would be required to undergo site-specific design review to ensure the project is consistent with City of Dublin design standards. Therefore, impacts associated with the proposed project would not be significant. No additional mitigation is required.

(c) Substantially degrade the visual character of public views of the site or surrounding area

Less Than Significant Impact. Development of the proposed project would change the existing visual character of the project area and vicinity by developing the existing vacant land into a memory care facility and an assisted living facility. The proposed project would construct a two-story, approximately 35,000-square-foot building on Parcel 2, at the corner of Dublin Boulevard and Inspiration Drive and a three-story, approximately 75,112-square-foot building further east on Inspiration Drive. Both of these facilities would be visible from public vantage points, including Inspiration Drive, Dublin Boulevard and I-580.

As described in Section 1.a. above and shown in Figures 11 and 12, the proposed project is designed to be similar to and consistent with adjacent residential development. In addition, earth-toned colors are proposed to allow proposed structures to blend into the surrounding landscape. The assisted living facility on Parcel 3 would feature a low roofline to mimic site topography and soften the visual impact of the proposed structure. Perimeter landscaping would be provided around both buildings to provide additional visual screening from public vantage points. To the extent possible, the proposed project would preserve existing visual features on the project site, including the riparian woodland area on Parcel 2, and provide new visual elements (e.g., entries, landscaping) to enhance and complement project improvements.

As described above, the VCC EIR determined that implementation of the VCC Expansion Project would result in significant impacts with regard to views of the site from the I-580 freeway and from Dublin Boulevard, since new buildings on the periphery of the core complex, including the residential development proposed on Parcel 2, would be out of scale with existing development in the western Dublin area (Impact 4.1-1). With implementation of Mitigation Measure 4.1-1, which requires that new buildings be restricted to one story or that one story buildings be considered adjacent to the edge of the existing slope (VCC campus buildings on Parcel 1) and in the vicinity of the Dublin Boulevard/Inspiration Drive intersection (residential buildings on Parcel 2) and that intensive landscaping, earth tone colors and non-reflective surfaces be used, this impact was reduced to a less-than-significant level.

The mitigation measures identified in the VCC EIR and the visual policies in the City of Dublin General Plan would apply to the proposed project. However, these mitigations state that the proposed residential buildings on the south side of the complex should be limited to a single story, whereas the currently proposed buildings would be two- and three-stories. To minimize the visual impact of the increased building height, as seen from I-580, Dublin Boulevard, and

the Dublin Boulevard/Inspiration Drive intersection, the memory care facility building would be further set back from the corner, as compared to the prior residential development. In addition, the articulation of the façade at the corner is designed with the upper story further set back from the lower floor, which would provide visual interest and modulate the apparent size and scale of a building. Extensive landscaping at the corner and use of earth tone colors that complement the surrounding landscape further mitigate the visual impact of the building height and massing.

The VCC EIR did not evaluate any visual changes to Parcel 3, as no specific development was proposed for Parcel 3 at that time. Therefore, development of the assisted living facility on Parcel 3 would result in a change in visual conditions as compared to the project evaluated in the VCC EIR and would result in impacts that were not identified in the VCC EIR. However, like the memory care facility, the assisted living facility on Parcel 3 would be set back from Dublin Boulevard and I-580 to the extent possible and the upper floors stepped back from the lower floors, minimizing the visual bulk of the proposed building. As described above, the assisted living facility is designed to complement the existing site topography so that the roofline would not extend above the top of the existing knoll and the majority of the building would sit below an existing ridgeline/berm. Like the memory care facility, extensive landscaping between the building and Dublin Boulevard and use of earth tone colors that complement the surrounding landscape would further mitigate the visual impact of the building height and massing. Therefore, this impact would be less than significant.

In addition, the proposed project would be required to undergo site-specific design review to ensure the project is consistent with City of Dublin design standards, property development regulations and performance standards related to aesthetics and to lessen the severity of visual changes resulting from the proposed project. Therefore, impacts associated with the proposed project would be less than significant. No mitigation is required.

(d) Create a new source of substantial light or glare

No New Impact. The VCC EIR determined construction of new buildings and other uses, such as parking areas, associated with the VCC Expansion Project would add additional levels of exterior lighting for safety and security purposes. The VCC EIR also determined that future lighting of playing fields could result in spillover of unwanted lights on surrounding residential areas. As described above, implementation of Mitigation Measure 4.1-2, which requires that all exterior light fixtures be equipped with cut-off lenses, directed downward, and limited in height would reduce light and glare impacts to a less than significant level. This measure was modified in the 2018 Supplemental IS/MND to address additional lighting impacts associated with construction of lighted playfields at the VCC.

Similar to the development evaluated in the VCC EIR and 2018 Supplemental IS/MND, the proposed project would introduce new light sources to the project site, as necessary for

security, safety, and way finding. Proposed lighting for the memory care facility on Parcel 2 would include building lighting along the walkway to the west and the main entrance to the north, light standards at the site driveway and in the parking area, and floodlights to illuminate the relocated entry signage at the corner of Dublin Boulevard and Inspiration Drive. The assisted living facility would also provide perimeter building lighting and light standards in the proposed parking areas. Proposed lighting would be similar to existing lighting for buildings and parking areas at the VCC and the lighting proposed for the prior residential development.

At night, these new sources of light would be visible from a distance; however, the addition of new light sources associated with the proposed project would generally blend in with existing development on the project site and would represent a continuation of the existing development within this area of the City. Consistent with Mitigation Measure 4.1-2 and City requirements, exterior lighting would be shielded so that direct glare and reflections are confined within the boundaries of the project site. As confirmed by the photometric studies prepared for the proposed project (see Figure 14a and 14b), site lighting would be directed downward and away from adjoining properties and public rights-of-way such that no light spillover onto adjacent properties or streets would occur.

Glare is caused by light reflections from pavement, vehicles, and building materials such as reflective glass and polished surfaces. During daylight hours, the amount of glare depends on intensity and direction of sunlight. Glare can create hazards to motorists and can be a nuisance for pedestrians and other viewers. Proposed exterior building materials primarily include stucco with stone, wood, and painted aluminum. These non-reflective building materials would not result in potential glare impacts within the project site or surrounding areas, and notably at the street level. Low-reflective vinyl windows would be provided on each level of the proposed buildings.

Therefore, the proposed project would not create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project. No additional analysis is required.

Source(s)

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Agricultural and Forestry Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
2. AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Environmental Setting

The project site is not used for agricultural production and is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. The surrounding area is characterized by institutional and residential uses.

The Farmland Mapping and Monitoring Program categorizes the project site as Urban and Built-Up Land and Grazing Land. Urban and Built-Up Land is defined as land that is occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Examples of Urban and Built-Up Land include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures. Grazing Land is defined as land on which the existing vegetation is suited to the grazing of livestock.

Regulatory Framework

State Regulations

California Department of Conservation Farmland Mapping and Monitoring Program

The California Department of Conservation (DOC) manages the Farmland Mapping and Monitoring Program to assess the location, quality, and quantity of agricultural lands and conversion of these lands over time. In each county, the land is analyzed for soil and irrigation quality, and the highest quality land is designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Based on the results of these analyses, the DOC issues maps every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance.

Williamson Act

The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments and private landowners to enter into contracts that restrict specific parcels of land to agricultural or related open space use. As a result, landowners receive reduced property tax assessments because they are based upon farming and open space uses rather than market value.

Local Regulations

City of Dublin General Plan

Guiding Policy A.1. in the City of Dublin General Plan states that the City will prevent the premature urbanization of agricultural lands. Implementing Policy B.1. requires the City to make findings that the land is suitable for the proposed use and will have adequate urban services and that conversion to an urban use will not have significant adverse effects on adjoining lands remaining under Williamson Act contract. Due to the location of the project site and its proximity to existing development, existing policies aimed at preserving agricultural uses in the City are not applicable to the proposed project.

Previous CEQA Documents

The VCC EIR and Supplemental IS/MND determined that the project site is located in an urbanized area, has not been used for agricultural production and is not encumbered by a Williamson Act Land Conservation Agreement. Therefore, the project was deemed not to have a potential for significant impacts related to agricultural resources.

Project Impacts and Mitigation Measures

(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (farmland)

No New Impact. As described above, the project site is not used for agricultural production and is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or any other type of farmland to non-agricultural uses. No new impacts or substantially more severe significant impacts to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would occur. No additional analysis is required.

(b) Conflict with existing zoning for agricultural use or a William Act contract

No New Impact. The project site is currently classified as Planned Development (PD) Ordinance No. 07-03 on the City's Zoning Map. The project site is not currently used for agricultural purposes, not zoned for agricultural uses, and is not protected by, or eligible for, a Williamson Act contract. Therefore, the proposed project would not conflict with existing zoning or Williamson Act contracts. No new or substantially more severe significant impacts to farmland or zoning beyond what has been analyzed in the prior environmental documents would occur. No additional analysis is required.

(c) Conversion of land from Farmland or forest use

No New Impact. As described above, the project site is currently classified as Planned Development (PD) Ordinance No. 07-03 on the City's Zoning Map. Neither the project site nor the surrounding area is zoned for agricultural use, forest land, timberland, or timberland production. Therefore, no new or substantially more severe significant impacts to farmland beyond what has been analyzed in the prior environmental documents would occur. No additional analysis is required.

(d) Result in loss of forest land or conversion of forest

No New Impact. The project site is located in an area of the City that is characterized by an urban setting. No forest or timberland exists on the project site or in the surrounding area. Therefore, the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use. Therefore, no new or substantially more severe significant impacts to forest land beyond what has been analyzed in the prior environmental documents would occur. No additional analysis is required.

(e) Conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use

No New Impact. A portion of the project site is currently developed with the existing VCC that includes church and school uses. None of the project parcels are currently used as farmland or forest land. The proposed project would not result in the conversion of farmland on or off the

project site to non-agricultural uses because there are no agricultural uses on or in the immediate vicinity of the project site. Likewise, the proposed project would not result in impacts related to changes in the existing environment that could result in the conversion of agricultural land to non-agricultural uses. Therefore, no new or substantially more severe significant impacts related to conversion of farmland or forest land beyond what has been analyzed in the prior environmental documents would occur. No additional analysis is required.

Source(s)

California Department of Conservation (DOC). California Farmland Conservancy. California Important Farmland Finder. Website: maps.conservation.ca.gov/dlrp/ciff/ (accessed February 16, 2021).

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

Air Quality

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?				X
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?				X
c. Expose sensitive receptors to substantial pollutant concentrations?		X		
d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?				X

Environmental Setting

The proposed project is located in the City of Dublin, and is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which regulates air quality in the San Francisco Bay Area. Air quality conditions in the San Francisco Bay Area have improved significantly since BAAQMD was created in 1955. Ambient concentrations of air pollutants and the number of days during which the region exceeds air quality standards have fallen substantially. In Dublin, and the rest of the air basin, exceedances of air quality standards occur primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights or hot, sunny summer afternoons.

Within BAAQMD, ambient air quality standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM_{10}, $PM_{2.5}$), and lead (Pb) have been set by both the State of California and the federal government. The State has also set standards for sulfate and visibility. BAAQMD is under State non-attainment status for ozone and particulate matter standards. BAAQMD is classified as non-attainment for the federal ozone 8-hour standard and non-attainment for the federal $PM_{2.5}$ 24-hour standard.

Regulatory Framework

Local and Regional Regulations

Bay Area Air Quality Management District

BAAQMD seeks to attain and maintain air quality conditions in the San Francisco Bay Area Air Basin through a comprehensive program of planning, regulation, enforcement, technical innovation, and education. The clean air strategy includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. BAAQMD also inspects stationary sources and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by law.

The BAAQMD *CEQA Air Quality Guidelines* were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. They also include recommended assessment methodologies for air toxics, odors, and greenhouse gas (GHG) emissions.

BAAQMD's Clean Air Plan guides the region's air quality planning efforts to attain the California ambient air quality standards. The BAAQMD 2017 Clean Air Plan, which was adopted on April 19, 2017, by the BAAQMD Board of Directors, is the current Clean Air Plan, which contains district-wide control measures to reduce ozone precursor emissions (i.e., reactive organic gases [ROG] and nitrogen oxides [NO_x]), particulate matter, and greenhouse gas emissions.

City of Dublin General Plan

Section 7.5 of the General Plan outlines policies and programs related to air quality. The following policy related to air quality is applicable to the proposed project:

> **Implementing Policy 7.5.1.A.2.** Require an air quality analysis for new development projects that could generate significant air emissions on a project and cumulative level. Air quality analyses shall include specific feasible measures to reduce anticipated air quality emissions to a less-than-significant California Environmental Quality Act (CEQA) level.

Previous CEQA Documents

VCC EIR

The VCC EIR found that the effects of project construction activities would be increased dust fall and locally elevated levels of PM_{10} downwind of construction activity. The VCC EIR also found

that construction dust has the potential for creating a nuisance at nearby properties. As such, the VCC EIR identified Mitigation Measure 4.2-1 to reduce construction impacts to a less-than-significant level.

In addition, the VCC EIR identified that the project would generate additional traffic volumes, increasing local levels of carbon monoxide. The VCC EIR determined that incremental increases in air pollution could be anticipated with the construction of the proposed project, however, such increases would be below the standard of air quality significance through as established by BAAQMD since no major intensification of land use is proposed. The VCC EIR found that local long-term air quality impacts would be less than significant and no mitigation would be required.

The following mitigation measure from the VCC EIR would be applicable to the proposed project:

> **Mitigation Measure 4.2-1 (construction impacts):** The following measures are recommended, based on BAAQMD standards, to reduce construction impacts to a less-than-significant level. The following construction practices should be required during all phases of construction on the project site:
>
> a. Water all active construction areas as needed;
>
> b. Watering or covering of stockpiles of debris, soil, sand or other materials that can be blown by the wind;
>
> c. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard;
>
> d. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites;
>
> e. Sweep daily (preferably with water sweepers) all paved access road, parking areas and staging areas at construction sites;
>
> f. Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets;
>
> g. Hydroseed or apply non-toxic soil stabilizers to inactive construction areas
>
> h. Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);
>
> i. Limit traffic speeds on unpaved roads to 15 mph;

j. Install sandbags or other erosion control measures to prevent silt runoff to public roadways;

k. Replant vegetation in disturbed areas as quickly as possible.

2018 Supplemental IS/MND

No new or more significant impacts related to air quality were identified in the 2018 Supplemental IS/MND; however, the 2018 Supplemental IS/MND acknowledged that since certification of the VCC EIR in 2003, BAAQMD had adopted newer and more restrictive standards to reduce construction dust and construction vehicle emissions and identified an additional mitigation measure to reduce this construction impact to a less-than-significant level.

> **Mitigation Measure AIR-1.** The Applicant's grading contractor(s) shall adhere to the most current Bay Area Air Quality Management District's (BAAQMD) construction mitigation measures (Tables 8-1 and 8-2 or as may be updated at the time a grading permit is requested) as set forth in the May 2017 BAAQMD CEQA Guidelines, or as may be amended in the future and in effect at time of issuance of grading permit.

The proposed project would be required to comply with the above mitigation measure. Consistent with Mitigation Measure AIR-1 above, the project contractor shall be required to implement BAAQMD Basic Construction Mitigation Measures as set forth in the May 2017 BAAQMD CEQA Guidelines. The BAAQMD Basic Construction Mitigation Measures are detailed below.

Project Impacts and Mitigation Measures

(a) Consistent with air quality plans

No New Impact. BAAQMD's Clean Air Plan is a comprehensive plan to improve Bay Area air quality and protect public health. The Clean Air Plan defines control strategies to reduce emissions and ambient concentrations of air pollutants; safeguard public health by reducing exposure to air pollutants that pose the greatest heath risk, with an emphasis on protecting the communities most heavily affected by air pollution; and reduce greenhouse gas emissions to protect the climate. Consistency with the Clean Air Plan can be determined if the project: (1) supports the goals of the Clean Air Plan; (2) includes applicable control measures from the Clean Air Plan; and (3) would not disrupt or hinder implementation of any control measures from the Clean Air Plan.

Clean Air Plan Goals.The primary goals of the Bay Area Clean Air Plan are to: attain air quality standards; reduce population exposure and protect public health in the Bay Area; and reduce greenhouse gas emissions and protect climate.

BAAQMD has established significance thresholds for project construction and operational impacts at a level at which the cumulative impact of exceeding these thresholds would have an adverse impact on the region's attainment of air quality standards. The health and hazards thresholds were established to help protect public health. As discussed in Section 3.3.b, implementation of the proposed project would result in less-than-significant operation-period emissions and, with implementation of Mitigation Measure AIR-1, the project would result in less-than-significant construction-period emissions. Therefore, the project would not conflict with the Clean Air Plan goals.

Clean Air Plan Control Measures.The control strategies of the Clean Air Plan include measures in the following categories: Stationary Source Measures, Transportation Measures, Energy Measures, Building Measures, Agriculture Measures, Natural and Working Lands Measures, Waste Management Measures, Water Measures, and Super-Greenhouse Gas (GHG) Pollutants Measures.

*Stationary Source Control Measures.*The stationary source measures, which are designed to reduce emissions from stationary sources such as metal melting facilities, cement kilns, refineries, and glass furnaces, are incorporated into rules adopted by BAAQMD and then enforced by BAAQMD's Permit and Inspection programs. Since the project would not include any stationary sources of emissions, the Stationary Source Measures of the Clean Air Plan are not applicable to the project.

*Transportation Control Measures.*BAAQMD identifies Transportation Measures as part of the Clean Air Plan to decrease emissions of criteria pollutants, toxic air contaminants (TACs), and GHGs by reducing demand for motor vehicle travel, promoting efficient vehicles and transit service, decarbonizing transportation fuels, and electrifying motor vehicles and equipment. The proposed project would provide a memory care and assisted living facility near existing church, school, residential, and open space uses, reducing the demand for travel by single occupancy vehicles. The proposed project would also provide pedestrian and bicyclist amenities, including sidewalks, short-term and long-term bicycle parking, and landscaping which would help to reduce the demand for travel by single occupancy vehicles. In addition, the proposed project would provide two electric vehicle (EV) ready spaces and two clean air/vanpool spaces. Consistent with the Green Building Code. Therefore, the project would support the ability of employees, visitors, and residents to use alternative and cleaner modes of transportation and would be consistent with BAAQMD's initiatives to reduce vehicle trips and vehicle miles traveled and increase the use of alternate means of transportation.

*Energy Control Measures.*The Clean Air Plan also includes Energy Measures, which are designed to reduce emissions of criteria air pollutants, TACs, and GHGs by decreasing the amount of electricity consumed in the Bay Area, as well as decreasing the carbon intensity of the electricity used by switching to less GHG-intensive fuel sources for electricity

generation. Since these measures apply to electrical utility providers and local government agencies (and not individual projects), the energy control measures of the Clean Air Plan are not applicable to the project.

Building Control Measures. BAAQMD has authority to regulate emissions from certain sources in buildings such as boilers and water heaters, but has limited authority to regulate buildings themselves. Therefore, the strategies in the control measures for this sector focus on working with local governments that do have authority over local building codes, to facilitate adoption of best GHG control practices and policies. The proposed project would be required to comply with the latest California Green Building Standards Code (CALGreen) standards. Therefore, the Building Control Measures of the Clean Air Plan are not applicable to the project.

Agriculture Control Measures. The Agriculture Control Measures are designed to primarily reduce emissions of methane. Since the project does not include any agricultural activities, the Agriculture Control Measures of the Clean Air Plan are not applicable to the project.

Natural and Working Lands Control Measures. The Natural and Working Lands Control Measures focus on increasing carbon sequestration on rangelands and wetlands, as well as encouraging local governments to ordinances that promote urban-tree plantings. Since the project does not include the disturbance of any rangelands or wetlands, the Natural and Working Lands Control Measures of the Clean Air Plan are not applicable to the project.

Waste Management Control Measures. The Waste Management Measures focus on reducing or capturing methane emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. The project would comply with local requirements for waste management (e.g., recycling and composting services). Therefore, the project would be consistent with the Waste Management Control Measures of the Clean Air Plan.

Water Control Measures. The Water Control Measures focus on reducing emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly-owned treatment works (POTWs), and promoting the use of biogas recovery systems. Since these measures apply to POTWs and local government agencies (and not individual projects), the Water Control Measures are not applicable to the project.

Super GHG Control Measures. The Super-GHG Control Measures are designed to facilitate the adoption of best GHG control practices and policies through BAAQMD and local government agencies. Since these measures do not apply to individual projects, the Super-GHG Control Measures are not applicable to the project.

Clean Air Plan Implementation.As discussed above, the proposed project would generally implement the applicable measures outlined in the Clean Air Plan, including Transportation Control Measures. Therefore, the project would not disrupt or hinder implementation of a control measure from the Clean Air Plan. The VCC EIR did not evaluate consistency with the applicable clean air plan; however, because the proposed project would be consistent with the Clean Air Plan, the proposed project would not result in any new or more severe impacts compared to those previously identified in the VCC EIR, and no additional analysis would be required.

(b) Project emissions

No New Impact. Both State and federal governments have established health-based Ambient Air Quality Standards for six criteria air pollutants: CO, ozone (O_3), NO_2, SO_2, Pb, and suspended particulate matter (PM). These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. As identified above, BAAQMD is under State non-attainment status for ozone, PM_{10}, and $PM_{2.5}$ standards. The Air Basin is also classified as non-attainment for both the federal ozone 8-hour standard and the federal $PM_{2.5}$ 24-hour standard.

Air quality standards for the proposed project are regulated by the BAAQMD *CEQA Air Quality Guidelines*. According to the BAAQMD *CEQA Air Quality Guidelines*, to meet air quality standards for operational-related criteria air pollutant and air precursor impacts, the project must not:

- Contribute to CO concentrations exceeding the State ambient air quality standards;
- Generate average daily construction emissions of ROG, NO_x, or $PM_{2.5}$ greater than 54 pounds per day or PM_{10} exhaust emissions greater than 82 pounds per day; or
- Generate average operational emissions of ROG, NO_x or $PM_{2.5}$ of greater than 10 tons per year or 54 pounds per day or PM_{10} emissions greater than 15 tons per year or 82 pounds per day.

The following sections describe the proposed project's construction- and operation-related air quality impacts and CO impacts.

Construction Emissions.The VCC EIR did not quantify construction emissions; however, the VCC EIR determined that construction period emissions would result from implementation of the proposed project. Similar to the VCC project, during construction of the proposed project, construction dust would affect local and regional air quality at various times during the build-out period of the project. The dry, windy climate of the area during the summer months combined with the fine, silty soils of the region create a high potential for dust generation. Emissions during the grading phase of construction are primarily associated with the exhaust of large earth moving equipment and the dust which is generated through grading activities.

Emissions in later stages of construction are primarily associated with construction employee commute vehicles, asphalt paving, mobile equipment, stationary equipment, and architectural coatings.

The effects of construction activities would be increased dust fall and locally elevated levels of PM_{10} near the construction activity. Depending on the weather, soil conditions, the amount of activity taking place, and nature of dust control efforts, these impacts could affect existing or future residential areas within or near the project.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. BAAQMD has established standard measures for reducing fugitive dust emissions (PM_{10}). With the implementation of these Basic Construction Mitigation Measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, ROGs and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using the California Emissions Estimator Model (CalEEMod) version 2016.3.2, consistent with BAAQMD recommendations. Construction of the proposed project is anticipated to begin in late 2022 or early 2023 and would continue over an approximately 20-month period. The proposed project would require the off haul of approximately 15,600 cubic yards of soil, which was included in CalEEMod. This analysis also assumes the use of Tier 2 construction equipment. Construction-related emissions are presented in Table D. CalEEMod output sheets are included in Appendix B.

Table D: Project Construction Emissions in Pounds Per Day

Project Construction	**ROG**	**NO_x**	**Exhaust PM_{10}**	**Fugitive Dust PM_{10}**	**Exhaust $PM_{2.5}$**	**Fugitive Dust $PM_{2.5}$**
Average Daily Emissions	3.8	21.8	0.7	1.6	0.7	0.6
BAAQMD Thresholds	54.0	54.0	82.0	BMP	54.0	BMP
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LSA (March 2021).
BMP = Best Management Practices

As shown in Table D, construction emissions associated with the project would be less than significant for ROG, NO_x, $PM_{2.5}$, and PM_{10} exhaust emissions. BAAQMD requires the implementation of BAAQMD's Basic Construction Mitigation Measures (best management practices) to minimize construction fugitive dust impacts. As identified in the VCC EIR, Mitigation Measure 4.2-1 reduced this impact to a less-than-significant level by requiring project contractors to comply with then-current BAAQMD's standards to minimize emission of dust and construction vehicle emission during grading operations. As described in the 2018 Supplemental IS/MND, BAAQMD has since adopted newer and more restrictive standards to reduce construction dust and construction vehicle emission. Consistent with Mitigation Measure AIR-1, identified in the 2018 IS/MND, the project would be required to implement the most current BAAQMD Basic Construction Mitigation Measures to reduce this construction impact to a less-than-significant level. The current BAAQMD Basic Construction Mitigation Measures are as follows:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt tracked-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.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 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.
- 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.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- A publicly-visible sign shall be posted with the telephone number and person to contact at the City of Dublin regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

With implementation of Mitigation Measure AIR-1, identified in the 2018 Supplemental IS/MND, the proposed project would not result in any new or more severe impacts compared to those identified in the prior environmental documents. No additional analysis is required.

Operational Emissions. The VCC EIR did not quantify operational emissions; however, the VCC EIR determined that increase in long-term vehicular emissions generated by the VCC project would not exceed BAAQMD's operations threshold and would have a less than significant impact on local and regional air quality.

Long-term air pollutant emission impacts associated with the proposed project are those related to mobile sources (e.g., vehicle trips), energy sources (e.g., electricity and natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment).

PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of electricity or natural gas) and the emission factor of the fuel source. Major sources of energy demand include building mechanical systems, such as heating and air conditioning, lighting, and plug-in electronics, such as refrigerators or computers. Greater building or appliance efficiency reduces the amount of energy for a given activity and thus lowers the resultant emissions. The proposed project would comply with the 2019 CALGreen Code, which was accounted for in the analysis.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of landscaping equipment and the use of consumer products.

Emission estimates for operation of the project were calculated using CalEEMod. Model results are shown in Table E. Trip generation rates for the project were based on the project's trip generation estimate, as identified in the Transportation Section, which estimates that the proposed project would generate approximately 329 average daily trips.

The primary emissions associated with the project are regional in nature, meaning that air pollutants are rapidly dispersed on release or, in the case of vehicle emissions associated with the project; emissions are released in other areas of the Air Basin. The daily and annual

emissions associated with project operational trip generation, energy, and area sources are identified in Table E for ROG, NO_x, PM_{10}, and $PM_{2.5}$.

Table E: Project Operational Emissions

	ROG	NO_x	PM_{10}	$PM_{2.5}$
Pounds Per Day				
Area Source Emissions	3.2	1.0	0.1	0.1
Energy Source Emissions	<0.1	0.2	<0.1	<0.1
Mobile Source Emissions	0.5	1.8	1.6	0.4
Total Project Emissions	**3.8**	**3.1**	**1.8**	**0.6**
BAAQMD Thresholds	54.0	54.0	82.0	54.0
Exceed Threshold?	**No**	**No**	**No**	**No**
Tons Per Year				
Area Source Emissions	0.5	<0.1	<0.1	<0.1
Energy Source Emissions	<0.1	<0.1	<0.1	<0.1
Mobile Source Emissions	0.1	0.3	0.3	0.1
Total Project Emissions	**0.6**	**0.4**	**0.3**	**0.1**
BAAQMD Thresholds	10.0	10.0	15.0	10.0
Exceed Threshold?	**No**	**No**	**No**	**No**

Source: LSA (March 2021).

The results shown in Table E indicate the project would not exceed the significance criteria for daily ROG, NO_x, PM_{10} or $PM_{2.5}$ emissions; therefore, the proposed project would not have a significant effect on regional air quality. The proposed project would not result in any new or more severe impacts compared to those previously identified in the VCC EIR and 2018 Supplemental IS/MND. No additional analysis is required.

Localized CO Impacts. The VCC EIR found that the project would generate additional traffic volumes, increasing local levels of carbon monoxide. However, the VCC determined that such increases would be below the standard of air quality significance.

Emissions and ambient concentrations of CO have decreased dramatically in the Bay Area with the introduction of the catalytic converter in 1975. No exceedances of the State or federal CO standards have been recorded at Bay Area monitoring stations since 1991. The BAAQMD *Air Quality CEQA Guidelines* include recommended methodologies for quantifying concentrations

of localized CO levels for proposed transportation projects. A screening level analysis using guidance from the BAAQMD *Air Quality CEQA Guidelines* was performed to determine the impacts of the project. The screening methodology provides a conservative indication of whether the implementation of a proposed project would result in significant CO emissions. According to the BAAQMD *Air Quality CEQA Guidelines*, a proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria are met:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, and the regional transportation plan and local congestion management agency plans.
- Project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The project would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, or below-grade roadway).

Implementation of the proposed project would not conflict with the Alameda County Transportation Commission's congestion management programs. The proposed project would generate approximately 20 AM peak hour trips and 32 PM peak hour trips; therefore, the project's contribution to peak hour traffic volumes at intersections in the vicinity of the project site would be well below 44,000 vehicles per hour. Therefore, the proposed project would not result in localized CO concentrations that exceed State or federal standards and impacts would be less than significant. The proposed project would not result in any new or substantially more severe impacts compared to those previously identified in the VCC EIR and 2018 Supplemental IS/MND. No additional analysis is required.

(c) Expose sensitive receptors to pollutant concentrations

Potentially Significant Impact Unless Mitigation Incorporated. Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. Exposure from diesel exhaust associated with construction activity contributes to both cancer and chronic non-cancer health risks.

The VCC EIR did not evaluate the potential of the VCC to expose sensitive receptors to substantial pollutant concentrations; therefore, the exposure of sensitive receptors to pollutant concentrations would be a new impact as compared to the project evaluated in the VCC EIR. According to BAAQMD, a project would result in a significant impact if it would: individually

expose sensitive receptors to TACs resulting in an increased cancer risk greater than 10.0 in one million, increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient $PM_{2.5}$ increase greater than 0.3 micrograms per cubic meter ($\mu g/m^3$).

A significant cumulative impact would occur if the project in combination with other projects located within a 1,000-foot radius of the project site would expose sensitive receptors to TACs resulting in an increased cancer risk greater than 100.0 in one million, an increased non-cancer risk of greater than 10.0 on the hazard index (chronic), or an ambient $PM_{2.5}$ increase greater than 0.8 $\mu g/m^3$ on an annual average basis. Impacts from substantial pollutant concentrations are discussed below.

Short-Term Exposure of Sensitive Receptors to Toxic Air Contaminants. The project site is located in close proximity to existing residential uses that could be exposed to diesel emission exhaust during the construction period. The closest sensitive receptors include the single-family residential uses located immediately north and east of Parcel 3, the multi-family residential uses located immediately west of Parcel 2, and Valley Christian Junior High and High School located immediately west of Parcel 3. To estimate the potential cancer risk from project construction equipment exhaust (including diesel particulate matter), a dispersion model was used to translate an emission rate from the source location to a concentration at the receptor location (i.e., a nearby residential land use). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis. This refined assessment was conducted using CARB's exposure methodology, with the air dispersion modeling performed using the USEPA dispersion model AERMOD. The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and site-specific meteorological data. Table F, below, identifies the results of the analysis utilizing the standard Tier 2 construction equipment. Model snap shots of the sources are provided in Appendix C.

Table F: Unmitigated Inhalation Health Risks from Project Construction to Off-Site Receptors

	Carcinogenic Inhalation Health Risk in One Million	**Chronic Inhalation Hazard Index**	**Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)**
Maximally Exposed Individual	42.10	0.04	0.19
BAAQMD Thresholds	10.0	1.0	0.30
Exceed Threshold?	**Yes**	**No**	**No**

Source: LSA (Marc 2021).

As shown in Table F, the risk associated with project construction at the maximally exposed individual (MEI) would be 42.10 in one million, which would exceed the BAAQMD cancer risk of 10 in one million. The total chronic hazard index would be 0.04, which would not exceed the threshold of 1.0. The results of the analysis indicate that the total PM2.5 concentration would be 0.19 µg/m3, which would also not exceed the BAAQMD significance threshold of 0.30 µg/m3. As indicated above, the unmitigated cancer risk of 42.10 in one million would exceed BAAQMD's thresholds, resulting in a new significant impact than was previously identified in the VCC EIR. Implementation of Mitigation Measure AIR-2 would be required to reduce pollutant concentrations during project construction.

> **Mitigation Measure AIR-2:** During construction of the proposed project, the project contractor shall ensure all off-road diesel-powered construction equipment of 50 horsepower or more used for the project construction at a minimum meets the California Air Resources Board (CARB) Tier 2 emissions standards or equivalent equipped with Level 3 diesel particulate filters equipped with Level 3 diesel particulate filters.

Table G identifies the results of the analysis with implementation of Mitigation Measure AIR-2.

Table G: Mitigated Inhalation Health Risks from Project Construction to Off-Site Receptors

	Carcinogenic Inhalation Health Risk in One Million	**Chronic Inhalation Hazard Index**	**Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)**
Maximally Exposed Individual	7.18	0.01	0.03
BAAQMD Thresholds	10.0	1.0	0.30
Exceed Threshold?	**No**	**No**	**No**

Source: LSA (March 2021).

As shown in Table G, the mitigated cancer risk at the MEI would be 7.18 in one million, which would not exceed the BAAQMD cancer risk of 10 in one million. Therefore, with implementation of Mitigation Measure AIR-2, construction of the proposed project would not exceed BAAQMD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations. Therefore, with implementation of Mitigation Measure AIR-2, this impact would be reduced to a less-than-significant level.

(d) Odors

No New Impact. During construction, the various diesel-powered vehicles and equipment in use on the site would create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the project site. The potential for diesel odor impacts is, therefore, considered to be less than significant. In addition, once the project is operational, it would not be a source of odors. Therefore, the proposed project would

not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and potential impacts would be considered less than significant. The proposed project would not result in any new or more severe impacts compared to those previously identified in the VCC EIR and 2018 Supplemental IS/MND. No additional analysis is required.

Source(s)

BAAQMD. 2017. Final 2017 Clean Air Plan. April 19. Website: www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en (accessed March 2021).

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

Biological Resources

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

Environmental Setting

The following discussion of biological resources within the project site is based on the *Biological Resources Analysis for the Inspiration Drive Memory Care and Assisted Living Facilities in Dublin, California* (Biological Resources Analysis) prepared for the proposed project (Appendix D). As part of this supplemental study, a reconnaissance-level field survey conducted on February 18, 2021, and on-line biological resources databases and relevant documents, including the VCC EIR, the Biological Resources Assessment, and Biological Site Conditions Update were reviewed. A letter report from Jane Valerius Environmental Consulting that provided updated information on the drainage in Parcel 2 was also reviewed and confirmed.

The dominant cover type on the project site is non-native annual grassland dominated by grasses and forbs such as slender wild oat (*Avena barbata*), Italian rye grass (*Festuca perennis*), hare barley (*Hordeum murinum* ssp. *leporinum*), and longbeak stork's bill (*Erodium botrys*). The grassland includes dense stands of ruderal herbaceous species, including black mustard (*Brassica nigra*), short-podded mustard (*Hirschfeldia incana*), Italian thistle (*Carduus pycnocephalus*), milk thistle (*Silybum marianum*), and poison hemlock (*Conium maculatum*), all non-native weedy species. There is also a small patch of coyote brush (*Baccharis pilularis*), a native shrub, on Parcel 2. A constructed water detention basin with a standpipe drain is located in the center of Parcel 3, between Inspiration Drive and Dublin Boulevard, and supports similar but sparser non-native annual grassland habitat with patches of bare ground. This detention basin is approximately 0.2 acre (8,655 square feet) in area.

A small area of riparian woodland is located along a drainage near the northwestern corner of Parcel 2; this woodland is composed of coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), arroyo willow (*Salix lasiolepis*), and red willow (*Salix laevigata*). The woodland understory supports of a mixture and native and weedy non-native herbaceous species; natives include tall flatsedge (*Cyperus eragrostis*) and California bulrush (*Schoenoplectus californicus*), and non-natives include poison hemlock, Pampas grass (*Cortaderia selloana*), Himalayan blackberry (*Rubus armeniacus*), and fiddle dock (*Rumex pulcher*).

An ephemeral stream within the drainage feeds into a culvert near the western edge of Parcel 2. During the February 2021 field survey conducted as part of the Biological Resources Analysis (Appendix D), little surface water was present. This drainage appears to be fed by runoff from the adjacent hillslope between Parcel 2 and the VCC campus to the north. This drainage does not have a hydrological connection with Dublin Creek, which drains the hills to the northwest. The Dublin Creek drainage corridor is largely occupied by residential development. Dublin Creek drains into a detention basin at the northwestern edge of the residential development and appears to be underground downstream of this basin.

Wildlife observed on the project site during the February 2021 field survey included Say's phoebe (*Sayornis saya*), California scrub-jay (*Aphelocoma californica*), house finch (*Haemorhous mexicanus*), song sparrow (*Melospiza melodia*), and spotted towhee (*Pipilo maculatus*). The diggings of Botta's pocket gopher (*Thomomys bottae*) were also present in some grassy areas.

Regulatory Framework

Federal and State Regulations

Federal and State Special Status Species

Special status species are individual plant and animal species that are protected under federal and State Endangered Species Acts. These species are classified as rare, threatened, or endangered. The United States Fish and Wildlife Service (USFWS) and the California

Department of Fish and Wildlife (CDFW) have adopted a system to conserve and protect plant and animal species that are limited in distribution as well as species that have a low or declining population. If a proposed project or activities associated with a proposed project result in the "take" of a threatened or endangered species, the necessary permits must be obtained from the USFWS and CDFW. The State of California defines take as any action or attempt to "hunt, pursue, catch, capture, or kill" a listed species. Additionally, the Federal Endangered Species Act includes the "harm" of a listed species in the definition of take.

Section 15380(b) of the *State CEQA Guidelines* also considers all potential rare or sensitive species and habitats that are capable of supporting such species in addition to those species listed under the federal and state Endangered Species Acts. These additional species considered under CEQA may include California plant species of concern as listed by the California Native Plant Society as well as "Species of Special Concern" listed by CDFW.

Sensitive Habitats

Wetland and riparian habitats are considered to be sensitive habitats, and are protected under various Federal, State, and local regulations. These habitats are generally subject to regulation, protection, or consideration by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS as per Sections 303, 304, and 404 of the Federal Clean Water Act and the State of California Porter-Cologne Water Quality Control Act. Wetland and riparian habitats are also subject to the National Pollutant Discharge Elimination System (NPDES) permit program under Section 402 of the Clean Water Act, which regulates discharge into waters of the United States.

Federal Migratory Bird Treaty Act

Under the federal Migratory Bird Treaty Act (MBTA), the killing, possessing, or trading of migratory birds is prohibited unless exempt by regulations prescribed by the Secretary of the Interior. The MBTA prohibits the possession of protected bird species and their nests, regardless of whether nests are active.[3]

Birds of prey, such as owls and hawks, are protected in California under provisions of the State Fish and Game Code. The code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFW.

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[3] *An active nest is defined as having eggs or young.*

California Department of Fish and Game Code 3503

California Department of Fish and Game Code 3503 stipulates that is unlawful to take, posses, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.

Regional and Local Regulations

East Alameda Conservation Strategy

The project site is located in the East Alameda Conservation Strategy (Conservation Strategy) Study Area. The Conservation Strategy is intended to provide an effective framework to protect, enhance, and restore natural resources in eastern Alameda County, while improving and streamlining the environmental permitting process for impacts resulting from infrastructure and development projects. The City of Dublin is a partner in the Conservation Strategy and uses the document to provide a baseline inventory of biological resources and conservation priorities during project-level planning and environmental permitting.

City of Dublin General Plan

Section 3.2 of the General Plan outlines policies for preservation of open space areas to protect natural resources, as well as public health and safety. Sections 7.2 and 7.4 of the General Plan outlines policies and programs related to stream corridors and riparian vegetation, and oak woodlands, respectively. The following policies related to biological resources are applicable to the proposed project:

> **Guiding Policy 3.2.1.A.1.** Preservation of oak woodlands, riparian vegetation, and natural creeks as open space for the natural resource value is of the highest importance. Limited modifications may be permitted on a case-by-case basis with adequate mitigation to replace disturbed resources.
>
> **Guiding Policy 3.2.1.A.2.** Generally, maintain slopes over thirty percent as permanent open space for public health and safety. Consider development in areas with slopes over 30 percent only if the area to be developed is: 1) less than three acres in size; 2) less than 20 percent of a large developable area; and, 3) surrounded by slopes less than 30 percent.
>
> **Implementing Policy 3.2.1.B.2.** Encourage an efficient and higher intensity use of the flat and gently sloping portions of the planning area as a means of minimizing grading requirements and potential impacts to environmental and aesthetic resources.
>
> **Guiding Policy 7.2.1.A.1.** Protect riparian vegetation as a protective buffer for stream quality and for its value as a habitat and aesthetic resource.

Guiding Policy 7.2.1.A.2. Promote access to stream corridors for passive recreational use and to allow stream maintenance and improvements as necessary, while respecting the privacy of owners of property abutting stream corridors.

Implementing Policy 7.2.1.B.1. Enforce Watercourse Ordinance 52-87 for developed areas of the city.

Implementing Policy 7.2.1.B.2. Require open stream corridors of adequate width to protect all riparian vegetation, improve access, and prevent flooding caused by blockage of streams.

Implementing Policy 7.2.1.B.3. Require revegetation of creek banks with species characteristic of local riparian vegetation, where construction requires creekbank alteration.

Guiding Policy 7.4.1.A.1. Protect oak woodlands.

Implementing Policy 7.4.1.B.1. Require preservation of oak woodlands. Where woodlands occupy slopes that otherwise could be graded and developed, permit allowable density to be transferred to another part of the site. Removal of an individual oak tree may be considered through the project review process.

Implementing Policy 7.4.1.B.2. Enact and enforce the Heritage Tree Ordinance.

City of Dublin Municipal Code

Heritage trees and approved street trees are protected under the Dublin Municipal Code, specifically Sections 7.56, Street Trees, and 5.60, Heritage Trees.

As defined in the Dublin Municipal Code, approved street trees include:

1. Any tree planted within any street right-of-way or adjacent easement, which conforms to the approved streetscape master plan;

2. Any existing tree within the right-of-way or adjacent easement, which conforms to the established species and location in any given area, and which was planted as a required street tree under the provisions of any improvement agreement, or as otherwise approved by the City; or

3. Any tree of the approved species and in an acceptable location, which was or may be planted as a replacement.

Heritage trees include any of the following:

4. Any oak, bay, cypress, maple, redwood, buckeye and sycamore tree having a trunk or main stem of twenty-four (24) inches or more in diameter measured at four (4) feet six (6) inches above natural grade.

5. A tree required to be preserved as part of an approved development plan, zoning permit, use permit, site development review, or subdivision map;

6. A tree required to be planted as a replacement for an unlawfully removed tree.

For private development projects, a permit is required from the City for the removal of any heritage tree and the removal/pruning of any approved street tree. In addition, for any property containing one or more heritage trees, a plan to protect heritage trees must be prepared and submitted to the City prior to the issuance of a demolition, grading, or building permit.

Previous CEQA Documents

VCC EIR

Based on a field reconnaissance conducted on the entire VCC EIR project site (Parcels 1-3), the VCC EIR found that development of the proposed residential component of the VCC Project on the southwest corner of the site (Parcel 2) would impact an existing wetland area. In addition, other wetland areas on the site could be affected by VCC Project development. As such, the VCC EIR identified Mitigation Measure 4.3-1 to reduce wetland impacts to a less-than-significant level.

The following mitigation measure from the VCC EIR would be applicable to the proposed project:

> **Mitigation Measure 4.3-1 (wetland and riparian habitat impacts):** A protocol-level wetlands delineation shall be performed on the project site. Based on the results of this analysis, the development plan should be modified to avoid all wetland areas. If avoidance is not possible, a wetland mitigation plan shall be prepared by a qualified biologist to include identification of replacement wetland area at a ratio of 2:1 on or near the project site. Necessary regulatory permits shall also be obtained from the U.S. Army Corps of Engineers, Fish and Wildlife Service, California Department of Fish and Game and Regional Water Quality Control Board.

As part of this supplemental study, a review of the ephemeral drainage channel located in the northwest corner of Parcel 2 was conducted to establish the approximate top of bank of the drainage and provide a recommended minimum setback to avoid any impacts to the channel. No wetlands were identified on Parcel 3 during the field survey conducted in 2021 (see

Biological Resources Analysis provided in Appendix D). Therefore, the proposed project is in compliance with Mitigation Measure 4.3-1 and no additional study is required.

2018 Supplemental IS/MND

The 2018 Supplemental IS/MND determined that construction of the project improvements could result in both direct and indirect impacts to sensitive on-site biological resources, including, nesting birds, coast live oak woodland, special-status plants, California red-legged frog, and wetland areas on Parcel 1. Mitigation measures were identified to reduce potential impacts to a less-than-significant level. The following mitigation measures are applicable to the proposed project:

> **Mitigation Measure BIO-1.** No more than 14 days prior to ground disturbance and vegetation removal during the nesting season (February 1-August 31), the project Applicant shall retain a qualified biologist to perform pre-construction breeding bird surveys. If nests are found, they shall be flagged and protected with a suitable buffer. Buffer distance would vary based on species and conditions at the project site, but would usually be at least 50 feet and up to 250 feet for raptors. This measure shall not apply to ground disturbance of vegetation removal outside of the nesting season (September 1 to January 31).
>
> **Mitigation Measure BIO-2.** Any on-site coast live oak lost or impacted as a result of project construction shall be replaced on site or in the immediate vicinity at a 2:1 (replacement: impacted) ratio. A Replacement Plan shall be prepared by a qualified biologist identifying the location of replacement habitat, replanting plans and long-term monitoring to ensure the success of the replacement habitat area. Necessary permits shall be obtained from local, state and federal biological resource agencies prior to commencement of replanting.
>
> **Mitigation Measure BIO-3.** The project Applicant shall retain a qualified botanist to conduct rare plant surveys within construction zones on the site for Congdon's Tarplant or for other species within the project site during the appropriate time of year in accordance with agency protocols. Impacts to special-status plants shall be avoided to the fullest extent feasible and habitat that supports special-status plant species shall be preserved. Rare plant surveys shall be conducted at the proper time of year when rare or endangered species are both evident and identifiable. Field surveys shall be scheduled to coincide with known blooming periods and/or during periods of physiological development that are necessary to identify the plant species of concern. If no special-status plant species are found, the proposed project would not have a significant impact to species and no additional mitigation is needed.

If any of the species are found on-site and cannot be avoided, the following measures shall be required:

a. Where surveys determine that special-status plant species are present within or adjacent to the proposed project site, direct and indirect impacts of the project on the species (e.g., Congdon's tarplant and/or San Joaquin spearscale) shall be avoided where feasible through the establishment of activity exclusion zones, where no ground-disturbing activities shall take place, including construction of new facilities, construction staging, or other temporary work areas. Activity exclusion zones for special-status plant species shall be established prior to construction activities around each occupied habitat site, the boundaries of which shall be clearly marked with standard orange plastic construction exclusion fencing or its equivalent. The establishment of activity exclusion zones shall not be required if no construction related disturbances would occur within 250 feet of the occupied habitat site. The size of activity exclusion zones may be reduced through consultation with a qualified biologist and with concurrence from California Department of Fish & Wildlife (CDFW) based on site-specific conditions.

b. If exclusion zones and avoidance of impacts on a special-status plant species are not feasible, then the loss of individuals or occupied habitat of a special-status plant species shall be compensated for through the acquisition, protection, and subsequent management of other existing occurrences. Before the implementation of compensation measures, the project's Applicant shall provide detailed information to the CDFW and lead agency on the quality of preserved habitat, location of the preserved occurrences, provisions for protecting and managing the areas, the responsible parties involved, and the other pertinent information that demonstrates the feasibility of the compensation. A mitigation plan identifying appropriate mitigation ratios shall be developed in consultation with, and approved by, the CDFW and the City prior to the commencement of any activities that would impact any special status plants.

Mitigation Measure BIO-4. For any development near on-site riparian areas, the project Applicant shall conduct pre-construction surveys for CRLF species. The survey shall be completed no more than 30 days prior to work within 200 feet of potential wetland/wet areas on the site. If no species are found, no mitigation shall be required.

If CRLF are found on the project site then the project Applicant shall provide information to support Section 7 consultation with the U.S. Fish & Wildlife Service (USFWS) and the project Applicant shall ensure no net loss of habitat that shall be achieved through avoidance, preservation, creation and/or purchase of credits. The final selected measures may be part of the Section 7 permitting process.

The project Applicant shall obtain a biological opinion from the USFWS and comply with the conditions and mitigation requirements under the opinion to ensure that no net loss of habitat occurs. Mitigation may include, but would not be limited to on-site and off-site preservation and creation of CRLF habitat, purchase of credits at mitigation banks, payment of in-lieu fees approved by the agencies, or other agency approved and required mitigation measures.

Avoidance measures may include the following or equivalent protective measures:

a. To minimize disturbance of breeding and dispersing CRLF construction activity within CRLF upland habitat shall be conducted during the dry season between April 15 and October 15 or before the onset of the rainy season, whichever occurs first. If construction activities are necessary in CRLF upland habitat between October 15 and April 15, the project Applicant would contact the USFWS for approval to extend the work period.

b. To minimize disturbance and mortality of adult and juvenile CRLF in aquatic habitat and underground burrows, the project Applicants should minimize the extent of ground-disturbing activities within these habitats by requiring the contractor to limit the work area to the minimum necessary for construction. In addition, the project Applicant should ensure that the contractor installs temporary exclusion fence between the construction work area and potential aquatic habitat for all construction within grasslands near aquatic habitat. A minimum buffer zone of 150 feet shall be maintained around CRLF aquatic habitat during construction. No staging, parking, material storage or ground disturbance shall be allowed in the buffer zone. The buffer zone will be clearly defined with construction fencing prior to the initiation of construction activities and shall be maintained until completion of construction.

c. The project Applicant should ensure that a qualified wildlife biologist monitors all construction activities within CRLF upland habitat to ensure no take of individual CRLF occurs during project construction. If a CRLF is found, then the monitor would immediately stop construction in that area and contact USFWS for development of a plan for how to proceed with construction.

Because the proposed project would not include development on Parcel 1, Mitigation Measure BIO-5, identified in the 2018 Supplemental IS/MND would not apply to the proposed project.

Project Impacts and Mitigation Measures

(a) Substantial adverse effect on candidate, sensitive, or special status species

A total of 77 (42 plants and 35 animals) special-status species were evaluated for the VCC project. Of these only two, Congdon's tarplant and California red-legged frog, have the potential to occur on the site and could be impacted by the proposed project. These species are further described below.

Congdon's Tarplant.Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) is a CNPS Rank 1B.1 species (i.e., rare, threatened, or endangered in California and elsewhere). Congdon's tarplant is also considered a focal species under the East Alameda County Conservation Strategy (EACCS). This plant is an annual forb that blooms from June to November and occurs in grasslands and disturbed sites, generally on alkaline soils, at elevations ranging from sea level to about 990 feet.

During surveys conducted in 2018, approximately five individuals of Congdon's tarplant were observed in the constructed stormwater detention basin in Parcel 3.[4] This basin would be impacted by the proposed project, resulting in the potential loss of individuals or occupied habitat of this special-status plant species. Implementation of Mitigation Measure BIO-3, identified in the 2018 Supplemental IS/MND, as modified below, would reduce potential impacts to Congdon's tarplant to a less-than-significant level.

> **Mitigation Measure BIO-3: Congdon's Tarplant.** The project Applicant shall retain a qualified botanist to conduct rare plant surveys within construction zones on the site for Congdon's Tarplant or for other species within the project site during the appropriate time of year in accordance with agency protocols. The survey shall be conducted during the blooming period of Condon's tarplant (June to November) to determine the presence/absence of this species within the site. The field survey shall follow standard protocols for rare plant surveys, which may require multiple site visits and checking a reference site(s) where the species is known to occur. The survey shall include Parcels 2 and 3 as well as the entire conservation easement portion of Parcel 3.
>
> Impacts to special-status plants shall be avoided to the fullest extent feasible and habitat that supports special-status plant species shall be preserved. Rare plant surveys shall be conducted at the proper time of year when rare or endangered species are both evident and identifiable. Field surveys shall be scheduled to coincide with known blooming periods and/or during periods of physiological development that are necessary to identify the plant species of concern. ~~If no special-status plant species are~~

[4] *A positive identification of this species was made by collecting a portion of one of the senesced (e.g., deteriorated with age) annual plants for examination under laboratory conditions.*

~~found, the proposed project would not have a significant impact to species and no additional mitigation is needed.~~

If any of the species are found on-site and cannot be avoided, the following measures shall be required:

a. Where surveys determine that special-status plant species are present within or adjacent to the proposed project site, direct and indirect impacts of the project on the species (e.g., Congdon's tarplant and/or San Joaquin spearscale) shall be avoided where feasible through the establishment of activity exclusion zones, where no ground-disturbing activities shall take place, including construction of new facilities, construction staging, or other temporary work areas. Activity exclusion zones for special-status plant species shall be established prior to construction activities around each occupied habitat site, the boundaries of which shall be clearly marked with standard orange plastic construction exclusion fencing or its equivalent. The establishment of activity exclusion zones shall not be required if no construction related disturbances would occur within 250 feet of the occupied habitat site. The size of activity exclusion zones may be reduced through consultation with a qualified biologist and with concurrence from California Department of Fish & Wildlife (CDFW) based on site-specific conditions.

b. If exclusion zones and avoidance of impacts on a special-status plant species are not feasible, then the loss of individuals or occupied habitat of a special-status plant species shall be compensated for through the acquisition, protection, and subsequent management of other existing occurrences. Mature seeds shall be collected from all the plants that are present and planted in a suitable mitigation area within the Parcel 3 conservation easement. The mitigation area for replanting shall be identified by a qualified botanist before the start of work on the project. The conservation easement portion of Parcel 3 supports the same soil type (Diablo clay 15-30 percent) as the detention basin within the proposed assisted living facility area, so mitigation for Condon's tarplant is feasible within the easement.

c. Before the start of work~~implementation of compensation measures~~, the project's Applicant shall provide detailed information to the CDFW and lead agency on the quality of preserved habitat, location of the preserved occurrences, provisions for protecting and managing the areas, the responsible parties involved, and the other pertinent information that demonstrates the feasibility of the compensation. A qualified botanist shall prepare a mitigation and monitoring plan for the Condon's tarplant mitigation area. The plan shall include, at a minimum, a discussion of the methods of seed collection and sources of seeds, the location and size of the mitigation area within the conservation easement, and mitigation site preparation, monitoring, and criteria for determining a successful mitigation effort. Mitigation

sites are typically monitored for five years; however, provisions for maintaining a viable population of Condon's tarplant in the conservation easement after the five year monitoring period shall be included in the plan.~~A mitigation plan identifying appropriate mitigation ratios shall be developed in consultation with, and approved by, the CDFW and the City prior to the commencement of any activities that would impact any special status plants.~~

If Condon's tarplants are not found within the project site during the rare plant survey, this may not indicate absence. If adverse environmental conditions for germination occur during the year the survey is conducted, Condon's tarplant may not have geminated; however, a persistent long-term seed bank could still be present. If flowering plants are not found on the project site during the initial rare plant survey, the project site shall be resurveyed during the next Condon's tarplant blooming season and, if plants are present, mature seeds for replanting shall be collected. If a second season plant survey is not feasible, viable seeds from another source shall be collected or purchased from a reliable native plant nursery for replanting.

With implementation of Mitigation Measure BIO-3, as modified above, no new impacts or substantially more severe impacts to special-status plant species would occur. No additional analysis is required.

California Red-legged Frog.The California red-legged frog (*Rana draytonii*), a federally listed threatened species, is known to occur in the hills west of the project site. Critical habitat has been designated for this species, and critical habitat unit ALA-1B is located in the hills west of the project site; however, the project site is not within designated critical habitat for California red-legged frog.

A pond where California red-legged frogs are known to breed is located approximately 4,600 feet (0.87 mile) to the northwest of Parcel 2 (in the upper reaches of the Dublin Creek watershed); this pond is within the range of documented overland dispersal of this frog. However, approximately 2,000 feet (0.37 mile) of the intervening area within the Dublin Creek drainage between the pond and Parcel 2 is occupied by residential development and the creek appears to terminate in a detention basin at the western edge of this development. This developed area would likely be a considerable barrier to frogs originating from this pond and potentially moving down the Dublin Creek drainage toward the project site. In addition, there are no pools or suitable breeding habitat for California red-legged frogs in the drainage adjacent to Parcel 2 and, therefore, this amphibian would not be expected to be present in this drainage. Most of Parcel 2, outside the drainage, has been previously graded and is flat with only sparse ruderal vegetation and a few coyote brush; this flat area does not provide suitable upland shelter habitat for California red-legged frogs.

Nonetheless, a corridor of undeveloped upland habitat, approximately 2,300 feet wide, is located between the detention basin at the western end of the residential area and the drainage on Parcel 2; therefore, the presence of a dispersing frog in the drainage, though unlikely, cannot be completely ruled out. If present, construction of project improvements near riparian areas and adjacent uplands could impact this special-status species. Implementation of Mitigation Measure BIO-4, as modified below, would reduce potential impact to a less-than-significant level.

> **Mitigation Measure BIO-4.** For any development near on-site riparian areas, ~~the project Applicant~~ a qualified biologist shall conduct pre-construction surveys for CRLF species within 24 hours of initial ground disturbance. If individuals are found, work shall not begin until they are moved out of the construction zone to a U.S. Fish and Wildlife Service/California Department of Fish and Wildlife approved relocation site. ~~The survey shall be completed no more than 30 days prior to work within 200 feet of potential wetland/wet areas on the site.~~ If no species are found, no mitigation shall be required.
>
> If CRLF are found on the project site then the project Applicant shall provide information to support Section 7 consultation with the U.S. Fish & Wildlife Service (USFWS) and the project Applicant shall ensure no net loss of habitat that shall be achieved through avoidance, preservation, creation and/or purchase of credits. The final selected measures may be part of the Section 7 permitting process.
>
> The project Applicant shall obtain a biological opinion from the USFWS and comply with the conditions and mitigation requirements under the opinion to ensure that no net loss of habitat occurs. Mitigation may include, but would not be limited to on-site and off-site preservation and creation of CRLF habitat, purchase of credits at mitigation banks, payment of in-lieu fees approved by the agencies, or other agency approved and required mitigation measures.
>
> Avoidance measures may include the following or equivalent protective measures:
>
> a. To minimize disturbance of breeding and dispersing CRLF construction activity within CRLF upland habitat shall be conducted during the dry season between April 15 and October 15 or before the onset of the rainy season, whichever occurs first. If construction activities are necessary in CRLF upland habitat between October 15 and April 15, the project Applicant would contact the USFWS for approval to extend the work period.
>
> b. To minimize disturbance and mortality of adult and juvenile CRLF in aquatic habitat and underground burrows, the project Applicants should minimize the extent of ground-disturbing activities within these habitats by requiring the contractor to limit

the work area to the minimum necessary for construction. In addition, the project Applicant should ensure that the contractor installs temporary exclusion fence between the construction work area and potential aquatic habitat for all construction within grasslands near aquatic habitat. The fence shall be at least three feet high, buried six inches underground, and have one-way exit funnels. The exclusion fence shall be made of an opaque material that California red-legged frogs cannot see through, to prevent frogs from trying to push through the fencing. Wooden cover board shall be placed every 50 feet along the outside edge of the fence to give California red-legged frogs a place to shelter until they can find their way around the work area without desiccating or being preyed upon. The integrity of the exclusion fencing shall be inspected daily, and any needed repairs shall be made immediately. A minimum buffer zone of 150 feet shall be maintained around CRLF aquatic habitat during construction. No staging, parking, material storage or ground disturbance shall be allowed in the buffer zone. The buffer zone will be clearly defined with construction fencing prior to the initiation of construction activities and shall be maintained until completion of construction.

c. The project Applicant should ensure that a qualified wildlife biologist monitors all construction activities within CRLF upland habitat to ensure no take of individual CRLF occurs during project construction. If a CRLF is found, then the monitor would immediately stop construction in that area and contact USFWS for development of a plan for how to proceed with construction.

d. No work shall occur at night.

e. For on-site storage of pipes, conduits, and other materials that could provide shelter for California red-legged frogs, an open-top trailer shall be used to elevate the materials above ground (unless the materials are inside the wildlife exclusion fencing). This is intended to reduce the potential for animals to climb into the conduits and other materials.

f. The wildlife exclusion fencing shall be removed within 72 hours of completion of work.

g. A qualified biologist shall be present during initial ground-disturbing activities.

h. No monofilament plastic shall be used for erosion control.

i. Any open trenches shall be provided with an escape ramp(s), such as a board that allows trapped frogs or other small animals to exit the trenches. Construction personnel shall inspect any open trenches in the morning before work begins for trapped amphibians.

j. A qualified biologist possessing a valid federal Endangered Species Act Section 10(a)(1)(A) permit or approved by the U.S. Fish and Wildlife Service under an active biological opinion shall be contracted to relocate amphibians to nearby suitable habitat if amphibians are found inside fenced areas.

k. Work shall stop at least an hour prior to a predicted rain event of 0.1 inch or greater and then shall not begin until at least 24 hours after the rain event. Work could continue within the wildlife exclusion fencing within 24 hours of the rain event if a qualified biologist has performed a clearance survey. However, no work or mobilization of vehicles or equipment outside of the wildlife exclusion fencing shall occur within 24 hours of the rain event.

With implementation of Mitigation Measure BIO-4, as modified above, no new impacts or substantially more severe impacts to special-status wildlife species would occur. No additional analysis is required.

(b) Substantial adverse effect on any riparian habitat or other natural community

No New Impact. As described above, a small area of riparian woodland is located along a drainage near the northwestern corner of Parcel 2. Riparian woodland is considered a sensitive natural community. As described above, a review of the ephemeral drainage channel located in the northwest corner of Parcel 2 was conducted to establish the approximate top of bank of the drainage and provide a recommended minimum setback to avoid any impacts to the channel. As shown on the project plans and consistent with the recommendations included in the drainage review prepared by Jane Valerius, a setback would be established and no development would occur within the established setback. Therefore, no new impacts or substantially more severe significant impacts related to riparian habitat would occur. No additional analysis is required.

(c) Substantial adverse effect on wetlands

No New Impact. As described above, the drainage located along the western edge of Parcel 2 is a potential wetland under the jurisdiction of the Clean Water Act. As described above, as shown on the project plans and consistent with the established setback recommended by Jane Valerius, this wetland feature would be avoided by the proposed development, including a proposed wetland setback around the drainage area. No other state or federally protected wetlands were identified on the project site during field survey conducted in 2021. Therefore, no new impacts or substantially more severe significant impacts related to wetlands would occur. No additional analysis is required.

(d) Interfere or impede the movement of migratory fish or wildlife

No New Impact. During the field survey, no nursery sites such as heron rookeries or raptor nests were observed in any of the large trees that are on or near the project site. No structures

or large hollow trees are present on the project parcels that could support bat maternity roosts. The short drainage on Parcel 2 does not form a connection with any areas of natural habitat because it runs into a culvert, and Dublin Boulevard and I-580 form a major barrier to wildlife movement to the south.

Vegetation on or adjacent to the parcels could provide nesting habitat for some species of native birds (e.g., northern mockingbird and house finch) protected under the federal Migratory Bird Treaty Act and the California Fish and Game Code. If the project requires removal and/or trimming of trees and/or shrubs during the nesting bird season (February 15 to August 31), impacts to the active nests of protected bird species could occur. Implementation of Mitigation Measure BIO-1, identified in the 2018 Supplemental IS/MND would reduce the potential project impacts to protected nesting birds to a less-than-significant level. With implementation of Mitigation Measure BIO-1, no new or substantially more severe impacts related to wildlife movement would occur than have been analyzed in the prior environmental documents. No additional analysis is required.

(e) Conflict with local policies or ordinance include tree preservation

No New Impact. The project would not conflict with any local policies or ordinances protecting biological resources. No trees are located within or adjacent to the areas proposed for development; therefore, the project would not conflict with the City's Tree Preservation Ordinance. No new impacts or substantially more severe significant impacts would occur. No additional analysis is required.

(f) Conflict with adopted habitat conservation or natural community conservation plans

No New Impact. The project site is located in Conservation Zone 1 of the East Alameda County Conservation Strategy (EACCS). The City of Dublin utilizes the EACCS as guidance for environmental permitting for public projects, and private development projects are encouraged to use the EACCS as a resource. However, the EACCS is neither a Habitat Conservation Plan nor a Natural Community Conservation Plan, but is a document intended to provide guidance during the project planning and permitting process to ensure that impacts are offset in a biologically effective manner. With implementation of the mitigation measures identified above, the project would be consistent with the EACCS. Therefore, the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Plan, or other approved local, regional, or State habitat conservation plan. No new impacts or substantially more severe significant impacts would occur. No additional analysis is required.

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Cultural Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
5. CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines section 15064.5?				X
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?				X
c. Disturb any human remains, including those interred outside of dedicated cemeteries?				X

Environmental Setting

Section 4.4 of the VCC EIR analyzed impacts to cultural resources associated with implementation of the VCC expansion project. As described in the VCC EIR, the project site is located on moderate slopes adjacent to Dublin Creek. According to the cultural resources study conducted for the VCC EIR, a Native American archaeological site was recorded south of the project site. Given the environmental setting of and the archaeological sensitive nature of the project area, there is a moderate potential for finding Native American sites in the project area.

Based on a review of historical literature and maps on file with the Northwest Information Center conducted for the VCC EIR, no historic structures or sites were identified on the project site.

Regulatory Framework

Federal and State Regulations

National Register of Historic Places

The National Register lists the historic significance and the eligibility for qualifying for such significance for a building, structure, or other site. Significance eligibility is determined based on the quality and integrity of the resource and its association to American history, architecture, and culture. The resources must also possess one or more of the following characteristics:

1. It is associated with events that have made a significant contribution to the broad pattern of our history; or

2. It is associated with the lives of persons significant to our past; or

3. It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

4. It yields, or may be likely to yield, information important in prehistory or history.

California Register of Historical Resources California Register

The California Register operates similarly to the National Register with almost the same structure for determining significance eligibility for potential historical resources. Generally, a resource is eligible for historical status under California Register if it is greater than 50 years old as well as meets one or more of the following criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

2. It is associated with the lives of persons important to local, California, or national history.

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or important creative individual, or possesses high artistic values.

California Historical LandmarksCalifornia Historical Landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. To be eligible for designation as a California Historic Landmark, a resource must meet at least one of the following criteria:

1. The first, last, only, or most significant of its type in the State or within a large geographic region (Northern, Central, or Southern California).

2. Associated with an individual or group having a profound influence on the history of California.

3. A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

California Environmental Quality ActHistorical resources are recognized as part of the environment under CEQA. The California Register is the authoritative guide to the state's historical resources and to which properties are considered significant for the purposes of CEQA, including resources listed in or formally determined eligible for listing in the National Register of Historic Places, as well as some, California State Landmarks and Points of Historical Interest. Properties of local significance that have been designed under a local preservation ordinance (local landmarks or landmark district) or that have been identified in a local historical resources inventory may be eligible for listing in the California Register and are presumed to be significant resources for the purposes of CEQA unless a preponderance of evidence indicates otherwise. However, a resources does not need to have been identified previously either through listing or survey to be considered significant under CEQA. In addition to assessing whether historical resources potentially impacted by a project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the California Register criteria prior to making a finding as to a proposed project's impacts to historical resources.

Public Resources Code Section 5097.5California PRC Section 5097.5(a) mandates that one cannot, "knowingly and willfully" excavate, remove, or destroy any "historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site," or "any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands." PRC Section 5097.5(b) defines public lands as those that are owned by or under the jurisdiction of any state or public authority or agency.

Local Regulations

City of Dublin General Plan

The City of Dublin General Plan establishes the following guiding policy associated with cultural resources that is relevant to the proposed project:

> **Guiding Policy 7.7.1.A.2:** Follow State regulations as set forth in Public Resources Code Section 21083.2 regarding discovery of archaeological sites, and Historical Resources, as defined in Section 5020.1 of the Public Resources Code.

Previous CEQA Documents

VCC EIR The VCC EIR concluded that although no prehistoric or archaeologically significant resources were identified in the project area, construction of new buildings, underground utility lines and similar facilities could result in disturbance to archaeological and/or Native American

underground resources. No historic resources were identified on the project site; therefore, no impacts to historic resources would occur.

The VCC EIR identified one mitigation measure to reduce impacts related to archaeological and/or Native American resources from the VCC project:

> **Mitigation Measure 4.4-1 (archaeological and Native American resources):** If an archeological or Native American artifact is identified, work on the project shall cease immediately until a resource protection plan conforming to CEQA Guideline Section 15064.5 (e) is prepared by a qualified archeologist and approved by the Dublin Community Development Director. Project work may be resumed in compliance with such plan. If human remains are encountered, the County Coroner shall be contacted immediately.

2018 Supplemental IS/MND No new or more significant impacts related to cultural resources were identified in the 2018 Supplemental IS/MND.

Project Impacts and Mitigation Measures

(a) Historic resources

No New Impact. For a cultural resource to be considered a historical resource (i.e., eligible for listing in the California Register of Historical Resources), it generally must be 50 years or older. Under CEQA, historical resources can include precontact (i.e., Native American) archaeological deposits, historic-period archaeological deposits, historic buildings, and historic districts. CEQA requires agencies considering projects that are subject to discretionary action to consider the potential impacts on cultural resources that may occur from project implementation (see CEQA Guidelines Section 15064.5).

Parcels 2 and 3, which are proposed for development, are currently undeveloped; therefore, no built historic resources are located on the project site. As described in the prior environmental documents, it cannot be entirely be ruled out that archaeological cultural resources could be encountered during construction at the project site. Should archaeological deposits be encountered during project ground disturbance, a substantial adverse change in the significance of a historical resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired (CEQA Guidelines Section 15064.5(b)(1)). If such resources are encountered, implementation of Mitigation Measure 4.4-1, identified in the VCC EIR would reduce any potential impacts to archaeological and/or Native American resources to a less-than-significant level. With adherence to Mitigation Measure 4.4-1, there would be no new or substantially more severe significant impacts to historic resources beyond what has been analyzed in the prior environmental documents. No additional analysis is required.

(b) Archaeological resources

No New Impact. Pursuant to CEQA Guidelines Section 15064.5(c)(1), "When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource." Those archaeological sites that do not qualify as historical resources shall be assessed to determine if they qualify as "unique archaeological resources" pursuant to California Public Resource Code Section 21083.2.

Although no archaeological resources have been identified at the project site, it cannot be entirely be ruled out that archaeological cultural resources could be encountered during project construction at the project site. Should archaeological deposits be encountered during project ground disturbance, a substantial adverse change in the significance of a historical resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired (CEQA Guidelines Section 15064.5(b)(1)). If such resources are encountered, implementation of Mitigation Measure 4.4-1 from the VCC EIR would reduce any potential impacts to archaeological and/or Native American resources to a less-than-significant level.

With adherence to previous Mitigation Measure 4.4-1, no new or substantially more severe significant impacts to archaeological resources would occur beyond what has been analyzed in the prior environmental documents. No additional analysis is required.

(c) Human remains

No New Impact. Based on previous archaeological investigation and analysis, there is a low potential for the disturbance of archaeological cultural resources or human remains. However, if human remains are encountered at the project areas, State Health and Safety Code Section 7050.5 and State CEQA Guidelines Section 15064.5(e)(1) state that no further disturbance shall occur to the area of the find until the County Coroner has made a determination of origin and disposition of the human bone pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately and shall make a determination within two working days of being notified. If the remains are determined to be Native American, the County Coroner shall notify the NAHC by phone within 24 hours, and the NAHC shall then immediately determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment of the remains within 48 hours of being granted access to the site. The MLD's recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

Compliance with Section 7050.5 of the California Health and Safety Code and Public Resources Code Section 5097.98 regarding the treatment of human remains would ensure that potential

impacts to human remains would be less than significant. No new or substantially more severe significant impacts to human remains would occur beyond what has been analyzed in the prior environmental documents. No additional analysis is required.

Source(s)

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City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

Energy

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
13. 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?				X
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

Environmental Setting

Electricity

Electricity is a man-made resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, or nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, and refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).[5] According to the most recent data available, in 2019, California consumed approximately 279,401 gigawatt-hours (GWh) or 279,401,879,875 kilowatt-hours (kWh).[6] Of this total, Alameda County consumed 10,684 GWh or 10,684,085,867 kWh.[7]

Natural Gas

Natural gas is a non-renewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over many years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills). In 2019, California consumed approximately

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5 *California Energy Commission. 2018. 2018 Total System Electric Generation. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2019-total-system-electric-generation/2018 (accessed March 2021).*

6 *California Energy Commission. 2021. Energy Consumption Data Management Service. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed March 2021).*

7 *Ibid.*

13,158 million therms or 13,158,207,489 therms, while Alameda County consumed approximately 384 million therms or approximately 384,150,529 therms.

Fuel

Petroleum is also a non-renewable fossil fuel. Petroleum is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the earth's surface. Petroleum is primarily recovered by oil drilling. It is refined into a large number of consumer products, primarily fuel oil and gasoline. Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. Based on fuel consumption obtained from EMFAC2017, vehicle trips in Alameda County in 2020 consumed 160,542,514 gallons of diesel fuel and 559,515,714 gallons of gasoline.

Regulatory Framework

Federal and State Regulations

Senate Bill 1389, Energy: Planning and Forecasting

In 2002, the State Legislature passed Senate Bill (SB) 1389, which required the CEC to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access.

In compliance with the requirements of SB 1389, the CEC adopts an *Integrated Energy Policy Report* every two years and an update every other year. The CEC approved the *2019 Integrated Energy Policy Report* in February 2020. The *2019 Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast.

Renewable Portfolio Standard

SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April

2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all State's electricity to come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.

California Energy Efficiency Strategic Plan

On September 18, 2008, the CPUC adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- 50 percent of commercial buildings will be retrofit to ZNE by 2030.
- 50 percent of new major renovations of State buildings will be ZNE by 2025.

Previous CEQA Documents

The VCC EIR found that the VCC would indirectly result in irretrievable commitment and use of energy and non-renewable resources for construction and operation of future residential and non-residential uses. However, the VCC EIR determined that the level and amount of commitment of such resources is commensurate with similar development projects undertaken in the Bay Area and throughout California and the nation.

Project Impacts and Mitigation Measures

(a) Wasteful consumption of energy resources

Similar to the VCC project, the proposed project would increase the demand for electricity, natural gas, and gasoline. The discussion and analysis provided below is based on data included in the CalEEMod output, which is included in Appendix B.

Construction-Period Energy Use. The anticipated construction schedule assumes that the proposed project would be built over 20 months. The proposed project would require grading, site preparation, and building activities during construction.

Construction of the proposed project would require energy for the manufacture and transportation of construction materials, preparation of the site for grading activities, and construction of the proposed facilities. Petroleum fuels (e.g., diesel and gasoline) would be the

primary sources of energy for these activities. In order to increase energy efficiency on the site during project construction, the project would restrict equipment idling times to five minutes or less and would require construction workers to shut off idle equipment, as required by Mitigation Measure AIR-1. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be less than significant. The proposed project would not result in any new or more severe impacts compared to those previously identified in the VCC EIR, and no new mitigation would be required.

Operational Energy Use. Energy use consumed by the proposed project would be associated primarily with electricity consumption and fuel used for vehicle trips associated with the project. With adoption of the new Construction All Electric Reach Code, installation of natural gas infrastructure in new construction will be restricted. However, to be conservative, it is assumed that natural gas could be used during project operation.

Energy and natural gas consumption was estimated for the project using default energy intensities by building type in CalEEMod. In addition, the proposed buildings would be constructed to CALGreen standards, which was included in CalEEMod inputs. Electricity and natural gas usage estimates associated with the proposed project are shown in Table H. In addition, the proposed project would result in energy usage associated with gasoline to fuel project-related trips. Based on the CalEEMod analysis, the proposed project would result in approximately 745,637 vehicle miles traveled (VMT) per year. The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.0 mpg in 2015. Therefore, using the USEPA fuel economy estimates for 2015, the proposed project would result in the consumption of approximately 33,893 gallons of gasoline per year. Table H, below, shows the estimated potential increased electricity and natural gas demand associated with the proposed project.

Table H: Estimated Annual Energy Use of Proposed Project

Electricity Use (kWh per year)	Natural Gas Use (therms per year)	Gasoline (gallons per year)
568,642	9,724	33,893

Source: LSA (March 2021).

As shown in Table H, the estimated potential increased electricity demand associated with the proposed project is 568,642 kWh per year. As identified above, in 2019, Alameda County

consumed 10,684,085,867 kWh; therefore, electricity demand associated with the proposed project would be less than 0.1 percent of Alameda County's total electricity demand.

The estimated potential increased natural gas demand associated with the proposed project is 9,724 therms per year, as shown in Table H. In 2019, Alameda County consumed approximately 384,150,529 therms; therefore, natural gas demand associated with the proposed project would be less than 0.1 percent of Alameda County's total natural gas demand.

In addition, the proposed project would result in energy usage associated with gasoline to fuel project-related trips. As shown above in Table H, vehicle trips associated with the proposed project would consume approximately 33,893 gallons of gasoline per year. In 2015, vehicles in California consumed approximately 15.1 billion gallons of gasoline. Therefore, gasoline demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California.

East Bay Community Energy (EBCE) would supply the proposed project's electricity, which is delivered by PG&E. The basic EBCE plan, Bright Choice, provides 40 percent of delivered electricity from renewable sources, including wind, solar, and hydropower. EBCE also provides a Renewable 100 plan, which provides 100 percent of delivered electricity from renewable sources, including wind and solar. Natural gas, if used, would be supplied and provided by PG&E. EBCE and PG&E will continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand. In addition, the proposed project would be constructed to CALGreen standards, which would help to reduce energy and natural gas consumption.

Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy. Construction and operation period impacts related to consumption of energy resources would be less than significant. The proposed project would not result in any new or more severe impacts compared to those previously identified in the VCC EIR, and no new mitigation would be required.

(b) Conflict with local plan for renewable energy

As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC's 2019 Integrated Energy Policy Report. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and this impact would be less than significant. The proposed project would not result

in any new or more severe impacts compared to those previously identified in the VCC EIR, and no new mitigation would be required.

Source(s)

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Geology and Soils

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
6. 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?				X
ii. Strong seismic ground shaking?				X
iii. Seismic-related ground failure, including liquefaction?				X
iv. Landslides?				X
b. Result in substantial soil erosion or the loss of topsoil?				X
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d. 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?				X
e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

Environmental Setting

The project site is located within the Coast Ranges geomorphic province, generally characterized by northwest-southeast trending valleys and ridges. Bedrock in the vicinity consists of Miocene- to Pliocene-age marine and non-marine sedimentary rocks. The project site is primarily underlain by Miocene-age sedimentary bedrock, which has been cut to develop the building pads and parking area for the VCC, and by areas of thick fill, including portions of the driveway and play fields. Thick fill occupies the northeast, east, and south portions of the project site, as well as the large drainage swale at the west central portion of the project site.

Subsurface investigations of the site typically encountered up to four feet of colluvium overlying the bedrock on steeper slopes, with as much as 14 feet of colluvium observed on the southeast comer of the site. Colluvium generally thickens in drainage swale areas and predominantly consist of dark brown to dark gray silty clay and sandy clay, with low to high plasticity and moderate to high expansion potential. Previous mass grading of the site resulted in removal of colluvium in cut areas; however, remnants of colluvium may still exist, particularly beneath fill at former drainage swales.

The project site is located approximately 26 miles northeast of the San Andreas fault, approximately seven miles northeast of the Hayward fault, approximately 0.7 mile southwest of the Calaveras fault, and approximately 42 miles southeast of the Rodgers Creek fault. The Dublin fault is located within 700 feet of the western property boundary; however, according to the Geotechnical Feasibility Study prepared for the VCC expansion project, it is unlikely that the Dublin fault would be capable of an earthquake exceeding magnitude 5-5.5. The project site is not located within a State-designated Alquist-Priolo Earthquake Fault Zone.

The Geotechnical Feasibility Study also noted that portions of the project site exhibited characteristics of a large landslide. Grading was performed to mitigate the landslide during grading for adjacent residential development and Inspiration Drive, as well as existing improvements associated with the VCC. However, the extent of landslide mitigation has not been confirmed. Two small, shallow landslides were identified in the southwest portion of the project site.

Regulatory Framework

Federal and State Regulations

Alquist-Priolo Earthquake Fault Zoning Act Following the 1971 San Fernando earthquake, the State legislature passed the Alquist-Priolo Earthquake Fault Zoning (AP) Act, requiring the State Geologist to delineate Earthquake Fault Zones (EFZ) along known active faults that have high potential for fault rupture. Active faults are defined as a fault that has surface displacement within the last 11,000 years. The AP Act also regulates developments near known active faults due to hazards associated with surface ruptures. As per the AP Act, development areas in or near the Alquist-Priolo Earthquake Fault Zone require evaluation for potential surface ruptures in order to ensure public safety. State regulations prohibit habitable structures from being sited within 50 feet of an active fault.

Seismic Hazards Mapping Act

The State legislature passed the Seismic Hazards Mapping Act (SHMA) to ensure public safety in regards to the effects of strong ground shaking, liquefaction, landslides, and other seismic hazards. Per the SHMA, the California Geological Survey (CGS) has established a Statewide mapping program for cities and counties to aid in identifying areas subject to these seismic hazards, which includes the central San Francisco Bay Area.

California Building Code

The State of California provides a minimum standard for building design and construction standards through Title 24 of the California Code of Regulations (CCR), known as the California Building Code (CBC). The CBC is updated every three years, and the current 2019 CBC went into effect in January 2020. Generally, the CBC is adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. The CBC defines the requirements for seismic safety, excavation, and construction activities relating to foundations, retaining walls, and site demolition. It also regulates grading activities such as drainage and erosion control.

California Public Resources Code Section 5097.5

Section 5097.5 of the California Public Resources Code prohibits the excavation, removal, destruction, or tampering with any paleontological resources situated on public lands, except with the express permission of a public agency with jurisdiction over the lands.

Local Regulations

City of Dublin General Plan

Chapter 8.0 of the General Plan outlines policies and programs related to seismic safety, safety and emergency preparedness. The following policies related to geology and soils are applicable to the proposed project:

Guiding Policy 8.2.1.A.1. Geologic hazards shall be mitigated or development shall be located away from geologic hazards in order to preserve life, protect property, and reasonably limit the financial risks to the City of Dublin and other public agencies that would result from damage to poorly located public facilities.

Implementing Policy 8.2.1.B.1. Structural and Grading Requirements

a. All structures shall be designed to the standards delineated in the Dublin Building Code and Dublin's Grading Ordinance. A "design earthquake" shall be established by an engineering geologist for each structure for which ground shaking is a significant design factor.

b. Structures intended for human occupancy shall be at least 50 feet from any active fault trace; freestanding garages and storage structures may be as close as 25 feet. These distances may be reduced based on adequate exploration to accurately locate the fault trace.

Generally, facilities should not be built astride potential rupture zones, although certain low-risk facilities may be considered. Critical facilities that must cross a fault, such as oil, gas, and water lines, shall be designed to accommodate the maximum expected offset from fault rupture. Site specific evaluations shall determine the maximum credible offset.

Previous CEQA Documents

VCC EIR The VCC EIR determined that implementation of the VCC expansion project could result in potentially significant impacts related to seismic ground shaking, landslide, and expansive soils. Other impacts were determined to be less than significant. The VCC EIR identified one mitigation measure to reduce impacts related to geology and soils:

Mitigation Measure 4.5-1 (seismic hazard, expansive soils and landslides): A site-specific geotechnical investigation shall be required for each building constructed as part of the proposed expansion by a California-registered geologist or California registered engineering geologist. The report(s) shall address the potential for extension of the Dublin fault on the site, expansive soils and the potential for future landslides on the site. Specific measures to reduce seismic hazards, expansive soils and landslide hazards to a less-than-significant level shall be included in the report(s).

2018 Supplemental IS/MND No new or more significant impacts related to geology and soils were identified in the 2018 Supplemental IS/MND.

Project Impacts and Mitigation Measures

(a) Seismic hazards

No New Impact. Potential impacts related to seismic hazards are described below.

Fault Rupture. The project site is not located within or adjacent to an Alquist-Priolo Earthquake Fault Zone. Therefore, the project would have no impact related to fault rupture.

Ground Shaking. The project site and the entire San Francisco Bay Area are located in a seismically active region subject to strong seismic ground shaking. Ground shaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake, and is normally the major cause of damage in seismic events. The extent of ground-shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. The magnitude of a seismic event is a measure of the energy released by an earthquake; it is assessed by seismographs that measure the amplitude of seismic waves. The intensity of an earthquake is a subjective measure of the perceptible effects of a seismic event at a given point. The Modified Mercalli Intensity (MMI) scale is the most commonly used scale to measure the subjective effects of earthquake intensity. It uses values ranging from I to XII.

Mapping has been compiled by the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) for the likely shaking intensities in the Bay Area that would have a 10 percent chance of occurring in any 50-year period. A large earthquake (magnitude 6.7 or greater) on one of the major active faults in the region would generate severe (MMI 8) ground shaking at the project site.

The most significant adverse impact associated with strong seismic shaking is potential damage to structures and improvements. The risk of ground shaking impacts is reduced through adherence to the design and materials standards set forth in building codes. The City of Dublin has adopted the 2019 CBC (Title 24, Part 2 of the California Code of Regulations), which provides for stringent construction requirements on projects in areas of high seismic risk. The design and construction for the proposed project would be required to conform with, or exceed, current best standards for earthquake resistant construction in accordance with the most recent CBC adopted by the City and with the generally accepted standards of geotechnical practice for seismic design in Northern California. In addition, implementation of Mitigation Measure 4.5-1, identified in the VCC EIR, which requires the preparation and implementation of a site-specific geotechnical investigation for each building constructed at the project site, would ensure this impact would be reduced to a less than significant level. With adherence to Mitigation Measure 4.5-1, identified in the VCC EIR, there would be no new or substantially

more severe significant impacts related to ground shaking beyond what has been analyzed in the prior environmental documents. No additional analysis is required.

Liquefaction. Liquefaction is the transformation of loose, fine-grained sediment to a fluid-like state similar to quicksand. This phenomenon occurs due to strong seismic activity, and lessens the soil's ability to support a structural foundation. The primary factors affecting the possibility of liquefaction in soil are: (1) intensity and duration of earthquake shaking; (2) soil type and relative density; (3) overburden pressures; and (4) depth to groundwater. Soil most susceptible to liquefaction is clean, loose, fine-grained sands and non-plastic silts that are saturated.

The California Geological Survey (CGS) has mapped Seismic Hazard Zones that delineate areas susceptible to liquefaction and/or landslides that require proposed new developments in these areas to conduct additional investigation to determine the extent and magnitude of potential ground failure. According to mapping by CGS, the project site is not located in an area mapped as a liquefaction hazard zone. Therefore, impacts related to liquefaction would be less than significant.

Landslide. As described above, the project site contains known landslides and areas of the project site are steeply sloped. Implementation of Mitigation Measure 4.5-1, identified in the VCC EIR, which requires the preparation and implementation of a site-specific geotechnical investigation for each building constructed at the project site, would ensure impacts related to landslide would be reduced to a less than significant level. With adherence to Mitigation Measure 4.5-1, identified in the VCC EIR, there would be no new or substantially more severe significant impacts related to landslide beyond what has been analyzed in the prior environmental documents. No additional analysis is required.

(b) Erosion/topsoil loss

No New Impact. The potential for soil erosion exists during the period of earthwork activities and between the time when earthwork is completed and new vegetation is established or hardscape is installed. Exposed soils could be entrained in stormwater runoff and transported off the project site. Construction specifications require the preparation of a Stormwater Pollution and Prevention Plan (SWPPP) prior to any ground disturbance activities as required by the National Pollutant Discharge Elimination System (NPDES) General Permit (GP) for Construction (Order 2009-009-DWQ). The SWPPP would provide the details of the erosion control measures to be applied on the project site during the construction period, including Best Management Practices (BMPs) for erosion control that are recognized by the RWQCB. Additional details regarding the SWPPP are provided in Section 9, Hydrology and Water Quality. In addition, the proposed project would be required to comply with Mitigation Measures 4.6-1 and 4.6-2, identified in the VCC EIR and described in Section 9 below, to reduce short- and long-term erosion and sedimentation associated with project construction and operation.

With adherence to the mitigation measures identified in the prior environmental documents and compliance with regulatory requirements, there would be no new or substantially more severe significant impacts related to erosion beyond what has been analyzed in the prior environmental documents. No additional analysis is required.

(c-d) Soil stability

No New Impact. Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume. Soils underlying the project site are primarily composed of Diablo clay, 15 to 30 percent slopes, according to the United States Department of Agriculture (USDA) Natural Resources Conservation Service Web Soil Survey. Diablo clay is a deep, well drained soil type, with high shrink-swell potential.

The proposed project would be designed and constructed consistent with the most current earthquake resistance standards for Seismic Zone 4 in the CBC, which includes specifications for site preparation, such as compaction requirements for foundations. Therefore, the project site is not anticipated to become unstable as a result of the proposed project, or potentially result in on- or off-site landslides, liquefaction, lateral spreading or settlement. In addition, implementation of Mitigation Measure 4.5-1 identified in the VCC EIR and described above would reduce potential impacts associated with unstable soils to a less-than-significant level. With adherence to the mitigation measures identified in the VCC EIR and compliance with standard City development requirements, there would be no new or substantially more severe significant impacts related to soil stability beyond what has been analyzed in the prior environmental documents. No additional analysis is required.

(e) Soil capability to support waste water disposal, including septic

No New Impact. The proposed project would connect to the existing wastewater conveyance system. On-site treatment and disposal of wastewater is not proposed for the project; therefore, the proposed project would have no impacts associated with soils incapable of supporting alternative wastewater disposal systems. No new impacts or substantially more severe significant impacts would occur. No additional analysis is required.

(f) Paleontological/unique geological resources

No New Impact. No paleontological resources or unique geologic features are known to exist within the project site and ground disturbance for the proposed project is not expected to extend deep enough to affect native soils or to impact scientifically important paleontological resources. If such resources are encountered during ground-disturbing activities, implementation of Mitigation Measure 4.4-1, identified in the VCC EIR would reduce any potential impacts to paleontological resources to a less-than-significant level. With adherence to Mitigation Measure 4.4-1, there would be no new or substantially more severe significant

impacts to paleontological resources beyond what has been analyzed in the prior environmental documents. No additional analysis is required.

Source(s)

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Greenhouse Gas Emissions

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

Project Impacts and Mitigation Measures

Since the VCC EIR was certified before greenhouse gas (GHG) emission analysis became a CEQA requirement in 2006, the determination of whether GHG emissions and climate change need to be analyzed for this proposed project is governed by the law on supplemental or subsequent EIRs (Public Resources Code Section 21166 and CEQA Guidelines Sections 15162 and 15163).

The topic of the project's contribution to GHG emissions was not analyzed in the VCC EIR. However, these impacts are not required to be analyzed unless they constitute new information of substantial importance that was not known and could not have been known at the time the previous EIR was certified as complete (Public Resources Code Section 21166 and the CEQA Guidelines Sections 15162 and 15163). The impact of GHG emissions was known at the time of the certification of the VCC EIR. Under CEQA standards, it is not new information that requires analysis in a supplemental EIR or negative declaration. Therefore, no supplemental environmental analysis of the project's impacts on this issue is required under CEQA.

(a-b) Generate greenhouse gas (GHG) emissions or conflict with GHG plans or regulations

As discussed above, no additional environmental analysis is required under Public Resources Code Section 21166.

Hazards and Hazardous Materials

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
8. 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?				X
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?				X
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

Environmental Setting

The project site includes development of Parcels 2 and 3 within the larger VCC site. Both Parcels 2 and 3 are currently undeveloped. Parcel 1 is developed with the existing VCC complex, which consists of a church and a pre-school through grade 12 private school, with associated parking, landscaping, sports and play fields, lighting and other infrastructure. Further north of the VCC complex and portions of Parcel 3 is a single-family residential neighborhood with two-story homes. Parcel 3 is bordered to the east by a single-family residential neighborhood with one- and two-story homes. Further east are residential uses and commercial development along Dublin Boulevard. To the south of both parcels is I-580, across which are residential uses and

two churches, Pleasant View Church of Christ and Kingdom Hall of Jehovah's Witnesses. Parcel 2 is bound to the west by multi-family residential development and undeveloped open space.

Regulatory Framework

Federal and State Regulations

Federal Aviation Administration (FAA)

Notification to the FAA is required for the construction of any tower or the alteration of an antenna structure that is registered with the Commission's Antenna Structure Registration (ASR) system. Generally, towers that meet certain height and location requirements (e.g., are more than 200 feet above ground level and/or are located within proximity of an airport) require notice with the FAA and ASR system and must register with the Federal Communications Commission (FCC). A final determination of "no hazard" is required from the FAA prior to any construction or alteration of facilities.California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) was formed in 1991 to preserve and protect the environment and to ensure public health and safety in relation to environmental laws and regulations. The CalEPA manages the State's natural resources in a cohesive, cabinet-based system. Additionally, the CalEPA implements the Unified Program, which ensures consistency in the administrative and enforcement actions taken in regard to hazardous waste and materials.Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 authorized the USEPA to control hazardous waste from "cradle-to-grave," which includes the generation, transportation, treatment, storage, and disposal of hazardous waste. Additionally, RCRA established regulations for managing non-hazardous solid wastes. In 1986, amendments to RCRA provided authority to the USEPA to manage environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Comprehensive Environmental Response, Compensation, and Liability Act

Commonly known as Superfund, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 established regulations concerning closed and abandoned hazardous waste sites. Additionally, it provided regulations regarding liability for closed and abandoned hazardous waste sites and established a trust fund for cleanup when no liability is found.

California Department of Toxic Substances and Control

The California Department of Toxic Substances Control (DTSC) is a sub-department under the CalEPA and manages the federal hazardous waste program within the State. The department regulates the lifecycle of hazardous waste and sets goals for reducing hazardous waste

production. The program follows federal and State law to ensure hazardous waste managers correctly handle, store, transport, dispose, reduce, and clean waste, and are equipped in the event of an emergency.

Government Code Section 65962.5

CalEPA is required by Section 65962.5 of the Government Code to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The SWRCB and DTSC identify hazardous substance release sites included on the Cortese List, which is used by State and local agencies to ensure CEQA compliance.

California Building Code

The State of California provides a minimum standard for building design construction through Title 24 of the California Code of Regulations (CCR) through the CBC, which is located in Part 2 of Title 24. The CBC is updated every three years, and the current 2019 CBC went into effect in January 2020. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. City building officials monitor commercial and residential building plans to ensure compliance with fire safety standards within the CBC.

California Fire Code

The California Fire Code includes regulations for emergency planning, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Several fire safety requirements include: installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas. Chapter 5.08 of the City's Municipal Code adopts the California Fire Code by reference, which is updated every three years.

California Emergency Management Agency

The California Emergency Management Agency (CalEMA) was consolidated as part of the Governor's Office on January 1, 2009, merging the former Governor's Office of Emergency Services with the existing Governor's Office of Homeland Security. CalEMA coordinates all State agency response to major disasters to provide support and hazard mitigation efforts for local governments. The agency also ensures the State has the appropriate resources and plans in order to respond in the event of all natural and human-induced emergencies and disasters.

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CALFIRE) maps the predicted threat of fire within all of California. CALFIRE categorizes this threat based on factors including fuel availability, topography, fire history, and climate. These threats are ranked on a threshold from no fire threat, moderate, high, and very high fire threat. The 2012 Strategic Fire Plan for

California was generated by CALFIRE to provide guidelines and objectives in order to account for associated fire impacts. The Strategic Plan was recently updated in January 2019.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond property boundaries. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. A Risk Management Plan (RMP) is required for such facilities. The intent of the RMP is to provide basic information that may be used by first responders in order to prevent or mitigate damage to the public health and safety and to the environment from a release or threatened release of a hazardous material, and to satisfy federal and state Community Right-to-Know laws. The Alameda County Department of Environmental Health reviews CalARP risk management plans as the Certified Unified Program Agency (CUPA).

Regional and Local Regulations

San Francisco Bay Regional Water Quality Control Board

The Porter-Cologne Water Quality Control Act established the State Water Resources Control Board (SWRCB) and nine regional water boards including the San Francisco Bay Regional Water Quality Control Board (RWQCB). The San Francisco Bay RWQCB oversees the regulation of waterways within the City of Dublin, and can order groundwater investigations and remediation actions in the event that either groundwater or State surface waters are susceptible to threat.

City of Dublin General Plan

Section 8.3.4 of the General Plan outlines policies and programs related to hazards and hazardous materials. The following policies related to hazardous materials are applicable to the proposed project:

> **Guiding Policy 8.3.4.1.A.1.** Maintain and enhance the ability to regulate the use, transport, and storage of hazardous materials and to quickly identify substances and take appropriate action during emergencies.
>
> **Guiding Policy 8.3.4.1.A.2.** Minimize the risk of exposure to hazardous materials from contaminated sites.
>
> **Implementing Policy 8.3.4.1.B.4**. Require site-specific hazardous materials studies for new development projects where there is a potential for the presence of hazardous materials from previous uses on the site. If hazardous materials are found, require the clean-up of sites to acceptable regulatory standards prior to development.

City of Dublin Wildfire Management Plan

In 1996, the City adopted the City of Dublin Wildfire Management Plan to reduce the risk of open land wildfire while protecting wildlife habitat and other open space values. The Wildfire Management Plan outline responsibilities for the maintenance of open space, funding source for open space maintenance, submittal requirements for review and approval, construction requirements for buildings adjacent to open space or other undeveloped land, emergency access to open space area, and vegetation standards.

Previous CEQA Documents

VCC EIR The VCC EIR did not evaluate hazards and hazardous materials as part of the environmental analysis.

2018 Supplemental IS/MND No significant impacts related to hazards and hazardous materials were identified in the 2018 Supplemental IS/MND.

Project Impacts and Mitigation Measures

(a) Exposure to hazardous materials

No New Impact. The proposed project would result in the construction of a memory care facility and an assisted living facility. These land uses typically do not involve transport, use, or disposal of significant quantities of hazardous materials. However, operation of the proposed project could involve the use, handling, and storage of small quantities of commercially-available hazardous materials associated with facilities operation and maintenance (e.g., paint, cleaning supplies, pesticides, and herbicides), as well as, biohazardous materials and medical wastes, including needle disposal bins for diabetic residents and pharmaceuticals. Needle disposal bins would be taken by staff to a nearby hospital for disposal on a scheduled basis. Hazardous materials stored and used at the site would be required to be managed in accordance with applicable local, State, and federal hazardous materials regulations that would reduce risks associated with leakage, explosions, fires, or the escape of harmful gases. Therefore, a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials would not occur and potential impacts related to operational use of hazardous materials would be less than significant.

During project construction, hazardous materials such as fuel, lubricants, paint, sealants, and adhesives would be transported and used at the project site. The proposed project would be required to comply with federal, State, and local regulations regarding the transportation, use, and disposal of hazardous materials, including preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that requires implementation of control measures for hazardous material storage and soil stockpiles, inspections, maintenance, and training, and containment of releases to prevent runoff into existing storm collection systems or waterways. Compliance with existing regulations and implementation of the SWPPP during construction

would ensure that potential impacts associated with hazardous material use, transport, and disposal are considered less than significant. Therefore, no new significant impacts would occur. No additional analysis is required.

(b) Upset/accident

No New Impact. The proposed project would not involve storage or use of hazardous materials (except for small quantities for routine maintenance and limited biohazardous materials and medical wastes as described above) or generation of significant hazardous wastes. As such, potential significant impacts related to a foreseeable upset would not be expected.

During construction, hazardous materials such as fuel, lubricants, paint, sealants, and adhesives would be transported and used at the project site. Management of these materials at the project site would be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. Compliance with the Construction General Permit would require preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) designed to reduce the risk of spills or leaks from the reaching the environment. The SWPPP would also include a Spill Response Plan to address minor spills of hazardous materials. Compliance with SWPPP requirements would ensure that potential significant hazards associated with routine transport, use, or disposal of hazardous materials during and after construction would be less than significant. No new significant impacts would occur. No additional analysis is required.

(c) Near school

No New Impact. As described above, the existing VCC facility on the project site includes a school. No other schools are located within 0.25 mile of the project site. As described in Sections 8.a and 8.b, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Operation of the proposed project could involve the use, handling, and storage of small quantities of commercially-available hazardous materials associated with facilities operation and maintenance (e.g., paint, cleaning supplies, pesticides, and herbicides), as well as biohazardous materials and medical wastes, including needle disposal bins for diabetic residents and pharmaceuticals. However, these materials would be required to be managed in accordance with applicable local, State, and federal hazardous materials regulations. Therefore, no new significant impacts would occur. No additional analysis is required.

(d) Hazardous materials list

No New Impact. Government Code Section 65962.5 states that the California Department of Toxic Substances shall compile and maintain annually a list of hazardous waste facilities subject to corrective action as part of the Health and Safety Code. This list is commonly referred to as the Cortese List. The project site is not located on the Regional Water Quality Control Board's Leaking Underground Tank Cleanup Site (LUST) or any other Cleanup Program Sites (formerly

known as spills, leaks, investigations, and cleanups or SLIC). These two components comprise the State Cortese List of known hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no significant impact related to being located on a list of hazardous materials site compiled pursuant to Government Code Section 65962.5 would occur. No additional analysis is required.

(e) Proximity to a public airport

No New Impact. The project site is not located within an airport land use plan, or within two miles of a public airport or public use airport. The closest airports to the project site are the Livermore Municipal Airport, located approximately seven miles east of the project site and the Hayward Executive Airport, located approximately 9.5 miles southwest. The proposed project would include development of a memory care facility and an assisted living facility. The proposed project would not be an incompatible land use, would not add structures of a height such that it would create a hazard or obstruction, and would not result in the addition of a characteristic that would create a hazard to air navigation. Therefore, the proposed project would not result in new significant impacts. No additional analysis is required.

(f) Impair implementation of an emergency response plan or emergency evacuation plan

No New Impact. The Tri-Valley Local Hazard Mitigation Plan was developed in compliance with State requirements and also meets the requirements of the Federal Emergency Management Agency (FEMA) as the City's local hazard mitigation plan. The Tri-Valley Local Hazard Mitigation Plan provides a uniform hazard mitigation strategy for the Tri-Valley area, addressing a range of hazards including, but not limited to, earthquakes, floods and wildland fire. The City of Dublin also has an adopted Comprehensive Emergency Management Plan and a Local Hazard Mitigation Plan to assess hazards and mitigate risks prior to a disaster event.

The proposed project would construct a memory care facility and an assisted living facility along Inspiration Drive. It is not located along an identified evacuation route, nor would it affect local roadways. The proposed project would not interfere with an adopted emergency response plan or emergency evacuation plan. Because the proposed project would not substantially alter or block the adjacent roadways, the proposed project would not be expected to impair the function of nearby emergency evacuation routes, including Dublin Boulevard. Therefore, the proposed project would not result in new significant impacts related to implementation of an adopted emergency response plan or emergency evacuation plan. No additional analysis is required.

(g) Expose people or structures to wildland fires

No New Impact. A wildland fire is a fire occurring in a suburban or rural area which contains uncultivated land, timber, range, brush, or grasslands. Wildland fires are primarily a concern in areas where there is a mix of developed and undeveloped lands. The project site is located in a largely urbanized area. It does not contain areas of moderate, high, or very high Fire Hazard

Severity Zones for the Local Responsibility Area, nor does it contain any areas of moderate, high, or very high Fire Hazard Severity for the State Responsibility Area, as mapped by the California Department of Forestry and Fire Protection (CAL FIRE). The proposed project would be constructed in accordance with the requirements of the CBC, California Fire Code, and the City's Wildfire Management Plan. In addition, consistent with the City's entitlement process, project plans would be reviewed by the Alameda County Fire Department to ensure that required fire protection elements are incorporated into final building plans, including provision of adequate water supply and pressure, and use of appropriate landscape and building materials. Therefore no new significant impacts related to wildland fires would occur. No additional analysis is required.

Source(s)

CAL FIRE. 2020. California Fire Hazard Severity Zone Viewer. Website: egis.fire.ca.gov/FHSZ/ (accessed June 25, 2021).

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2010. City of Dublin Wildfire Management Plan, Adopted July 9, 1996, Revised March 5, 2002 and November 2, 2010.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

Hydrology and Water Quality

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
9. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?				X
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				X
i. Result in substantial erosion or siltation on- or off-site;				X
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				X
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; or				X
iv. Impede or redirect flood flows?				X
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

Environmental Setting

The project site is located within the Alamo Canal watershed, which drains an approximately 44 square mile basin including the northern Amador Valley and a portion of the hills south of Mount Diablo. The Alamo Canal ends at its junction with Arroyo Mocho, where both flow into Arroyo de la Laguna, which eventually flows into Alameda Creek. The Alamo Canal watershed includes the Alamo Canal, Alamo Creek, South San Ramon Creek, Dublin Creek and others.

Local drainage facilities are owned and maintained by the City of Dublin. Regional drainage facilities are maintained by Zone 7 Flood Control and Water Conservation District.

As described in Section 4, Biological Resources, an ephemeral stream feeds into a culvert near the western edge of Parcel 2. This drainage appears to be fed by runoff from the adjacent hillslope between Parcel 2 and the VCC campus to the north. This drainage does not have a hydrological connection with Dublin Creek, which drains the hills to the northwest. Dublin Creek is not currently listed as impaired on the current Clean Water Act Section 303(d) List of Impaired Waters; however, Arroyo Mocho is listed as impaired due to diazinon associated with urban-related runoff and water temperature.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Panel 06001C0304G (August 3, 2009), the project site is not located within a special flood hazard area.

Regulatory Framework

Federal and State Regulations

Clean Water Act

The USEPA adopted the Clean Water Act (CWA) in 1977 to set a framework for establishing regulations to protect the chemical, physical, and biological integrity of the nation's waters. The National Pollutant Discharge Elimination System (NPDES) under section 402(p) of the CWA aims to reduce the direct discharge of pollutants into waterways and manage additional pollution runoff. The San Francisco Bay RWQCB has the authority to administer permits within its jurisdiction including the City of Dublin. Section 303(d) of the CWA requires that each state identify "impaired" water bodies or segments of water bodies that do not meet at least one of the listed state water-quality standards. When the water body or segment is listed as impaired, the state institutes a Total Maximum Daily Load (TMDL) for the pollutant found to be creating the impairment. The TMDL is the maximum amount of a pollutant that a water body can receive and still meet water-quality standards, and is usually calculated based on the total amount of allowable loads generated by a single pollutant deriving from all of its originating point and non-point sources. The 303(d) list identifies water bodies that will need to establish a TMDL in the future in order to abide by water-quality standards. As per 303(d), the RWQCB has identified impaired water bodies within its authority as well as the associated pollutants causing the impairment.

National Pollutant Discharge Elimination System

As described above, the NPDES was established under the CWA to regulate municipal, industrial and stormwater discharges to the surface waters of the United States, including discharges from municipal separate storm sewer systems (MS4s). All entities that discharge pollutants into an identified waterbody of the United States are required to obtain a NPDES permit.

The proposed project is subject to the conditions of the Municipal Regional Permit (MRP) (Order No. R2-2015-0049 NPDES Permit No. CAS612008). The C.3 Stormwater Technical Guidance updated in February 2021 as per the Alameda County Clean Water Program, outlines low impact development provisions that the MS4 permit holders can use during planning of development activities to manage and reduce occurrences of stormwater runoff pollutant discharges. These low impact development methods aim to preserve existing natural landscapes to minimize imperviousness and water quality impacts.

National Flood Insurance Program

The National Flood Insurance Program exists under the Federal Emergency Management Agency (FEMA) to distinguish and evaluate flood hazards. FEMA generated Flood Insurance Rate Maps (FIRMs) identify the location of these potential flooding hazards and help plan for the correct land use and floodplain development within those locations. Information for FIRMs is generated by Flood Insurance Studies (FISs). Special Flood Hazard Areas (SFHAs) are distinguished via FIRMs.

Porter-Cologne Water Quality Control Act

California adopted the Porter-Cologne Water Quality Act in 1969, giving the SWRCB and regional water quality control boards authority over State water rights and policies in relation to managing and enforcing water quality. The regional boards adopt Water Quality Control Plans (Basin Plans) that outline their region's water quality conditions and standards as well as beneficial uses of the region's ground and surface water. The City of Dublin lies within the boundaries Region 2 governed by the San Francisco Bay RWQCB. The most recent Basin Plan for the San Francisco Bay Watershed was updated by the RWQCB in 2015 and is revised periodically to reflect relevant ecological, technological, and political changes. The Basin also includes water quality standards for groundwater.

Statewide Construction General Permit

Construction projects or activities that are one acre or more must obtain a General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, or a Construction General Permit from the SWRCB. Prior to construction, the Project Applicant must submit online Permit Registration Document (PRDs) to the Stormwater Multiple Application and Report Tracking System (SMARTS) website. The PRDs include a Notice of Intent (NOI), Risk Assessment, Post-Construction Calculations, a Site Map, the Stormwater Pollution Prevention Plan (SWPPP), a signed certification by the project applicant, and the first annual fee. Applicants are also required develop BMPs in accordance with the development of a SWPPP. The SWPPP maps the boundaries of the project site, identifying the existing and proposed structures and roads within the vicinity of the site, as well as stormwater collection and discharge points and drainage patterns. These BMPs should address strategies to prevent soil erosion and the proper treatment and discharge of other pollutants generated by construction, which could

contaminate waterways on or nearby the site. A SWPPP must also include a visual chemical monitoring program of nonvisible pollutants and a sediment-monitoring program. As the Project site is larger than one acre, it is subject to these listed requirements.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act of 2014 (SGMA) is a comprehensive three-bill package that was signed into California State law in September 2014. The SGMA that provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention only if necessary to protect the resource. The plan is intended to ensure a reliable groundwater water supply for California for years to come.

The SGMA requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally based management plans. The act requires that GSAs implement plans and achieve long-term groundwater sustainability within 20 years of implementation of the SGMA.

Local Regulations

City of Dublin General Plan

Sections 7.2 and 7.3 of the General Plan outlines policies and programs related to stream corridors and riparian areas and erosion and siltation control. The following policies related to hydrology and water quality are applicable to the proposed project:

> **Guiding Policy 7.2.1.A.1.** Protect riparian vegetation as a protective buffer for stream quality and for its value as a habitat and aesthetic resource.
>
> **Guiding Policy 7.2.1.A.2.** Promote access to stream corridors for passive recreational use and to allow stream maintenance and improvements as necessary, while respecting the privacy of owners of property abutting stream corridors.
>
> **Implementing Policy 7.2.1.B.1.** Enforce Watercourse Ordinance 52-87 for developed areas of the city.
>
> **Implementing Policy 7.2.1.B.2.** Require open stream corridors of adequate width to protect all riparian vegetation, improve access, and prevent flooding caused by blockage of streams.
>
> **Implementing Policy 7.2.1.B.3.** Require revegetation of creek banks with species characteristic of local riparian vegetation, where construction requires creekbank alteration.
>
> **Guiding Policy 7.3.1.A.1.** Maintain natural hydrologic systems.

Guiding Policy 7.3.1.A.2. Regulate grading and development on steep slopes.

Implementing Policy 7.3.1.B.1. Enforce the requirements of the Municipal Regional Permit for stormwater issued by the San Francisco Bay Regional Water Quality Control Board or any subsequent permit as well as Chapter 7 (Public Works) and Chapter 9 (Subdivisions) of the Dublin Municipal Code for maintenance of water quality and protection of stream courses.

Implementing Policy 7.3.1.B.2. Review development proposals to insure site design that minimizes soil erosion and volume and velocity of surface runoff.

Implementing Policy 7.3.1.B.3. Restrict development on slopes over 30 percent.

Previous CEQA Documents

VCC EIR The VCC EIR identified potentially significant impacts related to soil erosion, potential degradation of water quality from nonpoint source pollution, and potentially increased quantities of stormwater runoff from the site. Mitigation measures were identified to reduce potential impacts to a less-than-significant level. The following mitigation measures would apply to the proposed project:

Mitigation Measure 4.6-1 (soil erosion): An erosion and sedimentation control plan shall be prepared by a California-registered civil engineer for implementation throughout all phases of project construction. The plan should be prepared in accordance with City of Dublin and RWQCB design standards and shall be approved by the Dublin Public Works Director prior to issuance of a grading permit. It is recommended that this plan, at a minimum, include the following provisions:

a. Existing vegetated areas should be left undisturbed until construction of improvements on each portion of the development site is actually ready to commence;

b. All disturbed areas should be immediately revegetated or otherwise protected from both wind and water erosion upon the completion of grading activities;

c. Stormwater runoff should be collected into stable drainage channels, from small drainage basins, to prevent the buildup of large, potentially erosive stormwater flows;

d. Specific measures should be implemented to control erosion from stockpiled earth and exposed soil;

e. Runoff should be directed away from all areas disturbed by construction;

f. Sediment ponds or siltation basins should be used to trap eroded soils before runoff is discharged into on-site or offsite drainage culverts and channels;

g. To the extent possible, major site development work involving excavation and earth moving shall be scheduled during the dry season.

Mitigation Measure 4.6-2 (non-point source pollution): A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared by a California-registered civil engineer to RWQCB and City of Dublin standards to ensure Best Management Practices will be employed to reduce surface water pollution to a less-than-significant level. The SWPPP shall be approved by the Dublin Public Works Director prior to issuance of a grading permit.

Mitigation Measure 4.6-3 (stormwater runoff): The project sponsor shall submit a hydrology study for the proposed project, prepared by a California-registered civil engineer, documenting the amount of current stormwater runoff from the site, estimated future quantities of runoff, and the ability of downstream facilities to accommodate increased stormwater quantities. The report shall also identify needed downstream improvements needed to accommodate increased storm flows and the applicant's financial participation in funding needed improvements, if required.

2018 Supplemental IS/MND No new or more significant impacts related to hydrology and water quality were identified in the 2018 Supplemental IS/MND.

Project Impacts and Mitigation Measures

(a) Violate water quality or waste discharge requirements or degrade surface or groundwater quality

No New Impact. Construction activities associated with the proposed project would cause disturbance of soil during excavation work, which could adversely impact water quality. Contaminants from construction vehicles and equipment and sediment from soil erosion could increase the pollutant load in runoff being transported to receiving waters during development. Although surface runoff from the site would likely decrease with the proposed project (due to proposed stormwater treatment measures), runoff from the proposed landscaped areas may contain residual pesticides and nutrients (associated with landscaping) and sediment and trace metals (associated with atmospheric deposition) during operation of the project. Implementation of Mitigation Measures 4.6-1 and 4.6-2, identified in the VCC EIR, would ensure that potential water quality impacts associated with construction are reduced to a less-than-significant level. The project would be required to comply with these mitigation measures.

In addition, because the project would result in the disturbance of greater than one acre of soil, project implementation is required to comply with the Construction General Permit, which requires preparation of a SWPPP and implementation of BMPs to reduce the discharge of construction-related stormwater pollutants. A SWPPP must include a detailed description of controls to reduce pollutants and outline maintenance and inspection procedures. Typical sediment and erosion BMPs include protecting storm drain inlets, establishing and maintaining construction exits and perimeter controls to avoid tracking sediment off-site onto adjacent roadways. A SWPPP also defines proper building material staging and storage areas, paint and concrete washout areas, describes proper equipment/vehicle fueling and maintenance practices, measures to control equipment/vehicle washing and allowable non-stormwater discharges, and includes a spill prevention and response plan. Compliance with the requirements of the Construction General Permit and implementation of Mitigation Measures 4.6-1 and 4.6-2 would ensure that the proposed project would result in less-than-significant impacts to water quality during construction.

As the site is currently largely undeveloped, the proposed project would increase the total amount of impervious surface on the project site. The increase in impervious surface could result in increased stormwater runoff (both flow rate and volume) from the project site relative to pre-project conditions, which may result in hydromodification impacts (i.e., increased potential for erosion of creek beds and banks, silt pollution generation, or other adverse impacts on beneficial uses due to increased erosive force). Hydromodification is the alteration of the natural flow of water through a landscape, and often takes the form of creek channel erosion. Hydromodification is one of the leading sources of impairment in streams, lakes, and estuaries. The MRP also requires implementation of LID Standards.

The proposed project would be considered a “regulated project” under the MRP. Provision C.3 of the MRP requires new development and redevelopment projects that would replace more than 10,000 square feet of existing impervious surfaces to include post-construction stormwater control in project designs, including measures for site design, source control, runoff reduction, stormwater treatment, and baseline hydromodification management. Under the C.3 requirements, the preparation and submittal of a Stormwater Control Plan (SCP) would be required for the project site. The purpose of a SCP is to detail the design elements and implementation measures necessary to meet the post-construction stormwater control requirements of the MRP. In particular, SCPs must include Low Impact Development (LID) design measures, which reduce water quality impacts by preserving and recreating natural landscape features, minimizing imperviousness, and using stormwater as a resource, rather than a waste product. The proposed project would also be required to prepare a Stormwater Facility Operation and Maintenance Plan to ensure that stormwater control measures are inspected, maintained, and funded for the life of the project. Compliance with the C.3 requirements of the MRP would ensure that operation-period impacts to water quality would be less than significant.

In addition, Mitigation Measure 4.6-3, identified in the VCC EIR, which requires preparation of a hydrology study for the proposed project, would ensure that potential impacts associated with stormwater runoff would be reduced to a less-than-significant level. Because the proposed project would be required to comply with applicable State and local regulations and mitigation measures identified in the VCC EIR, no new impacts or substantially more severe significant impacts related to water quality violations, wastewater discharges, or water quality degradation would occur. No additional analysis is required.

(b) Substantially decrease or interfere with groundwater supplies

No New Impact. Although the proposed project would result in a net increase in impervious surface coverage compared to the existing condition, the proposed project would include the use of LID features that would retain and clean stormwater onsite before discharging it into the municipal stormwater system, consistent with Provision C.3 of the MRP.

The proposed project would connect to the existing water lines within the vicinity of the project site and would not require the use of groundwater. Due to the depth of groundwater and the shallow excavations required for project construction, dewatering is not anticipated during construction activities. Therefore, no new impacts or substantially more severe significant impacts related to groundwater supplies would occur. No additional analysis is required.

(c) Substantially alter existing drainage patterns re: erosion/siltation, re: flooding, or degrade water quality

No New Impact. The proposed project would create new landscaped areas and impermeable pavement surfaces, which would alter the existing drainage pattern of the project site. However, as discussed above, the proposed project would be required to comply with the C.3 requirements of the MRP, standard City development requirements related to stormwater, and Mitigation Measure 4.6-3, identified in the VCC EIR, which requires preparation of a hydrology study for the proposed project.

As noted in Section 8.b and 9.a, the proposed project would be required to prepare a SWPPP as required by the Construction General Permit and consistent with Mitigation Measures 4.6-1 and 4.6-2, identified in the VCC EIR, to reduce short- and long-term erosion and sedimentation associated with project construction and operation.

Required compliance with applicable regulations, implementation of City policies, and the mitigation measures identified in the VCC EIR, would reduce potential impacts of the project related to changes in drainage patterns to a less-than-significant level. Therefore, no new impacts or substantially more severe significant impacts related to drainage patterns would occur. No additional analysis is required.

(d) Flood hazard, seiche, or tsunami

No New Impact. As described above, the project site is not located within a flood hazard area mapped by FEMA, or a mapped tsunami inundation area for Alameda County, and no seismically induced seiche waves have ever been documented in the San Francisco Bay area. Additionally, the proposed project would implement various design features to ensure contaminants would be contained. Therefore, no new impacts or substantially more severe significant impacts related to flood hazard, seiche or tsunami would occur. No additional analysis is required.

(e) Water Quality

No New Impact. As noted above, the proposed project would implement various design features to ensure the proposed project would have a less-than-significant impact related to water quality. Additionally, the proposed project would not include the use of groundwater and would not substantially increase the amount of impervious surfaces on the project site and, therefore, would not interfere with groundwater recharge in the vicinity of the project site. Therefore, no new impacts or substantially more severe significant impacts related to water quality would occur. No additional analysis is required.

Source(s)

California, State of. 2019. California Official Tsunami Inundation Maps. Website: www.conservation.ca.gov/cgs/tsunami/maps (accessed August 18, 2021).

California Water Boards San Francisco Bay R2. 2021. The 303(d) List of Impaired Water Bodies website: www.waterboards.ca.gov/rwqcb2/water_issues/programs/TMDLs/303dlist.html (accessed August 18, 2021).

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Federal Emergency Management Agency. 2021. FEMA Flood Map Service Center (map). Website: msc.fema.gov/portal/search?AddressQuery=6363%20Tassajara%20Road%2C%20Dublin%2C%20CA#searchresultsanchor (accessed June 27, 2021).

Land Use and Planning

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
10. LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?				X
b. Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Environmental Setting

The project site includes development of Parcels 2 and 3 within the larger VCC site. Parcel 2 (APN 941-0022-005) is located on the northwest corner of Inspiration Drive and Dublin Boulevard and contains 1.4 acres of land. Parcel 3 (APN 941-0022-006) contains approximately 12.7 acres of land located east of Inspiration Drive. This parcel includes approximately 8.02 acres of land that has been dedicated as a conservation easement that precludes development. Both Parcels 2 and 3 are currently undeveloped.

Parcel 1 is developed with the existing VCC complex, which consists of a church and a pre-school through grade 12 private school, with associated parking, landscaping, sports and play fields, lighting and other infrastructure. Surrounding land uses includes single-family residential development to the north and east, I-580 to the south, and multi-family residential development and undeveloped open space to the west.

The project site has General Plan land use designations of Public/Semi-Public and Open Space. The Public/Semi-Public designation allows a combination of public facilities land uses and semi-public facilities land uses, including public schools; libraries; city office buildings; State, County and other public agency facilities; post offices; fire stations; utilities; and, the Dublin Civic Center. Semi-public facilities are quasi-public uses, such as child care centers, youth centers, senior centers, special needs program facilities, religious institutions, clubhouses, community centers, community theatres, hospitals, private schools, and other facilities that provide cultural, educational, or other similar services and benefit the community. The Open Space designation includes areas dedicated as open space on subdivision maps, slopes greater than 30 percent, stream protection corridors, woodlands, and grazing lands.

Regulatory Framework

Local Regulations

City of Dublin General Plan

The City of Dublin General Plan is a policy document guiding future development within the City and is a comprehensive plan intended to guide growth and development. The Land Use Element is considered the framework for the General Plan because it establishes development and land use patterns that enhance the City's character. Chapter 3 of the Land Use Element outlines policies and programs to provide open space both within and apart from development projects. The following goals and policies related to land use are applicable to the proposed project.

Guiding Policy 2.6.1.A.1. Encourage housing of varied types, sizes, and prices within the Primary Planning Area.

Guiding Policy 2.6.5.A.1. Any development in the Western Extended Planning Area shall be integrated with the natural setting. Development shall be clustered in areas with fewer constraints.

a. An Urban Limit Line was adopted by initiative on November 7, 2000 for the majority of the Western Extended Planning Area. The Urban Limit Line is located along the City limit line as of the effective date of the initiative. Pursuant to the initiative, land west of the Urban Limit Line are designated as Rural Residential/Agriculture on the General Plan Land Use Map (Figure 1-1). The location of the Urban Limit Line may be changed only by a vote of the people of Dublin, and only following review and approval of a General Plan Amendment by the City Council. Any request to change the Urban Limit Line must be accompanied by a request to amend the land use designation to an urban designation.

b. The Dublin Open Space Initiative was adopted by the Dublin City Council on June 3, 2014. Pursuant to the initiative, lands west of the Urban Limit Line must adhere to the policies, regulations and development standards contained in the Initiative and subsequently incorporated into the General Plan (see Section 2.8).

Implementing Policy 2.6.1.B.1. The location, extent and density of residential development will be determined when municipal services can be provided and through General Plan refinement studies.

Implementing Policy 2.6.1.B.2. Approval of residential development in the Western Extended Planning Area will require determination that:

a. Utilities and public safety services will be provided at approved standards without financial burden to Dublin residents and businesses outside of the Western Extended Planning Area.

b. Proposed site grading and means of access will not disfigure the ridgelands as viewed from areas of existing development in Dublin. Any necessary grading and construction shall be planned so as to protect visual qualities.

c. Timing of development will not result in premature termination of viable agricultural operations on adjoining lands.

d. The fiscal impact of new residential development in the Western Extended Planning Area supports itself and does not draw upon and dilute the fiscal base of the remainder of the city.

Guiding Policy 3.2.2A.1. East of the Urban Limit Line development generally shall be confined to areas where slopes are under thirty percent, as part of an overall cluster development concept on approved development plans. Within projects proposing clustered development and ancillary facilities east of the Urban Limit Line in the Western Extended Planning Area, land alteration on slopes over thirty percent may be considered where the following conditions are present:

a. Public health and safety risks can be reduced to an acceptable level.

b. Proposed land alteration would be necessary to achieve a basic public need, such as housing, recreation, street access, or public facilities.

c. Long-term visual qualities can be maintained for residents of Dublin and nearby communities.

Guiding Policy 3.2.2A.2. Existing large stands of woodland and coastal scrub in the Western Extended Planning Area shall be protected wherever possible. Grassland sites shall be considered for development in preference to native shrub and woodland areas.

Implementing Policy 3.2.B.1. As conditions of development project approval, require detailed tree surveys, protection measures for existing trees to remain, and replanting of native vegetation.

City of Dublin Zoning Ordinance

Title 8 of the City's Municipal Code establishes the City of Dublin Zoning Ordinance, which sets cohesive zoning rules for the City and designates land use types. The City's Zoning Ordinance is the primary implementation tool for the goals and policies contained in the Land Use Element.

For this reason, the Zoning Map must be consistent with the General Plan Land Use Map. The City's Land Use Map indicates the general location and extent of future development in the City. The City's Zoning Ordinance contains more specific information related to permitted land uses, building intensities, and development standards.

The project site is designated as Planned Development (PD) Ordinance No. 07-03. The intent of the PD designation is to create a more desirable use of the land, a more coherent and coordinated development, and a better physical environment than would otherwise be possible under a single zoning district or combination of zoning districts. A PD Zoning District is established by the adoption of an Ordinance reclassifying the property to such district and adopting a Development Plan, which establishes regulations for the use, development, improvement, and maintenance of the property within the PD district.

Previous CEQA Documents

VCC EIR

The VCC EIR identified less than significant impacts related to on-site land uses, surrounding land uses and consistency with applicable land use and planning requirements.

2018 Supplemental IS/MND

No new or more significant impacts related to land use and planning were identified in the 2018 Supplemental IS/MND.

Project Impacts and Mitigation Measures

(a) Physically divide an established community

No New Impact. The physical division of an established community typically refers to the construction of a feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas. For instance, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside of the community.

The proposed project would result in the construction of a memory care facility and assisted living facility on undeveloped parcels within the larger VCC site. Access to the project site would be via Inspiration Drive. The proposed project would not result in the realignment or closure of any existing roads. Therefore, the proposed project would not result in the physical division of an established community or adversely affect the continuity of land uses in the vicinity nor result in new significant or substantially more severe significant impacts beyond those analyzed in the prior environmental documents. No additional analysis is required.

(b) Conflict with land use plan, policy, or regulation

No New Impact. It should be noted that according to CEQA, policy conflicts do not, in and of themselves, constitute a significant environmental impact. Policy conflicts are considered to be environmental impacts only when they would result in direct physical impacts or where those conflicts relate to avoiding or mitigating environmental impacts. As such, associated physical environmental impacts are discussed in this Initial Study under specific topical sections (e.g., cultural resources, hazardous materials, noise, etc.). The proposed project would not result in any direct physical impacts that cannot be mitigated to a less-than-significant level.

The project proposes development of a 55-bed memory care facility on Parcel 2 and an 84-bed assisted living facility on Parcel 3, with associated landscaping, parking, and utility improvements. Both facilities are considered Residential Care Facilities for the Elderly (RCFE). As part of the proposed project entitlements, the boundary of the conservation easement on Parcel 3 would be adjusted and the development of the assisted living facility on approximately 4.7 acres of Parcel 3 would require a General Plan Amendment to change the land use designation from Open Space to Public Semi-Public. In addition, a General Plan Amendment is requested to convert a portion of Parcel 1 from the Public/Semi-Public land use designation to Open Space**.**

The proposed project, as a memory care facility and an assisted living facility, would be consistent with the Public/Semi-Public land use designation in that they would be considered quasi-public facilities that provide a service that benefits the community. The proposed memory care and assisted living facilities would be compatible with the mix and intensity of uses located within the vicinity of the site, which generally consist of residential and public uses. Implementation of the proposed project would amend the City's General Plan and the General Plan Land Use Map to reflect the change in land use on Parcels 1 and 3. As a result of the proposed General Plan Amendment, the proposed project would not conflict with any applicable land use plans, policies, or regulations. Therefore, the proposed project would not result in new significant or substantially more severe significant impacts related to conformity with land use plans beyond those already analyzed in the prior environmental documents. No additional analysis is required.

Source(s)

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

Mineral Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
11. 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?				X
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				X

Environmental Setting

Minerals are any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances including, but not limited to, coal, peat and oil bearing rock, but excluding geothermal resources, natural gas and petroleum. Rock, sand, gravel and earth are also considered minerals by the Department of Conservation when extracted by surface mining operations.

Neither the State Geologist nor the California Department of Mines and Geology (CDMG) have classified any areas in the City as containing mineral deposits that are either of Statewide significance or the significance of which requires further evaluation.

Regulatory Framework

State Regulations

Surface Mining and Reclamation Act of 1974

The California Department of Conservation, Geological Survey (CGS) and the California State Mining and Geology Board are required by the Surface Mining and Reclamation Act of 1974 (SMARA) to categorize lands into four Aggregate and Mineral Resource Zones (MRZs), described below. These MRZs classify lands that contain significant regional or Statewide mineral deposits. Lead Agencies are mandated by the State to incorporate MRZs into their General Plans.

MRZs are classified on the basis of geologic factors without regard to existing land use and land ownership. The four MRZs are categorized as follows:

- **MRZ-1:** An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

- **MRZ-2:** An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** An area containing mineral deposits, the significance of which cannot be evaluated.
- **MRZ-4:** An area where available information is inadequate for assignment to any other MRZ zone.

Of the four categories, lands classified as MRZ-2 are of the greatest importance because such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by the State Mining and Geology Board as being "regionally significant." Such designations require that a Lead Agency make land use decisions involving designated areas in accordance with its mineral resource management policies and that it consider the importance of the mineral resource to the region or the State as a whole, not just to the Lead Agency's jurisdiction.

Previous CEQA Documents

None of the prior environmental documents indicate that significant mineral resource deposits exist on the project site. Therefore, no impacts related to mineral resources were identified.

Project Impacts and Mitigation Measures

(a-b) Loss of known or identified mineral resource

No New Impact. The project site is not located in a designated mineral resource area. Therefore, the proposed project would not result in the loss of available of a known mineral resource that would be of value of the region and residents of the state or the loss of availability of any known locally important mineral resource recovery site. Therefore, no new or substantially more severe significant impacts related to mineral resources would occur. No additional analyses is required.

Source(s)

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

Noise

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
12. 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?				X
b. Generation of excessive ground borne vibration or ground borne noise levels?				X
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

Environmental Setting

Noise Background

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

Vibration Background

Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem where the motion may be discernible, but there is less adverse reaction without the effects associated with the shaking of a building. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as motion of building surfaces, the rattling of items on shelves or hanging on walls, or a low-frequency rumbling noise, otherwise referred to as ground-borne noise. Typically, sources that have the potential to generate ground-borne noise are likely to produce airborne noise impacts that mask the radiated ground-borne noise. The rumbling noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment) and occasional traffic on rough roads. Problems with ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet of the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 feet. When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. For most projects, it is assumed that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however, construction of the project could result in ground-borne vibration that could be perceptible and annoying.

Existing Noise Levels

Major sources of noise on and adjacent to the project site include noise generated by vehicles on I-580, traffic sources on Dublin Boulevard and Inspiration Drive, and from aircraft flyovers.

To assess the existing noise conditions in the area, two long-term and one short-term noise measurements were conducted at the project site. The two long-term, 24-hour measurements were taken from February 25, 2021, to February 26, 2021. The short-term, 20-minute measurement was taken on February 25, 2021. The locations of the noise measurements are shown on Figure 15 and the results are summarized in Table I. Noise measurement data information is provided in Appendix E of this analysis.

Table I: Existing Noise Level Measurements

Location Number	Location Description	Daytime Noise Levels[1] (dBA L_{eq})	Evening Noise Levels[2] (dBA L_{eq})	Nighttime Noise Levels[3] (dBA L_{eq})	Average Daily Noise Levels (dBA CNEL)	Primary Noise Sources
LT-1	Southwest corner of the project site. Approximately 25 feet from the outer edge of Dublin Boulevard, 70 feet from 18-foot sound wall, 120 feet from center of westbound I-580 lanes.	68.7–70.9	66.5–68.7	61.0–70.1	73.6	Traffic on I-580 and Dublin Boulevard.
LT-2	East of Inspiration Drive. Approximately 130 feet from the outer edge of Dublin Boulevard, 170 feet from 16-foot sound wall, 230 feet from center of westbound I-580 lanes.	70.2–75.1	70.9–72.1	66.4–74.8	78.1	Traffic on I-580 and Dublin Boulevard.
ST-1[4]	Terminus of McPeak Lane, northwest of proposed memory care facility.	52.1-54.3	49.9-52.1	44.4-53.5	57.0	Traffic on I-580 and Dublin Boulevard.

Source: Compiled by LSA (March 2021).
[1] Daytime Noise Levels = noise levels during the hours of 7:00 a.m. to 7:00 p.m.
[2] Evening Noise Levels = noise levels during the hours of 7:00 p.m. to 10:00 p.m.
[3] Nighttime Noise Levels = noise levels during the hours of 10:00 p.m. to 7:00 a.m.
[4] Short-term measurement data estimated based on corresponding long-term measurement intervals.
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet

Surrounding Noise Sensitive Land Uses

Certain land uses are considered more sensitive to noise than others are. Examples of these include residential areas, educational facilities, hospitals, childcare facilities, and senior housing The nearest noise sensitive uses are the multifamily residential buildings approximately 15 feet to the west of Parcel 2 of the project site (proposed memory care facility site), and single-family residences located approximately 30 feet east of Parcel 3 of the project site (proposed assisted living facility site). Parcel 1 of the VCC EIR includes a church and associated schools. The school land uses are approximately 500 feet north of Parcel 3 and 600 feet north of Parcel 2.

Regulatory Framework

Federal Regulations

Federal Transit Administration

The criteria for environmental impacts resulting from ground-borne vibration are based on the maximum levels for a single event. The guidelines within the *FTA Manual* have been used to determine vibration impacts (refer to Table J, below).

Table J: Construction Vibration Damage Criteria

Building Category	PPV (in/sec)
Reinforced concrete, steel, or timber (no plaster)	0.50
Engineered concrete and masonry (no plaster)	0.30
Non-engineered timber and masonry buildings	0.20
Buildings extremely susceptible to vibration damage	0.12

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018), Table 12-3.
FTA = Federal Transit Administration PPV = peak particle velocity
in/sec = inches per second

The *FTA Manual* guidelines show that a vibration level of up to 0.2 in/sec PPV is considered safe for non-engineered timber and masonry buildings and would not result in any construction vibration damage. Therefore, in order to be conservative, the 0.2 in/sec PPV threshold has been used when evaluating vibration impacts at the nearest structures to the site.

Local Regulations

City of Dublin General Plan

The Noise Element of the City of Dublin General Plan establishes residential, commercial, and industrial land use compatibility standards for noise measured at the property line of the receiving land use. The land use compatibility noise criteria, as shown in Table K, provide the basis for decisions on location of land uses in relation to noise sources and for determining noise mitigation requirements.

The Noise Element of the Dublin General Plan identifies "normally acceptable" noise levels for all schools, churches and nursing home uses as 60 dBA CNEL or less. Noise levels from 61-70 CNEL are considered “conditionally acceptable,” while noise levels between 71-80 CNEL are considered “normally unacceptable.” Noise levels over 80 dBA CNEL are considered clearly unacceptable for new development of these types of land uses.

Table K: City of Dublin Land Use/Noise Compatibility Standards (dBA CNEL)

Land Use Category	Normally Acceptable	Conditionally Acceptable[1]	Normally Unacceptable	Clearly Unacceptable
Residential	60 or less	61-70	71-75	Over 75
Motels, hotels	60 or less	61-70	71-80	Over 80
Schools, churches, nursing homes	60 or less	61-70	71-80	Over 80
Neighborhood parks	60 or less	61-65	66-70	Over 70
Offices: retail commercial	70 or less	71-75	76-80	Over 80
Industrial	70 or less	71-75	Over 75	-

Source: Dublin General Plan Noise Element, Table 9-1, 2012
CNEL = Community Noise Equivalent Level
[1] Conditionally acceptable exposure requires noise insulation features in building design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

City of Dublin Municipal Code

The City of Dublin's Municipal Code (Section 5.28.020) prohibits any person within the City from making any loud, or disturbing, or unnecessary, or unusual or habitual noise or any noise which annoys or disturbs or injures or endangers the health, repose, peace, or safety of any reasonable person of normal sensitivity present in the area.

Dublin Municipal Code Section 8.36.060(C)(3) states that for lots 5,000 square feet or larger, mechanical equipment that generates noise when located within a required setback as allowed by this subsection, and within 10 feet of an existing or potential residence, or an existing paved patio area on adjoining property, shall be enclosed as necessary to reduce noise at the property line to a maximum of 50 dBA at any time.

Previous CEQA Documents

VCC EIR

The VCC EIR found that residents of dwellings surrounding the project site would be subject to short-term but potentially significant noise due to construction of new buildings, parking areas and associated improvements. The VCC EIR determined that existing residents west of the project site along Dublin Boulevard would be the most impacted. As such, the VCC EIR identified Mitigation Measure 4.8-1 to reduce construction noise impacts to a less-than-significant level.

The VCC EIR also found that upper floors of residential dwellings proposed at the northwest corner of Dublin Boulevard and Inspiration Drive would be subject to noise levels ranging from

71 to 74 dBA CNEL, which is considered an unacceptable noise level. The VCC EIR identified Mitigation Measure 4.8-2 to reduce future residential noise impacts to a less than significant level. In addition, the VCC EIR found that the main VCC campus would be exposed to future significant noise levels from I-580. As such, the VCC EIR identified Mitigation Measure 4.8-3 to reduce non-residential noise impacts, specifically at the proposed chapel, to a less-than-significant level.

The VCC EIR also evaluated impacts of future evening activities and found that commencement of these activities could generate significant noise on surrounding residential neighborhoods. The VCC EIR determined that implementation of Mitigation Measure 4.8-4 would reduce impacts of future evening activities to less than significant.

In addition, the VCC EIR determined that additional traffic added to local streets near the project site would increase noise on adjacent properties less than 1 dB CNEL at full build out. Therefore, impacts of project traffic were found to be less than significant and no mitigation was required.

The following mitigation measures from the VCC EIR would be applicable to the proposed project:

> **Mitigation Measure 4.8-1 (construction noise impacts):** The following construction noise reduction measures shall be implemented as part of all construction.
>
> a. Limit construction time to be 8:00 a.m. to 6:00 p.m. Monday-Saturday, except state and federal holidays. Exceptions may be granted in writing by the City Building Official for emergency or extenuating circumstances
>
> b. Noisy stationary equipment should be located away from the homes.
>
> c. All construction equipment should be in good working order and the mufflers should be inspected for proper functioning.
>
> d. Designate a construction noise coordinator. This coordinator shall be available to respond to complaints from neighbors and take appropriate measures to reduce noise.
>
> **Mitigation Measure 4.8-2 (residential noise impacts):** As part of Site Development Review applications for the housing portion of the project, a detailed acoustic study shall be completed by a qualified consultant to identify specific noise exposure of the dwellings and recommend specific measures to ensure that City interior and exterior noise exposure limits are met.

The analysis necessary to comply with Mitigation Measure 4.8-2 is being completed within a separate Land Use Compatibility Noise Report.

Mitigation Measures 4.8-3 and 4.8-4 would not be applicable to the proposed project, as the chapel and associated evening outdoor activities are not part of the currently proposed project. The proposed project will be required to comply with applicable noise mitigation measures contained in the VCC EIR.

2018 Supplemental IS/MND

The 2018 Supplemental IS/MND identified a new potentially significant impact associated with the proposed sound amplification system for the sports fields and amphitheater proposed to be located in the northwestern corner of the campus. Mitigation Measure NOISE-1, which establishes a noise performance standard for the proposed Public Address (PA) systems, was identified to reduce this impact to a less than significant level. As the proposed project does not include a PA system, this mitigation measure would not apply to the proposed project.

The 2018 Supplemental IS/MND also determined that construction impacts would be considered a more severe impact than was included in the VCC EIR since the 2018 project included an increase of up to 1,300 square feet of floor space over the approved VCC Master Plan and a football stadium. Mitigation Measure NOISE-2 was identified to reduce this impact to less than significant. Mitigation Measure NOISE-2 would apply to the proposed project:

> **Mitigation Measure NOISE-2**. In addition to the measures required by 2003 EIR 4.9-1, the project Applicant shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive receptors (e.g., residential uses and schools) and includes specific noise management measures to be included into project plans and specifications subject to review and approval by the City. These measures shall include, but not be limited to the following:
>
> a. All construction equipment shall be equipped with mufflers and sound control devices (e.g., intake silencers and noise shrouds) no less effective than those provided on the original equipment and no equipment shall have an un-muffled exhaust.
>
> b. The contractor shall maintain and tune-up all construction equipment to minimize noise emissions.
>
> c. Stationary equipment shall be placed so as to maintain the greatest possible distance to the sensitive receptors.
>
> d. All equipment servicing shall be performed so as to maintain the greatest possible distance to the sensitive receptors.

e. The project Applicant(s) shall provide, to the satisfaction of the City of Dublin Planning Department, a qualified "Noise Disturbance Coordinator." The Noise Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Noise Disturbance Coordinator shall notify the City within 24 hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, malfunctioning muffler, etc.) and shall implement reasonable measures to resolve the compliant, as deemed acceptable by the Dublin Planning Department. If any notices are sent to residential units immediately surrounding the construction site by the City and all signs posted at the construction site shall include the contact name and the telephone number for the Noise Disturbance Coordinator.

f. Select demolition method to minimize vibration, where possible (e.g. sawing masonry into sections rather than demolishing it by pavement breakers).

g. The construction contractor shall limit all on-site noise producing construction activities, including deliveries and warming up of equipment, to the daytime hours of 7:30 am to 5:00 pm, Monday through Friday (excluding holidays) unless otherwise approved by the City Engineer.

Project Impacts and Mitigation Measures

(a) Generate noise exceeding standards

No New Impact. The short-term construction and long-term noise impacts associated with the proposed project are described below.

Short-Term Construction Noise Impacts. Project construction would result in short-term noise impacts on the nearby sensitive receptors. Maximum construction noise would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from one day to several days depending on the phase of construction. The level and types of noise impacts that would occur during construction are described below.

Table L lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the project area but would no longer occur once construction of the project is completed.

Two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction

equipment and materials to the site, which would incrementally raise noise levels on Inspiration Drive and Dublin Boulevard leading to the project site. Two main categories of trips would be generated by construction activities: (1) worker commute trips; and (2) haul/delivery truck trips. Heavy equipment would not be hauled to/from the project site daily; it would be hauled in at the beginning of construction and hauled out upon completion of construction. Construction trips would occur throughout the day, but because the hauling trucks do not pass sensitive uses, there would be no impacts to sensitive uses.

The second type of short-term noise impact is related to noise generated during site preparation and the construction of the two proposed facilities, associated parking, and site improvements. The project would be constructed in five phases over a period of 455 days. Construction would be undertaken in discrete steps, each of which would have its own mix of equipment, and consequently its own noise characteristics. These various sequential phases would change the character of the noise generated on the project site. Therefore, the noise levels would vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table L lists the maximum noise levels from the Highway Construction Noise Handbook recommended for noise impact assessments for the loudest anticipated construction that would be used for the project based on a distance of 50 feet between the equipment and a noise receptor. Typical operating cycles for these types of construction equipment may involve one to two minutes of full power operation followed by three to four minutes at lower power settings.

In addition to the reference maximum noise level, the usage factor provided in Table L is utilized to calculate the hourly noise level impact for each piece of equipment based on the following equation:

$$L_{eq}(equip) = E.L. + 10\log(U.F.) - 20\log\left(\frac{D}{50}\right)$$

where: $L_{eq}(equip)$ = L_{eq} at a receiver resulting from the operation of a single piece of equipment over a specified time period

E.L. = noise emission level of the particular piece of equipment at a reference distance of 50 ft

U.F. = usage factor that accounts for the fraction of time that the equipment is in use over the specified period of time

D = distance from the receiver to the piece of equipment

Table L: Typical Maximum Construction Equipment Noise Levels (Lmax)

Type of Equipment	Acoustical Usage Factor	Suggested Maximum Sound Levels for Analysis (dBA L_{max} at 50 ft)
Air Compressor	40	80
Backhoe	40	80
Crane	16	85
Excavator	40	85
Forklift	20	85
Generator	50	80
Grader	40	85
Loader	40	80
Paver	50	85
Roller	20	85
Scraper	40	85
Skid Steer Loader	40	80
Tractor	40	84
Trencher	50	82
Water Truck	40	84

Source: *Highway Construction Noise Handbook* (FHWA 2006).
dBA = A-weighted decibel
FHWA = Federal Highway Administration
ft = foot/feet
HP = horsepower
L_{max} = maximum noise level

Each piece of construction equipment operates as an individual point source. Utilizing the following equation, a composite noise level can be calculated when multiple sources of noise operate simultaneously:

$$Leq\ (composite) = 10 * \log_{10}\left(\sum_{1}^{n} 10^{\frac{Ln}{10}}\right)$$

Table L shows the composite noise levels of the two loudest pieces of equipment for each construction phase, at a distance of 50 feet from the construction area.

Once composite noise levels are calculated, reference noise levels can then be adjusted for distance using the following equation:

$$Leq\ (at\ distance\ X) = Leq\ (at\ 50\ feet) - 20 * \log_{10}\left(\frac{X}{50}\right)$$

In general, this equation shows that doubling the distance would decrease noise levels by 6 dBA while halving the distance would increase noise levels by 6 dBA.

Table M: Equipment Noise by Construction Phase

Construction Phase	Loudest Equipment	Composite Noise Level at (dBA L_{eq} at 50 ft)
Site preparation, Grading	Excavator	88
	Grader	
Building Construction	Crane	88
	Forklift	
Paving	Paver	88
	Roller	
Architectural Coating	Air Compressor	80

Sources: Compiled by LSA Associates, Inc. (2021). *Construction Noise Handbook* (FHWA 2006).
dBA = A-weighted decibel
FHWA = Federal Highway Administration
ft = foot/feet
L_{max} = maximum noise level

According to the construction schedule provided by the applicant, the phases of construction include: (1) site preparation; (2) grading; (3) building construction; (4) paving; and (5) architectural coating. To provide a conservative estimate, the noise levels were calculated from the edge of the project site, whereas the construction activities would cover the entire site and often be further from sensitive receptors. Based on the typical construction equipment noise levels shown in Table M, noise levels associated with these pieces of construction equipment operating simultaneously would be approximately 88 dBA L_{eq} at 50 feet.

The closest sensitive receptors include multi-family residences located west of the project site, approximately 110 feet from the center of Parcel 2, resulting in short-term construction noise levels associated approaching 81 dBA L_{eq}. Single-family residences located east of the project site, approximately 500 feet from the acoustical center of Parcel 3, resulting in short-term construction noise levels approaching 68 dBA L_{max}.

Construction equipment would operate at various locations throughout project site and construction activities at any one receptor location would occur for a limited duration. While construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the project area, the noise impacts would no longer occur once project construction is completed.

As compared to the previous VCC EIR, the proposed project would generate similar noise levels during construction and would implement the previously required mitigation measures, Mitigation Measure 4.8-1and Mitigation Measure NOISE-2, to reduce construction related impacts to a less-than-significant level. Mitigation Measure 4.8-1, identified in the VCC EIR, and Mitigation Measure NOISE-2, identified in the 2018 Supplemental IS/MND, would reduce construction noise impacts to a less-than-significant level by limiting construction to the

daytime hours. With implementation of these mitigation measures, the proposed project would not result in any new or more severe impacts compared to those identified in the prior environmental documents. No additional analysis is required.

Long-Term Off-Site Traffic Noise Impacts

The proposed project is estimated to generate an average daily traffic (ADT) volume of 329. The existing ADT volume on Inspiration Drive north of Dublin Boulevard is 1,557.[8] It takes a doubling of traffic to increase traffic noise levels by 3 dBA per the following equation that was used to determine potential traffic noise increases:

$$\text{Change in CNEL} = 10 \log_{10} [V_{e+pt}/V_{existing}]$$

where: $V_{existing}$ = the existing daily volume
V_{e+pt} = existing daily volumes plus project trips
Change in CNEL = the increase in noise level due to project trips

The project-related traffic would increase traffic noise on Inspiration Drive north of Dublin Boulevard by up to 0.8 dBA. This noise level increase would not be perceptible to the human ear in an outdoor environment. Therefore, traffic noise impacts from project-related traffic on off-site sensitive receptors would be less than significant. The proposed project would not result in any new or more severe impacts compared to those previously identified in the prior environmental documents. No additional analysis is required.

Long-term Off-Site Operation-Related Noise Impacts**.** Noise impacts associated with the long--term operation of the project must comply with the 50 dBA L_{eq} standard for residential land uses as outlined in the City's Municipal Code above.

Adjacent off-site land uses would be potentially exposed to stationary-source noise impacts from heating, ventilation, and air conditioning (HVAC) equipment proposed with the project.

The project is expected to have HVAC units serving each facility of the project site. The HVAC equipment could operate 24 hours per day. One HVAC unit would generate a noise level of 72 dBA L_{eq} at 3.3 feet, based on manufacturer testing of typical equipment for such uses. Table N shows the exterior noise levels from on-site HVAC units at land uses nearest to the project along with the approximate distance from the closest HVAC unit and distance attenuation.

[8] *Collected by National Data & Surveying Services, compiled by LSA, 2021*

Table N: Summary of HVAC Noise Levels

Land Use (Direction)	Reference Noise Level (dBA L_{eq})	Reference Distance (ft)	Distance[1] (ft)	Distance Attenuation (dBA)	Exterior Noise Level (dBA L_{eq})
Multi-family Residences (west)	72	3.3	150	33	39
Single-family Residences (east)			300	39	33
School (north)			500	44	28

Source: Compiled by LSA Associates, Inc. (2021)
[1] Distance from HVAC sources to outdoor activity area at the nearest sensitive receptor.
dBA = A-weighted decibels
ft = feet
L_{eq} = equivalent continuous sound level

As stated in Table N, hourly noise levels associated with the operation of the proposed HVAC equipment would be below the City's 50 dBA L_{eq} exterior noise standard for mechanical equipment. Therefore, no mitigation is required to reduce operational noise levels.

Furthermore, the previous project included multi-family uses at the same location of the proposed memory care facility. Both uses would include similar sources of noise including parking lot activities and HVAC equipment. It is expected that the potential impacts would be the same or less at the memory care facility due to fewer trips associated with this institutional use (i.e., facility residents are patients that would not be driving).

As described above, the project would not result in 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 any other applicable standards. As such, the proposed project would not result in any new or more severe impacts compared to those previously identified in the VCC EIR and 2018 Supplemental IS/MND. No additional analysis is required.

(b) Generate excessive ground borne vibration or ground borne noise

No New Impact. Construction of the proposed project could result in the generation of groundborne vibration. This construction vibration impact analysis assesses the potential for building damages using vibration levels in peak particle velocity (in/sec PPV). The FTA Manual guidelines indicate that a vibration level up to 0.2 in/sec PPV is considered safe for non-engineered timber and masonry buildings.Table O shows the PPV values at 25 feet from a construction vibration source. Bulldozers and other heavy-tracked construction equipment (except for vibratory rollers) generate approximately 0.089 in/sec PPV of groundborne vibration when measured at 25 feet.

Table O: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV (in/sec) at 25 feet
Vibratory Roller	0.210
Hoe Ram	0.089
Large Bulldozer	**0.089**
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003

Sources: *Transit Noise and Vibration Impact Assessment* (FTA 2018).
in/sec = inches per second PPV = peak particle velocity

Construction vibration, similar to vibration from other sources, would not have any significant effects on outdoor activities (e.g., those outside of residential buildings in the project vicinity). While vibration from construction activity was not assessed in the VCC EIR, the proposed project is expected to include the use of heavy equipment similar to a large bulldozer. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project disturbance areas because vibration impacts occur normally within the buildings. The formula for vibration transmission is provided below.

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

As identified above, multifamily residential structures are located as close as 15 feet away from the project site and would experience vibration levels approaching 0.156 in/sec PPV with the use of heavy equipment at western property line of Parcel 2. Based on this analysis, vibration levels would not exceed any of the established guidelines considered for damage potential.

Short-term construction impacts related to ground-borne vibration or ground-borne noise would be minimal and temporary in nature and would cease upon construction. Therefore, construction vibration impact areas would be considered less than significant. As such, the proposed project would not result in any new or more severe impacts compared to those previously identified in the prior environmental documents. No additional analysis is required.

(c) Excessive noise level near a private airport

No New Impact. The project site is not located within two miles of a public or public use airport. Aircraft noise is occasionally audible at the project site; however, no portion of the project site lies within the 60 dBA CNEL noise contours of any public airport nor does any portion of the project site lie within two miles of any private airfield or heliport. Therefore, the proposed project would not result in the exposure of people residing or working in the project area to excessive noise levels. No additional analysis is required.

Source(s)

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

City of Dublin. 2020. Municipal Code. December.

Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. Roadway Construction Noise Model, FHWA-HEP-06-015. DOT-VNTSC-FHWA-06-02. NTIS No. PB2006-109012. August

Federal Transit Administration (FTA). 2018. Office of Planning and Environment. Transit Noise and Vibration Impact Assessment. FTA Report No. 0123. September.

Rheem. 2020. Rheem Prestige Series Variable Speed Air Conditioners. Website: https://s3.amazonaws.com/WebPartners/ProductDocuments/162ff43a-c0ff-4658-ac8d-26787125c737.pdf

Population and Housing

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
13. POPULATION AND HOUSING. Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Environmental Setting

According to the City of Dublin General Plan, in 2010, Dublin's total population was estimated at 46,036 and represented 17 percent of the 269,437 residents in the Tri-Valley area. Data from the 2020 United States Census indicates that Dublin's total population has grown to 72,589 and 24,426 housing units. The project site consists of approximately 32.8 acres of school uses and 14.1 acres of undeveloped land. No residential units currently exist at the project site.

Regulatory Framework

Regional and Local Regulations

Association of Bay Area Governments Projections 2040

The Association of Bay Area Governments (ABAG) is the regional planning agency for the San Francisco Bay Area. ABAG Projections 2040 (2018) is a growth forecast, which informs agencies such as MTC and BAAQMD for the purpose of project funding and regulatory decisions. The data for the projections were prepared in connection with Plan Bay Area 2040, adopted by ABAG and MTC in the summer of 2017. Data for this forecast are provided from collective regional General Plans, zoning codes, and growth management programs. This growth forecast is produced every four years with the Projections 2040 report being the most recent projection. These periodic updates include developing impacts of "smart growth" policies and incentives to improve future development trends in the region, such as a more balanced ratio of the number of jobs to houses.

Plan Bay Area 2040

Plan Bay Area 2040 is the Bay Area's Regional Transportation Plan and Sustainable Communities Strategy as mandated by Senate Bill 375, the Sustainable Communities and

Climate Protection Act. Plan Bay Area 2040 is a limited and focused update to the 2013 Plan Bay Area and includes key economic, demographic, and financial trends from the last several years. Plan Bay Area 2040 was adopted by ABAG and the MTC in 2017. Plan Bay Area aims to concentrate new population and employment growth in the region to areas with pre-existing transportation infrastructure to ensure greenhouse gas reductions are met.

Previous CEQA Documents

VCC EIR

The VCC EIR concluded that approval of the VCC Project would facilitate the addition of 22 new dwelling units and approximately 59 residents. The VCC EIR determined that since proposed land uses and construction of the dwellings would generally be consistent with regional housing and population projections used for planning purposes, this impact would be less-than-significant. In addition, the VCC EIR determined that on-site employment would increase from 145 to 165 staff with implementation of the VCC Project. It was determined that this increase would not be significant. No mitigation measures were identified.

The VCC EIR identified less than significant impacts related to population and housing.

2018 Supplemental IS/MND

No new or more significant impacts related to land use and planning were identified in the 2018 Supplemental IS/MND.

Project Impacts and Mitigation Measures

(a) Population growth

No New Impact. As described above, the VCC Expansion Project proposed to develop 22 multi-family residential units on Parcel 2, resulting in a population increase of 59 residents. The proposed project would provide residential care for approximately 139 elderly individuals (139 beds), which represents about 0.19 percent of the City's 2020 population (72,589). The estimated population served by the proposed project (139 elderly individuals) would represent approximately 0.17 percent of the City's projected 2040 population (83,595), as identified in Plan Bay Area 2040. The population growth anticipated between 2020 and 2040 is expected to be 11,006; population associated with the project would represent 1.26 percent of the anticipated growth. As described in Section 10, Land Use, the proposed project, as a memory care facility and an assisted living facility, would be considered quasi-public facilities, and is not a residential use. Elderly individuals who would be served by these two facilities would likely come from within the City and surrounding communities. Therefore, the proposed project would not induce substantial unplanned population growth.

As described above, the VCC EIR determined that implementation of the VCC Expansion Project would increase employment at the project site by approximately 20 employees in order to

serve the expanded school and church facilities. Since the proposed VCC campus improvements have been constructed, it is assumed that some or all of these additional staff are currently working at the project site. The proposed project would provide employment opportunities for up to 77 staff to serve the project residents. A fraction of these employees may move to the City solely for reasons of employment, although employees would likely commute from various communities throughout the Bay Area, due to the proximity of the I-580 corridor. Therefore, the proposed Project would not directly or indirectly induce substantial population growth on the site or in the surrounding area through the increase in employment on the site.

The extension of infrastructure onto the project site, including roadways and utilities that would only serve the proposed development, would not contribute to or cause additional growth to occur outside of the City boundaries or elsewhere within the vicinity of the project site, as the project site is surrounded by existing development.

As described above, patients and employees associated with the memory care and assisted living facilities would come from within the City and surrounding communities. Therefore, the proposed project would not directly or indirectly induce substantial unanticipated population growth in the City. Further, the proposed project is consistent with the General Plan's Public/Semi-Public land use designation and would not generate growth beyond that anticipated in the General Plan. Therefore, the proposed project would not result in new or more significant population growth than was analyzed and described in the prior environmental documents. No additional analysis is required.

(b) Housing and resident displacement

No New Impact. The proposed project would not displace substantial numbers of existing housing or people, such that replacement housing would need to be constructed elsewhere, as the site is currently vacant. This potential impact would be considered less than significant. Therefore, the proposed project would not result in new significant or substantially more severe significant housing impacts than were analyzed in the prior environmental documents. No additional analysis is required.

Source(s)

Association of Bay Area Governments and Metropolitan Transportation Commission. 2018. Plan Bay Area Projections 2040 - A Companion to Plan Bay Area 2040. November. Available online at: http://mtcmedia.s3.amazonaws.com/files/Projections_2040-ABAG-MTC-web.pdf (accessed June 25, 2021).

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

U.S. Census Bureau. 2021. Quick Facts Dublin City, California website: www.census.gov/quickfacts/dublincitycalifornia (Accessed October 11, 2021).

Public Services

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
14. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physical 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?				X
b. Police protection?				X
c. Schools?				X
d. Parks?				X
e. Other public facilities?				X

Environmental Setting

The proposed project is located within the City of Dublin and is served by the following existing public services.

Fire Protection

Fire suppression, emergency medical and rescue services, and other life safety services are provided to the project area and site by the Alameda County Fire Department (ACFD). There are three fire stations in Dublin, with the closest to the project site being Fire Station No. 16 at 7494 Donohue Drive, approximately 1.25 miles northeast.

Police Protection

The Alameda County Sherriff's Office provides contracted police protection to the project area and project site. The Dublin Police Services headquarters are located at 6361 Clark Avenue, east of the project site.

Schools

The project site is served by the Dublin Unified School District, which operates seven elementary, two middle, one K-8, one comprehensive high school, and one continuation high school, within the City of Dublin.

Parks

The City's Public Works Department oversees the maintenance of parks and recreational facilities throughout the City.

Library Services

The Dublin Library is operated by Alameda County Library, with additional funding from the City of Dublin. The Dublin Public Library is located at 200 Civic Plaza, southwest of the project site.

Regulatory Framework

Federal and State Regulations

California Fire Code

The California Fire Code exists within Part 9 of the CBC and includes measures for emergency planning preparation and safety. Examples of fire safety requirements include: installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Government Code Sections 65995 to 65998 (School Facilities)

California Government Code Section 65996 exists to offset the impacts of certain types of development on school facilities by requiring payment of fees to the associated school district prior to receiving a building permit. The school district is therefore responsible for implementing specific methods for mitigating school impacts under the Government Code. Pursuant to California Government Code Section 65995, payment of school impact fees is considered to be full mitigation for reducing impacts on school facilities that would result from implementation of a project.

Local Regulations

City of Dublin General Plan

Chapter 3 of the Land Use Element outlines policies and programs to provide open space both within and apart from development projects, which relate to the provision of park facilities in the City. Those policies are listed in Section 15, Recreation.

Section 8.3.2 of the City of Dublin outlines the following policies and programs related to fire hazards and fire protection:

> **Guiding Policy 8.3.2.1.A.1.** Require special precautions against fire as a condition of development approval in the western hills and elsewhere in the Extended planning Areas where proposed development would interface with open space.

Implementing Policy 8.3.2.1.B.1. Continue to enforce the City's wild land urban interface regulations.

Section 4.2 of the City of Dublin outlines the following policies and programs related to public schools:

Guiding Policy 4.2.1.A.1. Cooperate with the Dublin Unified School District to ensure preservation of surplus sites compatible with surrounding land uses and Housing Element objectives.

Guiding Policy 4.2.1.A.2. Cooperate with the Dublin Unified School District to ensure provision of school facilities in the Extended Planning Areas.

Implementing Policy 4.2.1.B.1. Initiate preparation of site plans or specific plans jointly with the Dublin Unified School District prior to sale of surplus sites.

Implementing Policy 4.2.1.B.2. As a condition of project approval in the Extended Planning Area, it is required that logical and buildable school sites be offered for dedication according to the State's Board of Education guidelines and acceptable to the Dublin Unified School District. This type of cooperation will achieve harmonious relationships between new development and existing residential areas and new park sites (See Open Space Element).

Previous CEQA Documents

VCC EIR The VCC EIR determined that impacts related to fire and police protection services would be less than significant. However, a potentially significant impact related to schools was identified, as the proposed multi-family residential development originally proposed on Parcel 2 would generate an estimated two new elementary school students, one middle school student and four high school students, which had not been planned for the Dublin Unified School District. Mitigation Measure 4.11-1 (schools) was identified to reduce this impact to a less-than-significant level.

Mitigation Measure 4.11-1 (schools): Prior to issuance of the first residential building permit, the project applicant shall enter into a school mitigation program with the Dublin Unified School District to ensure that a fair share fee towards off-setting costs to provide educational services to the District is provided.

2018 Supplemental IS/MND No significant impacts related to public services were identified in the 2018 Supplemental IS/MND.

Project Impacts and Mitigation Measures

(a) Fire protection

No New Impact. The construction of a 55-bed memory care facility on Parcel 2 and an 84-bed assisted living facility on Parcel 3 would serve approximately 139 elderly individuals and result in 77 additional staff at the project site. Development of the existing vacant site with an institutional use could incrementally increase demand for fire protection services. However, the proposed project is required to adhere to the CBC, the California Fire Code and City of Dublin codes, ordinance and regulations to minimize fire hazards, including fire prevention and suppression measures; fire hydrants and sprinkler systems; emergency access; and other similar requirements. ACFD would continue to provide services to the project site and would not require additional firefighters to serve the proposed project. The demand for fire protection services resulting from the proposed project would not require the construction of new or alteration of existing fire protection facilities to maintain an adequate level of fire protection service. No physical impacts associated with the provision of fire protection services would occur. Therefore, the proposed project would not result in new significant or substantially more severe significant impacts related to fire protection than were analyzed and described in the prior environmental documents. No additional analysis is required.

(b) Police protection, police, schools, parks and other public facilities

No New Impact. The construction of a 55-bed memory care facility on Parcel 2 and an 84-bed assisted living facility on Parcel 3 would serve approximately 139 elderly individuals and result in 77 additional staff at the project site. Development of the existing vacant site with an institutional use could incrementally increase demand for police protection services. However, the proposed project would incorporate safety features such as setbacks from the street and well-lit exterior spaces with visual exposure, would have a continual presence of staff members 24 hours per day, and would have a steady presence of residents and visitors during daytime hours. The increased demand for police protection services resulting from the proposed project would not be substantial compared to existing conditions, and would not require the construction of new or alteration of existing police protection facilities to maintain an adequate level of police protection service. No physical impacts associated with the provision of police protection services would occur. Therefore, the proposed project would not result in new significant or substantially more severe significant impacts related to police protection than were analyzed and described in the prior environmental documents. No additional analysis is required.

(c) Schools

No New Impact. The proposed project would develop a memory care facility and assisted living facility for senior citizens and would not generate additional students in the Dublin Unified School District. Additionally, as previously discussed, it is expected that new jobs that would be created by the proposed project would be filled by existing residents in the area. Appropriate developer impact fees, as required by State law, would be assessed and paid by the project applicant to offset any impact to school facilities, consistent with Mitigation Measure 4.11-1 identified in the VCC EIR. Therefore, the proposed project would not result in new significant or substantially more severe significant impacts related to schools than were analyzed and described in the prior environmental documents. No additional analysis is required.

(d) Parks

No New Impact. The construction of a 55-bed memory care facility on Parcel 2 and an 84-bed assisted living facility on Parcel 3 would serve approximately 139 elderly individuals and result in 77 additional staff at the project site. The assisted living and memory care facilities would provide amenities for patients and staff, including courtyards with turf area, patio, plantings and a fountain; and walkways around the perimeter of the facilities, which would allow for secure outdoor recreational activities for the residents. The proposed project would not contribute to a substantial increase in the population necessitating either construction of new or alteration of existing park facilities to maintain an adequate level of service. No physical impacts associated with the provision of park services would occur. Therefore, the proposed project would not result in new significant or substantially more severe significant impacts related to parks than were analyzed and described in the prior environmental documents. No additional analysis is required.

(e) Other public facilities

No New Impact. A portion of the patients and staff served by the proposed project would likely patronize public facilities such as local library branches operated by the Alameda County Library. However, as described above patients and staff are likely to come from within the City and surrounding communities; therefore, the proposed project is not anticipated to increase the number of library patrons utilizing public facilities. Therefore, the proposed project would not result in new significant or substantially more severe significant impacts related to other public facilities than were analyzed and described in the prior environmental documents. No additional analysis is required.

Source(s)

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

Recreation

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
15. RECREATION. Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Environmental Setting

The City of Dublin has a variety of recreational facilities including neighborhood parks, community parks, community facilities, a senior center, open space areas and a series of trail networks. According to the City of Dublin Parks and Recreation Master Plan, the City of Dublin currently has 18 parks, five deeded park sites, and six school parks and City-owned open space areas that account for nearly 233 acres of dedicated open space and developed park land. In addition, the City has over 59 acres of undeveloped parkland that has either been offered for dedication by landowners or acquired by the City. In addition, the East Bay Regional Park District (EBRPD) operates the Dublin Hills Regional Park, a large open space park with regional trail connections. The Iron Horse Trail runs along the Union Pacific/Southern Pacific Railroad right-of-way, connecting Dublin, the Dublin/Pleasanton BART station and the City of Pleasanton.

Regulatory Framework

Local Regulations

City of Dublin General Plan

Chapter 3 of the Land Use Element outlines policies and programs to provide open space both within and apart from development projects. The following goals and policies related to parks and recreation that are applicable to the proposed project:

> **Guiding Policy 3.4.1.A.1.** Expand park area throughout the Primary and Extended Planning Areas to serve new development.
>
> **Guiding Policy 3.4.1.A.3.** Restrict structures on the hillsides that appear to project above major ridgelines. The present undisturbed natural ridgelines as seen from the Primary

Planning Area and key travel corridors are an essential component of Dublin's appearance as a freestanding city ringed by open hills.

Implementing Policy 3.4.1.B.1. Acquire and improve parklands in conformance with the standards and policies in the City's Parks and Recreation Master Plan.

Implementing Policy 3.4.1B.2. Continue to maintain and periodically update the Citywide Parks and Recreation Master Plan. The Master Plan shall provide specific standards for acquiring parkland to support growth planned in the Land Use Element.

Implementing Policy 3.4.1.B.3. The policies set forth below, as implemented through the Parks and Recreation Master Plan and development approvals, constitute the action program for preserving and providing open space for outdoor recreation.

Guiding Policy 3.4.3.A.1. Provide a north-south trail link across the Planning Area, as part of a regional trail network.

Guiding Policy 3.4.3.A.2. Create a local trail network, which links large areas of permanent open space, while providing convenient access from nearby residential areas. Maximize visual exposure to open space, and provide multiple local physical access points to increase public enjoyment of open space.

Implementing Policy 3.4.3.B.1. In conjunction with development approvals, promote land dedication or reservation, and improvements for a ridgeline regional trail and other trail links.

Previous CEQA Documents

VCC EIR

The VCC EIR determined that impacts related to parks and recreation would be less than significant. No mitigation measure were identified for this environmental topic.

2018 Supplemental IS/MND

No significant impacts related to recreation were identified in the 2018 Supplemental IS/MND.

Project Impacts and Mitigation Measures

(a) Increase the use of existing recreation facilities causing deterioration

No New Impact. As discussed in Section 14.d, implementation of the proposed project, which would provide 139 beds for senior citizen residents, would not substantially increase the demand for park and recreation facilities. Similarly, the proposed project would not increase

the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. Therefore, no new significant or substantially more severe significant impacts related to existing recreation facilities would result from the proposed project. No additional analysis is required.

(b) Propose, require new facilities that cause physical effect

No New Impact. The proposed project would not include construction of recreational facilities nor is it required to construct or expand recreational facilities. As shown on Figures 7 and 8, the proposed facilities would include private courtyards for the exclusive use of future residents. The courtyards would be provided at the ground level, in the central portion of each of the proposed buildings. The courtyard for the memory care facility would include an artificial turf area, plantings and a patio with a water feature. The courtyard for the assisted living facility would include a patio area with seating. The physical impacts resulting from the construction of these facilities have been evaluated in this Initial Study checklist. No new significant or substantially more severe significant impacts related to new recreation facilities would result from the proposed project. No additional analysis is required.

Source(s)

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

Transportation

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

Environmental Setting

Key roadways in the vicinity of the proposed project are as follows:

- **Inspiration Drive:** According to the City of Dublin General Plan Circulation and Scenic Highways Element, Inspiration Drive is classified as a Local Residential roadway. Inspiration Drive is a two-lane divided, north-south roadway that provides access to the proposed assisted living facility and memory care facility. The posted speed limit within the vicinity of the project site is 25 miles per hour (mph). Sidewalks are provided on the western side of the roadway. On-street bicycle lanes are not provided on either side of the street. On-street parking is prohibited.

- **Dublin Boulevard:** According to the City of Dublin General Plan Circulation and Scenic Highways Element, Dublin Boulevard is classified as an Arterial roadway. In the vicinity of the project, Dublin Boulevard is a two-lane divided, east-west roadway that provides regional access within the City. The posted speed limit is 40 mph. Sidewalks are provided on the northern side of the roadway. On-street bicycle lanes are not provided on either side of the street. On-street parking is prohibited.

Peak-hour traffic volume data were collected on Tuesday, February 2, 2021, and adjusted to approximate non-pandemic conditions (see Traffic Analysis in Appendix F). Table P summarizes the results of the Existing a.m. and p.m. peak-hour level of service (LOS) analysis for the study area intersections. Table P indicates that all study area intersections operate at acceptable LOS (LOS D or better) in the a.m. and p.m. peak hours.

Table P: Existing Intersection Level of Service Summary

Study Area No.	Intersection	AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Inspiration Drive/Dublin Boulevard	13.3	B	12.7	B
2	Inspiration Drive/Memory Care Driveway	Future Driveway			
3	Inspiration Drive/Assisted Living Driveway	Future Driveway			

Source: LSA 2021
LOS = level of service
sec = seconds

Table Q summarizes the results of the Existing and Existing (non-pandemic) a.m. and p.m. peak-hour LOS analysis for the study area intersections. Table Q indicates that all study area intersections operate at acceptable LOS (LOS D or better) in the a.m. and p.m. peak hours.

Table Q: Estimated Non-Pandemic Existing Intersection Level of Service Summary

Study Area No.	Intersection	AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Inspiration Drive/Dublin Boulevard	45.3	D	12.5	B
2	Inspiration Drive/Memory Care Driveway	Future Driveway			
3	Inspiration Drive/Assisted Living Driveway	Future Driveway			

Source: LSA 2021
LOS = level of service
sec = seconds

Regulatory Framework

Regional and Local Regulations

Metropolitan Transportation Commission

The Metropolitan Transportation Commission (MTC) conducts transportation planning, financing, and coordination for the San Francisco Bay Area, including Alameda County. MTC periodically updates the Regional Transportation Plan, which plans for the development of mass transit, highway, airport, seaport, railroad, bike, and pedestrian facilities. The most current Regional Transportation Plan, *Transportation 2035*, budgets funding for transportation-related projects. In addition, MTC and ABAG adopted Plan Bay Area 2040 in 2017, which is a State-mandated transportation and land use plan. The Sustainable Communities Strategy outlines a sustainable communities strategy for the region, which aims to integrate transportation, land use, and housing to meet GHG reduction targets established by the California Air Resources Board.

Alameda County Congestion Management Program

The Alameda County Transportation Commission (Alameda CTC) is an independent special district that aims to provide sustainable, accessible, and community-focused transportation opportunities. The Alameda CTC is the county's congestion management agency, providing countywide transportation planning, design and construction of specific highway, pedestrian, and bicycle improvement projects, as well as the promotion of transit-oriented development. In accordance with California Statute, Government code 65088, the Alameda CTC prepares the Alameda County Congestion Management Program (CMP), which measures the performance of the county's multi-modal transportation system, addresses roadway congestion, and connects transportation and land use. Alameda CTC also maintains a countywide travel mode in compliance with Plan Bay Area 2040 and CMP legislation.

The Alameda County CMP contains the following five mandatory elements: (1) level of service monitoring; (2) performance; (3) travel demand management; (4) land use analysis program; and (5) capital improvements. The Alameda CTC has also developed information related to Senate Bill 743 and tools for measuring and reducing vehicle miles travelled.

City of Dublin General Plan

Chapter 5.0, Land Use and Circulation: Circulation and Scenic Highways Element, identifies the City's transportation and roadway policies. As described in the City of Dublin General Plan, the City aims to provide a comprehensive circulation network that supports multiple modes of transportation including private vehicles, transit, cycling, and walking. The proposed project would be accessed by existing roadways in the project area and would not modify any existing roadways. The following policies from the City of Dublin General Plan relate to the proposed project:

> **Implementing Policy 5.2.2.B.2.** Design and construct all roads in the City's circulation network as defined in Figure 5-1 as well as bicycle and pedestrian networks as defined in the City of Dublin Bicycle and Pedestrian Master Plan.
>
> **Guiding Policy 5.2.3.A.1.** Provide an integrated multi-modal circulation system that provides efficient vehicular circulation while providing a design that allows safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, seniors, children, youth, and families; and encourages pedestrian, bicycle, transit, and other non-automobile transportation alternatives.
>
> **Guiding Policy 5.4.3.A.1.** Plan for all users by creating and maintaining Complete Streets that provide safe, comfortable, and convenient travel along and across streets (including streets, roads, highways, bridges, and other portions of the transportation system) through a comprehensive, integrated transportation network that meets the

requirements of currently adopted transportation plans and serves all categories of users.

Guiding Policy 5.5.1.A.1. Provide safe, continuous, comfortable and convenient bikeways throughout the City.

Guiding Policy 5.5.1.A.2. Improve and maintain bikeways and pedestrian facilities and support facilities in conformance with the recommendations in the Dublin Bicycle and Pedestrian Master Plan.

Guiding Policy 5.5.1.A.4. Provide comfortable, safe, and convenient walking routes throughout the City and, in particular, to key destinations such as Downtown Dublin, the BART Stations, schools, parks, and commercial centers.

Implementing Policy 5.5.1.B.1. Complete the bikeways systems illustrated on Figures 5-3a and 5-3b (in the General Plan).

Implementing Policy 5.5.1.B.2. Improve bikeways, bicycle support facilities, and pedestrian facilities in accordance with the Dublin Bicycle and Pedestrian Master Plan in conjunction with development proposals.

Implementing Policy 5.5.1.B.3. Ensure on-going maintenance of bikeways, bicycle support facilities and pedestrian facilities that are intended for public use and located on private property in conjunction with development proposals.

Implementing Policy 5.75.1.B.2. Implement the Eastern Dublin Scenic Corridors Policies and Standards for projects within the Eastern Extended Planning Area.

City of Dublin Bicycle and Pedestrian Master Plan

The City of Dublin Bicycle and Pedestrian Master Plan provides policies, network plans, prioritized project lists, support programs, and best practice design guidelines for bicycling and walking in Dublin. As shown in Figure 5-2 of the Plan, Dublin Existing & Proposed Bikeways, Class IIA Bicycle Lanes are proposed along Dublin Boulevard adjacent to the project site. However, Dublin Boulevard currently consists of approximately 30-feet of paved roadway with 12-foot travel lanes; therefore, there is limited available width within the existing right-of-way to accommodate bicycle lanes in both directions.

Previous CEQA Documents

VCC EIR

The VCC EIR identified potentially significant impacts related to increased traffic associated with implementation of the VCC expansion project, including impacts to intersections, local roadway, and cumulative traffic impacts. Mitigation measures were identified to reduce these transportation impacts to a less than significant level. No impacts related to parking or transit service were identified. The following mitigation measures were included in the VCC EIR:

> **Mitigation Measure 4.10-1 (intersection impacts)** The project sponsor shall contribute a fair-share contribution to the funding of traffic signals at the Dublin Boulevard/Silvergate Drive and Dublin Boulevard/Inspiration Drive.
>
> **Mitigation Measure 4.10-2 (local street impacts).** Monitoring of the peak hour turning movements at project driveways be conducted on one typical school day every six months following the completion of the school expansion and reported to the City, to demonstrate that the expansion does not increase the rate of vehicles violating these restrictions. If the number of violators increases after the expansion, more stringent enforcement or other measures may be required by the school administration to limit the number of vehicles accessing the project site to or from Bay Laurel Street, as determined by the City of Dublin Public Works Director.
>
> **Mitigation Measure 4.10-3 (cumulative traffic).** The project sponsor shall make a fair share contribution toward the funding of the future widening of Dublin Boulevard between Hansen Drive and Silvergate Drive from two to four lanes.

These mitigation measures have already been implemented as part of the VCC Project approvals and, as described further below, the proposed project would not result in transportation impacts to intersections or roadways in the project vicinity. Therefore, Mitigation Measures 4.10-1 through 4.10-3 would not apply to the proposed project.

2018 Supplemental IS/MND

The 2018 Supplemental IS/MND identified potentially significant impacts associated with an increase in cut-through traffic from school operations and insufficient parking supply for the proposed football stadium. Mitigation Measures TRA-1 and TRA-2 were identified to reduce these transportation impacts to a less-than-significant level. Neither of these mitigation measures would apply to the proposed project, as the proposed project would not generate significant vehicle trips that would increase cut-through traffic or result in inadequate parking supply. All other transportation impacts were determined to be less than significant.

Project Impacts and Mitigation Measures

(a) Conflict with applicable transportation plans standards, including bicycle and pedestrian facilities

No New Impact. The consistency of the proposed project with applicable transportation plan standards, including bicycle and pedestrian facilities is described below.

Roadways and Intersections. A Traffic Analysis was prepared to review the trip generation and trip distribution of the proposed project to local area roadways. The Traffic Analysis is included as Appendix F of this IS/MND and its findings are summarized below.

Trip generation represents the amount of traffic that is attracted to and produced by a development project. The daily and peak-hour trips for the proposed project were generated using trip rates contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (2017). The project trip generation is presented in Table R. As Table R indicates, the proposed 55-bed memory care facility would generate 111 trips per day, including four trips (two inbound and two outbound) in the a.m. peak hour and 10 (six inbound and four outbound) trips in the p.m. peak hour. Additionally, the proposed 84-bed assisted living facility would generate 218 trips per day, including 16 trips (10 inbound and six outbound) in the a.m. peak hour and 22 (eight inbound and 13 outbound) trips in the p.m. peak hour. As such, the proposed project is anticipated to generate a total of 329 trips per day, including 20 trips (12 inbound and eight outbound) in the a.m. peak hour and 32 trips (14 inbound and 17 outbound) in the p.m. peak hour. This trip generation is higher than the previously analyzed trip generation for these development areas as identified in the VCC EIR, which was 15 trips in the a.m. peak hour (2 inbound and 13 outbound) and 19 trips in the p.m. peak hour (13 inbound and 6 outbound).

Table R: Project Trip Generation Summary

Land Use (Land Use Code)	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates[1]									
Congregate Care Facility (253)		DU	2.02	0.04	0.03	0.07	0.10	0.08	0.18
Assisted Living (254)		Bed	2.60	0.12	0.07	0.19	0.10	0.16	0.26
Trip Generation									
Memory Care (Parcel 2)	55	DU	111	2	2	4	6	4	10
Assisted Living (Parcel 3)	84	Bed	218	10	6	16	8	13	22
Total			329	12	8	20	14	17	32

Source: LSA 2021

[1] Trip rates referenced from the ITE *Trip Generation Manual*, 10th Edition, and supplement

ADT = average daily trips

DU = dwelling unit

ITE = Institute of Transportation Engineers

Based on the current observed travel patterns, traffic to and from the project site was distributed south towards the Inspiration Drive/Dublin Boulevard intersection. At the intersection with Dublin Boulevard, 15 percent of trips were distributed to and from the west along Dublin Boulevard, and 85 percent of trips were distributed to and from the east along Dublin Boulevard towards the I-580 freeway access.

To demonstrate the effect that the project would have on the study area intersections in the Existing condition, an Existing Plus Project LOS analysis was prepared. This analysis assumes the operation of the 55-bed memory care facility and 84-bed assisted living facility during Non-Pandemic (Modified Existing) conditions.

Table S summarizes the results of the estimated Non-Pandemic Existing Plus Project peak-hour LOS analysis for the three study area intersections. Table S indicates that all study area intersections operate at acceptable LOS (LOS D or better) in the a.m. and p.m. peak hours. Therefore, the project can be implemented in an existing setting with no peak hour LOS impacts to the surrounding intersections. The proposed project would not result in new significant or substantially more severe impacts related to traffic beyond those analyzed in the prior environmental documents. No additional analysis is required.

Table S: Estimated Non-Pandemic Existing Plus Project Level of Service Summary

Study Area No.	Intersections	Baseline				Plus Project			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1	Inspiration Drive/Dublin Boulevard	45.3	D	12.5	B	49.1	D	12.5	B
2	Inspiration Drive/Memory Care Driveway	Future Driveway				11.1	B	9.4	A
3	Inspiration Drive/Assisted Living Driveway	Future Driveway				21.9	C	10.5	B

Source: LSA 2021
LOS = level of service
sec = seconds

Transit, Bicycle and Pedestrian Facilities.Transit service in Dublin and throughout the Tri-Valley area is provided by the Livermore/Amador Valley Transit Authority (LAVTA). At present, no LAVTA bus routes provide service to the project site. School Route 503 provides service along Dublin Boulevard from Schafer Ranch Park to Dublin High School and Wells Middle School.

As described above, sidewalks are provided on the western side of Inspiration Drive and on the northern side of Dublin Boulevard. No bicycle facilities are currently provided. According to the City of Dublin Bicycle and Pedestrian Master Plan, Class IIA Bicycle Lanes are proposed along Dublin Boulevard adjacent to the project site. However, as described above, Dublin Boulevard currently consists of approximately 30-feet of paved roadway with 12-foot travel lanes; therefore, there is limited available width within the existing right-of-way to accommodate

bicycle lanes in both directions. Dublin Boulevard would likely need to be widened to provide the eventual bicycle lanes with adequate separation given the roadway speed on Dublin Boulevard. Completion of the proposed project would not affect existing conditions on Dublin Boulevard.

The proposed project would not interfere with existing transit, bicycle or pedestrian facilities. The proposed project would maintain existing sidewalks along Dublin Boulevard and Inspiration Drive and install new sidewalk along the project frontage of Parcel 3 on the east side of Inspiration Drive. Pathways within the project site would provide pedestrian connections to existing sidewalk. Both facilities would provide long- and short-term bicycle parking. Impacts to bicyclists, pedestrians, and transit service providers resulting from implementation of the proposed project would remain less than significant and the proposed project would not result in new significant or substantially more severe impacts related to alternative forms of transportation beyond those analyzed in the prior environmental documents. No additional analysis is required.

(b) Conflict with CEQA Section 15064.3 (b)

No New Impact. The topic of the project's contribution to vehicle miles traveled (VMT) was not analyzed in the VCC EIR or 2018 Supplemental IS/MND. This impact is not required to be analyzed unless it constitutes new information of substantial importance that was not known and could not have been known at the time the previous environmental documents were certified as complete (Public Resources Code Section 21166 and CEQA Guidelines Section 15162 and 15163). VMT was known at the time of the certification of these prior CEQA documents and could have been analyzed. A change in regulations for impact analysis under CEQA is not a trigger for further environmental review under supplemental review standards. The impact of increased traffic was analyzed using other methods (LOS) at the time of certification of the VCC EIR and 2018 Supplemental IS/MND. Under CEQA standards, it is not considered new information that requires analysis in a Supplemental EIR or negative declaration. Therefore, no supplemental environmental analysis of the project's impacts on this issue is required under CEQA.

(c) Substantially increase hazards due to a design feature

No New Impact. Access to the memory care and assisted living facilities would be provided via two new driveways off of Inspiration Drive. Proposed vehicular access would not change the layout of the roadways in the project vicinity. As described in the Traffic Analysis, the design, construction, and maintenance of project site access locations would be in compliance with the City's Municipal Code. Therefore, the proposed project would not result in new significant or substantially more severe significant impacts beyond those already analyzed in the prior environmental documents. No additional analysis is required.

(d) Result in inadequate emergency access

No New Impact. The proposed project would not result in inadequate emergency access. Emergency vehicle access to the project site would continue to be provided via Inspiration Drive and Dublin Boulevard. The design, construction, and maintenance of project site access locations would be in compliance with the City's Municipal Code and would be required to meet all emergency access standards. In addition, through Site Development Review, emergency services would review proposed plans to ensure that emergency vehicle access and circulation is adequate. Therefore, the proposed project would not result in new significant or substantially more severe significant impacts beyond those already analyzed in the prior environmental documents. No additional analysis is required.

Source(s)

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

Tribal Cultural Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
17. 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), or				X
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				X

Environmental Setting

Assembly Bill 52, which became law on January 1, 2015, provides for consultation with California Native American tribes during the CEQA environmental review process, and equates significant impacts to "tribal cultural resources" with significant environmental impacts. Public Resources Code (PRC) Section 21074 states that "tribal cultural resources" are:

> Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and are one of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources.
- Included in a local register of historical resources as defined in subdivision (k) of PRC Section 5020.1.
- 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

A “historical resource” (PRC Section 21084.1), a “unique archaeological resource” (PRC Section 21083.2(g)), or a “nonunique archaeological resource” (PRC Section 21083.2 (h)) may also be a tribal cultural resource if it is included or determined to be eligible for inclusion in the California Register.

The consultation provisions of the law require that a public agency consult with local Native American tribes that have requested placement on that agency’s notification list for CEQA projects. Within 14 days of determining that a project application is complete, or a decision by a public agency to undertake a project, the lead agency must notify tribes of the opportunity to consult on the project, should a tribe have previously requested to be on the agency’s notification list. California Native American tribes must be recognized by the California Native American Heritage Commission as traditionally and culturally affiliated with the project site and must have previously requested that the lead agency notify them of projects. Tribes have 30 days following notification of a project to request consultation with the lead agency.

The purpose of consultation is to inform the lead agency in its identification and determination of the significance of tribal cultural resources. If a project is determined to result in a significant impact on an identified tribal cultural resource, the consultation process must occur and conclude prior to adoption of a Negative Declaration or Mitigated Negative Declaration, or certification of an Environmental Impact Report (PRC Sections 21080.3.1, 21080.3.2, 21082.3).

In January 2021, the City provided formal notification to the California Native American tribe that has requested notification under Assembly Bill 52 and under Senate Bill 18 related to the proposed General Plan Amendment. In response to the notifications, two responses were received. Ms. Katherine Perez, Chairperson of the Northern Valley Yokut/Ohlone/Bay Mewuk Tribe, responded via email on January 27, 2021, requesting additional information related to the proposed project. Corrina Gould, Chairperson of the Confederated Villages of Lisjan Tribe requested information on the Sacred Lands Files and requested to be kept informed with any new details as it pertains to the Confederated Villages of Lisjan Tribe. No formal tribal consultation was requested.

Regulatory Framework

Federal and State Regulations

Native American Heritage Commission

In 1976, the California State Government passed AB 4239, creating the Native American Heritage Commission (NAHC). The NAHC is responsible for identifying and categorizing Native American cultural resources as well as preventing damages to designated sacred sites and associated artifacts and remains. Legislation passed in 1982 authorized the NAHC to identify a Most Likely Descendant (MLD) when Native American remains are found outside of any place

other than a designated cemetery. A MLD has the authority to make recommendations regarding the treatment and disposition of the discovered remains.

The Native American Historic Resource Protection Act

The Native American Historic Resource Protection Act, or Assembly Bill (AB 52) defines guidelines for reducing conflicts between Native Americans and development projects and activities. Projects are subject to AB 52 if a notice of preparation for an EIR is filed or a notice of intent to adopt a Negative or Mitigated Negative Declaration is filed on or after July 1, 2016. "Tribal cultural resources" (TCR) are protected under CEQA and are defined as a site, feature, place, cultural landscape (must include the size and scope of landscape), sacred place, and object with a cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources. At the lead agency's discretion, a resource can be treated as a TCR if a Native American Tribe provides substantial evidence. Additionally, AB 52 allows tribes to engage in consultation with lead agencies and sets guidelines for such consultation.

Health and Safety Code Section 7050.5

Section 7050.5 of the California Health and Safety Code protects Native American burials, remains, and associated grave artifacts in the event that they are discovered in any location other than a designated cemetery. The Code mandates the immediate suspension of excavation in the site as well as any adjacent or overlying area where the remains or associated item is found, and provides for the sensitive disposition of those remains. Should remains be discovered, the County Coroner must determine that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or designee, in the manner provided in Section 5097.98 of the Public Resources Code. The County Coroner shall make the determination within two working days from the time the person responsible for the excavation, or designee, notifies the County Coroner of the discovery or recognition of the human remains. If the County Coroner identifies the remains to be of Native American origin, or has reason to believe that the remains are those of Native American origin, the County Coroner must contact the California NAHC within 24 hours. The NAHC representative will then alert a Native American MLD to conduct an inspection of the site and to determine the following course of treatment and action. Additionally, *State CEQA Guidelines* Section 15064.5 sets forth a procedure if human remains are found on land outside of federal jurisdiction.

Local Regulations

City of Dublin General Plan

The City of Dublin General Plan establishes the following guiding policy associated with cultural resources that is relevant to the proposed project:

> **Guiding Policy 7.7.1.A.2:** Follow State regulations as set forth in Public Resources Code Section 21083.2 regarding discovery of archaeological sites, and Historical Resources, as defined in Section 5020.1 of the Public Resources Code.

Previous CEQA Documents

The topic of the project's potential impacts to tribal cultural resources was not specifically analyzed in the VCC EIR or the 2018 Supplemental IS/MND. Since certification of the VCC EIR, the topic of Tribal Cultural Resources has been added as a new category in the CEQA checklist. However, the VCC EIR and the 2018 Supplemental IS/MND analyzed prehistoric and historic resources and included mitigation measures related to historical and archaeological resources and human remains. These measures are listed in the cultural resources section of this Initial Study Checklist.

Because the VCC EIR has been certified, the determination of whether tribal cultural resources need to be analyzed for this proposed project is governed by the law on supplemental or subsequent EIRs (Public Resources Code section 21166 and CEQA Guidelines, Sections 15162 and 15163). Tribal cultural resources are not required to be analyzed under those standards unless it constitutes "new information of substantial importance, which was not known and could not have been known at the time the previous EIR was certified as complete" (CEQA Guidelines Sec. 15162 (a) (3)).

Project Impacts and Mitigation Measures

(a) Listed or eligible for listing in the California Register of Historical Resources

No New Impact. Native American consultation was conducted in compliance with Senate Bill 18, which requires tribal consultation for a proposed General Plan amendment. As described above, one tribal contact requested consultation regarding the proposed project; however, no information regarding specific known tribal cultural resources within the project site was provided by the tribe.

Parcels 2 and 3, which are proposed for development, are currently undeveloped; therefore, no built historic resources are located on the project site. As described in the prior environmental documents, a known archaeological deposit was identified south of the project site and there is a moderate potential for finding Native American sites in the project area, which could include tribal cultural resources that are eligible for listing in the California Register. If encountered during project-related ground disturbing activities, the proposed project could result in the

demolition, destruction, or alteration of unknown buried tribal cultural resources, which would result in a substantial adverse change in the significance of these resources. If such resources are encountered, implementation of Mitigation Measure 4.4-1, identified in the VCC EIR would reduce any potential impacts to archaeological and/or Native American resources to a less-than-significant level. With implementation of Mitigation Measure 4.4-1, as identified in Section 5, Cultural Resources, the project would not substantially increase the severity of the previously identified tribal cultural resource impacts, nor result in new significant impacts. No additional analysis is required.

(b) Significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1

No New Impact. As described above, no archaeological resources were identified on the site in the prior environmental documents. Therefore, the City, in its role as lead agency, has determined that the project site is not a resource significant to a California Native American tribe.

As described in the prior environmental documents and in Section 5, Cultural Resources, the proposed project could result in the demolition, destruction, or alteration of unknown buried tribal cultural resources. If such resources are encountered, implementation of Mitigation Measure 4.4-1, identified in the VCC EIR, would reduce any potential impacts to archaeological and/or Native American resources to a less-than-significant level. With implementation of Mitigation Measure 4.4-1, as identified in Section 5, Cultural Resources, the project would not substantially increase the severity of the previously identified tribal cultural resource impacts, nor result in new significant impacts. No additional analysis is required.

Source(s)

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

Utilities and Service Systems

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No New Impact
18. 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 telecommunications facilities the construction or relocation of which could cause significant environmental effects?				X
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project projected demand in addition to the provider's existing commitments?				X
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
e. Comply with federal, state, and local statutes and regulations related to solid waste?				X

Environmental Setting

A variety of local and regional providers in this area operate and maintain utility and service system facilities associated with electricity, water, stormwater, wastewater, solid waste, communications and natural gas.

Water

The Dublin San Ramon Services District (DSRSD) provides water service at the project site. DSRSD is responsible for providing both potable and recycled water to the City of Dublin, and the Dougherty Valley area of the City of San Ramon in Contra Costa County. DSRSD's water service area also includes Camp Parks, the Federal Correctional Institution (FCI), and Alameda County's Santa Rita Jail. Zone 7 supplies treated potable water to DSRSD. Treated potable water enters DSRSD's distribution system from five metered turnouts from the Zone 7 transmission system.

To reduce the demand for potable water, DSRSD promotes water recycling and is a member of the WaterReuse Association. In 1995, DSRSD and EBMUD, through a joint powers agreement,

formed the DSRSD-EBMUD Recycled Water Authority (DERWA). DERWA serves as a wholesaler to deliver recycled water to DSRSD and EBMUD, who in turn deliver the recycled water to their respective service areas. DERWA's San Ramon Valley Recycled Water Project (SRVRWP) provides a backbone distribution system that delivers recycled water to both DSRSD and EBMUD distribution systems. DSRSD's recycled water treatment facilities delivers recycled water to the SRVRWP. Recycled water is produced at DSRSD's wastewater treatment plant at the Recycled Water Treatment Facility (RWTF). The RWTF produces recycled water that meets the California Title 22 requirements for unrestricted reuse.

Wastewater

Wastewater collection and treatment services are also provided by DSRSD for the City of Dublin, City of Pleasanton, Camp Parks, FCI, Santa Rita Jail, and the southern portion of San Ramon. DSRSD owns and operates a wastewater treatment plant in Pleasanton that has a capacity of 17 million gallons per day (MGD). The existing wastewater service area encompasses approximately 13,340 acres, or 20.85 square miles. Within the wastewater service area there are currently 207 miles of gravity mains, one permanent lift station, and one temporary lift station. The permanent lift station has 26 feet of force main.

Stormwater

Drainage and flood control in the Eastern Dublin area is the responsibility of the City of Dublin and Zone 7. Zone 7 is responsible for master planning, overseeing construction coordination and maintaining major storm drain channels and culverts in Eastern Dublin. The City has jurisdiction and maintenance responsibility for local storm drains that discharge to the Zone 7 flood control system. Runoff from the project area drains to underground pipes and open culverts to Dublin Creek, south of the project site. Dublin Creek ultimately discharges into Las Positas Creek and flows south to San Francisco Bay.

Electricity

The East Bay Community Energy provides electricity to Dublin over PG&E's distribution system. PG&E provides natural gas service to the San Francisco Bay region and serves the project site.

Solid Waste

The City of Dublin has a Collection Services Agreement with a private solid waste collection company for residential and commercial garbage collection. The City also has comprehensive recycling and organics collection programs. All single-family residences are provided with three stream collection containers (landfill, recycle, organics) and most commercial and multi-family residences subscribe to three-stream collection service. Beginning January 1, 2022, all service accounts (with a few exceptions) will be required to subscribe to three-stream collection services due to State legislation (SB 1383).

Solid waste generated within the City is deposited at the Altamont Landfill which has a total estimated permitted capacity of 62 million cubic yards. The Altamont Landfill is approximately 26 percent full and is estimated to reach capacity in January 2029.

Regulatory Framework

Federal and State Regulations

California Urban Water Management Planning Act

Under the California Water Code and Urban Water Management Planning Act of 1983, all California urban water suppliers are required to prepare and adopt an Urban Water Management Plan (UWMP) every five years, which promotes water conservation and efficiency measures. Urban water suppliers that serve more than 3,000 customers or are supplying more than 3,000 acre-feet of water annually are subject to this Act. This Act requires that the total project water use be compared to water supply sources over the next 20 years in five-year increments. Planning must occur for all drought years and must include a water recycling analysis that incorporates a description of the wastewater collection and treatment system, outlining existing and potential recycled water uses. In September 2014, the Act was amended by SB 1420, which now requires urban water suppliers to provide descriptions of their water demand management measures and similar information.

Water Conservation Act of 2009

The Water Conservation Act of 2009 (SB X7-7) requires all water suppliers to increase water use efficiency by reducing per capita urban water use by 20 percent by December 31, 2020. This bill also set a goal for the state of reducing per capita water use by at least 10 percent by December 31, 2015.

California Integrated Waste Management Act (AB 939)

AB 939 established the California Integrated Waste Management Board under CalRecycle, which required all counties within California to prepare integrated waste management plans. Additionally, it changed the focus of solid waste management from landfill to diversion strategies (e.g., source reduction, recycling, and composting), and required all municipalities to divert 25 percent of their solid waste from landfill disposal by January 1, 1995, and 5 percent by the year 2000.

California Mandatory Commercial Recycling Law (AB 341)

AB 341 was enacted to help meet California's recycling goal of 75 percent by the year 2020. AB 341 requires all commercial businesses and public entities that generate four cubic yards or more of waste per week to have a recycling program in place. In addition, multi-family apartments with five or more units are also required to form a recycling program. In addition, each local government jurisdiction will implement a commercial solid waste recycling program

that consists of education, outreach and monitoring of businesses, designed to divert commercial solid waste from businesses. Each jurisdiction will report the progress achieved in implementing its commercial recycling program, including education, outreach and monitoring, and if applicable, enforcement efforts and exemptions, by providing updates in its electronic annual report. CalRecycle will review each jurisdiction's commercial recycling program that consists of education, outreach and monitoring.

Mandatory Organics Recycling AB 1826

In October 2014, Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time, while also offering an exemption process for rural counties. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

CALGreen Building Code

CALGreen requires mandatory green standards that all buildings in California must abide by, including: reducing indoor water use, reducing wastewater, recycling and/or salvaging nonhazardous construction and demolition debris, and providing readily accessible areas for recycling by the occupant. The code includes different categories such as energy, water, material, and resource efficiency. These standards include a mandatory set of minimum guidelines, as well as more stringent voluntary measures for new construction projects that local communities can opt into.

Local Regulations

2015 Urban Water Management Plan (UWMP)

Water is provided to the project site by DSRSD. The DSRSD adopted a UWMP in 2016 as per SB X7-7 and the Urban Water Management Planning Act (Section 10610 of Division 6 of the California Water Code). These plans are prepared every five years and must address the reliability of water sources within the following 20 years as well as other demand management measures and water shortage contingency plans. Additionally, the UWMP identifies strategies to meet requirements under SB X7-7 by reporting on progress towards meeting a 20 percent reduction for per-capita urban water use by the year 2020. The UWMP also plans for emergencies and times of water shortage. DSRSD is currently in the process of updating the UWMP.

City of Dublin General Plan

Chapter 4.0, Land Use and Circulation: Schools, Public Lands, and Utilities Element, identifies the City's policies related to the provision of public services and utilities in the City. The following policies from the City of Dublin General Plan relate to the proposed project:

> **Guiding Policy 4.4.1.A.1.** Ensure that adequate solid waste disposal capacity is available, to avoid constraining development, consistent with the Dublin General Plan.
>
> **Implementing Policy 4.4.1.B.3.** Prior to project approval, the applicant shall demonstrate that capacity will exist in solid waste disposal facilities for their project prior to the issuance of building permits.
>
> **Guiding Policy 4.5.1.A.1.** Expand sewage treatment and disposal capacity to avoid constraining development consistent with the Dublin General Plan.
>
> **Implementing Policy 4.5.1.B.1.** Prior to project approval, developers shall demonstrate that adequate capacity will exist in sewage treatment and disposal facilities for their projects prior to the issuance of building permits.
>
> **Guiding Policy 4.6.1.A.1.** Base General Plan proposals on the assumption that water supplies will be sufficient and that local wells could be used to supplement imported water if necessary.
>
> **Implementing Policy 4.6.1.B.1.** Consider obtaining water service from the East Bay Municipal Utility District and other sources.

Previous CEQA Documents

VCC EIR

The VCC EIR determined that approval of the VCC Expansion Project would increase demand for water, wastewater, solid waste disposal, electrical power and natural gas. However, impacts related to utilities and service systems were determined to be less than significant, as existing service providers could meet anticipated demand. No mitigation measure were identified for this environmental topic.

2018 Supplemental IS/MND

No significant impacts related to utilities and service systems were identified in the 2018 Supplemental IS/MND.

Project Impacts and Mitigation Measures

(a) Require relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities

No New Impact. The nature and scope of the proposed project would not 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. While the proposed project would likely generate greater demand for utility services than the multi-family residential development proposed as part of the VCC Expansion Project and evaluated in the VCC EIR, the increased demand associated with the memory care and assisted living facilities would not be substantial in the context of current demand and capacity, as described further below.

DSRSD maintains existing sanitary sewer lines within the vicinity of the project site, including the existing sanitary sewer main located within Dublin Boulevard, just south of the project site. As outlined in the Project Description, the proposed project would install new lines within the project site and would tie into the existing sanitary sewer main. A new sanitary sewer manhole would be installed within Dublin Boulevard at the sewer main connection. The new sanitary sewer lines installed within the project site would be constructed in conformance with City and DSRSD standards, and their construction would not cause significant environmental effects.

As described below, DSRSD provides potable water to the project site through an existing water main in Inspiration Drive. DSRSD's 2020 Urban Water Management Plan (UWMP) describes the existing and planned sources of water available in the water system service area through the year 2040. The UWMP has determined that water supplies would be adequate during normal year, single-dry year, and multiple-dry year scenarios through 2040 based on the development of the land uses within the DSRSD's service area, including the City of Dublin. The proposed project would not substantially increase demand for water and would therefore not exceed the capacity of existing water treatment facilities. The proposed project would not require the construction of new water treatment facilities, or the expansion of existing facilities, other than those already planned as part of the UWMP. The proposed project would include the installation of new water lines connecting to the existing water line located within Inspiration Drive. The proposed project would connect directly to existing mains, which have sufficient capacity to accommodate the proposed project.

The proposed storm water drainage system on the project site would be composed of catch basins and storm drains throughout the project site, which would connect and convey storm water to proposed bioretention basins on the project site and existing stormwater pipelines. The bioretention basins would be developed to accommodate approximately 4,600 square feet of water, which exceeds the estimated amount of storm water the proposed project would generate. The bioretention basins would provide appropriate vegetation and water quality

treatment to prevent discharge of untreated storm water from the project site. In addition, on-site drainage systems would be designed to be consistent with the Alameda County National Pollutant Discharge Elimination System (NPDES) C.3 requirements for Low Impact Development (LID).

The proposed project would include connections to the existing electricity and natural gas lines that run adjacent to the project site, which could include the lines within Dublin Boulevard and Inspiration Drive. These connections would not be considered "major" lines because these improvements would be made as additions to the existing infrastructure. Further, these connections would be conducted in accordance with each utility purveyor's specification and accordance with City guidelines.

On-site utility infrastructure necessary to serve the proposed project—including water, sanitary sewer, drainage, water quality treatment, and dry utilities (e.g., electricity, natural gas, cable)—would be installed within the project site and would connect to the existing utility lines within the adjacent roadways. No new or expanded utility lines or facilities are required off-site, except as needed for the utility connections.

Therefore, no new significant or substantially more severe significant impacts related to expanded water, wastewater, stormwater, electric power natural gas, or telecommunication facilities would occur beyond those analyzed in the prior environmental documents. No additional analysis is required.

(b) Sufficient water supply

No New Impact. The senior assisted living and memory care facilities and associated improvements would provide 139 beds and accommodate approximately 77 employees. The proposed project would connect to existing water mains that are serviced by the DSRSD, the water service provider for the City. Based on the DSRSD's 2020 Urban Water Management Plan (UWMP), which reported a baseline water use of 211 gallons per capita per day (GPCD) and a target of 169 GPCD in 2020. Based on an estimated 211 GPCD, water demand for the proposed project would be approximately 45,576 GPCD or 51 acre feet per year (afy). Under normal conditions, the 2020 UWMP predicts total water demand of 11,993 afy in 2025 and 13,820 in 2040. The estimated water demand for the senior assisted living and memory care would be nominal compared to the projected supply (95 gallons per minute and 160 gallon per minute at peak times, respectively); therefore, the DSRSD would have enough water supply to serve the project site. Additionally, consistent with the DSRSD District Code, the project applicant would be required obtain a certificate of capacity rights from DSRSD, prior to issuance of a building permit. The certificate of capacity rights, which is part of the entitlement review process, ensures the DSRSD can adequately serve the proposed project.

Currently, DSRSD's primary water supply source is purchased potable water from Zone 7, augmented by recycled water produced at DSRSD's RWTF. DSRSD also has a groundwater

pumping quota (GPQ) from the local groundwater basin, pumped on its behalf by Zone 7, the local groundwater basin manager. Imported water from the State Water Project, which is owned and operated by the Department of Water Resources, is by far Zone 7's largest water source, providing approximately 90 percent of the treated water supplied to its customers on an annual average basis. The proposed project would be served by these systems. DSRSD anticipates the same water supply mix to be available through 2040. With the projects and programs implemented by DSRSD and Zone 7, water supplies are projected to meet demands.

The senior assisted living and memory care facilities would use a relatively nominal percentage of the projected water supply available to DSRSD in future year scenarios. The proposed project would be consistent with the type and intensity of development assumed for the project site in in the City's General Plan and accounted for in the UWMP. As stated in the UWMP, DSRSD can meet its water demand under multiple dry years with diversified supply and conservation measures. Therefore, potential impacts associated with water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years would be less than significant. Therefore, the proposed project would not result in any new significant or substantially more severe significant impacts as compared to those impacts analyzed in the prior environmental documents. No additional analysis is required.

(c) Sufficient wastewater capacity

No New Impact. Wastewater generated by the senior assisted living and memory care facilities would be treated at DSRSD's Regional Wastewater Treatment Facility located at 7399 Johnson Drive in the City of Pleasanton. The wastewater treatment facilities have a capacity of approximately 17.0 million gallons per day (MGD), and the current average dry weather flow is approximately 9.7 MGD. The development at the project site would generate a nominal number of gallons of wastewater per day and would be within the average daily capacity amount of wastewater treated by DSRSD's Regional Wastewater Treatment Facility. Further, the proposed project would be consistent with the type and intensity of development assumed for the project site in the City's General Plan and accounted for in DSRSD's Wastewater Collection System Master Plan. Therefore, the proposed project would not result in any new significant or substantially more severe significant impacts as compared to those impacts analyzed in the prior environmental documents. No additional analysis is required.

(d-e) Adequate landfill and compliance

No New Impact. Operation of the proposed project is not anticipated to generate a significant amount of solid waste. The senior assisted living and memory care facility development would provide a total of 139 beds, resulting in an estimated 139 patients and 77 employees at the project site. The proposed project is estimated to generate approximately 127 tons of solid waste per year (0.35 tons per day) based on the CalEEMod data. Solid waste would be collected by Amador Valley Industries (AVI) and transferred to Altamont Landfill. According to Cal Recycle, Altamont Landfill (01-AA-0009), has a max permitted capacity of 11,150 tons per day.

The waste the senior assisted living and memory care facilities would generate would be nominal would not be significant in the context of the Landfill's operating permit. Disposal of solid waste would be required to comply with all federal state, and local statutes and regulations associated with solid waste. This would include providing receptacles for green waste, recyclables, and garbage. Therefore, the proposed project would not result in any new significant or substantially more severe significant impacts as compared to those impacts analyzed in the prior environmental documents. No additional analysis is required.

Source(s)

CalRecycle, 2019. Facility/Site Summary Details: Altamont Landfill and Resource Recovery (01-AA-0009). Website: www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/7?siteID=7 (accessed August 23, 2021).

Cal Recycle. 2021. 2019 State of Disposal and Recycling and Exports in California. February. Available online at: www2.calrecycle.ca.gov/Publications/Details/1697 (accessed August 23, 2021)

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

West Yost. 2019. 2017 Wastewater Collection System Master Plan. December. Available online at: www.dsrsd.com/about-us/library/plans-studies (accessed August 23, 2021).

West Yost. 2021. 2020 Urban Water Management Plan. June. Available online at: www.dsrsd.com/about-us/library/plans-studies (accessed August 23, 2021).

Wildfire

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

Existing Setting

As described in Section 8, Hazards and Hazardous Materials, the project site is located in a largely urbanized area. It is not identified as an area of moderate, high, or very high fire hazard severity for the Local Responsibility Area, nor is it identified as an area of moderate, high, or very high fire hazard severity for the State Responsibility Area, as mapped by the California Department of Forestry and Fire Protection (CAL FIRE).

Regulatory Framework

Federal and State Regulations

California Department of Forestry and Fire Protection

CALFIRE publishes maps that predict the threat of fire for each county within the State. Local Responsibility Areas and State or Federal Responsibility Areas are classified as either very high fire hazard severity zones (VHFHSZ) or non-VHFHSZ based on factors including fuel availability, topography, fire history, and climate. The 2012 Strategic Fire Plan for California was generated by CALFIRE to provide guidelines and objectives in order to account for associated fire impacts.

California Fire Code

Chapter 17.12 of the City of San José Municipal Code adopts the California Fire Code by reference, which is updated every three years. The California Fire Code includes regulations for emergency planning, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Several fire safety requirements include: installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Emergency Management Agency

CalEMA was consolidated as part of the Governor's Office on January 1, 2009, merging the former Governor's Office of Emergency Services with the existing Governor's Office of Homeland Security. CalEMA coordinates all State agency response to major disasters to provide support and hazard mitigation efforts for local governments. The agency also ensures the State has the appropriate resources and plans in order to respond in the event of all natural and human-induced emergencies and disasters.

Executive Order N-05-19

On January 9, 2019, Governor Gavin Newsom announced an Executive Order that requires CALFIRE and other State agencies to compile policy and regulatory recommendations concerning wildfire mitigation, emphasizing environmental sustainability and public health. The Executive Order requires the incorporation of socioeconomic analysis when conducting risk management of wildfires and mandates that agencies identify geographic areas with populations that are more vulnerable to the impacts of wildfires.

Local Regulations

City of Dublin General Plan

Section 8.3.2 of the City of Dublin outlines the following policies and programs related to fire hazards and fire protection:

> **Guiding Policy 8.3.2.1.A.1.** Require special precautions against fire as a condition of development approval in the western hills and elsewhere in the Extended planning Areas where proposed development would interface with open space.
>
> **Implementing Policy 8.3.2.1.B.1.** Continue to enforce the City's wild land urban interface regulations.

City of Dublin Wildfire Management Plan

The City of Dublin has adopted a Wildfire Management Plan to reduce the risk of open land wildfire to the lowest practical level consistent with reasonable protection of wildlife habitat and other open space values. The Wildfire Management Plan is implemented in conjunction with Chapter 7.32 of the City of Dublin Municipal Code, "Materials and Construction Methods for Exterior Wildfire Exposure," which provides for acceptable methods of compliance inspection and documentation for vegetation management. The Wildfire Management Plan requires compliance with State defensible space guidelines and brush control in designated wildland-urban interface fire areas.

Previous CEQA Documents

The previous CEQA documents did not specifically analyze impacts for wildfires as it was not a separate topic for analysis when the VCC EIR and Supplemental IS/MND were completed. Public services impacts and mitigation measures, some of which relate to the provision of fire services pertain to wildfires, were identified and are discussed in the public services section.

Project Impacts and Mitigation Measures

(a) Impair emergency response plan

No New Impact. As described above, the project site is located outside of a very high fire hazard severity (VHFHS) zone as identified by CALFIRE. The nearest VHFHS zone is located approximately 2.2 miles south of the project site. The proposed project would be designed to provide adequate access to the site for fire/police/emergency medical service personnel in the event of an emergency at the project site. In the event of an emergency on the site, employees and residents could exit the site via proposed site driveways connecting to Inspiration Drive. Once off the project site, employees and residents could exit the area via Dublin Boulevard and accessing I-580 to exit the City and region. As the proposed project would be site specific with no improvements occurring to the local roadway system, it would not substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, there would be no new or substantially more severe significant impacts to emergency response plan or emergency evacuation plan beyond what has been analyzed in the previous environmental documents. No additional analysis is required.

(b) Pollutants or uncontrolled spread

No New Impact. The proposed project is located in an area of Dublin that is predominantly occupied by residential and public/semi-public uses. The parcels proposed for development are bordered by existing residential development to the west and east, by the existing VCC campus to the north and I-580 to the south. As described in Section 6, Geology and Soils, portions of the project site are steeply sloped; however, the project design would include retaining walls to manage slopes on site. Prevailing winds are typically from the west between February and

November and from the north from November to February in the City. Finally, the proposed project would not include any design features that would increase the potential for a wildfire. The proposed project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, the project would not result in any pollutant concentrations or wildfire risk as a result of slope, prevailing winds, or other factors that exacerbate wildfire risks beyond what was analyzed in the prior environmental documents. No additional analysis is required.

(c) Infrastructure

No New Impact. As discussed above, the project site is located outside of a VHFHS zone as identified by CALFIRE. All proposed project components including infrastructure, would be located within the boundaries of the project site and impacts associated with the development of the proposed project within the project site have been analyzed herein. Additionally, through Site Development Review, emergency services would review proposed plans to ensure that emergency vehicle access and circulation is adequate. With adherence to applicable regulatory requirements, there would be no new or substantially more severe significant impacts to installation or maintenance of infrastructure beyond what has been analyzed in the prior environmental documents. No additional analysis is required.

(d) Slope instability resulting in post-fire slope instability

No New Impact. As described in Section 6, Geology and Soils, portions of the project site are steeply sloped; however, the project design would include retaining walls to manage slopes on site. In addition, Implementation of Mitigation Measure 4.5-1, identified in the VCC EIR, which requires the preparation and implementation of a site-specific geotechnical investigation for each building constructed at the project site, would ensure impacts related to slopes would be reduced to a less than significant level. Further, as discussed in Section 9, Hydrology and Water Quality, the project would be required to implement erosion control measures during and post-construction. The proposed on-site detention basins would limit the release of stormwater from the site; therefore, the project site would not expose people to flooding or landslides as a result of runoff, post-fire slope instability or drainage changes. With adherence to required mitigation measures and applicable regulatory requirements, there would be no new or substantially more severe significant impacts to exposure of people or structures to flooding or landslides beyond what has been analyzed in the prior environmental documents. No additional analysis is required.

Source(s)

CAL FIRE. 2020. California Fire Hazard Severity Zone Viewer. Website: egis.fire.ca.gov/FHSZ/ (accessed June 25, 2021).

City of Dublin. 1985. City of Dublin General Plan. February 11. (Amended November 21, 2017).

City of Dublin. 2003. Final Environmental Impact Report Valley Christian Center Expansion Project, State Clearinghouse Number 200212070. March.

City of Dublin. 2018. Valley Christian Center Supplemental Mitigated Negative Declaration/ Initial Study, Planning Application Number: PLPA-2014-00052. June 8.

Mandatory Findings of Significance

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

Significant Impacts

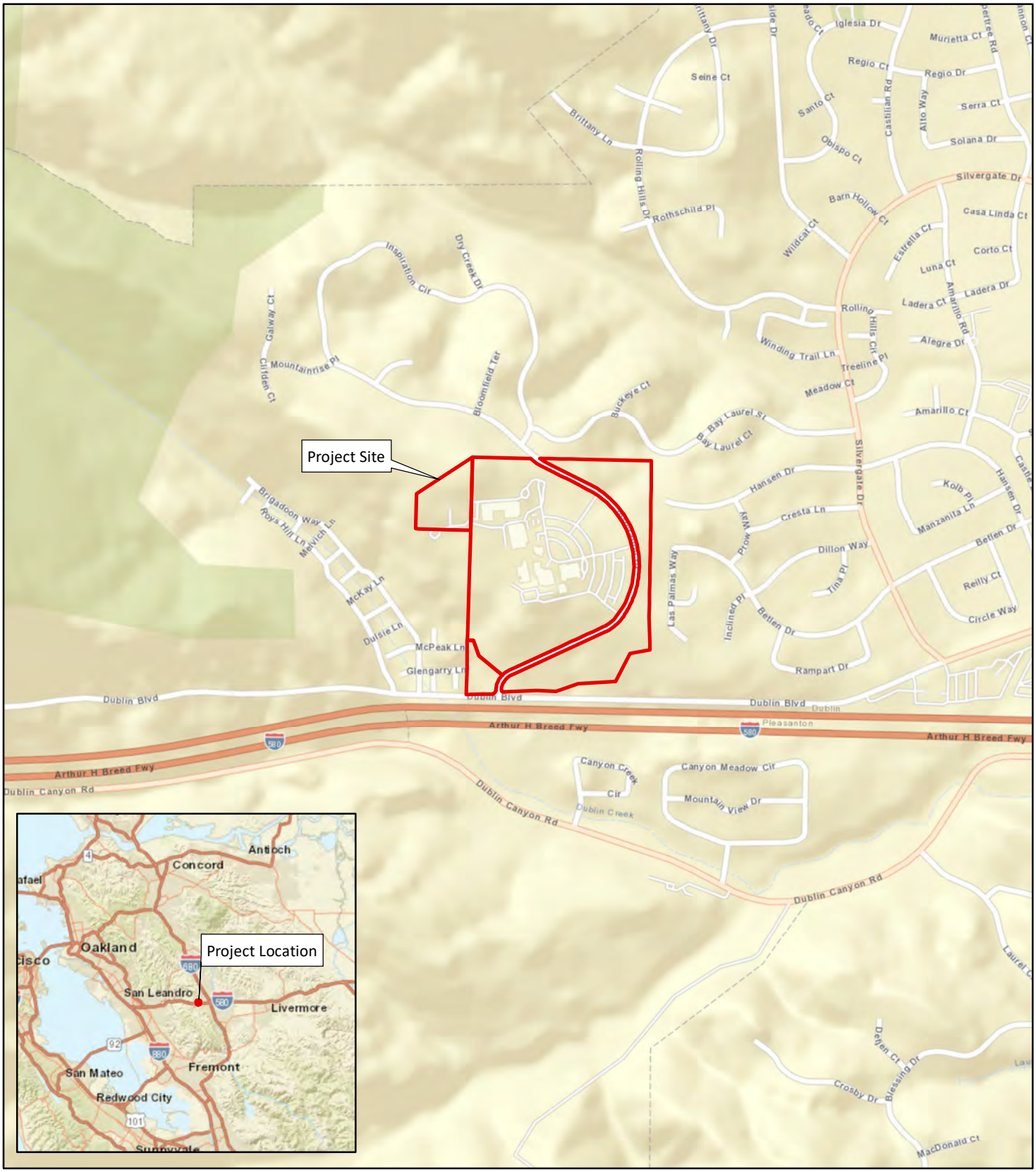
No New Impact. Construction and operation of the proposed project would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory. Potential impacts to biological and cultural resources, including special-status species, sensitive habitat, riparian areas and wetlands, nesting birds, historic and pre-historic resources were analyzed in the VCC EIR and the 2018 Supplemental IS/MND and are described herein. Implementation of Mitigation Measure 4.4-1, identified in the VCC EIR would ensure that potential impacts to historic, archaeological, tribal, and paleontological resources that could be uncovered during construction activities would be reduced to a less than significant level. Implementation of **Mitigation Measures BIO-1 through BIO-4** would ensure that potential impacts to nesting birds, coast live oak trees, Congdon's tarplant and CRLF are reduced to a less than significant level. With implementation of these mitigation measures, no new impacts or substantially more severe significant impacts to the quality of the environment would occur. No additional analysis is required.

Cumulative Impacts

No New Impact. Cumulative impacts associated with implementation of the proposed project were considered and evaluated in the VCC EIR and the 2018 Supplemental IS/MND. No new cumulative impacts or substantially more severe significant cumulative impacts were identified as a result of implementing the proposed project.

Substantial Adverse Effects on Human Beings

No New Impact. As described herein, environmental impacts (including those that may have a direct or indirect adverse effect on humans [i.e., air quality, noise]) that are associated with the proposed project can be reduced to less than significant through implementation of mitigation measures identified in the prior environmental documents or project-specific measures recommended in this document. Therefore, the proposed project would not result in environmental effects that would cause a substantial adverse effect on human beings either directly or indirectly. Therefore, implementation of the proposed project would not result in any new impacts or increase the severity of a previously identified significant impact as previously analyzed. No additional analysis is required.



LSA

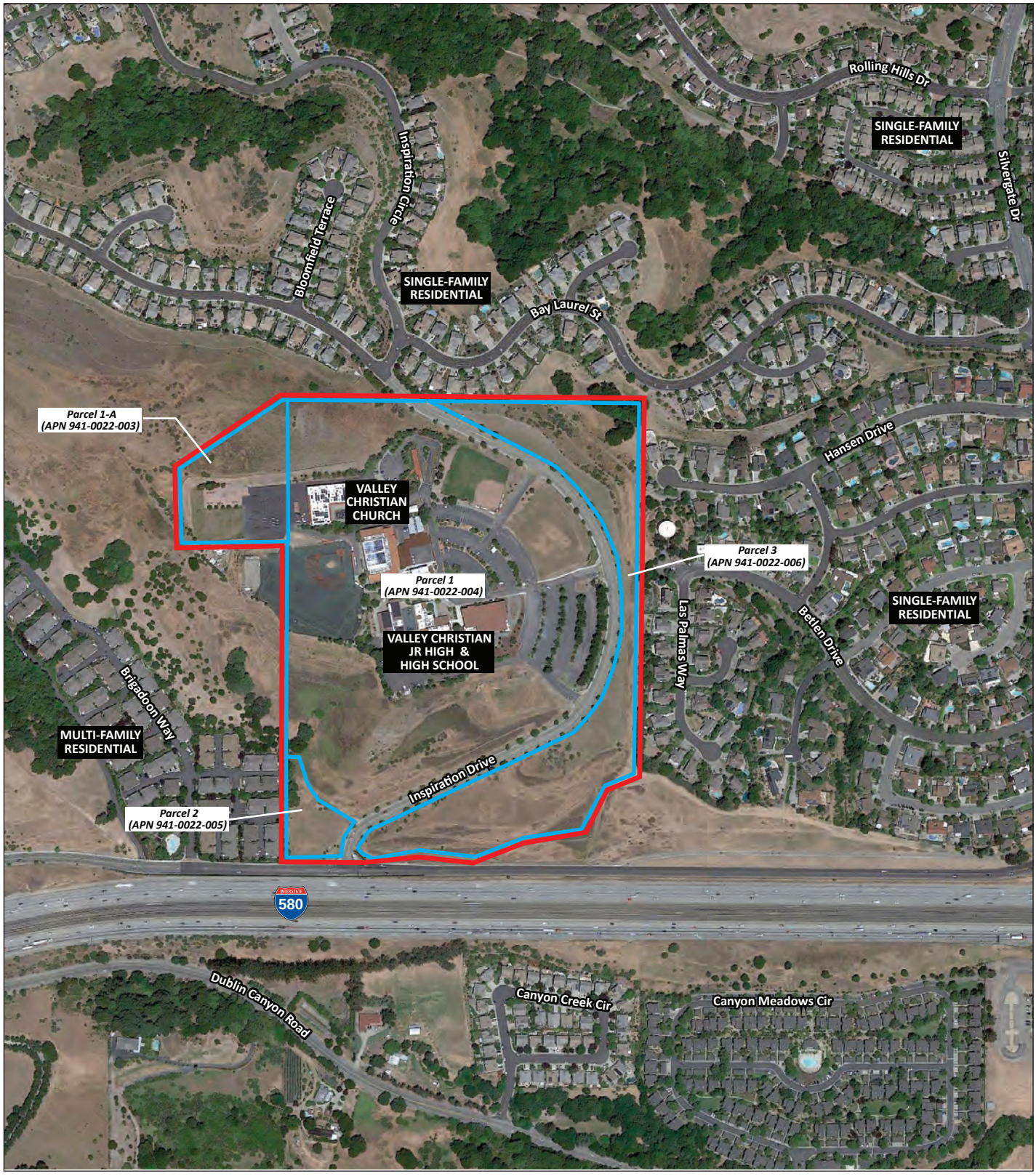
FIGURE 1

Inspiration Drive Memory Care and Assisted Living Facility Project

Regional Location

SOURCE: ESRI World Street Map (03/20).

I:\DUB1601.02\GIS\Maps\Figure 1_Regional Location.mxd (1/11/2021)



LSA

FIGURE 2

0 350 700
FEET

N

Project Site Boundary

Parcel Boundaries

Inspiration Drive Memory Care and Assisted Living Facility Project

Aerial Photograph of Project Site and Surrounding Land Uses

SOURCES: Google Earth, 6/20/2019; LSA, 2021

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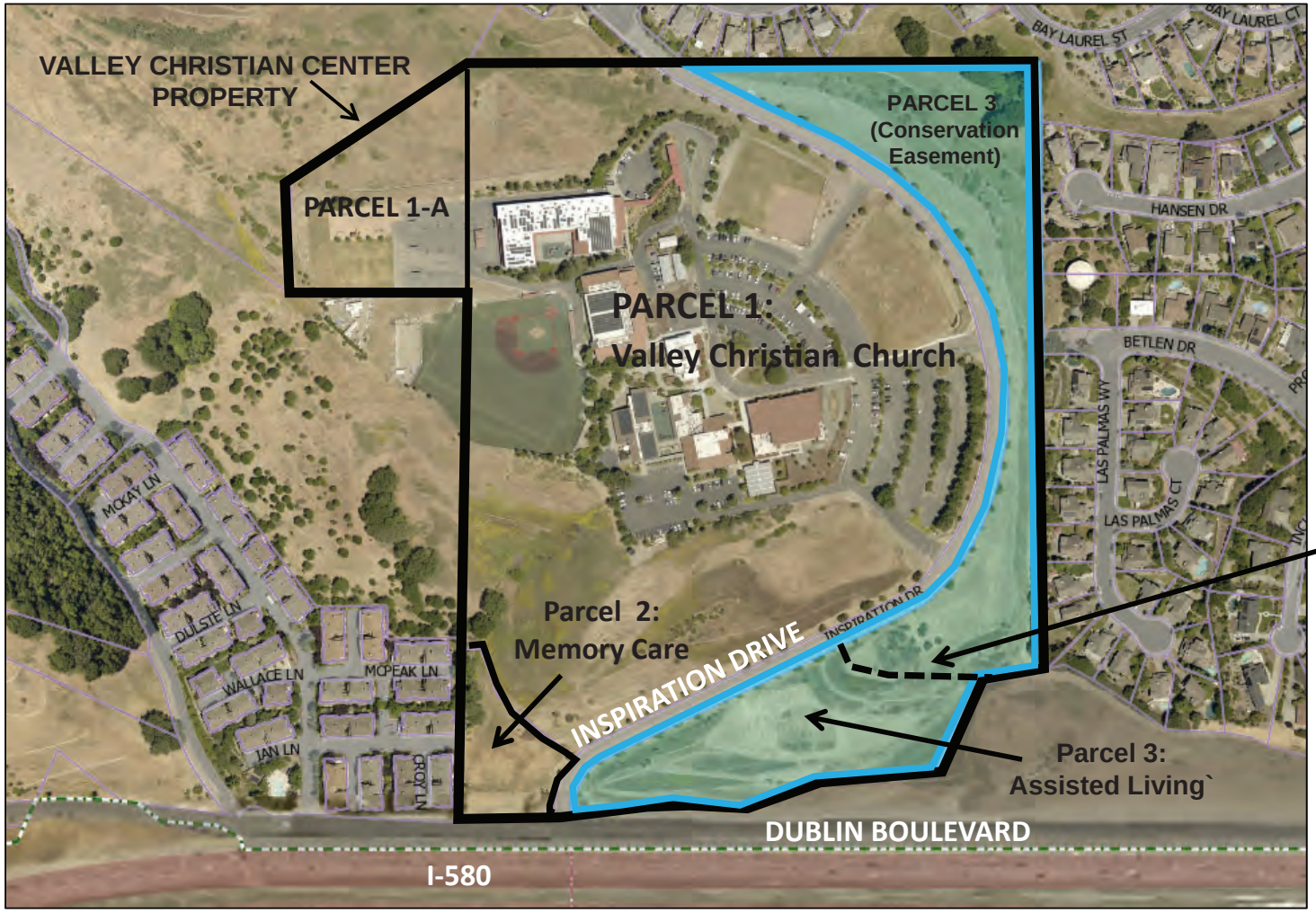


7500 Inspiration Drive

LSA

FIGURE 3

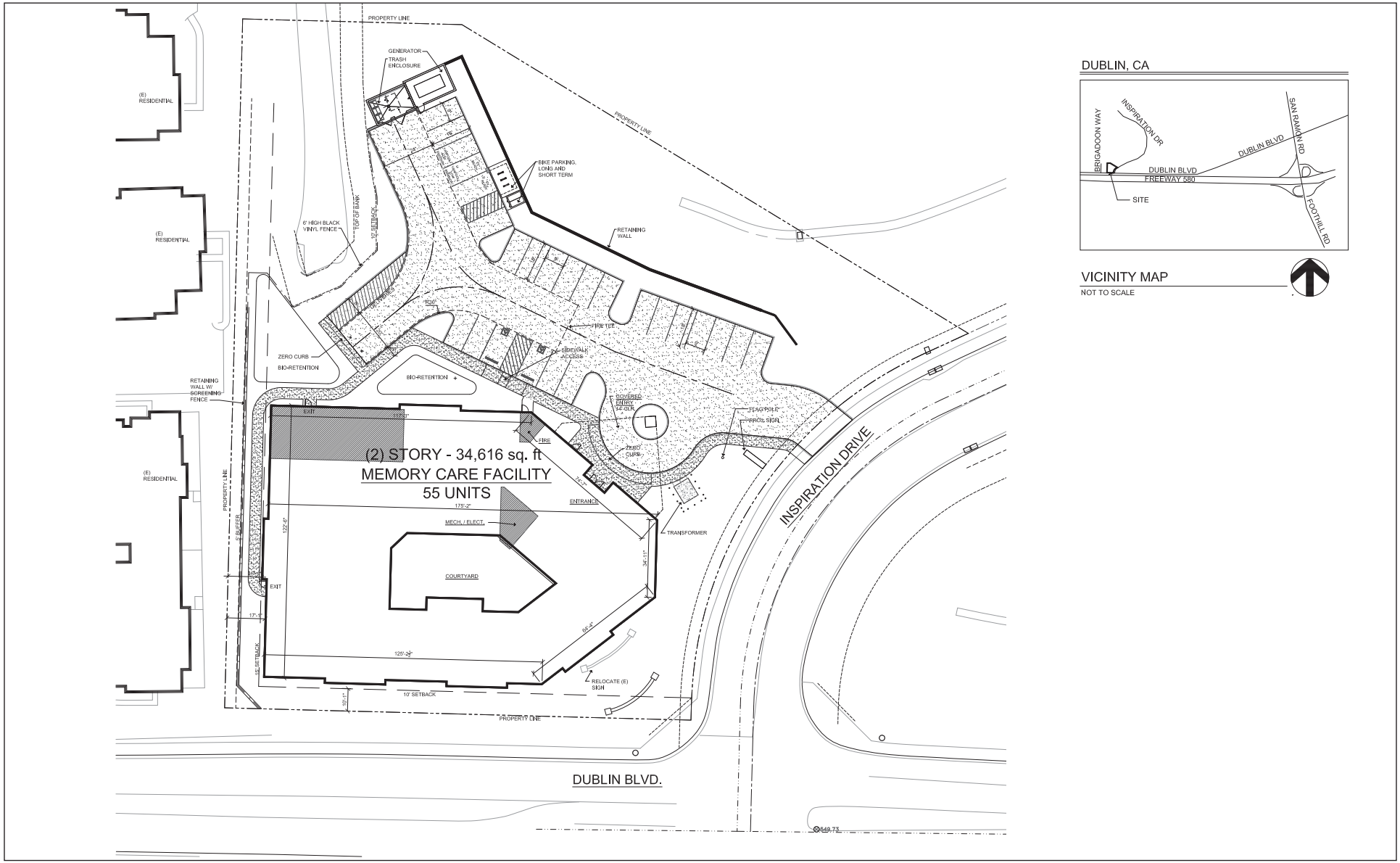
NOT TO SCALE

N

Inspiration Drive Memory Care and Assisted Living Facility Project
Proposed Parcel Layout

SOURCE: xxx

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 3.ai (1/8/2021)



LSA

0 30 60
FEET

N

FIGURE 4

Inspiration Drive Memory Care and Assisted Living Facility Project

Memory Care Facility - Proposed Site Plan

SOURCES: Lenity Architecture, Inc.; FULCRM, 2021

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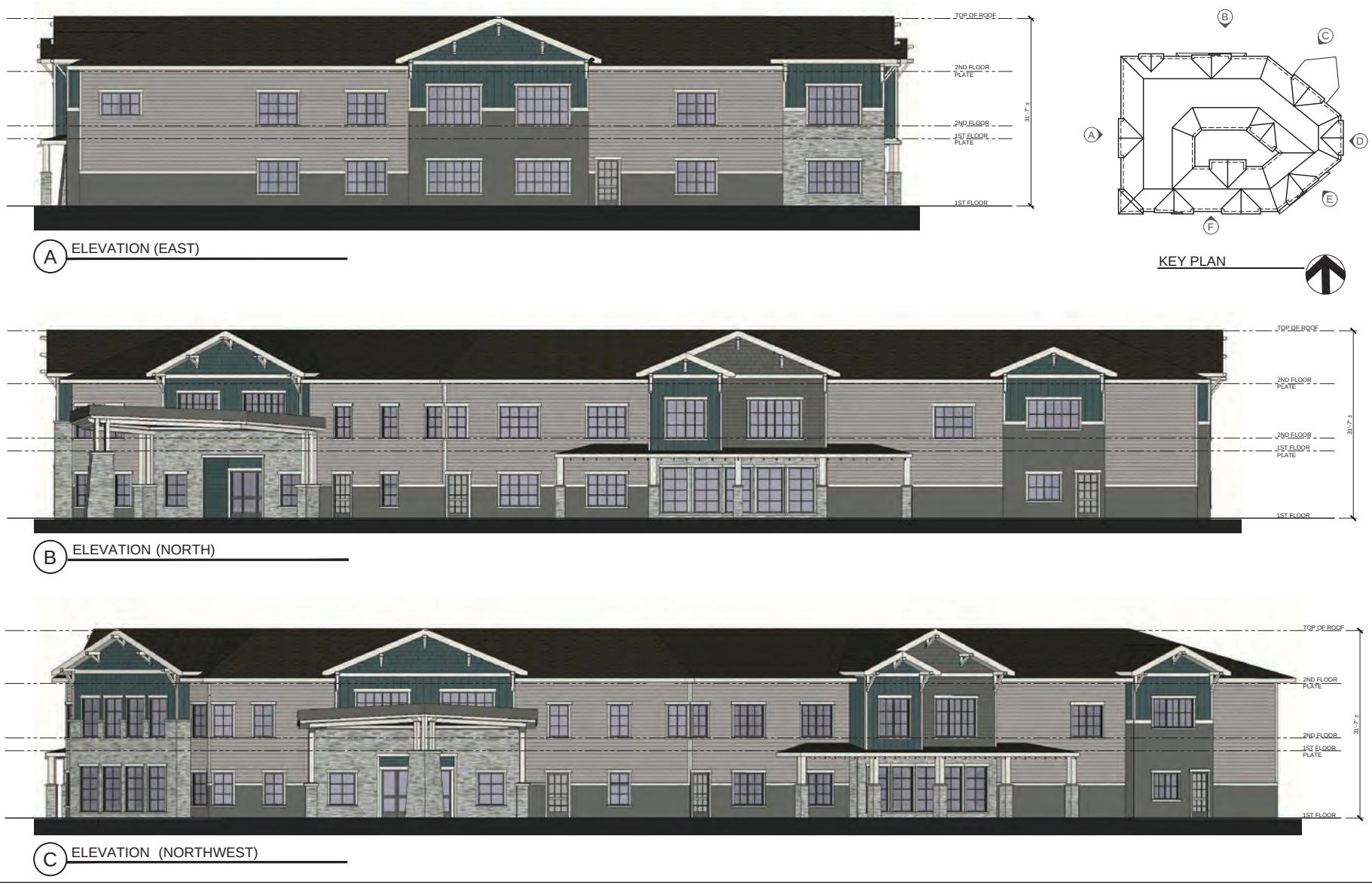

LSA

FIGURE 5

NOT TO SCALE

Inspiration Drive Memory Care and Assisted Living Facility Project

Memory Care Facility - Proposed Elevations

SOURCE: Lenity Architecture, Inc.; FULCRUM, 2021

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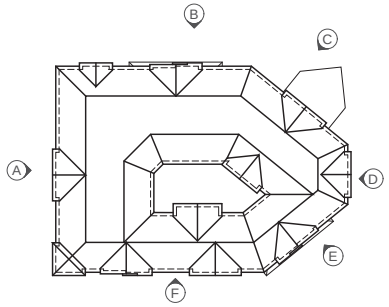
D ELEVATION (EAST)



KEY PLAN

E ELEVATION (NORTH)

F ELEVATION (NORTHWEST)

LSA

FIGURE 6

NOT TO SCALE

SOURCE: Lenity Architecture, Inc.; FULCRUM, 2021

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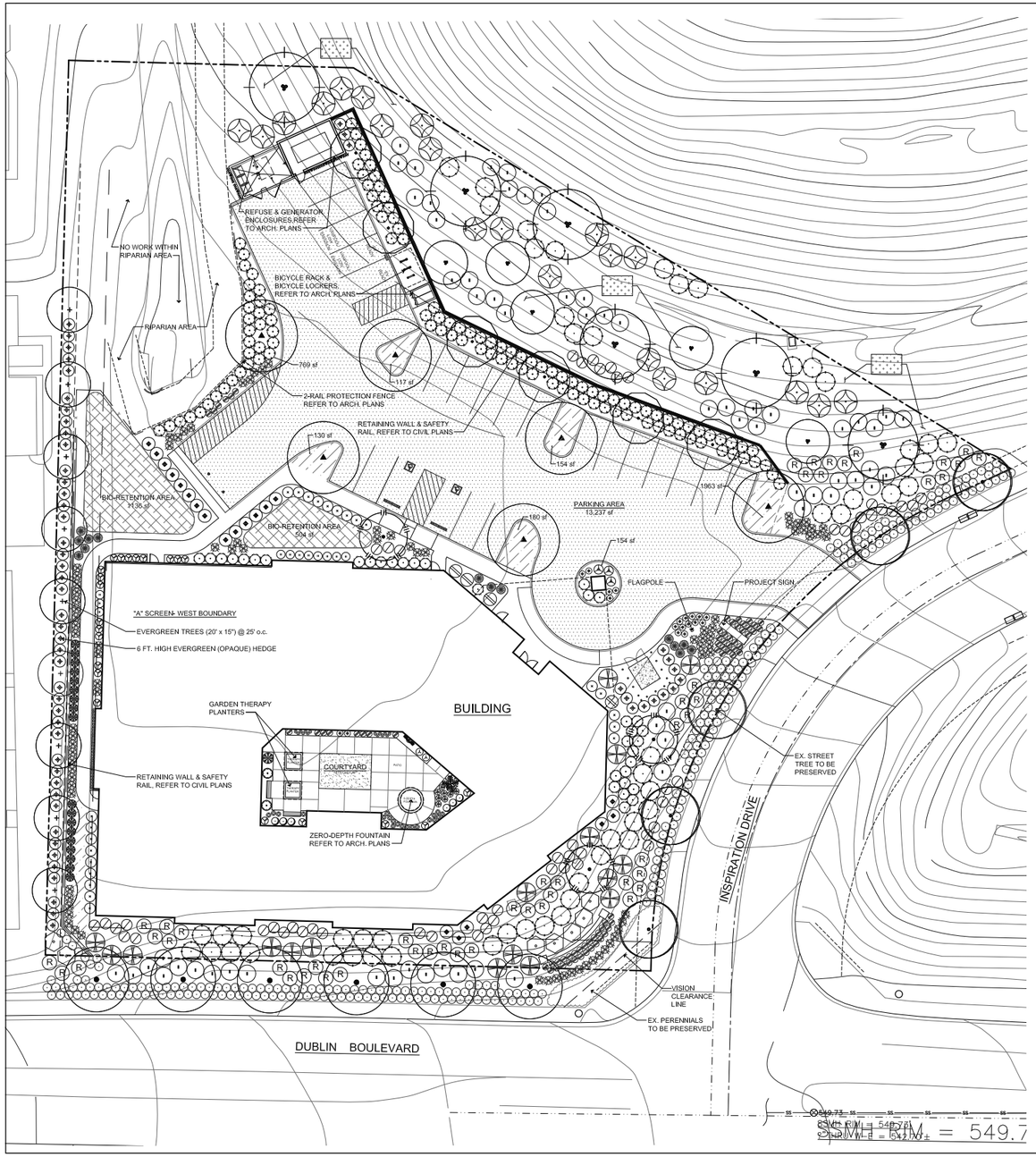
Inspiration Drive Memory Care and Assisted Living Facility Project

Memory Care Facility - Proposed Elevations



SYMBOL
(tree symbols reduced)

PLANTING LEGEND:

BOTANICAL / COMMON NAMES	QUANTITY	SIZE / FORM	MATURE HT. x WD.	WUCOLS REGION 1
STREET TREES				
Platanus x acerifolia 'Columbia' Columbia London Plane Tree (Dublin Blvd.)	6	15 gal. Standard	70' x 40'	Moderate
Match existing species (Inspiration Dr.) existing spacing approximately 45-50' o.c.	4	15 gal. Standard	NA	NA

STREETSCAPE PLANTING BOTANICAL / COMMON NAMES	QUANTITY	SIZE / FORM	SPACING	WUCOLS REGION 2
SHRUBS				
Ceanothus gloriosis 'Anchor Bay' Point Reyes Wild Lilac	54	5 gal.	7' o.c.	Very Low
Cistus 'Sunset' Magenta Rockrose	65	5 gal.	5' o.c.	Low
Phormium 'Sea Jade' Sea Jade New Zealand Flax	17	5 gal.	as shown	Low
Rosa rugosa 'Alba' White Rugosa Rose	49	5 gal.	5' o.c.	Low
GRASSES / GROUND COVERS / PERENNIALS				
Coreopsis lanceolata 'Early Sunrise' Double Flowered Yellow Tickseed	70	1 gal.	24" o.c.	Low
Pennisetum alopecuroides 'Little Bunny' Little Bunny Fountain Grass	85	1 gal.	30" o.c.	Low
Rosmarinus officinalis 'Prostratus' Rosemary	283	1 gal.	36" o.c.	Low

PROJECT SITE PLANTING BOTANICAL / COMMON NAMES	QUANTITY	SIZE / FORM	MATURE HT. x WD.	WUCOLS REGION 2
SHADE TREE				
Gleditsia tricanthos inermis 'Shademaster' Shademaster Honey Locust	6	24" box Standard	45' x 35'	Low
EVERGREEN BUFFER TREES				
Callistemon citrinus Lemon Bottlebrush	9	15 gal. Standard	20' x 15'	Low
Olea europaea 'Wilsonii' Wilson Fruitless Olive Tree	6	15 gal. Standard	30' x 30'	Very Low
Quercus agrifolia Coast Live Oak	6	15 gal. Multi-trunk	30' x 40'	Very Low
ORNAMENTAL TREES				
Cercis occidentalis Western Redbud	5	15 gal. Multi-trunk	20' x 15'	Very Low
Lagerstroemia indica x fauriei 'Muskogee' Muskogee Hybrid Crape Myrtle	3	15 gal. Standard	24' x 20'	Low

BACKGROUND / TALL SHRUBS	QUANTITY	SIZE / FORM	SPACING	WUCOLS REGION 2
Leonotis leonurus Lion's Tail	7	5 gal.	as shown	Low
Myrsine africana African Boxwood	57	5 gal.	4' o.c.	Low
Rhus integrifolia Lemonade Berry	21	5 gal.	as shown	Low
SHRUBS				
Aloe striata Coral Aloe	3	5 gal.	as shown	Low
Gardenia jasminoides 'August Beauty' August Beauty Gardenia	2	5 gal.	as shown	Moderate
Mahonia eurybracteata 'Soft Caress' Soft Caress Mahonia	1	5 gal.	as shown	Moderate
Mahonia repens Creeping Oregon Grape	34	5 gal.	4' o.c.	Low
Nandina domestica 'Gulf Stream' Heavenly Bamboo	22	5 gal.	3' o.c.	Low
Pittosporum tobira 'Dwarf Variegata' Dwarf Variegated Tobira	11	5 gal.	4' o.c.	Low
Rhaphiolepis indica 'Pinkie' India Hawthorn	23	5 gal.	4' o.c.	Low
Salvia greggii (Salmon) Autumn Sage	51	5 gal.	4' o.c.	Low
Salvia microphylla 'Hot Lips' Hot Lips Sage	2	5 gal.	as shown	Moderate
Sarcococca hookeriana humilis Sweet Sarcococca	6	5 gal.	as shown	Low
Sarcococca ruscifolia Sweet Box	4	5 gal.	as shown	Low
Westringia fruticosa 'Blue Gem' Blue Gem Coast Rosemary	20	5 gal.	5' o.c.	Low

PLANTING LEGEND CONTINUED:

VINES				
Jasminum floridum Showy Jasmine- train onto enclosure	5	5 gal.	as shown	Low
Trachelospermum jasminoides Star Jasmine- on trellis (Courtyard)	1	15 gal.	as shown	Moderate
GRASSES / PERENNIALS				
Calamagrostis x acutifolia 'Karl Foerster' Feather Reed Grass	19	1 gal.	as shown	Moderate
Dietes vegeta Fortnight Lily	14	1 gal.	as shown	Low
Hakonechloa macra 'Aureola' Japanese Forest Grass	8	1 gal.	as shown	Moderate
Lavandula angustifolia 'Munstead' Dwarf English Lavender	19	1 gal.	as shown	Low
Liriope muscari Big Blue Lily Turf	20	1 gal.	as shown	Moderate
Sisyrinchium bellum 'E.K.Balls' Blue-Eyed Grass	40	1 gal.	as shown	Low
GROUND COVER				
Coprosma petriei 'Verde Vista' Creeping Coprosma	116	1 gal.	4' o.c.	Low
Erodium reichardii Cranesbill (Building Area, Parking lot)	100% coverage	Cuttings	18" o.c.	Low
Myoporum parvifolium Creeping Myoporum (Slopes, Perimeter)	100% coverage	Cuttings	36" o.c.	Low
Artificial Turf- Courtyard DuPont Forever Lawn or equal	216 s.f.			Very Low
BIO-RETENTION PLANTING				
Plant grass species in natural masses of 24 minimum by quantity- triangular spacing	1640 s.f.			
Deschampsia caespitosa Tufted Hair Grass	164	1 gal.	24" o.c.	Low
Elymus triticoides Creeping Wild Rye	164	1 gal.	24" o.c.	Low
Festuca rubra 'Molate' Molate Creeping Red Fescue	328	1 gal.	12" o.c.	Low

NOTES:

1. Soil Preparation for planting areas, excluding bio-swales (per 1000 s.f.):
   4 cu. yds. organic compost free of biosolids & harmful pathogens
   100 lbs. Gro-Power Plus w/M (mycorrhizae) organic fertilizer
   Spread evenly and rototill into soil in two directions to a depth of 6-8".
   Adjust materials based upon Soil Analysis recommendations after completed.
2. Install a 3" minimum layer of Shredded Redwood Bark in all planted areas unless noted otherwise. Mulch available:Redi-Gro Corporation, (800) 654-4358
3. Landscaping shall be served by an automated irrigation system utilizing SMART Technology in compliance with the California Water Efficient Landscape Ordinance.

PARKING LOT LANDSCAPING:

Parking Lot Area-	13,237 sq. ft.
15% Parking Area Landscape Requirement-	1986 sq. ft.
Parking Area Landscape provided-	3697 sq. ft. (27.9%)
Trees Required (1 / 4 stalls)	6 trees
Shade trees provided- 25 stalls / 4=	6 trees

WATER USE CALCULATIONS

TOTAL SITE LANDSCAPE AREA* = 38,508 s.f.

TOTAL IRRIGATED LANDSCAPE AREA* = 31,254 s.f.

*Includes 3352 s.f. in Public right-of-way

MAXIMUM ANNUAL APPLIED WATER ALLOWANCE (MAAWA)

MAAWA (gallons)= (ETo) x (.62) x ((0.45 x LA) + (0.3 x SLA))

(46.2) x (.62) x ((0.45 x 38,508) + (0.3 x 0)) = MAAWA 496,360 gals.

ESTIMATED ANNUAL APPLIED WATER USE

(ETo) x (PF-Kc) x (HA) x (.62) / (IE)= EAAWU (HYDROZONE)

HIGH WATER USE (RECIRCULATING FOUNTAIN): (46.2) x (1.0) x (42) x (.62) = 1203 gals. EAAWU

MODERATE HYDROZONE AREA (DRIP): (46.2) x (0.5) x (501) x (.62) / (.81) = 8858 gals. EAAWU

LOW HYDROZONE AREA (DRIP): (46.2) x (0.2) x (6941) x (.62) / (.81) = 49,091 gals. EAAWU

LOW HYDROZONE AREA (OVERHEAD): (46.2) x (0.2) x (24,082) x (.62) / (.75) = 183,948 gals. EAAWU

VERY LOW WATER USE (ARTIFICIAL TURF): (46.2) x (0.1) x (216) x (.62) = 619 gals. EAAWU

NON-IRRIGATED AREAS: (46.2) x (0.0) x (6726) x (.62) = 0 gals. EAAWU

EAAWU TOTAL (EATAWU): 243,719 gals.

EATAWU 243,719 gals. is less than MAAWA 496,360 gals.

NOTE- ETo for Dublin, CA = 46.2

LSA

FIGURE 7

N

0 30 60
FEET

SOURCES: Lenity Architecture, Inc.; FULCRUM, 2021

Inspiration Drive Memory Care and Assisted Living Facility Project

Memory Care Facility - Proposed Landscape Plan

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 7.ai (8/31/2021)

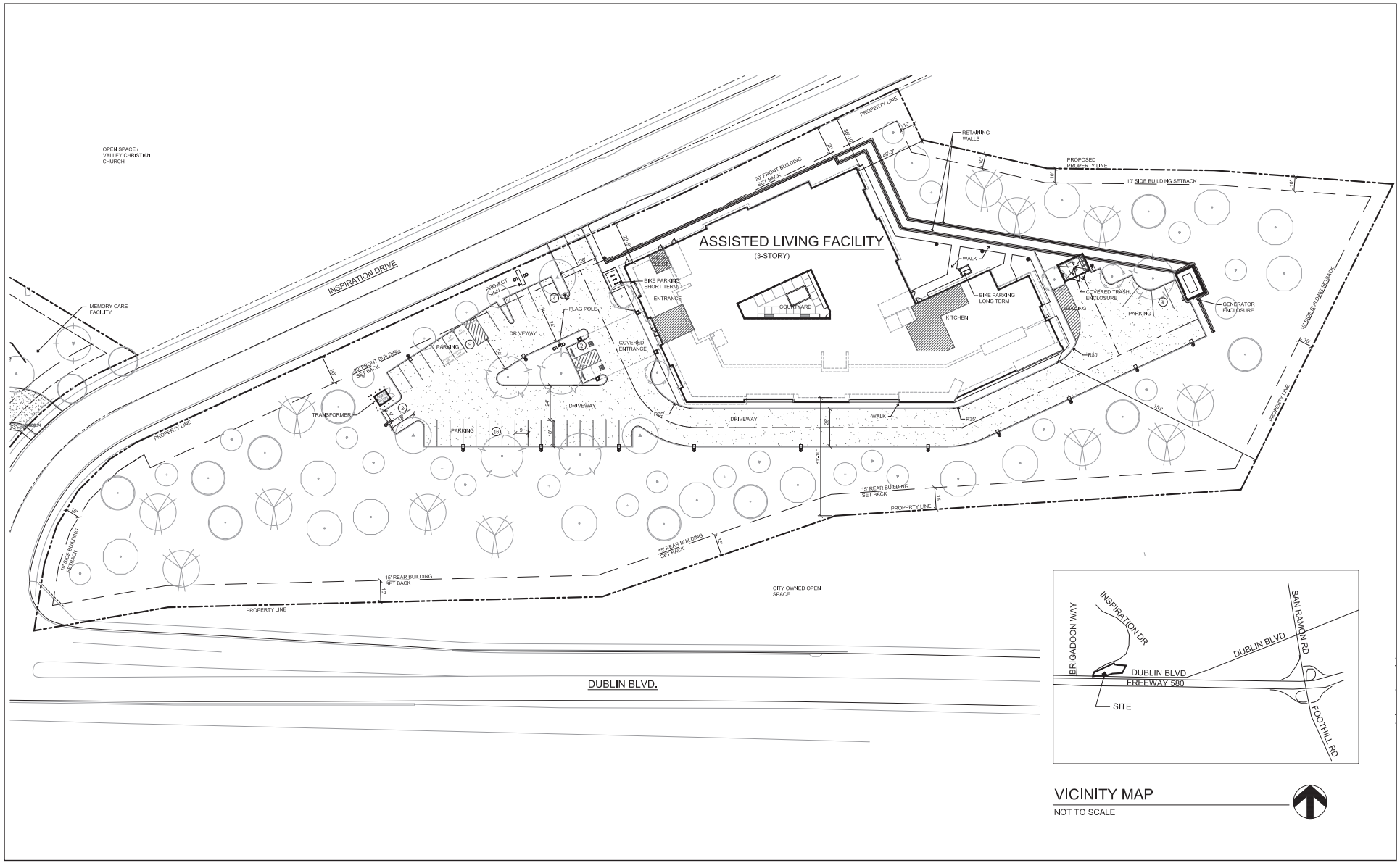


FIGURE 8

LSA

0 45 90
FEET

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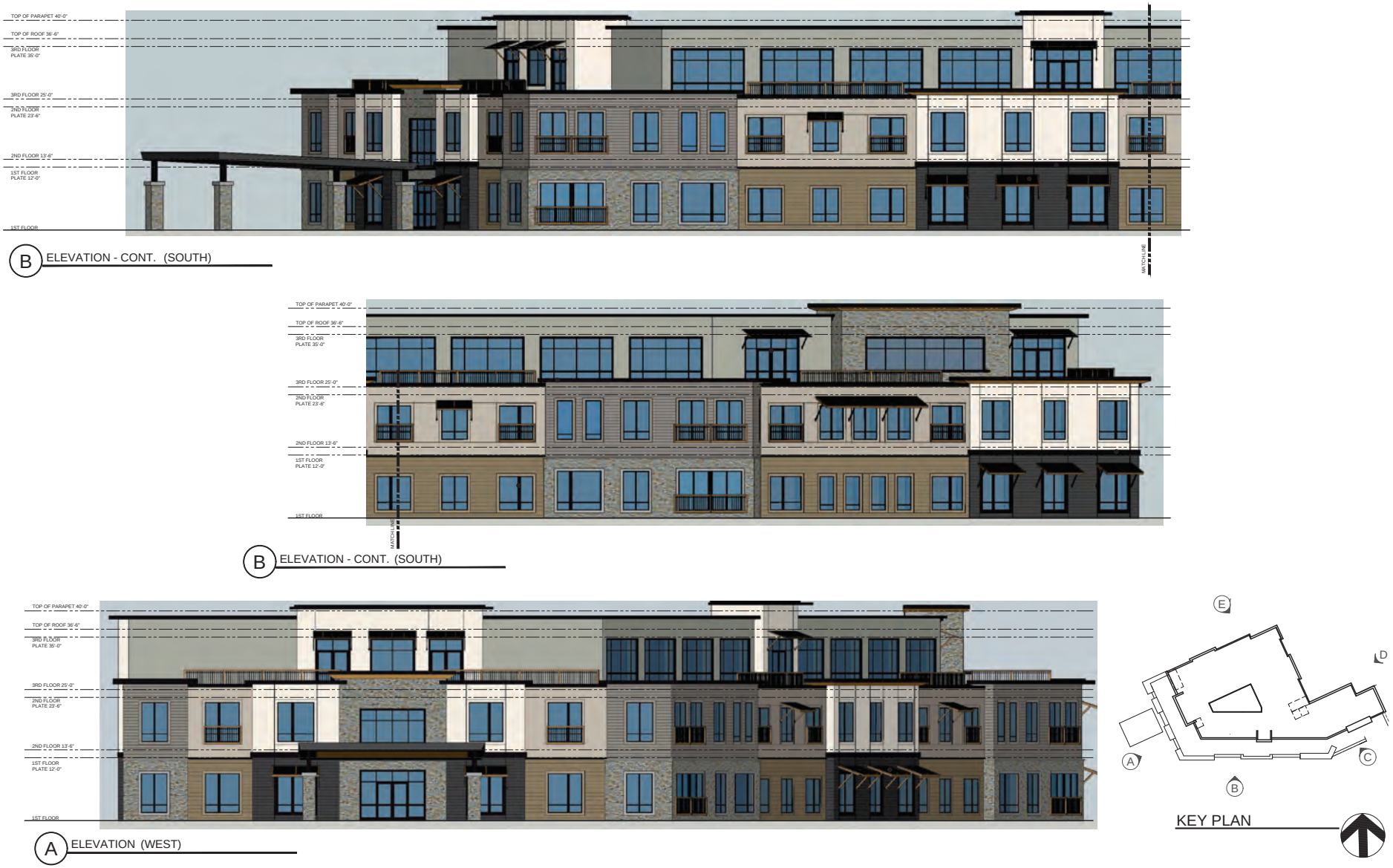
SOURCES: Lenity Architecture, Inc.; FULCRUM, 2021

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 8.ai (7/27/2021)

Inspiration Drive Memory Care and Assisted Living Facility Project

Assisted Living Facility - Proposed Site Plan



LSA

FIGURE 9a

NOT TO SCALE

Inspiration Drive Memory Care and Assisted Living Facility Project

Assisted Living Facility - Proposed Elevations

SOURCE: Lenity Architecture, Inc.; FULCRUM, 2021

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 9a.ai (7/27/2021)

LSA

FIGURE 9b

NOT TO SCALE

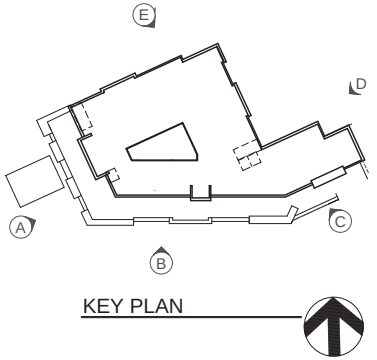
Inspiration Drive Memory Care and Assisted Living Facility Project

Assisted Living Facility - Proposed Elevations

SOURCE: Lenity Architecture, Inc.; FULCRUM, 2021

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 9b.ai (7/27/2021)

E ELEVATION (NORTH)



KEY PLAN

E ELEVATION - CONT. (NORTH)

LSA

FIGURE 9c

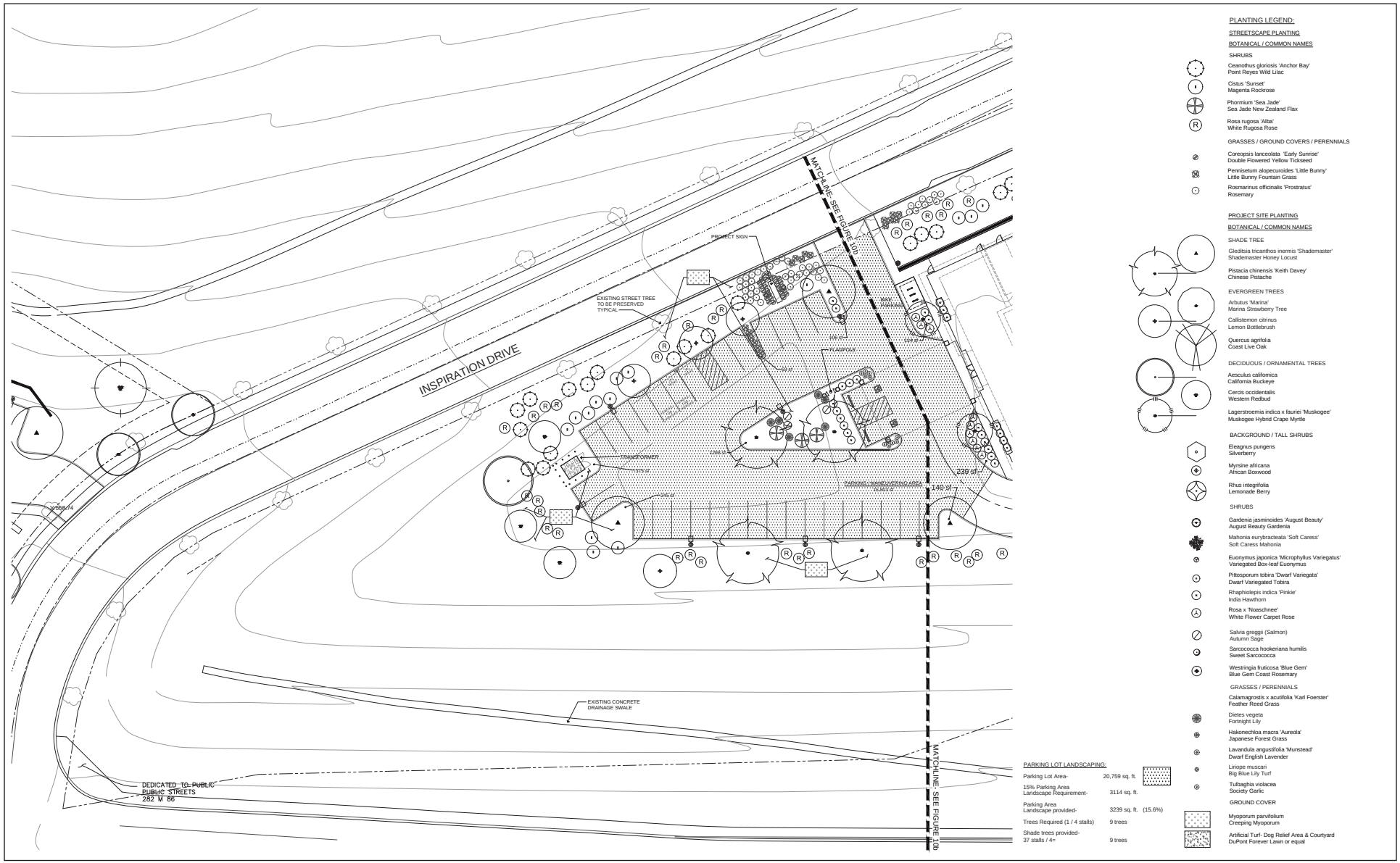
NOT TO SCALE

Inspiration Drive Memory Care and Assisted Living Facility Project

Assisted Living Facility - Proposed Elevations

SOURCE: Lenity Architecture, Inc.; FULCRUM, 2021

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 9c.ai (7/27/2021)



LSA

FIGURE 10a

0 30 60
FEET

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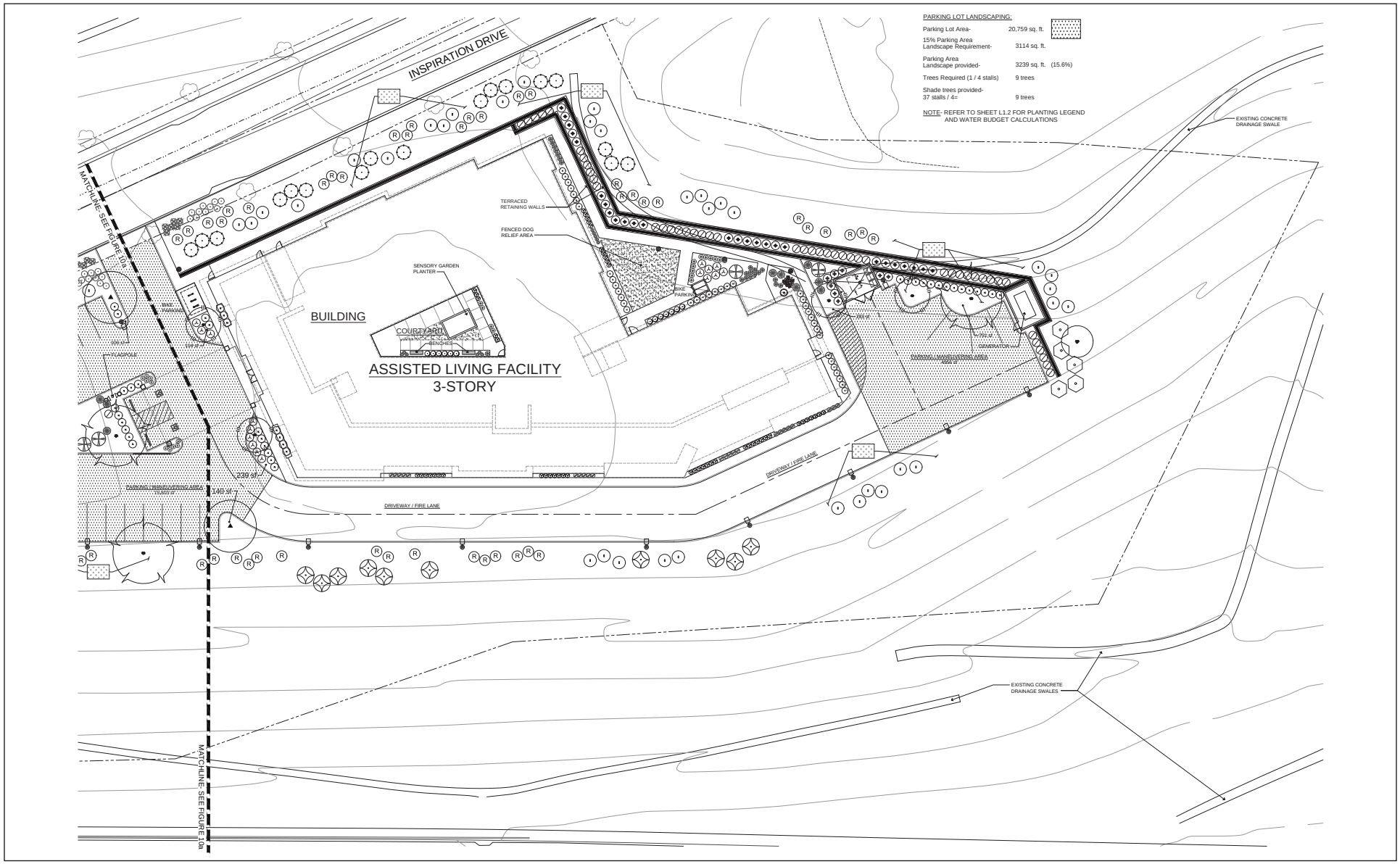
SOURCES: Lenity Architecture, Inc.; FULCRUM, 6/4/2021

Inspiration Drive Memory Care and Assisted Living Facility Project

Assisted Living Facility - Proposed Landscape Plan

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 10a.ai (8/25/2021)



LSA

FIGURE 10b

0 30 60
FEET

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Inspiration Drive Memory Care and Assisted Living Facility Project

Assisted Living Facility - Proposed Landscape Plan

SOURCES: Lenity Architecture, Inc.; FULCRUM, 6/4/2021

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 10b.ai (8/25/2021)

Existing view from eastbound I-580 looking northeast

Visual simulation of proposed project

LSA

FIGURE 11

Inspiration Drive Memory Care and Assisted Living Facility Project

Visual Simulation - Eastbound I-580

SOURCE: Environmental Vision, 09/10/2021

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 11.ai (10/25/2021)

Existing view from westbound I-580 looking northwest

Visual simulation of proposed project

LSA

FIGURE 12

Inspiration Drive Memory Care and Assisted Living Facility Project

Visual Simulation - Westbound I-580

SOURCE: Environmental Vision, 9/10/2021

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 12.ai (10/25/2021)

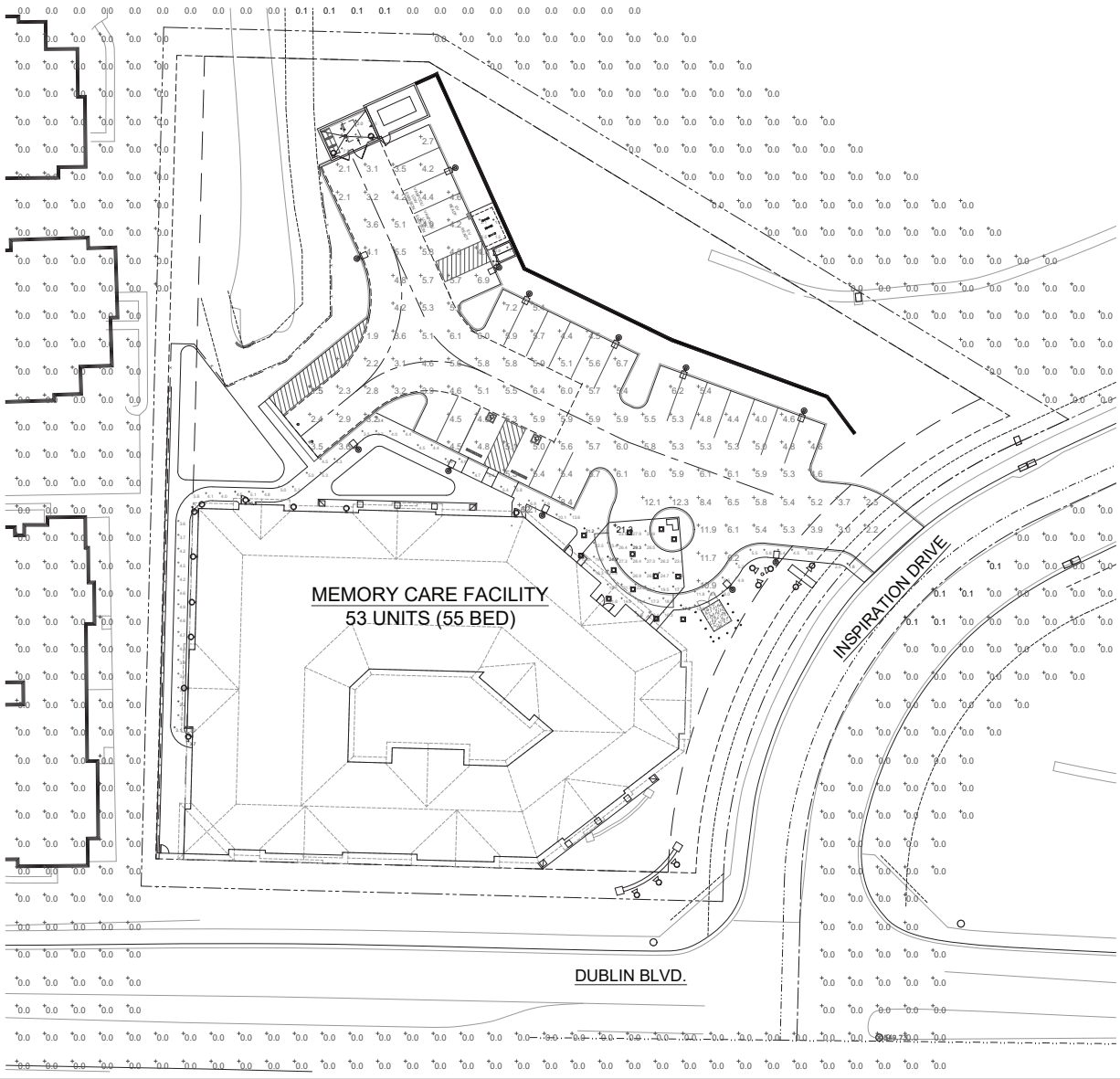
LSA

FIGURE 13

Inspiration Drive Memory Care and Assisted Living Facility Project
Existing Viewpoint From Downtown Dublin

SOURCE: Environmental Vision, 2021.

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 13.ai (10/25/2021)



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Bike Parking	+	2.4 fc	4.4 fc	1.1 fc	4.0:1	2.2:1
Entry 1	+	6.2 fc	6.2 fc	6.2 fc	1.0:1	1.0:1
Entry 1 (+6)	+	12.1 fc	12.1 fc	12.1 fc	1.0:1	1.0:1
Entry 2	+	5.2 fc	6.3 fc	4.5 fc	1.4:1	1.2:1
Entry 2 (+6)	+	13.1 fc	37.9 fc	4.3 fc	8.8:1	3.0:1
Entry 3	+	3.3 fc	3.7 fc	3.1 fc	1.2:1	1.1:1
Entry 3 (+6)	+	18.2 fc	29.8 fc	5.5 fc	5.4:1	3.3:1
Loading Area	+	25.0 fc	29.3 fc	17.7 fc	1.7:1	1.4:1
Loading Area (+6)	+	28.2 fc	41.6 fc	15.2 fc	2.7:1	1.9:1
Main Entry	+	17.3 fc	24.3 fc	8.0 fc	3.0:1	2.2:1
Main Entry (+6)	+	22.3 fc	37.1 fc	7.1 fc	5.2:1	3.1:1
Parking and Drive	+	5.3 fc	21.3 fc	1.5 fc	14.2:1	3.5:1
Side Walk 1	+	6.8 fc	17.2 fc	1.8 fc	9.6:1	3.8:1
Side Walk 1 (+6)	+	9.4 fc	28.1 fc	1.7 fc	16.5:1	5.5:1
Sidewalk 2	+	6.6 fc	21.2 fc	3.4 fc	6.2:1	1.9:1
Sidewalk 2 (+6)	+	8.3 fc	39.9 fc	2.3 fc	17.3:1	3.6:1
Sidewalk 3	+	4.3 fc	8.4 fc	2.2 fc	3.8:1	2.0:1
Sidewalk 3 (+6)	+	9.1 fc	46.1 fc	2.7 fc	17.1:1	3.4:1
Spill Light	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Trash Enclosure	+	4.9 fc	11.3 fc	2.0 fc	5.7:1	2.5:1

NOTE:
+6' LIGHT LEVELS NOT SHOWN ON SITE PLAN FOR PURPOSES OF CLARITY.

LSA

FIGURE 14a

0 30 60
FEET

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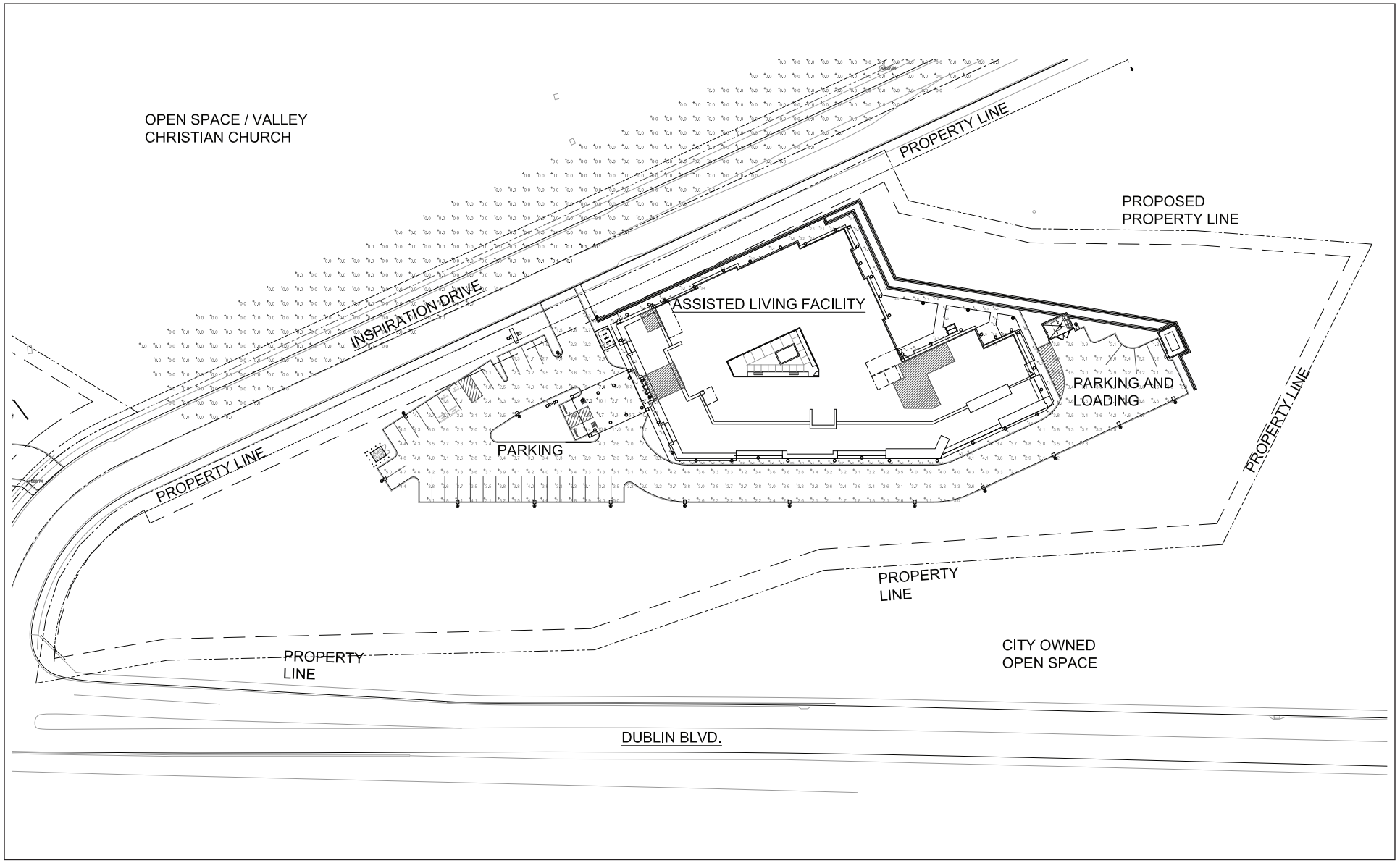
SOURCES: Lenity Architecture, Inc.; FULCRUM, 2020

Inspiration Drive Memory Care and Assisted Living Facility Project

Memory Care Facility - Photometric Analysis

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 14a.ai (11/4/2021)



LSA

FIGURE 14b

0 45 90
FEET

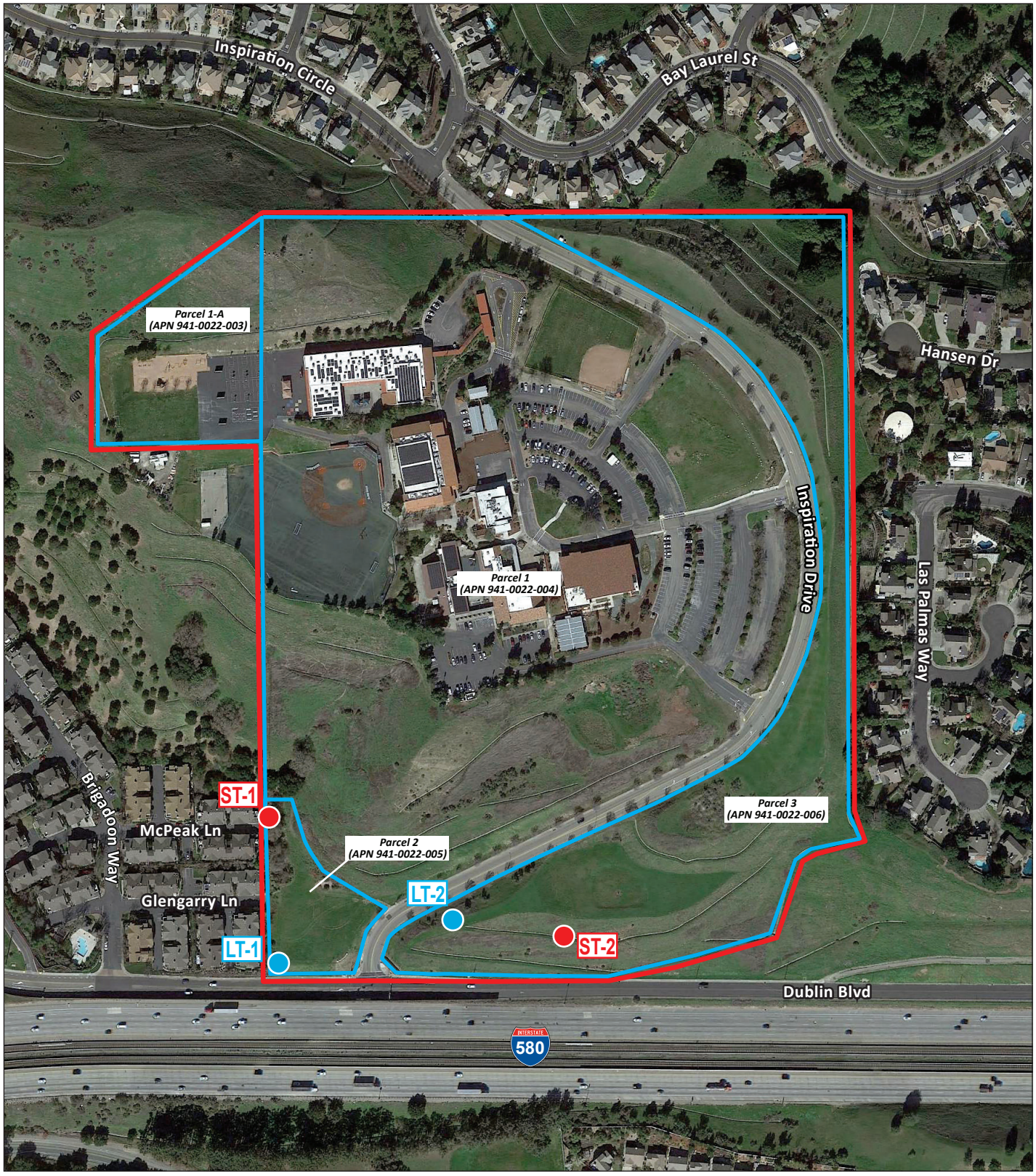
N

SOURCES: Lenity Architecture, Inc.; FULCRUM, 2020

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 14b.ai (11/4/2021)

Inspiration Drive Memory Care and Assisted Living Facility Project

Assisted Living Facility - Photometric Analysis



LSA

FIGURE 15

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LT# Long-term Noise Monitoring Location (24 hours)

ST# Short-term Noise Monitoring Location (15 minutes)

Project Site Boundary

Parcel Boundaries

Inspiration Drive Memory Care and Assisted Living Facility Project

Noise Monitoring Locations

SOURCES: Google Earth, 2/10/2020; LSA, 2021

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 15.ai (11/4/2021)

Appendix A

VCC EIR Mitigation Monitoring and Reporting Program

Inspiration Drive Memory Care and Assisted Living Facility Project

Mitigation Monitoring or Reporting Program

Date	November 11, 2021
Project Name	**Inspiration Drive Memory Care and Assisted Living Facility Project (PLPA-2020-00044 and PLPA-2020-00045)**
Project Location	The project site is located at 7500 Inspiration Drive (APNs 941-0022-003, 941-0022-004, 941-0022-005 and 941-0022-006) in the City of Dublin.
Project Applicant	Steven Ring Fulcrum Real Estate Development
State Clearinghouse Number	NUMBER
Contact	Amy Million Principal Planner City of Dublin Community Development Department 100 Civic Plaza Dublin, CA 94568 Phone: 925/833-6610 amy.million@dublin.ca.gov

Mitigation Monitoring or Reporting Program

The California Environmental Quality Act (CEQA) requires that all public agencies establish monitoring and/or reporting procedures for mitigation measures (MMs) adopted as part of the project approval in order to mitigate or avoid significant project impacts.

The MMRP identifies the following for each MM:

***Timing*.** In each case, a timeframe for performance of the mitigation measure, or review of evidence that mitigation has taken place, is provided. The measures are designed to ensure that impact-related components of Project implementation do not proceed without establishing that the mitigation is implemented or assured. All activities are subject to the approval of all required permits from local, State, and federal agencies with permitting authority over the specific activity.

***Responsible Party or Designated Representative*.** In each case, unless otherwise indicated, the applicant is the Responsible Party for implementing the mitigation. The City or a Designated Representative will also monitor the performance and implementation of the mitigation measures. To guarantee that the mitigation measure will not be inadvertently overlooked, a supervising public official acting as the Designated Representative is the official who grants the permit or authorization called for in the performance. Where more than one official is identified, permits or authorization from all officials shall be required.

The numbering system corresponds with the numbering system used in the VCC EIR, the 2008 Supplemental IS/MND and the Project IS/MND. The last column of the MMRP table will be used by the parties responsible for documenting when implementation of the MM has been completed. The ongoing documentation and monitoring of mitigation compliance will be completed by the City of Dublin. The completed MMRP will be kept on file at the City of Dublin Community Development Department.

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
Aesthetics				
During Site Development Review	**Mitigation Measure 4.1-1 (aesthetics and views):** Consideration shall be given during the Site Development Review process to: a. The proposed senior center and chapel buildings should be restricted to one story construction, consistent with the County Scenic Route Element, and set back from the top of slope the distance of the building height to reduce visibility from the I-580 freeway. Consideration should also be given to reducing the apparent heights of the two buildings by designing low rooflines, using earth tone building colors, using non-reflective surfaces and appropriate landscape screening. b. For the residential component of the proposed project, consideration shall be given to providing a greater building setback from the Dublin Boulevard/Inspiration Drive intersection, limiting the buildings on the south side of the complex to a single story, using intensive landscaping on the comer to screen the residences and using earth tone colors and non-reflective surfaces.	▪ Dublin Planning Division ▪ Project Applicant		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
During Site Development Review	**Mitigation Measure 4.1-2 (light and glare):** The following measures shall be taken during the Site Development Review process to: a. Ensure that all exterior light fixtures be equipped with cut-off lenses, directed downward, and limited in height to the maximum necessary for adequate illumination to minimize excess light and glare. b. Require that any future proposals to light the playing fields be subject to Planning Commission approval following a notice public hearing.	▪ Dublin Planning Division ▪ Project Applicant		
Air Quality				
During construction	**Mitigation Measure 4.2-1 (construction impacts):** The following measures are recommended, based on BAAQMD standards, to reduce construction impacts to a less-than-significant level. The following construction practices should be required during all phases of construction on the project site: a. Water all active construction areas as needed; b. Watering or covering of stockpiles of debris, soil, sand or other materials that can be blown by the wind; c. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard;	▪ Dublin Planning Division ▪ Project Applicant/Project Contractor		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	d. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites; e. Sweep daily (preferably with water sweepers) all paved access road, parking areas and staging areas at construction sites; f. Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets; g. Hydroseed or apply non-toxic soil stabilizers to inactive construction areas h. Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.); i. Limit traffic speeds on unpaved roads to 15 mph; j. Install sandbags or other erosion control measures to prevent silt runoff to public roadways; k. Replant vegetation in disturbed areas as quickly as possible.			
During construction	**Mitigation Measure AIR-1.** The Applicant's grading contractor(s) shall adhere to the most current Bay Area Air Quality Management District's (BAAQMD) construction mitigation measures (Tables 8-1 and 8-2 or as may be updated at the time a grading permit is requested) as set	▪ Dublin Planning Division ▪ Project Applicant/Project Contractor		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	forth in the May 2017 BAAQMD CEQA Guidelines, or as may be amended in the future and in effect at time of issuance of grading permit.			
During construction	**Mitigation Measure AIR-2:** During construction of the proposed project, the project contractor shall ensure all off-road diesel-powered construction equipment of 50 horsepower or more used for the project construction at a minimum meets the California Air Resources Board (CARB) Tier 2 emissions standards or equivalent equipped with Level 3 diesel particulate filters equipped with Level 3 diesel particulate filters.	▪ Dublin Planning Division ▪ Project Applicant/Project Contractor		
Biological Resources				
Prior to construction	**Mitigation Measure 4.3-1 (wetland and riparian habitat impacts):** A protocol-level wetlands delineation shall be performed on the project site. Based on the results of this analysis, the development plan should be modified to avoid all wetland areas. If avoidance is not possible, a wetland mitigation plan shall be prepared by a qualified biologist to include identification of replacement wetland area at a ratio of 2:1 on or near the project site. Necessary regulatory permits shall also be obtained from the U.S. Army Corps of Engineers, Fish and Wildlife Service, California Department of Fish and Game and Regional Water Quality Control Board.	▪ Dublin Planning Division ▪ Project Applicant/Project Contractor		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
No more than 14 days prior to ground disturbance occurring between February 1 and August 31	**Mitigation Measure BIO-1.** No more than 14 days prior to ground disturbance and vegetation removal during the nesting season (February 1-August 31), the project Applicant shall retain a qualified biologist to perform pre-construction breeding bird surveys. If nests are found, they shall be flagged and protected with a suitable buffer. Buffer distance would vary based on species and conditions at the project site, but would usually be at least 50 feet and up to 250 feet for raptors. This measure shall not apply to ground disturbance of vegetation removal outside of the nesting season (September 1 to January 31).	▪ Dublin Planning Division ▪ Project Applicant/Project Contractor		
Following project construction	**Mitigation Measure BIO-2.** Any on-site coast live oak lost or impacted as a result of project construction shall be replaced on site or in the immediate vicinity at a 2:1 (replacement: impacted) ratio. A Replacement Plan shall be prepared by a qualified biologist identifying the location of replacement habitat, replanting plans and long-term monitoring to ensure the success of the replacement habitat area. Necessary permits shall be obtained from local, state and federal biological resource agencies prior to commencement of replanting.	▪ Dublin Planning Division ▪ Qualified Biologist/Project Applicant/Project Contractor		
Prior to ground disturbance and within the blooming period	**Mitigation Measure BIO-3: Congdon's Tarplant.** The project Applicant shall retain a qualified botanist to conduct rare plant surveys within construction zones on the site for Congdon's Tarplant or for other species within the project site during the appropriate time of year in	▪ Dublin Planning Division ▪ Qualified Botanist/Project		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
(June to November)	accordance with agency protocols. The survey shall be conducted during the blooming period of Condon's tarplant (June to November) to determine the presence/absence of this species within the site. The field survey shall follow standard protocols for rare plant surveys, which may require multiple site visits and checking a reference site(s) where the species is known to occur. The survey shall include Parcels 2 and 3 as well as the entire conservation easement portion of Parcel 3. Impacts to special-status plants shall be avoided to the fullest extent feasible and habitat that supports special-status plant species shall be preserved. Rare plant surveys shall be conducted at the proper time of year when rare or endangered species are both evident and identifiable. Field surveys shall be scheduled to coincide with known blooming periods and/or during periods of physiological development that are necessary to identify the plant species of concern. ~~If no special-status plant species are found, the proposed project would not have a significant impact to species and no additional mitigation is needed.~~ If any of the species are found on-site and cannot be avoided, the following measures shall be required: a. Where surveys determine that special-status plant species are present within or adjacent to the proposed	Applicant/Project Contractor		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	project site, direct and indirect impacts of the project on the species (e.g., Congdon's tarplant and/or San Joaquin spearscale) shall be avoided where feasible through the establishment of activity exclusion zones, where no ground-disturbing activities shall take place, including construction of new facilities, construction staging, or other temporary work areas. Activity exclusion zones for special-status plant species shall be established prior to construction activities around each occupied habitat site, the boundaries of which shall be clearly marked with standard orange plastic construction exclusion fencing or its equivalent. The establishment of activity exclusion zones shall not be required if no construction related disturbances would occur within 250 feet of the occupied habitat site. The size of activity exclusion zones may be reduced through consultation with a qualified biologist and with concurrence from California Department of Fish & Wildlife (CDFW) based on site-specific conditions. b. If exclusion zones and avoidance of impacts on a special-status plant species are not feasible, then the loss of individuals or occupied habitat of a special-status plant species shall be compensated for through the acquisition, protection, and subsequent management of other existing occurrences. Mature seeds shall be collected from all the plants that are			

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	present and planted in a suitable mitigation area within the Parcel 3 conservation easement. The mitigation area for replanting shall be identified by a qualified botanist before the start of work on the project. The conservation easement portion of Parcel 3 supports the same soil type (Diablo clay 15-30 percent) as the detention basin within the proposed assisted living facility area, so mitigation for Condon's tarplant is feasible within the easement. c. Before the start of work~~implementation of compensation measures~~, the project's Applicant shall provide detailed information to the CDFW and lead agency on the quality of preserved habitat, location of the preserved occurrences, provisions for protecting and managing the areas, the responsible parties involved, and the other pertinent information that demonstrates the feasibility of the compensation. A qualified botanist shall prepare a mitigation and monitoring plan for the Condon's tarplant mitigation area. The plan shall include, at a minimum, a discussion of the methods of seed collection and sources of seeds, the location and size of the mitigation area within the conservation easement, and mitigation site preparation, monitoring, and criteria for determining a successful mitigation effort. Mitigation sites are typically monitored for five years; however,			

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	provisions for maintaining a viable population of Condon's tarplant in the conservation easement after the five year monitoring period shall be included in the plan.~~A mitigation plan identifying appropriate mitigation ratios shall be developed in consultation with, and approved by, the CDFW and the City prior to the commencement of any activities that would impact any special status plants.~~ If Condon's tarplants are not found within the project site during the rare plant survey, this may not indicate absence. If adverse environmental conditions for germination occur during the year the survey is conducted, Condon's tarplant may not have geminated; however, a persistent long-term seed bank could still be present. If flowering plants are not found on the project site during the initial rare plant survey, the project site shall be resurveyed during the next Condon's tarplant blooming season and, if plants are present, mature seeds for replanting shall be collected. If a second season plant survey is not feasible, viable seeds from another source shall be collected or purchased from a reliable native plant nursery for replanting.			
Within 24 hours of ground disturbance and	**Mitigation Measure BIO-4.** For any development near on-site riparian areas, ~~the project Applicant~~ a qualified biologist shall conduct pre-construction surveys for CRLF species within 24 hours of initial ground disturbance. If	▪ Dublin Planning Division		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
throughout the construction period	individuals are found, work shall not begin until they are moved out of the construction zone to a U.S. Fish and Wildlife Service/California Department of Fish and Wildlife approved relocation site. ~~The survey shall be completed no more than 30 days prior to work within 200 feet of potential wetland/wet areas on the site.~~ If no species are found, no mitigation shall be required. If CRLF are found on the project site then the project Applicant shall provide information to support Section 7 consultation with the U.S. Fish & Wildlife Service (USFWS) and the project Applicant shall ensure no net loss of habitat that shall be achieved through avoidance, preservation, creation and/or purchase of credits. The final selected measures may be part of the Section 7 permitting process. The project Applicant shall obtain a biological opinion from the USFWS and comply with the conditions and mitigation requirements under the opinion to ensure that no net loss of habitat occurs. Mitigation may include, but would not be limited to on-site and off-site preservation and creation of CRLF habitat, purchase of credits at mitigation banks, payment of in-lieu fees approved by the agencies, or other agency approved and required mitigation measures.	▪ Qualified Biologistt/Project Applicant/Project Contractor		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	Avoidance measures may include the following or equivalent protective measures: a. To minimize disturbance of breeding and dispersing CRLF construction activity within CRLF upland habitat shall be conducted during the dry season between April 15 and October 15 or before the onset of the rainy season, whichever occurs first. If construction activities are necessary in CRLF upland habitat between October 15 and April 15, the project Applicant would contact the USFWS for approval to extend the work period. b. To minimize disturbance and mortality of adult and juvenile CRLF in aquatic habitat and underground burrows, the project Applicants should minimize the extent of ground-disturbing activities within these habitats by requiring the contractor to limit the work area to the minimum necessary for construction. In addition, the project Applicant should ensure that the contractor installs temporary exclusion fence between the construction work area and potential aquatic habitat for all construction within grasslands near aquatic habitat. The fence shall be at least three feet high, buried six inches underground, and have one-way exit funnels. The exclusion fence shall be made of an opaque material that California red-legged frogs cannot see through, to prevent frogs from trying to			

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	push through the fencing. Wooden cover board shall be placed every 50 feet along the outside edge of the fence to give California red-legged frogs a place to shelter until they can find their way around the work area without desiccating or being preyed upon. The integrity of the exclusion fencing shall be inspected daily, and any needed repairs shall be made immediately. A minimum buffer zone of 150 feet shall be maintained around CRLF aquatic habitat during construction. No staging, parking, material storage or ground disturbance shall be allowed in the buffer zone. The buffer zone will be clearly defined with construction fencing prior to the initiation of construction activities and shall be maintained until completion of construction. c. The project Applicant should ensure that a qualified wildlife biologist monitors all construction activities within CRLF upland habitat to ensure no take of individual CRLF occurs during project construction. If a CRLF is found, then the monitor would immediately stop construction in that area and contact USFWS for development of a plan for how to proceed with construction. d. No work shall occur at night. e. For on-site storage of pipes, conduits, and other materials that could provide shelter for California red-			

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	legged frogs, an open-top trailer shall be used to elevate the materials above ground (unless the materials are inside the wildlife exclusion fencing). This is intended to reduce the potential for animals to climb into the conduits and other materials. f. The wildlife exclusion fencing shall be removed within 72 hours of completion of work. g. A qualified biologist shall be present during initial ground-disturbing activities. h. No monofilament plastic shall be used for erosion control. i. Any open trenches shall be provided with an escape ramp(s), such as a board that allows trapped frogs or other small animals to exit the trenches. Construction personnel shall inspect any open trenches in the morning before work begins for trapped amphibians. j. A qualified biologist possessing a valid federal Endangered Species Act Section 10(a)(1)(A) permit or approved by the U.S. Fish and Wildlife Service under an active biological opinion shall be contracted to relocate amphibians to nearby suitable habitat if amphibians are found inside fenced areas. k. Work shall stop at least an hour prior to a predicted rain event of 0.1 inch or greater and then shall not			

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	begin until at least 24 hours after the rain event. Work could continue within the wildlife exclusion fencing within 24 hours of the rain event if a qualified biologist has performed a clearance survey. However, no work or mobilization of vehicles or equipment outside of the wildlife exclusion fencing shall occur within 24 hours of the rain event.			
Cultural Resources				
During construction	**Mitigation Measure 4.4-1 (archaeological and Native American resources):** If an archeological or Native American artifact is identified, work on the project shall cease immediately until a resource protection plan conforming to CEQA Guideline Section 15064.5 (e) is prepared by a qualified archeologist and approved by the Dublin Community Development Director. Project work may be resumed in compliance with such plan. If human remains are encountered, the County Coroner shall be contacted immediately.	▪ Dublin Planning Division ▪ Qualified Archaeologist/ Project Applicant/Project Contractor		
Geology and Soils				
Prior to construction	**Mitigation Measure 4.5-1 (seismic hazard, expansive soils and landslides):** A site-specific geotechnical investigation shall be required for each building constructed as part of the proposed expansion by a California-registered geologist or California registered engineering geologist.	▪ Dublin Planning Division ▪ Project Applicant		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	The report(s) shall address the potential for extension of the Dublin fault on the site, expansive soils and the potential for future landslides on the site. Specific measures to reduce seismic hazards, expansive soils and landslide hazards to a less-than-significant level shall be included in the report(s).			
Hydrology and Water Quality				
Prior to and during project construction	**Mitigation Measure 4.6-1 (soil erosion):** An erosion and sedimentation control plan shall be prepared by a California-registered civil engineer for implementation throughout all phases of project construction. The plan should be prepared in accordance with City of Dublin and RWQCB design standards and shall be approved by the Dublin Public Works Director prior to issuance of a grading permit. It is recommended that this plan, at a minimum, include the following provisions: a. Existing vegetated areas should be left undisturbed until construction of improvements on each portion of the development site is actually ready to commence; b. All disturbed areas should be immediately revegetated or otherwise protected from both wind and water erosion upon the completion of grading activities; c. Stormwater runoff should be collected into stable drainage channels, from small drainage basins, to	▪ Dublin Planning Division ▪ Project Applicant/Project Contractor		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	prevent the buildup of large, potentially erosive stormwater flows; d. Specific measures should be implemented to control erosion from stockpiled earth and exposed soil; e. Runoff should be directed away from all areas disturbed by construction; f. Sediment ponds or siltation basins should be used to trap eroded soils before runoff is discharged into on-site or offsite drainage culverts and channels; g. To the extent possible, major site development work involving excavation and earth moving shall be scheduled during the dry season.			
Prior to and during project construction	**Mitigation Measure 4.6-2 (non-point source pollution):** A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared by a California-registered civil engineer to RWQCB and City of Dublin standards to ensure Best Management Practices will be employed to reduce surface water pollution to a less-than-significant level. The SWPPP shall be approved by the Dublin Public Works Director prior to issuance of a grading permit.	▪ Dublin Planning Division ▪ Project Applicant/Project Contractor		
Prior to and during project construction	**Mitigation Measure 4.6-3 (stormwater runoff):** The project sponsor shall submit a hydrology study for the proposed project, prepared by a California-registered civil engineer, documenting the amount of current stormwater	▪ Dublin Planning Division		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	runoff from the site, estimated future quantities of runoff, and the ability of downstream facilities to accommodate increased stormwater quantities. The report shall also identify needed downstream improvements needed to accommodate increased storm flows and the applicant's financial participation in funding needed improvements, if required.	▪ Project Applicant/Project Contractor		
Noise and Vibration				
During project construction	**Mitigation Measure 4.8-1 (construction noise impacts):** The following construction noise reduction measures shall be implemented as part of all construction. a. Limit construction time to be 8:00 a.m. to 6:00 p.m. Monday-Saturday, except state and federal holidays. Exceptions may be granted in writing by the City Building Official for emergency or extenuating circumstances b. Noisy stationary equipment should be located away from the homes. c. All construction equipment should be in good working order and the mufflers should be inspected for proper functioning. d. Designate a construction noise coordinator. This coordinator shall be available to respond to complaints	▪ Dublin Planning Division ▪ Project Applicant/Project Contractor		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	from neighbors and take appropriate measures to reduce noise.			
During Site Development Review	**Mitigation Measure 4.8-2 (residential noise impacts):** As part of Site Development Review applications for the housing portion of the project, a detailed acoustic study shall be completed by a qualified consultant to identify specific noise exposure of the dwellings and recommend specific measures to ensure that City interior and exterior noise exposure limits are met.	▪ Dublin Planning Division ▪ Project Applicant/Project Contractor		
Prior to and during project construction	**Mitigation Measure NOISE-2**. In addition to the measures required by 2003 EIR 4.9-1, the project Applicant shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive receptors (e.g., residential uses and schools) and includes specific noise management measures to be included into project plans and specifications subject to review and approval by the City. These measures shall include, but not be limited to the following: a. All construction equipment shall be equipped with mufflers and sound control devices (e.g., intake silencers and noise shrouds) no less effective than those provided on the original equipment and no equipment shall have an un-muffled exhaust.	▪ Dublin Planning Division ▪ Project Applicant/Project Contractor		

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	b. The contractor shall maintain and tune-up all construction equipment to minimize noise emissions. c. Stationary equipment shall be placed so as to maintain the greatest possible distance to the sensitive receptors. d. All equipment servicing shall be performed so as to maintain the greatest possible distance to the sensitive receptors. e. The project Applicant(s) shall provide, to the satisfaction of the City of Dublin Planning Department, a qualified "Noise Disturbance Coordinator." The Noise Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Noise Disturbance Coordinator shall notify the City within 24 hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, malfunctioning muffler, etc.) and shall implement reasonable measures to resolve the compliant, as deemed acceptable by the Dublin Planning Department. If any notices are sent to residential units immediately surrounding the construction site by the City and all signs posted at the construction site shall include the contact name and the telephone number for the Noise Disturbance Coordinator.			

Timing	Project Design Feature / Condition of Approval / Mitigation Measure	Responsible for Approval / Monitoring / Implementation	Completion	
			Date	Initials
	f. Select demolition method to minimize vibration, where possible (e.g. sawing masonry into sections rather than demolishing it by pavement breakers). g. The construction contractor shall limit all on-site noise producing construction activities, including deliveries and warming up of equipment, to the daytime hours of 7:30 am to 5:00 pm, Monday through Friday (excluding holidays) unless otherwise approved by the City Engineer.			

Appendix B

CalEEMod Output Sheets

Inspiration Drive Memory Care and Assisted Living Facility Project

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	62.00	Space	0.56	24,800.00	0
City Park	3.60	Acre	3.60	158,089.00	0
Congregate Care (Assisted Living)	139.00	Dwelling Unit	10.24	110,112.00	398

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	310	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Inspiration Drive Memory Care and Assisted Living Facility Project - Bay Area AQMD Air District, Annual

Project Characteristics - CO2 intensity factor based on 5-year average (PG&E 2019).

Land Use - The proposed project would include a 55-bed memory care facility on Parcel 2 and an 84-bed assisted living facility on Parcel 3, with landscaping, parking, and utilities.

Construction Phase - Construction of the proposed project is anticipated to begin in early 2022 and would occur over an approximately 20-month period.

Grading - The proposed project would require the offhaul of 15,600 cubic yards of soil.

Vehicle Trips - Trip rates based on trip generation prepared for the proposed project.

Construction Off-road Equipment Mitigation - Assuming compliance with BAAQMD Basic Construction Mitigation Measures and use of Tier 2 construction equipment

Mobile Land Use Mitigation -

Area Mitigation - Assuming only natural gas hearth.

Energy Mitigation - Assuming compliance with the 2019 CALGreen Code.

Waste Mitigation - Consistent with the CalRecycle Waste Diversion and Recycling Mandate which will reduce solid waste production by 75 percent.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
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tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	300.00	335.00
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	10.00	30.00
tblGrading	MaterialExported	0.00	15,600.00
tblLandUse	LandUseSquareFeet	156,816.00	158,089.00
tblLandUse	LandUseSquareFeet	139,000.00	110,112.00
tblLandUse	LotAcreage	8.69	10.24
tblProjectCharacteristics	CO2IntensityFactor	641.35	310
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.20	2.37
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	2.44	2.37
tblVehicleTrips	WD_TR	1.89	0.00

tblVehicleTrips	WD_TR	2.74	2.37

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3454	3.3621	2.9094	7.4400e-003	0.5923	0.1321	0.7244	0.2545	0.1233	0.3778	0.0000	669.5726	669.5726	0.1098	0.0000	672.3177
2023	0.9463	1.3967	1.6498	3.8600e-003	0.1203	0.0568	0.1771	0.0325	0.0534	0.0858	0.0000	344.7348	344.7348	0.0519	0.0000	346.0311
Maximum	**0.9463**	**3.3621**	**2.9094**	**7.4400e-003**	**0.5923**	**0.1321**	**0.7244**	**0.2545**	**0.1233**	**0.3778**	**0.0000**	**669.5726**	**669.5726**	**0.1098**	**0.0000**	**672.3177**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2262	4.3515	3.2246	7.4400e-003	0.3712	0.1271	0.4983	0.1428	0.1269	0.2698	0.0000	669.5721	669.5721	0.1098	0.0000	672.3173
2023	0.9104	2.1803	1.8008	3.8600e-003	0.1203	0.0733	0.1936	0.0325	0.0733	0.1057	0.0000	344.7346	344.7346	0.0519	0.0000	346.0308
Maximum	**0.9104**	**4.3515**	**3.2246**	**7.4400e-003**	**0.3712**	**0.1271**	**0.4983**	**0.1428**	**0.1269**	**0.2698**	**0.0000**	**669.5721**	**669.5721**	**0.1098**	**0.0000**	**672.3173**

Inspiration Drive Memory Care and Assisted Living Facility Project - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**12.00**	**-37.25**	**-10.23**	**0.00**	**31.03**	**-6.03**	**23.26**	**38.91**	**-13.29**	**19.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-3-2022**	**4-2-2022**	1.4143	1.5622
2	**4-3-2022**	**7-2-2022**	0.7373	0.9750
3	**7-3-2022**	**10-2-2022**	0.7455	0.9858
4	**10-3-2022**	**1-2-2023**	0.7484	0.9897
5	**1-3-2023**	**4-2-2023**	0.6538	0.9327
6	**4-3-2023**	**7-2-2023**	0.6573	0.9393
7	**7-3-2023**	**9-30-2023**	0.9647	1.1344
		Highest	1.4143	1.5622

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.8630	0.0193	1.4746	9.3000e-004		0.0689	0.0689		0.0689	0.0689	6.3370	4.2900	10.6269	0.0118	4.2000e-004	11.0460
Energy	6.4800e-003	0.0553	0.0236	3.5000e-004		4.4700e-003	4.4700e-003		4.4700e-003	4.4700e-003	0.0000	145.9941	145.9941	8.8900e-003	2.7600e-003	147.0389
Mobile	0.0749	0.3318	0.8511	3.1700e-003	0.2832	2.5900e-003	0.2857	0.0760	2.4200e-003	0.0784	0.0000	290.8445	290.8445	0.0101	0.0000	291.0970
Waste						0.0000	0.0000		0.0000	0.0000	25.8103	0.0000	25.8103	1.5254	0.0000	63.9439
Water						0.0000	0.0000		0.0000	0.0000	2.8732	11.8116	14.6847	0.2962	7.2000e-003	24.2345
Total	**0.9444**	**0.4064**	**2.3492**	**4.4500e-003**	**0.2832**	**0.0759**	**0.3591**	**0.0760**	**0.0757**	**0.1517**	**35.0205**	**452.9401**	**487.9606**	**1.8524**	**0.0104**	**537.3604**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5429	0.0167	1.0350	9.0000e-005		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	7.2399	7.2399	1.7300e-003	1.0000e-004	7.3135
Energy	5.2400e-003	0.0448	0.0191	2.9000e-004		3.6200e-003	3.6200e-003		3.6200e-003	3.6200e-003	0.0000	131.8382	131.8382	8.4700e-003	2.5000e-003	132.7947
Mobile	0.0744	0.3286	0.8386	3.1100e-003	0.2775	2.5500e-003	0.2800	0.0745	2.3800e-003	0.0769	0.0000	285.4653	285.4653	9.9500e-003	0.0000	285.7141
Waste						0.0000	0.0000		0.0000	0.0000	6.4526	0.0000	6.4526	0.3813	0.0000	15.9860
Water						0.0000	0.0000		0.0000	0.0000	2.8732	11.8116	14.6847	0.2962	7.2000e-003	24.2345
Total	**0.6225**	**0.3901**	**1.8927**	**3.4900e-003**	**0.2775**	**0.0123**	**0.2898**	**0.0745**	**0.0121**	**0.0866**	**9.3258**	**436.3550**	**445.6807**	**0.6977**	**9.8000e-003**	**466.0428**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**34.09**	**4.03**	**19.43**	**21.57**	**2.00**	**83.84**	**19.30**	**2.00**	**84.02**	**42.94**	**73.37**	**3.66**	**8.66**	**62.33**	**5.59**	**13.27**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/3/2022	2/11/2022	5	30	
2	Grading	Grading	2/14/2022	3/25/2022	5	30	
3	Building Construction	Building Construction	3/28/2022	7/7/2023	5	335	
4	Paving	Paving	7/10/2023	8/18/2023	5	30	
5	Architectural Coating	Architectural Coating	8/21/2023	9/29/2023	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0.56

Residential Indoor: 222,977; Residential Outdoor: 74,326; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,488 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,950.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	177.00	45.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0476	0.4963	0.2955	5.7000e-004		0.0242	0.0242		0.0223	0.0223	0.0000	50.1591	50.1591	0.0162	0.0000	50.5647
Total	**0.0476**	**0.4963**	**0.2955**	**5.7000e-004**	**0.2710**	**0.0242**	**0.2952**	**0.1490**	**0.0223**	**0.1712**	**0.0000**	**50.1591**	**50.1591**	**0.0162**	**0.0000**	**50.5647**

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	5.1000e-004	5.5700e-003	2.0000e-005	2.1300e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.7375	1.7375	4.0000e-005	0.0000	1.7384
Total	**7.7000e-004**	**5.1000e-004**	**5.5700e-003**	**2.0000e-005**	**2.1300e-003**	**1.0000e-005**	**2.1500e-003**	**5.7000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7375**	**1.7375**	**4.0000e-005**	**0.0000**	**1.7384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1220	0.0000	0.1220	0.0670	0.0000	0.0670	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0181	0.5058	0.3444	5.7000e-004		0.0142	0.0142		0.0142	0.0142	0.0000	50.1590	50.1590	0.0162	0.0000	50.5646
Total	**0.0181**	**0.5058**	**0.3444**	**5.7000e-004**	**0.1220**	**0.0142**	**0.1361**	**0.0670**	**0.0142**	**0.0812**	**0.0000**	**50.1590**	**50.1590**	**0.0162**	**0.0000**	**50.5646**

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	5.1000e-004	5.5700e-003	2.0000e-005	2.1300e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.7375	1.7375	4.0000e-005	0.0000	1.7384
Total	**7.7000e-004**	**5.1000e-004**	**5.5700e-003**	**2.0000e-005**	**2.1300e-003**	**1.0000e-005**	**2.1500e-003**	**5.7000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7375**	**1.7375**	**4.0000e-005**	**0.0000**	**1.7384**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1310	0.0000	0.1310	0.0541	0.0000	0.0541	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
Total	**0.0544**	**0.5827**	**0.4356**	**9.3000e-004**	**0.1310**	**0.0245**	**0.1555**	**0.0541**	**0.0226**	**0.0766**	**0.0000**	**81.8019**	**81.8019**	**0.0265**	**0.0000**	**82.4633**

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.2400e-003	0.2418	0.0550	7.5000e-004	0.0165	7.0000e-004	0.0172	4.5300e-003	6.7000e-004	5.2000e-003	0.0000	72.7584	72.7584	3.6800e-003	0.0000	72.8503
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	5.7000e-004	6.1800e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.9305	1.9305	4.0000e-005	0.0000	1.9315
Total	**8.1000e-003**	**0.2424**	**0.0612**	**7.7000e-004**	**0.0188**	**7.2000e-004**	**0.0196**	**5.1600e-003**	**6.8000e-004**	**5.8400e-003**	**0.0000**	**74.6889**	**74.6889**	**3.7200e-003**	**0.0000**	**74.7818**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0589	0.0000	0.0589	0.0243	0.0000	0.0243	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0272	0.7686	0.5508	9.3000e-004		0.0200	0.0200		0.0200	0.0200	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
Total	**0.0272**	**0.7686**	**0.5508**	**9.3000e-004**	**0.0589**	**0.0200**	**0.0789**	**0.0243**	**0.0200**	**0.0443**	**0.0000**	**81.8018**	**81.8018**	**0.0265**	**0.0000**	**82.4632**

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.2400e-003	0.2418	0.0550	7.5000e-004	0.0165	7.0000e-004	0.0172	4.5300e-003	6.7000e-004	5.2000e-003	0.0000	72.7584	72.7584	3.6800e-003	0.0000	72.8503
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	5.7000e-004	6.1800e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.9305	1.9305	4.0000e-005	0.0000	1.9315
Total	**8.1000e-003**	**0.2424**	**0.0612**	**7.7000e-004**	**0.0188**	**7.2000e-004**	**0.0196**	**5.1600e-003**	**6.8000e-004**	**5.8400e-003**	**0.0000**	**74.6889**	**74.6889**	**3.7200e-003**	**0.0000**	**74.7818**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1706	1.5616	1.6363	2.6900e-003		0.0809	0.0809		0.0761	0.0761	0.0000	231.7252	231.7252	0.0555	0.0000	233.1131
Total	**0.1706**	**1.5616**	**1.6363**	**2.6900e-003**		**0.0809**	**0.0809**		**0.0761**	**0.0761**	**0.0000**	**231.7252**	**231.7252**	**0.0555**	**0.0000**	**233.1131**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0133	0.4451	0.1103	1.2000e-003	0.0295	8.9000e-004	0.0304	8.5400e-003	8.5000e-004	9.3800e-003	0.0000	115.5604	115.5604	5.4800e-003	0.0000	115.6975
Worker	0.0506	0.0336	0.3648	1.2600e-003	0.1399	8.9000e-004	0.1408	0.0372	8.2000e-004	0.0380	0.0000	113.8996	113.8996	2.3800e-003	0.0000	113.9590
Total	**0.0640**	**0.4787**	**0.4751**	**2.4600e-003**	**0.1694**	**1.7800e-003**	**0.1712**	**0.0458**	**1.6700e-003**	**0.0474**	**0.0000**	**229.4600**	**229.4600**	**7.8600e-003**	**0.0000**	**229.6565**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1081	2.3554	1.7874	2.6900e-003		0.0904	0.0904		0.0904	0.0904	0.0000	231.7250	231.7250	0.0555	0.0000	233.1128
Total	**0.1081**	**2.3554**	**1.7874**	**2.6900e-003**		**0.0904**	**0.0904**		**0.0904**	**0.0904**	**0.0000**	**231.7250**	**231.7250**	**0.0555**	**0.0000**	**233.1128**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0133	0.4451	0.1103	1.2000e-003	0.0295	8.9000e-004	0.0304	8.5400e-003	8.5000e-004	9.3800e-003	0.0000	115.5604	115.5604	5.4800e-003	0.0000	115.6975
Worker	0.0506	0.0336	0.3648	1.2600e-003	0.1399	8.9000e-004	0.1408	0.0372	8.2000e-004	0.0380	0.0000	113.8996	113.8996	2.3800e-003	0.0000	113.9590
Total	**0.0640**	**0.4787**	**0.4751**	**2.4600e-003**	**0.1694**	**1.7800e-003**	**0.1712**	**0.0458**	**1.6700e-003**	**0.0474**	**0.0000**	**229.4600**	**229.4600**	**7.8600e-003**	**0.0000**	**229.6565**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1062	0.9710	1.0965	1.8200e-003		0.0472	0.0472		0.0444	0.0444	0.0000	156.4682	156.4682	0.0372	0.0000	157.3987
Total	**0.1062**	**0.9710**	**1.0965**	**1.8200e-003**		**0.0472**	**0.0472**		**0.0444**	**0.0444**	**0.0000**	**156.4682**	**156.4682**	**0.0372**	**0.0000**	**157.3987**

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7500e-003	0.2317	0.0667	7.9000e-004	0.0199	2.7000e-004	0.0202	5.7600e-003	2.5000e-004	6.0200e-003	0.0000	75.8172	75.8172	3.1500e-003	0.0000	75.8961
Worker	0.0320	0.0204	0.2265	8.2000e-004	0.0944	5.9000e-004	0.0950	0.0251	5.4000e-004	0.0257	0.0000	73.9378	73.9378	1.4400e-003	0.0000	73.9738
Total	**0.0387**	**0.2521**	**0.2932**	**1.6100e-003**	**0.1143**	**8.6000e-004**	**0.1152**	**0.0309**	**7.9000e-004**	**0.0317**	**0.0000**	**149.7550**	**149.7550**	**4.5900e-003**	**0.0000**	**149.8699**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0730	1.5899	1.2065	1.8200e-003		0.0610	0.0610		0.0610	0.0610	0.0000	156.4680	156.4680	0.0372	0.0000	157.3986
Total	**0.0730**	**1.5899**	**1.2065**	**1.8200e-003**		**0.0610**	**0.0610**		**0.0610**	**0.0610**	**0.0000**	**156.4680**	**156.4680**	**0.0372**	**0.0000**	**157.3986**

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7500e-003	0.2317	0.0667	7.9000e-004	0.0199	2.7000e-004	0.0202	5.7600e-003	2.5000e-004	6.0200e-003	0.0000	75.8172	75.8172	3.1500e-003	0.0000	75.8961
Worker	0.0320	0.0204	0.2265	8.2000e-004	0.0944	5.9000e-004	0.0950	0.0251	5.4000e-004	0.0257	0.0000	73.9378	73.9378	1.4400e-003	0.0000	73.9738
Total	**0.0387**	**0.2521**	**0.2932**	**1.6100e-003**	**0.1143**	**8.6000e-004**	**0.1152**	**0.0309**	**7.9000e-004**	**0.0317**	**0.0000**	**149.7550**	**149.7550**	**4.5900e-003**	**0.0000**	**149.8699**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0155	0.1529	0.2188	3.4000e-004		7.6500e-003	7.6500e-003		7.0400e-003	7.0400e-003	0.0000	30.0403	30.0403	9.7200e-003	0.0000	30.2832
Paving	7.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0162**	**0.1529**	**0.2188**	**3.4000e-004**		**7.6500e-003**	**7.6500e-003**		**7.0400e-003**	**7.0400e-003**	**0.0000**	**30.0403**	**30.0403**	**9.7200e-003**	**0.0000**	**30.2832**

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	3.8000e-004	4.2700e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3924	1.3924	3.0000e-005	0.0000	1.3931
Total	**6.0000e-004**	**3.8000e-004**	**4.2700e-003**	**2.0000e-005**	**1.7800e-003**	**1.0000e-005**	**1.7900e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.3924**	**1.3924**	**3.0000e-005**	**0.0000**	**1.3931**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0140	0.3017	0.2594	3.4000e-004		0.0100	0.0100		0.0100	0.0100	0.0000	30.0403	30.0403	9.7200e-003	0.0000	30.2832
Paving	7.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0147**	**0.3017**	**0.2594**	**3.4000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**	**0.0000**	**30.0403**	**30.0403**	**9.7200e-003**	**0.0000**	**30.2832**

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	3.8000e-004	4.2700e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3924	1.3924	3.0000e-005	0.0000	1.3931
Total	**6.0000e-004**	**3.8000e-004**	**4.2700e-003**	**2.0000e-005**	**1.7800e-003**	**1.0000e-005**	**1.7900e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.3924**	**1.3924**	**3.0000e-005**	**0.0000**	**1.3931**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7803					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8700e-003	0.0195	0.0272	4.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	3.8299	3.8299	2.3000e-004	0.0000	3.8356
Total	**0.7832**	**0.0195**	**0.0272**	**4.0000e-005**		**1.0600e-003**	**1.0600e-003**		**1.0600e-003**	**1.0600e-003**	**0.0000**	**3.8299**	**3.8299**	**2.3000e-004**	**0.0000**	**3.8356**

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-003	9.0000e-004	9.9500e-003	4.0000e-005	4.1500e-003	3.0000e-005	4.1700e-003	1.1000e-003	2.0000e-005	1.1300e-003	0.0000	3.2490	3.2490	6.0000e-005	0.0000	3.2506
Total	**1.4000e-003**	**9.0000e-004**	**9.9500e-003**	**4.0000e-005**	**4.1500e-003**	**3.0000e-005**	**4.1700e-003**	**1.1000e-003**	**2.0000e-005**	**1.1300e-003**	**0.0000**	**3.2490**	**3.2490**	**6.0000e-005**	**0.0000**	**3.2506**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7803					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0353	0.0275	4.0000e-005		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003	0.0000	3.8299	3.8299	2.3000e-004	0.0000	3.8356
Total	**0.7820**	**0.0353**	**0.0275**	**4.0000e-005**		**1.4300e-003**	**1.4300e-003**		**1.4300e-003**	**1.4300e-003**	**0.0000**	**3.8299**	**3.8299**	**2.3000e-004**	**0.0000**	**3.8356**

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-003	9.0000e-004	9.9500e-003	4.0000e-005	4.1500e-003	3.0000e-005	4.1700e-003	1.1000e-003	2.0000e-005	1.1300e-003	0.0000	3.2490	3.2490	6.0000e-005	0.0000	3.2506
Total	**1.4000e-003**	**9.0000e-004**	**9.9500e-003**	**4.0000e-005**	**4.1500e-003**	**3.0000e-005**	**4.1700e-003**	**1.1000e-003**	**2.0000e-005**	**1.1300e-003**	**0.0000**	**3.2490**	**3.2490**	**6.0000e-005**	**0.0000**	**3.2506**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0744	0.3286	0.8386	3.1100e-003	0.2775	2.5500e-003	0.2800	0.0745	2.3800e-003	0.0769	0.0000	285.4653	285.4653	9.9500e-003	0.0000	285.7141
Unmitigated	0.0749	0.3318	0.8511	3.1700e-003	0.2832	2.5900e-003	0.2857	0.0760	2.4200e-003	0.0784	0.0000	290.8445	290.8445	0.0101	0.0000	291.0970

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Congregate Care (Assisted Living)	329.43	329.43	329.43	760,854	745,637
Parking Lot	0.00	0.00	0.00		
Total	329.43	329.43	329.43	760,854	745,637

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Congregate Care (Assisted	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Congregate Care (Assisted Living)	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Parking Lot	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	79.9589	79.9589	7.4800e-003	1.5500e-003	80.6071
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	81.9104	81.9104	7.6600e-003	1.5900e-003	82.5744
NaturalGas Mitigated	5.2400e-003	0.0448	0.0191	2.9000e-004		3.6200e-003	3.6200e-003		3.6200e-003	3.6200e-003	0.0000	51.8793	51.8793	9.9000e-004	9.5000e-004	52.1876
NaturalGas Unmitigated	6.4800e-003	0.0553	0.0236	3.5000e-004		4.4700e-003	4.4700e-003		4.4700e-003	4.4700e-003	0.0000	64.0837	64.0837	1.2300e-003	1.1700e-003	64.4645

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	1.20088e+006	6.4800e-003	0.0553	0.0236	3.5000e-004		4.4700e-003	4.4700e-003		4.4700e-003	4.4700e-003	0.0000	64.0837	64.0837	1.2300e-003	1.1700e-003	64.4645
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.4800e-003**	**0.0553**	**0.0236**	**3.5000e-004**		**4.4700e-003**	**4.4700e-003**		**4.4700e-003**	**4.4700e-003**	**0.0000**	**64.0837**	**64.0837**	**1.2300e-003**	**1.1700e-003**	**64.4645**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	972182	5.2400e-003	0.0448	0.0191	2.9000e-004		3.6200e-003	3.6200e-003		3.6200e-003	3.6200e-003	0.0000	51.8793	51.8793	9.9000e-004	9.5000e-004	52.1876
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.2400e-003**	**0.0448**	**0.0191**	**2.9000e-004**		**3.6200e-003**	**3.6200e-003**		**3.6200e-003**	**3.6200e-003**	**0.0000**	**51.8793**	**51.8793**	**9.9000e-004**	**9.5000e-004**	**52.1876**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	573841	80.6898	7.5500e-003	1.5600e-003	81.3439
Parking Lot	8680	1.2205	1.1000e-004	2.0000e-005	1.2304
Total		**81.9104**	**7.6600e-003**	**1.5800e-003**	**82.5744**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	559962	78.7384	7.3700e-003	1.5200e-003	79.3767
Parking Lot	8680	1.2205	1.1000e-004	2.0000e-005	1.2304
Total		**79.9589**	**7.4800e-003**	**1.5400e-003**	**80.6071**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5429	0.0167	1.0350	9.0000e-005		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	7.2399	7.2399	1.7300e-003	1.0000e-004	7.3135
Unmitigated	0.8630	0.0193	1.4746	9.3000e-004		0.0689	0.0689		0.0689	0.0689	6.3370	4.2900	10.6269	0.0118	4.2000e-004	11.0460

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0780					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4331					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.3207	7.3800e-003	0.4416	8.8000e-004		0.0631	0.0631		0.0631	0.0631	6.3370	2.6029	8.9399	0.0102	4.2000e-004	9.3183
Landscaping	0.0312	0.0119	1.0329	5.0000e-005		5.7200e-003	5.7200e-003		5.7200e-003	5.7200e-003	0.0000	1.6871	1.6871	1.6200e-003	0.0000	1.7277
Total	**0.8630**	**0.0193**	**1.4746**	**9.3000e-004**		**0.0689**	**0.0689**		**0.0689**	**0.0689**	**6.3370**	**4.2900**	**10.6269**	**0.0118**	**4.2000e-004**	**11.0460**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0780					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4331					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.6000e-004	4.7900e-003	2.0400e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5529	5.5529	1.1000e-004	1.0000e-004	5.5859
Landscaping	0.0312	0.0119	1.0329	5.0000e-005		5.7200e-003	5.7200e-003		5.7200e-003	5.7200e-003	0.0000	1.6871	1.6871	1.6200e-003	0.0000	1.7277
Total	**0.5429**	**0.0167**	**1.0350**	**8.0000e-005**		**6.1100e-003**	**6.1100e-003**		**6.1100e-003**	**6.1100e-003**	**0.0000**	**7.2399**	**7.2399**	**1.7300e-003**	**1.0000e-004**	**7.3135**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	14.6847	0.2962	7.2000e-003	24.2345
Unmitigated	14.6847	0.2962	7.2000e-003	24.2345

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.28933	2.1110	2.0000e-004	4.0000e-005	2.1281
Congregate Care (Assisted Living)	9.05641 / 5.70948	12.5738	0.2960	7.1600e-003	22.1064
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**14.6847**	**0.2962**	**7.2000e-003**	**24.2345**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.28933	2.1110	2.0000e-004	4.0000e-005	2.1281
Congregate Care (Assisted Living)	9.05641 / 5.70948	12.5738	0.2960	7.1600e-003	22.1064
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**14.6847**	**0.2962**	**7.2000e-003**	**24.2345**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.4526	0.3813	0.0000	15.9860
Unmitigated	25.8103	1.5254	0.0000	63.9439

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.31	0.0629	3.7200e-003	0.0000	0.1559
Congregate Care (Assisted Living)	126.84	25.7474	1.5216	0.0000	63.7880
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**25.8103**	**1.5254**	**0.0000**	**63.9439**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.0775	0.0157	9.3000e-004	0.0000	0.0390
Congregate Care (Assisted Living)	31.71	6.4368	0.3804	0.0000	15.9470
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**6.4526**	**0.3813**	**0.0000**	**15.9860**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Inspiration Drive Memory Care and Assisted Living Facility Project

Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	62.00	Space	0.56	24,800.00	0
City Park	3.60	Acre	3.60	158,089.00	0
Congregate Care (Assisted Living)	139.00	Dwelling Unit	10.24	110,112.00	398

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	310	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor based on 5-year average (PG&E 2019).

Land Use - The proposed project would include a 55-bed memory care facility on Parcel 2 and an 84-bed assisted living facility on Parcel 3, with landscaping, parking, and utilities.

Construction Phase - Construction of the proposed project is anticipated to begin in early 2022 and would occur over an approximately 20-month period.

Grading - The proposed project would require the offhaul of 15,600 cubic yards of soil.

Vehicle Trips - Trip rates based on trip generation prepared for the proposed project.

Construction Off-road Equipment Mitigation - Assuming compliance with BAAQMD Basic Construction Mitigation Measures and use of Tier 2 construction equipment

Mobile Land Use Mitigation -

Area Mitigation - Assuming only natural gas hearth.

Energy Mitigation - Assuming compliance with the 2019 CALGreen Code.

Waste Mitigation - Consistent with the CalRecycle Waste Diversion and Recycling Mandate which will reduce solid waste production by 75 percent.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	300.00	335.00
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	10.00	30.00
tblGrading	MaterialExported	0.00	15,600.00
tblLandUse	LandUseSquareFeet	156,816.00	158,089.00
tblLandUse	LandUseSquareFeet	139,000.00	110,112.00
tblLandUse	LotAcreage	8.69	10.24
tblProjectCharacteristics	CO2IntensityFactor	641.35	310
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.20	2.37
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	2.44	2.37
tblVehicleTrips	WD_TR	1.89	0.00

tblVehicleTrips	WD_TR	2.74	2.37

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.1620	54.6968	33.0572	0.1139	18.2141	1.6820	19.8276	9.9699	1.5492	11.4543	0.0000	11,549.4240	11,549.4240	2.2122	0.0000	11,604.7284
2023	52.3093	18.0591	20.8672	0.0518	1.7586	0.7124	2.4710	0.4734	0.6702	1.1436	0.0000	5,105.1954	5,105.1954	0.7161	0.0000	5,122.2700
Maximum	**52.3093**	**54.6968**	**33.0572**	**0.1139**	**18.2141**	**1.6820**	**19.8276**	**9.9699**	**1.5492**	**11.4543**	**0.0000**	**11,549.4240**	**11,549.4240**	**2.2122**	**0.0000**	**11,604.7284**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.3478	67.0920	40.7383	0.1139	8.2777	1.3805	9.2248	4.5080	1.3784	5.4550	0.0000	11,549.4240	11,549.4240	2.2122	0.0000	11,604.7284
2023	52.2315	27.2286	22.4970	0.0518	1.7586	0.9162	2.6748	0.4734	0.9153	1.3887	0.0000	5,105.1954	5,105.1954	0.7161	0.0000	5,122.2700
Maximum	**52.2315**	**67.0920**	**40.7383**	**0.1139**	**8.2777**	**1.3805**	**9.2248**	**4.5080**	**1.3784**	**5.4550**	**0.0000**	**11,549.4240**	**11,549.4240**	**2.2122**	**0.0000**	**11,604.7284**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.35**	**-29.64**	**-17.27**	**0.00**	**49.75**	**4.08**	**46.64**	**52.30**	**-3.35**	**45.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	60.3122	1.3960	87.0034	0.1461		10.7856	10.7856		10.7856	10.7856	1,163.5476	535.7808	1,699.3284	1.6122	0.0822	1,764.1404
Energy	0.0355	0.3032	0.1290	1.9400e-003		0.0245	0.0245		0.0245	0.0245		387.0696	387.0696	7.4200e-003	7.1000e-003	389.3698
Mobile	0.4737	1.7675	4.8700	0.0184	1.6163	0.0142	1.6306	0.4324	0.0133	0.4457		1,863.1686	1,863.1686	0.0616		1,864.7075
Total	**60.8214**	**3.4668**	**92.0024**	**0.1665**	**1.6163**	**10.8243**	**12.4407**	**0.4324**	**10.8234**	**11.2558**	**1,163.5476**	**2,786.0190**	**3,949.5667**	**1.6811**	**0.0893**	**4,018.2177**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.2478	0.9931	11.8432	6.1000e-003		0.1331	0.1331		0.1331	0.1331	0.0000	1,119.5808	1,119.5808	0.0410	0.0202	1,126.6084
Energy	0.0287	0.2455	0.1045	1.5700e-003		0.0199	0.0199		0.0199	0.0199		313.3544	313.3544	6.0100e-003	5.7400e-003	315.2165
Mobile	0.4707	1.7509	4.7927	0.0181	1.5840	0.0140	1.5980	0.4238	0.0131	0.4368		1,828.6617	1,828.6617	0.0606		1,830.1774
Total	**3.7472**	**2.9894**	**16.7404**	**0.0257**	**1.5840**	**0.1669**	**1.7510**	**0.4238**	**0.1660**	**0.5898**	**0.0000**	**3,261.5968**	**3,261.5968**	**0.1076**	**0.0259**	**3,272.0023**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**93.84**	**13.77**	**81.80**	**84.54**	**2.00**	**98.46**	**85.93**	**2.00**	**98.47**	**94.76**	**100.00**	**-17.07**	**17.42**	**93.60**	**71.02**	**18.57**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/3/2022	2/11/2022	5	30	
2	Grading	Grading	2/14/2022	3/25/2022	5	30	
3	Building Construction	Building Construction	3/28/2022	7/7/2023	5	335	
4	Paving	Paving	7/10/2023	8/18/2023	5	30	
5	Architectural Coating	Architectural Coating	8/21/2023	9/29/2023	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0.56

Residential Indoor: 222,977; Residential Outdoor: 74,326; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,488 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,950.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	177.00	45.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.0663**	**1.6126**	**19.6788**	**9.9307**	**1.4836**	**11.4143**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0539	0.0303	0.4074	1.3800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		137.3212	137.3212	2.8600e-003		137.3927
Total	**0.0539**	**0.0303**	**0.4074**	**1.3800e-003**	**0.1479**	**9.1000e-004**	**0.1488**	**0.0392**	**8.4000e-004**	**0.0401**		**137.3212**	**137.3212**	**2.8600e-003**		**137.3927**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	1.2097	33.7214	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**1.2097**	**33.7214**	**22.9600**	**0.0380**	**8.1298**	**0.9462**	**9.0760**	**4.4688**	**0.9462**	**5.4150**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0539	0.0303	0.4074	1.3800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		137.3212	137.3212	2.8600e-003		137.3927
Total	**0.0539**	**0.0303**	**0.4074**	**1.3800e-003**	**0.1479**	**9.1000e-004**	**0.1488**	**0.0392**	**8.4000e-004**	**0.0401**		**137.3212**	**137.3212**	**2.8600e-003**		**137.3927**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7321	0.0000	8.7321	3.6054	0.0000	3.6054			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.7321**	**1.6349**	**10.3670**	**3.6054**	**1.5041**	**5.1095**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4773	15.8196	3.5630	0.0503	1.1357	0.0461	1.1818	0.3112	0.0441	0.3554		5,385.4343	5,385.4343	0.2648		5,392.0540
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0599	0.0337	0.4527	1.5300e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		152.5791	152.5791	3.1800e-003		152.6586
Total	**0.5372**	**15.8533**	**4.0157**	**0.0518**	**1.3000**	**0.0471**	**1.3471**	**0.3548**	**0.0451**	**0.3999**		**5,538.0134**	**5,538.0134**	**0.2680**		**5,544.7125**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9295	0.0000	3.9295	1.6224	0.0000	1.6224			0.0000			0.0000
Off-Road	1.8106	51.2386	36.7226	0.0621		1.3333	1.3333		1.3333	1.3333	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**1.8106**	**51.2386**	**36.7226**	**0.0621**	**3.9295**	**1.3333**	**5.2628**	**1.6224**	**1.3333**	**2.9557**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4773	15.8196	3.5630	0.0503	1.1357	0.0461	1.1818	0.3112	0.0441	0.3554		5,385.4343	5,385.4343	0.2648		5,392.0540
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0599	0.0337	0.4527	1.5300e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		152.5791	152.5791	3.1800e-003		152.6586
Total	**0.5372**	**15.8533**	**4.0157**	**0.0518**	**1.3000**	**0.0471**	**1.3471**	**0.3548**	**0.0451**	**0.3999**		**5,538.0134**	**5,538.0134**	**0.2680**		**5,544.7125**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1302	4.4073	1.0313	0.0121	0.3046	8.7300e-003	0.3134	0.0877	8.3500e-003	0.0960		1,287.6503	1,287.6503	0.0584		1,289.1091
Worker	0.5297	0.2983	4.0061	0.0135	1.4540	8.9400e-003	1.4630	0.3857	8.2300e-003	0.3939		1,350.3248	1,350.3248	0.0281		1,351.0283
Total	**0.6599**	**4.7056**	**5.0375**	**0.0257**	**1.7586**	**0.0177**	**1.7763**	**0.4734**	**0.0166**	**0.4899**		**2,637.9751**	**2,637.9751**	**0.0865**		**2,640.1373**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.0809**	**23.5544**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1302	4.4073	1.0313	0.0121	0.3046	8.7300e-003	0.3134	0.0877	8.3500e-003	0.0960		1,287.6503	1,287.6503	0.0584		1,289.1091
Worker	0.5297	0.2983	4.0061	0.0135	1.4540	8.9400e-003	1.4630	0.3857	8.2300e-003	0.3939		1,350.3248	1,350.3248	0.0281		1,351.0283
Total	**0.6599**	**4.7056**	**5.0375**	**0.0257**	**1.7586**	**0.0177**	**1.7763**	**0.4734**	**0.0166**	**0.4899**		**2,637.9751**	**2,637.9751**	**0.0865**		**2,640.1373**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0976	3.4059	0.9285	0.0118	0.3046	3.8800e-003	0.3085	0.0877	3.7000e-003	0.0914		1,251.4271	1,251.4271	0.0499		1,252.6739
Worker	0.4945	0.2683	3.6948	0.0130	1.4540	8.7500e-003	1.4628	0.3857	8.0600e-003	0.3937		1,298.5583	1,298.5583	0.0253		1,299.1900
Total	**0.5921**	**3.6742**	**4.6232**	**0.0248**	**1.7586**	**0.0126**	**1.7713**	**0.4734**	**0.0118**	**0.4851**		**2,549.9854**	**2,549.9854**	**0.0751**		**2,551.8639**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.0809**	**23.5544**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0976	3.4059	0.9285	0.0118	0.3046	3.8800e-003	0.3085	0.0877	3.7000e-003	0.0914		1,251.4271	1,251.4271	0.0499		1,252.6739
Worker	0.4945	0.2683	3.6948	0.0130	1.4540	8.7500e-003	1.4628	0.3857	8.0600e-003	0.3937		1,298.5583	1,298.5583	0.0253		1,299.1900
Total	**0.5921**	**3.6742**	**4.6232**	**0.0248**	**1.7586**	**0.0126**	**1.7713**	**0.4734**	**0.0118**	**0.4851**		**2,549.9854**	**2,549.9854**	**0.0751**		**2,551.8639**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0817**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0419	0.0227	0.3131	1.1000e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		110.0473	110.0473	2.1400e-003		110.1009
Total	**0.0419**	**0.0227**	**0.3131**	**1.1000e-003**	**0.1232**	**7.4000e-004**	**0.1240**	**0.0327**	**6.8000e-004**	**0.0334**		**110.0473**	**110.0473**	**2.1400e-003**		**110.1009**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9311	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9800**	**20.1146**	**17.2957**	**0.0228**		**0.6670**	**0.6670**		**0.6670**	**0.6670**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0419	0.0227	0.3131	1.1000e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		110.0473	110.0473	2.1400e-003		110.1009
Total	**0.0419**	**0.0227**	**0.3131**	**1.1000e-003**	**0.1232**	**7.4000e-004**	**0.1240**	**0.0327**	**6.8000e-004**	**0.0334**		**110.0473**	**110.0473**	**2.1400e-003**		**110.1009**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**52.2115**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0978	0.0531	0.7306	2.5700e-003	0.2875	1.7300e-003	0.2893	0.0763	1.5900e-003	0.0779		256.7771	256.7771	5.0000e-003		256.9020
Total	**0.0978**	**0.0531**	**0.7306**	**2.5700e-003**	**0.2875**	**1.7300e-003**	**0.2893**	**0.0763**	**1.5900e-003**	**0.0779**		**256.7771**	**256.7771**	**5.0000e-003**		**256.9020**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**52.1338**	**2.3524**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0978	0.0531	0.7306	2.5700e-003	0.2875	1.7300e-003	0.2893	0.0763	1.5900e-003	0.0779		256.7771	256.7771	5.0000e-003		256.9020
Total	**0.0978**	**0.0531**	**0.7306**	**2.5700e-003**	**0.2875**	**1.7300e-003**	**0.2893**	**0.0763**	**1.5900e-003**	**0.0779**		**256.7771**	**256.7771**	**5.0000e-003**		**256.9020**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4707	1.7509	4.7927	0.0181	1.5840	0.0140	1.5980	0.4238	0.0131	0.4368		1,828.6617	1,828.6617	0.0606		1,830.1774
Unmitigated	0.4737	1.7675	4.8700	0.0184	1.6163	0.0142	1.6306	0.4324	0.0133	0.4457		1,863.1686	1,863.1686	0.0616		1,864.7075

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Congregate Care (Assisted Living)	329.43	329.43	329.43	760,854	745,637
Parking Lot	0.00	0.00	0.00		
Total	329.43	329.43	329.43	760,854	745,637

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Congregate Care (Assisted	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Congregate Care (Assisted Living)	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Parking Lot	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0287	0.2455	0.1045	1.5700e-003		0.0199	0.0199		0.0199	0.0199		313.3544	313.3544	6.0100e-003	5.7400e-003	315.2165
NaturalGas Unmitigated	0.0355	0.3032	0.1290	1.9400e-003		0.0245	0.0245		0.0245	0.0245		387.0696	387.0696	7.4200e-003	7.1000e-003	389.3698

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	3290.09	0.0355	0.3032	0.1290	1.9400e-003		0.0245	0.0245		0.0245	0.0245		387.0696	387.0696	7.4200e-003	7.1000e-003	389.3698
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0355**	**0.3032**	**0.1290**	**1.9400e-003**		**0.0245**	**0.0245**		**0.0245**	**0.0245**		**387.0696**	**387.0696**	**7.4200e-003**	**7.1000e-003**	**389.3698**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	2.66351	0.0287	0.2455	0.1045	1.5700e-003		0.0199	0.0199		0.0199	0.0199		313.3544	313.3544	6.0100e-003	5.7400e-003	315.2165
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0287**	**0.2455**	**0.1045**	**1.5700e-003**		**0.0199**	**0.0199**		**0.0199**	**0.0199**		**313.3544**	**313.3544**	**6.0100e-003**	**5.7400e-003**	**315.2165**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.2478	0.9931	11.8432	6.1000e-003		0.1331	0.1331		0.1331	0.1331	0.0000	1,119.5808	1,119.5808	0.0410	0.0202	1,126.6084
Unmitigated	60.3122	1.3960	87.0034	0.1461		10.7856	10.7856		10.7856	10.7856	1,163.5476	535.7808	1,699.3284	1.6122	0.0822	1,764.1404

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	57.1652	1.2638	75.5265	0.1455		10.7221	10.7221		10.7221	10.7221	1,163.5476	515.1177	1,678.6653	1.5923	0.0822	1,742.9800
Landscaping	0.3462	0.1323	11.4769	6.1000e-004		0.0635	0.0635		0.0635	0.0635		20.6631	20.6631	0.0199		21.1605
Total	**60.3122**	**1.3960**	**87.0034**	**0.1461**		**10.7856**	**10.7856**		**10.7856**	**10.7856**	**1,163.5476**	**535.7808**	**1,699.3284**	**1.6121**	**0.0822**	**1,764.1404**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1007	0.8608	0.3663	5.4900e-003		0.0696	0.0696		0.0696	0.0696	0.0000	1,098.9177	1,098.9177	0.0211	0.0202	1,105.4480
Landscaping	0.3462	0.1323	11.4769	6.1000e-004		0.0635	0.0635		0.0635	0.0635		20.6631	20.6631	0.0199		21.1605
Total	**3.2478**	**0.9931**	**11.8432**	**6.1000e-003**		**0.1331**	**0.1331**		**0.1331**	**0.1331**	**0.0000**	**1,119.5808**	**1,119.5808**	**0.0410**	**0.0202**	**1,126.6084**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Inspiration Drive Memory Care and Assisted Living Facility Project

Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	62.00	Space	0.56	24,800.00	0
City Park	3.60	Acre	3.60	158,089.00	0
Congregate Care (Assisted Living)	139.00	Dwelling Unit	10.24	110,112.00	398

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	310	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Inspiration Drive Memory Care and Assisted Living Facility Project - Bay Area AQMD Air District, Winter

Project Characteristics - CO2 intensity factor based on 5-year average (PG&E 2019).

Land Use - The proposed project would include a 55-bed memory care facility on Parcel 2 and an 84-bed assisted living facility on Parcel 3, with landscaping, parking, and utilities.

Construction Phase - Construction of the proposed project is anticipated to begin in early 2022 and would occur over an approximately 20-month period.

Grading - The proposed project would require the offhaul of 15,600 cubic yards of soil.

Vehicle Trips - Trip rates based on trip generation prepared for the proposed project.

Construction Off-road Equipment Mitigation - Assuming compliance with BAAQMD Basic Construction Mitigation Measures and use of Tier 2 construction equipment

Mobile Land Use Mitigation -

Area Mitigation - Assuming only natural gas hearth.

Energy Mitigation - Assuming compliance with the 2019 CALGreen Code.

Waste Mitigation - Consistent with the CalRecycle Waste Diversion and Recycling Mandate which will reduce solid waste production by 75 percent.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	300.00	335.00
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	10.00	30.00
tblGrading	MaterialExported	0.00	15,600.00
tblLandUse	LandUseSquareFeet	156,816.00	158,089.00
tblLandUse	LandUseSquareFeet	139,000.00	110,112.00
tblLandUse	LotAcreage	8.69	10.24
tblProjectCharacteristics	CO2IntensityFactor	641.35	310
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.20	2.37
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	2.44	2.37
tblVehicleTrips	WD_TR	1.89	0.00

tblVehicleTrips	WD_TR	2.74	2.37

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.1788	55.0538	33.2798	0.1129	18.2141	1.6829	19.8276	9.9699	1.5500	11.4543	0.0000	11,445.4751	11,445.4751	2.2244	0.0000	11,501.0846
2023	52.3157	18.1386	20.7243	0.0504	1.7586	0.7125	2.4712	0.4734	0.6704	1.1437	0.0000	4,971.3114	4,971.3114	0.7160	0.0000	4,988.4314
Maximum	**52.3157**	**55.0538**	**33.2798**	**0.1129**	**18.2141**	**1.6829**	**19.8276**	**9.9699**	**1.5500**	**11.4543**	**0.0000**	**11,445.4751**	**11,445.4751**	**2.2244**	**0.0000**	**11,501.0846**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.3645	67.4490	40.9608	0.1129	8.2777	1.3813	9.2248	4.5080	1.3792	5.4550	0.0000	11,445.4751	11,445.4751	2.2244	0.0000	11,501.0846
2023	52.2380	27.3081	22.3541	0.0504	1.7586	0.9164	2.6750	0.4734	0.9155	1.3888	0.0000	4,971.3114	4,971.3114	0.7160	0.0000	4,988.4314
Maximum	**52.2380**	**67.4490**	**40.9608**	**0.1129**	**8.2777**	**1.3813**	**9.2248**	**4.5080**	**1.3792**	**5.4550**	**0.0000**	**11,445.4751**	**11,445.4751**	**2.2244**	**0.0000**	**11,501.0846**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.35**	**-29.46**	**-17.24**	**0.00**	**49.75**	**4.08**	**46.63**	**52.30**	**-3.35**	**45.67**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	60.3122	1.3960	87.0034	0.1461		10.7856	10.7856		10.7856	10.7856	1,163.5476	535.7808	1,699.3284	1.6122	0.0822	1,764.1404
Energy	0.0355	0.3032	0.1290	1.9400e-003		0.0245	0.0245		0.0245	0.0245		387.0696	387.0696	7.4200e-003	7.1000e-003	389.3698
Mobile	0.4076	1.8582	4.8926	0.0172	1.6163	0.0143	1.6306	0.4324	0.0134	0.4458		1,744.9429	1,744.9429	0.0627		1,746.5100
Total	**60.7553**	**3.5574**	**92.0251**	**0.1653**	**1.6163**	**10.8244**	**12.4407**	**0.4324**	**10.8235**	**11.2559**	**1,163.5476**	**2,667.7933**	**3,831.3409**	**1.6823**	**0.0893**	**3,900.0202**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.2478	0.9931	11.8432	6.1000e-003		0.1331	0.1331		0.1331	0.1331	0.0000	1,119.5808	1,119.5808	0.0410	0.0202	1,126.6084
Energy	0.0287	0.2455	0.1045	1.5700e-003		0.0199	0.0199		0.0199	0.0199		313.3544	313.3544	6.0100e-003	5.7400e-003	315.2165
Mobile	0.4047	1.8397	4.8239	0.0169	1.5840	0.0141	1.5981	0.4238	0.0131	0.4369		1,712.5563	1,712.5563	0.0618		1,714.1012
Total	**3.6812**	**3.0782**	**16.7715**	**0.0246**	**1.5840**	**0.1670**	**1.7510**	**0.4238**	**0.1661**	**0.5898**	**0.0000**	**3,145.4914**	**3,145.4914**	**0.1088**	**0.0259**	**3,155.9262**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**93.94**	**13.47**	**81.78**	**85.13**	**2.00**	**98.46**	**85.93**	**2.00**	**98.47**	**94.76**	**100.00**	**-17.91**	**17.90**	**93.53**	**71.02**	**19.08**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/3/2022	2/11/2022	5	30	
2	Grading	Grading	2/14/2022	3/25/2022	5	30	
3	Building Construction	Building Construction	3/28/2022	7/7/2023	5	335	
4	Paving	Paving	7/10/2023	8/18/2023	5	30	
5	Architectural Coating	Architectural Coating	8/21/2023	9/29/2023	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0.56

Residential Indoor: 222,977; Residential Outdoor: 74,326; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,488 (Architectural Coating – sqft)

OffRoad Equipment

Inspiration Drive Memory Care and Assisted Living Facility Project - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,950.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	177.00	45.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.0663**	**1.6126**	**19.6788**	**9.9307**	**1.4836**	**11.4143**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0572	0.0375	0.3796	1.2700e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		126.5026	126.5026	2.6600e-003		126.5691
Total	**0.0572**	**0.0375**	**0.3796**	**1.2700e-003**	**0.1479**	**9.1000e-004**	**0.1488**	**0.0392**	**8.4000e-004**	**0.0401**		**126.5026**	**126.5026**	**2.6600e-003**		**126.5691**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	1.2097	33.7214	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**1.2097**	**33.7214**	**22.9600**	**0.0380**	**8.1298**	**0.9462**	**9.0760**	**4.4688**	**0.9462**	**5.4150**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0572	0.0375	0.3796	1.2700e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		126.5026	126.5026	2.6600e-003		126.5691
Total	**0.0572**	**0.0375**	**0.3796**	**1.2700e-003**	**0.1479**	**9.1000e-004**	**0.1488**	**0.0392**	**8.4000e-004**	**0.0401**		**126.5026**	**126.5026**	**2.6600e-003**		**126.5691**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7321	0.0000	8.7321	3.6054	0.0000	3.6054			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.7321**	**1.6349**	**10.3670**	**3.6054**	**1.5041**	**5.1095**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4904	16.1687	3.8165	0.0494	1.1357	0.0470	1.1827	0.3112	0.0450	0.3562		5,293.5062	5,293.5062	0.2772		5,300.4364
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0636	0.0416	0.4218	1.4100e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		140.5584	140.5584	2.9600e-003		140.6323
Total	**0.5539**	**16.2104**	**4.2383**	**0.0508**	**1.3000**	**0.0480**	**1.3480**	**0.3548**	**0.0459**	**0.4007**		**5,434.0646**	**5,434.0646**	**0.2802**		**5,441.0687**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9295	0.0000	3.9295	1.6224	0.0000	1.6224			0.0000			0.0000
Off-Road	1.8106	51.2386	36.7226	0.0621		1.3333	1.3333		1.3333	1.3333	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**1.8106**	**51.2386**	**36.7226**	**0.0621**	**3.9295**	**1.3333**	**5.2628**	**1.6224**	**1.3333**	**2.9557**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4904	16.1687	3.8165	0.0494	1.1357	0.0470	1.1827	0.3112	0.0450	0.3562		5,293.5062	5,293.5062	0.2772		5,300.4364
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0636	0.0416	0.4218	1.4100e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		140.5584	140.5584	2.9600e-003		140.6323
Total	**0.5539**	**16.2104**	**4.2383**	**0.0508**	**1.3000**	**0.0480**	**1.3480**	**0.3548**	**0.0459**	**0.4007**		**5,434.0646**	**5,434.0646**	**0.2802**		**5,441.0687**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1379	4.4406	1.1849	0.0118	0.3046	9.0500e-003	0.3137	0.0877	8.6600e-003	0.0964		1,254.7751	1,254.7751	0.0631		1,256.3519
Worker	0.5627	0.3684	3.7327	0.0125	1.4540	8.9400e-003	1.4630	0.3857	8.2300e-003	0.3939		1,243.9419	1,243.9419	0.0262		1,244.5959
Total	**0.7006**	**4.8089**	**4.9176**	**0.0243**	**1.7586**	**0.0180**	**1.7766**	**0.4734**	**0.0169**	**0.4903**		**2,498.7170**	**2,498.7170**	**0.0892**		**2,500.9478**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.0809**	**23.5544**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1379	4.4406	1.1849	0.0118	0.3046	9.0500e-003	0.3137	0.0877	8.6600e-003	0.0964		1,254.7751	1,254.7751	0.0631		1,256.3519
Worker	0.5627	0.3684	3.7327	0.0125	1.4540	8.9400e-003	1.4630	0.3857	8.2300e-003	0.3939		1,243.9419	1,243.9419	0.0262		1,244.5959
Total	**0.7006**	**4.8089**	**4.9176**	**0.0243**	**1.7586**	**0.0180**	**1.7766**	**0.4734**	**0.0169**	**0.4903**		**2,498.7170**	**2,498.7170**	**0.0892**		**2,500.9478**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1036	3.4225	1.0521	0.0115	0.3046	4.0500e-003	0.3087	0.0877	3.8700e-003	0.0916		1,219.7972	1,219.7972	0.0535		1,221.1358
Worker	0.5271	0.3312	3.4282	0.0120	1.4540	8.7500e-003	1.4628	0.3857	8.0600e-003	0.3937		1,196.3043	1,196.3043	0.0234		1,196.8896
Total	**0.6308**	**3.7537**	**4.4803**	**0.0235**	**1.7586**	**0.0128**	**1.7715**	**0.4734**	**0.0119**	**0.4853**		**2,416.1015**	**2,416.1015**	**0.0770**		**2,418.0254**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.0809**	**23.5544**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1036	3.4225	1.0521	0.0115	0.3046	4.0500e-003	0.3087	0.0877	3.8700e-003	0.0916		1,219.7972	1,219.7972	0.0535		1,221.1358
Worker	0.5271	0.3312	3.4282	0.0120	1.4540	8.7500e-003	1.4628	0.3857	8.0600e-003	0.3937		1,196.3043	1,196.3043	0.0234		1,196.8896
Total	**0.6308**	**3.7537**	**4.4803**	**0.0235**	**1.7586**	**0.0128**	**1.7715**	**0.4734**	**0.0119**	**0.4853**		**2,416.1015**	**2,416.1015**	**0.0770**		**2,418.0254**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0817**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0447	0.0281	0.2905	1.0200e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		101.3817	101.3817	1.9800e-003		101.4313
Total	**0.0447**	**0.0281**	**0.2905**	**1.0200e-003**	**0.1232**	**7.4000e-004**	**0.1240**	**0.0327**	**6.8000e-004**	**0.0334**		**101.3817**	**101.3817**	**1.9800e-003**		**101.4313**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9311	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9800**	**20.1146**	**17.2957**	**0.0228**		**0.6670**	**0.6670**		**0.6670**	**0.6670**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0447	0.0281	0.2905	1.0200e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		101.3817	101.3817	1.9800e-003		101.4313
Total	**0.0447**	**0.0281**	**0.2905**	**1.0200e-003**	**0.1232**	**7.4000e-004**	**0.1240**	**0.0327**	**6.8000e-004**	**0.0334**		**101.3817**	**101.3817**	**1.9800e-003**		**101.4313**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**52.2115**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1042	0.0655	0.6779	2.3700e-003	0.2875	1.7300e-003	0.2893	0.0763	1.5900e-003	0.0779		236.5574	236.5574	4.6300e-003		236.6731
Total	**0.1042**	**0.0655**	**0.6779**	**2.3700e-003**	**0.2875**	**1.7300e-003**	**0.2893**	**0.0763**	**1.5900e-003**	**0.0779**		**236.5574**	**236.5574**	**4.6300e-003**		**236.6731**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**52.1338**	**2.3524**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1042	0.0655	0.6779	2.3700e-003	0.2875	1.7300e-003	0.2893	0.0763	1.5900e-003	0.0779		236.5574	236.5574	4.6300e-003		236.6731
Total	**0.1042**	**0.0655**	**0.6779**	**2.3700e-003**	**0.2875**	**1.7300e-003**	**0.2893**	**0.0763**	**1.5900e-003**	**0.0779**		**236.5574**	**236.5574**	**4.6300e-003**		**236.6731**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4047	1.8397	4.8239	0.0169	1.5840	0.0141	1.5981	0.4238	0.0131	0.4369		1,712.5563	1,712.5563	0.0618		1,714.1012
Unmitigated	0.4076	1.8582	4.8926	0.0172	1.6163	0.0143	1.6306	0.4324	0.0134	0.4458		1,744.9429	1,744.9429	0.0627		1,746.5100

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Congregate Care (Assisted Living)	329.43	329.43	329.43	760,854	745,637
Parking Lot	0.00	0.00	0.00		
Total	329.43	329.43	329.43	760,854	745,637

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Congregate Care (Assisted	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Congregate Care (Assisted Living)	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Parking Lot	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0287	0.2455	0.1045	1.5700e-003		0.0199	0.0199		0.0199	0.0199		313.3544	313.3544	6.0100e-003	5.7400e-003	315.2165
NaturalGas Unmitigated	0.0355	0.3032	0.1290	1.9400e-003		0.0245	0.0245		0.0245	0.0245		387.0696	387.0696	7.4200e-003	7.1000e-003	389.3698

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	3290.09	0.0355	0.3032	0.1290	1.9400e-003		0.0245	0.0245		0.0245	0.0245		387.0696	387.0696	7.4200e-003	7.1000e-003	389.3698
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0355**	**0.3032**	**0.1290**	**1.9400e-003**		**0.0245**	**0.0245**		**0.0245**	**0.0245**		**387.0696**	**387.0696**	**7.4200e-003**	**7.1000e-003**	**389.3698**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	2.66351	0.0287	0.2455	0.1045	1.5700e-003		0.0199	0.0199		0.0199	0.0199		313.3544	313.3544	6.0100e-003	5.7400e-003	315.2165
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0287**	**0.2455**	**0.1045**	**1.5700e-003**		**0.0199**	**0.0199**		**0.0199**	**0.0199**		**313.3544**	**313.3544**	**6.0100e-003**	**5.7400e-003**	**315.2165**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.2478	0.9931	11.8432	6.1000e-003		0.1331	0.1331		0.1331	0.1331	0.0000	1,119.5808	1,119.5808	0.0410	0.0202	1,126.6084
Unmitigated	60.3122	1.3960	87.0034	0.1461		10.7856	10.7856		10.7856	10.7856	1,163.5476	535.7808	1,699.3284	1.6122	0.0822	1,764.1404

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	57.1652	1.2638	75.5265	0.1455		10.7221	10.7221		10.7221	10.7221	1,163.5476	515.1177	1,678.6653	1.5923	0.0822	1,742.9800
Landscaping	0.3462	0.1323	11.4769	6.1000e-004		0.0635	0.0635		0.0635	0.0635		20.6631	20.6631	0.0199		21.1605
Total	**60.3122**	**1.3960**	**87.0034**	**0.1461**		**10.7856**	**10.7856**		**10.7856**	**10.7856**	**1,163.5476**	**535.7808**	**1,699.3284**	**1.6121**	**0.0822**	**1,764.1404**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1007	0.8608	0.3663	5.4900e-003		0.0696	0.0696		0.0696	0.0696	0.0000	1,098.9177	1,098.9177	0.0211	0.0202	1,105.4480
Landscaping	0.3462	0.1323	11.4769	6.1000e-004		0.0635	0.0635		0.0635	0.0635		20.6631	20.6631	0.0199		21.1605
Total	**3.2478**	**0.9931**	**11.8432**	**6.1000e-003**		**0.1331**	**0.1331**		**0.1331**	**0.1331**	**0.0000**	**1,119.5808**	**1,119.5808**	**0.0410**	**0.0202**	**1,126.6084**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

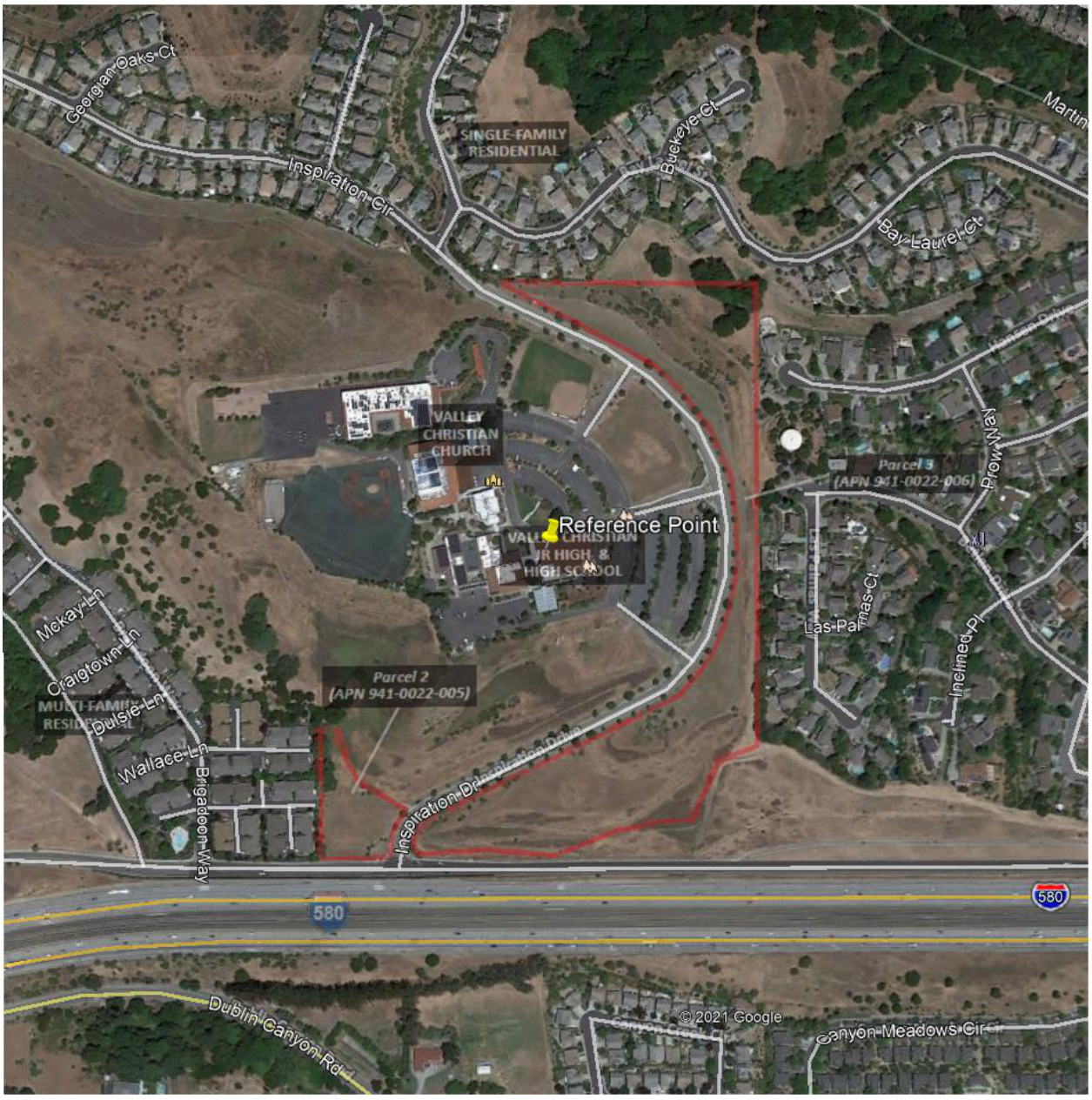
Equipment Type	Number

11.0 Vegetation

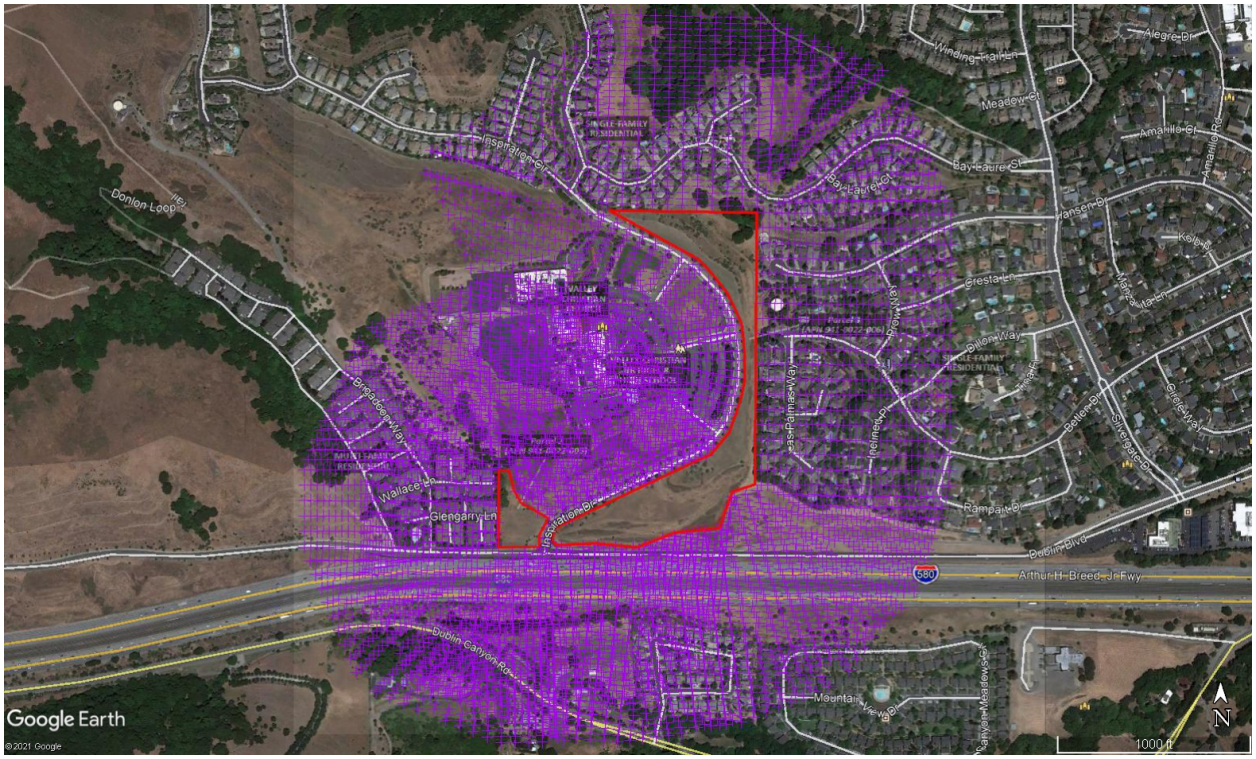
Appendix C

Model Snap Shots

Project Location



Sensitive Receptor Grid



Unmitigated Cancer Risk

Unmitigated Chronic Inhalation Hazard Index

Unmitigated $PM_{2.5}$ Concentration

Mitigated Cancer Risk

Mitigated Chronic Inhalation Hazard Index

Mitigated $PM_{2.5}$ Concentration

Appendix D

Biological Resources Analysis

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: March 18, 2021

TO: City of Dublin

FROM: LSA Associates, Inc.

SUBJECT: Biological Resources Analysis for the Inspiration Drive Memory Care and Assisted Living Facilities in Dublin, California

This memorandum analyzes the biological resources in regard to the above-referenced project (proposed project) located at 7500 Inspiration Drive (Figure 1) and was prepared to support a Draft Initial Study for the project pursuant to the California Environmental Quality Act (CEQA). The proposed project involves construction of a memory care facility and an assisted living facility, each on single adjacent parcels (Parcels 2 and 3) separated by Inspiration Drive, within the Valley Christian Center (VCC) (Figures 2 and 3). Parcels 2 and 3 are collectively referred to in this memorandum as the project site.

METHODS

As background material, LSA reviewed the Draft Environmental Impact Report (DEIR)[1] for the VCC Expansion Program, a Biological Resources Assessment for the project site WRA in 2015,[2] and a memorandum prepared by WRA in 2018 providing updated information on the biological conditions on the site.[3] These documents addressed the entire VCC property (Figure 3) including Parcels 2 and 3, but they did not specifically address the memory care and assisted living facilities because these projects were not proposed at the time. In addition to these documents, LSA reviewed a letter report from Jane Valerius Environmental Consulting[4] that provided updated information on the drainage in Parcel 2. LSA also conducted a search of the California Natural Diversity Database

[1] Draft Environmental Impact Report Valley Christian Center Expansion Program. State Clearing House # 2002012070, October 2002.

[2] WRA, Inc. 2015. Biological Resources Assessment, Dublin Valley Christian Center, Dublin, Alameda County, California. WRA Environmental Consultants, 2169-G East Francisco Blvd., San Rafael, CA 94901. June 15, 2015.

[3] WRA, Inc. 2018. Memorandum: Dublin Valley Christian Center Biological Site Conditions Update.

[4] Jane Valerius Environmental Consulting. 2020. 7500 Inspiration Drive, Dublin, CA – Review of Drainage Channel. Jane Valerius Environmental Consulting, 6467 Eagle Ridge Road, Penngrove, CA 94951.

(CNDDB)[5] and the California Native Plant Society (CNPS)[6] for updated information on occurrence records of special-status species within 5 miles of the project site.

LSA Senior Biologist Eric Lichtwardt conducted a field survey of the project site on February 18, 2021. The focus of the field survey was to determine if any changes to on-site environmental conditions, as described in the DEIR, WRA, and Jane Valerius Environmental Consulting documents, had occurred since these documents were prepared. During the field survey, Mr. Lichtwardt walked both parcels with a focus on the areas proposed for development and recorded observations in a field notebook. Binoculars (10 x 40) were used to aid in the identification and observation of wildlife and survey surrounding areas.

AFFECTED ENVIRONMENT

As noted above, the project site is divided into two parcels, Parcel 2 and Parcel 3, located west and east of Inspiration Drive, respectively; Dublin Boulevard flanks the southern boundary of both parcels (Figure 2). Surrounding areas are largely occupied by residential and other development to the west and east, with the Interstate 580 corridor to the south. An undeveloped area of open land is located to the north of Parcel 2 and the proposed assisted living facility footprint on Parcel 3 and extends off the site to the northwest (Figure 3). The VCC campus is located just north of this open undeveloped area.

WRA (2015, 2018) identified the dominant cover type within the two parcels as non-native annual grassland dominated by grasses and forbs such as slender wild oat (*Avena barbata*), Italian rye grass (*Festuca perennis*), hare barley (*Hordeum murinum* ssp. *leporinum*), and longbeak stork's bill (*Erodium botrys*). WRA also noted that the grassland includes dense stands of ruderal herbaceous species, including black mustard (*Brassica nigra*), short-podded mustard (*Hirschfeldia incana*), Italian thistle (*Carduus pycnocephalus*), milk thistle (*Silybum marianum*), and poison hemlock (*Conium maculatum*), all non-native weedy species. There is also a small patch of coyote brush (*Baccharis pilularis*), a native shrub, on Parcel 2. A constructed water detention basin with a standpipe drain is located in the center of Parcel 3, between Inspiration Drive and Dublin Boulevard, and supports similar but sparser non-native annual grassland habitat with patches of bare ground. This detention basin is approximately 0.2 acre (8,655 square feet) in area.[7]

WRA also identified a small area of riparian woodland along a drainage near the northwestern corner of Parcel 2; this woodland was composed of coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), arroyo willow (*Salix lasiolepis*), and red willow (*Salix laevigata*). The woodland understory supports of a mixture and native and weedy non-native herbaceous species; natives include tall flatsedge (*Cyperus eragrostis*) and California bulrush (*Schoenoplectus californicus*), and

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5 California Department of Fish and Wildlife. 2021. California Natural Diversity Database (CNDDB) - Commercial Version, March 2021. California Department of Fish and Wildlife, Biogeographic Data Branch, Sacramento, California.

6 California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.45). Website http://www.rareplants.cnps.org [accessed 18 March 2021].

7 Estimated from Google Earth imagery (03/11/2021).

non-natives include poison hemlock, Pampas grass (*Cortaderia selloana*), Himalayan blackberry (*Rubus armeniacus*), and fiddle dock (*Rumex pulcher*).

WRA identified an ephemeral stream within the drainage that feeds into a culvert near the western edge of Parcel 2; LSA confirmed the presence of the ephemeral stream and noted that little surface water was present during the February 2021 field survey. This drainage appears to be fed by runoff from the adjacent hillslope between Parcel 2 and the VCC campus to the north (Figure 3). This drainage does not have a hydrological connection with Dublin Creek, which drains the hills to the northwest. The Dublin Creek drainage from the Dublin Boulevard/Interstate 580 corridor and the western edge of Parcel 2 to approximately 2,000 feet[8] upstream is occupied by residential development. Dublin Creek drains into a detention basin at the northwestern edge of the residential development and appears to be underground downstream of this basin (Figure 3).

Wildlife observed on the project site during the February 2021 field survey included Say's phoebe (*Sayornis saya*), California scrub-jay (*Aphelocoma californica*), house finch (*Haemorhous mexicanus*), song sparrow (*Melospiza melodia*), and spotted towhee (*Pipilo maculatus*). The diggings of Botta's pocket gopher (*Thomomys bottae*) were also present in some grassy areas.

Soils on the project site are Diablo clay 15-30 percent slopes and a small amount of Diablo clay 30-45 percent slopes; 99 percent are Diablo clay 15-30 percent.[9]

In summary, based on LSA's February 18, 2021 survey, the on-site existing environmental conditions are similar to those described by WRA in 2015 and 2018.

IMPACT ANALYSIS

Special-Status Species

WRA evaluated 77 (42 plants and 35 animals) special-status species for the VCC project (see Appendix B in attached WRA 2015 Biological Site Assessment). Based on LSA's review of the WRA documents, updated searches of the CNDDB and CNPS, and the February 18, 2021 field survey, LSA concurs with the conclusions of the WRA report and follow-up memorandum in regard to the potential occurrence of special-status species in Parcels 2 and 3.

Congdon's Tarplant

As noted in WRA's 2018 memorandum, Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), a CNPS Rank 1B.1 species (i.e., rare, threatened, or endangered in California and elsewhere), is present within a small water detention basin in Parcel 3; this basin would be impacted by the proposed assisted living facility (Figure 5). Congdon's tarplant is also considered a focal species under the East Alameda County Conservation Strategy. This plant is an annual forb that blooms from

8 Estimated from Google Earth imagery (03/11/2021).

9 Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx) (accessed March 8, 2021).

June to November and occurs in grasslands and disturbed sites, generally on alkaline soils, at elevations ranging from sea level to about 990 feet (Baldwin et al. 2012[10], CNPS 2021[11]).

During the WRA 2018 survey, approximately five individuals of Congdon's tarplant were observed in the constructed stormwater detention basin in Parcel 3. A positive identification of this species was made by collecting a portion of one of the senesced annual plants for examination under laboratory conditions. Impacts to Congdon's tarplant would be considered a significant impact unless mitigated.

Mitigation Measure BIO-1: Congdon's Tarplant

a. Because the status of Congdon's tarplant on the project site has not been investigated since 2018, the site should be resurveyed for this plant before the start of work on the project. The survey should be conducted during the blooming period of Condon's tarplant (June to November) to determine the presence/absence of this species within the site. The field survey should follow standard protocols for rare plant surveys,[12] which may require multiple site visits and checking a reference site(s) where the species is known to occur. The survey should include Parcels 2 and 3 as well as the entire conservation easement portion of Parcel 3.

b. If blooming Congdon's tarplants are found within the project site during the protocol rare plant survey, mature seeds should be collected from all the plants that are present and planted in a suitable mitigation area within the Parcel 3 conservation easement. The mitigation area for replanting should be identified by a qualified botanist before the start of work on the project. The conservation easement portion of Parcel 3 supports the same soil type (Diablo clay 15-30 percent) as the detention basin within the proposed assisted living facility area, so mitigation for Condon's tarplant should be feasible within the easement.

c. If Condon's tarplants are not found within the project site during the rare plant survey, this may not indicate absence. If adverse environmental conditions for germination occur during the year the survey is conducted, Condon's tarplant may not have geminated; however, a persistent long-term seed bank could still be present. If flowering plants are not found on the project site during the initial rare plant survey, the project site should be resurveyed during the next Condon's tarplant blooming season and, if plants are present, mature seeds for

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10 Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press, Berkeley.

11 California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.45). Website http://www.rareplants.cnps.org [accessed 18 March 2021].

12 California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special-status Native Plant Population and Sensitive Natural Communities. California Department of Fish and Wildlife. March 20, 2018.

replanting should be collected. If a second season plant survey is not feasible, viable seeds from another source should be collected or purchased from a reliable native plant nursery for replanting.

d. Before the start of work, a qualified botanist should prepare a mitigation and monitoring plan for the Condon's tarplant mitigation area. The plan should include, at a minimum, a discussion of the methods of seed collection and sources of seeds, the location and size of the mitigation area within the conservation easement, and mitigation site preparation, monitoring, and criteria for determining a successful mitigation effort. Mitigation sites are typically monitored for 5 years; however, provisions for maintaining a viable population of Condon's tarplant in the conservation easement after the 5-year monitoring period should be included in the plan.

With the above mitigation measures, the proposed project would not result in significant impacts to Condon's tarplant.

California Red-Legged Frog

As noted by WRA (2015), the California red-legged frog (*Rana draytonii*), a federally listed threatened species, is known to occur in the hills west of the project site. Critical habitat has been designated for this species, and critical habitat unit ALA-1B is located in the hills west of the project site; however, the project site is not within designated critical habitat for California red-legged frog.[13]

A pond where California red-legged frogs are known to breed is located approximately 4,600 feet (0.87 mile) to the northwest of Parcel 2 (in the upper reaches of the Dublin Creek watershed); this is within the range of documented overland dispersal of this frog.[14] However, approximately 2,000 feet (0.37 mile) of the intervening area within the Dublin Creek drainage between the pond and Parcel 2 is occupied by residential development and the creek appears to terminate in a detention basin at the western edge of this development. This developed area would likely be a considerable barrier to frogs originating from this pond and potentially moving down the Dublin Creek drainage toward the project site. In addition, there are no pools or suitable breeding habitat for California red-legged frogs in the drainage adjacent to Parcel 2 and therefore this amphibian would not be expected to be present in this drainage. Most of Parcel 2, outside the drainage, has been previously graded and is flat with only sparse ruderal vegetation and a few coyote brush; this flat area does not provide suitable upland shelter habitat for California red-legged frogs.

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13 U.S. Fish and Wildlife Service. 2021. California Red-Legged Frog Critical Habitat. 2010 Revised Final Designation. Website: https://www.fws.gov/sacramento/es/Critical-Habitat/CA-Red-Legged-Frog/Current/ (accessed March 4, 2021).

14 Thomson, R.C., A.N. Wright, and H.B. Shaffer. 2016. *California Amphibian and Reptile Species of Special Concern*. California Department of Fish and Wildlife, Sacramento and University of California Press, Berkeley and Los Angeles, California.

WRA (2015) noted that there was no breeding habitat in the drainage containing the ephemeral stream adjacent to Parcel 2 but stated that the riparian area adjacent to the parcel connects to the breeding pond in the upper reach of the Dublin Creek drainage. However, as noted above, the drainage adjacent to Parcel 2 does not currently have a hydraulic/riparian connection with the Dublin Creek drainage, due to the intervening residential development. Nonetheless, a corridor of undeveloped upland habitat, approximately 2,300 feet wide, is located between the detention basin at the western end of the residential area and the drainage on Parcel 2; therefore, the presence of a dispersing frog in the drainage, though unlikely, cannot be completely ruled out. To reduce potential impacts to California red-legged frogs to less than significant, the following mitigation measures are proposed.

Mitigation Measure BIO-2: California Red-Legged Frog

a. A qualified biologist will conduct preconstruction surveys for California red-legged frogs prior to activities within 24 hours of initial ground disturbance. If individuals are found, work will not begin until they are moved out of the construction zone to a U.S. Fish and Wildlife Service/California Department of Fish and Wildlife approved relocation site.

b. Because the site is within the potential dispersal distance of breeding habitat, a wildlife exclusion fence will be constructed around the worksite to prevent amphibians or other small wildlife from entering the work area. The fence will be at least 3 feet high, buried 6 inches underground, and have one-way exit funnels. The exclusion fence will be made of an opaque material that California red-legged frogs cannot see through, to prevent frogs from trying to push through the fencing. Wooden cover board will be placed every 50 feet along the outside edge of the fence to give California red-legged frogs a place to shelter until they can find their way around the work area without desiccating or being preyed upon. The integrity of the exclusion fencing will be inspected daily, and any needed repairs will be made immediately.

c. A qualified biological monitor will be on the site during any activities that could result in the take of a California red-legged frog.

d. No work will occur at night.

e. For on-site storage of pipes, conduits, and other materials that could provide shelter for California red-legged frogs, an open-top trailer will be used to elevate the materials above ground (unless the materials are inside the wildlife exclusion fencing). This is intended to reduce the potential for animals to climb into the conduits and other materials.

f. The wildlife exclusion fencing will be removed within 72 hours of completion of work.

g. A qualified biologist should be present during initial ground-disturbing activities.

h. No monofilament plastic will be used for erosion control.

i. Any open trenches will be provided with an escape ramp(s), such as a board that allows trapped frogs or other small animals to exit the trenches. Construction personnel will inspect any open trenches in the morning before work begins for trapped amphibians.

j. A qualified biologist possessing a valid federal Endangered Species Act Section 10(a)(1)(A) permit or approved by the U.S. Fish and Wildlife Service under an active biological opinion will be contracted to relocate amphibians to nearby suitable habitat if amphibians are found inside fenced areas.

k. Work will stop at least an hour prior to a predicted rain event of 0.1 inch or greater and then will not begin until at least 24 hours after the rain event. Work could continue within the wildlife exclusion fencing within 24 hours of the rain event if a qualified biologist has performed a clearance survey. However, no work or mobilization of vehicles or equipment outside of the wildlife exclusion fencing will occur within 24 hours of the rain event.

With the above mitigation measures, the proposed project would not result in significant impacts to California red-legged frogs.

Sensitive Natural Communities

The riparian woodland in Parcel 2, described above in the Affected Environment section, is considered a sensitive natural community; however, the proposed development within Parcel 2 will completely avoid impacts to the community. There will be no impacts to sensitive natural communities.

Wetlands

The drainage in Parcel 2 is a potential wetland under the jurisdiction of the Clean Water Act; however, this wetland will be completely avoided by the proposed development. There will be no impacts to federally protected wetlands.

Wildlife Movement/Wildlife Nursery Sites

During the field survey, no nursery sites such as heron rookeries or raptor nests were observed in any of the large trees that are on or near the project site. No structures or large hollow trees are present on the project parcels that could support bat maternity roosts. The short drainage on Parcel 2 does not form a connection with any areas of natural habitat because it runs into a culvert, and Dublin Drive and Interstate 580 form a major barrier to wildlife movement to the south.

Vegetation on or adjacent to the parcels could provide nesting habitat for some species of native birds (e.g., northern mockingbird and house finch) protected under the federal Migratory Bird Treaty Act and the California Fish and Game Code. If the project requires removal and/or trimming of trees and/or shrubs during the nesting bird season (February 15 to August 31), impacts to the

active nests of protected bird species could occur. The following mitigation measure would reduce the potential project impacts to protected nesting birds to a less-than-significant level.

Mitigation Measure BIO-3: Nesting Birds

If project activities occur during the nesting season (February 15 to August 31), a qualified biologist shall conduct a preconstruction nesting bird survey prior to vegetation removal and/or vegetation trimming. The survey area shall include all suitable nesting habitats within the work area. Due to the urban settings and/or general ongoing human activity of the project site, any nesting raptors or other native birds in the area would likely be habituated to human activity such as pedestrian, vehicle, and train traffic. If an active raptor nest is discovered during the preconstruction survey, the qualified biologist will determine a suitable exclusion buffer based on the nesting species and context of the nest location.

The preconstruction survey shall be conducted no more than 14 days prior to the start of work. If the survey determines the presence of nesting birds, the qualified biologist will determine an appropriately sized exclusion zone around the nest in which no work would be allowed until the young have successfully fledged (or the nest has been abandoned). Exclusion buffers shall be clearly delineated (i.e., orange construction fencing) around each active nest site. Active nest sites of protected bird species will be monitored periodically to determine the time of fledging. The qualified biologist will determine when construction activities may commence within the buffer.

Local Policies Protecting Biological Resources

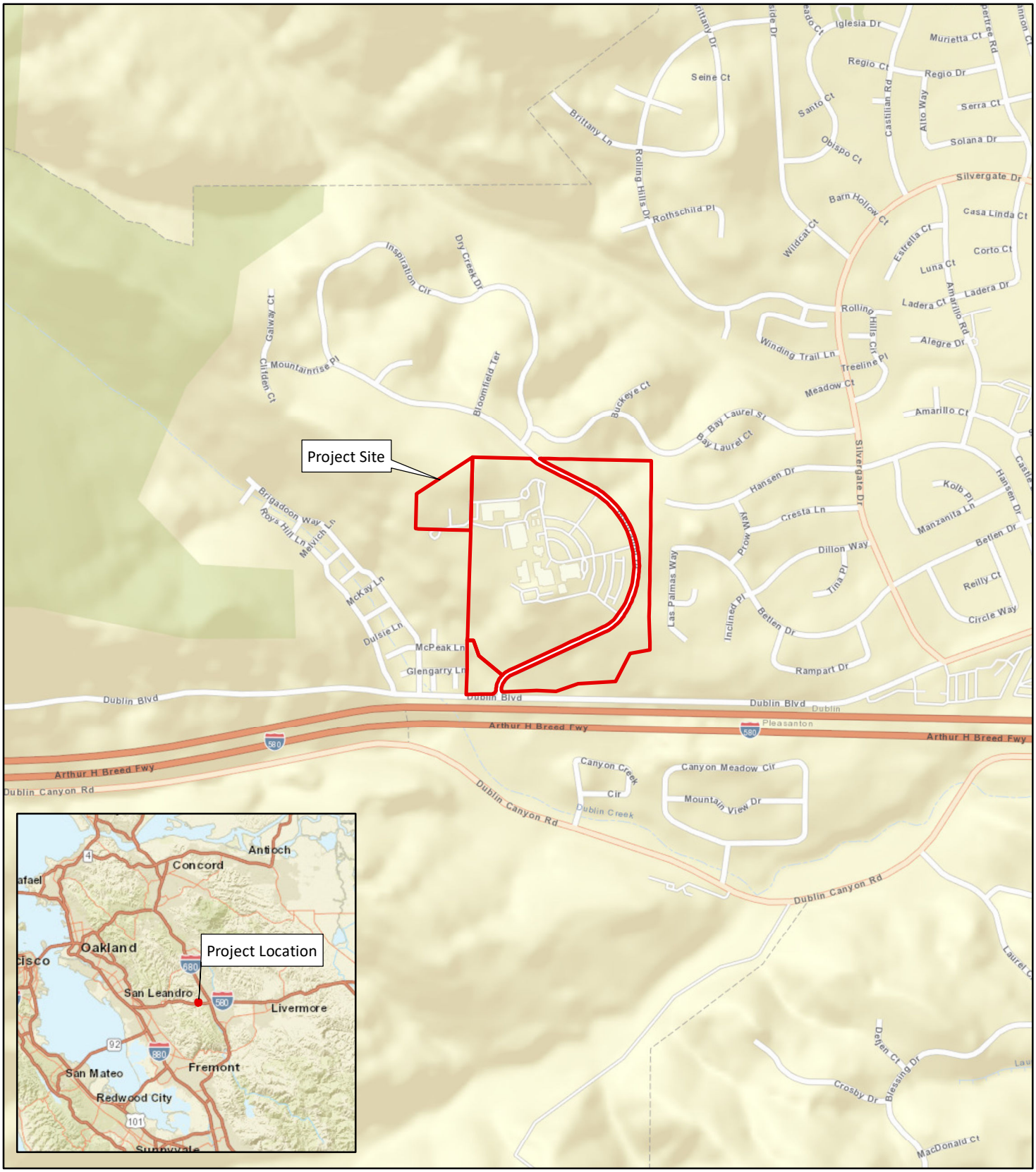
The project would not conflict with any local polices or ordinances protecting biological resources. There are no trees within or adjacent to the project area, and therefore the project would not conflict with the City's Tree Preservation Ordinance.

Habitat Conservation Plan

The project site is located in Conservation Zone 1 of the East Alameda County Conservation Strategy (EACCS).[15] If the above proposed mitigation measures are followed, the project will not conflict with the EACCS.

Attachments: Figure 1: Project Location and Regional Vicinity
Figure 2: Aerial Photograph of Project Site and Surrounding Land Uses
Figure 3: Parcel Layout
Figure 4: Memory Care Facility – Proposed Site Plan
Figure 5: Assisted Living Facility – Proposed Site Plan

[15] ICF International. 2010. East Alameda County Conservation Strategy. Final Draft. October. (ICF 00906.08.) San Jose, CA. Prepared for: East Alameda County Conservation Strategy Steering Committee, Livermore, CA.



LSA

FIGURE 1

N

0 500 1000

FEET

SOURCE: ESRI World Street Map (03/20).

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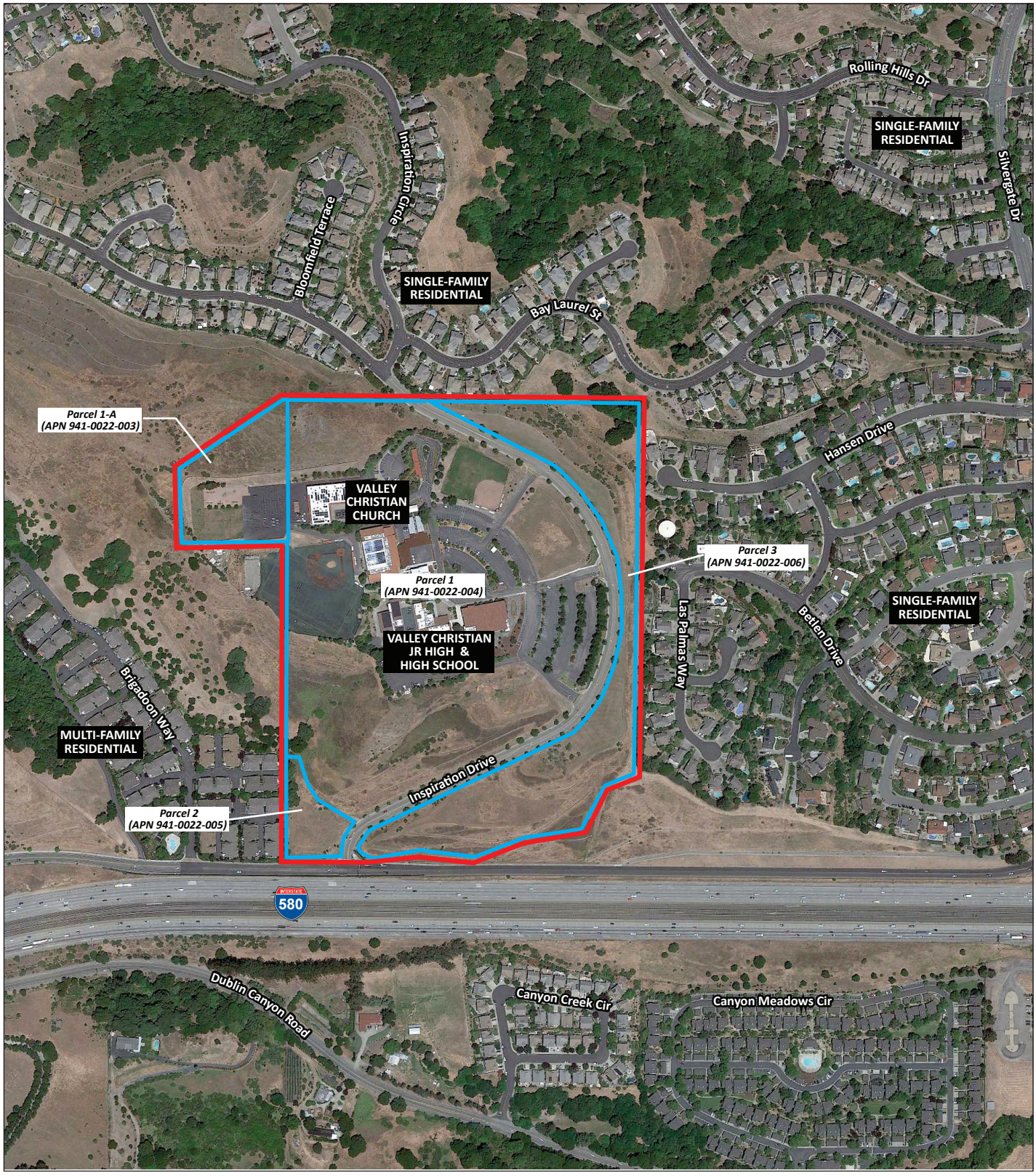
Inspiration Drive Memory Care and Assisted Living Facility Project

Regional Location



LSA

FIGURE 2

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Project Site Boundary

Parcel Boundaries

Inspiration Drive Memory Care and Assisted Living Facility Project

Aerial Photograph of Project Site and Surrounding Land Uses

SOURCES: Google Earth, 6/20/2019; LSA, 2021

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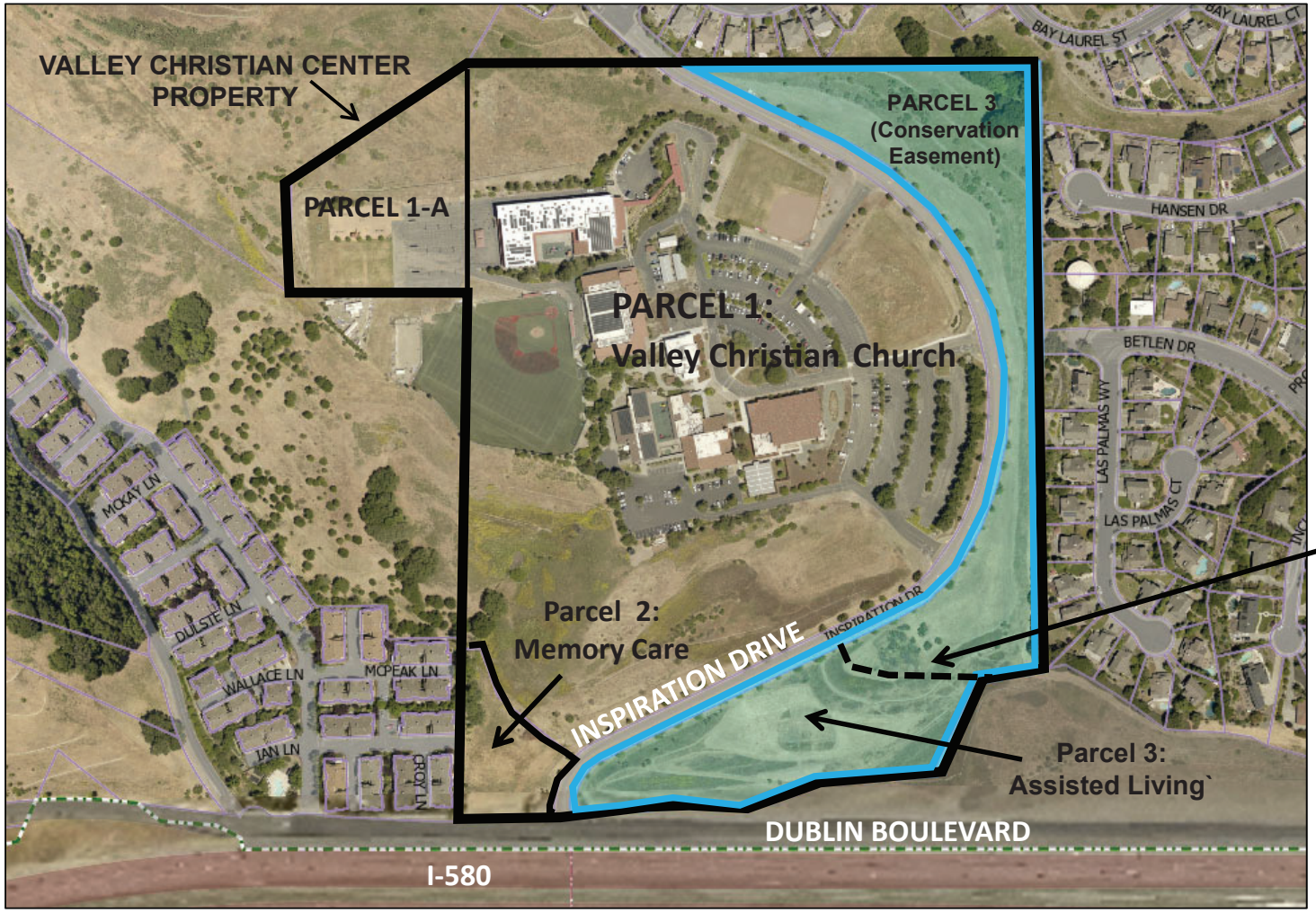

7500 Inspiration Drive

LSA

FIGURE 3

NOT TO SCALE

N

Inspiration Drive Memory Care and Assisted Living Facility Project
Proposed Parcel Layout

SOURCE: xxx

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 3.ai (1/8/2021)

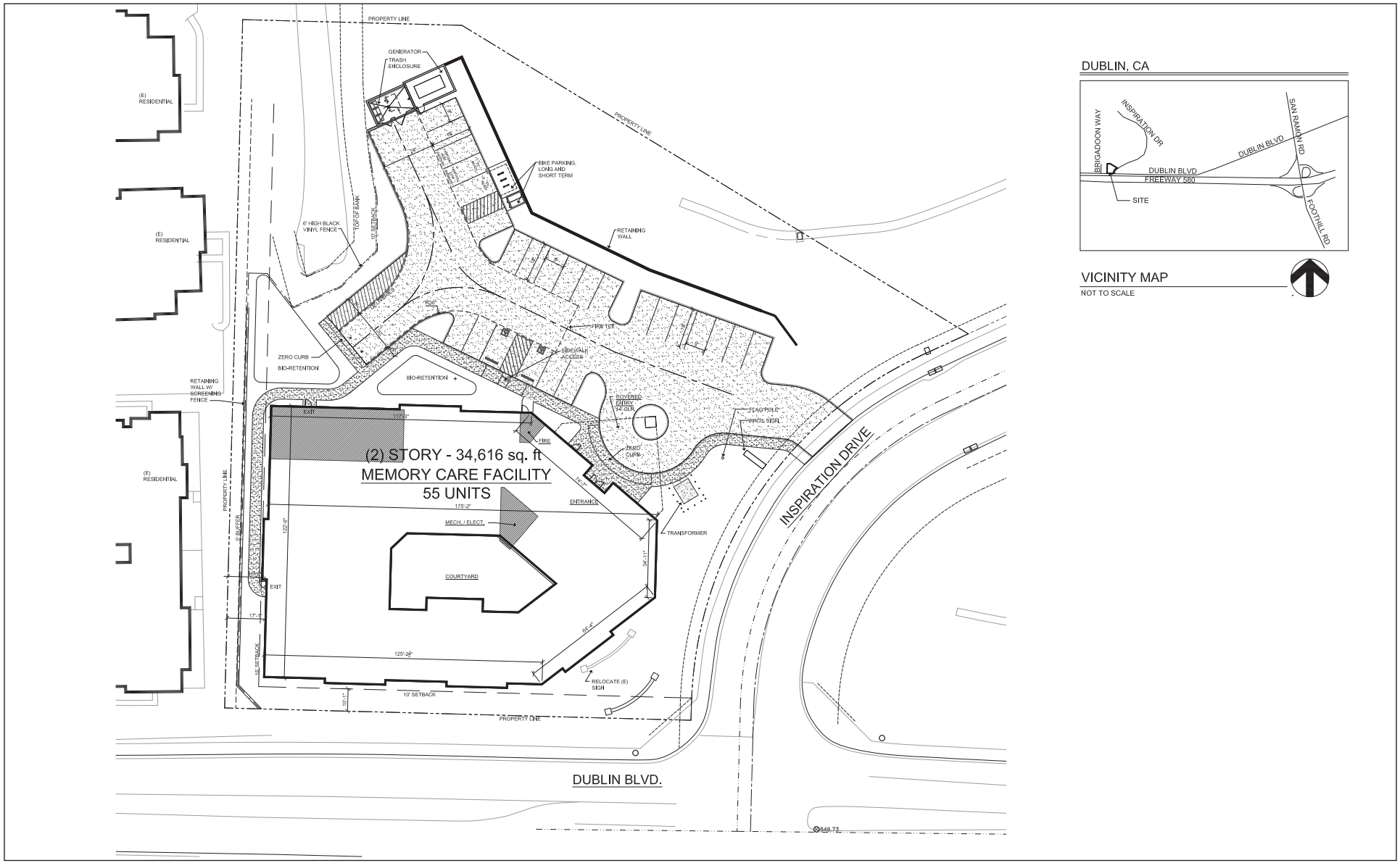

FIGURE 4

Inspiration Drive Memory Care and Assisted Living Facility Project

Memory Care Facility - Proposed Site Plan

SOURCES: Lenity Architecture, Inc.; FULCRM, 2021

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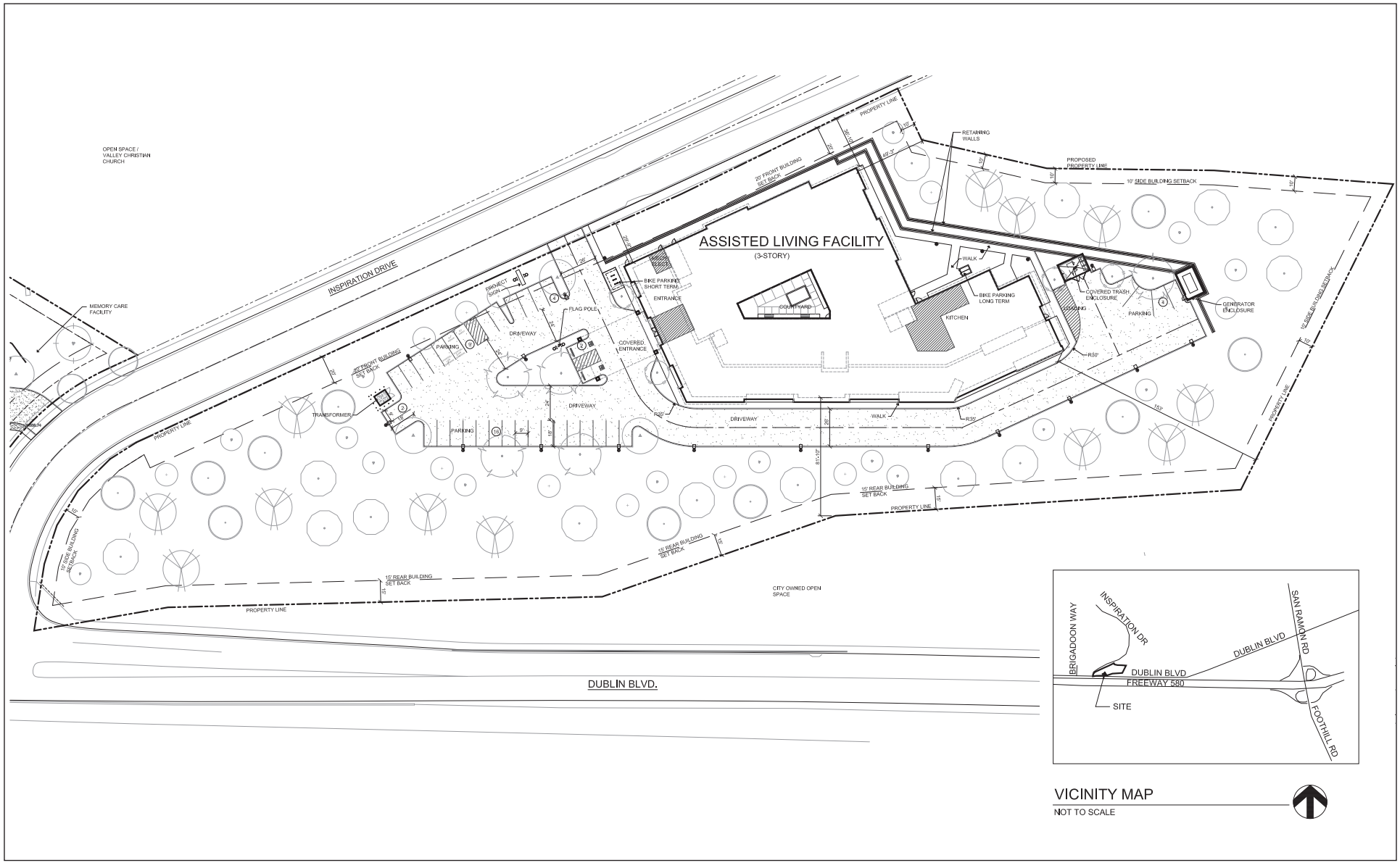


LSA

0 45 90
FEET

N

FIGURE 5

Inspiration Drive Memory Care and Assisted Living Facility Project

Assisted Living Facility - Proposed Site Plan

SOURCES: Lenity Architecture, Inc.; FULCRUM, 2021

P:\DUB1601.02 Inspiration Drive\PRODUCTS\Graphics\Figure 8.ai (7/27/2021)

Appendix E

Noise Measurement Data

Noise Measurement Survey – 24 HR

Project Number: DUB1601.02
Project Name: Inspiration Drive

Test Personnel: Jordan Roberts
Equipment: Larson Davis Spark 706RC

Site Number: LT-1 Date: 2/25/2021

Time: From 3:00 PM To 3:00 PM

Site Location: In bush at setback of adjacent residential building. Southwest corner of the project site. Approximately 25 feet from the outer edge of the outside lane of Dublin Boulevard, 70 feet from 18-foot masonry sound wall, 120 feet from center of westbound I-580 lanes.

Primary Noise Sources: Traffic on I-580 and Dublin Boulevard.

Location Photo:

Noise Measurement Survey – 24 HR

Project Number: DUB1601.02
Project Name: Inspiration Drive

Test Personnel: Jordan Roberts
Equipment: Larson Davis Spark 706RC

Site Number: LT-2 Date: 2/25/2021

Time: From 4:00 PM To 4:00 PM

Site Location: In bush on top of hill overlooking roadways, east of Inspiration Drive. Approximately 130 feet from the outer edge of the outside lane of Dublin Boulevard, 170 feet from 16-foot masonry sound wall, 230 feet from center of westbound I-580 lanes.

Primary Noise Sources: Traffic on I-580 and Dublin Boulevard.

Location Photo:

Appendix F

Traffic Analysis

LSA

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: April 30, 2021

TO: Pratyush Bhatia, City of Dublin

FROM: Arthur Black, LSA

SUBJECT: Inspiration Drive Memory Care and Assisted Living Facility Traffic Analysis

LSA is pleased to present this traffic analysis for the proposed Inspiration Drive Memory Care and Assisted Living Facility Project (project) at 7500 Inspiration Drive in Dublin, California. The purpose of this traffic memorandum is to identify and disclose any potential circulation effects to local intersections and access associated with the development of the proposed project.

Project Description

The project site is comprised of two vacant parcels which are part of the larger Valley Christian Center (VCC) site. The VCC site is bounded by single-family residential uses and open space to the west, single-family residential uses and the existing VCC complex to the north, Interstate 580 (I-580) to the south, and single-family residential uses to the east. The proposed project would construct two buildings, a 55-dwelling unit memory care facility (to be located at the northwest corner of Inspiration Drive/Dublin Boulevard, south of the VCC) and an 84-bed assisted living facility (to be located at the northeast corner of Inspiration Drive/Dublin Boulevard, east of the VCC). Both driveways are accessed via Inspiration Drive. Figure 1 (all figures are provided in Attachment A) shows the location of the proposed project and the study area intersections. Figure 2 illustrates the site plan.

Analysis Methodology

This traffic memorandum is prepared based on guidance provided by City of Dublin (City) staff and consistent with previous traffic analyses prepared for the City.

Study Area

Based on discussions with City staff, the project study area includes the following three intersections.

Intersections

1. Inspiration Drive/Dublin Boulevard
2. Inspiration Drive/Memory Care Driveway
3. Inspiration Drive/Assisted Living Driveway

Existing Traffic Volume Adjustments

Peak-hour turn movement volumes at the intersection of Inspiration Drive/Dublin Boulevard were collected by an independent data collection company on Tuesday, February 2, 2021.

Due to the global pandemic, COVID-19, traffic conditions are potentially atypical and reflect a reduced traffic volume. For example, the VCC does not offer traditional full day instruction. As such, adjustments to the existing traffic volumes were made to represent Existing (2021) no-pandemic conditions. LSA compared the inbound traffic volume collected in the a.m. peak hour and outbound traffic volume in the early afternoon (at the end of the school day) to the anticipated trip generation of the VCC operating at full capacity. Based on this comparison, additional traffic volume data (corresponding to 65 percent of a 1,300-student facility) were added to the existing traffic volume data. It should be noted that private school trips were distributed as 15 percent coming from and leaving towards the west and 85 percent coming from and leaving to the east, similar to observed traffic distribution. Figure 3 illustrates both sets of traffic volumes.

Intersection Level of Service Methodology

The *Highway Capacity Manual* 6th Edition (HCM) (Transportation Research Board 2017) methodology and Synchro (Version 10.1) software were used to determine level of service (LOS) at the signalized study area intersections. The HCM signalized intersection methodology presents LOS in terms of delay (in seconds per vehicle). This resulting delay is expressed in terms of LOS.

The relationship between LOS and delay (in seconds) for signalized intersections is as follows:

Level of Service	Signalized Intersection Delay (seconds)	Unsignalized Intersection Delay (seconds)
A	≤10.0	≤10.0
B	>10.0 and ≤20.0	>10.0 and ≤15.0
C	>20.0 and ≤35.0	>15.0 and ≤25.0
D	>35.0 and ≤55.0	>25.0 and ≤35.0
E	>55.0 and ≤80.0	>35.0 and ≤50.0
F	>80.0	>50.0

Source: *Highway Capacity Manual* (Transportation Research Board 2017).

Significance Criteria

The City of Dublin utilizes guidelines established by the Alameda County Transportation Commission (CTC), the County's Congestion Management Program, and the Metropolitan Transportation System (MTS) roadway segments (e.g. I-580, Interstate 680 [I-680], and State Route 84 [SR 84]) considers LOS D as the upper limit of satisfactory operations (intersections with a delay of 55.0 seconds or fewer). According to the City's improvement thresholds, a project will need to implement improvements when one of the following occurs to an intersection:

1. The addition of project traffic results in a service drop from LOS D or better to LOS E or F. Under this condition, the project is responsible for improvements necessary to restore the intersection to LOS D or better.

2. An intersection is operating at LOS E or F under the no-project scenario and the proposed project adds more than six seconds of average vehicle delay. Under this condition, the project is responsible for improvements necessary to restore the intersection to pre-project conditions or better.

3. An intersection operating at LOS F under the no-project scenario and the proposed project causes the overall volume-to-capacity (V/C) ratio to increase 0.03 or more seconds or the critical movement V/C ratio to increase 0.05 or more.

4. A queuing impact would occur if:

    a. Trip generated by the project causes the 95th percentile queue in a turn pocket to extend beyond the turn pocket by more than 25 feet (ft) (i.e., one vehicle) into adjacent traffic lanes or,

    b. If the 95th percentile queue already exceeds that turn pocket length under no project conditions, the project traffic lengthens the queue by more than 25 ft.

5. If the operations of an unsignalized intersection operate at unsatisfactory LOS with the addition of proposed project traffic, and if the installation of a traffic signal based on the *California Manual on Uniform Traffic Control Devices* (CAMUTCD) Peak Hour Signal Warrant (Warrant 3) is warranted.

Existing Conditions

Existing Circulation System

Key roadways in the vicinity of the proposed project are as follows:

- **Inspiration Drive:** According to the City of Dublin General Plan Circulation and Scenic Highways Element, Inspiration Drive is classified as a Local Residential roadway. Inspiration Drive is a two-lane divided, north-south roadway that provides access to the proposed assisted living center and memory care facility. The posted speed limit within the vicinity of the project site is 25 miles per hour (mph). Sidewalks are provided on the western side of the roadway. On-street bicycle lanes are not provided on either side of the street. On-street parking is prohibited.

- **Dublin Boulevard:** According to the City of Dublin General Plan Circulation and Scenic Highways Element, Dublin Boulevard is classified as an Arterial roadway. In the vicinity of the project, Dublin Boulevard is a two-lane divided, east-west roadway that provides regional access within the City. The posted speed limit is 40 mph. Sidewalks are provided on the northern side of the roadway. On-street bicycle lanes are not provided on either side of the street. On-street parking is prohibited.

As previously discussed, peak-hour traffic volume data were collected on Tuesday, February 2, 2021, and adjusted to approximate non-pandemic conditions. Traffic volume data are provided in Attachment B.

Existing Intersection Level of Service

Table A summarizes the results of the Existing a.m. and p.m. peak-hour LOS analysis for the study area intersections. All HCM analysis worksheets are provided in Attachment C. Table A indicates that all study area intersections operate at acceptable LOS (LOS D or better) in the a.m. and p.m. peak hours.

Table A: Existing Intersection Level of Service Summary

Study Area No.	Intersection	AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Inspiration Drive/Dublin Boulevard	13.3	B	12.7	B
2	Inspiration Drive/Memory Care Driveway	Future Driveway			
3	Inspiration Drive/Assisted Living Driveway	Future Driveway			

LOS = level of service
sec = seconds

Estimated Non-pandemic Existing Intersection Level of Service

Table B summarizes the results of the Existing and Existing (non-pandemic) a.m. and p.m. peak-hour LOS analysis for the study area intersections. Table B indicates that all study area intersections operate at acceptable LOS (LOS D or better) in the a.m. and p.m. peak hours.

Table B: Estimated Non-Pandemic Existing Intersection Level of Service Summary

Study Area No.	Intersection	AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Inspiration Drive/Dublin Boulevard	45.3	D	12.5	B
2	Inspiration Drive/Memory Care Driveway	Future Driveway			
3	Inspiration Drive/Assisted Living Driveway	Future Driveway			

LOS = level of service
sec = seconds

Project Impacts

Trip Generation

The daily and peak-hour trips for the proposed project were generated using trip rates contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (2017). The project trip generation is presented in Table C. As Table C indicates, the proposed 55-dwelling unit memory care building would generate 111 trips per day, including 4 trips (2 inbound and 2 outbound) in the a.m. peak hour and 10 (6 inbound and 4 outbound) trips in the p.m. peak hour. Additionally, the proposed 84-bed assisted living facility would generate 218 trips per day, including 16 trips (10 inbound and 6 outbound) in the a.m. peak hour and 22 (8 inbound and 13 outbound) trips in the p.m. peak hour. As such, the proposed project is anticipated to generate a total of 329 trips per day, including 20 trips (12 inbound and 8 outbound) in the a.m. peak hour and 32 trips (14 inbound and 17 outbound) in the p.m. peak hour.

Table C: Project Trip Generation Summary

Land Use (Land Use Code)	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates[1]									
Congregate Care Facility (253)		DU	2.02	0.04	0.03	0.07	0.10	0.08	0.18
Assisted Living (254)		Bed	2.60	0.12	0.07	0.19	0.10	0.16	0.26
Trip Generation									
Memory Care (Parcel 2)	55	DU	111	2	2	4	6	4	10
Assisted Living (Parcel 3)	84	Bed	218	10	6	16	8	13	22
Total			329	12	8	20	14	17	32

[1] Trip rates referenced from the ITE *Trip Generation Manual*, 10th Edition, and supplement
ADT = average daily trips
DU = dwelling unit
ITE = Institute of Transportation Engineers

Trip Distribution and Assignment

To determine trip distribution for the proposed project, LSA considered likely traffic patterns to and from local and regional destinations and transportation facilities. Based on the current observed travel patterns, traffic to and from the project site was distributed south towards the Inspiration Drive/Dublin Boulevard intersection. At the intersection with Dublin Boulevard, 15 percent of trips were distributed to and from the west along Dublin Boulevard, and 85 percent of trips were distributed to and from the east along Dublin Boulevard towards the I-580 freeway access. Figure 3 illustrates the project trip assignment.

Estimated Non-Pandemic Existing Plus Project Condition

To demonstrate the effect that the project would have on the study area intersections in the Existing condition, an Existing Plus Project LOS analysis was prepared. Figure 3 illustrates the resulting traffic volume. This analysis assumes the operation of the 55-dwelling unit memory care building and 84-bed assisted living building during Non-Pandemic (Modified Existing) conditions.

Table D summarizes the results of the estimated Non-Pandemic Existing Plus Project peak-hour LOS analysis for the three study area intersections. Table D indicates that all study area intersections operate at acceptable LOS (LOS D or better) in the a.m. and p.m. peak hours. Therefore, the project can be implemented in an existing setting with no peak hour LOS impacts to the surrounding intersections.

Table D: Estimated Non-Pandemic Existing Plus Project Level of Service Summary

Study Area No.	Intersections	Baseline				Plus Project			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1	Inspiration Drive/Dublin Boulevard	45.3	D	12.5	B	49.1	D	12.5	B
2	Inspiration Drive/Memory Care Driveway	Future Driveway				11.1	B	9.4	A
3	Inspiration Drive/Assisted Living Driveway	Future Driveway				21.9	C	10.5	B

LOS = level of service
sec = seconds

Access Analysis and Sight Distance

Access Analysis

LSA determined the projected peak hour LOS at the proposed Memory Care and Assisted Living Driveways using HCM methodologies under estimated Non-Pandemic Existing Plus Project conditions. As previously illustrated, the Memory Care Driveway would operate at satisfactory LOS with the Modified Existing Plus Project condition during both peak hours (LOS B during the a.m. peak hour and LOS A during the p.m. peak hour). Additionally, the Assisted Living Driveway would operate at satisfactory LOS during both peak hours (LOS C during the a.m. peak hour and LOS B during the p.m. peak hour).

LSA analyzed the proposed Memory Care Driveway intersections' 95th percentile queuing and storage length to determine if queues would interfere with the Inspiration Drive/Dublin Boulevard intersection. The Memory Care Driveway is located 125 ft north of the Inspiration Drive/Dublin Boulevard intersection. As illustrated in the HCM worksheets, the anticipated northbound left-turn queue into the Memory Care Driveway is less than one vehicle length during both peak hours. Similarly, the anticipated northbound right-turn queue into the Assisted Living Driveway is less than one vehicle length during both peak hours. As such, vehicles would not be anticipated to interrupt traffic flow along Inspiration Drive.

Sight Distance

A sight distance analysis was conducted along Inspiration Drive at the proposed Memory Care and Assisted Living Driveways. In the project vicinity, the Inspiration Drive speed limit is 25 mph. According to Table 6C-2 of the *California Manual on Uniform Traffic Control Devices* (CAMUTCD), the stopping sight distance for a roadway with the speed limit of 25 mph is 155 ft. However, Inspiration Drive presents an uphill grade in the northbound direction. Stopping sight distance is shorter for vehicles traveling uphill and longer for vehicles traveling downhill. The American Association of State Highway and Transportation Officials (AASHTO) publication *A Policy on Geometric Design of Highways and Streets* (i.e., the Green Book) presents calculations for stopping sight distance on grades. According to Table 3-2 of the Green Book, for a speed of 25 mph and a grade of up to 6 percent, stopping sight distance increases to 165 feet for vehicles traveling downhill and decreases to 143 feet for vehicles traveling uphill.

The Green Book also presents design intersection sight distance for right-turns and left-turns from stops. As requested by the City, LSA considered whether a distance of 240 feet is available for right-turns and 280 feet is available for left-turns. LSA also considered whether 205 feet northbound is provided for vehicles deciding when to make their northbound left-turn into the memory care facility.

Figure 4 illustrates the sight distance along Inspiration Drive. As shown in this figure, both driveways would provide 280 feet of sight distance for left-turning vehicles. At the assisted living driveway, the prescribed 240 feet of sight distance is provided for right-turning vehicles. At the memory care driveway, northbound left-turning vehicles would have 205 feet of visibility for oncoming traffic. While the memory care driveway is located less than 240 feet from the intersection with Dublin

Boulevard, the minimum stopping sight distance is provided. It should also be noted that vehicles approaching from Dublin Boulevard would be traveling slower having completed a turning movement. Therefore, it is anticipated that adequate sight distance is available at the proposed driveways.

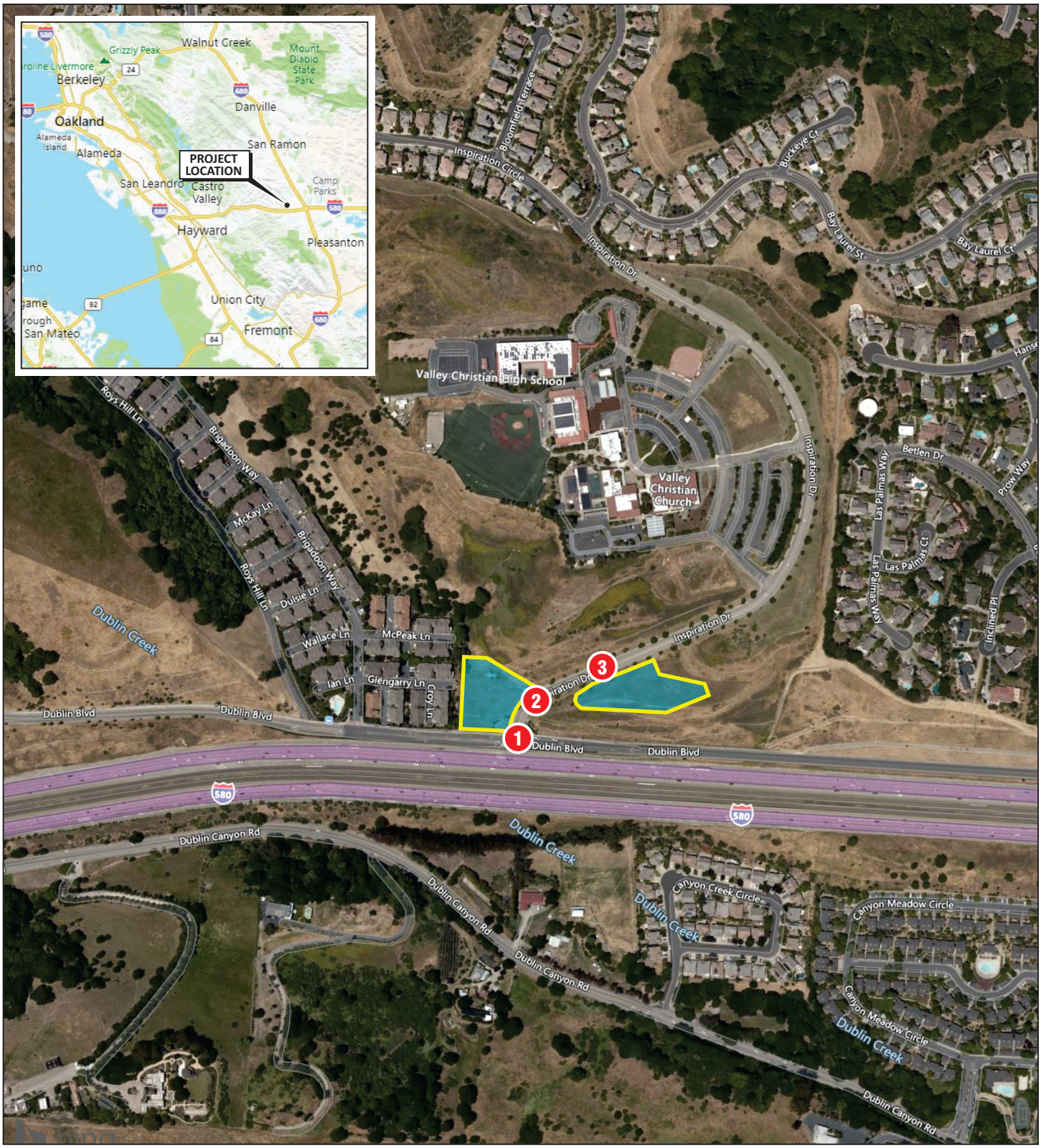
Conclusions

Based on the results of this analysis, the proposed memory care and assisted living facilities can be implemented without impacting the LOS of the surrounding circulation system. The evaluation of the study area intersection LOS with the inclusion of trips generated by the project shows that the project would not create any adverse LOS impacts according to the City's performance criteria.

Attachments: A: Figures
B: Traffic Volume Data
C: Level of Service Worksheets

ATTACHMENT A

FIGURES



LSA

LEGEND

Project Site

Study Area Intersection

0 250 500

FEET

SOURCE: Bing Maps

FIGURE 1

Inspiration Drive Assisted Living

Project Location and Study Area Intersections

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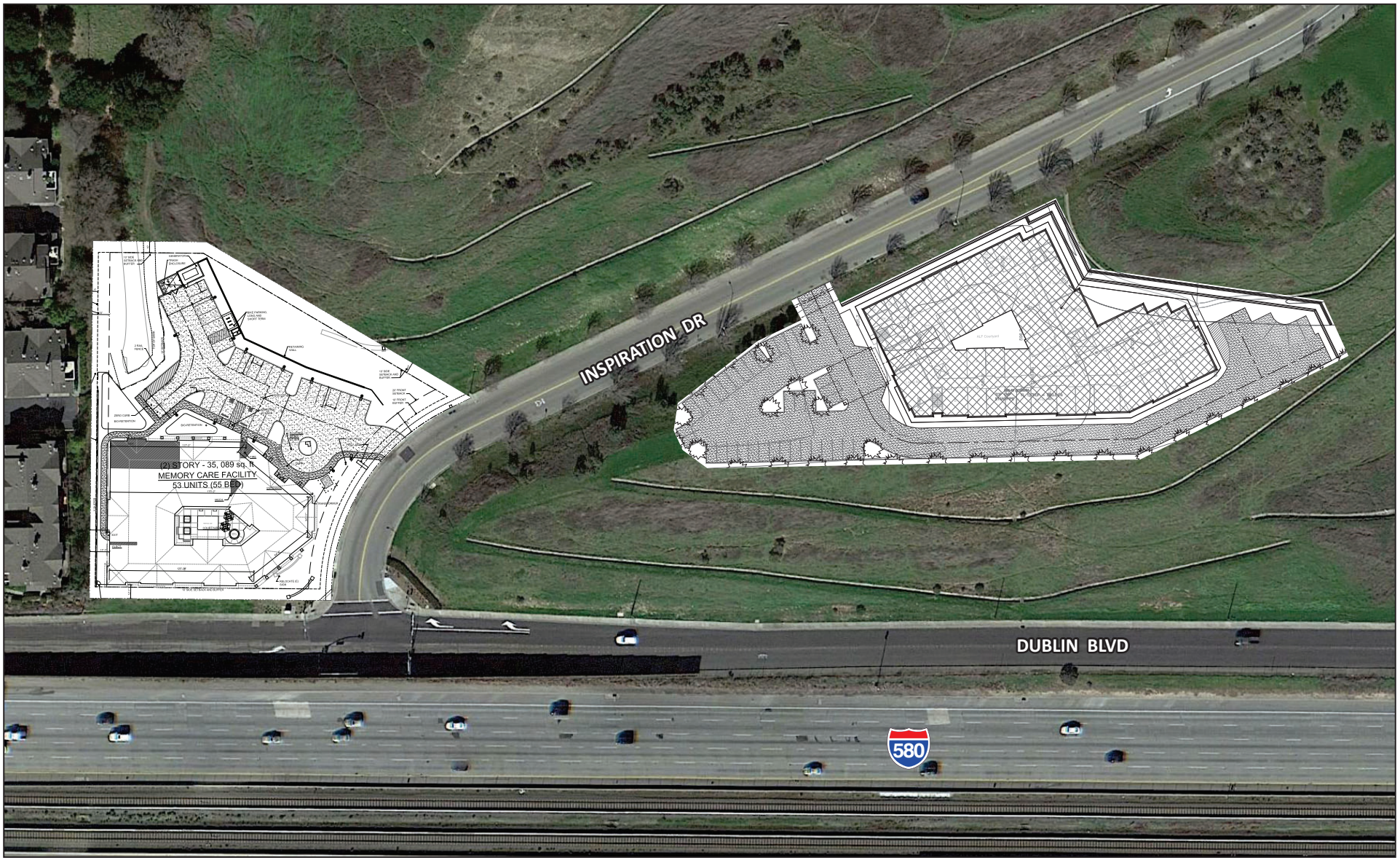

LSA

FIGURE 2

N

0 60 120

FEET

SOURCE: Google Earth, Lenity Architecture, Inc.

Inspiration Drive Assisted Living

Site Plan

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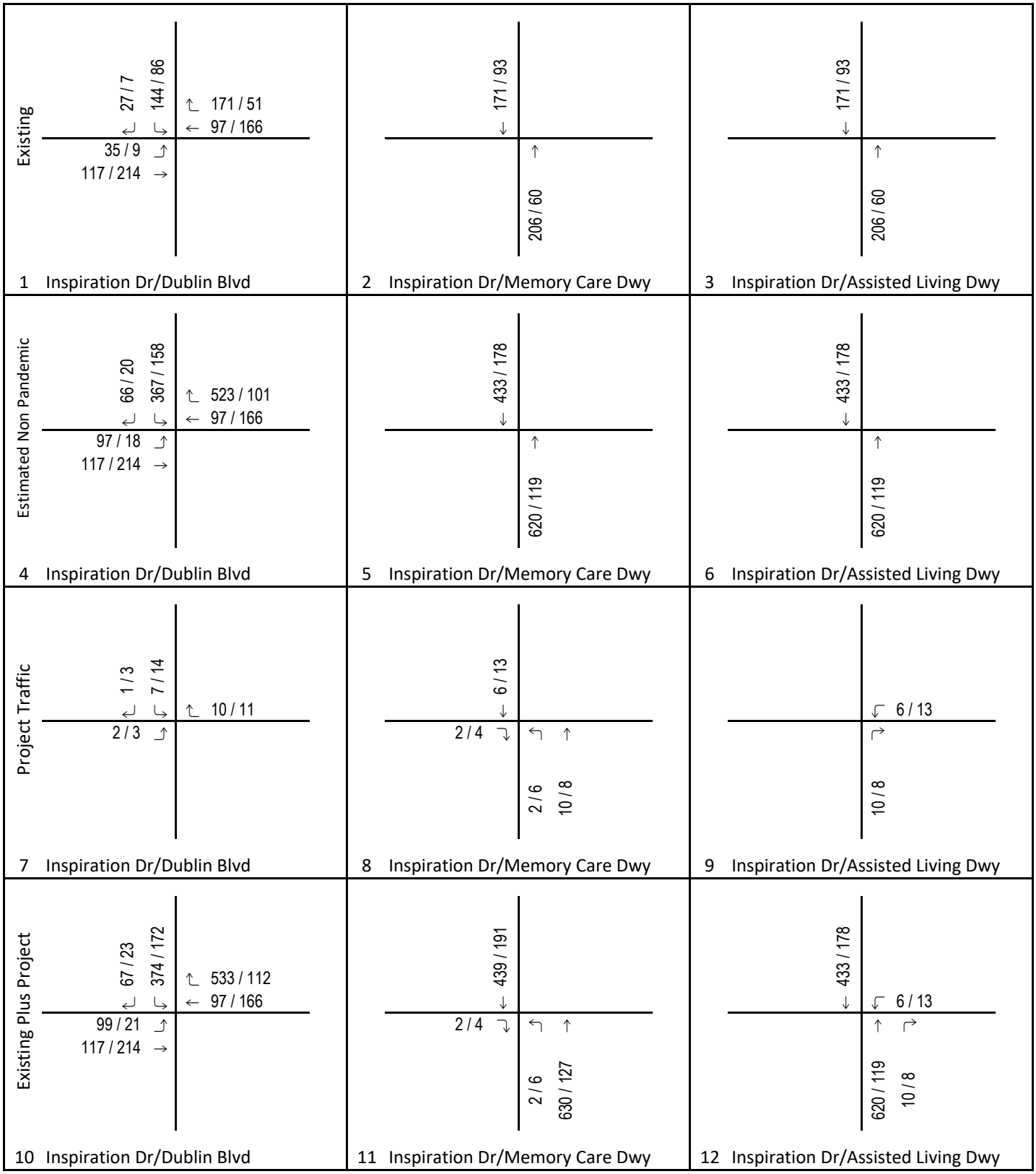


FIGURE 3

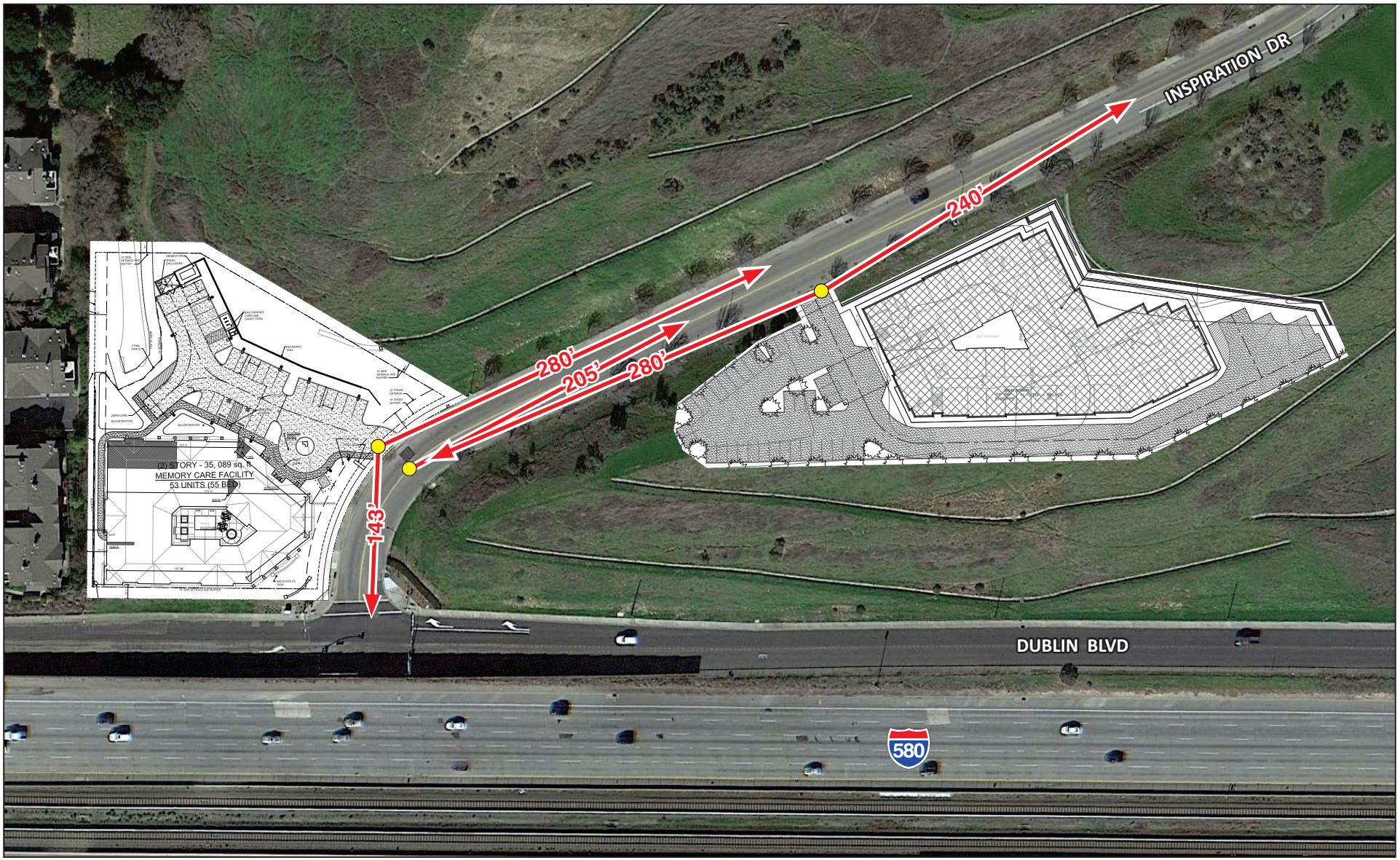
LSA

LEGEND

XXX / YYY AM / PM Volume

Inspiration Drive Assisted Living

Traffic Volumes



LSA

FIGURE 4

N

0 60 120

FEET

SOURCE: Google Earth, Lenity Architecture, Inc.

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Inspiration Drive Assisted Living

Sight Distance

ATTACHMENT B

TRAFFIC VOLUME DATA

National Data & Surveying Services Intersection Turning Movement Count

Location: Inspiration Dr & Dublin Blvd
City: Dublin
Control: Signalized

Project ID: 21-080009-001
Date: 2/2/2021

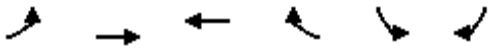
Data - Total

NS/EW Streets:	Inspiration Dr				Inspiration Dr				Dublin Blvd				Dublin Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	2	0	0	0	2	15	0	0	0	9	6	0	34
7:15 AM	0	0	0	0	5	0	2	0	4	11	0	0	0	7	20	0	49
7:30 AM	0	0	0	0	9	0	0	0	3	25	0	0	0	11	14	0	62
7:45 AM	0	0	0	0	14	0	1	0	8	23	0	0	0	22	35	0	103
8:00 AM	0	0	0	0	55	0	10	0	18	24	0	0	0	14	80	0	201
8:15 AM	0	0	0	0	55	0	14	0	6	36	0	0	0	31	30	0	172
8:30 AM	0	0	0	0	20	0	2	0	3	34	0	0	0	30	26	0	115
8:45 AM	0	0	0	0	12	0	3	0	1	39	0	0	0	28	5	0	88
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	172	0	32	0	45	207	0	0	0	152	216	0	824
APPROACH %'s :					84.31%	0.00%	15.69%	0.00%	17.86%	82.14%	0.00%	0.00%	0.00%	41.30%	58.70%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	144	0	27	0	35	117	0	0	0	97	171	0	591
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.655	0.000	0.482	0.000	0.486	0.813	0.000	0.000	0.000	0.782	0.534	0.000	0.735
					0.620				0.905				0.713				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	24	0	1	0	1	59	0	0	0	35	14	0	134
4:15 PM	0	0	0	0	13	0	1	0	1	49	0	0	0	46	7	0	117
4:30 PM	0	0	0	0	23	0	4	0	2	57	0	0	0	38	18	0	142
4:45 PM	0	0	0	0	26	0	1	0	5	49	0	0	0	47	12	0	140
5:00 PM	0	0	0	0	15	0	3	0	1	42	0	0	0	43	11	0	115
5:15 PM	0	0	0	0	14	0	2	0	5	33	0	0	0	39	12	0	105
5:30 PM	0	0	0	0	12	0	3	0	4	34	0	0	0	41	10	0	104
5:45 PM	0	0	0	0	15	0	2	0	2	33	0	0	0	38	13	0	103
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	142	0	17	0	21	356	0	0	0	327	97	0	960
APPROACH %'s :					89.31%	0.00%	10.69%	0.00%	5.57%	94.43%	0.00%	0.00%	0.00%	77.12%	22.88%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	86	0	7	0	9	214	0	0	0	166	51	0	533
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.827	0.000	0.438	0.000	0.450	0.907	0.000	0.000	0.000	0.883	0.708	0.000	0.938
					0.861				0.929				0.919				

ATTACHMENT C

LEVEL OF SERVICE WORKSHEETS



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	117	97	171	144	27
Future Volume (veh/h)	35	117	97	171	144	27
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	38	127	105	186	157	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	77	623	335	284	652	121
Arrive On Green	0.04	0.33	0.18	0.18	0.44	0.44
Sat Flow, veh/h	1781	1870	1870	1585	1468	271
Grp Volume(v), veh/h	38	127	105	186	187	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1748	0
Q Serve(g_s), s	0.8	2.0	2.0	4.4	2.7	0.0
Cycle Q Clear(g_c), s	0.8	2.0	2.0	4.4	2.7	0.0
Prop In Lane	1.00			1.00	0.84	0.16
Lane Grp Cap(c), veh/h	77	623	335	284	777	0
V/C Ratio(X)	0.50	0.20	0.31	0.66	0.24	0.00
Avail Cap(c_a), veh/h	220	831	831	705	777	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.9	9.7	14.5	15.5	7.0	0.0
Incr Delay (d2), s/veh	4.9	0.2	0.5	2.6	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	0.8	1.5	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.9	9.8	15.0	18.0	7.7	0.0
LnGrp LOS	C	A	B	B	A	A
Approach Vol, veh/h		165	291		187	
Approach Delay, s/veh		13.1	16.9		7.7	
Approach LOS		B	B		A	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	18.0	22.5	6.2	11.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	4.0	4.7	2.8	6.4
Green Ext Time (p_c), s	0.5	0.4	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	206	171	0
Future Vol, veh/h	0	0	0	206	171	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	224	186	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	410	186	186	0	-	0
Stage 1	186	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	598	856	1388	-	-	-
Stage 1	846	-	-	-	-	-
Stage 2	813	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	598	856	1388	-	-	-
Mov Cap-2 Maneuver	598	-	-	-	-	-
Stage 1	846	-	-	-	-	-
Stage 2	813	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1388	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	206	0	0	171
Future Vol, veh/h	0	0	206	0	0	171
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	224	0	0	186

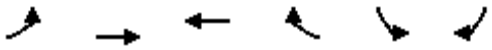
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	410	224	0	0	224	0
Stage 1	224	-	-	-	-	-
Stage 2	186	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	598	815	-	-	1345	-
Stage 1	813	-	-	-	-	-
Stage 2	846	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	598	815	-	-	1345	-
Mov Cap-2 Maneuver	598	-	-	-	-	-
Stage 1	813	-	-	-	-	-
Stage 2	846	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1345	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

HCM 6th Signalized Intersection Summary
1: Dublin Blvd & Inspiration Dr

02/12/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	9	214	166	51	86	7
Future Volume (veh/h)	9	214	166	51	86	7
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	10	233	180	55	93	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	23	550	306	259	757	65
Arrive On Green	0.01	0.29	0.16	0.16	0.47	0.47
Sat Flow, veh/h	1781	1870	1870	1585	1609	138
Grp Volume(v), veh/h	10	233	180	55	102	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1765	0
Q Serve(g_s), s	0.2	3.8	3.4	1.2	1.2	0.0
Cycle Q Clear(g_c), s	0.2	3.8	3.4	1.2	1.2	0.0
Prop In Lane	1.00			1.00	0.91	0.08
Lane Grp Cap(c), veh/h	23	550	306	259	830	0
V/C Ratio(X)	0.43	0.42	0.59	0.21	0.12	0.00
Avail Cap(c_a), veh/h	233	880	880	746	830	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.7	10.9	14.8	13.9	5.7	0.0
Incr Delay (d2), s/veh	11.8	0.5	1.8	0.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.3	1.4	0.4	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.5	11.4	16.6	14.3	6.0	0.0
LnGrp LOS	C	B	B	B	A	A
Approach Vol, veh/h		243	235		102	
Approach Delay, s/veh		12.2	16.1		6.0	
Approach LOS		B	B		A	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	15.8	22.5	5.0	10.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	5.8	3.2	2.2	5.4
Green Ext Time (p_c), s	1.0	0.2	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	60	93	0
Future Vol, veh/h	0	0	0	60	93	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	65	101	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	166	101	101	0	-	0
Stage 1	101	-	-	-	-	-
Stage 2	65	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	824	954	1491	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	958	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	824	954	1491	-	-	-
Mov Cap-2 Maneuver	824	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	958	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1491	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

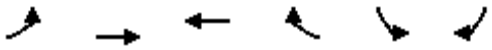
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	60	0	0	93
Future Vol, veh/h	0	0	60	0	0	93
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	65	0	0	101

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	166	65	0	0	65	0
Stage 1	65	-	-	-	-	-
Stage 2	101	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	824	999	-	-	1537	-
Stage 1	958	-	-	-	-	-
Stage 2	923	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	824	999	-	-	1537	-
Mov Cap-2 Maneuver	824	-	-	-	-	-
Stage 1	958	-	-	-	-	-
Stage 2	923	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1537	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	97	117	97	523	367	66
Future Volume (veh/h)	97	117	97	523	367	66
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	105	127	105	568	399	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	134	927	629	533	497	90
Arrive On Green	0.08	0.50	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1781	1870	1870	1585	1478	267
Grp Volume(v), veh/h	105	127	105	568	472	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1748	0
Q Serve(g_s), s	3.1	2.0	2.1	18.0	13.1	0.0
Cycle Q Clear(g_c), s	3.1	2.0	2.1	18.0	13.1	0.0
Prop In Lane	1.00			1.00	0.85	0.15
Lane Grp Cap(c), veh/h	134	927	629	533	588	0
V/C Ratio(X)	0.78	0.14	0.17	1.07	0.80	0.00
Avail Cap(c_a), veh/h	166	927	629	533	588	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.3	7.3	12.5	17.8	16.2	0.0
Incr Delay (d2), s/veh	17.3	0.1	0.1	57.7	11.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.6	0.8	14.1	6.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.7	7.4	12.6	75.4	27.2	0.0
LnGrp LOS	D	A	B	F	C	A
Approach Vol, veh/h		232	673		472	
Approach Delay, s/veh		22.9	65.6		27.2	
Approach LOS		C	E		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	31.0	22.5	8.5	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	4.0	15.1	5.1	20.0
Green Ext Time (p_c), s	0.5	0.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	45.3
HCM 6th LOS	D

Notes

User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	620	433	0
Future Vol, veh/h	0	0	0	620	433	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	674	471	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1145	471	471	0	-	0
Stage 1	471	-	-	-	-	-
Stage 2	674	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	221	593	1091	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	506	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	221	593	1091	-	-	-
Mov Cap-2 Maneuver	221	-	-	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	506	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1091	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

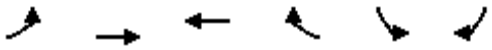
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	620	0	0	433
Future Vol, veh/h	0	0	620	0	0	433
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	674	0	0	471

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1145	674	0	0	674	0
Stage 1	674	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	221	455	-	-	917	-
Stage 1	506	-	-	-	-	-
Stage 2	628	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	221	455	-	-	917	-
Mov Cap-2 Maneuver	221	-	-	-	-	-
Stage 1	506	-	-	-	-	-
Stage 2	628	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	917	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	18	214	166	101	158	20
Future Volume (veh/h)	18	214	166	101	158	20
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	20	233	180	110	172	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	44	575	312	264	716	92
Arrive On Green	0.02	0.31	0.17	0.17	0.46	0.46
Sat Flow, veh/h	1781	1870	1870	1585	1550	198
Grp Volume(v), veh/h	20	233	180	110	195	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1757	0
Q Serve(g_s), s	0.4	3.8	3.5	2.4	2.6	0.0
Cycle Q Clear(g_c), s	0.4	3.8	3.5	2.4	2.6	0.0
Prop In Lane	1.00			1.00	0.88	0.11
Lane Grp Cap(c), veh/h	44	575	312	264	812	0
V/C Ratio(X)	0.45	0.41	0.58	0.42	0.24	0.00
Avail Cap(c_a), veh/h	229	864	864	732	812	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.7	10.7	15.0	14.5	6.3	0.0
Incr Delay (d2), s/veh	6.9	0.5	1.7	1.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.3	1.4	0.8	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.7	11.1	16.7	15.6	7.0	0.0
LnGrp LOS	C	B	B	B	A	A
Approach Vol, veh/h		253	290		195	
Approach Delay, s/veh		12.3	16.2		7.0	
Approach LOS		B	B		A	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			16.5		22.5	5.5	11.0
Change Period (Y+Rc), s			4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s			18.0		18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s			5.8		4.6	2.4	5.5
Green Ext Time (p_c), s			1.0		0.4	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	119	178	0
Future Vol, veh/h	0	0	0	119	178	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	129	193	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	322	193	193	0	-	0
Stage 1	193	-	-	-	-	-
Stage 2	129	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	672	849	1380	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	672	849	1380	-	-	-
Mov Cap-2 Maneuver	672	-	-	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1380	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	119	0	0	178
Future Vol, veh/h	0	0	119	0	0	178
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	129	0	0	193

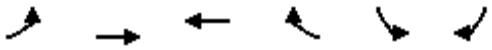
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	322	129	0	0	129	0
Stage 1	129	-	-	-	-	-
Stage 2	193	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	672	921	-	-	1457	-
Stage 1	897	-	-	-	-	-
Stage 2	840	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	672	921	-	-	1457	-
Mov Cap-2 Maneuver	672	-	-	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	840	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1457	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

HCM 6th Signalized Intersection Summary
1: Dublin Blvd & Inspiration Dr

04/05/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	99	117	97	533	374	67
Future Volume (veh/h)	99	117	97	533	374	67
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	108	127	105	579	407	73
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	138	929	627	532	496	89
Arrive On Green	0.08	0.50	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1781	1870	1870	1585	1480	265
Grp Volume(v), veh/h	108	127	105	579	481	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1749	0
Q Serve(g_s), s	3.2	2.0	2.1	18.0	13.5	0.0
Cycle Q Clear(g_c), s	3.2	2.0	2.1	18.0	13.5	0.0
Prop In Lane	1.00			1.00	0.85	0.15
Lane Grp Cap(c), veh/h	138	929	627	532	587	0
V/C Ratio(X)	0.78	0.14	0.17	1.09	0.82	0.00
Avail Cap(c_a), veh/h	166	929	627	532	587	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.3	7.3	12.6	17.8	16.3	0.0
Incr Delay (d2), s/veh	18.0	0.1	0.1	65.4	12.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.6	0.8	15.3	6.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.3	7.4	12.7	83.2	28.5	0.0
LnGrp LOS	D	A	B	F	C	A
Approach Vol, veh/h		235	684		481	
Approach Delay, s/veh		23.4	72.4		28.5	
Approach LOS		C	E		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	31.2	22.5	8.7	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	4.0	15.5	5.2	20.0
Green Ext Time (p_c), s	0.5	0.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.1
HCM 6th LOS	D

Notes

User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	2	630	439	0
Future Vol, veh/h	0	2	2	630	439	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	2	685	477	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1166	477	477	0	-	0
Stage 1	477	-	-	-	-	-
Stage 2	689	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	214	588	1085	-	-	-
Stage 1	624	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	213	588	1085	-	-	-
Mov Cap-2 Maneuver	213	-	-	-	-	-
Stage 1	622	-	-	-	-	-
Stage 2	498	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1085	-	588	-	-
HCM Lane V/C Ratio	0.002	-	0.004	-	-
HCM Control Delay (s)	8.3	0	11.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

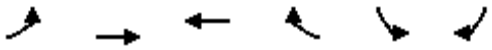
Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	0	620	10	0	433
Future Vol, veh/h	6	0	620	10	0	433
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	0	674	11	0	471

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1151	680	0	0	685	0
Stage 1	680	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	219	451	-	-	908	-
Stage 1	503	-	-	-	-	-
Stage 2	628	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	219	451	-	-	908	-
Mov Cap-2 Maneuver	219	-	-	-	-	-
Stage 1	503	-	-	-	-	-
Stage 2	628	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	219	908	-
HCM Lane V/C Ratio	-	-	0.03	-	-
HCM Control Delay (s)	-	-	21.9	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	214	166	112	172	23
Future Volume (veh/h)	21	214	166	112	172	23
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	23	233	180	122	187	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	50	581	313	265	709	95
Arrive On Green	0.03	0.31	0.17	0.17	0.46	0.46
Sat Flow, veh/h	1781	1870	1870	1585	1542	206
Grp Volume(v), veh/h	23	233	180	122	213	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1756	0
Q Serve(g_s), s	0.5	3.8	3.5	2.7	2.9	0.0
Cycle Q Clear(g_c), s	0.5	3.8	3.5	2.7	2.9	0.0
Prop In Lane	1.00			1.00	0.88	0.12
Lane Grp Cap(c), veh/h	50	581	313	265	807	0
V/C Ratio(X)	0.46	0.40	0.57	0.46	0.26	0.00
Avail Cap(c_a), veh/h	227	860	860	729	807	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.7	10.6	15.0	14.7	6.5	0.0
Incr Delay (d2), s/veh	6.3	0.4	1.7	1.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.3	1.4	0.9	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.1	11.1	16.7	15.9	7.3	0.0
LnGrp LOS	C	B	B	B	A	A
Approach Vol, veh/h		256	302		213	
Approach Delay, s/veh		12.3	16.4		7.3	
Approach LOS		B	B		A	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	16.7	22.5	5.6	11.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	5.8	4.9	2.5	5.5
Green Ext Time (p_c), s	1.0	0.5	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	6	127	191	0
Future Vol, veh/h	0	4	6	127	191	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	7	138	208	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	360	208	208	0	-	0
Stage 1	208	-	-	-	-	-
Stage 2	152	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	639	832	1363	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	876	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	635	832	1363	-	-	-
Mov Cap-2 Maneuver	635	-	-	-	-	-
Stage 1	822	-	-	-	-	-
Stage 2	876	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1363	-	832	-	-
HCM Lane V/C Ratio	0.005	-	0.005	-	-
HCM Control Delay (s)	7.7	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	0	119	8	0	178
Future Vol, veh/h	13	0	119	8	0	178
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	0	129	9	0	193

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	327	134	0	0	138	0
Stage 1	134	-	-	-	-	-
Stage 2	193	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	667	915	-	-	1446	-
Stage 1	892	-	-	-	-	-
Stage 2	840	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	667	915	-	-	1446	-
Mov Cap-2 Maneuver	667	-	-	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	840	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	667	1446	-
HCM Lane V/C Ratio	-	-	0.021	-	-
HCM Control Delay (s)	-	-	10.5	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-