CITY OF PACIFICA

Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program

Draft Environmental Impact Report (EIR) Appendices

December 13, 2024

SCH#: 2024050168

Volume 2

City of Pacifica

Environmental Impact Report (EIR) Appendices

December 13, 2024

Volume 2

Prepared for the City of Pacifica

Prepared by

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In association with:

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Appendix A

NOP AND COMMENT LETTERS

NOTICE OF PREPARATION

Program Environmental Impact Report

Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program

Date May 3, 2024

To Reviewing Agencies, Interested Parties, and Organizations

Subject Notice of Preparation of a Draft Environmental Impact Report for the Pacifica Housing Element General Plan Amendments, Rezoning, and Objective Development Standards Program (6th Cycle) and Scheduling of a Scoping Meeting on Wednesday, May 22, 2024

The City of Pacifica will be the Lead Agency and will prepare a programmatic Environmental Impact Report ("EIR") for the Pacifica Housing Element Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program (6th Cycle) ("Proposed Project"). The Proposed Project, its location, and potential environmental effects are described below. Pursuant to California Environmental Quality Act ("CEQA") Section 15060, the City has determined that an EIR is required for the Project.

Public agencies and members of the general public are invited to provide comments in writing as to the scope and content of the EIR. Specifically, the City desires to know the views of Responsible and Trustee Agencies as to the potentially significant environmental issues, reasonable alternatives, and mitigation measures that are germane to each agency's statutory responsibilities in connection with the Proposed Project. Responsible Agencies will need to use the EIR prepared by the City when considering permits or other approvals for the Proposed Project.

Due to the time limits mandated by State law, responses must be received by the City at the earliest possible date, but no later than the close of the Notice of Preparation ("NOP") review period, which runs as follows: May 3, 2024 through June 3, 2024.

Please send written responses to Brianne Harkousha at the address shown below. Public agencies providing comments are requested to include a contact person for the agency.

PROJECT TITLE:

Pacifica Housing Element Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program (6th Cycle)

LEAD AGENCY CONTACT:

Brianne Harkousha, Senior Planner
540 Crespi Drive
Pacifica, CA 94044
Email: bharkousha@pacifica.gov
Phone: (650) 738-7341

PROJECT SPONSOR:

City of Pacifica
540 Crespi Drive
Pacifica, CA 94044

PROJECT DESCRIPTION:

The Proposed Project is the Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program. The City of Pacifica has adopted an update to the Housing Element of the General Plan. This Housing Element covers a planning period from January 31, 2023 to January 31, 2031 (also referred to as the "6th Cycle"). The City Council adopted the Housing Element on January 22, 2024, and it is posted on the City of Pacifica website, accessible at this link: https://www.planpacifica.org/project-docs.

The implementation of Program HE-1-1: *General Plan and Zoning Amendments to Achieve RHNA* of the Housing Element is the Proposed Project for the EIR. Key project components under the Proposed Project are summarized below.

General Plan Amendments and Rezoning

Objectives

The General Plan Amendments and Rezoning component of Program HE-I-1 will create the regulatory framework to accommodate the Regional Housing Needs Allocation (RHNA) sites inventory and promote development of multi-family housing, including rental housing, missing middle housing, and mixed-use development. Along with rezoning specific sites in order to develop housing, the Proposed Project will also involve General Plan amendments to existing land use designations. As such, the Proposed Project addresses land use constraints to make the production of housing more likely. It reflects the priority given in the General Plan overall and Housing Element specifically to focus development in existing commercial shopping centers and other infill locations.

Rezoning Sites

Pacifica's RHNA allocation for the 6th Cycle is 1,892 housing units. The General Plan Amendments and Rezoning component of Program HE-I-1 will redesignate and rezone sites within the City to allow an additional 2,042 housing units. The Housing Element identifies sites capable of accommodating 2,578 total housing units, including 1,271 lower-income units which includes a 50 percent buffer over its lower-income RHNA requirement and a buffer of 36 percent over its total RHNA requirement to address the State's No Net Loss requirement (Government Code Section 65863). Approximately 122 of the 2,578 housing units would be on sites already zoned for housing at appropriate densities.

The additional 2,042 units would require rezoning, and a proportion requiring changes to their existing General Plan designation, in order for the City to accommodate its share of regional housing. The Proposed Project redesignation also anticipates mixed-use development at some of the sites, for a total of approximately 353,751 square feet of additional non-residential development. As shown in Table 1 and Figure 1, the Housing Element includes an inventory of properties that are intended to be redesignated and/or rezoned under the Proposed Project in order to meet the City's RHNA allocation. These

redesignated and/or rezoned properties would allow residential uses or higher density residential as standalone residential or mixed-use development to plan for the potential development of low- and moderate-income units.

Table 1: Sites that Require Rezoning to Meet RHNA Capacity

Site #	*Location*	*Existing Use*	*Existing GP Land Use Designation*	*Existing Zoning Designation*[1]	*Existing Allowed Density (DU/A)*	*Proposed Density (DU/A)*	*Total Capacity*	*New Commercial (Sq. Ft.)*
2	751 Oceana	Vacant	High Density Residential	R-3	30	40	81	0
10	Lumberyard, 4275 Coast Hwy	Building Materials, Equipment Storage	Mixed Use Neighborhood & Open Space /Agriculture/Residential	C-2	30	60	49	15,246
11	Vacant, Coast Hwy	Vacant	Mixed Use Neighborhood	C-2	30	60	69	21,802
12	Vacant, Former Caltrans between 4300-4400 Coast Hwy	Vacant	Mixed Use Neighborhood	C-2/HPD	30	60	169	53,056
18	Caltrans Park and Ride, Linda Mar Blvd	Caltrans Park and Ride	Mixed Use Neighborhood	N/A	30	60	53	16,771
19	7th Day Adventist, 533 Hickey Blvd	Religious- Filipino 7th Day Adventist	Low Density Residential	P-D	15	30	15	0
20	Public Works Corp Yard, 155 Milagra Dr	Pacifica Public Works Corp Yard	Retail Commercial	C-2	0	60	39	0
21	Oceana HS, 401 Paloma Ave	Oceana HS; vacant portion	Public and Semi Public	R-1/B-1	0	40	178	0
22	Terra Nova HS, 1450 Terra Nova Blvd	Terra Nova HS; vacant portion	Public and Semi Public	R-1	0	40	129	0
23	Sanchez Art Center, 1220 Linda Mar Blvd	Institutional- Art Center	Public and Semi Public/Park	A/B-5	0	40	130	0
24	Sanchez Library, 1111 Terra Nova Blvd	Institutional- Library	Public and Semi Public	C-1	0	50	65	0
25	Caltrans ROW, Skyline Blvd	Vacant ROW	N/A	N/A	N/A	40	165	0
28	Fairmont Shopping Center, 777 Hickey Blvd	Fairmont Shopping Center retail portion and parking lot	Retail Commercial	P-D	0	50	41	15,246
29	Linda Mar Shopping Center, 500 Linda Mar Blvd	Linda Mar Shopping Center retail portion and parking lot	Low Density Residential/Retail Commercial	C-1, C-2	0	50	182	68,607

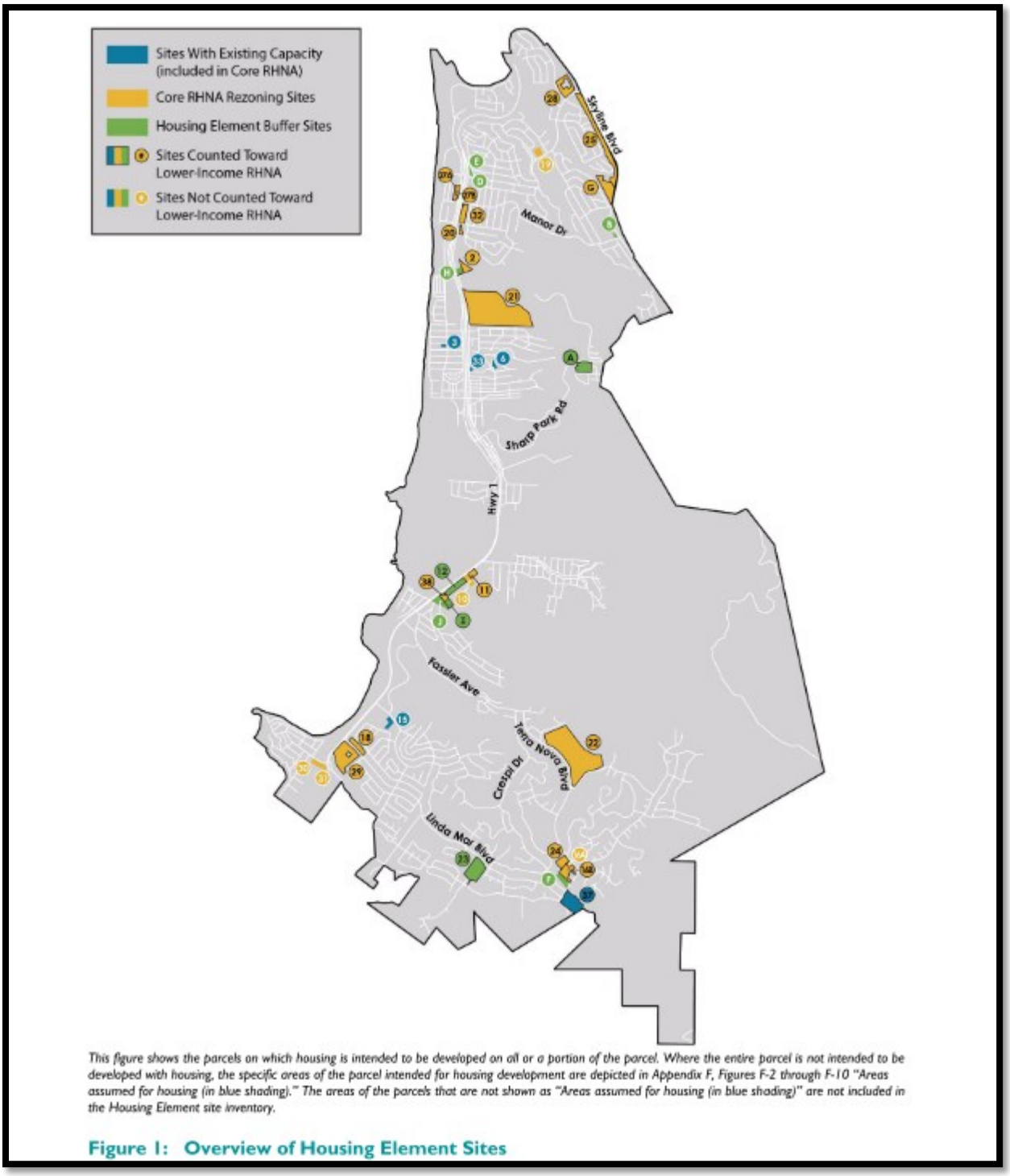
30	Builders Exchange, 520 San Pedro Ave	General commercial- Builder's Exchange	Retail Commercial	C-2/C-Z	0	30	23	10,454
31	Ace Hardware, 560 San Pedro Ave	General commercial- Ace	Retail Commercial	C-2/C-Z	0	30	30	13,504
32	Brentwood Shopping Center, Oceana/Manor	Brentwood Shopping Center retail portion and parking lot	Retail Commercial	C-1, C-2	0	60	97	30,492
38	Vacant, Coast Hwy/San Marlo	Vacant	Mixed Use Neighborhood	C-1	30	60	61	19,210
16A	Park Mall, 1055 Terra Nova Blvd	Vacant/Park Mall Neighborhood Shopping Center	Mixed Use Neighborhood	C-1	26	50	17	6,251
16B	Park Mall, 1035 Terra Nova Blvd	Park Mall Neighborhood Shopping Center	Mixed Use Neighborhood	C-1	26	50	44	22,869
27A	Pacific Manor Parking Lot, Palmetto Ave	Pacifica Manor Shopping Center Parking Lot	Retail Commercial	P/C-Z, C-1	0	60	37	11,587
27B	Pacific Manor Parking Lot, Palmetto Ave	Pacifica Manor Shopping Center Parking Lot	Retail Commercial	P/C-Z, C-1	0	60	53	16,771
A	Latter Day Saints, 730 Sharp Park Rd	Religious- Latter Day Saints and Parking Lot	Public and Semi Public	P-F+	0	40	52	0
B	Ramallah Plaza, 24800 Skyline Blvd	Shopping Center	Retail Commercial	C-1	0	30	11	5,009
D	Vacant, 340 Waterford St	Vacant	Retail Commercial	C-1	0	40	6	2,178
E	Car Wash, 340 Waterford St	Car Wash	Retail Commercial	C-1	0	40	11	5,031
F	Oddstad Blvd	Vacant with accessory structure	Mixed Use Neighborhood	C-1	30	40	16	0
G	Skyline Water Tank, Skyline Blvd	Vacant/Skyline Water Tank	Utilities	P-D	0	40	55	0
H	Pavilion of Flowers, 801 Oceana Blvd	Commercial- Florist	Office Commercial	C-1, O	0	40	42	19,667
I	Vacant, Coast Hwy	Vacant	Low Density Residential	R-1/B-3	9	60	73	0
J	Lutheran Church, 4400 Coast Hwy	Lutheran Church	Retail Commercial/High Density Residential	C-1	30	60	49	0

	Redesignation/Rezone Total:	**2,042**	**353,751**

1. Zoning Designations: R-1 = Single-Family Residential; R-3 = Multiple-Family Residential; C-1 = Neighborhood Commercial; C-2 = Community Commercial; C-3 = Service Commercial; P-F Public Facilities; P-D = Planned Development; + = Requires public vote to rezone

Source: City of Pacifica, 2024

Figure 1: Sites that need rezoning



This figure shows the parcels on which housing is intended to be developed on all or a portion of the parcel. Where the entire parcel is not intended to be developed with housing, the specific areas of the parcel intended for housing development are depicted in Appendix F, Figures F-2 through F-10 "Areas assumed for housing (in blue shading)." The areas of the parcels that are not shown as "Areas assumed for housing (in blue shading)" are not included in the Housing Element site inventory.

Figure 1: Overview of Housing Element Sites

Objective Development Standards

Objectives

The Objective Development Standards component of Program HE-I-1 will create or revise objective development standards ("ODS") applicable to the sites identified to meet the City's RHNA. The Proposed Project would create or amend six ODS addressing the following: height; setbacks from property lines; lot coverage; floor area ratio ("FAR"); open space per dwelling unit; and, off-street parking.

PROJECT LOCATION AND CONTEXT:

Located in San Mateo County along the Pacific Ocean between San Francisco and Half Moon Bay, Pacifica has a distinct physical identity, characterized as a stretch of dramatic coastline punctuated by ridges. Its boundaries include the Ocean to the west, the crest of Sweeney Ridge and Skyline Boulevard to the east, and San Pedro Mountain to the south. Highway 1 provides a gateway to the city's narrow northern edge. Pacifica possesses a large proportion of both parks and permanent open space; about two thirds of the city is undeveloped, and nearly half is protected open space. Pacifica's clustered urban development pattern of coastal and valley neighborhoods and rugged, open ridges alternate along the length of the city. In addition to large areas of preserved open space along ridgelines, Pacifica has over six miles of coastline and beaches, offering recreation opportunities that include isolated beach experiences, outstanding fishing, surfing, tide-pooling and diving.

City of Pacifica Setting

Pacifica is within the San Francisco-Oakland-San Jose metropolitan area, and its northern end is less than 10 miles from downtown San Francisco. The cities of Daly City, South San Francisco, and San Bruno border the city on the north and east and are developed up to city's borders. Much of the land to the southeast and south is preserved as part of the Golden Gate National Recreation Area, State and County parks, and protected San Francisco watershed areas. Rural and agricultural land is prevalent to the south. The Pacific Ocean borders Pacifica to the west. Land west of Coast Highway, as well as the Shelldance Nursery property, is part of the Coastal Zone, subject to Pacifica's Local Coastal Land Use Plan (LCLUP) and the policies of the California Coastal Act. Pacifica's Coastal Zone comprises approximately 1,286 acres of land, or about 15 percent of the city. Access to Pacifica is primarily via Coast Highway (also known as State Route-1, "SR 1," "1," Cabrillo Highway, and Highway 1) and State Route 35 (SR 35, or Skyline Boulevard.) Pacifica's regional location is shown in Figure 2.

Existing Land Uses

The City of Pacifica comprises 8,625 acres, or about 13.5 square miles, including all of the City of Pacifica (8,019 acres) as well as 606 acres of unincorporated land south of City limits on the slope of San Pedro Mountain. Nearly half (47 percent) of the city is preserved as open space. Most of Pacifica's rugged ridges are part of the Golden Gate National Recreation Area (GGNRA) or Sharp Park. Sharp Park Golf Course, San Pedro Valley County Park, and Pacifica State Beach represent other important public open spaces. Another 16 percent of the city is vacant or undeveloped, and five percent is agricultural. Urban uses make up 32 percent of the city, 70 percent of which is residential. Residential land is the predominant land use in the neighborhoods that occupy Pacifica's five valleys, along the coast, and in the highlands bordering Daly

City and South San Francisco. Most residential land in Pacifica (90 percent) contains single-family housing, which is typical in nearly all neighborhoods. Pacifica also has 125 acres of commercial uses, including a small amount of mixed-use development. Commercial land is located at the city's shopping centers (Linda Mar, Pacific Manor, Fairmont, Eureka Square, Park Mall, Pedro Point) and at smaller shopping centers and districts at Rockaway Beach, Crespi Drive, Palmetto Avenue, and along the Highway 1 corridor.

However, the Proposed Project itself focuses on 31 sites that would be redesignated and/or rezoned, as shown in Table 1 and Figure 1, and the adoption of ODS for all sites identified in the Housing Element to meet the City's RHNA. Existing land uses at these sites are primarily comprised of retail and commercial spaces, with several public and vacant parcels as well.

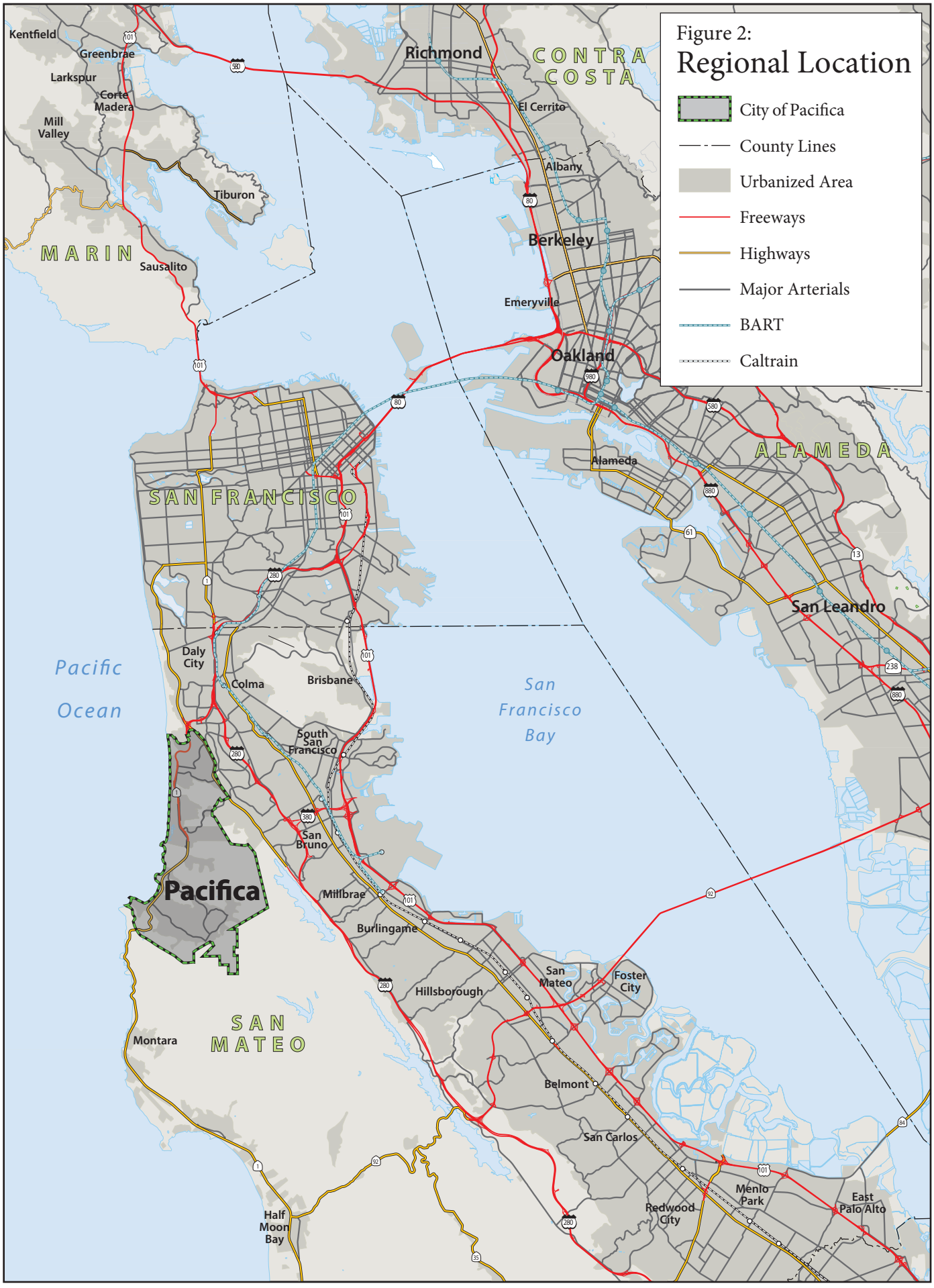


Figure 2:
Regional Location
City of Pacifica
County Lines
Urbanized Area
Freeways
Highways
Major Arterials
BART
Caltrain
Kentfield
Greenbrae
Larkspur
Corte Madera
Mill Valley
Tiburon
MARIN
Sausalito
Richmond
CONTRA COSTA
El Cerrito
Albany
Berkeley
Emeryville
Oakland
ALAMEDA
Alameda
San Leandro
SAN FRANCISCO
Daly City
Colma
Brisbane
South San Francisco
San Bruno
Pacific Ocean
San Francisco Bay
Pacifica
Millbrae
Burlingame
San Mateo
Foster City
Hillsborough
Belmont
San Carlos
SAN MATEO
Montara
Half Moon Bay
Redwood City
Menlo Park
East Palo Alto

Natural Resources and Environmental Constraints

Nearly half of the land in Pacifica is protected open space or park land, providing for a wide variety of plant and animal species and natural communities. In addition to large areas of preserved open space along ridgelines, Pacifica has over six miles of coastline and beaches, offering economic value and recreation opportunities that include isolated beach experiences, outstanding fishing, surfing, tide-pooling, and diving. Trails provide public access along the city's ridges and coastline. The southern and eastern portions of Pacifica have been designated as Critical Habitat for the California red-legged frog (CRLF). In 2010, the most recent designation by the United States Fish and Wildlife Service (USFWS) identified approximately 2,900 acres of CRLF Critical Habitat in Pacifica. In addition, the city's water resources are unique and numerous, and they provide important benefits to the city, including wildlife habitat, scenic natural corridors, and flood control.

As noted in the Housing Element, environmental constraints to housing development include hillside erosion, coastal erosion, and seismic hazards. Bluff and coastal erosion is commonplace along much of the Pacifica coastline which could increase with sea level rise. Landslides and slope failures have also presented serious problems in the past. Steep slopes on Mori Point, Sweeney Ridge, Cattle Hill, Gypsy Hill, and San Pedro Mountain may be at risk for slope failures, as well as portions of Pedro Point and Fairmont neighborhoods.

PROBABLE ENVIRONMENTAL IMPACTS OF THE PROJECT

The Program EIR will describe existing environmental resources and current conditions in the City's sites that are designated to be rezoned, evaluate the environmental impacts of implementing the Proposed Project, and identify feasible mitigation measures and alternatives that may lessen or avoid adverse environmental impacts. The analysis will focus on the reasonably foreseeable direct and indirect physical environmental effects that could result from implementation of the Proposed Project.

The following CEQA environmental issue areas will be addressed in the EIR:

- Aesthetics
- Agricultural and Forest Resources
- Air Quality
- Biological Resources
- Cultural and Historic Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation

- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

There is reasonable potential that the Proposed Project would result in less-than-significant effects related to Agricultural and Forestry Resources, Mineral Resources, and Hazards and Hazardous Materials. Thus, it is anticipated that these topics will be discussed in the Less than Significant Impact chapter in the EIR. A brief rationale for scoping out these topics is provided below.

Agricultural and Forestry Resources

The Proposed Project does not involve any changes to existing agricultural or forestry resources or policies affecting agricultural or forestry activities. There is no Important Farmland in the city based on latest (2018) Farmland Mapping and Monitoring Program data, and no parcels under Williamson Contract. In addition, none of the parcels proposed for rezoning are located on agriculturally zoned land. As such, the Proposed Project would not create any changes to agricultural or forest land, and therefore would have no impact on any agriculture and/or forest resources.

Mineral Resources

Mineral resources in the City of Pacifica are limited primarily to limestone deposits. According to the current General Plan, there are no longer any operational mineral extraction sites in the city or any locally important mineral resource recovery sites. There are limestone deposits found in the southern portion of the city, underlying development, which are not mined. General Plan policies would require the protection or environmentally sensitive extraction of significant mineral resources upon discovery. Thus, the Proposed Project would not result in the loss or availability of a known mineral resource that would be of value to the region and the residents or the State.

Hazards and Hazardous Materials

According to the California Department of Toxic Substances Control's EnviroStor database and the State Water Resources Control Board's GeoTracker database, there are no hazardous materials sites located at or near the Proposed Project sites to be rezoned in Pacifica. Further, the construction and operation of housing generally does not involve the release -- accidental or otherwise -- of hazardous materials that would create a significant hazard to the public, nor would it involve emitting or handling acutely hazardous materials or wastes in the vicinity of schools. Overall, compliance with existing federal, State, and local regulations would result in a less than significant impact.

In addition, the EIR will also evaluate potential cumulative and growth-inducing effects of the Proposed Project, and alternatives to the Project. The CEQA-required No Project alternative will evaluate the environmental impacts through an assumed future growth pattern and transportation improvements based on the current General Plan. Alternatives that would avoid or lessen significant environmental effects related to the Proposed Project will be discussed.

SCOPING MEETING:

A scoping meeting will be conducted on Wednesday, May 22, 2024, to collect oral comments from agencies and members of the public regarding the scope and content of the EIR in accordance with CEQA Section 21083.9.

EIR Scoping Meeting on the Pacifica Housing Element General Plan Amendment, Rezoning, and Objective Development Standards Program (6th Cycle)

Wednesday, May 22nd, 2024 | 6:00 PM

Via Zoom teleconference (online only - no physical location):

https://pacifica-gov.zoom.us/j/87009713123

Phone: (669) 900-6833 | Webinar ID: 870 0971 3123

For project information, please visit https://www.planpacifica.org/housing-element

Please contact Brianne Harkousha at (650) 738-7341 or bharkousha@pacifica.gov with any questions regarding this notice or the scoping meeting.

Brianne Harkousha

Brianne Harkousha, Senior Planner

5/3/2024

Date

NOP SUPERSEDED

NOTICE OF PREPARATION

Program Environmental Impact Report

Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments and Rezoning Program

Date July 11, 2023

To Reviewing Agencies, Interested Parties, and Organizations

Subject Notice of Preparation of a Draft Environmental Impact Report for the Pacifica Housing Element Rezoning Program (6th Cycle) and Scheduling of a Scoping Meeting on Tuesday, August 1, 2023

The City of Pacifica will be the Lead Agency and will prepare a programmatic Environmental Impact Report ("EIR") for the Pacifica Housing Element Targeted General Plan Amendments and Rezoning Program (6th Cycle) ("Proposed Project"). The Proposed Project, its location, and potential environmental effects are described below. Pursuant to California Environmental Quality Act ("CEQA") Section 15060, the City has determined that an EIR is required for the Project.

Public agencies and members of the general public are invited to provide comments in writing as to the scope and content of the EIR. Specifically, the City desires to know the views of Responsible and Trustee Agencies as to the potentially significant environmental issues, reasonable alternatives, and mitigation measures that are germane to each agency's statutory responsibilities in connection with the Proposed Project. Responsible Agencies will need to use the EIR prepared by the City when considering permits or other approvals for the Proposed Project.

Due to the time limits mandated by State law, responses must be received by the City at the earliest possible date, but no later than the close of the Notice of Preparation ("NOP") review period, which runs as follows: July 11, 2023 through August 9, 2023.

Please send written responses to Brianne Harkousha at the address shown below. Public agencies providing comments are requested to include a contact person for the agency.

PROJECT TITLE:

Pacifica Housing Element Targeted General Plan Amendments and Rezoning Program (6th Cycle)

LEAD AGENCY CONTACT:

Brianne Harkousha, Senior Planner
540 Crespi Drive
Pacifica, CA 94044
Email: bharkousha@pacifica.gov
Phone: (650) 738-7341

PROJECT SPONSOR:

City of Pacifica
540 Crespi Drive
Pacifica, CA 94044

PROJECT DESCRIPTION:

The Proposed Project is the Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments and Rezoning Program. The City of Pacifica is in the midst of preparing an update to the Housing Element of the General Plan. This Housing Element covers a planning period from January 31, 2023 to January 31, 2031 (also referred to as the "6th Cycle"). The State Review Draft Housing Element (Draft Housing Element) was released for review on May 10, 2023 and is posted on the City of Pacifica website, accessible at this link: https://www.planpacifica.org/project-docs.

The implementation of Program HE-1-1: General Plan and Zoning Amendments to Achieve RHNA (Rezoning Program), of the Housing Element is the Proposed Project for the EIR. Key project components under the Rezoning Program are summarized below.

General Plan Amendments and Rezoning Program

Objectives

The General Plan Amendments and Rezoning Program will create the regulatory framework to accommodate the Regional Housing Needs Allocation (RHNA) sites inventory and promote development of multi-family housing, including rental housing, missing middle housing, and mixed-use development. Along with rezoning specific sites in order to develop housing, the Proposed Project will also involve General Plan amendments to existing land use designations. As such, the Proposed Project addresses land use constraints to make the production of housing more likely. It reflects the priority given in the General Plan and Draft Housing Element to focus development in existing commercial shopping centers and other infill locations.

Rezoning Sites

The General Plan Amendments and Rezoning Program will redesignate and rezone sites within the City to allow an additional 1,612 housing units. Pacifica's RHNA allocation for the 6th Cycle is 1,892 housing units. The Draft Housing Element identifies sites capable of accommodating 2,476 total housing units, including 1,289 lower-income units which includes a 52 percent buffer over its lower-income RHNA requirement and a buffer of 31 percent over its total RHNA requirement to address the State's No Net Loss requirement (Government Code Section 65863). Approximately 712 of the 2,476 housing units would be on sites already zoned for housing at appropriate densities.

The additional 1,612 units would require rezoning, and a proportion requiring changes to their existing General Plan designation, in order for the City to accommodate its share of regional housing. The Proposed Project redesignation also anticipates mixed-use development at some of the sites, for a total of approximately 79,605 square feet of additional non-residential development. As shown in Table 1 and Figure 1, the Draft Housing Element includes an inventory of properties that are intended to be redesignated and/or rezoned under the Proposed Project in order to meet the city's RHNA allocation. These

redesignated and/or rezoned properties would allow residential uses or higher density residential as standalone residential or mixed-use development to plan for the potential development of low- and moderate-income units.

Table 1: Sites that Require Rezoning to Meet RHNA Capacity

Site #	*Location*	*Existing Use*	*Existing GP Land Use Designation*	*Existing Zoning Designation*[1]	*Existing Allowed Density (DU/A)*	*Proposed Density (DU/A)*	*Total Capacity*	*New Commercial (Sq. Ft.)*[3]
2	751 Oceana	Vacant	High Density Residential	R-3	30	40	80	0
19	7th Day Adventist, 533 Hickey Blvd	Religious- Filipino 7th Day Adventist	Medium Density Residential	R-1	15	30	15	0
20	Public Works Corp Yard, 155 Milagra Dr	Pacifica Public Works Corp Yard	Retail Commercial	C-2	0	40	50	0
21	Oceana HS, 401 Paloma Ave	Oceana HS; vacant portion	Public and Semi Public	R-1	0	30	134	0
22	Terra Nova HS, 1450 Terra Nova Blvd	Terra Nova HS; vacant portion	Public and Semi Public	R-1	0	30	97	0
23	Sanchez Art Center, 1220 Linda Mar Blvd	Institutional- Art Center	Public and Semi Public	P-F	0	40	130	0
24	Sanchez Library, 1111 Terra Nova Blvd	Institutional- Library	Public and Semi Public	C-1	0	40	52	0
25	Caltrans ROW, Skyline Blvd	Vacant ROW	N/A	N/A	N/A	40	162	0
26	Caltrans ROW, Coast Hwy/Quarry	Vacant ROW	N/A	C-3	N/A	60	122	0
27	Pacific Manor Shopping Center, 440 Manor Pl	Pacific Manor Shopping Center retail portion and parking lot	Retail Commercial /Mixed Use Neighborhood	C-1	0-30	60	76	0
28	Fairmont Shopping Center, 777 Hickey Blvd	Fairmont Shopping Center retail portion and parking lot	Retail Commercial	P-D	0	50	41	15,246
29	Linda Mar Shopping Center, 500 Linda Mar Blvd	Linda Mar Shopping Center retail portion and parking lot	Low Density Residential/Retail Commercial	C-1, C-2	0	50	182	0
30	Builders Exchange, 520 San Pedro Ave	General commercial- Builder's Exchange	Retail Commercial	C-2	0	30	23	10,454.4
31	Ace Hardware, 560 San Pedro Ave	General commercial- Ace	Retail Commercial	C-2	0	30	30	13,503.6

32	Brentwood Shopping Center, Oceana/Manor	Brentwood Shopping Center retail portion and parking lot	Retail Commercial	C-1, C-2	0	60	100	0
33	US Bank, 1655 Oceana Blvd	Office/ commercial	Mixed Use Center	C-1	30	50	14	5,336.1
34	Vallemar Station, 2125 Coast Hwy	Commercial buildings and parking lot	Retail Commercial	C-1	0	50	64	0
35	Vacant, Coast Hwy/Sea Bowl Ln	Vacant	Visitor Serving Commercial	C-1	0	20	32	0
36	Sea Bowl, 4625 Coast Hwy	Bowling Alley	Visitor Serving Commercial	C-1	0	60	219	0
Newly Added Sites[2]								
A	Latter Day Saints, 730 Sharp Park Rd	Religious- Latter Day Saints and Parking Lot	Public and Semi Public	P-F+	0	30	22	0
B	Ramallah Plaza Parcel 1, 2480 Skyline Dr	Strip mall	Retail Commercial	C-1	0	30	23	0
C	Ramallah Plaza Parcel 2, 681 Manor Dr	Strip mall	Retail Commercial	C-1	0	Combined with Site B		
D	340 Waterford St	Vacant	Retail Commercial	C-1	0	40	16	7,623
E	Waterford Carwash, 340 Waterford St	Commercial- car wash	Retail Commercial	C-1	0	Combined with Site D		
F	Oddstad Blvd	Vacant with accessory structure	Mixed Use Neighborhood	C-1	0	40	16	7,623
G	Skyline Water Tank	Vacant	Utilities	P-D	0	30	42	0
H	Pavilion of Flowers, 801 Oceana Blvd	Commercial- Florist	Office Commercial	C-1	0	40	42	19,819.8
			Redesignation/Rezone Total:				**1,612**	**79,605.9**

1. Zoning Designations: R-1 = Single-Family Residential; R-3 = Multiple-Family Residential; C-1 = Neighborhood Commercial; C-2 = Community Commercial; C-3 = Service Commercial; P-F Public Facilities; P-D = Planned Development; + = Requires public vote to rezone

2. At the direction of the Pacifica Planning Commission on 6/19/2023, the following sites will be added to the City's Housing Element for rezoning.

3. At the direction of the Pacifica Planning Commission on 6/19/2023, these sites will have "no net loss" to existing non-residential square footage. Sites are required to include existing non-residential square footage (which deviates from square footage allowed under current mixed use land use designations) as part of site redevelopment.

Source: City of Pacifica, 2023

NOP SUPERSEDED

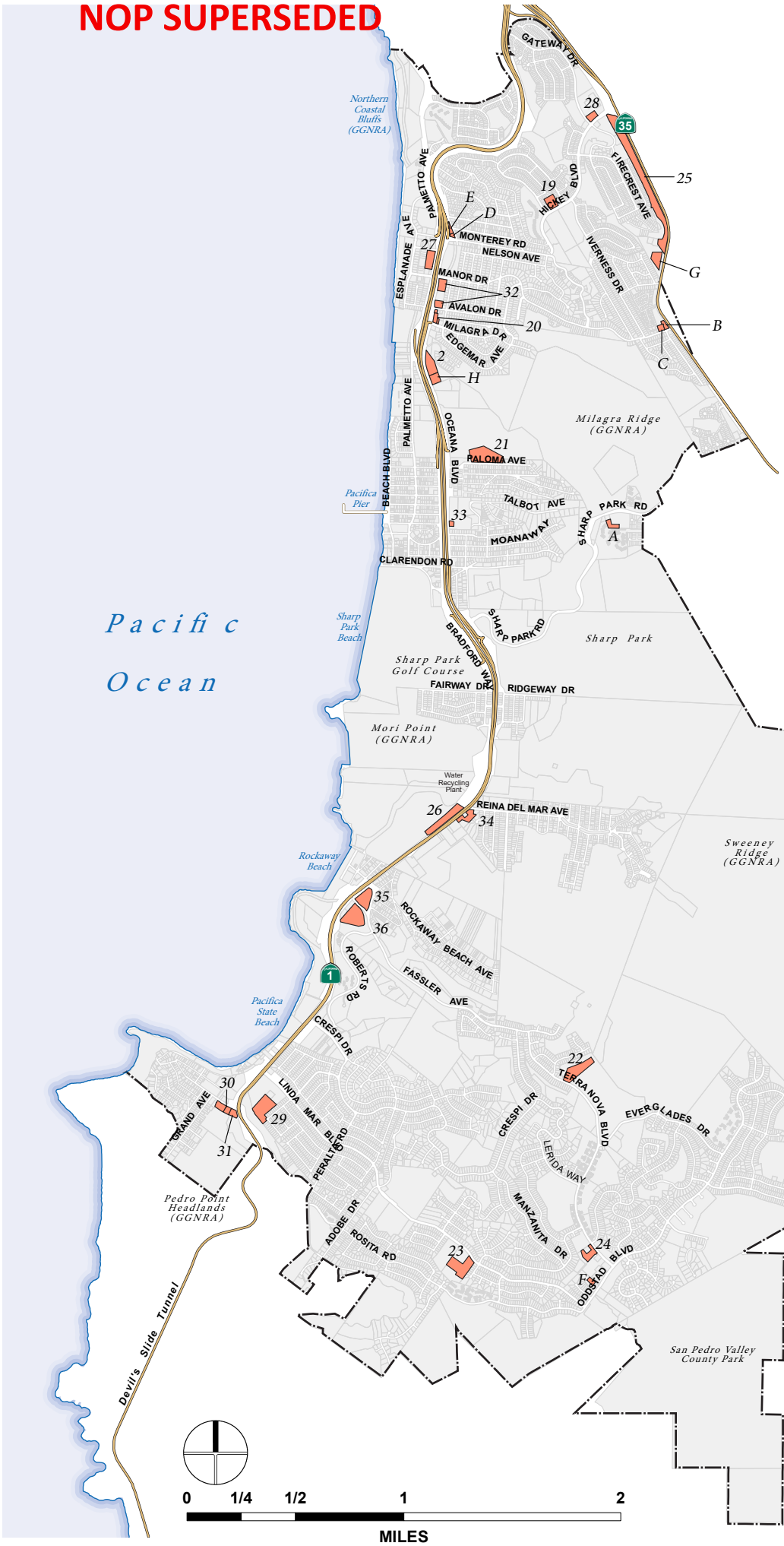


Figure 1:

Sites for Rezoning

Sites that need rezoning

City Limits

Source: City of Pacifica, 2021; San Mateo County, 2021; Dyett & Bhatia, 2021.

PROJECT LOCATION AND CONTEXT:

Located in San Mateo County along the Pacific Ocean between San Francisco and Half Moon Bay, Pacifica has a distinct physical identity, characterized as a stretch of dramatic coastline punctuated by ridges. Its boundaries include the Ocean to the west, the crest of Sweeney Ridge and Skyline Boulevard to the east, and San Pedro Mountain to the south. Highway 1 provides a gateway to the city's narrow northern edge. Pacifica possesses a large proportion of both parks and permanent open space; about two thirds of the city is undeveloped, and nearly half is protected open space. Pacifica's clustered urban development pattern of coastal and valley neighborhoods and rugged, open ridges alternate along the length of the city. In addition to large areas of preserved open space along ridgelines, Pacifica has over six miles of coastline and beaches, offering recreation opportunities that include isolated beach experiences, outstanding fishing, surfing, tide-pooling and diving.

City of Pacifica Setting

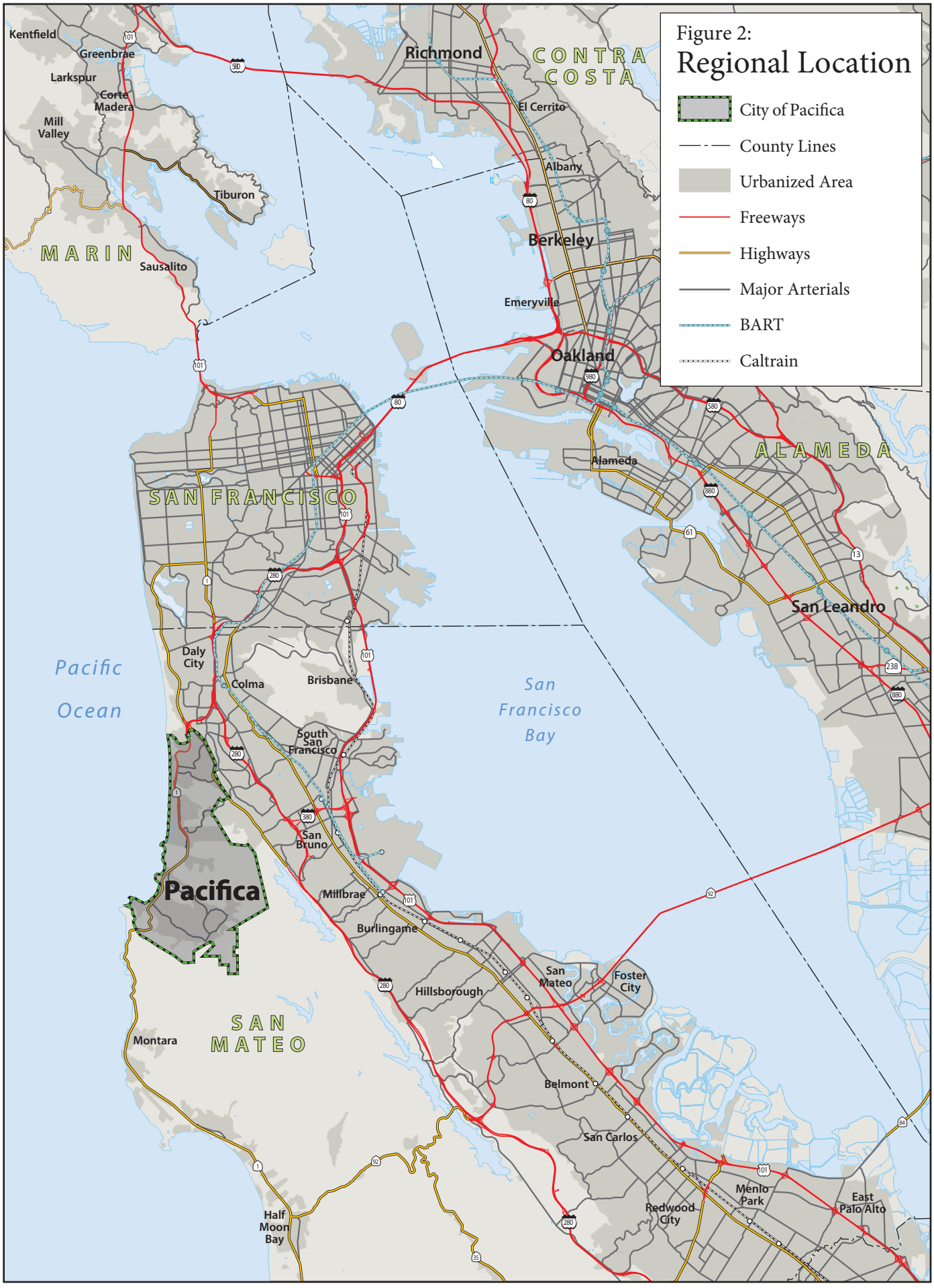
Pacifica is within the San Francisco-Oakland-San Jose metropolitan area, and its northern end is less than 10 miles from downtown San Francisco. The cities of Daly City, South San Francisco, and San Bruno border the city on the north and east and are developed up to city's borders. Much of the land to the southeast and south is preserved as part of the Golden Gate National Recreation Area, State and County parks, and protected San Francisco watershed areas. Rural and agricultural land is prevalent to the south. The Pacific Ocean borders Pacifica to the west. Land west of Coast Highway, as well as the Shelldance Nursery property, is part of the Coastal Zone, subject to Pacifica's Local Coastal Land Use Plan (LCLUP) and the policies of the California Coastal Act. Pacifica's Coastal Zone comprises approximately 1,286 acres of land, or about 15 percent of the city. Access to Pacifica is primarily via Coast Highway (also known as State Route-1, "SR 1," "1," Cabrillo Highway, and Highway 1) and State Route 35 (SR 35, or Skyline Boulevard.) Pacifica's regional location is shown in Figure 2.

Existing Land Uses

The City of Pacifica comprises 8,625 acres, or about 13.5 square miles, including all of the City of Pacifica (8,019 acres) as well as 606 acres of unincorporated land south of City limits on the slope of San Pedro Mountain. Nearly half (47 percent) of the city is preserved as open space. Most of Pacifica's rugged ridges are part of the Golden Gate National Recreation Area (GGNRA) or Sharp Park. Sharp Park Golf Course, San Pedro Valley County Park, and Pacifica State Beach represent other important public open spaces. Another 16 percent of the city is vacant or undeveloped, and five percent is agricultural. Urban uses make up 32 percent of the city, 70 percent of which is residential. Residential land is the predominant land use in the neighborhoods that occupy Pacifica's five valleys, along the coast, and in the highlands bordering Daly City and South San Francisco. Most residential land in Pacifica (90 percent) contains single-family housing, which is typical in nearly all neighborhoods. Pacifica also has 125 acres of commercial uses, including a small amount of mixed-use development. Commercial land is located at the city's shopping centers (Linda Mar, Pacific Manor, Fairmont, Eureka Square, Park Mall, Pedro Point) and at smaller shopping centers and districts at Rockaway Beach, Crespi Drive, Palmetto Avenue, and along the Highway 1 corridor.

However, the Proposed Project itself focuses on 27 sites that would be redesignated and/or rezoned, as shown in Table 1 and Figure 1. Existing land uses at these sites are primarily comprised of retail and commercial spaces, with several public and vacant parcels as well.

NOP SUPERSEDED



Natural Resources and Environmental Constraints

Nearly half of the land in Pacifica is protected open space or park land, providing for a wide variety of plant and animal species and natural communities. In addition to large areas of preserved open space along ridgelines, Pacifica has over six miles of coastline and beaches, offering economic value and recreation opportunities that include isolated beach experiences, outstanding fishing, surfing, tide-pooling, and diving. Trails provide public access along the city's ridges and coastline. The southern and eastern portions of Pacifica have been designated as Critical Habitat for the California red-legged frog (CRLF). In 2010, the most recent designation by the United States Fish and Wildlife Service (USFWS) identified approximately 2,900 acres of CRLF Critical Habitat in Pacifica. In addition, the city's water resources are unique and numerous, and they provide important benefits to the city, including wildlife habitat, scenic natural corridors, and flood control.

As noted in the Draft Housing Element, environmental constraints to housing development include hillside erosion, coastal erosion, and seismic hazards. Bluff and coastal erosion is commonplace along much of the Pacifica coastline which could increase with sea level rise. Landslides and slope failures have also presented serious problems in the past. Steep slopes on Mori Point, Sweeney Ridge, Cattle Hill, Gypsy Hill, and San Pedro Mountain may be at risk for slope failures, as well as portions of Pedro Point and Fairmont neighborhoods.

PROBABLE ENVIRONMENTAL IMPACTS OF THE PROJECT

The Program EIR will describe existing environmental resources and current conditions in the City's sites that are designated to be rezoned, evaluate the environmental impacts of implementing the Proposed Project, and identify feasible mitigation measures and alternatives that may lessen or avoid adverse environmental impacts. The analysis will focus on the reasonably foreseeable direct and indirect physical environmental effects that could result from implementation of the Proposed Project.

The following CEQA environmental issue areas will be addressed in the EIR:

- Aesthetics
- Agricultural and Forest Resources
- Air Quality
- Biological Resources
- Cultural and Historic Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources

- Utilities and Service Systems
- Wildfire

There is reasonable potential that the Proposed Project would result in less-than-significant effects related to Agricultural and Forestry Resources, Mineral Resources, and Hazards and Hazardous Materials. Thus, it is anticipated that these topics will be discussed in the Less than Significant Impact chapter in the EIR. A brief rationale for scoping out these topics is provided below.

Agricultural and Forestry Resources

The Proposed Project does not involve any changes to existing agricultural or forestry resources or policies affecting agricultural or forestry activities. There is no Important Farmland in the city based on latest (2018) Farmland Mapping and Monitoring Program data, and no parcels under Williamson Contract. In addition, none of the parcels proposed for rezoning are located on agriculturally zoned land. As such, the Proposed Project would not create any changes to agricultural or forest land, and therefore would have no impact on any agriculture and/or forest resources.

Mineral Resources

Mineral resources in the City of Pacifica are limited primarily to limestone deposits. According to the current General Plan, there are no longer any operational mineral extraction sites in the city or any locally important mineral resource recovery sites. There are limestone deposits found in the southern portion of the city, underlying development, which are not mined. General Plan policies would require the protection or environmentally sensitive extraction of significant mineral resources upon discovery. Thus, the Proposed Project would not result in the loss or availability of a known mineral resource that would be of value to the region and the residents or the State.

Hazards and Hazardous Materials

According to the California Department of Toxic Substances Control's EnviroStor database and the State Water Resources Control Board's GeoTracker database, there are no hazardous materials sites located at or near the Proposed Project sites to be rezoned in Pacifica. Further, the construction and operation of housing generally does not involve the release -- accidental or otherwise -- of hazardous materials that would create a significant hazard to the public, nor would it involve emitting or handling acutely hazardous materials or wastes in the vicinity of schools. Overall, compliance with existing federal, State, and local regulations would result in a less than significant impact.

In addition, the EIR will also evaluate potential cumulative and growth-inducing effects of the Proposed Project, and alternatives to the Project. The CEQA-required No Project alternative will evaluate the environmental impacts through an assumed future growth pattern and transportation improvements based on the current General Plan. Alternatives that would avoid or lessen significant environmental effects related to the Proposed Project will be discussed.

NOP SUPERSEDED

SCOPING MEETING:

A scoping meeting will be conducted on Tuesday, August 1, 2023 to collect oral comments from agencies and members of the public regarding the scope and content of the EIR in accordance with CEQA Section 21083.9.

EIR Scoping Meeting on the Pacifica Housing Element Rezoning Program (6th Cycle)

Tuesday, August 1st , 2023 | 6:00 PM

Via Zoom teleconference (online only- no physical location):
https://dyettandbhatia.zoom.us/meeting/register/tZcqc-usrTsrEtV74MEjAWU3ktgnsCAw5YTn

Phone: (669 900 6833) | Meeting ID: 837 4243 0181

For project information, please visit https://www.planpacifica.org/housing-element

Please contact Brianne Harkousha at 650-738-7443 or bharkousha@pacifica.gov with any questions regarding this notice or the scoping meeting.

Brianne Harkousha — 7/11/23

Brianne Harkousha, Senior Planner — Date

C/CAG

CITY/COUNTY ASSOCIATION OF GOVERNMENTS
OF SAN MATEO COUNTY

Atherton • Belmont • Brisbane • Burlingame • Colma • Daly City • East Palo Alto • Foster City • Half Moon Bay • Hillsborough • Menlo Park • Millbrae • Pacifica • Portola Valley • Redwood City • San Bruno • San Carlos • San Mateo • San Mateo County •South San Francisco • Woodside

July 12, 2023

Ms. Brianne Harkousha, Senior Planner
540 Crespi Drive
Pacifica, CA 94044

RE: C/CAG Airport Land Use Committee Staff Comments - Notice of Prep. Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments and Rezoning Program

Dear Ms. Harkousha,

In response to your notice on the above matter, C/CAG Airport Land Use Committee staff offers the following input for your consideration:

- A portion of the community of Pacifica is located within Airport Influence Area B (AIA B), the Project Referral Area, for San Francisco International Airport. As described in a recent Airport Land Use Commission review of Pacifica's Draft Housing Element update, four identified housing opportunity sites are located within AIA B:

Site #	Location
1	323 Beaumont Blvd
19	533 Hickey Blvd
25	Skyline Blvd (Caltrans ROW)
28	777 Hickey Blvd

- Accordingly, the DEIR should discuss how the proposed policies in the Housing Element update will ensure Airport/Land Use Compatibility including the Airport Influence Area disclosure and ALUC project referral requirements, noise compatibility, and height/airspace protection policies contained in the 2012 Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport (SFO ALUCP).

Thank you for the opportunity to review and comment on this NOP. If you have any questions, please contact me at kkalkin@smcgov.org.

Sincerely,

Susy Kalkin
ALUC Staff

California Department of Transportation

DISTRICT 4
OFFICE OF REGIONAL AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

August 9, 2023

SCH #: 2023070192
GTS #: 04-SM-2023-00529
GTS ID: 30347
Co/Rt/Pm: SM/1/VAR

Brianne Harkousha, Senior Planner
City of Pacifica
540 Crespi Drive
Pacifica, CA 94044

Re: Pacifica Housing Element Targeted General Plan Amendments and Rezoning Program (6th Cycle) Environmental Impact Report (EIR) – Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR)

Dear Brianne Harkousha:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Pacifica Housing Element Targeted General Plan Amendments and Rezoning Program (6th Cycle). We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system.

The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities. The following comments are based on our review of the July 2023 NOP.

Project Understanding
The proposed project will create the regulatory framework to accommodate the Regional Housing Needs Allocation (RHNA) sites inventory and will rezone specific sites in order to develop housing. The involved amendments to the General Plan will affect existing land use designations that will enable more housing production.

Travel Demand Analysis
With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and multimodal improvements. For more information on how Caltrans assesses

Transportation Impact Studies, please review Caltrans' Transportation Impact Study Guide (*link*).

Multimodal Transportation Planning
Please review and include reference to the *Caltrans District 4 Pedestrian Plan* (2021) and the *Caltrans District 4 Bike Plan* (2018) in the DEIR. These two plans studied existing conditions for walking and biking along and across the State Transportation Network (STN) in the nine-county Bay Area and developed a list of location-based and prioritized needs.

Please note that any Complete Streets reference should be updated to reflect Caltrans Director's Policy 37 (link) that highlights the importance of addressing the needs of non-motorists and prioritizing space-efficient forms of mobility, while also facilitating goods movement in a manner with the least environmental and social impacts. This supersedes Deputy Directive 64-R1, and further builds upon its goals of focusing on the movement of people and goods.

Integrated Transportation and Land Use Planning
Transportation and housing are integrally connected. The Housing Element Update process provides a mechanism to reflect current transportation and land use policy and adopt efficient land-use strategies such as transit-oriented, infill and mixed-use developments that can potentially reduce vehicle miles traveled and address climate change.

Please review and include reference to the current California Transportation Plan (CTP) in the DEIR. CTP 2050 envisions that the majority of new housing located near existing housing, jobs, and transit, and in close proximity to one another will reduce vehicle travel and GHG emissions, and be accessible and affordable for all Californians, including disadvantaged and low-income communities. The location, density, and affordability of future housing will dictate much of our future travel patterns, and our ability to achieve the vision outlined in CTP 2050. Caltrans encourages the City to consider and explore the potential of excess state-owned property for affordable housing development, per Executive Order N-06-19.

Caltrans looks forward to reviewing the DEIR that should demonstrate how the future housing development patterns align with the City's adopted VMT policies. Caltrans supports collaboration with local agencies to work towards a safe, functional, interconnected, multi-modal transportation network integrated through efficient and equitable land use planning and policies. The City should also continue to coordinate with Caltrans to identify and implement necessary network improvements and impact mitigation.

Climate Change/Sea Level Rise
In the 2020 Caltrans District 4 Adaptation Priorities Report, U.S. 101 adjacent to the project location is identified as a high-priority Caltrans asset vulnerable to sea level rise, storm surge, and climate change impacts, including increased precipitation. Caltrans would like to be included in discussions, to stay informed as Caltrans is interested in engaging in multi-agency collaboration early and often, to find multi-benefit solutions that protect vulnerable shorelines, communities, infrastructure, and the environment. Please contact Vishal Ream-Rao, Caltrans Bay Area Climate Change Planning Coordinator, with any questions at d4_climateresilience@dot.ca.gov.

Lead Agency
As the Lead Agency, the City of Pacifica is responsible for all project mitigation, including any needed improvements to the State Transportation Network (STN). The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Equitable Access
If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Marley Mathews, Transportation Planner, via LDR-D4@dot.ca.gov.

For future early coordination opportunities or project referrals, please contact LDR-D4@dot.ca.gov.

Sincerely,

Laurel Sears

LAUREL SEARS
Acting District Branch Chief
Local Development Review

c: State Clearinghouse

CITY OF PACIFICA
Emergency Preparedness & Safety Commission
540 Crespi Drive • Pacifica, California 94044-3422
www.cityofpacifica.org

Scenic Pacifica
Incorporated Nov. 22, 1957

July 19, 2023

Honorable Mayor, Council members, and Planning Department Staff,

The Emergency Preparedness & Safety Commission requests that vehicular evacuation routes be considered and evaluated in any and all EIR's involving the draft housing plan for the City of Pacifica.

Regards,

Jay Crawford
Vice Chair

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

July 21, 2023

Governor's Office of Planning & Research

July 24 2023

STATE CLEARINGHOUSE

Brianne Harkousha
City of Pacifica
540 Crespi Dr.
Pacifica, CA 94044

Re: 2023070192, Pacifica Housing Element Targeted General Plan Amendments and Rezoning Program (6th Cycle), San Mateo County

Dear Ms. Harkousha:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).

2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.

3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).

4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:

- **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
- **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:

- **a.** If part or all of the APE has been previously surveyed for cultural resources.
- **b.** If any known cultural resources have already been recorded on or adjacent to the APE.
- **c.** If the probability is low, moderate, or high that cultural resources are located in the APE.
- **d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
- **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@nahc.ca.gov

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

cc: State Clearinghouse

Gmail

Alison Moore <alison@dyettandbhatia.com>

Public Comment Environmental Impact - Potential Housing at Oceana High

1 message

Harkousha, Brianne <BHarkousha@pacifica.gov> Mon, Aug 7, 2023 at 7:20 AM
To: Alison Moore <alison@dyettandbhatia.com>

Hi Alison,

Please see public comment received below.

Thanks,
Brianne

From: Angela Wilson <bustoswilsonangela@gmail.com>
Sent: Sunday, August 6, 2023 8:51:30 PM
To: Harkousha, Brianne <BHarkousha@pacifica.gov>
Subject: Environmental Impact - Potential Housing at Oceana High

[CAUTION: External Email]

Hello Ms Brianne Harkousha,

I'm writing to you regarding potential housing development at Oceana Hogh School. Below are my thoughts on the environmental impact.
Please forward this to the appropriate people that are decision makers.

1). Additional Traffic (3 schools in close proximity)
2). Impact on Wild life
3). Environmental Impact (pollution)
4). Impact on Event Parking (Soccer Games/Swim Meets)

Thank you,
Angela Wilson

Harkousha, Brianne

From: al94ranger@gmail.com
Sent: Friday, July 14, 2023 9:54 PM
To: Harkousha, Brianne
Subject: Environmental for Oceana high.
Attachments: Video.MOV

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Categories: Housing

[CAUTION: External Email]

Oceana high is a Mecca for birds who constantly hunt here, it will ruin their environment.
Pacifica Resident,
Al Romero

Harkousha, Brianne

From: al94ranger@gmail.com
Sent: Friday, July 14, 2023 10:03 PM
To: Harkousha, Brianne
Subject: Environmental Oceana
Attachments: Video.MOV

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Categories: Housing

[CAUTION: External Email]

Oceana high is a magnet for birds and development would ruin their environment.

Pacifica Resident
Al Romero

Harkousha, Brianne

From: al94ranger@gmail.com
Sent: Friday, July 14, 2023 10:19 PM
To: Harkousha, Brianne
Subject: Environmental Oceana

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Categories: Housing

[CAUTION: External Email]

Oceana high school and its students have physical education and science projects on the field thus, development of housing here would ruin their environment.
CAUTION: This email originated from outside of the City of Pacifica. Unless you recognize the sender's email address and know the content is safe, do not click links, open attachments or reply.

Pacifica Resident
Al Romero

Harkousha, Brianne

From: al94ranger@gmail.com
Sent: Friday, July 14, 2023 10:06 PM
To: Harkousha, Brianne
Subject: Environmental Oceana
Attachments: Video.MOV

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Categories: Housing

[CAUTION: External Email]

Oceana high is a magnet for birds an nd coyotes and development here would ruin their environment.

Pacifica Resident
Al Romero
CAUTION: This email originated from outside of the City of Pacifica. Unless you recognize the sender's email address and know the content is safe, do not click links, open attachments or reply.

Harkousha, Brianne

From: al94ranger@gmail.com
Sent: Friday, July 14, 2023 10:00 PM
To: Harkousha, Brianne
Subject: Environmental…
Attachments: Video.MOV

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Categories: Housing

[CAUTION: External Email]

Oceana high is a magnet for birds and development would ruin their environment.

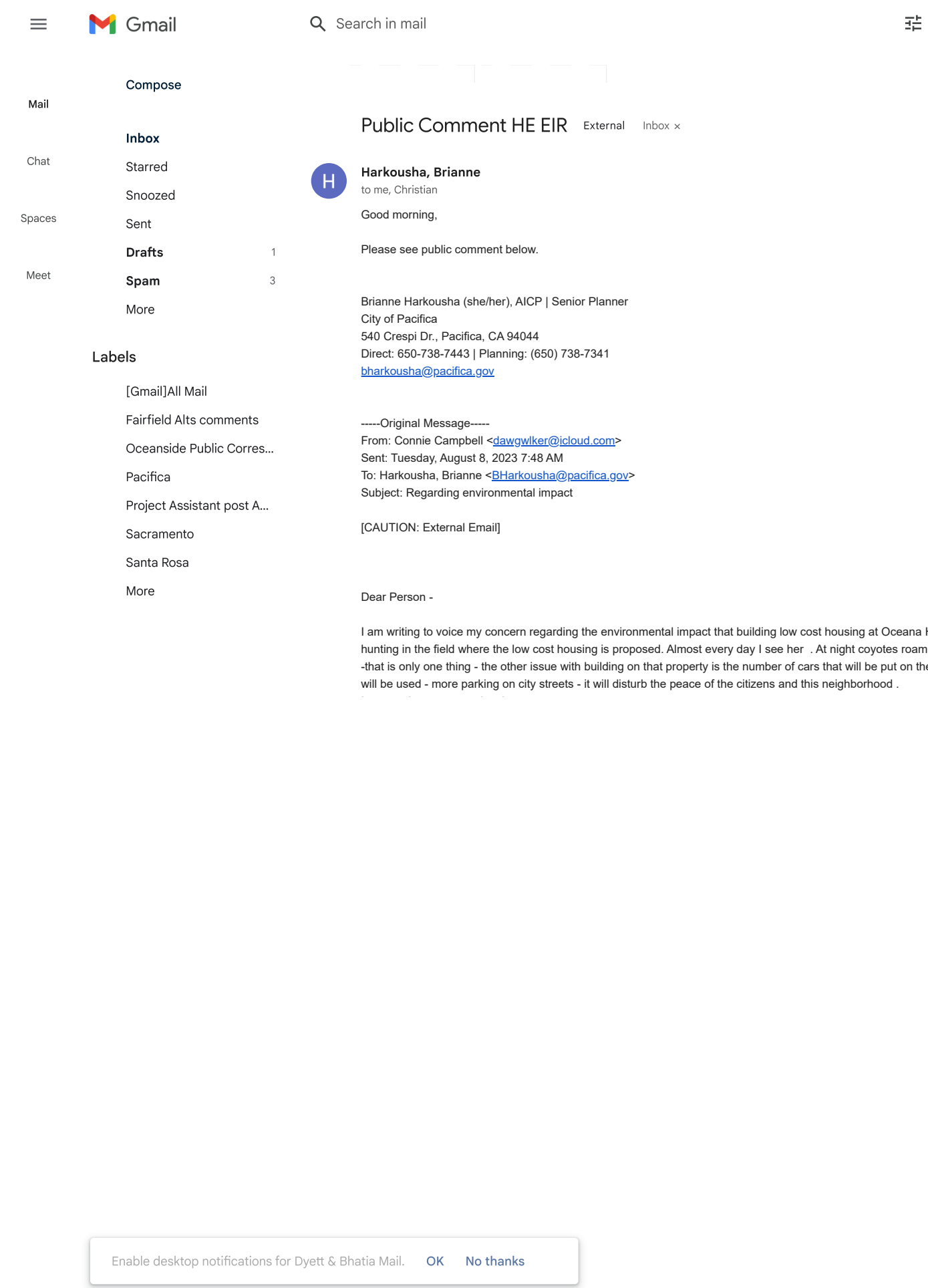
Pacifica Resident
Al Romero

From: al94ranger@gmail.com
To: Harkousha, Brianne
Subject: Environmental of Oceana High.
Date: Saturday, July 15, 2023 7:10:41 AM

[CAUTION: External Email]

The field at Oceana high school is at some point the lowest elevation in this valley. With added infrastructure, this would create more rain run-off adding to erosion in our coasts that are already in despair. Because of the unique valley setting all the water from the adjacent hills rain run off gets absorbed in this field. These fields were once used for agriculture for these reasons. The soil is very nutrient rich because of thousands of years of rain-runoff collects here. Replacing the natural land with infrastructure cement/ asphalt/housing, would destroy the regular displacement/absorption of rainfall. This would create more pollution(Co2), contaminated runoff, more rain run-off. Thus, would be detrimental to the Coast, sea life, further erosion of the coast and potentially unbalance what is already a balanced valley with housing only on one side of the valley. Example: Manor valley is completely built up with no field for absorption. Thus, constant erosion of the bluffs.

Pacifica Resident,
Al Romero



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Public Comment HE EIR

External Inbox ×

Harkousha, Brianne
to me, Christian

Good morning,

Please see public comment below.

Brianne Harkousha (she/her), AICP | Senior Planner
City of Pacifica
540 Crespi Dr., Pacifica, CA 94044
Direct: 650-738-7443 | Planning: (650) 738-7341
bharkousha@pacifica.gov

-----Original Message-----
From: Connie Campbell <dawgwlker@icloud.com>
Sent: Tuesday, August 8, 2023 7:48 AM
To: Harkousha, Brianne <BHarkousha@pacifica.gov>
Subject: Regarding environmental impact

[CAUTION: External Email]

Dear Person -

I am writing to voice my concern regarding the environmental impact that building low cost housing at Oceana HS site. I am l hunting in the field where the low cost housing is proposed. Almost every day I see her . At night coyotes roam that land - I h -that is only one thing - the other issue with building on that property is the number of cars that will be put on the street here . will be used - more parking on city streets - it will disturb the peace of the citizens and this neighborhood .

Enable desktop notifications for Dyett & Bhatia Mail. OK No thanks

CITY OF PACIFICA HOUSING ELEMENT

EIR SCOPING COMMENTS

The following are concerns which should be considered in the EIR analysis, followed by a description of actions the City can take to address those concerns.

To : City of Pacifica
Re : EIR Housing Element/Re-Zoning Scoping Comments August 7, 2023

The Rezoning program contemplated by the City purports to *"accommodate the RHNA sites inventory and promote development of multi-family housing, including missing middle housing and mixed-use development".*

Despite this stated objective, the City continues to ignore multiple sites already zoned for these very stated objectives (in 3 cases), and ignore opportunities for recognizing already existing adjacent mixed-use high-density development (in 1 case), all 4 sites of which are immediately adjacent to &/or surrounded by, already existing high-density uses and designations, and within the central core of the City.
Sites with at least 12 potential units of the critically required affordable housing types described above, which are required by the RHNA.

The City has opined that the above sites *"did not meet criteria due to being within the Coastal Zone".* Yet despite this, the City has in fact chosen to identify several sites within the Coastal Zone, <u>despite</u> *"not meeting the criteria"*. Furthermore, there is no lawful basis for such categorical exclusion of the Coastal Zone from Housing Sites Inventory.

The City further opined that these are within what the City called its *"Vulnerable Zone".* And yet despite this, the City has already expended very substantial funds to encourage the community development appeal & uses within one of these Zones (West Sharp Park), including performing many physical improvements to enhance its dynamism & vibrancy , and enlarging mixed-use opportunities within this district, as well as passing resolutions approving City-formulated plans to promote the continuation of this enhancement process.

Still further, the City has expended costly plans for its very own future municipal development within this very same "Coastal/Vulnerable Zone".

Even further, the City (despite its claimed exclusions due to "Coastal/Vulnerable Zone reasons") has within its newest (Aug 1, 2023) re-zoning plan, proposed multiple re-zonings within the very same "Coastal/Vulnerable Zone". (West Sharp Park & Rockaway Beach)

Thus, it is very challenging to view the above exclusions – which are at dramatic variance from City's own extensive prior actions & declarations of intent - as anything other than proclaiming one narrative to one Audience, and a completely opposing narrative to another Audience.

The 1 site (of the above 4) which does require re-zoning, is surrounded by existing high-density and mixed-use development, as well as existing zoning for high-density/mixed-use, and yet chose to keep the existing 6-unit apartment as a Single-Family zone.

We had described these material zoning inconsistencies to City staff prior to the adoption of the West Sharp Park Plan, with staff subsequently informing the Council in response to its query on this, that such corrections would be made during the forthcoming re-zoning.

Notwithstanding this prior assertion to the Council, the proposed re-zoning portrayed within this EIR does not fulfill this. Another site is entirely surrounded by an existing Mixed-Use district and located within Rockaway Beach, also an area which the City promotes such use and development, yet continues to exclude from its Housing Sites Inventory.

We therefore sincerely hope the City takes the present opportunity to correct its arbitrary "exclusions" of these sites from its Housing Sites Inventory (as well as perform the corrective re-zoning), and instead fulfill its long & amply-declared intentions to in-fact :

- Strengthen & further enhance the vibrancy of its downtown core
- Increase & underscore the importance of mixed-use opportunities
- Increase affordable missing-middle housing rental & ownership opportunities

These intentions can readily & simply be accomplished at these affordable Housing-Ready sites by carrying out the City's already declared intent within its proffered documents.

The APN #'s are listed below :

1.) 022-027-030
2.) 016-031-130
3.) 016-050-390
4.) 016-050-410

Thank you for your attention to this matter.
David Beaumont

August 8, 2023

Pacifica Housing Element
Response to Planning Commission Meeting June 19 and Scoping Meeting August 1, 2023

Dear Planning Commissioners and Planning Department

After watching the PCT video of the June 19 meeting and the Scoping Meeting of August 1, I want to commend you all for the thoughtful consideration you are showing with regard to the state imposed requirements for our city's housing element. Thank you for your preparation and attention to the public's concerns. We all know you cannot control the demands of the State, but I believe we should still push back and ask for exceptions to the imposed formulas.. Local needs and limitations are understood at our local level and should be controlled here. Following are a few push-backs:

1) The State's timeline for the prescribed "objective standards" is too short and the predetermined 10 year development timeline is too short. Our city's infrastructure is not prepared for the scale of population growth that has been dealt to us. We will be forced to correct traffic gridlock and slow-response emergency services locally *after* the properties are developed. We know that engaging with Caltrans for highway improvements requires years of planning and construction - well beyond 10 years. We also know that the coast is very poorly served by limited SamTrans bus routes and schedules. We do not have a centrally located hub or transit options, but need them to serve increased housing. Our water, sewage, police and firefighting capacity is already stretched. Will we need bigger schools? We need improvements, or plans, in place as the population grows. We should ask for exceptions or a timeline extension until such concerns are addressed.
2) It is patently absurd that traffic congestion and "level of service" is not part of an Environmental Impact Report, except as a complicated calculation of "Vehicle Miles Traveled". Traffic congestion is a major concern for each neighborhood, our whole city and also for our neighbors to the south. This concern is not about being inconvenienced during commute hours. More importantly, we must be prepared for eventual catastrophic emergencies. The scale of a wildfire, earthquake or tsunami is unimaginable, because we don't want to think about it. I believe it is imperative, for the purposes of housing plans, that there are mitigations for emergency impacts! Publicly addressing traffic impacts and concerns, as clearly as possible, outside the EIR, to all of Pacifica, should be a step taken by city, county and state representatives.
3) Pacifica has unique geographic limitations that could call for exceptions in the Housing Element. Where not bordered by the ocean, much of Pacifica is within an Urban Wildland Interface zone. Not only does that limit development sites, but it limits the availability and affordability of property insurance. Housing cannot be affordable if buyers can't get a mortgage because they can't get insurance. Can we ask for recognition, by the State, of this designation and a decrease in our housing requirements?

4) To reach the designated 1,892 housing units I understand that Pacifica's growth will mainly be multi-unit construction. I think many Pacificans are concerned about the scale of these projects. 1) We could begin to adjust the scale by counting the number of bedrooms as units. A family of five requires five habitation units. 2) We could allot sites for affordable multi-generational villages of small houses with shared community spaces that would be more cohesive with the nature of our existing neighborhoods. 3) With an extension of the building timeline, we can gradually adjust to the growth and changes in our community.

With a stretch of the imagination, I have wondered about a coalition of small, geographically-limited cities developing a kind of "cap and trade" system of off-setting the State imposed housing requirements. As an example, South San Francisco clearly has space, transportation and commercial establishments to support large-scale development for affordable housing. Could we compensate them to assume some of our share? They would get a tax base and we would offer our recreational open-space for future generations.

We are often encouraged to think that government begins at the local level. I encourage you, as city planners and commissioners, to make a statement to the State about the unique limitations we face for fulfilling imposed quotas and timelines.

Thank you for taking time to read the opinions and ideas of a concerned citizen.

Elaine McKeen
293 Hillside Drive
Pacifica, CA 94044
emckeen@sbcglobal.net

Housing Element and ReZoning EIR Pacifica
August 9, 2023

To : City of Pacifica
Re: Designation of Housing Sites, and Re-Zoning to enable housing opportunities for missing-middle-income families

I wish to express my support for increasing housing opportunities for all income levels within the City of Pacifica, and in particular the "missing middle" category of housing. The cohesive strength of a small community like Pacifica is greatly enhanced when all community-members are able to continue to afford to remain present and vested participants within it, especially within its core neighborhood.

As a young multi-racial woman who is just starting her family and is seeking to create a modest family home on the very type of site contemplated by this Element, I am disappointed that the proposed re-zoning – which declares that it seeks to promote and accommodate this necessary affordable category - does not do so within the West Sharp Park neighborhood, where my future home is located.

Pacifica is so strongly centered around its Ocean/Coastal setting, and thus excluding the Coastal Zone from re-zoning to enable such critically necessary and desirable housing within it, is an exclusionary practice.

Please reconsider this exclusionary practice, and include the Coastal Zone in both the housing inventory sites, as well as necessary re-zoning to accomplish the City's declared housing affordability and accommodation goals.

Thank you for your consideration,

Elizabeth Carey

016-050-410

From: Helena Pacholuk
To: Harkousha, Brianne
Subject: feedback on EIR
Date: Wednesday, August 9, 2023 7:05:05 PM

Why Oceana High School should be removed from list of potential housing sites:

Additional Traffic

There are 3 schools in close proximity to each other here, resulting in morning and afternoon congestion in Sharp Park/Pacific Manor. Traffic on Paloma Ave. and Oceana Blvd. near the high school is particularly busy on a daily basis, and will probably be worse now that the Paloma Ave. bridge has been reduced to one lane only on each side. If housing were to be built on the Oceana HS site, traffic in the Sharp Park neighborhood could worsen considerably. The plan to revitalize and increase business on Palmetto Ave. would likely be negatively impacted by this increased traffic; visitors might see how difficult it is to get in and out of Sharp Park and take their shopping/service needs elsewhere.

Impact on Wildlife and Environmental Impact

The Mission Blue butterfly is an endangered species known to live in the area directly above the Oceana campus. A larger population of residents in the immediate area of the campus would create more frequent disturbance of the butterfly's habitat. Since Covid-19, far more visitors frequent the Milagra Ridge hillside both on trail and off; dogs in particular are often seen off trail. This would exponentially increase if hundreds of new residents and their pets are housed on the Oceana HS land, thereby making the butterfly habitat and population even more vulnerable. Other wildlife would likewise be driven away with the increasing foot traffic that would occur on this hillside.

Impact on Event Pkg (Soccer Games/Swim Meets)/student parking

The current student lot is used on a daily basis. Where would students park if housing were constructed here? Housing would take up considerable space and create a need for additional parking for its residents and visitors. There isn't room for both uses. The faculty/staff/visitors parking lot is already in full use between those populations, and sports activities that utilize the nearby fields and campus buildings (swimming, basketball, soccer) fill all lots and street parking on Paloma Ave. as it is. There isn't room in the staff lot for students to park here during the day, not to mention that if there were, staff and faculty would lose privacy/their cars could become targets of student vandalism.

Housing should not be on school campus

This is a potential safety issue for students and staff. A school should be an insular, safe place with a buffer from residences and businesses to protect the school from potential criminal activity. Schools need that buffer to be aware of potential trespassers and school administrators to see who is supposed to be there and who is not. If housing is constructed on the Oceana HS site, it would by necessity be so close to school buildings that monitoring who is supposed to be on campus and who is not would be exceedingly difficult.

From: Harkousha, Brianne <BHarkousha@pacifica.gov>
Sent: Tuesday, August 8, 2023 4:00 PM
To: Alison Moore; Clare Kucera
Cc: Murdock, Christian
Subject: Public Comment HE EIR

Please see public comment for HE EIR below.

Brianne Harkousha (she/her), AICP | Senior Planner
City of Pacifica
540 Crespi Dr., Pacifica, CA 94044
Direct: 650-738-7443 | Planning: (650) 738-7341
bharkousha@pacifica.gov

From: Irene <davies.irene@gmail.com>
Sent: Monday, August 7, 2023 9:36 PM
To: Housing <Housing@pacifica.gov>
Cc: Harkousha, Brianne <BHarkousha@pacifica.gov>; Christine Boles <christineforpacifica@gmail.com>; Murdock, Christian <cmurdock@pacifica.gov>
Subject: Comments to Pacifica Housing Element (6th Cycle)

[CAUTION: External Email]

Hi,

Do we really need the required housing per the Regional Housing Needs Allocation (RHNA)? Maybe we don't need as many as required.

Table 1 -rezoning suggestions:
Site 20, Public Works Corp Yard - How about converting this into high rise/high density housing with retail spaces below. It is on the public transportation route.

Sites 25 and 26, Caltrans ROW - These could be potential high density housing with retail spaces below if Caltrans allows.

Sites 27, 28, and 29, Shopping Center - These would require permission of the shopping owners to redevelop the shopping centers into mixed use, with housing on the upper levels and regular shops at the ground levels. Will still need to have parking spots for customers, or a parking garage at the site.

Sites 30 and 31 - Could rezone to Mixed use high density residential/commercial.

Sites 32, 33, 34, 35, and 36- These are on the transportation route, so it would be beneficial to rezone to high density residential/commercial.

Sites A, B, and H - These are on the transportation route, so it would be beneficial to rezone to high density residential/commercial.

_____

What about changing the residential zoning to allow for multiplexes as long as there is a buffer set back of at least 3 to 5 feet from the adjacent houses. And increase the height limit to 3 stories height.

Do we have shelters for the unhouse in Pacifica? Does this EIR address homeless shelters and a place for the unhouse vehicles to park safely without the Pacifica homeowners having to deal with the trash from the unhouse vehicles or homeless camps along San Pedro Creek by the Linda Mar Shopping Center?

If possible, any site that is on a public transportation route would be a candidate for Mixed use high density residential/commercial.

Thanks for the chance to comment on this important issue and Good Luck.

Irene Lee

City of Pacifica, California
Housing Element Targeted General Plan Amendments and Rezoning Program

Date: 8/8/2023

To: Pacifica Planning Department c/o Brianne Harkousha

From: John Mikulin – Pacifica Property Owner

Subject: Programmatic Environmental Impact Report Comments

As the City of Pacifica evaluates property rezoning and redevelopment options to accommodate additional residences, I encourage the Planning Department to consider how each program alternative will impact mobile source criteria pollutant, air toxic, and greenhouse gas (GHG) emissions within the city. While the following measures focus on mobile source emissions mitigation strategies and technologies, a more fundamental concern is how additional residences and the mobile sources engendered by them will impact local air quality, road congestion, and the city's GHG inventory. Inevitably, adding residences will increase human exposure to mobile source emissions within neighborhoods and citywide. This is real concern for public health within Pacifica, and for the city's contribution to anthropogenic climate change and its locally relevant impacts (e.g., sea level rise).

I appreciate your consideration of these comments, and I hope that you find this input useful.

Mobile Source Emissions Mitigation in Pacifica

- Minimize on-highway vehicle trips, nonroad operational hours and related emissions within the city.
    - Reduce the number of commuter vehicles travelling to and from project sites.
        - Include carpooling and/or transit subsidies for relevant employees.
    - Plan construction scheduling to minimize vehicle trips and/or nonroad operational hours.
    - Prohibit projects that will significantly increase indirect source emissions within the city.
        - An indirect source is a facility, building, structure, or installation which attracts or may attract mobile source activity that results in additional localized emissions.
- Minimize unnecessary idling of on-highway vehicles and nonroad equipment during construction and operation of homes and businesses within the city.
    - https://ww2.arb.ca.gov/capp-resource-center/heavy-duty-diesel-vehicle-idling-information
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations for vehicles and equipment used for project construction and operation.
    - https://www.epa.gov/enforcement/epa-tampering-policy-epa-enforcement-policy-vehicle-and-engine-tampering-and

- Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- Lease new, cleaner equipment using the best available emissions control technologies that meets the most stringent of applicable federal or state standards.

Deploy Best Available Control Technology (BACT) - Require BACT during construction and operation of projects, employing the cleanest alternatives available, including but not limited to:

a) Soliciting bids that include use of energy and fuel-efficient fleets;
b) Soliciting preference construction bids that use BACT, particularly those seeking to deploy zero-emission technologies (i.e., electricity and/or hydrogen);
c) Using lighting systems that are energy efficient, such as LED technology;
d) Using the minimum feasible amount of greenhouse gas (GHG)-emitting construction materials that is feasible;
e) Use of cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production;
f) Use of lighter-colored pavement where feasible;
g) Recycling construction debris to maximum extent feasible; and
h) Planting shade trees in or near construction projects where feasible.

Electric Power during Construction - Projects should ensure to the extent possible that construction activities utilize grid-based electricity, onsite renewable electricity generation and/or hydrogen versus other, higher emitting sources of energy.

Definition of "clean truck" – Recommend defining the term "clean truck" in relation to applicable federal or state emissions standards. One option for defining this technology would be products certified to meet the US EPA GHG emissions standards for model year 2021 and newer heavy-duty on-highway vehicles. Another option would be to define it as products certified to meet the CARB optional low NOx emission standards for heavy-duty engines.
https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-phase-2-greenhouse-gas-emissions-standards
https://ww2.arb.ca.gov/our-work/programs/optional-reduced-nox-standards

Voluntary Accelerated Vehicle Retirement (VAVR) - Given the significant contribution of vehicle emissions to the poor air quality conditions throughout the nation, vehicle owners should be strongly encouraged to retire legacy light and heavy-duty vehicles and replace them with technologies that meet or exceed current emissions standards. Suggest the following mitigation measure:
Implement programs to encourage the voluntary removal from use and the marketplace of legacy on-highway vehicles including scrappage incentives for pre-2017 light-duty vehicles and pre-2021 heavy-duty vehicles.
https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-control-air-pollution-motor-vehicles-tier-3
https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-phase-2-greenhouse-gas-emissions-standards

Deploy Low and Zero Emission Technologies for Project Construction and Operation

On-Highway Vehicles - On-highway vehicles servicing project sites should meet or exceed the US EPA exhaust emissions standards for model year 2017 and newer light-duty vehicles and model year 2021 and newer heavy-duty vehicles.
https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-control-air-pollution-motor-vehicles-tier-3
https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-phase-2-greenhouse-gas-emissions-standards

Nonroad Vehicles and Equipment - Nonroad vehicles and equipment servicing infrastructure sites should meet or exceed the US EPA Tier 4 exhaust emissions standards for heavy-duty nonroad compression-ignition engines (e.g., construction equipment, nonroad trucks, cargo handlers, etc.).
https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100OA05.pdf

Locomotives - Locomotives servicing project sites should meet or exceed the US EPA Tier 4 exhaust emissions standards for line-haul and switch locomotive engines.
https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100OA09.pdf

Marine Vessels – Marine vessels servicing project sites should meet or exceed the latest US EPA exhaust emissions standards for marine compression-ignition engines (i.e., Tier 4 for Category 1 and 2 vessels, and Tier 3 for Category 3 vessels).
https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100OA0B.pdf

Low Emission Equipment Exemptions – The equipment specifications outlined above should be met unless a piece of specialized equipment is not available for purchase or lease within California.

Advanced Technology Demonstration and Deployment - Project proponents should be encouraged to demonstrate and/or deploy mobile source technologies that exceed the latest US EPA emissions performance standards for the equipment categories that are relevant for a given project (e.g., plug-in hybrid-electric vehicles-PHEVs, battery-electric vehicles-BEVs, fuel cell electric vehicles-FCEVs, advanced powertrain nonroad equipment, locomotives and marine vessels, etc.).
https://www.fueleconomy.gov/feg/evsbs.shtml
https://www.fueleconomy.gov/feg/fcv_sbs.shtml
https://globaldrivetozero.org/tools/zero-emission-technology-inventory/

Submitted via email on 8/8/2023 by:
John Mikulin
Owner, 376 Monterey Road - Pacifica, California 94044
jmikulin@hotmail.com

Cc via email:
Christine Boles
District 2 Councilmember, City of Pacifica
ChristineforPacifica@gmail.com

BRIANNE HARKOUSHA

City Planning - CHRISTIAN MURDOCK
MAYOR Bigstyck

THIS IS CONCEANING THE HOUSING DEVELOPEMENT AT OCEANA HIGH SCHOOL ON PALOMA AVE.

PLEASE TAKE THE TIME to LOOK AT ALL THESE PHOTOS. ONES WITH PURPLE X IS JUST A TYPICAL LATE AFTERNOON/ EARLY EVENING. THE OTHERS ARE A TYPICAL WEEKEND.

1. PARKING ON PALOMA IS ALSO NEEDED BY THE HOMES ON CARMEL - LOMA VISTA - PICO - VALLEJO + MORE DUE to VERY SMALL STREETS WITH NO SIDEWALKS

2. WE LIVED THROUGH THE ~~CONST~~ CONSTRUCTION of the FIELD AT OCEANA FOR TWO YEARS. WE HAD NO REGULAR SLEEP FOR THOSE TWO YEARS DUE to TRUCKS AT ALL HOURS. IT WAS HELL.

3. ONE MEETING IT WAS SAID " PEOPLE WHO GREW UP HERE SHOULD BE ABLE to STAY HERE. YOU ARE FORCING US OUT BY the CONSTRUCTION ALONE AND

I'VE BEEN HERE FOR 55 YEARS, MY FAMILY. MEMBERS of MY FAMILY HAVE WORKED AND HAD BUSINESS BEFORE PACIFICA BECAME PACIFICA. YOU ARE FORCING OUR YOUNG + OLD OUT!

4. THERE IS ONE MAIN ROAD INTO NORTH-EAST SHARP PARK THAT IS PALOMA

5. WE HAVE YELLOW TAIL HAWKS, HERON, MOUNTAIN LION, COYOTES, BUCKS + DOES, ONLY to MENTION A FEW of OUR WILD LIFE WHO LOVE THOSE GOPHERS on THOSE FIELDS

6. PLEASE COME OUT HERE ON MONDAY-WED AND WEEKENDS to SEE FOR YOURSELF THE CONJESTION OF CARS. 4:30 - 6:00 WOULD BE A GOOD TIME HAS NOTHING to DO WITH OCEAN SCHOOL SCHEDULE

7. ARE YOU going to get RID of PARKS BEACH + RECREATION / SOCCER, SWIMMING MEETS, ECT.?

8. THANK YOU for YOUR TIME. MAYOR →

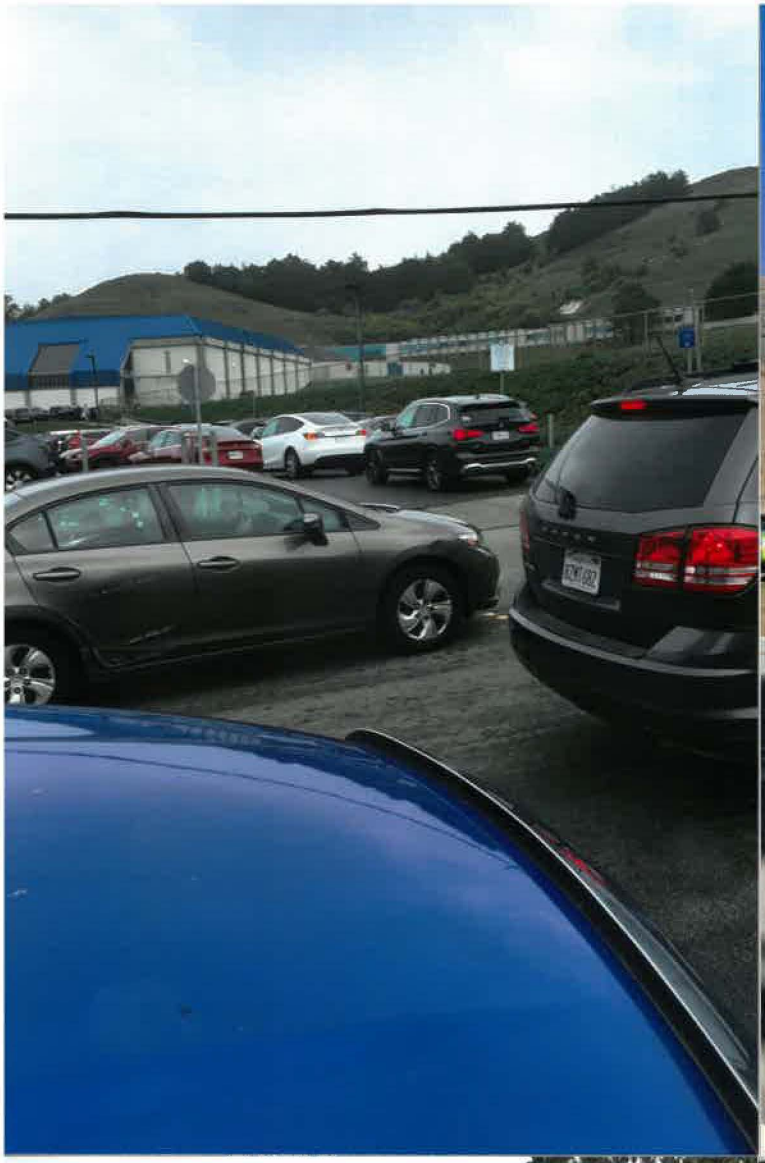
Bigstyck said
" Pacifica, it's up to you to DECIDE if YOUR QUALITY of LIFE IS WORTH the PRICE trg. I would gladly pay for improvement. This is not that THIS IS MESSING with OUR QUALITY of LIFE !!

THANK YOU,

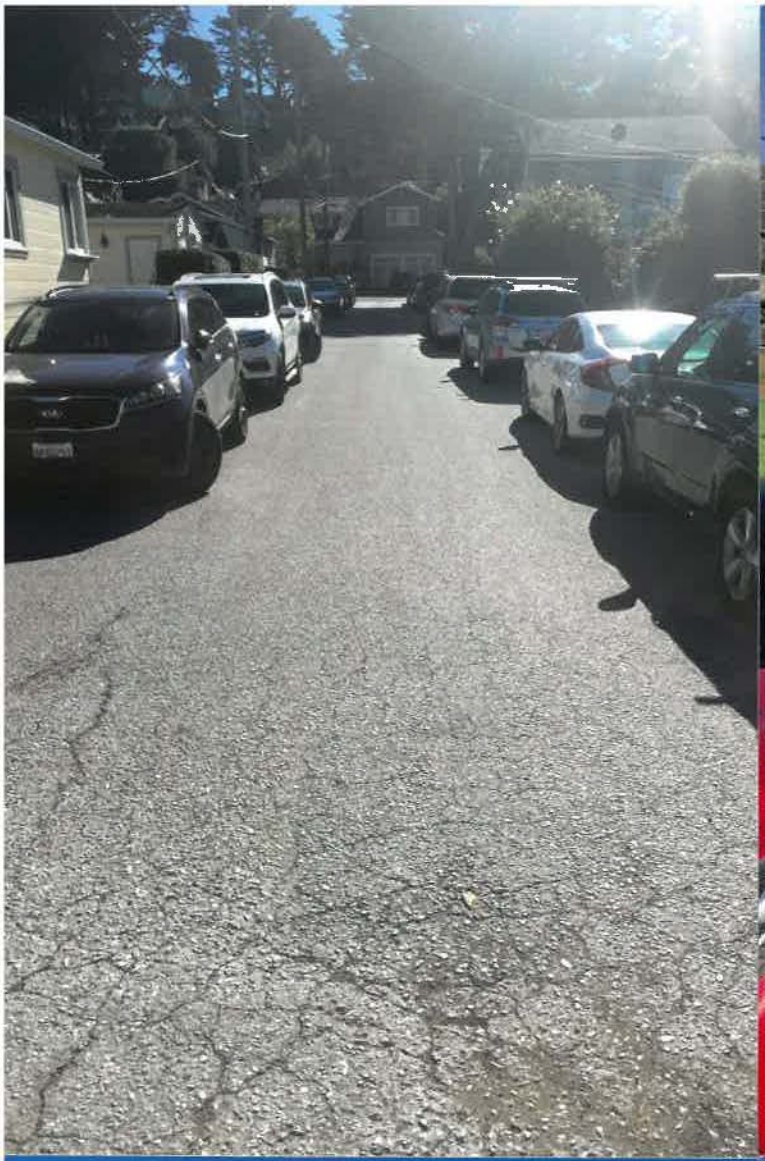
JOYCE TOOMEY
STEVE FRANCO

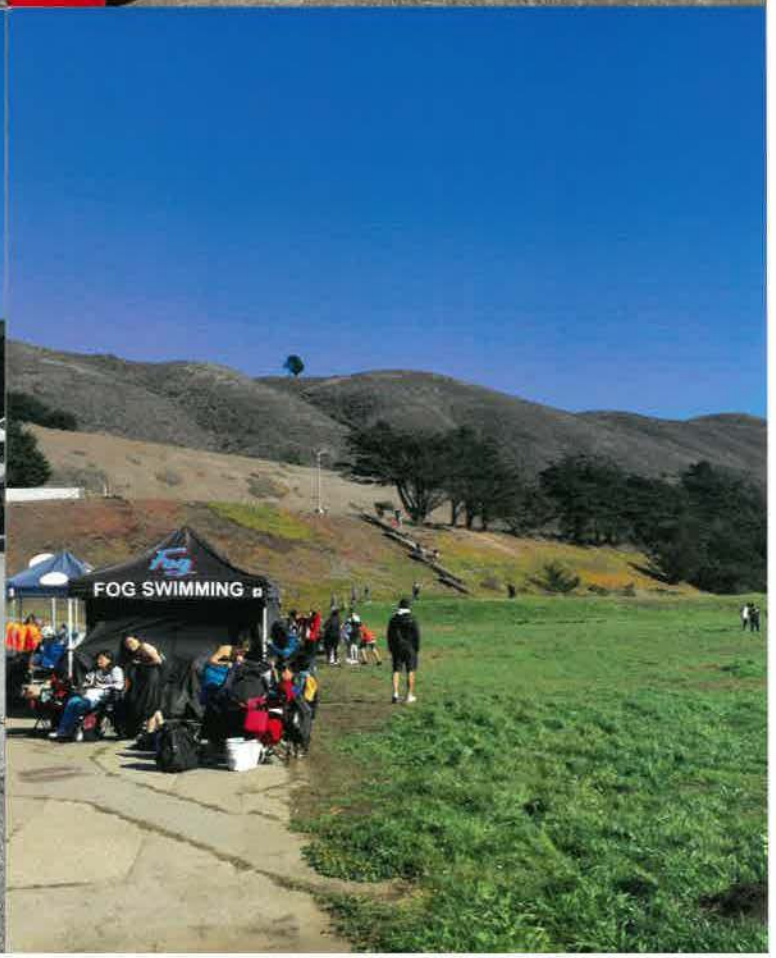
ANY other QUESTIONS - please call
(650) 355-3031

HOPE YOU CAN READ MY WRITING
I'M OBVIOUSLY OLD ~~SCHOOL~~ SCHOOL.

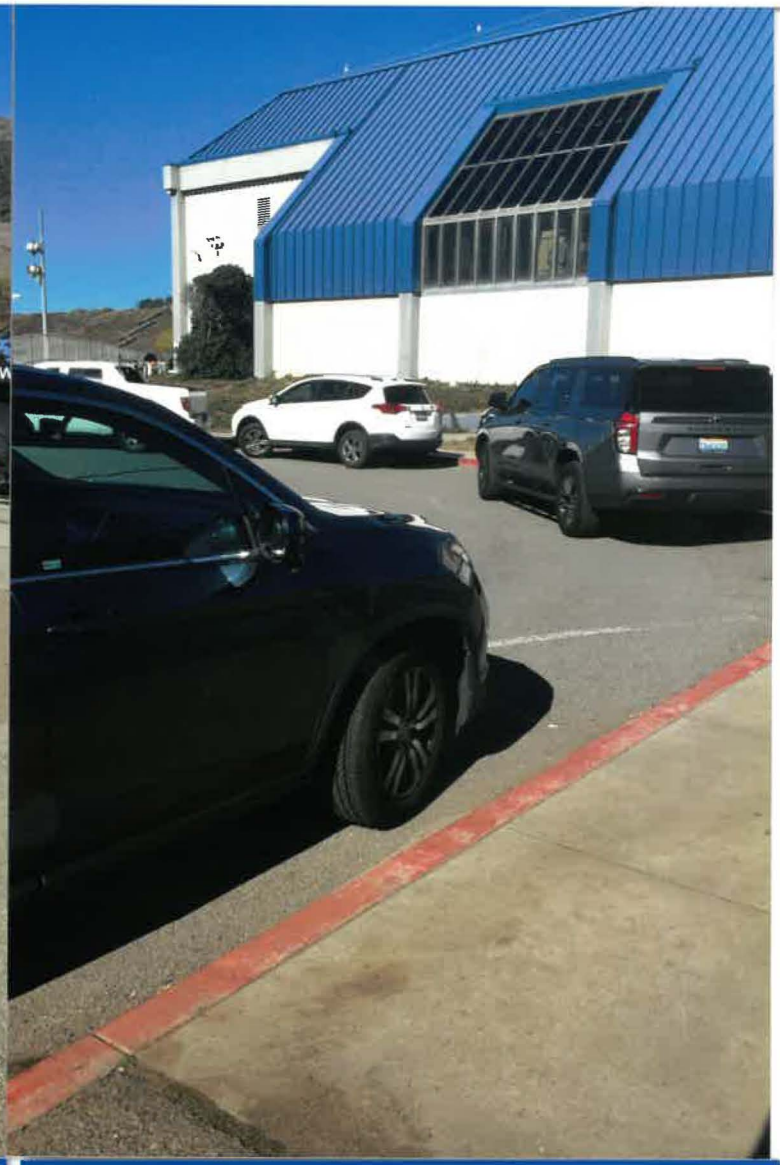


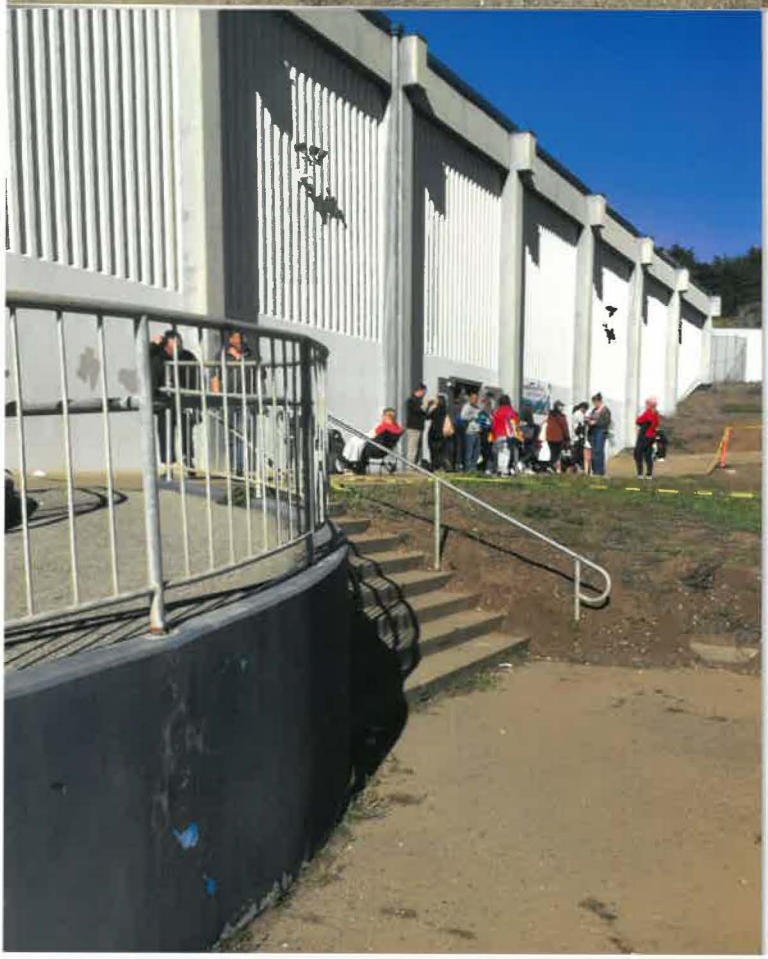

Oceana High School

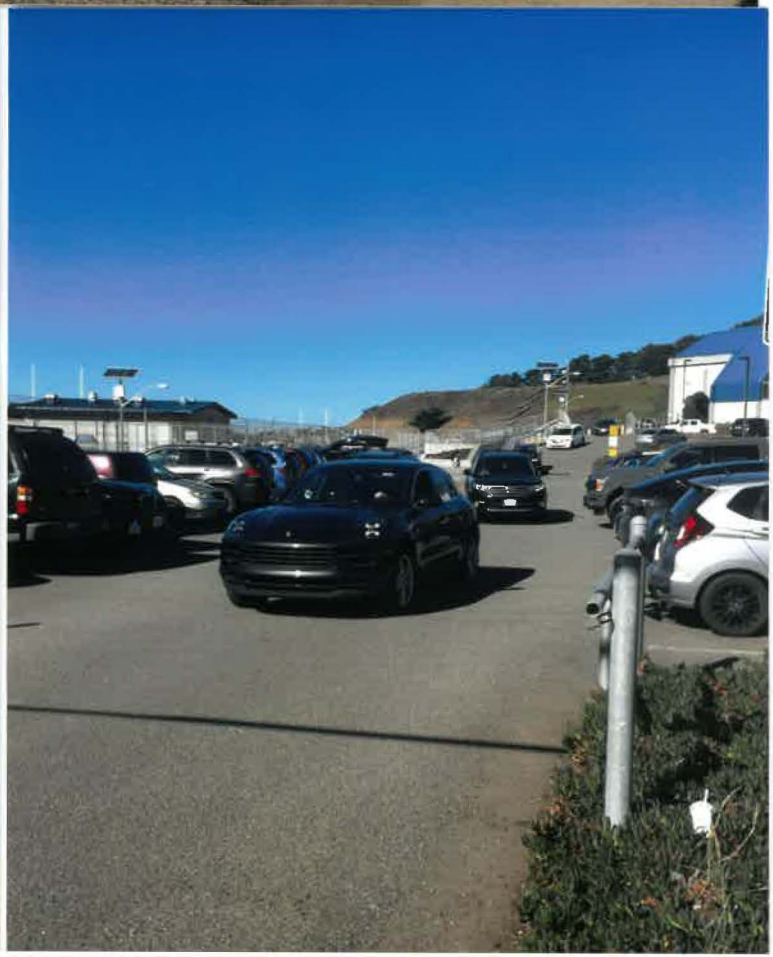


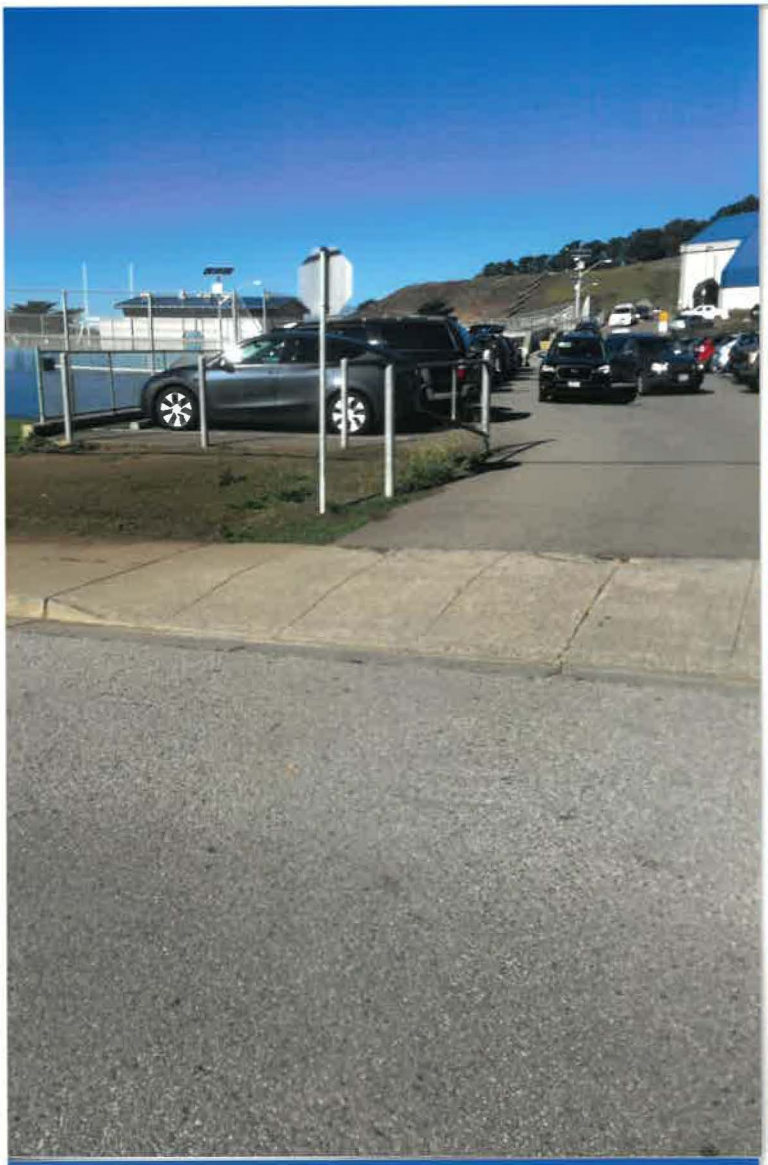

FOG SWIMMING

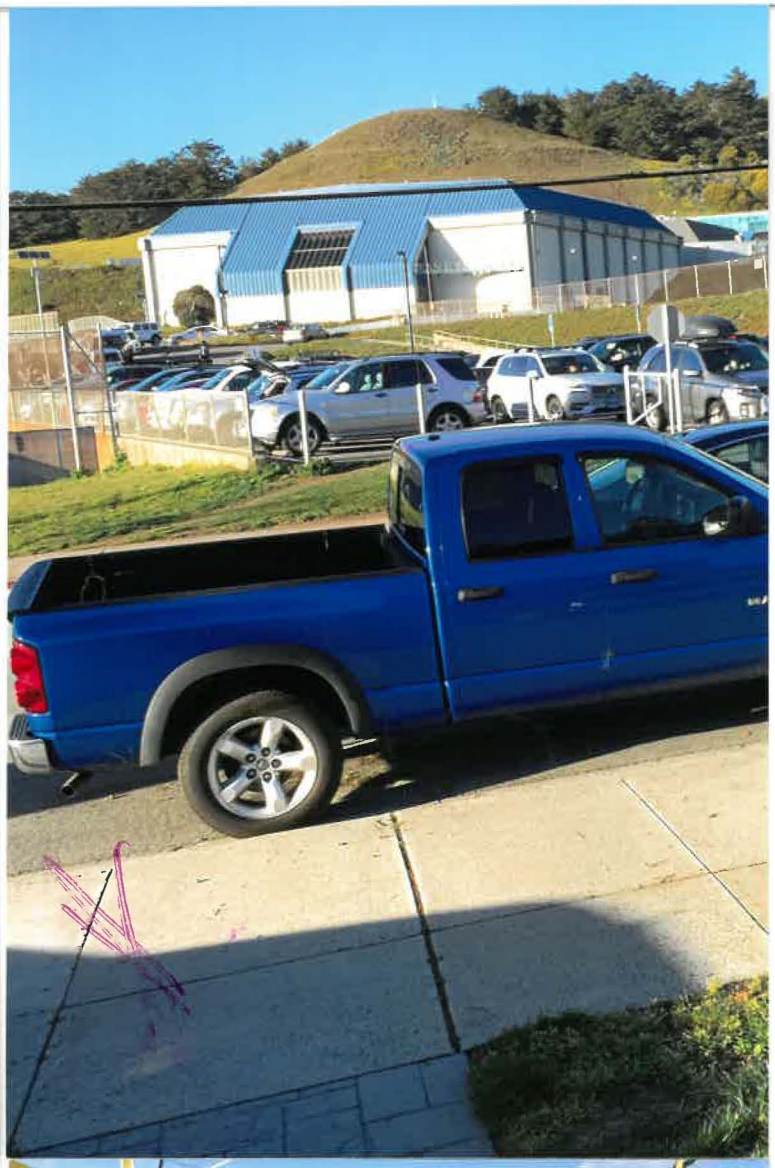

FOG SW

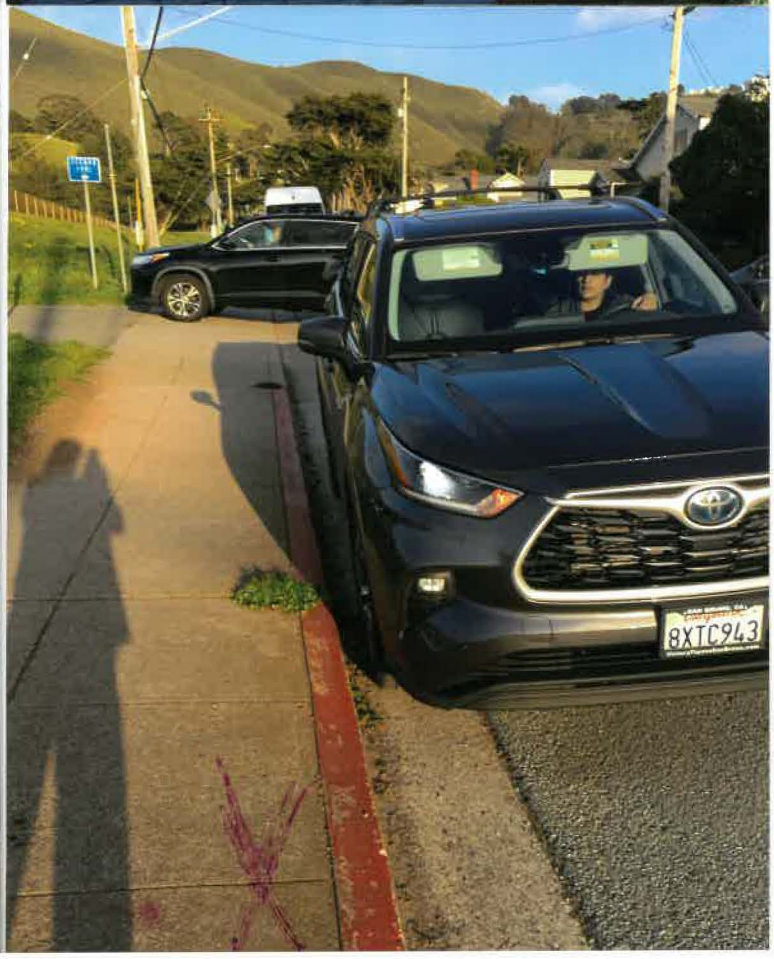











8XTC943

Gmail

Alison Moore <alison@dyettandbhatia.com>

FW: Environmental concerns about the potential housing development at Oceania High School

2 messages

Harkousha, Brianne <BHarkousha@pacifica.gov> Wed, Jul 26, 2023 at 5:00 PM
To: Alison Moore <alison@dyettandbhatia.com>

Hi Alison,

Please see public comment for NOP below.

Thanks,

Brianne Harkousha (she/her), AICP | Senior Planner
City of Pacifica
540 Crespi Dr., Pacifica, CA 94044
Direct: 650-738-7443 | Planning: (650) 738-7341
bharkousha@pacifica.gov

-----Original Message-----
From: K King <kljgk3@yahoo.com>
Sent: Wednesday, July 26, 2023 10:36 AM
To: Harkousha, Brianne <BHarkousha@pacifica.gov>
Subject: Environmental concerns about the potential housing development at Oceania High School

[CAUTION: External Email]

Hi Brianna,

Many of my neighbors who live near Oceana High School have expressed a list of environmental concerns about the potential housing development there. I will not repeat the list here, but please add my voice to their objections to the development of this site.

Sincerely,

Kathleen King
239 Carmel Ave
Pacifica
kljgk3@yahoo.com

Sent from my iPad

Alison Moore <alison@dyettandbhatia.com> Wed, Jul 26, 2023 at 5:06 PM
To: "Harkousha, Brianne" <BHarkousha@pacifica.gov>

Thanks, Brianne, received.
[Quoted text hidden]
--
Alison Moore
Associate Principal
415.956.4300

Cell: 713.818.4815

DYETT & BHATIA
Urban and Regional Planners
4001 Howe Street
Oakland, CA 94611

dyettandbhatia.com

From: Kevin Pacholuk
To: Harkousha, Brianne
Subject: Potential Low Income Housing Development at Oceana High School
Date: Wednesday, August 9, 2023 7:30:38 PM

[CAUTION: External Email]

Anyone with half a brain knows Pacifica doesn't need more ghetto neighborhoods, let alone any new housing. The plan is to build low income houses in the high school parking lots, and the last thing a school needs is a bunch of scumbag crackheads dealing drugs to teenagers. A few other by-products of this development plan would include increased crime in the Sharp Park area, a mob of hikers on Milagra Ridge every day, dropping their trash everywhere, and a mile-long traffic backup on Paloma Avenue. Pacifica is a small town. If you want a ghetto concrete jungle, it's called San Francisco.

From: Harkousha, Brianne <BHarkousha@pacifica.gov>
Sent: Wednesday, August 9, 2023 12:30 PM
To: Clare Kucera
Cc: Alison Moore; Murdock, Christian
Subject: Public Comment HE EIR

Hi Clare,

Please see public comment for HE EIR.

Thanks,

Brianne Harkousha (she/her), AICP | Senior Planner
City of Pacifica
540 Crespi Dr., Pacifica, CA 94044
Direct: 650-738-7443 | Planning: (650) 738-7341
bharkousha@pacifica.gov

From: kirk@kirkmiller.net <kirk@kirkmiller.net>
Sent: Wednesday, August 9, 2023 12:09 PM
To: Harkousha, Brianne <BHarkousha@pacifica.gov>
Subject: Draft EIR for Housing Element Rezonng

[CAUTION: External Email]

Dear Ms. Harkousha,

This letter is submitted on behalf of my client, Rockaway Highlands LLC (Rockaway). It is with regards Pacifica's request for comments on the programmatic EIR for the Housing Element Targeted General Plan amendments and Rezoning Program (Proposed Project).

Rockaway is the owner of 3 vacant parcels of land (APNs 018-140-220 {220}, 018-140-660 {660}, 018-140-300 {300}). The land is located north-east of the Lutheran Church at 4400 Cabrillo Highway (Highway One), which is between Fassler and Reina del Mar.

On December 16, 2022 we submitted a request to the Planning Department for these parcels to be included in the Pacifica Housing Element as housing opportunity sites. The request included exhibits supporting why all three parcels are opportunity sites.

The parcels we not included in the February 24, 2023 draft of the Housing Element.

On March 21, 2023 we resubmitted the request, with supporting documents, to you all. Also, on that same evening (March 21) I attended the Joint City Council and Planning Commission public hearing on the Housing Element.

During the public comment portion of the hearing, I presented our housing opportunity request to the Council and the Commission. Hard copies of the request were distributed by staff to the Councilors and Commissioners.

As a result of our outreach APNs 660 (1.25 acres) and 300 (.05 acres) were included in in the May 10, 2023 State Review Draft of the housing Element. Both of these parcels are zoned C-1.

We thank you for putting these two opportunity sites in the Housing Element.

Unfortunately, APN 220 (1.45 acres) was not included in the draft. It is currently zoned R-1.

The supporting documents for including 220 in the Housing Element demonstrated that a rezoning to a higher density would add a significant number on housing units to Pacifica's RHNA requirements.

As a result of 220 not being in the Housing Element we now need to independently submit a General Plan amendment and rezoning request. We have begun that process.

Not being in the Housing Element means that 220 will not be part of the programmatic EIR for General Plan and Rezoning that you are about to undertake.

Our concern is that by 220 not being in the housing element, we may be forced to take extra individual steps to get the General Plan amendment and Rezoning accomplished.

We therefore request, again, that APN 018-140-220 be included in the Housing Element as an opportunity site…and that it be slated for rezoning.

Hopefully you will have the opportunity to include 220 when you again review the Housing Element as a result of HCD feedback.

Sincerely yours,

L. Kirk Miller CDS, FAIA emeritus
Development Strategist
Telephone 415-505-0106
The Process Determines the Product

Gmail

Alison Moore <alison@dyettandbhatia.com>

FW: addendum to concerned citizen re: housing project at Oceana High School

1 message

Harkousha, Brianne <BHarkousha@pacifica.gov> Tue, Aug 8, 2023 at 12:00 PM
To: Alison Moore <alison@dyettandbhatia.com>

Hi Alison,

Please see revisions to the public commenters email.

Thanks,

Brianne Harkousha (she/her), AICP | Senior Planner

City of Pacifica

540 Crespi Dr., Pacifica, CA 94044

Direct: 650-738-7443 | Planning: (650) 738-7341

bharkousha@pacifica.gov

From: Lara Garner <laragarner15@gmail.com>
Sent: Tuesday, August 8, 2023 11:31 AM
To: Harkousha, Brianne <BHarkousha@pacifica.gov>
Subject: Re: addendum to concerned citizen re: housing project at Oceana High School

[CAUTION: External Email]

Addendum to my last email.

Dear Ms Harkousha,

I neglected to mention that Milagra Ridge is a protected habitat for Mission Blue butterflies and Red-Tailed hawks. This huge construction project may erode their habitat. If so, there may be litigation from environmental groups. Thank you. Please add that to my grave concerns about this project.

Best, Lara Garner

On Tue, Aug 8, 2023, 10:31 AM Lara Garner <laragarner15@gmail.com> wrote:

Lara Garner

635 Loma Vista Terrace

Pacifica, Ca 94044

Re: Housing project proposal at Ocean High School

Dear Ms. Harkoushka,

I am a resident of the East Sharp Park neighborhood and want to voice my concerns about your proposed low-income housing project at Oceana School. Environmentally, there is already a shortage of open space here as it is as the neighborhood is getting more and more crowded. People have built on smaller and smaller lots in this area, removing the space between houses. Locals look to this field as a place of respite for walking their dogs and socializing in a peaceful green space. Children play on the field.

Besides being too much construction for this small space, I think this is a very bad idea for this neighborhood, which houses a preschool and a highschool. Young children are always walking to and from school and passing this area where you propose to put low-income housing. It is also a popular area for residents walking their dogs. Oceana high school students use this field for running. I see them every day in their red gym clothes running down Paloma Blvd. There has also been a presence at the high school every afternoon when school lets out to prevent drug sales. A gentleman sits on the corner every day at 3pm, watching out for traffic and also I assume watching to prevent drug dealers from approaching the children. This I assume has been an effective deterrent to crime.

Because of the heavy environmental impact of this project ultimately negatively affecting the quality of life in this neighborhood, as well as the liability of the city if more crime and drug sales occur near a high school and a preschool, I am adamantly opposed to this project. My concerns are echoed by all the local residents I have spoken with. This is a neighborhood where parents let their young children walk alone to go to a friend's house. That will not be the case if you implement this project. The preschool may have to relocate if the parents do not feel their 4-5 year olds are safe. My children went to this preschool. In fact, we helped build the playground years ago and my children's hand prints are in tiles on the wall. Your proposal will forever change this neighborhood for the worse.

Thank you for taking the time to register my concerns about this project. Lara Garner

Gmail

Alison Moore <alison@dyettandbhatia.com>

FW: Request for Comments - NoP Pacifica Housing Element Rezoning

1 message

Harkousha, Brianne <BHarkousha@pacifica.gov> Mon, Jul 24, 2023 at 8:30 AM
To: Alison Moore <alison@dyettandbhatia.com>

Hi Alison,

Please see public comment received for NOP. Sorry, I'm still not able to save this in the one drive link you provided. IT is still working on the issue.

Thanks!

Brianne Harkousha (she/her), AICP | Senior Planner

City of Pacifica

540 Crespi Dr., Pacifica, CA 94044

Direct: 650-738-7443 | Planning: (650) 738-7341

bharkousha@pacifica.gov

From: Lori Chelemedos <lrchelemedos@gmail.com>
Sent: Sunday, July 23, 2023 4:09 PM
To: Harkousha, Brianne <BHarkousha@pacifica.gov>
Cc: _City Council <citycouncil@ci.pacifica.ca.us>
Subject: Request for Comments - NoP Pacifica Housing Element Rezoning

[CAUTION: External Email]

Dear City of Pacifica Planning Department,

Thank you for sending the Request of Comments email regarding the Program Environmental Impact Report related to the Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments and Rezoning Program. As I will be unable to attend the August 1st meeting due to a family medical procedure on that day, I wanted to provide my initial thoughts via email.

Let me start by saying that I am not a great fan of the state mandates to increase low cost housing simply because it is forcing a change to neighborhoods that many (including myself) invested in simply because we thought that we would

enjoy the ambiance and attributes that were present when we purchased our homes. It is literally pushing out homeowners to alternative communities and states to retain the quality of life we paid for leaving the current mess that is the Bay Area (where I have lived my entire life) and much of the state. It reeks of the scene in Dr. Zhivago where the proletarians took over the Zhivago home "because it was fair". But, unfortunately, that is part of the sad state of thinking in Sacramento...

With that out of the way, the only way I can see this being both practical and feasible with minimal impact to the environment is to use infill which is what this plan is trying to do. I live in the BOV and I am aware of the proposed growth on Fassler (not represented in this plan), as well as the teacher housing proposed just down the street from me (which is listed in the plan) and now looking at the overall plan it has a few flaws.

More specifically, the plan to date does not recognize that there are two practical routes to get out of the BOV to the highway which are Linda Mar Blvd. and Everglades/Terra Nova/Fassler. These two routes are one lane residential streets until a driver gets within approximately a half mile or so of Hwy. 1. This plan (in Table 1) proposes rezoning seven different parcels (numbered 22, 23, 24, 29, 35, 36, and F) accounting for 728 units (e.g., in the proposed density column) that would impact both routes. Assuming each unit would have one to two cars, that would be an extra 728 - 1454 cars that may travel those routes.

At the same time, Page 10, paragraph 1 states, "There is reasonable potential that the Proposed Project would result in less-than-significant effects related to ...Hazards and Hazardous Materials" with the rationale in paragraph 4 that "the construction and operation of housing generally does not involve the release -- accidental or otherwise -- of hazardous materials...". But what about the traffic congestion (for emergencies and non-emergencies) and emissions that it would cause? Why would the Planning Department signal that hazards are improbable prior to a full study?

With that, and understanding that infill is the least impactful route, my thought is that there are more commercial areas that have better transportation routes that would be better to leverage. Doing so would continue the revitalization of the Palmetto downtown area and consolidate the population where the city initially intended it to be. The BOV is simply not built for the alternative.

Thank you for your consideration.

Best Regards,

Lori Chelemedos

From: Martin P
To: Harkousha, Brianne
Subject: Oceana High School proposed development - concerns
Date: Wednesday, August 9, 2023 7:32:25 PM

[CAUTION: External Email]

Dear Brianne,

As a resident at the East end of Loma Vista terrace, I"m concerned what adding 130+ units on the current Oceana High grounds will do to egress in the case of wildfire or other natural disaster. Paloma ave is the main, and really the only exit from what is essentially a box canyon.

SIncerely,
Martin Pacholuk

rea. make such landings. the owner to be standing at (Continued on Page 2) (Continued on Page 8)

Pacifica's Past Unveiled—Almost

Faint traces of Pacifica's past—when the red man was king on this continent—were uncovered this week during a further probe into the bones and relics recently discovered by freeway workers near Vallemar.

At least six and as many as 50 bodies have been buried in an area 100 feet in diameter on the ocean side of Coast Highway near Vallemar, a paleontologist from the University of California in Berkeley, said.

After studying the area, Zenon Pohorecky, a former instructor at UC who is currently working on his doctorate thesis on the South Coast ranges, estimated that several hundred years ago Costanoan tribesmen made the area their home base.

"It's an ideal location for a home base," Pohorecky said. He explained that nearby shells, points and a creek made the spot particularly well suited for easy access to water and food.

The Costanoan, also known as Olhonean Indians, were coastal dwellers whose settlements stretched in historic times from northern Monterey to the San Francisco area, Pohorecky said.

His estimate of the number of bodies buried in the area was based on the size of the shell midden and ash lense

(Continued on Page 7)

THE ARROWS IN the picture indicate the layers of shell and ash that were found on the side of the recently excavated ditch near Vallemar. The layers are clear indications that Indians used the area as a camping and burial ground several hundred years ago for an extended length of time —perhaps as much as one hundred years. Sitting on the edge of the ditch are four Pacifica youngsters bent on finding part of the buried remains. From left to right they are: Bruce Ayres, Tom Critchlow, Neil Bauman and Mike Neal.

(TRIBUNE Photo)

1963. Aug 21. Past unveiled - Bones

Clipped By:

patriciamkremer
Wed, Mar 22, 2023

2 — Pacifica Tribune — August 14, 1963

Bones, Relics Found Near Vallemar

(Continued from Page 1)

position on the fact that the bone fractures appeared in the same general locations as do most bone fractures in living beings.

The condition of some of the teeth could mean that the species was several centuries old, Dr. Stroot said.

It was impossible to ascertain whether or not the bone remains belonged to one or more human frames. Dr. Stroot could find no duplicate bones to examine. But Keith Lund of the state bridge department, who discovered most of the remains, felt that the site was a burial ground for more than one person because, he said, the remains were so widely scattered.

The volcanic glass arrowheads and spearheads, probably reflecting the craftsmanship of Coastside Indians, appeared almost completely transparent after Lund had cleaned them.

The pottery remains were claimed by freeway workers.

The presumed Indian relics were found on the west side of Coast Highway at the Vallemar turnoff alongside a creek.

Freeway plans call for dumping dirt in the general vicinity of the finds.

KEITH LUND, the man who uncovered most of the presumed Indian relics, is standing near the site with a sampling of his finds—an arrow-head, spearhead and a portion of a shell necklace — in his hand.

(TRIBUNE Photo)

DR. JEROME H. STROOT, a bone specialist at the Pacifica Medical Center in Pacific Manor, and Keith Lund of the State bridge department, take a close look at the spot where human remains were uncovered by Freeway workers Thursday.

(TRIBUNE Photo)

Terra Nova Bridges In By Sept. 1

Target date for completion of the two missing links between Linda Mar boulevard and Terra Nova boulevard is

A Second Sea Village Building

Construction will start immediately on a 12,000 square foot building next to the new Safeway store on Pedro Point, Sea Village Shopping Center developer Morley Turner said this week.

The building will be designed for shops and stores but none will be leased until the structure is ready, Turner said.

Turner said a third building, about 20,000 square feet, is planned later to the east toward the ocean for offices and other shops.

Development will be by Coastside Builders, of which Turner is president. Architecturally, the new buildings will "blend" with the Safeway store, he said. The first structure should be finished within four or five months, he said.

1963 Aug 14. article continued

Clipped By:

patriciamkremer
Wed, Mar 22, 2023

Tribune Exclusive

Human Bones, Relics Found By Workmen Near Vallemar

Perhaps An Indian Burial Or Camp Site

By MAHMOUD ABOUZEID

Bones of a human — probably a 19th Century Indian, and pieces of pre-modern man's utensils, were discovered by freeway workers excavating near Vallemar last Thursday.

The findings are believed to be part of an Indian camping or burial ground more than a century old.

Jaw, skull, arm, leg, and rib bones, along with teeth, were found two feet below ground level by on-site workers while digging in the area.

In addition, workers found spearheads and arrowheads apparently made of volcanic glass; shell parts of what appeared to be a hand-made necklace; and the remains of pottery probably used as cooking utensils.

Dr. Jerome H. Stroot, an orthotist (bone specialist) at the Pacifica Medical Center in Pacific Manor, examined the bones and diagnosed them as probably being more than 100 years old.

The bone fractures might indicate that the victim or victims were clubbed or beaten to death — presumably as some type of sacrifice or form of punishment, Dr. Stroot said. He based this sup-

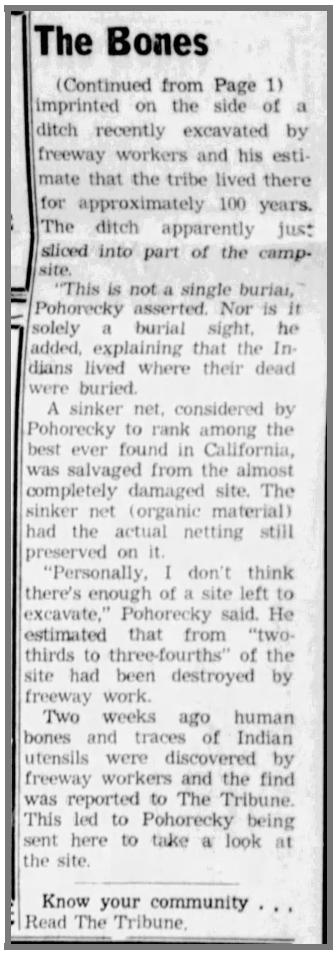
(Continued on Page 2)

SAMPLES OF the bones and teeth uncovered during freeway work near Vallemar last Thursday are shown above. The display includes arm, leg, jaw, skull and rib bones, in addition to teeth. (TRIBUNE Photo)

1963 Aug 14. Human Bones found

Clipped By:

patriciamkremer
Wed, Mar 22, 2023



The Bones

(Continued from Page 1)

imprinted on the side of a ditch recently excavated by freeway workers and his estimate that the tribe lived there for approximately 100 years. The ditch apparently just sliced into part of the campsite.

"This is not a single burial," Pohorecky asserted. Nor is it solely a burial sight, he added, explaining that the Indians lived where their dead were buried.

A sinker net, considered by Pohorecky to rank among the best ever found in California, was salvaged from the almost completely damaged site. The sinker net (organic material) had the actual netting still preserved on it.

"Personally, I don't think there's enough of a site left to excavate," Pohorecky said. He estimated that from "two-thirds to three-fourths" of the site had been destroyed by freeway work.

Two weeks ago human bones and traces of Indian utensils were discovered by freeway workers and the find was reported to The Tribune. This led to Pohorecky being sent here to take a look at the site.

Know your community . . . Read The Tribune.

1963 Aug 21. (con't article)

Clipped By:

patriciamkremer
Wed, Mar 22, 2023

To: City of Pacifica Planning Department
From: Patricia Kremer, 5 Eastlake Avenue, Pacifica <patriciamkremer@gmail.com>
Date: 9 August 2023
Subject: Written Response to Program Environmental Impact Report Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments and Rezoning Program

I am submitting these comments so they will be included in any revision required of the City of Pacifica's EIR relevant to their draft Housing Element. This is not the first time I have raised this issue, but I have not received what I feel is a satisfactory response to my comments, so I am trying again.

Among the list of "Opportunity Sites" included in the Housing Element is site #26 "Caltrans, ROW, Coast highway/Quarry". There is a fairly high probability that this site includes remains of Native American artifacts. On August 14, 1963, the Pacifica Tribune reported about "Bones, Relics Found Near Vallemar". Although the precise location is not clear from the article, it is reasonable to think the area of the excavation was near or part of Site #26.

The Pacifica General Plan from Spring 2002 says the following: "As part of the General Plan update process, the Native American Heritage Commission (NAHC) conducted a record search of the sacred lands file in 2009. The search did not indicate the presence of additional Native American cultural resources within the Planning Area. The NAHC response listed six tribes that may have historic ties to the Planning Area, and letters of inquiry were sent to the six tribal representatives; however, no responses were received."

The Planning Staff from the City of Pacifica has replied to me that they have met their legal obligations of CEQA requirements by notifying a major indigenous organization about these findings. Apparently this notification has not resulted in a reply from the stated organization, but the City of Pacifica does not feel any further action is necessary or desirable before they "Initiate Caltrans decertification process for any Caltrans owned site (sites 18, 25, 26), including making an initial deposit of funds (approximately

$35,000 in 2022) by December 2024, designate sites as required. It is anticipated that the City may partner with nonprofit housing developers for these sites." (p. 23 of May 2023 Housing Element document).

The bones and relics found in 1963 were undoubtedly linked with the small village of Timigtac, located near where Calera Creek was located at the time of Spanish colonization (1770's). Although unlikely, living descendants from those inhabitants have been identified through records kept by Mission Delores, which had jurisdiction over the Aramai people who inhabited the area now known as Pacifica.

Perhaps the City of Pacifica and Caltrans have no legal obligation to notify these descendants, but in a time when native people are trying to regain confiscated lands, it seems to me the moral things to do. The Association of Ramaytush Ohlone < https://www.ramaytush.org> is active locally and would undoubtedly be interested in the possibility of having access to surplus land from Caltrans.

I am including as a part of this memo the relevant articles from the Pacifica Tribune 1963. There is also information about additional investigations by local Archeologist Shirley Drye in 1993, but I do not seem to have digital copies of those articles in my computer at this time.

From: Harkousha, Brianne <BHarkousha@pacifica.gov>
Sent: Wednesday, August 9, 2023 4:58 PM
To: Clare Kucera
Cc: Alison Moore; Murdock, Christian
Subject: FW: Environmental concerns... Oceana High School

Hi Clare,

Please see public comment for HE EIR below.
Thanks,

Brianne Harkousha (she/her), AICP | Senior Planner
City of Pacifica
540 Crespi Dr., Pacifica, CA 94044
Direct: 650-738-7443 | Planning: (650) 738-7341
bharkousha@pacifica.gov

From: Joe Buttifunew <jbuttifunew@gmail.com>
Sent: Wednesday, August 9, 2023 4:54 PM
To: Harkousha, Brianne <BHarkousha@pacifica.gov>
Subject: Fwd: Environmental concerns... Oceana High School

[CAUTION: External Email]

My Environmental Concerns are for Oceana High School Pacifica, Ca.;

1. The land animals depend on this area for a food resource. There is a abundance of goffers here at the Oceana School. I constantly see Red Tail Hawks, Owls, Heron and Coyotes and eating here at Oceana High. Since mostly Pacifica is developed and or has dense trees, this field has become a essential part for the wildlife ecosystem. This field makes up what Man has done to the natural environment in these areas. There is constant wildlife activity on this field and around its border. The hawks and Owls sit on the surrounding trees/fences and snag their pray.
2. The acoustics of Ocean from this small valley will be diminished. At night when the noise pollution is less, the waves from the Ocean echo off the surrounding hills and valley of this field. Adding housing here will diminish that beautiful sound the Oceana High school neighborhood has enjoyed.

3. The hydrodynamics of the collection of rain water from the surrounding hills drain naturally in this field. The added concrete will add more rain run-off to the Ocean. This could already disrupt the fragile coastline that is already deteriorating. This should be studied extensively.
4. The already congested traffic during school hours, Pool swim meets and soccer games. Added housing would cause even more congestion to this environment, which is bad for students, the community, the employees who work here, the residences surrounding the area.
5. The Students at Oceana High run and play around this field. The PE instructor watches from the gym as students run within eyesight of the instructor. Adding housing would totally disrupt that environment and the view of that PE instructor.
6. The local community have a view of the Ocean from their residences. These people purchased these homes (particularly the residences on Paloma Ave) with scenic views of the Ocean. Building housing here would totally disrupt that environment. Thier housing prices would diminish because of this proposed housing development. This in turn would ruin these people's environment. Some serious studies should be addressed to these people that live here with these views.

Thank you,
Rocky Roo

Gmail

Alison Moore <alison@dyettandbhatia.com>

Public Comment HE EIR.

1 message

Harkousha, Brianne <BHarkousha@pacifica.gov> Tue, Aug 8, 2023 at 1:33 PM
To: Alison Moore <alison@dyettandbhatia.com>, Clare Kucera <clare@dyettandbhatia.com>
Cc: "Murdock, Christian" <cmurdock@pacifica.gov>

Please see public comment for HE EIR.

Brianne Harkousha (she/her), AICP | Senior Planner

City of Pacifica

540 Crespi Dr., Pacifica, CA 94044

Direct: 650-738-7443 | Planning: (650) 738-7341

bharkousha@pacifica.gov

From: Remi Tan <remitan@sbcglobal.net>
Sent: Tuesday, August 8, 2023 1:09 PM
To: Housing <Housing@pacifica.gov>; Harkousha, Brianne <BHarkousha@pacifica.gov>
Subject: Comments on the NOP for the DEIR for the Housing Element

[CAUTION: External Email]

1. All existing commercial sites C-1. C-2, PD-commercial should consider mixed use multifamily developments so that we maintain the commercial tax base. Consider building on more parking lots with ground floor retail first followed by building over some of the existing retail to maximize density.

2. C-3 sites need to be carefully considered as not to reduce potential for additional hotel space which has high TOT revenue

3. Highest densities for housing (and commercial) should be permitted on sites closest to the HWY 1 bus route transit corridor to minimize traffic impact. DEIR/FEIR should carefully consider the additional ridership and improvements in head-ways/frequencies of bus service, and maybe study privately funded BART shuttles if SamTrans does not restore service

4. All sites to the west of the HWY1 in the Coast Zone needs to account for Coastal Commission Review.

5. Site 26 is problematic in that it is in the Quarry and would require the referendum rezoning for residential, and there are identified wetlands and potential endangered garter snake and CA red legged frog habitat from the HWY 1 widening project study that was rejected by the city and citizens previously. There is potential native American significance too to that site. Would recommend Site 26 be removed and housing distributed in other sites near the HWY 1 transit corridor

6. All public sites should be maximized for affordable housing as the city, school or CalTrans can grant land to affordable housing developers and densities maximized

7. On school and CalTrans sites City needs to confirm with those agencies if they are on board with the proposed affordable housing and maximizing densities

8. Traffic on HWY 1 needs to be carefully studied with worse case scenario if the proposed densities still not enough ridership to get better bus transit service. New technologies like shared driver-less electric ride-share service should be considered in the traffic/transportation analysis. Smart synchronized traffic signals on HWY 1or replacing those with traffic circles should be considered.

9. Avoid all hillside sites with landslide, erosion, wildfire danger and any coastal flooding and erosion sites.

Thank you and Best Regards,

Remi Tan, AIA, LEED AP BD+C

Architecture, Green/Sustainability Consulting, and Real Estate Investment

650-291-3097

From: Harkousha, Brianne <BHarkousha@pacifica.gov>
Sent: Wednesday, August 9, 2023 4:58 PM
To: Clare Kucera
Cc: Alison Moore; Murdock, Christian
Subject: FW: Pacifica Housing Element EIR NOP potential faults and Inadequacies

Hi Clare,

Please see public comment for HE EIR below.
Thanks,

Brianne Harkousha (she/her), AICP | Senior Planner
City of Pacifica
540 Crespi Dr., Pacifica, CA 94044
Direct: 650-738-7443 | Planning: (650) 738-7341
bharkousha@pacifica.gov

From: Samuel Casillas <samuelcasillas@hotmail.com>
Sent: Wednesday, August 9, 2023 4:53 PM
To: Housing <Housing@pacifica.gov>; Harkousha, Brianne <BHarkousha@pacifica.gov>
Subject: Pacifica Housing Element EIR NOP potential faults and Inadequacies

[CAUTION: External Email]

To Whom it may concern,
After reviewing the Pacifica Housing Element NOP for the EIR I have come to the conclusion that the scope of the EIR will be inadequate and contain multiple faults that will require a new review and a re-circulation based on the scoping meeting and materials that are currently in circulation. Specifically the EIR needs to address the following:

1. Traffic Mitigation: the addition of any of these development sites and the whole plan for the entirety of the 1,892-2,476 housing unit plan does needs to address the increased traffic, pollution and additional waiting time that will be caused by new vehicles being added, nor is there adequate planning for increasing the ability of Pacifica's roads and highways. In fact, Pacifica has been negligent in doing even basic road repairs so how can they plan for the increased traffic that 1,892-2,476 housing units would bring to Pacifica? Even one of these sites where there would be consideration of approximately 30 new units would need a traffic mitigation plan that would need to be properly addressed in the EIR.
2. Sewage and Water Treatment capabilities: Wastewater treatment plant expansion would be needed to support significant new project development yet our sewage system is already over extended and we have sewage spills that violate California law on an annual basis due to incompetence, this EIR needs to adequately address how the city will increase the sewer system to handle approximately

2,000 new housing units and address how global warming and the impact of climate change will detrimentally impact Pacifica's already inadequate sewage system.

3. Increased Water Demand: The EIR needs to adequately address how 1,892-2,476 new households will get water supply needs in the coming changes to water supply due to global warming and climate change. There is simply not enough water to sustain these many units in Pacifica as proven by the on-going drought that will only worsen with man-made global warming and the on-going climate crisis.
4. Additionally, the city is not addressing how the impact of the 1,892-2,476 units will have on our economy. By sacrificing commercial space for housing we will continue to have a structural budget deficit that will impact our environment. For example, the city is proposing to re-build a sea wall at Sharp Park that will necessitate a "hybrid" plan for sand renourishment at Sharp Park Beach. If the city is to go bankrupt by adding these units, how would they be able to replace the sand that is being stripped away by the seawall in perpetuity? This needs to be addressed.

Note that the plan also has two sites, 30 and 31, that are in the coastal zone that need to be removed. The LCLUP has been sent back to the city with major revisions and the city has not even planned to meet with the CCC to come up with a workable solution and has instead chosen to be intransigent in its approach with the CCC. The city is currently working off of a 1980 general plan that is woefully inadequate so any sites in the Coastal Zone need to be removed.

The appropriate solution is to go back to the state and determine what a much lower and realistic housing number is appropriate for Pacifica.

Thank you,
Sam Casillas

From: Harkousha, Brianne <BHarkousha@pacifica.gov>
Sent: Tuesday, August 8, 2023 4:13 PM
To: Alison Moore; Clare Kucera
Cc: Murdock, Christian
Subject: Public Comment for HE EIR

Hello,

Please find below public comment for HE EIR.

Brianne Harkousha (she/her), AICP | Senior Planner
City of Pacifica
540 Crespi Dr., Pacifica, CA 94044
Direct: 650-738-7443 | Planning: (650) 738-7341
bharkousha@pacifica.gov

From: Suzanne Moore <suzyqettu2@gmail.com>
Sent: Monday, August 7, 2023 5:00 PM
To: Housing <Housing@pacifica.gov>
Subject: EIR comments

[CAUTION: External Email]

In talking with neighbors, I hear that further traffic studies seem necessary as we plan for further housing.
Another concern: safety and the need to update a fire hazard map.

My concerns remain the same: policies to prevent displacement and preserve existing affordable housing. The needs assessment that cost of rents have increased while wages stagnated, our rental market is constrained, we have failed to build low-income housing in the past, there are neighbors disproportionately impacted by housing costs, and Pacifica suffered from displacement, evictions, overcrowding, and homelessness. Pacifica needs policies in our Housing Element to address these issues. Thank you.

CITY OF PACIFICA HOUSING ELEMENT

EIR SCOPING COMMENTS

To : City of Pacifica
Re : EIR Housing Element/Re-Zoning Scoping Comments August 8, 2023

The following are concerns which should be considered in the EIR analysis, followed by a description of actions the City can take to address those concerns :

The Rezoning program contemplated by the City purports to *"accommodate the RHNA sites inventory and promote development of multi-family housing, including missing middle housing and mixed-use development".*

Despite this stated objective, the City continues to ignore multiple sites already zoned for these very stated objectives (in 3 cases), and ignore opportunities for recognizing already existing adjacent mixed-use high-density development (in 1 case), all 4 sites of which are immediately adjacent to &/or surrounded by, already existing high-density uses and designations, and within the central core of the City.
Sites possessing at least 12 potential units of the critically required affordable housing types described by the City, which are required by the RHNA.

The City has opined that the above sites *"did not meet criteria due to being within the Coastal Zone".* Yet despite this, the City has in fact chosen to identify several sites within the Coastal Zone, <u>despite</u> *"not meeting the criteria"*. Furthermore, there is no lawful basis for such arbitrary & categorical exclusion of the Coastal Zone from Housing Sites Inventory.

The City further opined that these are within what the City called its *"Vulnerable Zone".* And yet despite this, the City has already expended very substantial funds to encourage the community development appeal & uses within one of these Zones (West Sharp Park), including performing many physical improvements to enhance its dynamism & vibrancy , and enlarging mixed-use opportunities within this district, as well as passing resolutions approving City-formulated plans to promote the continuation of this enhancement process.

Still further, the City has expended costly funds on plans for its very own future municipal development within this very same "Coastal/Vulnerable Zone" (West Sharp Park).

Even further, the City (despite its claimed exclusions due to "Coastal/Vulnerable Zone reasons") has within its newest (Aug 1, 2023) re-zoning plan, proposed multiple re-zonings within the very same "Coastal/Vulnerable Zone". (West Sharp Park & Rockaway Beach)

Thus, it is very challenging to view the above exclusions – which are at dramatic variance from City's own extensive prior actions & declarations of intent - as anything other than shaping one narrative to one Audience, and a completely opposite narrative to a different Audience.

The 1 site (of the above 4) which does require re-zoning, is surrounded by existing high-density and mixed-use development, as well as existing zoning for high-density/mixed-use, and yet chose to keep the existing 6-unit apartment as a Single-Family zone.

We had pointed out these material zoning inconsistencies to City staff prior to the adoption of the West Sharp Park Plan, with staff subsequently informing the Council in response to its query on this, that such corrections would be made during the forthcoming re-zoning.

Notwithstanding this prior assertion to the Council, the proposed re-zoning portrayed within this EIR does not fulfill this. Another site is entirely surrounded by an existing Mixed-Use district and located within Rockaway Beach, also an area which the City promotes such use and development, yet continues to exclude from its Housing Sites Inventory.

We therefore sincerely hope the City takes the present opportunity to correct its arbitrary "exclusions" of these sites from its Housing Sites Inventory (as well as perform the corrective re-zoning), and instead fulfill its long & amply-declared intentions to in-fact :

- Strengthen & further enhance the vibrancy of its downtown core
- Increase & underscore the importance of mixed-use opportunities
- Increase affordable missing-middle housing rental & ownership opportunities

These intentions can readily & simply be accomplished at these affordable Housing-Ready sites by carrying out the City's already declared intent within its proffered documents.

The APN #'s are listed below :

1.) 022-027-030
2.) 016-031-130
3.) 016-050-390
4.) 016-050-410

Thank you for your attention to this important matter,

Thomas J. Carey, Trustee
1580 Laurel St, San Carlos, Ca 94070

Gmail

Alison Moore <alison@dyettandbhatia.com>

Pacifica Housing Element Public Comment

1 message

Harkousha, Brianne <BHarkousha@pacifica.gov> Tue, Aug 1, 2023 at 2:37 PM
To: Alison Moore <alison@dyettandbhatia.com>

Please see public comment below.

Thanks,

Brianne Harkousha (she/her), AICP | Senior Planner

City of Pacifica

540 Crespi Dr., Pacifica, CA 94044

Direct: 650-738-7443 | Planning: (650) 738-7341

bharkousha@pacifica.gov

From: Catherine Wachtler <wachtler.c@gmail.com>
Sent: Tuesday, August 1, 2023 2:11 PM
To: Harkousha, Brianne <BHarkousha@pacifica.gov>
Subject: Pacifica Housing Element

[CAUTION: External Email]

Hello Planner Harkousha,

My husband, Jeff Martin, and I reside at 919 Yosemite Drive in Pacifica.

We have a few questions about the Program Environmental Impact Report:

1. What does the heading DU/A mean?

2. The sum of the Total Capacity for all sites, excluding the "Newly Added Sites", is 1623 units, not the 1612 the City is proposing. Why the discrepancy?

3. If it passes the EIR, would a public vote take place on the November ballot regarding the zoning for "Site A" in the "Newly Added Sites" list?

4. Why is Park Mall, at the intersection of Terra Nova Boulevard and Oddstad Boulevard not on the rezoning list? When we attended a public meeting earlier this year, it was on a list to consider for accommodating at least 40 units.

Our public comments:

At the very least, sites 26, 27, 30 and 31 should be removed from consideration. All are located west of Highway 1; these are areas at greatest risk to be challenged by sea level rise. It is irresponsible to consider locating housing in such unstable spaces.

Sites 2, 20, 21, 29, 32, 33, 34, 35, 36, E, D and H, while located east of Highway 1, are also dangerously close to the Pacific Ocean and, as such, should be considered only as last resorts for the Housing Element.

We appreciate all the work city staff, elected officials and residents have

done for the Housing Element. We wish they would identify more inland sites as proposed housing locations. There is a lot of land at the archery range and although it is owned by the City of San Francisco, as communities in California, it is our responsibility to work together to improve our state and make it comfortable for all Californians. I would hope our city is in discussions with the City of SF to develop an altruistic plan for that land.

Thank you,

Catherine Wachtler and Jeff Martin

WALTER A. MACDONALD, JR.
1290 PINE AVENUE
SAN JOSE, CA 95125
TELEPHONE (408) 269-0286
walt@macdlaw.com

August 9, 2023

Housing Element and Re-Zoning EIR Pacifica

To: City of Pacifica
Re: EIR Housing Element/Re-Zoning Scoping Comments
APN#: 016-050-420 016-050-410 016-050-390 016-031-130

Dear City of Pacifica:

As an owner of property APN #016-050-420 in the City of Pacifica, I request that the City consider and address the following concerns:

1. The Stated Objective of the RE-Zoning Program is to:
   "accommodate the RHNA sites inventory and promote development of muti-family housing, including missing middle housing and mixed -use development."

2. The City has ignored three (3) multiple sites already zoned for these *"stated objectives"*. **Why is that?**

3. There are four (4) actual sites which are adjacent to and surrounded by existing High-Density Designated Properties, which comply with the City's Stated Objective. With these previously existing mixed high-density developments neighboring these sites, I ask again **"Why is that?"**

4. By determining that the above-described sites fail to ***"meet the criteria due to being within the Coastal Zone"***, I ask **"Why is that?",** since there is not legal basis for such arbitrary and capricious exclusion of the entire Coastal Area form the Housing Sites Inventory.

Prior to the adoption of the West Sharp Park Plan, the Planning Staff was made keenly aware of numerous zoning inconsistencies. In fact, I recall the Staff later advising the Council that such correction would be made within the upcoming Re-Zoning Plan. **Why was this ignored?**

This PROPOSED Re-Zoning within the EIR fails to fulfill this requirement and obligation. I sincerely hope that the City corrects these arbitrary exclusions as the above-described sites are Affordable and Ready to be Built, thereby carrying on the City's declared intent as described above.

Truly yours,

Walter A. MacDonald, Jr.

WALTER A. MACDONALD, JR.
1290 PINE AVENUE
SAN JOSE, CA 95125
TELEPHONE (408) 269-0286
walt@macdlaw.com

August 9, 2023

Housing Element and Re-Zoning EIR Pacifica

To: City of Pacifica
Re: Housing Sites Designation --- Re-Zoning To Enable Housing Opportunities For Middle Class Families

Dear City of Pacifica:

I completely support the increase in housing opportunities for all income levels within the City of Pacifica. I particularly support the "MISSING MIDDLE" category of housing needs in your city. As a Fifth Generation of the San Francisco (and adjoining areas), whose family rose through the ashes of the San Francisco Fire and Earthquake, the years of the Depression-Era, and service in the many wars for our country, we were the poor who never owned any property until the GI Bill. Without the GI Bill, no one in my family would have been able to purchase a house. Those in my family who could not afford to live in San Francisco proper, purchased starter homes in Daly City, Pacifica, Oakland, South San Francisco, and even Cupertino. I hope you realize that in the 1940's – 1960's that these areas were for the poor and lower middle class as distance from San Francisco determined cost and value. This was the start of our great Middle Class. Because my family received the benefits of the government, they were able to continue to raise our entire extended families here in the San Francisco Bay Area.

Similarly, this proposed "MISSING MIDDLE" category shall allow families to flourish in Pacifica.

I hope to build a home in the West Sharp Area on Solada Avenue for my son Scott, his partner Amber, and their four (4) children, aged 13, 4, 2, and 9 months. They current rent a home in East San Jose. My son works as in inside sales for SAGE. Amber graduated from Cal Berkeley and is currently in the process of obtaining her Masters in Child Development and Clinical Counseling. She works full-time as a social worker for the County of Santa Clara.

Presently, I am very concerned with the failure to include the West Sharp Area of Pacifica in the proposed Re-Zoning of Pacifica as it appears exclusionary as it denies all classes of our society from growing their families in this core area of the Pacifica Community. Please reconsider and therefore include the Coastal Zone in both housing inventory sites these areas. Without it, Pacifica's declaration for housing affordability and accommodation goals are just words.

Truly yours,

Walter A. MacDonald, Jr.

From: Helena Pacholuk
To: Harkousha, Brianne
Subject: EIR question
Date: Saturday, May 4, 2024 8:55:36 AM

[CAUTION: External Email]

Hi! Why isn't the former city hall and sewage plant site near the pier an area for possible RHYNA units?

From: Helena Pacholuk
To: Harkousha, Brianne
Subject: another question
Date: Saturday, May 4, 2024 8:59:05 AM

[CAUTION: External Email]

In the NOP - Pacifica Phase 1 Rezoning for Housing Element - 2024-05-03.pdf sent to me, an appendix F is mentioned but I don't see it in this document. Where can I find that?

From:	Catherine Wachtler
To:	Harkousha, Brianne
Subject:	Questions about the Environmental Impact Report (EIR) being prepared for the Pacifica Housing Element Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program (6th Cycle)
Date:	Sunday, May 19, 2024 3:03:36 PM

[CAUTION: External Email]

Hi Brian,

Thank you for your work on this. My husband and I own and live in a single family home in Pacifica which we purchased in 1997.

I have several questions about the EIR:
1)
Could you please explain these zoning designations listed on pages 3 and 4: HPD, B-1, A/B-5, C-Z, O, B-3, P-C/Z ?
They are not listed in the footnote on pages

2)
What is the proposed Zoning Designation for each property listed on pages 3 and 4?

3)
Will this project consider amending the ODS, beyond what is already in place, for privately owned R-1 sites in Pacifica in order to support owners to construct ADU's on their property and thus contribute to the city's Housing Element plan? Specifically, I am wondering about the current requirement that an ADU be setback at least 20 feet from the rear property line even though state of California requirements are less than that.

Thank you,
Catherine Wachtler
919 Yosemite Drive
Pacifica

From:	Al R
To:	Housing; Harkousha, Brianne; Brooks, Elizabeth; Murdock, Christian; Christine Boles; _City Council; Coffey, Sarah; Woodhouse, Kevin
Subject:	Please read and do not Adopt or build at Oceana High school
Date:	Monday, May 20, 2024 5:52:46 PM

[CAUTION: External Email]

Hello planning departments and City Council. I am a resident of the Oceana High School neighborhood. Oceana high School is our de facto community courtyard if you all didn't know, and I am not sure if any of you all live in this neighborhood. Regardless, If you did live in this small neighborhood, you all would know that people from all over Pacifica come and enjoy the "Open Space" on the field 7 days a week. It is quite a peaceful environment and I encourage you to come play some ball sport activity, frisbee, enjoy the scenic view of the Ocean, spend some time with your family and or go for a peaceful walk. Maybe you'll see one of the many Herons that frequent the place or catch a glimpse at a redtail hawk getting some prey on the open space/field. A potential development of 178 units here would ruin everything here I mentioned and double the population in this specific neighborhood. In a nutshell, you all know what development would mean to this neighborhood, while taking away the only open space for individual recreation that is available from Manor Dr. to Vallemar that people and animals enjoy everyday. I highly oppose ANY development of housing in Oceana High School. Besides all this, this would have a substantial adverse effect on our scenic vistas/views of the Ocean, that which would be disrupted as well. (www.Planbayarea.org Aesthetics and Visual Resources Section 3.2.3, AES-1,2,3. and Coastal Act Section 30251)
:The attachment picture is of a Father and Son playing catch, which is quintessential to what typically happens here on a daily basis.
Thank you for reading this.
Albert Romero; second generation immigrant and resident of the Oceana High School neighborhood.

NATIVE AMERICAN HERITAGE COMMISSION

May 10, 2024

Brianne Harkousha
City of Pacifica
540 Crespi Drive
Pacifica CA 94044

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

Re:
2024050168, Pacifica Housing Element (6th Cycle) Targeted General Plan Amendmennts, Rezoning, and Objective Development Standards Project, San Mateo County

Dear Ms. Harkousha:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.

b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).

2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.

3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).

4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:

a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or

b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:

a. If part or all of the APE has been previously surveyed for cultural resources.
b. If any known cultural resources have already been recorded on or adjacent to the APE.
c. If the probability is low, moderate, or high that cultural resources are located in the APE.
d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@NAHC.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

cc: State Clearinghouse

Buchalter

425 Market Street
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San Francisco, CA 94105
415.227.0900 Phone
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415.227.3508 Direct
aguerra@buchalter.com

May 22, 2024

VIA E-MAIL

Christian Murdock, Planning Director
City of Pacifica
540 Crespi Drive
Pacifica, CA 94044

Re: Pacifica Housing Element Update - Sea Bowl Property

Dear Christian:

Buchalter, a Professional Corporation ("Buchalter"), represents Toll Brothers with its proposal to develop a residential townhome project on the property located at 4625 Coast Highway in the City (APN: 022-150-440) (the "Property"). Toll Brothers is proposing to demolish the existing Sea Bowl bowling alley and subdivide one parcel into 25 parcels for the development of 15 - three story multifamily townhome buildings (81 townhome style units with 22 ADUs) and 5 - three story duet style buildings (10 duet style units) (the "Sea Cove Project"). The Sea Cove Project would result in the development of 113-unit residential units, 178 resident parking spaces, and 22 guest parking spaces. Toll Brothers originally filed with the City of Pacifica ("City") an SB 330 Preliminary Application for the Project on September 11, 2023, and a formal application on April 1, 2024.

For well over a year, Toll Brothers representatives have submitted comments on the City's Draft Housing Element Update, and requested that the Property be identified in the Site Inventory to no avail. We have received the latest letter from Department of Housing & Community Development ("HCD") dated March 29, 2024 (the "March 29 Letter") advising you that the City remains out of compliance with State Housing Element Laws. As you know, HCD noted that the necessary rezones are not complete (Programs 1-1 General Plan and Zoning Amendments to Achieve regional housing needs allocation (RHNA)), and the housing element is out of compliance and will remain out of compliance until the rezoning have been completed.

As noted in our prior letters to you and to the City Council, State law requires that a housing element provide an "inventory of land suitable and available for residential

development" that have "***realistic and demonstrated potential*** for redevelopment during the planning period to meet the locality's housing need." (Gov. Code, § 65883(a)(3) (emphasis added).) The City even acknowledges this requirement in the Draft Housing Element.[1] (Draft Housing Element, p. F-2.) HCD has acknowledged this and other issues with the Housing Element in finding it out of compliance.

Once again, we reiterate our request to add the Sea Bowl Property to the Housing Element. Toll Brothers' Sea Cove Project for the redevelopment of the Sea Bowl Property represents a realistic and demonstrated potential for redevelopment of the Property with housing. In that regard, Toll Brothers intends to continue processing its formal development project application submitted under the Builder's Remedy.

The Sea Cove Project presents a realistic opportunity to redevelop the Property with residential units and offset a portion of the shortage of RHNA units identified in the City's Housing Element. As HCD identified in its March 29 Letter, the City's Housing Element "should consider public comments received regarding the inclusion of sites from property owners" with a written interest in residential development. (March 29, Letter, append., p. 2.) The "[housing] element must analyze the likelihood that the identified units will be developed as noted in the inventory in zones that allow 100 percent nonresidential uses," considering "development trends supporting residential development." (March 29, Letter, append., p. 1.) As explained above, Toll Brothers and its representatives have submitted numerous comments to the City, requesting that the City include the Property in the Housing Element Sites Inventory. Thus, the Sea Cove Project is the exact type of residential project that is likely to be developed. Here, HCD is expressly recommending the City undertake Toll Brothers' request, and we believe supports the City's decision to include the Property within the Housing Element's Sites Inventory.

HCD acknowledges the Housing Element's discussion of the City's planned infrastructure improvements to its sewer and water capacity. (March 29, Letter, append., p. 2.) Specifically, the Housing Element must include a program providing for the City's commitments to these improvements in order to accommodate its RHNA requirement. As we noted in prior letters, Toll Brothers is willing to consider sharing in the cost of some of these improvements with the City and other benefitting developments.

The March 29 Letter additionally requested the City include in the Housing Element a timeline for implementing actions that encourage the development of ADUs. As you know, the Sea Cove Project proposes 22 ADUs. As the Draft Housing Element explains, ADUs can provide naturally affordable housing options for middle- and lower-income individuals and households which will contribute to the housing that will assist with satisfying the City's RHNA

[1] The Draft Housing Element explains that state law "requires an inventory of land suitable for residential development ***that can be feasibly developed*** during the 2023-2031 period and is sufficient to provide for the regional housing need for all income levels" (emphasis added).

requirement. (*See* Draft Housing Element, pp. F-6, F-12.) Accordingly, including the Sea Cove Project in the Housing Element Sites Inventory is consistent with both Draft Housing Element policies and HCD's request.

Toll Brothers echoes HCD's comment with respect to Program HE – 1-1. HCD explains that the City must commit to the necessary General Plan amendment and rezoning requirements that will accommodate all of the required affordable housing without discretionary action. (March 29, Letter, append., p. 4.) Toll Brothers has consistently requested that the City adopt measures like this in order to accommodate the Sea Cove Project, which will greatly contribute to the housing required under the City's RHNA allocation.

Consistent with our request that the Sea Cove Project be included in the Targeted General Plan Amendments, Rezoning and Objective Development Standards Program for the Housing Element Update, we also request that the City consider the Sea Cove Project in its Environmental Impact Report (EIR) under preparation for the Pacifica Housing Element Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program (6th Cycle). As you know, we previously requested on December 18, 2023 that the Sea Cove Project be covered by the City's Initial Study/Mitigated Negative Declaration for the 6th Cycle Housing Element Update. We supplemented that request with yet another request that the Sea Cove Project be included in the City's EIR for the General Plan Amendments and Rezoning project as a comment on the Notice of Preparation for the EIR currently under preparation. Those requests are incorporated by reference into this comment letter in furtherance of Toll Brothers' interest in accommodating the City's need to provide more housing in accordance with State law.

Again, Toll Brothers respectfully requests that the City make these necessary changes in the next draft of the Housing Element. Doing so will ensure the necessary planning for badly-needed residential capacity in the City.

Thank you for your attention to these comments and please do not hesitate to reach out if you have any questions.

Sincerely,

BUCHALTER
A Professional Corporation

By

Alicia Guerra

AG:nj

cc: Sarah Coffey
Michelle Kenyon
Karen Murphy
Nick Kosla
Alli Sweeney
Braeden Mansouri

From: Remi Tan
To: Housing; barkhousha@pacifica.gov
Subject: Housing Element EIR Scoping comments
Date: Wednesday, May 22, 2024 6:37:30 PM

[CAUTION: External Email]

Hi Brianne Wanted to add to my spoken comments tonight to make sure Planning is counting the projects in the pipeline ..

Thank you and Best Regards,

Remi Tan, AIA LEED AP BD+C

Architecture, Green Building
Real estate investment and brokerage

650 291 3097

Sent from my iPhone

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

May 28, 2024

Brianne Harkousha, Senior Planner
City of Pacifica
540 Crespi Drive
Pacifica, CA 94044
BHarkousha@pacifica.gov

Subject: Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program, Notice of Preparation of a Draft Environmental Impact Report, SCH No. 2024050168, City of Pacifica, San Mateo County

Dear Ms. Harkousha:

The California Department of Fish and Wildlife (CDFW) has reviewed the City of Pacifica's (City) Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) for the Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect fish and wildlife resources of the State. Please be advised, by law, CDFW may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW is providing the City of Pacifica, as the Lead Agency, with specific detail about the scope and content of the environmental information related to CDFW's area of statutory responsibility that must be included in the draft EIR (See: Cal. Code Regs., tit. 14, § 15082, subd. (b).).

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.). For purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.). CDFW expects that it may need to exercise regulatory authority over the Project pursuant to the Fish and Game Code. For example, the Project may be subject to CDFW's Lake and Streambed Alteration (LSA) regulatory authority, if the Project impacts the bed, channel or bank of any river, stream or lake within the State (Fish & G. Code, § 1600 et seq.). Likewise, to the extent the Project may result in "take" as defined by state law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

REGULATORY REQUIREMENTS

California Endangered Species Act

A CESA Incidental Take Permit (ITP) must be obtained from CDFW if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. Under CESA, "take" means "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (Fish & G. Code, § 86.). CDFW's issuance of an ITP is subject to CEQA and to facilitate permit issuance, any Project modifications and mitigation measures must be incorporated into the CEQA document analysis, discussion, and mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit.

CEQA requires a mandatory finding of significance if a project is likely to substantially impact threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064 & 15065). In addition, pursuant to CEQA, the Lead Agency cannot approve a project unless all impacts to the environment are avoided or mitigated to less-than-significant levels, or the Lead Agency makes and supports Findings of Overriding Consideration (FOC) for impacts that remain significant despite the implementation of all feasible mitigation. FOC under CEQA, however, do not eliminate the Project proponent's obligation to comply with the Fish and Game Code.

Lake and Streambed Alteration

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et seq., for Project activities affecting river, lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank (including

associated riparian or wetland resources); or deposit or dispose of material where it may pass into a river, lake, or stream. Work within ephemeral streams, drainage ditches, washes, watercourses with a subsurface flow, and floodplains is generally subject to notification requirements. In addition, infrastructure installed beneath such aquatic features, such as through hydraulic directional drilling, is also generally subject to notification requirements**.** Therefore, any impact to the mainstems, tributaries, or floodplains or associated riparian habitat caused by the proposed Project will likely require an LSA Notification. CDFW may not execute a final LSA Agreement until it has considered the final EIR and complied with its responsibilities as a responsible agency under CEQA.

Migratory Birds and Raptors

CDFW has authority over actions that may result in the disturbance or destruction of active bird nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include section 3503 (regarding unlawful take, possession, or needless destruction of the nests or eggs of any bird), section 3503.5 (regarding the take, possession, or destruction of any birds-of-prey or their nests or eggs), and section 3513 (regarding unlawful take of any migratory nongame bird). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

PROJECT DESCRIPTION AND LOCATION SUMMARY

Proponent: City of Pacifica

Objective: The objective of the Project is to amend City's General Plan, rezone specific sites, and amend existing land use designations citywide, to promote the development of residential housing, specifically to focus new multifamily, higher density residential, and mixed-use developments in existing commercial shopping centers, and other infill locations (NOP, 2024). The Project proposes the new Housing Element to comply with state law. "The Housing Element is mandated by State law to be updated every eight years and certified by California's Department of Housing and Community Development (HCD)"[2]. Primary Project activities include policy changes described in the Housing Element to make land use redesignations to permit an additional 2,042 housing units currently not permitted under the existing General Plan and land uses (NOP, 2024).

Location: City of Pacifica, citywide (NOP, 2024, Table 1, and Figure 1)

Timeframe: 2023-2031

[2] City of Pacifica, Housing Element Update, Retrieved May 17, 2024, https://www.planpacifica.org/housing-element.

The CEQA Guidelines (§§15124 & 15378) require that the draft EIR incorporate a full Project description, including reasonably foreseeable future phases of the Project, and that contains sufficient information to evaluate and review the Project's environmental impact. Please include a complete description of the following Project components in the Project description including, but not limited to, the below information.

- Land use changes resulting from, for example, rezoning certain areas.
- Footprints of permanent Project features and temporarily impacted areas, such as staging areas and access routes.
- Area and plans for any proposed buildings/structures, ground-disturbing activities, fencing, paving, stationary machinery, landscaping, and stormwater systems.
- Operational features of the Project, including level of anticipated human presence (describe seasonal or daily peaks in activity, if relevant), artificial lighting/light reflection, noise, traffic generation, and other features.

ENVIRONMENTAL SETTING

Sufficient information regarding the environmental setting is necessary to understand any potentially significant impacts on the environment of the proposed Project and any alternatives identified in the draft EIR (CEQA Guidelines, §§15125 & 15360). CDFW recommends the draft EIR provide baseline habitat assessments for special-status plant, fish and wildlife species located and potentially located within the Project area and surrounding lands, including all rare, threatened, and endangered species (CEQA Guidelines, §15380). The draft EIR should describe aquatic habitats, such as wetlands or waters of the U.S. or State, and any sensitive natural communities or riparian habitat occurring on or adjacent to the Project site (for sensitive natural communities see:https://wildlife.ca.gov/Data/VegCAMP/NaturalCommunities#sensitive%20natural%20communities), and any stream, riparian, or wetland set back distances the City may require. Fully protected, threatened or endangered, candidate, and other special-status species or sensitive natural communities that are known to occur, or have the potential to occur in or near the City include, but are not limited to: the species listed in Attachment A.

Habitat descriptions and species profiles included in the draft EIR should include robust information from multiple sources: aerial imagery; historical and recent survey data; field reconnaissance; scientific literature and reports; U.S. Fish and Wildlife Service's (USFWS) Information, Planning, and Consultation System; California Aquatic Resources Inventory; and findings from "positive occurrence" databases such as California Natural Diversity Database (CNDDB). Only with sufficient data and

information can the City adequately assess which special-status species are likely to occur in the Project vicinity.

CDFW recommends surveys be conducted for special-status species with potential to occur, following recommended survey protocols if available. Survey and monitoring protocols and guidelines are available at: https://www.wildlife.ca.gov/Conservation/Survey-Protocol.

Botanical surveys for special-status plant species, including those listed by the California Native Plant Society (http://www.cnps.org/cnps/rareplants/inventory/), should also be conducted during the blooming period for all sensitive plant species potentially occurring within the Project area and include the identification of reference populations. Please refer to CDFW protocols for surveying and evaluating impacts to rare plants available at: https://www.wildlife.ca.gov/Conservation/Plants.

IMPACT ANALYSIS AND MITIGATION MEASURES

The CEQA Guidelines (§15126.2) necessitate the draft EIR discuss all direct and indirect impacts (temporary and permanent) that may occur with implementation of the Project. This includes evaluating and describing impacts such as:

- Land use changes that would reduce open space or agricultural land uses and increase residential or other land use involving increased development;
- Potential for impacts to special-status species;
- Permanent and temporary habitat disturbances associated with ground disturbance, noise, lighting, reflection, air pollution, traffic or human presence;
- Obstruction of movement corridors, fish passage, or access to water sources and other core habitat features;
- Water quality impacts resulting from construction and operation of the Project; and
- Impacts to the bed, channel, and bank, in the reservoirs and creeks downstream of the Project.

The CEQA document also should identify existing and reasonably foreseeable future projects in the Project vicinity, disclose any cumulative impacts associated with these projects, determine the significance of each cumulative impact, and assess the significance of the Project's contribution to each impact (CEQA Guidelines, §15355). Although a project's impacts may be insignificant individually, its contributions to a cumulative impact may be considerable; a contribution to a significant cumulative

impact (e.g., reduction of available habitat for a listed species) should be considered cumulatively considerable without mitigation to minimize or avoid the impact.

The CEQA Guidelines direct the City of Pacifica, as the Lead Agency, to consider and describe in the draft EIR all feasible mitigation measures to avoid and/or mitigate potentially significant impacts of the Project on the environment based on comprehensive analysis of the potential direct, indirect, and cumulative impacts of the Project. (CEQA Guidelines, §§ 15021, 15063, 15071, 15126.2, 15126.4 & 15370.). This should include a discussion of take avoidance and minimization measures for special-status species, which are recommended to be developed in early consultation with the USFWS, the National Marine Fisheries Service and CDFW. These measures can then be incorporated as enforceable Project conditions to reduce potential impacts to biological resources to less-than-significant levels.

Fully protected species such as San Francisco gartersnake (*Thamnophis sirtalis tetrataenia*), may not be taken or possessed at any time except in limited circumstances (Fish & G. Code, §§ 3511, 4700, 5050, & 5515). Therefore, the draft EIR should include measures to completely avoid "take" of fully protected species.

CDFW COMMENT

The Project baseline environmental setting should be determined using an appropriate geographic scale to understand potentially significant impacts on the environment. To meaningful evaluate potential impacts to special-status plant, fish and wildlife species, impact assessments should be provided for each parcel within redesignated or rezoned locations (see Table 1 of the NOP).

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to prepare subsequent CEQA documents or to make supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (d) & (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNDDB field survey form can be filled out and submitted online here: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found here: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

CDFW anticipates that the proposed Project will have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray

the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (See: Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.).

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP in order to assist the City of Pacifica in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Jason Teichman, Environmental Scientist at 707-210-5104 or Jason.Teichman@wildlife.ca.gov; or Wesley Stokes, Senior Environmental Scientist, (Supervisory), at (707) 339-6066 or Wesley.Stokes@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erin Chappell
B77E9A6211EF486...

Erin Chappell
Regional Manager
Bay Delta Region

Attachment A: Special-status species, City of Pacifica, California, May 17, 2024

ec: Office of Planning and Research, State Clearinghouse (SCH No. 2024050168)

REFERENCES

Notice of Preparation (NOP), Program Environmental Impact Report, Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program, May 3, 2024.

Attachment A: Special-status species, City of Pacifica, California

Common Name	Scientific Name	Federal Status	State Status	CDFW Status	Rare Plant Rank	Taxon Group
Alameda song sparrow	Melospiza melodia pusillula	None	None	SSC		Birds
American badger	Taxidea taxus	None	None	SSC		Mammals
arcuate bush-mallow	Malacothamnus arcuatus	None	None		1B.2	Dicots
big free-tailed bat	Nyctinomops macrotis	None	None	SSC		Mammals
California red-legged frog	Rana draytonii	Threatened	None	SSC		Amphibians
Choris' popcornflower	Plagiobothrys chorisianus var. chorisianus	None	None		1B.2	Dicots
coastal triquetrella	Triquetrella californica	None	None		1B.2	Bryophytes
congested-headed hayfield tarplant	Hemizonia congesta ssp. congesta	None	None		1B.2	Dicots
foothill yellow-legged frog - central coast DPS	Rana boylii pop. 4	Threatened	Endangered			Amphibians
fragrant fritillary	Fritillaria liliacea	None	None		1B.2	Monocots
Franciscan onion	Allium peninsulare var. franciscanum	None	None		1B.2	Monocots
Franciscan thistle	Cirsium andrewsii	None	None		1B.2	Dicots
Kellogg's horkelia	Horkelia cuneata var. sericea	None	None		1B.1	Dicots
Kings Mountain manzanita	Arctostaphylos regismontana	None	None		1B.2	Dicots
Mission blue butterfly	Icaricia icarioides missionensis	Endangered	None			Insects
monarch - California overwintering population	Danaus plexippus plexippus pop. 1	Candidate	None			Insects
Montara manzanita	Arctostaphylos montaraensis	None	None		1B.2	Dicots
Myrtle's silverspot butterfly	Speyeria zerene myrtleae	Endangered	None			Insects
obscure bumble bee	Bombus caliginosus	None	None			Insects
pappose tarplant	Centromadia parryi ssp. parryi	None	None		1B.2	Dicots
perennial goldfields	Lasthenia californica ssp. macrantha	None	None		1B.2	Dicots
Point Reyes horkelia	Horkelia marinensis	None	None		1B.2	Dicots
Robbins' broomrape	Aphyllon robbinsii	None	None		1B.1	Dicots
rose leptosiphon	Leptosiphon rosaceus	None	None		1B.1	Dicots
saltmarsh common yellowthroat	Geothlypis trichas sinuosa	None	None	SSC		Birds
San Bruno elfin butterfly	Callophrys mossii bayensis	Endangered	None			Insects
San Francisco Bay spineflower	Chorizanthe cuspidata var. cuspidata	None	None		1B.2	Dicots
San Francisco campion	Silene verecunda ssp. verecunda	None	None		1B.2	Dicots
San Francisco collinsia	Collinsia multicolor	None	None		1B.2	Dicots
San Francisco gartersnake	Thamnophis sirtalis tetrataenia	Endangered	Endangered	FP		Reptiles
San Francisco owl's-clover	Triphysaria floribunda	None	None		1B.2	Dicots
steelhead - central California coast DPS	Oncorhynchus mykiss irideus pop. 8	Threatened	None	SSC		Fish
western bumble bee	Bombus occidentalis	None	Candidate Endangered			Insects
western leatherwood	Dirca occidentalis	None	None		1B.2	Dicots
white-rayed pentachaeta	Pentachaeta bellidiflora	Endangered	Endangered		1B.1	Dicots
woodland woollythreads	Monolopia gracilens	None	None		1B.2	Dicots

Fully protected, threatened or endangered, candidate, rare, and other special-status species that may occur in the City of Pacifica California Natural Diversity Database (CNDDB), May 17, 2024

From:	Limon, Jessica@Wildlife
To:	Harkousha, Brianne
Cc:	Teichman, Jason@Wildlife; Stokes, Wesley@Wildlife; OPR State Clearinghouse; Culpepper, Amanda(Mandy)@Wildlife; Weightman, Craig@Wildlife; Coombes, Julie@Wildlife
Subject:	Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program-SCH2024050168
Date:	Tuesday, May 28, 2024 4:55:44 PM
Attachments:	image001.png image002.png Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program-SCH202405016.pdf

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Good afternoon,

Please see the attached letter for your records. If you have any questions, contact Jason Teichman, cc'd above.

Thank you,

Jessica Limon
Staff Services Analyst/ Administrative Support Analyst
California Department of Fish and Wildlife – Bay Delta Region

2109 Arch Airport Rd., Stockton, CA 95206
209-616-6011
jessica.limon@wildlife.ca.gov

From: steve franco
To: Harkousha, Brianne
Subject: EIR on paloma north east sharp park
Date: Sunday, June 2, 2024 10:10:01 AM

[CAUTION: External Email]

Dear Miss Harkousha , My name is Joyce Toomey and I`m contacting you again on this housing issue. The first time I brought letter and photos into your office and Mr. Murdock`s about a year ago (it seems anyway) I never received a response , although that time I didn`t request one. 1. Parking on Paloma ave is also needed and used by the people who live on Carmel , Loma Vista and more , due to very small streets with no sidewalks. There is absolutely no parking available for the people here let alone for all the people you would be bringing in.. 2. We lived through the construction of the track and football field at Oceana for two years. We had no regular sleep for those two years due to the trucks and noise at all hours. It was Hell !!! I`m losing sleep again at just the thought. Also , all the damage they left behind , like cracking my sidewalk by parking their huge equipment ten feet away from my bedroom window , pulling the electric wires by not lowering the backs of their trucks and crushing the sidewalk down the street which wasn`t fixed till two years later .4. There is one main road into north east Sharp Park. That is Paloma . How can that be enough for our now and the future planning ? 5.We have red tail hawks , Heron , mountain lions , bucks and does , to only mention a few of the wild life this will be affecting . The construction on the field kept our birds and owls away for two years after they were done and we were invaded by skunks , racoons during the construction . They were forced to move to concrete life . 6. Please drive over here on weekends and 4:30 - 9:30 mon- fri . You can see for yourself if you never received my photos . 7> Are you going to get rid of PBR at Oceana ? Soccer , swimming meets , just swimming , ect. ???? Thank you for your time and I would love a response. I won`t expect soon as you will be buried by all us eleventh hour responders Deeply appreciated , Joyce (650) 355-3031 or at this email. scfranco2000@yahoo.com

From: Michelle Lavorini
To: Harkousha, Brianne
Subject: Paloma Ave
Date: Sunday, June 2, 2024 5:45:46 PM
Attachments: 20240602_171610.heic
20240602_171559.heic

[CAUTION: External Email]

Hello
My name is Michelle Lavorini we live on Paloma Ave across the street from Oceana High School and the pool. I want to voice our concerns about the proposed housing project. We bought our house back in 1999 with the intentions of living here the rest of our lives as we knew there would be no building across the street. Now this is something that is being proposed. As it is now we have soccer, tennis, swim meets and more and with that the parking is horrendous It's even hard for us to park in front of our own house let alone across the street when these events are happening. With a new structure to be proposed to be built this would increase more traffic on our block as it is bad enough with school going in and out of the parking lot, as well as some of the drivers racing up and down are block during that time. As you can see from some of the pictures that are just from today which is a Sunday parking It's crazy right now. As it is now We have to sometimes deal with RVs parking across the street which takes up parking as well. We basically have a one-way in and a one-way out in this section of Sharp Park and with more cars coming in and out This will make things more difficult for people to do. And when school is in the students do their physical education running up and down Paloma avenue to me I feel that this would be putting our kids at risk just by having housing across the street, on school property. It's bad enough when the RVs are parked there and the kids are running up and down I personally don't feel that is safe. You're also talking about redoing the field with sewer systems being installed concrete going up and down our block dirt going up and down the block and just your basic construction when that was done when the football field was being redone all the wildlife that we had up on the hills were gone and we haven't had any of that back until just about last year or two and now you want to put up 300 400 housing units I don't think that's fair to the neighborhood. Maybe but should be thought about is redoing the baseball fields up there and giving our kids a place to play ball and maybe even the school having baseball teams. There are plenty of other places in Pacifica that have the land to build housing. Maybe one thought is to have some of the people on the board or what have you come out to our neighborhood during some of these events to see how it affects our neighborhood We even have people parking around the corners to get to these events. On some weekends there are two and three events going on at the same time. After school we have school buses coming from other districts with kids for tennis matches swim meets soccer games And sometimes those events don't even end until about 8:00 p.m. at night. We hope your department will take deep consideration for all of our concerns of our neighborhood.
Thank you
Michelle Lavorini

Yahoo Mail: Search, Organize, Conquer

Send written comments to
bharkousha@pacifica.gov.
or Housing@pacifica.gov

From: Patricia Kremer
Date: 3 June 2024
Subject: Environmental Impacts of list of properties in Table of properties to be rezoned (Figure 1: Overview of Housing Element Sites)

#1. Six properties (# 10, 11, 12, 38, I and J) all lie east of Hwy #1 and are geographically adjacent to one another lying between Reina Del Mar and Fassler Ave., though none have direct access to those streets.

The total number of units estimated for these combined properties is 523, over 25% of Pacifica's total assigned RHNA number. This represents a sizeable fraction of the total in a relatively small geographic area. Given the geographic distribution of these properties, it seems essential that planning for residences for these properties would be done in a co-ordinated way in order to be successful, but the focus here is the EIR implications.

Although there are several reasons why this area might be considered desirable for residential development, several environmental issues need attention.

A) TRANSPORTATION

Although the properties proposed for future residential development are adjacent to Hwy #1, this is the busiest section of the highway in Pacifica and ingress/egress to the few **existing** businesses is **already** problematical. If the number of proposed residences were actually to be built in this area, ingress/egress directly from Hwy 1 is unimaginable.

Many Pacificans would undoubtedly consider the challenge of providing car access to these properties enough to deny ANY residential development here, certainly not several hundred units. Both Reina Del Mar and Fassler are overcapacity certain times of day and the two stoplights of this area are regular bottlenecks during the morning, evening, and weekend.

Nevertheless, I think careful and coordinated planning of these properties could overcome the traffic/transportation challenge.

Among ideas that might alleviate the challenge:

1) minimize paved surfaces used by residents for driving inside the newly developed area.

2) No public parking inside the new residential except for a limited number of spots for guests of residents. Strict limits on the number of parking places allowed for each unit (e.g. 0-3), but allowing for bartering among the residents for the parking permits (some residents would require no parking and others would want more than 2). There should **not** be a "one size fits all" requirement for parking/unit.

3) **No mixed use zoning**. Commercial use brings in additional cars and traffic which should not be tolerated in this area, because of the traffic problems discussed above.

4) Creative design of how automobile traffic will intersect with existing roads in both Vallemar and Rockaway, including for example, one way driveways and restrictive turning at the traffic lights. Perhaps nearly the entire ground level of the housing development might become a parking garage with internal driveways to move traffic north and south.

B. **LAND USE AND PLANNING; SAFETY (geology, soils, Wildfires, Terrain)**

Several environmental considerations are critical to consider when developing these site. Some of the area has very steep terrain and encroachment of housing onto steep hillsides needs to be minimized. Undeveloped hillsides has for a long time been a goal of Pacifica, and mitigations measures will be necessary if these properties are to be developed for an appreciable number of residential units. Given the topography, much of the acreage should already lie within the Hillside Protection District overlays and therefore restricted by city ordinance. Land that was less desirable for actual construction in this area could be utilized for recreational facilities and trails. Danger from wildfires can be mitigated by appropriate clearing of vegetation, and should be a necessary requirement for developing these sites.

Thoughtful and cooperative design of the housing could minimize potential hazards and maximize the attractiveness and desirability of the housing units.

C. **POPULATION AND HOUSING**

Over 500 units are included in the Table of the proposed Housing Element that need rezoning. The expectation would be that most of the units would be efficiencies and one bedroom units, but larger ones would also be included. "Affordable Housing" is the current War Cry of Pacificans, and many of the units proposed for this area would be for residrnts with less than what is know as "moderate". Nevertheless, this location is desirable in many ways, so there should be accommodations for a range of income levels and unit sizes in this development.

C. **UTILITIES AND INFRASTRUCTURE -**

These are generally straightforward with the exception of the infiltration of water in the sewage lines of the area. The City needs to require that **any** new development avoids the problem of infiltration of sewage lines, a make this problem a priority throughout the city.
Additional suggestions to minimize Environmental Impact:

- underground electrical
- no natural gas in new residences
- sewage dilution and flooding – these should be able to be avoided with appropriate engineering of the new development. The Rockaway pump station has been problematical during winter rains, but can be improved with appropriate expenditures by homeowners and the city.

D. **NOISE**

Noise is an important consideration for these housing units, although the housing units themselves will not be an appreciable source of environmental noise. The residential units **would** be VERY close to noise from Hwy #1, but appropriate building materials can mitigate noise. Some fraction of the units will have spectacular ocean and sunset views, and could be creatively designed with enclosed decks and other aesthetic amenities to compensate for their proximity to the highway.

E. **AESTHETICS**

This is a **critical** environmental consideration. The proximity of residential units to Highway #1 means that they will be VERY conspicuous to those driving on the highway. Since six different properties are included in the housing element for this same "strip" of land, appearance is a **major** consideration. There is an opportunity to

have development of this property be an example of intelligent/pleasing design or an absolute eyesore of disparate conflicting styles. The city should exert whatever control it has to **force** the developers to work **together** cooperatively in the design of this area. This is essential for the aesthetics as well as the major challenges associated with transportation (as stated above in "A").

#2. Last summer 2023, during a Scoping discussion (8/1/23), I was surprise to learn that there had been little to no direct communication between some of the property owners and the City staff who were compiling the list of proposed properties for the Housing Element to achieve our RHNA quota. If the City expects to fulfill the RHNA targets, it does not make any sense to include properties on the list that neither the property owner nor the neighbors want to see developed.

The most glaring example of this is property #21, on Oceana High School property owned by the Jefferson High School District. 178 units (nearly 10% of the total RHNA units) in this space would be an absolute disaster for the neighborhood. The residents of the area have expressed their objections most strongly and the School District has no interest in developing housing on this land. Nevertheless, the property continues to be listed again and again in the series of Tables for the Housing Element that have been included in various documents for more than two years.

Although I am not trained as a professional, I think I have included here several reasonable and practical considerations that should be taken seriously. Please to not take the requirement for public comments as a opportunity merely to "check the box". Also think in terms of the environment and long-term livability of our city.

California Department of Transportation

DISTRICT 4
OFFICE OF REGIONAL AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

June 3, 2024

SCH #: 2024050168
GTS #: 04-SM-2023-00570
GTS ID: 30347
Co/Rt/Pm: SM/1/VAR

Brianne Harkousha, Senior Planner
City of Pacifica
540 Crespi Drive
Pacifica, CA 94044

Re: Pacifica Housing Element Targeted General Plan Amendments and Rezoning Program (6th Cycle) Environmental Impact Report (EIR) – Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR)

Dear Brianne Harkousha:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Pacifica Housing Element Targeted General Plan Amendments and Rezoning Program (6th Cycle). The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities. The following comments are based on our review of the May 2024 NOP.

Please note this correspondence does not indicate an official position by Caltrans on this project and is for informational purposes only.

Project Understanding
The proposed project will create the regulatory framework to accommodate the Regional Housing Needs Allocation (RHNA) sites inventory and will rezone specific sites to develop housing. The involved amendments to the General Plan will affect existing land use designations that will enable more housing production.

Travel Demand Analysis
With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and multimodal improvements. For more information on how Caltrans assesses Vehicle Miles Traveled (VMT) analysis for land use projects, please review Caltrans' Transportation Impact Study Guide (*link*).

Multimodal Transportation Planning
Please review and include the reference to the *Caltrans District 4 Pedestrian Plan* (2021) and the *Caltrans District 4 Bike Plan* (2018) in the DEIR. These two plans studied existing conditions for walking and biking along and across the State Transportation Network (STN) in the nine-county Bay Area and developed a list of location-based and prioritized needs.

Please note that any Complete Streets reference should be updated to reflect Caltrans Director's Policy 37 (*link*) that highlights the importance of addressing the needs of non-motorists and prioritizing space-efficient forms of mobility, while also facilitating goods movement in a manner with the least environmental and social impacts. This supersedes Deputy Directive 64-R1, and further builds upon its goals of focusing on the movement of people and goods.

Integrated Transportation and Land Use Planning
Transportation and housing are integrally connected. The Housing Element Update process provides a mechanism to reflect current transportation and land use policy and adopt efficient land-use strategies such as transit-oriented, infill and mixed-use developments that can potentially reduce vehicle miles traveled and address climate change.

Please review and include the reference to the current California Transportation Plan (CTP) in the DEIR. CTP 2050 envisions that the majority of new housing located near existing housing, jobs, and transit, and in close proximity to one another will reduce vehicle travel and GHG emissions, and be accessible and affordable for all Californians, including disadvantaged and low-income communities. The location, density, and affordability of future housing will dictate much of our future travel patterns, and our ability to achieve the vision outlined in CTP 2050. Caltrans encourages the City to consider and explore the potential of excess state-owned property for affordable housing development, per Executive Order N-06-19.

Caltrans looks forward to reviewing the DEIR that should demonstrate how the future housing development patterns align with the City adopted VMT policies. Caltrans supports collaboration with local agencies to work towards a safe, functional, interconnected, multi-modal transportation network integrated through efficient and equitable land use planning and policies. The City should also continue to coordinate with Caltrans to identify and implement necessary network improvements and impact mitigation.

Equity and Public Engagement
We will achieve equity when everyone has access to what they need to thrive no matter their race, socioeconomic status, identity, where they live, or how they travel. Caltrans is committed to advancing equity and livability in all communities. We look forward to collaborating with the City to prioritize projects that are equitable and provide meaningful benefits to historically underserved communities.

Caltrans encourages the City to foster meaningful, equitable and ongoing public engagement in the General Plan development process to ensure future transportation decisions and investments reflect community interests and values. The public engagement process should include community-sensitive and equity-focused approaches seeking out the needs of individuals from underserved, Tribal, and low-income communities, the elderly, and individuals with disabilities.

Equitable Access
If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

Sea Level Rise
In the 2020 Caltrans District 4 Adaptation Priorities Report (*link*), S.R. 1 adjacent to the project location is identified as a high-priority Caltrans asset vulnerable to sea level rise, storm surge, and climate change impacts, including increased precipitation. Caltrans would like to be included in discussions, to stay informed as Caltrans is interested in engaging in multi-agency collaboration early and often, to find multi-benefit solutions that protect vulnerable shorelines, communities, infrastructure, and the environment. Please contact Vishal Ream-Rao, Caltrans Bay Area Climate Change Planning Coordinator, with any questions at d4_climateresilience@dot.ca.gov.

Lead Agency
As the Lead Agency, the City is responsible for all project mitigation, including any needed improvements to STN. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Melissa Hernandez, Associate Transportation Planner via LDR-D4@dot.ca.gov. For future early coordination opportunities or project referrals, please contact LDR-D4@dot.ca.gov.

Sincerely,

YUNSHENG LUO
Branch Chief, Local Development Review
Office of Regional and Community Planning

c: State Clearinghouse

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Appendix B

SUPPORTING MATERIALS FOR CULTURAL AND TRIBAL RESOURCES

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710

March 5, 2024

Alison Moore
Dyett & Bhatia

Via Email to: alison@dyettandbhatia.com

Re: Native American Consultation, Pursuant to Senate Bill 18 (SB18), Government Codes §65352.3 and §65352.4, as well as Assembly Bill 52 (AB52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2, SB 18 and AB 52 Tribal Consultation List Project, Solano County

Dear Ms. Moore:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties or projects.

Government Codes §65352.3 and §65352.4 require local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to cultural places when creating or amending General Plans, Specific Plans and Community Plans.

Public Resources Codes §21080.3.1 and §21080.3.2 requires public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to tribal cultural resources as defined, for California Environmental Quality Act (CEQA) projects.

The law does not preclude local governments and agencies from initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction. The NAHC believes that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

Best practice for the AB52 process and in accordance with Public Resources Code §21080.3.1(d), is to do the following:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The NAHC also recommends, but does not require that lead agencies include in their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential affect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

    - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE, such as known archaeological sites;
    - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
    - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the APE; and
    - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

    - Any report that may contain site forms, site significance, and suggested mitigation measures.

      All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.

3. The result of the Sacred Lands File (SFL) check conducted through the Native American Heritage Commission was positive. Please contact the tribes on the attached list for more information.

4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event, that they do, having the information beforehand well help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address:

Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

Attachment

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person
Solano	Cachil Dehe Band of Wintun Indians of the Colusa Indian Community	F	Wayne Mitchum Jr., Chairman
	Cachil Dehe Band of Wintun Indians of the Colusa Indian Community	F	Jennie Mitchum, Cultural Preservation Director
	Chicken Ranch Rancheria of Me-Wuk Indians	F	Lloyd Mathiesen, Chairperson
	Confederated Villages of Lisjan Nation	N	Corrina Gould, Chairperson
	Confederated Villages of Lisjan Nation	N	Cheyenne Gould, Tribal Cultural Resource Manager
	Confederated Villages of Lisjan Nation	N	Deja Gould, Language Program Manager
	Cortina Rancheria - Kletsel Dehe Band of Wintun Indians	F	Charlie Wright, Chairperson
	Guidiville Rancheria of California	F	Bunny Tarin, Tribal Administrator
	Guidiville Rancheria of California	F	Michael Derry, Historian
	Muwekma Ohlone Indian Tribe of the SF Bay Area	N	Monica Arellano, Vice Chairwoman

Muwekma Ohlone Indian Tribe of the SF Bay Area	N	Charlene Nijmeh, Chairperson
Nashville Enterprise Miwok-Maidu-Nishinam Tribe	N	Cosme Valdez, Chairperson
Nashville Enterprise Miwok-Maidu-Nishinam Tribe	N	Leland Valdez, Cultural Resources
Northern Valley Yokut / Ohlone Tribe	N	Timothy Perez, Tribal Compliance Officer
United Auburn Indian Community of the Auburn Rancheria	F	Gene Whitehouse, Chairperson
United Auburn Indian Community of the Auburn Rancheria	F	Matt Moore, Tribal Historic Preservation Officer
Wilton Rancheria	F	Herbert Griffin, Executive Director of Cultural Preservation
Wilton Rancheria	F	Cultural Preservation Department,
Wilton Rancheria	F	Dahlton Brown, Executive Director of Administration
Yocha Dehe Wintun Nation	F	Leland Kinter, Tribal Treasurer
Yocha Dehe Wintun Nation	F	Anthony Roberts, Chairperson

	Yocha Dehe Wintun Nation	F	Yvonne Perkins, THPO, Cultural Resources Chairman
	Yocha Dehe Wintun Nation	F	James Kinter, Tribal Secretary

This list is current only as of the date of this document and is based on the information available to the Commission o
the Pu

This list is applicable only for consultation with Native American tribes under Government Code S

Native American Heritage Commission
Native American Contact List
Solano County
3/5/2024

Contact Address	Phone #	Fax #	Email Address
3730 Highway 45 Colusa, CA, 95932	(530) 458-6512		asmelser@colusa-nsn.gov
3730 Highway 45 Colusa, CA, 95932	(530) 458-6303		jmitchum@colusa-nsn.gov
P.O. Box 1159 Jamestown, CA, 95327	(209) 984-9066	(209) 984-9269	lmathiesen@crtribal.com
10926 Edes Avenue Oakland, CA, 94603	(510) 575-8408		cvltribe@gmail.com
10926 Edes Ave Oakland, CA, 94603	(510) 575-8408		cvltribe@gmail.com
10926 Edes Ave Oakland, CA, 94603	(510) 575-8408		cvltribe@gmail.com
P.O. Box 1630 Williams, CA, 95987	(530) 473-3274	(530) 473-3301	
PO Box 339 Talmage, CA, 95481	(707) 462-3682		admin@guidiville.net
PO Box 339 Talmage, CA, 95481	(707) 391-1665		historian@guidiville.net
20885 Redwood Road, Suite 232 Castro Valley, CA, 94546	(408) 205-9714		monicavarellano@gmail.com

20885 Redwood Road, Suite 232 Castro Valley, CA, 94546	(408) 464-2892		cnijmeh@muwekma.org
P.O. Box 580986 Elk Grove, CA, 95758-0017	(916) 396-1173		valdezcome@comcast.net
	(916) 429-8047		
P.O. Box 717 Linden, CA, 95236	(209) 662-2788		huskanam@gmail.com
10720 Indian Hill Road Auburn, CA, 95603	(530) 883-2390	(530) 883-2380	TribalChairman@auburnrancheria.com
10720 Indian Hill Road Auburn, CA, 95603	(530) 883-2390		THPO@auburnrancheria.com
9728 Kent Street Elk Grove, CA, 95624	(916) 683-6000		hgriffin@wiltonrancheria-nsn.gov
9728 Kent Street Elk Grove, CA, 95624	(916) 683-6000		cpd@wiltonrancheria-nsn.gov
9728 Kent Street Elk Grove, CA, 95624	(916) 683-6000		dbrown@wiltonrancheria-nsn.gov
P.O. Box 18 Brooks, CA, 95606	(530) 908-2902		lkinter@yochadehe.gov
P.O. Box 18 Brooks, CA, 95606	(530) 796-3400		thpo@yochadehe.gov

P.O. Box 18 Brooks, CA, 95606	(530) 796-3400		thpo@yochadehe.gov
P.O. Box 18 Brooks, CA, 95606	(530) 908-7564		jkinter@yochadehe.gov

on the date it was produced. Distribution of this list does not relieve any person of statutory responsibility as defined in Secti
ublic Resources Code and Section 5097.98 of the Public Resources Code.

ections 65352.3, 65352.4 et seq. and Public Resources Code Sections 21080.3.1 for the proposed SB 18 and AB 52 Tribal

Cultural Affiliation	Counties	Last Updated
Wintun	Colusa,Glenn,Lake,Napa,Sacramento,Solano,Sutter,Yolo	6/6/2023
Wintun	Colusa,Glenn,Lake,Napa,Sacramento,Solano,Sutter,Yolo	6/6/2023
Me-Wuk	Alpine,Amador,Calaveras,Contra Costa,El Dorado,Fresno,Madera,Mariposa,Merced,Mono,Sacramento,San	
Bay Miwok Ohlone Delta Yokut	Alameda,Contra Costa,Sacramento,San Joaquin,Santa Clara,Solano,Stanislaus	3/22/2023
Bay Miwok Ohlone Delta Yokut	Alameda,Contra Costa,Sacramento,San Joaquin,Santa Clara,Solano,Stanislaus	3/22/2023
Bay Miwok Ohlone Delta Yokut	Alameda,Contra Costa,Sacramento,San Joaquin,Santa Clara,Solano,Stanislaus	3/22/2023
Wintun	Colusa,Napa,Solano,Yolo	
Pomo	Alameda,Contra Costa,Lake,Marin,Mendocino,Napa,Sacramento,San Joaquin,Solano,Sonoma	6/21/2023
Pomo	Alameda,Contra Costa,Lake,Marin,Mendocino,Napa,Sacramento,San Joaquin,Solano,Sonoma	6/21/2023
Costanoan	Alameda,Contra Costa,Marin,Merced,Napa,Sacramento,San Francisco,San Joaquin,San Mateo,Santa Clara,Santa Cruz,Solano,Sonoma,Stanislaus	7/12/2019

Costanoan	Alameda,Contra Costa,Marin,Merced,Napa,Sacramento,San Francisco,San Joaquin,San Mateo,Santa Clara,Santa Cruz,Solano,Sonoma,Stanislaus	
Miwok	Alpine,Amador,Calaveras,Contra Costa,El Dorado,Fresno,Madera,Mariposa,Merced,Mono,Sacramento,San	7/17/2023
Miwok	Alpine,Amador,Calaveras,Contra Costa,El Dorado,Fresno,Madera,Mariposa,Merced,Mon	7/17/2023
Costanoan Northern Valley Yokut	Alameda,Calaveras,Contra Costa,Fresno,Madera,Mariposa,Merced,Sacramento,San Benito,San Joaquin,Santa	11/21/2023
Maidu Miwok	Amador,Butte,El Dorado,Nevada,Placer,Plumas,Sacramento,San Joaquin,Sierra,Solano,Sutter,Yolo,Yuba	12/13/2023
Maidu Miwok	Amador,Butte,El Dorado,Nevada,Placer,Plumas,Sacramento,San Joaquin,Sierra,Solano,Sutter,Yolo,Yuba	12/13/2023
Miwok	Alameda,Alpine,Amador,Contra Costa,El Dorado,Mono,Nevada,Placer,Sacramento,San Joaquin,Solano,Stanislaus,Sutter,Yolo,Yuba	8/7/2023
Miwok	Alameda,Alpine,Amador,Contra Costa,El Dorado,Mono,Nevada,Placer,Sacramento,San Joaquin,Solano,Stanislaus,Sutter,Yolo,Yuba	8/7/2023
Miwok	Alameda,Alpine,Amador,Contra Costa,El Dorado,Mono,Nevada,Placer,Sacramento,San Joaquin,Solano,Stanislaus,Sutter,Yolo,Yuba	8/7/2023
Patwin	Colusa,Lake,Napa,Sacramento,Solano,Sutter,Yolo	11/6/2023
Patwin	Colusa,Lake,Napa,Sacramento,Solano,Sutter,Yolo	11/6/2023

Patwin	Colusa,Lake,Napa,Sacramento,Solano,Sutter, Yolo	11/6/2023
Patwin	Colusa,Lake,Napa,Sacramento,Solano,Sutter, Yolo	11/6/2023

on 7050.5 of the Health and Safety Code, Section 5097.94 of

Record: PROJ-2024-001284
Report Type: AB52 SB18 Combo
Counties: Solano
NAHC Group: All

l Consultation List Project, Solano County.

The Amah Mutsun Tribal Band of San Juan Bautista
&
A.M.T.B. Inc.

Letter of Response

To whom it may concern:

It is our pride and privilege to be of service for any Native American Cultural Resource Monitoring, Consulting and/ or Sensitivity Training you may need or require. We take our Heritage and History seriously and are diligent about preserving as much of it as we can. Construction is a constant in the Bay Area and with that new discoveries are bound to happen. If you choose our services we will gladly guide all personnel through proper procedures to safely protect and preserve: Culture, Heritage, and History.

It is highly recommended, if not previously done, to search through Sacred Lands Files (SLF) and California Historical Resource Information Systems (CHRIS) as well as reaching out to the Native American Heritage Commission (NAHC) In order to determine whether you are working in a Cultural and/ or Historic sensitivity.

If you have received any positive cultural or historic sensitivity within 1 mile of the project area here is A.M.T.B Inc's and Amah Mutsun Tribal Band of San Juan Bautista's recommendations:

- All Crews, Individuals and Personnel who will be moving any earth be Cultural Sensitivity Trained.
- A Qualified California Trained Archaeological Monitor is present during any earth movement.
- A Qualified Native American Monitor is present during any earth movement.

If further Consultation, Monitoring or Sensitivity Training is needed please feel free to contact A.M.T.B. Inc. or Myself Directly.

Sincerely, Irenne Zwierlein

Irenne Zwierlein

3030 Soda Bay Road, Lakeport
CA 95453
amtbinc21@gmail.com
(650)851-7489

Amah Mutsun Tribal Band of San Juan Bautista
&
AMTB Inc.

3030 Soda Bay Road Lakeport, CA 95453

Our rates for 2023

$250.00 per hour.

4 hours minimum

Cancellations not 48 hours (about 2 days) prior will be charged a 4-hour minimum. There is a round trip mileage charge if canceled after they have traveled to site.

Anything over 8 hours a day is charged as time and a half.

Weekends are charged at time and a half.

Holidays are charged at double time.

For fiscal year (FY) 2023, standard per diem rate of $329 ($255 lodging, $74 M&IE).

M&IE Breakdown FY 2023

M&IE Total[1]	Continental Breakfast/ Breakfast[2]	Lunch[2]	Dinner[2]	Incidental Expenses	First & Last Day of Travel[3]
$74.00	$17.00	$18.00	$34.00	$5.00	$55.50

Beginning on July 1st, 2022, the standard mileage rates for the use of a car round trip (also vans, pickups or panel trucks) will be: $62.50 cents per mile driven for business use or what the current federal standard is at the time.

Our Payment terms are 5 days from date on invoice.

Our Monitors are Members of the Amah Mutsun Tribal Band of Mission San Juan Bautista.

If you have any questions, please feel free to contact the A.M.T.B. Inc. at the below contact information.

Sincerely,
Irenne Zwierlein

Irenne Zwierlein

3030 Soda Bay Rd, Lakeport
CA 95453
amtbinc21@gmail.com
(650)851-7489

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 7/25/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Brenda Aldaco	
Allied Brokers 591 Lytton Avenue Palo Alto CA 94301	PHONE (A/C, No, Ext): (650) 328-1000	FAX (A/C, No): (650) 324-1142
	E-MAIL ADDRESS: BusinessVIP@alliedbrokers.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A: Scottsdale Insurance Company	41297
INSURED Amah Mutsun Tribal Band 3030 SODA BAY RD LAKEPORT CA 95453	INSURER B: United States Liability Insurance Company	25895
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [X] POLICY [ ] PRO-JECT [ ] LOC [ ] OTHER:			CPS7617452	07/09/2022	07/09/2023	EACH OCCURRENCE	$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 100,000
							MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
							GENERAL AGGREGATE	$ 2,000,000
							PRODUCTS - COMP/OP AGG	$ 2,000,000
							Deductible	$ 500
	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident)	$
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
								$
	[ ] UMBRELLA LIAB [ ] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $						EACH OCCURRENCE	$
							AGGREGATE	$
								$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [ ] N / A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						[ ] PER STATUTE [ ] OTH-ER	
							E.L. EACH ACCIDENT	$
							E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$
B	Professional Liability			SP 1573468B	06/21/2022	06/21/2023	Each Claim	$1,000,000
							Aggregate	$1,000,000
							Deductible	$2,500

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

PROOF OF COVERAGE

CERTIFICATE HOLDER

For Your Information

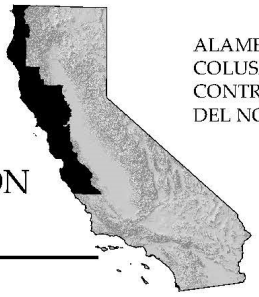
CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Brenda Aldaco

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM



ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
1400 Valley House Drive, Suite 210
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
https://nwic.sonoma.edu

ACCESS AGREEMENT SHORT FORM

File Number: 23-0092

I, the the undersigned, have been granted access to historical resources information on file at the Northwest Information Center of the Califronia Historical Resources Information System.

I understand that any CHRIS Confidential Information I receive shall not be disclosed to individuals who do not qualify for access to such information, as specified in Section III(A-E) of the CHRIS Information Center Rules of Operation Manual, or in publicly distributed documents without written consent of the Information Center Coordinator.

I agree to submit historical Resource Records and Reports based in part on the CHRIS information released under this Access Agreement to the Information Center within sixy (60) calendar days of completion.

I agree to pay for CHRIS services provided under this Access Agreement within sixty (60) calendar days of receipt of billing.

I understand that failure to comply with this Access Agreement shall be grounds for denial of access to CHRIS Information.

Print Name: Clare Kucera Date:

Signature:

Affiliation: Dyett & Bhatia

Address: City/State/ZIP:

Billing Address (if different from above):

Special Billing Information

Telephone: Email: clare@dyettandbhatia.com

Purpose of Access:

Reference (project name or number, title of study, and street address if applicable):

Data Search for City of Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments and Rezoning P

County: SMA USGS 7.5' Quad: San Francisco South, Montara Mountain

This is not an invoice. Sonoma State University will send separate Invoice

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
1400 Valley House Drive, Suite 210
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
https://nwic.sonoma.edu

August 21, 2023 NWIC File No.: 23-0092

Clare Kucera
Dyett & Bhatia
1330 Broadway, Suite 604
Oakland, CA 94612

Re: Record search results for the proposed City of Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments and Rezoning Program

Dear Clare Kucera:

Per your request received by our office on July 24, 2023, a records search was conducted for the above referenced project by reviewing pertinent Northwest Information Center (NWIC) base maps that reference cultural resources records and reports, historic-period maps, and literature for San Mateo County. An Area of Potential Effects (APE) map was provided depicting the Pacifica Housing Element 6th Cycle project areas and will be used to conduct this records search. Please note that use of the term cultural resources includes both archaeological resources and historical buildings and/or structures.

Review of this information indicates that there has been twenty-four cultural resource studies that cover approximately 2/3 of the Pacifica Housing Element 6th Cycle project areas. See enclosed Report Listing. This Pacifica Housing Element 6th Cycle project area contains one recorded Native American archaeological resource, P-41-000162, a habitation site. There are no previously recorded historic-period archaeological resources within the project areas. The State Office of Historic Preservation Built Environment Resources Directory (OHP BERD), which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places, lists two recorded buildings or structures within two of the proposed Pacifica Housing Element 6th Cycle project areas; #23 contains the Sanchez Art Center at 1220 Linda Mar Blvd (OTIS # 524214), and #34 contains Vallemar Station at 2125 SR 1 (OTIS # 518595), each with status code 6Y, meaning, these resources were Determined ineligible for the National Register (NR) by consensus through Section 106 process – Not evaluated for the California Register (CR) or local listing. In addition to these inventories, the NWIC base maps also show two recorded buildings or structures within the proposed Pacifica Housing Element 6th Cycle project area, #23 contains P-41-002208, the Art Center, and #34 contains P-41-002209, Vallemar Station, both, as listed above.

At the time of Euroamerican contact, the Native Americans that lived in the area were speakers of the Ramaytush language, part of the Costanoan/Ohlone language family (Levy 1978:485). Using Milliken's study of various mission records, the proposed Pacifica Housing Element 6th Cycle project area is located within the lands of the *Pruristac*, a village in San Pedro Valley on the Pacific Coast just south of San Francisco, and *Timigtac*, just a few miles north on

the coast at the present town of Rockaway Beach, were inhabited by small group of closely interrelated families. (Milliken 1995: 251).

Based on an evaluation of the environmental setting and features associated with known sites, Native American resources in this part of San Mateo County have been found in areas marginal to the coast, and inland on ridges, midslope benches, in valleys, near intermittent and perennial watercourses and near areas populated by oak, buckeye, manzanita, and pine, as well as near a variety of plant and animal resources. The Pacifica Housing Element 6th Cycle project areas are all located within the City of Pacifica in San Mateo County in areas marginal to the Pacific Ocean and inland along areas of the first coastal range. Given the similarity of these environmental factors and the ethnographic and archaeological sensitivity of the area, there is a high potential for unrecorded Native American resources to be within the proposed Pacifica Housing Element 6th Cycle project area.

Review of historical literature and maps indicated historic-period activity within the Pacifica Housing Element 6th Cycle project area. Early San Mateo County maps indicated the project area was located within the lands of several land owners (Bromfield 1894). In addition, other San Mateo County maps indicate buildings and/or roads within or immediately adjacent to these project areas (1896, 1899, 1915). With this in mind, there is a high potential for unrecorded historic-period archaeological resources to be within the proposed Pacifica Housing Element 6th Cycle project areas.

The 1956 photo revised 1980 San Francisco South and Montara Mountain USGS 7.5-minute topographic quadrangle depicts buildings and structures within the Pacifica Housing Element 6th Cycle project area. If present, these unrecorded buildings or structures may meet the Office of Historic Preservation's minimum age standard that buildings, structures, and objects 45 years or older may be of historical value.

RECOMMENDATIONS:

1) This proposed Pacifica Housing Element 6th Cycle project area contains three cultural resources, including one recorded archaeological resource, P-41-000162, and two recorded buildings or structures, P-41-002208, the Sanchez Art Center, and P-41-002209, Vallemar Station. There is a high potential for unrecorded Native American archaeological resources and a high potential for historic-period archaeological resources to be within the project area.

Given that the purpose of a General Plan Update for the City of Pacifica (Housing Element 6th Cycle) is to provide a planning document that will guide future development, and given the presence of known cultural resources and the likelihood of additional resources in unsurveyed areas, it is recommended that future projects be considered on an individual basis under the Northwest Information Center's Project Review Program. This Program is organized to aid cities and counties in meeting their CEQA obligations on a project-by-project basis. These reviews result in project specific information and recommendations, and are completed in seven calendar days. Please contact the NWIC Coordinator at 707/588-8455 for additional information.

2) Our research indicates that there are two buildings or structures included in the OHP BERD within the Pacifica 6th Cycle project area, the Sanchez Art Center at 1220 Linda Mar Blvd (OTIS # 524214), and the Vallemar Station at 2125 SR 1 (OTIS # 518595) that are included in the OHP BERD. Additionally, the project area may contain unrecorded buildings or structures may meet the Office of Historic Preservation's minimum age standard that buildings, structures, and objects 45 years or older may be of historical value. Therefore, it is recommended that the agency responsible for Section 106 compliance consult with the Office of Historic Preservation regarding potential impacts to these buildings or structures:

Project Review and Compliance Unit
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816
(916) 445-7000

3) Review for possible historic-period buildings or structures has included only those sources listed in the attached bibliography and should not be considered comprehensive.

4) As per Senate Bill 18 (Chapter 905, Statutes of 2004), local governments are required to consult with California Native American tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of general plans (defined in Government Code §65300 et seq.). Each time a local government considers a proposal to adopt or amend the general plan, they are required to contact the appropriate tribes identified by the Native American Heritage Commission.

5) We recommend the lead agency contact the local Native American tribes regarding traditional, cultural, and religious heritage values. For a complete listing of tribes in the vicinity of the project, please contact the Native American Heritage Commission at (916)373-3710.

6) If archaeological resources are encountered **during construction,** work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. Project personnel should not collect cultural resources. Native American resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.

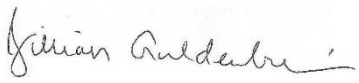
7) It is recommended that any identified cultural resources be recorded on DPR 523 historic resource recordation forms, available online from the Office of Historic Preservation's website: https://ohp.parks.ca.gov/?page_id=28351

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

Thank you for using our services. Please contact this office if you have any questions, (707) 588-8455.

Sincerely,



Jillian Guldenbrein
Researcher

LITERATURE REVIEWED

In addition to archaeological maps and site records on file at the Northwest Information Center of the Historical Resources Information System, the following literature was reviewed:

Barrows, Henry D., and Luther A. Ingersoll
2005 *Memorial and Biographical History of the Coast Counties of Central California*. Three Rocks Research, Santa Cruz (Digital Reproduction of The Lewis Publishing Company, Chicago: 1893.)

Brabb, Earl E., Fred A. Taylor, and George P. Miller
1982 *Geologic, Scenic, and Historic Points of Interest in San Mateo County, California*. Miscellaneous Investigations Series, Map I-1257-B, 1:62,500. Department of the Interior, United States Geological Survey, Washington, D.C.

Bromfield, Davenport
1894 Official Map of San Mateo County, California

Department of Environmental Management
1980 Coastside Cultural Resources. Planning Division, San Mateo County, Redwood City, CA.

General Land Office
1859 Survey Plat for Rancho San Pedro Sanchez Township 3, 4 South/Ranges 6, 5 West.

Heizer, Robert F., editor
1974 *Local History Studies*, Vol. 18., "The Costanoan Indians." California History Center, DeAnza College, Cupertino, CA.

Helley, E.J., K.R. Lajoie, W.E. Spangle, and M.L. Blair
1979 *Flatland Deposits of the San Francisco Bay Region - Their Geology and Engineering Properties, and Their Importance to Comprehensive Planning*. Geological Survey Professional Paper 943. United States Geological Survey and Department of Housing and Urban Development.

Hope, Andrew
2005 *Caltrans Statewide Historic Bridge Inventory Update*. Caltrans, Division of Environmental Analysis, Sacramento, CA.

Kroeber, A.L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78, Smithsonian Institution, Washington, D.C. (Reprint by Dover Publications, Inc., New York, 1976)

Levy, Richard
1978 Costanoan. In *California*, edited by Robert F. Heizer, pp. 485-495. Handbook of North American Indians, vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Milliken, Randall
1995 *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810*. Ballena Press Anthropological Papers No. 43, Menlo Park, CA.

Nelson, N.C.
1909 *Shellmounds of the San Francisco Bay Region*. University of California Publications in American Archaeology and Ethnology 7(4):309-356. Berkeley. (Reprint by Kraus Reprint Corporation, New York, 1964)

Nichols, Donald R., and Nancy A. Wright
1971 Preliminary Map of Historic Margins of Marshland, San Francisco Bay, California. U.S. Geological Survey Open File Map. U.S. Department of the Interior, Geological Survey in cooperation with the U.S. Department of Housing and Urban Development, Washington, D.C.

San Mateo County Historic Resources Advisory Board
1984 San Mateo County: Its History and Heritage. Second Edition. Division of Planning and Development Department of Environmental Management.

State of California Department of Parks and Recreation
1976 *California Inventory of Historic Resources*. State of California Department of Parks and Recreation, Sacramento.

State of California Office of Historic Preservation **
2022 *Built Environment Resources Directory*. Listing by City (through September 23, 2022). State of California Office of Historic Preservation, Sacramento.

**Note that the Office of Historic Preservation's *Historic Properties Directory* includes National Register, State Registered Landmarks, California Points of Historical Interest, and the California Register of Historical Resources as well as Certified Local Government surveys that have undergone Section 106 review.

Report List

NWIC File # 23-0092 City of Pacifica Housing Element (6th Cycle) Targeted General Plan

Report No.	Other IDs	Year	Author(s)	Title	Affiliation
S-003051	Caltrans - 04210-38141; Voided - E-49 SMA	1978	Cindy Desgrandchamp	Cultural Resources Survey, 04-SMa-1, Proposed Operational and Safety Improvements to Route 1 in Pacifica, San Mateo County, P.M. 40.7/43.5, 04210-38141	Caltrans
S-003082	Voided - E-81 SMA	1970	Stephen A. Dietz and Thomas L. Jackson	An Archaeological and Historical Reconnaissance of a Portion of the San Mateo County Coastside	Adan E. Treganza Anthropology Museum, San Francisco State College
S-003140	Voided - E-145 SMA	1976	Daniel L. Young	Archaeological Survey Report for Resurfacing and Reconstructing Shoulders of Highway on 4-SM-1-45.4/46.5	California Department of Transportation, District 4
S-003152	Voided - E-158 SMA	1975	Miley Paul Holman and David Chavez	An Archaeological Reconnaissance of the San Pedro Valley Park Site	Adan E. Treganza Anthropology Museum
S-004876		1971	Michael J. Moratto	Archaeological reconnaissance of the proposed freeway route 380 between the Coast Highway and Skyline Blvd. (letter report)	Adan Treganza Anthropology Museum, San Francisco State College
S-004877		1974	Michael J. Moratto	Archaeological reconnaissance of proposed Route 380, between Hwy. 280 on the east and Hwy. 1 on the west (letter report)	San Francisco State University

Report List

NWIC File # 23-0092 City of Pacifica Housing Element (6th Cycle) Targeted General Plan

Report No.	Other IDs	Year	Author(s)	Title	Affiliation
S-005819	Caltrans - 04210-120771; Caltrans - 0421-112370; Caltrans - EA 112371; OHP PRN - FHWA830912A; Voided - S-29219; Voided - S-6140; Voided - S-6606; Voided - S-6933	1983	David W. Mayfield	Archaeological Survey Report for a Proposed Bypass of Route 1 from the San Pedro Valley to Half Moon Bay, San Mateo County, 04-SM-1-34.0/41.0	California Department of Transportation, District 4
S-005819a		1984	Robert L. Gross	Addendum Two: Archaeological Survey Report for the Proposed Bypass of Route 1 from the San Pedro Valley to Half Moon Bay, San Mateo County 4-SM-1 34.0/41.0	California Department of Transportation
S-005819b		1984	Lawrence E. Weigel	Archaeological Survey Report, Third Addendum to the Devil's Slide Bypass, 04-SM-1 P.M. 34.0/41.0	California Department of Transportation
S-005819c		1983	Eric Montizambert	Addendum Archaeological Survey Report for the Marine Disposal Alternative of the Proposed Bypass of Route 1 from the San Pedro Valley to Half Moon Bay, San Mateo County, 04-SM-1-38.8/39.3, 04210-120771	California Department of Transportation
S-005819d		1983	Mara Melandry	Evaluation of Ocean Shore Railroad along San Mateo County Coast, 04-SM-1, 34/0/41.0, 04210-120771, Devil's Slide	California Department of Transportation
S-005819e		1985	Knox Mellon, Marion Mitchell-Wilson, Kathryn Gualtieri, Robert Fink, D. L. Eyres, and Richard T. Fitzgerald	FHWA830912A; Proposed Devil's Slide Bypass Project 04-SM-1-34.0/41.0	California Office of Historic Preservation, California Department of Transportation
S-005819f		1998	Mark G. Hylkema	Archaeologial Survey Report for the Proposed Tunnel Alternative, Devil's Slide Improvement Project, 4-SMA-1 PM 34.0/41.0(KP 54.7/66.0), San Mateo County, California	California Department of Transportation
S-005819g		2000	Mark G. Hylkema and Richard T. Fitzgerald	Supplemental Historic Properties Survey Report, Devil's Slide Improvement Project in San Mateo County, State Route 1, KP 54.7/66.0 (PM 34.0/41.0) 04-210-112371	California Department of Transportation

Report List

NWIC File # 23-0092 City of Pacifica Housing Element (6th Cycle) Targeted General Plan

Report No.	Other IDs	Year	Author(s)	Title	Affiliation
S-005819h		2000	Elizabeth Krase	Historic Architectural Survey Report- MOU Short Form, Supplement to HPSR Prepared in 1982 Revised 1984, Devil's Slide area of State Route 1	California Department of Transportation
S-005819j		2000	Richard T. Fitzgerald	Supplemental Archaeological Survey Report, For the Devil's Slide Improvement Project, 4-SMA-1 PM 34.0/41.0 (KP54.7/66.0), San Mateo County, California, EA 112371	California Department of Transportation
S-005819k		1982	Fred Wasserman	Historic Architectural Survey Report, for the Proposed Devil's Slide Bypass Project, from Half Moon Bay Airport to Linda Mar Boulevard in Pacifica, 04-SM-1, 34.0/41.0, 04132-926000-3CULT	California Department of Transportation
S-005819l		1982		Historic Properties Survey Report, Proposed Devil's Slide Bypass Project from Half Moon Bay Airport to Linda Mar Boulevard in Pacifica, San Mateo County, 04-SM-1, 34.0/41.0, 04132-926000-3CULT	California Department of Transportation
S-005950	Caltrans - 04210-209170; Voided - E-200 SMA	1981	Margaret Buss	Archaeological Survey Report for Safety and Operational Improvements between Fassler Avenue and Crespi Avenue, 04-SM-1 41.3/42.2 04210-209170, City of Pacifica, San Mateo County	Caltrans District 04
S-008244	Caltrans - 04215-112261; Voided - S-9715	1986	Mara Melandry	Archaeological Survey Report, 4-SM-1 PM 42.0/R43.2, from Fassler Avenue to Westport Drive, in the City of Pacifica, San Mateo County, 04215-112261	Caltrans District 4
S-008244a		1988	Denise O'Connor	Negative Archaeological Survey report, Addendum #1, Proposed new alignment of Highway 1, 04-Sma-1 P.M. 42.0/43.2 04215-11261	Caltrans
S-008244b		1988		Addendum #1 Historic Properties Survey Report for 4-SMA-1, P.M. 42.0/43.2 From Fassler Avenue to Westport Drive in the City of Pacifica, San Mateo County, 04215-112261	California Department of Transportation

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation
S-008244c		1988	Denise O'Connor	Addendum #1 Historical Architectural Survey Report for a proposed Highway Project on Highway 1 in the City of Pacifica, San Mateo County, 4-SMA-1, P.M. 42.0/43.2, 04215-112261	California Department of Transportation
S-008244d		1986		Historic Properties Survey Report for 4-SMA-1, P.M. 42.0/43.2 From Fassler Avenue to Westport Drive in the City of Pacifica, San Mateo County, 04215-112261	California Department of Transportation
S-008244e		1986	Gregory King	Historical Architectural Survey Report for a Proposed Widening and Realignment of SM-1 Near Fassler Avenue, 4-SMA-1, P.M. 42.0/43.2, San Mateo County, 04215-112261	California Department of Transportation
S-008244f		1986	Kathryn Gualtieri	FHWA860919A, Historic Property Survey Report: Proposed Widening of State Route 1 from Fassler Avenue to Westport Drive, Pacifica, California (4-SM-1 42.0/43.2)	Office of Historic Preservation
S-008265	Other - DACWO 7-75-E-4283	1975	Robin L. Gordon and Martin Rosenson	Assessment of Impact on the Cultural Resources of the Proposed San Pedro Creek Improvement, City of Pacifica, San Mateo County, California	
S-009185		1987	Allan G. Bramlette	Cultural Resources Assessment for the San Pedro Creek Bank Stabilization and Flood Control Project in the City of Pacifica, San Mateo County, California	
S-019579		1997	Miley Paul Holman	Archaeological Field Inspection of the Proposed Fairmont Estates Project, Pacifica, San Mateo County, California (letter report)	Holman & Associates
S-022089		1995	Kathleen Ungvarsky	San Pedro Flood Control Project	U.S. Army Corps of Engineers
S-025067		2002	Matthew R.Clark	Cultural Resource Evaluation of the Pacifica Village Center Project Area in the City of Pacifica, San Mateo County, California	Holman & Associates
S-025156	Other - Internship Project 50001-2000	2001	Kathleen Ungvarsky	A Cultural Resources Study and Discovery Report for the San Pedro Creek Flood Control and Wetland Restoration Project, City of Pacifica, San Mateo County, California	U.S. Army Corps of Engineers

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation
S-034499	Voided - S-31602	2007	Matthew R. Clark	Historic Properties Inventory Research for National Historic Preservation Act Section 106 Compliance for the North Coast County Water District, Pacifica Recycled Water Project	Holman & Associates
S-034499a		2006	Matthre R. Clark	Historic Properties Inventory Research for National Historic Preservation Act Section 106 Compliance for the North Coast County Water District Pacifica Recycled Water Project	Holman & Associates
S-035683		2008	Lorna Billat	New Tower (NT) Submission Packet: FCC Form 620. Project Name: Sanchez Art Center. Project Number: SF20160B.	EarthTouch, Inc.
S-036825	Caltrans - EA 04-254600; Voided - S-36826; Voided - S-36827	2009	Colin Busby	Historic Property Survey Report, District 04, San Mateo County, Post Miles 41.7-43.0, Expenditure Authorization 04-254600	Basin Research Associates, Inc.
S-036825a		2009	Colin I. Busby	ESA Action Plan, Route 1/Calera Parkway Project Between Fassler Avenue and Reina Del Mar Avenue, Pacifica, San Mateo County, 04-SMA-1 PM 41.7 to 43.0, Caltrans EA 04-254600	Basin Research Associates, Inc.
S-036825a		2009	Colin I. Busby	Archaeological Survey Report, Route 1/Calera Parkway Project between Fassler Avenue and Reina Del Mar Avenue, Pacifica, San Mateo County, 04-SMA-1 PM 41.7 to 43.0, Caltrans EA 04-254600	Basin Research Associates, Inc.
S-036825c		2009	Ward Hill	Historic Resources Evaluation Report, Route 1/Calera Parkway Project Between Fassler Avenue and Reina Del Mar Avenue, Pacifica, San Mateo County, 04-SMA-1 PM 41.7 to 43.0, Caltrans EA 04-254600	
S-037906	Submitter - AC Project 4433	2011	Mary Doane and Gary S. Breschini	Preliminary Archaeological Reconnaissance for the Headlands Trail Project, in Pacifica, San Mateo County, California	Archaeological Consulting
S-038201	Other - 2010-100	2010	Eric Strother and Thomas M. Origer	A Cultural Resources Survey for the Oddstad Assisted Living Center EIR, Pacifica, San Mateo County, California	Tom Origer & Associates
S-040533	Submitter - CNU3352	2013	Lorna Billat	Collocation Submission Packet; Hwy 35-Manor; CNU3352; 685 Manor Drive, Pacifica	Earth Touch, Inc.

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation
S-046397		2014	Tim Spillane	Archaeological Overview and Assessment: Indigenous Sites of the GGNRA, 2014	BayArcheo
S-048964	Caltrans - EA 4G850; Caltrans - EFIS 0413000005	2015	Helen Blackmore	Historic Property Survey Report For the Proposed San Jose Avenue Pedestrian Overcrossing Structure Replacement Project, City Of Pacifica, San Mateo County 04-SM-1 PM 44.04 0413000005 EA 4G850	California Department of Transportation District 4
S-048964a		2015	Helen Blackmore	Historical Resources Evaluation Report for the Replacement of a Proposed Pedestrian Overcrossing in San Mateo County 04-SM-1 PM 44.04 EA 4G850 EFIS 0413000005	California Department of Transportation District 4
S-048964b		2015	Karen Reichardt	Archaeological Survey Report for the Proposed San Jose Avenue Pedestrian Overcrossing Structure Replacement Project, City Of Pacifica, San Mateo County 04-SM-1 PM 44.04 EA 4G850	California Department of Transportation District 4
S-048964c		2015	Brett Rushing and Carol Roland-Nawi	FHWA_2015_0522_001 Determination of Eligibility for the Proposed San Jose Avenue Pedestrian Overcrossing (35 0240) Replacment in Pecifica, San Mateo County, CA	Office of Historic Preservation; California Department of Transportation
S-050551	Submitter - AT&T Site No. CCL05416/CNU5416; Submitter - FCC_2017_0302_001	2017	Dana E. Supernowicz	Record Search Results for the Monte Vista Lane Project, 7 Nelson Court, Daly City, San Mateo County, California (letter report)	Historic Resource Associates

Report List

NWIC File # 23-0092 City of Pacifica Housing Element (6th Cycle) Targeted General Plan

Report No.	Other IDs	Year	Author(s)	Title	Affiliation
S-050551a		2017		Cultural Resources Study of the Monte Vista Lane Project, AT&T Site No. CCL05416, 7 Nelson Court, Daly City, San Mateo County, California 94015	Historic Resource Associates
S-050551b		2017	Dana E. Supernowicz	Section 106 Review, AT&T Site No. CCL05416 "Monte Vista Lane", 7 Nelson Court (Reservoir 6B), Daly City, San Mateo County, CA	Historic Resource Associates; Diablo Green Consulting, Inc.
S-050551c		2017	Dana E. Supernowicz and Julianne Polanco	FCC_2017_0302_001, AT&T Site No. CCL05416/CNU5416-"Monte Vista Lane" 7 Nelson Court (Reservoir 6B) Daly City, San Mateo County, New Tower	Diablo Green Consulting, Inc.; California Office of Historic Preservation

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Appendix C

GHG AND AIR QUALITY DATA

Pacifica Proposed Project Mitigated Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacifica Proposed Project Mitigated
Operational Year	2047
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	4.60
Precipitation (days)	43.0
Location	Pacifica, CA, USA
County	San Mateo
City	Pacifica
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1222
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	271	Dwelling Unit	16.9	287,260	0.00	—	780	—

Apartments Mid Rise	1,904	Dwelling Unit	50.1	1,827,840	0.00	—	5,484	—
Regional Shopping Center	102	1000sqft	2.34	102,004	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-20	Expand Bikeway Network
Transportation	T-26*	Increase Transit Service Frequency
Transportation	T-29	Reduce Transit Fares
Transportation	T-31-B*	Improve Destination Accessibility in Underserved Areas
Transportation	T-34*	Provide Bike Parking
Transportation	T-35*	Provide Tra c Calming Measures
Transportation	T-37*	Dedicate Land for Bike Trails
Transportation	T-39*	Implement Preferential Parking Permit Program
Transportation	T-43*	Provide Real-Time Transit Information
Transportation	T-44*	Provide Shuttles (Gas or Electric)
Transportation	T-46*	Improve Transit Access, Safety, and Comfort
Transportation	T-47*	Provide Bike Parking Near Transit
Transportation	T-50*	Required Project Contributions to Transportation Infrastructure Improvement
Transportation	T-51*	Install Park-and-Ride Lots
Energy	E-2	Require Energy Efficient Appliances
Energy	E-3-A*	Require Energy Efficient Residential Boilers
Energy	E-3-B*	Require Energy Efficient Commercial Packaged Boilers
Energy	E-21*	Install Cool Pavements
Energy	E-23*	Use Microgrids and Energy Storage
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes

Water	W-7	Adopt a Water Conservation Strategy
Waste	S-1/S-2	Implement Waste Reduction Plan
Waste	S-4*	Recycle Demolished Construction Material
Natural Lands	N-3*	Implement Management Practices to Improve the Health and Function of Natural and Working Lands
Area Sources	AS-2	Use Low-VOC Paints
Area Sources	E-14	Limit Wood Burning Devices and Natural Gas/Propane Fireplaces in Residential Development

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	83.8	80.6	34.5	249	0.51	2.36	36.8	39.1	2.34	9.31	11.7	1,090	73,044	74,134	112	1.49	20.4	77,407
Mit.	83.8	80.5	34.5	248	0.50	2.36	36.6	39.0	2.34	9.28	11.6	168	72,600	72,769	20.0	1.38	20.4	73,698
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%	< 0.5%	—	< 0.5%	< 0.5%	85%	1%	2%	82%	8%	< 0.5%	5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	71.5	69.0	34.5	114	0.49	2.30	36.8	39.1	2.29	9.31	11.6	1,090	71,229	72,319	112	1.59	15.8	75,617
Mit.	71.5	68.9	34.5	114	0.48	2.30	36.6	38.9	2.29	9.28	11.6	168	70,790	70,958	20.0	1.47	15.8	71,913
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	—	< 0.5%	< 0.5%	—	< 0.5%	< 0.5%	85%	1%	2%	82%	7%	—	5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	73.7	72.1	13.0	157	0.32	0.63	32.2	32.8	0.61	8.16	8.77	1,090	41,735	42,826	112	1.41	17.5	46,055
Mit.	73.7	72.1	13.0	156	0.32	0.63	32.1	32.7	0.61	8.13	8.74	168	41,306	41,474	19.4	1.29	17.5	42,361
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	—	< 0.5%	< 0.5%	—	< 0.5%	< 0.5%	85%	1%	3%	83%	8%	< 0.5%	8%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.5	13.2	2.37	28.6	0.06	0.11	5.87	5.99	0.11	1.49	1.60	180	6,910	7,090	18.5	0.23	2.89	7,625
Mit.	13.4	13.2	2.37	28.5	0.06	0.11	5.85	5.97	0.11	1.48	1.60	27.8	6,839	6,867	3.21	0.21	2.89	7,013
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	85%	1%	3%	83%	8%	< 0.5%	8%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.6	11.6	6.08	109	0.33	0.10	36.8	36.9	0.09	9.31	9.41	—	33,157	33,157	0.91	0.92	4.73	33,460
Area	70.5	68.6	22.6	138	0.14	1.80	—	1.80	1.78	—	1.78	0.00	27,597	27,597	0.53	0.05	—	27,626
Energy	0.67	0.34	5.75	2.51	0.04	0.46	—	0.46	0.46	—	0.46	—	11,977	11,977	1.40	0.11	—	12,044
Water	—	—	—	—	—	—	—	—	—	—	—	166	313	478	17.0	0.41	—	1,026
Waste	—	—	—	—	—	—	—	—	—	—	—	925	0.00	925	92.4	0.00	—	3,235
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Total	83.8	80.6	34.5	249	0.51	2.36	36.8	39.1	2.34	9.31	11.7	1,090	73,044	74,134	112	1.49	20.4	77,407
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.5	11.5	7.27	103	0.31	0.10	36.8	36.9	0.09	9.31	9.41	—	31,690	31,690	0.97	1.02	0.12	32,019
Area	58.4	57.2	21.5	9.13	0.14	1.74	—	1.74	1.74	—	1.74	0.00	27,249	27,249	0.51	0.05	—	27,277
Energy	0.67	0.34	5.75	2.51	0.04	0.46	—	0.46	0.46	—	0.46	—	11,977	11,977	1.40	0.11	—	12,044
Water	—	—	—	—	—	—	—	—	—	—	—	166	313	478	17.0	0.41	—	1,026

Waste	—	—	—	—	—	—	—	—	—	—	—	925	0.00	925	92.4	0.00	—	3,235
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Total	71.5	69.0	34.5	114	0.49	2.30	36.8	39.1	2.29	9.31	11.6	1,090	71,229	72,319	112	1.59	15.8	75,617
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.1	10.2	6.14	90.5	0.28	0.09	32.2	32.3	0.08	8.16	8.24	—	28,602	28,602	0.85	0.89	1.84	28,890
Area	61.9	61.6	1.11	63.6	0.01	0.07	—	0.07	0.07	—	0.07	0.00	844	844	0.02	< 0.005	—	845
Energy	0.67	0.34	5.75	2.51	0.04	0.46	—	0.46	0.46	—	0.46	—	11,977	11,977	1.40	0.11	—	12,044
Water	—	—	—	—	—	—	—	—	—	—	—	166	313	478	17.0	0.41	—	1,026
Waste	—	—	—	—	—	—	—	—	—	—	—	925	0.00	925	92.4	0.00	—	3,235
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Total	73.7	72.1	13.0	157	0.32	0.63	32.2	32.8	0.61	8.16	8.77	1,090	41,735	42,826	112	1.41	17.5	46,055
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.03	1.87	1.12	16.5	0.05	0.02	5.87	5.89	0.02	1.49	1.50	—	4,735	4,735	0.14	0.15	0.30	4,783
Area	11.3	11.2	0.20	11.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	140	140	< 0.005	< 0.005	—	140
Energy	0.12	0.06	1.05	0.46	0.01	0.08	—	0.08	0.08	—	0.08	—	1,983	1,983	0.23	0.02	—	1,994
Water	—	—	—	—	—	—	—	—	—	—	—	27.4	51.8	79.2	2.82	0.07	—	170
Waste	—	—	—	—	—	—	—	—	—	—	—	153	0.00	153	15.3	0.00	—	536
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.59	2.59
Total	13.5	13.2	2.37	28.6	0.06	0.11	5.87	5.99	0.11	1.49	1.60	180	6,910	7,090	18.5	0.23	2.89	7,625

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.6	11.6	6.06	108	0.33	0.10	36.6	36.7	0.09	9.28	9.38	—	33,051	33,051	0.91	0.92	4.71	33,353
Area	70.5	68.6	22.6	138	0.14	1.80	—	1.80	1.78	—	1.78	0.00	27,597	27,597	0.53	0.05	—	27,626

Energy	0.67	0.34	5.75	2.51	0.04	0.46	—	0.46	0.46	—	0.46	—	11,722	11,722	1.36	0.10	—	11,786
Water	—	—	—	—	—	—	—	—	—	—	—	122	230	352	12.5	0.30	—	756
Waste	—	—	—	—	—	—	—	—	—	—	—	46.2	0.00	46.2	4.62	0.00	—	162
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Total	83.8	80.5	34.5	248	0.50	2.36	36.6	39.0	2.34	9.28	11.6	168	72,600	72,769	20.0	1.38	20.4	73,698
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.4	11.4	7.25	102	0.31	0.10	36.6	36.7	0.09	9.28	9.38	—	31,589	31,589	0.97	1.02	0.12	31,917
Area	58.4	57.2	21.5	9.13	0.14	1.74	—	1.74	1.74	—	1.74	0.00	27,249	27,249	0.51	0.05	—	27,277
Energy	0.67	0.34	5.75	2.51	0.04	0.46	—	0.46	0.46	—	0.46	—	11,722	11,722	1.36	0.10	—	11,786
Water	—	—	—	—	—	—	—	—	—	—	—	122	230	352	12.5	0.30	—	756
Waste	—	—	—	—	—	—	—	—	—	—	—	46.2	0.00	46.2	4.62	0.00	—	162
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Total	71.5	68.9	34.5	114	0.48	2.30	36.6	38.9	2.29	9.28	11.6	168	70,790	70,958	20.0	1.47	15.8	71,913
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.1	10.2	6.12	90.2	0.28	0.09	32.1	32.2	0.08	8.13	8.21	—	28,511	28,511	0.85	0.89	1.83	28,798
Area	61.9	61.6	1.11	63.6	0.01	0.07	—	0.07	0.07	—	0.07	0.00	844	844	0.02	< 0.005	—	845
Energy	0.67	0.34	5.75	2.51	0.04	0.46	—	0.46	0.46	—	0.46	—	11,722	11,722	1.36	0.10	—	11,786
Water	—	—	—	—	—	—	—	—	—	—	—	122	230	352	12.5	0.30	—	756
Waste	—	—	—	—	—	—	—	—	—	—	—	46.2	0.00	46.2	4.62	0.00	—	162
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Total	73.7	72.1	13.0	156	0.32	0.63	32.1	32.7	0.61	8.13	8.74	168	41,306	41,474	19.4	1.29	17.5	42,361
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.02	1.86	1.12	16.5	0.05	0.02	5.85	5.87	0.02	1.48	1.50	—	4,720	4,720	0.14	0.15	0.30	4,768
Area	11.3	11.2	0.20	11.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	140	140	< 0.005	< 0.005	—	140
Energy	0.12	0.06	1.05	0.46	0.01	0.08	—	0.08	0.08	—	0.08	—	1,941	1,941	0.23	0.02	—	1,951
Water	—	—	—	—	—	—	—	—	—	—	—	20.2	38.1	58.3	2.08	0.05	—	125

Waste	—	—	—	—	—	—	—	—	—	—	—	7.65	0.00	7.65	0.76	0.00	—	26.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.59	2.59
Total	13.4	13.2	2.37	28.5	0.06	0.11	5.85	5.97	0.11	1.48	1.60	27.8	6,839	6,867	3.21	0.21	2.89	7,013

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	1.61	1.48	0.78	13.9	0.04	0.01	4.69	4.70	0.01	1.19	1.20	—	4,232	4,232	0.12	0.12	0.60	4,271
Apartments Mid Rise	7.56	6.97	3.65	65.3	0.20	0.06	22.1	22.1	0.06	5.59	5.65	—	19,901	19,901	0.55	0.55	2.84	20,083
Regional Shopping Center	3.43	3.16	1.65	29.6	0.09	0.03	10.0	10.0	0.03	2.53	2.56	—	9,024	9,024	0.25	0.25	1.29	9,107
Total	12.6	11.6	6.08	109	0.33	0.10	36.8	36.9	0.09	9.31	9.41	—	33,157	33,157	0.91	0.92	4.73	33,460
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	1.59	1.47	0.93	13.1	0.04	0.01	4.69	4.70	0.01	1.19	1.20	—	4,045	4,045	0.12	0.13	0.02	4,087

Apartments	7.48	6.89	4.36	61.7	0.19	0.06	22.1	22.1	0.06	5.59	5.65	—	19,020	19,020	0.58	0.61	0.07	19,218
Regional Shopping Center	3.39	3.12	1.98	28.0	0.08	0.03	10.0	10.0	0.03	2.53	2.56	—	8,625	8,625	0.26	0.28	0.03	8,715
Total	12.5	11.5	7.27	103	0.31	0.10	36.8	36.9	0.09	9.31	9.41	—	31,690	31,690	0.97	1.02	0.12	32,019
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.26	0.24	0.14	2.10	0.01	< 0.005	0.75	0.75	< 0.005	0.19	0.19	—	602	602	0.02	0.02	0.04	608
Apartments Mid Rise	1.28	1.18	0.71	10.5	0.03	0.01	3.72	3.73	0.01	0.94	0.95	—	2,999	2,999	0.09	0.09	0.19	3,029
Regional Shopping Center	0.49	0.45	0.27	3.96	0.01	< 0.005	1.41	1.41	< 0.005	0.36	0.36	—	1,135	1,135	0.03	0.04	0.07	1,146
Total	2.03	1.87	1.12	16.5	0.05	0.02	5.87	5.89	0.02	1.49	1.50	—	4,735	4,735	0.14	0.15	0.30	4,783

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	1.60	1.48	0.77	13.8	0.04	0.01	4.68	4.69	0.01	1.18	1.20	—	4,218	4,218	0.12	0.12	0.60	4,257
Apartments Mid Rise	7.54	6.95	3.64	65.1	0.20	0.06	22.0	22.1	0.06	5.57	5.63	—	19,837	19,837	0.55	0.55	2.83	20,019

Regional	3.42	3.15	1.65	29.5	0.09	0.03	9.97	10.00	0.03	2.53	2.55	—	8,995	8,995	0.25	0.25	1.28	9,078
Total	12.6	11.6	6.06	108	0.33	0.10	36.6	36.7	0.09	9.28	9.38	—	33,051	33,051	0.91	0.92	4.71	33,353
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	1.59	1.46	0.93	13.1	0.04	0.01	4.68	4.69	0.01	1.18	1.20	—	4,032	4,032	0.12	0.13	0.02	4,074
Apartments Mid Rise	7.46	6.87	4.35	61.5	0.19	0.06	22.0	22.1	0.06	5.57	5.63	—	18,959	18,959	0.58	0.61	0.07	19,157
Regional Shopping Center	3.38	3.11	1.97	27.9	0.08	0.03	9.97	10.00	0.03	2.53	2.55	—	8,597	8,597	0.26	0.28	0.03	8,687
Total	12.4	11.4	7.25	102	0.31	0.10	36.6	36.7	0.09	9.28	9.38	—	31,589	31,589	0.97	1.02	0.12	31,917
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.26	0.24	0.14	2.09	0.01	< 0.005	0.74	0.75	< 0.005	0.19	0.19	—	600	600	0.02	0.02	0.04	606
Apartments Mid Rise	1.28	1.18	0.71	10.4	0.03	0.01	3.71	3.72	0.01	0.94	0.95	—	2,989	2,989	0.09	0.09	0.19	3,019
Regional Shopping Center	0.48	0.45	0.27	3.95	0.01	< 0.005	1.40	1.41	< 0.005	0.36	0.36	—	1,131	1,131	0.03	0.04	0.07	1,143
Total	2.02	1.86	1.12	16.5	0.05	0.02	5.85	5.87	0.02	1.48	1.50	—	4,720	4,720	0.14	0.15	0.30	4,768

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	568	568	0.09	0.01	—	574
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,630	3,630	0.59	0.07	—	3,666
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	487	487	0.08	0.01	—	492
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,685	4,685	0.76	0.09	—	4,731
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	568	568	0.09	0.01	—	574
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,630	3,630	0.59	0.07	—	3,666
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	487	487	0.08	0.01	—	492
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,685	4,685	0.76	0.09	—	4,731
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	94.0	94.0	0.02	< 0.005	—	95.0

Apartment Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	601	601	0.10	0.01	—	607
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	80.6	80.6	0.01	< 0.005	—	81.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	776	776	0.13	0.02	—	783

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	535	535	0.09	0.01	—	541
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,407	3,407	0.55	0.07	—	3,441
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	487	487	0.08	0.01	—	492
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,429	4,429	0.72	0.09	—	4,473
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	535	535	0.09	0.01	—	541

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,407	3,407	0.55	0.07	—	3,441
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	487	487	0.08	0.01	—	492
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,429	4,429	0.72	0.09	—	4,473
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	88.6	88.6	0.01	< 0.005	—	89.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	564	564	0.09	0.01	—	570
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	80.6	80.6	0.01	< 0.005	—	81.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	733	733	0.12	0.01	—	741

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.16	0.08	1.37	0.58	0.01	0.11	—	0.11	0.11	—	0.11	—	1,733	1,733	0.15	< 0.005	—	1,738
Apartments Mid Rise	0.50	0.25	4.23	1.80	0.03	0.34	—	0.34	0.34	—	0.34	—	5,372	5,372	0.48	0.01	—	5,387

Regiona Shopping Center	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	186	186	0.02	< 0.005	—	187
Total	0.67	0.34	5.75	2.51	0.04	0.46	—	0.46	0.46	—	0.46	—	7,292	7,292	0.65	0.01	—	7,312
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.16	0.08	1.37	0.58	0.01	0.11	—	0.11	0.11	—	0.11	—	1,733	1,733	0.15	< 0.005	—	1,738
Apartments Mid Rise	0.50	0.25	4.23	1.80	0.03	0.34	—	0.34	0.34	—	0.34	—	5,372	5,372	0.48	0.01	—	5,387
Regional Shopping Center	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	186	186	0.02	< 0.005	—	187
Total	0.67	0.34	5.75	2.51	0.04	0.46	—	0.46	0.46	—	0.46	—	7,292	7,292	0.65	0.01	—	7,312
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.03	0.01	0.25	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02	—	287	287	0.03	< 0.005	—	288
Apartments Mid Rise	0.09	0.05	0.77	0.33	< 0.005	0.06	—	0.06	0.06	—	0.06	—	889	889	0.08	< 0.005	—	892
Regional Shopping Center	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.8	30.8	< 0.005	< 0.005	—	30.9
Total	0.12	0.06	1.05	0.46	0.01	0.08	—	0.08	0.08	—	0.08	—	1,207	1,207	0.11	< 0.005	—	1,211

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.16	0.08	1.37	0.58	0.01	0.11	—	0.11	0.11	—	0.11	—	1,733	1,733	0.15	< 0.005	—	1,738
Apartments Mid Rise	0.50	0.25	4.23	1.80	0.03	0.34	—	0.34	0.34	—	0.34	—	5,372	5,372	0.48	0.01	—	5,387
Regional Shopping Center	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	186	186	0.02	< 0.005	—	187
Total	0.67	0.34	5.75	2.51	0.04	0.46	—	0.46	0.46	—	0.46	—	7,292	7,292	0.65	0.01	—	7,312
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.16	0.08	1.37	0.58	0.01	0.11	—	0.11	0.11	—	0.11	—	1,733	1,733	0.15	< 0.005	—	1,738
Apartments Mid Rise	0.50	0.25	4.23	1.80	0.03	0.34	—	0.34	0.34	—	0.34	—	5,372	5,372	0.48	0.01	—	5,387
Regional Shopping Center	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	186	186	0.02	< 0.005	—	187
Total	0.67	0.34	5.75	2.51	0.04	0.46	—	0.46	0.46	—	0.46	—	7,292	7,292	0.65	0.01	—	7,312
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.03	0.01	0.25	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02	—	287	287	0.03	< 0.005	—	288

Apartments	0.09	0.05	0.77	0.33	< 0.005	0.06	—	0.06	0.06	—	0.06	—	889	889	0.08	< 0.005	—	892
Regional Shopping Center	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.8	30.8	< 0.005	< 0.005	—	30.9
Total	0.12	0.06	1.05	0.46	0.01	0.08	—	0.08	0.08	—	0.08	—	1,207	1,207	0.11	< 0.005	—	1,211

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	2.51	1.26	21.5	9.13	0.14	1.74	—	1.74	1.74	—	1.74	0.00	27,249	27,249	0.51	0.05	—	27,277
Consumer Products	47.4	47.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	8.45	8.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	12.1	11.4	1.18	128	0.01	0.06	—	0.06	0.05	—	0.05	—	348	348	0.01	< 0.005	—	349
Total	70.5	68.6	22.6	138	0.14	1.80	—	1.80	1.78	—	1.78	0.00	27,597	27,597	0.53	0.05	—	27,626
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	2.51	1.26	21.5	9.13	0.14	1.74	—	1.74	1.74	—	1.74	0.00	27,249	27,249	0.51	0.05	—	27,277

Consum Products	47.4	47.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	8.45	8.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	58.4	57.2	21.5	9.13	0.14	1.74	—	1.74	1.74	—	1.74	0.00	27,249	27,249	0.51	0.05	—	27,277
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	0.01	0.10	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	111	111	< 0.005	< 0.005	—	111
Consumer Products	8.66	8.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.54	1.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.09	1.03	0.11	11.6	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	28.4	28.4	< 0.005	< 0.005	—	28.5
Total	11.3	11.2	0.20	11.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	140	140	< 0.005	< 0.005	—	140

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	2.51	1.26	21.5	9.13	0.14	1.74	—	1.74	1.74	—	1.74	0.00	27,249	27,249	0.51	0.05	—	27,277
Consumer Products	47.4	47.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	8.45	8.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	12.1	11.4	1.18	128	0.01	0.06	—	0.06	0.05	—	0.05	—	348	348	0.01	< 0.005	—	349
Total	70.5	68.6	22.6	138	0.14	1.80	—	1.80	1.78	—	1.78	0.00	27,597	27,597	0.53	0.05	—	27,626
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	2.51	1.26	21.5	9.13	0.14	1.74	—	1.74	1.74	—	1.74	0.00	27,249	27,249	0.51	0.05	—	27,277
Consumer Products	47.4	47.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	8.45	8.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	58.4	57.2	21.5	9.13	0.14	1.74	—	1.74	1.74	—	1.74	0.00	27,249	27,249	0.51	0.05	—	27,277
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	0.01	0.10	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	111	111	< 0.005	< 0.005	—	111
Consumer Products	8.66	8.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.54	1.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.09	1.03	0.11	11.6	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	28.4	28.4	< 0.005	< 0.005	—	28.5
Total	11.3	11.2	0.20	11.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	140	140	< 0.005	< 0.005	—	140

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	18.8	35.6	54.4	1.94	0.05	—	117
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	132	250	382	13.6	0.33	—	820
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	14.5	27.3	41.8	1.49	0.04	—	89.7
Total	—	—	—	—	—	—	—	—	—	—	—	166	313	478	17.0	0.41	—	1,026
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	18.8	35.6	54.4	1.94	0.05	—	117
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	132	250	382	13.6	0.33	—	820
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	14.5	27.3	41.8	1.49	0.04	—	89.7
Total	—	—	—	—	—	—	—	—	—	—	—	166	313	478	17.0	0.41	—	1,026

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.12	5.89	9.01	0.32	0.01	—	19.3
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.9	41.4	63.3	2.25	0.05	—	136
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	2.40	4.53	6.92	0.25	0.01	—	14.9
Total	—	—	—	—	—	—	—	—	—	—	—	27.4	51.8	79.2	2.82	0.07	—	170

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	13.8	26.0	39.7	1.41	0.03	—	85.2
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	96.6	183	279	9.94	0.24	—	599
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	11.6	21.9	33.5	1.19	0.03	—	71.8
Total	—	—	—	—	—	—	—	—	—	—	—	122	230	352	12.5	0.30	—	756
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Low Rise	—	—	—	—	—	—	—	—	—	—	—	13.8	26.0	39.7	1.41	0.03	—	85.2
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	96.6	183	279	9.94	0.24	—	599
Regiona l Shoppin g Center	—	—	—	—	—	—	—	—	—	—	—	11.6	21.9	33.5	1.19	0.03	—	71.8
Total	—	—	—	—	—	—	—	—	—	—	—	122	230	352	12.5	0.30	—	756
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	—	—	—	—	—	—	—	—	—	—	—	2.28	4.30	6.58	0.23	0.01	—	14.1
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	16.0	30.2	46.2	1.65	0.04	—	99.2
Regiona l Shoppin g Center	—	—	—	—	—	—	—	—	—	—	—	1.92	3.62	5.54	0.20	< 0.005	—	11.9
Total	—	—	—	—	—	—	—	—	—	—	—	20.2	38.1	58.3	2.08	0.05	—	125

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	108	0.00	108	10.8	0.00	—	378
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	759	0.00	759	75.8	0.00	—	2,655
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	57.7	0.00	57.7	5.77	0.00	—	202
Total	—	—	—	—	—	—	—	—	—	—	—	925	0.00	925	92.4	0.00	—	3,235
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	108	0.00	108	10.8	0.00	—	378
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	759	0.00	759	75.8	0.00	—	2,655
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	57.7	0.00	57.7	5.77	0.00	—	202
Total	—	—	—	—	—	—	—	—	—	—	—	925	0.00	925	92.4	0.00	—	3,235
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	17.9	0.00	17.9	1.79	0.00	—	62.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	126	0.00	126	12.6	0.00	—	440

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Total	—	—	—	—	—	—	—	—	—	—	—	153	0.00	153	15.3	0.00	—	536

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	5.40	0.00	5.40	0.54	0.00	—	18.9
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	37.9	0.00	37.9	3.79	0.00	—	133
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	2.89	0.00	2.89	0.29	0.00	—	10.1
Total	—	—	—	—	—	—	—	—	—	—	—	46.2	0.00	46.2	4.62	0.00	—	162
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	5.40	0.00	5.40	0.54	0.00	—	18.9
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	37.9	0.00	37.9	3.79	0.00	—	133

Regional	—	—	—	—	—	—	—	—	—	—	—	2.89	0.00	2.89	0.29	0.00	—	10.1
Total	—	—	—	—	—	—	—	—	—	—	—	46.2	0.00	46.2	4.62	0.00	—	162
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.89	0.00	0.89	0.09	0.00	—	3.13
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	6.28	0.00	6.28	0.63	0.00	—	22.0
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.48	0.00	0.48	0.05	0.00	—	1.67
Total	—	—	—	—	—	—	—	—	—	—	—	7.65	0.00	7.65	0.76	0.00	—	26.8

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.1	13.1

Regional Shopping	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.1	13.1
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.17	2.17
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.59	2.59

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.1	13.1
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.1	13.1
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34

Apartments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.17	2.17
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.59	2.59

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	612	680	526	222,559	6,002	6,666	5,152	2,181,076
Apartments Mid Rise	3,199	2,875	2,399	1,108,958	31,347	28,175	23,511	10,867,784
Regional Shopping Center	1,187	1,450	663	419,758	11,636	14,215	6,498	4,113,630

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	611	678	524	221,849	5,983	6,645	5,136	2,174,121
Apartments Mid Rise	3,189	2,866	2,391	1,105,421	31,247	28,086	23,436	10,833,129
Regional Shopping Center	1,184	1,446	661	418,420	11,599	14,170	6,477	4,100,512

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	138
Propane Fireplaces	0

Electric Fireplaces	0
No Fireplaces	133
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	971
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	933
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	138
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	133
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	971
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	933
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
4283077.5	1,427,693	153,006	51,002	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	1,016,382	204	0.0330	0.0040	5,408,972
Apartments Mid Rise	6,495,402	204	0.0330	0.0040	16,762,951
Regional Shopping Center	871,621	204	0.0330	0.0040	581,277

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	957,952	204	0.0330	0.0040	5,408,972
Apartments Mid Rise	6,096,414	204	0.0330	0.0040	16,762,951
Regional Shopping Center	871,621	204	0.0330	0.0040	581,277

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	9,828,194	0.00
Apartments Mid Rise	69,051,226	0.00
Regional Shopping Center	7,555,693	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	7,178,513	0.00

Apartments Mid Rise	50,435,015	0.00
Regional Shopping Center	6,044,555	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	200	—
Apartments Mid Rise	1,408	—
Regional Shopping Center	107	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	10.0	—
Apartments Mid Rise	70.4	—
Regional Shopping Center	5.36	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0

Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	6.11	annual days of extreme heat
Extreme Precipitation	10.2	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	23.3	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	3	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	3	1	1	3
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	10.6
AQ-PM	21.2
AQ-DPM	23.2
Drinking Water	10.8
Lead Risk Housing	60.8
Pesticides	0.00
Toxic Releases	28.6
Traffic	30.3
Effect Indicators	—
CleanUp Sites	33.9
Groundwater	47.4
Haz Waste Facilities/Generators	7.35
Impaired Water Bodies	0.00
Solid Waste	2.52

Sensitive Population	—
Asthma	60.5
Cardio-vascular	30.0
Low Birth Weights	87.1
Socioeconomic Factor Indicators	—
Education	17.8
Housing	60.1
Linguistic	9.46
Poverty	21.7
Unemployment	48.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	74.54125497
Employed	87.75824458
Median HI	74.3744386
Education	—
Bachelor's or higher	68.75401001
High school enrollment	100
Preschool enrollment	90.94058771
Transportation	—
Auto Access	71.35891184
Active commuting	83.51084306
Social	—
2-parent households	69.22879507
Voting	88.57949442

Neighborhood	—
Alcohol availability	50.2245605
Park access	81.35506224
Retail density	44.03952265
Supermarket access	71.62838445
Tree canopy	90.79943539
Housing	—
Homeownership	38.72706275
Housing habitability	43.91120236
Low-inc homeowner severe housing cost burden	18.29847299
Low-inc renter severe housing cost burden	41.89657385
Uncrowded housing	62.77428461
Health Outcomes	—
Insured adults	79.55857821
Arthritis	0.0
Asthma ER Admissions	44.2
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	23.8
Cognitively Disabled	74.6
Physically Disabled	59.0
Heart Attack ER Admissions	50.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	92.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	21.7
Children	68.4
Elderly	69.3
English Speaking	66.9
Foreign-born	23.2
Outdoor Workers	40.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	66.0
Traffic Density	22.2
Traffic Access	68.1
Other Indices	—
Hardship	20.4
Other Decision Support	—
2016 Voting	82.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	19.0

Healthy Places Index Score for Project Location (b)	90.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Based on DKS input
Land Use	not including gp

Appendix D

GEOTECHNICAL FEASIBILITY REVIEW

Project No. E9382-04-01
August 20, 2024

Dyett & Bhatia
4001 Howe Street
Oakland, California 94611

Attention: Ms. Alison Moore

Subject: CITY OF PACIFICA REDEVELOPMENT EIR
PACIFICA, CALIFORNIA
GEOTECHNICAL FEASIBILTY REVIEWS

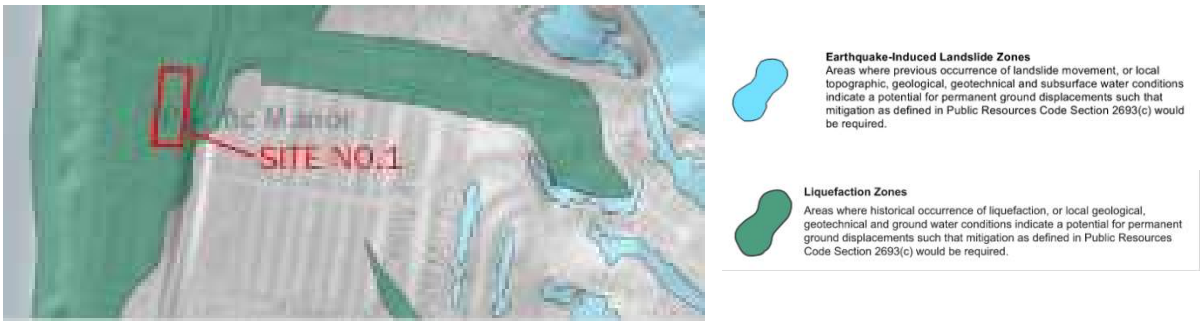
Dear Ms. Moore:

Per your request, we have prepared this report to present the results of our geotechnical feasibility reviews for three sites being considered for redevelopment in the City of Pacifica. Numerous sites were identified for potential redevelopment as outlined in excerpts from the *Pacifica 2023-2031 Draft Housing Element* and other information provided by Dyett & Bhatia. Our EIR-level feasibility reviews were performed to identify potential geotechnical impacts to planned development, with particular focus on geologic hazards. Per our correspondence with Dyett & Bhatia, we have selected three sites to represent a range of site geologic conditions. We note that two of the three of the "sites" discussed below encompass multiple City of Pacifica redevelopment sites in the draft housing element. Our scope of services for the feasibility reviews included:

- Review of published documents, geologic maps and other geological and geotechnical literature to aid in identifying geologic hazards.
- Performing site visits to observe current site conditions.
- Preparing this correspondence to present our professional opinions on the geotechnical feasibility of redevelopment and discussion regarding potential geotechnical site constraints.

SITE NO. 1 – PACIFIC MANOR SHOPPING CENTER PARKING LOT (EIR SITE NOS. 27A AND 27B)

The approximately 1.6-acre site comprises most of the existing asphalt-paved parking lot for the Pacific Manor Shopping Center. The site is located at the southwest corner of Aura Vista Drive and Palmetto Avenue. WGS84 (Google Earth) site coordinates are N 37.6500°, W 122.4915°. The site is relatively flat and level with existing ground surface elevations of approximately 95 to 100 feet MLS per web-based mapping. The site is mapped within a State of California Seismic Hazard Zone (SHZ) as shown in the map excerpt below.



Excerpts from *Earthquake Zones of Required Investigation, San Francisco South Quadrangle,* California Geological Survey, 2021.

United States Geological Survey (USGS) mapping indicates the site is underlain by Holocene to late Pleistocene age dune sand deposits, with potential Pleistocene age marine terrace deposits in the far southeastern corner. Artificial fills from previous episodes of site development may also be present.

A primary geotechnical consideration for site redevelopment is the potential for liquefaction. In addition to the site being mapped within a California Geological Survey (CGS) SHZ for liquefaction, USGS mapping indicates moderate potential for liquefaction at the site. Liquefaction is a phenomenon in which saturated cohesionless soils e.g. clean sands under groundwater are subject to a temporary loss of shear strength due to pore pressure buildup under the cyclic shear stresses associated with intense earthquakes. Primary factors that trigger liquefaction are moderate to strong ground shaking, loose granular soils, and saturated soil conditions. In addition to liquefaction of saturated sands, strong seismic shaking can induce settlement of unsaturated, loose sandy soil through cyclic densification i.e. dynamic compaction.

Based on our background review and site observations, it is our opinion that site redevelopment is generally feasible from a geotechnical standpoint. However, a geotechnical investigation should be performed to evaluate potential geologic hazards and site geotechnical constraints. The geotechnical investigation should include an evaluation of liquefaction potential in general accordance with State of California requirements and related industry implementation guidelines. Liquefaction potential should be evaluated per CGS Special Publication 117A (2008).

SITE NO. 2 – NORTHWEST END OF TERRA NOVA HIGH SCHOOL CAMPUS (EIR SITE NO. 22)

The approximately 4.7-acre site is a generally undeveloped open field at the northwest end of the existing Terra Nova High School campus. Topographically, the site lies below Terra Nova Boulevard to the southwest and the existing residential subdivision to the northwest, and above the balance of the school campus to the southeast. WGS84 (Google Earth) site coordinates are N 37.5965°, W 122.4775°. The majority of the site is relatively flat and level with existing ground surface elevations of approximately 305 to 310 feet MLS per web-based mapping. The slope that ascends from the northwest margin of the site is mapped within a State of California Seismic Hazard Zone (SHZ) for earthquake-induced landslides as shown in the map excerpt below. Similarly, a portion of the short slope that descends from the site to developed portion of the school campus is in a SHZ for the same.

Excerpts from *Earthquake Zones of Required Investigation, Montara Mountain Quadrangle,* California Geological Survey, 2019.

USGS mapping indicates various geologic units are present at the site. The northwestern portion of the site is underlain by Franciscan Formation greenstone and sandstone; artificial fill and Holocene age alluvial fan deposits are mapped throughout southeastern portion.

Primary geotechnical considerations for site redevelopment include the stability of the slopes adjacent to the site and the suspected presence of artificial fills. The slope that ascends from the northwestern site margin to

the adjacent subdivision is mapped within a SHZ for earthquake-induced landslides and evidence of previous slope repair was noted in our recent site visit.

Based on our background review and site observations, it is our opinion that site redevelopment is generally feasible from a geotechnical standpoint. However, a geotechnical investigation should be conducted to evaluate potential geologic hazards and site geotechnical constraints. The extent and competency of existing artificial fills should be investigated; remedial grading may be necessary. Seismic hazards should be evaluated per CGS Special Publication 117A (2008).

SITE NO. 3 – LUTHERAN CHURCH AND ADJACENT PARCELS (EIR SITE NOS. 38, I AND J)

Site No. 3 site consists of three adjacent parcels on the southeast side of State Route 1 (Coast Highway), generally opposite the Rockaway Quarry property that lies on the west side of the highway. One of the parcels is occupied by Our Savior's Lutheran Church and the other two parcels are generally undeveloped. Ground surface elevations range from approximately 45 to 60 feet MSL along the Coast Highway frontage to highs of approximately 135 feet MSL at the southeastern margin of the site. The church property was apparently graded during previous site development, with cuts and fills to create a level building pad, surface parking and a driveway; the balance of the site is generally natural terrain with no overt indications of previous grading. WGS84 (Google Earth) site coordinates are N 37.6100°, W 122.4920°. Various slope areas at the site are mapped within a State of California Seismic Hazard Zone for earthquake-induced landslides as shown in the map excerpt below. The extreme western corner of the site is mapped within Seismic Hazard Zone for liquefaction.

Excerpts from *Earthquake Zones of Required Investigation, Montara Mountain Quadrangle,* California Geological Survey, 2019.

The developed portion of the church parcel is underlain by Holocene age young alluvial fan deposits per USGS mapping, but artificial fills from previous site grading are also likely present. The remainder of the site is mapped as Franciscan Formation greenstone and sandstone underlain, with the exception of a sliver of Holocene age alluvium along the northwestern margin.

Primary geotechnical considerations for site redevelopment include the stability of the slopes in the upland portions of the site and the suspected presence of artificial fills. Most of the upland slope areas are mapped within a SHZ for earthquake-induced landslides. We also noted evidence of instability (shallow slides and sloughing) within a steep slope that ascends from the northeastern margin of the site.

Based on our background review and site observations, it is our opinion that site redevelopment is generally feasible from a geotechnical standpoint. Conceptually, the redevelopment footprint may need to be setback from unstable slopes unless the instability can be properly mitigated. A geotechnical investigation should be conducted to evaluate potential geologic hazards and site geotechnical constraints. The extent and competency of existing artificial fills should be investigated; remedial grading may be necessary. Seismic hazards should be evaluated per CGS Special Publication 117A (2008).

LIMITATIONS AND CLOSURE

Our professional services were performed in accordance with generally accepted geotechnical engineering principles and practices used in the site area at this time. No warranty is provided, express or implied.

Should you have any questions regarding this correspondence, or if we may be of further service, please contact the undersigned at your convenience.

Sincerely,
GEOCON CONSULTANTS, INC.

Shane Rodacker, GE
Senior Engineer

(1/e-mail) Addressee

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Appendix E

TRANSPORTATION AND VMT ASSESSMENT

DKS 1970 BROADWAY, SUITE 740, OAKLAND, CA 94612 • 510.763.2061 • DKSASSOCIATES.COM

CITY OF PACIFICA HOUSING ELEMENT REZONE - VMT ASSESSMENT

DATE: July 26, 2024

TO: Alison Moore | Dyett & Bhatia

FROM: Ariel Clark, Erin Vaca | DKS Associates

SUBJECT: City of Pacifica Housing Element Rezone – VMT Assessment Project #24088-000

BACKGROUND AND SUMMARY

This memorandum updates the VMT impact analysis previously prepared for the City of Pacifica General Plan Update 2040 to reflect proposed zoning changes associated with the city's housing element update. The proposed zoning changes would allow for more housing units and jobs than previously assumed in the general plan analyses.

With the additional population and jobs associated with the housing element rezone, the City's VMT per capita would fall below the threshold of 13.4 by 2040. Home-based VMT per employee would also decrease, although it would not fall below the threshold of 14.2 VMT per employee.

SELECTION OF THRESHOLD OF SIGNIFICANCE

A key consideration in assessing the potential for VMT impacts is the selection of a threshold of significance. The City of Pacifica has not formally adopted VMT baselines or thresholds of significance. In lieu of locally adopted VMT baselines or thresholds, this analysis relies on the thresholds of significance established for the general plan.

METHODOLOGY

The same methodology used to calculate VMT metrics for the general plan analyses was applied to assess the housing element update 2040 scenario. The calculations derive from the most recently published 2040 scenario of the trip-based travel demand model jointly maintained by C\CAG and the Santa Clara County VTA.

The standard 2040 scenario reflects regional growth assumptions aligned with the previous regional transportation plan/Sustainable Community Strategy, Plan Bay Area 2040. DKS modified the land use inputs for the City of Pacifica Transportation Analysis Zones (TAZs) by adding growth increments reflecting the housing element rezone to the previously developed assumptions for the general plan. **Figure 1** illustrates the TAZs in Pacifica and the land use quantities are summarized in **Table 1**.

For reference, more detail on the steps taken to calculate the VMT metrics is provided below.

1) VMT from all home-based trip purposes was tabulated from the person trip tables output from the model's mode choice step. The VMT calculation script employed a peak hour network distance matrix and employed appropriate factors to convert person trip ends to vehicle trip ends. The row totals from the resulting home-based (HB-ALL) matrix represent the daily (full tour) VMT associated with the production (home) end of the trips for each TAZ. In contrast, the column totals from the resulting home-based work (HB-W) VMT matrix represent the work tour VMT associated with the attraction (work) end of the trips for each TAZ. This step was implemented in the Cube Base transportation software environment.

2) The HB-ALL and HB-W VMT matrices were exported to CSV format and combined with the C\CAG model's demographic inputs to calculate a VMT per capita and VMT per employee rate by TAZ at the production end and at the attraction end, respectively. The resulting VMT rates by TAZ were aggregated to calculate VMT per capita and HBW VMT per employee for the City of Pacifica. This step was implemented with an Excel spreadsheet.

RESULTS AND CONCLUSION

Table 2 summarizes the VMT characteristics for the City of Pacifica compared to the 2015 baseline thresholds of significance established in the general plan Draft Environmental Impact Report (DEIR). As expected with the addition of population and some jobs, the VMT per capita for Pacifica is expected to drop to 12.4 by 2040 under the housing element rezone scenario, which is below the threshold of significance. Although the additional housing units and population are assumed to be in place by 2030, the horizon year of the housing element, VMT per capita depends on the regional context and growth. Therefore, it is reasonable to assume that VMT per capita will decrease between 2015 and 2040 to an interpolated rate of 13.8 for 2030, which falls slightly above the threshold of significance.

The Pacifica VMT per employee for the housing element rezone scenario also decreases relative to the general plan scenario. Because VMT per employee is rising between the base and future scenarios, the interpolated 2030 value is 16.7 which falls above the threshold of significance.

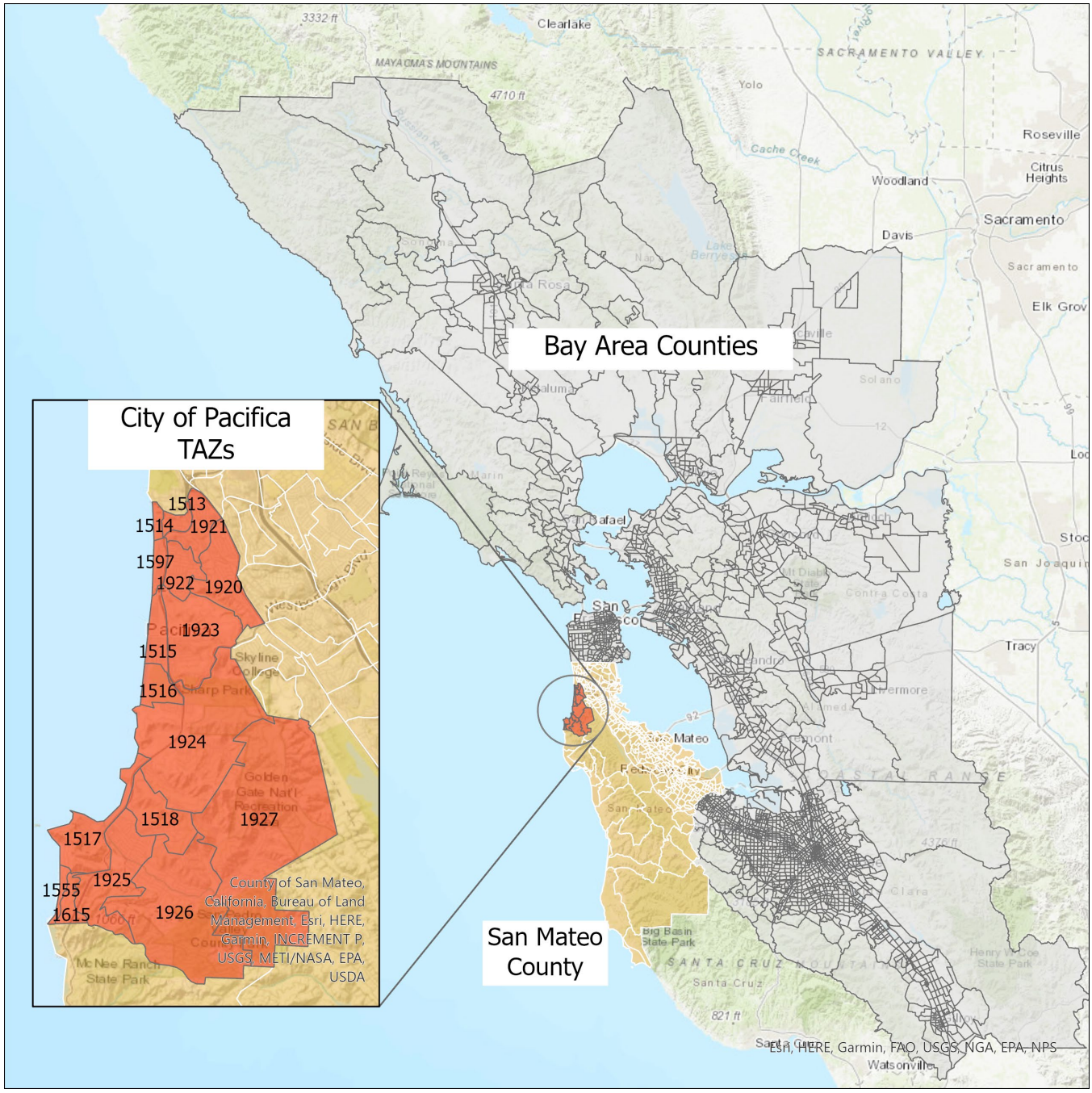

FIGURE 1: PACIFICA TRANSPORTATION ANALYSIS ZONES

TABLE 1. LAND USE QUANTITIES

TABLE 1: CHANGE TO GENERAL PLAN 2040 PREFERRED SCENARIO

TAZ	SFDU [a]	MFDU [b]	RETAIL JOBS	SERVICE JOBS	OTHER JOBS
1513		4			
1514		0			
1515		0			
1516		0			
1517		58	25	-22	
1518		9			
1597		103	39		
1920		252	-4		
1921		72	34		
1922		163	96	-34	
1923		348	-76	31	
1924	-7	461	86		
1925	-2	307	94		-5
1926		232	-14		
1927		177			
TOTAL	-9	2184	280	-25	-5

[a] Single-family dwelling units

[b] Accessory Dwelling Units (ADUs) were coded as multifamily dwelling units in the travel demand model inputs.

Source: Dyett & Bhatia and DKS Associates.

TABLE 2: PACIFICA VMT METRICS
HOUSING ELEMENT REZONE COMPARED TO GENERAL PLAN AND THRESHOLDS OF SIGNIFICANCE

	2015 BASE YEAR	THRESHOLD OF SIGNIFICANCE	2040 PREFERRED	2040 HE REZONE	INTERPOLATED 2030
HOME-BASED VMT	614,525		617,804	597,863	
POPULATION	38,973		42,887	48,065	
VMT PER CAPITA	15.77	**13.4** [a]	14.4	12.4	13.8
HBW VMT	104,516		160,884	149,977	
EMPLOYMENT	5,841		7,316	7,565	
VMT PER EMPLOYEE	17.89	**14.2** [b]	21.99	19.83	16.7

[a] Threshold of significance based on 15% reduction from the 2015 baseline VMT per capita for Pacifica.

[b] Threshold of significance based on 15% reduction from the 2015 baseline VMT per employee for San Mateo County.

Source: Santa Clara VTA- C\CAG travel demand model and DKS Associates.

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CITY OF PACIFICA HOUSING ELEMENT REZONE - TRAFFIC OPERATIONS

DATE: August 13, 2024

TO: Alison Moore | Dyett & Bhatia
Rajeev Bhatia | Dyett & Bhatia

FROM: Erin Vaca | DKS
Ariel Clark | DKS
Christine Lazaro | DKS

SUBJECT: City of Pacifica Housing Element Rezone – Traffic Operations Analysis Project #24088-000

BACKGROUND

The City of Pacifica will undertake rezoning necessary to implement its proposed housing element for the 2023 to 2031 planning period. This will result in a greater number of housing units and jobs than envisioned in the city's most recent general plan update. The purpose of this memorandum is to summarize the traffic operational results of the 2040 Rezoning scenario compared to the Existing and Preferred scenarios previously analyzed for the General Plan 2040.

TRAFFIC FORECASTS

The travel demand associated with the housing element rezoning was forecasted using the model jointly maintained by the City\County Association of Governments (C\CAG) of San Mateo County and the Santa Clara County Valley Transportation Authority. The C\CAG-VTA model is regional and encompasses the nine-county Bay Area. The version of the model used incorporates land use forecasts for 2040 that are consistent with the Plan Bay Area 2040 Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS).

Inputs for the Transportation Analysis Zones (TAZs) covering Pacifica were based on the land use quantities for the Preferred general plan alternative with modifications to reflect the housing element rezone. A total of 2,175 additional housing units and 250 jobs were assumed for the 2040 rezone scenario. **Figure 1** illustrates the TAZs in Pacifica and the changes in land use quantities are summarized in **Table 1**.

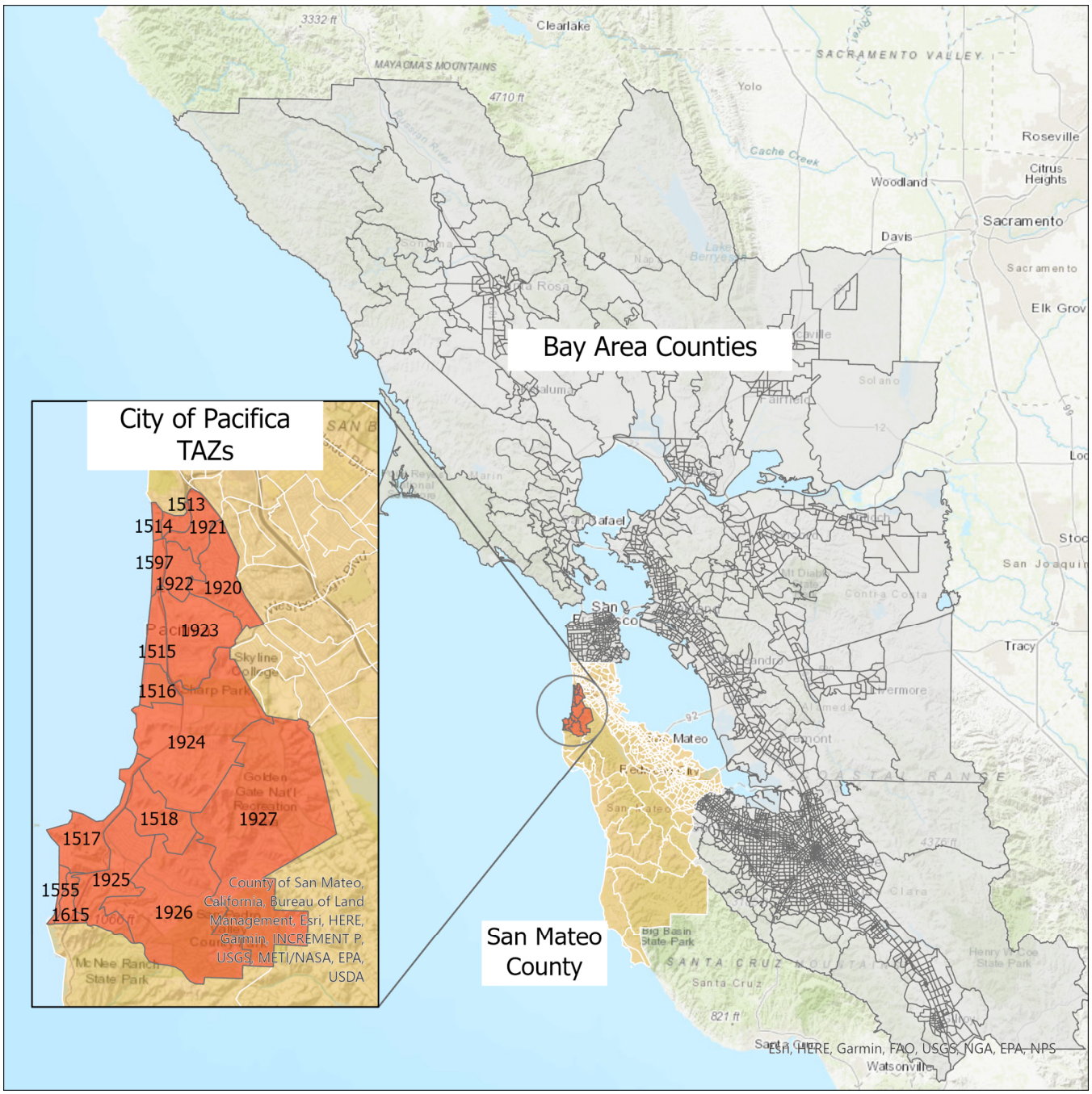

FIGURE 1: PACIFICA TRANSPORTATION ANALYSIS ZONES

TABLE 1. LAND USE QUANTITIES

TABLE 1: CHANGE TO GENERAL PLAN 2040 PREFERRED SCENARIO

TAZ	SFDU	MFDU [a]	RETAIL JOBS	SERVICE JOBS	OTHER JOBS
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1924	-7	461	86		
1925	-2	307	94		-5
1926		232	-14		
1927		177			
TOTAL	-9	2184	280	-25	-5

[a] Accessory Dwelling Units (ADUs) were coded as multifamily dwelling units in the travel demand model inputs.

Source: DKS Associates.

Full model runs for the base year (2019) and Pacifica rezone forecast year (2040) were conducted to calculate a growth increment for study intersection peak hour approach volumes. This growth increment was used in conjunction with turning movement counts collected for the general plan analyses to arrive at updated turning movement forecasts. Updated forecasts for intersection operations are reported in the following section.

INTERSECTION OPERATIONS

Operating conditions during the weekday morning and afternoon periods were evaluated to capture the highest potential impacts for the 2040 Rezone scenario. The 13 study intersections within the project area are shown in **Figure 2**.

METHODOLOGY AND PERFORMANCE STANDARDS

The intersection operational analysis was conducted for the morning and afternoon peak hours within the study area. Intersection analyses were conducted using methodology outlined in the Highway Capacity Manual (HCM) and implemented in the Synchro 12 software package. This procedure calculates an average control delay per vehicle at an intersection and assigns a level of service (LOS) designation based upon the delay. Note that for direct comparability to the results reported for the general plan, HCM 2000 methods for signalized intersections and HCM 2010 methods for all-way stop controlled (AWSC) intersections were applied. Where initial results for signalized intersections fell below the performance threshold, the reported results reflect optimized signal timing splits.

As stated in the General Plan, the most significant congestion occurs on SR 1 and SR 35, where some intersections and roadway segments currently operate at a LOS E or F during peak periods. The City of Pacifica has established a policy to limit further deterioration of traffic conditions by maintaining LOS D for City streets. The performance standards set by the C/CAG for the San Mateo County Congestion Management Program (CMP) apply to CMP roadway segments.

INTERSECTION OPERATIONAL ANALYSIS RESULTS

Table 2 summarizes the intersection operational analysis results for the 2040 Rezone scenario in comparison to the Existing and 2040 Preferred Conditions from the 2040 General Plan.

The operations of the five CMP study intersections do not change much between the general plan Preferred and 2040 Rezone scenarios except for the intersection of Hickey Boulevard and SR 35 (Intersection 1). With optimized signal splits, the delay at this intersection decreases by about 4 seconds in the morning peak hour, although the level of service remains at LOS D.

Of the eight non-CMP intersections, one additional intersection would fall below the performance threshold with the traffic associated with additional development. Paloma Avenue and Francisco Boulevard (Intersection 5) is expected to operate at a LOS E, with over 49 seconds per vehicle delay during the afternoon peak hour. This intersection previously operated at an acceptable level of service under the general plan Preferred scenario.

The Synchro results and worksheets can be found in **Attachment A**.

FIGURE 2: STUDY INTERSECTIONS

TABLE 2: INTERSECTION OPERATIONAL ANALYSIS RESULTS SUMMARY

No.	Intersection	Control	Peak Hour	Existing Conditions		2040 Preferred Conditions		2040 Rezone Conditions	
				Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]
1	Hickey Blvd & CA-35*	Signalized	AM	41.7	D	50.8	D	46.7	D
			PM	39.1	D	50.8	D	51.3	D
2	Manor Dr & Oceana Blvd	AWSC[3] Signalized Build	AM	32.1	D	96.9	**F**	97.5	**F**
			PM	23.0	C	71.7	**E**	93.9	**F**
3	Manor Dr & Palmetto Ave	AWSC[3] Signalized Build	AM	18.0	C	63.1	**E**	66.3	**E**
			PM	23.2	C	44.3	D	54.9	D
4	Paloma Ave & Oceana Blvd	AWSC[3] Signalized Build	AM	66.6	**F**	48.4	D	51.5	D
			PM	15.4	C	23.5	C	31.4	C
5	Paloma Ave & Francisco Blvd	AWSC[3]	AM	12.2	B	20.8	C	21.0	C
			PM	13.9	B	28.7	D	49.3	**E**
6	Paloma Ave & Palmetto Ave	AWSC[3]	AM	11.2	B	17.5	C	18.1	C
			PM	9.8	A	13.2	B	15.3	C
7	Clarendon Rd & Oceana Blvd	AWSC[3]	AM	9.8	A	11.9	B	13.2	B
			PM	10.2	B	11.6	B	12.5	B
8	Clarendon Rd & Francisco Blvd	AWSC[3]	AM	12.4	B	17.1	C	20.3	C
			PM	12.3	B	15.3	C	16.3	C
9	Francisco Blvd & CA-1	AWSC[3]	AM	5.0	A	5.0	A	5.0	A
			PM	5.0	A	5.0	A	5.0	A
10	CA-1 & Reina Del Mar Ave*	Signalized	AM	61.0	**E**	69.6	**E**	80.0	**E**
			PM	35.5	D	58.2	**E**	71.0	**E**
11	CA-1 & Fassler Ave*	Signalized	AM	35.5	D	38.8	D	45.0	D
			PM	47.8	D	37.0	D	40.3	D
12	CA-1 & Crespi Dr*	Signalized	AM	12.2	B	14.7	B	17.7	B
			PM	7.1	A	9.7	A	10.0	B
13	CA-1 & Linda Mar Blvd*	Signalized	AM	24.0	C	28.0	C	28.9	C
			PM	27.2	C	43.6	D	45.2	D

* Intersections included in C/CAG's Congestion Management Program (CMP) for San Mateo County.

[1] Delay is in seconds per vehicle. For signalized intersections, delay is based on average stopped delay. For unsignalized intersections, delay is based at the worst approach for two-way stop-controlled intersection.

[2] LOS = Level of Service, AWSC = All-Way Stop Control

Source: Pacifica General Plan 2040 and DKS Associates, 2024

SEGMENT ANALYSIS

Operational analysis of roadway segments evaluated for the general plan was updated using traffic volumes forecasted for the 2040 Rezone scenario.

METHODOLOGY

The roadway segment analysis was conducted using the same methodology as applied for the 2040 Pacifica General Plan and consistent with C\CAG San Mateo County CMP. The volume to capacity ratio of each roadway segment was calculated for the morning and afternoon peak hours. **Table 3** provides the C/CAG LOS descriptions as stated in the San Mateo County CMP.

TABLE 3: C/CAG LEVEL OF SERVICE DESCRIPTIONS

LOS	FREEWAYS AND MULTILANE HIGHWAYS	TWO-LANE HIGHWAYS
A	Highest quality of service with free-flow conditions and a high level of maneuverability	Free-flow conditions with a high level of maneuverability. Passing is easy to accomplish.
B	Free-flow conditions, but presence of other vehicles is noticeable. Minor disruptions easily absorbed.	Stable operations with passing demand approaching passing capacity.
C	Stable operations, but minor disruptions cause significant local congestion.	Stable operations, but with noticeable increases in passing difficulty.
D	Borders on unstable traffic flow with ability to maneuver severely restricted due to congestion.	Approaching unstable traffic flow. Passing demand is high while passing capacity approaches zero.
E	Unstable operations with conditions at or near capacity. Disruptions cannot be dissipated and cause bottlenecks to form.	Unstable operations. Passing is virtually impossible, and platooning becomes intense.
F	Forced or breakdown flow with bottlenecks forming at locations where demand exceeds capacity. Speeds may drop to zero.	Heavily congested traffic flow with traffic demand exceeding capacity. Speeds may drop to zero.

Source: C/CAG San Mateo CMP and DKS Associates, 2024

ROADWAY SEGMENT ANALYSIS RESULTS

Table 4 summarizes the roadway segment operational analysis results for the 2040 Rezone scenario compared to the Existing and 2040 Preferred Conditions. All ten non-CMP roadway segments are still expected to operate at acceptable levels of service in both peak periods.

Of the 16 CMP studied roadway segments, one segment is expected to exceed the LOS threshold under the 2040 Rezone scenario. During the afternoon peak hour, the v/c ratio of SR 1 from Fassler Avenue to Crespi Drive in the southbound direction is expected to increase from 0.97 (LOS E) under the 2040 Preferred scenario to 1.03 (LOS F) under the 2040 Rezone scenario.

SR 1 between San Pedro Avenue and Linda Mar Boulevard is expected to somewhat improve its v/c from LOS F to LOS E in the morning peak period. This could be due to increased congestion resulting in changes in route in the traffic assignment. All the other segments are expected to operate at similar levels of service compared to the 2040 Preferred scenario.

TABLE 4: ROADWAY SEGMENT ANALYSIS RESULTS SUMMARY

Roadway Segment	Location	Class	Direction	Measure of Effectiveness (MOE)	Peak Hour	Existing Conditions		2040 Preferred Conditions		2040 Rezone Conditions	
						MOE	LOS	MOE	LOS	MOE	LOS
Hickey Blvd	Between SR 35 and Gateway	Type II	Westbound	V/C Ratio	AM	0.26	A	0.25	A	0.26	A
					PM	0.57	A	0.27	A	0.56	A
			Eastbound	V/C Ratio	AM	0.45	A	0.40	A	0.43	A
					PM	0.33	A	0.31	A	0.33	A
SR 35*	Between South of SR 1 and Hickey Blvd	Type I	Southbound	V/C Ratio	AM	0.60	A	0.64	B	0.61	A
					PM	0.07	C	0.85	D	0.86	D
			Northbound	V/C Ratio	AM	0.07	B	0.75	C	0.77	C
					PM	0.58	A	0.68	B	0.65	B
SR 35*	Between Hickey Blvd and Timber Hill St	Type I	Southbound	V/C Ratio	AM	0.90	D	0.53	A	0.51	A
					PM	0.90	D	0.67	B	0.71	B
			Northbound	V/C Ratio	AM	0.87	D	0.51	A	0.58	A
					PM	0.88	D	0.64	B	0.60	A
Reina del Mar Ave	Between SR 1 and Lauren Ave	Type I	Westbound	V/C Ratio	AM	0.34	A	0.40	A	0.41	A
					PM	0.27	A	0.31	A	0.32	A
			Eastbound	V/C Ratio	AM	0.36	A	0.42	A	0.43	A
					PM	0.22	A	0.26	A	0.26	A
Fassler Ave	Between SR 1 and Ebken St	Type I	Westbound	V/C Ratio	AM	0.21	A	0.22	A	0.22	A
					PM	0.38	A	0.39	A	0.40	A
			Eastbound	V/C Ratio	AM	0.39	A	0.40	A	0.40	A
					PM	0.20	A	0.20	A	0.20	A
Crespi Dr	Between SR 1 and Roberts Rd	Type II	Westbound	V/C Ratio	AM	0.11	A	0.13	A	0.13	A
					PM	0.20	A	0.25	A	0.26	A
			Eastbound	V/C Ratio	AM	0.18	A	0.24	A	0.24	A
					PM	0.15	A	0.18	A	0.18	A
Linda Mar Blvd	Between SR 1 and De Solo Dr	Type II	Westbound	V/C Ratio	AM	0.22	A	0.23	A	0.23	A
					PM	0.42	A	0.41	A	0.41	A
			Eastbound	V/C Ratio	AM	0.30	A	0.29	A	0.29	A
					PM	0.29	A	0.30	A	0.31	A

SR 1*	Between San Pedro Ave and Linda Mar Blvd	Two-Lane Highway I	Combined Directions	V/C Ratio	AM	0.27	C	1.03	**F**	0.74	E
					PM	0.20	B	1.05	**F**	0.98	**F**
SR 1*	Between Linda Mar Blvd and Crespi Dr	Four-Lane Highway	Northbound	V/C Ratio	AM	0.61	C	0.67	C	0.72	D
					PM	0.43	B	0.58	C	0.60	C
			Southbound	V/C Ratio	AM	0.30	B	0.43	B	0.43	B
					PM	0.69	C	0.79	D	0.83	D
SR 1*	From Crespi Dr to Sea Bowl Ln	Four-Lane Highway	Northbound	V/C Ratio	AM	0.76	D	0.90	E	0.95	E
					PM	68.00	C	0.68	C	0.69	C
	From Sea Bowl Ln to Fassler Ave		Northbound	V/C Ratio	AM	0.78	D	0.90	E	0.95	E
					PM	0.52	C	0.68	C	0.69	C
	From Fassler Ave to Crespi Dr		Southbound	V/C Ratio	AM	0.36	B	0.52	C	0.52	C
					PM	0.83	D	0.97	E	1.03	**F**
SR 1*	Between Fassler Ave and Reina del Mar Ave	Four-Lane Highway	Northbound	V/C Ratio	AM	1.17	**F**	1.30	**F**	1.35	**F**
					PM	0.70	D	0.87	E	0.87	E
			Southbound	V/C Ratio	AM	0.59	C	0.76	D	0.75	D
					PM	1.16	**F**	1.35	**F**	1.42	**F**
SR 1*	Between Reina del Mar Ave and Mori Point Rd	Four-Lane Highway	Northbound	V/C Ratio	AM	1.23	**F**	1.37	**F**	1.42	**F**
					PM	0.72	D	0.89	E	0.89	E
			Southbound	V/C Ratio	AM	0.66	C	0.84	D	0.83	D
					PM	1.24	**F**	1.42	**F**	1.48	**F**
SR 1*	Between Mori Point Rd and Westport St	Four-Lane Highway	Northbound	V/C Ratio	AM	1.23	**F**	1.37	**F**	1.42	**F**
					PM	0.72	D	0.89	E	0.89	E
			Southbound	V/C Ratio	AM	0.66	C	0.84	D	0.83	D
					PM	1.24	**F**	1.42	**F**	1.48	**F**

* Roadway segments included in C/CAG's Congestion Management Program (CMP) for San Mateo County.

[1] MOE = Measures of Effectiveness. For arterials, MOE is measured in v/c ratios (volume to capacity ratios).

[2] LOS = Level of Service is based on 2019 C/CAG of San Mateo County Final CMP criteria.

Source: Pacifica General Plan 2040 and DKS Associates, 2024

CONCLUSION

The City of Pacifica is undertaking a rezoning associated with its 2023-2031 housing element update that will expand the potential number of housing units relative to the number assumed for the most recent General Plan. Therefore, an updated operational analysis was performed for the General Plan study intersections and roadway segments in the General Plan.

As expected, several intersections and roadway segments have increased average delay and v/c ratio under the housing element rezone scenario. However, most study intersections and segments are expected to operate similarly to the 2040 General Plan scenario.

ATTACHMENTS

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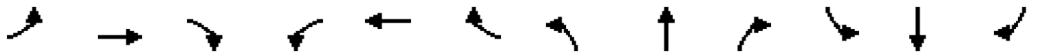
ATTACHMENT A: SYNCHRO WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	451	307	191	90	168	229	127	1039	140	221	830	285
Future Volume (vph)	451	307	191	90	168	229	127	1039	140	221	830	285
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	3.5		3.5	3.5	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.95	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.98	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1751	1583		3478	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.98	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1751	1583		3478	1583	1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	465	316	197	93	173	236	131	1071	144	228	856	294
RTOR Reduction (vph)	0	0	147	0	0	157	0	0	54	0	0	198
Lane Group Flow (vph)	381	400	50	0	266	79	131	1071	90	228	856	96
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Actuated Green, G (s)	21.8	21.8	21.8		13.0	13.0	8.0	25.2	25.2	11.0	28.2	28.2
Effective Green, g (s)	21.8	21.8	21.8		13.0	13.0	8.0	25.2	25.2	11.0	28.2	28.2
Actuated g/C Ratio	0.25	0.25	0.25		0.15	0.15	0.09	0.29	0.29	0.13	0.33	0.33
Clearance Time (s)	3.5	3.5	3.5		3.5	3.5	3.0	5.0	5.0	3.0	5.0	5.0
Vehicle Extension (s)	6.0	6.0	6.0		4.0	4.0	4.0	8.0	8.0	4.0	8.0	8.0
Lane Grp Cap (vph)	426	443	401		525	239	164	1037	463	226	1160	519
v/s Ratio Prot	0.23	c0.23			c0.08		0.07	c0.30		c0.13	c0.24	
v/s Ratio Perm			0.03			0.05			0.06			0.06
v/c Ratio	0.89	0.90	0.12		0.50	0.33	0.79	1.03	0.19	1.00	0.73	0.18
Uniform Delay, d1	30.9	31.0	24.7		33.5	32.6	38.2	30.4	22.7	37.4	25.6	20.6
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	22.5	23.2	0.3		1.0	1.1	24.2	36.7	0.8	62.1	4.2	0.7
Delay (s)	53.5	54.2	25.1		34.6	33.7	62.4	67.1	23.6	99.6	29.8	21.4
Level of Service	D	D	C		C	C	E	E	C	F	C	C
Approach Delay (s/veh)		48.1			34.1			62.0			39.5	
Approach LOS		D			C			E			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	48.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	265	104	29	306	201	122	221	41	11	78	190
Future Volume (vph)	295	265	104	29	306	201	122	221	41	11	78	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.7	4.7		4.5	4.7		4.7	4.7			4.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frt	1.00	0.95		1.00	0.94		1.00	0.97			0.90	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	1784		1770	1752		1770	1819			1688	
Flt Permitted	0.95	1.00		0.95	1.00		0.58	1.00			0.47	
Satd. Flow (perm)	1770	1784		1770	1752		1085	1819			807	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	307	276	108	30	319	209	127	230	43	11	81	198
RTOR Reduction (vph)	0	10	0	0	18	0	0	5	0	0	60	0
Lane Group Flow (vph)	307	374	0	30	510	0	127	268	0	0	230	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	52.0		4.8	36.6		21.3	21.3			33.3	
Effective Green, g (s)	20.0	52.0		4.8	36.6		21.3	21.3			33.3	
Actuated g/C Ratio	0.15	0.40		0.04	0.28		0.16	0.16			0.26	
Clearance Time (s)	4.7	4.7		4.5	4.7		4.7	4.7			4.7	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	272	713		65	493		177	298			206	
v/s Ratio Prot	c0.17	0.21		0.02	c0.29			c0.15				
v/s Ratio Perm							0.12				c0.29	
v/c Ratio	1.12	0.52		0.46	1.03		0.71	0.89			1.11	
Uniform Delay, d1	55.0	29.6		61.3	46.7		51.4	53.2			48.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	93.7	2.7		5.1	49.7		12.9	27.6			98.2	
Delay (s)	148.7	32.3		66.4	96.4		64.4	80.9			146.6	
Level of Service	F	C		E	F		E	F			F	
Approach Delay (s/veh)		84.0			94.8			75.6			146.6	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	94.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	90.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	214	45	337	134	134	15	33	177	273	113	16
Future Volume (vph)	2	214	45	337	134	134	15	33	177	273	113	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7		4.7	4.7			4.7		4.7	4.7	
Lane Util. Factor		0.95		1.00	1.00			1.00		1.00	1.00	
Frt		0.97		1.00	0.92			0.89		1.00	0.98	
Flt Protected		0.99		0.95	1.00			0.99		0.95	1.00	
Satd. Flow (prot)		3447		1770	1723			1660		1770	1828	
Flt Permitted		0.95		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (perm)		3285		1770	1723			1637		1770	1828	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	225	47	355	141	141	16	35	186	287	119	17
RTOR Reduction (vph)	0	25	0	0	34	0	0	133	0	0	5	0
Lane Group Flow (vph)	0	249	0	355	248	0	0	104	0	287	131	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)		14.4		15.9	35.0			24.3		16.7	30.8	
Effective Green, g (s)		14.4		15.9	35.0			24.3		16.7	30.8	
Actuated g/C Ratio		0.17		0.19	0.41			0.29		0.20	0.36	
Clearance Time (s)		4.7		4.7	4.7			4.7		4.7	4.7	
Vehicle Extension (s)		3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)		556		331	709			469		347	662	
v/s Ratio Prot				c0.20	0.14			0.01		c0.16	c0.07	
v/s Ratio Perm		c0.08						0.05				
v/c Ratio		1.57dr		1.07	0.35			0.22		0.82	0.19	
Uniform Delay, d1		31.7		34.5	17.1			23.1		32.7	18.6	
Progression Factor		1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2		0.5		70.0	1.3			0.2		14.8	0.1	
Delay (s)		32.3		104.6	18.5			23.3		47.6	18.7	
Level of Service		C		F	B			C		D	B	
Approach Delay (s/veh)		32.3			66.5			23.3			38.3	
Approach LOS		C			E			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	46.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	336	265	50	53	123	342	33	405	112	77	132	188
Future Volume (vph)	336	265	50	53	123	342	33	405	112	77	132	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5	4.5		4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	
Frt	1.00	0.97			1.00	0.85		0.97		1.00	0.91	
Flt Protected	0.95	1.00			0.98	1.00		0.99		0.95	1.00	
Satd. Flow (prot)	1770	1818			1835	1583		1806		1770	1699	
Flt Permitted	0.55	1.00			0.62	1.00		0.95		0.36	1.00	
Satd. Flow (perm)	1041	1818			1169	1583		1729		671	1699	
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	431	340	64	68	158	438	42	519	144	99	169	241
RTOR Reduction (vph)	0	10	0	0	0	292	0	13	0	0	73	0
Lane Group Flow (vph)	431	394	0	0	226	146	0	692	0	99	337	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		6			2			4			3	
Permitted Phases	6			2		2	4			3		
Actuated Green, G (s)	23.3	23.3			23.3	23.3		22.1		11.1	11.1	
Effective Green, g (s)	23.3	23.3			23.3	23.3		22.1		11.1	11.1	
Actuated g/C Ratio	0.33	0.33			0.33	0.33		0.32		0.16	0.16	
Clearance Time (s)	4.5	4.5			4.5	4.5		4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	346	605			389	526		545		106	269	
v/s Ratio Prot		0.22									c0.20	
v/s Ratio Perm	c0.41				0.19	0.09		c0.40		0.15		
v/c Ratio	1.24	0.65			0.58	0.27		1.26		0.93	1.25	
Uniform Delay, d1	23.3	19.8			19.3	17.1		23.9		29.0	29.4	
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	132.5	2.5			2.2	0.2		135.3		66.1	140.2	
Delay (s)	155.8	22.4			21.5	17.4		159.2		95.2	169.7	
Level of Service	F	C			C	B		F		F	F	
Approach Delay (s/veh)		91.3			18.8			159.2			155.2	
Approach LOS		F			B			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	103.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	0	0	169	231	1	82	1	356	207	91	97
Future Volume (vph)	0	0	0	169	231	1	82	1	356	207	91	97
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	0	0	0	194	266	1	94	1	409	238	105	111

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	460	1	504	454
Volume Left (vph)	194	0	94	238
Volume Right (vph)	0	1	409	111
Hadj (s)	0.24	-0.67	-0.42	-0.01
Departure Headway (s)	7.7	6.7	6.4	6.9
Degree Utilization, x	0.98	0.00	0.90	0.87
Capacity (veh/h)	460	524	545	511
Control Delay (s/veh)	62.8	8.5	43.2	40.5
Approach Delay (s/veh)	62.7		43.2	40.5
Approach LOS	F		E	E

Intersection Summary				
Delay	48.7			
Level of Service	E			
Intersection Capacity Utilization	79.6%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	0	0	57	103	315	36	181	5	0	265	51
Future Volume (vph)	0	0	0	57	103	315	36	181	5	0	265	51
Peak Hour Factor	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
Hourly flow rate (vph)	0	0	0	92	166	508	58	292	8	0	427	82

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	258	508	358	509
Volume Left (vph)	92	0	58	0
Volume Right (vph)	0	508	8	82
Hadj (s)	0.21	-0.67	0.05	-0.06
Departure Headway (s)	7.4	6.5	7.0	6.6
Degree Utilization, x	0.53	0.92	0.70	0.93
Capacity (veh/h)	478	538	498	509
Control Delay (s/veh)	17.4	45.9	24.4	48.4
Approach Delay (s/veh)	36.3		24.4	48.4
Approach LOS	E		C	E

Intersection Summary				
Delay	37.5			
Level of Service	E			
Intersection Capacity Utilization	47.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	85	2	5	5	11	19	44	388	6	5	5	260
Future Volume (vph)	85	2	5	5	11	19	44	388	6	5	5	260
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	92	2	5	5	12	21	48	422	7	5	5	283

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	99	38	477	293
Volume Left (vph)	92	5	48	5
Volume Right (vph)	5	21	7	283
Hadj (s)	0.19	-0.27	0.05	-0.54
Departure Headway (s)	5.9	5.6	4.7	4.4
Degree Utilization, x	0.16	0.06	0.62	0.35
Capacity (veh/h)	535	538	740	788
Control Delay (s/veh)	10.1	9.0	15.1	9.7
Approach Delay (s/veh)	10.1	9.0	15.1	9.7
Approach LOS	B	A	C	A

Intersection Summary				
Delay	12.6			
Level of Service	B			
Intersection Capacity Utilization	61.6%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	32	32	24	106	56	227	7	86	18	21	288	21
Future Volume (vph)	32	32	24	106	56	227	7	86	18	21	288	21
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	39	39	29	128	67	273	8	104	22	25	347	25

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	107	468	134	397
Volume Left (vph)	39	128	8	25
Volume Right (vph)	29	273	22	25
Hadj (s)	-0.06	-0.26	-0.05	0.01
Departure Headway (s)	6.4	5.5	6.4	5.9
Degree Utilization, x	0.19	0.72	0.24	0.65
Capacity (veh/h)	470	628	485	582
Control Delay (s/veh)	10.9	21.1	11.4	19.1
Approach Delay (s/veh)	10.9	21.1	11.4	19.1
Approach LOS	B	C	B	C

Intersection Summary				
Delay	18.2			
Level of Service	C			
Intersection Capacity Utilization	56.6%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	93	315	250	239	0	0
Future Volume (vph)	93	315	250	239	0	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	109	371	294	281	0	0

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	109	371	294	281
Volume Left (vph)	0	0	294	0
Volume Right (vph)	0	371	0	0
Hadj (s)	0.03	-0.57	0.53	0.03
Departure Headway (s)	4.5	3.2	5.1	4.6
Degree Utilization, x	0.14	0.33	0.42	0.36
Capacity (veh/h)	779	1113	698	773
Control Delay (s/veh)	8.2	7.8	10.5	9.0
Approach Delay (s/veh)	7.9		9.8	
Approach LOS	A		A	

Intersection Summary			
Delay	8.9		
Level of Service	A		
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		

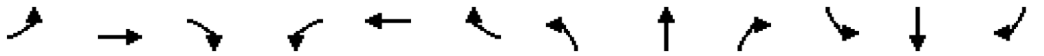
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	0	0	0	92	0	396	1	0	2807	245	7	213
Future Volume (vph)	0	0	0	92	0	396	1	0	2807	245	7	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.5	3.5		3.0	4.8	4.8		3.0
Lane Util. Factor					0.95	0.95		1.00	0.95	1.00		1.00
Frt					0.90	0.85		1.00	1.00	0.85		1.00
Flt Protected					0.98	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)					1573	1504		1770	3539	1583		1770
Flt Permitted					0.98	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)					1573	1504		1770	3539	1583		1770
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	0	0	0	93	0	400	1	0	2835	247	7	215
RTOR Reduction (vph)	0	0	0	0	73	116	0	0	0	19	0	0
Lane Group Flow (vph)	0	0	0	0	180	124	0	1	2835	228	0	222
Turn Type				Split	NA	Perm	Prot	Prot	NA	Perm	Prot	Prot
Protected Phases	4	4		3	3		5	5	2		1	1
Permitted Phases						3				2		
Actuated Green, G (s)					15.5	15.5		0.8	104.6	104.6		11.0
Effective Green, g (s)					15.5	15.5		0.8	104.6	104.6		11.0
Actuated g/C Ratio					0.11	0.11		0.01	0.73	0.73		0.08
Clearance Time (s)					3.5	3.5		3.0	4.8	4.8		3.0
Vehicle Extension (s)					2.0	2.0		2.0	5.0	5.0		2.0
Lane Grp Cap (vph)					171	163		9	2599	1162		136
v/s Ratio Prot					c0.11			0.00	c0.80			c0.13
v/s Ratio Perm						0.08				0.14		
v/c Ratio					1.05	0.76		0.11	1.09	0.19		1.63
Uniform Delay, d1					63.4	61.6		70.4	18.9	5.8		65.7
Progression Factor					1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2					83.3	17.0		1.9	47.9	0.1		315.3
Delay (s)					146.7	78.7		72.4	66.8	6.0		381.0
Level of Service					F	E		E	E	A		F
Approach Delay (s/veh)		0.0			113.6				61.9			
Approach LOS		A			F				E			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	62.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	142.4	Sum of lost time (s)	14.8
Intersection Capacity Utilization	116.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1616	0
Future Volume (vph)	1616	0
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.8	
Lane Util. Factor	0.95	
Frt	1.00	
Flt Protected	1.00	
Satd. Flow (prot)	3539	
Flt Permitted	1.00	
Satd. Flow (perm)	3539	
Peak-hour factor, PHF	0.99	0.99
Adj. Flow (vph)	1632	0
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	1632	0
Turn Type	NA	
Protected Phases	6	
Permitted Phases		
Actuated Green, G (s)	114.8	
Effective Green, g (s)	114.8	
Actuated g/C Ratio	0.81	
Clearance Time (s)	4.8	
Vehicle Extension (s)	5.0	
Lane Grp Cap (vph)	2853	
v/s Ratio Prot	0.46	
v/s Ratio Perm		
v/c Ratio	0.57	
Uniform Delay, d1	4.9	
Progression Factor	1.00	
Incremental Delay, d2	0.4	
Delay (s)	5.4	
Level of Service	A	
Approach Delay (s/veh)	50.3	
Approach LOS	D	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1	0	917	0	2097	0	510	1133	0
Future Volume (vph)	0	0	0	1	0	917	0	2097	0	510	1133	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0	3.0		5.5		3.0	5.5	
Lane Util. Factor					1.00	0.88		0.95		0.97	0.95	
Frt					1.00	0.85		1.00		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1770	2787		3539		3433	3539	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1770	2787		3539		3433	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	1	0	965	0	2207	0	537	1193	0
RTOR Reduction (vph)	0	0	0	0	0	456	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1	509	0	2207	0	537	1193	0
Turn Type				Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	7		8	8	1	5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)					0.8	19.8		76.6		19.0	98.6	
Effective Green, g (s)					0.8	19.8		76.6		19.0	98.6	
Actuated g/C Ratio					0.01	0.18		0.71		0.18	0.91	
Clearance Time (s)					3.0	3.0		5.5		3.0	5.5	
Vehicle Extension (s)					2.0	2.0		4.5		2.0	4.5	
Lane Grp Cap (vph)					13	588		2512		604	3233	
v/s Ratio Prot					0.00	c0.15		c0.62		0.16	0.34	
v/s Ratio Perm						0.03						
v/c Ratio					0.07	0.86		0.87		0.88	0.36	
Uniform Delay, d1					53.1	42.7		12.0		43.4	0.6	
Progression Factor					1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2					0.9	12.3		4.0		14.5	0.1	
Delay (s)					54.1	55.0		16.1		57.9	0.7	
Level of Service					D	E		B		E	A	
Approach Delay (s/veh)		0.0			55.0			16.1			18.4	
Approach LOS		A			E			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	107.9	Sum of lost time (s)	14.5
Intersection Capacity Utilization	98.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	28	492	1476	55	225	856
Future Volume (vph)	28	492	1476	55	225	856
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	5.5	5.5	3.0	5.5
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	3433	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	3433	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	29	518	1554	58	237	901
RTOR Reduction (vph)	0	10	0	11	0	0
Lane Group Flow (vph)	29	508	1554	47	237	901
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.1	13.9	31.9	31.9	11.8	46.7
Effective Green, g (s)	2.1	13.9	31.9	31.9	11.8	46.7
Actuated g/C Ratio	0.04	0.24	0.56	0.56	0.21	0.82
Clearance Time (s)	3.0	3.0	5.5	5.5	3.0	5.5
Vehicle Extension (s)	2.0	2.0	2.5	2.5	2.0	2.0
Lane Grp Cap (vph)	64	466	1970	881	706	2884
v/s Ratio Prot	0.02	c0.22	c0.44		0.07	0.25
v/s Ratio Perm		0.10		0.03		
v/c Ratio	0.45	1.09	0.78	0.05	0.33	0.31
Uniform Delay, d1	27.0	21.7	10.0	5.8	19.4	1.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	68.4	2.0	0.0	0.1	0.0
Delay (s)	28.8	90.1	12.1	5.8	19.5	1.3
Level of Service	C	F	B	A	B	A
Approach Delay (s/veh)	86.8		11.9			5.1
Approach LOS	F		B			A

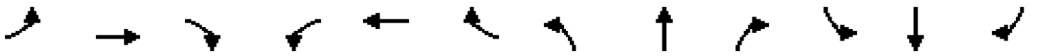
Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	57.3	Sum of lost time (s)	11.5
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	46	9	120	34	494	30	914	135	340	494	69
Future Volume (vph)	115	46	9	120	34	494	30	914	135	340	494	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.2	4.2		3.7	3.7	3.5	5.7		3.7	5.7	4.2
Lane Util. Factor	1.00	1.00	1.00		1.00	0.88	1.00	0.95		0.97	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583		1793	2787	1770	3471		3433	3539	1583
Flt Permitted	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583		1793	2787	1770	3471		3433	3539	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	119	47	9	124	35	509	31	942	139	351	509	71
RTOR Reduction (vph)	0	0	8	0	0	337	0	8	0	0	0	25
Lane Group Flow (vph)	119	47	1	0	159	172	31	1073	0	351	509	46
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	3	3		4	4	5	1	6		5	2	3
Permitted Phases			3			4						2
Actuated Green, G (s)	11.4	11.4	11.4		13.5	28.2	3.4	41.0		14.7	52.5	63.9
Effective Green, g (s)	11.4	11.4	11.4		13.5	28.2	3.4	41.0		14.7	52.5	63.9
Actuated g/C Ratio	0.12	0.12	0.12		0.14	0.29	0.03	0.42		0.15	0.54	0.65
Clearance Time (s)	4.2	4.2	4.2		3.7	3.7	3.5	5.7		3.7	5.7	4.2
Vehicle Extension (s)	2.0	2.0	2.0		2.5	2.0	2.0	4.0		2.0	4.0	2.0
Lane Grp Cap (vph)	206	216	184		247	908	61	1453		515	1897	1033
v/s Ratio Prot	c0.07	0.03			c0.09	0.03	0.02	c0.31		c0.10	0.14	0.01
v/s Ratio Perm			0.00			0.03						0.02
v/c Ratio	0.57	0.21	0.00		0.64	0.18	0.50	0.73		0.68	0.26	0.04
Uniform Delay, d1	40.9	39.2	38.2		39.9	26.2	46.4	23.9		39.3	12.2	6.0
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.4	0.1	0.0		5.0	0.0	2.4	2.1		2.9	0.1	0.0
Delay (s)	43.4	39.3	38.2		44.9	26.2	48.8	26.0		42.3	12.4	6.0
Level of Service	D	D	D		D	C	D	C		D	B	A
Approach Delay (s/veh)		42.0			30.7			26.7			23.2	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	97.9	Sum of lost time (s)	17.3
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		

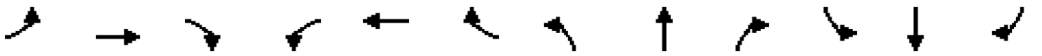
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	201	252	168	369	233	265	912	126	191	1129	590
Future Volume (vph)	275	201	252	168	369	233	265	912	126	191	1129	590
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	3.5		3.5	3.5	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.95	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1755	1583		3485	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.99	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1755	1583		3485	1583	1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	284	207	260	173	380	240	273	940	130	197	1164	608
RTOR Reduction (vph)	0	0	218	0	0	89	0	0	45	0	0	286
Lane Group Flow (vph)	241	250	42	0	553	151	273	940	85	197	1164	322
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Actuated Green, G (s)	16.7	16.7	16.7		22.5	22.5	19.5	36.2	36.2	13.8	30.5	30.5
Effective Green, g (s)	16.7	16.7	16.7		22.5	22.5	19.5	36.2	36.2	13.8	30.5	30.5
Actuated g/C Ratio	0.16	0.16	0.16		0.22	0.22	0.19	0.35	0.35	0.13	0.29	0.29
Clearance Time (s)	3.5	3.5	3.5		3.5	3.5	3.0	5.0	5.0	3.0	5.0	5.0
Vehicle Extension (s)	6.0	6.0	6.0		4.0	4.0	4.0	8.0	8.0	4.0	8.0	8.0
Lane Grp Cap (vph)	269	281	253		752	341	331	1229	549	234	1035	463
v/s Ratio Prot	c0.14	0.14			c0.16		c0.15	0.27		0.11	c0.33	
v/s Ratio Perm			0.03			0.10			0.05			0.20
v/c Ratio	0.89	0.88	0.16		0.73	0.44	0.82	0.76	0.15	0.84	1.12	0.69
Uniform Delay, d1	42.8	42.8	37.7		38.0	35.4	40.7	30.2	23.4	44.1	36.8	32.7
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	31.8	29.6	0.8		4.0	1.2	15.9	4.3	0.5	23.8	68.8	8.3
Delay (s)	74.7	72.4	38.6		42.0	36.6	56.6	34.5	24.0	67.9	105.7	41.0
Level of Service	E	E	D		D	D	E	C	C	E	F	D
Approach Delay (s/veh)		61.4			40.4			38.0			81.9	
Approach LOS		E			D			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	59.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	104.2	Sum of lost time (s)	15.0
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	253	350	159	43	364	136	207	191	89	14	84	155
Future Volume (vph)	253	350	159	43	364	136	207	191	89	14	84	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frt	1.00	0.95		1.00	0.95		1.00	0.95			0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	1776		1770	1787		1770	1774			1704	
Flt Permitted	0.95	1.00		0.95	1.00		0.59	1.00			0.42	
Satd. Flow (perm)	1770	1776		1770	1787		1117	1774			718	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	258	357	162	44	371	139	211	195	91	14	86	158
RTOR Reduction (vph)	0	14	0	0	13	0	0	15	0	0	52	0
Lane Group Flow (vph)	258	505	0	44	497	0	211	271	0	0	206	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	17.1	41.6		4.1	28.6		21.8	21.8			24.5	
Effective Green, g (s)	17.1	41.6		4.1	28.6		21.8	21.8			24.5	
Actuated g/C Ratio	0.16	0.38		0.04	0.26		0.20	0.20			0.22	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	275	671		65	464		221	351			159	
v/s Ratio Prot	c0.15	0.28		0.02	c0.28			0.15				
v/s Ratio Perm							c0.19				c0.29	
v/c Ratio	0.93	0.75		0.67	1.07		0.95	0.77			1.29	
Uniform Delay, d1	45.9	29.7		52.2	40.7		43.6	41.7			42.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	37.5	7.6		24.4	62.4		47.4	10.0			171.3	
Delay (s)	83.4	37.3		76.7	103.1		91.0	51.7			214.0	
Level of Service	F	D		E	F		F	D			F	
Approach Delay (s/veh)		52.6			101.0			68.4			214.0	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	89.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	86.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	278	135	349	210	132	38	20	114	373	146	29
Future Volume (vph)	8	278	135	349	210	132	38	20	114	373	146	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5			4.5		4.5	4.5	
Lane Util. Factor		0.95		1.00	1.00			1.00		1.00	1.00	
Frt		0.95		1.00	0.94			0.91		1.00	0.97	
Flt Protected		0.99		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)		3366		1770	1755			1678		1770	1816	
Flt Permitted		0.94		0.95	1.00			0.89		0.95	1.00	
Satd. Flow (perm)		3189		1770	1755			1511		1770	1816	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	8	287	139	360	216	136	39	21	118	385	151	30
RTOR Reduction (vph)	0	67	0	0	20	0	0	81	0	0	6	0
Lane Group Flow (vph)	0	367	0	360	332	0	0	97	0	385	175	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)		18.7		18.9	42.1			15.7		18.7	38.9	
Effective Green, g (s)		18.7		18.9	42.1			15.7		18.7	38.9	
Actuated g/C Ratio		0.21		0.21	0.47			0.17		0.21	0.43	
Clearance Time (s)		4.5		4.5	4.5			4.5		4.5	4.5	
Vehicle Extension (s)		3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)		662		371	820			263		367	784	
v/s Ratio Prot				c0.20	0.19					c0.22	0.10	
v/s Ratio Perm		c0.11						c0.06				
v/c Ratio		1.64dr		0.97	0.40			0.36		1.04	0.22	
Uniform Delay, d1		31.9		35.2	15.7			32.7		35.6	16.0	
Progression Factor		1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2		1.0		38.7	1.4			0.8		60.4	0.1	
Delay (s)		32.9		74.0	17.2			33.6		96.0	16.2	
Level of Service		C		E	B			C		F	B	
Approach Delay (s/veh)		32.9			45.9			33.6			70.5	
Approach LOS		C			D			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	49.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	211	277	58	93	160	126	341	157	101	136	122
Future Volume (vph)	290	211	277	58	93	160	126	341	157	101	136	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5	4.5		4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	
Frt	1.00	0.91			1.00	0.85		0.96		1.00	0.92	
Flt Protected	0.95	1.00			0.98	1.00		0.99		0.95	1.00	
Satd. Flow (prot)	1770	1704			1828	1583		1782		1770	1731	
Flt Permitted	0.65	1.00			0.42	1.00		0.86		0.61	1.00	
Satd. Flow (perm)	1220	1704			792	1583		1548		1146	1731	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	309	224	295	62	99	170	134	363	167	107	145	130
RTOR Reduction (vph)	0	77	0	0	0	115	0	18	0	0	49	0
Lane Group Flow (vph)	309	442	0	0	161	55	0	646	0	107	226	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		6			2			4			3	
Permitted Phases	6			2		2	4			3		
Actuated Green, G (s)	19.9	19.9			19.9	19.9		22.1		6.5	6.5	
Effective Green, g (s)	19.9	19.9			19.9	19.9		22.1		6.5	6.5	
Actuated g/C Ratio	0.32	0.32			0.32	0.32		0.36		0.10	0.10	
Clearance Time (s)	4.5	4.5			4.5	4.5		4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	391	546			254	508		551		120	181	
v/s Ratio Prot		c0.26									c0.13	
v/s Ratio Perm	0.25				0.20	0.03		c0.42		0.09		
v/c Ratio	0.79	0.81			0.63	0.10		1.17		0.89	1.24	
Uniform Delay, d1	19.1	19.3			17.9	14.8		19.9		27.4	27.7	
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	10.4	8.8			5.0	0.0		95.5		50.1	148.8	
Delay (s)	29.5	28.1			23.0	14.8		115.5		77.5	176.5	
Level of Service	C	C			C	B		F		E	F	
Approach Delay (s/veh)		28.6			18.8			115.5			148.8	
Approach LOS		C			B			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	74.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	62.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	100.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	0	0	174	209	6	79	5	310	372	127	106
Future Volume (vph)	0	0	0	174	209	6	79	5	310	372	127	106
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	189	227	7	86	5	337	404	138	115

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	416	7	428	657
Volume Left (vph)	189	0	86	404
Volume Right (vph)	0	7	337	115
Hadj (s)	0.26	-0.67	-0.40	0.05
Departure Headway (s)	7.5	6.6	6.3	6.5
Degree Utilization, x	0.87	0.01	0.75	1.19
Capacity (veh/h)	472	532	560	554
Control Delay (s/veh)	41.9	8.5	25.5	126.9
Approach Delay (s/veh)	41.4		25.5	126.9
Approach LOS	E		D	F

Intersection Summary				
Delay	74.1			
Level of Service	F			
Intersection Capacity Utilization	88.1%	ICU Level of Service	E	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	0	0	91	97	242	26	315	5	0	271	80
Future Volume (vph)	0	0	0	91	97	242	26	315	5	0	271	80
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	0	0	107	114	285	31	371	6	0	319	94

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	221	285	408	413
Volume Left (vph)	107	0	31	0
Volume Right (vph)	0	285	6	94
Hadj (s)	0.28	-0.67	0.04	-0.10
Departure Headway (s)	7.1	6.1	6.1	5.9
Degree Utilization, x	0.44	0.49	0.69	0.68
Capacity (veh/h)	486	558	571	579
Control Delay (s/veh)	14.3	13.6	21.4	20.7
Approach Delay (s/veh)	13.9		21.4	20.7
Approach LOS	B		C	C

Intersection Summary				
Delay	18.3			
Level of Service	C			
Intersection Capacity Utilization	55.2%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	148	0	5	5	0	17	0	426	0	44	5	378
Future Volume (vph)	148	0	5	5	0	17	0	426	0	44	5	378
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	156	0	5	5	0	18	0	448	0	46	5	398

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	161	23	448	449
Volume Left (vph)	156	5	0	46
Volume Right (vph)	5	18	0	398
Hadj (s)	0.21	-0.39	0.03	-0.48
Departure Headway (s)	6.3	6.1	5.1	4.6
Degree Utilization, x	0.28	0.04	0.64	0.58
Capacity (veh/h)	501	462	679	747
Control Delay (s/veh)	11.7	9.3	16.6	13.8
Approach Delay (s/veh)	11.7	9.3	16.6	13.8
Approach LOS	B	A	C	B

Intersection Summary				
Delay	14.6			
Level of Service	B			
Intersection Capacity Utilization	73.6%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	54	43	107	80	160	27	148	42	37	277	44
Future Volume (vph)	20	54	43	107	80	160	27	148	42	37	277	44
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	22	60	48	119	89	178	30	164	47	41	308	49

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	130	386	241	398
Volume Left (vph)	22	119	30	41
Volume Right (vph)	48	178	47	49
Hadj (s)	-0.15	-0.18	-0.06	-0.02
Departure Headway (s)	6.7	6.0	6.4	6.1
Degree Utilization, x	0.24	0.64	0.43	0.67
Capacity (veh/h)	442	563	507	554
Control Delay (s/veh)	11.8	19.3	14.0	20.5
Approach Delay (s/veh)	11.8	19.3	14.0	20.5
Approach LOS	B	C	B	C

Intersection Summary				
Delay	17.7			
Level of Service	C			
Intersection Capacity Utilization	57.7%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	192	780	304	175	0	0
Future Volume (vph)	192	780	304	175	0	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	211	857	334	192	0	0

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	211	857	334	192
Volume Left (vph)	0	0	334	0
Volume Right (vph)	0	857	0	0
Hadj (s)	0.03	-0.57	0.53	0.03
Departure Headway (s)	4.5	3.2	5.2	4.7
Degree Utilization, x	0.26	0.76	0.48	0.25
Capacity (veh/h)	784	1121	689	760
Control Delay (s/veh)	9.1	15.6	11.7	8.0
Approach Delay (s/veh)	14.3		10.3	
Approach LOS	B		B	

Intersection Summary			
Delay	13.0		
Level of Service	B		
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		

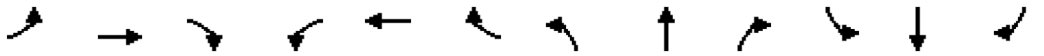
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	0	0	0	146	0	149	11	0	1868	110	7	251
Future Volume (vph)	0	0	0	146	0	149	11	0	1868	110	7	251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.5	3.5		3.0	4.8	4.8		3.0
Lane Util. Factor					0.95	0.95		1.00	0.95	1.00		1.00
Frt					0.98	0.85		1.00	1.00	0.85		1.00
Flt Protected					0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)					1669	1504		1770	3539	1583		1770
Flt Permitted					0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)					1669	1504		1770	3539	1583		1770
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	155	0	159	12	0	1987	117	7	267
RTOR Reduction (vph)	0	0	0	0	76	132	0	0	0	25	0	0
Lane Group Flow (vph)	0	0	0	0	95	11	0	12	1987	92	0	274
Turn Type				Split	NA	Perm	Prot	Prot	NA	Perm	Prot	Prot
Protected Phases	4	4		3	3		5	5	2		1	1
Permitted Phases						3				2		
Actuated Green, G (s)					10.3	10.3		1.5	90.5	90.5		24.8
Effective Green, g (s)					10.3	10.3		1.5	90.5	90.5		24.8
Actuated g/C Ratio					0.08	0.08		0.01	0.66	0.66		0.18
Clearance Time (s)					3.5	3.5		3.0	4.8	4.8		3.0
Vehicle Extension (s)					2.0	2.0		2.0	5.0	5.0		2.0
Lane Grp Cap (vph)					125	113		19	2339	1046		320
v/s Ratio Prot					c0.06			0.01	0.56			c0.15
v/s Ratio Perm						0.01				0.06		
v/c Ratio					0.76	0.09		0.63	0.84	0.08		0.85
Uniform Delay, d1					62.0	58.9		67.4	17.9	8.3		54.3
Progression Factor					1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2					21.4	0.1		40.9	3.4	0.0		18.9
Delay (s)					83.5	59.0		108.3	21.3	8.4		73.2
Level of Service					F	E		F	C	A		E
Approach Delay (s/veh)		0.0			72.4				21.1			
Approach LOS		A			E				C			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	49.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	136.9	Sum of lost time (s)	14.8
Intersection Capacity Utilization	109.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3046	0
Future Volume (vph)	3046	0
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.8	
Lane Util. Factor	0.95	
Frt	1.00	
Flt Protected	1.00	
Satd. Flow (prot)	3539	
Flt Permitted	1.00	
Satd. Flow (perm)	3539	
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	3240	0
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	3240	0
Turn Type	NA	
Protected Phases	6	
Permitted Phases		
Actuated Green, G (s)	113.8	
Effective Green, g (s)	113.8	
Actuated g/C Ratio	0.83	
Clearance Time (s)	4.8	
Vehicle Extension (s)	5.0	
Lane Grp Cap (vph)	2941	
v/s Ratio Prot	c0.92	
v/s Ratio Perm		
v/c Ratio	1.10	
Uniform Delay, d1	11.5	
Progression Factor	1.00	
Incremental Delay, d2	51.6	
Delay (s)	63.1	
Level of Service	E	
Approach Delay (s/veh)	63.9	
Approach LOS	E	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	0	441	0	1529	15	853	2327	0
Future Volume (vph)	0	0	0	15	0	441	0	1529	15	853	2327	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0	3.0		5.5	5.5	3.0	5.5	
Lane Util. Factor					1.00	0.88		0.95	1.00	0.97	0.95	
Frt					1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected					0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1770	2787		3539	1583	3433	3539	
Flt Permitted					0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1770	2787		3539	1583	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	15	0	450	0	1560	15	870	2374	0
RTOR Reduction (vph)	0	0	0	0	0	302	0	0	7	0	0	0
Lane Group Flow (vph)	0	0	0	0	15	148	0	1560	8	870	2374	0
Turn Type				Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	7		8	8	1	5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)					0.7	30.8		51.3	51.3	30.1	84.4	
Effective Green, g (s)					0.7	30.8		51.3	51.3	30.1	84.4	
Actuated g/C Ratio					0.01	0.33		0.55	0.55	0.32	0.90	
Clearance Time (s)					3.0	3.0		5.5	5.5	3.0	5.5	
Vehicle Extension (s)					2.0	2.0		4.5	4.5	2.0	4.5	
Lane Grp Cap (vph)					13	1006		1939	867	1103	3191	
v/s Ratio Prot					c0.01	0.05		c0.44		c0.25	0.67	
v/s Ratio Perm						0.01			0.01			
v/c Ratio					1.15	0.14		0.80	0.00	0.78	0.74	
Uniform Delay, d1					46.4	22.1		17.0	9.6	28.8	1.3	
Progression Factor					1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2					304.9	0.0		2.8	0.0	3.5	1.0	
Delay (s)					351.4	22.1		19.9	9.6	32.3	2.4	
Level of Service					F	C		B	A	C	A	
Approach Delay (s/veh)		0.0			32.7			19.8			10.4	
Approach LOS		A			C			B			B	

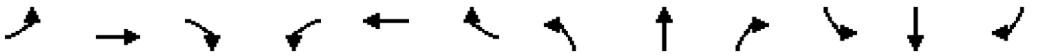
Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	93.6	Sum of lost time (s)	14.5
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	50	358	1243	73	506	1785
Future Volume (vph)	50	358	1243	73	506	1785
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	5.5	5.5	3.0	5.5
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	3433	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	3433	3539
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	51	365	1268	74	516	1821
RTOR Reduction (vph)	0	8	0	17	0	0
Lane Group Flow (vph)	51	357	1268	57	516	1821
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	3.9	20.0	30.3	30.3	16.1	49.4
Effective Green, g (s)	3.9	20.0	30.3	30.3	16.1	49.4
Actuated g/C Ratio	0.06	0.32	0.49	0.49	0.26	0.80
Clearance Time (s)	3.0	3.0	5.5	5.5	3.0	5.5
Vehicle Extension (s)	2.0	2.0	2.5	2.5	2.0	2.0
Lane Grp Cap (vph)	111	589	1735	776	894	2828
v/s Ratio Prot	0.03	c0.16	c0.36		0.15	0.51
v/s Ratio Perm		0.07		0.04		
v/c Ratio	0.45	0.60	0.73	0.07	0.57	0.64
Uniform Delay, d1	27.9	17.5	12.5	8.3	19.8	2.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	1.2	1.5	0.0	0.5	0.3
Delay (s)	29.0	18.7	14.0	8.3	20.4	2.9
Level of Service	C	B	B	A	C	A
Approach Delay (s/veh)	20.0		13.7			6.8
Approach LOS	C		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	11.5
Intersection Capacity Utilization	64.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	63	49	194	57	454	28	758	123	724	929	158
Future Volume (vph)	105	63	49	194	57	454	28	758	123	724	929	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.2	4.2		3.7	3.7	3.5	5.7		3.7	5.7	4.2
Lane Util. Factor	1.00	1.00	1.00		1.00	0.88	1.00	0.95		0.97	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583		1793	2787	1770	3465		3433	3539	1583
Flt Permitted	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583		1793	2787	1770	3465		3433	3539	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	108	65	51	200	59	468	29	781	127	746	958	163
RTOR Reduction (vph)	0	0	46	0	0	265	0	9	0	0	0	61
Lane Group Flow (vph)	108	65	5	0	259	203	29	899	0	746	958	102
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	3	3		4	4	5	1	6		5	2	3
Permitted Phases			3			4						2
Actuated Green, G (s)	11.0	11.0	11.0		20.0	47.6	3.8	33.6		27.6	57.6	68.6
Effective Green, g (s)	11.0	11.0	11.0		20.0	47.6	3.8	33.6		27.6	57.6	68.6
Actuated g/C Ratio	0.10	0.10	0.10		0.18	0.43	0.03	0.31		0.25	0.53	0.63
Clearance Time (s)	4.2	4.2	4.2		3.7	3.7	3.5	5.7		3.7	5.7	4.2
Vehicle Extension (s)	2.0	2.0	2.0		2.5	2.0	2.0	4.0		2.0	4.0	2.0
Lane Grp Cap (vph)	177	187	159		327	1305	61	1063		865	1861	991
v/s Ratio Prot	c0.06	0.03			c0.14	0.04	0.02	c0.26		c0.22	0.27	0.01
v/s Ratio Perm			0.00			0.03						0.05
v/c Ratio	0.61	0.34	0.03		0.79	0.15	0.47	0.84		0.86	0.51	0.10
Uniform Delay, d1	47.1	45.9	44.4		42.7	18.7	51.8	35.5		39.1	16.8	8.1
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	4.3	0.4	0.0		11.9	0.0	2.1	6.5		8.5	0.3	0.0
Delay (s)	51.5	46.3	44.4		54.7	18.7	53.9	42.1		47.7	17.1	8.1
Level of Service	D	D	D		D	B	D	D		D	B	A
Approach Delay (s/veh)		48.4			31.5			42.4			28.5	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	109.5	Sum of lost time (s)	17.3
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

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