COUNTY OF SAN MATEO PLANNING AND BUILDING DEPARTMENT

DATE: December 11, 2019

- **TO:** Planning Commission
- **FROM:** Planning Staff
- **SUBJECT:** <u>EXECUTIVE SUMMARY</u>: Consideration of (1) the adoption of an Initial Study and Mitigated Negative Declaration and (2) a Coastal Development Permit, Use Permit, Design Review Permit, Mobilehome Park Permit, and a Grading Permit, for the construction of a new 50-space Recreational Vehicle (RV) park, 7 tent camping spaces, plus a shower and laundry building located on a legal 3.356-acre parcel (legality confirmed via Lot Line Adjustment: LLA 94-0014) at 240 Capistrano Road in the Princeton area of unincorporated San Mateo County. The construction of the RV park involves 4,500 cubic yards of cut and 4,575 cubic yards of fill. No trees are proposed for removal. The project is appealable to the California Coastal Commission.

County File Number: PLN 2017-00320 (Stefanick)

PROPOSAL

The applicant, Ron Stefanick of Point Pillar Project Developers, has submitted an application to construct a new recreational vehicle (RV) park on a legal, undeveloped parcel at the west corner of the intersection of Cabrillo Highway (Highway 1) and Capistrano Road. The proposed RV park includes 50 RV spaces, 7 tent camping spaces, and a shower and laundry building and two (2) roofed 120 square foot trash enclosure. The shower and laundry building is required to have three (3) toilets, showers, and lavatories per building code as noted in Condition 48. The applicant has submitted a conceptual set of revised plans for the building to accommodate the aforementioned building code requirements (Attachment K). The construction of the RV park involves 4,500 cubic yards of cut and 4,575 cubic yards of fill. No trees are proposed for removal. The applicant proposes to enclose the RV park with a new split rail natural-stained wood fence (4-feet high along Cabrillo Highway and 3-feet high along Capistrano Road).

The RV park would have an on-site manager available at all times to oversee the maintenance of the park and enforce rules and regulations, including those that pertain to trash and noise. Stays would be limited to no more than 28 consecutive days and 90 days annually per RV, as required by the policies of the Local Coastal Program (LCP).

Customers who would like to use the tent camping spaces would be able to walk-in without a vehicle.

RECOMMENDATION

That the Planning Commission adopt the Initial Study/Mitigated Negative Declaration and approve the Coastal Development Permit, Use Permit, Design Review Permit, Mobilehome Park Permit, and Grading Permit by making the required findings and adopting the conditions of approval identified in Attachment A.

SUMMARY

The undeveloped site is located at the corner of Cabrillo Highway and Capistrano Road. The area to the north contains commercial uses in the unincorporated community of El Granada. The area to the northwest contains agricultural land. A parking lot for Pillar Point Harbor is located to the southeast. The areas to the southwest contain commercial uses, anchored by the Oceano Hotel. The project site has been previously used for temporary events such as pumpkin sales during annual holidays and as overflow parking for the adjacent commercial development.

The project complies with the Soil Resources Policies of the County's General Plan and the Grading Regulations of the County's Building Regulations. Review of the grading and erosion control plans – together with the County Geotechnical Section's review of submitted geotechnical studies and the Department of Public Works' review of the drainage reports - was critical to ensure that the development and its associated grading during construction and post-construction stormwater drainage was adequately contained on site and did not adversely affect or increase erosion. The associated mitigation measures and the conditions of approval will ensure that the project can be completed without significant harm to the environment.

The project also complies with the Visual Quality Policies of the County's General Plan, the Visual Resources Component of the County's Local Coastal Program (LCP), and the Design Review District Standards of the County's Zoning Regulations. Due to the presence of intervening trees and development, including mature Monterey Cypress trees along Cabrillo Highway, various mature trees spread throughout Pillar Point Harbor to the southeast, and the one- and two-story commercial structures to the southwest, public views of the Pacific Ocean are substantially blocked from viewing locations at the site and the portion of Cabrillo Highway which fronts the project site. When driving along Cabrillo Highway closer to the corner of Capistrano Road and Cabrillo Highway, there is a narrow viewshed of the Pacific Ocean which has the potential to be impacted by the project. To ensure minimal blockage of this view, proposed landscaping is limited to groundcover and low-growing shrubs at the corner of Capistrano Road and Cabrillo Highway and along the entire stretch of Capistrano Road adjacent to the property. In addition, no RV parking spaces are proposed along the Capistrano Road side of the property to further minimize view blockage. As part of the project scope, the existing grade level would be lowered by approximately 1-foot relative to the elevation of the adjacent Cabrillo Highway, further minimizing the effects of any views being blocked by vertical elements. The proposed one-story laundry/shower building reflects the nautical character of the harbor setting, employs natural colors (Kelly Moore's Lover's Hideaway (dark beige)), and uses pitched roofs. The proposed materials such as horizontal fiber cement siding and brown composition shingle, have a natural appearance. Signage will be limited to the existing monument and tower signs that serve the existing Harbor Village development.

The project complies with the Recreation/Visitor-Serving Facilities component of the Local Coastal Program and the Coastside Commercial Recreation (CCR) zoning district regulations of the County's Zoning Regulations. The proposed RV park is a visitor serving and a commercial recreation facility that will provide support services and low-cost lodging to the visitors of the coast. The tent camping spaces will provide an even more affordable form of lodging relative to the RV spaces. Per LCP Policy, stays would be limited to no more than 28 consecutive days, and no more than 90 days per year.

The project complies with the Public Works component of the Local Coastal Program which considers Service Level D (LOS D) acceptable during commuter peak periods and Service Level E (LOS E) acceptable during recreation peak periods. A Traffic Impact Analysis (Hexagon TIA) was prepared by Hexagon Transportation Consultants, Inc. for the project, and peer-reviewed for the County by DKS Associates. According to the Hexagon analysis, the proposed development would generate a total of 20 trips (7 incoming and 13 outgoing) during the AM peak hour, 25 trips (16 incoming and 9 outgoing) during the PM peak hour, and 24 trips (11 incoming and 13 outgoing) during the Saturday midday peak hour. The Hexagon analysis determined that, under all scenarios with and without the project, all studied intersection would operate at an acceptable level of service (LOS C or better, with each individual movement operating at LOS D or better). The analysis indicates that vehicles on the stop-controlled approaches (Pillar Point Harbor Boulevard and the Shoppes at Harbor Village private driveway) would experience minimal increases in delay with added project traffic. Additionally, the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts states that land use projects "may be assumed to cause a less-than significant transportation impact" if they generate or attract fewer than 110 trips per day.

RSP:cmc - RSPDD0611_WCU.DOCX

COUNTY OF SAN MATEO PLANNING AND BUILDING DEPARTMENT

DATE: December 11, 2019

- TO: Planning Commission
- **FROM:** Planning Staff
- **SUBJECT:** Consideration of (1) adoption of an Initial Study and Mitigated Negative Declaration, pursuant to the California Environmental Quality Act, and (2) a Coastal Development Permit, Use Permit, Design Review Permit, and Mobilehome Park Permit, pursuant to Sections 6328.4, 6267, 6268, and 6540 of the County Zoning Regulations, and a Grading Permit, pursuant to Section 9283 of the County Building Regulations (Division VII, Chapter 5), for the construction of a new 50-space Recreational Vehicle (RV) park, 7 tent camping spaces, plus a shower and laundry building located on a legal 3.356-acre parcel (legality confirmed via Lot Line Adjustment: LLA 94-0014) at 240 Capistrano Road in the Princeton area of unincorporated San Mateo County. The construction of the RV park involves 4,500 cubic yards of cut and 4,575 cubic yards of fill. No trees are proposed for removal. The project is appealable to the California Coastal Commission.

County File Number: PLN 2017-00320 (Stefanick)

PROPOSAL

The applicant, Ron Stefanick of Point Pillar Project Developers, has submitted an application to construct a new recreational vehicle (RV) park on a legal, undeveloped parcel at the west corner of the intersection of Cabrillo Highway (Highway 1) and Capistrano Road. The proposed RV park includes 50 RV spaces, 7 tent camping spaces, and a shower and laundry building and two (2) roofed 120 square foot trash enclosure. The shower and laundry building is required to have three (3) toilets, showers, and lavatories per building code as noted in Condition 48. The applicant has submitted a conceptual set of revised plans for the building to accommodate the aforementioned building code requirements (Attachment K). The construction of the RV park involves 4,500 cubic yards of cut and 4,575 cubic yards of fill. No trees are proposed for removal. The applicant proposes to enclose the RV park with a new split rail natural-stained wood fence (4-feet high along Cabrillo Highway and 3-feet high along Capistrano Road.

The RV park would have an on-site manager available at all times to oversee the maintenance of the park and enforce rules and regulations, including those that pertain to trash and noise. Stays would be limited to no more than 28 consecutive days and 90

days annually per RV, as required by the policies of the Local Coastal Program (LCP). Customers who would like to use the tent camping spaces would be able to walk-in without a vehicle.

RECOMMENDATION

That the Planning Commission adopt the Initial Study/Mitigated Negative Declaration and approve the Coastal Development Permit, Use Permit, Design Review Permit, Mobilehome Park Permit, and Grading Permit by making the required findings and adopting the conditions of approval identified in Attachment A.

BACKGROUND

Report Prepared By: Ruemel Panglao, Project Planner

Applicant: Ron Stefanick

Owner: Point Pillar Project Developers

Location: 240 Capistrano Road, Princeton

APN(s): 047-081-430

Size: 3.356 acres

Existing Zoning: CCR/DR/CD (Coastside Commercial Recreation/Design Review/Coastal Development)

General Plan Designation: Coastside Commercial Recreation (Urban)

Local Coastal Plan Designation: Coastside Commercial Recreation

Sphere-of-Influence: Half Moon Bay

Existing Land Use: Vacant; the parcel has been previously used for temporary events such as pumpkin sales during annual holidays and as overflow parking for the adjacent commercial development.

Water Supply: Coastside County Water District

Sewage Disposal: Granada Community Services District

Flood Zone: FEMA Flood Insurance Rate Map designation indicates parcel as Zone X, Area of Minimal Flooding, Community Map No. 06081C0138F, dated August 2, 2017.

Environmental Evaluation: An Initial Study and Mitigated Negative Declaration (IS/MND) was prepared for this project and was circulated from September 18 through October 18, 2019. Further discussion is provided in Section B of this report.

Setting: The undeveloped site is located at the corner of Cabrillo Highway and Capistrano Road. The area to the north contains commercial uses in the unincorporated community of El Granada. The area to the northwest contains agricultural land. A parking lot for Pillar Point Harbor is located to the southeast. The areas to the southwest contain commercial uses, anchored by the Oceano Hotel.

Chronology:

Date		Action	
August 9, 2017	-	Application submitted.	
March 6, 2018	-	The County released an RFP to find a traffic consultant to conduct a peer review of the applicant's traffic impact analysis prepared by Hexagon Traffic Consultants (Hexagon TIA).	
March 19, 2018	-	At the end of the RFP period, the County received no proposals from traffic consulting firms to complete the peer review and was therefore unsuccessful in retaining a consultant.	
November 8, 2018	-	The County retained a traffic consultant (DKS Associates) to conduct a peer review of the applicant's traffic impact analysis prepared by Hexagon Traffic Consultants (Hexagon TIA).	
January 5, 2019	-	The project's compliance with the state's Model Water Efficient Landscape Ordinance (MWELO) was confirmed by the County's MWELO consultant.	
January 28, 2019	-	In its peer review, the DKS Associates finds the applicant's revised traffic impact analysis prepared by Hexagon Traffic Consultants' sufficient.	
June 20, 2019	-	Applicant submits an archaeological report for review after the Northwest Information Center of the California Historical Resources Information System determines that archaeological resources may be at the subject site.	

- August 18, 2019 IS/MND is posted with the State Clearinghouse, County Clerk and on the Planning and Building Department's website. The 30-day public review period begins.
- October 17, 2019 The California Coastal Commission requests a 6-day extension to provide comments on the IS/MND.
- October 24, 2019 End of public review period for IS/MND.
- November 26, 2019 A conceptual design for the laundry and shower building is submitted (Attachment K). These plans were submitted in response to building code requirements which require additional toilets, lavatories, and showers.
- December 11, 2019 Planning Commission public hearing.

DISCUSSION

A. KEY ISSUES

1. <u>Conformance with the General Plan</u>

Upon review of the applicable provisions of the General Plan, staff has determined that the project complies with applicable General Plan Policies, including the following:

a. Soil Resources

Policy 2.17 (*Regulate Development to Minimize Soil Erosion and Sedimentation*) requires that development minimize soil erosion and sedimentation, including, but not limited to, measures which consider the effects of slope and the stabilization of disturbed areas. The site has a moderate slope of 2%, from the property line along Cabrillo Highway (Highway 1). The construction of the RV park involves 4,500 cubic yards of cut and 4,575 cubic yards of fill. The nearly balanced earthwork is necessary in order to flatten the site and to provide onsite bio-retention systems to treat project stormwater run-off, as required by the Municipal Regional Permit (MRP). Total land disturbance is 2.9 acres. Conditions 21, 22, and 29 (Mitigation Measures 2, 3, and 10, respectively) provide measures to minimize erosion and sedimentation during project construction activities.

b. Visual Qualities

Policies 4.15(a) (*Appearance of New Development*), 4.22 (*Scenic Corridors*), and 4.36 (*Urban Area Design Concept*) require

development in urban areas to promote and enhance good design, siting, site relationships, and other aesthetic considerations which should protect the visual quality of the scenic corridor and maintain the character of development. The proposed project is located within the Cabrillo Highway County Scenic Corridor. The architectural elements and exterior materials and colors proposed for the one-story laundry and shower building, two (2) 120 square foot trash enclosures, and new split rail wood fence (4-feet high along Cabrillo Highway and 3feet high along Capistrano Road) work to enhance the overall design of the RV park in conjunction with the proposed landscaping. The height of the proposed laundry/shower building is 16 feet 7 inches, which is below the maximum height of 28 feet. The proposal did not include details of the trash enclosures. Staff has added Condition No. 3 to require the trash enclosures to match the aesthetics of the laundry/shower building and to require the applicant to provide detailed drawings prior to Planning approval of the building permit. The shower and laundry building is required to have three (3) toilets, showers, and lavatories per building code. The applicant has submitted a conceptual set of revised plans for the building to accommodate the aforementioned building code requirements (Attachment K). While the existing views to the Pacific Ocean from Cabrillo Highway are minimal with intervening commercial development, such views would be preserved. Existing views are shown in Attachment J. The project has been reviewed against the applicable Design Review guidelines and regulations and has been found to conform to those standards. Further discussion can be found in Sections A.2 and A.5 of this report.

c. <u>Park and Recreation Resources</u>

Policy 6.30 (*Minimize Traffic and Litter Problems*) encourages recreationists to properly dispose of litter in recreation facilities. The applicant proposes two roofed, 120 square foot trash enclosures. The proposal also includes an on-site manager present at all times to monitor the RV Park and to enforce applicable policies related to litter (Attachment L).

2. Conformance with the Local Coastal Program

A Coastal Development Permit is required pursuant to Section 6328.4 of the Zoning Regulations for development in the Coastal Development (CD) District. The parcel is located in the Cabrillo Highway County Scenic Corridor. Because an RV park is a conditionally permitted use in the Coastside Commercial Recreation/Design Review (CCR/DR/CD) zoning district, as discussed in Section 4 of this report, the project requires a Use Permit and is therefore appealable to the California Coastal Commission.

Staff has determined that the project is in compliance with applicable Local Coastal Program (LCP) Policies, elaborated as follows:

a. Locating and Planning New Development

Policy 1.3 (*Definition of Urban Area*) recognizes that in the creation of the urban/rural boundary, some land has been included within the urban boundary which should be restricted to open space uses and not developed at relatively high densities, such as lands containing prime agricultural soils and sensitive habitats.

In addition to the subject parcel, the developed area of Princeton and a large portion of the Harbor District property to the southeast also contain prime soils. The subject parcel has been disturbed by temporary events including pumpkin sales and overflow parking uses and has not been farmed in the recent past. Also, the project site is zoned Coastside Commercial Recreation and is similarly designated in the General Plan and Local Coastal Program. Listed permitted uses of the zoning district do not include agricultural use. The parcel is not subject to an existing Open Space Easement. The proposed RV park use is not considered high density development. Further discussion can be found in the IS/MND (Attachment L).

b. Public Works

Policy 2.43 (*Desired Level of Service*) considers Service Level D acceptable during commuter peak periods and Service Level E acceptable during recreation peak periods. Policy 2.52 (*Traffic Mitigation for all Development in the Urban Midcoast*) requires a traffic impact analysis for new development that accounts for cumulative effects along with any future planned projects. A Traffic Impact Analysis (Hexagon TIA), dated January 18, 2019, was prepared by Hexagon Transportation Consultants, Inc. for the project, and peerreviewed for the County by DKS Associates. According to the Hexagon analysis, the proposed development would generate a total of 20 trips (7 incoming and 13 outgoing) during the AM peak hour, 25 trips (16 incoming and 9 outgoing) during the Saturday midday peak hour.

The Hexagon analysis determined that under all scenarios with and without the project, the signalized study intersection, Cabrillo Highway (SR 1)/Capistrano Road, would operate at an acceptable level of service (LOS C or better, with each individual movement operating at LOS D or better) during the AM, PM, and Saturday midday peak hours. In addition, the analysis results show that under all scenarios with and without the project, the two-way stop-controlled study intersection would operate at LOS C or better during all peak hours. The analysis indicates that vehicles on the stop-controlled approaches (Pillar Point Harbor Boulevard and the Shoppes at Harbor Village private driveway) would experience minimal increases in delay with added project traffic.

On January 28, 2019, in its peer review of the Hexagon TIA, DKS Associates found the Hexagon TIA to be sufficient. Review of the Hexagon TIA by the Department of Public Works is not required as the project does not meet the 100-vehicle trip threshold for significant adverse impact on traffic conditions in San Mateo County per the 2013 Traffic Impact Study Requirements.

Additionally, the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts states that land use projects "may be assumed to cause a less-than significant transportation impact" if they generate or attract fewer than 110 trips per day.

c. <u>Agriculture</u>

Policy 5.22 (*Protection of Agricultural Water Supplies*) requires the protection of agricultural water supplies. There is no well currently on the parcel.

d. <u>Visual Resources</u>

Policies 8.12(2) (*General Regulations*) and 8.32 (*Regulation of Scenic Corridors*) require the application of Section 6565.17 (*Design Review Districts*) of the Zoning Regulations and the design criteria set forth in the Community Design Manual for all development in urban areas of the Coastal Zone, as discussed below:

(1) Design Review District (Section 6565.17) and Community Design Manual standards:

Paved Areas, Landscaping, and View Preservation

Paved areas should integrate into the site, relate to any existing and proposed structures, and include landscape areas to reduce visual impact from residential areas and from roadways. Public views from public roads and along scenic corridors must be protected. The asphalt-paved areas are limited to the drive aisles. In an effort to minimize impervious surfaces, the parking areas would utilize pervious pavers. The applicant has proposed multiple landscaped areas with significant vegetation inside of the park and along the perimeter to visually soften views of the project.

Due to the presence of intervening trees and development, including mature Monterey Cypress trees along Cabrillo Highway, various mature trees spread throughout Pillar Point Harbor to the southeast, and the one- and two-story commercial structures to the southwest, public views of the Pacific Ocean are substantially blocked from viewing locations at the site and the portion of Cabrillo Highway which fronts the project site. When driving along Cabrillo Highway closer to the corner of Capistrano Road and Cabrillo Highway, there is a narrow viewshed of the Pacific Ocean which has the potential to be impacted by the project. The viewshed is presented in Attachment J. To ensure minimal blockage of this view, proposed landscaping is limited to groundcover and low-growing shrubs at the corner of Capistrano Road and Cabrillo Highway and along the entire stretch of Capistrano Road adjacent to the property. In addition, no RV parking spaces are proposed along the Capistrano Road side of the property to further minimize view blockage. As part of the project scope, the existing grade level would be lowered by approximately 1-foot relative to the elevation of the adjacent Cabrillo Highway, further minimizing the effects of any views being blocked by vertical elements. A Section-Elevation with cars and RVs provided in the project plans visually demonstrates the grade difference between Cabrillo Highway and the proposed elevation of the RV park (Attachment C).

<u>Signs</u>

Signs should be simple, well designed and constructed of materials which harmonize with their surroundings. Signage for the RV Park would consist of panels located on existing multi-tenant monument and 1 tower sign for the Harbor Village property.

Policy 8.13b (*Special Design Guidelines for Coastal Communities*) applies supplemental design criteria for the Princeton-by-the-Sea community which require structures to be designed to reflect the nautical character of the harbor setting, are of wood or shingle siding, employ natural or sea colors, and use pitched roofs. The proposed materials and colors for the

one-story laundry/shower building, such as horizontal fiber cement siding in Kelly Moore's Lover's Hideaway (dark beige), have a natural appearance. The building uses gable roofs, including a non-reflective, brown composition shingle as the primary roof material. Condition No. 3 requires the roofed trash enclosures to match the color and materials of the laundry/shower facility.

e. <u>Recreation/Visitor-Serving Facilities</u>

Policies 11.4 (*Recreation and Visitor-Serving Facilities Permitted in the Coastal Zone*), 11.5 (*Priority to Visitor-Serving and Commercial Recreation Facilities*), 11.7(c) (*Urban Areas*), and 11.22(b) (*Encourage Facility Development by the Private Sector*) permits, encourages and prioritizes visitor-serving and commercial recreation uses and facilities in the Coastal Zone. The proposed RV park is a visitor serving facility as defined by Policy 11.1 and a commercial recreation facility as defined by Policy 11.2. As a private development, the RV park would provide support services to the RV and tent camping segments of visitors that frequent the coast.

Policy 11.23 (*Low Cost Facilities*) encourages low cost facilities in privately developed visitor-serving facilities which are open to the general public. Recreational vehicle parks can be a form of low-cost recreational land use that provides access to the coast. In addition, the tent camping spaces will provide an even more affordable form of lodging relative to the RV spaces. These types of low-cost lodging benefits the visitors that may not be in a position to afford more costly accommodations in the surrounding area.

Policy 11.15(c)(1) (*Private Recreation and Visitor Serving Facilities*) requires a deed restriction as a condition of approval that affirms that the development will remain a visitor-serving use exclusively available to the general public and limits visitor length of stays to no more than 29 consecutive days, and no more than 90 days per year. The applicant has proposed stays of no more than 28 consecutive days and no more than 90 days per year. There equirements are fulfilled by Condition No. 19 of this permit.

Policy 11.21 (*Shoreline Access*) requires that any development along the shoreline provide access in accordance with the policies of the Shoreline Access Component. Policy 10.1 (*Permit Conditions for Shoreline Access*) requires some provision for shoreline access for development between the sea and nearest road. The project site is not located between the nearest public road (Capistrano Road) and the sea. Therefore, Policy 11.21 does not apply. However, the project does propose a vehicular and pedestrian connection to established circulation on Capistrano Road that would allow for easy access to the shoreline from the project site.

3. Conformance with the Half Moon Bay Airport Land Use Compatibility Plan

The project site is located approximately 900 feet east of the southeasterly boundary of the Half Moon Bay Airport, a public airport operated by the County Department of Public Works. Development within certain proximities of the airport are regulated by applicable policies and requirements of the Final Half Moon Bay Airport Land Use Compatibility Plan (ALUCP), as adopted by the City/County Association of Governments (C/CAG) on October 9, 2014. The overall objective of the ALUCP safety compatibility guidelines is to minimize the risks associated with potential aircraft accidents for people and property on the ground and to enhance the chances of survival for aircraft occupants involved in an accident that occurs beyond the runway environment. ALUCP's safety zone land use compatibility standards restrict land use development that could pose particular hazards to the public or to vulnerable populations in case of an aircraft accident.

A large majority of the project site is located in the Airport Influence Area (Runway Safety Zone 7), where accident risk level is considered to be low. The bathroom/laundry building would be located within this zone.

A small portion of the west corner of the project site (approximately .13 acre of the 3.356 acres of the total site) is located in the Airport Influence Area (Zone 2), the Inner Turning Zone (ITZ), where accident risk level is considered to be moderate to high as approximately seven percent of general aviation aircraft accidents occur in an ITZ Zone. The ITZ Zone does not identify RV parks as a prohibited use. Additionally, the proposed use complies with the other ITZ development conditions in the Safety Criteria Matrix of the ALUCP such as locating the structure a maximum distance from the extended runway centerline and maintaining a less than 35-ft. building height. No project structures are proposed within the ITZ. Four (4) RV spaces and two (2) guest parking spaces are within the ITZ. The ITZ does not directly address the proposed use but prohibits buildings with more than three above ground habitable floors. The maximum height of any RVs parked in the ITZ would not exceed the height limit of the CCR zoning district (28 feet), which is less than the ITZ height limit.

4. <u>Conformance with the Coastside Commercial Recreation/Design Review</u> (CCR/DR/CD) Development Standards

The project site is located within the Coastside Commercial Recreation (CCR) Zoning District which allows commercial recreation and visitor-

serving uses that are not listed in the ordinance, subject to a use permit, if they are deemed a compatible land use. These uses must be consistent with the purpose of the district and compatible with other permitted land uses. Staff has determined that the proposed 50 space RV park and associated uses meet the purpose of the CCR Zoning District in that it is primarily oriented towards meeting the service and recreational needs of Coastside visitors. In addition, the use is compatible with other permitted uses in the CCR Zoning District, most notably small and large hostelries which similarly provide sources of lodging.

CCR Development Standards							
Standard	Required	Proposed					
Minimum Side Yard Setbacks	5 ft., combined total of 15 ft.	82 ft. left side 255 ft. right side					
Maximum Impervious Surface Area (<18" from grade)	10%*	35%					
Maximum Lot Coverage	50%	0.59%					
Maximum Building Height	36 ft.	16 ft. 7 in.					
Minimum Parking Spaces	1	17					
* An exception to the limit may be granted by the Community Development Director for							

* An exception to the limit may be granted by the Community Development Director for select development upon finding that off-site project drainage, i.e., runoff, will not exceed that amount equivalent to 10% (parcel size).

a. Protection of Coastal Resources

Development shall be sited and designed to provide maximum feasible protection of coastal resources including, but not limited to, marine views. Further discussion can be found in Section A.2 of this report.

b. Impervious Surface Area

The amount of parcel area covered by impervious structures less than 18 inches in height is limited to 10% of the parcel size. An exception to the limit may be granted for select development upon finding that off-site project drainage, i.e., runoff, will not exceed that amount equivalent to 10 percent (parcel size). The County Drainage Policy requires that post pre-development runoff amounts do not exceed predevelopment runoff amounts. The project, which includes drainage facilities, was reviewed by the County's Department of Public Works and found to meet this policy.

c. Landscaping

Landscaping must be provided in all yards abutting a public street, except that portion necessary for driveways and sidewalks. Landscaping areas would be provided in the yards abutting Cabrillo Highway and Capistrano Road.

d. <u>CCR Zoning District Use Permit Findings</u>

The applicant is seeking a use permit to operate a 50 space RV park and associated uses as required in the CCR zoning district for Other Compatible Uses. In order for the Planning Commission to approve a use permit, the following findings are required.

- 1. That the design and operation of the proposed use will further the purpose of this Chapter as stated in Section 6265. The purpose of the CCR Zoning District is to limit and control the use and development of land designated as commercial recreation in the Local Coastal Program in order to establish commercial areas which:
 - a. are primarily oriented toward meeting the service and recreational needs of Coastside visitors, boat users and Coastside residents seeking recreation;
 - b. are active and pedestrian-oriented, while meeting the need for safe and efficient automobile access and parking;
 - c. have an intimate, human scale;
 - d. have a unified design theme appropriate to their location;
 - e. provide public access to nearby coastal areas; and
 - f. protect coastal resources.
- 2. That the design and operation of the proposed use will conform with the development standards stated in Section 6269. The project conforms to the applicable development standards in Section 6269 of the CCR Zoning District Regulations as discussed in this Section.
- e. <u>Finding for Use Permit</u>

Section 6503 requires that, in order to grant the use permit as applied for or conditioned, the findings of the Planning Commission must

include "That the establishment, maintenance, and/or conducting of the use will not, under the circumstances of the particular case, result in a significant adverse impact to coastal resources, or be detrimental to the public welfare or injurious to property or improvements in said neighborhood."

The project is compatible with the type and appearance of other existing commercial/visitor-serving development in the surrounding area. As previously mentioned, the proposed RV Park would include 50 RV spaces and 7 tent spaces. The facility would be open to the public year-round with a limit on stays (28 days consecutively and 90 days annually), which is compatible with the operation of other lodging establishments in the surrounding area.

Furthermore, the project is not considered a destination attraction that would cause a significant increase or change in pedestrian or vehicle traffic patterns. The use is intended to provide supportive lodging services for people that visit the coastside for other primary reasons. As discussed in the IS/MND, the traffic impact analysis found that the proposed project would not have a significant impact on traffic in the area. Also, the IS/MND determined that the project would not pose a significant safety impact to other vehicles, pedestrians or bicycles. The Hexagon analysis notes that the overall network of sidewalks and crosswalks in the study area has good connectivity and provides pedestrians with safe routes to buses and other points of interest in the vicinity of the project site and that the sidewalks and bikeways in the vicinity of the project site are adequate to serve the proposed RV park. There is no evidence to suggest that the proposed project will have any detrimental effects upon coastal resources or result in adverse impacts to properties or improvements in the area.

5. <u>Conformance with Design Review District Standards</u>

Pursuant to Section 6268 (Design Review) of the CCR Zoning District regulations and provided the project parcel is located in a Design Review overlay, the project is subject to design review. Non-residential development is required to comply with the design guidelines and criteria of the Community Design Manual and the LCP's Visual Resources and Special Communities Component.

Conformance with the applicable Site Design criteria of the Community Design Manual, including paved areas, landscaping, view preservation, and signs, are discussed in Section A.2 of this report. The Site Design criteria for grading requires that grading be carefully controlled to reduce erosion, minimize impacts on natural systems, and maintain surface runoff at existing levels. Conformance with these standards can be found in Section A.7 of this report. See Section A.2 for discussion on the project's compliance with the Visual Resources and Special Communities Component of the LCP.

6. <u>Conformance with the Mobilehome (MH) General Standards</u>

A Mobilehome Park Permit is required pursuant to Section 6540(1) of the Zoning Regulations for any mobilehome park in any zoning district in the unincorporated County. The project meets the definition of a mobilehome park as defined by Section 6537(2), which includes not just manufactured housing, but all forms of mobile housing, specifically including recreational vehicles; however, to the extent the MH ordinance requires consistency with components of State law that only apply to manufactured housing, mobilehome parks and installation, or factory-built housing, those requirements will not be applied to the proposed RV park, which is governed by a separate State law, the Special Occupancy Parks Act. The project is intended to be a visitor-serving use that provides low cost lodging opportunities for people visiting the coastside. Per Policy 11.15(c)(1) of the LCP, a deed restriction will be required limiting individual stays to 28 consecutive days with a maximum of 90 days per year. Further discussion can be found in Sections A.2 and A.4 of this report.

7. Conformance with the Grading Regulations

The applicant has provided the following estimates of grading in cubic yards required to construct the project:

Project Grading Quantities in Cubic Yards (c.y.)							
	Cut	Fill	Grading Total				
Lot	4,500 c.y.	4,575 c.y.	9,075 c.y.				
		Net Import: 75 c.y.*					
* Net import of fill means that the use of cubic yards of cut is not adequate							
to contribute the proposed and necessary fill; the net import amount is							
brought to the site from off-site sources.							

The purpose of the Grading Regulations is to promote the conservation of natural resources, including topography and vegetation, as well as to protect health and safety, which includes the reduction or elimination of erosion, siltation and flooding.

The construction of the RV park involves earthwork of 4,500 cubic yards of cut and 4,575 cubic yards of fill. A Grading Permit is required for projects that require a building permit and involve earthwork that exceeds 250 cubic yards (c/y). All application requirements of the Grading Regulations (including grading plans with engineer's estimate of the quantity of

materials, an erosion and sediment control plan, dust control plan, cross sections detailing the grading to occur), have been submitted and reviewed by the County Department of Public Works and the County Geotechnical Section and deemed compliant with the applicable requirements.

a. Findings for Grading Permit

The following is a discussion of how the project complies with required findings per Section 9290:

1. That this project, as conditioned, will not have a significant adverse effect on the environment.

The project has been reviewed by Planning staff and the Department of Public Works, which found that the project can be completed without significant harm to the environment as conditioned. Staff reviewed the grading and erosion control plans – together with the County Geotechnical Section's review of submitted geotechnical studies and drainage reports - and determined that the project, as proposed and conditioned, including grading, construction, and post-construction stormwater drainage, would adequately contain project drainage on-site, and would not adversely affect or increase erosion in the area. The implementation of the associated mitigation measures of the IS/MND together with the conditions of approval would ensure that the project can be completed without significant harm to the environment.

2. That this project, as conditioned, conforms to the criteria of the San Mateo County Grading Regulations and is consistent with the General Plan.

Planning staff and the Department of Public Works have reviewed the project and have determined its conformance to the criteria of Chapter 8, Division VII, San Mateo County Ordinance Code, including the standards referenced in Section 8605 and the San Mateo County General Plan.

Pursuant to the County Department of Public Works and Geotechnical Section's review and conditional approval of the grading plans, the project complies with the Grading Regulations.

B. <u>ENVIRONMENTAL REVIEW</u>

An Initial Study and Mitigated Negative Declaration (IS/MND) was prepared for this project and circulated from September 18 through October 18, 2019. While initially released and circulated for a 30-day period, the County extended the review period for another six days to accommodate the California Coastal Commission's request for additional time for comments. As a result, the County extended the review period to October 24, 2019.

- 1. Summary of Analysis of the Main Environmental Factors: Staff has summarized its analysis of the main environmental factors discussed in the IS/MND, below.
 - а. Aesthetics: The Aesthetics section addresses potential impacts of the project to ocean views. Mitigation Measure 1 (Condition 20) was included to limit the amount of light spilling over to adjacent properties. The shower and laundry building will be slightly expanded relative to what is shown on the plans in Attachment C because it is required to have three (3) toilets, showers, and lavatories per building code. In response to these requirements, the applicant has submitted a conceptual set of revised plans for the building (Attachment K). The changes will not create further aesthetic impacts as the structure will still be one-story, retain the same location, and not impact ocean views as they will still be blocked by the adjacent Oceano Hotel. In addition, the enlarged structure will not increase the overall intensity or density of the use as it does not spur an increase in RV or tent spaces, only ensuring that those already proposed are properly served. Further discussion can be found in Section A.2 of this report.
 - Biological Resources: The Biological Resources section addresses b. the potential impacts of construction on sensitive species. In summary, an SWCA biologist conducted a reconnaissance-level field survey of the study area on October 17, 2017. The SWCA evaluation states that developed, agricultural, and disturbed/ruderal habitats do not typically provide suitable habitat for sensitive wildlife species. No jurisdictional wetlands, water features, or riparian corridors were observed within the project area. Although the project area lacks suitable natural habitat conditions for California red-legged frog and San Francisco garter snake, the project area could be used by these species for dispersal. However, due to the lack of emergent vegetation cover and development surrounding the project area, the potential for these species to occur within the project area is low. The project area does contain habitat for nesting migratory birds, including northern harrier (Circus cyaneus), a California Department of Fish and Wildlife (CDFW) species of special concern that is protected under the Migratory Bird Treaty Act and/or the California Fish and Game Code.

With the provided mitigation measures and conditions of approval, the impacts of construction and development would be less than significant.

- c. <u>Geology and Soils</u>: The Geology and Soils section mainly addresses the suitability of the land to support development and potential erosion that could occur during construction activities. With the provided mitigation measures, the impacts of construction and development would be less than significant. Further discussion can be found in Section A.7 of this report.
- d. <u>Hydrology and Water Quality</u>: The Hydrology and Water Quality section addresses pre-and post-development stormwater flows. The project complies with the County's Drainage Policy requiring postconstruction stormwater flows to be at, or below, pre-construction flow rates. In addition, due to the amount of new impervious surface proposed, the Department of Public Works required a Bay Area Hydrology Model (BAHM) analysis and associated stormwater detention to meet C3 requirements. These measures, in addition to requiring the detention and treatment of stormwater runoff onsite, also requires treatment or project drainage.
- e. <u>Transportation</u>: Per the Screening Thresholds for Land Use Projects section of the "Technical Advisory on Evaluating Transportation Impacts in CEQA" document published by the Governor's Office of Planning and Research, the proposed project "may be assumed to cause a less-than significant transportation impact" because it generates or attracts fewer than 110 trips per day. With respect to compliance with the Department of Public Works' 2013 Traffic Impact Study Requirements, the project does not meet its 100-trip threshold for a significant adverse impact on traffic conditions in San Mateo County. Further discussion can be found in Section A.2 of this report.
- f. <u>Utilities and Service Systems</u>: The Granada Community Services District has indicated that they have adequate capacity to serve the project's sanitary sewerage demands. In addition, the project would also have adequate water service connections from the Coastside County Water District. Further discussion can be found in Section A.2 of this report.
- 2. Summary of Comments Received by Staff on the IS/MND: Comments were received from the California Department of Toxic Substances Control (DTSC), California Department of Transportation (Caltrans), California Coastal Commission (CCC), and Midcoast Community Council (MCC). Comments from individuals were also received, which aligned with comments received by the MCC and are addressed in the MCC section.

What follows is a summary of the comments received, each followed by staff response.

- a. <u>California Department of Toxic Substances Control</u>: Upon circulation of the IS/MND, the DTSC provided comments (email dated October 4, 2019; Attachment I), within which they cited issues and concerns summarized as follows:
 - (1) Hazardous Materials: Minimal amounts of hazardous materials such as fuel and paint would be used during construction and should be acknowledged. Adequate Best Management Practices must be implemented to prevent spills or incorrect use of these hazardous materials. Relevant mitigation measures should be referenced or proposed.
 - (2) Past Land Uses: Past land uses must be discussed in that they could have resulted in hazardous materials releases within the project area that should be investigated prior to development for public health protection. Past land uses could indicate the need for collecting environmental samples and/or preparing a Phase 2 Environmental Site Assessment (ESA).
 - (3) Grading: Discuss whether on-site soil would be sampled for disposal or reuse and how an adequate fill source would be chosen.
 - (4) Cortese List Requirements: Ensure that the project was reviewed under the Cortese List requirements and evaluate how nearby contaminated sites, if any, may impact the project site.

Staff Response: Regarding the prevention of spills or incorrect use of hazardous materials, Mitigation Measures 2, 9, and 14 (Condition Nos. 21, 28, and 32) address the prevention of spills or incorrect use of hazardous materials. Mitigation Measure 14 (Condition No. 32) specifically requires the control of fuels and other hazardous materials.

Past land uses are discussed in Question 2.d of the IS/MND. The property has been used as a pumpkin patch for sale of pumpkins for annual holidays. It has also been used historically as a staging area for temporary events and as unpaved overflow parking for the adjacent commercial development.

All cut soils from the project would need to be disposed of in a class 3 landfill such as Ox-Mountain. They would not receive soil unless it is manifested properly for disposal. This would be done as soil is excavated, stockpiled for sampling, and then disposed of properly. All fill soils (except for small amounts of organic topsoil kept for landscaping purposes) would consist of class 2 or class 3 subbase for road and driveway construction and drain-rock for the drainage systems. The fills are considered engineered fill and would not require testing.

During the preparation of the IS/MND, the project was reviewed against the Cortese List requirements by the Planning Section. The project site and those in the vicinity were not found to be on the EnviroStor, Geotracker, DTSC, or Water Board databases. In addition, the County Geotechnical Engineer reviewed the site against the contaminated soils criteria of the San Mateo Countywide Water Pollution Prevention Program's Construction Best Management Practices and found no evidence of possible contaminated sites within the immediate vicinity, and the lack of existing conditions that would indicate contaminated soils, it is unlikely that the project site has been subject to contamination by hazardous materials.

b. <u>California Department of Transportation (Caltrans)</u>: Upon circulation of the IS/MND, Caltrans provided comments (email dated October 15, 2019; Attachment H), regarding concerns about construction-related temporary access points along Cabrillo Highway, the addition or modification of utilities in Caltrans right-of-way, and impacts to traffic on Cabrillo Highway during construction.

Staff Response: No temporary construction access points are proposed along Cabrillo Highway. The temporary construction entrance would be off of Capistrano Road in the same location as the proposed permanent entrance into the RV park. Condition No. 82 requires a Transportation Management Plan to be submitted at the building permit stage for review and approval by Caltrans to address the temporary traffic impacts that may arise during construction.

- c. <u>California Coastal Commission</u>: The California Coastal Commission provided comments in a letter dated September 15, 2017 addressing the project submittal and, in an email, dated October 25, 2019 addressing the IS/MND which are summarized as follows:
 - Land Use: CCC staff has noted that the proposed RV park must be evaluated against the CCR zoning regulations as an Other Compatible Use.
 - (2) Traffic: CCC staff recommends that the traffic impact analysis address potential conflicts with commercial vehicle traffic that fluctuates seasonally in and out of the harbor. They also recommend that the analysis discuss potential project impacts to public coastal access along Highway 1 during peak summer

periods and traffic issues that may arise pre-and postconstruction, consistent with LCP Policy 2.52.

- (3) Commercial Recreation/Visitor Serving Facilities: As noted by CCC staff, the LCP encourages low-cost, public-serving recreational opportunities along the coast such as RV parks. Their staff is in favor of such uses as they benefit the visitors that may not be in a position to afford more costly lodging facilities such as luxury hotels located in coastal areas. They determined that the project meets the definitions of a visitor serving facility (LCP Policy 11.1) and commercial recreation facility (LCP Policy 11.2). They also note that the permit shall include a condition, per LCP Policy 11.15, limiting consecutive stays to 29 days and no more than 90 days annually. This condition has been added as Condition No. 19 in Attachment A.
- (4) Visual Resources: CCC staff notes that the LCP requires the protection of scenic and visual resources and that the development must minimize impacts on ocean views from public viewpoints. They also state that the project must be reviewed against the applicable design guidelines and regulations.
- (5) Prime Soils: Because the entire project site contains prime soils that have a Class III rating (non-irrigated), CCC staff recommends that the project should be evaluated against LCP Policies 1.3 and 5.22.
- (6) Biological Resources: CCC staff recommends that the drainage system for the project should not affect the character of the swale at the northeast edge of the project area because the swale could provide marginal, suitable habitat for sensitive wildlife species such as the California red-legged frog and the San Francisco garter snake which may use the drainage for dispersal.

Staff Response: Regarding land use, further discussion can be found in Section A.4 of this report. Traffic is addressed above in this section and in Section A.2. Commercial recreation/visitor serving facilities, visual resources, and prime soils are discussed in Section A.2.

In terms of biological resources, the project does not propose any changes to the swale and mitigation measures are provided to minimize the impacts of construction and development to a less than significant level. Further discussion can be found above in this section and in the IS/MND.

- d. <u>Midcoast Community Council</u>: Upon circulation of the IS/MND, the MCC provided comments (memo dated October 9, 2019; Attachment D), within which it cited concerns from the community. The comments regarding aesthetics and traffic largely echo those received by Planning staff from individuals via email. The MCC's concerns related to environmental factors of the IS/MND are summarized as follows:
 - (1) Aesthetics: Majority of the comments from the public raised concerns about the potential visual impacts of this project according to the MCC. Many people are concerned about the blockage of ocean views and consider the sight of an RV park unappealing overall for residents and visitors.
 - (2) Traffic: Project traffic impacts are a major concern of the MCC. The MCC asserts that the Midcoast has significant traffic delays on the weekends and that trailers and RVs, by their nature, tend to impact traffic more than most vehicles, because they are larger and slower.

Staff Response: The aesthetics of the project have been evaluated against the applicable Design Review regulations as required by the Visual Resources Component of the LCP and the CCR Zoning District regulations. Further discussion can be found above, in Sections A.1 and A.2 of this report and in the IS/MND. The traffic impact analysis found that the proposed project would not have a significant impact on traffic in the area. Further discussion can be found above, Section A.2 of this report, and the IS/MND.

C. MIDCOAST COMMUNITY COUNCIL

After the comment period for the IS/MND, the Midcoast Community Council provided comments on the project in a letter dated October 23, 2019 in which the MCC recommends denial of the project unless the RV park is reduced from 50 to 25 spaces. Their specific concerns are regarding aesthetics, traffic, length of guest stays, and pollution which are addressed below:

Aesthetics: In addition to their comments on the IS/MND, the MCC requests a height-restricted Clear View Easement on a portion of the property that would limit the height of vegetation to 3 feet at maturity to minimize impacts to ocean views. Proposed landscaping is limited to groundcover and low-growing shrubs at the corner of Capistrano Road and Cabrillo Highway and along the entire stretch of Capistrano Road adjacent to the property. In addition, no RV parking spaces are proposed along the Capistrano Road side of the property to further minimize view blockage. Further discussion can be found in Section A.2 of this report and the IS/MND.

Traffic: In addition to their comments on the IS/MND, the MCC also expressed concern regarding the cumulative effect on traffic that would be incurred with the proposed project and the Big Wave North Parcel Alternative Project (Big Wave)¹ on Airport Street (PLN 2013-00451). The provided traffic impact analysis includes a scenario that reviews the proposed development in conjunction with construction of Big Wave and a motel expansion at 11 Avenue Alhambra. In this and all other reviewed scenarios, the traffic analysis found that the proposed project would not have a significant impact on traffic in the area. Further discussion can be in Section A.2 of this report and the IS/MND.

Length of Guest Stay Enforcement: They also indicate that the applicant's 28 day stay limit will be difficult to enforce, claiming that the developer has a history of allowing stays longer than 28 days at the Pillar Point RV park and that part of the park may become permanent housing instead of 100% visitor serving. Per LCP Policy 11.15(c)(1), Condition 19 has been added limiting consecutive stays to 28 days and no more than 90 days annually and ensuring that the use will remain public and visitor serving. In addition, the County's Code Compliance Section may be employed for enforcement if this requirement is not met in the future. Further discussion can be found in Section A.2 of this report.

Climate/Pollution: The MCC has concerns regarding the amount of greenhouse gases that may be generated by the RVs, both through travel and the use of generators by RV visitors. As noted in Section A.2 of this report and the IS/MND, the Screening Thresholds for Land Use Projects section of the Technical Advisory on Evaluating Transportation Impacts in CEQA document published by the Governor's Office of Planning and Research, the proposed project "may be assumed to cause a less-than significant transportation impact" because it generates or attracts fewer than 110 trips per day which indicates that there will be a minimal impact on air pollutants and greenhouse gases (GHG). Additionally, the proposed project would have electrical hookups, minimizing the need for generators operated by RV visitors. Discussion regarding stormwater runoff and water quality can be found in Sections A.4 and B of this report.

There is also concern that the impervious surface proposed would increase polluted stormwater runoff and affect the habitat of native species, including nesting migratory birds. The project complies with County drainage and stormwater treatment requirements. See the Hydrology and Water Quality Section of Section B for further discussion.

D. <u>REVIEWING AGENCIES</u>

¹ The Big Wave North Parcel Alternative Project includes five (5) buildings containing approximately 155,500 sq. ft. of industrial/office/storage uses. The Office Park buildings will be occupied by private firms with their own workers. It also includes a Wellness Center that will consist of 70,500 sq. ft. of affordable housing and associated uses with up to 57 bedrooms for a maximum of 50 developmentally disabled adults and their aides.

Building Inspection Section Geotechnical Section Department of Public Works Environmental Health Services Coastside Fire Protection District Coastside County Water District Granada Community Services District California Coastal Commission California Department of Transportation California Department of Toxic Substances Control Sonoma State Midcoast Community Council California Coastal Commission

ATTACHMENTS

- A. Recommended Findings and Conditions of Approval
- B. Vicinity Map
- C. Project Plans
- D. Midcoast Community Council IS/MND Comment Letter, dated October 9, 2019
- E. Midcoast Community Council Letter, dated October 23, 2019
- F. California Coastal Commission Comments, dated September 15, 2017
- G. California Coastal Commission IS/MND Comments, dated October 25, 2019
- H. California Department of Transportation IS/MND Comments, dated October 15, 2019
- I. California Department of Toxic Substances Control IS/MND Comments, dated October 4, 2019
- J. Photos from Cabrillo Highway
- K. Revised Conceptual Shower/Laundry Building Site Plan and Floor Plan
- L. Initial Study/Mitigated Negative Declaration and Attachments:
 - Project Plans/Proposed RV Park Rules

SWCA Biological Resources Evaluation (dated November 2017)

California Historical Resources Information System Review Letter (dated April 10, 2019)

Holman & Associates Archeological Resources Reconnaissance Report for the Harbor Village RV Park Project (dated June 2019)

Sigma Prime Geotechnical Study (dated May 17, 2018)

Sigma Prime Geosciences, Inc. Harbor Village RV Park Drainage Report (dated March 2018)

Hexagon Transportation Consultants, Inc, 100 Capistrano Road Harbor Village RV Park Draft Traffic Impact Analysis (dated January 18, 2019)

DKS Associates Draft Peer Review of Princeton Harbor RV Park TIA (dated November 30, 2018)

Project EECAP Development Checklist

RSP:cmc - RSPDD0612_WCU.DOCX

County of San Mateo Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2017-00320 Hearing Date: December 11, 2019

Prepared By: Ruemel Panglao Project Planner For Adoption By: Planning Commission

RECOMMENDED FINDINGS

For the Environmental Review, Find:

- 1. That the Planning Commission does hereby find that the Initial Study/Mitigated Negative Declaration reflects the independent judgment of San Mateo County.
- 2. That the Initial Study/Mitigated Negative Declaration is complete, correct, and adequate and prepared in accordance with the California Environmental Quality Act (CEQA) and applicable State and County Guidelines.
- 3. That on the basis of the Initial Study/Mitigated Negative Declaration, comments received hereto, and testimony presented and considered at the public hearing, there is no substantial evidence that the project will have a significant effect on the environment.
- 4. That the Mitigation Measures (numbered 1 through 17) in the Initial Study/Mitigated Negative Declaration and agreed to by the owner and placed as conditions on the project address the Mitigation Monitoring and Reporting Plan requirements of California Public Resources Code Section 21081.6.1. The Mitigation Measures have been included as conditions into this attachment. This attachment shall serve as the Mitigation Monitoring and Reporting Plan.

For the Coastal Development Permit, Find:

5. That the project, as described in the application and accompanying materials required by Zoning Regulations Section 6328.7 and as conditioned in accordance with Section 6328.14, conforms to the plans, policies, requirements, and standards of the San Mateo County Local Coastal Program (LCP), specifically in regard to the Locating and Planning New Development Component, Public Works Component, Visual Resources Component (including the Community Design Manual Standards), Shoreline Access, and Recreation/Visitor-Serving Facilities Component of the LCP. Furthermore, the proposed project is visually compatible

with the mix of commercial recreation development along Capistrano Road, and the project is a visitor-serving and commercial recreation facility that would serve the needs of Coastside visitors and residents in the area.

6. That the project conforms to the specific findings required by policies of the San Mateo County Local Coastal Program. Any applicable findings are discussed in Section A.2 of the staff report.

For the Use Permit, Find:

- 7. That the design and operation of the proposed use will further the purpose of the CCR Zoning District as stated in Section 6265, as the project consists of a 50-space RV park intended to serve coastside visitors and locals. The proposed project is compatible with the surrounding mix of commercial/visitor-serving development in the Princeton area, which includes retail shops, lodging, and restaurants. The project would provide on-site parking. The project site is within walking distance to other commercial visitor-serving businesses, primarily along Capistrano Road, and is within walking distance to shoreline access points to Princeton Beach. Overall, the project would not impact coastal resources or public ocean views.
- 8. That the design and operation of the proposed use will conform with the development standards stated in Section 6269 (CCR Zoning District) since the project, as proposed and conditioned, conforms to the applicable development standards of the CCR Zoning District Regulations with regard to setbacks, height, lot coverage, protection of coastal resources, and landscaping. The applicant is seeking a use permit to classify an RV park under Other Compatible Uses as allowed by the CCR regulations.
- That the establishment, maintenance, and/or conducting of the use will not, under 9. the circumstances of the particular case, result in a significant adverse impact to coastal resources, or be detrimental to the public welfare or injurious to property or improvements in said neighborhood since there is no evidence to suggest that the proposed project, as conditioned and approved, will have any detrimental effect upon coastal resources or result in adverse impacts to properties or improvements in the area. The project is compatible with the type and appearance of other existing commercial/visitor-serving development in the surrounding area, including two other RV parks in close proximity at Pillar Point Harbor and Pillar Point RV Park. As proposed and conditioned, the facility would be open to the public year-round with a limit on stays consistent with the LCP (28 days consecutively and 90 days annually), which is compatible with the operation of other lodging establishments in the surrounding area. Furthermore, the project is not considered a destination attraction that would cause a significant increase or change in pedestrian or vehicle traffic patterns as the use is intended to provide supportive lodging service to people that visit the Princeton area for other primary reasons.

For the Design Review Permit, Find:

10. That the project complies with the design guidelines and criteria of the Community Design Manual and the LCP's Visual Resources Component. The proposed materials and colors for the one-story laundry/shower facility, such horizontal fiber cement siding in Kelly Moore's Lover's Hideaway (dark beige), has a natural appearance. The structure uses gable roofs, including a non-reflective, brown composition shingle as the primary roof material. Paved areas integrate into the site, relate to the proposed structure, and would be landscaped to reduce visual impact from residential areas and from roadways. Public views from public roads and along scenic corridors to the ocean are protected. The proposed signs would include panels located on an existing multi-tenant monument sign and tower sign that consolidate signage for the Harbor Village property.

For the Mobilehome Park Permit, Find:

11. That the proposed project meets all of the applicable regulations of Chapter 26 of the Zoning Regulations. The project meets the definition of a mobilehome park as defined by Section 6537(2), which includes not just manufactured housing, but all forms of mobile housing, specifically including recreational vehicles; however, to the extent the MH ordinance requires consistency with components of State law that only apply to manufactured housing, mobilehome parks and installation, or factory-built housing, those requirements will not be applied to the proposed RV park, which is governed by a separate State law, the Special Occupancy Parks Act. The project is intended to be a commercial recreation and visitor serving use that provides low cost lodging opportunities for people visiting the coastside.

For the Grading Permit, Find:

- 12. That this project, as conditioned, will not have a significant adverse effect on the environment. The project has been reviewed by the Planning Section, who prepared an Initial Study/Mitigated Negative Declaration and found that the project can be completed without significant harm to the environment as conditioned.
- 13. That this project, as conditioned, conforms to the criteria of the San Mateo County Grading Ordinance and is consistent with the General Plan. Planning staff and the Department of Public Works have reviewed the project and have determined its conformance to the criteria of Chapter 8, Division VII, San Mateo County Ordinance Code, including the standards referenced in Section 8605 and the San Mateo County General Plan.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

- 1. This approval applies only to the proposal, documents and plans described in this report and approved by the Planning Commission on December 11, 2019. The Community Development Director may approve minor revisions or modifications to the project if they are consistent with the intent of, and in substantial conformance with, this approval.
- 2. The Coastal Development Permit, Use Permit, Mobilehome Park Permit, and Grading Permit approvals shall be valid for five (5) years from the date of final approval in which time a building permit shall be issued and a completed building inspection (to the satisfaction of the Building Inspector) shall have occurred within 180 days of its issuance. The Mobilehome Park Permit must be renewed every 5 years thereafter. Any extension to these permits shall require submittal of a request for permit extension and payment of applicable extension fees, no less than sixty (60) days prior to expiration. An extension of these approvals will be considered upon written request and payment of the applicable fees sixty (60) days prior to the expiration of the approvals.
- 3. The applicant shall submit detailed drawings of the two roofed trash enclosure structures to the project planner prior to Planning approval of the building permit. The structure shall match the design and materials of the laundry/shower building.
- 4. Any change in use or intensity not already approved shall require an amendment to the use permit. Amendment to this use permit requires an application for amendment, payment of applicable fees, and consideration at a public hearing.
- 5. Signage for the use shall be limited to that approved under this permit. Any additional signage beyond the existing monument and tower signs shall require separate approval by the Planning and Building Department prior to installation.
- 6. Any new utilities shall be located underground from the nearest existing pole. No new poles are permitted to be installed.
- 7. The exterior colors and materials are approved. Color verification shall occur in the field after the applicant has applied the approved materials and colors but before a final inspection has been scheduled.
- 8. All approved landscaping shall be maintained in a healthy condition for the life of the use. Any dead or dying landscape shall be removed and replaced with the same or similar species.

- 9. At the building permit application stage, the project shall demonstrate compliance with the Water Efficient Landscape Ordinance (WELO) and provide the required information and forms.
- 10. The applicant shall provide "finished floor elevation verification" to certify that the laundry/shower building is actually constructed at the height shown on the submitted plans. The applicant shall have a licensed land surveyor or engineer establish a baseline elevation datum point in the vicinity of the construction site.
 - a. The applicant shall maintain the datum point so that it will not be disturbed by the proposed construction activities until final approval of the building permit.
 - b. This datum point and its elevation shall be shown on the submitted site plan. This datum point shall be used during construction to verify the elevation of the finished floors relative to the existing natural or to the grade of the site (finished grade).
 - c. Prior to Planning approval of the building permit application, the applicant shall also have the licensed land surveyor or engineer indicate on the construction plans: (1) the natural grade elevations at the significant corners (at least four) of the footprint of the proposed structure on the submitted site plan, and (2) the elevations of proposed finished grades.
 - d. In addition, (1) the natural grade elevations at the significant corners of the proposed structure, (2) the finished floor elevations, (3) the topmost elevation of the roof, and (4) the garage slab elevation must be shown on the plan, elevations, and cross-section (if one is provided).
 - e. Once the building is under construction, prior to the below floor framing inspection or the pouring of the concrete slab (as the case may be) for the lowest floor(s), the applicant shall provide to the Building Inspection Section a letter from the licensed land surveyor or engineer certifying that the lowest floor height, as constructed, is equal to the elevation specified for that floor in the approved plans. Similarly, certifications on the garage slab and the topmost elevation of the roof are required.
 - f. If the actual floor height, garage slab, or roof height, as constructed, is different than the elevation specified in the plans, then the applicant shall cease all construction and no additional inspections shall be approved until a revised set of plans is submitted to and subsequently approved by both the Building Official and the Community Development Director.
- 11. The property owner shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:

- a. Delineation with field markers of clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses within the vicinity of areas to be disturbed by construction and/or grading.
- b. Protection of adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
- c. Performing clearing and earth-moving activities only during dry weather.
- d. Stabilization of all denuded areas and maintenance of erosion control measures continuously between October 1 and April 30.
- e. Storage, handling, and disposal of construction materials and wastes properly, so as to prevent their contact with stormwater.
- f. Control and prevention of the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges, to storm drains and watercourses.
- g. Use of sediment controls or filtration to remove sediment when dewatering the site and obtain all necessary permits.
- h. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
- i. Limiting and timing applications of pesticides and fertilizers to prevent polluted runoff.
- j. Limiting construction access routes and stabilization of designated access points.
- k. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.
- I. Training and providing instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and construction Best Management Practices.
- m. Additional Best Management Practices in addition to those shown on the plans may be required by the Building Inspector to maintain effective stormwater management during construction activities. Any water leaving the site shall be clear and running slowly at all times.

- n. Failure to install or maintain these measures will result in stoppage of construction until the corrections have been made and fees paid for staff enforcement time.
- 12. The applicant shall include an erosion and sediment control plan to comply with the County's Erosion Control Guidelines on the plans submitted for the building permit. This plan shall identify the type and location of erosion control measures to be installed upon the commencement of construction in order to maintain the stability of the site and prevent erosion and sedimentation off-site.
- 13. No site disturbance shall occur, including any tree/vegetation removal or grading, until a building permit has been issued.
- 14. To reduce the impact of construction activities on neighboring properties, comply with the following:
 - a. All debris shall be contained on-site; a dumpster or trash bin shall be provided on site during construction to prevent debris from blowing onto adjacent properties. The applicant shall monitor the site to ensure that trash is picked up and appropriately disposed of daily.
 - b. The applicant shall remove all construction equipment from the site upon completion of the use and/or need of each piece of equipment which shall include but not be limited to tractors, back hoes, cement mixers, etc.
 - c. The applicant shall ensure that no construction-related vehicles shall impede through traffic along the right-of-way on Capistrano Road and Pillar Point Harbor Boulevard. All construction vehicles shall be parked on-site outside the public right-of-way or in locations which do not impede safe access on Capistrano Road and Pillar Point Harbor Boulevard. There shall be no storage of construction vehicles in the public right-of-way.
- 15. At the building permit application stage, the applicant shall submit a tree protection plan, including the following:
 - a. Identify, establish, and maintain tree protection zones throughout the entire duration of the project.
 - b. Isolate tree protection zones using 5-foot tall, orange plastic fencing supported by poles pounded into the ground, located at the driplines as described in the arborist's report.
 - c. Maintain tree protection zones free of equipment and materials storage; contractors shall not clean any tools, forms, or equipment within these areas.

- If any large roots or large masses of roots need to be cut, the roots shall be inspected by a certified arborist or registered forester prior to cutting as required in the arborist's report. Any root cutting shall be undertaken by an arborist or forester and documented. Roots to be cut shall be severed cleanly with a saw or toppers. A tree protection verification letter from the certified arborist shall be submitted to the Planning Department within five (5) business days from site inspection following root cutting.
- e. Normal irrigation shall be maintained, but oaks shall not need summer irrigation, unless the arborist's report directs specific watering measures to protect trees.
- f. Street tree trunks and other trees not protected by dripline fencing shall be wrapped with straw wattles, orange fence and 2 x 4 boards in concentric layers to a height of 8 feet.
- g. Prior to Issuance of a building permit, the Planning and Building Department shall complete a pre-construction site inspection, as necessary to verify that all required tree protection and erosion control measures are in place.
- 16. The applicant shall prepare a Stormwater Management Plan (SWMP) that includes, at a minimum, exhibit(s) showing drainage areas and location of Low Impact Development (LID) treatment measures; project watershed; total project site area and total area of land disturbed; total new and/or replaced impervious area; treatment measures and hydraulic sizing calculations; a listing of source control and site design measures to be implemented at the site; hydromodification management measures and calculations, if applicable; Natural Resources Conservation Service (NRCS) soil type; saturated hydraulic conductivity rate(s) at relevant locations or hydrologic soil type (A, B, C or D) and source of information; elevation of high seasonal groundwater table; a brief summary of how the project is complying with Provision C.3 of the MRP; and detailed Maintenance Plan(s) for each site design, source control and treatment measure requiring maintenance. An Operation and Maintenance Agreement must be recorded prior to Planning final approval of the building permit.
- The project shall comply with all requirements of the Municipal Regional Stormwater NPDES Permit Provision C.3. Please refer to the San Mateo Countywide Water Pollution Prevention Program's (SMCWPPP) C.3 Stormwater Technical Guidance Manual for assistance in implementing LID measures at the site.
- 18. The property owner(s) shall coordinate with the project planner to record the Notice of Determination and pay an environmental filing fee of \$2,354.75 (or current fee), as required under Fish and Game Code Section 711.4(d), plus a \$50 recording fee to the San Mateo County within four (4) working days of the final approval date of this project.

- 19. The Coastal Development Permit shall not be in effect until a deed restriction is recorded by the owner of the land that specifies the following:
 - a. The development is a visitor-serving use exclusively available to the general public and that visitor and recreational vehicle length of stays are limited to no more than 28 consecutive days, and no more than 90 days per year. No recreational vehicles, trailers, or tents shall be allowed to remain on the site in excess of the length of stay limits. The deed restriction shall be recorded by the County Recorder to run with the land.
 - b. Conversion of any portion of the visitor-serving or commercial recreation facilities from development allowed under subparagraph (1) above, to a non-public, private, or member-only use, or the implementation of any program to allow extended or exclusive use or occupancy of such facilities by an individual or limited group or segment of the public, shall require an amendment to the applicable permit, and shall require a reduction in project density to the amount prescribed by LCP Policy 1.8 for uses which are not visitor serving.

The following conditions of approval impose the mitigation measure identified in the IS/MND, with minor changes to Mitigation Measures 1 shown in underlines. The minor changes would not lessen the effectiveness of the mitigation measure.

- 20. <u>Mitigation Measure 1</u>: All exterior lights shall be designed and located so as to confine direct rays to the subject property and prevent glare in the surrounding area while meeting building code requirements. Any light spilling over onto adjacent properties caused by lighting required by building code shall be limited to the minimum lighting intensity and fixture amount required. A photometric and lighting plan shall be reviewed by the Planning Section during the building permit process to verify compliance with this condition. Prior to the final approval of the building permit, lighting shall be inspected and compliance with this requirement shall be verified.
- 21. <u>Mitigation Measure 2</u>: The applicant shall implement dust control measures, as listed below. Measures shall be included on plans submitted for the Building Permit and encroachment permit applications. The measures shall be implemented for the duration of any grading, demolition, and construction activities that generate dust and other airborne particles. The measures shall include the following
 - a. Water all active construction areas at least twice daily.
 - b. Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.

- c. Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least 2 feet of freeboard.
- d. Apply water three times daily or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at the construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
- e. Sweep daily (preferably with water sweepers) all paved access roads, parking, and staging areas at the construction sites.
- f. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.
- g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- h. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour (mph).
- i. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- j. Replant vegetation in disturbed areas as quickly as possible.
- 22. <u>Mitigation Measure 3</u>: The applicant shall submit an Air Quality Best Management Practices Plan to the Planning and Building Department prior to the issuance of any grading permit "hard card" or building permit that, at a minimum, includes the "Basic Construction Mitigation Measures" as listed in Table 8-1 of the BAAQMD California Environmental Quality Act (CEQA) Guidelines (May 2011). The following Bay Area Air Quality Management District Best Management Practices for mitigating construction-related criteria air pollutants and precursors shall be implemented prior to beginning any grading and/or construction activities and shall be maintained for the duration of the project grading and/or construction activities:
 - a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
 - b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
 - c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day.

- d. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour(mph).
- e. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485, of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- f. Roadways and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- g. Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485, of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- h. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.
- i. Minimize the idling time of diesel-powered construction equipment to two minutes.
- j. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
- 23. <u>Mitigation Measure 4</u>: Pre-Construction Nesting Bird Surveys. Prior to any Project construction-related activities (such as tree removal, grubbing, grading or other land disturbing activities), the Project proponent shall take the following steps to avoid direct losses of active nests, eggs, and nestlings and indirect impacts to avian breeding success:

If construction-related activities occur only during the non-breeding season, between August 31 and February 1, no nest surveys will be required.

During the breeding bird season (February 1 through August 31), a qualified biologist shall survey areas intended for construction-related activities in the Project Area for nesting raptors and passerine birds not more than 14 days prior to any ground-disturbing activity or vegetation removal. Surveys shall include all potential habitats within 250 feet of activities for raptors, and 50 feet of activities for passerines. If results are positive for nesting birds, a qualified biologist shall advise as to whether avoidance procedures are necessary, subject to review and approval by the Community Development Director. These may include

implementation of buffer areas (minimum 50-foot buffer for passerines and minimum 250-foot buffer for most raptors) or seasonal avoidance. Once established, buffer areas around active nests may be reduced on a case-by-case basis based on guidance from a qualified biologist. The biologist shall consider factors such as topography, land use, Project activities, visual screening or line-ofsite to active nest, and background noise levels when establishing a reduced nest buffer. The biologist shall advise whether full-time biological monitoring should be required during all activities that occur within reduced nest buffers in order to monitor the active nest(s) for signs of disturbance or "take."

- 24. <u>Mitigation Measure 5</u>: Environmental Training. All crewmembers shall attend an Environmental Awareness Training presented by a qualified biologist. The training shall include a description of the special-status species that may occur in the region, the project Avoidance and Minimization Measures, Mitigation Measures, the limits of the project work areas, applicable laws and regulations, and penalties for non-compliance. Upon completion of training, crewmembers shall sign a training form indicating they attended the program and understood the measures. Completed training form(s) shall be provided to the Project Planner before the start of project activities.
- 25. <u>Mitigation Measure 6</u>: Ground Disturbing Construction Activities. Ground disturbing construction-related activities shall occur during the dry season (June 1 to October 15) to facilitate avoidance of California red-legged frog. Regardless of the season, no construction shall occur within 24 hours following a significant rain event defined as greater than 1/4 inches of precipitation in a 24-hour period. Following a significant rain event and the 24-hour drying-out period, a qualified biologist shall conduct a preconstruction survey for California red-legged frog prior to the restart of any Project activities.
- 26. <u>Mitigation Measure 7</u>: Wildlife Encounters. If any wildlife is encountered during Project activities, said encounter shall be reported to a qualified biologist and wildlife shall be allowed to leave the work area unharmed. Animals shall be allowed to leave the work area of their own accord and without harassment. Animals shall not be picked up or moved in any way.
- 27. <u>Mitigation Measure 8</u>: Vegetation Disturbance. Disturbance to vegetation shall be kept to the minimum necessary to complete the Project activities. Prior to the Current Planning Section's approval of the building permit for the project, the applicant shall submit a Biological Protection Plan, subject to Community Development Director review and approval, showing areas to remain undisturbed by construction-related activities and protected with recommended measures (such as temporary fencing with the type to be specified by a qualified biologist). To minimize impacts to vegetation, a qualified biologist shall work with the contractor to designate work areas (including all staging areas) and designate areas to remain undisturbed and protected.

- 28. <u>Mitigation Measure 9</u>: Vehicle Fueling and Maintenance. All fueling, maintenance of vehicles and other equipment, and staging areas should occur at least 50 feet from the drainage swale on the northeastern edge of the project area. The edge of the 50 feet buffer zone shall be marked using visible markers by a biologist no sooner than 30 days prior to the start of construction. Equipment operators and fueling crews shall ensure that contamination of the swale does not occur during such operations by restricting all activities to outside of the buffer zone. Prior to the start of construction-related activities, a plan to allow for prompt and effective response to any accidental spills shall be submitted and subject to review and approval by the Community Development Director. All workers should be informed of the importance of preventing spills, and of the appropriate measures to take should a spill occur.
- 29. <u>Mitigation Measure 10</u>: Erosion and Sediment Control BMPs. Prior to the Current Planning Section's approval of a building permit, the applicant shall revise and submit the Erosion and Sediment Control Plan, subject to review and approval by the project planner. The plan shall have been reviewed by a qualified biologist prior to submittal to the County. The plan shall include measures to prevent runoff to the drainage swale on the northeastern edge of the project area and demonstrate compliance with other erosion control requirements and mitigation measures. This shall include the installation of silt fences or straw wattles between work areas and any water sources such as the drainage swale, and around any spoil piles (e.g., loose asphalt, dirt, debris, construction-related materials) that could potentially discharge sediment into habitat areas. If straw wattles are used, they shall be made of biodegradable fabric (e.g., burlap) and free of monofilament netting.
- 30. <u>Mitigation Measure 11</u>: In the event that cultural, paleontological, or archaeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archaeologist and of any recording, protecting, or curating shall be borne solely by the project sponsor. The archaeologist shall be required to submit to the Community Development Director, subject to review and approval, a report of the findings and methods of curation or protection of the resources. No further grading or site work within the area of discovery shall be allowed until the preceding has occurred. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).
- 31. <u>Mitigation Measure 12</u>: The applicants and contractors must be prepared to carry out the requirements of California State law with regard to the discovery of human remains during construction, whether historic or prehistoric. In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately, and the County coroner shall be notified

immediately. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

- 32. <u>Mitigation Measure 14</u>: At the time of building permit and encroachment permit application, the applicant shall revise as necessary and submit for review and approval the Erosion and Sediment Control Plan such that it shows how the transport and discharge of soil and pollutants from and within the project site would be minimized. The plans shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. the plans shall include measures that limit the application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:
 - a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.
 - b. Minimize the area of bare soil exposed at one time (phased grading).
 - c. Clear only areas essential for construction.
 - d. Within five (5) days of clearing or inactivity in construction, stabilize bare soils through either non-vegetative Best Management Practices (BMPs), such as mulching, or vegetative erosion control methods, such as seeding. Vegetative erosion control shall be established within two (2) weeks of seeding/planting.
 - e. Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and to control dust.
 - f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.
 - g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 feet, or to the extent feasible, from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.
 - h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.

- i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.
- j. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5 acres or less per 100 feet of fence. Silt fences shall be inspected regularly, and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.
- k. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved erosion control plan.
- I. No erosion or sediment control measures will be placed in vegetated areas.
- m. Environmentally-sensitive areas shall be delineated and protected to prevent construction impacts per Mitigation Measure 10.
- n. Control of fuels and other hazardous materials, spills, and litter during construction.
- o. Preserve existing vegetation whenever feasible.
- 33. <u>Mitigation Measure 15</u>: Should any traditionally or culturally affiliated Native American tribe respond to the County's issued notification for consultation, such process shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation of the project, if the project has not yet been implemented.
- 34. <u>Mitigation Measure 16</u>: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.
- 35. <u>Mitigation Measure 17</u>: Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

Grading Permit

- 36. Unless approved, in writing, by the Community Development Director, no grading shall be allowed during the winter season (October 1 to April 30) to avoid potential soil erosion. The applicant shall submit a letter to the Current Planning Section stating the date when grading will begin.
- 37. No grading activities shall commence until the property owner has been issued a grading permit (issued as the "hard card" with all necessary information filled out and signatures obtained) by the Current Planning Section.
- 38. Prior to any land disturbance and throughout the grading operation, the property owner shall implement the erosion control plan, as prepared and signed by the engineer of record and approved by the decision maker. Revisions to the approved erosion control plan shall be prepared and signed by the engineer and submitted to the Community Development Director for review and approval.
- 39. Prior to issuance of the grading permit "hard card," the property owner shall submit a schedule of all grading operations to the Current Planning Section, subject to review and approval by the Current Planning Section. The submitted schedule shall include a schedule for winterizing the site. If the schedule of grading operations calls for the grading to be completed in one grading season, then the winterizing plan shall be considered a contingent plan to be implemented if work falls behind schedule. All submitted schedules shall represent the work in detail and shall project the grading operations through to completion.
- 40. It shall be the responsibility of the engineer of record to regularly inspect the erosion control measures for the duration of all grading remediation activities, especially after major storm events, and determine that they are functioning as designed and that proper maintenance is being performed. Deficiencies shall be immediately corrected, as determined by and implemented under the observation of the engineer of record.
- 41. For the final approval of the grading permit, the property owner shall ensure the performance of the following activities within 30 days of the completion of grading at the project site: (a) The engineer shall submit written certification that all grading has been completed in conformance with the approved plans, conditions of approval/mitigation measures, and the Grading Regulations, to the Department of Public Works and the Planning and Building Department's Geotechnical Engineer, and (b) The geotechnical consultant shall observe and approve all applicable work during construction and sign Section II of the Geotechnical Consultant Approval form, for submittal to the Planning and Building Department's Geotechnical

42. As the project involves over 1-acre of land disturbance, the property owner shall file a Notice of Intent (NOI) with the State Water Resources Board to obtain coverage under the State General Construction Activity National Pollutant Discharge Elimination System (NPDES) Permit. A copy of the project's NOI, WDID Number, and Stormwater Pollution Prevention Plan (SWPPP) shall be submitted to the Current Planning Section and the Building Inspection Section, prior to the issuance of the grading permit "hard card."

Building Inspection Section

- 43. On sheet T1, please include Title 25, Chapter 2.2 as an applicable code under general notes.
- 44. A "permit to operate" a Special Occupancy Park shall be obtained from the County of San Mateo Environmental Health Services upon building permit issuance.
- 45. The minimum average foot-candles of lighting along the full length of all roadways and walkways within the RV park shall be 0.2. It appears that the average foot-candles shown on sheet E1 is over the RV park area not roadway and walkway length. As such, it appears that additional park lighting will be required.
- 46. A minimum of 5-foot candles of lighting shall be shown at the exterior entrances of the toilet/shower/laundry building.
- 47. A minimum of 10-foot candles of lighting shall be shown for the interior of toilet and shower buildings and laundry buildings.
- 48. Based on 50 recreational vehicle spaces and seven (7) tent spaces, a minimum of three (3) toilets, showers and lavatories shall be provided for each gender.
- 49. The RV park and associated single story laundry/restroom facility shall meet all applicable accessibility requirements of the current California Building Code.

Geotechnical Section

50. <u>Mitigation Measure 13</u>: The design of the proposed development (upon submittal of the Building Permit) on the subject parcel shall generally follow the recommendations cited in the Geotechnical Study prepared by Sigma Prime Geosciences, Inc. and its subsequent updates regarding seismic criteria, grading, slab-on grade construction, and surface drainage. Any such changes to the recommendations by the project geotechnical engineer cited in this report and subsequent updates shall be submitted for review and approval by the County's Geotechnical Engineer.

Drainage Section

51. Prior to the issuance of the Building permit, the applicant shall have prepared, by a registered civil engineer, a drainage analysis of the proposed project and submit it to the Drainage Section for review and approval. The drainage analysis shall consist of a written narrative and a plan. The flow of the stormwater onto, over, and off of the property shall be detailed on the plan and shall include adjacent lands as appropriate to clearly depict the pattern of flow. The analysis shall detail the measures necessary to certify adequate drainage. Post-development flows and velocities shall not exceed those that existed in the pre-developed state. Recommended measures shall be designed and included in the improvement plans and submitted to the Drainage Section for review and approval.

Department of Public Works

- 52. Prior to the issuance of the building permit, the applicant shall demonstrate that the existing driveway onto Capistrano Road has sufficient clearance to accommodate the largest size RV as allowed in the RV park, so that vehicles will not block access along Capistrano Road.
- 53. Should the access shown on the plans go through neighboring properties, the applicant shall provide documentation for "ingress and egress" easements, prior to issuance of the building permit, as required.
- 54. No proposed construction work within the County right-of-way shall begin until County requirements for the issuance of an encroachment permit, including review of the plans, have been met and an encroachment permit issued. Applicant shall contact a Department of Public Works Inspector 48 hours prior to commencing work in the right-of-way.
- 55. Prior to the issuance of the Building Permit, the applicant will be required to provide payment of "roadway mitigation fees" based on the square footage (assessable space) of the proposed building per Ordinance #3277.

Environmental Health Services

56. Applicant should to obtain approval from the State Department of Housing & Community, RV/Camps Section. Once approved by the State, an annual Environmental Health permit/fees from the Housing Program will be required when the RV park is in operation.

Coastside Fire Protection District (District)

- 57. Fire Department access shall be to within 150 ft. of all exterior portions of the facility and all portions of the exterior walls of the first-story of the buildings as measured by an approved access route around the exterior of the building or facility. Access shall be a minimum of 20 ft. wide, asphalt, and able to support a fire apparatus weighing 75,000 pounds. Where a fire hydrant is located in the access, a minimum of 26 ft. is required for a minimum of 20 ft. on each side of the hydrant. This access shall be provided from a publicly maintained road to the property. Road Radius shall not be less than 28 feet from center line.
- 58. All buildings that have a street address shall have the number of that address on the building, mailbox, or other type of sign at the driveway entrance in such a manner that the number is easily and clearly visible from either direction of travel from the street. Buildings shall have illuminated address numbers contrasting with the background so as to be seen from the public way fronting the building. Commercial address numbers shall be at least six feet above the finished surface of the driveway. An address sign shall be placed at each break of the road where deemed applicable by the San Mateo County Fire Department. Numerals shall be contrasting in color to their back-ground and shall be no less than 6 inches in height and have a minimum 3/4-inch stroke. Remote signage shall be a 6" x 18" green reflective metal sign.
- 59. Contact the Fire Marshal's Office to schedule a Final Inspection prior to occupancy and Final Inspection by a Building Inspector. Allow for a minimum of 72 hours' notice to the Fire Department at 650/ 726-5213.
- 60. A fire flow of 1500 gpm for 2 hours with a 20-psi residual operating pressure must be available as specified by additional project conditions to the project site. The applicant shall provide documentation including hydrant location, main size, and fire flow report at the building permit application stage. Inspection required prior to Fire's final approval of the building permit or before combustibles are brought on site.
- 61. Maintain around and adjacent to such buildings or structures a fuelbreak/firebreak made by removing and clearing away flammable vegetation for a distance of not less than 30 feet and up to 100 feet around the perimeter of all structures, or to the property line, if the property line is less than 30 feet from any structure.
- 62. All roof assemblies shall have a minimum CLASS-B fire resistive rating and be installed in accordance with the manufacturer's specifications and current California Building and Residential Codes.

- 63. Smoke alarms and carbon monoxide detectors shall be installed in accordance with the California Building Codes. This includes the requirement for hardwired, interconnected detectors equipped with battery backup.
- 64. An approved Automatic Fire System meeting the requirements of NFPA-13 along with an approved NFPA 72 Fire Alarm shall be required for your project. Plans shall be submitted to the San Mateo County Building Department for review and approval by the San Mateo County Fire Department.
- 65. Street signs shall be posted at each intersection conforming to the standards of the Department of Public Works.

Coastside County Water District

- 66. Backflow protection is required on all water services.
- 67. Fire service should be provided from the 12-inch-high pressure water main located on Capistrano Road.
- 68. Domestic service and irrigation service should be provided from the 10-inch water main on Capistrano Road.
- 69. Metering will be determined after the water demand and water capacity has been determined.
- 70. Point of connection(s) locations will be determined once the District clearly understands the location of all other utilities. The District requires adequate separation from sewer, electrical and gas services.
- 71. Water demand/end uses need to be clearly shown on the drawings. Additional water demand worksheets are required by Coastside County Water District. Those worksheets will be provided when the District receives actual construction plans and fire system plans for building permit approvals.
- 72. Purchased water capacity will be determined once the District reviews and determines water demand.
- 73. Type of water capacity (priority vs. non-priority) must comply with the county's LCP.
- 74. Provide adequate clearance around existing public utility easements/water mains. It appears that tent camping, proposed landscaping and fencing along Capistrano Road may encroach upon the District's easement for the 12-inch-high pressure main. The 12-inch high pressure main is dedicated to fire services and is located on Capistrano Road. Please show location of the 12-inch and 10-inch water mains on the civil plans along with the public utility easement. Trees shall not be

planted within the public utility easement for water mains. Signage should not be placed in public utility easement for water mains.

- 75. Coastside County Water District needs additional information to determine the amount of capacity required to serve the proposed RV Park. Detailed landscape and irrigation plans (pipes and valves) must be submitted to determine the size of the dedicated irrigation service. Trees shall not be planted in public utility easements for water mains.
- 76. The project is required to comply with Coastside County Water District's regulations. District staff performs inspections to verify compliance with all Coastside County Water District regulations during and after construction. Approved backflow protection is required on domestic, irrigation and fire services.
- 77. If fire sprinklers are required for any of the structures, please note that Coastside County Water District does not allow passive purge systems to be installed. Fire protection services are authorized for the sole purpose of fire protection and there shall be no cross connections. The District cannot complete their review of the proposed project until the Coastside Fire Protection District has approved the fire system requirements, including fire hydrants.

Granada Community Services District

78. A sewer permit shall be required. A set of approved plans showing the on-site and off-site sewers with the application.

Caltrans

- 79. Any work or traffic control that encroaches onto the state ROW requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating state ROW must be submitted to: Office of Permits, California DOT, District 4, P.O. Box 23660, Oakland, CA 94623-0660. Traffic-related mitigation measures should be incorporated into the construction plans during the encroachment permit process. See the website link below for more information. http://www.dot.ca.gov/hq/traffops/developserv/permits/.
- 80. Project work that requires movement of oversized or excessive load vehicles on state roadways requires a transportation permit that is issued by Caltrans. To apply, visit: https://dot.ca.gov/programs/traffic-operations/transportation-permits. Prior to construction, coordination is required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the state transportation network. A copy of the approved TMP shall be submitted to the Planning Section prior to issuance of the building permit.

81. If utilities within Caltrans ROW will be impacted by the project, provide site plans that show the location of existing and/or proposed utilities. These modifications shall require a Caltrans-issued encroachment permit.

California Department of Housing and Community Development

82. All permits and licenses required by the California Department of Housing and Community Development for this project shall be forwarded to the Planning Section prior to building permit final.

RSP:cmc - RSPDD0612_WCU.DOCX

ATACHNEN

County of San Mateo - Planning and Building Department

NATEO NATEO KANGO KANGO



San Mateo County Planning & Building Dept.

Owner/Applicant:

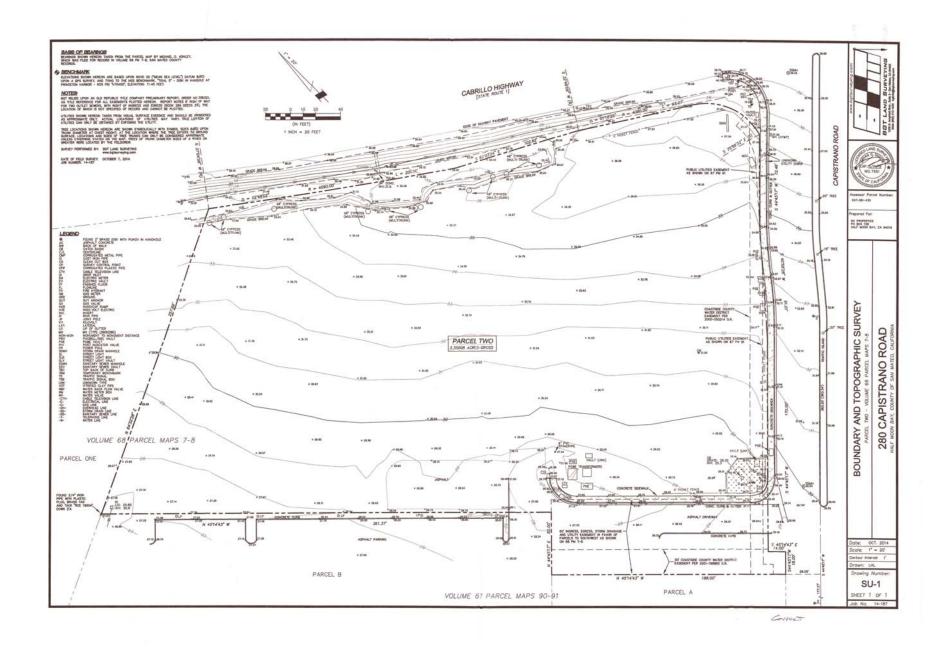
Attachment:

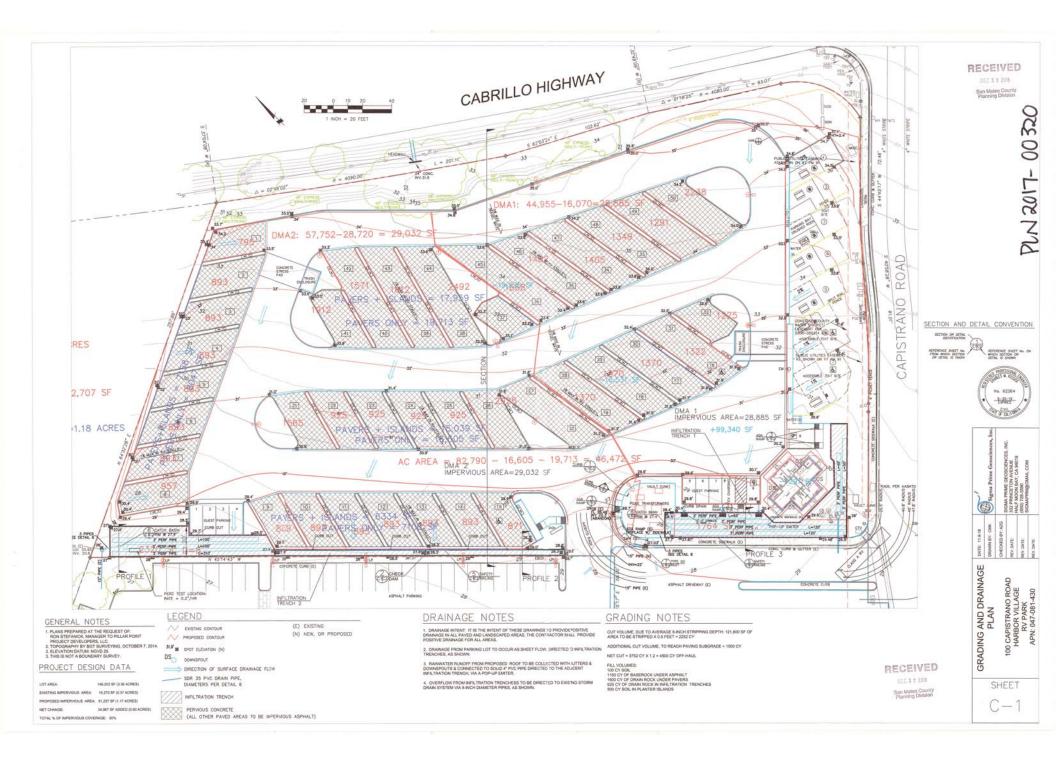
U ATTACH MENT

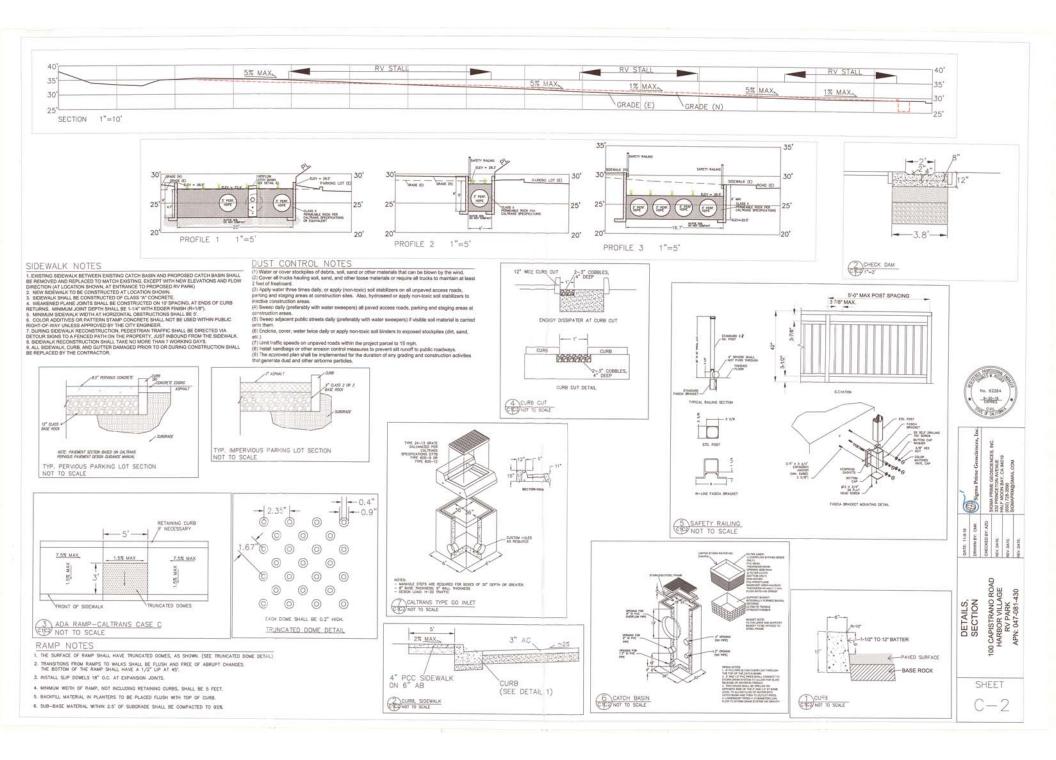
County of San Mateo - Planning and Building Department

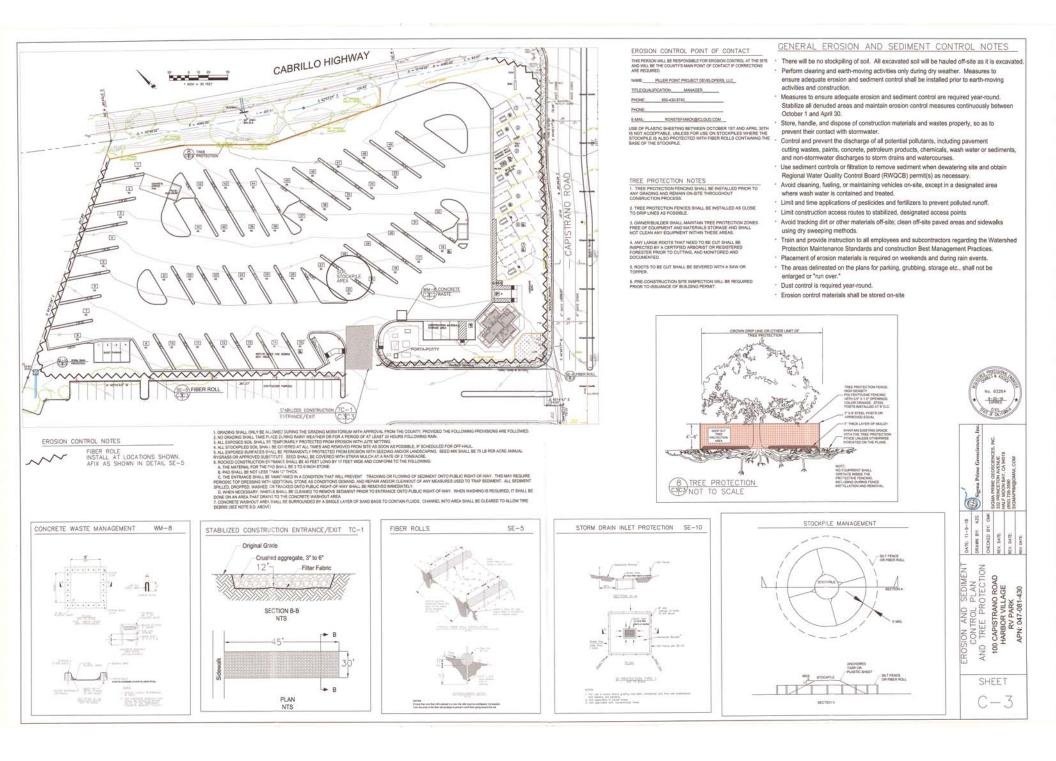
HATEO KANA LINNOJ



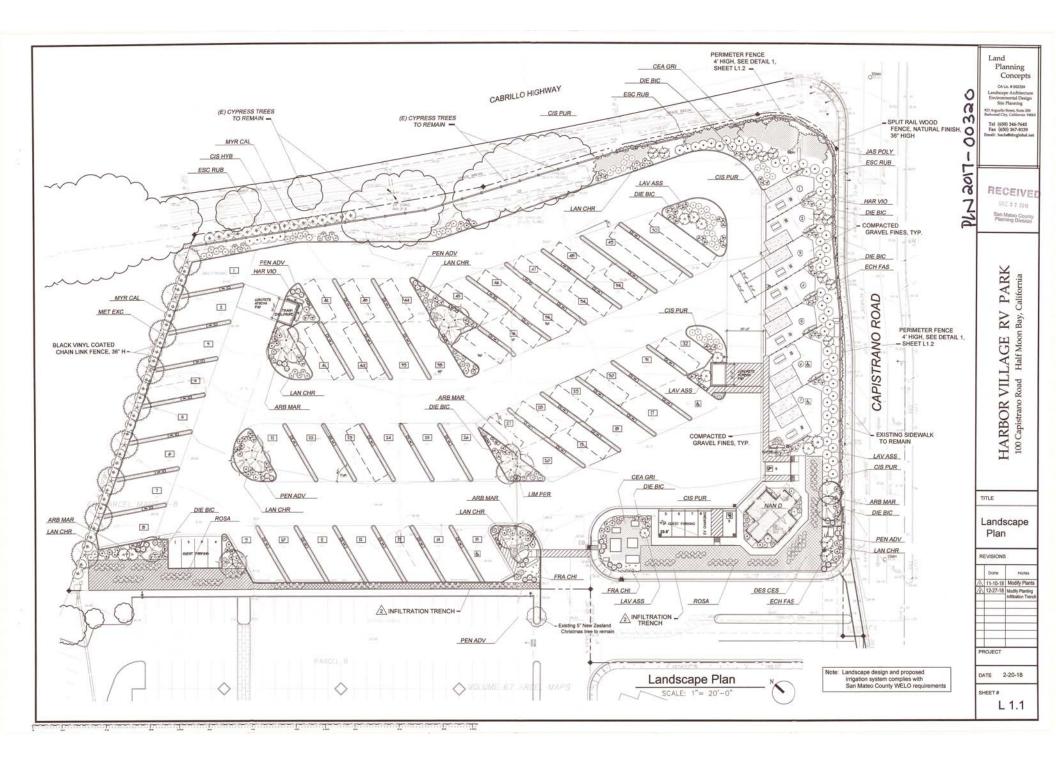


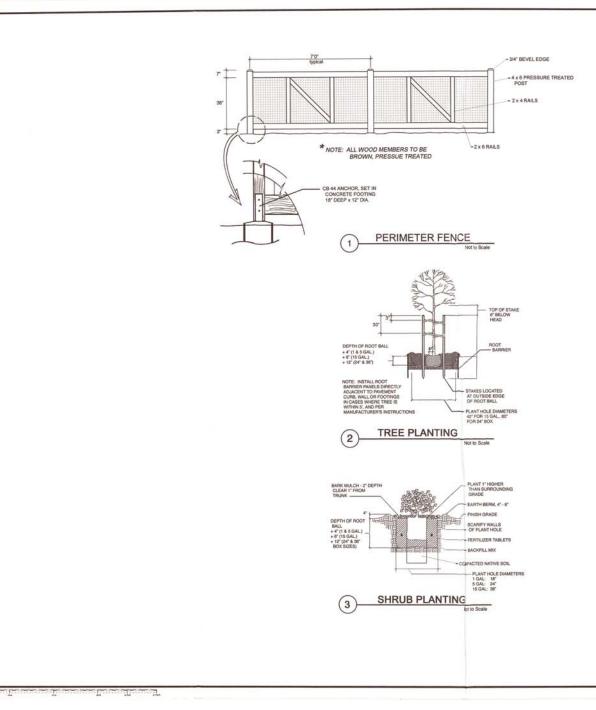












No.	Botanical Name	Common Name	QY.	Size	WI	Plant Type/ Remarks	
ARB MAR	Arbutus 'Marina'	Strawberry Tree	3	24° Box	L	Evgn Tree	
			18	15 Gal	L	Evgn/ plant in group	
METEXC	Metrosideros excelsus	New Zealand Christmas Tree	9	24" Box	L	Evgn Tree	
DIE BIC	Dietes bicolor	Forthight Lily	73	1 Gal	L	Low Shrub	
CIS HYB	Cistus hybridus	White Rockrose	26	5 Gal	L	Evgn Shrub	
CIS PUR	Cistus purpureus	Pink Rockrose	43	5 Gal	L	Evgn Shrub	
ESCA RUB	Escalionia rubra	Red Escallonia	54	5 Gal	L	Evgn Shrub	
ECH FAS	Echium fastuosum	Pride of Madeira	10	5 Gal	L	Evgn Shrub	
HAR VIO	Hardenbergia violacea	Hardenbergia	10	15 Gal.	M	Evgn Shrub/ Españe	
LAN CHR	Lantana 'Christine'	NCN	84	5 Gal	L	Evgn Shrub	
LAV ASS	Lavatera assurgentifolia	Tree Mallow	14	5 Gal	L	Evgn Shrub	
LIM PER	Limonium perezii	Sea Thrift	44	1 Gal	L	Perennial	
MYR CAL	Myrica californica	Pacific Wax Myrtie	42	5 Gal	M	Evgn Shrub	
NAN DOM	Nandian domestica	Heavenly Bamboo	2	5 Gal	L	Evgn Shrub	
PENADV	Pennisetum advena	Red Fountain Grass	53	5 Gal	L	Grassy Plant	
	'Rubrum'						
JAS POLY	Jasminum polyanthem	Pink Flowering Jasmine	28	5 Gal	м	Evgn Vine	
CEA GRI	Ceanothus griseus	Carmel Creecer	84	1 Gai	L	Groundcover	
	'Horizontalis'			1.011		Choundourter	
FRA CHI	Fragaria chiloensis	Ornamental	14	Flat	ι	Groundcover	
_		Stawberry			-		
			1			INFILTRATION	
						TRENCH	
No.	Botanical Name	Common Name	Qty*	Size	WI	Plant Type/ Remarks	
ROSA	Rosa californica	California Wild Rose	170	1 Gal	L	Evgn Shrub	
DES CES	Deschampsia cespitosa	Tufted hairgrass	224	1 Gai	L	Evgn Shrub	

Land Planning Concepts CA Liz # 002334 Landscape Architectun Environmental Design Site Planning

23 Arguello Steert, Suite 200 Redwood City, California 140 Tel (650) 346-7645 Fax (650) 367-8139 imail: baclathsbeglobal.

PLANTING NOTES

CONTRACTOR SHALL CONTACT UNDERGROUND SERVICES ADMINISTRATION PRIOR TO 1. EXCAVATION AND GRADING

- ALL PLANTING AREAS SHALL BE CLEARED OF WEEDS AND OTHER DEBRIS. THE CONTRACTOR SHALL VERIFY WITH THE OWNER WHICH EXISTING PLANTS ARE TO REMAIN. EXISTING PLANTS TO BE REMOVED SHALL BE VERIFIED WITH OWNER PRIOR TO REMOVAL. ALL BY IN PROJECT AREA SHALL BE REMOVED; IVY SHALL BE SPRAYED WITH HERBICIDE TWO WEEKS PRIOR TO 2 REMOVAL
- REMOVAL OF EXISTING TREES SHALL BE CONFIRMED WITH THE LANDSCAPE ARCHITECT AND OWNER IN THE FIELD PRIOR TO REMOVAL. EACH TREE TO BE REMOVED SHALL HAVE A RED OR GRANGE THATE SECURET DO A BRANCH. AND THE TUNK SHALL BE CLEARLY WANKED WITH PANT OF THE SAME COLOR. THE CONTRACTOR SHALL SUPPLY THE MATERIALS FOR MARRING THE TREES AND COORDINATE WITH THE LANDSCAPE ARCHIECT. THE TREE STUMPS AND ROOTS SHALL ALSO BE REMOVED, AND SUFROUNDING SUFFACE RE-GRADED AND RESTORED. 3.
- 4. SOIL TESTING SHALL BE UNDERTAKEN BY THE CONTRACTOR, AND PERFORMED BY A CERTIFIED LABORATORY. A COPY OF THE REPORT SHALL BE PROVIDED TO THE OWNER AND LANSCALE REPORTED. THE RECOMMENDATIONS FOR AMENDMENTS AND FERTILIZATION SHALL REFLECT THE NUTRIENT REQUIREMENTS OF SPECIFIED PLANT SPECIES
- SOIL AMENDMENTS SHALL BE FREE OF DEBRIS SUCH AS LITTER, BROKEN CLAY POTS, AND OTHER FOREION MATERIAL. ROCKS LARGER THAN ONE INCH DIAMETER WILL NOT BE PERMITTED. SOIL AMENDMENTS SHALL HAVE THE FOLLOWING CONTENT: REDWOOD NITRIFIED COMPOST 40%, COARSE SAND 30%, BLACK TOPSOIL 30%.
- PLANT HOLES SHALL BE DOUBLE THE SIZE OF THE CONTAINER (generally). THE WALLS AND BASES OF PLANT HOLES SHALL BE SCARFFED. HOLES SHALL BE BACKFILED WITH THE FOLLOWING MIXTURE'S 50% TO 20% IMPORTED SOLT DE XISTING SOLL.
- 7. SOIL BERMS SHALL BE FORMED AROUND ALL PLANTS 1 GALLON SIZE AND LARGER. BASINS SHALL BE MULCHED WITH A 2" LAYER OF BARK CHIPS, MINIMUM OF 1" IN SIZE.
- 8. ALL PLANTS SHALL BE FEBTILIZED, FEBTILIZER SHALL BE COMMERCIALLY AVAILABLE TYPE. A CONTRET SHALL BE FERRI LISEL, FOR ULCER SHALL CONSIDER OULL MARKED ALL MARKED EN SHALL DE CONTRET DE LISEL FOR ULCER SHALL DE APPLICATION DE LISEL DE LIS
- 9.
- 11. ROOT BARRIERS FOR ALL TREES WITHIN EIGHT FEET OF PAVEMENT SHALL BE INSTALLED. BARRIERS SHALL BE PLASTIC AND EXTEND COMPLETELY AROUND THE ROOT BALL. THE DIAMETER OF THE BARRIER SHALL BE 42". THE BARRIER SHALL EXTEND TO A DEPTH OF 24".
- 12. ESPALIER PLANTS SHALL BE FURNISHED WITH A PREMANUFACTURED WOOD TRELLIS. THE TRELLIS SHALL BE SECURELY FASTENED TO TWO PRESSURE TREATED 2" DIAMETER POLES.
- 13. PLANTING AREAS SHALL BE COVERED WITH A THREE INCH LAYER OF BARK CHIPS.

REVISIONS Note Date 11-10-18 Modify Plan List 12-27-18 Modily Planting Infiltration Trem

Landscape

Details

TITLE

PROJECT DATE 2-20-18 SHEET #

L 2.1



1

LOT AREA	146,202 SF
EXISTING IMPERVIOUS AREA.	16,270 BP
PROPOSED IMPERVIOUS AREA	100,247 SF
TOTAL POST-PROJECT IMPERVO	US AREAS: 116,517.5/
NET CHANGE	63.977 SF ADDED
TOTAL % OF PARCEL COVERAGE	



					Sec.
Hydrozone		Hydrozone Area (HA) (ft ²)	Plant Factor ³ (PF)	Plant Water Use Type	PF x HA (ft ²)
North Side	Zone 1	1,285	0.30	Low	38
East Side/ highway	Zone 2	4,440	0.30	Low	1,33
Corner w/ Sign	Zone 3	2,960	0.30	Low	88
Capistrano Road	Zone 4	3,960	0.30	Low	1,18
Corner Access Road	Zone 5	748	0,30	Low	22
Entry RV park	Zone 6	1,069	0.30	Low	32
Corner NW	Zone 7	1,500	0.30	Low	45
Interior Planters	Zone 8	4,760	0.30	Low	1,42
	Zone 9				+
	Zone 10		1 - H		
	Zone 11				-
	Zone 12				-
	Zone 13				-
	Zone 14				-
				-	
				-	
	Zone 21	1			-
Hydrozone Area (H					6,21
Special Landsc			1.00	High	4,26
	ape Area (TLA)				10,48
Irrigation Effic	iency (IE)_Drip	0.81			
			MAWA1 =	432,960.87	gal.
				57,878.64	cu. ft.
				578.79	
					acre-ft.
					millions of gal.
			ETWU ² =	327,494.79	
		About Concerns		43,779.83	
ETWI	I complies with	MAWA		437.80	and the second se
				1.01	acre-ft.
				0.33	millions of gal.
³ Plant Water Use Types	Plant Factor				
Very Low Low	0-0.1				
Medium	0.4 - 0.6	(ETo) x (0.62) x (0.5	5 x HA)+(0.45:	< SLA)], where ETo +	44.24
High	0.7 - 1.0	(ETo) x (0.62) x (IPF			

Land Planning Concepts CA Le 20233 Landscape Architecture Environmental Design Site Flanning 923 Arguebs three Suite 202 Gebeword (67, Collamass Bas Tel (650) 346-7645 Fax (650) 346-7645

HARBOR VILLAGE RV PARK 100 Capistrano Road Half Moon Bay, California

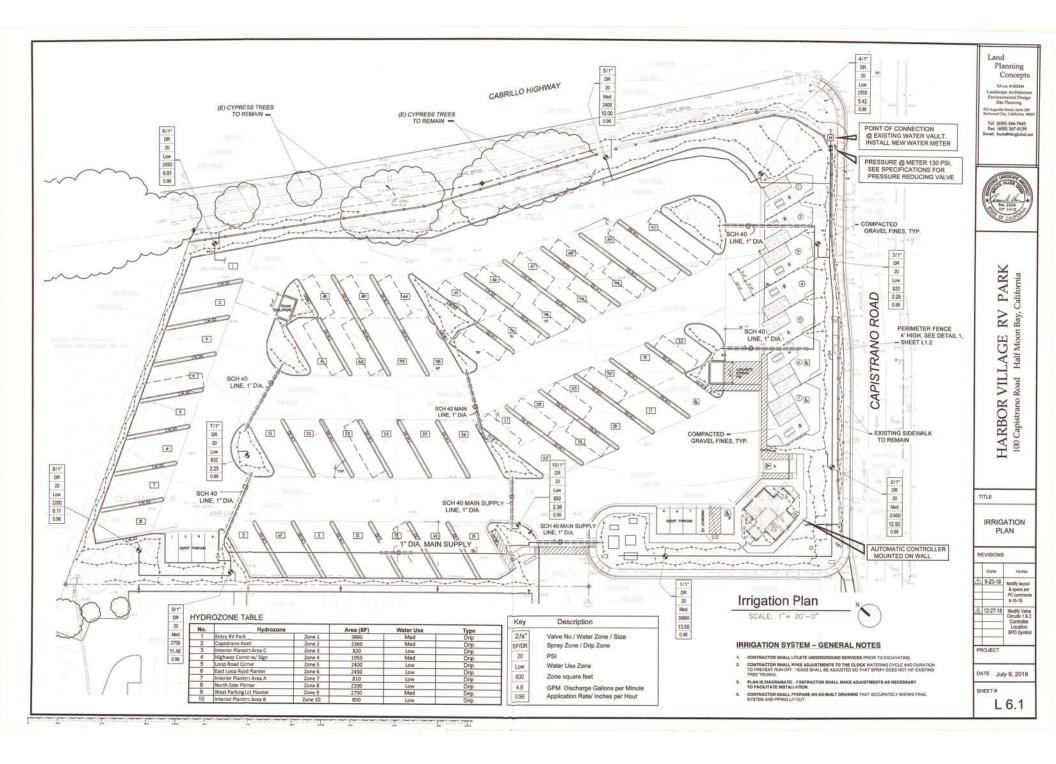
TITLE

Hydrozone
MWELO
Plan

REVISIONS

REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS

SHEET# L 3.1

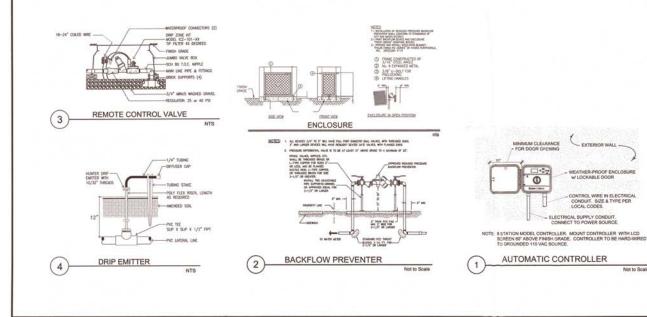


Estimated Total Water Use ETWU

Reference Evapotranspiration (ETo)	33.70	half moon bay	1			2
	ETWU	ETWU requirement	ETWU requirement	ETWU requirement	MAWA requirement	ETWU requirement	
Hydrozone#/Planting Description	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Landscape Area (LA) (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)
Regular Landscape Areas	A						
1) Entry RV Park	0.5	Drip	0.81	0.617		2,395.06	50,04
2) Capistrano Road	0.5	Drip	0.81	0.617		1,456.79	30,43
3) Interior Planters Area C	0.3	Drip	0.81	0.370		303.70	6,34
4) Highway Corner w/ Sign	0.5	Drip	0.81	0.617	1,950	1,203.70	25,150
5) Loop Road Corner	0.2	Drip	0.81	0.247	2,400	592.59	12,38
6) East Loop Road Planter	0.3	Drip	0.81	0.370	2,450	907.41	18,959
7) Interior Planters Area A	0.3	Drip	0.81	0.370	810	300.00	6,268
8) North Side Planter	0.3	Drip	0.81	0.370	2,200	814.81	17,025
9) West Parking Lot Planter	0.5	Drip	0.81	0.617	2,750	1,697.53	35,468
10) Interior Planters Area 8	0.3	Drip	0.81	0.370	850	314.81	6,578
			Tota	als	20,470	9,986.42	
Special Landscape Areas (SLA): Rec	ycled Water					1	
1) low water use plants				1		0	0
2) medium water use plants	The second of the			1		0	0
3) medium water use plants				1		-	0 0
		1.3		Totals	Estimated Total	0 Water Use (ETWU	208,650
				Maximu	m Allowed Water		
					Complies		

Maximum Applied Water Allowance MAWA

(Et) (0.62) [0.7 x LA) + (0.3 x SLA)] = 299,390.13



SYMBOL	MODEL	DESCRIPTION
9	700-OMR-100 SERIES/ LT-T SERIES	IRRITROL REMOTE CONTROL VALVE W PRESSURE REGULATION/ KBI PVC BALL VALVE
-	975XL2-1*	WILKINS LEAD-FREE REDUCED PRESSURE BACKFLOW PREVENTER
С	MC-24E PROMAX-UA	IRRITROL 24 STATION MC-E CONTROLLER - WALL MOUNT PRO MAX UNIVERSAL MAINTENANCE REMOTE KIT
+		DRIP TUBING TORO T-EHD1645 FLUE STRIPE HOSE WITH TORO LOC-EZE FITTINGS. 4" COVER. DISTRIBUTION TUBING. TORO EHW0437-010 1/4" HOSE.
#</td <td></td> <td>HOSE BIBB. 3/4" BRASS ON 18" H GALV RISER</td>		HOSE BIBB. 3/4" BRASS ON 18" H GALV RISER

Irrigation Legend

- EXTERIOR WALL -

CONTROL WIRE IN ELECTRICAL CONDUIT. SIZE & TYPE PER LOCAL CODES.

Not to Scale

W/LOCKABLE DOOR

IRRIGATION INSTALLATION NOTES

- CONTRACTOR SHALL LOCATE UNDERGROUND SERVICES PRIOR TO PERFORMING ANY EXCAVATION. 1.
- AN APPROVED BACKFLOW PREVENTER SHALL BE INSTALLED PER LOCAL CODES AND MANURACTURER'S INSTRUCTIONS. THE BACKFLOW DEVICE SHALL BE A REDUCED PRESSURE DOUBLE OFFICE VTPR INSTALLED NA LOCKAINE DERUCIOSITIE. THE BACKFLOW DEVICE SHALL SE LOCATED IN THE VICNITY OF THE WATER METER, IF POSSIBLE. 2

IRR PERF 503

IFIN PERP 503

- 3. A MANUAL SHUT OFF VALVE SHALL BE REQUIRED, AS CLOSE AS POSSIBLE TO THE POINT OF THE WATER SUPPLY, TO MINIMIZE WATER LOSS IN CASE OF AN EMERGENCY OR ROUTINE
- PRESSURE REGULATING DEVICES ARE REQUIRED IF WATER PRESSURE IS BELOW OR IN EXCESS OF RECOMMENDED OPERATING PRESSURE OF SPECIFIED IRRIGATION DEVICES 4.
- 5. MAIN SUPPLY LINES SHALL BE PVC SCHEDULE 40, SIZE AS NOTED, BURIED 18" DEEP. LATERAL SUPPLY LINES SHALL BE BURIED 12" DEEP. FLEXIBLE PIPE TUBING SHALL BE BURIED 4" OFF.
- REMOTE CONTROL VALVES BIALL BE 1" WHEN CONVENTED TO MAIN SUPPLY LIVES OF SAME SEZ, AND SUPPLY A TOTAL INVENTED FOR TO EXCEED 14 GALLONE FER MINUTE DISCHARGE FOR EACH CREDUT. FOR MARS SUPPLY LIVES OF 1-12° DIMATER, THE CORTINUTE MAY INTO A SUPPLY AND A THE CONTROL FOR THE ANALY CREDIT FLOW NATE NOT TO EXCEED 30 GPL, VALVES SHALL BE MANUFACTURED BY TOPO OR HAITET AND NATE INOT TO EXCEED 30 GPL, VALVES SHALL BE MANUFACTURED BY TOPO OR HAITET AND NATE INOT TO EXCEED 30 GPL, VALVES SHALL BE MANUFACTURED BY TOPO OR HAITET AND NATE INOT TO EXCEED 30 GPL, VALVES SHALL BE MANUFACTURED BY TOPO OR HAITET AND NEEDLED IN THE PROFEMANCE BOXES. 6.3
- DRIP IRRIGATION CIRCUITS SHALL BE FURNISHED WITH A PRESSURE REGULATING DEVICE IF THE WATER PRESSURE IS BELOW OF EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES. AN INLINE FLITTER SHALL BE INSTALLED ADADCENT TO THE CONTROL VALVE. THE END OF EACH SUPPLY CIRCUIT SHALL BE FURNISHED WITH A BALL VALVE. 7.
- AN INTEGRATED CHECK VALVE SHALL BE INSTALLED INTO THE LOWEST SPRINKLER HEAD ON EACH CIRCUIT. CHECK VALVES OR ANTI-DRAIN VALAVE ARE REQUIRED ON ALL SPRINKLER HEADS WHERE LOW POINT DRAINAGE COULD COCUR. 8
- CONTRACTOR SHALL FLUBH ALL PIPES PRIOR TO INSTALLING SPRINGLER HEADS AND PRESSURE TEST THE MAIN SUPPLY LINE. A THOROUGH CHECK FOR ANY LEAKS SHALL BE PERFORMED. THE ENTIFIE SYSTEM SHALL BE CHECKED FOR LEAKS PRIOR TO BACKFILLING OF TRENCHES. 9.
- 10. CONTRACTOR SHALL MAKE ADJUSTMENTS TO THE CLOCK WATERING CYCLE AND DURATION TO PREVENT RUN-OFF. HEADS SHALL BE ADJUSTED SO THAT SPRAY DOES NOT HIT EXISTING TREE TRUNKS.
- 11, THIS PLAN IS DIAGRAMATIC. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NECESSARY TO ENSURE PROPER COVERAGE AND WATERING TO EACH PLANT. A SUFFICIENT NUMBER OF SPRINKLER HEADS AND EMITTERS SHALL BE FURNISHED AT THE CONTRACTOR'S EXPENSE TO ACHEVE THIS.

COMPLIANCE NOTES

- A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES. T
- A CERTIFICATE OF COMPLETION SHALL BE FILLED OUT AND CERTIFIED BY EITHER THE DESIGNER OF THE LANDICAPE PLANS, IRRIGATION PLANS, OR THE LICNENSED LANDICAPE CONTRACTOR FOR THE PROJECT. 2
- AN IRRIGATION AUDIT REPORT BY A CERTIFIED IRRIGATION AUDITOR SHALL BE COMPLETED AT THE TIME OF FINAL INSPECTION AND SUBMITTED WITH THE CERTIFICATE OF COMPLETION.
- AT THE TIME OF FINAL INSPECTION, THE PERMIT APPLICANT MUST PROVIDE THE OWNER OF THE PROPERTY WITH A CERTIFICATE OF COMPLETION, CERTIFICATE OF INSTALLATION, IRRIGATION SCHEDULE OF LANGECAPE AND INFROATION MAINTENANCE. 4

LANDSUAFE	WATER USE STATEMENT
PROJECT NAME:	HARBOR VILLAGE RV PARK
PROJECT ADDRESS:	100 CAPISTRANO ROAD PRINCETON CA
PREPARED BY:	BRUCE A. CHAN CA RLA #2324 923 ARGUELLO STREET, SUITE 200 REDWOOD CITY CA 94063 650-345-7645 650-367-6139 (FAX) backs@sbcglobal.net
	iteria of the ordinance and applied them accordingly ter the imigation design plan."
for efficient use of was	A. U.

Land Planning Concepts CALL # 002324 Landscape Architectur Environmental Design Site Planning Arguello Street, Suite 20 Invoid City, California W

Tel (650) 346-7645 Fax (650) 367-8139 mail: bacla@sbcglobal



ARK / PARK

RV Bay, C

Half Moon F VILLAGE

Road

100

HARBOR Capistrano

IRRIGATION

DETAILS

Note

Revise WELO

compliance in

Add Hose Bibs to Legend Modify ETWU Calculations

TITLE

REVISIONS

Date

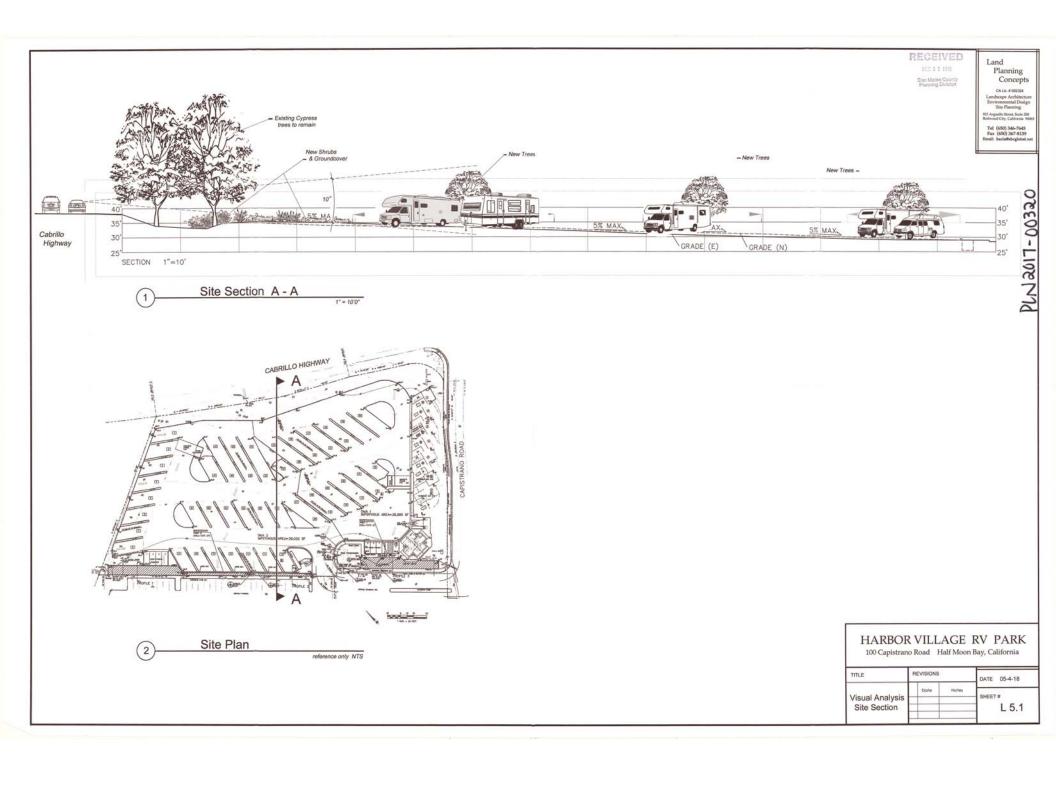
11-10-18

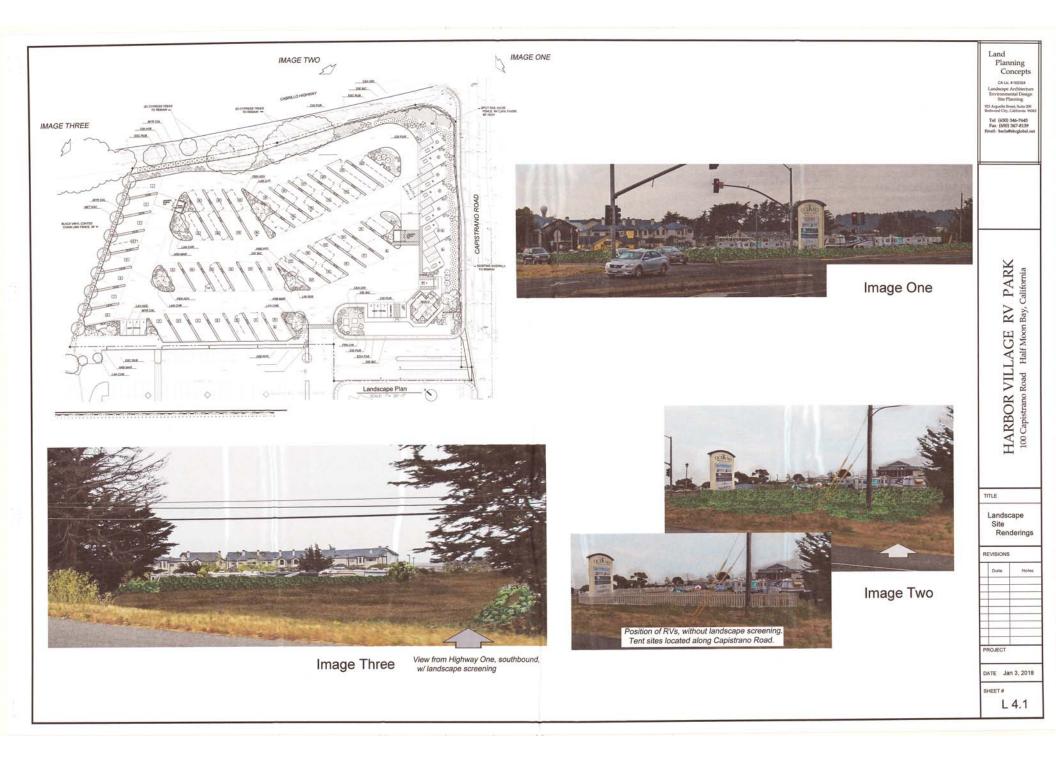
A 12-27-18

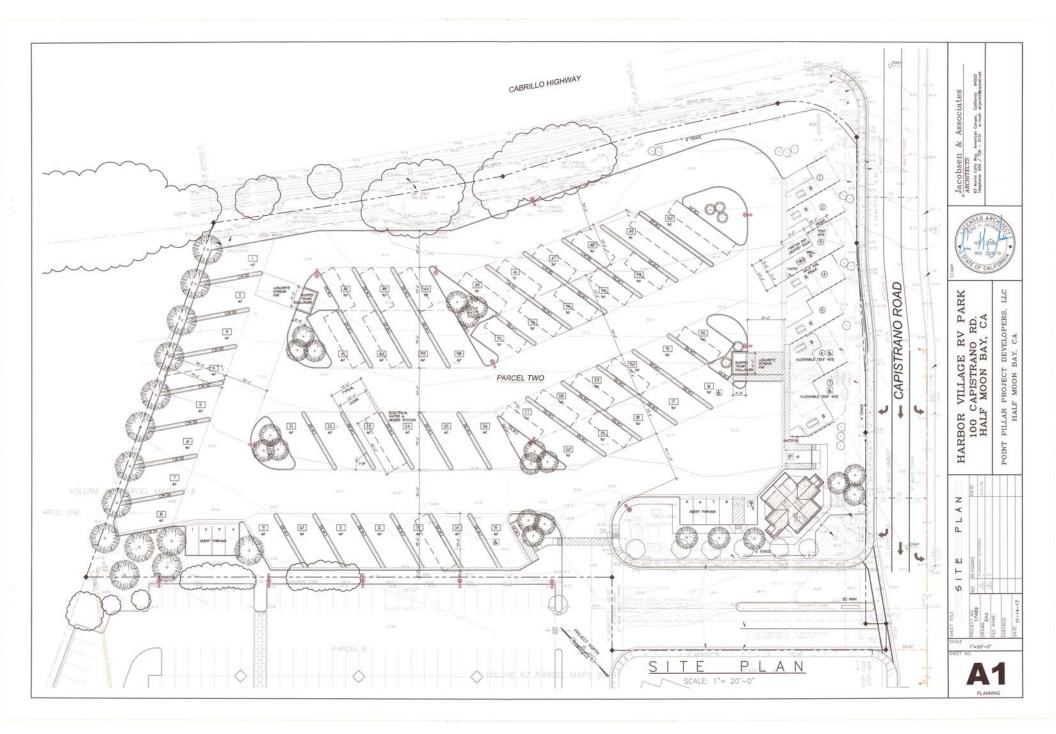
PROJECT

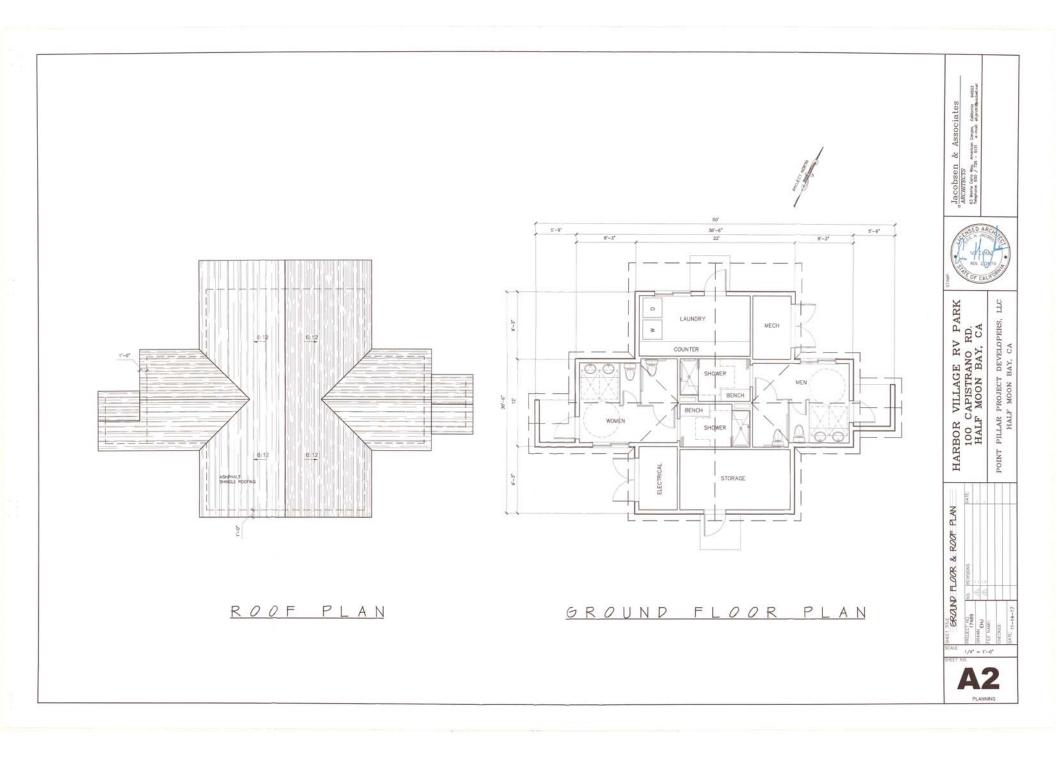
SHEET # L 6.2

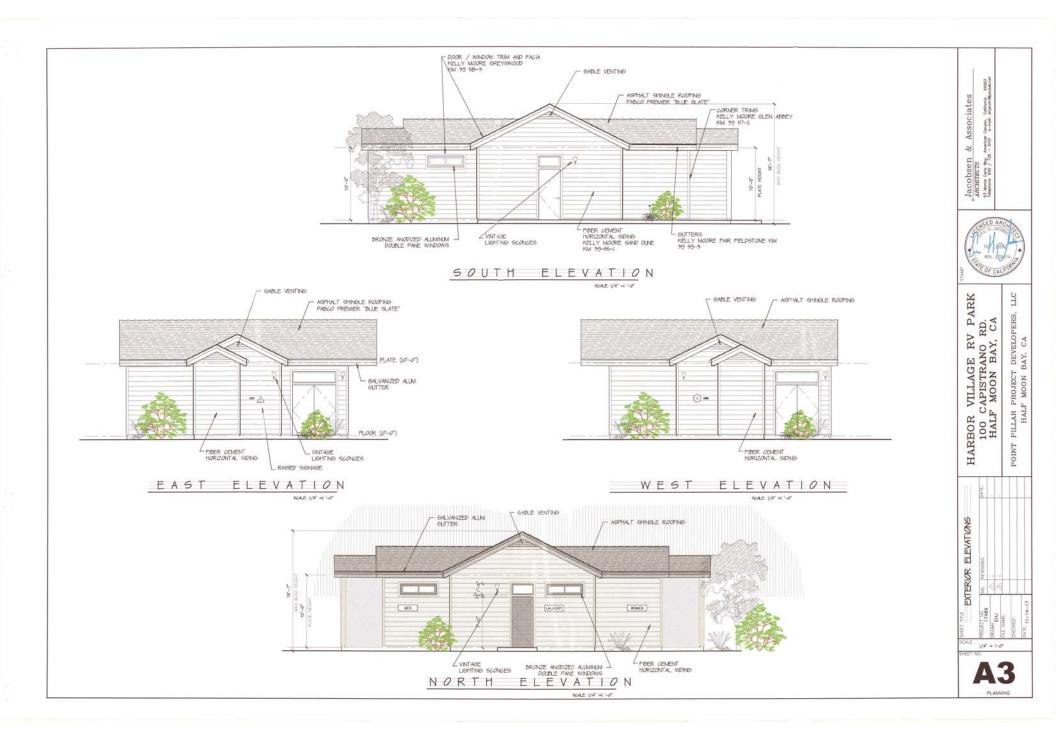
DATE July 9, 2018

















SCOPE OF WORK: FABRICATE & INSTALL (2) TWO NEW FACES FOR EACH SIGN (4 TOTAL FACES)

THE RECTANGLES SHOWN HERE REPRESENT THE VISUAL OPENING MEASUREMENT, NOT THE FACE CUT SIZES OR THE RETAINERS

MECHANICAL DIVIDERS: (SIGN A) EXISTING 2.5", (SIGN B) EXISTING 1.5" EXTRUDED ALUMINUM

NOTE: THERE HAS NOT BEEN AN OFFICIAL SURVEY COMPLETED AS OF 06.22.17

1	A SALE OF A	NOTICE TO THE CUSTOMER	CUSTOMER APPROVAL	DATE	BY D	ATE BY	Y	COMPANY OR JOB NAME / JOB DESCRIPTION	170228/42365 R	
170778		Note: The colors depicted on this rendering may not match actual colors used on the finished display. Please refer to the detail drawing for the apprevent user specification. Note: The	CEPTED W/ NO CHANGES CEPTED W/ CHANGES AS NOTED REVISE AS NOTED AND RESUBMIT		1 単 33 1 単	37 14.	-	PRINCETON HARBOR RV PARK REFACES FOR TWO EXISTING DF ILLUMINATED SIGN CABINETS PRO	PRINCETON HARBOR RV PARK REFACES FOR TWO EXISTING DF ILLUMINATED SIGN CABINETS PROJECT	
á II		cost of providing electrical wiring to the sign area, all required permits and all special inspections are not included in the size areased when the superstring	BY CUSTOMER BY LANDLORD	- =	_		ADDRES	ADDRESS: 100 CAPISTRANO ROAD HALF MOON BAY CALIFORNIA 94019		
5	DESIGNS T	of signs shown on building & tandscape area photos is an approximate representation.	DATE DATE		-	-	SA	ALESPERSON DOUG SMITH CUSTOMER CONTACT XXXXX		
1	PO. BOX 4580 / 204 CAMPUS WAY, MODESTO, CA 95350 / OFFICE 209 524.4884 / FAX 209 521.0272 / LC#268001	COPYRIGHT The drawn	ig was created to assist you in vasualizing our propose. The original ideas terein and try of 3pp Designs Permasion to copy or remain that drawing da addor membranding to boy not all encourse-tarties or call Spp Designs. As for not interd to, a la data or the spectra of t	locument, 1 under another sign con company logo, u	many, an	l am not of hitectural co epresented	bligated company l logo wa	I to partness this project, not-initializing, the above answork concor be submitted for priving -duplication or other business write for the purpose or insert of manufacting or the use as institutial property, such as provide to Sign Digitary the cassimer will reput store throngo document by Sign Delayer emotyme. NAME / DATE	2 OF 2	
	THIS SIGN IS INTENDED TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 600 OF THE NATIONAL ELECTRIC	AL CODE AND/OR OTHER APPLICAR	E CODES. THIS INCLUDES PROPER GROUNDING AND BONDING OF THE SIGN.		1		ALL	MEASUREMENTS SHOWN IN THIS DRAWING ARE NOMINAL UNTIL THE "NOT FOR PRODUCTION" STAMP HAS	BEEN REMOVED	



Image One Original Photo, August 2017









Image Two Original Photo, August 2017

В



Image Three Original Photo, August 2017

ATTACH MENT

County of San Mateo - Planning and Building Department NATEO NATEO KANGO KANGO

Midcoast Community Council

An elected Advisory Council to the San Mateo County Board of Supervisors representing Montara, Moss Beach, El Granada, Princeton, and Miramar P.O. Box 248, Moss Beach, CA 94038-0248 - www.MidcoastCommunityCouncil.org

Claire Toutant Len Erickson Dave Olson Barbra Mathewson Dan Haggerty Michelle Weil Tamar Powell Chair Vice-Chair Secretary Treasurer

Date: October 9, 2019

To: Ruemel Panglao, SMC Project Planner

Cc: Supervisor Horsley, San Mateo County Planning Commission

From: Midcoast Community Council

Subject: RV Park in Princeton Mitigated Negative Declaration – PLN2017-00320

The Midcoast Community Council has received 18 community comments on the Mitigated Negative Declaration for this project. All were opposed to the project.

Nearly all the comments focused on two areas of the Neg Dec:

Item 3. The project will not degrade the aesthetic quality of the area.

All the comments raised concerns about the impact of this project. Some focused on residents views, while others focused on the negative impact to visitors, who will now see RVs immediately in their view of the harbor as they enter or drive past.

Item 4. The project will not have adverse impacts on traffic or land use

This was a major concern of the comments, given that the Midcoast already has significant traffic delays on the weekends and the days prior to the weekends, often taking 3 or 4 times normal driving times. Trailers and RVs, by their nature, tend to impact traffic more than most vehicles, because they are larger and slower. The Council has previously submitted comments on this project, on September 27, 2017, and April 12, 2018. Both discussed the aesthetic issues of this project, and the latter also discussed traffic impacts. These comments and issues still apply, even though there has been some improvement in the plans with respect to the aesthetic impacts. The overall major impact of a large number of RVs and trailers is nearly impossible to mitigate.

MIDCOAST COMMUNITY COUNCIL s/Claire Toutant, Chair

ATTACH MENT

County of San Mateo - Planning and Building Department HATEO KANGO CLANDOD

Midcoast Community Council

An elected Advisory Council to the San Mateo County Board of Supervisors representing Montara, Moss Beach, El Granada, Princeton, and Miramar P.O. Box 248, Moss Beach, CA 94038-0248 - www.MidcoastCommunityCouncil.org

Claire Toutant Len Erickson Dave Olson Barbra Mathewson Dan Haggerty Michelle Weil Tamar Powell Chair Vice-Chair Secretary Treasurer

- Date: October 23, 2019
- To: San Mateo County Planning Commission
- Cc: Ruemel Panglao, SMC Project Planner, Erik Martinez, Coastal Commission Staff
- From: Midcoast Community Council / Claire Toutant Chair
- Subject: Proposed 50-space RV Park on vacant 3.3 acres at NW corner Capistrano & Highway 1 in Princeton (PLN2017-00320)

Aligning with clearly strong public opposition to this project since the 2015 preapplication workshop, the MCC adamantly opposes the Harbor Village RV Park project as planned. Opposition is based on negative impacts to aesthetics, vehicle mobility and pedestrian walkability, 28 day stay enforcement, climate/pollution, and planning for the location. The MCC strongly requests that a full Environmental Impact Report be submitted instead of the Mitigated Negative Declaration.

Harbor Gateway

One primary concern is the visual aesthetic of the harbor gateway. We request preserving the remaining slice of ocean view corridor from southbound Hwy 1. No more coastal view blocking should be added to the already obstructed view caused by existing development and a perimeter row of cypress trees. Full LCP protections should be complied with for this Coastal Act-designated Scenic Highway/Corridor (8.12.b and 11.4) to reduce blocking more of the ocean view in any way.

As we stated in our previous letter dated 4/12/18, if this project is to move forward, we request a height-restricted Clear View Easement with all plantings to remain below 3-feet in height above adjacent Capistrano Road at maturity.

Traffic Impacts

The RV Park is expected to generate approximately 110 trips per day, adding to daily congestion from Capistrano Road toward Half Moon Bay and Pacifica. Highway 1 is already choked with traffic on weekends; the addition of slow-moving large RVs will worsen congestion locally and coming into the area. Furthermore, the lack of a Comprehensive Transportation Management Plan is concerning, especially considering other previously approved projects such as Big Wave, projected to generate nearly 1,500 trips per day. The intersection of Capistrano Road and Pillar Point Harbor Blvd. is often difficult to maneuver through today. The cumulative impact of future developments, additional large RVs, numerous pedestrian and bicycle crossings from

the RV Park would have great impact everyone's ability to use the roads. This RV park will endanger the community in a major emergency, and therefore an evacuation plan should be required.

28 Day Stay Enforcement

The 28 day stay of RVs at the Harbor Village RV park will be difficult to enforce. The developer has a history of allowing stays longer than 28 days at the Pillar Point RV park, and we are concerned there will be a lack of enforcement at the new park. Therefore, part of the Harbor Village RV Park may become permanent housing instead of 100% visitor serving. There will likely be extra vehicles that will have no place to park, except in adjacent neighborhoods.

Climate and Pollution

We disagree with the assertion that the RVs traveling to and from the site would all be traveling this route anyway and would not generate any additional greenhouse gas emissions. RV users specifically target RV parks, obviously making each new one a destination it was not previously. Even if measures were put in place to reduce idling time, gas powered RVs (and generators) will result in additional pollution to the area. The nearly 35,000 square feet of impervious surface proposed will increase polluted stormwater runoff. Paving of this area also disrupts the habitat of native species, including nesting migratory birds.

Conclusion

Based on community opposition, the MCC requests that the project not be approved, or approved with a reduction to 25 spaces. LCP policy 11.4 requires the facility not subvert the unique small-town character of the nearby community. This prime visible gateway location to the only recreation and working fishing harbor in the County does not support "other compatible use" listed in the CCR Zoning District. Per CCR Section 6269 (7), development must be sited in a manner that maximizes public ocean views.

MIDCOAST COMMUNITY COUNCIL s/Claire Toutant Chair



View to harbor across requested view corridor.



Aerial view showing requested view corridor

ATTACH MENT

County of San Mateo - Planning and Building Department NATEO NATEO KANGO KANGO

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE 45 FREMONT STREET, SUITE 2000 SAN FRANCISCO, CA 94105 PHONE: (415) 904-5260 FAX: (415) 904-5260 WEB: WWW.COASTAL.CA.GOV



September 15, 2017

Ruemel Panglao, Project Planner County of San Mateo – Planning and Building Department 455 County Center, 2nd Floor Redwood City, CA 94063

RE: PLN2017-00320 Associated with PRE 2015-00019 (Point Pillar Project Developer)

Dear Mr. Holbrook:

Thank you for forwarding the County of San Mateo's PLN2017-00320 permit referral form dated August 29, 2017 and received on August 30, 2017. We appreciate the additional time Dave Holbrook afforded us to complete our review. The applicant is requesting a Coastal Development Permit (CDP), Use Permit, and Grading Permit to locate a 30-space RV park on a 3.35-acre legal, vacant, parcel at the corner of Highway 1 and Capistrano Road in Princeton-by-the-Sea. The proposed project includes thirty RV parking spaces, seven camping spaces, and a single-story, 832-square-foot laundry and restroom facility. Landscape and drainage improvements are also proposed that would necessitate approximately 6,700 cubic yards of cut material to be off-hauled from the site and 3,865 cubic yards of imported fill which would include base rock for beneath the asphalt areas, drain rock for the detention basins and soil for the planting/landscape areas. We would like to provide the following comments regarding the proposed project:

Land Use

The proposed project is located on a parcel zoned Coastside Commercial Recreation/ Design Review (CCR/DR). LCP Section 6265 provides that the purpose of the CCR District is to limit and control the use and development of land designated as CCR. The proposed project must be analyzed to determine its conformity with LCP Section 6265 including demonstrating that the proposed project: 1) meets the service and recreational needs of visitors, boat users, and residents seeking recreation in the San Mateo County Coastside area, 2) does not detract from pedestrian-uses while providing safe and efficient vehicular access and parking, 3) is designed to be of an intimate human-scale, and 4) presents a unified design theme appropriate to the location.

The proposed RV Park must be evaluated as an "Other Compatible Use" defined by LCP Section 6266 and provided in LCP Section 6267. Such uses are only allowed if consistent with the purpose of the CCR District, as further detailed above. The RV Park must meet the development standards of LCP Section 6269, including for coastal access (since the site is located between the mean high tide line and the Highway 1, i.e., the nearest public road), the protection of coastal resources, building height, landscaping, and impervious surface. The proposed project must be sited in a manner that maximizes public views of, and access to the shoreline or ocean, as required by LCP Section 6269. We recommend that the proposed RV lot meet the performance standards of LCP Section 6270 including, but are not limited to, noise, lighting, trash and storage, and grading.

1

Dave Holbrook PLN2017-00320 (Ron Stefanack) Pillar Point RV Lot September 15, 2017

Traffic

The proposed project caters to large vehicles that would be driving along Highway 1 and Capistrano Road. A detailed traffic study, dated June 7, 2017, was prepared by Hexagon Transportation Consultants, Inc. to analyze potential traffic impacts associated with the proposed project. According to the study, congestion during AM and Saturday midday peak hours was observed in the northbound and southbound directions along Highway 1. Page 13 of the study states that this congestion does not spill back or cause operational issues at the intersection of the Highway 1 and Capistrano Road. The study should further explain why the congestion does not adversely affect egress from and ingress to Capistrano Road. The Saturday midday peak hour trip generation rate used in the study was based on surveys conducted in March 2017 at comparable RV parks in the Bay Area. Johnson Pier is a main destination for vehicles associated with commercial fishing, including large semi-trucks which mainly access the pier via the intersection of Highway 1 and Capistrano Ave. Since the proposed project would serve large recreational vehicles that would access the site coming from Highway 1, we recommend that the traffic impact analysis address potential conflicts with commercial vehicle traffic that fluctuates seasonally in and out of the harbor. A discussion of the proposed project's impacts to public coastal access (along Highway 1) during the summer periods when the public is likely to travel to the coast for recreational purposes should also be included as part of the traffic impacts analysis. Finally, the proposed project should provide a mitigation plan to address traffic issues during construction and post-construction when the proposed RV Park is operational, consistent with the requirements of LCP Policy 2.52.

Recreation/Visitor-serving Facilities

The LCP provides for the protection of visitor-serving uses within the Coastal Zone. An important aspect of the LCP is to ensure and encourage low-cost recreational opportunities along the coast be available to the public. Recreational vehicle parks are a form of low-cost recreational land use that provides access to the coast. Commission staff is in favor of such uses as they benefit the visitors that may not be in a position to afford more costly facilities such as luxury hotels located in coastal areas. However, there must be a balance between this form of recreational use and the protection of coastal resources.

The proposed RV Park, as a private development, would provide support services to the RV segment of visitors that frequent the coast. It is a recreational facility that would be operated by Point Pillar Project Developers, LLC and as such meets the definition of a visitor-serving facility and the definition of a commercial recreation facility as defined by LCP Policies 11.1 and 11.2. The proposed project must be evaluated to ensure that it is in conformity with the Recreation /Visitor-serving Facilities Component of the LCP including LCP Policy 11.4 which requires that the facility be a necessary visitor-serving facility designed to enhance coastal recreation opportunities for the public and that it not substantially change/alter the natural environment or undermine the unique, small-town, and or rural character of the nearby community.

The use of RV facilities is usually temporary with specific restrictions on the amount of time park users can stay at a facility. RV Parks have the potential to become more residential should occupants not adhere to the specified time limitations on stay. The analysis of the proposed RV Park must consider if and how it is in conformity with the development standards for private recreation and visitor-serving facilities provided by LCP Policy 11.15. Per LCP Policy 11.15, any CDP issued for the RV Park shall include a condition of approval that requires the land owner execute and record a deed

2

Dave Holbrook PLN2017-00320 (Ron Stefanack) Pillar Point RV Lot September 15, 2017

restriction over the entire parcel specifying that visitor lengths of stays not extend longer than 29 consecutive days and no more than 90 days each year, and that if the use of the parcel is converted to a non-public, private, or member-only use or a program is proposed/implemented that allows extended stays or exclusive use or occupancy by an individual or limited group or segment of the public a CDP amendment shall be required.

The design of roadway signs associated with the proposed RV Park must conform to LCP Policy 11.16 which requires that signs be placed / posted as part of a recreational development, on or near major near major public and commercial recreation areas, to inform visitors of available services. We suggest that the permittee be required to coordinate with the California Department of Transportation and the County regarding requirements they may have with respect to design and location of signs along the coast.

The utilities element of the proposed project must be evaluated for conformity with LCP Policy 11.20 including that it be required to connect to existing public or community water and sewer systems if available, i.e., the Coastside County Water District and Granada Community Services District.

The proposal includes seven campsites. Are the campsites only for those that come to the site in RVs or would car campers and or "walk-in" campers be able to use these campsites as well? The applicant should clarify for whom the seven campsites would be designated.

Visual Resources

The LCP requires the protection of scenic and visual resources. The proposed RV Park would be sited adjacent to Highway 1, a County Scenic Highway and Corridor (LCP Policy 8.30). LCP Policy 11.20 requires that permitted recreation or visitor-serving facilities have or develop access to a public road in conformity with the Scenic Resources Component of the LCP. The portion of the development which may impact scenic and visual resources must be located on a portion of the parcel that is least visible from Highway 1, least likely to result in a significant impact on views from public viewpoints, and best preserves the visual and open space qualities of the parcel overall. The development, including landscaping, should also be designed so that ocean views are not blocked from public viewing points such as public roads, in this case, the Highway 1 and Capistrano Road, consistent with LCP Policy 8.12. The project design must also conform to the Design Guidelines for Coastal Communities, which include Princeton-by-the-Sea, and regulations of the Design Review Zoning ordinance consistent with the requirements of LCP Policies 8.13 and 8.32.

Biological Resources

The parcel for the proposed project site, which is located northwesterly of Pillar Point harbor waters, is currently vacant and unpaved. The proposed project must be consistent with LCP policies that are in place to protect marine resources, water quality and sensitive habitats. The applicant must demonstrate that the proposed project's design and operational measures will ensure on-going protection of water quality, adequate treatment of surface runoff, and will avoid adverse impacts on water quality of the nearby coastal waters.

We appreciate the opportunity to provide input on the proposed project. You can contact me at (415)-904-5292 or via e-mail renee.ananda@coastal.ca.gov if you have questions regarding our comments.

3

Dave Holbrook PLN2017-00320 (Ron Stefanack) Pillar Point RV Lot September 15, 2017

Sincerely,

١.

Unanda

Renée Ananda, Coastal Program Analyst California Coastal Commission North Central Coast District Office

Cc: Dave Holbrook, San Mateo County

U **ATACHMENT**

County of San Mateo - Planning and Building Department NATEO NATEO KANGO KANGO

Ruemel Panglao

From:	Martinez, Erik@Coastal <erik.martinez@coastal.ca.gov></erik.martinez@coastal.ca.gov>
Sent:	Friday, October 25, 2019 10:10 AM
То:	Ruemel Panglao
Subject:	RE: IS/MND for the Proposed Harbor Village RV Park (PLN2017-00320)

CAUTION: This email originated from outside of San Mateo County. Unless you recognize the sender's email address and know the content is safe, do not click links, open attachments or reply.

Hi Ruemel,

Thank you for the opportunity to comment on Notice of Intent and Initial Study for the Mitigated Negative Declaration (MND) for the Proposed Harbor Village RV Park at 240 Capistrano Road, Princeton (PLN2017-000320). Staff has reviewed the provided documents and has few thoughts for the consideration of County Planning.

Prime Soils: Section 2d of the MND states that the entire project site contains prime soils that have a Class III rating (non-irrigated). While the site has not been used for agricultural purposes in the recent past, we encourage the County to carefully consider and evaluate the proposed development on "prime agricultural soils", "prime agricultural land" or "other land suitable for agriculture" as defined by the LCP, to still be subject to LCP agricultural policies that apply generally to such lands regardless of the designation as stated in LCP policies 1.3 and 5.22.

Public Views – Per Section 6565.17, we encourage the County to ensure that public views to and along the shoreline from public roads and other public lands are protected. We recommend that the design structure proposed for the RV Park shower and laundry building should be in harmony with the shape, size and scale of adjacent buildings, and with the surrounding community character generally.

Planting Plan – The Landscape Plan indicates that New Zealand Christmas trees will be used in the northwestern part of the project site. Per Section 6565.20 (F) (1), we recommend that the Applicant maintain a smooth transition between development and adjacent open areas through the use of landscaping and plant materials which are native or appropriate to the area. All landscaping should be drought-tolerant, and either native or non-invasive plant species. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or the State of California should be employed.

Paved Areas – The proposed project should minimize the hardscape or impervious areas on site in order to maximize permeable surfaces that have a more natural appearance, reduce the volume of runoff, and improve the water quality of runoff into creeks and storm drains.

Lighting – The RV Park proposes ten (10) 16-feet high lamp posts that will be located next to strawberry trees that when mature will provide additional screening from light. While the strawberry trees will provide additional future screening, please ensure that the Applicant minimizes light and glare as viewed from public roads, scenic corridors and other public view corridors per Section 6565.20 (F)(4). All exterior, landscape and site lighting should be designed and located so that light and glare are directed away from neighbors and confined to the site. Low-level lighting directed toward the ground is encouraged.

Biological Resources – Section 4a of the MND states that the drainage swale along the northeast edge of the project area may provide marginal, suitable habitat for sensitive wildlife species such as the California red-legged frog and the San Francisco garter snake which may use the drainage for dispersal. Please ensure that the drainage system is not altered so as to affect the character of this habitat feature, or the sensitive species that use it.

Traffic Impacts – The Traffic Impacts Analysis states that the signalized study intersection, Cabrillo Highway (SR1)/Capistrano Road, would operate at an LCP-designated acceptable level of service (LOS C or better per LCP policy 2.43) under all scenarios with and without the project. However, there have been several public comments regarding traffic impacts due to the proposed project. We encourage the County to carefully consider these comments and ensure that the desired level of service maintained, and that mitigating measures for adverse impacts to traffic flow are incorporated into the project.

Let me know if you have any questions.

Best,

-Erik 415-904-5502

ATACHMENT

County of San Mateo - Planning and Building Department NATEO NATEO KANGO KANGO

Ruemel Panglao

From:	Mchenry, Michael@DOT <michael.mchenry@dot.ca.gov></michael.mchenry@dot.ca.gov>
Sent:	Tuesday, October 15, 2019 3:25 PM
To:	Ruemel Panglao
Subject:	Caltrans Comment - Harbor Village RV Park - Notice of Intent (NOI) to Adopt a
	Mitigated Negative Declaration (MND)
Follow Up Flag:	Flag for follow up
Flag Status:	Completed

CAUTION: This email originated from outside of San Mateo County. Unless you recognize the sender's email address and know the content is safe, do not click links, open attachments or reply.

Dear Ruemel Panglao:

Construction-Related Impacts

Potential impacts to the State Right-of-Way (ROW) on State Route 1 from project-related temporary access points should be analyzed. Project work that requires movement of oversized or excessive load vehicles on state roadways requires a transportation permit that is issued by Caltrans. To apply, visit: <u>https://dot.ca.gov/programs/traffic-operations/transportation-permits</u>. Prior to construction, coordination is required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the STN.

Utilities

Any utilities that are proposed, moved or modified within Caltrans' (ROW) shall be discussed. If utilities are impacted by the project, provide site plans that show the location of existing and/or proposed utilities. These modifications require a Caltrans-issued encroachment permit.

Encroachment Permit

Please be advised that any work or traffic control that encroaches onto the State right-of-way (ROW) requires an encroachment permit that is issued by Caltrans. To obtain an encroachment permit, a completed encroachment permit application, environmental documentation, and six (6) sets of plans clearly indicating the State ROW, and six (6) copies of signed and stamped traffic control plans must be submitted to: Office of Encroachment Permits, California DOT, District 4, P.O. Box 23660, Oakland, CA 94623-0660. To download the permit application and obtain more information, visit https://dot.ca.gov/programs/traffic-operations/ep/applications/

Thank you for including Caltrans in the environmental review process. Should you have any questions regarding these comments or require any additional information, please feel free to contact me at (510) 286-5562 or <u>Michael.McHenry@dot.ca.gov</u>.

Best regards,

Michael McHenry Associate Transportation Planner Local Development- Intergovernmental Review Caltrans District 4 (510) 286-5562

ATTACH NENT

County of San Mateo - Planning and Building Department

Ruemel Panglao

From:	Roman, Isabella@DTSC <isabella.roman@dtsc.ca.gov></isabella.roman@dtsc.ca.gov>
Sent:	Friday, October 04, 2019 3:44 PM
To:	Ruemel Panglao
Subject:	Harbor Village RV Park IS/MND Comment
Follow Up Flag:	Follow up
Flag Status:	Completed

CAUTION: This email originated from outside of San Mateo County. Unless you recognize the sender's email address and know the content is safe, do not click links, open attachments or reply.

Hello,

I represent a responsible agency reviewing the Initial Study/Mitigated Negative Declaration for the Harbor Village RV Park. My comments are included below.

Questions 9a and 9b both say that the project doesn't involve the use of hazardous materials. This is misleading, as most construction projects involve the use of hazardous materials such as gasoline, diesel and paint for example. Minimal amounts are typically used but should be acknowledged in the document. Please state what Best Management Practices (BMPs) will be implemented to prevent spills or incorrect use of these hazardous materials. In addition to these hazardous materials used during construction, limited amounts of household hazardous waste would also be used during operation. Since the site will have a residential use, residents of the RVs will likely have household hazardous waste such as cleaning supplies. This also should be acknowledged within the text.

Mitigation measures relating to hazardous materials have been proposed, however are not referenced within the hazards section. Relevant mitigation measures may include MM 2 (dust control) and MM 9 (vehicle fueling and maintenance) for example. In the hazards section, please include a discussion and/or reference to relevant mitigation measures proposed.

The text doesn't include a discussion of past land uses. Past land uses could have resulted in hazardous materials releases within the project area that should be investigated prior to development for public health protection. Past land uses could indicate the need for collecting environmental samples and/or preparing a Phase 2 Environmental Site Assessment (ESA). If sampling has occurred or if a Phase 2 ESA has been prepared, I would like to see a copy of this documentation. Please revise the text to include a discussion of past land uses.

The project would include cut and fill activities. Please describe whether on-site soil would be sampled for disposal or reuse. Please also discuss how an adequate fill source will be chosen.

The statement under Question 9d is slightly misleading. The discussion states that the project site is not on the "Cortese List" and "therefore would not result in the creation of a significant hazard to the public or the environment." Also, according to the source listed which only references DTSC, it implies that a full review of the Cortese List requirements was not conducted. Please refer to the following link for a list of Cortese List requirements that should be reviewed as part of the CEQA process (<u>https://calepa.ca.gov/sitecleanup/corteselist/</u>). For DTSC, Cortese List sites are sites where DTSC has issued an order for cleanup. This is why the statement quoted above is misleading—it implies that just because a site is not on the Cortese List this means the site is free from contamination. There are several other types of cleanup sites that DTSC oversees that aren't included on the Cortese List. Please correct this statement and conduct a full review of the Cortese List requirements. Additionally, please include a discussion of your search of the Envirostor and Geotracker online databases and how any nearby sites may or may not impact the project site. Please note that even if

the project site is not on or near any listed Envirostor or Geotracker sites, this does not mean that the site is not contaminated. The project site may have not been discovered to contain contamination.

Please feel free to reach out if you have any questions or concerns.

Sincerely,

Isabella Roman Environmental Scientist Site Mitigation and Restoration Program Department of Toxic Substances Control 700 Heinz Avenue Suite 200 Berkeley, CA 94710 (510)-540-3879

ATTACH MENT

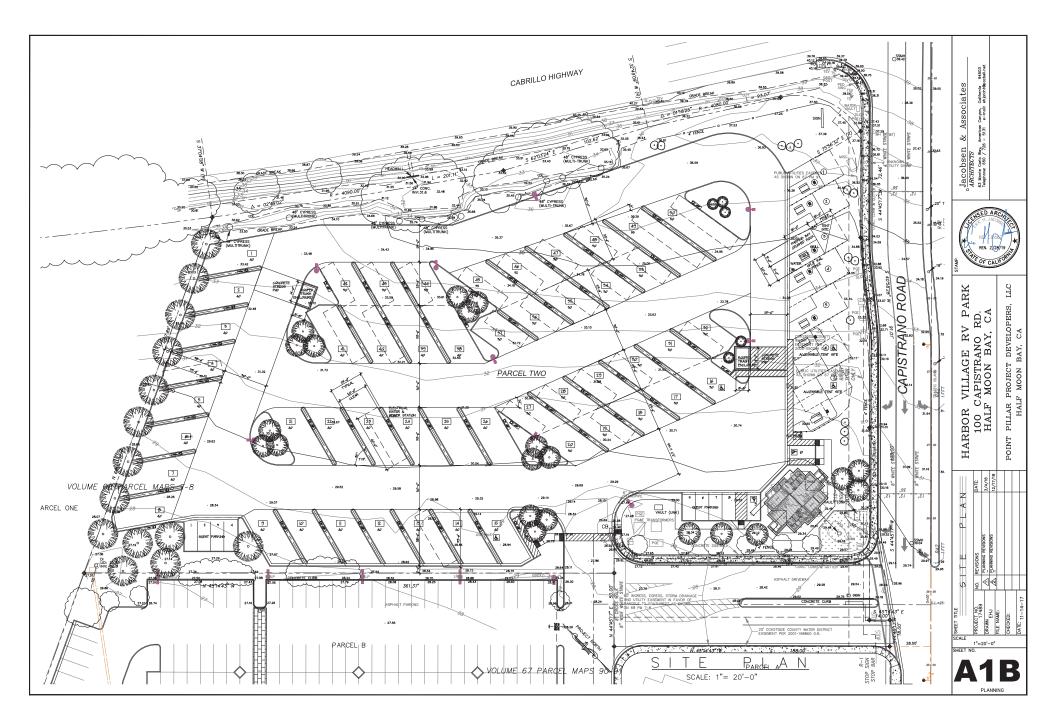
County of San Mateo - Planning and Building Department

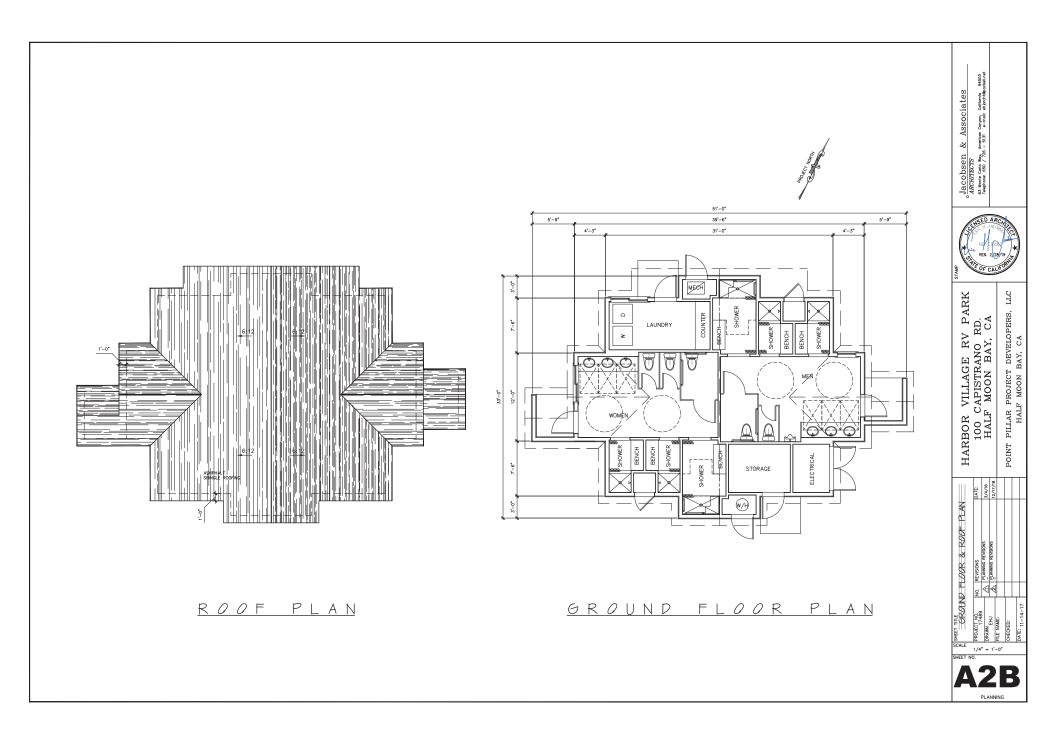




ATACHMENT

County of San Mateo - Planning and Building Department NATEO NATEO KANGO KANGO





ATTACH MENT

County of San Mateo - Planning and Building Department NATEO NATEO KANGO KANGO

COUNTY OF SAN MATEO, PLANNING AND BUILDING DEPARTMENT

NOTICE OF INTENT TO ADOPT MITIGATED NEGATIVE DECLARATION

A notice, pursuant to the California Environmental Quality Act of 1970, as amended (Public Resources Code 21,000, et seq.), that the following project: <u>Harbor Village Recreational</u> <u>Vehicle (RV) Park</u>, when adopted and implemented, will not have a significant impact on the environment.

FILE NO.: PLN 2017-00320

OWNER: Point Pillar Project Developer, PO Box 158, Half Moon Bay, CA 94019

APPLICANT: Ron Stefanick, Pillar Point Project Developers, PO Box 158, Half Moon Bay, CA 94019

ASSESSOR'S PARCEL NO.: 047-081-430

LOCATION: 240 Capistrano Road, Princeton

PROJECT DESCRIPTION

The applicant requests Coastal Development Permit (CDP), Use Permit, Mobile Home Permit, and Grading Permit for the construction of a new 50 space RV park, plus a 869 sq. ft. shower and laundry facility located on a legal 3.356-acre parcel (legality confirmed via Lot Line Adjustment: LLA94-0014). The construction of the RV park involves 4,500 cubic yards of cut and 4,575 cubic yards of fill. No trees are proposed for removal. The project is appealable to the California Coastal Commission.

FINDINGS AND BASIS FOR A NEGATIVE DECLARATION

The Current Planning Section has reviewed the initial study for the project and, based upon substantial evidence in the record, finds that:

- 1. The project will not adversely affect water or air quality or increase noise levels substantially.
- 2. The project will not have adverse impacts on the flora or fauna of the area.
- 3. The project will not degrade the aesthetic quality of the area.
- 4. The project will not have adverse impacts on traffic or land use.
- 5. In addition, the project will not:
 - a. Create impacts which have the potential to degrade the quality of the environment.

- b. Create impacts which achieve short-term to the disadvantage of long-term environmental goals.
- c. Create impacts for a project which are individually limited, but cumulatively considerable.
- d. Create environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

The County of San Mateo has, therefore, determined that the environmental impact of the project is insignificant.

MITIGATION MEASURES included in the project to avoid potentially significant effects:

<u>Mitigation Measure 1</u>: All exterior lights shall be designed and located so as to confine direct rays to the subject property and prevent glare in the surrounding area. A photometric plan shall be reviewed by the Planning Section during the building permit process to verify compliance with this condition. Prior to the final approval of the building permit, lighting shall be inspected and compliance with this requirement shall be verified.

Mitigation Measure 2: The applicant shall implement dust control measures, as listed below. Measures shall be included on plans submitted for the Building Permit and encroachment permit applications. The measures shall be implemented for the duration of any grading, demolition, and construction activities that generate dust and other airborne particles. The measures shall include the following:

- a. Water all active construction areas at least twice daily.
- b. Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.
- c. Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least 2 feet of freeboard.
- d. Apply water three times daily or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at the construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
- e. Sweep daily (preferably with water sweepers) all paved access roads, parking, and staging areas at the construction sites.
- f. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.
- g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- h. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour (mph).

- i. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- j. Replant vegetation in disturbed areas as quickly as possible.

<u>Mitigation Measure 3</u>: The applicant shall submit an Air Quality Best Management Practices Plan to the Planning and Building Department prior to the issuance of any grading permit "hard card" or building permit that, at a minimum, includes the "Basic Construction Mitigation Measures" as listed in Table 8-1 of the BAAQMD California Environmental Quality Act (CEQA) Guidelines (May 2011). The following Bay Area Air Quality Management District Best Management Practices for mitigating construction-related criteria air pollutants and precursors shall be implemented prior to beginning any grading and/or construction activities and shall be maintained for the duration of the project grading and/or construction activities:

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day.
- d. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour(mph).
- e. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485, of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- f. Roadways and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- g. Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485, of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- h. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.
- i. Minimize the idling time of diesel-powered construction equipment to two minutes.
- j. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

<u>Mitigation Measure 4</u>: Pre-Construction Nesting Bird Surveys. Prior to any Project construction-related activities (such as tree removal, grubbing, grading or other land disturbing

activities), the Project proponent shall take the following steps to avoid direct losses of active nests, eggs, and nestlings and indirect impacts to avian breeding success:

If construction-related activities occur only during the non-breeding season, between August 31 and February 1, no nest surveys will be required.

During the breeding bird season (February 1 through August 31), a qualified biologist shall survey areas intended for construction-related activities in the Project Area for nesting raptors and passerine birds not more than 14 days prior to any ground-disturbing activity or vegetation removal. Surveys shall include all potential habitats within 250 feet of activities for raptors, and 50 feet of activities for passerines. If results are positive for nesting birds, a qualified biologist shall advise as to whether avoidance procedures are necessary, subject to review and approval by the Community Development Director. These may include implementation of buffer areas (minimum 50-foot buffer for passerines and minimum 250-foot buffer for most raptors) or seasonal avoidance. Once established, buffer areas around active nests may be reduced on a case-by-case basis based on guidance from a qualified biologist. The biologist shall consider factors such as topography, land use, Project activities, visual screening or line-of-site to active nest, and background noise levels when establishing a reduced nest buffer. The biologist shall advise whether full-time biological monitoring should be required during all activities that occur within reduced nest buffers in order to monitor the active nest(s) for signs of disturbance or "take."

<u>Mitigation Measure 5</u>: Environmental Training. All crewmembers shall attend an Environmental Awareness Training presented by a qualified biologist. The training shall include a description of the special-status species that may occur in the region, the project Avoidance and Minimization Measures, Mitigation Measures, the limits of the project work areas, applicable laws and regulations, and penalties for non-compliance. Upon completion of training, crewmembers shall sign a training form indicating they attended the program and understood the measures. Completed training form(s) shall be provided to the Project Planner before the start of project activities.

<u>Mitigation Measure 6</u>: Ground Disturbing Construction Activities. Ground disturbing construction-related activities shall occur during the dry season (June 1 to October 15) to facilitate avoidance of California red-legged frog. Regardless of the season, no construction shall occur within 24 hours following a significant rain event defined as greater than 1/4 inches of precipitation in a 24-hour period. Following a significant rain event and the 24-hour drying-out period, a qualified biologist shall conduct a preconstruction survey for California red-legged frog prior to the restart of any Project activities.

<u>Mitigation Measure 7</u>: Wildlife Encounters. If any wildlife is encountered during Project activities, said encounter shall be reported to a qualified biologist and wildlife shall be allowed to leave the work area unharmed. Animals shall be allowed to leave the work area of their own accord and without harassment. Animals shall not be picked up or moved in any way.

<u>Mitigation Measure 8</u>: Vegetation Disturbance. Disturbance to vegetation shall be kept to the minimum necessary to complete the Project activities. Prior to the Current Planning Section's approval of the building permit for the project, the applicant shall submit a Biological Protection Plan, subject to Community Development Director review and approval, showing areas to remain undisturbed by construction-related activities and protected with recommended measures (such as temporary fencing with the type to be specified by a qualified biologist). To minimize impacts to vegetation, a qualified biologist shall work with the contractor to designate

work areas (including all staging areas) and designate areas to remain undisturbed and protected.

Mitigation Measure 9: Vehicle Fueling and Maintenance. All fueling, maintenance of vehicles and other equipment, and staging areas should occur at least 50 feet from the drainage swale on the northeastern edge of the project area. The edge of the 50 feet buffer zone shall be marked using visible markers by a biologist no sooner than 30 days prior to the start of construction. Equipment operators and fueling crews shall ensure that contamination of the swale does not occur during such operations by restricting all activities to outside of the buffer zone. Prior to the start of construction-related activities, a plan to allow for prompt and effective response to any accidental spills shall be submitted and subject to review and approval by the Community Development Director. All workers should be informed of the importance of preventing spills, and of the appropriate measures to take should a spill occur.

Mitigation Measure 10: Erosion and Sediment Control BMPs. Prior to the Current Planning Section's approval of a building permit, the applicant shall revise and submit the Erosion and Sediment Control Plan, subject to review and approval by the project planner. The plan shall have been reviewed by a qualified biologist prior to submittal to the County. The plan shall include measures to prevent runoff to the drainage swale on the northeastern edge of the project area and demonstrate compliance with other erosion control requirements and mitigation measures. This shall include the installation of silt fences or straw wattles between work areas and any water sources such as the drainage swale, and around any spoil piles (e.g., loose asphalt, dirt, debris, construction-related materials) that could potentially discharge sediment into habitat areas. If straw wattles are used, they shall be made of biodegradable fabric (e.g., burlap) and free of monofilament netting.

<u>Mitigation Measure 11</u>: In the event that cultural, paleontological, or archaeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archaeologist and of any recording, protecting, or curating shall be borne solely by the project sponsor. The archaeologist shall be required to submit to the Community Development Director, subject to review and approval, a report of the findings and methods of curation or protection of the resources. No further grading or site work within the area of discovery shall be allowed until the preceding has occurred. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

<u>Mitigation Measure 12</u>: The applicants and contractors must be prepared to carry out the requirements of California State law with regard to the discovery of human remains during construction, whether historic or prehistoric. In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately, and the County coroner shall be notified immediately. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

<u>Mitigation Measure 13</u>: The design of the proposed development (upon submittal of the Building Permit) on the subject parcel shall generally follow the recommendations cited in the Geotechnical Study prepared by Sigma Prime Geosciences, Inc. and its subsequent updates regarding seismic criteria, grading, slab-on grade construction, and surface drainage. Any such changes to the recommendations by the project geotechnical engineer cited in this report and

subsequent updates shall be submitted for review and approval by the County's Geotechnical Engineer.

Mitigation Measure 14: At the time of building permit and encroachment permit application, the applicant shall revise as necessary and submit for review and approval the Erosion and Sediment Control Plan such that it shows how the transport and discharge of soil and pollutants from and within the project site would be minimized. The plans shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plans shall include measures that limit the application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

- a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.
- b. Minimize the area of bare soil exposed at one time (phased grading).
- c. Clear only areas essential for construction.
- d. Within five (5) days of clearing or inactivity in construction, stabilize bare soils through either non-vegetative Best Management Practices (BMPs), such as mulching, or vegetative erosion control methods, such as seeding. Vegetative erosion control shall be established within two (2) weeks of seeding/planting.
- e. Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and to control dust.
- f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.
- g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 feet, or to the extent feasible, from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.
- h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.
- i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.
- j. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5 acres or less per 100 feet of fence. Silt fences shall be inspected regularly, and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.

- k. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved erosion control plan.
- I. No erosion or sediment control measures will be placed in vegetated areas.
- m. Environmentally-sensitive areas shall be delineated and protected to prevent construction impacts per Mitigation Measure 10.
- n. Control of fuels and other hazardous materials, spills, and litter during construction.
- o. Preserve existing vegetation whenever feasible.

<u>Mitigation Measure 15</u>: Should any traditionally or culturally affiliated Native American tribe respond to the County's issued notification for consultation, such process shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation of the project, if the project has not yet been implemented.

<u>Mitigation Measure 16</u>: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

<u>Mitigation Measure 17</u>: Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

INITIAL STUDY

The San Mateo County Current Planning Section has reviewed the Environmental Evaluation of this project and has found that the probable environmental impacts are insignificant. A copy of the initial study is attached.

REVIEW PERIOD: September 18, 2019 to October 18, 2019

All comments regarding the correctness, completeness, or adequacy of this Negative Declaration must be received by the County Planning and Building Department, 455 County Center, Second Floor, Redwood City, no later than **5:00 p.m., October 18, 2019**.

CONTACT PERSON

Ruemel Panglao Project Planner, 650/363-4582 <u>rpanglao@smcgov.org</u>.

in 110 Ruemel Panglao, Project Planner

RSP:cmc - RSPDD0169_WCH.DOCX

County of San Mateo Planning and Building Department

INITIAL STUDY ENVIRONMENTAL EVALUATION CHECKLIST (To Be Completed by Planning Department)

- 1. **Project Title:** Harbor Village Recreational Vehicle (RV) Park
- 2. County File Number: PLN 2017-00320
- 3. Lead Agency Name and Address: San Mateo County Planning and Building Department, 455 County Center, 2nd Floor, Redwood City, CA 94063
- 4. **Contact Person and Phone Number:** Ruemel Panglao, Project Planner, 650/363-4582
- 5. **Project Location:** 240 Capistrano Road, unincorporated Princeton area of San Mateo County
- 6. Assessor's Parcel Number and Size of Parcel: 047-081-430 (3.356 acres)
- 7. **Project Sponsor's Name and Address:** Ron Stefanick, Pillar Point Project Developers, P.O. Box 158, Half Moon Bay, CA 94019
- 8. Name of Person Undertaking the Project or Receiving the Project Approval (if different from Project Sponsor): N/A
- 9. General Plan Designation: Coastside Commercial Recreation (Urban)
- 10. **Zoning:** CCR/DR/CD (Coastside Commercial Recreation/Design Review/Coastal Development)
- 11. Description of the Project: The applicant requests a Coastal Development Permit (CDP), Use Permit, Mobile Home Permit, and Grading Permit for the construction of a new 50 parking space RV park, plus a 869 sq. ft. shower and laundry building and landscaping, located on a legal 3.356-acre parcel (legality confirmed via Lot Line Adjustment: LLA94-0014). The construction of the RV park involves earthwork of 4,500 cubic yards of cut and 4,575 cubic yards of fill. No trees are proposed for removal. The project is located within the Cabrillo Highway (Highway 1) County Scenic Corridor. The project is appealable to the California Coastal Commission.
- 12. **Surrounding Land Uses and Setting:** The undeveloped site is located at the corner of Cabrillo Highway and Capistrano Road. The area to the north contains commercial uses in the unincorporated community of El Granada. The area to the west contains agricultural land. A parking lot for Pillar Point Harbor is located to the east. The areas to the south contains commercial uses, anchored by the Oceano Hotel.
- 13. **Other Public Agencies Whose Approval is Required:** California Department of Housing and Community Development, California Department of Transportation, Regional Water Quality Control Board.

14. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?: No, see Section 18.a.ii. (NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources (see Public Resources Code Section 21080.3.2.). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality).

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

Х	Aesthetics		Energy		Public Services
	Agricultural and Forest Resources		Hazards and Hazardous Materials		Recreation
Х	Air Quality	Х	Hydrology/Water Quality		Transportation
Х	Biological Resources		Land Use/Planning	Х	Tribal Cultural Resources
Х	Climate Change		Mineral Resources		Utilities/Service Systems
Х	Cultural Resources	Х	Noise		Wildfire
Х	Geology/Soils		Population/Housing	Х	Mandatory Findings of Significance

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must take account of the whole action involved, including off-site as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
- 4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in 5. below, may be cross-referenced).
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other California Environmental Quality Act (CEQA) process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources. Sources used, or individuals contacted should be cited in the discussion.

Г

1. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:					
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
1.a	Have a substantial adverse effect on a scenic vista, views from existing residen- tial areas, public lands, water bodies, or roads?			Х	

Discussion: Due to the presence of mature Monterey Cypress trees along Cabrillo Highway and

the one- and two-story commercial structures to the south, public views of the Pacific Ocean are substantially blocked from viewing locations at the site and the portion of Cabrillo Highway which fronts the project site. When driving along Cabrillo Highway closer to the corner of Capistrano Road and Cabrillo Highway, there is a brief portion of the road with a view of the Pacific Ocean which may be impacted by the project. To ensure minimal blockage of this view, the proposed landscaping is limited to groundcover and low-growing shrubs at the corner of Capistrano Road and Cabrillo Highway and along the entire stretch of Capistrano Road adjacent to the property. In addition, no RV parking spaces are proposed along the Capistrano Road side of the property. As part of the project scope, the existing grade level would be lowered by approximately 1-foot relative to the elevation of the adjacent Cabrillo Highway, further minimizing the effects of any views being blocked by vertical elements.

The project is within the Cabrillo Highway County Scenic Corridor. There is an existing RV park approximately a half mile east of the project site. Additionally, RV parks are a common sight along Cabrillo Highway within other municipalities, such as Pacifica and Half Moon Bay. The applicant does not propose any additional signage, other than the use of small signs informing visitors of the rules of the RV Park. Such signs would be located at the center of the RV Park and would not be significantly visible from off-site viewing locations. Signage for the RV Park would be a panel located on an existing multi-tenant monument sign for the Harbor Village property.

Based on the foregoing, the proposed use would result in visual impacts which are less than significant.

Source: Project Plans, Project Location, County GIS Maps.

1.b	resources, including, but not limited to, trees, rock outcroppings, and historic		Х
	buildings within a state scenic highway?		

Discussion: The project parcel does not contain and is not located in close proximity to any rock outcroppings. One historic structure, the former Ocean Shore Railroad North Granada Station is located on the east side of Highway 1 but not within the immediate project vicinity.

Source: Project Plans, Project Location, County GIS Maps, Holman & Associates Archaeological Report.

1.c	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings, such as significant change	X	
	in topography or ground surface relief features, and/or development on a ridgeline? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an		
	urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?		

Discussion: The project parcel is located in an urbanized area within a Design Review (DR) District as it is zoned CCR/DR/CD (Coastside Commercial Recreation / Design Review / Coastal Development) and is within the Cabrillo Highway County Scenic Corridor. In addition, the Mobile Home (MH) ordinance applies to this project despite not offering spaces for long term residence. Based on the discussion in Sections 1.a. and 1.d., the project, as proposed and conditioned, is in compliance with the applicable design review standards of the DR Zoning District and the Community Design Manual. The project meets all applicable MH Ordinance, Zoning District, General Plan, and Local Coastal Program provisions. For a discussion of potential impacts to the County Cabrillo Highway Scenic Corridor, see Section 1.a, above.

An RV park is a conditionally permitted use in the CCR Zoning District. The proposal meets the development standards of the respective zoning district.

Source: Project Plans, Project Location, San Mateo County Zoning Regulations.

1.d	Create a new source of substantial light	Х	
•	or glare that would adversely affect day		
	or nighttime views in the area?		

Discussion: The project would increase nighttime ambient lighting within an area that contains existing ambient light sources. The RV park proposes ten (10) 16 feet high lamp posts with downward directed lamp heads and would not create a new source of substantial light or glare. While the property does not currently contain any light sources, it is located immediately adjacent to the Ocean Hotel and the Shoppes at Harbor Village, which contains light sources and is visible from the Cabrillo Highway.

The applicant has agreed to remove the five (5) 20-foot-high lamp posts previously proposed along the southwestern edge of the property which would have resulted in light spilling offsite. The RV park would be screened by existing, mature Monterey Cypress trees along Cabrillo Highway and existing structures from neighboring properties to the south. In addition, the majority of the lamp posts in the interior of the park would be located adjacent to one to three proposed strawberry trees (*Arbutus 'Marina'*) which, per the County Arborist, would likely reach a mature height of 25 to 30 feet based on the proposed growing conditions. These trees would also provide further screening of the light. Any light produced from the habitation of the RV park would also be screened. However, to further reduce any potential impact, the following mitigation is recommended:

<u>Mitigation Measure 1</u>: All exterior lights shall be designed and located so as to confine direct rays to the subject property and prevent glare in the surrounding area. A photometric plan shall be reviewed by the Planning Section during the building permit process to verify compliance with this condition. Prior to the final approval of the building permit, lighting shall be inspected and compliance with this requirement shall be verified.

Source: Project Plans, Project Location.

1.e	Be adjacent to a designated Scenic	х	
	Highway or within a State or County		
	Scenic Corridor?		

Discussion: See the discussion provided for Sections 1.a. through 1.e, above.

Source: Project Plans, Project Location.

1.f.	If within a Design Review District, conflict		Х	
	with applicable General Plan or Zoning			

Ordinance provisions?							
Discussion: See the discussion provided for Section 1.c. Source: Project Plans, Project Location, San Mateo County Zoning Regulations.							
1.g Visually intrude into an area having . natural scenic qualities?			Х				
Discussion: See the discussion provided for S Source: Project Plans, Project Location.	ections 1.a. th	rough 1.e, abo	ove.				

2. AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
2.a.	For lands outside the Coastal Zone, convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?				Х

Discussion: The project site is located within the Coastal Zone. The parcel is not within an area that is mapped or designated as Prime or Unique Farmland or Farmland of Statewide Importance.

Source: Project Location, County GIS Maps, California Department of Conservation Farmland Mapping and Monitoring Program.

2.b.	Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract?		Х

Discussion: The project site is zoned Coastside Commercial Recreation (CCR). The zoning does not allow for agriculture uses. The parcel is also not subject to an existing Open Space Easement or Williamson Act contract.

Source: Project Location, County Zoning Regulations, County GIS Maps, County Williamson Act

Contra	acts.				
2.c.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use?				x
the pr	ssion: The project site is undeveloped. It of operty has been used in the past as a pump ys, but the property was not used for the cul	kin patch for s	ale of pumpki	ns for annual f	
any sp or mo recrea agricu Depar Source	the site does not contain forestland (defined becies, including hardwoods, under natural or re forest resources including timber, aesthet ation, and other public benefits). Therefore, litural use or forestland to non-forest use. P thent of Conservation Farmland Mapping a ce: Project Location, County GIS Maps, Cal ing and Monitoring Program.	conditions, and ics, fish and w the project wo roject Locatior nd Monitoring	I that allows fo ildlife, biodive uld not conver n, County GIS Program.	rr managemer rsity, water qu t Farmland to Maps, Califorr	it of one ality, a non- nia
2.d.	For lands within the Coastal Zone, convert or divide lands identified as Class I or Class II Agriculture Soils and Class III Soils rated good or very good for artichokes or Brussels sprouts?			Х	
Conse (non-i and a be con disturf annua has al parkin the pro over ti impac		e as containin soils, as well as to the southea st for agricultu d as a pumpkin for temporary of No division of soils, the area ed for agricultu	g soils that ha s the develope ist. The areas ral purposes a patch for sale of any agricu events and as of land is prope a has been cou ure. Thus, the	ve a Class III ed area of Prin that are prop and have beer of pumpkins iltural commod unpaved over osed. Therefo ntinually distur project poses	iceton osed to for dities. It flow re, while bed minimal
	e: Project Location, Natural Resources Coned Storie Index, County Zoning Regulations.		vice Web Soil	Survey - Calif	fornia
2.e.	Result in damage to soil capability or loss of agricultural land?			Х	
Discu	ssion: See the discussion provided for Sec	ction 2.d.			
	e: Project Location, Natural Resources Cone ed Storie Index, County Zoning Regulations		vice Web Soil	Survey - Calif	fornia

2.f.	Conflict with existing zoning for, or cause		Х
	rezoning of, forestland (as defined in		
	Public Resources Code Section 12220(g)), timberland (as defined by		
	Public Resources Code Section 4526),		
	or timberland zoned Timberland		
	Production (as defined by Government		
	Code Section 51104(g))?		
	Note to reader: This question seeks to address the economic impact of converting forestland to a non- timber harvesting use.		

Discussion: The project site does not contain forestland or timberland; therefore, there is no conflict with existing zoning or cause for rezoning.

Source: Project Location, County GIS Maps, County Zoning Regulations.

3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
3.a.	Conflict with or obstruct implementation of the applicable air quality plan?		Х		

Discussion: The Bay Area 2010 Clean Air Plan (CAP), developed by the Bay Area Air Quality Management District (BAAQMD), is the applicable air quality plan for San Mateo County. The CAP was created to improve Bay Area air quality and to protect public health and climate.

The project would not conflict with or obstruct the implementation of the BAAQMD's 2010 CAP. The project and its operation involve minimal hydrocarbon (carbon monoxide; CO2) air emissions, whose source would be from trucks and equipment (whose primary fuel source is gasoline) during its construction. The impact from the occasional and brief duration of such emissions would not conflict with or obstruct the Bay Area Air Quality Plan.

The construction of the RV park involves earthwork of 4,500 cubic yards of cut and 4,575 cubic yards of fill. As proposed grading would largely be balanced on-site, there would be no off-haul and minimal truck trips for import of materials.

Regarding emissions from construction vehicles (employed at the site during the project's construction), the following mitigation measure is recommended to ensure that the impact from such emissions is less than significant:

<u>Mitigation Measure 2</u>: The applicant shall implement dust control measures, as listed below. Measures shall be included on plans submitted for the Building Permit and encroachment permit applications. The measures shall be implemented for the duration of any grading, demolition, and construction activities that generate dust and other airborne particles. The measures shall include the following:

a. Water all active construction areas at least twice daily.

- b. Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.
- c. Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least 2 feet of freeboard.
- d. Apply water three times daily or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at the construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
- e. Sweep daily (preferably with water sweepers) all paved access roads, parking, and staging areas at the construction sites.
- f. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.
- g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- h. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour (mph).
- i. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- j. Replant vegetation in disturbed areas as quickly as possible.

Source: Project Plans, Bay Area Air Quality Management District.

or State ambient air quality standard?		3.b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable Federal or State ambient air quality standard?		Х		
--	--	------	---	--	---	--	--

Discussion: As of December 2012, San Mateo County is a non-attainment area for PM-2.5. On January 9, 2013, the Environmental Protection Agency (EPA) issued a final rule to determine that the Bay Area attains the 24-hour PM-2.5 national standard. However, the Bay Area will continue to be designated as "non-attainment" for the national 24-hour PM-2.5 standard until the BAAQMD submits a "re-designation request" and a "maintenance plan" to EPA and the proposed re-designation is approved by the EPA. A temporary increase in the project area is anticipated during construction since these PM-2.5 particles are a typical vehicle emission. The temporary nature of the proposed construction and California Air Resources Board vehicle regulations reduce the potential effects to a less than significant impact. The following mitigation measure would minimize increases in non-attainment criteria pollutants generated from project construction to a less than significant level:

Mitigation Measure 3: The applicant shall submit an Air Quality Best Management Practices Plan to the Planning and Building Department prior to the issuance of any grading permit "hard card" or building permit that, at a minimum, includes the "Basic Construction Mitigation Measures" as listed in Table 8-1 of the BAAQMD California Environmental Quality Act (CEQA) Guidelines (May 2011). The following Bay Area Air Quality Management District Best Management Practices for mitigating construction-related criteria air pollutants and precursors shall be implemented prior to beginning any grading and/or construction activities and shall be maintained for the duration of the project grading and/or construction activities:

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

- c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day.
- d. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour(mph).
- e. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485, of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- f. Roadways and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- g. Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485, of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- h. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.
- i. Minimize the idling time of diesel-powered construction equipment to two minutes.
- j. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Source: Project Plans, Bay Area Air Quality Management District.

3.c.	Expose sensitive receptors to substantial pollutant concentrations, as defined by		х	
	the Bay Area Air Quality Management District?			

Discussion: The project site is located in an urban area with no sensitive receptors, such as schools, located within the project vicinity. The closet residence is over 20 feet to the north of the parcel. Therefore, the project would not expose sensitive receptors to significant levels of pollutant concentrations.

Source: Project Plans, Bay Area Air Quality Management District.

3.d.	Result in other emissions (such as those		Х	l
	leading to odors) adversely affecting a			
	substantial number of people?			

Discussion: The project, once operational, would not create or generate any significant odors. Potential odors which may be generated include exhaust odors associated with typical vehicle parking uses. The project has the potential to generate more odors associated with construction activities. However, any such odors would be temporary and would not have a significant impact on large numbers of people over an extended duration of time. Thus, the impact would less than significant.

Source: Project Plans.

4. BIOLOGICAL RESOURCES. Would the	project:			
	Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
4.a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		Х		
Discussion: A biological resources evaluation (S Environmental Consultants, dated November 201 biological resources on the subject parcel. SWCA	7, which analy	zed potential	oroject impacts	
According to the SWCA evaluation, SWCA biolog reconnaissance-level field survey of the study are biological conditions and determine the potential f area. One northern harrier <i>(Circus cyaneus)</i> , a C species of special concern was observed foraging species were observed within the study area durin was observed along the northeastern edge of the to be considered jurisdictional by CDFW, US Arm Water Quality Control Board (RWQCB), and the C jurisdictional wetlands, water features, or riparian	a on October 1 or special-state alifornia Depar within the stu- ng the biologica project area, v y Corps of Eng California Coas	17, 2017, to do us species to tment of Fish dy area. No c al field survey which is unlike jineers (USAC tal Commissio	occur in the ex occur in the st and Wildlife (C other special-s A drainage s ly in SWCA's o CE), the Region on (CCC). No	xisting udy CDFW) tatus swale opinion nal other
The project area is bordered by a commercial dev cultivated agricultural land to the north and west, a SWCA evaluation states that developed, agricultur provide suitable habitat for sensitive wildlife speci- facilities surrounding the project area (e.g., roads to dispersal of wildlife into and across the project	and by Cabrillo iral, and disturb es. In addition and dense dev	Highway to the Highway to the Highway to the Higher Higher to the Higher	he northeast. Ibitats do not t e and other ma	The ypically an-made
The drainage swale along the northeast edge of the culvert pipe with a presumed terminus in the Pacial habitat for sensitive wildlife species such as California species of <i>(Thamnophis sirtalis tetrataenia)</i> , a federally and sepecies, the project area could be used by these semergent vegetation cover and development surrespecies to occur within the Project Area is low.	fic Ocean, may prnia red-legge of special conce state listed ence s suitable natu species for dis	/ provide marg d frog <i>(Rana c</i> ern, and San F langered spec iral habitat cor persal. Howe	ginal, suitable draytonii), a fe Francisco garte ties and CDFV nditions for the ever, due to the	aquatic derally er snake V fully ese e lack of
Additionally, the drainage swale does not meet the lack of riparian vegetation.	e LCP definitio	n of a riparian	corridor due t	to the
The project area does contain habitat for nesting cyaneus), a CDFW species of special concern that and/or the California Fish and Game Code.				
Due to the potential for these species to occur wit	hin the project	area, it is reco	ommended that	at the

following mitigation measures be implemented to avoid potential impacts to California red-legged frog, San Francisco garter snake, and nesting migratory birds (during the breeding season):

<u>Mitigation Measure 4</u>: Pre-Construction Nesting Bird Surveys. Prior to any Project constructionrelated activities (such as tree removal, grubbing, grading or other land disturbing activities), the Project proponent shall take the following steps to avoid direct losses of active nests, eggs, and nestlings and indirect impacts to avian breeding success:

If construction-related activities occur only during the non-breeding season, between August 31 and February 1, no nest surveys will be required.

During the breeding bird season (February 1 through August 31), a qualified biologist shall survey areas intended for construction-related activities in the Project Area for nesting raptors and passerine birds not more than 14 days prior to any ground-disturbing activity or vegetation removal. Surveys shall include all potential habitats within 250 feet of activities for raptors, and 50 feet of activities for passerines. If results are positive for nesting birds, a qualified biologist shall advise as to whether avoidance procedures are necessary, subject to review and approval by the Community Development Director. These may include implementation of buffer areas (minimum 50-foot buffer for passerines and minimum 250-foot buffer for most raptors) or seasonal avoidance. Once established, buffer areas around active nests may be reduced on a case-by-case basis based on guidance from a qualified biologist. The biologist shall consider factors such as topography, land use, Project activities, visual screening or line-of-site to active nest, and background noise levels when establishing a reduced nest buffer. The biologist shall advise whether full-time biological monitoring should be required during all activities that occur within reduced nest buffers in order to monitor the active nest(s) for signs of disturbance or "take."

<u>Mitigation Measure 5</u>: Environmental Training. All crewmembers shall attend an Environmental Awareness Training presented by a qualified biologist. The training shall include a description of the special-status species that may occur in the region, the project Avoidance and Minimization Measures, Mitigation Measures, the limits of the project work areas, applicable laws and regulations, and penalties for non-compliance. Upon completion of training, crewmembers shall sign a training form indicating they attended the program and understood the measures. Completed training form(s) shall be provided to the Project Planner before the start of project activities.

<u>Mitigation Measure 6</u>: Ground Disturbing Construction Activities. Ground disturbing constructionrelated activities shall occur during the dry season (June 1 to October 15) to facilitate avoidance of California red-legged frog. Regardless of the season, no construction shall occur within 24 hours following a significant rain event defined as greater than 1/4 inches of precipitation in a 24-hour period. Following a significant rain event and the 24-hour drying-out period, a qualified biologist shall conduct a preconstruction survey for California red-legged frog prior to the restart of any Project activities.

<u>Mitigation Measure 7</u>: Wildlife Encounters. If any wildlife is encountered during Project activities, said encounter shall be reported to a qualified biologist and wildlife shall be allowed to leave the work area unharmed. Animals shall be allowed to leave the work area of their own accord and without harassment. Animals shall not be picked up or moved in any way.

<u>Mitigation Measure 8</u>: Vegetation Disturbance. Disturbance to vegetation shall be kept to the minimum necessary to complete the Project activities. Prior to the Current Planning Section's approval of the building permit for the project, the applicant shall submit a Biological Protection Plan, subject to Community Development Director review and approval, showing areas to remain undisturbed by construction-related activities and protected with recommended measures (such as temporary fencing with the type to be specified by a qualified biologist). To minimize impacts to vegetation, a qualified biologist shall work with the contractor to designate work areas (including all staging areas) and designate areas to remain undisturbed and protected.

Mitigation Measure 9: Vehicle Fueling and Maintenance. All fueling, maintenance of vehicles and other equipment, and staging areas should occur at least 50 feet from the drainage swale on the northeastern edge of the project area. The edge of the 50 feet buffer zone shall be marked using visible markers by a biologist no sooner than 30 days prior to the start of construction. Equipment operators and fueling crews shall ensure that contamination of the swale does not occur during such operations by restricting all activities to outside of the buffer zone. Prior to the start of construction-related activities, a plan to allow for prompt and effective response to any accidental spills shall be submitted and subject to review and approval by the Community Development Director. All workers should be informed of the importance of preventing spills, and of the appropriate measures to take should a spill occur.

Mitigation Measure 10: Erosion and Sediment Control BMPs. Prior to the Current Planning Section's approval of a building permit, the applicant shall revise and submit the Erosion and Sediment Control Plan, subject to review and approval by the project planner. The plan shall have been reviewed by a qualified biologist prior to submittal to the County. The plan shall include measures to prevent runoff to the drainage swale on the northeastern edge of the project area and demonstrate compliance with other erosion control requirements and mitigation measures. This shall include the installation of silt fences or straw wattles between work areas and any water sources such as the drainage swale, and around any spoil piles (e.g., loose asphalt, dirt, debris, construction-related materials) that could potentially discharge sediment into habitat areas. If straw wattles are used, they shall be made of biodegradable fabric (e.g., burlap) and free of monofilament netting.

Source: Project Plans, Project Location, County GIS Maps, SWCA Biological Resources Evaluation (dated November 2017).

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

Discussion: Per the SWCA evaluation, there are no areas of riparian habitat or sensitive natural communities identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, in the project area.

Source: Project Plans, Project Location, County GIS Maps, SWCA Biological Resources Evaluation (dated November 2017).

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

Discussion: The SWCA evaluation found no wetlands in the entire study area, as defined either by Section 404 or in the County Local Coastal Program. As a result, the project poses no impact to these resources.

Source: Project Plans, Project Location, County GIS Maps, SWCA Biological Resources Evaluation

(dated	d November 2017).				
4.d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?		Х		
comm wildlife frog a disper 4.a, in Source	Ission: According to the SWCA evaluation, percial and agricultural development and the e movement corridor. Due to the presence of nd San Francisco garter snake, it is possible rsal habitat for these species. With the imple npacts to wildlife corridors would be minimized ce: Project Plans, Project Location, County of November 2017).	efore it is unli of marginal aq that the Proje ementation of ed.	kely that the p uatic habitat fo ect Area may t the Mitigation	roject area sel or California re oe used as sea Measures in S	ves as a d-legged asonal ection
4.e.	Conflict with any local policies or ordi- nances protecting biological resources, such as a tree preservation policy or ordinance (including the County Heritage and Significant Tree Ordinances)?			Х	
The exproted chain- perfor to rem	Ission: The project does not propose to rem xisting, mature Monterey Cypress trees alon cted during construction. As noted in the Ma link fence shall be installed around the dripli med in the tree protection zone unless supe hain should be significantly impacted by the p ce: Project Plans, Mayne Arborist Report.	g Cabrillo Hig yne Arborist F ne of affected rvised by the p	hway would be Report, a prote trees and no project arboris	e retained and ctive barrier of work shall be	six-foot
4.f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or state habitat conservation plan?				Х
	ssion: The site is not located in an area wit al Conservation Community Plan, other appr	•			
Sourc	e: Project Plans, Project Location, County	GIS Map.			
4.g.	Be located inside or within 200 feet of a marine or wildlife reserve?				Х
Discu	ssion: The project site is not located inside	or within 200	feet of a mari	ne or wildlife r	
Discu					eserve.

4.h.	Result in loss of oak woodlands or other non-timber woodlands?				Х
	ssion: The project site includes no oak woo e: Project Plans, Project Location.	odlands or oth	er timber woo	dlands.	

5.	CULTURAL RESOURCES. Would the pre-	oject:			
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impaci
5.a.	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				Х
or Fe	ussion: The project site does not host any k deral listings. Thus, the project poses no imp ce: California Register of Historical Resourc	pact to these r		y either Coun	ty, State
5.b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5?		Х		
project Histori Univer resour Sono archa record alluvia The p meter project	Ussion: Based on the project parcel's existinct parcel and surrounding area would host an rical Resources Information System's Northwersity (Sonoma State), in a letter dated April 1 arce study for the project area in 1994 that ide ma State letter notes that the project area have letter areas in the project area have letter notes that the project area have letter at the project area is situated within Holoc proposed project area is situated within Holoc rs from Half Moon Bay; additionally, accordinct area was once adjacent to a perennial wat	by archaeologi vest Informatic 10, 2019, note entified no cult is the possibili in this part of S the mouths of jacent to interr cene alluvial fa g to a review ercourse.	cal resources on Center at S s that there wa tural resources ty of containin San Mateo Co drainage cany mittent or pere on deposits ap of historic map	The Californ onoma State as a previous of s. However, th g unrecorded unty have bee rons, in Holoce proximately 16 os, the propose	ia cultural ne en ene urses. 50
archa archa	o the passage of time since the previous sur leological theory and method since that time, leologist conduct further archival and field stu leological resources.	Sonoma Stat	e recommend	s a qualified	
area Histor quite	ne Archaeological Report, prepared by Holma contains no evidence of prehistoric archaeolo ric topographic maps show no prior developn unlikely historic archaeological deposits or fe	ogical resource nent around a	es by archival nd within the p	search or field project area, se	d survey o it is

The following mitigation measure is provided in the event that any cultural, paleontological, or

developed property.

archeological resources are encountered during project construction and excavation activities:

Mitigation Measure 11: In the event that cultural, paleontological, or archaeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archaeologist and of any recording, protecting, or curating shall be borne solely by the project sponsor. The archaeologist shall be required to submit to the Community Development Director, subject to review and approval, a report of the findings and methods of curation or protection of the resources. No further grading or site work within the area of discovery shall be allowed until the preceding has occurred. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

Source: Project Location, County GIS Maps, California Historical Resources Information System Review Letter (dated April 10, 2019), Holman & Associates Archaeological Report (dated June 2019).

5.c.	Disturb any human remains, including	Х	
	those interred outside of formal		
	cemeteries?		

Discussion: No known human remains are located within the project area or surrounding vicinity. In case of accidental discovery, the following mitigation measure is recommended:

<u>Mitigation Measure 12</u>: The applicants and contractors must be prepared to carry out the requirements of California State law with regard to the discovery of human remains during construction, whether historic or prehistoric. In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately, and the County coroner shall be notified immediately. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

Source: Project Location, County GIS Maps.

6.	ENERGY . Would the project:				
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
6.a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			Х	

Discussion: The project involves the construction of a small 869 sq. ft. laundry and restroom facility. The size of the proposed building is appropriate to the proposed use. The proposed lighting would be LED and, therefore, energy efficient. The project includes landscaping that would minimize heat island effects. Overall, the site would be constructed in compliance with all relevant building codes and regulations. In addition, per the discussion in Section 17.b, the project would cause a less than significant impact on vehicles miles traveled (VMT), which indicates that there will

be a minimal impact on air pollutants and greenhouse gases (GHG) and congestion.

In terms of the use of electrical power, the RV park would use power mainly for the small laundry and restroom facility and for any customer utilizing the electrical hookups for their respective RV. These represent a necessary consumption of resources for the operation of the RV park.

Source: Project Plans, Project Location, Hexagon Transportation Consultants, Inc. 100 Capistrano Road Harbor Village RV Park Draft Traffic Impact Analysis (dated January 18, 2019).

efficiency.		6.b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.			Х		
-------------	--	------	--	--	--	---	--	--

Discussion: Per the discussion in Section 6.a., the project would pose a less than significant impact.

Source: Project Plans.

7.	GEOLOGY AND SOILS. Would the project	ct:			
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
7.a.	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in:				
	 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Note: Refer to Division of Mines and Geology Special Publication 42 and the County Geotechnical Hazards Synthesis Map. 		Х		

Discussion: A geotechnical report was prepared by Sigma Prime Geosciences, Inc. (Sigma Prime), dated May 17, 2019, included as Attachment F. Sigma Prime determined the closest mapped active fault zone to the site is the San Gregorio-Seal Cove fault, located offshore about 1 kilometer (km) to the west. Other faults in the region most likely to produce significant seismic ground motions include the San Andreas, Hayward, Rodgers Creek, and Calaveras faults.

According to Sigma Prime, the site is not located in an active Alquist-Priolo special studies area or zone where fault rupture is considered likely. Therefore, active faults are not believed to exist beneath the site, and the potential for fault rupture to occur at the site is low. Although it is highly probable that the proposed project would experience very strong ground shaking during a moderate to large nearby earthquake, Sigma Prime states that the proposed project can be developed as

planned, provided that the geotechnical recommendations from their report be implemented.

Since the project location and its distance from the cited fault zone can result in strong seismic ground shaking in the event of an earthquake, the following mitigation measure is recommended to ensure that such impacts are less than significant:

<u>Mitigation Measure 13</u>: The design of the proposed development (upon submittal of the Building Permit) on the subject parcel shall generally follow the recommendations cited in the Geotechnical Study prepared by Sigma Prime Geosciences, Inc. and its subsequent updates regarding seismic criteria, grading, slab-on grade construction, and surface drainage. Any such changes to the recommendations by the project geotechnical engineer cited in this report and subsequent updates shall be submitted for review and approval by the County's Geotechnical Engineer.

Source: Project Plans, Project Location, San Mateo County Hazards Maps, Sigma Prime Geotechnical Study (dated May 17, 2018).

ii. Strong seismic ground shaking?		Х		
------------------------------------	--	---	--	--

Discussion: Pursuant to the discussion in Section 7.a.i., strong seismic ground shaking may occur in the event of an earthquake. However, the mitigation measure provided in Section 6.a.i. would minimize impacts to a less than significant level.

Source: Project Plans, Project Location, San Mateo County Hazards Maps, Sigma Prime Geotechnical Study (dated May 17, 2018).

iii. Seismic-related ground failure, including liquefaction and differential	Х		
settling?			

Discussion: According to Sigma Prime, soils most susceptible to liquefaction are saturated, loose, silty sands, and uniformly graded sands. The 4.5-foot thick layer of loose silty sand at a depth of 13.5 feet underlying the site is likely to liquefy during a design earthquake. Sigma Prime estimates up to 1.8 inches of settlement. An existing thick clay cap should reduce this amount at the ground surface to about 1-inch of total settlement and 0.5 inches of differential settlement.

However, pursuant to the discussion in Section 7.a.i., its respective mitigation measure is provided to minimize any impacts to a less than significant level.

Source: Project Plans, Project Location, San Mateo County Hazards Maps, Sigma Prime Geotechnical Study (dated May 17, 2018).

iv. Landslides?		Х		
-----------------	--	---	--	--

Discussion: The site is moderately sloped, so the likelihood of a landslide impacting the site is low.

However, pursuant to the discussion in Section 7.a.i., its respective mitigation measure is provided to minimize any impacts to a less than significant level.

Source: Project Plans, Project Location, San Mateo County Hazards Maps, Sigma Prime Geotechnical Study (dated May 17, 2018).

v. Coastal cliff/bluff instability or erosion?		х
Note to reader: This question is looking at instability under current conditions. Future, potential instability is looked at in Section 7		

	(Climate Change).				
--	-------------------	--	--	--	--

Discussion: The project site is located about 500 feet from the coastline. Therefore, there would be no project impact on coastal cliff or bluff instability or erosion.

Source: Project Location.

7.t	D. Result in substantial soil erosion or the loss of topsoil?	х	

Discussion: The construction of the RV park involves 4,500 cubic yards of cut and 4,575 cubic yards of fill. Total land disturbance is 2.9-acres. The project is subject to coverage under a State General Construction Permit. The mitigation measures in Sections 3.a. and 3.b., and the following mitigation measure are included to control erosion during both project construction activities.

With these mitigation measures, the project impact would be less than significant.

Mitigation Measure 14: At the time of building permit and encroachment permit application, the applicant shall revise as necessary and submit for review and approval the Erosion and Sediment Control Plan such that it shows how the transport and discharge of soil and pollutants from and within the project site would be minimized. The plans shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plans shall include measures that limit the application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

- a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.
- b. Minimize the area of bare soil exposed at one time (phased grading).
- c. Clear only areas essential for construction.
- d. Within five (5) days of clearing or inactivity in construction, stabilize bare soils through either non-vegetative Best Management Practices (BMPs), such as mulching, or vegetative erosion control methods, such as seeding. Vegetative erosion control shall be established within two (2) weeks of seeding/planting.
- e. Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and to control dust.
- f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.
- g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 feet, or to the extent feasible, from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.
- h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.
- i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow

energy.

- j. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5 acres or less per 100 feet of fence. Silt fences shall be inspected regularly, and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.
- k. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved erosion control plan.
- I. No erosion or sediment control measures will be placed in vegetated areas.
- m. Environmentally-sensitive areas shall be delineated and protected to prevent construction impacts per Mitigation Measure 10.
- n. Control of fuels and other hazardous materials, spills, and litter during construction.
- o. Preserve existing vegetation whenever feasible.

Source: Project Plans, Project Location, San Mateo County Hazards Maps, Sigma Prime Geotechnical Study (dated May 17, 2018), San Mateo Countywide Stormwater Pollution Prevention Program.

Discussion: Pursuant to the discussion to Sections 7.a. and 7.b., the associated mitigation measures would assure that the project does not result in an on-site or off-site landslide, lateral spreading, subsidence, severe erosion, liquefaction or collapse. Therefore, the mitigation measures would minimize project impacts in these areas to a less than significant level.

Source: Project Plans, Project Location, San Mateo County Hazards Maps, Sigma Prime Geotechnical Study (dated May 17, 2018).

7.d. Be located on expansive soil, as defined in Table 18-1-B of Uniform Building	Х		
Code, creating substantial direct or indirect risks to life or property?			

Discussion: According to Sigma Prime, subsurface clayey soils at the site have a high potential for expansion. Expansive soils tend to swell with increases in moisture content and shrink with decreases in moisture content. These moisture fluctuations typically occur during seasonal variations in precipitation, but can also occur from irrigation, changes in site drainage, or the presence of tree roots. As the soil shrinks and swells, improvements supported on the expansive soils may fall and rise. These movements may cause cracking and vertical deformations of improvements, which can be addressed by regular maintenance of parking areas and structures.

However, pursuant to the discussion in Section 7.a.i., its respective mitigation measure is provided to minimize any impacts to a less than significant level.

Source: Project Plans, Project Location, San Mateo County Hazards Maps, Sigma Prime

r					
Geot	echnical Study (dated May 17, 2018).				
7.e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				Х
Gran waste	ussion: The proposed RV park would have ada Community Services District and therefo ewater disposal systems. Thus, the project p ce: Project Plans, Project Location, County	ore does not re poses no impa	quire or incluc ct in this area.	le any septic ta	
7.f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		Х		
proje	ussion: Based on the project parcel's existin ct parcel and surrounding area would host ar ogic feature. However, Mitigation Measure 1	ny paleontolog	ical resource of	or site or uniqu	Je

Source: Project Location, County GIS Maps.

impact is less than significant if any resources are encountered.

8.	CLIMATE CHANGE. Would the project:				
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
8.a.	Generate greenhouse gas (GHG) emissions (including methane), either directly or indirectly, that may have a significant impact on the environment?		Х		

Discussion: Greenhouse Gas Emissions (GHG) include hydrocarbon (carbon monoxide; CO2) air emissions from vehicles and machines that are fueled by gasoline. Project-related grading and construction of the RV park would result in the temporary generation of GHG emissions along travel routes and at the project site. In general, construction involves GHG emissions mainly from exhaust from vehicle trips (e.g., construction vehicles and personal vehicles of construction workers). Even assuming construction vehicles and workers are based in and traveling from urban areas, the potential project GHG emission levels from construction would be considered minimal considering the temporary duration of construction (approximately 10 to 12 month). Although the project scopes for the current and potential future projects are not likely to generate a significant cumulative amount of construction-related greenhouse gases, the mitigation measure is provided in Section 3.b. to minimize any impact to a less than significant level.

In terms of operational GHG, GHGs would be produced by the RVs travelling to and from the site. The trips to the proposed RV park would be along the typical shoreline route that many travelers in

	ake when visiting the California coast; theref ould not already be generated by the RVs a				HGs
	ce: Project Plans, Project Location.	,			
8.b.	Conflict with an applicable plan (including a local climate action plan), policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				Х
Efficie	Ission: The proposed project does not confercy Climate Action Plan (EECAP). As new able measures regarding green building, lar	construction, t	he project cor	nplies with the	
	ce: Project Plans, 2013 San Mateo County l opment Checklist.	Energy Efficier	ncy Climate Ad	ction Plan, EE	CAP
8.c.	Result in the loss of forestland or conversion of forestland to non-forest use, such that it would release signifi- cant amounts of GHG emissions, or significantly reduce GHG sequestering?				Х
host a	Ission: The project parcel and surrounding any such forest canopy. Therefore, the proje ce: Project Plans, Project Location, County	ect poses no in			o they
8.d.	Expose new or existing structures and/or infrastructure (e.g., leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels?				Х
locate	Ission: As discussed in Section 7.a.v., the ped about 500 feet from the coastline. Therefore for the resion due to rising sea levels.	-	-	-	
Sourc	ce: Project Location.				
8.e.	Expose people or structures to a significant risk of loss, injury or death involving sea level rise?				Х
locate	Ission: As discussed in Section 7.a.v., the period about 500 feet from the coastline. Therefore uff erosion due to rising sea levels.	-	-	-	
Sourc	ce: Project Location.			1	
8.f.	Place structures within an anticipated 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood			X	

hazard delineation map?			

Discussion: The project site is not located in an anticipated 100-year flood hazard area as mapped by the Federal Emergency Management Agency (FEMA). The project site and associated parcels are located in FEMA Flood Zone X, which is considered a minimal flood hazard (Panel No. 06081C0138F, effective August 2, 2017). FEMA Flood Zone X areas have a 0.2% annual chance of flooding, with areas with one (1) percent annual chance of flooding with average depths of less than 1-foot. Therefore, the project impact would be less than significant.

Source: Project Location, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C0138F, effective August 2, 2017.

8.g.	Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows?		х

Discussion: The project site is not located in an anticipated 100-year flood hazard area as mapped by FEMA. Pursuant to the discussion in Section 7.f., the project poses no impact.

Source: Project Location, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C0138F, effective August 2, 2017.

9.	HAZARDS AND HAZARDOUS MATERIA	LS. Would th	e project:		
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
9.a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive material)?				Х
Discu	ussion: The project does not involve the use	e, transport, or	disposal of h	azardous mate	erials.
Sour	ce: Project Plans.				
9.b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident condi- tions involving the release of hazardous materials into the environment?				Х
Discu	ussion: The use of hazardous materials is n	ot proposed fo	or this project.		
Sour	ce: Project Plans.				
9.c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within				Х

	one-quarter mile of an existing or proposed school?				
	ussion: The emission of hazardous materia ct. The project parcel is also not located with bl.				
Sour	ce: Project Plans, Project Location.				
9.d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
hazar	ussion: The project site and the remaining vertices of the project site and the remaining vertices materials compiled pursuant to Govern esult in the creation of a significant hazard to	ment Code Se	ection 65962.5	and therefore	
Sour	ce: Project Location, California Department	of Toxic Subs	tances Contro	l.	
9.e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?			X	
Half M Devel require by the of the accide and to occur stand vulne	Ussion: The project site is located approxim Moon Bay Airport, a public airport operated b lopment within certain proximities of the airport rements of the Final Half Moon Bay Airport L e City/County Association of Governments (C e ALUCP safety compatibility guidelines is to ents for people and property on the ground in o enhance the chances of survival of the occ is beyond the runway environment. The ALL lards that restrict land use development that rable populations in case of an aircraft accid	y the County I ort are regulate and Use Com C/CAG) on Oct minimize the r n the event of upants of an a JCP has safety could pose pa ent.	Department of ed by applicab patibility Plan tober 9, 2014. isks associate an aircraft acc aircraft involved y zone land us rticular hazard	Public Works. le policies and (ALUCP), as a The overall o ed with potentia ident near an d in an accident e compatibility is to the public	d adopted bjective al aircraft airport nt that y or to
where	ge majority of the project site is located in the e accident risk level is considered to be low. n this zone.				
the to accide of gen Furthe propo	all portion of the west corner of the project si total site) is located in the Airport Influence Are ent risk level is considered to be moderate to neral aviation aircraft accidents. The ITZ Zon ermore, the bathroom/laundry facility would b used use complies with the other ITZ develop CP such as locating the structure a maximum raining a less than 35-ft. building height. No	ea (Zone 2), th o high encomp ne does not pr oe located out oment conditio o distance from	ne Inner Turnir assing approx ohibit uses su side of this zor ns in the Safet n extended run	ng Zone (ITZ), imately seven ch as RV park ne. Additional ty Criteria Mat way centerline	where percent s. ly, the rix of the e and

The maximum height of any RVs parked in the ITZ zone would not exceed the height limit of the CCR zoning district (28 feet).

Based on the discussion above, staff has determined that the proposed project complies with the safety compatibility criteria and poses a less than significant impact.

Source: Project Plans, Project Location, 2014 Final Half Moon Bay Airport Land Use Compatibility Plan.

9.f.	Impair implementation of or physically		Х	
	interfere with an adopted emergency			
	response plan or emergency evacuation			
	plan?			

Discussion: The project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan. The proposed project would not impede, change the configuration of, or close any roadways that could be used for emergency purposes. However, as discussed in Section 17, the project would contribute additional traffic to existing roadways, but the level of impact is considered less than significant and does not require mitigation. Therefore, the project poses no impact.

Source: Project Plans, Project Location, County GIS Maps.

9.g.	Expose people or structures, either		х
	directly or indirectly, to a significant risk		
	of loss, injury or death involving wildland		
	fires?		

Discussion: The project site is not located within a Fire Hazard Severity Zone (State Responsibility Area). The project site is currently vegetated, undeveloped land which is located within an urban, developed area. Project implementation would result in the construction of a paved and landscaped site that would reduce risk of wildland fire in the area. Additionally, the project was reviewed by Coastside Fire Protection District (CFPD) and received conditional approval subject to compliance with the California Building Code for hard wired smoke detectors, an automatic fire sprinkler system, and ignition resistant construction and materials, among other fire prevention requirements. No further mitigation, beyond compliance with the standards and requirements of the CFPD, is necessary.

Source: Project Location, California State Fire Severity Zones Maps, Coastside Fire Protection District.

9	9.h.	Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?		Х
		nazaru ueimeauon map?		

Discussion: While no housing is proposed as part of this project, the project includes a total of 50-parking spaces for overnight stays within recreational vehicles. The project would not place structures within a 100-year flood hazard area as the project site is not located within a flood hazard zone that will be inundated by a 100-year flood.

Source: Project Plans.

			х		
e structures wi	thin a 100-yea	ar flood hazard	l area as		
Source: Project Location, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C0138F, effective August 2, 2017.					
			х		
•		•	-		
GIS Maps, Sa	n Mateo Coun	ty Hazards Ma	aps.		
		Х			
mudflow?Discussion: While no housing is proposed as part of this project and the bathroom and laundry facility building is the only structure, the project includes a total of 50-parking spaces for overnight stays within recreational vehicles. According to the San Mateo County General Plan Hazards Map, only a small portion of landscaping in the southwest area of the project parcel is located within a San Mateo County General Plan tsunami and seiche inundation area. Furthermore, the project site is not located in an area of high landslide susceptibility (which could contribute to mudflow).Source:Project Plans, Project Location, County GIS Maps, San Mateo County Hazards Maps.					
	e structures wi l zone that will leral Emergen ust 2, 2017. 9.i., no damo berefore, there GIS Maps, Sa GIS Maps, Sa cludes a total of e San Mateo st area of the nundation area which could co	e structures within a 100-yea cone that will be inundated leral Emergency Manageme ust 2, 2017. 9.i., no dam or levee is loca berefore, there is no risk of fl GIS Maps, San Mateo Count GIS Maps, San Mateo Count cludes a total of 50-parking s e San Mateo County Gener st area of the project parcel nundation area. Furthermore which could contribute to ma	ust 2, 2017.		

10.		Vould the proj	ect:		
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
10.a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash))?			X	

Discussion: As the proposed project would result in 1.17 acres of new or replaced impervious surface, the project has the potential to generate polluted stormwater runoff during project operation. The project would be required to comply with the County's Drainage Policy requiring postconstruction stormwater flows to be at, or below, pre-construction flow rates. Drainage analysis for the RV park was prepared by Sigma Prime, dated November 2018, detailing the proposed drainage system. The drainage reports state that the proposed detention system is designed such that post-development runoff would be less than or equal to the pre-development runoff, and no runoff is diverted from one drainage area to another. The reports state that there would be no appreciable downstream impacts and that current drainage patterns indicate minimal runoff from adjacent impervious surfaces onto the subject property. Runoff from the RV park would be filtered through and be detained by the proposed bioretention areas. This would result in a net decrease of the volume of runoff that ultimately reaches the Pacific Ocean through the existing storm drainage system.

The proposed project, including the discussed drainage report and plans, were reviewed and approved by the Department of Public Works. Based on these findings, the project impact will be less than significant.

Source: Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Harbor Village RV Park Drainage Report (dated November 2018).

groundwater recharge such that the project may impede sustainable groundwater management of the basin?		10.b.				Х	
--	--	-------	--	--	--	---	--

Discussion: The project site is currently vegetated, undeveloped land which allows surface water to infiltrate into the groundwater basin. The proposal includes creation of 34,967 sq. ft. of new impervious surface. Run-off from these new surfaces would be directed to on-site bio-retention systems that would allow surface water to infiltrate into the groundwater basin. The project site does not contain any wells nor does the project involve any new wells. The project would connect to Coastside County Water District (CCWD).

Source: Project Plans, Project Location, San Mateo County Hazards Maps, Sigma Prime Geotechnical Study (dated May 17, 2018).

10.c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:		
	i. Result in substantial erosion or siltation on- or off-site;	Х	

Discussion: The proposed project does not involve the alteration of the course of a stream or river. The project involves the construction of 1.17 acres of impervious area. The proposed development on the project parcel would include drainage features that have been reviewed and approved by the Department of Public Works. With Mitigation Measures 2 and 3 to address potential impacts during construction activities, the project would have a less than significant impact.

Source: Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Harbor Village RV Park Drainage Report (dated March 2018).

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Discussion: Pursuant to the discussion in Sections 10.a. and 10.c.i., the proposed project would have a less than significant impact.

Source: Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Harbor Village RV Park Drainage Report (dated March 2018).

iii.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or		Х	

Discussion: Pursuant to the discussion in Section 10.a., the proposed project would have a less than significant impact.

Source: Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Harbor Village RV Park Drainage Report (dated March 2018).

iv. Impede or redirect flood flows?			Х		
-------------------------------------	--	--	---	--	--

Discussion: Pursuant to the discussion in Sections 10.a. and 10.c.i, the proposed project would have a less than significant impact.

Source: Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Harbor Village RV Park Drainage Report (dated March 2018).

10.d.	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to		Х	
	project inundation?			

Discussion: Pursuant to the discussion in Section 9.k., the proposed project will have a less than significant impact.

Source: Project Plans, Project Location, County GIS Maps, San Mateo County Hazards Maps.

10.e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?		Х	
	•			

Discussion: Pursuant to the discussion in Sections 10.a. and 10.b, the proposed project would have a less than significant impact.

Source: Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Harbor Village RV Park Drainage Report (dated March 2018).

10.f. Significantly degrade surface or ground- water water quality?			Х		
--	--	--	---	--	--

Discussion: As discussed in Section 10.b, the project site does not contain any wells nor does the project involve any new wells. Thus, the project would pose a less than significant impact.

Source: Project Plans, Project Location, San Mateo County Hazards Maps, Sigma Prime Geotechnical Study (dated May 17, 2018).

1	0.g.	Result in increased impervious surfaces and associated increased runoff?	Х		

Discussion: Pursuant to the discussion in Section 10.c. and the cited mitigation measures, the proposed project would create new impervious surfaces but would not result in increased runoff and would have a less than significant impact.

Source: Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Harbor Village RV Park Drainage Report (dated March 2018).

11. LAND USE AND PLANNING. Would the project:						
	Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact		
11.a. Physically divide an established community?				Х		
 Discussion: The proposed RV park would result in infill development of a parcel on the boundary of an urban area surrounded by existing commercial uses to the north, south, and east, single-family residential uses to the north, and agricultural land to the west. The project does not include a proposal to divide lands or include development that would result in the division of an established community. Source: Project Plans, Project Location. 						
11.b. Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			Х			
Discussion: Staff has reviewed the project and has not found a conflict with applicable policies of the County's Local Coastal Program (LCP) and applicable CCR, MH, and Design Review (DR) District Zoning regulations as discussed in Section 1.f that would cause a significant environmental impact. Based on the discussion provided in Section 1.f, the project is in compliance with all						

applicable Design Review standards. Therefore, the project impact would be less than significant. **Source:** San Mateo County LCP; County Zoning Regulations.

11.c. Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?	X	

Discussion: The project would not serve to encourage off-site development of presently undeveloped areas. The project scope includes the construction of an RV park, a commercial recreation use. An RV park already exists within the vicinity of the project site, as well as restaurants and stores in the area to serve visitors. The project would be connected to already available municipal water from the Coastside County Water District and sewer services from the Granada Community Services District.

Source: Project Plans, Project Location, Coastside County Water District, Granada Community Services District.

12.	MINERAL RESOURCES. Would the project	ect:				
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact	
12.a.	Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?				Х	
resour	Discussion: The proposed project neither involves nor results in any extraction or loss of mineral resources. Therefore, the project poses no impact. Source: Project Plans.					
12.b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				Х	
Discussion: There are no known mineral resources on the project parcel; therefore, the proposed project would not result in the loss of availability of a locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan. Source: Project Plans.						

	Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impaca
13.a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			Х	
Discussion: The proposed project would not proposed project would generate short-term noise associated project site is not adjacent to any noise sensitive us schools. Additionally, the short-term noise from gr temporary, where volume and hours are regulated Mateo County Ordinance Code for Noise Control v demolition, construction, repair, remodeling, or gra a.m. to 6:00 p.m., weekdays and 9:00 a.m. to 5:00 activities on Sundays, Thanksgiving, and Christma activities to a maximum of 80-dBA level at any one regulations would limit potential temporary noise in Source: Project Plans, Project Location, San Mat	d with grading ses, such as r ading and cor by Section 4. which limits no ding of any re p.m., Saturda as and limits no e moment. Th npacts to a les	and construct residential use instruction active 88.360 (Exem- ise sources ac- al property to ays. The Sect oise levels pro- erefore, the C ass than signific	tion activities. es, hospitals o vities will be options) of the ssociated with the hours from ion prohibits s oduced by con county's noise cant level.	The r San n 7:00 such
13.b. Generation of excessive ground-borne vibration or ground-borne noise levels?		Х		
Discussion: Generation of excessive ground-bor grading and construction activities. However, cons severe vibrations, such as blasting and pile driving Measure 14 in Section 13.a. is provided to ensure Source: Project Plans, Project Location, San Mat	struction activi , would not oc that the impac	ties that typica ccur for the pro ct is less than	ally generate t oject. Mitigatio	he most
13.c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure to people residing or working in the project area to excessive noise levels?			Х	
Discussion: The project site is located approximate Half Moon Bay Airport, a public airport operated by project site is not located within the airport's noise would not be exposed to excessive noise levels. The impact.	/ the County E exposure con	Department of tours. Thus, v	Public Works. visitors to the	. The RV Park
Source: Project Plans, Project Location, 2014 Fin Plan.	al Half Moon	Bay Airport La	and Use Comp	atibility

14.	POPULATION AND HOUSING. Would the	e project:				
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact	
14.a.	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				Х	
and w	ssion: The proposed RV park is a visitor-se ould be served by existing utility infrastructu ation growth. Therefore, the project poses n	re and would t				
Sourc	e: Project Plans, Project Location.					
14.b.	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				Х	
	Discussion: The proposed RV park would be located on an undeveloped parcel; therefore, no existing housing would be displaced. Therefore, the project poses no impact.					
Sourc	Source: Project Plans, Project Location.					

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

		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
15.a.	Fire protection?				Х
15.b.	Police protection?			Х	
15.c.	Schools?				Х
15.d.	Parks?				Х
15.e.	Other public facilities or utilities (e.g., hospitals, or electrical/natural gas supply				Х

systems)?		

Discussion: The proposed project is to construct an RV park in a commercial area. The proposed project does not involve and is not associated with the provision of new or physically altered government facilities, nor will it generate a need for an increase in any such facilities. Stays at the RV Park would be limited to 28 days and would not increase the demand for schools in the area or significantly increase the demand for parks in the area, as discussed in Section 16, below. The project may result in increased calls to the Sheriff's Office due to the potential for increased noise, parties, trash, and alcohol consumption associated with commercial recreation uses. Additionally, the applicant proposes to have an on-site manager present at all times to monitor the RV Park and to enforce applicable policies relating to excessive noise, partying, trash, and alcohol consumption. The RV Park will also have an established quiet time between 10:00. P.M. and 8:00 A.M. In addition, the County Sherriff regularly patrols the area and the nearby Pillar Point RV Park. The on-site manager will only contact the Sheriff's Office if they cannot control a given situation.

Per the review of the Coastside Fire Protection District, the project would not disrupt acceptable service ratios, response times or performance objectives of the Coastside Fire Protection District. Therefore, the project poses no impact.

Source: Project Plans, Project Location, Coastside Fire Protection District.

16. RECREATION. Would the project:					
	Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact	
16.a. Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X	
Discussion: Stays at the RV Park would be limited the demand for parks in the area. The RV Park we options in the area and may increase visitation to e would be required to pay a Transient Occupancy T contribute to the County's General Fund which car County's tourism infrastructure. Source: Project Plans, Project Location.	ould add to ex existing State ax (TOT Tax)	tisting motels, and local park) for each stay	hotels, campin s. The proper which would	ng rty owner	
16.b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X	
Discussion: Pursuant to the discussion in Section than significant impact.	16.a., the pro	posed projec	t would have a	aless	
Source: Project Plans.					

		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
17.a.	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and parking?			Х	
by Hei and w analys during trips (7 Threst Impac propos	ssion: A Traffic Impact Analysis (Hexagon xagon Transportation Consultant, Inc., was as subsequently found to be sufficient by Drais, the proposed development would general the AM peak hour, 25 trips (16 incoming an 11 incoming and 13 outgoing) during the Satholds for Land Use Projects section of the T ts in CEQA document published by the Gov sed project "may be assumed to cause a lest ates or attracts fewer than 110 trips per day.	peer-reviewed (S associates. ate a total of 20 ad 9 outgoing) turday midday echnical Advis ernor's Office ss-than signific	for the Count According to trips (7 incorduring the PM peak hour. P ory on Evaluation of Planning ar	y by DKS Ass the Hexagon ming and 13 o peak hour, a rer the Screen ating Transport nd Research, f	ociates, utgoing) nd 24 ing tation the
Requi condit and w would operat analys contro indica Shopp	espect to compliance with the Department or rements, the project does not meet the threst ions in San Mateo County. The Hexagon ar ithout the project, the signalized study inters operate at an acceptable level of service (L ting at LOS D or better) during the AM, PM, sis results show that under all scenarios with illed study intersection would operate at LOS tes that vehicles on the stop-controlled appr bes at Harbor Village private driveway) would project traffic.	shold of a sign nalysis determ section, Cabrill OS C or better and Saturday and without th S C or better d oaches (the Pi	ificant adverse ined that unde o Highway (Sl r, with each in midday peak ne project, the uring all peak illar Point Harl	e impact on tra er all scenarios R 1)/Capistran dividual mover hours. In addi two-way stop hours. The ar bor Boulevard	s with no Road, ment ition, the - nalysis and the
and er guests vehicle pedes crossy buses	ding to the Hexagon analysis, the proposed mergency access to and circulation around to s/visitors to) generated by the new RV Park es on Capistrano Road, and thus would pos trians or bicycles. The Hexagon analysis no valks in the study area has good connectivit and other points of interest in the vicinity of ays in the vicinity of the project site are adec	the RV park. T would not resu e no significan otes that the ov y and provides the project site	The traffic trips ult in a signific t safety impact verall network s pedestrians e and that the	s (comprised o ant increase ir ct to other vehi of sidewalks a with safe route sidewalks and	of icles, and es to
the Co	dequacy of access, along Capistrano Road, ounty's Department of Public Works and the ided that such access complies with their re	Coastside Fire	e Protection D	istrict, who ha	
Road Thres	e: Project Plans, Project Location, Hexago Harbor Village RV Park Draft Traffic Impact holds for Land Use Projects section of the T ts in CEQA, DKS Associates Draft Peer Rev	Analysis (date echnical Advis	d January 18, ory on Evalua	, 2019), Scree ating Transport	ning tation

Noven	nber 30, 2018), Coastside Fire Protection D	istrict.						
17.b.	Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) <i>Criteria</i> <i>for Analyzing Transportation Impacts</i> ?				Х			
Vehicle consis	Discussion: Per CEQA Guidelines Section 15064.3, Subdivision (c) <i>Applicability</i> , the use of Vehicle Miles Traveled (VMT) will apply statewide on July 1, 2020; however, the project is consistent. Source: CEQA Guidelines Section 15064.3, Subdivision (c) <i>Applicability</i> .							
17.c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X				
	ssion: Pursuant to the discussion in Sectio ignificant impact.	n 17.a., the pr	oposed projec	ct would have	a less			
Source: Project Plans, Project Location, Hexagon Transportation Consultants, Inc. 100 Capistrano Road Harbor Village RV Park Draft Traffic Impact Analysis (dated January 18, 2019), Coastside Fire Protection District.								
17.d.	Result in inadequate emergency access?			Х				
	Discussion: Pursuant to the discussion in Section 17.a., the proposed project would have a less han significant impact.							
Sourc	e: Project Plans, Project Location, Coastsic	de Fire Protec	tion District.					

18.	TRIBAL CULTURAL RESOURCES. Would the project:					
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact	
18.a.	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					

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

Discussion: The project is not listed in a local register of historical resources, pursuant to any local ordinance or resolution as defined in Public Resources Code Section 5020.1(k), the project poses no impact.

Source: Project Location, California Register of Historical Resources.

agen supp to be set fo Reso (In aj Subo Code agen signit	source determined by the lead cy, in its discretion and orted by substantial evidence, significant pursuant to criteria orth in Subdivision (c) of Public ources Code Section 5024.1. oplying the criteria set forth in livision (c) of Public Resource e Section 5024.1, the lead cy shall consider the ficance of the resource to a ornia Native American tribe.)	X		
---	--	---	--	--

Discussion: A Sacred Lands File and Native American Contacts List Request was sent to the Native American Heritage Commission on March 22, 2019. A record search of the Native American Heritage Commission Sacred Lands File was completed, and the results were negative. Although the project is not subject to Assembly Bill 52 (Tribal Consultation), as the County has no records of written requests for formal notification of proposed projects within the County from any traditionally or culturally affiliated California Native American tribes, the County seeks to satisfy the Native American Heritage Commission's best practices to consult with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project to avoid inadvertent impacts on tribal cultural resources. On April 3, 2019, a letter was mailed via certified mail to the tribes identified by the Native American Heritage Commission. To date, no request for consultation was received. Therefore, while the project is not expected to cause a substantial adverse change to any potential tribal cultural resources pursuant to discussion in Sections 5.a. and 5.b., the following mitigation measures are recommended to minimize any potential significant impacts to unknown tribal cultural resources:

<u>Mitigation Measure 15</u>: Should any traditionally or culturally affiliated Native American tribe respond to the County's issued notification for consultation, such process shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation of the project, if the project has not yet been implemented.

<u>Mitigation Measure 16</u>: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

Mitigation Measure 17: Any inadvertently discovered tribal cultural resources shall be treated with

culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

Source: Project Plans, Project Location, Native American Heritage Commission, State Assembly Bill 52, California Historical Resources Information System Review Letter (dated March 26, 2019).

19. UTILITIES AND SERVICE SYSTEMS. Would the project:						
	Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact		
19.a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			Х			
Discussion: The proposed RV park would connect to and receive sewage services from the Granada Community Services District and water service from the Coastside County Water District. The proposed project does not involve or require any water or wastewater treatment facilities that would exceed any requirements of the Regional Water Quality Control Board. In addition, the project would connect to PG&E infrastructure for electric power.						
surface and has the potential to generate polluted permanent project would be required to comply w construction stormwater flows to be at, or below, p drainage system design, reviewed and approved	As discussed in Section 10.a., as the proposed project would result in 1.17 acres of impervious surface and has the potential to generate polluted stormwater runoff during project operation, the permanent project would be required to comply with the County's Drainage Policy requiring post-construction stormwater flows to be at, or below, pre-construction flow rates. The proposed drainage system design, reviewed and approved by the Department of Public Works, would accommodate the proposed project, and ensure pre-construction runoff levels are maintained or					
Source: Project Plans, Project Location, County Village RV Park Drainage Report (dated March 20		ıma Prime Ge	osciences, Inc	. Harbor		
19.b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				Х		
Discussion: The proposed RV park would have adequate water service connections from the Coastside County Water District. Therefore, the project poses no impact. Source: Project Plans, Project Location, Coastside County Water District.						

19.c. Result in a determination by the water treatment provider which or may serve the project that it adequate capacity to serve the projected demand in addition the provider's existing commitment.	n serves t has e project's to the hts?			X				
Discussion: The Granada Communi capacity to serve the project's sanitary								
Source: Project Plans, Project Location, Granada Sanitary District.								
19.d. Generate solid waste in exces or local standards, or in exces capacity of local infrastructure otherwise impair the attainmer waste reduction goals?	s of the , or		X					
Discussion: The construction of the project would generate some solid waste, both during construction and after completion (on an ongoing basis typical for that generated by the RV park use). Stays at the RV Park would be limited to 28 days. Similar to all other properties in the Midcoast area, the RV park would receive municipal trash and recycling pick-up service by Recology. The County's local landfill facility is the Corinda Los Trancos (Ox Mountain) Landfill, located at 12310 San Mateo Road (State Highway 92), a few miles east of Half Moon Bay. This landfill facility has permitted capacity/service life until 2034. Therefore, the project impact is less than significant.								
Source: San Mateo County Environn								
19.e. Comply with Federal, State, and management and reduction staregulations related to solid was	atutes and		X					
Discussion: Solid waste generated by the RV Park is expected to be minimal. Stays at the RV Park would be limited to 28 days. The project site would receive solid waste service by Recology. The landfill cited in Section 19.d. is licensed and operates pursuant to all Federal, State and local statutes and regulations as overseen by the San Mateo County Health System's Environmental Health Services. Therefore, the project impact would be less than significant.								

20.	WILDFIRE . If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:						
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact		
20.a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?				Х		

		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No
21.	MANDATORY FINDINGS OF SIGNIFICA	NCE.			
Sourc	e: Project Location, County GIS Maps.				
Additic	onally, the site is relatively flat.				
Discu	or drainage changes? ssion: Pursuant to the discussion in Sectio	n 20.a., the pr	oposed proied	t will have no	impact.
20.d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability,				Х
Sourc	e: Project Location, County GIS Maps.				
line or	ssion: The project does not involve a new other associated infrastructure that may examp impacts to the environment.				
	of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
20.c.	e: Project Location, County GIS Maps. Require the installation or maintenance				х
exacer wildfire	ssion: Pursuant to the discussion in Sectio rbate wildfire risks, and thereby expose proje or the uncontrolled spread of a wildfire.				from a
20.b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				Х
Sourc	e: Project Location, County GIS Maps.		1		r
0					

	Impacts	Mitigated	Impact	Impact
21.a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause		Х		

	substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			
measu signific		Ild result in po	tential impacts	
Sourc	e: All Applicable Sources Previously Cited	in This Docum	ient.	
21.b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively consider- able" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		Х	

significant impact, the proposed project would not have impacts that are cumulatively considerable. This project would have a less than significant cumulative impact upon the environment and no evidence has been found that the project would result in broader regional impacts. The Big Wave Wellness Center and Office Park, which has not yet started construction, is the only other major project proposed for the area. The proposed RV Park is a smaller scale project which will take significantly less time to construct at approximately 10 to 12 months. Additionally, traffic patterns associated with this recreation use are likely to be different than traffic patterns generated by the Office Park, which may follow standard commute times.

Source: All Applicable Sources Previously Cited in This Document.

_				
21.c.	Does the project have environmental	Х		l
	effects which will cause substantial			
	adverse effects on human beings, either			
	directly or indirectly?			
			1	1

Discussion: As discussed in the previous sections, the proposed project is to construct a new RV park. Based on the discussions in the previous sections where project impacts were determined to be less than significant, or mitigation measures were required to result in an overall less than significant impact, the proposed project would not cause significant adverse effects on human beings, either directly or indirectly.

Source: All Applicable Sources Previously Cited in This Document.

RESPONSIBLE AGENCIES. Check what agency has permit authority or other approval for the project.

AGENCY	YES	NO	TYPE OF APPROVAL
Bay Area Air Quality Management District		Х	
Caltrans	Х		Encroachment Permit
City		Х	
California Coastal Commission (CCC)		х	No separate permit required; local decision is appealable to CCC
County Airport Land Use Commission (ALUC)		Х	
Other: California Department of Housing and Community Development	х		Special Occupancy Park Permit
Regional Water Quality Control Board	x		Coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity
San Francisco Bay Conservation and Development Commission (BCDC)		х	
Sewer/Water District:		Х	
State Department of Fish and Wildlife		Х	
State Department of Public Health		Х	
State Water Resources Control Board		Х	
U.S. Army Corps of Engineers (CE)		Х	
U.S. Environmental Protection Agency (EPA)		Х	
U.S. Fish and Wildlife Service		Х	

MITIGATION MEASURES		
	Yes	<u>No</u>
Mitigation measures have been proposed in project application.	Х	
Other mitigation measures are needed.	Х	

The following measures are included in the project plans or proposals pursuant to Section 15070(b)(1) of the State CEQA Guidelines:

<u>Mitigation Measure 1</u>: All exterior lights shall be designed and located so as to confine direct rays to the subject property and prevent glare in the surrounding area. A photometric plan shall be

reviewed by the Planning Section during the building permit process to verify compliance with this condition. Prior to the final approval of the building permit, lighting shall be inspected and compliance with this requirement shall be verified.

<u>Mitigation Measure 2</u>: The applicant shall implement dust control measures, as listed below. Measures shall be included on plans submitted for the Building Permit and encroachment permit applications. The measures shall be implemented for the duration of any grading, demolition, and construction activities that generate dust and other airborne particles. The measures shall include the following:

- a. Water all active construction areas at least twice daily.
- b. Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.
- c. Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least 2 feet of freeboard.
- d. Apply water three times daily or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at the construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
- e. Sweep daily (preferably with water sweepers) all paved access roads, parking, and staging areas at the construction sites.
- f. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.
- g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- h. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour (mph).
- i. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- j. Replant vegetation in disturbed areas as quickly as possible.

<u>Mitigation Measure 3</u>: The applicant shall submit an Air Quality Best Management Practices Plan to the Planning and Building Department prior to the issuance of any grading permit "hard card" or building permit that, at a minimum, includes the "Basic Construction Mitigation Measures" as listed in Table 8-1 of the BAAQMD California Environmental Quality Act (CEQA) Guidelines (May 2011). The following Bay Area Air Quality Management District Best Management Practices for mitigating construction-related criteria air pollutants and precursors shall be implemented prior to beginning any grading and/or construction activities and shall be maintained for the duration of the project grading and/or construction activities:

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day.
- d. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour(mph).
- e. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485, of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.

- f. Roadways and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- g. Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485, of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- h. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.
- i. Minimize the idling time of diesel-powered construction equipment to two minutes.
- j. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

<u>Mitigation Measure 4</u>: Pre-Construction Nesting Bird Surveys. Prior to any Project constructionrelated activities (such as tree removal, grubbing, grading or other land disturbing activities), the Project proponent shall take the following steps to avoid direct losses of active nests, eggs, and nestlings and indirect impacts to avian breeding success:

If construction-related activities occur only during the non-breeding season, between August 31 and February 1, no nest surveys will be required.

During the breeding bird season (February 1 through August 31), a qualified biologist shall survey areas intended for construction-related activities in the Project Area for nesting raptors and passerine birds not more than 14 days prior to any ground-disturbing activity or vegetation removal. Surveys shall include all potential habitats within 250 feet of activities for raptors, and 50 feet of activities for passerines. If results are positive for nesting birds, a qualified biologist shall advise as to whether avoidance procedures are necessary, subject to review and approval by the Community Development Director. These may include implementation of buffer areas (minimum 50-foot buffer for passerines and minimum 250-foot buffer for most raptors) or seasonal avoidance. Once established, buffer areas around active nests may be reduced on a case-by-case basis based on guidance from a qualified biologist. The biologist shall consider factors such as topography, land use, Project activities, visual screening or line-of-site to active nest, and background noise levels when establishing a reduced nest buffer. The biologist shall advise whether full-time biological monitoring should be required during all activities that occur within reduced nest buffers in order to monitor the active nest(s) for signs of disturbance or "take."

<u>Mitigation Measure 5</u>: Environmental Training. All crewmembers shall attend an Environmental Awareness Training presented by a qualified biologist. The training shall include a description of the special-status species that may occur in the region, the project Avoidance and Minimization Measures, Mitigation Measures, the limits of the project work areas, applicable laws and regulations, and penalties for non-compliance. Upon completion of training, crewmembers shall sign a training form indicating they attended the program and understood the measures. Completed training form(s) shall be provided to the Project Planner before the start of project activities.

Mitigation Measure 6: Ground Disturbing Construction Activities. Ground disturbing constructionrelated activities shall occur during the dry season (June 1 to October 15) to facilitate avoidance of California red-legged frog. Regardless of the season, no construction shall occur within 24 hours following a significant rain event defined as greater than 1/4 inches of precipitation in a 24-hour period. Following a significant rain event and the 24-hour drying-out period, a qualified biologist shall conduct a preconstruction survey for California red-legged frog prior to the restart of any

Project activities.

<u>Mitigation Measure 7</u>: Wildlife Encounters. If any wildlife is encountered during Project activities, said encounter shall be reported to a qualified biologist and wildlife shall be allowed to leave the work area unharmed. Animals shall be allowed to leave the work area of their own accord and without harassment. Animals shall not be picked up or moved in any way.

Mitigation Measure 8: Vegetation Disturbance. Disturbance to vegetation shall be kept to the minimum necessary to complete the Project activities. Prior to the Current Planning Section's approval of the building permit for the project, the applicant shall submit a Biological Protection Plan, subject to Community Development Director review and approval, showing areas to remain undisturbed by construction-related activities and protected with recommended measures (such as temporary fencing with the type to be specified by a qualified biologist). To minimize impacts to vegetation, a qualified biologist shall work with the contractor to designate work areas (including all staging areas) and designate areas to remain undisturbed and protected.

Mitigation Measure 9: Vehicle Fueling and Maintenance. All fueling, maintenance of vehicles and other equipment, and staging areas should occur at least 50 feet from the drainage swale on the northeastern edge of the project area. The edge of the 50 feet buffer zone shall be marked using visible markers by a biologist no sooner than 30 days prior to the start of construction. Equipment operators and fueling crews shall ensure that contamination of the swale does not occur during such operations by restricting all activities to outside of the buffer zone. Prior to the start of construction-related activities, a plan to allow for prompt and effective response to any accidental spills shall be submitted and subject to review and approval by the Community Development Director. All workers should be informed of the importance of preventing spills, and of the appropriate measures to take should a spill occur.

Mitigation Measure 10: Erosion and Sediment Control BMPs. Prior to the Current Planning Section's approval of a building permit, the applicant shall revise and submit the Erosion and Sediment Control Plan, subject to review and approval by the project planner. The plan shall have been reviewed by a qualified biologist prior to submittal to the County. The plan shall include measures to prevent runoff to the drainage swale on the northeastern edge of the project area and demonstrate compliance with other erosion control requirements and mitigation measures. This shall include the installation of silt fences or straw wattles between work areas and any water sources such as the drainage swale, and around any spoil piles (e.g., loose asphalt, dirt, debris, construction-related materials) that could potentially discharge sediment into habitat areas. If straw wattles are used, they shall be made of biodegradable fabric (e.g., burlap) and free of monofilament netting.

Mitigation Measure 11: In the event that cultural, paleontological, or archaeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archaeologist and of any recording, protecting, or curating shall be borne solely by the project sponsor. The archaeologist shall be required to submit to the Community Development Director, subject to review and approval, a report of the findings and methods of curation or protection of the resources. No further grading or site work within the area of discovery shall be allowed until the preceding has occurred. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

<u>Mitigation Measure 12</u>: The applicants and contractors must be prepared to carry out the requirements of California State law with regard to the discovery of human remains during construction, whether historic or prehistoric. In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately, and the County coroner

shall be notified immediately. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

<u>Mitigation Measure 13</u>: The design of the proposed development (upon submittal of the Building Permit) on the subject parcel shall generally follow the recommendations cited in the Geotechnical Study prepared by Sigma Prime Geosciences, Inc. and its subsequent updates regarding seismic criteria, grading, slab-on grade construction, and surface drainage. Any such changes to the recommendations by the project geotechnical engineer cited in this report and subsequent updates shall be submitted for review and approval by the County's Geotechnical Engineer.

Mitigation Measure 14: At the time of building permit and encroachment permit application, the applicant shall revise as necessary and submit for review and approval the Erosion and Sediment Control Plan such that it shows how the transport and discharge of soil and pollutants from and within the project site would be minimized. The plans shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plans shall include measures that limit the application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

- a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.
- b. Minimize the area of bare soil exposed at one time (phased grading).
- c. Clear only areas essential for construction.
- d. Within five (5) days of clearing or inactivity in construction, stabilize bare soils through either non-vegetative Best Management Practices (BMPs), such as mulching, or vegetative erosion control methods, such as seeding. Vegetative erosion control shall be established within two (2) weeks of seeding/planting.
- e. Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and to control dust.
- f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.
- g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 feet, or to the extent feasible, from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.
- h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.
- i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.
- j. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5 acres or less per 100 feet of fence. Silt fences shall be inspected regularly, and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.

- k. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved erosion control plan.
- I. No erosion or sediment control measures will be placed in vegetated areas.
- m. Environmentally-sensitive areas shall be delineated and protected to prevent construction impacts per Mitigation Measure 10.
- n. Control of fuels and other hazardous materials, spills, and litter during construction.
- o. Preserve existing vegetation whenever feasible.

<u>Mitigation Measure 15</u>: Should any traditionally or culturally affiliated Native American tribe respond to the County's issued notification for consultation, such process shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation of the project, if the project has not yet been implemented.

<u>Mitigation Measure 16</u>: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

<u>Mitigation Measure 17</u>: Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

DETERMINATION (to be completed by the Lead Agency).

On the basis of this initial evaluation:

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

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because of the mitigation measures in the discussion have been included as part of the proposed project. A MITIGATED NEGATIVE DECLARATION will be prepared.

Х

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

Signature

September 18, 2019

Project Planner

Date

(Title)

RSP:cmc - RSPDD0168_WCV.DOCX

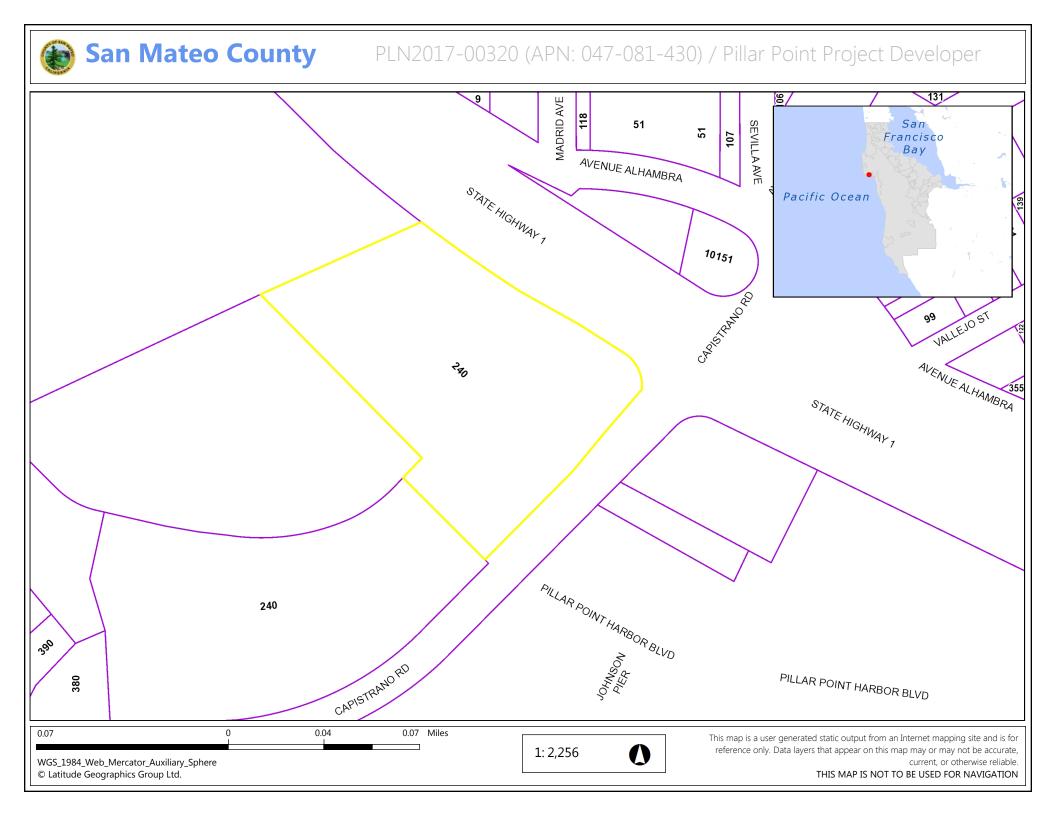
ATTACHMENTS

- A. Location Map
- B. Project Plans/Proposed RV Park Rules
- C. SWCA Biological Resources Evaluation (dated November 2017)
- D. California Historical Resources Information System Review Letter (dated April 10, 2019)
- E. Holman & Associates Archeological Resources Reconnaissance Report for the Harbor Village RV Park Project
- F. Sigma Prime Geotechnical Study (dated May 17, 2018)
- G. Sigma Prime Geosciences, Inc. Harbor Village RV Park Drainage Report (dated March 2018)
- H. Hexagon Transportation Consultants, Inc, 100 Capistrano Road Harbor Village RV Park Draft Traffic Impact Analysis (dated January 18, 2019)
- I. DKS Associates Draft Peer Review of Princeton Harbor RV Park TIA (dated November 30, 2018)
- J. Project EECAP Development Checklist

ATTACHMENT A



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT





San Mateo County Planning & Building Dept.

Owner/Applicant:

Attachment:

ATTACHMENT B



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

PRINCETON HARBOR RV PARK PLAN SUMMARY

August 2nd, 2017

As per suggested in the staff summary letter dated June 24th, 2015 in order to reduce the visual impact along the entrance to Capistrano road, the tent sites and the bath/laundry building have been relocated to the front of the project along side Capistrano road accompanied with an adjacent three foot high berm with shrubs that will reach a maximum hight of six feet and trees to grow a maximum of fifteen to eighteen feet. With the RV site being one to two feet lower than Capistrano road and the RV height's being between eight and ten feet high this landscape buffer will help shield the RV's from the public entering into the Princeton area.

As the site lighting photometry plan shows we are installing the minimal amount of lighting to allow the RV's and autos to navigate the park safely at night. The plan also shows that there will be very little, if any off site light spill. The lights will be equipped with motion sensors to turn on and off as vehicles pass by further reducing night time light spill. The lights will also have the ability to be dimmed or brightened by means of a hand held remote control unit.

The project signage will be located both on the existing primary sign at the corner of Cabrillo Highway and Capistrano Road, and the smaller existing sign located at the entrance to the Oceano Hotel parking lot.

As per staff recommendations the plan now has two tent and two RV handicap sites, and two car/van handicap parking spaces. We have added an additional trash enclosure area both with gated six foot high walls.

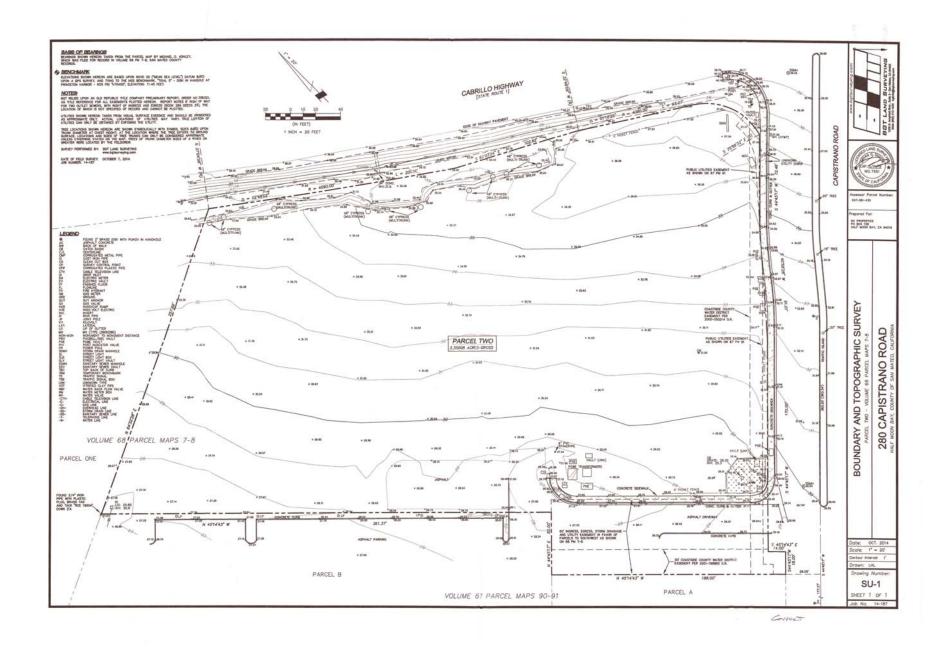
The Park will have an on-site manager on duty 24/7.

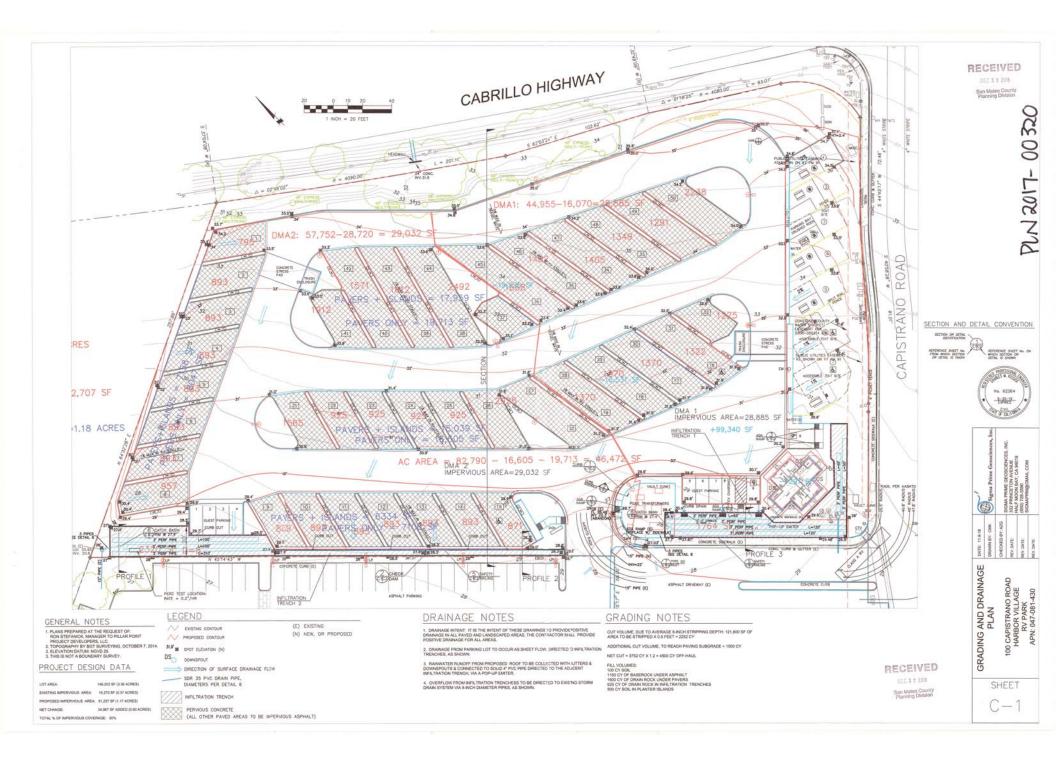
The maximum stay will be enforced at 28 days, with no long term stay beyond that allowed. No RV will be allowed to stay at the park that is older than 12 years, unless in the opinion of the park manager RV's older than that are in a well kept condition.

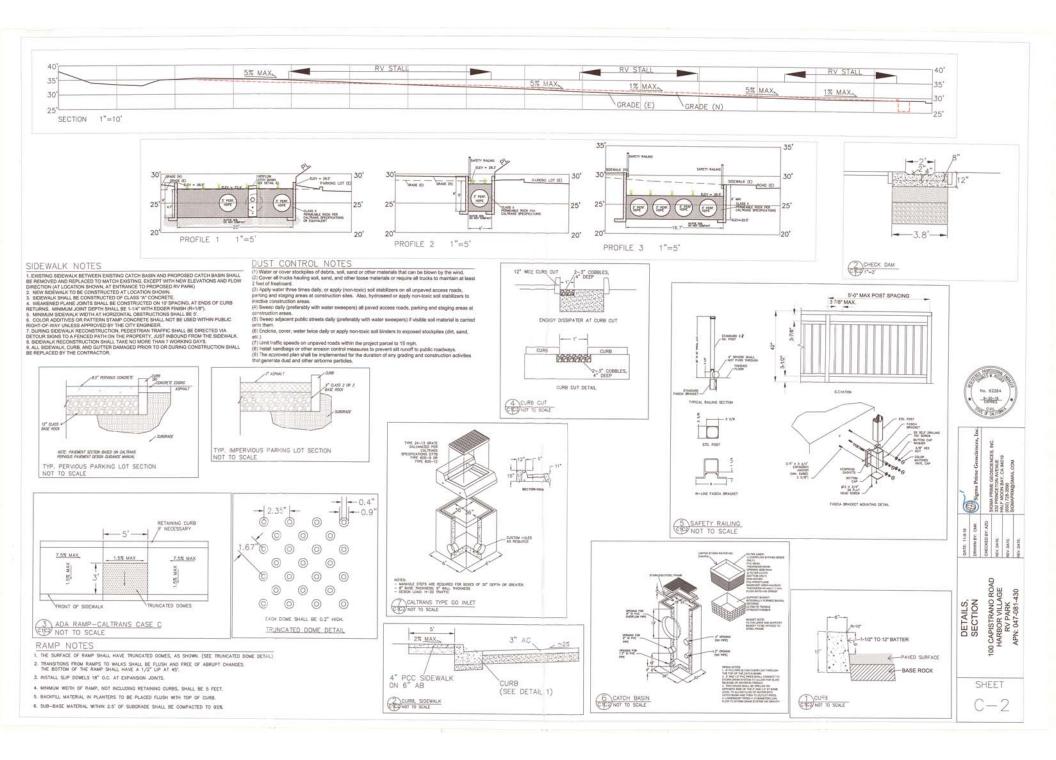
Quiet hours will be between ten pm and eight am.

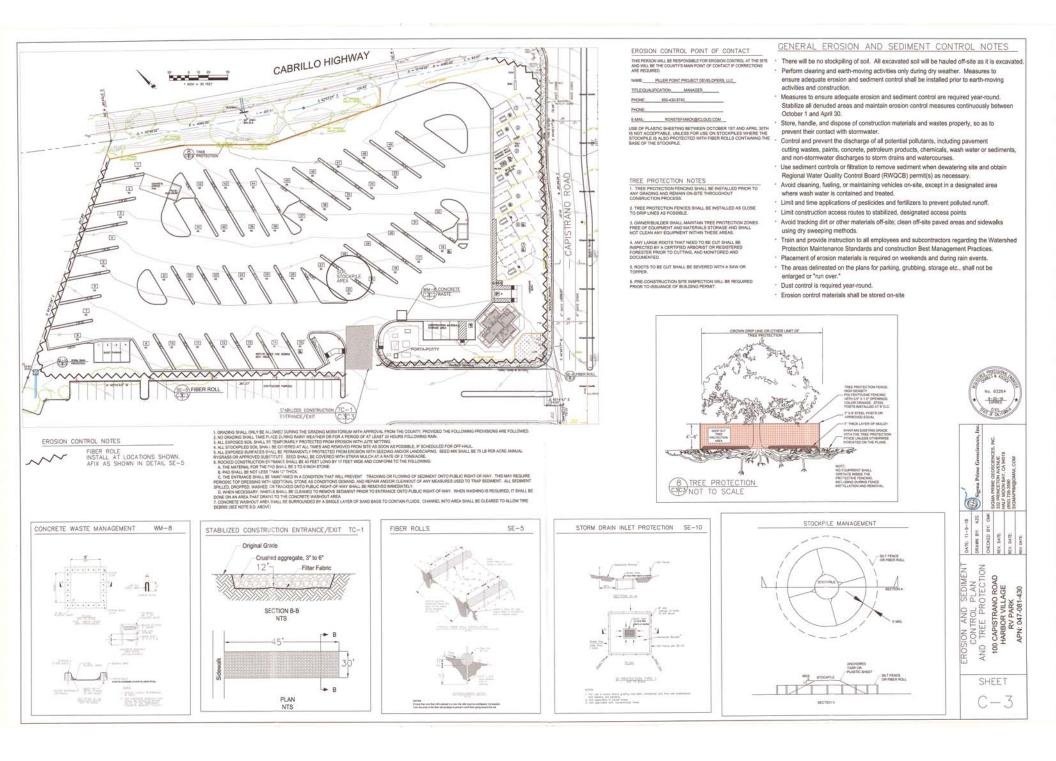
The parks landscaping will be maintained on a weekly basis.



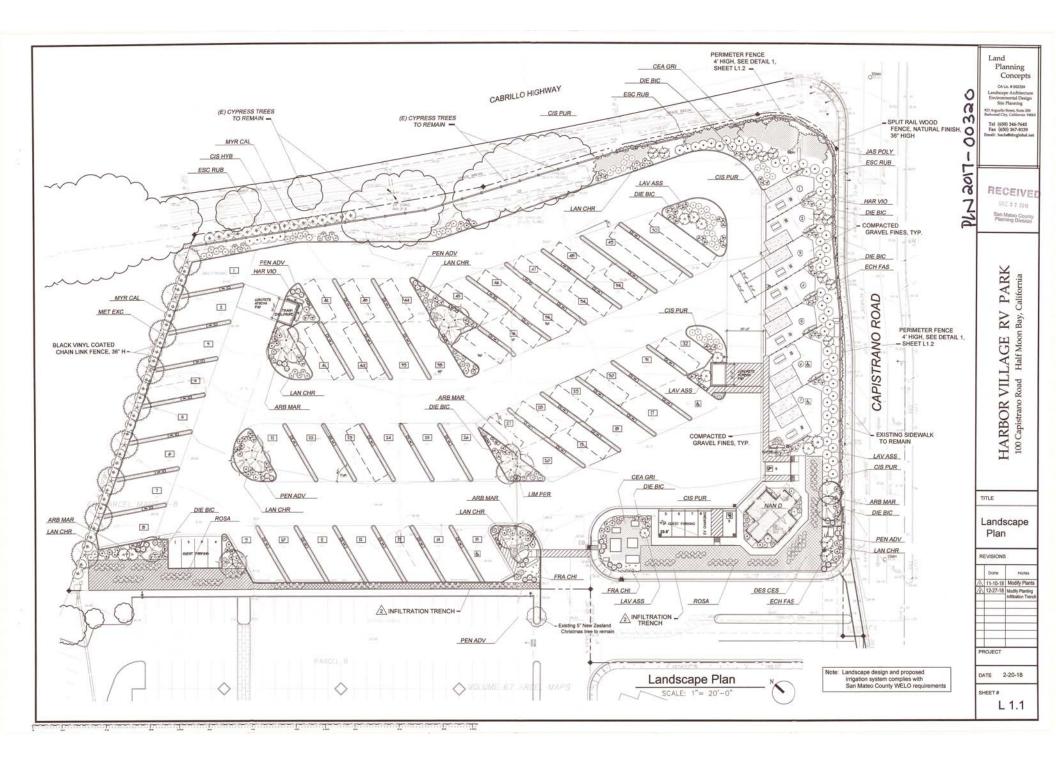


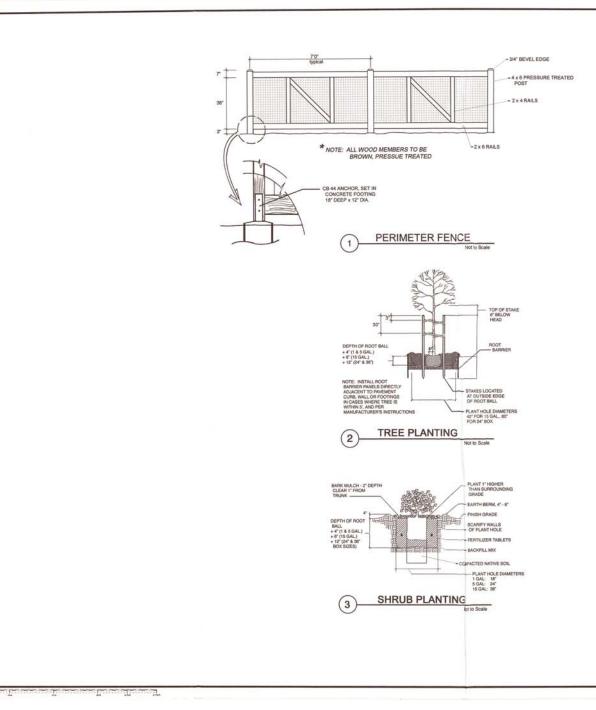












No.	Botanical Name	Common Name	QY.	Size	WI	Plant Type/ Remarks
ARB MAR	Arbutus 'Marina'	Strawberry Tree	3	24° Box	L	Evgn Tree
			18	15 Gal	L	Evgn/ plant in group
METEXC	Metrosideros excelsus	New Zealand Christmas Tree	9	24" Box	L	Evgn Tree
DIE BIC	Dietes bicolor	Forthight Lily	73	1 Gal	L	Low Shrub
CIS HYB	Cistus hybridus	White Rockrose	26	5 Gal	L	Evgn Shrub
CIS PUR	Cistus purpureus	Pink Rockrose	43	5 Gal	L	Evgn Shrub
ESCA RUB	Escalionia rubra	Red Escallonia	54	5 Gal	L	Evgn Shrub
ECH FAS	Echium fastuosum	Pride of Madeira	10	5 Gal	L	Evgn Shrub
HAR VIO	Hardenbergia violacea	Hardenbergia	10	15 Gal.	M	Evgn Shrub/ Españe
LAN CHR	Lantana 'Christine'	NCN	84	5 Gal	L	Evgn Shrub
LAVASS	Lavatera assurgentifolia	Tree Mallow	14	5 Gal	L	Evgn Shrub
LIM PER	Limonium perezii	Sea Thrift	44	1 Gal	L	Perennial
MYR CAL	Myrica californica	Pacific Wax Myrtle	42	5 Gai	M	Evgn Shrub
NAN DOM	Nandian domestica	Heavenly Bamboo	2	5 Gal	L	Evgn Shrub
PEN ADV	Pennisetum advena	Red Fountain Grass	53	5 Gal	L	Grassy Plant
	'Rubrum'					
JAS POLY	Jasminum polyanthem	Pink Flowering Jasmine	28	5 Gal	м	Evgn Vine
CEA GRI	Ceanothus griseus	Carmel Creecer	84	1 Gai	L	Groundcover
	'Horizontalis'			- Com		Choundourter
FRA CHI	Fragaria chiloensis	Ornamental	14	Flat	ι	Groundcover
_		Stawberry			-	
			1			INFILTRATION
						TRENCH
No.	Botanical Name	Common Name	Qty*	Size	WI	Plant Type/ Remarks
ROSA	Rosa californica	California Wild Rose	170	1 Gal	L	Evgn Shrub
DES CES	Deschampsia cespitosa	Tufted hairgrass	224	1 Gai	L	Evgn Shrub

Land Planning Concepts CA Liz # 002334 Landscape Architectun Environmental Design Site Planning

23 Arguello Steert, Suite 200 Redwood City, California 140 Tel (650) 346-7645 Fax (650) 367-8139 imail: baclathsbeglobal.

PLANTING NOTES

CONTRACTOR SHALL CONTACT UNDERGROUND SERVICES ADMINISTRATION PRIOR TO 1. EXCAVATION AND GRADING

- ALL PLANTING AREAS SHALL BE CLEARED OF WEEDS AND OTHER DEBRIS. THE CONTRACTOR SHALL VERIFY WITH THE OWNER WHICH EXISTING PLANTS ARE TO REMAIN. EXISTING PLANTS TO BE REMOVED SHALL BE VERIFIED WITH OWNER PRIOR TO REMOVAL. ALL BY IN PROJECT AREA SHALL BE REMOVED; IVY SHALL BE SPRAYED WITH HERBICIDE TWO WEEKS PRIOR TO 2 REMOVAL
- REMOVAL OF EXISTING TREES SHALL BE CONFIRMED WITH THE LANDSCAPE ARCHITECT AND OWNER IN THE FIELD PRIOR TO REMOVAL. EACH TREE TO BE REMOVED SHALL HAVE A RED OR GRANGE THATE SECURET DO A BRANCH. AND THE TUNK SHALL BE CLEARLY WANKED WITH PANT OF THE SAME COLOR. THE CONTRACTOR SHALL SUPPLY THE MATERIALS FOR MARRING THE TREES AND COORDINATE WITH THE LANDSCAPE ARCHIECT. THE TREE STUMPS AND ROOTS SHALL ALSO BE REMOVED, AND SUFROUNDING SUFFACE RE-GRADED AND RESTORED. 3.
- 4. SOIL TESTING SHALL BE UNDERTAKEN BY THE CONTRACTOR, AND PERFORMED BY A CERTIFIED LABORATORY. A COPY OF THE REPORT SHALL BE PROVIDED TO THE OWNER AND LANSCALE REPORTED. THE RECOMMENDATIONS FOR AMENDMENTS AND FERTILIZATION SHALL REFLECT THE NUTRIENT REQUIREMENTS OF SPECIFIED PLANT SPECIES
- SOIL AMENDMENTS SHALL BE FREE OF DEBRIS SUCH AS LITTER, BROKEN CLAY POTS, AND OTHER FOREION MATERIAL. ROCKS LARGER THAN ONE INCH DIAMETER WILL NOT BE PERMITTED. SOIL AMENDMENTS SHALL HAVE THE FOLLOWING CONTENT: REDWOOD NITRIFIED COMPOST 40%, COARSE SAND 30%, BLACK TOPSOIL 30%.
- PLANT HOLES SHALL BE DOUBLE THE SIZE OF THE CONTAINER (generally). THE WALLS AND BASES OF PLANT HOLES SHALL BE SCARFFED. HOLES SHALL BE BACKFILED WITH THE FOLLOWING MIXTURE'S 50% TO 20% IMPORTED SOLT DE XISTING SOLL
- 7. SOIL BERMS SHALL BE FORMED AROUND ALL PLANTS 1 GALLON SIZE AND LARGER. BASINS SHALL BE MULCHED WITH A 2" LAYER OF BARK CHIPS, MINIMUM OF 1" IN SIZE.
- 8. ALL PLANTS SHALL BE FEBTILIZED, FEBTILIZER SHALL BE COMMERCIALLY AVAILABLE TYPE. A CONTRET SHALL BE FERRI LISEL, FOR ULCER SHALL CONSIDER OULL MARKED ALL MARKED EN SHALL DE CONTRET DE LISEL FOR ULCER SHALL DE APPLICATION DE LISEL DE LIS
- 9.
- 11. ROOT BARRIERS FOR ALL TREES WITHIN EIGHT FEET OF PAVEMENT SHALL BE INSTALLED. BARRIERS SHALL BE PLASTIC AND EXTEND COMPLETELY AROUND THE ROOT BALL. THE DIAMETER OF THE BARRIER SHALL BE 42". THE BARRIER SHALL EXTEND TO A DEPTH OF 24".
- 12. ESPALIER PLANTS SHALL BE FURNISHED WITH A PREMANUFACTURED WOOD TRELLIS. THE TRELLIS SHALL BE SECURELY FASTENED TO TWO PRESSURE TREATED 2" DIAMETER POLES.
- 13. PLANTING AREAS SHALL BE COVERED WITH A THREE INCH LAYER OF BARK CHIPS.

REVISIONS Note Date 11-10-18 Modify Plan List 12-27-18 Modily Planting Infiltration Trem

Landscape

Details

TITLE

PROJECT DATE 2-20-18 SHEET #

L 2.1



1

LOT AREA	146,202 SF
EXISTING IMPERVIOUS AREA.	16,270 BP
PROPOSED IMPERVIOUS AREA	100,247 SF
TOTAL POST-PROJECT IMPERVO	US AREAS: 116,517.5/
NET CHANGE	63.977 SF ADDED
TOTAL % OF PARCEL COVERAGE	



			2		Sec.
Hydrozone		Hydrozone Area (HA) (ft ²)	Plant Factor ³ (PF)	Plant Water Use Type	PF x HA (ft ²)
North Side	Zone 1	1,285	0.30	Low	38
East Side/ highway	Zone 2	4,440	0.30	Low	1,33
Corner w/ Sign	Zone 3	2,960	0.30	Low	88
Capistrano Road	Zone 4	3,960	0.30	Low	1,18
Corner Access Road	Zone 5	748	0.30	Low	22
Entry RV park	Zone 6	1,069	0.30	Low	32
Corner NW	Zone 7	1,500	0.30	Low	45
Interior Planters	Zone 8	4,760	0.30	Low	1,42
	Zone 9				+
	Zone 10		₩1 日 4		
	Zone 11				-
	Zone 12				-
	Zone 13				-
	Zone 14				-
	Zone 15		1		-
	Zone 16				-
	Zone 17				
	Zone 18				-
	Zone 19				
	Zone 20				
	Zone 21	1			-
Hydrozone Area (H					6,21
Special Landsc			1.00	High	4,26
	ape Area (TLA)				10,48
Irrigation Effic	iency (IE)_Drip	0.81			
			MAWA1 =	432,960.87	gal.
				57,878.64	and the second se
				578.79	
			1		acre-ft.
					millions of gal.
			ETWU ² =	327,494.79	
		APR DO CONTRACTOR		43,779.83	
ETW	I complies with	MAWA	19 Mar 2	437.80	and the second se
				1.01	acre-ft.
				0.33	millions of gal.
³ Plant Water Use Types	Plant Factor				
Very Low Low	0-0.1				
Medium	0.4 - 0.6	(ETo) x (0.62) x (0.5	5 x HA)+(0.45	x SLA)], where ETo	44.24
High	0.7 - 1.0	(ETo) x (0.62) x (IPF			

Land Planning Concepts CA Le 20233 Landscape Architecture Environmental Design Site Flanning 923 Arguebs three Suite 202 Gebeword (67, Collamass Bas Tel (650) 346-7645 Fax (650) 346-7645

HARBOR VILLAGE RV PARK 100 Capistrano Road Half Moon Bay, California

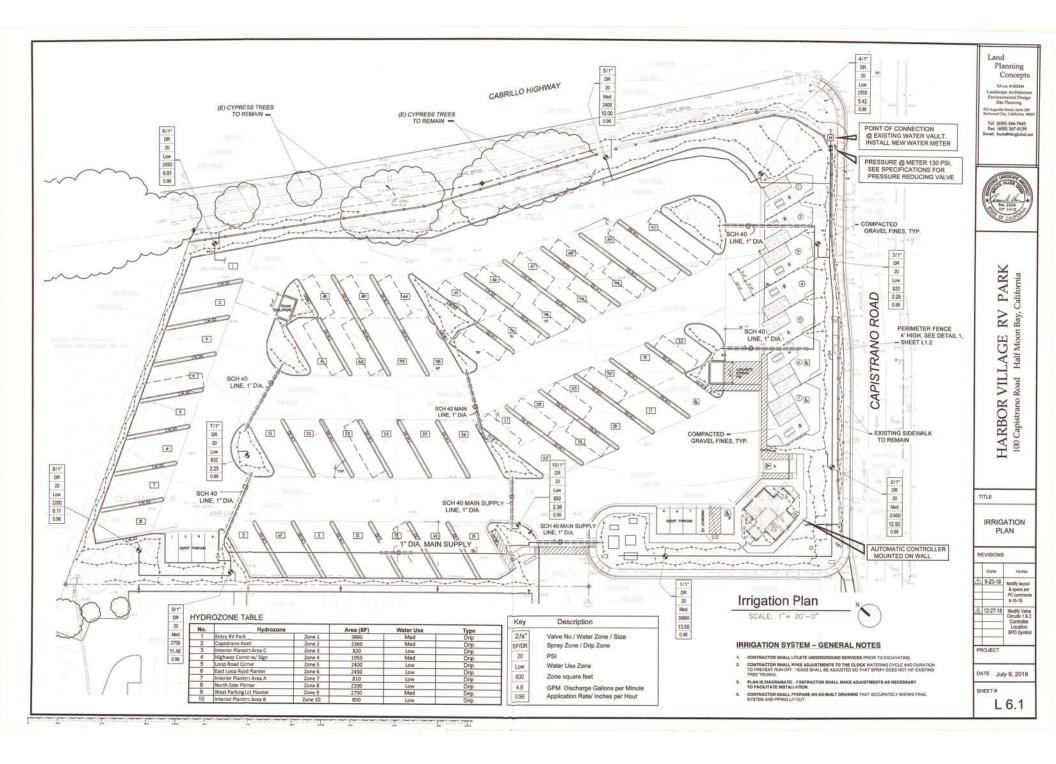
TITLE

Hydrozone
MWELO
Plan

REVISIONS

REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS
REVISIONS

SHEET# L 3.1

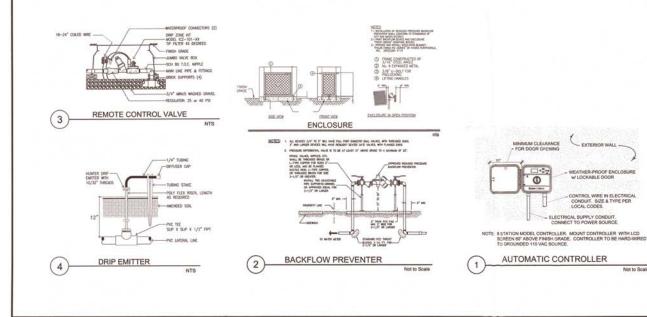


Estimated Total Water Use ETWU

Reference Evapotranspiration (ETo)	33.70	half moon bay	1			2
	ETWU	ETWU requirement	ETWU requirement	ETWU requirement	MAWA requirement	ETWU requirement	
Hydrozone#/Planting Description	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Landscape Area (LA) (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)
Regular Landscape Areas	A						
1) Entry RV Park	0.5	Drip	0.81			2,395.06	50,04
2) Capistrano Road	0.5	Drip	0.81			1,456.79	30,43
3) Interior Planters Area C	0.3	Drip	0.81			303.70	6,34
4) Highway Corner w/ Sign	0.5	Drip	0.81		1,950	1,203.70	25,150
5) Loop Road Corner	0.2	Drip	0.81	0.247	2,400	592.59	12,38
6) East Loop Road Planter	0.3	Drip	0.81	0.370	2,450	907.41	18,959
7) Interior Planters Area A	0.3	Drip	0.81	0.370	810	300.00	6,268
8) North Side Planter	0.3	Drip	0.81	0.370	2,200	814.81	17,025
9) West Parking Lot Planter	0.5	Drip	0.81	0.617	2,750	1,697.53	35,468
10) Interior Planters Area 8	0.3	Drip	0.81	0.370	850	314.81	6,578
			Tota	als	20,470	9,986.42	
Special Landscape Areas (SLA): Rec	ycled Water						
1) low water use plants				1		0	0 0
2) medium water use plants	The second of the			1		0	0
3) medium water use plants				1			0
				Totals			0
					Estimated Total	Water Use (ETWU	208,65
				Maximu	m Allowed Water	Allowance (MAWA	299,390.13
							Complies

Maximum Applied Water Allowance MAWA

(Et) (0.62) [0.7 x LA) + (0.3 x SLA)] = 299,390.13



SYMBOL	MODEL	DESCRIPTION IRRITROL REMOTE CONTROL VALVE W PRESSURE REGULATION KBI PVC BALL VALVE					
9	700-OMR-100 SERIES/ LT-T SERIES						
975XL2-1*		WILKINS LEAD-FREE REDUCED PRESSURE BACKFLOW PREVENTER					
С	MC-24E PROMAX-UA	IRRITROL 24 STATION MC-E CONTROLLER - WALL MOUNT PRO MAX UNIVERSAL MAINTENANCE REMOTE KIT					
+		DRIP TUBING TORO T-EHD1645 FLUE STRIPE HOSE WITH TORO LOC-EZE FITTINGS. 4" COVER. DISTRIBUTION TUBING. TORO EHW0437-010 1/4" HOSE.					
#</td <td></td> <td>HOSE BIBB. 3/4" BRASS ON 18" H GALV RISER</td>		HOSE BIBB. 3/4" BRASS ON 18" H GALV RISER					

Irrigation Legend

- EXTERIOR WALL -

CONTROL WIRE IN ELECTRICAL CONDUIT. SIZE & TYPE PER LOCAL CODES.

Not to Scale

W/LOCKABLE DOOR

IRRIGATION INSTALLATION NOTES

- CONTRACTOR SHALL LOCATE UNDERGROUND SERVICES PRIOR TO PERFORMING ANY EXCAVATION. 1.
- AN APPROVED BACKFLOW PREVENTER SHALL BE INSTALLED PER LOCAL CODES AND MANURACTURER'S INSTRUCTIONS. THE BACKFLOW DEVICE SHALL BE A REDUCED PRESSURE DOUBLE OFFICE VTPR INSTALLED NA LOCKABLE BERLOGSURE. THE BACKFLOW DEVICE SHALL SE LOCATED IN THE VICINITY OF THE WATER METER, IF POSSIBLE. 2

IRR PERF 503

IFIN PERP 503

- 3. A MANUAL SHUT OFF VALVE SHALL BE REQUIRED, AS CLOSE AS POSSIBLE TO THE POINT OF THE WATER SUPPLY, TO MINIMIZE WATER LOSS IN CASE OF AN EMERGENCY OR ROUTINE
- PRESSURE REGULATING DEVICES ARE REQUIRED IF WATER PRESSURE IS BELOW OR IN EXCESS OF RECOMMENDED OPERATING PRESSURE OF SPECIFIED IRRIGATION DEVICES 4.
- 5. MAIN SUPPLY LINES SHALL BE PVC SCHEDULE 40, SIZE AS NOTED, BURIED 18" DEEP. LATERAL SUPPLY LINES SHALL BE BURIED 12" DEEP. FLEXIBLE PIPE TUBING SHALL BE BURIED 4" OFF.
- REMOTE CONTROL VALVES BIALL BE 1" WHEN CONVENTED TO MAIN SUPPLY LIVES OF SAME SEZ, AND SUPPLY A TOTAL INVENTED FOR TO EXCEED 14 GALLONE FER MINUTE DISCHARGE FOR EACH CREDUT. FOR MARS SUPPLY LIVES OF 1-12° DIMATER, THE CORTINUTE MAY INTO A SUPPLY AND A THE CONTROL FOR THE ANALY CREDIT FLOW NATE NOT TO EXCEED 30 GPL, VALVES SHALL BE MANUFACTURED BY TOPO OR HAITET AND NATE INOT TO EXCEED 30 GPL, VALVES SHALL BE MANUFACTURED BY TOPO OR HAITET AND NATE INOT TO EXCEED 30 GPL, VALVES SHALL BE MANUFACTURED BY TOPO OR HAITET AND NATE INOT TO EXCEED 30 GPL, VALVES SHALL BE MANUFACTURED BY TOPO OR HAITET AND NEEDLED IN THE PART FOR THE MANUFACTURED BY TOPO OR 6.3
- DRIP IRRIGATION CIRCUITS SHALL BE FURNISHED WITH A PRESSURE REGULATING DEVICE IF THE WATER PRESSURE IS BELOW OF EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES. AN INLINE FLITTER SHALL BE INSTALLED ADADCENT TO THE CONTROL VALVE. THE END OF EACH SUPPLY CIRCUIT SHALL BE FURNISHED WITH A BALL VALVE. 7.
- AN INTEGRATED CHECK VALVE SHALL BE INSTALLED INTO THE LOWEST SPRINKLER HEAD ON EACH CIRCUIT. CHECK VALVES OR ANTI-DRAIN VALAVE ARE REQUIRED ON ALL SPRINKLER HEADS WHERE LOW POINT DRAINAGE COULD COCUR. 8
- CONTRACTOR SHALL FLUBH ALL PIPES PRIOR TO INSTALLING SPRINGLER HEADS AND PRESSURE TEST THE MAIN SUPPLY LINE. A THOROUGH CHECK FOR ANY LEAKS SHALL BE PERFORMED. THE ENTIFIE SYSTEM SHALL BE CHECKED FOR LEAKS PRIOR TO BACKFILLING OF TRENCHES. 9.
- 10. CONTRACTOR SHALL MAKE ADJUSTMENTS TO THE CLOCK WATERING CYCLE AND DURATION TO PREVENT RUN-OFF. HEADS SHALL BE ADJUSTED SO THAT SPRAY DOES NOT HIT EXISTING TREE TRUNKS.
- 11, THIS PLAN IS DIAGRAMATIC. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NECESSARY TO ENSURE PROPER COVERAGE AND WATERING TO EACH PLANT. A SUFFICIENT NUMBER OF SPRINKLER HEADS AND EMITTERS SHALL BE FURNISHED AT THE CONTRACTOR'S EXPENSE TO ACHEVE THIS.

COMPLIANCE NOTES

- A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES. T
- A CERTIFICATE OF COMPLETION SHALL BE FILLED OUT AND CERTIFIED BY EITHER THE DESIGNER OF THE LANDICAPE PLANS, IRRIGATION PLANS, OR THE LICNENSED LANDICAPE CONTRACTOR FOR THE PROJECT. 2
- AN IRRIGATION AUDIT REPORT BY A CERTIFIED IRRIGATION AUDITOR SHALL BE COMPLETED AT THE TIME OF FINAL INSPECTION AND SUBMITTED WITH THE CERTIFICATE OF COMPLETION.
- AT THE TIME OF FINAL INSPECTION, THE PERMIT APPLICANT MUST PROVIDE THE OWNER OF THE PROPERTY WITH A CERTIFICATE OF COMPLETION, CERTIFICATE OF INSTALLATION, IRRIGATION SCHEDULE OF LANGECAPE AND INFROATION MAINTENANCE. 4

LANDSUAFE	WATER USE STATEMENT
PROJECT NAME:	HARBOR VILLAGE RV PARK
PROJECT ADDRESS:	100 CAPISTRANO ROAD PRINCETON CA
PREPARED BY:	BRUCE A. CHAN CA RLA #2324 923 ARGUELLO STREET, SUITE 200 REDWOOD CITY CA 94063 650-345-7645 650-367-6139 (FAX) backs@sbcglobal.net
	iteria of the ordinance and applied them accordingly ter the imigation design plan."
for efficient use of was	A. U.

Land Planning Concepts CALL # 002324 Landscape Architectur Environmental Design Site Planning Arguello Street, Suite 20 Invoid City, California W

Tel (650) 346-7645 Fax (650) 367-8139 mail: bacla@sbcglobal



ARK / PARK

RV Bay, C

Half Moon F VILLAGE

Road

100

HARBOR Capistrano

IRRIGATION

DETAILS

Note

Revise WELO

compliance in

Add Hose Bibs to Legend Modify ETWU Calculations

TITLE

REVISIONS

Date

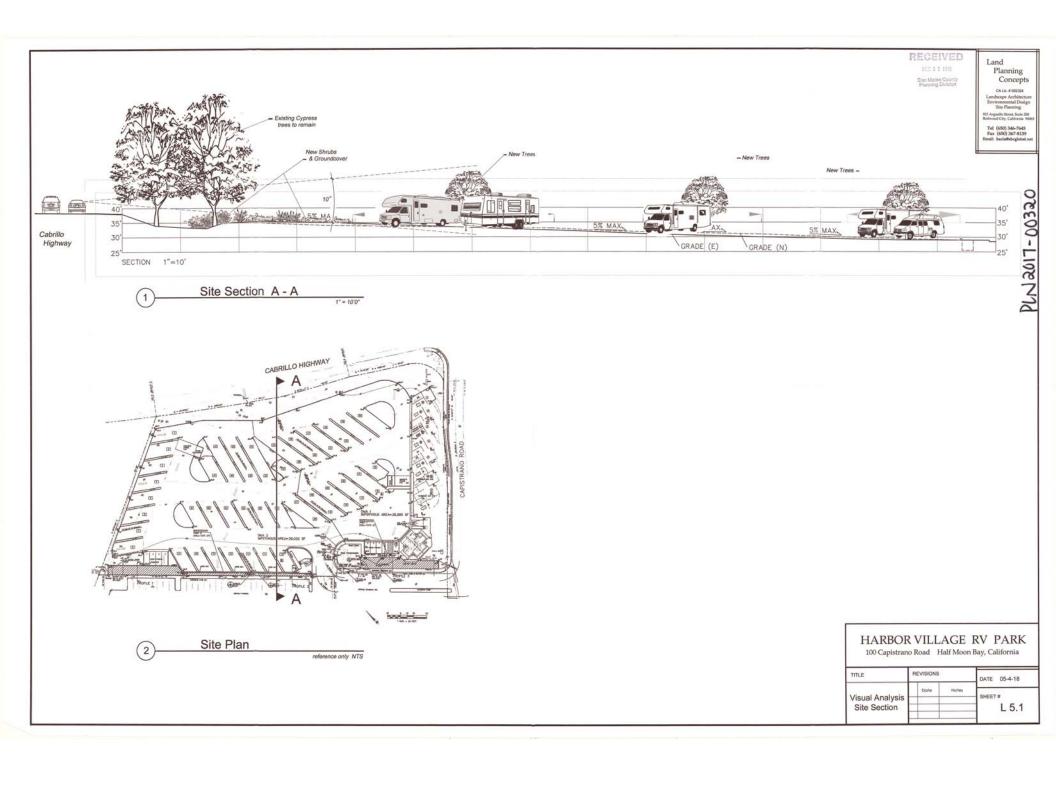
11-10-18

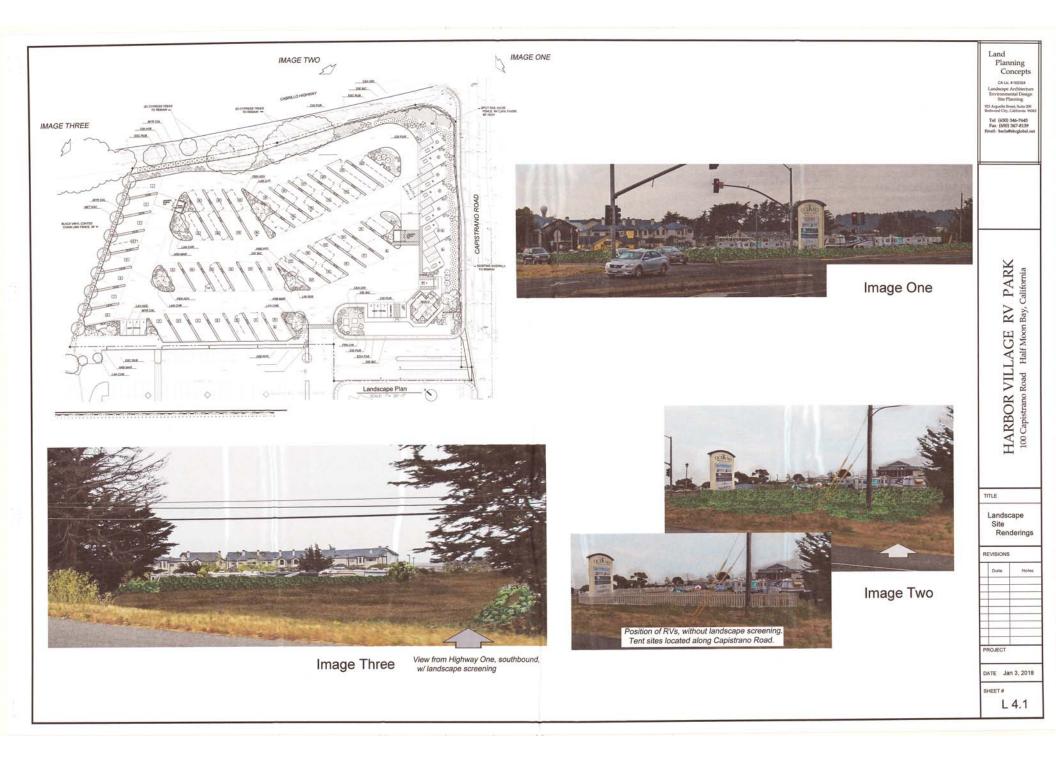
A 12-27-18

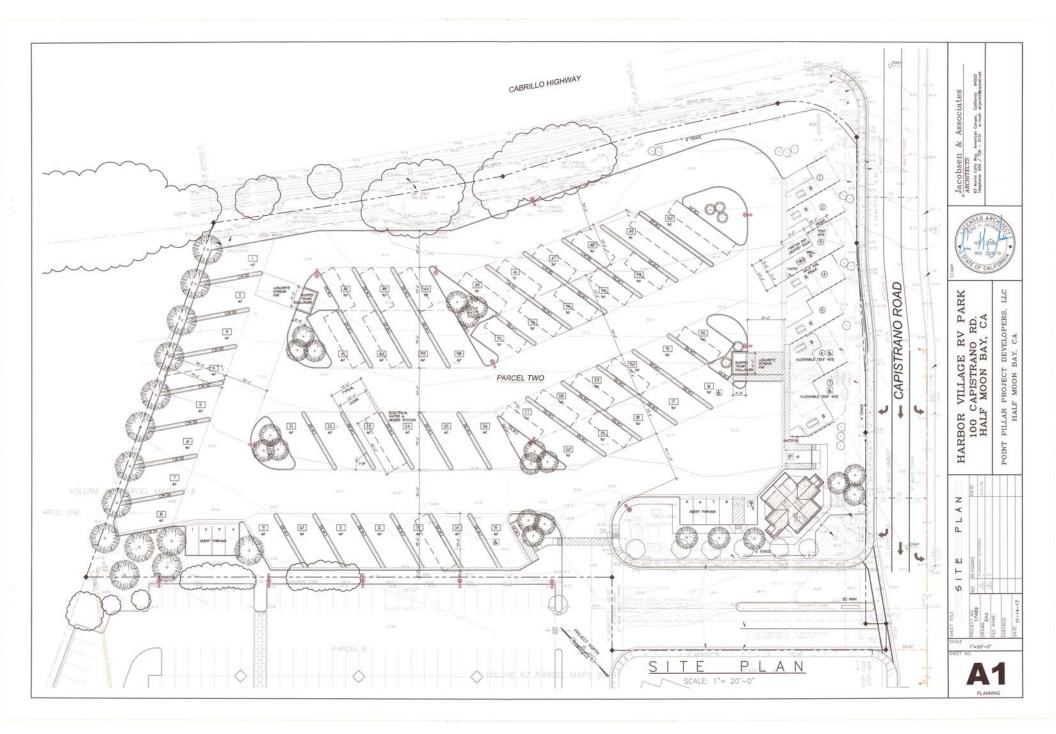
PROJECT

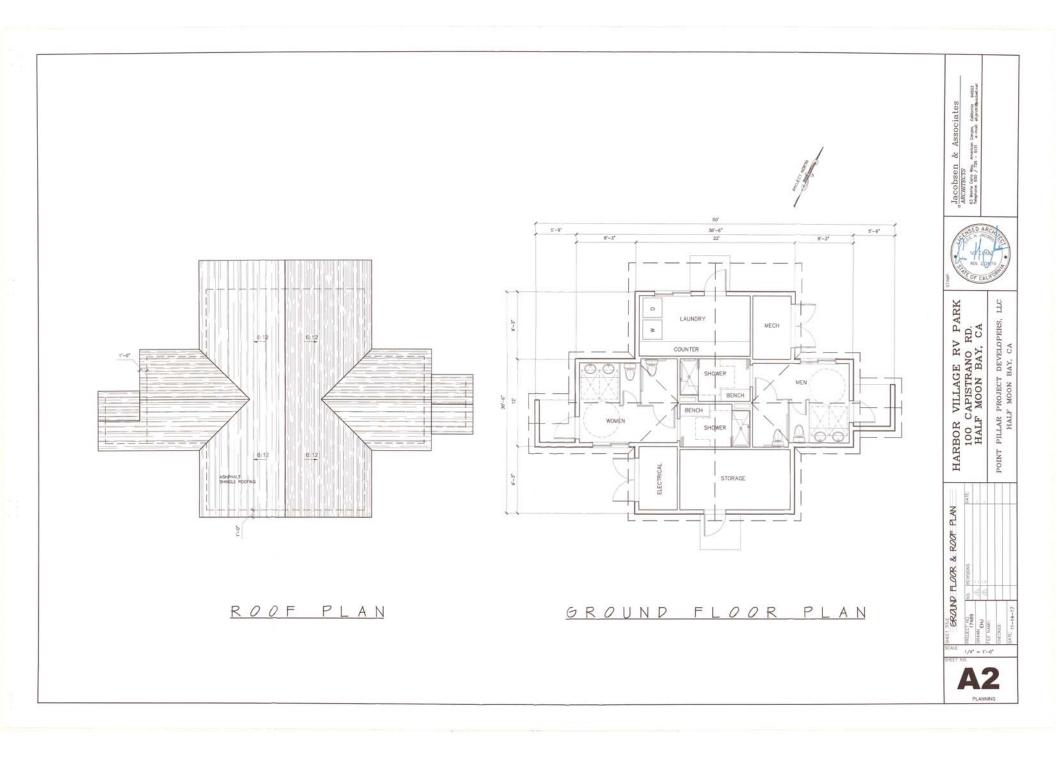
SHEET # L 6.2

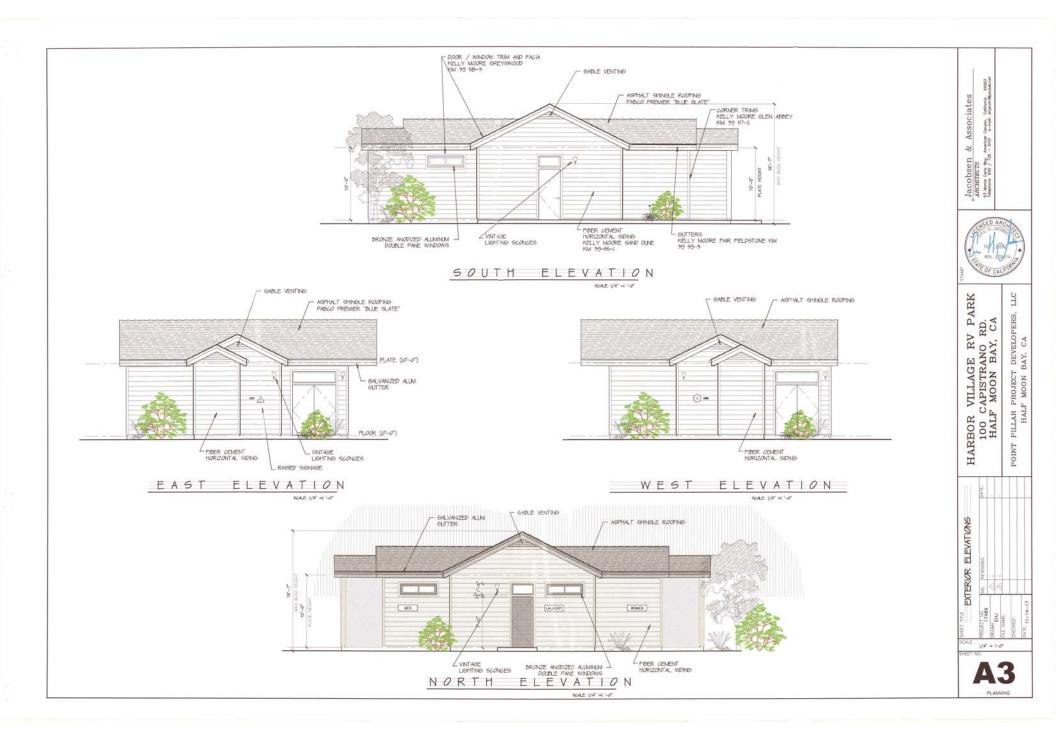
DATE July 9, 2018

















SCOPE OF WORK: FABRICATE & INSTALL (2) TWO NEW FACES FOR EACH SIGN (4 TOTAL FACES)

THE RECTANGLES SHOWN HERE REPRESENT THE VISUAL OPENING MEASUREMENT, NOT THE FACE CUT SIZES OR THE RETAINERS

MECHANICAL DIVIDERS: (SIGN A) EXISTING 2.5", (SIGN B) EXISTING 1.5" EXTRUDED ALUMINUM

NOTE: THERE HAS NOT BEEN AN OFFICIAL SURVEY COMPLETED AS OF 06.22.17

1	A SALE OF A	NOTICE TO THE CUSTOMER	CUSTOMER APPROVAL	DATE	BY D	ATE BY	Y	COMPANY OR JOB NAME / JOB DESCRIPTION	170228/42365 R
170228 R		Note: The colors depicted on this madering may not match actual colors and on the followed dipular. Press rates to the detail drawing for the second providing detectical where to the sign area, all required parents and all press and area area in called p	ACCEPTED W/ NO CHANGES AS NOTED W/ CHANGES AS NOTED		単	(7 H).	-	PRINCETON HARBOR RV PARK REFACES FOR TWO EXISTING DF ILLUMINATED SIGN CABINETS PROJECT	
			BY CUSTOMER BY LANDLORD				ADI	ADDRESS: 100 CAPISTRANO ROAD HALF MOON BAY CALIFORNIA 94019	
5	DESIGNS T	of signs shown on building & tandscape area photos is an approximate representation.	DATE DATE		-	-	SA	ALESPERSON DOUG SMITH CUSTOMER CONTACT XXXXX	
1	PO. BOX 4580 / 204 CAMPUS WAY, MODESTO, CA 95350 / OFFICE 209 524.4884 / FAX 209 521.0272 / LC#268001	COPYRIGHT The drawn	ig wu created to assist you in vasualizing our propose. The original ideas terein and try of 3pp Designs Permasion to copy or remain that drawing da addor membranding to boy not all encourse-tarties or call Spp Designs. But not not immed to, a addor membranding to addor membranding to addor addor membranding to addor add	locument, 1 under another sign con company logo, u	many, an	l am not of hitectural co epresented	bligated company l logo wa	I to partness this project, not-initializing, the above answork concor be submitted for priving -duplication or other business write for the purpose or insert of manufacting or the use as institutial property, such as provide to Sign Digitary the cassimer will reput store throngo document by Sign Delayer emotyme. NAME / DATE	2 OF 2
	THIS SIGN IS INTENDED TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 600 OF THE NATIONAL ELECTRIC	AL CODE AND/OR OTHER APPLICAR	E CODES. THIS INCLUDES PROPER GROUNDING AND BONDING OF THE SIGN.		1		ALL	MEASUREMENTS SHOWN IN THIS DRAWING ARE NOMINAL UNTIL THE "NOT FOR PRODUCTION" STAMP HAS	BEEN REMOVED



Image One Original Photo, August 2017









Image Two Original Photo, August 2017

В



Image Three Original Photo, August 2017

ATTACHMENT C



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT



BIOLOGICAL RESOURCE EVALUATION FOR THE PRINCETON RECREATIONAL VEHICLE PARK PROJECT

November 2017

SUBMITTED TO

Mr. Ronald Stefanick Point Pillar Project Developers LLC ronstefanick@icloud.com

SUBMITTED BY

SWCA Environmental Consultants 60 Stone Pine Road, Suite 100 Half Moon Bay, CA 94019

Biological Resource Evaluation for the Princeton Recreational Vehicle Park Project San Mateo County, California

Prepared for

Mr. Ronald Stefanick Point Pillar Project Developers LLC ronstefanick@icloud.com

Prepared by

Jessica Henderson-McBean, Biologist

SWCA Environmental Consultants

60 Stone Pine Road, Suite 100 Half Moon Bay, California 94019 (650) 440-4160 www.swca.com

SWCA Project No. 45857

November 7, 2017

EXECUTIVE SUMMARY

SWCA Environmental Consultants (SWCA) has prepared this Biological Resource Evaluation (BRE) report for the Princeton Recreational Vehicle Park Project, San Mateo County, California (Project Area). The Project Area is located at the corner of Cabrillo Highway (California State Highway 1) and Capistrano Road. This report was prepared in accordance with Section 7.5 of the County of San Mateo (County) Local Coastal Program (LCP) Policies (County of San Mateo 2013), as well as the County's Biological Impact Form, to support the County's development review process for proposed development of the Project Area (Project). The purpose of this report is to document the existing environmental setting and potential biological resources within the Project Area as well as an additional Biological Study Area (BSA) comprising a 200-foot buffer area encircling the Project Area. This report includes identification and analysis of the Project's potential to affect sensitive biological resources, a description of recommended Avoidance and Minimization Measures, and review of the Project's consistency with applicable federal, state, and local environmental regulations and policies. For the purposes of this report, the Project includes the development of a recreational vehicle (RV) park including 50 RV spaces, seven tent camping spaces, and a single-story laundry/restroom building. The Project location is currently an unpaved vacant parcel. Project development includes paving portions of the parcel as well as landscaping and drainage improvements.

SWCA biologists conducted a literature review and preliminary analysis of biological resources on and in the vicinity of the Project Area. This analysis included the review of available biological resources reports and searches of special-status species databases to identify habitat types and plant and wildlife species that have potential to occur in the BSA. Biologists also examined the potential for *Sensitive Habitats*, as defined by San Mateo County LCP Policies Sections 7.1–7.14, to occur within or in the vicinity of the Project Area (County of San Mateo 2013). Databases utilized for the analysis include the California Natural Diversity Database (CNDDB), the California Native Plant Society (CNPS) Rare Plant Inventory, and the U.S. Fish and Wildlife Service (USFWS) endangered and threatened species database. Additional database and mapping resources employed include the National Wetland Inventory (NWI) database, U.S. Geological Survey (USGS) topographic quadrangle maps, and Natural Resource Conservation Service (NRCS) Web Soil Survey.

Following completion of the preliminary analysis, SWCA biologist Jessica Henderson-McBean conducted a reconnaissance-level field survey of the BSA on October 17, 2017, to document the existing biological conditions and determine the potential for special-status species to occur in the BSA. One northern harrier (*Circus cyaneus*), a California Department of Fish and Wildlife (CDFW) species of special concern was observed foraging within the BSA. No other special-status species were observed within the BSA during the biological field survey. A drainage swale was observed along the northeastern edge of the Project Area, which is unlikely to be considered jurisdictional by CDFW, US Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Coastal Commission (CCC). No other jurisdictional wetlands, water features, or riparian corridors were observed within the Project Area.

The Project Area consists of a disturbed vacant lot dominated by ruderal, nonnative plant species. The predominant habitat type within the Project Area is disturbed/ruderal. The Project Area is bordered by a commercial development to the northwest and southwest, by actively cultivated agricultural land to the north, and by Cabrillo Highway to the northeast. Developed, agricultural, and disturbed/ruderal habitats do not typically provide suitable habitat for sensitive wildlife species. In addition, infrastructure and other man-made facilities surrounding the Project Area (e.g., roads and dense development) present potential barriers to dispersal of wildlife into and across the Project Area.

The drainage swale along the northeast edge of the project area, which conveys surface flows into a culvert pipe with a presumed terminus in the Pacific Ocean, may provide marginal, suitable aquatic habitat for sensitive wildlife species such as California red-legged frog (*Rana draytonii*), a federally listed threatened

species and California species of special concern, and San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), a federally and state listed endangered species and CDFW fully protected species. Although the Project Area lacks suitable natural habitat conditions for these species, the Project Area could be used by these species for dispersal. Due to the potential for these species to occur within the Project Area, it is recommended that Best Management Practices and Avoidance and Minimization Measures be implemented to avoid potential impacts to California red-legged frog and San Francisco garter snake (see Section 5).

Additionally, the Project Area contains habitat for nesting migratory birds, including northern harrier (*Circus cyaneus*), a CDFW species of special concern that is protected under the Migratory Bird Treaty Act and/or the California Fish and Game Code. Due to the potential for nesting birds to occur within the Project Area and surrounding area during the breeding season (February 1 through August 31), it is recommended that best management practices and Avoidance and Minimization Measures (see Section 5) be implemented during project activities to reduce and/or eliminate potential impacts to nesting birds.

CONTENTS

EX	ECUTIVE SUMMARY	i
1	INTRODUCTION	1
	1.1 PROJECT LOCATION AND DESCRIPTION	1
2	REGULATORY FRAMEWORK	
	2.1 FEDERAL POLICIES AND REGULATIONS	
	2.1.1 Section 404 of the Clean Water Act of 1977	
	2.1.2 Federal Endangered Species Act	
	2.1.3 Migratory Bird Treaty Act	
	2.2 STATE POLICIES AND REGULATIONS	
	2.2.1 California Endangered Species Act	
	2.2.2 California Environmental Quality Act Guidelines2.2.3 California Coastal Act	
	2.2.5 California Coastal Act	
	2.2.4 California Prist and Game Code Section 1002	/
	2.2.5 Camorina Protection for Birds (Camorina Pish and Game Code Sections 5505, 3503.5, 3513, and 3800)	7
3	METHODOLOGY	8
	3.1 BIOLOGICAL STUDY AREA	8
	3.2 LITERATURE REVIEW AND PRELIMINARY ANALYSIS	8
	3.3 FIELD SURVEY	
4	RESULTS	9
	4.1 TOPOGRAPHY AND SOILS	9
	4.2 JURISDICTIONAL WETLANDS AND WATERS	
	4.3 VEGETATION COMMUNITIES	
	4.3.1 Disturbed/Ruderal	
	4.3.2 Developed	
	4.3.3 Agricultural	
	4.4 SENSITIVE RESOURCES	
	4.4.1 Desktop Review and Literature Search	
	4.4.2 Special-status Plants	
	4.4.3 Special-status Wildlife4.4.4 Migratory Birds	
	4.4.4 Migratory Birds 4.4.5 Wildlife Movement Corridors	
	4.4.6 Sensitive Habitats	
	4.5 LAND USE AND ZONING	
5	CONCLUSION AND RECOMMENDATIONS	16
·	5.1 SITE-SPECIFIC AVOIDANCE AND MINIMIZATION MEASURES	
6	REFERENCES	10
U		17

FIGURES

Figure 1. Site Location Map	2
Figure 2. Project Area Map	3
Figure 3. Vegetation Communities Map	12

APPENDICES

Appendix A. Special-Status Species Considered for Potential Occurrence in the Project Area

Appendix B. Species Observed During the Field Survey

Appendix C. Photo Documentation

Appendix D. CNDDB Records Map

1 INTRODUCTION

SWCA Environmental Consultants (SWCA) has prepared this Biological Resource Evaluation (BRE) report for the Princeton Recreational Vehicle Park Project, San Mateo County, California (Project Area). This report was prepared in accordance with Section 7.5 of the County of San Mateo (County) Local Coastal Program (LCP) Policies (County of San Mateo 2013) as well as the County's Biological Impact Form. This report documents the existing environmental setting and potential biological resources within the Project Area as well as an additional Biological Study Area (BSA) comprising a 200-foot buffer area around the Project Area. The report also identifies and analyzes the Project's potential to affect sensitive biological resources, describes recommended Avoidance and Minimization Measures, and reviews the Project's consistency with applicable federal, state, and local environmental regulations and policies.

1.1 Project Location and Description

The Project Area consists of an approximately 3.35 acre vacant parcel in unincorporated San Mateo County, California (Figures 1 and 2). The Project Area is located at the corner of Cabrillo Highway (California State Highway 1) and Capistrano Road (APN 047-081-430). The Project Area is surrounded by commercial development to the southwest and southeast, by actively cultivated agricultural fields to the northwest, and by Cabrillo Highway to the northeast. A roadside drainage swale runs along the northeastern boundary of the Project Area, along the southern road shoulder of Cabrillo Highway. Land use in the area is a mixture of commercial development to the south, residential development to the north, and agricultural cultivation to the northwest.

For the purposes of this report, the Project includes the development of a recreational vehicle (RV) park including 50 RV spaces, seven tent camping spaces, and a single-story laundry/restroom building. The Project location is currently an unpaved vacant parcel. Project development includes paving portions of the parcel as well as landscaping and drainage improvements.

Figure 1. Site Location Map

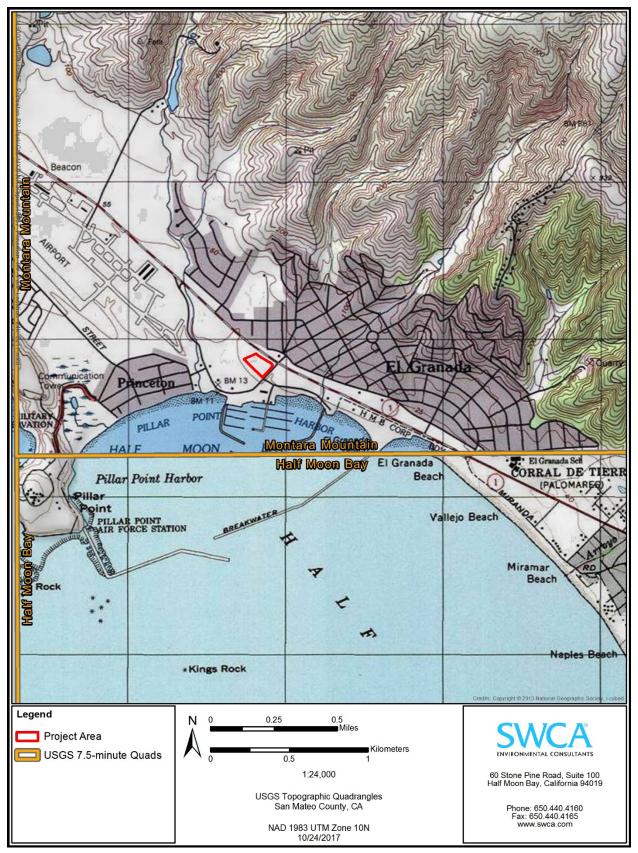
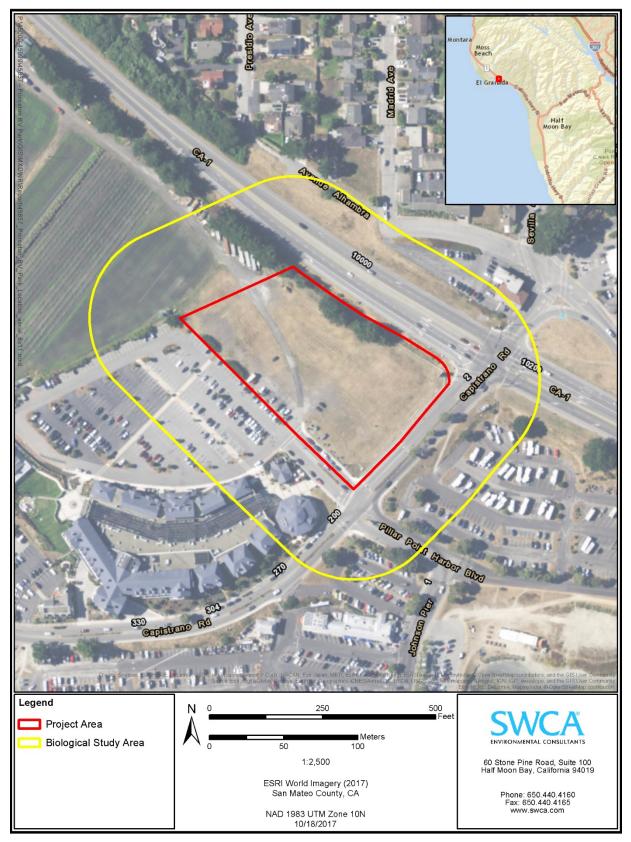


Figure 2. Project Area Map



2 REGULATORY FRAMEWORK

The federal, state, and local regulatory context for this report is described below.

2.1 Federal Policies and Regulations

2.1.1 Section 404 of the Clean Water Act of 1977

The purpose of the Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "waters of the United States" without a permit from the U.S. Army Corps of Engineers (USACE). The term "waters of the United States" as defined in the Code of Federal Regulations (CFR; 33 CFR 328.3[a]; 40 CFR 230.3[s]) includes:

- 1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- 2) All interstate waters including interstate wetlands (Wetlands are defined by the federal government [CFR Section 328.3(b), 1991] as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.).;
- 3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce;
- 4) All impoundments of waters otherwise defined as waters of the United States under the definition;
- 5) Tributaries of waters identified in paragraphs (1) through (4);
- 6) Territorial seas; and,
- 7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6).
- 8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the Environmental Protection Agency (EPA; 33 CFR 328.3[a][8] added 58 CFR 45035, August 25, 1993).

The EPA also has authority over wetlands and may override a USACE permit. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the applicable Regional Water Quality Control Board (RWQCB).

2.1.2 Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) protects plants and wildlife that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries). Section 9 of the FESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot,

wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging-up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 United States Code [U.S.C.] 1538). Under Section 7 of the FESA, federal agencies are required to consult with USFWS if their actions, including permit approvals or funding, may adversely affect a federally listed species or its designated critical habitat. Through consultation and the issuance of a biological opinion, USFWS may issue an incidental take statement allowing take of the species that is incidental to otherwise authorized activity provided the action will not jeopardize the continued existence of the species. Section 10 of the FESA provides for issuance of incidental take permits to private parties in association with development of a Habitat Conservation Plan.

2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, USFWS may issue permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13, General Permit Procedures, and 50 CFR Part 21, Migratory Bird Permits.

2.2 State Policies and Regulations

2.2.1 California Endangered Species Act

The California Endangered Species Act of 1984 (CESA) and the Native Plant Protection Act of 1977 (NPPA) ensure legal protection for plants listed as rare or endangered, and wildlife listed as threatened or endangered. The California Department of Fish and Wildlife (CDFW) regulates activities that may result in the "take" of such species. Take of state-listed species would require a Section 2081 incidental take permit from CDFW. This process requires submittal of a sensitive species study and permit application package to CDFW. If CDFW concurs that impacts to a state listed species would likely occur as a result of a proposed project, alternatives and measures to avoid or reduce the impacts must be identified in a Section 2081 permit to allow for incidental take authorization. CDFW may also include compensatory mitigation (mitigation/conservation bank) requirements for impacts to habitat for listed plants and wildlife.

CDFW also maintains informal lists of "species of special concern." These species are broadly defined as plants and wildlife that are of concern to CDFW because of population declines and restricted distributions, and/or they are associated with habitats that are declining in California. Development-related impacts to species on the state endangered or threatened lists and lists of species of special concern are considered "significant" under the *California Environmental Quality Act* (CEQA) *Guidelines*.

2.2.2 California Environmental Quality Act Guidelines

Although threatened and endangered species are protected by specific federal and state statutes, *State CEQA Guidelines* Section 15380 provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the FESA and the section of the California Fish and Game Code dealing with rare or endangered species. Section 15380 was included in the *State CEQA Guidelines* primarily to address situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either USFWS or CDFW. Therefore, CEQA provides a

lead agency with the ability to protect a species from a project's potential impacts until the respective governmental agencies have an opportunity to formally protect the species.

2.2.3 California Coastal Act

The California Coastal Act of 1976 (CCA) governs the decisions made by the California Coastal Commission (CCC) regarding issues such as shoreline public access and recreation, terrestrial and marine habitat protection, water quality, commercial fisheries, and development within the California coastal zone. Development within the coastal zone requires either a Coastal Development Permit (CDP) or CDP Exemption from CCC or from a local government with a CCC-certified LCP. Pursuant to Public Resources Code (PRC) Section 30106, development in this context means:

"...on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511)."

Whereas, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

CCC also regulates activities in wetlands. Unlike the federal government, CDFW and CCC have adopted the Cowardin et al. (1979) definition of wetlands:

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface of the land or is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes (at least 50 percent of the aerial vegetative cover); (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

The Project is located within the coastal zone in San Mateo County. The San Mateo County LCP was approved by the County Board of Supervisors and CCC in 1980. In April 1981, the County assumed responsibility for implementing the State Coastal Act in the unincorporated areas of San Mateo County, including issuance of CDPs. For a permit to be issued the development must comply with the policies of the LCP and those ordinances adopted to implement the LCP. The LCP defines wetlands as:

"...an area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of plants which normally are found to grow in water or wet ground. Such wetlands can include mudflats (barren of vegetation), marshes, and swamps. Such wetlands can be either fresh or saltwater, along streams (riparian), in tidally influenced areas (near the ocean and usually below extreme high water of spring tides), marginal to lakes, ponds, and man-made impoundments. Wetlands do not include areas which in normal rainfall years are permanently submerged (streams, lakes, ponds and impoundments), nor marine or estuarine areas below extreme low water of spring tides, nor vernally wet areas where the soils are not hydric.

In San Mateo County, wetlands typically contain the following plants: cordgrass, pickleweed, jaumea, frankenia, marsh mint, tule, bullrush, narrow-leaf cattail, broadleaf cattail, pacific silverweed, salt rush, and bog rush. To qualify, a wetland must contain at least a 50% cover of some combination of these plants, unless it is a mudflat."

The County provides the following definition for Sensitive Habitats:

"...any area in which plant or animal life or their habitats are either rare or especially valuable and any area which meets one of the following criteria: (1) habitats containing or supporting "rare and endangered" species as defined by the State Fish and Game Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes.

Sensitive habitat areas include, but are not limited to, riparian corridors, wetlands, marine habitats, sand dunes, sea cliffs, and habitats supporting rare, endangered, and unique species."

Policies of the San Mateo County LCP take precedence over San Mateo County General Plan policies for property located in the Coastal Zone. Actions taken by counties or municipalities within the Coastal Zone may be appealed to CCC only under defined circumstances, as specified in PRC Section 30603. CCC also retains permit authority in certain limited areas, such as tidelands and submerged lands (Coastal Act Section 30519[b]). Development must also comply with other provisions of the County Ordinance Code, such as zoning, building, and health regulations.

2.2.4 California Fish and Game Code Section 1602

Section 1602 of the California Fish and Game Code requires that a Notification of Lake or Streambed Alteration be submitted to CDFW and the notification deemed complete by CDFW for any activity that may, "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake." CDFW reviews the proposed actions and, if the activity would result in a substantial adverse effect to fish and wildlife resources, submits to the applicant a draft agreement with measures to protect the affected fish and wildlife resources. The final proposal that is mutually agreed upon by the department and the applicant is the Lake or Streambed Alteration Agreement.

2.2.5 California Protection for Birds (California Fish and Game Code Sections 3503, 3503.5, 3513, and 3800)

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by in the California Fish and Game Code or any regulation made pursuant thereto. Section 3503.5 provides protection for all birds of prey, including their eggs and nests. In addition, Section 3513 states that it is unlawful to take or possess any migratory

bird as designated in the MBTA or any part of such migratory birds except as provided by rules and regulations under provisions of the MBTA. Section 3800 states that it is unlawful to take non-game birds and defines non-game birds as, "all birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds."

3 METHODOLOGY

The following section details the methods employed when reviewing biological resources in proximity to the Project.

3.1 Biological Study Area

This report contains a review of the BSA that includes the maximum anticipated extent of Project-related impacts within the Project Area and an additional survey buffer of 200 feet beyond the Project Area (Figure 2). SWCA conducted a literature review of existing sources of information regarding occurrences of special-status species and sensitive resources within and near the BSA. Field surveys were conducted within the BSA to document biological resources, including sensitive habitats.

3.2 Literature Review and Preliminary Analysis

SWCA conducted a literature review to gain familiarity with the Project Area and to identify sensitive biological features including *Sensitive Habitats* and target special-status species that have the potential to occur within the BSA. The following inventories and databases were searched:

- *California Natural Diversity Database (CNDDB).* The CNDDB database search covered specialstatus species occurrences within a 5-mile radius of the Project Area.
- *California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants.* The CNPS database search covered occurrences of native plant species within the Montara Mountain U.S. Geological Survey (USGS) 7.5-minute quadrangle, in which the Project Area is located.
- Sacramento U.S. Fish and Wildlife Service Office Federal Endangered and Threatened Species Database. The Sacramento USFWS Office database search covered occurrences of endangered and threatened wildlife species within the Montara Mountain USGS 7.5-minute quadrangle.

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2017) and USFWS National Wetlands Inventory (NWI) Database (USFWS 2017) were also reviewed to provide additional information regarding soils and wetlands known to occur in the area. The USFWS Wetlands Mapper and USGS National Hydrography Data were used to identify potential hydrological features in the BSA, the presence/absence of which were confirmed during the field survey (see Section 3.3). Literature pertaining to pertinent zoning and land use documents was reviewed to determine the local compliance requirements for the Project (County of San Mateo 2012, 2013).

All special-status species and sensitive habitats identified in the records search and literature review that have potential to occur within the BSA were compiled into a table for use during the field survey as described in Section 3.3 below. Appendix A provides a description of the 57 special-status plant and wildlife species and two natural communities reviewed, and rationale for expecting presence or absence within the Project Area. For the purpose of this report, special-status species are defined as follows:

 Plants and wildlife listed, proposed, or candidates for listing as threatened or endangered under the FESA.

- Plants and animals listed or proposed for listing by the State of California as threatened or endangered under the CESA.
- Plants listed as rare under the NPPA.
- Plants included in California Rare Plant Ranks 1 and 2.
- California designated status:
 - Animal species that are classified as Fully Protected by the State; or
 - Species of special concern (SSC) by CDFW.

3.3 Field Survey

Following the literature review, on October 17, 2017, SWCA biologist Jessica Henderson-McBean conducted a reconnaissance-level field survey of biological resources in the Project Area and surrounding BSA. The purpose of the field survey was to identify vegetative communities present and evaluate the presence or absence of suitable habitat for special-status species determined to have the potential to occur in the area, sensitive habitats with potential to occur, wetland features, wildlife movement corridors, and indications of wildlife breeding activities. In addition, the biologist identified and mapped vegetation communities using *A Manual of California Vegetation, Second Edition* (MCV) (Sawyer et. al. 2009). A complete list of plant and wildlife species observed during the field survey is included in Appendix B. When necessary, the biologist referred to the *Jepson Manual* (Baldwin et al. 2012) to identify plant species. Representative photographs depicting existing conditions are included in Appendix C.

The field surveys also identified the presence/absence of features that may be subject to CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code, USACE/RWQCB jurisdiction pursuant to CWA Section 404/401, or CCC jurisdiction pursuant to the CCA. This included observations for the presence of a defined streambed, bank, or other channel features such as an Ordinary High Water Mark (OHWM) or riparian vegetation.

4 RESULTS

4.1 Topography and Soils

The topography within the BSA slopes from the northeast toward the southwest at an approximately 5–10% grade (field estimate). The elevation is approximately 30–40 feet above mean sea level. The NRCS Web Soil Survey identified the Project Area as occurring on a mixture of Denison clay loam, nearly level soils; Denison coarse sandy loam, nearly level soils; Denison loam, nearly level soils; and coastal beaches. Denison soils are characterized as being moderately well-drained soils comprised primarily of alluvium derived from weathered sedimentary rock (NRCS 2017). Coastal beach soils are poorly drained, sandy, soils which are primarily comprised of alluvium.

4.2 Jurisdictional Wetlands and Waters

A formal wetland delineation was not conducted as part of this study; however, several drainage features were identified within the BSA.

One roadside drainage swale was identified along the northeastern boundary of the Project Area, generally flowing from north to south (Figure 3). This ephemeral swale appears to convey surface flows to a culvert that drains west toward the Pacific Ocean. Monterey cypress trees (*Cupressus macrocarpa*) line the edge of the swale, and vegetation within the swale primarily consists of ruderal vegetation including pampas

grass (*Cortaderia selloana*), English ivy (*Hedera helix*), California blackberry (*Rubus ursinus*), Italian thistle (*Carduus pynocephalus*), and bristly ox-tongue (*Helminthotheca echioides*). In addition, one small patch (less than 2 square feet) of horsetail (*Equisetum sp.*), a wetland indicator species, was observed within the channel. No water was present in the drainage swale at the time of the site visit, and there was no evidence of wetland hydrology. Based on the lack of defined bed and banks, OHWM, a dominance of hydrophytic vegetation, and/or wetland hydrology, it is unlikely that this feature would be considered jurisdictional by USACE, RWQCB, CDFW, or CCC.

A roadside drainage swale was also observed on the northeast side of Cabrillo Highway. The drainage swale feature conveys overland surface flow towards culverts, crosses beneath Cabrillo Highway, and enters the drainage swale that parallels the west side of the highway. This drainage swale also lacks a defined bed and banks, OHWM, hydrophytic vegetation, and wetland hydrology, and therefore is unlikely be considered jurisdictional by USACE, RWQCB, CDFW, and CCC.

4.3 Vegetation Communities

Vegetation communities observed within the BSA included Disturbed/Ruderal, Developed, and Agricultural, as described below. Photographs (Appendix C) and mapping (Figure 3) depict the locations of habitat types in the BSA.

4.3.1 Disturbed/Ruderal

This cover type describes areas with highly modified soils and vegetation structure. These areas are often dominated by nonnative and weedy annual species that may or may not have been intentionally planted. Disturbed/Ruderal lands are the dominant cover type within the BSA. This cover type does not meet the definitions for any vegetation community in the MCV. This cover type is predominantly composed of nonnative ruderal species, and is generally found adjacent to the access roads and other human disturbances. Few native species are generally present within these areas.

Within the BSA, common species in this cover type include cut leaf plantain (*Plantago coronopus*), Bermuda grass (*Cynodon dactylon*), wild radish (*Raphanus sativus*), Italian rye grass (*Festuca perennis*), bristly ox-tongue (*Helminthotheca echioides*), Italian thistle (*Carduus pynocephalus*), and pampas grass (*Cortaderia jubata*).

Disturbed/Ruderal areas within the BSA are not likely to support special-status species due to the high level of disturbance and human activity; however, the cover type may provide habitat for nesting birds covered under the MBTA.

4.3.2 Developed

This cover type is used to describe areas dominated by man-made structures. These areas typically lack vegetation, and are best represented as either concrete, gravel, or bare soil. Typical structures include roads, houses, horse paddocks, etc. This cover type does not meet definitions for any vegetation community in the MCV.

In the BSA, developed areas are present in the form of numerous parking lots, commercial buildings, and paved roadways. These areas are not likely to support special-status species due to the high level of disturbance and human activity. However, ornamental trees and shrubs within developed areas may provide habitat for nesting bird species covered under the MBTA.

4.3.3 Agricultural

MCV does not characterize agricultural cover types. However, for the purposes of this report, agricultural cover type is primarily characterized as land that is under active cultivation. An agricultural field (cultivated artichokes) is present within the BSA northwest of the Project Area. The agricultural area within the BSA is not likely to support special-status species due to the high level of disturbance and human activity; however, this may provide marginal habitat for nesting birds covered under the MBTA.

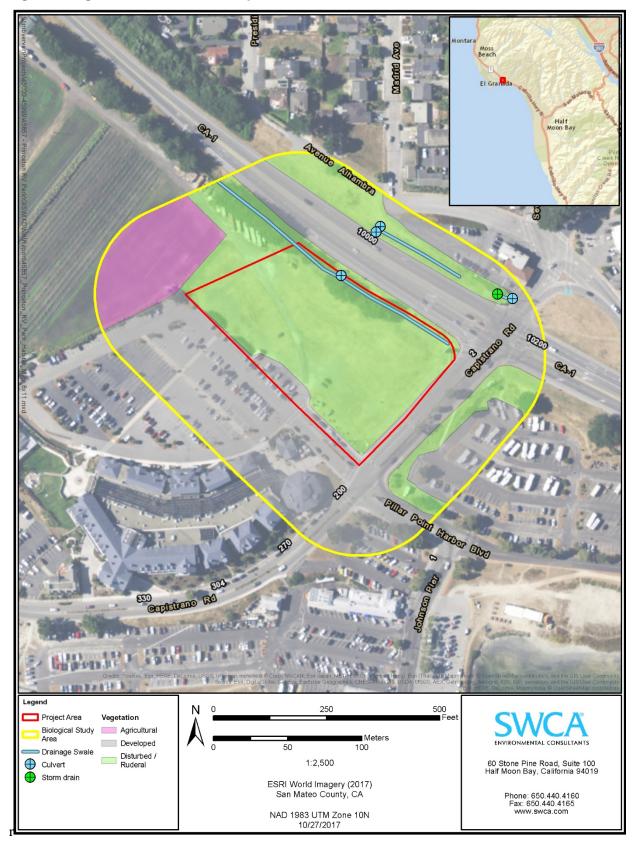


Figure 3. Vegetation Communities Map

4.4 Sensitive Resources

4.4.1 Desktop Review and Literature Search

Results of desktop research included records for 14 federally or state-listed plant species and 29 additional plants with CNPS California Rare Plant Rank 1B or 2 in the vicinity of the BSA. Records were returned for 21 wildlife species with state listing status, federal listing status, and/or CDFW designated status. Tables A-1 and A-2 in Appendix A describe each species' habitat requirements, listing status, and potential to occur in the BSA. No USFWS designated critical habitat is located within the BSA.

4.4.2 Special-status Plants

Based on the existing biological conditions in and adjacent to the BSA, the predominance of disturbed/ruderal and developed areas within the BSA, review of relevant literature, the known occurrences of special-status species in the region (Appendix A), and SWCA biologists' local knowledge of the region, no special-status plant species were determined to have potential to occur in the BSA. No known population of rare plant occurrences have been identified within the BSA (CNDDB 2017). None of the 36 special-status plant species identified during desktop review were observed during field surveys. Field surveys were conducted by SWCA within the appropriate blooming period for nine of the identified species (surveys conducted in October 2017). The remaining 34 plant species, with blooming periods outside of when the field survey was conducted, were determined to not have the potential to occur within the BSA due to lack of suitable habitat, soils, or elevation requirements.

4.4.3 Special-status Wildlife

One northern harrier (*Circus cyaneus*, CDFW species of special concern) was observed foraging within the Project Area during the field surveys. No other special-status species were observed in the BSA during the field surveys. Based on desktop review (CNDDB 2017; USFWS 2017), 22 special-status wildlife species that have been recorded within the Project vicinity. A description of these species and their potential to occur is included in Appendix A. Northern harrier, despite no previous records in the CNDDB, was included in the review based on observed presence. Of the 23 listed species that were assessed, three special-status wildlife species are discussed in the sections below:

- California red-legged frog (*Rana draytonii*): federally threatened, CDFW species of special concern.
- San Francisco garter snake (*Thamnophis sirtalis tetrataenia*): federally and state endangered, CDFW fully protected species.
- Northern harrier (Circus cyaneus): CDFW species of special concern.

4.4.3.1 CALIFORNIA RED-LEGGED FROG

The nearest record for California red-legged frog, dated 2006, is located approximately 1.2 miles to the northeast of the Project Area (CNDDB 2017). California red-legged frog occurs in various habitats during its life cycle. Breeding areas include aquatic habitats such as lagoons, streams, natural and human-made ponds, and slow-flowing stream reaches or deep pools within a stream with vegetation or other material to which egg masses may be attached (USFWS 2010). This species prefers aquatic habitats with little or no flow, the presence of surface water until at least early June, surface water depths to at least 2.3 feet, and the presence of emergent vegetation (e.g., cattails and bulrush). The largest densities of California red-legged frog are typically associated with dense stands of overhanging willows and an intermixed fringe of sturdy emergent vegetation. During periods of wet weather, some individuals may make overland dispersals

through adjacent upland habitats of distances up to 2 miles (USFWS 2010). Upland habitats including small mammal burrows and woody debris can also be used as refuge during the summer if water is scarce or unavailable (Jennings and Hayes 1994). California red-legged frogs typically travel between sites and are unaffected by topography and vegetation types during migration. Dispersal habitat makes it possible for California red-legged frogs to locate new breeding and non-breeding sites, and is crucial for conservation of the species.

Although it is well-documented that California red-legged frogs are known to migrate and use upland areas for refuge, research has shown that these migrations are temporary, often initiated by winter rains and limited to the winter wet-season, spatially restricted, and most often occur between aquatic habitats that are required for survival (Bulger et al. 2002; Tatarian 2008). Bulger et al. (2002) found that only 11-22% of the adult population studied migrated to and from breeding sites annually, the remaining percentage staying in close proximity to breeding areas (median travel of less than 82 feet [25 meters]). Tatarian (2008) found similar results with only 42.8% of frogs tracked moving from source pools. Average migratory distances observed for aquatic and terrestrial movements were 352 feet (107.2 meters) and 80 feet (24.4 meters), respectively. Radio tracking of 123 individuals by Fellers and Kleeman (2007) found the majority of frog movements observed in this study to be less than 98 feet (30 meters). Of the individuals that moved greater than 98 feet (30 meters) (32), the median distance traveled was 492 feet (150 meters). This distance was found to roughly coincide with the distance to the nearest suitable nonbreeding area. Larger movements, including one presumed to be upwards of 1.74 miles (2.8 kilometers), were observed but generally found to occur along riparian corridors coinciding with winter rains or upon seasonal habitat drying. Similar to Bulger et al. (2002) and Tatarian (2008) most movements recorded during the study were typically between aquatic habitats. High-density urban or industrial developments also form barriers to California red-legged frog dispersal (USFWS 2010).

The Project Area is primarily comprised of a disturbed/ruderal field, which provides marginal upland dispersal habitat for this species. Scattered pocket gopher burrows were observed throughout the Project Area, which may provide upland refugia refuges to California red-legged frogs. In addition, the roadside drainage swale observed on the northeast side of the Project Area may provide seasonal aquatic non-breeding habitat for this species. Two creeks occur in the vicinity of the Project Area which provide suitable aquatic non-breeding habitat for this species: Denniston Creek (0.25 miles northwest of the Project Area) and Deer Creek (0.25 miles southwest). However, the Project Area is surrounded by developed land and actively cultivated agricultural fields. The developed and highly disturbed nature of areas surrounding the Project Area may provide obstacles to upland dispersal to the Project Area from any nearby aquatic features.

Due to the location of the Project Area in relation to suitable aquatic habitat, there is low potential for California red-legged frog to travel through the Project Area to access other nearby aquatic sources, such as the roadside drainage swale on the north side of the Project Area. With the implementation of Avoidance and Minimization Measures outlined in Section 5, such as work restriction following rain, no impacts are anticipated to this species as a result of project activities.

4.4.3.2 SAN FRANCISCO GARTER SNAKE

San Francisco garter snake inhabits various aquatic habitats, including reservoirs, freshwater marshes, creeks, drainage ditches, ponds, and lakes. Less ideal habitats can also be used by San Francisco garter snake, such as ditches and other waterways, or floating algal or rush mats. Suitable breeding habitat includes shallow marshlands with an abundance of emergent vegetation. Grasslands are also an important upland habitat for this species, as they provide areas for thermoregulation and cover. Prey items for this species include California red-legged frog, Pacific chorus frogs (*Pseudacris regilla*), and earthworms. Small mammal burrows are used by San Francisco garter snake during hibernation. During the warm days of summer, most activity occurs during the morning and afternoon. Preferred nocturnal retreats are thought to be holes, especially mammal burrows, crevices, and surface objects (USFWS 2007).

There are 18 records of San Francisco garter snake within the Montara Mountain USGS 7.5-minute quadrangle; however, more specific locational data for this species is suppressed by CDFW in the CNDDB database.

The roadside drainage swale observed on the northeast side of the Project Area may provide seasonal marginal aquatic habitat for this species. The drainage swale lacks cover for this species because no emergent vegetation is present. The Project Area is comprised primarily of a disturbed/ruderal field, which provides marginal upland dispersal habitat for this species. Scattered pocket gopher burrows were observed throughout the Project Area as well as farm equipment and wood piles which could provide upland refugia for this species. Two creeks occur in the vicinity of the Project Area which provide suitable aquatic habitat for this species: Denniston Creek (0.25 miles northwest of the Project Area) and Deer Creek (0.25 miles southwest). However, the Project Area is surrounded by developed land and actively cultivated agricultural fields. The developed and highly disturbed nature of habitat surrounding the Project Area may provide obstacles to upland dispersal to the Project Area from nearby aquatic features with more suitable habitat.

Due to the location of the Project Area in relation to marginal aquatic habitat, there is low potential for San Francisco garter snake to occur within the Project Area. With the implementation of Avoidance and Minimization Measures outlined in Section 5, no impacts are anticipated to this species as a result of project activities.

4.4.3.3 NORTHERN HARRIER

Northern harriers occur in many kinds of open terrain including: marshes, fields, and prairies. This species flies low over fields hunting for small mammals, large insects, snakes, lizards, toads, and other small birds. Northern harriers nest on the ground in dense fields or marshes, where they build a shallow nest depression lined with grass or a platform of sticks, grass, and weeds (Audubon 2017).

One female northern harrier was observed foraging within the BSA during the site visit. However, no suitable nesting habitat for this species was observed within the BSA. With the implementation of Avoidance and Minimization Measures outlined in Section 5, no impacts are anticipated to this species as a result of project activities.

4.4.4 Migratory Birds

Most nesting bird species are protected under the MBTA as well as the California Fish and Game Code. Additional protections are provided to state listed species and fully protected species under the CESA and California Fish and Game Code Section 3511, respectively. The migratory bird nesting season is generally identified as February 1 through August 31, but varies by species. These regulations prohibit the removal of active nests and provide nests with protection from "take" typically in the form of activity-free buffers around active nests or other performance controls. There are further provisions that prohibit the removal of inactive nests used by raptors and listed species.

Ruderal and fallow agricultural fields within the BSA provide suitable foraging habitat for many raptor species in the area, including northern harrier. One northern harrier was observed foraging within the BSA during the survey. In addition, Monterey cypress trees within the BSA provide suitable nesting habitat for other raptor species.

Monterey cypress trees, ruderal and ornamental vegetation, and commercial structures within the BSA provide suitable foraging and nesting habitat for migratory bird species. Avian species protected by the MBTA and observed within the BSA during the field survey included black phoebe (*Sayornis nigricans*), Brewer's blackbird (*Euphagus cyanocephalus*), white-crowned sparrow (*Zonotrichia leucophrys*), American crow (*Corvus brachyrhynchos*), northern harrier (*Circus cyaneus*), and red-shouldered hawk (*Buteo lineatus*). If project activities occur during the nesting season (February 1 through August 31), it is

recommended that Avoidance and Minimization Measures, described below in Section 5, be implemented to avoid impacts to nesting birds.

4.4.5 Wildlife Movement Corridors

The Project Area is located within an area of commercial and agricultural development and therefore it is unlikely that the Project Area serves as a wildlife movement corridor. Due to the presence of marginal aquatic habitat for California red-legged frog and San Francisco garter snake, it is possible that the Project Area may be used as seasonal dispersal habitat for these species. However, due to the lack of emergent vegetation cover and development surrounding the Project Area, the potential for these species to occur within the Project Area is low. With the implementation of recommended Avoidance and Minimization Measures described in Section 5 below, impacts to wildlife corridors would be avoided.

4.4.6 Sensitive Habitats

No sensitive habitats, as defined by San Mateo County LCP Policies 7.1–7.14, were observed within the Project Area. The drainage swale observed within the Project Area does not contain 50% cover of the plant species that are used to define riparian corridors under Policy 7.7 of the San Mateo County LCP. No coastal wetlands as defined by the County (see Sections 2.2.3 and 4.2) were observed within the Project Area.

4.5 Land Use and Zoning

The Project Area is located within the California Coastal Zone and is zoned as a Coastside Commercial Recreation/Design Review/Coastal Development District (San Mateo County Property Maps Portal). The San Mateo County LCP Land Use Plan designates the Project Area as Coastside Commercial Recreation area. Based on review of the San Mateo County Zoning Regulations, December 2012 (Zoning Code), the proposed Project falls within the Coastal Development District and as such would likely require a CDP.

5 CONCLUSION AND RECOMMENDATIONS

The goal of this BRE is to identify the potential for sensitive biological resources to occur within the Project Area and analyze any potential Project impacts to biological resources. One northern harrier, a CDFW species of special concern, was observed within the BSA during the biological field surveys. No other special-status species were observed. Based on the results of the literature review and field survey, the Project Area is not expected to contain or support special-status species. However, the drainage swale on the northeast side of the Project Area may provide marginally suitable, seasonally available, aquatic habitat for California red-legged frog and San Francisco garter snake. Additionally, the Project Area and BSA contain suitable nesting habitat for migratory birds covered under the MBTA. It is recommended that Avoidance and Minimization Measures, listed below, be implemented to reduce or eliminate potential impacts to sensitive wildlife species.

Although the drainage swale along the northeast side of the Project Area is unlikely to be considered jurisdictional by USACE, RWQCB, CDFW, and CCC, it is suggested that project impacts avoid the swale because the swale has connectivity to navigable waterways. It is suggested that erosion and sediment control Best Management Practices (BMPs) provided in Section 5 are implemented in order to avoid impacts to downstream water quality.

The Project is not anticipated to be subject to permitting pursuant to the CWA, FESA, CESA, or Section 1602 of the California Fish and Game Code. Due to the location of the project within the Coastal Zone, the project will likely require a CDP from the County.

5.1 Site-Specific Avoidance and Minimization Measures

- 1. **Pre-Construction Nesting Bird Surveys.** Prior to any Project construction activities, the Project proponent will take the following steps to avoid direct losses of active nests, eggs, and nestlings and indirect impacts to avian breeding success:
 - If construction activities occur only during the non-breeding season, between August 31 and February 1, no nest surveys will be required.
 - During the breeding bird season (February 1 through August 31), a qualified biologist will survey construction areas in the vicinity of the Project Area for nesting raptors and passerine birds not more than 14 days prior to any ground-disturbing activity or vegetation removal. Surveys will include all potential habitats within 250 feet of activities for raptors, and 50 feet of activities for all other species of activities. If results are positive for nesting birds, avoidance procedures will be adopted, if necessary, on a case-by-case basis. These may include implementation of buffer areas (minimum 50-foot buffer for passerines and minimum 250-foot buffer for most raptors) or seasonal avoidance. Buffer areas around active nests may be reduced on a case-by-case basis based on guidance from a qualified biologist. The biologist will consider factors such as topography, land use, Project activities, visual screening or line-of-site to active nest, and background noise levels when establishing a reduced nest buffer. The biologist will determine if full-time biological monitoring may be required during all activities that occur within reduced nest buffers in order to monitor the active nest(s) for signs of disturbance or "take."
- 2. Environmental Training. Before the start of project activities, all crewmembers shall attend an Environmental Awareness Training presented by a qualified biologist. The training shall include a description of the life history special-status species that may occur in the region, the project Avoidance and Minimization Measures, the limits of the project work areas, applicable laws and regulations, and penalties for non-compliance. Upon completion of training, crewmembers shall sign a training form indicating they attended the program and understood the measures.
- 3. **Ground Disturbing Construction Activities.** It is suggested that ground disturbing construction activities (i.e., grubbing, grading, or paving) should occur during the dry season (June 1 to October 15) to facilitate avoidance of California red-legged frog. Regardless of the season, no construction shall occur within 24 hours following a significant rain event (>1/4 inches in a 24-hour period). Following a significant rain event and the 24-hour drying-out period, a qualified biologist shall conduct a preconstruction survey for California red-legged frog prior to the restart of any Project activities.
- 4. **Wildlife Encounters.** If any wildlife is encountered during Project activities, said wildlife should be allowed to leave the work area unharmed. Animals will be allowed to leave the work area of their own accord and without harassment. Animals shall not be picked up or moved in any way.
- 5. **Vegetation Disturbance.** Disturbance to vegetation should be kept to the minimum necessary to complete the Project activities, provided there is no feasible alternative. To minimize impacts to vegetation, a qualified biologist shall work with the contractor to designate the work area and any staging areas.
- 6. Vehicle Fueling and Maintenance. All fueling and maintenance of vehicles and other equipment and staging areas should occur at least 50 feet from the drainage swale on the northeastern edge of the project area. Equipment operators and fueling crews shall ensure that contamination of the swale does not occur during such operations. Prior to the onset of work, a plan to allow for prompt and effective response to any accidental spills shall be established. All workers should be informed of the importance of preventing spills, and of the appropriate measures to take should a spill occur.

7. Erosion and Sediment Control BMPs. Erosion and sediment control BMPs shall be installed to prevent runoff to the drainage swale on the northeastern edge of the project area. This shall include the installation of silt fences or straw wattles between work areas and any water sources such as the drainage swale, and around any spoil piles (e.g., loose asphalt, dirt, debris, construction-related materials) that could potentially discharge sediment into habitat areas. If straw wattles are used, they shall be made of biodegradable fabric (e.g., burlap) and free of monofilament netting.

6 REFERENCES

- Audubon. 2017. Guide to North American Birds. Available at <u>http://www.audubon.org/bird-guide</u>. Accessed on October 24, 2017.
- Baldwin, B., D. Goldman, D. Keil, R. Patterson, T. Rosatti (Editors). 2012. *The Jepson Manual: Vascular Plants of California* (second edition). Berkeley, California: University of California Press.
- Bulger, B. John, J. Norman Scott Jr, B. Richard Seymour. 2002. Terrestrial activity and conservation of adult California red-legged frogs *Rana aurora draytonii* in coastal forests and grasslands. *Biological Conservation* 110 (2003) 85-95.
- California Native Plant Society (CNPS). 2017. Inventory of Rare and Endangered Plants (online edition, v8-02). Sacramento, California: California Native Plant Society. Available at: <u>http://www.rareplants.cnps.org</u>. Accessed on October 24, 2017.
- California Natural Diversity Data Base (CNDDB). 2017. Rarefind data for known occurrences within 5 miles of the Project Area.
- County of San Mateo. 2012. San Mateo County Zoning Regulations. Planning and Building Department.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States.* FWS/OBS-79/31, 131p.
- Fellers, Gary M. and Patrick M Kleeman. 2007. California Red-Legged (*Rana draytonii*) Movement and Habitat Use: Implications for Conservation. *Journal of Herpetology*, Vol. 41, No. 2 pp 276-286.
- Jennings, M.R., and M.P. Hayes. 1994. *Amphibian and Reptile Species of Concern in California*. Sacramento, California: California Department of Fish and Game.
- Sawyer, J.O., T. Keeler-Wolf and J.M. Evens. 2009. Manual of California Vegetation, Second Edition. California Native Plant Society. Sacramento, California.
- Tatarian, J. Patricia. 2008. Movement Patterns of California Red-Legged Frogs (Rana draytonii) in an Inland California Environment. *Herpetological Conservation and Biology* 3(2):155-169.
- U.S. Department of Agriculture (USDA). 1961. Soil Survey San Mateo County California. Series 1954, No.
 13. U.S. Department of Agriculture, Soil Conservation Service in cooperation with California Agricultural Experiment Station.
- USDA Natural Resources Conservation Service (NRCS). 2017. Soil Survey GIS Data. Available at: <u>http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx</u>. Accessed October 24, 2017
- U.S. Fish and Wildlife Service (USFWS). 2007. Endangered Species Accounts: San Francisco Garter Snake (Thamnophis sirtalis tetrataenia).
 - ———. 2010. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the California Red-Legged Frog. U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office.

—. 2016. National Wetlands Inventory. Available at: <u>http://www.fws.gov/wetlands/</u>. Accessed October 24, 2017. This page intentionally left blank.

Appendix A. Special-Status Species Considered for Potential Occurrence in the Project Area

This page intentionally left blank.

Notes for Tables A-1 and A-2

Sources: Sawyer et. al. (2009), CNPS (2017) CNDDB (2017), USFWS (2017).

Status Codes:

-- = No status

Federal:

FE = Federal Endangered FT = Federal Threatened MBTA = Protected by Migratory Bird Treaty Act

State:

SE = State Endangered ST = State Threatened SR = State Rare CSC = California Special Concern Species FP = Fully Protected SC=State Candidate

General Habitat Descriptions:

Months in parentheses are uncommon.

California Native Plant Society (CNPS):

List 1B = Rare, threatened, or endangered in California and elsewhere List 2 = Rare, threatened, or endangered in California, but more common elsewhere List 3 = Plants about which more information is needed List 4 = Watch list of plants of limited distribution

CNPS Threat Code:

.1 = Seriously endangered in California (more than 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Fairly endangered in California (20–80% occurrences threatened)
.3 = Not very endangered I California (<20% of occurrences threatened or no current threats known)

Potential for Occurrence Ratings:

Project area, and suitable habitat is present.

None = No potential for the species or habitat to occur due to lack of suitable habitat in the BSA. Low = Species has been mapped within 5 miles of the BSA, but record is old/unreliable, the appropriate habitat is not present, or the record is far from the Project area. Moderate = Records have been mapped near the Project area and/or suitable habitat is present, but records are old or far from the Project area. High = Species has high likelihood of presence in the BSA, has been mapped in close proximity to the

SWCA Environmental Consultants

Species Name	General Habitat Description	Legal Status Federal/ State/CNPS	Potential for Occurrence
Plant Species of Concer	n		
arcuate bush-mallow (Malacothamnus arcuatus)	A perennial evergreen shrub associated with chaparral and cismontane woodland habitat. Blooming period: April-September. Elevation: 12- 355 meters	/-/1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
bent-flowered fiddleneck (<i>Amsinckia lunaris</i>)	An annual herb that occurs in coastal bluff scrub, cismontane woodland, and valley and foothill grassland habitat. Blooming period: March-June. Elevation: 3-500 meters	//1B.2	None: Suitable habitat for the species is not present in the BSA including lack of serpentine soils and gravelly slopes. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Blasdale's bent grass (<i>Agrostis blasdalei</i>)	A perennial rhizomatous herb that occurs in coastal bluff scrub, coastal dunes, and coastal prairie habitats. Blooming period: May-June Elevation: 5-150 meters	//1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
California seablite (<i>Suaeda californica</i>)	A perennial evergreen shrub found in marshes and swamps. Blooming period: July-October Elevation: 0-15 meters	FE//1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Choris' popcorn-flower (Plagiobothrys chorisianus var. chorisianus)	An annual herb occurring in mesic chaparral, coastal prairie, and coastal scrub habitats. Blooming period: March–June. Elevation: 3-160 meters	//1B.2	None: Suitable habitat for the species not present in the BSA. Species known to be limited to coastal areas with mesic conditions. Species not observed during field survey.
coast yellow leptosiphon (Leptosiphon croceus)	An annual herb that occurs in coastal bluff scrub and coastal prairie habitats. Blooming period: April–May. Elevation: 10-150 meters	/SC/1B.1	None: Suitable habitat not present in the BSA and located outside of the known elevation range for this species. Species not observed during field survey. This species is thought to be extirpated from San Mateo County
coastal marsh milk-vetch (Astragalus pycnostachyus var. pycnostachyus)	Perennial herb that occurs in mesic coastal dunes, coastal scrub, marshes, and swamps (coastal salt marshes and streamsides). Blooming period: April– October. Elevation: 0-30 meters	/-/1B.2	None: Suitable habitat for the species is not present in the BSA. Site elevation above typical range for this species. Species not observed during field survey.

Table A-1. Special-Status Species and Habitats Considered for Potential Occurrence in the Project Area (Plants and Natural Communities)

Table A-1. Special-Status Species and Habitats Considered for	r Potential Occurrence in the Project Area (Plants and Natural Communities)

Species Name	General Habitat Description	Legal Status Federal/ State/CNPS	Potential for Occurrence
coastal triquetrella (<i>Triquetrella californica</i>)	A moss that forms loose mats on exposed shaded soil within coastal bluff scrub and coastal scrub habitats. Elevation: 10-100 meters.	//1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Crystal Springs lessingia (Lessingia micradenia var. arachnoidea)	An annual herb that occurs in serpentine soil often on roadsides, in cismontane woodland, coastal scrub and grassland habitats. Blooming period: July-October. Elevation: 60-200 meters	//1B.2	None: Serpentine soils do not occur in the BSA. Species not observed during field survey. Impacts to this species are not expected to occur. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Davidson's bush-mallow (Malacothamnus davidsonii)	A perennial deciduous shrub that occurs in chaparral, cismontane woodland, coastal scrub, and riparian woodlands. Blooming period: June–January. Elevation: 185-855 meters.	//1B.2	None: Suitable habitat not present in the BSA and located outside of the known elevation range for this species. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
fragrant fritillary (Fritillaria liliacea)	A perennial bulb found in cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland habitats. This species is often found on serpentinite soils. Blooming period: February–April. Elevation: 3-410 meters.	//1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
Franciscan manzanita (<i>Arctostaphylos franciscana</i>)	A perennial evergreen shrub found in coastal scrub habitats on serpentinite soils. Blooming period: February-April, Elevation: 60-300 meters	FE//1B.1	None: Serpentine soils do not occur in the BSA. Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Franciscan onion (Allium peninsulare ssp. franciscanum)	Perennial bulb found on clay, volcanic and often serpentinite soils within cismontane woodlands and grasslands. Blooming period: April–June. Elevation: 52-300 meters.	//1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
Franciscan thistle (Cirsium andrewsii)	Perennial herb found in mesic areas and occasionally on serpentine soils in broadleafed upland forest, coastal bluff scrub, coastal prairie, and coastal scrub habitats. Blooming period March-July. Elevation: 0-150 meters.	//1B.2	None: Serpentine soils do not occur in the BSA. Suitable habitat for the species is not present in the BSA. Species not observed during field survey.

Table A-1. Special-St	atus Species and Habitat	s Considered for Potential Occurrence	e in the Project Area (Plants and	Natural Communities)
			, ,	,

Species Name	General Habitat Description	Legal Status Federal/ State/CNPS	Potential for Occurrence
fountain thistle (Cirsium fontinale var. fontinale)	A perennial herb that occurs in serpentine seeps. Known only from the vicinity of Crystal Springs Reservoir. Occurs in chaparral, cismontane woodlands, grassland, meadows, and seeps. Blooming period: April-October. Elevation: 45-175 meters.	FE/SE/1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Hall's bush-mallow (Malacothamnus hallii)	A stout perennial evergreen shrub associated with open chaparral and coastal scrub habitat. Blooming period: May-October. Elevation: 10-760 meters.	//1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Hickman's cinquefoil (<i>Potentilla hickmanii)</i>	Occurs in vernally wet meadows, coastal bluff scrub, closed-cone coniferous forest, vernally mesic meadows and seeps, and freshwater marshes and swamps. Found along the central California coast. Blooming period: April-August. Elevation: 10-149 meters.	FE/SE/1B.1	None: Suitable habitat not present in the BSA and located outside of the known elevation range for this species. Species not observed during field survey.
Hillsborough chocolate lily (<i>Fritillaria biflora</i> var. <i>ineziana</i>)	A perennial bulb associated with serpentine soils in the San Francisco Bay Area. Found in cismontane woodland, and valley and foothill grasslands. Known only from the Hillsborough area. Blooming period: March-April.	-/-/1B.1	None: Serpentine soils do not occur in the BSA. Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Kellogg's horkelia (Horkelia cuneata var. sericea)	A perennial herb found in sandy or gravelly openings in closed-cone coniferous forests, maritime chaparral, coastal dune and coastal scrub habitats. Blooming period: April-September, Elevation: 10-200 meters	-/-/1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
Kings Mountain manzanita (Arctostaphylos regismontana)	A perennial evergreen shrub that occurs in broad- leafed upland forest, chaparral, and north coast coniferous forest with granitic or sandstone based soil. Blooming period: December–April.	//1B.2	None: Suitable habitat not present in the BSA and located outside of the known elevation range for this species. Species not observed during field survey.
Marin checker lily (<i>Fritillaria lanceolata</i> var. <i>tristulis</i>)	A perennial bulb that occurs in coastal bluff scrub, coastal prairie, and coastal scrub. Blooming period: February–May. Elevation 15-150 meters.	//1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.

Table A-1. Special-Status Species and Habitats Considered for	r Potential Occurrence in the Project Area (Plants and Natural Communities)

Species Name	General Habitat Description	Legal Status Federal/ State/CNPS	Potential for Occurrence
Marin dwarf-flax (<i>Hesperolinon congestum</i>)	An annual herb that occurs on serpentinite soils in chaparral and grassland habitats. Blooming period: April-July. Elevation: 5-370 meters.	FT/CT/1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Montara manzanita (Arctostaphylos montaraensis)	A perennial evergreen shrub that occurs on granite and sandstone outcrops in maritime chaparral and coastal scrub habitats. Blooming period: January– March. Elevation: 80-500 meters	//1B.2	None: Suitable habitat not present in the BSA and located outside of the known elevation range for this species. Species not observed during field survey.
Oregon polemonium (Polemonium carneum)	A perennial herb found in moist to dry, open areas. This species occurs in coastal prairie, coastal scrub, and lower montane coniferous forest habitats. Blooming period: April-September. Elevation: 0 to 1830 m.	//2B.2	None: Suitable habitat not present in the BSA. Most recent occurrence within 5 miles is dated from 1916 (CNDDB 2016). Species not observed during field survey.
Ornduff's meadowfoam (Limnanthes douglasii ssp. ornduffii)	An annual herb found in agricultural fields, meadows, and seeps. Restricted to a single agricultural field in San Mateo County. Blooming period: November-May. Elevation: 10-20 meters.	//1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
pappose tarplant (<i>Centromadia parryi</i> ssp. <i>parryi</i>)	Annual herb that occurs on alkaline soils in chaparral, coastal prairie, meadows and seeps, marshes and swamps (coastal salt), and valley and foothill grassland (vernally mesic). Blooming period: May-November. Elevation: 0-420 meters	//1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
perennial goldfields (Lasthenia californica ssp. macrantha)	Perennial herb that occurs in coastal bluff scrub, coastal dune and coastal scrub habitats. Blooming period: January-November Elevation: 5-520 meters	//1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Point Reyes horkelia (<i>Horkelia marinensis</i>)	Occurs on sandy soils in coastal dunes, prairie, and scrubland. Blooming period: May–September. Elevation: 5-755 meters	//1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.

Table A-1. Special-Status Species and Habitats	Considered for Potential Occurrence in the	e Project Area (Plants and Natural Communities)
		,

Species Name	General Habitat Description	Legal Status Federal/ State/CNPS	Potential for Occurrence
Presidio manzanita (<i>Arctostaphylos montana</i>)	A perennial evergreen shrub found in serpentinite outcrops in chaparral, coastal prairie and coastal scrub habitats. Known from only one extant population at the Presidio in San Francisco. Blooming period: February-March Elevation: 45-215 meters	FE/CE/1B.1	None: Suitable habitat not present in the BSA and located outside of the known elevation range for this species. This species is only known to occur at the Presidio in San Francisco. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
robust spineflower (Chorizanthe robusta var. robusta)	Annual herb that is known to occur in sandy or gravelly soils in maritime chaparral, cismontane woodland openings, coastal dunes, and coastal scrub habitats. Blooming period: April-September Elevation: 3-300 meters	FE//1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
rose leptosiphon (Leptosiphon rosaceus)	An annual herb found in coastal bluff scrub habitat on the central California coast. Blooming period: April-July. Elevation: 0-100 meters	//1B.1	None: Suitable habitat not present in the BSA and located outside of the known elevation range for this species. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
San Francisco Bay spineflower (Chorizanthe cuspidata var. cuspidata)	An annual herb that grows in sand along the central California coast. This species occurs in coastal bluff scrub, coastal dunes, coastal prairie, and coastal scrub habitats. Blooming period: April-August. Elevation: 3-215 meters.	//1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
San Francisco campion (Silene verecunda ssp. verecunda)	A perennial herb occurring in coastal bluff scrub, chaparral, coastal prairie, coastal scrub, valley and foothill grasslands habitats. Blooming period: February-August. Elevation: 30-645 meters	/-/1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
San Francisco collinsia (Collinsia multicolor)	An annual herb that occurs in closed-cone coniferous forest and coastal scrub. Occasionally found in serpentine soils. Blooming period: February-May. Elevation: 30-250 meters	/-/1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
San Francisco lessingia (<i>Lessingia germanorum</i> = L.g. var. germanorum)	An annual herb that occurs in coastal scrub habitats on remnant dunes. Blooming period: (June)July-November, Elevation: 25-110 meters	FE/CE/1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.

Table A-1. Special-Status Species and Habitats Considered for	r Potential Occurrence in the Project Area (Plants and Natural Communities)

Species Name	General Habitat Description	Legal Status Federal/ State/CNPS	Potential for Occurrence
San Francisco owl's clover (<i>Triphysaria floribunda</i>)	An annual herb found in coastal prairie, coastal scrub, and coastal grasslands on serpentine soils. Blooming period: April-June. Elevation: 10-160 meters.	//1B.2	None: Serpentine soils do not occur in the BSA. Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
San Mateo thornmint Acanthomintha obovate ssp. duttonii	An annual herb that occurs in chaparral and grassland habitats. Often occurs on serpentine soils. Blooming period: April-June Elevation: 50-300 meters.	FE/SE/1B.1	None: Serpentine soils do not occur in the BSA. Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
San Mateo woolly sunflower (Eriophyllum latilobum)	A perennial herb found in cismontane woodlands in the San Francisco Bay Area. Often found on road cuts and on serpentinite soils. Blooming period: May-June Elevation: 45-150 meters.	FE/SE/1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Showy indian clover (<i>Trifolium amoenum</i>)	An annual herb that occurs on coastal bluff scrub, valley and foothill grasslands and sometimes serpentinite soils. Blooming period: April-June Elevation: 5-415 meters	FE//1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Sonoma sunshine (Blennosperma bakeri)	An annual herb that occurs in valley and foothill grasslands (mesic) and vernal pools. Blooming period: March-May Elevation: 10-110 meters	FE/SE/1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
western leatherwood (Dirca occidentalis)	A perennial deciduous shrub that occurs in broad- leafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, north coast coniferous forest, riparian forest, and riparian woodland habitats. Blooming period: January– April. Elevation: 25-425 meters.	//1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
white-rayed pentachaeta (<i>Pentachaeta bellidiflora</i>)	Occurs in grassy or rocky areas on the central California coast and in the San Francisco Bay Area. Primarily in cismontane woodland, valley and foothill grasslands on serpentine soils. Blooming period: March-May. Elevation: 35-620 meters	FE/SE/1B.1	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.

Table A-1. Special-Status Species and Habitats Considered for	r Potential Occurrence in the Project Area (Plants and Natural Communities)

Species Name	General Habitat Description	Legal Status Federal/ State/CNPS	Potential for Occurrence
woodland woollythreads (<i>Monolopia gracilens)</i>	An annual herb associated with serpentine soils in broad-leafed upland forest openings, chaparral openings, cismontane woodlands, North Coast coniferous forest openings, and grassland habitats. Blooming period: February–July. Elevation: 100- 1200 meters.	//1B.2	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
Natural Communities of Co	ncern		
northern coastal salt marsh	Marsh habitat supporting herbaceous, suffrutescent, salt-tolerant hydrophytes often active in summer and dormant in winter. Characteristic species include <i>Jaumea carnosa, Limonium</i> <i>californicum</i> , and <i>Frankenia salina</i> . Developed around Humboldt Bay, Tomales Bay, San Francisco Bay, Elkhorn Slough, and Morro Bay.		None: Project Area does not support northern coastal salt marsh.
northern maritime chaparral	Dense shrub habitat composed of several species of manzanita, wild lilac, and chamise. Associated with sandy substrates in the coastal fog zone, usually on rolling to hilly terrain. Occurs from Santa Cruz to Sonoma Counties.		None: Project Area does not support northern maritime chaparral.

Species Name	General Habitat Description	Legal Status Federal/ State	Potential for Occurrence
Wildlife Species of Conc	ern		
Invertebrates			
Bay checkerspot butterfly (<i>Euphydryas editha</i> <i>bayensis</i>)	A medium sized butterfly which occurs in shallow serpentinite soil communities. The primary host plant for this species is dwarf plantain (<i>Plantago</i> <i>erecta</i>) when they eggs hatch they feed on the host plant or if the host plant has dried up they will move to native owls clover species (<i>Castilleja</i> <i>densiflorus or Castilleja exserta</i>). The range of this species primarily occurs within the San Francisco Bay Area from Twin Peaks to Santa Clara County with some populations in Contra Costa and Alameda Counties.	FT/	None: Suitable habitat and larval host plants were not observed in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Callippe silverspot butterfly (<i>Speyeria callippe callippe</i>)	A medium-sized butterfly that occurs in only 14 populations along hilltops and ridges in grassland habitats located in the San Francisco Bay Area of California. Their primary host plants are Johnny jump-ups (<i>Viola pedunculata</i>).	FE/	None: Suitable habitat and larval host plants were not observed in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
mission blue butterfly (<i>Icaricia icarioides</i> <i>missionensis</i>)	A small bluish-lavender or brown butterfly that occurs in coastal grassland and coastal chaparral dominated habitats. The primary larval food plant is lupine (<i>Lupinus albifrons, L. formosus, L. variicolor</i>).	FE/	None: Suitable habitat and larval host plants were not observed in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Myrtle's silverspot butterfly (Speyeria zerene myrtleae)	A medium-sized butterfly found in coastal dune or prairie habitat. The primary larval food plant is violets (typically <i>Viola adunca</i>). Populations range from the Golden Gate in San Francisco north to the mouth of the Russian River in Sonoma County.	FE/	None: Suitable habitat and the larval host plant were not observed in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
San Bruno elfin butterfly (Callophrys mossii bayensis)	A small brownish butterfly that occurs in coastal mountains near San Francisco Bay, in the fog-belt of steep north-facing slopes that receive little direct sunlight. The primary larval host plant is stonecrop (Sedum spathulifolium).	FE/	None: Suitable habitat and the larval host plant were not observed in the BSA. Species not observed during field survey.

Table A-2. Special-Status Species and Habitats Considered for Potential Occurrence in the Project Area (Wile	dlife)
	unio)

Table A 2	Special Status S	nanian and Habitat	Considered for Det	ontial Accurrance in t	he Project Area (Wildlife)
Table A-2.	Special-Status S	pecies and habitat			ne Fiojeci Alea (Wildine)

Species Name	General Habitat Description	Legal Status Federal/ State	Potential for Occurrence
Amphibians			
California giant salamander (Dicamptodon ensatus)	A large reddish brown terrestrial salamander found in wet coastal forests or near clear, cold permanent and semi-permanent streams. Typically occurs from sea level to near 3,000 feet in elevation.	/SSC	None . Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
California red-legged frog (Rana draytonii)	Aquatic habitats with little or no flow and surface water depths to at least 2.3 feet. Upland habitats include small mammal burrows and woody debris.	FT /SSC	Low: Suitable habitat for the species is not present in the Project Area; however the roadside drainage swale on the north side of the Project Area may provide marginal aquatic non-breeding habitat for this species. Low potential for this species to occur in the Project Area if using area for dispersal.
Fish			
Delta smelt (<i>Hypomesus transpacificus</i>)	Delta smelt are endemic to the upper San Francisco Estuary and can be found throughout the delta region. Delta smelt are a euryhaline species that can tolerate a wide range of salinities, but are typically found in a salinity range of 2–7 ppt. They are typically found in the shallow (<3 meters) open waters of the delta, where they feed on plankton.	FT/SE	None: Suitable habitat for the species is not present in the Project Area. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project area.
Steelhead-central California coast DPS (<i>Oncorhynchus mykiss</i> <i>irideus</i>)	Clear, cool water with abundant in-stream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	FT/	None: Suitable habitat for the species is not present in the Project Area. Species not observed during field survey. Although CNDDB occurrences have been documented within 5 miles of the Project Area.
Tidewater goby (Eucyclobius newberryi)	Inhabits coastal lagoons and brackish bays at mouth of freshwater streams.	FE/SSC	None: Suitable habitat for the species is not present in the Project Area. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project area.
Reptiles			
Green sea turtle (<i>Chelonia mydas</i>)	A large marine turtle with low, smooth, heart- shaped carapace. This species rarely comes on to land, and are often found far out to sea. Eggs are laid on sandy beaches.	FE//	None: Suitable habitat for the species is not present in the BSA. This species is primarily marine. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.

Species Name	General Habitat Description	Legal Status Federal/ State	Potential for Occurrence
San Francisco garter snake (Thamnophis sirtalis tetrataenia)	Occurs in ponds and other wetlands where their preferred prey (California red-legged frog) reside. Grasslands and vegetated bank side areas are often used for basking.	FE/SE/FP	Low: Suitable habitat for this species is not present in the Project Area; however, the roadside drainage swale on the north side of the project area could provide marginal aquatic habitat for this species. Species not observed during field survey.
Birds			
California clapper rail (Rallus longirostris obsoletus)	Found in tidal salt marshes, sloughs, and wetlands with concentrations of pickleweed and cordgrass. This species occasionally nests in brackish marshes.	FE/SE/FP	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
California least tern (Sternula antillarum browni)	Primarily found along marine or estuarine shores in areas free of human disturbance and predators. This species primarily feeds on fish.	FE/SE/FP	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
Marbled murrelet (Brachyramphus marmoratus)	Spends the majority of its life on the ocean, but come inland to nest. Nesting occurs in old-growth coniferous forests near coasts, nesting on large horizontal branches high up in trees.	FT/SE	None: Suitable nesting and/or foraging habitat for the species is not present in the BSA. Species not observed during field survey.
Northern harrier (<i>Circus cyaneus</i>)	This species has a flat, owl-like face. Flies close to the ground when hunting for small mammals. Often found in undisturbed tracts of wetlands and grasslands with thick vegetation. This species nests on the ground in thick stands of cattails, alders or willows.	/SSC	High: One individual was observed foraging in the Project Area during the field surveys. Suitable foraging habitat is present within the BSA, however no suitable nesting habitat is present.
Saltmarsh common yellowthroat Geothlypis trichas sinuosa	Frequents low, dense vegetation near water. Nest usually placed on or within 8 centimeters (3 inches) of ground. May be over water, in emergent aquatic vegetation, dense shrubs, or other dense growth.	MBTA/SSC	None: Suitable nesting and/or foraging habitat for the species is not present in the BSA. Species not observed during field survey.

Table A-2.	Special-Status Species and	Habitats Considered for Potential	Occurrence in the Project Area (Wildlife)
------------	----------------------------	-----------------------------------	---

Species Name	General Habitat Description	Legal Status Federal/ State	Potential for Occurrence
Short-tailed albatross Phoebastria [=Diomedea] albatrus	The largest seabird in the North Pacific, and can be identified from other albatross species by its pink bill. This species spends most of its life at sea, but nests in colonies on islands off the coast of Japan. Following nesting season (which typically ends in June), this species migrates to their foraging habitat which ranges across the temperate and subarctic North Pacific. This species primarily feeds on squid, but other marine organisms such as fish and offal thrown overboard by fisherman are also consumed.	FE/SSC	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
western snowy plover (<i>Charadrius alexandrinus</i> <i>nivosus</i>)	This species breeds and nests in March through September, usually along coastal beaches and river mouths, and occasionally dry salt ponds and river bars. Nests typically occur in sparsely vegetated, flat, open areas with sandy or saline substrate.	FT/SSC	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey.
Mammals			
Southern sea otter (Enhydra lutris nereis)	This exclusively marine species of otter occurs in kelp forests found along the coast of California from San Mateo County to the city of Santa Barbara. Diet primarily includes crabs, snails, urchins, clams, mussels, and other marine invertebrate species.	FT/FP	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project Area.
American badger (Taxidea taxus)	Occurs in open stages of shrub, forest, and herbaceous habitats; needs uncultivated ground with friable soils.	/SSC	None: No suitable badger burrows or sign identified in the BSA during the survey.
salt marsh harvest mouse (<i>Reithrodontomys</i> <i>raviventris</i>)	The salt marsh harvest mouse inhabits tidal saline or brackish marsh habitats around the San Francisco Bay Estuary characterized by dense stands of pickleweed. Pickleweed stands must remain unsubmerged during periods of tidal flooding within the marshes.	FE/SE/FP	None: Suitable habitat for the species is not present in the BSA. Species not observed during field survey. No CNDDB occurrences have been recorded within 5 miles of the Project area.

Table A-2. Special-Status Species and Habitats Considered for Potential Occurrence in the Project Area (Wildlife)

Appendix B. Species Observed During the Field Survey

This page intentionally left blank.

Table B-1. Species Observed During the Field Survey

Scientific Name	Common Name	Native
Gymnosperms		
Pinaceae	Pine Family	
Pinus radiata	Monterey pine	Yes
Angiosperms (Eudicots)		
Anacardiaceae	Sumac Family	
Toxicodendron diversilobum	Poison oak	Yes
Araliaceae	Ginseng Family	
Hedera helix	English ivy	No
Asteraceae	Sunflower Family	
Baccharis pilularis	coyotebrush	Yes
Helminthotheca (Picris) echioides	bristly ox-tongue	No
Brassicaceae	Mustard Family	
Brassica nigra	black mustard	No
Raphanus sativus	wild radish	No
Malvaceae	Mallow Family	
Malva parviflora	cheeseweed	No
Papaveraceae	Poppy Family	
Eschscholzia californica	California poppy	Yes
Plantaginaceae	Plantain Family	
Plantago coronopus	cut leaf plantain	No
Plantago lanceolata	English plantain	No
Polygonaceae	Buckwheat Family	
Rumex crispus	curly dock	No
Rosaceae	Rose Family	
Rubus ursinus	California blackberry	Yes
Salicaceae	Willow Family	
Salix lasiolepis	arroyo willow	Yes
Angiosperms (Monocots)		
Poaceae	Grass Family	
Avena barbata	slender wild oats	No
Bromus diandrus	ripgut brome	No
Cortaderia jubata	pampas grass	No
Cynodon dactylon	Bermuda grass	No
Festuca perennis	Italian rye grass	No

Scientific Name	Common Name	Native
Phalaris aquatica	Harding grass	No
Equisetales		
Equisetaceae	Horsetail family	
Equisetum sp.	unknown horsetail species	Yes
Wildlife		
Buteo lineatus	red-shouldered hawk	Yes
Circus cyaneus	northern harrier	Yes
Corvus brachyrhynchos	american crow	Yes
Euphagus cyanocephalus	Brewer's blackbird	Yes
Sayornis nigricans	black phoebe	Yes
Zonotrichia leucophrys	white-crowned sparrow	Yes

Table B-1. Species Observed During the Field Survey

Appendix C. Photo Documentation

This page intentionally left blank.



Photo 1: View looking east at the Project Area from the northwestern corner of the Project Area.



Photo 2: View looking northwest at the Project Area from the northeastern corner of the Project Area.



Photo 3: View looking northwest along the ephemeral drainage swale on the northeastern boundary of the Project Area. Photo is taken standing at the northeastern corner of the Project Area.



Photo 4: View looking northwest along the ephemeral drainage swale along the northeastern boundary of the Project Area. Photo shows the location of the culvert outlet which conveys water from the north side of Cabrillo Highway to the drainage swale.



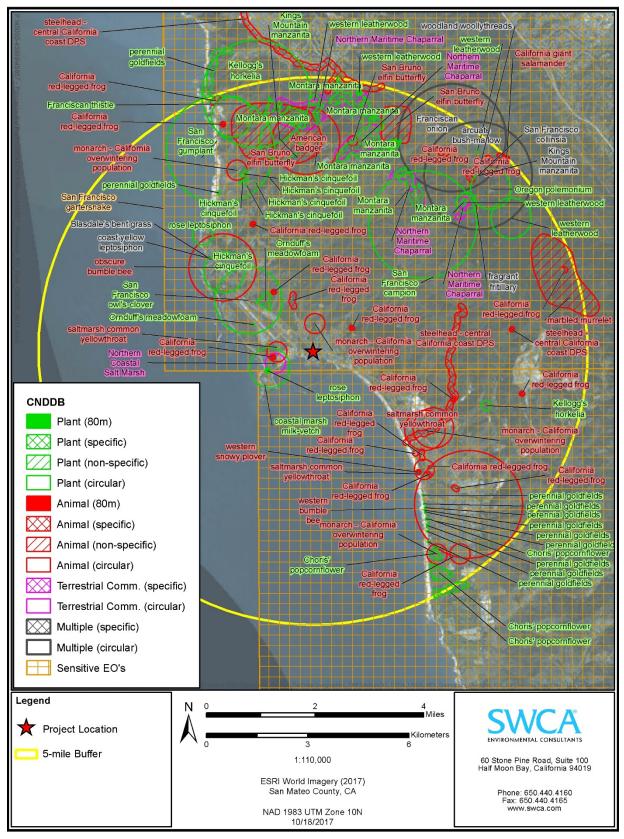
Photo 5: View looking south from the northern end of the drainage swale location on the north side of Cabrillo Highway. Photo shows the culvert inlet which conveys water beneath the highway to the drainage swale on the northeastern edge of the Project Area.

This page intentionally left blank.

Appendix D. CNDDB Records Map

This page intentionally left blank.





ATTACHMENT D



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT



April 10, 2019

Ruemel Panglao, Project Planner San Mateo County Planning and Building Division 455 County Center Redwood City, CA 94063

re: PLN2017-00320 / 100 Capistrano Road, APN 047-081-430 / Harbor Village RV Park

Dear Ruemel Panglao,

Records at this office were reviewed to determine if this project could adversely affect cultural resources. <u>Please note that use of the term cultural resources includes both archaeological sites and historical buildings</u> <u>and/or structures.</u> <u>The review for possible historic-era building/structures, however, was limited to</u> <u>references currently in our office and should not be considered comprehensive.</u>

Project Description: CDP, Use Permit & Grading permit to allow a RV park with 50 spaces & 7 tent camping spaces, a single-story 832 sq/ft laundry & restroom facility, & landscape & drainage improvements

Previous Studies:

XX Study #16130 (Clark 1994), covering approximately 100% of the proposed project area, identified no cultural resources (see recommendation below).

Archaeological and Native American Resources Recommendations:

XX The proposed project area has the possibility of containing unrecorded <u>archaeological site(s)</u>. Native American resources in this part of San Mateo County have been recorded in the foothill to valley floor interface, at the mouths of drainage canyons, in Holocene alluvial fan deposits, and in coastal terraces or adjacent to intermittent or perennial watercourses. The proposed project area is situated within Holocene alluvial fan deposits approximately 160 m from Half Moon Bay; additionally, according to a review of historic maps, the proposed project area was once adjacent to a perennial watercourse.

Due to the passage of time since the previous survey (Clark 1994) and the changes in archaeological theory and method since that time, we recommend a qualified archaeologist conduct further archival and field study for the entire project area to identify archaeological resources. Field study may include, but is not limited to, pedestrian survey, hand auger sampling, shovel test units, or geoarchaeological analyses as well as other common methods used to identify the presence of archaeological resources. Please refer to the list of consultants who meet the Secretary of Interior's Standards at http://www.chrisinfo.org.

XX We recommend the lead agency contact the local Native American tribe(s) 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.

Northwest Information Center

SAN FRANCISCO

SAN MATEO

SANTA CLATA

SANTA CRUZ

SOLANO

SONOMA

YOLO

Sonoma State University 150 Professional Center Drive, Suite E Rohnert Park, California 94928-3609 Tel: 707.588.8455 nwic@sonoma.edu http://www.sonoma.edu/nwic

File No.: 18-1904

Built Environment Recommendations:

XX Since the Office of Historic Preservation has determined that any building or structure 45 years or older may be of historical value, if the project area contains such properties, it is recommended that prior to commencement of project activities, a qualified professional familiar with the architecture and history of San Mateo County conduct a formal CEQA evaluation.

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.

For your reference, a list of qualified professionals in California that meet the Secretary of the Interior's Standards can be found at <u>http://www.chrisinfo.org</u>. If archaeological resources are encountered during the project, work in the immediate vicinity of the finds should be halted until a qualified archaeologist has evaluated the situation. If you have any questions please give us a call (707) 588-8455.

Sincerely,

Cameron Felt Researcher

ATTACHMENT E



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ARCHAEOLOGICAL RESOURCES RECONNAISSANCE REPORT

FOR THE HARBOR VILLAGE RV PARK PROJECT,

100 CAPISTRANO ROAD, PRINCETON,

SAN MATEO COUNTY, CALIFORNIA

by

Matthew R. Clark RPA #10310

Report Prepared For

Mary Young, Project Manager Pillar Point Project Developers, LLC PO Box 158 Half Moon Bay, CA 94019

June 2019

HOLMAN & ASSOCIATES ARCHAEOLOGICAL CONSULTANTS 3615 FOLSOM STREET SAN FRANCISCO, CA 94110 415-550-7286 HOLMAN.ASSOC@COMCAST.NET

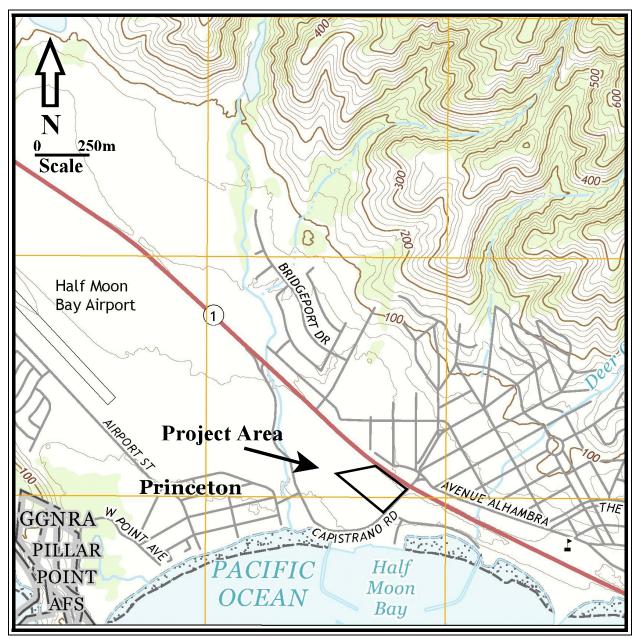
INTRODUCTION AND PROJECT SUMMARY

In June 2019, for Holman & Associates (H&A) the author conducted a historical resources records search and field survey of the "Harbor Village RV Park Project Area" (HVRV/Project), in the unincorporated town of Princeton in coastal San Mateo County. This work was requested by Mr. Ronald Stefanick and authorized by Ms. Mary Young, of Pillar Point Project Developers, LLC, of Half Moon Bay. San Mateo County required this archaeological research and report under CEQA, its own procedures as part of permitting, and after a recommendation by the California Historical Resources Information System (CHRIS) for a resurvey of the property, because the proposed project would involve earth-moving and construction impacts that could adversely affect archaeological resources.

H&A first conducted an archaeological records search for the approximately 3.36 acre Project Area at the CHRIS Northwest Information Center (NWIC). The records search found this property had been the subject of a surface reconnaissance and report in 1994 (Clark 1994), which was negative for archaeological or other historic resources. Three wide area and/or longitudinal survey reports including the records search area may have covered portions of the specific property (Dietz and Jackson 1970; Nissen and Swezey 1976; Hylkema 1989), and three others were smaller surveys in the immediate vicinity of the Project Area (Brandt 1980; Rudo 1981; Clark 1989); none of these reported resources within or adjacent to the HVRV Project. No archaeological resources are recorded within the search perimeter, but there is one historic structure on the opposite side of Highway 1. There are no recorded archaeological or historical resources within or adjacent to the Project Area. The nearest recorded archaeological sites are over a kilometer/0.68 mile from the Project Area at Princeton Marsh, not within the records search perimeter.

A pedestrian general surface reconnaissance of the Project Area was completed by the author on 02 June 2019, finding no evidence of archaeological resources anywhere on the property. There are no standing or permanent structures on the property to be evaluated for significance; the historic structure across the highway would not be physically impacted by the proposed project. No evidence of prehistoric or historical archaeological resources was found during the surface survey.

The HVRV Park Project Area at 100 Capistrano Road was surface surveyed; poor field conditions generally hampered the survey over most of the property; much of the parcel is covered or partially covered by imported fill and gravels; surface visibility ranged from good in small areas to fair in slightly larger areas to poor or nonexistent on most of the property. Conditions were adequate for a general surface survey, and the area is generally of medium archaeological sensitivity, being near the beach (~160 m away) and a small perennial stream running through Princeton (~310 m away), where prehistoric sites could be expected but none are recorded. No additional cultural resources research is recommended for this property and project, which would be of low archaeological sensitivity based on previous surveys on and around the property. The hamlet of Princeton to the west of the Project Area was developed prior to the twentieth century, but there is a low possibility historical archaeological resources could exist on the property (see discussion below). The general caveat about surprise discoveries given at the end of this report (Recommendation 2) should be incorporated into permitting conditions for construction and landscape alterations on the property.



Map 1: Harbor Village RV Park Project Area Location. (USGS "Montara Mountain" 7.5 minute topographic quadrangle, 2015)

THE PROJECT AREA

Location and Legal Description

The Harbor Village RV Park Project Area at 100 Capistrano Road is located on the flat and nearly level coastal terrace in the community of Princeton in coastal San Mateo County. The parcel is an uneven quadrilateral but basically a rectangle running northwest from Capistrano, fronting onto that road at the southeast and on the CalTrans right-of-way for State Route 1 to the northeast. The Project Area is located on the USGS "Montara Mountain" 7.5 minute topographic quadrangle, a portion of which is reproduced here as "Map 1." Princeton and the Project Area are within the Spanish-era "Rancho Corral de Tierra (Palomares)" land grant and so are not surveyed into the township-and-range survey system. The property is designated by San Mateo County Assessor's Parcel Number (APN) 047-081-430 and contains approximately 3.36 acres. The property is only fenced along the southeast boundary, part of the northeast, and part of the adjacent parking lot at the southwest, but is bounded by undeveloped CalTrans ROW at the east and paved parking lot and curbs along the west side, so the Project Area was easily defined in the field.

Biophysical Description

Cultural resources and/or historic properties likely to exist in the Project Area are products of the interaction of human behaviors with the physical environment–i.e, adaptations to utilize resources allowing human use and occupation of the location. To find, understand the genesis and uses, and interpret the meanings of cultural resources in the Project Area, knowing the past and present environmental and cultural context is essential. Following is a basic description of the natural setting, current conditions, and cultural past of the HVRVPA vicinity.

The Project Area lies at the ocean-side edge of the generally flat to rolling and generally nearly level coastal terrace along Half Moon Bay, just above the beach and ocean to the south. This location on the terrace is between Denniston Creek to the west and Deer Creek to the east, both small but perennial streams. The parcel is basically flat and level, rising slightly from the southernmost corner at about 31 feet to about 34 feet at the northernmost. Native topsoil is a medium dark to medium light grey fine silty clay loam containing few native rocks, but imported angular gravels and other fill/displaced materials were observed wherever the surface could be seen as well as in rodent backdirt piles. Open native soil was only visible at a few spots on the property, on the southwest margin and in the northern corner, with a few smaller spots and rodent burrows spread around the parcel.

The Project Area appears to never have been more developed than it is currently; the only structures are utility boxes and vaults, concentrated at the southwest corner and along the southern boundary. An asphalt on the south then graveled at the north driveway/access road crosses the property from near the middle of the southwestern boundary, curving northwest to near the northernmost corner. Just off the property at the north several trailers and agricultural equipment are stored. A less obvious graveled former access also runs into the parcel to the northeast from the same starting point as the asphalt drive.

A large majority of the property was covered by not so recently mowed annual grasses and forbs, limiting surface visibility considerably where thicker weeds occur. Noted were annual grasses of Eurasian origins, wild radish, Bristly Oxtongue, Gloxinia, California Burclover, at least one other clover, Sow Thistle, mallow, camomile, and others. As noted, rodent burrows and backdirt were common except on the paved/graveled roadways and compacted former roads.

Aboriginally, this location would have been an open windy brushy/grassy terrace edge above the beach, probably lacking trees, with topography much like now except the beach would have been farther south. It would have been a location used by local populations for scouting the beach and reef resources, but not as attractive as right next to a stream for habitation, where detectable prehistoric sites are typically found in the region.

BACKGROUND RESEARCH AND SETTING

Historical Resources Records Search and Archival Research

Archaeological research was conducted for the Project Area with the initial basic goal of determining whether any physical remnants of prehistoric or historic cultural use of the property were present and recorded, or likely to be present. This began with a search of relevant records, maps, and archives maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University. The records search was conducted on 23 May 2019 by Charles Mikulik of Cultural Resources Practitioners, LLC, a former NWIC employee, for the Project Area and environs within 100 m. The records search also included a check of National Register of Historic Places data, the California Register, California Historical Landmarks, California Points of Historical Interest, the California Inventory of Historic Resources, local historic resource registries, and other historic maps and archives in the possession of the NWIC. The results of the records search are briefly reviewed here.

The records search found one archaeological/historical resources reconnaissance report that covered the HVRVPA property exactly (Clark 1994), and three others that were nearby, within or just outside the 100 m search perimeter (Brandt 1980; Rudo 1081; Clark 1989). As noted, the Project Area may have been inspected during three wide area surveys that generally, if new fieldwork was conducted, would have been cursory examinations (Dietz and Jackson 1970; Nissen and Swezey 1976; Hylkema 1989). No historical resources are recorded within, adjacent to, or near the Project Area, nor within the records search 100 m reach. Several prehistoric archaeological sites are recorded around the north end of Half Moon Bay, but the nearest is at least 1.1 km/0.68 miles from the Project Area: none of the characteristics of those sites were found on the HVRVPA property, though the topography is very similar to at least two sites. Another 13 wide or general surveys and reports that considered the entire region or even wider regions such as the whole Bay Area, all of California, and even all the West Coast states, but did not focus on this Project Area and did not include fieldwork on or near the property (classified as "Other" reports by the NWIC; not included in references below). None of the reports on file recorded archaeological or historical resources within the search perimeter.

The survey of this property by Clark 1994 did not find any archaeological evidence and describes the area as very like the current situation. The 1980 report by Brandt was a "Cultural Resources Investigation of Operating Projects, Half Moon Bay - Pillar Point Harbor" and the 1981 Rudo report was a "Cultural Resources Survey, Pillar Point Harbor Navigational Improvements." As nothing has been built on the Project Area, no "operating projects," and no "navigational improvements" were then present to cause this property to be examined for these focused surveys. The 1989 Clark report is for a parcel between Pillar Point Harbor property and Highway 1 more than 650 m/2150 feet south of this Project Area. None of these reports recorded archaeological or historical resources. The one historic structure recorded (but not evaluated) across the highway less than 200 feet from the HVRVPA is the 1906 former Ocean Shore Railroad "North Granada Station" building, now occupied by a Japanese restaurant; the record notes it had been "extensively remodeled" and was a real estate office in 1970 (McGregor 1970).

The NWIC File Number for the records search is 18-2273; a copy of this report will be submitted to the NWIC for inclusion in the permanent CHRIS archives.

Historic maps were also examined for the records search. The oldest USGS topographic maps, the 1896 and 1899 15 minute San Mateo quadrangles, shows Capistrano Road on the ocean side of the current Highway 1 as the County Highway, but do not show any structures at the Project Area. By the 1915 the 15 minute San Mateo quad shows the Ocean Shore Railroad running on the current highway alignment and the North Granada Station in place near the property, but no roads into or structures on the property. The 1939 15 minute San Mateo map shows Highway 1 still running through Princeton but does not spot structures; no development is shown in the vicinity of the HVRVPA property but the street pattern of El Granada on the other side of the highway is in place; the railroad was gone by then. The 1949 Montara Mountain 7.5 minute map shows the same, with no developments on or near the Project Area; the 1956 version of that map shows Highway 1 in its current alignment and no development at the intersection with Capistrano Road.

The vicinity of 100 Capistrano Road was occupied by Native Americans, now known most commonly as the Ohlones, for thousands of years prior to the Spanish invasion of California, creating numerous archaeological sites generally located along the creeks and other perennial and seasonal streams but also numerous along the ocean coast. When the Spanish arrived, the best evidence indicates the Point Montara to Half Moon Bay area was held by the *Chiguan* tribelet, who had several villages in the area but none known near the Project Area (Milliken 1995:228, 239). The Portolá Expedition passed by, crossing Denniston Creek north toward Point Montara in October 1769, and did the same on their return trip in November, but did not comment on encountering natives between Half Moon Bay and Pacifica (Costansó 1992[1770]). Later expeditions to the San Francisco Bay Area established missions in the area in the 1770s, including Mission San Francisco in 1776, where some *Chiguan* were baptized. The Native Americans were quickly swept aside and brought under the control of the Spanish. By the 1840s Europeans were settled in parts of Pacifica and along the banks of Pilarcitos Creek in what became Half Moon Bay, and by 1839 the Rancho Miramontes "Rancho Corral de Tierra (Palomares)" land grant had encompassed the Project Area (Dietz and Jackson 1970).

Field Surface Reconnaissance

Pedestrian field survey was conducted by the author on 02 June 2019. An "intensive surface reconnaissance" was planned, but conditions reduced the survey coverage to "general" (King, Moratto, and Leonard 1973) as attempting to find locations where surface soil or subsoil could be examined became most important. The Project area was covered in NW/SE transects spaced at 10 m, with open soil and rodent burrows examined wherever they occurred. Surface visibility was generally poor, ranging from goof to fair to nonexistent. Visibility was particularly poor in the entire central part of the property, as the majority was covered by thick grass and weeds. As noted, native topsoil could only be seen rarely, often poorly, but those areas observed had soil amendments (gravels mostly) and were only partially native. Numerous gopher burrows had brought up native soil in the grass and around the edges, which were examined. Archaeological sites right along the terrace edge away from fresh water tend to not have subsurface components and to be sparsely indicated because those locations were not suitable for habitation or other activities that leave more substantial indications, so the surface survey in this instance is judged adequate.



Figure 1: Harbor Village RV Park Project Area, looking northwest from south-central property fence, Highway 1 to right, buried utility box in foreground (02 June 2019).

CONCLUSION AND RECOMMENDATIONS

No evidence of prehistoric archaeological resources was found on the Harbor Village RV Park Project Area by archival search or field survey. No areas very likely to contain perhaps obscured resources were identified. The Project Area had been surveyed previously; that and the nearest other surveys have found no resources with the exception of prehistoric sites well to the north around the Pillar Point marsh and bluff, and near a perennial stream meeting the ocean about 2.25 km to the south. This Project Area would have been suitable for prehistoric cultural use but in this region virtually all identified prehistoric sites are found quite near sources of fresh water. There was no evidence found that previous work on the property could have disturbed historical resources, but the large majority of the property displays evidence of at least surface and near-surface disturbances for many years, including plowing many times, and that with other shallow earth moving has introduced and spread imported construction gravels across the property.

Historic topographic maps show no prior development around and within the Project Area, so it is quite unlikely historic archaeological deposits or features could exist in or around the currently developed property.

The proposed development work at the Harbor Village RV Park Project Area can proceed without affecting known prehistoric or historic archaeological resources as defined under CEQA or historic properties as defined by federal regulations. However, due to the inability to adequately inspect much of the property surface, the normal conditions requiring appropriate investigations if potential archaeological resources are encountered should be in place for this development.

Recommendations

1) No additional prehistoric archaeological or historic preservation research for resources is recommended for the Harbor Village RV Park Project Area at this time, not being needed for onsite work to proceed.

2) Although no archaeological resources were found on the 100 Capistrano Road Project Area property, it is possible that subsurface deposits may yet exist or that evidence of such resources has been obscured by more recent natural or cultural factors. Archaeological and historic resources and human remains are protected from unauthorized disturbance by State law, so supervisory and construction personnel therefore must notify the County and proper authorities if any archaeological or historic resources or human remains are encountered during construction activities and halt construction to allow qualified archaeologists to identify, record, and evaluate such resources and recommend an appropriate course of action.

References

Brandt, Steven A.

1980 *Cultural Resources Investigation of Operating Projects, Half Moon Bay - Pillar Point Harbor.* Report on file, California Historical Resources Information System, Northwest Information Center, Sonoma State University; File No. S-11127a.

Clark, Matthew R.

- 1989 Archaeological Reconnaissance of Marchant Enterprises' Proposed Hotel Project Site and Coastside County Water District "Local Improvement District 1989-1 Water Extension Project" in El Granada, San Mateo County, California. Report on file, California Historical Resources Information System, Northwest Information Center, Sonoma State University; File No. S-10905.
- Archaeological Reconnaissance of a Proposed San Mateo County Harbor District Overflow Parking Lot for Pillar Point Harbor at Highway One and Capistrano Road, Princeton, San Mateo County, California. Report on file, California Historical Resources Information System, Northwest Information Center, Sonoma State University; File No. S-16130.

Costansó, Miguel

1992[1770] The Discovery of San Francisco Bay: The Portolá Expedition of 1769-1770: the Diary of Miguel Constansó in Spanish and English. Edited by Peter Browning; reprint and revision of 1911 version of same title, edited by Frederick J. Teggert, UC Press, Berkeley. Great West Books, Lafayette, CA.

Dietz, Stephen A., and Thomas L. Jackson

1970 An Archaeological and Historical Reconnaissance of a Portion of the San Mateo County Coastside. Report on file, California Historical Resources Information System, Northwest Information Center, Sonoma State University; File No. S-3082.

Hylkema, Mark G.

- Archaeological Survey Report, proposed shoulder widening, pavement resurfacing, and widening of the Pilarcitos Creek Bridge on Route 1, 04-SMA-1 P.M. 26.4/35.4, 04-SMA-92 P.M. 0.0/0.2, 4336-121900.
 Report on file, Northwest Information Center, California Historical Resources Information System, Sonoma State University, File S-10761.
- King, Thomas F., Michael J. Moratto, and Nelson N. Leonard III
- 1973 *Recommended Procedures for Archaeological Impact Evaluation*. Report prepared for the Society for California Archaeology and University of California at Los Angeles Archaeological Survey. Los Angeles.

McGregor, T.

1970 Archaeological Site Survey Record [for the Ocean Shore Railroad North Granada Station Building], P-41-194/CA-SMA-194H. Report on file, California Historical Resources Information System, Northwest Information Center, Sonoma State University.

Milliken, Randall T.

- A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810.
 Ballena Press Anthropological Papers No. 43. Ballena Press, Menlo Park, CA.
- Nissen, Karen M., and Sean Swezey
- 1976 Assessment of Archaeological Resources, San Mateo County Mid-Coastside Waste-Water Management Plan for Thomas Reid Associates, Palo Alto, California. Report on file, California Historical Resources Information System, Northwest Information Center, Sonoma State University; File No. S-5395.

Rudo, Mark

1981 *Cultural Resources Survey, Pillar Point Harbor Navigational Improvements.* Report on file, California Historical Resources Information System, Northwest Information Center, Sonoma State University; File No. S-11127.

ATTACHMENT F



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT



GEOTECHNICAL STUDY

HARBOR VILLAGE RV PARK 100 CAPISTRANO ROAD PRINCETON, CALIFORNIA APN 047-081-430

PREPARED FOR: PILLAR POINT PROJECT DEVELOPERS LLC P.O. BOX 158 HALF MOON BAY, CA 94019

PREPARED BY: SIGMA PRIME GEOSCIENCES, INC. 332 PRINCETON AVENUE HALF MOON BAY, CALIFORNIA 94019

MAY 17, 2018



May 17, 2018

Pillar Point Project Developers LLC P.O. Box 158 Half Moon Bay, CA 94019

Re: Geotechnical Report for Proposed RV Park: 100 Capistrano Road, Princeton, California. APN 047-081-430 Sigma Prime Geosciences Job No. 14-158

Dear Sirs:

As per our proposal dated November 20, 2014 we have performed a geotechnical study for your proposed RV Park located at 100 Capistrano Road in Princeton, California. The accompanying report summarizes the results of our field study, laboratory testing, and engineering analyses, and presents geotechnical recommendations for the planned project.

Thank you for the opportunity to work with you on this project. If you have any questions concerning our study, please call.

Yours,

Sigma Prime Geosciences, Inc.

Charles M. Kissick, P.E.





GEOTECHNICAL STUDY 100 CAPISTRANO ROAD PRINCETON, CALIFORNIA APN 047-081-430

PREPARED FOR:

PILLAR POINT PROJECT DEVELOPERS LLC P.O. BOX 158 HALF MOON BAY, CA 94019

PREPARED BY:

SIGMA PRIME GEOSCIENCES, INC. 332 PRINCETON AVENUE HALF MOON BAY, CALIFORNIA 94019

May 17, 2018



TABLE OF CONTENTS

Page No.

1.	INT		1
•	.1 .2	PROJECT DESCRIPTION	
2.	FIN	IDINGS	2
2	•••	GENERAL	
_	.2 .3	SITE CONDITIONS	
_	.3 .4	SITE SUBSURFACE CONDITIONS	
	.5	GROUNDWATER	
_	.6 .7	FAULTS AND SEISMICITY	
3	••	GENERAL	4
-	.2	EXPANSIVE SOILS	
-	.3 .4	GEOLOGIC HAZARDS	
	3.4	.1 Clearing & Subgrade Preparation	5
	3.4	.2 Compaction	
3	.5 .5		
	3.5		
3	3.5 .6	.2 Slabs-on-Grade	
•	.7	CONSTRUCTION OBSERVATIONS AND TESTING	
4.	LIN	NITATIONS	3
5.	RE	FERENCES	9

TABLES

TABLE 1 - HISTORICAL EARTHQUAKES TABLE 2 - SEISMIC PARAMETERS FIGURES FIGURE 1 - SITE LOCATION MAP FIGURE 2 - SITE MAP APPENDICES APPENDIX A - SUBSURFACE STUDY APPENDIX B - LABORATORY TESTS



1. INTRODUCTION

We are pleased to present this geotechnical study report for the proposed RV Park located at 100 Capistrano Road in Princeton, California, at the location shown in Figure 1. The purpose of this study was to evaluate the subsurface conditions at the site, and to provide geotechnical design recommendations for the proposed project.

1.1 PROJECT DESCRIPTION

We understand that you plan to grade the site to create 50 RV parking stalls. Most cuts and fills be 1 foot or less in thickness. A 770 square foot restroom and laundry is the only planned structure. Structural loads are expected to be relatively light as is typical for this type of construction.

1.2 <u>SCOPE OF WORK</u>

The scope of work for this study was presented in our proposal dated November 20, 2014. In order to complete this project we have performed the following tasks:

- Reviewed published information on the geologic and seismic conditions in the site vicinity;
- Subsurface study, including 1 soil boring at the site;
- Laboratory testing of selected soil samples, to establish their engineering properties, and for soil classification purposes;
- Engineering analysis and evaluation of the subsurface data to develop geotechnical design criteria; and
- Preparation of this report presenting our recommendations for the proposed project.



2. FINDINGS

2.1 <u>GENERAL</u>

The site reconnaissance and subsurface study were performed on April 26, 2018. The subsurface study consisted of drilling 1 soil boring, 53.5 feet deep. The approximate location of the boring is shown in Figure 2. The boring log and the results of laboratory tests on soil samples are attached in Appendix A.

2.2 <u>SITE CONDITIONS</u>

At the time of our study, the site was an undeveloped 3.36-acre property. The property slopes to the northwest at a gradient of about 4 percent The project site is vegetated with grasses and weeds throughout the property.

2.3 <u>REGIONAL AND LOCAL GEOLOGY</u>

Based on Brabb and Pampeyan (1983), the site vicinity is primarily underlain by Holocene-age inner and outer alluvial fan deposits. The alluvial fan deposits are described as silt, sand, and clayey silt.

2.4 <u>SITE SUBSURFACE CONDITIONS</u>

Based on the soil boring, the subsurface conditions at the restroom site consist of 13.5 feet of stiff clay over a 4.5 foot thick layer of loose silty sand. Below a depth of 18 feet, the soil consists of stiff the very stiff clays and dense to very dense sands. The upper clay has a high expansive potential, with a plasticity index of 31.

2.5 <u>GROUNDWATER</u>

Groundwater was not detected at the time of soil sampling, due to the drilling method (mud-rotary drilling). It is likely that groundwater is in the silty sand lens at a depth of 13.5 feet. Groundwater is not expected to have an impact on the project.

2.6 FAULTS AND SEISMICITY

The site is in an area of high seismicity, with active faults associated with the San Andreas fault system. The closest active fault to the site is the San Gregorio-Seal Cove fault, located offshore, about 1 km to the west. The San Andreas fault is located about 12 km to the northeast. Other faults most likely to produce significant seismic ground motions include the Hayward, Rodgers Creek, and Calaveras faults. Selected historical earthquakes in the area with an estimated magnitude greater than 6-1/4, are presented in Table 1 below.



	TABLE 1										
HISTORICAL EARTHQUAKES											
Date	<u>Magnitude</u>	<u>Fault</u>	Locale								
June 10, 1836	6.5 ¹	San Andreas	San Juan Bautista								
June 1838	7.0 ²	San Andreas	Peninsula								
October 8, 1865	6.3 ²	San Andreas	Santa Cruz Mountains								
October 21, 1868	7.0 ²	Hayward	Berkeley Hills, San Leandro								
April 18, 1906	7.9 ³	San Andreas	Golden Gate								
July 1, 1911	6.6 ⁴	Calaveras	Diablo Range, East of San Jose								
October 17, 1989	7.1 ⁵	San Andreas	Loma Prieta, Santa Cruz Mountains								
(1) Borchardt & Top											
(2) Toppozada et a											
(3) Petersen (1996)											
(4) Toppozada (198	34)										
(5) USGS (1989)											

2.7 <u>2016 CBC EARTHQUAKE DESIGN PARAMETERS</u>

Based on the 2016 California Building Code (CBC) and our site evaluation, we recommend using Site Class Definition D (stiff soil) for the site. The other pertinent CBC seismic parameters are given in Table 2 below.

Table 2 CBC SEISMIC DESIGN PARAMETERS

Ss	S ₁	Sмs	S _{M1}	SDS	S _{D1}								
2.21	0.859	2.21	null	1.474	null								

Because the S₁ value is greater than 0.75, Seismic Design Category E is recommended, per CBC Section 1613.5.6. The values in the table above were obtained from a USGS software program which provides the values based on the latitude and longitude of the site, and the Site Class Definition. The latitude and longitude were 37.5045 and −122.4823, respectively, and were accurately obtained from Google EarthTM. These same values can be obtained directly from maps in the CBC, however the scale of the map makes it impractical to achieve satisfactory accuracy. The map in the CBC was derived from the same work that led to the USGS software. The remaining parameters were also obtained by the same USGS program.



3. CONCLUSIONS AND RECOMMENDATIONS

3.1 <u>GENERAL</u>

It is our opinion that, from a geotechnical viewpoint, the site is suitable for the proposed construction, provided the recommendations presented in this report are followed during design and construction. Detailed recommendations are presented in the following sections of this report.

Because subsurface conditions may vary from those encountered at the location of our borings, and to observe that our recommendations are properly implemented, we recommend that we be retained to 1) Review the project plans and structural calculations for conformance with our report recommendations and 2) Observe and test the earthwork and foundation installation phases of construction.

3.2 EXPANSIVE SOILS

Subsurface clayey soils at the site have a high potential for expansion. Expansive soils tend to swell with increases in moisture content and shrink with decreases in moisture content. These moisture fluctuations typically occur during seasonal variations in precipitation, but can also occur from irrigation, changes in site drainage, or the presence of tree roots. As the soil shrinks and swells, improvements supported on the expansive soils may fall and rise. These movements may cause cracking and vertical deformations of improvements.

We will recommend a foundation type for the restroom that takes into account the highly expansive soils in Section 3.5 below.

3.3 <u>GEOLOGIC HAZARDS</u>

We reviewed the potential for geologic hazards to impact the site, considering the geologic setting, and the soils encountered during our investigation. The results of our review are presented below:

- <u>Fault Rupture</u> The site is not located in an Alquist-Priolo Earthquake Fault Zone where fault rupture is considered likely (California Division of Mines and Geology, 1976). Therefore, active faults are not believed to exist beneath the site, and the potential for fault rupture to occur at the site is considered low, in our opinion.
- <u>Ground Shaking</u> The site is located in an active seismic area. Moderate to large earthquakes are probable along several active faults in the greater Bay Area over a 30 to 50 year design life. Strong ground shaking should therefore be expected several times during the design



life of the project, as is typical for sites throughout the Bay Area. The improvements should be designed and constructed in accordance with current earthquake resistance standards.

- <u>Differential Compaction</u> Differential compaction occurs during moderate and large earthquakes when soft or loose, natural or fill soils are densified and settle, often unevenly across a site. In our opinion, due to the stiff nature of the upper 13.5 feet of clay and the small proportion of loose sands, the likelihood of significant damage to the project from differential compaction is low.
- Liquefaction Liquefaction occurs when loose, saturated sandy soils lose strength and flow like a liquid during earthquake shaking. Ground settlement often accompanies liquefaction. Soils most susceptible to liquefaction are saturated, loose, silty sands, and uniformly graded sands. The 4.5-foot thick layer of loose silty sand at a depth of 13.5 feet is likely to liquefy during a design earthquake. Using the methods of ldriss and Boulanger (2008), we estimated up to 1.8 inches of settlement. The thick clay cap should reduce this amount at the ground surface. We estimate about 1 inch of total settlement and 0.5 inches of differential settlement.

3.4 <u>EARTHWORK</u>

3.4.1 <u>Clearing & Subgrade Preparation</u>

All deleterious materials, including trees, topsoil, roots, vegetation, designated utility lines, etc., should be cleared from building and paving areas. The actual stripping depth required will depend on site usage prior to construction, and should be established by the Contractor during construction. Topsoil may be stockpiled separately for later use in landscaping areas.

After the site has been properly cleared, stripped, and excavated to the required grades, the exposed surface soil in areas to receive a slab-on-grade or paving should be scarified to the depth recommended in Section 3.5.2, moisture conditioned to at least 3-5 percent over optimum moisture content, and compacted to the specifications listed below under the section captioned "compaction."

3.4.2 Compaction

The scarified surface soils should be moisture conditioned to 3-5 percent above the optimum moisture content and compacted to at least 90 percent of the maximum dry density, as determined by ASTM D1557-78. All trench backfill should also be moisture conditioned to 3-5 percent above the optimum moisture content and compacted to at least 90 percent of the maximum dry density. The upper 3 feet of trench backfill below foundations or paved areas should be



compacted to 95 percent of the maximum dry density. Fills should be placed in maximum loose lifts of 6 to 8 inches.

3.4.3 Surface Drainage

The finish grades should be designed to drain surface water away from foundations and slab areas, to suitable discharge points. On pervious surfaces, such as soil, slopes of at least 5 percent within 10 feet of the structures is required by the building code. The slope can be reduced to 2 percent for impervious surfaces. Ponding of water should not be allowed adjacent to the structure.

3.5 FOUNDATIONS

Due to the nature of the highly expansive soils found on this site and the potential for liquefaction-induced ground settlement, a reinforced slab/mat foundation is recommended for the restroom. A reinforced slab or mat foundation may be designed for allowable bearing pressures of 2,500 pounds per square foot for dead plus live loads, with a one-third increase allowed for total loads including wind or seismic forces.

We recommend that the slabs be underlain by at least 12 inches of non-expansive granular fill, including a 2-foot-wide zone around the mat foundation. Where floor wetness would be detrimental, a vapor barrier, such Stego wrap or equivalent may be used.

All slabs should be reinforced to provide structural continuity and to permit spanning of local irregularities. The slabs should be capable of spanning 10 feet, point to point, and should cantilever a minimum of 4 feet.

3.5.1 Lateral Loads

A passive pressure equivalent to that provided by a fluid weighing 300 pcf and a friction factor of 0.3 may be used to resist lateral forces and sliding against mat or spread footing foundations. These values include a safety factor of 1.5 and may be used in combination without reduction. Passive pressures should be disregarded for the uppermost 12 inches of foundation depth, measured below the lowest adjacent finished grade, unless confined by concrete slabs or pavements. However, the pressure distribution may be computed from the ground surface.

3.5.2 Slabs-on-Grade

Slabs-on-grade should be constructed as free-standing slabs, structurally isolated from surrounding grade beams. We recommend that the slab-on-grade be underlain by at least 24 inches of non-expansive fill. The upper 4 inches of this



fill should consist of ½- to ¾-inch clean crushed rock. Where floor wetness would be detrimental, a vapor barrier, such as Stego wrap or equivalent may be used.

3.6 PAVING

The RV park will have large areas of standard asphalt paving, as well as pervious concrete. The upper soils are comprised of stiff clay. The standard pavement section of 3 inches of asphalt over 9 inches of compacted class 2 base rock is recommended. The pervious concrete should consist of 8.5 inches of permeable concrete over 12 inches of class 4 base rock. This recommended section is based on the Caltrans pervious pavement design guidance manual.

3.7 CONSTRUCTION OBSERVATIONS AND TESTING

The earthwork and foundation phases of construction should be observed and tested by us to 1) Establish that subsurface conditions are compatible with those used in the analysis and design; 2) Observe compliance with the design concepts, specifications and recommendations; and 3) Allow design changes in the event that subsurface conditions differ from those anticipated. The recommendations in this report are based on a limited number of borings. The nature and extent of variation across the site may not become evident until construction. If variations are then exposed, it will be necessary to reevaluate our recommendations.



4. LIMITATIONS

This report has been prepared for the exclusive use of the owner for specific application in developing geotechnical design criteria for the currently planned project at 100 Capistrano Road in Princeton, California (APN 047-081-430). We make no warranty, expressed or implied, except that our services were performed in accordance with geotechnical engineering principles generally accepted at this time and location. The report was prepared to provide engineering opinions and recommendations only. In the event that there are any changes in the nature, design or location of the project, or if any future improvements are planned, the conclusions and recommendations contained in this report should not be considered valid unless 1) The project changes are reviewed by us, and 2) The conclusions and recommendations presented in this report are modified or verified in writing.

The analyses, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of our study; the currently planned improvements; review of previous reports relevant to the site conditions; and laboratory results. In addition, it should be recognized that certain limitations are inherent in the evaluation of subsurface conditions, and that certain conditions may not be detected during a study of this type. Changes in the information or data gained from any of these sources could result in changes in our conclusions or recommendations. If such changes do occur, we should be advised so that we can review our report in light of those changes.



5. **REFERENCES**

- Borchardt, G. and Toppozada, T.R., 1996, Relocation of the "1836 Hayward Fault Earthquake" to the San Andreas Fault, Abstracts, American Geophysical Union Fall Meeting, December, San Francisco.
- Brabb, Earl E. and Pampeyan, Earl H., 1983, Geologic Map of San Mateo County, California, USGS Miscellaneous Investigations Series Map I-1257-A, Scale 1:62,500.

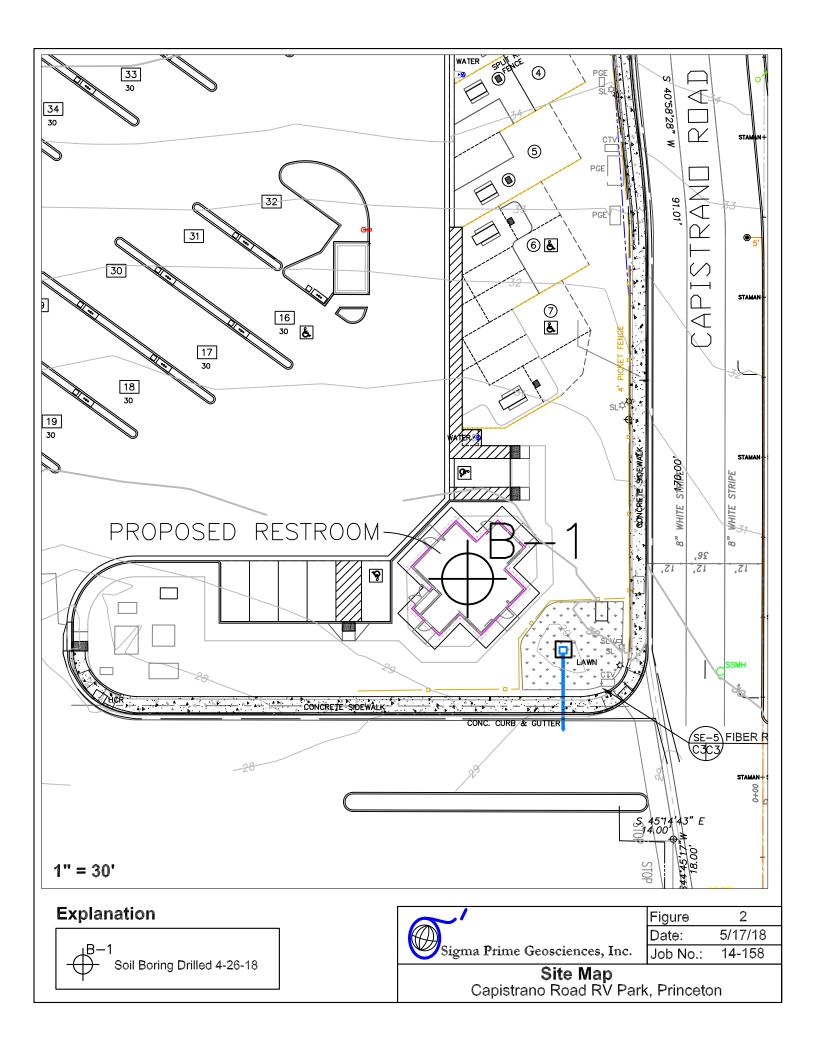
California Building Code, 2013. California Code of Regulations. Title 24, Part 2 Volume 2, Effective January 1, 2014.

- California Division of Mines and Geology, 1976, Earthquake Fault Zones, Alquist-Priolo Earthquake Fault Zoning Act, Half Moon Bay Quadrangle, Scale 1: 24,000.
- Idriss, I.M. and Boulanger, R.W., 2008, Soil Liquefaction During Earthquakes, Earthquake Engineering Research Institute, Monograph, 237 pp.
- Jennings, C.W., 1996, Preliminary Fault and Geologic Map, State of California, California Division of Mines and Geology, Scale 1:750,000.
- Petersen, M.D., Bryant, W.A., Cramer, C.H., Cao, T., Reichle, M.S., Frankel, A.D., Lienkaemper, J.J., McCrory, P.A., and Schwartz, D.P., 1996, Probabilistic Seismic Hazard Assessment for the State of California, USGS Open File Report 96-706, CDMG Open File Report 96-08, 33p.
- Toppozada, T.R., Real, C.R., and Park, D.L., 1981, Preparation of Isoseismal Maps and Summaries of Reported Effects for pre-1900 California Earthquakes, CDMG Open File Report 81-11 SAC.
- Toppozada, T.R., 1984, History of Earthquake Damage in Santa Clara County and Comparison of 1911 and 1984 Earthquakes.
- United States Geological Survey, 1989, Lessons Learned from the Loma Prieta, California Earthquake of October 17, 1989, Circular 1045.
- United States Geologic Survey, 11/20/2007, Earthquake Ground Motion Parameters, Version 5.0.8.
- Working Group on California Earthquake Probabilities, 1999, Earthquake Probabilities in the San Francisco Bay Region: 2000 to 2030 – A Summary of Findings, U.S. Geological Survey Open File Report 99-517, version 1.



Ν







APPENDIX A

SUBSURFACE STUDY

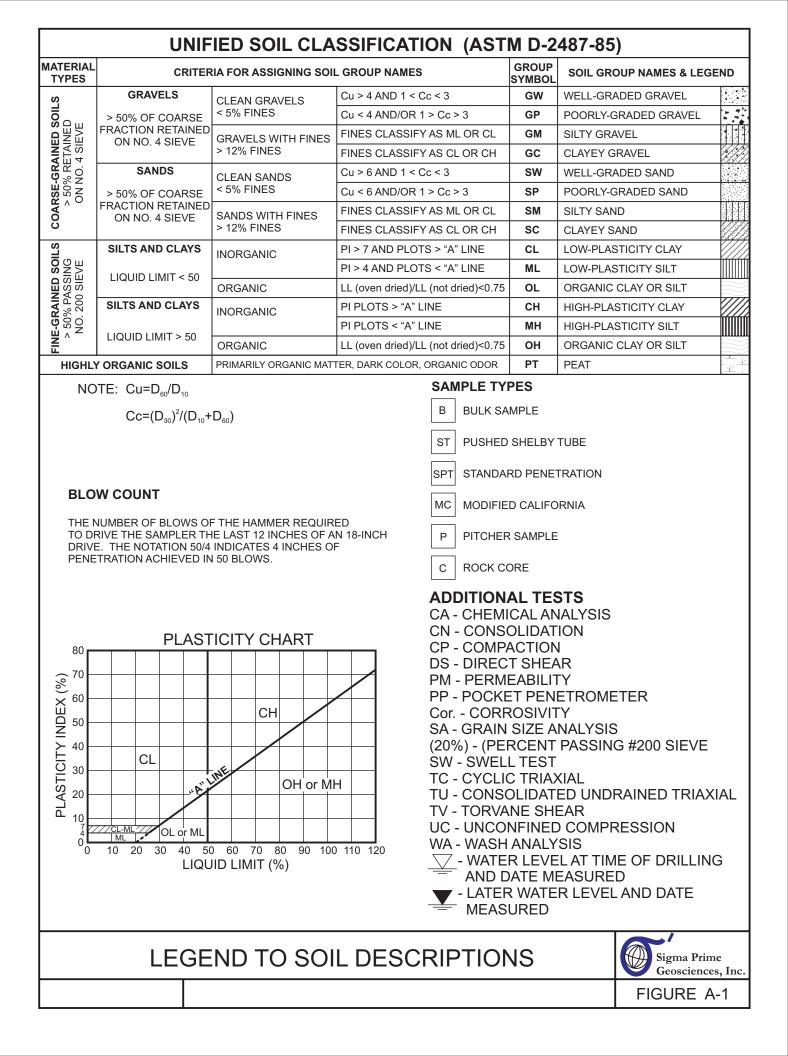
The soils encountered during drilling were logged by our representative, and samples were obtained at depths appropriate to the study. The samples were taken to the laboratory where they were carefully observed and classified in accordance with the Unified Soil Classification System. The logs of our borings, as well as a summary of the soil classification system, are attached.

Several tests were performed in the field during drilling. The standard penetration resistance was determined by dropping a 140-pound hammer through a 30-inch free fall, and recording the blows required to drive the 2-inch (outside diameter) sampler 24 inches. The standard penetration resistance is the number of blows required to drive a standard split spoon sampler the last 12 inches. The blow counts are recorded on the boring logs at the appropriate depth. Use of the standard split spoon sampler defines a Standard Penetration Test (SPT), and yields an SPT-equivalent blow count. A modified California (Mod-Cal) sampler was also used, which results in blow counts that are higher than an SPT-equivalent blow count, due to the Mod-Cal sampler's larger diameter. For analyses, it is normal practice to reduce the Mod-Cal blow counts to correspond to an SPT-equivalent blow count. The blow counts from the Mod-Cal sampler are uncorrected on the logs. The results of these field tests are also presented on the boring logs.

The boring logs and related information depict our interpretation of subsurface conditions only at the specific location and time indicated. Subsurface conditions and groundwater levels at other locations may differ from conditions at the locations where sampling was conducted. The passage of time may also result in changes in the subsurface conditions.

Project Name Capistrano RV Park								Project Number 14-158								
Locatio		-					· · · · · · · · · · · · · · · · · · ·					Prime Geosciences Inc.				
Drilli		Hole Size		Soil Footage	Rock F	ootage	Ele	evation	Datu	m	Sigma Prime Geosciences, Inc.					
	d Rotary	4"	53.5'	53.5'	0'			9.5'	NAVE	880	Boring	No.	В-3			
		Pitcher	Drilling			Logged	C.	Kissi			Р	Page	1 of 2			
Type of	Drill Rig Failing	1500	Type of Samp SPT	ler(s)		Hamme	er We 14	eight and 0 Ib, 3	d Fall 30"		Dat	te(s)	4/26/18			
Depth (feet)		D	escription			Grap Lo	hic	Class	Blow Count	Samp No.	le Sample Type		Comments			
	0-3': Sano	dy <u>Clay</u> :	dark brown	; stiff; moist.												
-						-{///			N/a	1	N/a		Grab Sample #1:			
_								CL	11/0				LL=50, PL=19, PI=31			
									3 4	2	SPT					
-	3'-13.5': <u>S</u>	andy Cla	<u>ay</u> : yellowish	n brown; stif	f; mois	st.			5	2		F				
_						_////						L				
5—	1				_				4							
-					9 11	3	SPT	┝								
_								L								
-						-////						-				
_								CL				L				
10—					_											
-												–				
-	1															
-						-////						-				
_			<u>nd</u> : blue-gra	y; loose; mc	oist.		ÍÍ					L				
	Fine sand	Ι.														
15—					_				3			\vdash				
_									3 2	4	SPT	F				
-	1															
-	40' 00 5'	0										–				
_	18'-22.5':	Sandy (<u>⊿ay</u> : blue-g	ray; stiff; mo	DIST.			CL				L				
20																

Project	Name	Boring No.		Date		Page		2	🕖 s	igma Prime Geosciences, Inc.
Depth (feet)	D	escription			Graphic Log	Class	Blow Count	Sample No.	Sample Type	Comments
20	18'-22.5': <u>Sandy C</u>	<u>lay</u> : blue-gr	ay; stiff; r	noist.		CL	3 3 7	5	SPT	-
_ 25—	22.5'-32': <u>Clayey Sa</u>	and: blue-g	ray; dens	e; moist						-
-		-					6 12 20	6	SPT	-
30—	Very dense.					9			-	
-	32'-44': <u>Sandy Cla</u>	ay: blue-gra	y; very sti	iff; mois	- -		20 31	7	SPT	-
 35							4 8 13	8	SPT	-
-						CL				-
40				-	-		5 13 20	9	SPT	-
- 45	44'-53.5': <u>Silty Sar</u> moist. Fine sand.	'-53.5': <u>Silty Sand</u> : blue-gray; very dens bist. Fine sand.					22			- -
						SM	36 43 13	10	SPT	- - - 52'
- 50	Bottom of Hole 53	3.5' below g	round sui	rface.			13 31 44	11	SPT	- 53.5'





APPENDIX B

LABORATORY TESTS

Samples from the subsurface study were selected for tests to establish some of the physical and engineering properties of the soils. The tests performed are briefly described below.

The plasticity of the upper clayey soil sample was determined on one soil sample in accordance with ASTM D 422. These results are presented on the boring log, at the appropriate sample depth.

ATTACHMENT G



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT



332 PRINCETON AVENUE HALF MOON BAY, CA 94019 650-728-3590 sigmaprm@gmail.com

DRAINAGE REPORT

HARBOR VILLAGE RV PARK 100 Capistrano Road El Granada, California APN: 047-081-430 Sigma Prime Job #: 14-158

March 2018

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Site Overview	1
1.2	Existing Conditions	1
1.3	Proposed Improvements	1
2.0	BEST MANAGEMENT PRACTICES (BMPs)	2
2.1	Construction Measures	2
2.2	Post-Construction Measures	2
3.0	MAINTENANCE	3
3.1	Additional Inspection and Maintenance	3

APPENDICES:

- **BAHM Report** i)
- Pervious and Impervious Areas ii)
- C3 and C6 Development Review Culvert Sizing Calculations iii)
- iv)

1.0 INTRODUCTION

This drainage report was prepared for 100 Capistrano Road in El Granada, California. The drainage analysis for the proposed project was conducted in accordance with the San Mateo County "Guidelines for Drainage Review" (Guidelines). The Guidelines require the project to show that the post-project peak flow is less than or equal to the pre-project condition. Peak runoff flow rates were calculated using the Rational Method (Q=CIA) with a runoff coefficient of 0.30 for vegetated areas, and 0.90 for impervious areas (hardscape or roof). The San Mateo County Rainfall Runoff Data Map was used to obtain the local rainfall intensity.

1.1 Site Overview

The site is a 3.36-acre commercial lot located at the corner of Highway 1 and Capistrano Road in El Granada, California. It is on the west side of Highway 1 within the Denniston Creek watershed which covers approximately 2600 acres and discharges into Pillar Point Harbor. The site is gently sloping at approximately 4% to the southwest with no drainage channels. Any runoff that currently flows across the site occurs as dispersed sheet flow. The site is vegetated with grasses and weeds. There are no springs or shallow groundwater on the site. The gentle slope is very stable.

1.2 Existing Conditions

The site has little relief and is generally flat at approximately 40 feet (NAVD) at the eastern edge to 32 feet above sea level at the western boundary. The property is bounded on the east by Highway 1. The west side is bounded by the Oceano Hotel, shops, and large parking lot. The north side is bounded by farmer's fields and an irrigation pond. Capistrano Road is at the south side of the property with Pillar Point Parking beyond.

The subject property contains approximately 3 acres of wild grasses and weeds with 0.38 acres of asphalt at the west end of the property. Currently, surface runoff flows across the property as sheet flow to the west side of the property. There are three existing stormwater catch basins at the western side of the property.

1.3 Proposed Improvements

Proposed improvements include a 50 space RV Park, 7 tent sites, 9 visitor parking spaces and a bath house/laundry facility building. The pervious surfaces will consist of permeable concrete within the RV parking spaces, the tent spaces on gravel or drainrock and landscape features. Pervious surfaces will account for 1.92 acres of the proposed improvements. Impervious surfaces will consist of asphalt driveway and parking areas, sidewalks, concrete berms and the roof area of the bath-house/laundry facility. Impervious surfaces will account for 1.46 acres of the site.

Due to the impervious area being larger than 1 acre, we ran the Bay Area Hydrology Model (BAHM) 2013 program to justify the use of the drainage element as described below. We established that a 2-foot diameter pipe at 1000' length would be adequate for this site. We calculated the volume of this pipe to corelate with the volume of two proposed bioretention areas. The bioretention areas would also be a good element for filtering possible stormwater contaminants prior to discharge to the existing storm-water system.

Based on the above data, we have designed a drainage system consisting of two bioretention areas. Our calculations, attached, show that the proposed volume of the bioretention systems will be large enough for a 10-year storm. The bioretention areas receive runoff from two Drainage Management Areas (DMAs), shown on the plans. The DMAs are very nearly the same size and will produce about 1570 cubic feet of runoff for retention, based on the BAHM analysis. The surface areas of the two bioretention areas (1764 square feet and 2320 square feet) yield required water depths on 8 inches and 11 inches. To provide conservatively sized bioretention areas, these water depths disregard the volume of water held in the bioretention soil and underlying drain rock. The overflow from both bioretention areas are able to flow by gravity to the existing drainage system. We performed hydrologic calculations to show that the overflow from the bioretention areas will not overwhelm the existing 15 to 18 inch drain pipes on the adjacent property.

We performed a percolation test at the north-west corner of the property. Below approximately 2 feet of rich organic top-soil we encountered colluvial deposits of sandy clay with a percolation rate of 0.2 inches/hour.

With the proposed bioretention areas, the post-development runoff will be not more than the pre-development runoff. No runoff is diverted from one drainage area to another. There will be no downstream impacts. Runoff from the RV park will be filtered through and be detained by the bioretention areas. This will result in a net decrease of the volume of runoff that ultimately reaches the Pacific Ocean through the existing storm drain system.

2.0 BEST MANAGEMENT PRACTICES (BMPs)

2.1 Construction Measures

The quality and quantity of stormwater runoff will be controlled during construction with the use of the following measures:

- A designated equipment washout area to minimize impact to the surrounding area.
- Fiber rolls will be utilized to collect sediment and reduce the erosive potential of runoff.
- All existing and proposed storm drain inlets and channels will be protected with sand/gravel bags to prevent storm drain runoff from being introduced into the storm system during construction.
- Periodic removal of debris from existing and proposed storm inlets where protected.
- Covering of all stockpiled material with Visqueen or tarpaulin until material is removed from site.
- Use of dikes, swales, inlet filters, straw bales, earth berms, etc. to protect downhill drainage courses, streams, etc.
- A water truck or alternate adequate method shall be used during construction to ensure that dust contamination is minimized.
- Protective fencing around existing trees to be installed, per arborist recommendations.
- Vegetative buffer strip and mulching.

2.2 Post-Construction Measures

On-site post construction stormwater treatment measures include:

• Landscape planting, new grass or other forms of stabilization (mulch) to reduce the surface exposure and prevent long-term erosion.

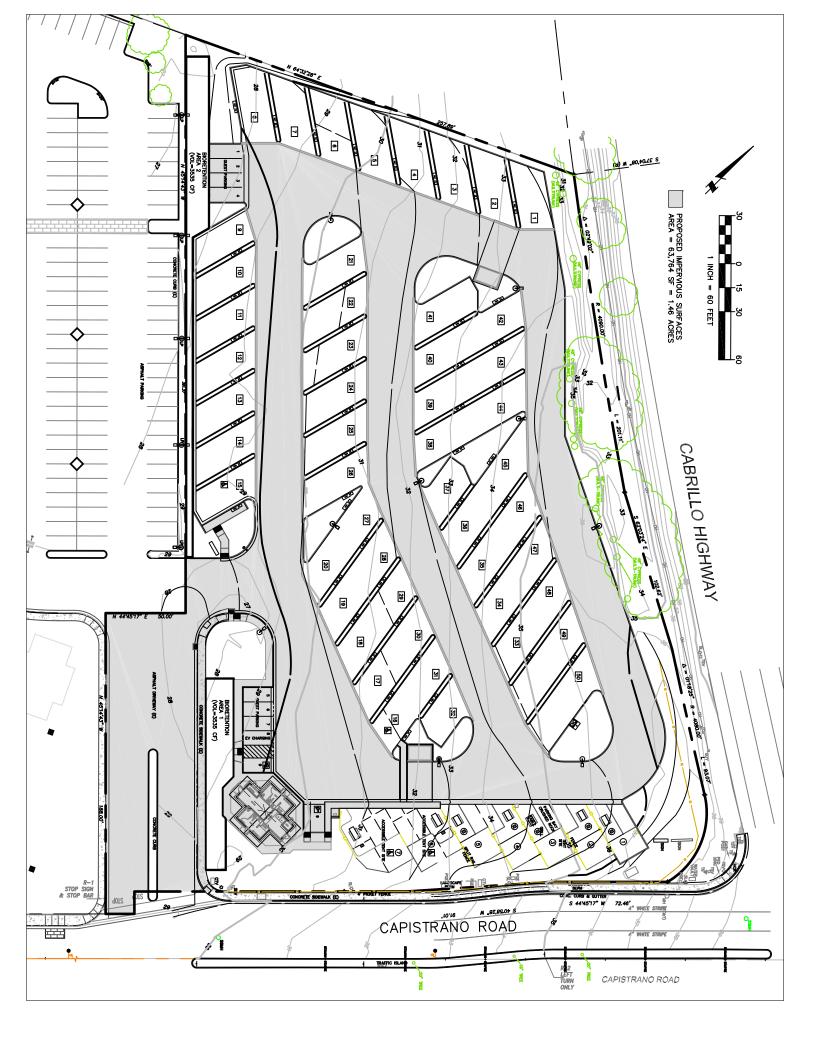
3.0 MAINTENANCE

The operation and maintenance of the source control BMPs is the responsibility of the site owner.

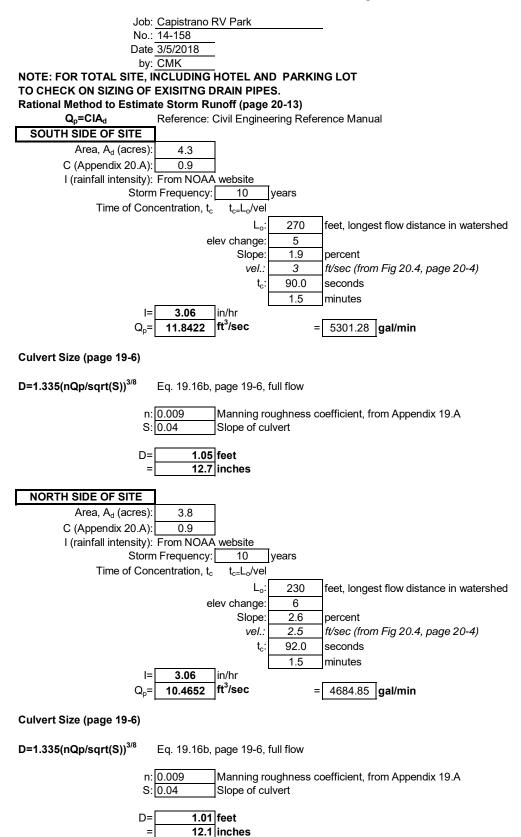
3.1 Additional Inspection and Maintenance

The property owner or manager should regularly maintain grading and drainage structures to ensure functionality throughout the lifetime of the facility. This maintenance should include:

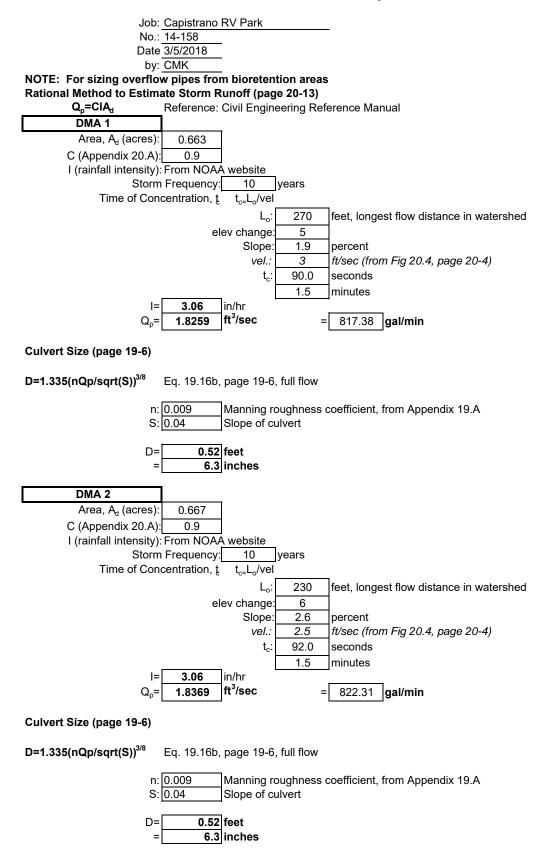
- The clearing of debris and sediment build-up from the roof gutters, downspouts, area drains and drainage lines.
- Keep permeable concrete free of debris.
- Continual refinement of surface grading, including clearing/re-finishing of slopes, to: minimize ponding, provide positive drainage away from structures, and protect against erosion.



Rational Method / Culvert Sizing



Rational Method / Culvert Sizing



ATTACHMENT H



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT





100 Capistrano Road Harbor Village RV Park



Draft Traffic Impact Analysis

Prepared for:

Point Pillar Project Developers, LLC



January 18, 2019



ĥ





Hexagon Transportation Consultants, Inc.

Hexagon Office: 4 North Second Street, Suite 400 San Jose, CA 95113 Hexagon Job Number: 17LK04 Phone: 408.971.6100 Client Name: Point Pillar Project Developers, LLC

San Jose · Gilroy · Pleasanton · Phoenix

www.hextrans.com

Areawide Circulation Plans Corridor Studies Pavement Delineation Plans Traffic Handling Plans Impact Fees Interchange Analysis Parking Transportation Planning Traffic Calming Traffic Control Plans Traffic Simulation Traffic Impact Analysis Traffic Signal Design Travel Demand Forecasting

Table of Contents

Exec	utive Summary	i
	Introduction	
2.	Existing Conditions	8
3.	Existing Plus Project Conditions	14
4.	Background Conditions	20
5.	Background Plus Project Conditions	23
6.	Cumulative Conditions	26
7.	Other Transportation Issues	29
8.	Conclusions	34

Appendices

Traffic Counts
Volume Summary
List of Approved Projects
Level of Service Calcluations
Signalized Intersection Queues

List of Tables

Table ES-1	Intersection Level of Service Summary	iii
Table 1	Signalized Intersection Level of Service Definitions Based on Control Delay	5
Table 2	Unsignalized Intersection Level of Service Definitions Based on Control Delay	6
Table 3	Roadway Segment Capacity Evaluation	6
Table 4	Existing Intersection Levels of Service	13
Table 5	Trip Generation Rate Surveys	15
Table 6	Project Trip Generation Estimates	16
Table 7	Existing Plus Project Level of Service Summary	19
Table 8	Background Intersection Levels of Service	22
Table 9	Background Plus Project Level of Service Summary	25
Table 10	Cumulative Level of Service Summary	28
Table 11	Queuing Analysis Summary	30

List of Figures

Figure 1	Site Location and Study Intersections	2
Figure 2	Project Site Plan	
Figure 3	Existing Bicycle Facilities and Transit Services	
Figure 4	Existing Lane Configuration	
Figure 5	Existing Traffic Volumes	
Figure 6	Project Trip Distribution and Assignment	
Figure 7	Existing Plus Project Traffic Volumes	
Figure 8	Background Traffic Volumes	
Figure 9	Background Plus Project Traffic Volumes	24
Figure 10	Cumulative with Project Traffic Volumes	
Figure 11	Share-Driveway Access Turning Radii	



Executive Summary

This report presents the results of the Traffic Impact Analysis (TIA) conducted for the proposed RV Park located at 100 Capistrano Road in Half Moon Bay, California. The project proposes to construct a 50-space RV park with 7 tent spaces and a supporting 832 square-foot laundry and restroom facility. The proposed RV park site is located on the northwest corner of the Cabrillo Highway (State Route 1) and Capistrano Road intersection, just north of Pillar Point Harbor. The project site is currently vacant. Access to the project site would be provided via a driveway operating as the north leg of the unsignalized intersection at Pillar Point Harbor Boulevard/Capistrano Road. The driveway access would be shared with the existing Shoppes at Harbor Village.

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed development. The potential impacts of the project were evaluated in accordance with the standards set forth by the County of San Mateo and the City/County Association of Governments (C/CAG) of San Mateo County CMP. The study included the analysis of traffic conditions at one signalized intersection and one unsignalized intersection during the weekday AM, PM, and Saturday midday peak hours. The analysis focuses on the weekday peak commute periods between 7:00 AM and 9:00 AM and 4:00 PM and 6:00 PM, and the Saturday midday peak hour is typically between 11:00 AM and 3:00 PM. It is during these hours that traffic conditions on the surrounding roadways are generally the most congested and the impact on the roadway system by traffic from the proposed RV park would be greatest.

Project Trip Generation

Trip generation for the proposed RV park was estimated by applying to the size and use of the development the appropriate trip generation rates obtained from the ITE *Trip Generation Manual, 10th Edition* (2017). The trip generation rates for Campground/Recreational Vehicle Park (ITE Land Use 416) were applied to the project. In consultation with County staff, the upper-range trip rate during each peak hour was used to present a conservative estimate. Given that the ITE trip generation rates do not include Saturday peak hours, the Saturday midday peak hour was derived from trip generation surveys Hexagon Transportation Consultants, Inc. conducted in March 2017 at comparable RV parks within the Bay Area. The magnitude of traffic generated by the proposed RV park was estimated by multiplying the ITE and the observed RV parks' trip generation rates by the proposed development.

Based on a size of 57 spaces, the proposed development would generate a total of 20 trips (7 incoming and 13 outgoing) during the AM peak hour, 25 trips (16 incoming and 9 outgoing) during the PM peak hour, and 24 trips (11 incoming and 13 outgoing) during the Saturday midday peak hour.



Project Impacts

The results of the intersection level of service analysis are shown in Table ES-1. The analysis determined that under all scenarios with and without the project, the signalized study intersection, Cabrillo Highway (SR 1)/Capistrano Road, would operate at an acceptable level of service (LOS C or better, with each individual movement operating at LOS D or better) during the AM, PM, and Saturday midday peak hours. In addition, the analysis results show that under all scenarios with and without the project, the two-way stop-controlled study intersection would operate at LOS C or better during all peak hours. The analysis indicates that vehicles on the stop-controlled approaches (the Pillar Point Harbor Boulevard and the Shoppes at Harbor Village private driveway) would experience minimal increases in delay with added project traffic.

Other Transportation Issues

Based on a review of the project site plan, there would be no issues regarding site access along Capistrano Road; and no issues are expected to arise regarding on-site circulation. The driveway design of the proposed shared-access driveway would provide adequate clearance for large vehicles to perform turn movements. Furthermore, the proposed project would not have an adverse effect on the existing transit, pedestrian, or bicycle facilities in the study area. Thus, no project sponsored improvements would be necessary.

Table ES-1Intersection Level of Service Summary

							ting	Background				Cumulative																							
						No Projec	t	with Proje	ct	No Proje	ct	with Proj	with Project		with Project		with Project		with Project		with Project		with Project		with Project		with Project		with Project		with Project		ect	with Project	
	Study umber	Intersection	Peak Hour	Count Date	Control Type	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)) LOS																		
		Capistrano Road and Cabrillo Highway (SR 1)	AM	3/2/17		17.9	В	17.9	в	19.6	в	19.7	в	19.5	в	19.6	В																		
	1		PM	3/2/17	Signal	15.9	В	16.0	В	16.9	В	17.1	В	18.5	В	18.7	В																		
			Sat Midday	3/4/17		16.2	В	16.4	В	18.6	В	18.8	В	19.6	В	20.1	С																		
			AM	5/4/17		12.7	В	13.0	В	14.1	В	14.6	В	13.6	В	14.1	В																		
	2	Capistrano Road and Pillar Point Harbor Boulevard	PM	5/4/17	TWSC ¹	17.5	С	17.9	С	20.3	С	20.9	С	19.4	С	19.9	С																		
			Sat Midday	5/6/17		20.4	С	21.9	С	20.4	С	21.9	С	22.6	С	24.7	С																		

Note:

TWSC = Two-Way Stop Control

¹ For TWSC intersections, the worst approach's delay and level of service are reported.

Bold indicates a substandard level of service.

Bold indicates a significant project impact.



1. Introduction

This report presents the results of the Traffic Impact Analysis (TIA) conducted for the proposed RV Park located at 100 Capistrano Road in Half Moon Bay, California. The project proposes to construct a 50-space RV park with 7 tent spaces and a supporting 832 square-foot laundry and restroom facility. The proposed RV park site is located on the northwest corner of the Cabrillo Highway (State Route 1) and Capistrano Road intersection, just north of Pillar Point Harbor (see Figure 1). The project site is currently vacant. The project would occupy two parcels with a total area of 141,350 square feet. The parcel terrain is flat and grassy with trees between the site and SR 1. There are shops and restaurants located in the region southwest to southeast of the project site. There is farmland to the northwest of the project site and residential area to the north and east across SR 1. The existing zoning is CCR/DR, and there is no proposed zoning change with the project. Access to the project site would be provided via a driveway operating as the north leg of the Pillar Point Harbor Boulevard/Capistrano Road intersection (see Figure 2). The driveway access would be shared with the existing Shoppes at Harbor Village.

Scope of Study

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed development. The potential impacts of the project were evaluated in accordance with the standards set forth by the County of San Mateo and the City/County Association of Governments (C/CAG) of San Mateo County CMP. A County Congestion Management Program (CMP) analysis was not required because the project would add fewer than 100 peak hour trips to any CMP roadways (SR 1) designated by the C/CAG. The traffic study includes an analysis of AM, PM, and Saturday midday peak hour traffic conditions for one signalized intersection and one unsignalized intersection in the vicinity of the project site. The study also includes an analysis of the project driveway design, and transit, bicycle, and pedestrian access.

Study Intersections

- 1. Cabrillo Highway (State Route 1) and Capistrano Road
- 2. Pillar Point Harbor Boulevard and Capistrano Road (unsignalized)

Analysis Time Periods

Traffic conditions at the study intersections were analyzed for the weekday AM, PM, and Saturday midday peak hours of adjacent street traffic. The AM and PM peak hours are expected to occur between 7:00 AM and 9:00 AM and 4:00 PM and 6:00 PM, respectively, on a regular weekday, and the Saturday midday peak hour is expected to occur between 11:00 AM and 3:00 PM. It is during these peak travel periods that traffic is busiest, and the impact on the roadway system by traffic from the proposed RV park would be greatest.



Harbor Village RV Park





NORTH Not to Scale

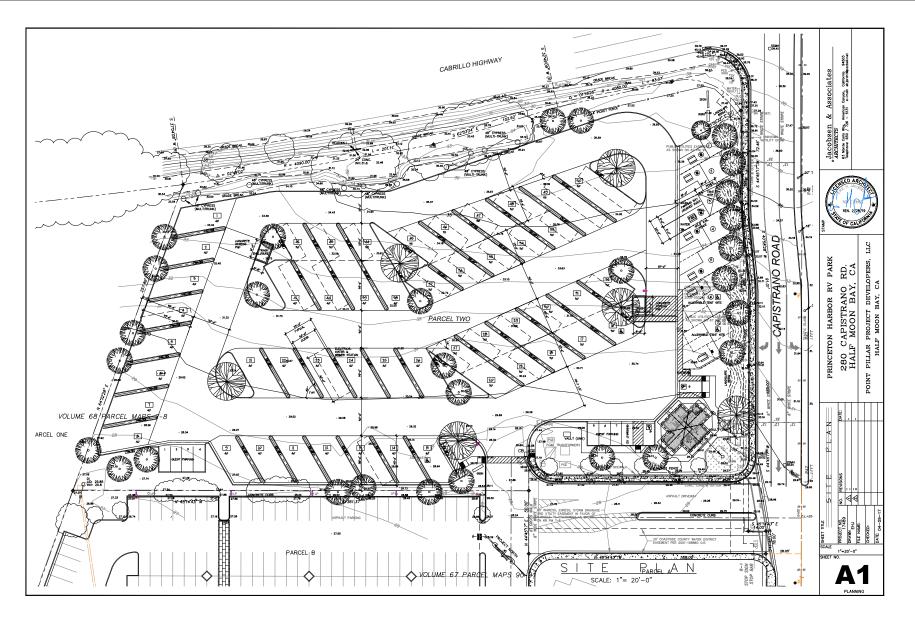


Figure 2 Project Site Plan





Analysis Scenarios

Traffic conditions were evaluated for the following scenarios:

- Scenario 1: *Existing Conditions.* Existing traffic volumes at study intersections were based on traffic counts conducted in March and May of 2017. The traffic counts and volume summary are included in Appendix A and Appendix B, respectively.
- **Scenario 2:** *Existing plus Project Conditions.* Existing traffic volumes with the project were estimated by adding to existing traffic volumes the additional traffic generated by the project. Existing plus project conditions were evaluated relative to existing conditions in order to determine the effects the project would have on the existing roadway network.
- Scenario 3: Background Conditions. Background traffic volumes reflect traffic added by projected volumes from approved but not yet completed developments in the project area. The approved project trips and/or approved project information was provided by the County of San Mateo. The County of San Mateo approved project information is included in Appendix C.
- **Scenario 4:** Background plus Project Conditions. Background traffic volumes with the project were estimated by adding to background traffic volumes the additional traffic generated by the project. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts.
- **Scenario 5:** *Cumulative Conditions.* Cumulative traffic volumes represent traffic growth through the year 2040 (approximately twenty years of growth). Cumulative traffic volumes were estimated from forecasts obtained from C/CAG/VTA and added to the existing traffic counts. Cumulative plus project conditions were estimated by adding to the cumulative traffic volumes the additional traffic estimated to be generated by the proposed project. Cumulative plus project conditions were evaluated relative to cumulative conditions to determine potential project impacts.

Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

Data Requirements

The data required for the analysis were obtained from new traffic counts, the County of San Mateo, the Santa Clara Valley Transportation Authority (VTA), and field observations. The following data were collected from these sources:

- existing peak-hour intersection turning-movement volumes
- lane configurations
- intersection signal timing and phasing
- list of approved but not yet completed projects
- forecasted volumes for SR 1 in the year 2040



Level of Service Definitions and Analysis Methodologies

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various analysis methods are described below.

County of San Mateo Signalized Intersections

The County of San Mateo level of service standards were used to evaluate the signalized study intersection. The County of San Mateo evaluates intersection level of service based on the *Highway Capacity Manual* (HCM) 2010 method using Synchro Version 9.2. The 2010 HCM method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. This average delay can then be correlated to a level of service. The County of San Mateo level of service standard for signalized intersections is LOS C or better, with each individual movement operating at LOS D or better. The correlation between delay and level of service is shown in Table 1.

Table 1

Signalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
в	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
с	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major-contributing causes of such delay levels.	greater than 80.0
Source: 1	Fransportation Research Board, 2010 Highway Capacity Manual (Washington, D.C	C., 2010) p18-6.



Unsignalized Intersections

Level of service at the unsignalized intersection was based on the 2010 *Highway Capacity Manual* (2010 HCM) method using Synchro Version 9.2. This method is applicable for both two-way and all-way stop-controlled intersections. The one unsignalized study intersection operates with two-way stop control. For two-way stop-controlled intersections, the reported levels of service are based on the worst approach delay at the intersection. The County of San Mateo does not have a level of service standard for unsignalized intersections. Therefore, intersection levels of service for unsignalized intersections are reported for informational purposes only. The correlation between average control delay and LOS for unsignalized intersections is shown in Table 2.

Table 2

Unsignalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Little or no traffic delay	10.0 or less
в	Short Traffic delays	10.1 to 15.0
С	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	greater than 50.0
Source: Transp	ortation Research Board, 2010 Highway Capacity Manual (Washin	gton, D.C., 2010) p20-3.

CMP Roadway System

Per CMP technical guidelines, a roadway system level of service analysis is required when a project is expected to add trips greater than one percent of a segment's capacity. New SR 1 trips generated by the project are expected to be less than the one percent threshold of roadway capacity to all segments in the area. Therefore, a detailed analysis of roadway system levels of service was not performed. A simple roadway segment capacity evaluation to substantiate this determination is presented in Table 3.

Table 3

Roadway Segment Capacity Evaluation

			Existin	g Conditi	ons ¹	Project Conditions			
Roadway	Segment	Peak Hour	# of Lanes	Capacity	LOS	Project Trips ² (% Capacity	Impact	
SR 1	Linda Mar Boulevard to French Mans Creek Road	AM PM Sat Midday	2 2 2	2,800 2,800 2,800	E E E	20 25 24	0.71% 0.89% 0.86%	NO NO NO	

Notes:

¹ Existing freeway conditions referenced the Level of Service and Performance Measure Monitoring Report - 2015.

² Project trips are estimated via manual trip assignment.

BOLD indicates a substandard level of service.



Intersection Operations

The analysis of intersection level of service was supplemented with an analysis of traffic operations for intersections where the project would add a significant number of turning movements. The operations analysis is based on vehicle queuing for high demand turning movements at intersections. Vehicle queues were estimated using Synchro Version 9.2.

The basis of the analysis is as follows: (1) Synchro Version 9.2 is used to estimate the 95th percentile maximum queue length for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future turn pocket storage requirements at signalized intersections.

The 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles. Or, a queue length larger than the 95th percentile queue would only occur on 5 percent of the signal cycles (about 3 cycles during the peak hour for a signal with a 60-second cycle length). Therefore, left-turn storage pocket designs based on the 95th percentile queue length would ensure that storage space would be exceeded only 5 percent of the time. The 95th percentile queue length is also known as the "design queue length."

Report Organization

The remainder of this report is divided into seven chapters. Chapter 2 describes the existing roadway network, transit services, and pedestrian facilities. Chapter 3 describes the methods used to estimate project traffic and its impact on the existing transportation system. Chapter 4 presents the intersection operations under background conditions, including the approved projects in the County of San Mateo. Chapter 5 presents the intersection operations under background plus project conditions. Chapter 6 describes cumulative traffic conditions. Chapter 7 presents the analysis of other transportation issues including site access and circulation, transit services, bicycle and pedestrian facilities, and vehicle queuing. Chapter 8 includes a summary of project impacts, any proposed mitigation measures, and recommended improvements.

2. Existing Conditions

This chapter describes the existing conditions for transportation facilities in the vicinity of the site, including the roadway network, transit service, pedestrian and bicycle facilities.

Existing Roadway Network

Regional access to the project site is provided via Cabrillo Highway (SR 1). Local access to the site is provided on Capistrano Road. These roadways are described below.

Cabrillo Highway (SR 1) is a two-lane, north-south highway in the vicinity of the site. Cabrillo Highway extends along the Pacific coastline, northward through San Francisco and southward through the San Mateo and Santa Cruz Counties. Access to and from the project study area is provided via Capistrano Road.

Capistrano Road is a local roadway that extends in an east-west direction. In the vicinity of the project site, Capistrano Road is a two-lane roadway and runs along the southern boundary of the project site. Capistrano Road provides direct access to the proposed Harbor Village RV Park site via the existing Shoppes at Harbor Village driveway at the Pillar Point Harbor Boulevard intersection.

Existing Pedestrian and Bicycle Facilities, and Transit Services

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. In the project vicinity, sidewalks exist along both sides of Capistrano Road and along the west side of Pillar Point Harbor Boulevard, providing pedestrian access to and from the project site. Marked crosswalks with pedestrian signal heads and push buttons are provided on three legs of the signalized study intersection of Cabrillo Highway and Capistrano Road. The north leg of the intersection does not have a crosswalk. At the unsignalized study intersection of Pillar Point Harbor Boulevard and Capistrano Road, crosswalks are provided on two legs of the intersection. Although some crosswalk connections are missing on Capistrano Road and Cabrillo Highway, the overall network of sidewalks and crosswalks in the study area has good connectivity and provides pedestrians with safe routes to transit services and other points of interest in the vicinity of the project site.

The existing bicycle facilities within the study area comprise the Coastal Trail along the Cabrillo Highway corridor. The Coastal Trail is part of a larger network of public trails along the entire California coastline, extending northward through San Francisco and southward through San Mateo and Santa Cruz Counties. The trail consists of Class I Bike Paths, Class II Bike Lanes, Class III Bike Routes, and unpaved gravel trails. In the vicinity of the project, the Coastal Trail consists of a Class I multi-use path south of the project site and accessible via Pillar Point Harbor Boulevard, which is designated as a



Class III bike route (see Figure 3). According to the 2011 San Mateo County Comprehensive Bicycle and Pedestrian Plan, the County of San Mateo plans to provide the Parallel Trail (consisting of Class I Bike Paths and Class II Bike Lanes), which would run on the east side of the SR 1 from Montara to Half Moon Bay. This trail would provide enhanced bicycle connections to the project site.

Existing Transit Services

Existing transit services near the project site are provided by the San Mateo County Transit District (SamTrans) (See Figure 3). The study area is served directly by two local bus routes. Bus lines that run through the study area are listed in Table 4, including their route description and commute hour headways.

Local Route 17 operates on Cabrillo Highway in the vicinity of the project. The closest bus stop is within walking distance, located on the southern boundary of the project site. Route 17 operates between the Linda Mar Park & Ride lot and the Stage Road/Pescadero Creek Road intersection. Weekday service is from approximately 6:00 AM to 9:10 PM with 60-minute headways during commute hours.

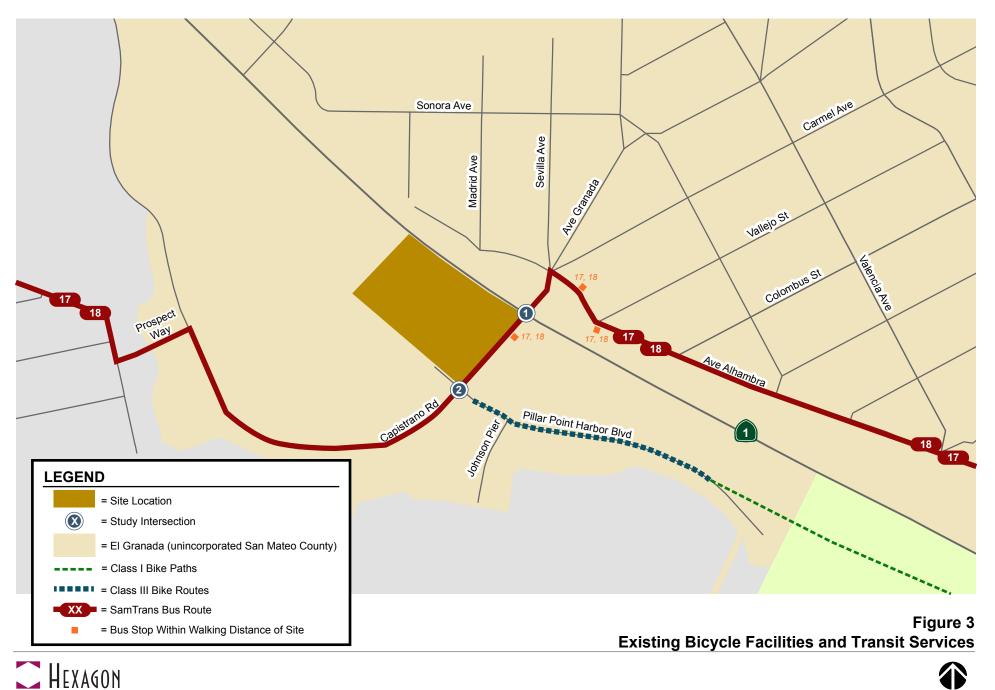
Local Route 18 operates on Cabrillo Highway in the vicinity of the project. The closest bus stop is within walking distance, located on the southern boundary of the project site. Route 18 operates between the Moonridge Apartments southeast of Half Moon Bay and the Main Street/7th Street intersection in Montara. Service is provided only on school days with three runs in the morning and two runs in the afternoon.

Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 4.

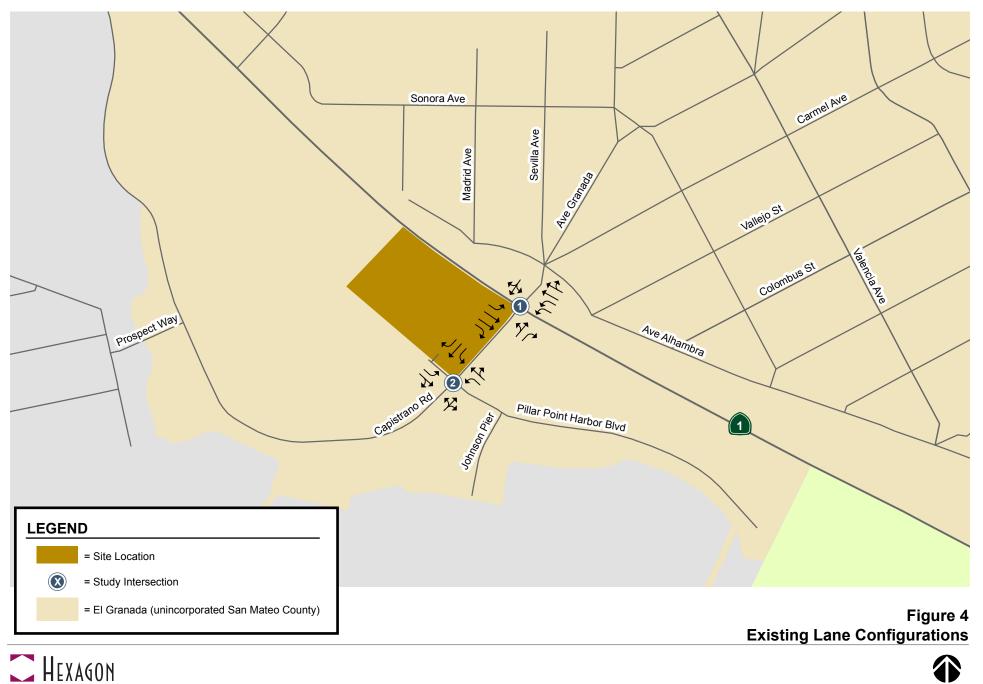
Existing Traffic Volumes

Existing traffic volumes were obtained from new peak-hour turning movement counts collected in March and May of 2017. The existing peak-hour intersection volumes are shown in Figure 5. Intersection turning-movement counts conducted for this analysis are presented in Appendix A.



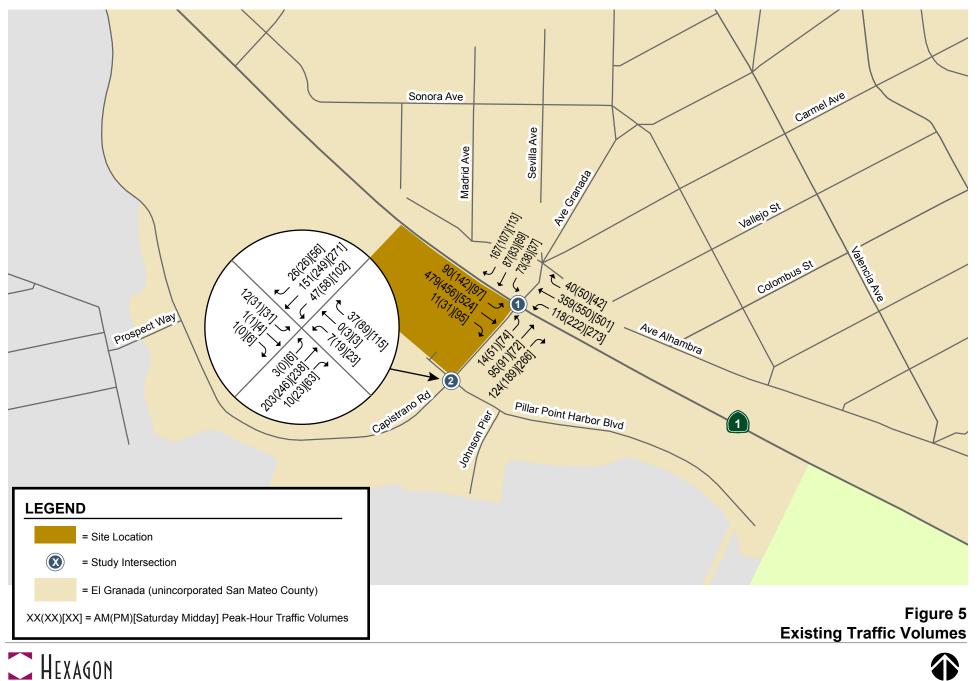


Harbor Village RV Park





Harbor Village RV Park





Existing Intersection Levels of Service

Intersection levels of service were evaluated against County of San Mateo standards. The results of the analysis show that the signalized study intersection currently operates at acceptable levels of service (LOS C or better, with each individual movement operating at LOS D or better) during the AM, PM, and Saturday midday peak hours (see Table 4). The intersection levels of service calculation sheets are included in Appendix D.

The analysis results show that the stop-controlled study intersection currently operates at LOS C or better during all peak hours. The level of service analysis indicates that vehicles on the stop-controlled approaches (Pillar Point Harbor Boulevard and the Shoppes at Harbor Village private driveway) would experience moderate delays.

Table 4Existing Intersection Levels of Service

Study Number	Intersection	Peak Hour	Count Date	Control Type	Existing Cor Average Delay (sec.)	
1	Capistrano Road and Cabrillo Highway (SR 1)	AM PM Sat Midday	3/2/17 3/2/17 3/4/17	Signal	17.9 15.9 16.2	B B B
2	Capistrano Road and Pillar Point Harbor Boulevard	AM PM Sat Midday	5/4/17 5/4/17 5/6/17	TWSC ¹	12.7 17.5 20.4	B C C
¹ For TWSC	wo-Way Stop Control C intersections, the worst approach's delay and level o ates a substandard level of service. indicates a significant project impact.	f service are re	ported.			

Observed Existing Traffic Conditions

Traffic conditions were observed in the field in order to identify existing operational deficiencies and to confirm the accuracy of calculated intersection levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to level of service, and (2) to identify any locations where the level of service analysis does not accurately reflect existing traffic conditions.

Overall, both study intersections operated adequately during the AM, PM, and Saturday midday peak hours of traffic, and the level of service analysis appears to accurately reflect actual existing traffic conditions. It should be noted that congestion exists in the southbound direction during the AM and Saturday midday peak hours and in the northbound direction during the PM peak hour along SR 1. However, the congestion does not spillback or cause any operational issues at the Cabrillo Highway (SR 1)/Capistrano intersection.



3. Existing Plus Project Conditions

This chapter describes traffic conditions with the project. It begins with a description of the transportation system under project conditions and the method by which project traffic is estimated. Project traffic is then added to existing conditions.

Significant Impact Criteria

Significance criteria are used to establish what constitutes an impact. For this analysis, the criteria used to determine impacts on intersections are based on the thresholds established by the County of San Mateo, Department of Public Works in the *2013 Traffic Impact Study Requirements*.

County of San Mateo Definition of Significant Intersection Impacts

The project is said to create a significant adverse impact on traffic conditions at a signalized intersection in San Mateo County if for either peak hour:

- 1. The level of service at the intersection degrades from an acceptable LOS C under background conditions to an unacceptable LOS D, E, or F under project conditions, or
- 2. The level of service of an individual movement degrades from an acceptable LOS D under background conditions to an unacceptable LOS E or F under project conditions, or
- 3. The level of service at the intersection is an unacceptable LOS D, E, or F under background conditions and the addition of project trips causes the average control delay at the intersection to increase by four (4) or more seconds.

A significant impact by the County of San Mateo standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to background conditions or better.

Transportation Network under Project Conditions

The proposed project does not include any changes to the existing transportation network.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear were estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic traveling to and from the proposed RV park was estimated for the AM, PM, and Saturday midday peak hours. As part of the project trip distribution, the directions to and from which the project trips would travel were estimated. In



the project trip assignment, the project trips were assigned to specific streets and intersections. These procedures are described below.

Trip Generation

Through empirical research, data have been collected that indicate the amount of traffic that can be expected to be generated by common land uses. The standard trip generation rates can be applied to help predict the future traffic increases that would result from a new development. The standard trip generation rates are published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual.*

Project trip generation was estimated by applying to the size and use of the development the appropriate trip generation rates obtained from the ITE *Trip Generation Manual, 10th Edition* (2017). The trip generation rates for Campground/Recreational Vehicle Park (ITE Land Use 416) were applied to the project. In consultation with County staff, the upper-range trip rate during each peak hour was used to present a conservative estimate. Given that the ITE trip generation rates do not include Saturday peak hours, the Saturday midday peak hour was derived from trip generation surveys Hexagon Transportation Consultants, Inc. conducted in March 2017 at comparable RV parks within the Bay Area. The observed trip generation rates are presented in Table 5. The magnitude of traffic generated by the proposed RV park was estimated by multiplying the ITE and the observed RV parks' trip generation rates by the proposed development (see Table 6). Trip generation survey sheets of comparable RV parks are included in Appendix A.

Table 5Trip Generation Rate Surveys

		Saturday Peak Hour ¹									
Count Location	Size	In	Rate	Out	Rate						
Pillar Point RV Park	49 spaces	12	0.24	17	0.35						
Pelican Point RV Park	74 spaces	8	0.11	10	0.14						
Maple Leaf RV Park	272 spaces	61	0.22	62	0.23						
RV Park Average			0.19		0.24						
<u>Notes:</u> ¹ The Saturday peak hour is the											

Based on a size of 57 spaces, the proposed development would generate a total of 20 trips (7 incoming and 13 outgoing) during the AM peak hour, 25 trips (16 incoming and 9 outgoing) during the PM peak hour, and 24 trips (11 incoming and 13 outgoing) during the Saturday midday peak hour.



Table 6

Project Trip Generation Estimates

		AN	AM Peak Hour		PM Peak Hour			Saturday Peak Hour				Ir		
Land Use	Size	Rate ¹	In	Out	Total	Rate ¹	In	Out	Total	Rate ²	In	Rate ²	Out	Total
Proposed Project														
Harbor Village RV Park	57 spaces	0.35	7	13	20	0.43	16	9	25	0.19	11	0.24	13	24

¹ Campground/Recreational Vehicle Park (Land Use 416) upper-range of rates published in ITE's *Trip Generation Manual, 10th Edition, 2017*.

The observed peak hour trip rate (per space) was based on surveys conducted by Hexagon Transportation Consultants in March 2017 at comparable RV parks.

Trip Distribution and Assignment

The trip distribution pattern for the project was estimated based on existing travel patterns on the surrounding roadway network and major destinations in the area (see Figure 6). Project trips were assigned based on the directions of approach and departure, as well as the roadway network connections in accordance with the project trip distribution pattern.

Existing Plus Project Traffic Volumes

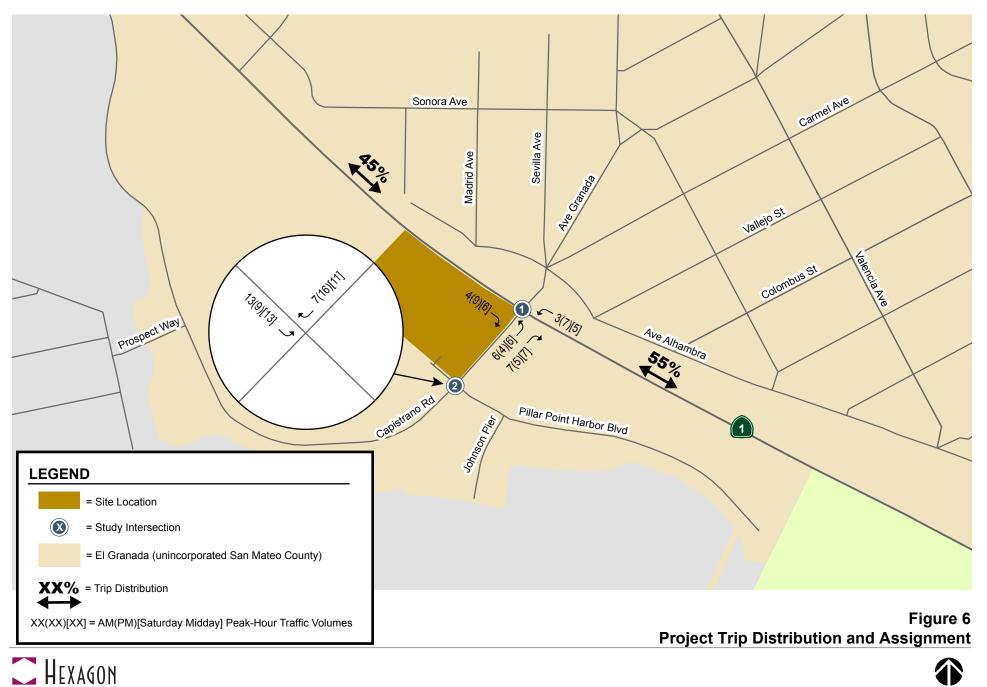
Project trips, as represented in the previously mentioned project trip assignment, were added to existing traffic volumes to obtain existing plus project traffic volumes. The existing plus project traffic volumes are shown on Figure 7.

Existing Plus Project Intersection Analysis

The results of the level of service analysis under existing plus project conditions show that the signalized study intersection would continue to operate at acceptable levels of service (LOS C or better, with each individual movement operating at LOS D or better) during all peak hours (see Table 7). The intersection levels of service calculation sheets are included in Appendix D.

The analysis results also show that, under existing plus project conditions, the stop-controlled study intersection would operate at LOS C or better during all peak hours. The level of service analysis indicates that vehicles on the stop-controlled approaches (Pillar Point Harbor Boulevard and the Shoppes at Harbor Village private driveway) would experience minimal increases in delay with added project traffic.







Harbor Village RV Park

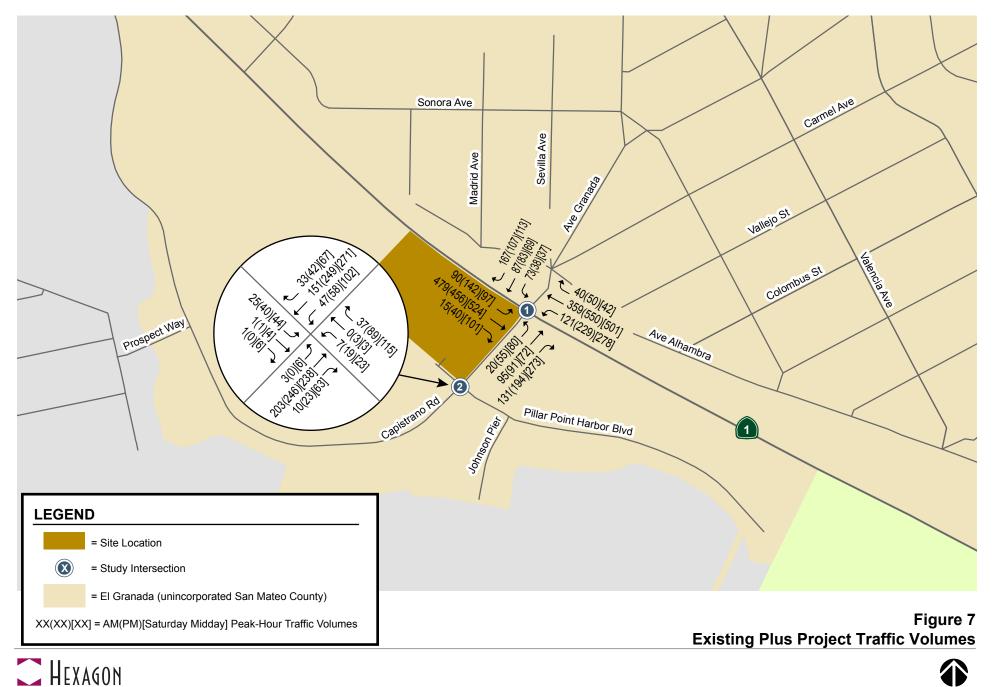




Table 7

Existing Plus Project Level of Service Summary

			Exis	ting C	onditions		
				No Project		With Proje	ect
Study Number	Intersection	Peak Hour	Control Type	Average Delay (sec.)	LOS	Average Delay (sec.)	LOS
		AM		17.9	В	17.9	В
1	Capistrano Road and Cabrillo Highway (SR 1)	PM	Signal	15.9	В	16.0	В
				16.2	В	16.4	В
	Capistrano Road and Pillar Point Harbor	AM		12.7	В	13.0	В
2	Boulevard	PM	TWSC ¹	17.5	С	17.9	С
	Bodicvalu	Sat Midday		20.4	С	21.9	С
Notes:	wo-Way Stop Control						
	c intersections, the worst approach's delay and level	of service are	reported				
	ates a substandard level of service.		reported.				
Bold							
Bold	indicates a significant project impact.						

4. Background Conditions

This chapter presents a summary of the traffic conditions that would occur under background conditions. Background conditions are defined as conditions just prior to completion of the proposed development. Traffic volumes for background conditions comprise volumes from existing traffic counts plus traffic generated by other approved developments in the vicinity of the site.

Roadway Network and Traffic Volumes

The roadway network under background conditions is assumed to be the same as under existing conditions.

Background traffic volumes for the study intersections were estimated by adding to existing traffic volumes the trips generated by nearby approved developments that have not yet been constructed or occupied. Approved project trips and/or approved project information was obtained from the County of San Mateo. The list of nearby projects that are included in the background scenario can be found in Appendix C. The approved projects that would add traffic to the study area of Princeton Harbor include a motel expansion at 11 Avenue Alhambra and the Big Wave North Parcel development. Traffic volumes for all components of traffic are tabulated in Appendix B. Figure 8 shows the intersection turning-movement volumes under background conditions.

Intersection Level of Service Analysis

The results of the level of service analysis under background conditions are summarized in Table 8. The results show that, when measured against the County of San Mateo level of service standards, the Cabrillo Highway/Capistrano Road study intersection is expected to operate at an acceptable LOS B or better during the AM, PM, and Saturday midday peak hours of traffic. Level of service calculation sheets are included in Appendix D.

The analysis results also show that, under background conditions, the stop-controlled study intersection would continue to operate at LOS C or better during all peak hours. The level of service analysis indicates that vehicles on the stop-controlled approaches (Pillar Point Harbor Boulevard and the Shoppes at Harbor Village private driveway) would experience minimal increases in delay under background conditions.



Harbor Village RV Park

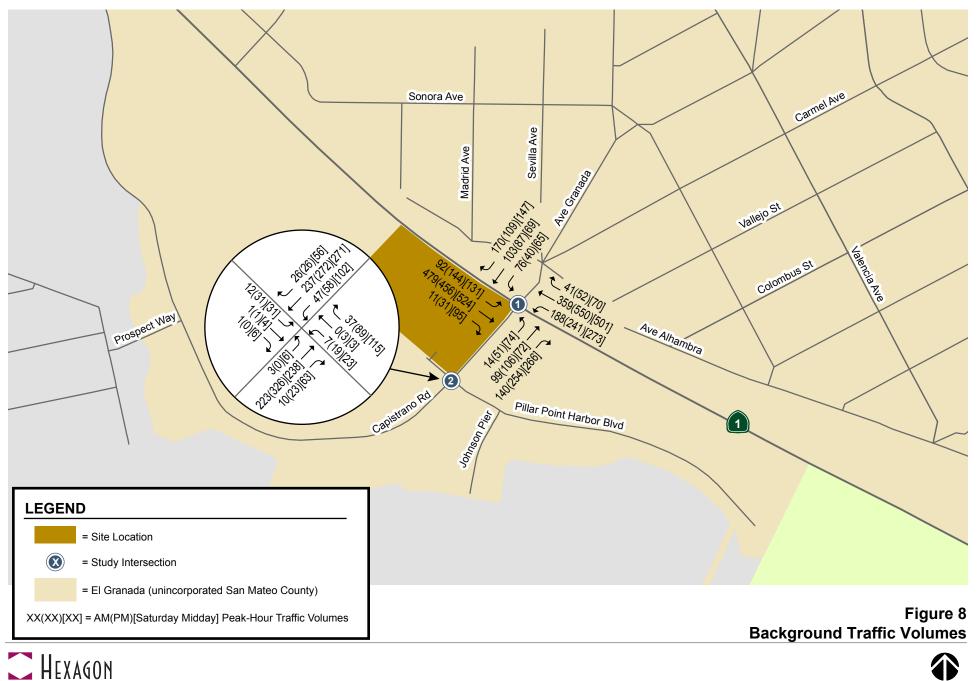




Table 8

Background Intersection Levels of Service

Intersection	Peak Hour	Control Type	Background C Average Delay (sec.)	LOS
Capistrano Road and Cabrillo Highway (SR 1)	AM PM Sat Midday	Signal	19.6 16.9 18.6	B B B
Capistrano Road and Pillar Point Harbor Boulevard	AM PM Sat Midday	TWSC ¹	14.1 20.3 20.4	B C C
	Capistrano Road and Cabrillo Highway (SR 1) Capistrano Road and Pillar Point Harbor	Intersection Hour Capistrano Road and Cabrillo Highway (SR 1) AM Capistrano Road and Pillar Point Harbor AM Boulevard PM	IntersectionHourTypeCapistrano Road and Cabrillo Highway (SR 1)AM PM Signal Sat MiddaySignal Signal Sat MiddayCapistrano Road and Pillar Point HarborAM PM PM TWSC 1	IntersectionHourTypeDelay (sec.)Capistrano Road and Cabrillo Highway (SR 1)AM PM Signal19.6 PM Signal16.9 18.6Capistrano Road and Pillar Point HarborAM PM PM TWSC 114.1 20.3



5. Background Plus Project Conditions

This chapter presents a summary of the traffic conditions that would occur under background plus project conditions. Project trips, as represented in Chapter 3, were added to background traffic volumes to obtain background plus project traffic volumes.

Background Plus Project Traffic Volumes

Peak hour traffic volumes with the project were estimated by adding to background traffic volumes the additional traffic generated by the project. Project conditions were evaluated relative to background conditions in order to determine potential project impacts. The project traffic volumes are shown graphically on Figure 9 for background plus project conditions. Traffic volumes for all components of traffic are tabulated in Appendix B.

Background Plus Project Intersection Analysis

The results of the level of service analysis under background plus project conditions show that, when measured against the San Mateo County standards, the signalized study intersection would operate at acceptable levels of service (LOS C or better, with each individual movement operating at LOS D or better) during the AM, PM, and Saturday midday peak hours (see Table 9). The intersection levels of service calculation sheets are included in Appendix D.

The analysis results also show that, under background plus project conditions, the two-way stopcontrolled study intersection would operate at LOS C or better during all peak hours. The analysis indicates that vehicles on the stop-controlled approaches (the Pillar Point Harbor Boulevard and the Shoppes at Harbor Village private driveway) would experience minimal increases in delay with added project traffic.

Harbor Village RV Park

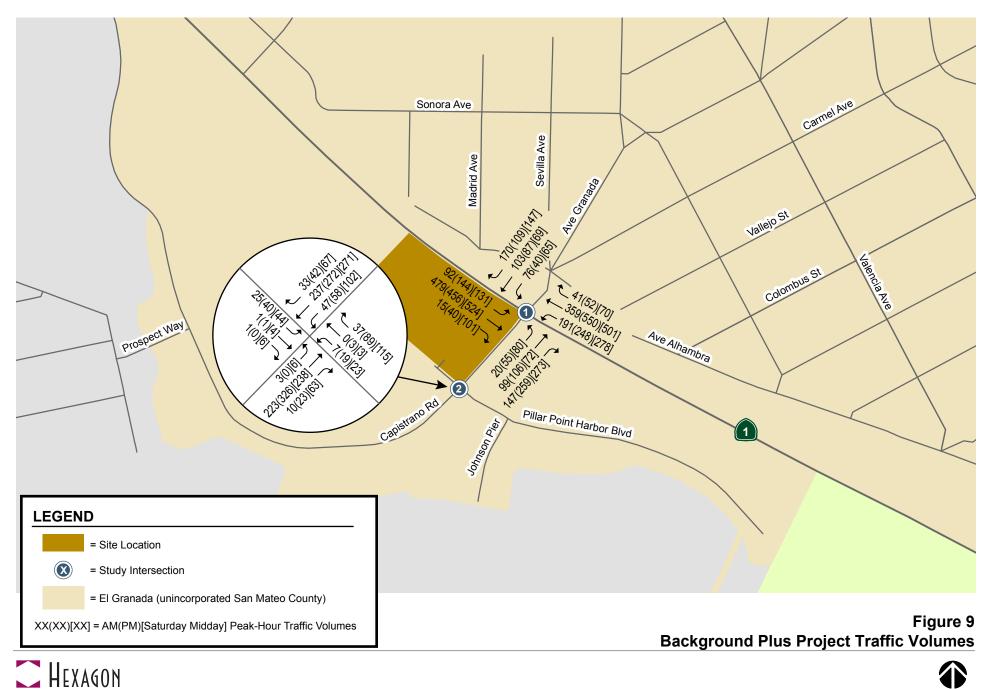




Table 9

Background Plus Project Level of Service Summary

				Backg	I Conditions		
				No Project		With Proje	ect
Study Number	Intersection	Peak Hour	Control Type	Average Delay (sec.)	LOS	Average Delay (sec.)	LOS
1	Capistrano Road and Cabrillo Highway (SR 1)	AM PM Sat Midday	Signal	19.6 16.9 18.6	B B B	19.7 17.1 18.8	B B B
2	Capistrano Road and Pillar Point Harbor Boulevard	AM PM Sat Midday	TWSC ¹	14.1 20.3 20.4	B C C	14.6 20.9 21.9	B C C
¹ For TWSC	wo-Way Stop Control intersections, the worst approach's delay and level ates a substandard level of service. indicates a significant project impact.	of service are	reported.				



6. Cumulative Conditions

This chapter presents a summary of the traffic conditions that would occur under cumulative conditions with the proposed project. Cumulative conditions represent future traffic conditions with expected growth in the area. The year 2040 traffic volumes were obtained from the VTA travel demand forecasting model. The year 2040 model-forecast growth was added to the existing counts. Cumulative conditions reflect approximately twenty years of growth.

Roadway Network and Traffic Volumes

The intersection lane configurations under cumulative conditions were assumed to be the same as described under background conditions.

Cumulative volumes for the study intersections were estimated by taking year 2040 growth forecasts from the VTA model and adding them to the existing traffic counts. Project trips were then added to the cumulative volumes to create the cumulative plus project conditions volumes (see Figure 10).

Intersection Levels of Service Analysis

The results of the level of service analysis under cumulative conditions show that, measured against the San Mateo County standards, the signalized study intersection would operate at an acceptable level of service (LOS C or better, with each individual movement operating at LOS D or better) during the AM, PM, and Saturday midday peak hours (see Table 10). The intersection levels of service calculation sheets are included in Appendix D.

The analysis results also show that, under cumulative plus project conditions, the two-way stopcontrolled study intersection would operate at LOS C or better during all peak hours. The analysis indicates that vehicles on the stop-controlled approaches (the Pillar Point Harbor Boulevard and the Shoppes at Harbor Village private driveway) would experience minimal increases in delay with added project traffic.



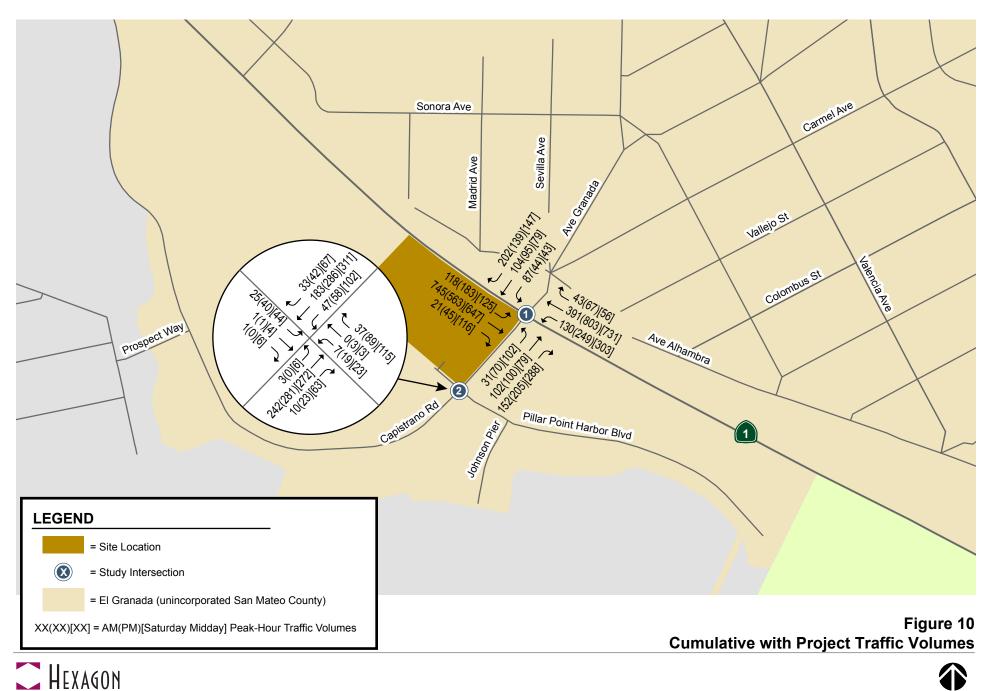




Table 10Cumulative Level of Service Summary

				Cumulative Conditions						
				No Proje	ct	With Project				
Study Number			Control Type	Average Delay (sec.)	LOS	Average Delay (sec.)	LOS			
		AM		19.5	В	19.6	В			
1	Capistrano Road and Cabrillo Highway (SR 1)	PM Sat Midday	Signal	18.5	В	18.7	В			
				19.6	В	20.1	С			
	Capistrano Road and Pillar Point Harbor	AM		13.6	В	14.1	В			
2	Boulevard	PM	TWSC ¹	19.4	С	19.9	С			
	Bodievalu	Sat Midday		22.6	С	24.7	С			
¹ For TWSC	wo-Way Stop Control intersections, the worst approach's delay and level of s ates a substandard level of service. indicates a significant project impact.	ervice are repor	ted.							

7. Other Transportation Issues

This chapter presents other transportation issues associated with the project. These include an analysis of:

- Vehicle Queuing
- Site access and circulation
- Potential impacts to transit, bicycle and pedestrian facilities

The analyses in this chapter are based on professional judgement in accordance with the standards and methods employed by the traffic engineering community.

Queuing Analysis

The operations analysis is based on vehicle queuing for high-demand movements at intersections. Vehicle queues were estimated using Synchro Version 9.2.

The following four movements were examined as part of the queuing analysis for this project:

- Northbound left turn at Cabrillo Highway (SR 1) and Capistrano Road
- Eastbound left/through turn at Cabrillo Highway (SR 1) and Capistrano Road
- Eastbound right turn at Cabrillo Highway (SR 1) and Capistrano Road
- Southbound left turn at Pillar Point Harbor Boulevard and Capistrano Road

The estimated queue lengths based on the Synchro output show no queuing deficiencies at the four locations (see Table 11). The signalized intersection queues are included in Appendix E.

Table 11Queuing Analysis Summary

			Cabrillo H	ighway (SR 1) ar	d Capistra	ano Roa	d		Capistrano Road and Pillar Point Harbor Boulevard			
		NBL			EBL/EB	Г		EBR			SBL		
Measurement	AM	РМ	Sat Mid	AM	PM	Sat Mid	AM	PM	Sat Mid	AM	РМ	Sat Mid	
<i>Existing</i> Total Volume Total 95th %. Queue (veh.) Total 95th %. Queue (ft.) Total Storage (ft.) Adequate (Y/N)	118 3 75 1000 Y	222 4 100 1000 Y	273 5 125 1000 Y	109 4 100 525 Y	142 5 125 525 Y	146 5 125 525 Y	124 2 50 525 Y	189 2 50 525 Y	266 3 75 525 Y	12 1 25 175 Y	31 1 25 175 Y	31 1 25 175 Y	
<i>Existing Plus Project</i> Total Volume Total 95th %. Queue (veh.) Total 95th %. Queue (ft.) Total Storage (ft.) Adequate (Y/N)	121 3 75 1000 Y	229 4 100 1000 Y	278 5 125 1000 Y	115 4 100 525 Y	146 5 125 525 Y	152 6 150 525 Y	131 2 50 525 Y	194 2 50 525 Y	273 3 75 525 Y	25 1 25 175 Y	40 1 25 175 Y	44 1 25 175 Y	
Background Total Volume Total 95th %. Queue (veh.) Total 95th %. Queue (ft.) Total Storage (ft.) Adequate (Y/N)	188 4 100 1000 Y	241 4 100 1000 Y	271 5 125 1000 Y	113 4 100 525 Y	157 5 125 525 Y	146 5 125 525 Y	140 2 50 525 Y	254 3 75 525 Y	266 3 75 525 Y	12 1 25 175 Y	31 1 25 175 Y	31 1 25 175 Y	
Background Plus Project Total Volume Total 95th %. Queue (veh.) Total 95th %. Queue (ft.) Total Storage (ft.) Adequate (Y/N)	191 4 100 1000 Y	248 4 100 1000 Y	278 5 125 1000 Y	119 4 100 525 Y	161 5 125 525 Y	152 6 150 525 Y	147 2 50 525 Y	259 3 75 525 Y	273 3 75 525 Y	25 1 25 175 Y	40 1 25 175 Y	44 1 25 175 Y	
Cumulative Total Volume Total 95th %. Queue (veh.) Total 95th %. Queue (ft.) Total Storage (ft.) Adequate (Y/N)	127 3 75 1000 Y	242 4 100 1000 Y	298 5 125 1000 Y	127 4 100 525 Y	166 6 150 525 Y	175 7 175 525 Y	145 2 50 525 Y	200 2 50 525 Y	281 3 75 525 Y	12 1 25 175 Y	31 1 25 175 Y	31 1 25 175 Y	
Cumulative Plus Project Total Volume Total 95th %. Queue (veh.) Total 95th %. Queue (ft.) Total Storage (ft.) Adequate (Y/N)	130 3 75 1000 Y	249 4 100 1000 Y	303 5 125 1000 Y	133 4 100 525 Y	170 6 150 525 Y	181 7 175 525 Y	152 2 50 525 Y	205 2 50 525 Y	288 3 75 525 Y	25 1 25 175 Y	40 1 25 175 Y	44 1 25 175 Y	

¹ Vehicle queue calculations based on output from Synchro Version 9.2

² Assumes 25 Feet Per Vehicle

Site Access and On-Site Circulation

The site access and circulation evaluation is based on the April 9, 2017 site plan prepared by Jacobsen & Associates Architects, LLC (see Figure 2). On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards.

Project Driveway Operations

Site access was evaluated to determine the adequacy of the site's proposed driveway with regard to the following: traffic volume, delays, vehicle queues, geometric design, and corner sight distance. Vehicular access to the project site would be provided via a driveway adjacent to the Shoppes at Harbor Village shopping center parking lot. The project site driveway would measure 34 feet wide at the throat. Access to the project site driveway would be shared with the existing shopping center traffic via



a shared full-access driveway located as the north leg of the Pillar Point Harbor Boulevard/Capistrano Road intersection. The shared-access driveway is 24 feet wide for the entrance lane and 26 feet wide for the exit lane with a 6-foot wide median The County of San Mateo does not specify standards for a two-way driveway. However, based on AASHTO's *Geometric Design of Highways and Streets, 6th Edition* (2011), a two-way driveway where large vehicles are expected should be a minimum of 18 feet wide.

Driveway Design

Based on the project description, the project would accommodate recreational vehicles and vehicles with attached trailers, thus requiring a larger turning radius within the driveway design to accommodate large vehicles. The shared-access driveway located at the Pillar Point Harbor Boulevard/Capistrano Road intersection includes a 6-foot wide raised median that would create challenges for large vehicles turning into the driveway. Therefore, vehicle turning paths for a smaller single-unit truck (WB 30), a larger motor home vehicle, and a passenger car with a camper trailer were reviewed at the shared-access driveway. The review of vehicle turning paths indicates that the approximately 24-foot width of the driveway entrance would be adequate for all three vehicle types to perform the right-turn movement into the shared-access driveway. A motor home vehicle with an attached boat may not be applicable to the project site given that it will not fit within any of the provided parking spaces. However, the review indicates that a motor home vehicle with an attached boat also would be able to complete the right-turn movement into the shared-access driveway, but would need to use some of the through-lane on Capistrano Road. Figure 11 shows that the proposed shared-access driveway design would accommodate a smaller single-unit trucks, larger motor home vehicles, and cars with a camper trailer.

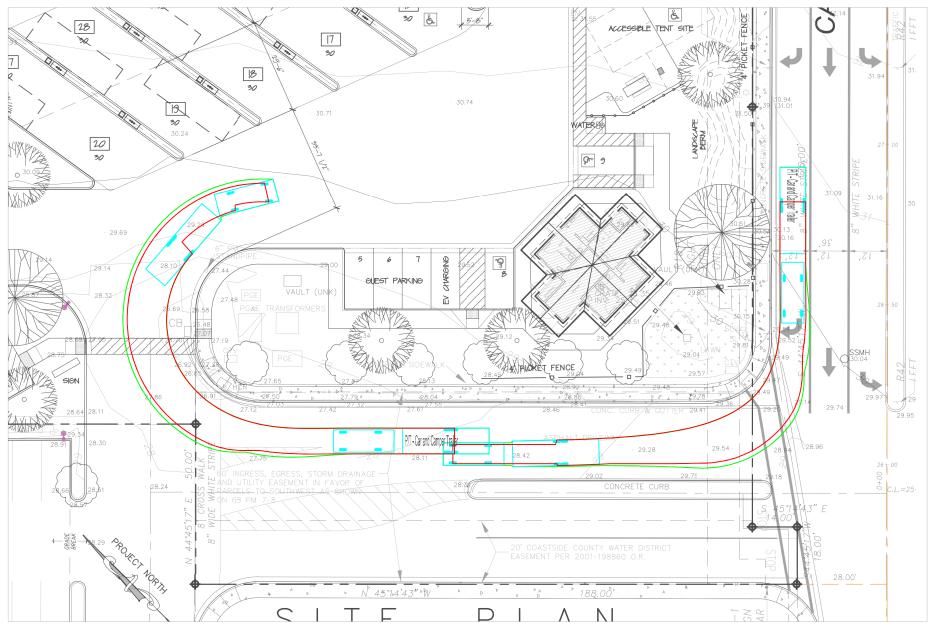


Figure 11 Shared-Access Driveway Turning Paths





Sight Distance at the Project Driveway

There are no existing trees or visual obstructions along the project frontage to obscure sight distance at the project driveway. There are also no curves in the roadway along the project frontage on Capistrano Road. Clear sight distance triangles should be provided at the project driveways to optimize sight distance. Any landscaping and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site.

On-Site Circulation

The on-site circulation was reviewed in accordance with generally accepted traffic engineering standards. Generally, the proposed plan would provide vehicle traffic with adequate connectivity through the parking areas. The project would provide 60-degree parking throughout the project site, adjacent to 25-foot and 30-foot wide drive aisles accommodating two-way traffic flow. Typically, two-way drive aisles adjacent to 60-degree parking are required to be a minimum of 24 feet wide, to provide sufficient room for vehicles to back out of the parking stalls. The aisle widths are adequate for recreational vehicles and trailers. The RV parking stalls are shown to be 20 feet wide with varying lengths to accommodate various sizes of RVs.

Transit, Pedestrian and Bicycle Analysis

Pedestrian facilities in the study area consist of sidewalks located on both sides of Capistrano Road and along the west side of Pillar Point Harbor Boulevard in the vicinity of the project. Marked crosswalks are provided at the Cabrillo Highway/Capistrano Road and Pillar Point Harbor Boulevard/Capistrano Road intersections (see Chapter 2 for detailed discussion). The overall network of sidewalks and crosswalks in the study area has good connectivity and provides pedestrians with safe routes to transit services and other points of interest in the vicinity of the project site.

Bicycle facilities within the study area consist of a multi-use path as part of the Coastal Trail, south of the project site and accessible via Pillar Point Harbor Boulevard, which is designated as a Class III bike route (see Chapter 2 for detailed discussion). The County of San Mateo plans to develop the Parallel Trail, which would run on the east side of SR 1 from Montara to Half Moon Bay. The sidewalks and bikeways in the vicinity of the project site are adequate to serve the proposed RV park.

Transit services in the study area are provided by SamTrans. The study area is served directly by two local bus routes. It is expected that there would be an insignificant number of people that would use transit to and from the project site. The traffic volumes added to Capistrano Road and Cabrillo Highway would have a less than significant impact on bus travel times.



8. Conclusions

The potential impacts of the project were evaluated in accordance with the standards set forth by the County of San Mateo and the City/County Association of Governments (C/CAG) of San Mateo County CMP. The study included the analysis of traffic conditions at one signalized intersection and one unsignalized intersection during the weekday AM, PM, and Saturday midday peak hours. The analysis focuses on the weekday peak commute periods between 7:00 AM and 9:00 AM and 4:00 PM and 6:00 PM, and the Saturday midday peak hour is typically between 11:00 AM and 3:00 PM. It is during these hours that traffic conditions on the surrounding roadways are generally the most congested and the impact on the roadway system by traffic from the proposed RV park would be greatest.

Intersection Level of Service Analysis

The results of the intersection level of service analysis determined that under all scenarios with and without the project, the signalized study intersection, Cabrillo Highway (SR 1)/Capistrano Road, would operate at an acceptable level of service (LOS C or better, with each individual movement operating at LOS D or better) during the AM, PM, and Saturday midday peak hours. In addition, the analysis results show that the two-way stop-controlled study intersection would operate at LOS C or better during all peak hours. The analysis indicates that vehicles on the stop-controlled approaches (the Pillar Point Harbor Boulevard and the Shoppes at Harbor Village private driveway) would experience minimal increases in delay with added project traffic.

Other Transportation Issues

Based on a review of the project site plan, there would be no issues regarding site access along Capistrano Road; and no issues are expected to arise regarding on-site circulation. The driveway design of the proposed shared-access driveway would provide adequate clearance for large vehicles to perform turn movements. Furthermore, the proposed project would not have an adverse effect on the existing transit, pedestrian, or bicycle facilities in the study area. Thus, no project sponsored improvements would be necessary.

100 Capistrano Road Harbor Village RV Park TIA Technical Appendices

January 18, 2019

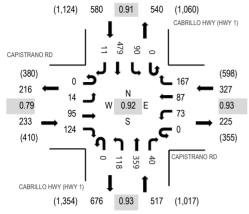
Appendix A Traffic Counts



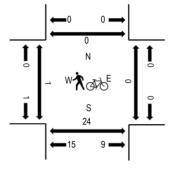
Location: 1 CABRILLO HWY (HWY 1) & CAPISTRANO RD AM Date and Start Time: Thursday, March 2, 2017 Peak Hour: 07:30 AM - 08:30 AM Peak 15-Minutes: 07:45 AM - 08:00 AM

(303) 216-2439 www.alltrafficdata.net

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

	CA	PISTR	ANO F	RD	CA	PISTR/	ANO RD		CABRI	LLO HV	NY (HV	VY 1)	CABR	ILLO H	WY (H\	VY 1)						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	estrair	n Crossi	ngs
 Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
7:00 AM	0	3	10	23	0	12	12	40	0	19	95	2	0	7	111	1	335	1,559	0	0	5	0
7:15 AM	0	0	5	43	0	20	11	41	0	16	96	6	0	6	120	2	366	1,626	0	0	4	0
7:30 AM	0	5	27	35	0	25	15	43	0	23	83	6	0	17	126	2	407	1,657	0	0	4	0
7:45 AM	0	1	43	31	0	13	26	49	0	38	73	17	0	34	122	4	451	1,624	0	0	5	0
8:00 AM	0	3	12	31	0	17	29	43	0	27	103	8	0	16	112	1	402	1,590	1	0	11	0
8:15 AM	0	5	13	27	0	18	17	32	0	30	100	9	0	23	119	4	397		0	0	3	0
8:30 AM	0	2	7	30	0	18	19	28	0	23	84	13	0	25	123	2	374		0	0	4	0
8:45 AM	0	3	19	32	0	18	16	36	0	40	92	14	0	16	128	3	417		0	0	2	0

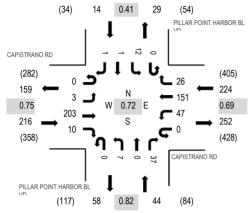
		East	bound			West	bound			North	bound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	5
Lights	0	13	91	116	0	69	83	167	0	111	330	39	0	89	463	11	1,582
Mediums	0	1	4	8	0	4	4	0	0	7	28	1	0	1	12	0	70
Total	0	14	95	124	0	73	87	167	0	118	359	40	0	90	479	11	1,657

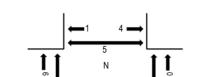


Location: 1 PILLAR POINT HARBOR BLVD & CAPISTRANO RD AM Date and Start Time: Thursday, May 04, 2017 Peak Hour: 07:15 AM - 08:15 AM Peak 15-Minutes: 07:45 AM - 08:00 AM

(303) 216-2439 www.alltrafficdata.net

Peak Hour - All Vehicles





Peak Hour - Pedestrians/Bicycles in Crosswalk

 $\begin{bmatrix} \mathbf{N} \\ \mathbf{\omega} \\ \mathbf{\omega} \\ \mathbf{w} \\ \mathbf{A} \\ \mathbf{A}$

Note: Total study counts contained in parentheses.

Traffic Counts

	CA		RANO F	RD			ANO RD		PILLA	R POIN		BOR	PILLA			BOR						
Interval		Eastb	ound			Westb	ound			NoRAD	Qund			South	Jound			Rolling	Ped	lestrair	n Crossi	ngs
 Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
7:00 AM	0	0	29	3	0	11	20	3	0	1	0	6	0	3	0	0	76	451	2	0	1	0
7:15 AM	0	1	44	4	0	18	18	8	0	2	0	4	0	4	0	0	103	498	1	0	5	2
7:30 AM	0	1	47	2	0	6	24	3	0	3	0	12	0	2	0	0	100	495	2	0	2	2
7:45 AM	0	1	69	2	0	10	67	9	0	0	0	12	0	1	0	1	172	481	1	0	2	1
8:00 AM	0	0	43	2	0	13	42	6	0	2	0	9	0	5	1	0	123	430	4	0	5	0
8:15 AM	0	0	37	4	0	8	30	10	0	1	1	9	0	0	0	0	100		6	0	1	1
8:30 AM	0	0	25	3	0	13	25	4	0	3	0	10	0	2	0	1	86		2	0	1	0
8:45 AM	0	1	35	5	0	12	39	6	0	3	0	6	0	14	0	0	121		3	0	2	0

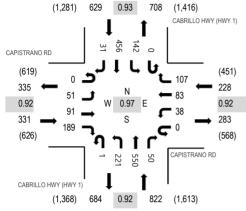
		East	bound			West	bound			North	bound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	3	194	10	0	45	146	23	0	6	0	37	0	11	1	1	477
Mediums	0	0	9	0	0	2	5	3	0	1	0	0	0	1	0	0	21
Total	0	3	203	10	0	47	151	26	0	7	0	37	0	12	1	1	498



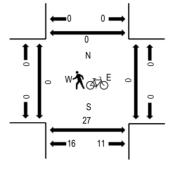
Location: 1 CABRILLO HWY (HWY 1) & CAPISTRANO RD PM Date and Start Time: Thursday, March 2, 2017 Peak Hour: 04:30 PM - 05:30 PM Peak 15-Minutes: 05:00 PM - 05:15 PM

(303) 216-2439 www.alltrafficdata.net

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

	CA	APISTRANO RD			CA	PISTRA	NO RD		CABRI	LLO HV	NY (HV	VY 1)	CABR	LLO H	WY (HV	VY 1)						
Interval		Eastb	ound			Westbo	ound			Northb	ound			South	bound			Rolling	Ped	estrair	n Crossii	ngs
 Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM	0	14	14	51	0	5	27	24	0	46	161	18	0	26	135	2	523	1,976	0	0	4	0
4:15 PM	0	10	18	45	0	8	18	26	0	29	147	14	0	27	122	7	471	1,972	0	1	8	0
4:30 PM	0	15	16	47	0	12	18	29	1	49	146	19	0	34	111	8	505	2,010	0	0	7	0
4:45 PM	0	12	22	41	0	4	21	24	0	57	135	8	0	37	111	5	477	1,981	0	0	3	0
5:00 PM	0	10	23	55	0	10	26	28	0	55	139	9	0	33	121	10	519	1,995	0	0	6	0
5:15 PM	0	14	30	46	0	12	18	26	0	60	130	14	0	38	113	8	509		0	0	7	0
5:30 PM	0	10	23	37	0	11	21	24	0	45	134	14	0	41	106	10	476		2	0	4	0
5:45 PM	0	10	24	39	0	11	31	17	0	41	131	11	0	55	114	7	491		0	2	16	0

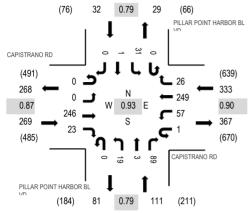
		East	bound			West	bound			North	bound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	51	89	183	0	36	82	106	1	217	545	50	0	141	441	30	1,972
Mediums	0	0	2	5	0	2	1	1	0	4	5	0	0	1	15	1	37
Total	0	51	91	189	0	38	83	107	1	221	550	50	0	142	456	31	2,010

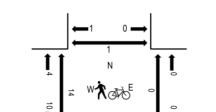


Location: 1 PILLAR POINT HARBOR BLVD & CAPISTRANO RD PM Date and Start Time: Thursday, May 04, 2017 Peak Hour: 05:00 PM - 06:00 PM Peak 15-Minutes: 05:00 PM - 05:15 PM

(303) 216-2439 www.alltrafficdata.net

Peak Hour - All Vehicles





S

17

13

ĺ

Note: Total study counts contained in parentheses.

Traffic Counts

	CA	PISTR	RANO F	RD	CA					R POIN	T HAR	BOR	PILLA	R POIN	IT HAR	BOR						
Interval		Eastb	ound			Westb	ound			NoRAD	Qund			South	Dund			Rolling	Ped	lestrair	n Crossi	ngs
 Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM	0	2	37	5	0	18	47	5	0	3	0	28	0	8	2	0	155	666	0	0	3	0
4:15 PM	0	1	51	7	0	18	49	9	0	4	0	13	0	8	0	1	161	712	1	0	6	0
4:30 PM	0	0	48	4	0	19	41	13	0	6	0	20	0	11	3	0	165	744	8	0	5	0
4:45 PM	0	0	54	7	0	20	61	6	0	9	1	16	0	9	0	2	185	736	0	0	3	2
5:00 PM	0	0	74	6	0	12	68	5	0	7	0	22	0	6	1	0	201	745	5	0	3	1
5:15 PM	0	0	70	10	1	17	64	2	0	1	2	17	0	9	0	0	193		1	0	2	0
5:30 PM	0	0	51	5	0	13	53	5	0	7	1	19	0	3	0	0	157		1	0	3	0
5:45 PM	0	0	51	2	0	15	64	14	0	4	0	31	0	13	0	0	194		5	0	9	0

Peak Rolling Hour Flow Rates

	Eastbound						bound			North	ound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	0	243	23	1	56	247	25	0	18	3	89	0	31	1	0	737
Mediums	0	0	2	0	0	1	2	1	0	1	0	0	0	0	0	0	7
Total	0	0	246	23	1	57	249	26	0	19	3	89	0	31	1	0	745

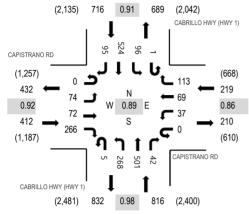
Peak Hour - Pedestrians/Bicycles in Crosswalk



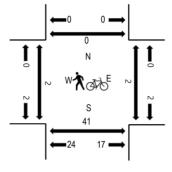
Location: 1 CABRILLO HWY (HWY 1) & CAPISTRANO RD Noon Date and Start Time: Saturday, March 4, 2017 Peak Hour: 01:45 PM - 02:45 PM Peak 15-Minutes: 02:30 PM - 02:45 PM

(303) 216-2439 www.alltrafficdata.net

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

	CA	PISTR		RD			ANO RD				NY (HW	/Y 1)	CABR		WY (H)	NY 1)						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	lestrain	Cross	ngs
 Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru R	ight	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
12:00 PM	0	7	12	56	0	11	22	27	1	66	124	12	0	15	147	27	527	2,101	0	0	10	0
12:15 PM	0	19	24	67	0	12	18	29	0	61	115	14	0	29	121	17	526	2,095	0	0	7	0
12:30 PM	0	19	15	53	0	14	19	29	0	54	126	14	1	25	145	20	534	2,120	0	0	3	0
12:45 PM	0	19	23	64	0	7	12	31	2	71	100	12	0	18	134	21	514	2,132	0	0	11	0
1:00 PM	0	14	22	55	0	10	15	22	0	61	128	9	0	24	141	20	521	2,135	0	0	7	0
1:15 PM	0	30	18	65	0	14	17	32	0	68	130	7	1	13	133	23	551	2,158	0	4	6	0
1:30 PM	0	19	9	79	0	5	16	20	0	68	133	7	0	26	143	21	546	2,099	0	1	5	0
1:45 PM	0	12	15	66	0	12	14	27	1	75	116	15	0	20	126	18	517	2,163	1	0	9	0
2:00 PM	0	19	13	60	0	9	13	20	2	69	134	7	0	29	149	20	544	2,154	0	2	14	0
2:15 PM	0	12	17	62	0	10	23	35	1	60	103	8	1	21	129	10	492		0	0	5	0
2:30 PM	0	31	27	78	0	6	19	31	1	64	148	12	0	26	120	47	610		1	0	8	0
2:45 PM	0	20	15	51	0	12	26	29	1	62	129	9	0	28	106	20	508		3	0	5	0

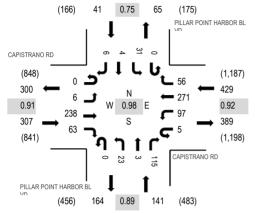
		East	bound			West	bound			Northb	ound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	73	72	263	0	36	68	109	5	265	491	42	1	96	516	94	2,131
Mediums	0	1	0	3	0	1	1	4	0	3	10	0	0	0	8	1	32
Total	0	74	72	266	0	37	69	113	5	268	501	42	1	96	524	95	2,163



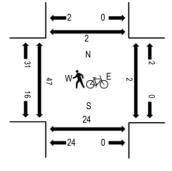
Location: 1 PILLAR POINT HARBOR BLVD & CAPISTRANO RD Noon Date and Start Time: Saturday, May 06, 2017 Peak Hour: 01:00 PM - 02:00 PM Peak 15-Minutes: 01:15 PM - 01:30 PM

(303) 216-2439 www.alltrafficdata.net

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

	Interval	CAPISTRANO RD Eastbound					PISTRA Westb	ANO RD			R POIN NoBILIN	T HARB	OR		R POIN South		BOR			Ded	o otro in	Crossi	200
	Interval													-					Rolling			Crossi	<u> </u>
_	Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru R	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
	12:00 PM	0	1	62	7	0	26	53	10	0	5	1	35	0	15	2	1	218	869	9	0	0	0
	12:15 PM	0	0	57	14	1	21	65	8	0	3	1	39	0	20	0	3	232	882	5	0	3	0
	12:30 PM	0	4	43	16	1	21	63	11	0	7	2	33	0	10	1	6	218	885	9	0	0	0
	12:45 PM	0	2	43	7	0	23	66	9	0	4	1	35	0	8	2	1	201	896	10	0	1	1
	1:00 PM	0	1	71	12	1	25	79	8	0	4	0	23	0	5	0	2	231	918	9	0	7	2
	1:15 PM	0	2	56	18	2	28	66	21	0	2	1	28	0	7	1	3	235	907	9	0	0	0
	1:30 PM	0	3	55	21	2	16	64	15	0	10	1	31	0	9	1	1	229	881	12	0	2	0
	1:45 PM	0	0	56	12	0	28	62	12	0	7	1	33	0	10	2	0	223	905	16	2	14	0
	2:00 PM	0	2	57	10	0	22	63	4	1	6	3	40	0	11	0	1	220	890	8	0	1	0
	2:15 PM	0	0	53	18	0	27	52	9	0	9	1	28	0	10	1	1	209		10	0	4	0
	2:30 PM	0	2	62	19	2	24	61	21	0	7	2	40	0	9	1	3	253		13	0	2	2
	2:45 PM	0	3	45	7	0	21	62	12	0	5	1	33	0	17	1	1	208		12	0	1	0

		East	bound			West	bound			North	bound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	6	235	63	5	96	269	55	0	23	3	115	0	30	4	6	910
Mediums	0	0	3	0	0	1	2	1	0	0	0	0	0	1	0	0	8
Total	0	6	238	63	5	97	271	56	0	23	3	115	0	31	4	6	918

PM Peak-Hour Volume Count Worksheet

Date:	Thursday March 2					
Counter:	Patti, Jo, Huy					
Intersection Name:	RV Trip Gen					
Weather:	Clear	Half Moon Bay and Morgan Hill				

AUTO-CENSUS

Traffic Monitoring and Analysis 870 Castlewood Dr. #1 Los Gatos, CA 95032 Phone 408-826-9673 Fax 408-877-1625

	Mapl	e Leaf	Pelica	n Point	Pillar	Point	Pillar Poir	nt - Pay Lot	
Start Time	In	Out	In	Out	In	Out	In	Out	
7:00	0	0	0	0	0	0	0	0	
7:15	0	0	0	1	0	1	0	1	
7:30	0	0	0	1	0	2	0	1	
7:45	0	0	5	1	0	2	0	1	
8:00	0	0	6	2	0	2	0	1	
8:15	0	0	6	3	2	3	2	2	
8:30	0	0	6	6	3	5	2	2	
8:45	0	0	8	6	4	7	2	2	
9:00	0	0	10	9	4	7	2	2	
									Hou
Peak Hour			-			-			Tot
7:00 - 8:00	0	0	6	2	0	2	0	1	1
7:15 - 8:15	0	0	6	2	2	2	2	1	1
7:30 - 8:30	0	0	6	5	3	3	2	1	2
7:45 - 8:45	0	0	3	5	4	5	2	1	2
8:00 - 9:00	0	0	4	7	4	5	2	1	2
0.00 - 3.00									

PM Peak-Hour Volume Count Worksheet

Counter: Patti, Jo, Huy	Date:	Thursday March 2	
Interpretion Name: DV/Trip Con	Counter:	Patti, Jo, Huy	
intersection name. RV mp Gen	Intersection Name:	ame: RV Trip Gen	
Weather: Clear Half Moon Bay and Morgan Hill	Neather:	Clear Half Moon Bay and Morgan Hill	

AUTO-CENSUS

Traffic Monitoring and Analysis 870 Castlewood Dr. #1 Los Gatos, CA 95032 Phone 408-826-9673 Fax 408-877-1625

	Mapl	e Leaf	Pelica	n Point	Pillar P	oint - All	Pillar Poi	nt - Pay Lot	
Start Time	In	Out	In	Out	In	Out	In	Out	
4:00	0	0	0	0	0	0	0	0	
4:15	0	0	2	0	3	1	2	1	
4:30	0	0	4	1	8	1	3	1	
4:45	0	0	7	1	15	5	8	5	
5:00	0	0	8	2	16	8	9	8	
5:15	0	0	9	5	16	9	9	9	
5:30	0	0	9	6	16	14	9	14	
5:45	0	0	10	7	19	15	11	15	
6:00	0	0	12	9	22	19	13	18	
									Ho
Peak Hour									To
4:00 - 5:00	0	0	8	2	16	8	9	8	:
4:15 - 5:15	0	0	7	5	13	8	7	8	4
4:30 - 5:30	0	0	5	5	8	13	6	13	4
4:45 - 5:45	0	0	3	6	4	10	3	10	:
5:00 - 6:00	0	0	4	7	6	11	4	10	4
eak Volumes:	0	0	8	2	16	8	9	8	

PM Peak-Hour Volume Count Worksheet

Date:	March 4th, 20)17
Counter:	Patti, Jo, Huy	,
Intersection Name:	RV Trip Gen	
Weather:	Clear	Half Moon Bay and Morgan Hill

AUTO-CENSUS

Traffic Monitoring and Analysis 870 Castlewood Dr. #1 Los Gatos, CA 95032 Phone 408-826-9673 Fax 408-877-1625

	Maple	e Leaf	Pelica	n Point		Pilla	Point	Pillar Poir	nt - Pay Lot	
Start Time	In	Out	In	Out	1	In	Out	In	Out	
12:00 PM	0	0	0	0		0	0	0	0	
12:15 PM	12	16	1	1		4	6	2	3	
12:30 PM	22	31	1	3		5	11	2	5	
12:45 PM	34	40	3	4		9	13	4	5	
1:00 PM	42	46	6	7		10	15	4	7	
1:15 PM	56	54	6	10		15	17	8	8	
1:30 PM	66	59	8	13		19	19	10	9	
1:45 PM	77	71	11	14		22	20	10	10	
2:00 PM	90	82	13	17		24	22	11	10	
2:15 PM	104	99	14	17		29	28	13	11	
2:30 PM	111	110	15	18		31	31	14	12	
2:45 PM	134	122	17	21		33	34	15	14	
3:00 PM	151	144	19	23		36	39	17	17	
Peak Hour					_					Hourly Totals
12:00 - 1:00	42	46	6	7		10	15	4	7	137
12:15 - 1:15	44	38	5	9		11	11	6	5	129
12:30 - 1:30	44	28	7	10		14	8	8	4	123
12:45 - 1:45	43	31	8	10		13	7	6	5	123
1:00 - 2:00	48	36	7	10		14	7	7	3	132
1:15 - 2:15	48	45	8	7		14	11	5	3	141
1:30 - 2:30	45	51	7	5		12	12	4	3	139
1:45 - 2:45	57	51	6	7		11	14	5	4	155
2:00 - 3:00	61	62	6	6		12	17	6	7	177
Peak Volumes:	42	46	6	7		10	15	4	7	137

Appendix B Volume Summary

Harbor Village RV Park TIA AM Conditions

Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario:	AM 03/02/	17	vay (SR		&	Capistra	ano Road		I	Date of An	alysis:	01/16/	19
						1	Number c	of Years	s to Cun	nulative Ho	orizon:	20	
	North	Approad	ch	East A	pproad		ments South	Approa	ch	West A	Approad	ch	-
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
INDEX	7	6	5	13	12	11	4	3	2	10	9	8	
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
User Adjustment	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
Existing Conditions	11	479	90	167	87	73	40	359	118	124	95	14	1657
Approved Project Trips	0	0	2	2	0	2	4	0	0	0	0	0	0
11 Avenue Alhambra	0	0	2	3	0	3	1	0	0	0	0	0	9
Big Wave North Parcel Total Approved Trips	0	0	0	0	16 16	0	0	0	70 70	<u>16</u> 16	4	0	106 115
i olai Approveu Trips	U	0	2	3	10	3	I	U	10	10	4	U	115
Background Conditions	11	479	92	170	103	76	41	359	188	140	99	14	1772
		.75	<u>.</u>		.00		11	000	100	170	00		2
Project Trips	4	0	0	0	0	0	0	0	3	7	0	6	20
Existing + Project	15	479	90	167	87	73	40	359	121	131	95	20	1677
Background + Project	15	479	92	170	103	76	41	359	191	147	99	20	1792
													_
Cumulative Baseline Conditions	17	745	118	202	104	87	43	391	127	145	102	25	2106
Cumulative + Proj Conditions	21	745	118	202	104	87	43	391	130	152	102	31	2126
Traffix Node Number: Intersection Name:		Point Ha	arbor Bou	ulevard	&	Capistra	ano Road						
Traffix Node Number: Intersection Name: Peak Hour: Count Date:	2 Pillar F AM 05/04/	17	arbor Bou		&					Date of An			
Traffix Node Number: Intersection Name: Peak Hour: Count Date:	2 Pillar F AM 05/04/	17			&		Number c	f Years		Date of An		01/16/	
Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario:	2 Pillar F AM 05/04/ Harboi	17 r Village	e RV Par	k		Move	Number c		s to Cun	nulative Ho	orizon:	20	
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario:	2 Pillar F AM 05/04/ Harbon	17 r Village Approad	RV Par	k East A	pproac	Move	Number of ments South	Approa	to Cun	nulative Ho	orizon:	20	
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario:	2 Pillar F AM 05/04/ Harbon North / RT	17 r Village Approad TH	RV Par	k East A RT	pproac TH	Move	Number of ments South A RT	Approa TH	to Cun ch LT	nulative Ho West A RT	orizon: Approac TH	20 ch LT	
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario:	2 Pillar F AM 05/04/ Harbon North / RT 7	17 r Village Approad TH 6	e RV Par ch LT 5	k East A RT 13	pproac TH 12	Move Move h LT	Number of ments South RT 4	Approa TH 3	to Cun ch LT 2	NULATIVE Ho West A RT 10	orizon: Approac TH 9	20 ch LT 8	
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX	2 Pillar F AM 05/04/ Harboi North RT 7 1.00	17 r Village Approad TH 6 1.00	e RV Par ch LT 5 1.00	<u>East A</u> <u>RT</u> 13 1.00	pproac TH 12 1.00	Move Move LT 11 1.00	Number of ments South RT 4 1.00	Approa TH 3 1.00	ch LT 2 1.00	West A RT 10 1.00	orizon: Approac TH 9 1.00	20 ch LT 8 1.00	
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment	2 Pillar F AM 05/04/ Harbor North A RT 7 1.00 1.00	17 r Village Approad TH 6 1.00 1.00	e RV Par ch LT 5 1.00 1.00	<u>East A</u> RT 13 1.00 1.00	pproac TH 12 1.00 1.00	Move bh LT 1.00 1.00	Number of ments South RT 4 1.00 1.00	Approa TH 3 1.00 1.00	to Cun ch LT 2 1.00 1.00	West A RT 10 1.00 1.00	2007 2007 2007 2007 2007 2007 2007 2007	20 ch LT 8 1.00 1.00	Total
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions	2 Pillar F AM 05/04/ Harboi North RT 7 1.00	17 r Village Approad TH 6 1.00	e RV Par ch LT 5 1.00	<u>East A</u> <u>RT</u> 13 1.00	pproac TH 12 1.00	Move Move LT 11 1.00	Number of ments South RT 4 1.00	Approa TH 3 1.00	ch LT 2 1.00	West A RT 10 1.00	orizon: Approac TH 9 1.00	20 ch LT 8 1.00	Total
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips	2 Pillar F AM 05/04/ Harbor North A RT 7 1.00 1.00	17 r Village Approad TH 6 1.00 1.00 1	e RV Par ch LT 5 1.00 1.00 12	k East A RT 13 1.00 1.00 26	pproac TH 12 1.00 1.00 151	Move h LT 1.00 1.00 47	Number of ments South / RT 4 1.00 1.00 37	Approa TH 3 1.00 1.00 0	to Cun ch LT 1.00 1.00 7	West A RT 10 1.00 1.00 1.00 10	Approac TH 9 1.00 1.00 203	20 th LT 8 1.00 1.00 3	
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions	2 Pillar F AM 05/04/ Harbon RT 7 1.00 1.00 1	17 r Village Approad TH 6 1.00 1.00	e RV Par ch LT 5 1.00 1.00	<u>East A</u> RT 13 1.00 1.00	pproac TH 12 1.00 1.00	Move bh LT 1.00 1.00	Number of ments South RT 4 1.00 1.00	Approa TH 3 1.00 1.00	to Cun ch LT 2 1.00 1.00	West A RT 10 1.00 1.00	2007 2007 2007 2007 2007 2007 2007 2007	20 ch LT 8 1.00 1.00	-
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra	2 Pillar F AM 05/04/ Harbon RT 7 1.00 1.00 1 0	17 r Village Approad TH 6 1.00 1.00 1 0	e RV Par ch LT 5 1.00 1.00 12 0	k East A RT 13 1.00 1.00 26 0	pproac TH 12 1.00 1.00 151	Move h LT 1.00 1.00 47	Number of ments South RT 1.00 1.00 37	Approa TH 3 1.00 1.00 0	to Cun ch LT 1.00 1.00 7	West A RT 10 1.00 1.00 10	2007 2007 2007 0 2007 0	20 ch LT 8 1.00 1.00 3 0	-
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips	2 Pillar F AM 05/04/ Harboi RT 7 1.00 1.00 1 0 0	17 r Village Approad TH 6 1.00 1.00 1 0 0	⇒ RV Par Ch LT 5 1.00 1.00 12 0 0 0	k East A RT 1.00 1.00 26 0 0	pproac TH 12 1.00 1.00 151 0 86	Move ch 1.00 1.00 47 0 0	Number c ments South / RT 1.00 1.00 37 0 0	Approa TH 3 1.00 1.00 0 0	to Cun LT 1.00 1.00 7 0 0	West A RT 10 1.00 1.00 10 0 0	2007 Approac TH 9 1.00 1.00 203 0 20	20 ch LT 8 1.00 1.00 3 0 0 0	
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips Background Conditions	2 Pillar F AM 05/04/ Harbon North / RT 7 1.00 1.00 1.00 1 0 0 0	17 r Village Approad TH 6 1.00 1.00 1.00 1 0 0 0 0	RV Par 2h LT 5 1.00 12 0 0 0 0 0 0	k East A RT 13 1.00 1.00 26 0 0 0	pproac TH 12 1.00 1.00 151 0 86 86	Move th LT 1.00 1.00 47 0 0 0	Number of ments South RT 4 1.00 1.00 37 0 0 0	Approa TH 1.00 1.00 0 0 0	to Cun ch LT 2 1.00 1.00 7 0 0 0 0	West A RT 10 1.00 1.00 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 20 0 20 20	20 ch LT 8 1.00 1.00 3 0 0 0 0 0	
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips Background Conditions Project Trips	2 Pillar F AM 05/04/ Harbon RT 7 1.00 1.00 1 0 0 0 0 1 0 0	17 r Village TH 6 1.00 1.00 1 0 0 0 1 0	RV Par ch LT 5 1.00 12 0 0 0 12 13	k East A RT 13 1.00 26 0 0 0 0 0 0 26 7	pproad TH 12 1.00 1.00 151 0 86 86 237 0	Move h LT 1100 1.00 47 0 0 47 0 0 0 0 0 0 0 0 0 0 0 0 0	Number of ments NT 4 1.00 1.00 37 0 0 0 0 37 0 0 0 0 0 0 0 0 0 0 0 0	Approa TH 3 1.00 1.00 0 0 0 0 0	to Cun LT 2 1.00 1.00 7 0 0 0 7 0 0 0 0 0 0 0 0 0 0 0 0 0	West A RT 10 1.00 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 20 20 223 0 0 0 20 0 0 20 0 0 20 0 0 0 0 0 0 0 0 0 0 0 0 0	20 ch LT 8 1.00 1.00 3 0 0 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0	- - - - - - - - - - - - - - - - - - -
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips Background Conditions Project Trips Existing + Project	2 Pillar F AM 05/04/ Harbon RT 7 1.00 1.00 1 0 0 0 0 1 0 0 0 1 1 0 0 1	17 r Village Approad TH 6 1.00 1.00 1 0 0 0 0 1 0 0 1	RV Par ch LT 5 1.00 12 0 0 0 12 13 25	k East A RT 13 1.00 26 0 0 0 0 0 0 0 26 7 33	pproad TH 12 1.00 1.00 151 0 86 86 237 0 151	Move h LT 1100 1.00 47 0 0 47 0 47 0 47	Number of ments South RT 4 1.00 1.00 37 0 0 0 0 0 37 0 37	Approa TH 3 1.00 1.00 0 0 0 0 0 0	to Cun LT 2 1.00 1.00 7 0 0 7 0 7 0 7 0 7 0 7	West A RT 10 1.00 1.00 0 0 0 0 0 0 0 10	Opizon: ypproad TH 9 1.00 203 0 20 223 0 203	20 ch LT 8 1.00 1.00 3 0 0 0 0 3 0 3 0 3	- - - - - - - - - - - - - - - - - - -
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips Background Conditions Project Trips Existing + Project	2 Pillar F AM 05/04/ Harbon RT 7 1.00 1.00 1 0 0 0 0 1 0 0	17 r Village TH 6 1.00 1.00 1 0 0 0 1 0	RV Par ch LT 5 1.00 12 0 0 0 12 13	k East A RT 13 1.00 26 0 0 0 0 0 0 26 7	pproad TH 12 1.00 1.00 151 0 86 86 237 0	Move h LT 1100 1.00 47 0 0 47 0 0 0 0 0 0 0 0 0 0 0 0 0	Number of ments NT 4 1.00 1.00 37 0 0 0 0 37 0 0 0 0 0 0 0 0 0 0 0 0	Approa TH 3 1.00 1.00 0 0 0 0 0	to Cun LT 2 1.00 1.00 7 0 0 0 7 0 0 0 0 0 0 0 0 0 0 0 0 0	West A RT 10 1.00 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 20 20 223 0 0 0 20 0 0 20 0 0 20 0 0 0 0 0 0 0 0 0 0 0 0 0	20 ch LT 8 1.00 1.00 3 0 0 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0	- - - - - - - - - - - - - - - - - - -
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips Background Conditions Project Trips Existing + Project Background + Project	2 Pillar F AM 05/04/ Harbor 7 1.00 1.00 1 0 0 0 0 0 1 0 0 1 1 0 0 1 1	17 r Village Approad TH 6 1.00 1.00 1 0 0 0 0 1 0 0 1 0 1 1	RV Par LT 5 1.00 1.00 12 0 0 0 12 13 25 25	k East A RT 13 1.00 26 0 0 0 0 0 0 26 7 7 33 33	pproac TH 12 1.00 1.00 151 0 86 86 237 0 151 237	Move h LT 1.00 1.00 47 0 0 47 0 47 0 47 47	Number of ments South A 1.00 1.00 37 0 0 0 0 37 0 37 37 37	Approa TH 3 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0	to Cun LT 1.00 1.00 7 0 0 7 0 7 0 7 7 7 7 7	West A RT 10 1.00 1.00 1.00 1.00 0 0 0 0 10 10 10 10 10 10 10 10 10 10	Oprizon: Approac TH 9 1.00 203 0 20 20 20 20 20 20 203 0 223 0 203 223	20 ch LT 8 1.00 1.00 3 0 0 0 3 0 3 3 3	- - - - - - - - - - - - - - - - - - -
Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel	2 Pillar F AM 05/04/ Harbon RT 7 1.00 1.00 1 0 0 0 0 1 0 0 0 1 1 0 0 1	17 r Village Approad TH 6 1.00 1.00 1 0 0 0 0 1 0 0 1	RV Par ch LT 5 1.00 12 0 0 0 12 13 25	k East A RT 13 1.00 26 0 0 0 0 0 0 0 26 7 33	pproad TH 12 1.00 1.00 151 0 86 86 237 0 151	Move h LT 1100 1.00 47 0 0 47 0 47 0 47	Number of ments South RT 4 1.00 1.00 37 0 0 0 0 0 37 0 37	Approa TH 3 1.00 1.00 0 0 0 0 0 0	to Cun LT 2 1.00 1.00 7 0 0 7 0 7 0 7 0 7 0 7	West A RT 10 1.00 1.00 0 0 0 0 0 0 0 10	Opizon: ypproad TH 9 1.00 203 0 20 223 0 203	20 ch LT 8 1.00 1.00 3 0 0 0 0 3 0 3 0 3	- - - - - - - - - - - - - - - - - - -

Harbor Village RV Park TIA PM Conditions

Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario:	PM 03/02/	17	vay (SR 1) e RV Park		&	Capistra	ano Road		I	Date of An	alysis:	01/16/	19
							Number o	of Years	s to Cun	nulative He	orizon:	20	
						Move	ments						
	North /	Approa	ch	East A	pproac	h	South	Approa	ch	West A	Approad	ch	_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
INDEX	7	6	5	13	12	11	4	3	2	10	9	8	
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
User Adjustment	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	_
Existing Conditions	31	456	142	107	83	38	50	550	222	189	91	51	2010
Approved Project Trips													
11 Avenue Alhambra	0	0	2	2	0	2	2	0	0	0	0	0	8
Big Wave North Parcel	0	0	2	2	4	2	2	0	0 19	65	0 15	0	8 103
Total Approved Trips	0	0	2	2	4	2	2	0	19	<u>65</u>	15	0	103
i otal Approved Trips	U	U	2	2	4	2	2	U	19	co	10	U	111
Background Conditions	31	456	144	109	87	40	52	550	241	254	106	51	2121
Project Trips	9	0	0	0	0	0	0	0	7	5	0	4	25
Existing + Project	40	456	142	107	83	38	50	550	229	194	91	55	2035
Background + Project	40	456	142	107	87	40	52	550	248	259	106	55	2030
Background + Project	40	400	144	109	07	40	52	550	240	259	100	55	_ 2140
Currentetine Deseline Velumes	00	500	102	120	05	4.4	07	000	040	200	100	00	
Cumulative Baseline volumes	36	563	103	139	95	44	07	803	242	200	100	00	2000
Cumulative + Proj Conditions Intersection Number: Traffix Node Number:	36 45 2 2 Pillar F	563 563	183 183	139 139	95 95 &	44 44 Capistra	67 67	803 803	242 249	200 205	<u>100</u> 100	66 70	-
Cumulative Baseline Volumes Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario:	45 2 2 Pillar F PM 05/04/	563 Point Ha		139 evard	95	44 Capistra	67 ano Road	803	249	205 Date of An	100 alysis:	70 01/16/	2563
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date:	45 2 2 Pillar F PM 05/04/	563 Point Ha	183 arbor Boul	139 evard	95	44 Capistra	67 ano Road	803	249	205	100 alysis:	70	2563
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date:	45 2 Pillar F PM 05/04/ Harbon	563 Point Ha 17 r Village	183 arbor Boul e RV Park	139 evard	95 &	44 Capistra	67 ano Road <u>Number c</u> ments	803	249 I s to Cun	205 Date of An	100 aalysis:	70 01/16/ 20	2563
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario:	45 2 Pillar F PM 05/04/ Harbon	563 Point Ha 17 r Village	183 arbor Boul e RV Park	139 evard East A	95 &	44 Capistra Move	67 ano Road <u>Number c</u> ments South	803 of Years	249 I s to Cun ch	205 Date of An nulative He West A	100 aalysis: orizon:	70 01/16/ 20	2563
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario:	45 2 Pillar F PM 05/04/ Harbon North / RT	563 Point Ha 17 r Village Approac	183 arbor Boul <u>e RV Park</u> ch LT	139 evard East A RT	95 & pproac TH	44 Capistra Move h LT	67 ano Road Mumber c ments South RT	803 of Years Approa TH	249 I s to Cun ch LT	205 Date of An <u>hulative He</u> West A RT	100 halysis: prizon: Approac TH	70 01/16/ 20 ch LT	2563
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario:	45 2 Pillar F PM 05/04/ Harbon North / RT 7	563 Point Ha 17 r Village Approad TH 6	183 arbor Boul ⇒ RV Park Ch LT 5	139 evard East A RT 13	95 & pproac TH 12	44 Capistra Move h LT 11	67 ano Road <u>Mumber c</u> ments South RT 4	803 of Years Approa TH 3	249 [s to Cun ch LT 2	205 Date of An <u>hulative Ho</u> <u>West A</u> RT 10	100 halysis: brizon: Approac TH 9	70 01/16/ 20 ch LT 8	2563
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX	45 2 Pillar F PM 05/04/ Harbor North A RT 7 1.00	563 Point Ha 17 r Village TH 6 1.00	183 arbor Boul e RV Park ch LT 5 1.00	139 evard East A RT 13 1.00	95 & pproac TH 12 1.00	44 Capistra Move h LT 11 1.00	67 ano Road <u>ments</u> South RT 4 1.00	803 of Years Approa TH 3 1.00	249 [s to Cun ch LT 2 1.00	205 Date of An <u>hulative He</u> <u>West A</u> <u>RT</u> 10 1.00	100 halysis: prizon: Approad TH 9 1.00	70 01/16/ 20 ch LT 8 1.00	2563
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment	45 2 Pillar F PM 05/04/ Harbor North A RT 7 1.00	563 Point Ha 17 r Village Approad TH 6	183 arbor Boul ⇒ RV Park Ch LT 5	139 evard East A RT 13	95 & pproac TH 12	44 Capistra Move h LT 11	67 ano Road <u>Mumber c</u> ments South RT 4	803 of Years Approa TH 3	249 [s to Cun ch LT 2	205 Date of An <u>hulative Ho</u> <u>West A</u> RT 10	100 halysis: brizon: Approac TH 9	70 01/16/ 20 ch LT 8	2563 19 - - - - -
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions	45 2 Pillar F PM 05/04/ Harbon North A RT 7 1.00 1.00	563 Point Ha 17 r Village TH 6 1.00 1.00	183 arbor Boul e RV Park ch LT 5 1.00 1.00	139 evard East A RT 13 1.00 1.00	95 & pproac TH 12 1.00 1.00	44 Capistra Move h LT 11 1.00 1.00	67 ano Road ments South RT 4 1.00 1.00	803 of Years Approa TH 3 1.00 1.00	249 5 to Cun ch LT 2 1.00 1.00	205 Date of An <u>Mest A</u> RT 10 1.00 1.00	100 aalysis: orizon: Approad TH 9 1.00 1.00	70 01/16/ 20 ch LT 8 1.00 1.00	2563 19 - - - - -
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips	45 2 Pillar F PM 05/04/ Harbod North / RT 7 1.00 1.00 0	563 Point Ha 17 r Village TH 6 1.00 1.00 1	183 arbor Boul e RV Park ch LT 5 1.00 1.00 31	139 evard East A RT 13 1.00 1.00 26	95 & pproac TH 12 1.00 1.00 249	44 Capistra Move h LT 1.00 1.00 58	67 ano Road Mumber of ments South RT 4 1.00 1.00 89	803 of Years Approa TH 3 1.00 1.00 3	249 I s to Cun ch LT 2 1.00 1.00 19	205 Date of An nulative He RT 10 1.00 23	100 alysis: orizon: Approac TH 9 1.00 1.00 246	70 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	2563 19 Total
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra	45 2 Pillar F PM 05/04/ Harbon North / RT 7 1.00 1.00 0	563 Point Ha 17 r Village Approad 100 1.00 1 0	183 arbor Boul e RV Park ch LT 5 1.00 1.00 31	139 evard East A RT 13 1.00 26 0	95 & pproac TH 1.00 1.00 249 0	44 Capistra Move h LT 1.00 1.00 58 0	67 ano Road <u>Number c</u> ments <u>South</u> RT 1.00 1.00 89	803 of Years Approa TH 3 1.00 1.00 3 0	249 E to Cun Ch LT 1.00 1.00 1.9 0	205 Date of An <u>mulative He</u> RT 10 1.00 23 0	100 alysis: prizon: Approad TH 1.00 1.00 246 0	70 01/16/ 20 ch LT 1.00 1.00 0 0	2563 19 - - - 745 0
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips	45 2 Pillar F PM 05/04/ Harbod North / RT 7 1.00 1.00 0	563 Point Ha 17 r Village TH 6 1.00 1.00 1	183 arbor Boul e RV Park ch LT 5 1.00 1.00 31	139 evard East A RT 13 1.00 1.00 26	95 & pproac TH 12 1.00 1.00 249	44 Capistra Move h LT 1.00 1.00 58	67 ano Road Mumber of ments South RT 4 1.00 1.00 89	803 of Years Approa TH 3 1.00 1.00 3	249 I s to Cun ch LT 2 1.00 1.00 19	205 Date of An nulative He RT 10 1.00 23	100 alysis: orizon: Approac TH 9 1.00 1.00 246	70 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	256: 19 - - - 745 0 103
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips	45 2 Pillar F PM 05/04/ Harboi North / RT 7 1.00 1.00 0 0 0 0	563 Point Ha 17 r Village TH 6 1.00 1.00 1 0 0 0	183 arbor Boul arbor Boul RV Park Ch LT 5 1.00 1.00 31 0 0 0 0	East A RT 13 1.00 26 0 0 0	95 & pproac TH 12 1.00 1.00 249 0 23 23	44 Capistra Move h LT 1.00 1.00 58 0 0 0 0	67 ano Road <u>ments</u> <u>South</u> 1.00 1.00 89 0 0 0	803 of Years Approa TH 3 1.00 1.00 3 0 0 0 0	249 <u>s to Cun</u> <u>ch</u> <u>LT</u> <u>2</u> <u>1.00</u> <u>1.00</u> <u>19</u> 0 0 0 0	205 Date of An <u>hulative He</u> West A RT 10 1.00 23 0 0 0	100 halysis: <u>prizon:</u> Approad TH 9 1.00 1.00 246 0 80 80	70 01/16/ 20 ch LT 8 1.00 1.00 0 0 0 0	2563 19 - 745 0 103 103
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips Background Conditions	45 2 Pillar F PM 05/04/ Harboi North RT 1.00 1.00 0 0 0	563 Point Ha 17 r Village TH 6 1.00 1.00 1 0 0	183 arbor Boul RV Park RV Park Ch LT 5 1.00 1.00 31 0 0 0	139 evard East A RT 13 1.00 1.00 26 0 0	95 & pproac TH 12 1.00 1.00 249 0 23	44 Capistra Move h LT 1100 1.00 58 0 0	67 ano Road <u>ments</u> <u>South</u> <u>RT</u> 4 1.00 1.00 89 0 0	803 of Years Approa TH 3 1.00 1.00 3 0 0	249 5 to Cun ch LT 2 1.00 1.00 1.00 1.00 0 0 0	205 Date of An <u>hulative He</u> RT 10 1.00 23 0 0	100 halysis: <u>prizon:</u> Approad TH 9 1.00 1.00 246 0 80	70 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	2563 19 - 745 0 103 103
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips	45 2 Pillar F PM 05/04/ Harboi North / RT 7 1.00 1.00 0 0 0 0	563 Point Ha 17 r Village TH 6 1.00 1.00 1 0 0 0	183 arbor Boul arbor Boul RV Park Ch LT 5 1.00 1.00 31 0 0 0 0	East A RT 13 1.00 26 0 0 0	95 & pproac TH 12 1.00 1.00 249 0 23 23	44 Capistra Move h LT 1.00 1.00 58 0 0 0 0	67 ano Road <u>ments</u> <u>South</u> 1.00 1.00 89 0 0 0	803 of Years Approa TH 3 1.00 1.00 3 0 0 0 0	249 <u>s to Cun</u> <u>ch</u> <u>LT</u> <u>2</u> <u>1.00</u> <u>1.00</u> <u>19</u> 0 0 0 0	205 Date of An <u>hulative He</u> West A RT 10 1.00 23 0 0 0	100 halysis: <u>prizon:</u> Approad TH 9 1.00 1.00 246 0 80 80	70 01/16/ 20 ch LT 8 1.00 1.00 0 0 0 0	2563 19 - 745 0 103 103
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: INDEX Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips Background Conditions Project Trips Existing + Project	45 2 Pillar F PM 05/04/ Harbon RT 7 1.00 1.00 0 0 0 0 0 0	563 Point Ha 17 r Village TH 6 1.00 1.00 1 0 0 0 1	183 arbor Boul e RV Park ch LT 5 1.00 1.00 31 0 0 0 0 31 9 40	139 evard East A RT 13 1.00 26 0 0 0 26	95 & pproac TH 12 1.00 1.00 249 0 23 23 23 272	44 Capistra Move h LT 11 1.00 58 0 0 0 58 0 58 0	67 ano Road <u>ments</u> South RT 4 1.00 1.00 89 0 0 0 0 89	803 of Years Approa TH 3 1.00 1.00 3 0 0 0 3 0 3	249 5 to Cun ch LT 2 1.00 1.00 19 0 0 19 0 19 19	205 Date of An <u>hulative He</u> <u>West A</u> RT 10 1.00 23 0 0 0 0 23	100 halysis: <u>orizon:</u> Approac TH 9 1.00 1.00 246 0 80 80 80 326	70 01/16/ 20 2h LT 8 1.00 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2563 19 7051 745 0 103 103 848 25
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips Background Conditions Project Trips	45 2 Pillar F PM 05/04/ Harbon RT 7 1.00 1.00 0 0 0 0 0 0 0 0 0	563 Point Ha 17 r Village TH 6 1.00 1.00 1 0 0 0 1 0	183 arbor Boul RV Park Ch LT 5 1.00 1.00 31 0 0 0 0 31 9	139 evard East A RT 13 1.00 26 0 0 0 0 26 16	95 & pproac TH 12 1.00 1.00 249 0 23 23 23 23 272 0	44 Capistra Move h LT 11 1.00 58 0 0 0 58 0 0	67 ano Road <u>ments</u> <u>South</u> RT 4 1.00 1.00 89 0 0 0 0 0 0 0 0 0	803 of Years Approa TH 3 1.00 1.00 3 0 0 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0	249 Eto Cun Ch LT 2 1.00 1.00 1.00 1.00 0 0 0 19 0 0	205 Date of An <u>hulative He</u> <u>West A</u> RT 10 1.00 23 0 0 0 0 0 0 0	100 halysis: orizon: Approac TH 9 1.00 1.00 246 0 80 80 80 326 0	70 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	745 0 103 103 848
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips Background Conditions Project Trips Existing + Project Background + Project	45 2 Pillar F PM 05/04/ Harbon RT 7 1.00 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	563 Point Ha 17 r Village TH 6 1.00 1.00 1 0 0 0 1 0 1 0 1 1 0	183 arbor Boul arbor Boul ar	139 evard East A RT 13 1.00 26 0 0 0 0 0 0 26 16 16 42 42	95 & pproac TH 12 1.00 2.49 0 2.3 2.72 0 249 272 0 249 272	44 Capistra Move h LT 11 1.00 58 0 0 0 58 0 0 58 0 58 58	67 ano Road <u>ments</u> <u>South</u> RT 4 1.00 1.00 89 0 0 0 0 0 0 0 89 0 0 0 0 0 0 0 89 0 0 0 89 0 0	803 of Years Approa TH 3 1.00 1.00 3 0 0 0 3 0 3 3	249 Eto Cun Ch LT 2 1.00 1.00 1.00 1.00 0 0 0 19 0 0 19 19 19 19	205 Date of An nulative He RT 10 1.00 1.00 23 0 0 23 0 0 23 0 23 23	100 alysis: orizon: Approac TH 9 1.00 1.00 246 0 80 80 80 326 0 246 326	70 01/16/ 20 20 20 2h LT 8 1.00 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2563 19 - 745 - 745 - 745 - 0 103 - 848 - 848 - 25 - 770 - 873
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: INDEX Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips Background Conditions Project Trips Existing + Project	45 2 Pillar F PM 05/04/ Harbon RT 7 1.00 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	563 Point Ha 17 r Village TH 6 1.00 1.00 1 0 0 0 0 1 0 0 1	183 arbor Boul e RV Park ch LT 5 1.00 1.00 31 0 0 0 0 31 9 40	139 evard East A RT 13 1.00 26 0 0 0 0 0 0 26 16 42	95 & pproac TH 12 1.00 249 0 23 23 23 23 272 0 249	44 Capistra Move h LT 11 1.00 58 0 0 0 58 0 58 0	67 ano Road <u>Number c</u> ments <u>South</u> RT 4 1.00 1.00 89 0 0 0 0 0 0 0 89 0 0 0 89	803 of Years Approa TH 3 1.00 1.00 3 0 0 0 3 0 3	249 5 to Cun ch LT 2 1.00 1.00 19 0 0 19 0 19 19	205 Date of An <u>hulative He</u> <u>West A</u> RT 10 1.00 23 0 0 0 23 0 23	100 alysis: orizon: Approac TH 9 1.00 1.00 246 0 80 80 326 0 246	70 01/16/ 20 2h LT 8 1.00 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	256: 19 745 0 103 - 848 25 - 770

Harbor Village RV Park TIA Saturday Middday Conditions

Intersection Number:	1												
Traffix Node Number: ntersection Name:	1 Cabrill	o Hiahv	vay (SR 1)	&	Canistra	ino Road						
Peak Hour:		ay Mido		,	ŭ	Ouplotte			[Date of An	alysis:	01/16/	19
Count Date:	03/04/										, , .		
Scenario:	Harbo	r Village	RV Park	κ.									
								of Years	s to Cun	nulative He	orizon:	20	
							ments						-
Oranania		Approad		_	pproac		South			West A			
Scenario: INDEX	RT 7	<u>ТН</u> 6	LT 5	RT 13	TH 12	LT	RT 4	TH 3	LT 2	RT 10	TH 9	LT 8	Tota
PHF	1.00	1.00	5 1.00	1.00	1.00	11 1.00	4	1.00	2 1.00	1.00	9	1.00	
User Adjustment	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Existing Conditions	95	524	97	113	69	37	42	501	273	266	72	74	216
													-
Approved Project Trips													
11 Avenue Alhambra	0	0	34	34	0	28	28	0	0	0	0	0	124
Big Wave North Parcel	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	34	34	0	28	28	0	0	0	0	0	124
Background Conditions	95	524	131	147	69	65	70	501	273	266	72	74	228
Project Trips	6	0	0	0	0	0	0	0	5	7	0	6	24
Existing + Project	101	524	97	113	69	37	42	501	278	273	72	80	218
Background + Project	101	524	131	147	69	65	70	501	278	273	72	80	231
,													-
Cumulative Baseline Volumes	110	647	125	147	79	43	56	731	298	281	79	96	_ 2692
Cumulative + Proj Conditions Intersection Number: Traffix Node Number:	116 2 2	647	125	147	79	43	56	731	298 303	281 288	79 79	96 102	-
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour:	116 2 2 Pillar F	647 Point Ha lay Mido	125 arbor Bou	147	79	43		731	303		79	102	2710
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date:	116 2 2 Pillar F Saturd 05/06/	647 Point Ha lay Mido 17	125 arbor Bou	147 levard	79	43 Capistra	56 Ino Road	731	303	288 Date of An	79 aalysis:	102 01/16/	2710 /19
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date:	116 2 2 Pillar F Saturd 05/06/	647 Point Ha lay Mido 17	125 arbor Bou day	147 levard	79	43 Capistra	56 ino Road	731	303	288	79 aalysis:	102	2710 /19
Cumulative Baseline Volumes Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario:	116 2 2 Pillar F Saturd 05/06/ Harbon	647 Point Ha lay Midd 17 r Village	125 arbor Bou day e <u>RV Park</u>	147 levard	79 &	43 Capistra	56 no Road <u>Number c</u> ments	731	303 [s to Cun	288 Date of An	79 aalysis: prizon:	102 01/16/ 20	2710 /19
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario:	116 2 2 Pillar F Saturd 05/06/ Harbon	647 Point Ha lay Midd 17 r Village	125 arbor Bou day ≥ RV Park	147 levard	79 &	43 Capistra	56 no Road <u>Number of</u> ments South	731 of Years	303 [s to Cun ch	288 Date of An nulative He West A	79 aalysis: orizon:	102 01/16/ 20	2710
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date:	116 2 2 Pillar F Saturd 05/06/ Harbon	647 Point Ha lay Midd 17 r Village	125 arbor Bou day e <u>RV Park</u>	147 levard	79 &	43 Capistra	56 no Road <u>Number c</u> ments	731	303 [s to Cun	288 Date of An	79 aalysis: prizon:	102 01/16/ 20	2710
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario:	116 2 Pillar F Saturd 05/06/ Harbon North / RT	647 Point Ha lay Mido 17 r Village Approac	125 arbor Bou day ≥ RV Park ch LT	147 levard	79 & pproac TH	43 Capistra	56 no Road Mumber of ments South RT	731 of Years Approa TH	303 s to Cun ch LT	288 Date of An <u>nulative He</u> West A RT	79 halysis: prizon: Approac TH	102 01/16/ 20 20	
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX	116 2 Pillar F Saturd 05/06/ Harbon North / RT 7	647 Point Ha lay Mido 17 r Village Approad TH 6	125 arbor Bou day ⇒ RV Park Ch LT 5	147 levard <u>East A</u> RT 13	79 & pproac TH 12	43 Capistra Move h LT 11	56 no Road Mumber of ments South RT 4	731 of Years Approa TH 3	303 E to Cun ch LT 2	288 Date of An <u>Nulative Ho</u> West A RT 10	79 halysis: brizon: Approac TH 9	102 01/16/ 20 2h LT 8	2710
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment	116 2 2 Pillar F Saturd 05/06/ Harbor North A RT 7 1.00	647 Point Ha lay Mido 17 r Village Approac TH 6 1.00	125 arbor Bou day ⇒ RV Park Ch LT 5 1.00	147 levard <u>East A</u> RT 13 1.00	79 & pproac TH 12 1.00	43 Capistra Move h LT 11 1.00	56 Ino Road Mumber of ments South RT 4 1.00	731 of Years Approa TH 3 1.00	303 [s to Cun ch LT 2 1.00	288 Date of An <u>Mulative Ho</u> West A RT 10 1.00	79 halysis: orizon: Approac TH 9 1.00	102 01/16/ 20 :h LT 8 1.00	2710 (19 - - - -
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF	116 2 2 Pillar F Saturd 05/06/ Harbor North A RT 7 1.00 1.00	647 Point Ha lay Mide 17 r Village Approad TH 6 1.00 1.00	125 arbor Bou day ⇒ RV Park Ch LT 5 1.00 1.00	147 levard <u>East A</u> RT 13 1.00 1.00	79 & pproac TH 12 1.00 1.00	43 Capistra Move h LT 11 1.00 1.00	56 no Road <u>Mumber c</u> ments <u>South</u> RT 4 1.00 1.00	731 5f Years Approa TH 3 1.00 1.00	303 5 to Cun ch LT 2 1.00 1.00	288 Date of An <u>West A</u> RT 10 1.00 1.00	79 halysis: orizon: TH 9 1.00 1.00	102 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	2710 (19 - - - -
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra	116 2 2 Pillar F Saturd 05/06/ Harbor North A RT 7 1.00 1.00	647 Point Ha lay Mide 17 r Village Approad TH 6 1.00 1.00	125 arbor Bou Jay arbor Bou Jay Ch LT 5 1.00 1.00 31 0	147 levard <u>East A</u> RT 13 1.00 1.00	79 & pproac TH 12 1.00 1.00	43 Capistra Move h LT 11 1.00 1.00	56 no Road <u>Mumber c</u> ments <u>South</u> RT 4 1.00 1.00	731 5f Years Approa TH 3 1.00 1.00	303 5 to Cun ch LT 2 1.00 1.00	288 Date of An <u>West A</u> RT 10 1.00 1.00	79 aalysis: orizon: Approac TH 1.00 1.00 238 0	102 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	_ 2710 /19
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel	116 2 Pillar F Saturd 05/06/ Harbon RT 7 1.00 1.00 6 0 0	647 Point Ha lay Mido 17 r Village Approad TH 6 1.00 1.00 4 0 0	125 arbor Bou day ⇒ RV Park ⇒ RV Park LT 5 1.00 1.00 31 0 0 0	147 levard <u>East A</u> RT 13 1.00 1.00 56 0 0	79 & pproac TH 1.00 1.00 271 0 0	43 Capistra Move h LT 1100 1.00 102 0 0	56 no Road <u>Number of</u> ments <u>South</u> 1.00 1.00 115 0 0	731 of Years Approa TH 3 1.00 1.00 3 0 0	303 s to Cun ch LT 2 1.00 1.00 23 0 0	288 Date of An <u>Nulative He</u> RT 10 1.00 63 0 0	79 palysis: <u>prizon:</u> Approac TH 9 1.00 1.00 238 0 0	102 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	271 19 - - - - - - - - - - - - - - - - - -
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra	116 2 Pillar F Saturd 05/06/ Harbod North / RT 7 1.00 1.00 6	647 Point Ha ay Mido 17 r Village Approad TH 6 1.00 1.00 4	125 arbor Bou Jay arbor Bou Jay Ch LT 5 1.00 1.00 31 0	147 levard <u>East A</u> RT 13 1.00 <u>1.00</u> 56 0	79 & pproac TH 12 1.00 271 0	43 Capistra Move h LT 1.00 1.00 102 0	56 no Road <u>Number of</u> ments <u>South</u> RT 4 1.00 1.00 115	731 of Years Approa TH 3 1.00 1.00 3 0	303 [s to Cun ch LT 2 1.00 1.00 23 0	288 Date of An nulative He RT 10 1.00 63 0	79 aalysis: orizon: Approac TH 1.00 1.00 238 0	102 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	271 (19 <i>Tota</i> 918
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips	116 2 Pillar F Saturd 05/06/ Harbon RT 7 1.00 1.00 6 0 0	647 Point Ha lay Mido 17 r Village Approad TH 6 1.00 1.00 4 0 0	125 arbor Bou day ⇒ RV Park ⇒ RV Park LT 5 1.00 1.00 31 0 0 0	147 levard <u>East A</u> RT 13 1.00 1.00 56 0 0	79 & pproac TH 1.00 1.00 271 0 0	43 Capistra Move h LT 1100 1.00 102 0 0	56 no Road <u>Number of</u> ments <u>South</u> 1.00 1.00 115 0 0	731 of Years Approa TH 3 1.00 1.00 3 0 0	303 s to Cun ch LT 2 1.00 1.00 23 0 0	288 Date of An <u>Nulative He</u> RT 10 1.00 63 0 0	79 palysis: <u>prizon:</u> Approac TH 9 1.00 1.00 238 0 0	102 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	2711 19 - - - - - - - - - - - - - - - - -
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips Background Conditions	116 2 2 Pillar F Saturd 05/06/ Harboi North / RT 7 1.00 1.00 6 0 0 0	647 Point Ha lay Mido 17 r Village TH 6 1.00 1.00 4 0 0 0	125 arbor Bou day ⇒ RV Park Ch LT 5 1.00 1.00 31 0 0 0 0 0	147 levard East A RT 13 1.00 56 0 0 0 0 0	79 & pproac TH 1.00 1.00 271 0 0 0	43 Capistra Move h LT 1.00 1.00 102 0 0 0	56 no Road <u>Number c</u> ments South RT 4 1.00 1.00 1.00 115 0 0 0	731 of Years Approa TH 3 1.00 1.00 3 0 0 0 0	303 5 to Cun ch LT 2 1.00 1.00 23 0 0 0 0	288 Date of An <u>Nulative He</u> <u>West A</u> RT 10 1.00 63 0 0 0	79 halysis: <u>prizon:</u> Approac TH 9 1.00 1.00 238 0 0 0	102 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	271 (19 - - - - - - - - - - - - - - - - - - -
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips Background Conditions Project Trips Existing + Project	116 2 2 Pillar F Saturd 05/06/ Harbor 7 1.00 1.00 6 0 0 0 0 0 6 0 0 0 0 0 0 0 0 0 0 0	647 Point Ha lay Mide 17 r Village Approac TH 6 1.00 1.00 4 0 0 0 0 4 0 0 0 0 4	125 arbor Bou day	147 levard <u>East A</u> RT 13 1.00 1.00 56 0 0 0 0 56 11 11 67	79 & * * * * * * * * * * * * *	43 Capistra Move h LT 11 1.00 1.00 1.00 0 0 0 0 0 0 102 0 102	56 no Road <u>Number c</u> ments South RT 4 1.00 1.00 1.00 0 0 0 0 0 0 0 0 1.15	731 of Years Approa TH 3 1.00 1.00 3 0 0 0 3 0 3	303 5 to Cun ch LT 2 1.00 1.00 23 0 0 23 0 23	288 Date of An <u>Mulative Ha</u> <u>West A</u> RT 10 1.00 63 0 0 0 63 0 0 0 0 0	79 alysis: orizon: Approac TH 9 1.00 238 0 0 238 0 238	102 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	271 (19 - - - - - - - - - - - - -
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: Scenario: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips Background Conditions Project Trips	116 2 2 Pillar F Saturd 05/06/ Harbor North / RT 7 1.00 1.00 6 0 0 0 0 0 0 0 0	647 Point Ha lay Mide 17 r Village TH 6 1.00 1.00 4 0 0 0 0 4	125 arbor Bou day ⇒ RV Park Ch LT 5 1.00 1.00 31 0 0 0 0 0 31 13	147 levard East A RT 13 1.00 56 0 0 56 10 56 11	79 & * * * * * * * * * * * * *	43 Capistra Move h LT 11 1.00 1.00 1.00 0 0 0 0 0 0 0 0 0 0	56 Ino Road Mumber of ments South RT 4 1.00 1.00 1.00 1.00 0 0 0 0 0 0 0 0 0	731 of Years Approa TH 3 1.00 1.00 3 0 0 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0	303 5 to Cun ch LT 2 1.00 1.00 23 0 0 0 23 0	288 Date of An <u>Mulative Ha</u> <u>West A</u> RT 10 1.00 63 0 0 0 0 0 0 0	79 alysis: <u>Drizon:</u> Approac TH 9 1.00 238 0 0 0 238 0 0 0 0	102 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	271 (19 - - - - - - - - - - - - -
Cumulative + Proj Conditions Intersection Number: Traffix Node Number: Intersection Name: Peak Hour: Count Date: Scenario: INDEX PHF User Adjustment Existing Conditions Approved Project Trips 11 Avenue Alhambra Big Wave North Parcel Total Approved Trips Background Conditions Project Trips Existing + Project	116 2 2 Pillar F Saturd 05/06/ Harbor 7 1.00 1.00 6 0 0 0 0 0 6 0 0 0 0 0 0 0 0 0 0 0	647 Point Ha lay Mide 17 r Village Approac TH 6 1.00 1.00 4 0 0 0 0 4 0 0 0 0 4	125 arbor Bou day	147 levard <u>East A</u> RT 13 1.00 1.00 56 0 0 0 0 56 11 11 67	79 & * * * * * * * * * * * * *	43 Capistra Move h LT 11 1.00 1.00 1.00 0 0 0 0 0 0 102 0 102	56 no Road <u>Number c</u> ments South RT 4 1.00 1.00 1.00 0 0 0 0 0 0 0 0 1.15	731 of Years Approa TH 3 1.00 1.00 3 0 0 0 3 0 3	303 5 to Cun ch LT 2 1.00 1.00 23 0 0 23 0 23	288 Date of An <u>Mulative Ha</u> <u>West A</u> RT 10 1.00 63 0 0 0 63 0 0 0 0 0	79 alysis: orizon: Approac TH 9 1.00 238 0 0 238 0 238	102 01/16/ 20 20 20 20 20 20 20 20 20 20 20 20 20	2711 19 - - - - - - - - - - - - - - - - -

Appendix C List of Approved Projects

RECORD ID	APN	RECORD STATUS	RECORD STATUS DATE	ADDR FULL LINE#	COMMUNITY AREA	DESCRIPTION
PLN2011-00164	4.7E+07	Approved	8/22/2011	345 SAN PEDRO RD, EL GRANADA, CA 94018	EL GRANADA	Coastside Design Review & CDX for a new 2,597 sq/ft single family residence with an attached 684 sq/ft 3-car garage on a 6,938 sq/ft parcel.
PLN2012-00132	4.7E+07	Approved	1/15/2015	280 CAPISTRANO RD, PRINCETON, CA 94018	PRINCETON	4/2014 AMENDMENT- Use Permit Amendment and Coastal Development Permit to replace existing use of a 3,831 sq ft season tent structure with a 4,000 sq ft permanent building for the purpose of hosftng wedding events. Use Permit & 'After-the-Fact' CDP to legalize an existing 3,831 s/f tent (to be up for 6 months), a permanent 10'x10' gazebo & permanent 360 lineal ft. long, 6' high fence.
PLN2013-00451	4.7E+07	Agency Referrals	2/28/2017	AIRPORT RD, PRINCETON	PRINCETON	12/28/16 CML - Major Modification to a 2015 Project Approval of a CDP (appealable to the California Coastal Commission) and Use Permit for the Wellness Center for requested changes to 1) Project Phasing as regulated by Condition No. 73, 2) Change to the Wellness Center type of construction from Type 1 (steel and concrete) to Type 5. The proposed modification requires the amendment of an executed Development Agreement. NOTE: On 1/17/17, the applicant withdrew proposed changes to Mitigation Measure TRANS-1.Consideration of: Certification of an Addendum to the Certified 2010 Big Wave Wellness Center and Office Park Project Draft Environmental Impact Report; the proposed Use Permit, Minor and Major Subdivisions, Coastal Development Permit (appealable to the California Coastal Commission), Design Review Permit, and Grading Permit; Adoption of an Ordinance approving the execution of a Development Agreement to allow project construction over 15 years; and Approve the execution of an Affordable Housing Agreement, for the Big Wave North Parcel Alternative (NPA) Project consisting of a 5- building Office Park and a 3-building Wellness Center (consisting of affordable housing for 50 developmentally disabled (DD) adults and 20 staff) on the north parcel and a boat storage lot and 92 coastal access public parking spaces on the south parcel, on two undeveloped parcels along Airport Street in the unincorporated Princeton-by-the-Sea area of San Mateo County.Consideration of: Certification of an Addendum to the Certified 2010 Big Wave Wellness Center and Office Park Project Draft Environmental Impact Report; the proposed Use Permit, Minor and Major Subdivisions, Coastal Development Permit (appealable to the California Coastal Commission), Design Review Permit, and Grading Permit; Adoption of an Ordinance approving the execution of a Development Agreement to allow project construction over 15 years; and Approve the execution of an Affordable Housing Agreement, for the Big Wave North Parcel Alternative (NPA) Project consisting of
PLN2014-00007	3.7E+07	Approved	12/27/2016	123 BERNAL AVE, MOSS BEACH, CA	MOSS BEACH	Coastside Design Review Permit & CDP (appealable to the Coastal Commission) to construct a new 2,900 sq/ft single family residence with a 400 sq/ft garage. No tree removals or grading.
PLN2014-00126	4.7E+07	Approved	9/25/2014	101 AVENUE PORTOLA, EL GRANADA, CA 94019	EL GRANADA	Coastside Design Review, CDP, Grading Permit & Negative Declaration for a new 12-unit apartment building. Pre- application workshop was held (PRE2104-00002).
PLN2014-00273	4.7E+07	Approved	1/21/2016	923 COLUMBUS ST, EL GRANADA	EL GRANADA	CDP & Subdivision to split a 16,292 sq/ft parcel into 2 lots (8,146 sq/ft each). Requires an Initial Study/Neg. Dec. because the slope of the parcel is over 20% (does not qualify for Cat. Exempt. Sec 15315)
PLN2014-00310	3.7E+07	Agency Referrals	10/15/2014	520 MARINE BLVD, MOSS BEACH, CA 94038	MOSS BEACH	Coastside Design Review & CDX for a new 2,443 sq/ft 2-story single family residence with an attached 503 sq/ft garage on a 7,666 sq/ft parcel; includes removal of 1 tree.
PLN2014-00350	4.7E+07	Agency Referrals	10/15/2014	224 DEL MONTE RD, EL GRANADA 94019	EL GRANADA	Coastside Design Review, CDP & Grading Permit for a new 2,658 s/f single family residence with 506 s/f attached garage. Grading includes 1,300 cubic yards of cut (no fill) & removal of one 48" Monterey pine tree.
PLN2014-00435	4.7E+07	Agency Referrals	11/20/2014	435 AVENUE DEL ORO, EL GRANADA, CA 94018	EL GRANADA	Coastside Design Review, CDX & Certificate of Compliance (to confirm parcel legality) for new 2,320 s/f single-family residence with attached 410 s/f garage & 154 s/f rear yard deck; includes 5 trees proposed for removal (12" pine, 36" pine, 24" pine, 28" pine, 52" pine) & Grading of 215 cu/yds of cut.
PLN2014-00453	4.8E+07	CEQA Preparation	5/27/2016	412 LEE AVE, MIRAMAR, CA 94019	MIRAMAR	Coastside Design Review & Staff-level CDP for a new 1,819 s/f 2-story single family residence, plus an attached 396 s/f garage on a legal 4,800 s/f parcel (COC recorded PLN2014-00138); no trees proposed for removal. Associated with BLD2015-00603.
PLN2014-00490	3.7E+07	Agency Referrals	2/18/2015	1900 EAST AVE, MONTARA, CA	MONTARA	Coastside Design Review & CDX for new 3,152 sq/ft residence (includes 625 s/f garage & 60 s/f covered porch) & COC/Type A to confirm parcel legality of APN 037-015-090 (lots 39 & 40 separately conveyed on 9/20/1915) on a 6,000 s/f parcel; includes removal of 6 trees. (7/5/16 TBD: Waiting for CCC to determine whether a CDP is required; waiting for civil engineer to estimate grading for house to see if Grading Permit is required).
PLN2015-00007	3.6E+07	Approved	5/19/2015	1160 CEDAR ST, MONTARA, CA	MONTARA	Admin Review & CDX for new 2nd Unit - involving the conversion of 654 sq/ft of an existing lower level residence into a 2nd unit; associated with BLD2015-00763.

PLN2015-00152	4.8E+07	Approved	4/27/2017	3260 N CABRILLO HWY, MIRAMAR, CA	MIRAMAR	Certification of a Re-circulated Initial Study/Mitigated Negative Declaration (IS/MND) and consideration of a Coastal Development Permit and Design Review to allow construction of a new 1,724 sq. ft., two-story, single-family residence, plus a 400 sq. ft. attached two-car garage, and a 551 sq. ft. Second Unit, on an existing 5,080 sq. ft. legal parcel. The Second Unit requires a staff-level ministerial permit. Arroyo de en Medio Creek is located on a southeast portion of the parcel. The project is appealable to the California Coastal Commission.
PLN2015-00376	4.7E+07	Approved	6/9/2016	Coronado Ave. @ Ave. Portola, El Granada, CA	EL GRANADA	Design Review & staff-level CDP for a triplex, consisting of three 1-BR units each with a 1-car garage on APN 047-233- 360. No tree removal & only minor grading. Project is not appealable to the CA Coastal Commission. (Associated with similar & concurrent triplex proposal, PLN2015-00377 on adjacent parcel).
PLN2015-00404	4.7E+07	Approved	6/9/2016	401 PALOMA AVE, EL GRANADA, CA	EL GRANADA	Coastside Design Review, Certificate of Compliance (Type A), & CDX for construction of a new 2,280 s.f. single family residence, with a 510 s.f. attached garage on a corner parcel (7,818 s.f.) in El Granada. No trees to be removed & 233 c.y. of grading.
PLN2015-00412	4.7E+07	Approved	3/28/2017	265 EL GRANADA BLVD, EL GRANADA, CA	EL GRANADA	MAJOR REVISION of a previous approval - rotafton of home, expansion of roof deck & a new 507 sf 2nd dwelling unit. Coastside Design Review & CDX for a new 2-story 2308 s/f single-family residence with attached 436 s/f garage. No grading; 8 eucalyptus trees proposed for removal.
PLN2016-00011	4.7E+07	Approved	12/13/2016	755 SAN CARLOS AVE, EL GRANADA, CA	EL GRANADA	Certification of an Initial Study/Mitigated Negative Declaration and approval of a Coastal Development Permit, a Design Review, and a Certificate of Compliance (Type B) to legalize a 6,350 sq. ft. undeveloped parcel and to allow construction of a 2,200 sq. ft. single-family residence located on San Carlos Avenue in the El Granada area of San Mateo County. The project is appealable to the California Coastal Commission.
PLN2016-00016	4.7E+07	Approved	6/29/2016	640 FERDINAND AVE, EL GRANADA, CA	EL GRANADA	Coastside Design Review, CDX and Grading Permit involving 400 cu yds. of cut and 0 cu. yds. of fill for a new single-family dwelling on an existing legal lot (COC recorded; PLN2013-00159)
PLN2016-00024	4.7E+07	Approved	3/10/2016	847 FRANCISCO ST, UNIT 2ND, EL GRANADA, CA 94019	EL GRANADA	2nd Unit Admin Review & CDX for conversion of 2 BRs on lower floor of existing 4-BR house (no expansion of footprint) to a 403 s/f 2nd unit, with a compliant single car parking space to side of house; associated with BLD2016-00004
PLN2016-00054	4.7E+07	Approved	7/8/2016	917 PALMA ST, EL GRANADA, CA	EL GRANADA	Coastside Design Review & CDX for a new 2337 s/f 2-story with attached 527 s/f garage on a 6000 s/f legal parcel. Grading includes 90 cu/yds of cut; no tree removal; parcel legality previously confirmed by Merger (MIS94-0015).
PLN2016-00136	4.7E+07	Agency Referrals	4/14/2016	11 AVENUE ALHAMBRA, EL GRANADA, CA 94019	EL GRANADA	CDP, Design Review, & Use Permit Amendment (original UP USE84-52) to allow for the addition of 14 guest rooms, one manager's apartment, a conference room, a storage room, & a new reception area to an existing 18-room motel. Will require an Initial Study/Neg Dec. This project is appealable to the California Coastal Commission.
PLN2016-00160	3.6E+07	Project Decision	9/1/2016	1060 DATE ST, MONTARA, CA	MONTARA	Coastside Design Review & CDX for a new 1,682 sq/ft single family residence with an attached 440 sq/ft garage on a 4,998 sq/ft parcel. LLA in 1993 established the parcel as legal (LLA93-0011)
PLN2016-00283	4.7E+07	Approved	3/28/2017	910 MALAGA ST, EL GRANADA, CA	EL GRANADA	Coastside DR & CDX for a 480 SF addition of 1st floor living room & 2nd floor enclosed "sun room" to existing 1511 SF single family residence.
PLN2016-00317	3.7E+07	Agency Referrals	9/15/2016	146 LA GRANDE AVE, MOSS BEACH, CA	MOSS BEACH	Coastside Design Review & CDP (hearing level) for a new 2-story single family house (includes demolition of exsiting house) located at 147 La Grande Ave., Moss Beach (037-258-260; zoning: R-1/S-17/DR/GH); parcel legality not applicable since this replaces existing house. Project is appealable to the California Coastal Commission.
PLN2016-00337	4.8E+07	Staff Decision - Hearings	2/10/2017	Terrace Ave @ Miramar Dr., Miramar	MIRAMAR	Coastside Design Review to allow construction of a new 2-story 3,546 sq. ft. single-family residence with an attached 487 sq. ft. 2-car garage, including a 1,152 sq. ft. 2nd Unit with a detached 400 sq. ft. carport, on an existing 22,337 sq. ft. legal parcel (COC PLN2015-00444) and "After-the-Fact" staff level Coastal Development Permit (CDP) for removal of 17 significant trees, in order to resolve VIO2016-00141. Only minor grading is proposed. Seventeen (17) existing significant trees are proposed for removal. The project is not appealable to the California Coastal Commission.
PLN2016-00346	4.7E+07	Agency Referrals	8/24/2016	0 OBISPO RD, EL GRANADA, CA 94019	EL GRANADA	CDP, Design Review, Use Permit, Variance & Grading Permit to construct a new 12,340 SF fire station on a vacant legal parcel (PLN2015-00019), along with a Subdivision to split the 2.5-acre parcel along the C-1 & EG zoning boundary line. Project includes for 10,310 cy of grading (10,150 cy of cut & 160 cy of fill) & removal of 7 trees. Coastside Fire Protection District is acting as lead agency for the EIR. This project relocates existing fire station at 531 Obispo Rd.
PLN2016-00429	3.7E+07	Project Analysis	2/10/2017	Marine BLVD, Moss Beach, CA	MOSS BEACH	Coastside Design Review & CDP for new 1824 sq/ft SFD on a 3,800 sq/ft parcel. Project does not require a non- conforming use permit because the parcel exceeds the 3,500 sq/ft threshold as stipulated by Sect. 6133(3)(b)(1)(a). Parcel is legal pursuant to recorded COC (PLN2014-00140).
PLN2016-00525	4.7E+07	Agency Referrals	4/21/2017	155 BROADWAY, EL GRANADA, CA	PRINCETON	CDP & Use Permit for the HMB Distillery. The Distillery already has a UP to operate at a different location, but they are proposing to move to another location in Princeton. This is a change of use for this new location & an intensification of use, thus requiring a new UP & CDP. Project qualifies for a Use Permit in the CCR zoning district because they do limited indoor sales during tasting tours.
PLN2017-00154	3.6E+07	Submitted	4/20/2017	George St @ Birch St., Montara	MONTARA	Coastside Design Review & CDX for a new 3,300 sq/ft SFD with attached garage on a legal 6,249 sq/ft parcel (COC recorded; PLN2017-00020).

RECORD ID	APN	RECORD STATUS	RECORD STATUS DATE	ADDR FULL LINE#	COMMUNITY AREA	DESCRIPTION
PLN2011-00164	4.7E+07	Approved	8/22/2011	345 SAN PEDRO RD, EL GRANADA, CA 94018	EL GRANADA	Coastside Design Review & CDX for a new 2,597 sq/ft single family residence with an attached 684 sq/ft 3-car garage on a 6,938 sq/ft parcel.
PLN2012-00132	4.7E+07	Approved	1/15/2015	280 CAPISTRANO RD, PRINCETON, CA 94018	PRINCETON	4/2014 AMENDMENT- Use Permit Amendment and Coastal Development Permit to replace existing use of a 3,831 sq ft season tent structure with a 4,000 sq ft permanent building for the purpose of hosftng wedding events. Use Permit & 'After-the-Fact' CDP to legalize an existing 3,831 s/f tent (to be up for 6 months), a permanent 10'x10' gazebo & permanent 360 lineal ft. long, 6' high fence.
PLN2013-00451	4.7E+07	Agency Referrals	2/28/2017	AIRPORT RD, PRINCETON	PRINCETON	12/28/16 CML - Major Modification to a 2015 Project Approval of a CDP (appealable to the California Coastal Commission) and Use Permit for the Wellness Center for requested changes to 1) Project Phasing as regulated by Condition No. 73, 2) Change to the Wellness Center type of construction from Type 1 (steel and concrete) to Type 5. The proposed modification requires the amendment of an executed Development Agreement. NOTE: On 1/17/17, the applicant withdrew proposed changes to Mitigation Measure TRANS-1.Consideration of: Certification of an Addendum to the Certified 2010 Big Wave Wellness Center and Office Park Project Draft Environmental Impact Report; the proposed Use Permit, Minor and Major Subdivisions, Coastal Development Permit (appealable to the California Coastal Commission), Design Review Permit, and Grading Permit; Adoption of an Ordinance approving the execution of a Development Agreement to allow project construction over 15 years; and Approve the execution of an Affordable Housing Agreement, for the Big Wave North Parcel Alternative (NPA) Project consisting of a 5-building Office Park and a 3-building Wellness Center (consisting of affordable housing for 50 developmentally disabled (DD) adults and 20 staff) on the north parcel and a boat storage lot and 92 coastal access public parking spaces on the south parcel, on two undeveloped parcels along Airport Street in the unincorporated Princeton-by-the-Sea area of San Mateo County.Consideration of: a Affordable Housing Agreement, for the Big Wave North Parcel Alternative (NPA) Project construction over 15 years; and Approve the execution of an Affordable Housing Agreement to allow project construction and Major Subdivisions, Coastal Development Permit (appealable to the California Coastal Commission), Design Review Permit, and Grading Permit; Adoption of an Ordinance approving the execution of a Development Agreement to allow project construction over 15 years; and Approve the execution of an Affordable Housing Agreement, for the Big Wave Worth Parcel
PLN2014-00007	3.7E+07	Approved	12/27/2016	123 BERNAL AVE, MOSS BEACH, CA	MOSS BEACH	Coastside Design Review Permit & CDP (appealable to the Coastal Commission) to construct a new 2,900 sq/ft single family residence with a 400 sq/ft garage. No tree removals or grading.
PLN2014-00126	4.7E+07	Approved	9/25/2014	101 AVENUE PORTOLA, EL GRANADA, CA 94019	EL GRANADA	Coastside Design Review, CDP, Grading Permit & Negative Declaration for a new 12-unit apartment building. Pre- application workshop was held (PRE2104-00002).
PLN2014-00273	4.7E+07	Approved	1/21/2016	923 COLUMBUS ST, EL GRANADA	EL GRANADA	CDP & Subdivision to split a 16,292 sq/ft parcel into 2 lots (8,146 sq/ft each). Requires an Initial Study/Neg. Dec. because the slope of the parcel is over 20% (does not qualify for Cat. Exempt. Sec 15315)
PLN2014-00310	3.7E+07	Agency Referrals	10/15/2014	520 MARINE BLVD, MOSS BEACH, CA 94038	MOSS BEACH	Coastside Design Review & CDX for a new 2,443 sq/ft 2-story single family residence with an attached 503 sq/ft garage on a 7,666 sq/ft parcel; includes removal of 1 tree.
PLN2014-00350	4.7E+07	Agency Referrals	10/15/2014	224 DEL MONTE RD, EL GRANADA 94019	EL GRANADA	Coastside Design Review, CDP & Grading Permit for a new 2,658 s/f single family residence with 506 s/f attached garage. Grading includes 1,300 cubic yards of cut (no fill) & removal of one 48" Monterey pine tree.
PLN2014-00435	4.7E+07	Agency Referrals	11/20/2014	435 AVENUE DEL ORO, EL GRANADA, CA 94018	EL GRANADA	Coastside Design Review, CDX & Certificate of Compliance (to confirm parcel legality) for new 2,320 s/f single-family residence with attached 410 s/f garage & 154 s/f rear yard deck; includes 5 trees proposed for removal (12" pine, 36" pine, 24" pine, 28" pine, 52" pine) & Grading of 215 cu/yds of cut.
PLN2014-00453	4.8E+07	CEQA Preparation	5/27/2016	412 LEE AVE, MIRAMAR, CA 94019	MIRAMAR	Coastside Design Review & Staff-level CDP for a new 1,819 s/f 2-story single family residence, plus an attached 396 s/f garage on a legal 4,800 s/f parcel (COC recorded PLN2014-00138); no trees proposed for removal. Associated with BLD2015-00603.
PLN2014-00490	3.7E+07	Agency Referrals	2/18/2015	1900 EAST AVE, MONTARA, CA	MONTARA	Coastside Design Review & CDX for new 3,152 sq/ft residence (includes 625 s/f garage & 60 s/f covered porch) & COC/Type A to confirm parcel legality of APN 037-015-090 (lots 39 & 40 separately conveyed on 9/20/1915) on a 6,000 s/f parcel; includes removal of 6 trees. (7/5/16 TBD: Waiting for CCC to determine whether a CDP is required; waiting for civil engineer to estimate grading for house to see if Grading Permit is required).
PLN2015-00007	3.6E+07	Approved	5/19/2015	1160 CEDAR ST, MONTARA, CA	MONTARA	Admin Review & CDX for new 2nd Unit - involving the conversion of 654 sq/ft of an existing lower level residence into a 2nd unit; associated with BLD2015-00763.

						Certification of a Re-circulated Initial Study/Mitigated Negative Declaration (IS/MND) and consideration of a Coastal
PLN2015-00152	4.8E+07	Approved	4/27/2017	3260 N CABRILLO HWY, MIRAMAR, CA	MIRAMAR	Development Permit and Design Review to allow construction of a new 1,724 sq. ft., two-story, single-family residence, plus a 400 sq. ft. attached two-car garage, and a 551 sq. ft. Second Unit, on an existing 5,080 sq. ft. legal parcel. The Second Unit requires a staff-level ministerial permit. Arroyo de en Medio Creek is located on a southeast portion of the parcel. The project is appealable to the California Coastal Commission.
PLN2015-00376	4.7E+07	Approved	6/9/2016	Coronado Ave. @ Ave. Portola, El Granada, CA	EL GRANADA	Design Review & staff-level CDP for a triplex, consisting of three 1-BR units each with a 1-car garage on APN 047-233- 360. No tree removal & only minor grading. Project is not appealable to the CA Coastal Commission. (Associated with similar & concurrent triplex proposal, PLN2015-00377 on adjacent parcel).
PLN2015-00404	4.7E+07	Approved	6/9/2016	401 PALOMA AVE, EL GRANADA, CA	EL GRANADA	Coastside Design Review, Certificate of Compliance (Type A), & CDX for construction of a new 2,280 s.f. single family residence, with a 510 s.f. attached garage on a corner parcel (7,818 s.f.) in El Granada. No trees to be removed & 233 c.y. of grading.
						MAJOR REVISION of a previous approval - rotafton of home, expansion of roof deck & a new 507 sf 2nd dwelling unit.
PLN2015-00412	4.7E+07	Approved	3/28/2017	265 EL GRANADA BLVD, EL GRANADA, CA	EL GRANADA	Coastside Design Review & CDX for a new 2-story 2308 s/f single-family residence with attached 436 s/f garage. No grading; 8 eucalyptus trees proposed for removal.
PLN2016-00011	4.7E+07	Approved	12/13/2016	755 SAN CARLOS AVE, EL GRANADA, CA	EL GRANADA	Certification of an Initial Study/Mitigated Negative Declaration and approval of a Coastal Development Permit, a Design Review, and a Certificate of Compliance (Type B) to legalize a 6,350 sq. ft. undeveloped parcel and to allow construction of a 2,200 sq. ft. single-family residence located on San Carlos Avenue in the El Granada area of San Mateo County. The project is appealable to the California Coastal Commission.
PLN2016-00016	4.7E+07	Approved	6/29/2016	640 FERDINAND AVE, EL GRANADA, CA	EL GRANADA	Coastside Design Review, CDX and Grading Permit involving 400 cu yds. of cut and 0 cu. yds. of fill for a new single-family dwelling on an existing legal lot (COC recorded; PLN2013-00159)
PLN2016-00024	4.7E+07	Approved	3/10/2016	847 FRANCISCO ST, UNIT 2ND, EL GRANADA, CA 94019	EL GRANADA	2nd Unit Admin Review & CDX for conversion of 2 BRs on lower floor of existing 4-BR house (no expansion of footprint) to a 403 s/f 2nd unit, with a compliant single car parking space to side of house; associated with BLD2016-00004
PLN2016-00054	4.7E+07	Approved	7/8/2016	917 PALMA ST, EL GRANADA, CA	EL GRANADA	Coastside Design Review & CDX for a new 2337 s/f 2-story with attached 527 s/f garage on a 6000 s/f legal parcel. Grading includes 90 cu/yds of cut; no tree removal; parcel legality previously confirmed by Merger (MIS94-0015).
PLN2016-00136	4.7E+07	Agency Referrals	4/14/2016	11 AVENUE ALHAMBRA, EL GRANADA, CA 94019	EL GRANADA	CDP, Design Review, & Use Permit Amendment (original UP USE84-52) to allow for the addition of 14 guest rooms, one manager's apartment, a conference room, a storage room, & a new reception area to an existing 18-room motel. Will require an Initial Study/Neg Dec. This project is appealable to the California Coastal Commission.
PLN2016-00160	3.6E+07	Project Decision	9/1/2016	1060 DATE ST, MONTARA, CA	MONTARA	Coastside Design Review & CDX for a new 1,682 sq/ft single family residence with an attached 440 sq/ft garage on a 4,998 sq/ft parcel. LLA in 1993 established the parcel as legal (LLA93-0011)
PLN2016-00283	4.7E+07	Approved	3/28/2017	910 MALAGA ST, EL GRANADA, CA	EL GRANADA	Coastside DR & CDX for a 480 SF addition of 1st floor living room & 2nd floor enclosed "sun room" to existing 1511 SF single family residence.
PLN2016-00317	3.7E+07	Agency Referrals	9/15/2016	146 LA GRANDE AVE, MOSS BEACH, CA	MOSS BEACH	Coasticle Design Review & CDP (hearing level) for a new 2-story single family house (includes demolition of exsiting house) located at 147 La Grande Ave., Moss Beach (037-258-260; zoning: R-1/S-17/DR/GH); parcel legality not applicable since this replaces existing house. Project is appealable to the California Coastal Commission.
PLN2016-00337	4.8E+07	staff Decision - Hearing	2/10/2017	Terrace Ave @ Miramar Dr., Miramar	MIRAMAR	Coastside Design Review to allow construction of a new 2-story 3,546 sq. ft. single-family residence with an attached 487 sq. ft. 2-car garage, including a 1,152 sq. ft. 2nd Unit with a detached 400 sq. ft. carport, on an existing 22,337 sq. ft. legal parcel (COC PLN2015-00444) and "After-the-Fact" staff level Coastal Development Permit (CDP) for removal of 17 significant trees, in order to resolve VIO2016-00141. Only minor grading is proposed. Seventeen (17) existing significant trees are proposed for removal. The project is not appealable to the California Coastal Commission.
PLN2016-00346	4.7E+07	Agency Referrals	8/24/2016	0 OBISPO RD, EL GRANADA, CA 94019	EL GRANADA	CDP, Design Review, Use Permit, Variance & Grading Permit to construct a new 12,340 SF fire station on a vacant legal parcel (PLN2015-00019), along with a Subdivision to split the 2.5-acre parcel along the C-1 & EG zoning boundary line. Project includes for 10,310 cy of grading (10,150 cy of cut & 160 cy of fill) & removal of 7 trees. Coastide Fire Protection District is acting as lead agency for the EIR. This project relocates existing fire station at 531 Obispo Rd.
PLN2016-00429	3.7E+07	Project Analysis	2/10/2017	Marine BLVD, Moss Beach, CA	MOSS BEACH	Coastside Design Review & CDP for new 1824 sq/ft SFD on a 3,800 sq/ft parcel. Project does not require a non- conforming use permit because the parcel exceeds the 3,500 sq/ft threshold as stipulated by Sect. 6133(3)(b)(1)(a). Parcel is legal pursuant to recorded COC (PLN2014-00140).
PLN2016-00525	4.7E+07	Agency Referrals	4/21/2017	155 BROADWAY, EL GRANADA, CA	PRINCETON	CDP & Use Permit for the HMB Distillery. The Distillery already has a UP to operate at a different location, but they are proposing to move to another location in Princeton. This is a change of use for this new location & an intensification of use, thus requiring a new UP & CDP. Project qualifies for a Use Permit in the CCR zoning district because they do limited indoor sales during tasting tours.
PLN2017-00154	3.6E+07	Submitted	4/20/2017	George St @ Birch St., Montara	MONTARA	Coastside Design Review & CDX for a new 3,300 sq/ft SFD with attached garage on a legal 6,249 sq/ft parcel (COC recorded; PLN2017-00020).

Appendix D Level of Service Calcluations

	۶	-	\mathbf{r}	•	-	•	1	1	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<u>स</u>	1		÷		ሻሻ	∱ ⊅		<u>۲</u>	- ††	1
Traffic Volume (veh/h)	14	95	124	73	87	167	118	359	40	90	479	11
Future Volume (veh/h)	14	95	124	73	87	167	118	359	40	90	479	11
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	14	95	66	73	87	140	118	359	38	90	479	-19
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	430	396	140	139	185	231	1545	163	119	1691	756
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.07	0.48	0.48	0.07	0.48	0.00
Sat Flow, veh/h	100	1718	1583	286	557	738	3442	3232	340	1774	3539	1583
Grp Volume(v), veh/h	109	0	66	300	0	0	118	196	201	90	479	-19
Grp Sat Flow(s),veh/h/ln	1819	0	1583	1582	0	0	1721	1770	1803	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.1	7.5	0.0	0.0	2.2	4.3	4.3	3.3	5.4	0.0
Cycle Q Clear(g_c), s	3.1	0.0	2.1	11.4	0.0	0.0	2.2	4.3	4.3	3.3	5.4	0.0
Prop In Lane	0.13	0.0	1.00	0.24	0.0	0.47	1.00		0.19	1.00	•	1.00
Lane Grp Cap(c), veh/h	517	0	396	464	0	0	231	846	862	119	1691	756
V/C Ratio(X)	0.21	0.00	0.17	0.65	0.00	0.00	0.51	0.23	0.23	0.76	0.28	-0.03
Avail Cap(c_a), veh/h	1459	0	1261	1304	0	0	1070	846	862	605	1691	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.7	0.0	19.3	22.7	0.0	0.0	29.7	10.1	10.1	30.2	10.4	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	1.5	0.0	0.0	1.7	0.6	0.6	9.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.0	5.2	0.0	0.0	1.1	2.2	2.3	1.9	2.7	0.0
LnGrp Delay(d),s/veh	19.9	0.0	19.5	24.2	0.0	0.0	31.5	10.7	10.8	39.7	10.8	0.0
LnGrp LOS	B	0.0	B	C	0.0	0.0	C	B	B	D	B	0.0
Approach Vol, veh/h		175			300			515			550	
Approach Delay, s/veh		19.7			24.2			15.5			15.9	
Approach LOS		В			24.2 C			B			13.3 B	
					U						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		21.0	8.9	36.0		21.0	8.9	36.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		52.5	20.5	31.5		52.5	22.5	29.5				
Max Q Clear Time (g_c+I1), s		5.1	4.2	7.4		13.4	5.3	6.3				
Green Ext Time (p_c), s		3.1	0.3	6.0		3.1	0.2	5.9				
Intersection Summary			4= 0									
HCM 2010 Ctrl Delay			17.8									
HCM 2010 LOS			В									

Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$		5	•	1	ľ	et e		ľ	4	
Traffic Vol, veh/h	3	203	10	47	151	26	7	0	37	12	1	1
Future Vol, veh/h	3	203	10	47	151	26	7	0	37	12	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	203	10	47	151	26	7	0	37	12	1	1

Major/Minor	Major1		1	Major2			Minor1			Minor2			
Conflicting Flow All	151	0	0	213	0	0	460	459	208	478	464	151	
Stage 1	-	-	-	-	-	-	214	214	-	245	245	-	
Stage 2	-	-	-	-	-	-	246	245	-	233	219	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1430	-	-	1357	-	-	512	499	832	498	495	895	
Stage 1	-	-	-	-	-	-	788	725	-	759	703	-	
Stage 2	-	-	-	-	-	-	758	703	-	770	722	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1430	-	-	1357	-	-	496	481	832	463	477	895	
Mov Cap-2 Maneuver	-	-	-	-	-	-	496	481	-	463	477	-	
Stage 1	-	-	-	-	-	-	786	724	-	757	679	-	
Stage 2	-	-	-	-	-	-	730	679	-	734	721	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.1	1.6	10	12.7	
HCM LOS			В	В	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	496	832	1430	-	-	1357	-	-	463	622
HCM Lane V/C Ratio	0.014	0.044	0.002	-	-	0.035	-	-	0.026	0.003
HCM Control Delay (s)	12.4	9.5	7.5	0	-	7.7	-	-	13	10.8
HCM Lane LOS	В	А	А	А	-	А	-	-	В	В
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0.1	-	-	0.1	0

	۶	-	\mathbf{r}	4	+	•	1	1	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		- सी	1		4		ካካ	∱ î≽		<u>۲</u>	- ††	1
Traffic Volume (veh/h)	51	91	189	38	83	107	222	550	50	142	456	31
Future Volume (veh/h)	51	91	189	38	83	107	222	550	50	142	456	31
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	51	91	38	38	83	65	222	550	46	142	456	5
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	233	284	112	149	100	360	1585	132	187	1700	761
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.10	0.48	0.48	0.11	0.48	0.48
Sat Flow, veh/h	442	1298	1583	203	832	556	3442	3308	276	1774	3539	1583
Grp Volume(v), veh/h	142	0	38	186	0	0	222	294	302	142	456	5
Grp Sat Flow(s),veh/h/ln	1740	0	1583	1591	0	0	1721	1770	1814	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	1.2	2.4	0.0	0.0	3.5	5.9	6.0	4.5	4.4	0.1
Cycle Q Clear(g_c), s	3.9	0.0	1.2	6.3	0.0	0.0	3.5	5.9	6.0	4.5	4.4	0.1
Prop In Lane	0.36		1.00	0.20		0.35	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	397	0	284	361	0	0	360	848	869	187	1700	761
V/C Ratio(X)	0.36	0.00	0.13	0.52	0.00	0.00	0.62	0.35	0.35	0.76	0.27	0.01
Avail Cap(c_a), veh/h	899	0	788	873	0	0	1233	848	869	666	1700	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	0.0	19.8	21.7	0.0	0.0	24.5	9.3	9.3	24.9	8.9	7.7
Incr Delay (d2), s/veh	0.5	0.0	0.2	1.1	0.0	0.0	1.7	1.1	1.1	6.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.5	2.9	0.0	0.0	1.8	3.1	3.2	2.5	2.2	0.0
LnGrp Delay(d),s/veh	21.4	0.0	20.0	22.9	0.0	0.0	26.3	10.4	10.4	31.0	9.3	7.8
LnGrp LOS	С		В	С			С	В	В	С	А	А
Approach Vol, veh/h		180			186			818			603	
Approach Delay, s/veh		21.1			22.9			14.7			14.4	
Approach LOS		С			С			В			В	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.8	10.5	32.0		14.8	10.5	31.9				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	20.5	27.5		28.5	21.5	26.5				
Max Q Clear Time (g_c+l1), s		5.9	5.5	6.4		8.3	6.5	8.0				
Green Ext Time (p_c), s		2.1	0.6	7.0		2.0	0.3	6.6				
<i>u</i> = <i>y</i> .		<u> </u>	0.0	1.0		2.0	0.0	0.0				
Intersection Summary HCM 2010 Ctrl Delay			16.1									
HCM 2010 LOS			B									
			D									

Int Delay, s/veh	3												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		\$		ľ	•	1	ľ	et e		ľ	4		
Traffic Vol, veh/h	0	246	23	58	249	26	19	3	89	31	1	0	
Future Vol, veh/h	0	246	23	58	249	26	19	3	89	31	1	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-	
Veh in Median Storage, #	# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	0	246	23	58	249	26	19	3	89	31	1	0	

Major/Minor	Major1		ľ	Major2			Minor1			Minor2			
Conflicting Flow All	249	0	0	269	0	0	624	623	258	669	634	249	
Stage 1	-	-	-	-	-	-	258	258	-	365	365	-	
Stage 2	-	-	-	-	-	-	366	365	-	304	269	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1317	-	-	1295	-	-	398	402	781	371	397	790	
Stage 1	-	-	-	-	-	-	747	694	-	654	623	-	
Stage 2	-	-	-	-	-	-	653	623	-	705	687	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1317	-	-	1295	-	-	384	384	781	316	379	790	
Mov Cap-2 Maneuver	-	-	-	-	-	-	384	384	-	316	379	-	
Stage 1	-	-	-	-	-	-	747	694	-	654	595	-	
Stage 2	-	-	-	-	-	-	623	595	-	622	687	-	
-													

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0	1.4	11.2	17.5	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	384	756	1317	-	-	1295	-	-	316	379
HCM Lane V/C Ratio	0.049	0.122	-	-	-	0.045	-	-	0.098	0.003
HCM Control Delay (s)	14.9	10.4	0	-	-	7.9	-	-	17.6	14.5
HCM Lane LOS	В	В	А	-	-	А	-	-	С	В
HCM 95th %tile Q(veh)	0.2	0.4	0	-	-	0.1	-	-	0.3	0

	≯	-	\mathbf{r}	4	+	×.	1	Ť	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्भ	1		4		ካካ	↑ Ъ		<u>۲</u>	- ††	1
Traffic Volume (veh/h)	74	72	266	37	69	113	273	501	42	97	524	95
Future Volume (veh/h)	74	72	266	37	69	113	273	501	42	97	524	95
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	74	72	50	37	69	64	273	501	28	97	524	75
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	164	279	102	127	97	409	1843	103	127	1746	781
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.12	0.54	0.54	0.07	0.49	0.49
Sat Flow, veh/h	642	931	1583	190	723	551	3442	3409	190	1774	3539	1583
Grp Volume(v), veh/h	146	0	50	170	0	0	273	260	269	97	524	75
Grp Sat Flow(s),veh/h/ln	1573	0	1583	1464	0	0	1721	1770	1829	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	1.7	2.2	0.0	0.0	4.8	5.0	5.1	3.4	5.6	1.6
Cycle Q Clear(g_c), s	5.1	0.0	1.7	7.3	0.0	0.0	4.8	5.0	5.1	3.4	5.6	1.6
Prop In Lane	0.51		1.00	0.22		0.38	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	362	0	279	327	0	0	409	957	989	127	1746	781
V/C Ratio(X)	0.40	0.00	0.18	0.52	0.00	0.00	0.67	0.27	0.27	0.77	0.30	0.10
Avail Cap(c_a), veh/h	766	0	707	758	0	0	1160	957	989	375	1746	781
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	22.4	24.4	0.0	0.0	26.9	7.9	7.9	29.1	9.6	8.6
Incr Delay (d2), s/veh	0.7	0.0	0.3	1.3	0.0	0.0	1.9	0.7	0.7	9.3	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.8	2.9	0.0	0.0	2.4	2.6	2.7	2.0	2.8	0.7
LnGrp Delay(d),s/veh	24.4	0.0	22.7	25.7	0.0	0.0	28.8	8.6	8.6	38.4	10.1	8.8
LnGrp LOS	С		С	С			С	A	A	D	В	A
Approach Vol, veh/h		196			170			802			696	
Approach Delay, s/veh		23.9			25.7			15.5			13.9	
Approach LOS		C			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.7	12.1	36.0		15.7	9.1	39.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	21.5	26.5		28.5	13.5	34.5				
Max Q Clear Time (g_c+I1), s		7.1	6.8	7.6		9.3	5.4	7.1				
Green Ext Time (p_c), s		2.0	0.8	7.0		9.5 2.0	0.1	8.0				
(1 -):		2.0	0.0	1.0		2.0	0.1	0.0				
Intersection Summary			40 7									
HCM 2010 Ctrl Delay			16.7									
HCM 2010 LOS			В									

Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$		ľ	•	1	ľ	et et		ľ	4	
Traffic Vol, veh/h	6	238	63	102	271	56	23	3	115	31	4	6
Future Vol, veh/h	6	238	63	102	271	56	23	3	115	31	4	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	£ _	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	238	63	102	271	56	23	3	115	31	4	6

Major/Minor	Major1		ľ	Major2			Minor1			Minor2			
Conflicting Flow All	271	0	0	301	0	0	762	757	270	816	788	271	
Stage 1	-	-	-	-	-	-	282	282	-	475	475	-	
Stage 2	-	-	-	-	-	-	480	475	-	341	313	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1292	-	-	1260	-	-	322	337	769	296	323	768	
Stage 1	-	-	-	-	-	-	725	678	-	570	557	-	
Stage 2	-	-	-	-	-	-	567	557	-	674	657	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1292	-	-	1260	-	-	295	308	769	233	295	768	
Mov Cap-2 Maneuver	-	-	-	-	-	-	295	308	-	233	295	-	
Stage 1	-	-	-	-	-	-	721	674	-	567	512	-	
Stage 2	-	-	-	-	-	-	513	512	-	567	653	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.2	1.9	12	20.4	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	295	741	1292	-	-	1260	-	-	233	468
HCM Lane V/C Ratio	0.078	0.159	0.005	-	-	0.081	-	-	0.133	0.021
HCM Control Delay (s)	18.2	10.8	7.8	0	-	8.1	-	-	22.8	12.9
HCM Lane LOS	С	В	А	А	-	А	-	-	С	В
HCM 95th %tile Q(veh)	0.3	0.6	0	-	-	0.3	-	-	0.5	0.1

	۶	→	$\mathbf{\hat{z}}$	4	+	•	1	1	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<u>स</u>	1				ኘኘ	↑ ⊅		<u>۲</u>	- ††	1
Traffic Volume (veh/h)	20	95	131	73	87	167	121	359	40	90	479	15
Future Volume (veh/h)	20	95	131	73	87	167	121	359	40	90	479	15
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	20	95	73	73	87	140	121	359	38	90	479	-15
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	411	398	140	140	185	232	1543	162	119	1688	755
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.07	0.48	0.48	0.07	0.48	0.00
Sat Flow, veh/h	166	1635	1583	286	557	737	3442	3232	340	1774	3539	1583
Grp Volume(v), veh/h	115	0	73	300	0	0	121	196	201	90	479	-15
Grp Sat Flow(s), veh/h/ln	1801	0	1583	1579	0	0	1721	1770	1803	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.4	7.5	0.0	0.0	2.2	4.3	4.3	3.3	5.4	0.0
Cycle Q Clear(g_c), s	3.3	0.0	2.4	11.4	0.0	0.0	2.2	4.3	4.3	3.3	5.4	0.0
Prop In Lane	0.17	0.0	1.00	0.24	0.0	0.47	1.00	1.0	0.19	1.00	0.1	1.00
Lane Grp Cap(c), veh/h	517	0	398	465	0	0	232	845	861	119	1688	755
V/C Ratio(X)	0.22	0.00	0.18	0.65	0.00	0.00	0.52	0.23	0.23	0.76	0.28	-0.02
Avail Cap(c_a), veh/h	1430	0.00	1258	1299	0.00	0.00	1068	845	861	604	1688	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.7	0.0	19.4	22.7	0.0	0.0	29.8	10.1	10.2	30.3	10.5	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	1.5	0.0	0.0	1.8	0.6	0.6	9.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	1.1	5.2	0.0	0.0	1.1	2.2	2.3	1.9	2.7	0.0
LnGrp Delay(d),s/veh	19.9	0.0	19.6	24.2	0.0	0.0	31.6	10.8	10.8	39.7	10.9	0.0
LnGrp LOS	B	0.0	13.0 B	24.2 C	0.0	0.0	01.0 C	B	10.0 B	D	10.5 B	0.0
Approach Vol, veh/h		188			300		<u> </u>	518			554	
Approach Delay, s/veh		19.8			24.2			15.6			15.9	
Approach LOS		19.0 B			24.2 C			15.0 B			15.9 B	
											D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		21.1	9.0	36.0		21.1	8.9	36.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		52.5	20.5	31.5		52.5	22.5	29.5				
Max Q Clear Time (g_c+I1), s		5.3	4.2	7.4		13.4	5.3	6.3				
Green Ext Time (p_c), s		3.2	0.3	6.0		3.2	0.2	5.9				
Intersection Summary												
HCM 2010 Ctrl Delay			17.9									
HCM 2010 LOS			В									

Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$		ľ	•	1	ľ	et et		ľ	4	
Traffic Vol, veh/h	3	203	10	47	151	33	7	0	37	25	1	1
Future Vol, veh/h	3	203	10	47	151	33	7	0	37	25	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	ŧ -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	203	10	47	151	33	7	0	37	25	1	1

Major/Minor	Major1		Ν	/lajor2			Minor1			Minor2			
Conflicting Flow All	151	0	0	213	0	0	460	459	208	478	464	151	
Stage 1	-	-	-	-	-	-	214	214	-	245	245	-	
Stage 2	-	-	-	-	-	-	246	245	-	233	219	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1430	-	-	1357	-	-	512	499	832	498	495	895	
Stage 1	-	-	-	-	-	-	788	725	-	759	703	-	
Stage 2	-	-	-	-	-	-	758	703	-	770	722	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1430	-	-	1357	-	-	496	481	832	463	477	895	
Mov Cap-2 Maneuver	-	-	-	-	-	-	496	481	-	463	477	-	
Stage 1	-	-	-	-	-	-	786	724	-	757	679	-	
Stage 2	-	-	-	-	-	-	730	679	-	734	721	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.1	1.6	10	13	
HCM LOS			В	В	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	496	832	1430	-	-	1357	-	-	463	622
HCM Lane V/C Ratio	0.014	0.044	0.002	-	-	0.035	-	-	0.054	0.003
HCM Control Delay (s)	12.4	9.5	7.5	0	-	7.7	-	-	13.2	10.8
HCM Lane LOS	В	Α	А	А	-	А	-	-	В	В
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0.1	-	-	0.2	0

	۶	→	\mathbf{F}	4	+	×	1	Ť	1	1	Ļ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<u>स</u>	1		4 >		ኘኘ	↑ ⊅		<u>۲</u>	- ††	1
Traffic Volume (veh/h)	55	91	194	38	83	107	229	550	50	142	456	40
Future Volume (veh/h)	55	91	194	38	83	107	229	550	50	142	456	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	55	91	43	38	83	65	229	550	46	142	456	14
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	228	286	112	150	100	368	1584	132	187	1691	757
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.11	0.48	0.48	0.11	0.48	0.48
Sat Flow, veh/h	474	1260	1583	200	827	552	3442	3308	276	1774	3539	1583
Grp Volume(v), veh/h	146	0	43	186	0	0	229	294	302	142	456	14
Grp Sat Flow(s),veh/h/ln	1734	0	1583	1580	0	0	1721	1770	1814	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	1.3	2.3	0.0	0.0	3.7	6.0	6.0	4.5	4.4	0.3
Cycle Q Clear(g_c), s	4.0	0.0	1.3	6.4	0.0	0.0	3.7	6.0	6.0	4.5	4.4	0.3
Prop In Lane	0.38	0.0	1.00	0.20	0.0	0.35	1.00	0.0	0.15	1.00		1.00
Lane Grp Cap(c), veh/h	400	0	286	361	0	0	368	848	869	187	1691	757
V/C Ratio(X)	0.37	0.00	0.15	0.52	0.00	0.00	0.62	0.35	0.35	0.76	0.27	0.02
Avail Cap(c_a), veh/h	891	0.00	784	865	0.00	0.00	1226	848	869	663	1691	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	19.9	21.8	0.0	0.0	24.6	9.4	9.4	25.0	9.0	7.9
Incr Delay (d2), s/veh	0.6	0.0	0.2	1.1	0.0	0.0	1.7	1.1	1.1	6.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.6	2.9	0.0	0.0	1.8	3.1	3.2	2.5	2.2	0.1
LnGrp Delay(d),s/veh	21.5	0.0	20.1	22.9	0.0	0.0	26.3	10.5	10.5	31.2	9.4	8.0
LnGrp LOS	21.0 C	0.0	20.1 C	C	0.0	0.0	20.0 C	B	B	C	A Street	A
Approach Vol, veh/h		189	<u> </u>		186		<u> </u>	825			612	
Approach Delay, s/veh		21.2			22.9			14.9			14.4	
Approach LOS		21.2 C			22.9 C			14.9 B			14.4 B	
											D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.9	10.6	32.0		14.9	10.6	32.1				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	20.5	27.5		28.5	21.5	26.5				
Max Q Clear Time (g_c+l1), s		6.0	5.7	6.4		8.4	6.5	8.0				
Green Ext Time (p_c), s		2.1	0.6	7.0		2.1	0.3	6.7				
Intersection Summary												
HCM 2010 Ctrl Delay			16.2									
HCM 2010 LOS			В									

Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		¢		ľ	•	1	ľ	4		ľ	et e	
Traffic Vol, veh/h	0	246	23	58	249	42	19	3	89	40	1	0
Future Vol, veh/h	0	246	23	58	249	42	19	3	89	40	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	- 1	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	246	23	58	249	42	19	3	89	40	1	0

Major/Minor	Major1		ľ	Major2			Minor1			Minor2			
Conflicting Flow All	249	0	0	269	0	0	624	623	258	669	634	249	
Stage 1	-	-	-	-	-	-	258	258	-	365	365	-	
Stage 2	-	-	-	-	-	-	366	365	-	304	269	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1317	-	-	1295	-	-	398	402	781	371	397	790	
Stage 1	-	-	-	-	-	-	747	694	-	654	623	-	
Stage 2	-	-	-	-	-	-	653	623	-	705	687	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1317	-	-	1295	-	-	384	384	781	316	379	790	
Mov Cap-2 Maneuver	-	-	-	-	-	-	384	384	-	316	379	-	
Stage 1	-	-	-	-	-	-	747	694	-	654	595	-	
Stage 2	-	-	-	-	-	-	623	595	-	622	687	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0	1.3	11.2	17.9	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	384	756	1317	-	-	1295	-	-	316	379
HCM Lane V/C Ratio	0.049	0.122	-	-	-	0.045	-	-	0.127	0.003
HCM Control Delay (s)	14.9	10.4	0	-	-	7.9	-	-	18	14.5
HCM Lane LOS	В	В	А	-	-	А	-	-	С	В
HCM 95th %tile Q(veh)	0.2	0.4	0	-	-	0.1	-	-	0.4	0

	۶	-	\mathbf{F}	•	-	•	1	1	/	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्भ	1		- 4 >		ሻሻ	↑ ⊅		<u>۲</u>	- ††	1
Traffic Volume (veh/h)	80	72	273	37	69	113	278	501	42	97	524	101
Future Volume (veh/h)	80	72	273	37	69	113	278	501	42	97	524	101
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	80	72	57	37	69	64	278	501	28	97	524	81
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	205	157	287	101	129	97	414	1832	102	127	1729	773
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.12	0.54	0.54	0.07	0.49	0.49
Sat Flow, veh/h	659	870	1583	180	710	538	3442	3409	190	1774	3539	1583
Grp Volume(v), veh/h	152	0	57	170	0	0	278	260	269	97	524	81
Grp Sat Flow(s),veh/h/ln	1529	0	1583	1428	0	0	1721	1770	1829	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.0	2.0	0.0	0.0	5.0	5.1	5.1	3.4	5.7	1.8
Cycle Q Clear(g_c), s	5.6	0.0	2.0	7.6	0.0	0.0	5.0	5.1	5.1	3.4	5.7	1.8
Prop In Lane	0.53		1.00	0.22		0.38	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	362	0	287	327	0	0	414	951	983	127	1729	773
V/C Ratio(X)	0.42	0.00	0.20	0.52	0.00	0.00	0.67	0.27	0.27	0.77	0.30	0.10
Avail Cap(c_a), veh/h	752	0	703	745	0	0	1152	951	983	373	1729	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	22.3	24.3	0.0	0.0	27.0	8.1	8.1	29.3	9.9	8.9
Incr Delay (d2), s/veh	0.8	0.0	0.3	1.3	0.0	0.0	1.9	0.7	0.7	9.3	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.9	2.9	0.0	0.0	2.5	2.6	2.7	2.0	2.9	0.8
LnGrp Delay(d),s/veh	24.4	0.0	22.7	25.6	0.0	0.0	28.9	8.8	8.7	38.6	10.3	9.1
LnGrp LOS	С		С	С			С	А	А	D	В	А
Approach Vol, veh/h		209			170			807			702	
Approach Delay, s/veh		24.0			25.6			15.7			14.1	
Approach LOS		С			C			В			В	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.1	12.2	35.9		16.1	9.1	39.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	21.5	26.5		28.5	13.5	34.5				
Max Q Clear Time (g_c+l1), s		7.6	7.0	7.7		9.6	5.4	7.1				
Green Ext Time (p_c), s		2.1	0.8	7.0		2.0	0.1	8.1				
Intersection Summary												
HCM 2010 Ctrl Delay			16.9									
HCM 2010 LOS			B									
			_									

Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$		٦	•	1	1	4		٦	et e	
Traffic Vol, veh/h	6	238	63	102	271	67	23	3	115	44	4	6
Future Vol, veh/h	6	238	63	102	271	67	23	3	115	44	4	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	- 1	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	238	63	102	271	67	23	3	115	44	4	6

Major/Minor	Major1		Ν	/lajor2			Minor1			Minor2			
Conflicting Flow All	271	0	0	301	0	0	762	757	270	816	788	271	
Stage 1	-	-	-	-	-	-	282	282	-	475	475	-	
Stage 2	-	-	-	-	-	-	480	475	-	341	313	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1292	-	-	1260	-	-	322	337	769	296	323	768	
Stage 1	-	-	-	-	-	-	725	678	-	570	557	-	
Stage 2	-	-	-	-	-	-	567	557	-	674	657	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1292	-	-	1260	-	-	295	308	769	233	295	768	
Mov Cap-2 Maneuver	-	-	-	-	-	-	295	308	-	233	295	-	
Stage 1	-	-	-	-	-	-	721	674	-	567	512	-	
Stage 2	-	-	-	-	-	-	513	512	-	567	653	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.2	1.9	12	21.9	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	295	741	1292	-	-	1260	-	-	233	468
HCM Lane V/C Ratio	0.078	0.159	0.005	-	-	0.081	-	-	0.189	0.021
HCM Control Delay (s)	18.2	10.8	7.8	0	-	8.1	-	-	24	12.9
HCM Lane LOS	С	В	А	А	-	А	-	-	С	В
HCM 95th %tile Q(veh)	0.3	0.6	0	-	-	0.3	-	-	0.7	0.1

	۶	-	\mathbf{r}	4	+	×	1	1	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्भ	1		4		ሻሻ	∱1 ≽		- T	- ††	1
Traffic Volume (veh/h)	14	99	140	76	103	170	188	359	41	92	479	11
Future Volume (veh/h)	14	99	140	76	103	170	188	359	41	92	479	11
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	14	99	82	76	103	143	188	359	39	92	479	-19
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	453	417	138	158	185	298	1525	165	121	1611	721
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.09	0.47	0.47	0.07	0.46	0.00
Sat Flow, veh/h	100	1720	1583	281	598	703	3442	3223	348	1774	3539	1583
Grp Volume(v), veh/h	113	0	82	322	0	0	188	196	202	92	479	-19
Grp Sat Flow(s),veh/h/ln	1820	0	1583	1583	0	0	1721	1770	1801	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.8	8.7	0.0	0.0	3.7	4.5	4.6	3.5	5.9	0.0
Cycle Q Clear(g_c), s	3.3	0.0	2.8	12.8	0.0	0.0	3.7	4.5	4.6	3.5	5.9	0.0
Prop In Lane	0.12	0.0	1.00	0.24	0.0	0.44	1.00	1.0	0.19	1.00	0.0	1.00
Lane Grp Cap(c), veh/h	538	0	417	481	0	0.11	298	838	853	121	1611	721
V/C Ratio(X)	0.21	0.00	0.20	0.67	0.00	0.00	0.63	0.23	0.24	0.76	0.30	-0.03
Avail Cap(c_a), veh/h	1391	0.00	1201	1244	0.00	0.00	1019	838	853	577	1611	721
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.0	0.0	19.8	23.4	0.0	0.0	30.5	10.8	10.8	31.7	11.9	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	1.6	0.0	0.0	2.2	0.7	0.7	9.3	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	1.2	5.9	0.0	0.0	1.8	2.3	2.4	2.0	3.0	0.0
LnGrp Delay(d),s/veh	20.2	0.0	20.0	25.0	0.0	0.0	32.7	11.5	11.5	40.9	12.4	0.0
LnGrp LOS	20.2 C	0.0	20.0 C	23.0 C	0.0	0.0	52.7 C	B	B	40.9 D	12.4 B	0.0
Approach Vol, veh/h	0	195	0	0	322		0	586	0	D	552	
		20.1			25.0			18.3			17.5	
Approach Delay, s/veh Approach LOS		20.1 C			25.0 C			10.3 B			П.5 В	
Approach LOS		U			U			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.7	10.5	36.0		22.7	9.2	37.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		52.5	20.5	31.5		52.5	22.5	29.5				
Max Q Clear Time (g_c+l1), s		5.3	5.7	7.9		14.8	5.5	6.6				
Green Ext Time (p_c), s		3.4	0.5	6.0		3.4	0.2	5.9				
Intersection Summary												
HCM 2010 Ctrl Delay			19.6									
HCM 2010 LOS			В									

Int Delay, s/veh	nt I	Delay	, s/veh
------------------	------	-------	---------

Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$		1	•	1	ľ	et		۲.	4	
Traffic Vol, veh/h	3	223	10	47	237	26	7	0	37	12	1	1
Future Vol, veh/h	3	223	10	47	237	26	7	0	37	12	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	4 -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	223	10	47	237	26	7	0	37	12	1	1

Major/Minor	Major1		Ν	/lajor2			Minor1			Minor2			
Conflicting Flow All	237	0	0	233	0	0	566	565	228	584	570	237	
Stage 1	-	-	-	-	-	-	234	234	-	331	331	-	
Stage 2	-	-	-	-	-	-	332	331	-	253	239	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1330	-	-	1335	-	-	435	434	811	423	431	802	
Stage 1	-	-	-	-	-	-	769	711	-	682	645	-	
Stage 2	-	-	-	-	-	-	681	645	-	751	708	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1330	-	-	1335	-	-	421	417	811	392	415	802	
Mov Cap-2 Maneuver	-	-	-	-	-	-	421	417	-	392	415	-	
Stage 1	-	-	-	-	-	-	767	709	-	680	622	-	
Stage 2	-	-	-	-	-	-	655	622	-	715	706	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.1	1.2	10.3	14.1	
HCM LOS			В	В	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	421	811	1330	-	-	1335	-	-	392	547
HCM Lane V/C Ratio	0.017	0.046	0.002	-	-	0.035	-	-	0.031	0.004
HCM Control Delay (s)	13.7	9.7	7.7	0	-	7.8	-	-	14.5	11.6
HCM Lane LOS	В	А	А	А	-	А	-	-	В	В
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0.1	-	-	0.1	0

	۶	-	\mathbf{r}	•	-	×	1	1	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		- सी	1		4		ሻሻ	∱ î≽		- T	- ††	1
Traffic Volume (veh/h)	51	106	254	40	87	109	241	550	52	144	456	31
Future Volume (veh/h)	51	106	254	40	87	109	241	550	52	144	456	31
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	51	106	103	40	87	67	241	550	48	144	456	5
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	258	303	112	157	103	380	1555	135	190	1658	742
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.11	0.47	0.47	0.11	0.47	0.47
Sat Flow, veh/h	396	1352	1583	198	820	537	3442	3295	287	1774	3539	1583
Grp Volume(v), veh/h	157	0	103	194	0	0	241	295	303	144	456	5
Grp Sat Flow(s),veh/h/ln	1748	0	1583	1555	0	0	1721	1770	1812	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	3.3	2.4	0.0	0.0	3.9	6.2	6.2	4.6	4.6	0.1
Cycle Q Clear(g_c), s	4.4	0.0	3.3	6.8	0.0	0.0	3.9	6.2	6.2	4.6	4.6	0.1
Prop In Lane	0.32	0.0	1.00	0.21	0.0	0.35	1.00	0.2	0.16	1.00	1.0	1.00
Lane Grp Cap(c), veh/h	415	0	303	371	0	0.00	380	835	855	190	1658	742
V/C Ratio(X)	0.38	0.00	0.34	0.52	0.00	0.00	0.63	0.35	0.35	0.76	0.28	0.01
Avail Cap(c_a), veh/h	885	0.00	769	834	0.00	0.00	1202	835	855	650	1658	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	20.5	21.8	0.0	0.0	25.0	9.8	9.8	25.5	9.5	8.3
Incr Delay (d2), s/veh	0.6	0.0	0.7	1.1	0.0	0.0	1.8	1.2	1.2	6.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	1.5	3.0	0.0	0.0	2.0	3.2	3.4	2.6	2.3	0.0
LnGrp Delay(d),s/veh	21.5	0.0	21.2	23.0	0.0	0.0	26.7	11.0	11.0	31.6	9.9	8.3
LnGrp LOS	21.5 C	0.0	21.2 C	23.0 C	0.0	0.0	20.7 C	B	B	01.0 C	9.9 A	0.5 A
Approach Vol, veh/h	0	260	0	0	194		0	839		0	605	
		200			23.0			15.5			15.1	
Approach Delay, s/veh Approach LOS		21.4 C			23.0 C			15.5 B			B	
Approach 203		U			U			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.7	11.0	32.0		15.7	10.8	32.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	20.5	27.5		28.5	21.5	26.5				
Max Q Clear Time (g_c+l1), s		6.4	5.9	6.6		8.8	6.6	8.2				
Green Ext Time (p_c), s		2.5	0.7	7.0		2.4	0.3	6.6				
Intersection Summary												
			10.0									
HCM 2010 Ctrl Delay			16.9									

Int Delay, s/veh	2.9												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		\$		<u>ار ا</u>	•	1	1	et e		٦	et e		
Traffic Vol, veh/h	0	326	23	58	272	26	19	3	89	31	1	0	
Future Vol, veh/h	0	326	23	58	272	26	19	3	89	31	1	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-	
Veh in Median Storage, #	£ _	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	0	326	23	58	272	26	19	3	89	31	1	0	

Major/Minor	Major1		Ν	/lajor2			Minor1			Minor2			
Conflicting Flow All	272	0	0	349	0	0	727	726	338	772	737	272	
Stage 1	-	-	-	-	-	-	338	338	-	388	388	-	
Stage 2	-	-	-	-	-	-	389	388	-	384	349	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1291	-	-	1210	-	-	339	351	704	317	346	767	
Stage 1	-	-	-	-	-	-	676	641	-	636	609	-	
Stage 2	-	-	-	-	-	-	635	609	-	639	633	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1291	-	-	1210	-	-	326	334	704	265	329	767	
Mov Cap-2 Maneuver	-	-	-	-	-	-	326	334	-	265	329	-	
Stage 1	-	-	-	-	-	-	676	641	-	636	580	-	
Stage 2	-	-	-	-	-	-	604	580	-	556	633	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0	1.3	12.1	20.3	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	326	679	1291	-	-	1210	-	-	265	329
HCM Lane V/C Ratio	0.058	0.135	-	-	-	0.048	-	-	0.117	0.003
HCM Control Delay (s)	16.7	11.1	0	-	-	8.1	-	-	20.4	16
HCM Lane LOS	С	В	А	-	-	А	-	-	С	С
HCM 95th %tile Q(veh)	0.2	0.5	0	-	-	0.2	-	-	0.4	0

	≯	-	\mathbf{r}	4	+	×	1	Ť	/	1	ţ	-∢
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्भ	1		4		ሻሻ	≜ ⊅		٦	<u></u>	7
Traffic Volume (veh/h)	74	72	266	65	69	147	273	501	70	131	524	95
Future Volume (veh/h)	74	72	266	65	69	147	273	501	70	131	524	95
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	74	72	50	65	69	98	273	501	56	131	524	75
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	205	176	362	124	119	130	396	1561	174	168	1649	738
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.11	0.49	0.49	0.09	0.47	0.47
Sat Flow, veh/h	562	769	1583	260	519	570	3442	3211	358	1774	3539	1583
Grp Volume(v), veh/h	146	0	50	232	0	0	273	275	282	131	524	75
Grp Sat Flow(s), veh/h/ln	1331	0	1583	1349	0	0	1721	1770	1800	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	1.8	5.6	0.0	0.0	5.4	6.7	6.8	5.1	6.6	1.9
Cycle Q Clear(g_c), s	6.5	0.0	1.8	12.1	0.0	0.0	5.4	6.7	6.8	5.1	6.6	1.9
Prop In Lane	0.51	0.0	1.00	0.28	0.0	0.42	1.00	0.7	0.20	1.00	0.0	1.00
Lane Grp Cap(c), veh/h	381	0	362	374	0	0.42	396	860	875	168	1649	738
V/C Ratio(X)	0.38	0.00	0.14	0.62	0.00	0.00	0.69	0.32	0.32	0.78	0.32	0.10
Avail Cap(c_a), veh/h	634	0.00	636	640	0.00	0.00	1043	860	875	337	1649	738
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	0.0	21.8	25.8	0.0	0.0	30.2	11.1	11.1	31.4	11.9	10.6
Incr Delay (d2), s/veh	0.6	0.0	0.2	1.7	0.0	0.0	2.2	1.0	1.0	7.6	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.5	0.0	0.0	4.4	0.0	0.0	2.7	3.5	3.6	2.9	3.3	0.0
%ile BackOfQ(50%),veh/ln		0.0	22.0	27.5	0.0		32.3	12.1	12.1	39.0	5.5 12.4	
LnGrp Delay(d),s/veh	23.9 C	0.0	22.0 C	27.5 C	0.0	0.0	32.3 С	IZ.I B	12.1 B			10.9
LnGrp LOS	U	400	U	U	000		U		D	D	B	B
Approach Vol, veh/h		196			232			830			730	
Approach Delay, s/veh		23.4			27.5			18.7			17.0	
Approach LOS		С			С			В			В	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		20.7	12.7	37.6		20.7	11.2	39.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	21.5	26.5		28.5	13.5	34.5				
Max Q Clear Time (g_c+l1), s		8.5	7.4	8.6		14.1	7.1	8.8				
Green Ext Time (p_c), s		2.5	0.8	7.0		2.2	0.2	8.1				
Intersection Summary												
HCM 2010 Ctrl Delay			19.6									
HCM 2010 LOS			В									

Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$		ľ	•	1	ľ	et et		ľ	4	
Traffic Vol, veh/h	6	238	63	102	271	56	23	3	115	31	4	6
Future Vol, veh/h	6	238	63	102	271	56	23	3	115	31	4	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	£ _	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	238	63	102	271	56	23	3	115	31	4	6

Major/Minor	Major1		ľ	Major2			Minor1			Minor2			
Conflicting Flow All	271	0	0	301	0	0	762	757	270	816	788	271	
Stage 1	-	-	-	-	-	-	282	282	-	475	475	-	
Stage 2	-	-	-	-	-	-	480	475	-	341	313	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1292	-	-	1260	-	-	322	337	769	296	323	768	
Stage 1	-	-	-	-	-	-	725	678	-	570	557	-	
Stage 2	-	-	-	-	-	-	567	557	-	674	657	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1292	-	-	1260	-	-	295	308	769	233	295	768	
Mov Cap-2 Maneuver	-	-	-	-	-	-	295	308	-	233	295	-	
Stage 1	-	-	-	-	-	-	721	674	-	567	512	-	
Stage 2	-	-	-	-	-	-	513	512	-	567	653	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.2	1.9	12	20.4	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	295	741	1292	-	-	1260	-	-	233	468
HCM Lane V/C Ratio	0.078	0.159	0.005	-	-	0.081	-	-	0.133	0.021
HCM Control Delay (s)	18.2	10.8	7.8	0	-	8.1	-	-	22.8	12.9
HCM Lane LOS	С	В	А	А	-	А	-	-	С	В
HCM 95th %tile Q(veh)	0.3	0.6	0	-	-	0.3	-	-	0.5	0.1

	۶	-	\mathbf{r}	4	+	×	1	1	1	1	Ļ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्भ	1				ካካ	∱ }		<u>۲</u>	- ††	1
Traffic Volume (veh/h)	20	99	147	76	103	170	191	359	41	92	479	15
Future Volume (veh/h)	20	99	147	76	103	170	191	359	41	92	479	15
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	20	99	89	76	103	143	191	359	39	92	479	-15
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	429	418	138	158	185	301	1524	165	121	1606	718
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.09	0.47	0.47	0.07	0.45	0.00
Sat Flow, veh/h	162	1624	1583	281	598	702	3442	3223	348	1774	3539	1583
Grp Volume(v), veh/h	119	0	89	322	0	0	191	196	202	92	479	-15
Grp Sat Flow(s), veh/h/ln	1786	0	1583	1580	0	0	1721	1770	1801	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	3.0	8.7	0.0	0.0	3.7	4.6	4.6	3.5	5.9	0.0
Cycle Q Clear(g_c), s	3.5	0.0	3.0	12.9	0.0	0.0	3.7	4.6	4.6	3.5	5.9	0.0
Prop In Lane	0.17	0.0	1.00	0.24	0.0	0.44	1.00	1.0	0.19	1.00	0.0	1.00
Lane Grp Cap(c), veh/h	533	0	418	482	0	0.11	301	837	852	121	1606	718
V/C Ratio(X)	0.22	0.00	0.21	0.67	0.00	0.00	0.63	0.23	0.24	0.76	0.30	-0.02
Avail Cap(c_a), veh/h	1359	0.00	1197	1238	0.00	0.00	1016	837	852	575	1606	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.1	0.0	19.9	23.4	0.0	0.0	30.6	10.8	10.9	31.8	12.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.3	1.6	0.0	0.0	2.2	0.7	0.7	9.3	0.5	0.0
Initial Q Delay(d3),s/veh	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	1.3	5.9	0.0	0.0	1.9	2.4	2.5	2.1	3.0	0.0
LnGrp Delay(d),s/veh	20.3	0.0	20.2	25.0	0.0	0.0	32.8	11.5	11.5	41.0	12.5	0.0
LnGrp LOS	20.3 C	0.0	20.2 C	23.0 C	0.0	0.0	52.0 C	B	B	41.0 D	12.3 B	0.0
-	0	208	0	0	322		0	589	В	D	556	
Approach Vol, veh/h		208			322 25.0			569 18.4				
Approach Delay, s/veh											17.5	
Approach LOS		С			С			В			В	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.8	10.6	36.0		22.8	9.2	37.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		52.5	20.5	31.5		52.5	22.5	29.5				
Max Q Clear Time (g_c+l1), s		5.5	5.7	7.9		14.9	5.5	6.6				
Green Ext Time (p_c), s		3.5	0.5	6.0		3.5	0.2	5.9				
Intersection Summary												
HCM 2010 Ctrl Delay			19.6									
HCM 2010 LOS			В									

Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		<u>ار ا</u>	•	1	1	4		1	et	
Traffic Vol, veh/h	3	223	10	47	237	33	7	0	37	25	1	1
Future Vol, veh/h	3	223	10	47	237	33	7	0	37	25	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	223	10	47	237	33	7	0	37	25	1	1

Major/Minor	Major1		Ν	lajor2			Minor1			Minor2			
Conflicting Flow All	237	0	0	233	0	0	566	565	228	584	570	237	
Stage 1	-	-	-	-	-	-	234	234	-	331	331	-	
Stage 2	-	-	-	-	-	-	332	331	-	253	239	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1330	-	-	1335	-	-	435	434	811	423	431	802	
Stage 1	-	-	-	-	-	-	769	711	-	682	645	-	
Stage 2	-	-	-	-	-	-	681	645	-	751	708	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1330	-	-	1335	-	-	421	417	811	392	415	802	
Mov Cap-2 Maneuver	-	-	-	-	-	-	421	417	-	392	415	-	
Stage 1	-	-	-	-	-	-	767	709	-	680	622	-	
Stage 2	-	-	-	-	-	-	655	622	-	715	706	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.1	1.2	10.3	14.6	
HCM LOS			В	В	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	421	811	1330	-	-	1335	-	-	392	547
HCM Lane V/C Ratio	0.017	0.046	0.002	-	-	0.035	-	-	0.064	0.004
HCM Control Delay (s)	13.7	9.7	7.7	0	-	7.8	-	-	14.8	11.6
HCM Lane LOS	В	Α	А	А	-	А	-	-	В	В
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0.1	-	-	0.2	0

	۶	-	$\mathbf{\hat{z}}$	4	+	×	1	Ť	1	1	ŧ	-
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<u>स</u>	1		4		ሻሻ	↑ Ъ		<u>۲</u>	- † †	7
Traffic Volume (veh/h)	55	106	259	40	87	109	248	550	52	144	456	40
Future Volume (veh/h)	55	106	259	40	87	109	248	550	52	144	456	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	55	106	108	40	87	67	248	550	48	144	456	14
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	253	305	111	157	103	388	1554	135	190	1648	737
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.11	0.47	0.47	0.11	0.47	0.47
Sat Flow, veh/h	424	1312	1583	195	815	533	3442	3295	287	1774	3539	1583
Grp Volume(v), veh/h	161	0	108	194	0	0	248	295	303	144	456	14
Grp Sat Flow(s),veh/h/ln	1737	0	1583	1543	0	0	1721	1770	1812	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	3.5	2.4	0.0	0.0	4.1	6.2	6.3	4.7	4.7	0.3
Cycle Q Clear(g_c), s	4.6	0.0	3.5	7.0	0.0	0.0	4.1	6.2	6.3	4.7	4.7	0.3
Prop In Lane	0.34	0.0	1.00	0.21	0.0	0.35	1.00	•	0.16	1.00		1.00
Lane Grp Cap(c), veh/h	417	0	305	371	0	0	388	835	855	190	1648	737
V/C Ratio(X)	0.39	0.00	0.35	0.52	0.00	0.00	0.64	0.35	0.35	0.76	0.28	0.02
Avail Cap(c_a), veh/h	876	0	764	827	0	0	1195	835	855	646	1648	737
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	20.6	21.9	0.0	0.0	25.0	9.9	9.9	25.6	9.7	8.5
Incr Delay (d2), s/veh	0.6	0.0	0.7	1.1	0.0	0.0	1.8	1.2	1.2	6.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	1.6	3.0	0.0	0.0	2.0	3.3	3.4	2.6	2.4	0.1
LnGrp Delay(d),s/veh	21.6	0.0	21.3	23.0	0.0	0.0	26.8	11.1	11.1	31.8	10.1	8.5
LnGrp LOS	С		С	С			C	В	В	С	В	A
Approach Vol, veh/h	<u>+</u>	269			194		<u>_</u>	846		<u>_</u>	614	
Approach Delay, s/veh		21.5			23.0			15.7			15.1	
Approach LOS		C			C			B			B	
	4		2	4		<u>^</u>	7				5	
Timer		2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.9	11.2	32.0		15.9	10.8	32.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	20.5	27.5		28.5	21.5	26.5				
Max Q Clear Time (g_c+l1), s		6.6	6.1	6.7		9.0	6.7	8.3				
Green Ext Time (p_c), s		2.5	0.7	7.0		2.4	0.3	6.6				
Intersection Summary												
HCM 2010 Ctrl Delay			17.1									
HCM 2010 LOS			В									

Int Delay, s/veh	/eh	s/	av.	Del	Int	
------------------	-----	----	-----	-----	-----	--

Int Delay, s/veh	3.1												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		\$		٦	•	1	1	et e		1	el -		
Traffic Vol, veh/h	0	326	23	58	272	42	19	3	89	40	1	0	
Future Vol, veh/h	0	326	23	58	272	42	19	3	89	40	1	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-	
Veh in Median Storage,	¥ -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	0	326	23	58	272	42	19	3	89	40	1	0	

Major/Minor	Major1		Ν	/lajor2			Minor1			Minor2			
Conflicting Flow All	272	0	0	349	0	0	727	726	338	772	737	272	
Stage 1	-	-	-	-	-	-	338	338	-	388	388	-	
Stage 2	-	-	-	-	-	-	389	388	-	384	349	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1291	-	-	1210	-	-	339	351	704	317	346	767	
Stage 1	-	-	-	-	-	-	676	641	-	636	609	-	
Stage 2	-	-	-	-	-	-	635	609	-	639	633	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1291	-	-	1210	-	-	326	334	704	265	329	767	
Mov Cap-2 Maneuver	-	-	-	-	-	-	326	334	-	265	329	-	
Stage 1	-	-	-	-	-	-	676	641	-	636	580	-	
Stage 2	-	-	-	-	-	-	604	580	-	556	633	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0	1.3	12.1	20.9	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	326	679	1291	-	-	1210	-	-	265	329
HCM Lane V/C Ratio	0.058	0.135	-	-	-	0.048	-	-	0.151	0.003
HCM Control Delay (s)	16.7	11.1	0	-	-	8.1	-	-	21	16
HCM Lane LOS	С	В	А	-	-	А	-	-	С	С
HCM 95th %tile Q(veh)	0.2	0.5	0	-	-	0.2	-	-	0.5	0

	۶	-	\mathbf{r}	•	-	•	1	1	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<u>स</u>	1		- 4 >		ሻሻ	↑ ⊅		<u>۲</u>	- ††	1
Traffic Volume (veh/h)	80	72	273	65	69	147	278	501	70	131	524	101
Future Volume (veh/h)	80	72	273	65	69	147	278	501	70	131	524	101
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	80	72	57	65	69	98	278	501	56	131	524	81
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	168	373	123	120	130	400	1546	172	168	1627	728
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.12	0.48	0.48	0.09	0.46	0.46
Sat Flow, veh/h	571	712	1583	247	508	552	3442	3211	358	1774	3539	1583
Grp Volume(v), veh/h	152	0	57	232	0	0	278	275	282	131	524	81
Grp Sat Flow(s),veh/h/ln	1283	0	1583	1308	0	0	1721	1770	1800	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.0	5.5	0.0	0.0	5.6	6.8	6.9	5.2	6.7	2.1
Cycle Q Clear(g_c), s	7.2	0.0	2.0	12.7	0.0	0.0	5.6	6.8	6.9	5.2	6.7	2.1
Prop In Lane	0.53		1.00	0.28		0.42	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	379	0	373	372	0	0	400	852	866	168	1627	728
V/C Ratio(X)	0.40	0.00	0.15	0.62	0.00	0.00	0.69	0.32	0.33	0.78	0.32	0.11
Avail Cap(c_a), veh/h	614	0	630	622	0	0	1032	852	866	334	1627	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	0.0	21.7	25.8	0.0	0.0	30.5	11.4	11.4	31.7	12.3	11.0
Incr Delay (d2), s/veh	0.7	0.0	0.2	1.7	0.0	0.0	2.2	1.0	1.0	7.6	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.9	4.5	0.0	0.0	2.7	3.5	3.6	2.9	3.4	1.0
LnGrp Delay(d),s/veh	24.0	0.0	21.9	27.5	0.0	0.0	32.6	12.4	12.4	39.3	12.8	11.3
LnGrp LOS	С		С	С			С	В	В	D	В	В
Approach Vol, veh/h		209			232			835			736	
Approach Delay, s/veh		23.5			27.5			19.2			17.4	
Approach LOS		С			С			В			В	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	<u> </u>	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		21.4	12.8	37.5		21.4	, 11.3	39.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	21.5	26.5		28.5	13.5	34.5				
Max Q Clear Time (g_c+l1), s		9.2	7.6	8.7		14.7	7.2	8.9				
Green Ext Time (p_c), s		9.2 2.5	0.8	7.0		2.2	0.2	8.1				
. ,		2.5	0.0	1.0		2.2	0.2	0.1				
Intersection Summary			40.0									
HCM 2010 Ctrl Delay			19.9									
HCM 2010 LOS			В									

Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$		ľ	•	1	ľ	4		ľ	et e	
Traffic Vol, veh/h	6	238	63	102	271	67	23	3	115	44	4	6
Future Vol, veh/h	6	238	63	102	271	67	23	3	115	44	4	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	238	63	102	271	67	23	3	115	44	4	6

Major/Minor	Major1		ľ	/lajor2			Minor1			Minor2		
Conflicting Flow All	271	0	0	301	0	0	762	757	270	816	788	271
Stage 1	-	-	-	-	-	-	282	282	-	475	475	-
Stage 2	-	-	-	-	-	-	480	475	-	341	313	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1292	-	-	1260	-	-	322	337	769	296	323	768
Stage 1	-	-	-	-	-	-	725	678	-	570	557	-
Stage 2	-	-	-	-	-	-	567	557	-	674	657	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1292	-	-	1260	-	-	295	308	769	233	295	768
Mov Cap-2 Maneuver	-	-	-	-	-	-	295	308	-	233	295	-
Stage 1	-	-	-	-	-	-	721	674	-	567	512	-
Stage 2	-	-	-	-	-	-	513	512	-	567	653	-

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.2	1.9	12	21.9	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	295	741	1292	-	-	1260	-	-	233	468
HCM Lane V/C Ratio	0.078	0.159	0.005	-	-	0.081	-	-	0.189	0.021
HCM Control Delay (s)	18.2	10.8	7.8	0	-	8.1	-	-	24	12.9
HCM Lane LOS	С	В	А	А	-	А	-	-	С	В
HCM 95th %tile Q(veh)	0.3	0.6	0	-	-	0.3	-	-	0.7	0.1

	≯	-	\mathbf{r}	1	+	•	1	Ť	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	1				ሻሻ	≜ ⊅		ሻ	- ††	1
Traffic Volume (veh/h)	25	102	145	87	104	202	127	391	43	118	745	17
Future Volume (veh/h)	25	102	145	87	104	202	127	391	43	118	745	17
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	25	102	87	87	104	175	127	391	41	118	745	-13
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	443	469	149	156	222	224	1375	143	155	1583	708
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.07	0.43	0.43	0.09	0.45	0.00
Sat Flow, veh/h	206	1497	1583	289	529	749	3442	3235	337	1774	3539	1583
Grp Volume(v), veh/h	127	0	87	366	0	0	127	213	219	118	745	-13
Grp Sat Flow(s),veh/h/ln	1703	0	1583	1567	0	0	1721	1770	1803	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.9	10.7	0.0	0.0	2.5	5.5	5.6	4.6	10.4	0.0
Cycle Q Clear(g_c), s	3.6	0.0	2.9	14.9	0.0	0.0	2.5	5.5	5.6	4.6	10.4	0.0
Prop In Lane	0.20		1.00	0.24		0.48	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	565	0	469	527	0	0	224	752	767	155	1583	708
V/C Ratio(X)	0.22	0.00	0.19	0.69	0.00	0.00	0.57	0.28	0.29	0.76	0.47	-0.02
Avail Cap(c_a), veh/h	1301	0	1180	1214	0	0	1002	752	767	567	1583	708
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.7	0.0	18.5	22.5	0.0	0.0	32.0	13.2	13.2	31.4	13.6	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	1.7	0.0	0.0	2.2	0.9	0.9	7.5	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	1.3	6.7	0.0	0.0	1.3	2.9	2.9	2.6	5.3	0.0
LnGrp Delay(d),s/veh	18.9	0.0	18.7	24.2	0.0	0.0	34.2	14.2	14.2	39.0	14.6	0.0
LnGrp LOS	В		В	С			С	В	В	D	В	
Approach Vol, veh/h		214			366			559			850	
Approach Delay, s/veh		18.8			24.2			18.7			18.2	
Approach LOS		B			C			B			B	
			•			•	-					
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		25.3	9.1	36.0		25.3	10.6	34.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		52.5	20.5	31.5		52.5	22.5	29.5				
Max Q Clear Time (g_c+l1), s		5.6	4.5	12.4		16.9	6.6	7.6				
Green Ext Time (p_c), s		4.0	0.3	7.8		3.9	0.2	8.3				
Intersection Summary												
HCM 2010 Ctrl Delay			19.5									
HCM 2010 LOS			В									

Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$		1	•	1	ľ	et e		ľ	4	
Traffic Vol, veh/h	3	242	10	47	183	26	7	0	37	12	1	1
Future Vol, veh/h	3	242	10	47	183	26	7	0	37	12	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	ŧ –	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	242	10	47	183	26	7	0	37	12	1	1

Major/Minor	Major1		Ν	/lajor2			Minor1			Minor2			
Conflicting Flow All	183	0	0	252	0	0	531	530	247	549	535	183	
Stage 1	-	-	-	-	-	-	253	253	-	277	277	-	
Stage 2	-	-	-	-	-	-	278	277	-	272	258	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1392	-	-	1313	-	-	459	455	792	446	452	859	
Stage 1	-	-	-	-	-	-	751	698	-	729	681	-	
Stage 2	-	-	-	-	-	-	728	681	-	734	694	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1392	-	-	1313	-	-	444	437	792	413	435	859	
Mov Cap-2 Maneuver	-	-	-	-	-	-	444	437	-	413	435	-	
Stage 1	-	-	-	-	-	-	749	696	-	727	657	-	
Stage 2	-	-	-	-	-	-	700	657	-	698	692	-	
-													

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.1	1.4	10.3	13.6	
HCM LOS			В	В	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	444	792	1392	-	-	1313	-	-	413	578
HCM Lane V/C Ratio	0.016	0.047	0.002	-	-	0.036	-	-	0.029	0.003
HCM Control Delay (s)	13.2	9.8	7.6	0	-	7.8	-	-	14	11.3
HCM Lane LOS	В	Α	А	А	-	А	-	-	В	В
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0.1	-	-	0.1	0

	≯	-	\mathbf{r}	4	-	•	1	1	/	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	1		4		ሻሻ	At≯		ሻ	^	1
Traffic Volume (veh/h)	66	100	200	44	95	139	242	803	67	183	563	36
Future Volume (veh/h)	66	100	200	44	95	139	242	803	67	183	563	36
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	66	100	49	44	95	97	242	803	63	183	563	10
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	244	340	109	158	138	376	1437	113	235	1612	721
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.11	0.43	0.43	0.13	0.46	0.46
Sat Flow, veh/h	475	1133	1583	182	737	641	3442	3325	261	1774	3539	1583
Grp Volume(v), veh/h	166	0	49	236	0	0	242	427	439	183	563	10
Grp Sat Flow(s),veh/h/ln	1608	0	1583	1560	0	0	1721	1770	1817	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	1.5	3.6	0.0	0.0	4.1	11.1	11.1	6.1	6.3	0.2
Cycle Q Clear(g_c), s	5.1	0.0	1.5	8.7	0.0	0.0	4.1	11.1	11.1	6.1	6.3	0.2
Prop In Lane	0.40	0.0	1.00	0.19	0.0	0.41	1.00		0.14	1.00	0.0	1.00
Lane Grp Cap(c), veh/h	428	0	340	405	0	0	376	765	785	235	1612	721
V/C Ratio(X)	0.39	0.00	0.14	0.58	0.00	0.00	0.64	0.56	0.56	0.78	0.35	0.01
Avail Cap(c_a), veh/h	807	0.00	736	804	0.00	0.00	1151	765	785	622	1612	721
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	19.5	22.2	0.0	0.0	26.2	13.0	13.0	25.7	10.8	9.1
Incr Delay (d2), s/veh	0.6	0.0	0.2	1.3	0.0	0.0	1.8	2.9	2.9	5.5	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.7	3.8	0.0	0.0	2.0	6.0	6.1	3.4	3.2	0.0
LnGrp Delay(d),s/veh	2.3	0.0	19.7	23.5	0.0	0.0	28.0	16.0	15.9	31.2	11.4	9.2
LnGrp LOS	21.4 C	0.0	В	20.0 C	0.0	0.0	20.0 C	10.0 B	но.5 В	C	B	J.2 A
Approach Vol, veh/h	0	215	0	0	236		0	1108		0	756	
		215			230			18.6			16.2	
Approach Delay, s/veh		21.0 C			23.5 C			10.0 B			10.2 B	
Approach LOS		U			U			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.7	11.2	32.4		17.7	12.6	31.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	20.5	27.5		28.5	21.5	26.5				
Max Q Clear Time (g_c+I1), s		7.1	6.1	8.3		10.7	8.1	13.1				
Green Ext Time (p_c), s		2.6	0.7	9.5		2.5	0.4	7.6				
Intersection Summary												
HCM 2010 Ctrl Delay			18.5									
HCM 2010 LOS			В									

|--|

Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		¢		ľ	•	1	ľ	et et		5	et e	
Traffic Vol, veh/h	0	281	23	58	286	26	19	3	89	31	1	0
Future Vol, veh/h	0	281	23	58	286	26	19	3	89	31	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	ŧ -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	281	23	58	286	26	19	3	89	31	1	0

Major/Minor	Major1		Ν	/lajor2			Minor1			Minor2			
Conflicting Flow All	286	0	0	304	0	0	696	695	293	741	706	286	
Stage 1	-	-	-	-	-	-	293	293	-	402	402	-	
Stage 2	-	-	-	-	-	-	403	402	-	339	304	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1276	-	-	1257	-	-	356	366	746	332	361	753	
Stage 1	-	-	-	-	-	-	715	670	-	625	600	-	
Stage 2	-	-	-	-	-	-	624	600	-	676	663	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1276	-	-	1257	-	-	343	349	746	280	344	753	
Mov Cap-2 Maneuver	-	-	-	-	-	-	343	349	-	280	344	-	
Stage 1	-	-	-	-	-	-	715	670	-	625	572	-	
Stage 2	-	-	-	-	-	-	594	572	-	593	663	-	
-													

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0	1.3	11.6	19.4	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	343	719	1276	-	-	1257	-	-	280	344
HCM Lane V/C Ratio	0.055	0.128	-	-	-	0.046	-	-	0.111	0.003
HCM Control Delay (s)	16.1	10.7	0	-	-	8	-	-	19.5	15.5
HCM Lane LOS	С	В	А	-	-	А	-	-	С	С
HCM 95th %tile Q(veh)	0.2	0.4	0	-	-	0.1	-	-	0.4	0

	≯	-	\mathbf{F}	4	+	×	1	Ť	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<u>स</u>	1				ኘኘ	↑ ⊅		<u>۲</u>	- ††	1
Traffic Volume (veh/h)	96	79	281	43	79	147	298	731	56	125	647	110
Future Volume (veh/h)	96	79	281	43	79	147	298	731	56	125	647	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	96	79	65	43	79	98	298	731	42	125	647	90
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	153	375	92	136	134	423	1645	94	161	1598	715
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.12	0.48	0.48	0.09	0.45	0.45
Sat Flow, veh/h	565	647	1583	134	573	568	3442	3402	195	1774	3539	1583
Grp Volume(v), veh/h	175	0	65	220	0	0	298	380	393	125	647	90
Grp Sat Flow(s),veh/h/ln	1212	0	1583	1275	0	0	1721	1770	1828	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.3	3.0	0.0	0.0	5.9	10.1	10.1	4.9	8.8	2.4
Cycle Q Clear(g_c), s	9.6	0.0	2.3	12.6	0.0	0.0	5.9	10.1	10.1	4.9	8.8	2.4
Prop In Lane	0.55	0.0	1.00	0.20	0.0	0.45	1.00		0.11	1.00	0.0	1.00
Lane Grp Cap(c), veh/h	365	0	375	362	0	0	423	856	884	161	1598	715
V/C Ratio(X)	0.48	0.00	0.17	0.61	0.00	0.00	0.70	0.44	0.44	0.78	0.40	0.13
Avail Cap(c_a), veh/h	598	0	632	620	0	0	1037	856	884	336	1598	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.0	0.0	21.7	24.9	0.0	0.0	30.0	12.1	12.1	31.7	13.1	11.4
Incr Delay (d2), s/veh	1.0	0.0	0.2	1.6	0.0	0.0	2.2	1.7	1.6	7.8	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	1.0	4.2	0.0	0.0	2.9	5.3	5.4	2.7	4.4	1.1
LnGrp Delay(d),s/veh	25.0	0.0	21.9	26.6	0.0	0.0	32.2	13.8	13.7	39.5	13.9	11.7
LnGrp LOS	C	0.0	C	C	0.0	0.0	C	B	В	D	B	В
Approach Vol, veh/h		240		-	220			1071			862	
Approach Delay, s/veh		24.2			26.6			18.9			17.4	
Approach LOS		24.2 C			20.0 C			B			В	
			_			•	_				U	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		21.4	13.3	36.7		21.4	11.0	39.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	21.5	26.5		28.5	13.5	34.5				
Max Q Clear Time (g_c+l1), s		11.6	7.9	10.8		14.6	6.9	12.1				
Green Ext Time (p_c), s		2.5	0.9	8.6		2.3	0.1	10.6				
Intersection Summary												
HCM 2010 Ctrl Delay			19.6									
HCM 2010 LOS			В									

													_
Int Delay, s/veh	3.6												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		¢		ľ	•	1	ľ	et et		5	et e		
Traffic Vol, veh/h	6	272	63	102	311	56	23	3	115	31	4	6	
Future Vol, veh/h	6	272	63	102	311	56	23	3	115	31	4	6	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-	
Veh in Median Storage, #	ŧ -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	6	272	63	102	311	56	23	3	115	31	4	6	

Major/Minor	Major1		ľ	Major2			Minor1			Minor2			
Conflicting Flow All	311	0	0	335	0	0	836	831	304	890	862	311	
Stage 1	-	-	-	-	-	-	316	316	-	515	515	-	
Stage 2	-	-	-	-	-	-	520	515	-	375	347	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1249	-	-	1224	-	-	287	305	736	264	293	729	
Stage 1	-	-	-	-	-	-	695	655	-	543	535	-	
Stage 2	-	-	-	-	-	-	539	535	-	646	635	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1249	-	-	1224	-	-	262	278	736	206	267	729	
Mov Cap-2 Maneuver	-	-	-	-	-	-	262	278	-	206	267	-	
Stage 1	-	-	-	-	-	-	691	651	-	540	490	-	
Stage 2	-	-	-	-	-	-	486	490	-	539	631	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.1	1.8	12.6	22.6	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	262	706	1249	-	-	1224	-	-	206	431
HCM Lane V/C Ratio	0.088	0.167	0.005	-	-	0.083	-	-	0.15	0.023
HCM Control Delay (s)	20.1	11.1	7.9	0	-	8.2	-	-	25.5	13.6
HCM Lane LOS	С	В	А	А	-	А	-	-	D	В
HCM 95th %tile Q(veh)	0.3	0.6	0	-	-	0.3	-	-	0.5	0.1

Initial Q (Qb), veh00000000000Ped-Bike Adj(A_pbT)1.001.001.001.001.001.001.001.001.001.001.00Parking Bus, Adj1.001.001.001.001.001.001.001.001.001.001.001.00Adj Sat Flow, veh/h/In19001863186319001863190018631863190018631863Adj Flow Rate, veh/h3110294871041751303914111874Adj No. of Lanes0110102201Peak Hour Factor1.001.001.001.001.001.001.001.001.001.00	5 21 5 21 4 14 0 0 1.00
Traffic Volume (veh/h) 31 102 152 87 104 202 130 391 43 118 74 Future Volume (veh/h) 31 102 152 87 104 202 130 391 43 118 74 Number 5 2 12 1 6 16 3 8 18 7 Initial Q (Qb), veh 0<	5 21 5 21 4 14 0 0 1.00
Traffic Volume (veh/h) 31 102 152 87 104 202 130 391 43 118 74 Future Volume (veh/h) 31 102 152 87 104 202 130 391 43 118 74 Number 5 2 12 1 6 16 3 8 18 7 Initial Q (Qb), veh 0 1.00 <t< td=""><td>5 21 5 21 4 14 0 0 1.00</td></t<>	5 21 5 21 4 14 0 0 1.00
Number 5 2 12 1 6 16 3 8 18 7 Initial Q (Qb), veh 0<	4 14) 0 1.00
Initial Q (Qb), veh 0 1.00 <td>) 0 1.00</td>) 0 1.00
Ped-Bik Adj(A_pbT) 1.00 <td>1.00</td>	1.00
Parking Bus, Adj1.001.0	
Adj Sat Flow, veh/h/In190018631863190018631900186318631900186318631900186318631900186318631863190018631864190018631864190018631867190018631900186319001863186719001001.011.001.011.011.011.011.011.011.011.011.011.011.01 <t< td=""><td>) 1.00</td></t<>) 1.00
Adj Flow Rate, veh/h3110294871041751303914111874Adj No. of Lanes0110102201Peak Hour Factor1.001.001.001.001.001.001.001.001.001.00Percent Heavy Veh, %22222222222Cap, veh/h1384114701491572222251373143155158Arrive On Green0.300.300.300.300.300.300.070.420.420.090.4Sat Flow, veh/h25313831583288528748344232353371774353Grp Volume(v), veh/h1330943660013021321911874Grp Sat Flow(s),veh/h/ln1636015831565001721177018031774177Q Serve(g_s), s0.00.03.110.70.00.02.65.65.64.610.Cycle Q Clear(g_c), s3.80.03.115.00.00.02.65.65.64.610.Prop In Lane0.231.000.240.481.000.191.001.001.00	
Adj Flow Rate, veh/h3110294871041751303914111874Adj No. of Lanes0110102201Peak Hour Factor1.001.001.001.001.001.001.001.001.001.00Percent Heavy Veh, %22222222222Cap, veh/h1384114701491572222251373143155158Arrive On Green0.300.300.300.300.300.300.070.420.420.090.4Sat Flow, veh/h25313831583288528748344232353371774353Grp Volume(v), veh/h1330943660013021321911874Grp Sat Flow(s),veh/h/ln1636015831565001721177018031774177Q Serve(g_s), s0.00.03.110.70.00.02.65.65.64.610.Cycle Q Clear(g_c), s3.80.03.115.00.00.02.65.65.64.610.Prop In Lane0.231.000.240.481.000.191.001.001.00	3 1863
Adj No. of Lanes0110102201Peak Hour Factor1.00 <td< td=""><td>5-9</td></td<>	5-9
Peak Hour Factor1.001.0	2 1
Percent Heavy Veh, % 2	
Cap, veh/h1384114701491572222251373143155158Arrive On Green0.300.300.300.300.300.300.300.420.420.090.4Sat Flow, veh/h25313831583288528748344232353371774353Grp Volume(v), veh/h1330943660013021321911874Grp Sat Flow(s), veh/h/ln1636015831565001721177018031774177Q Serve(g_s), s0.00.03.110.70.00.02.65.65.64.610.Cycle Q Clear(g_c), s3.80.03.115.00.00.02.65.65.64.610.Prop In Lane0.231.000.240.481.000.191.000.191.00	2 2
Arrive On Green0.300.300.300.300.300.300.300.420.420.420.090.4Sat Flow, veh/h25313831583288528748344232353371774353Grp Volume(v), veh/h1330943660013021321911874Grp Sat Flow(s), veh/h/ln1636015831565001721177018031774177Q Serve(g_s), s0.00.03.110.70.00.02.65.65.64.610.Cycle Q Clear(g_c), s3.80.03.115.00.00.02.65.65.64.610.Prop In Lane0.231.000.240.481.000.191.000.191.00	
Sat Flow, veh/h25313831583288528748344232353371774353Grp Volume(v), veh/h1330943660013021321911874Grp Sat Flow(s),veh/h/ln1636015831565001721177018031774177Q Serve(g_s), s0.00.03.110.70.00.02.65.65.64.610.Cycle Q Clear(g_c), s3.80.03.115.00.00.02.65.65.64.610.Prop In Lane0.231.000.240.481.000.191.000.191.00	
Grp Volume(v), veh/h1330943660013021321911874Grp Sat Flow(s),veh/h/ln1636015831565001721177018031774177Q Serve(g_s), s0.00.03.110.70.00.02.65.65.64.610.Cycle Q Clear(g_c), s3.80.03.115.00.00.02.65.65.64.610.Prop In Lane0.231.000.240.481.000.191.00	
Grp Sat Flow(s),veh/h/ln1636015831565001721177018031774177Q Serve(g_s), s0.00.03.110.70.00.02.65.65.64.610.Cycle Q Clear(g_c), s3.80.03.115.00.00.02.65.65.64.610.Prop In Lane0.231.000.240.481.000.191.00	
Q Serve(g_s), s 0.0 0.0 3.1 10.7 0.0 0.0 2.6 5.6 5.6 4.6 10. Cycle Q Clear(g_c), s 3.8 0.0 3.1 15.0 0.0 0.0 2.6 5.6 5.6 4.6 10. Prop In Lane 0.23 1.00 0.24 0.48 1.00 0.19 1.00	
Cycle Q Clear(g_c), s 3.8 0.0 3.1 15.0 0.0 0.0 2.6 5.6 5.6 4.6 10. Prop In Lane 0.23 1.00 0.24 0.48 1.00 0.19 1.00	
Prop In Lane 0.23 1.00 0.24 0.48 1.00 0.19 1.00	
	1.00
Lane Gib Cabici, ven/n 349 0 470 320 0 0 223 731 703 133 130	
1 = p	
HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	
Upstream Filter(I) 1.00 0.00 1.00 1.00 0.00 0.00 1.00 1.0	
Uniform Delay (d), s/veh 18.8 0.0 18.5 22.5 0.0 0.0 32.0 13.3 13.3 31.5 13.	
Incr Delay (d2), s/veh 0.2 0.0 0.2 1.6 0.0 0.0 2.3 0.9 0.9 7.5 1.	
Initial Q Delay(d3),s/veh 0.0 <td></td>	
%ile BackOfQ(50%),veh/ln 2.0 0.0 1.4 6.7 0.0 0.0 1.3 2.9 3.0 2.6 5.	
LnGrp Delay(d),s/veh 19.0 0.0 18.7 24.2 0.0 0.0 34.4 14.2 14.2 39.0 14.	
	3
Approach Vol, veh/h 227 366 562 85	
Approach Delay, s/veh 18.9 24.2 18.9 18.	
Approach LOS B C B	3
Timer 1 2 3 4 5 6 7 8	
Assigned Phs 2 3 4 6 7 8	
Phs Duration (G+Y+Rc), s 25.5 9.1 36.0 25.5 10.7 34.5	
Change Period (Y+Rc), s 4.5 4.5 4.5 4.5 4.5 4.5	
Max Green Setting (Gmax), s 52.5 20.5 31.5 52.5 22.5 29.5	
Max Q Clear Time (g_c+l1), s 5.8 4.6 12.4 17.0 6.6 7.6	
Green Ext Time (p_c), s 4.1 0.3 7.8 4.0 0.2 8.3	
Intersection Summary	
HCM 2010 Ctrl Delay 19.6	
HCM 2010 LOS B	

Int	Delay,	s/veh
	0000,	0, 1011

Int Delay, s/veh	2.1												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		\$		۲.	•	1	٦	4		1	el -		
Traffic Vol, veh/h	3	242	10	47	183	33	7	0	37	25	1	1	
Future Vol, veh/h	3	242	10	47	183	33	7	0	37	25	1	1	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None										
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-	
Veh in Median Storage, #	- 1	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	3	242	10	47	183	33	7	0	37	25	1	1	

Major/Minor	Major1		N	/lajor2			Minor1			Minor2			
Conflicting Flow All	183	0	0	252	0	0	531	530	247	549	535	183	
Stage 1	-	-	-	-	-	-	253	253	-	277	277	-	
Stage 2	-	-	-	-	-	-	278	277	-	272	258	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1392	-	-	1313	-	-	459	455	792	446	452	859	
Stage 1	-	-	-	-	-	-	751	698	-	729	681	-	
Stage 2	-	-	-	-	-	-	728	681	-	734	694	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1392	-	-	1313	-	-	444	437	792	413	435	859	
Mov Cap-2 Maneuver	-	-	-	-	-	-	444	437	-	413	435	-	
Stage 1	-	-	-	-	-	-	749	696	-	727	657	-	
Stage 2	-	-	-	-	-	-	700	657	-	698	692	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.1	1.4	10.3	14.1	
HCM LOS			В	В	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	444	792	1392	-	-	1313	-	-	413	578
HCM Lane V/C Ratio	0.016	0.047	0.002	-	-	0.036	-	-	0.061	0.003
HCM Control Delay (s)	13.2	9.8	7.6	0	-	7.8	-	-	14.3	11.3
HCM Lane LOS	В	А	А	А	-	А	-	-	В	В
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0.1	-	-	0.2	0

	≯	-	\mathbf{i}	1	+	•	1	Ť	1	1	Ŧ	-
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्भ	1		4		ካካ	≜ ⊅		<u>۲</u>	- ††	1
Traffic Volume (veh/h)	70	100	205	44	95	139	249	803	67	183	563	45
Future Volume (veh/h)	70	100	205	44	95	139	249	803	67	183	563	45
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	70	100	54	44	95	97	249	803	63	183	563	19
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	237	345	108	159	138	384	1431	112	235	1597	714
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.11	0.43	0.43	0.13	0.45	0.45
Sat Flow, veh/h	491	1087	1583	178	729	633	3442	3325	261	1774	3539	1583
Grp Volume(v), veh/h	170	0	54	236	0	0	249	427	439	183	563	19
Grp Sat Flow(s), veh/h/ln	1578	0	1583	1540	0	0	1721	1770	1817	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	1.7	3.5	0.0	0.0	4.3	11.2	11.2	6.1	6.4	0.4
Cycle Q Clear(g_c), s	5.4	0.0	1.7	8.9	0.0	0.0	4.3	11.2	11.2	6.1	6.4	0.4
Prop In Lane	0.41	0.0	1.00	0.19	0.0	0.41	1.00	11.2	0.14	1.00	0.7	1.00
Lane Grp Cap(c), veh/h	426	0	345	405	0	0.41	384	761	782	235	1597	714
V/C Ratio(X)	0.40	0.00	0.16	0.58	0.00	0.00	0.65	0.56	0.56	0.78	0.35	0.03
Avail Cap(c_a), veh/h	796	0.00	733	795	0.00	0.00	1145	761	782	619	1597	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	19.5	22.2	0.0	0.0	26.2	13.2	13.2	25.8	11.0	9.4
Incr Delay (d2), s/veh	0.6	0.0	0.2	1.3	0.0	0.0	1.8	3.0	2.9	25.0 5.5	0.6	9.4 0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6		0.0	3.8	0.0	0.0	2.1	0.0 6.0	0.0 6.1	0.0 3.4	3.3	0.0
%ile BackOfQ(50%),veh/ln		0.0			0.0							
LnGrp Delay(d),s/veh	21.4	0.0	19.7 B	23.5	0.0	0.0	28.1	16.2 B	16.1 B	31.3	11.6	9.5
LnGrp LOS	C	004	D	С	000		C		D	C	<u>B</u>	A
Approach Vol, veh/h		224			236			1115			765	
Approach Delay, s/veh		21.0			23.5			18.8			16.3	
Approach LOS		С			С			В			В	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.9	11.4	32.3		17.9	12.7	31.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	20.5	27.5		28.5	21.5	26.5				
Max Q Clear Time (g_c+I1), s		7.4	6.3	8.4		10.9	8.1	13.2				
Green Ext Time (p_c), s		2.7	0.7	9.5		2.5	0.4	7.6				
Intersection Summary												
HCM 2010 Ctrl Delay			18.7									
HCM 2010 LOS			В									

Int Delay, s/veh	3												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		\$		٦	•	1	1	et e		1	et		
Traffic Vol, veh/h	0	281	23	58	286	42	19	3	89	40	1	0	
Future Vol, veh/h	0	281	23	58	286	42	19	3	89	40	1	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	0	281	23	58	286	42	19	3	89	40	1	0	

Major/Minor	Major1		Ν	/lajor2			Minor1			Minor2			
Conflicting Flow All	286	0	0	304	0	0	696	695	293	741	706	286	
Stage 1	-	-	-	-	-	-	293	293	-	402	402	-	
Stage 2	-	-	-	-	-	-	403	402	-	339	304	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1276	-	-	1257	-	-	356	366	746	332	361	753	
Stage 1	-	-	-	-	-	-	715	670	-	625	600	-	
Stage 2	-	-	-	-	-	-	624	600	-	676	663	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1276	-	-	1257	-	-	343	349	746	280	344	753	
Mov Cap-2 Maneuver	-	-	-	-	-	-	343	349	-	280	344	-	
Stage 1	-	-	-	-	-	-	715	670	-	625	572	-	
Stage 2	-	-	-	-	-	-	594	572	-	593	663	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0	1.2	11.6	19.9	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	343	719	1276	-	-	1257	-	-	280	344
HCM Lane V/C Ratio	0.055	0.128	-	-	-	0.046	-	-	0.143	0.003
HCM Control Delay (s)	16.1	10.7	0	-	-	8	-	-	20	15.5
HCM Lane LOS	С	В	А	-	-	А	-	-	С	С
HCM 95th %tile Q(veh)	0.2	0.4	0	-	-	0.1	-	-	0.5	0

	≯	-	$\mathbf{\hat{z}}$	•	-	•	1	1	/	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		स ी	1		4		ሻሻ	∱ ⊅		<u>۳</u>	- ††	1
Traffic Volume (veh/h)	102	79	288	43	79	147	303	731	56	125	647	116
Future Volume (veh/h)	102	79	288	43	79	147	303	731	56	125	647	116
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	102	79	72	43	79	98	303	731	42	125	647	96
Adj No. of Lanes	0	1	1	0	1	0	2	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	147	390	89	136	134	427	1622	93	161	1569	702
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.12	0.48	0.48	0.09	0.44	0.44
Sat Flow, veh/h	559	595	1583	122	553	542	3442	3402	195	1774	3539	1583
Grp Volume(v), veh/h	181	0	72	220	0	0	303	380	393	125	647	96
Grp Sat Flow(s),veh/h/ln	1154	0	1583	1218	0	0	1721	1770	1828	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.6	2.8	0.0	0.0	6.1	10.4	10.4	5.0	9.0	2.6
Cycle Q Clear(g_c), s	10.8	0.0	2.6	13.6	0.0	0.0	6.1	10.4	10.4	5.0	9.0	2.6
Prop In Lane	0.56		1.00	0.20		0.45	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	362	0	390	359	0	0	427	843	871	161	1569	702
V/C Ratio(X)	0.50	0.00	0.18	0.61	0.00	0.00	0.71	0.45	0.45	0.78	0.41	0.14
Avail Cap(c_a), veh/h	572	0	623	592	0	0	1022	843	871	331	1569	702
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	0.0	21.5	24.7	0.0	0.0	30.5	12.6	12.6	32.2	13.7	11.9
Incr Delay (d2), s/veh	1.1	0.0	0.2	1.7	0.0	0.0	2.2	1.7	1.7	7.8	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	1.2	4.3	0.0	0.0	3.0	5.4	5.6	2.8	4.6	1.2
LnGrp Delay(d),s/veh	25.2	0.0	21.8	26.4	0.0	0.0	32.7	14.4	14.3	40.1	14.5	12.4
LnGrp LOS	С		С	С			С	В	В	D	В	В
Approach Vol, veh/h		253			220			1076			868	
Approach Delay, s/veh		24.2			26.4			19.5			18.0	
Approach LOS		C			C			B			B	
											D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.3	13.5	36.6		22.3	11.1	39.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	21.5	26.5		28.5	13.5	34.5				
Max Q Clear Time (g_c+l1), s		12.8	8.1	11.0		15.6	7.0	12.4				
Green Ext Time (p_c), s		2.5	0.9	8.6		2.3	0.1	10.5				
Intersection Summary												
Intersection Summary HCM 2010 Ctrl Delay HCM 2010 LOS			20.1 C									

Int Delay, s/veh	3.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$		ľ	•	1	ľ	et et		ľ	et e	
Traffic Vol, veh/h	6	272	63	102	311	67	23	3	115	44	4	6
Future Vol, veh/h	6	272	63	102	311	67	23	3	115	44	4	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	272	63	102	311	67	23	3	115	44	4	6

Major/Minor	Major1		Ν	/lajor2			Minor1			Minor2			
Conflicting Flow All	311	0	0	335	0	0	836	831	304	890	862	311	
Stage 1	-	-	-	-	-	-	316	316	-	515	515	-	
Stage 2	-	-	-	-	-	-	520	515	-	375	347	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	1249	-	-	1224	-	-	287	305	736	264	293	729	
Stage 1	-	-	-	-	-	-	695	655	-	543	535	-	
Stage 2	-	-	-	-	-	-	539	535	-	646	635	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1249	-	-	1224	-	-	262	278	736	206	267	729	
Mov Cap-2 Maneuver	-	-	-	-	-	-	262	278	-	206	267	-	
Stage 1	-	-	-	-	-	-	691	651	-	540	490	-	
Stage 2	-	-	-	-	-	-	486	490	-	539	631	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.1	1.7	12.6	24.7	
HCM LOS			В	С	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	262	706	1249	-	-	1224	-	-	206	431
HCM Lane V/C Ratio	0.088	0.167	0.005	-	-	0.083	-	-	0.214	0.023
HCM Control Delay (s)	20.1	11.1	7.9	0	-	8.2	-	-	27.2	13.6
HCM Lane LOS	С	В	А	А	-	А	-	-	D	В
HCM 95th %tile Q(veh)	0.3	0.6	0	-	-	0.3	-	-	0.8	0.1

Appendix E Signalized Intersection Queues

	-	$\mathbf{\hat{v}}$	←	1	Ť	\mathbf{k}	ŧ	∢	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	109	124	327	118	399	90	479	11	
v/c Ratio	0.24	0.25	0.73	0.30	0.25	0.39	0.29	0.01	
Control Delay	22.3	5.7	30.1	32.9	14.6	35.1	14.2	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	22.3	5.7	30.1	32.9	14.6	35.1	14.2	0.0	
Queue Length 50th (ft)	38	0	108	24	54	37	67	0	
Queue Length 95th (ft)	78	36	202	53	111	86	128	0	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	1368	1251	1221	1040	1578	588	1653	768	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.08	0.10	0.27	0.11	0.25	0.15	0.29	0.01	
Intersection Summary									

	-	$\mathbf{\hat{z}}$	←	1	Ť	\mathbf{k}	ŧ	∢
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	142	189	228	222	600	142	456	31
v/c Ratio	0.53	0.41	0.64	0.43	0.37	0.49	0.29	0.04
Control Delay	31.1	6.9	27.1	28.3	14.1	30.9	13.2	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.1	6.9	27.1	28.3	14.1	30.9	13.2	0.7
Queue Length 50th (ft)	49	0	61	40	77	50	55	0
Queue Length 95th (ft)	105	45	134	78	154	108	110	4
Internal Link Dist (ft)	376		80		406		1007	
Turn Bay Length (ft)		225		350		275		
Base Capacity (vph)	618	818	755	1115	1638	603	1563	740
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.23	0.30	0.20	0.37	0.24	0.29	0.04
Intersection Summary								

	-	\mathbf{r}	-	1	1	1	Ļ	1	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	146	266	219	273	543	97	524	95	
v/c Ratio	0.71	0.52	0.63	0.51	0.30	0.41	0.32	0.12	
Control Delay	46.6	7.6	27.5	31.5	12.0	35.1	13.8	2.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	46.6	7.6	27.5	31.5	12.0	35.1	13.8	2.1	
Queue Length 50th (ft)	60	0	62	56	66	39	68	0	
Queue Length 95th (ft)	124	56	134	101	135	90	136	17	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	462	816	703	1083	1828	350	1624	795	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.32	0.33	0.31	0.25	0.30	0.28	0.32	0.12	
Intersection Summary									

	→	\mathbf{r}	+	•	Ť	1	Ŧ	∢	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	115	131	327	121	399	90	479	15	
v/c Ratio	0.27	0.26	0.75	0.32	0.25	0.40	0.30	0.02	
Control Delay	22.8	5.7	31.7	33.0	14.4	35.6	14.7	0.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	22.8	5.7	31.7	33.0	14.4	35.6	14.7	0.1	
Queue Length 50th (ft)	40	0	108	25	54	37	67	0	
Queue Length 95th (ft)	82	37	202	55	112	86	129	0	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	1259	1206	1169	992	1625	561	1576	735	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.09	0.11	0.28	0.12	0.25	0.16	0.30	0.02	
Intersection Summary									

	-	$\mathbf{\hat{v}}$	←	1	Ť	1	Ŧ	-	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	146	194	228	229	600	142	456	40	
v/c Ratio	0.56	0.42	0.64	0.44	0.37	0.49	0.29	0.05	
Control Delay	32.4	6.9	27.1	28.3	14.1	31.0	13.3	1.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	32.4	6.9	27.1	28.3	14.1	31.0	13.3	1.7	
Queue Length 50th (ft)	51	0	61	41	77	50	55	0	
Queue Length 95th (ft)	109	46	134	80	154	108	111	8	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	601	820	754	1114	1639	602	1557	737	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.24	0.24	0.30	0.21	0.37	0.24	0.29	0.05	
Intersection Summary									

	-	$\mathbf{\hat{v}}$	←	1	1	\mathbf{k}	ţ	∢	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	152	273	219	278	543	97	524	101	
v/c Ratio	0.72	0.52	0.61	0.52	0.30	0.41	0.33	0.13	
Control Delay	46.5	7.4	26.6	31.9	12.4	35.5	14.2	2.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	46.5	7.4	26.6	31.9	12.4	35.5	14.2	2.5	
Queue Length 50th (ft)	63	0	62	57	67	39	70	0	
Queue Length 95th (ft)	129	56	134	104	138	91	140	20	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	457	816	697	1073	1812	347	1607	788	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.33	0.33	0.31	0.26	0.30	0.28	0.33	0.13	
Intersection Summary									

	-	\mathbf{r}	←	1	Ť	\mathbf{k}	Ļ	1	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	113	140	349	188	400	92	479	11	
v/c Ratio	0.24	0.27	0.77	0.43	0.25	0.42	0.32	0.02	
Control Delay	22.5	5.4	33.2	34.7	15.4	37.9	16.7	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	22.5	5.4	33.2	34.7	15.4	37.9	16.7	0.0	
Queue Length 50th (ft)	41	0	126	41	58	40	74	0	
Queue Length 95th (ft)	82	38	226	81	120	93	144	0	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	1250	1160	1124	947	1609	536	1501	703	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.09	0.12	0.31	0.20	0.25	0.17	0.32	0.02	
Intersection Summary									

	-	\mathbf{r}	-	1	Ť	\mathbf{k}	Ļ	∢	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	157	254	236	241	602	144	456	31	
v/c Ratio	0.56	0.49	0.66	0.46	0.37	0.49	0.30	0.04	
Control Delay	31.7	6.9	27.9	28.6	14.5	31.4	13.7	0.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	31.7	6.9	27.9	28.6	14.5	31.4	13.7	0.7	
Queue Length 50th (ft)	55	0	66	44	80	51	57	0	
Queue Length 95th (ft)	114	52	140	84	158	110	114	3	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	625	847	744	1102	1628	596	1537	728	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.25	0.30	0.32	0.22	0.37	0.24	0.30	0.04	
Intersection Summary									

	-	\mathbf{r}	←	1	1	1	Ļ	-	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	146	266	281	273	571	131	524	95	
v/c Ratio	0.61	0.48	0.73	0.52	0.33	0.52	0.34	0.12	
Control Delay	38.2	6.6	32.7	33.9	14.1	39.4	15.7	2.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	38.2	6.6	32.7	33.9	14.1	39.4	15.7	2.2	
Queue Length 50th (ft)	62	0	94	61	82	57	78	0	
Queue Length 95th (ft)	123	54	180	106	155	122	151	18	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	432	785	643	1021	1724	330	1563	770	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.34	0.34	0.44	0.27	0.33	0.40	0.34	0.12	
Intersection Summary									

	-	\mathbf{r}	-	1	Ť	\mathbf{b}	ţ	∢	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	119	147	349	191	400	92	479	15	
v/c Ratio	0.26	0.28	0.77	0.43	0.25	0.42	0.32	0.02	
Control Delay	22.9	5.3	33.2	34.8	15.4	38.0	16.8	0.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	22.9	5.3	33.2	34.8	15.4	38.0	16.8	0.1	
Queue Length 50th (ft)	43	0	126	42	58	40	74	0	
Queue Length 95th (ft)	86	39	228	82	120	93	145	0	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	1203	1160	1121	945	1610	535	1498	701	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.10	0.13	0.31	0.20	0.25	0.17	0.32	0.02	
Intersection Summary									

	-	\mathbf{r}	+	1	Ť	\mathbf{b}	ţ	∢	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	161	259	236	248	602	144	456	40	
v/c Ratio	0.59	0.49	0.65	0.46	0.37	0.49	0.30	0.06	
Control Delay	33.0	6.9	27.8	28.6	14.5	31.5	13.9	1.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	33.0	6.9	27.8	28.6	14.5	31.5	13.9	1.8	
Queue Length 50th (ft)	57	0	66	45	80	52	57	0	
Queue Length 95th (ft)	119	53	140	86	158	110	114	8	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	608	849	742	1101	1629	595	1530	726	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.26	0.31	0.32	0.23	0.37	0.24	0.30	0.06	
Intersection Summary									

	-	$\mathbf{\hat{v}}$	+	1	Ť	\mathbf{k}	Ļ	∢_	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	152	273	281	278	571	131	524	101	
v/c Ratio	0.66	0.49	0.73	0.52	0.33	0.52	0.34	0.13	
Control Delay	41.3	6.6	32.7	33.8	14.1	39.5	15.8	2.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	41.3	6.6	32.7	33.8	14.1	39.5	15.8	2.7	
Queue Length 50th (ft)	65	0	94	62	82	57	78	0	
Queue Length 95th (ft)	130	55	180	108	155	122	151	21	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	416	789	642	1021	1724	330	1556	767	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.37	0.35	0.44	0.27	0.33	0.40	0.34	0.13	
Intersection Summary									

	→	\mathbf{r}	←	•	Ť	1	Ļ	∢
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	127	145	393	127	434	118	745	17
v/c Ratio	0.26	0.26	0.79	0.34	0.29	0.49	0.50	0.02
Control Delay	22.1	4.9	33.7	36.7	18.3	39.6	19.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.1	4.9	33.7	36.7	18.3	39.6	19.5	0.1
Queue Length 50th (ft)	45	0	145	28	71	52	131	0
Queue Length 95th (ft)	92	37	263	63	147	117	247	0
Internal Link Dist (ft)	376		80		406		1007	
Turn Bay Length (ft)		225		350		275		
Base Capacity (vph)	1137	1135	1088	922	1496	522	1492	699
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.13	0.36	0.14	0.29	0.23	0.50	0.02
Intersection Summary								

	-	$\mathbf{\hat{v}}$	-	1	Ť	\mathbf{k}	Ļ	∢
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	166	200	278	242	870	183	563	36
v/c Ratio	0.62	0.40	0.70	0.47	0.62	0.57	0.37	0.05
Control Delay	35.2	6.3	29.6	30.8	20.5	33.6	15.4	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	6.3	29.6	30.8	20.5	33.6	15.4	1.3
Queue Length 50th (ft)	62	0	82	47	143	69	78	0
Queue Length 95th (ft)	130	47	171	92	278	143	154	6
Internal Link Dist (ft)	376		80		406		1007	
Turn Bay Length (ft)		225		350		275		
Base Capacity (vph)	522	788	715	1051	1397	568	1519	721
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.25	0.39	0.23	0.62	0.32	0.37	0.05
Intersection Summary								

	-	\mathbf{r}	-	1	1	\mathbf{k}	Ļ	∢	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	175	281	269	298	787	125	647	110	
//c Ratio	0.80	0.49	0.66	0.54	0.46	0.51	0.42	0.15	
ontrol Delay	54.6	6.5	27.6	33.8	16.0	39.6	17.3	3.4	
ueue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
otal Delay	54.6	6.5	27.6	33.8	16.0	39.6	17.3	3.4	
ueue Length 50th (ft)	78	0	83	65	124	54	101	0	
ueue Length 95th (ft)	153	55	164	116	233	119	198	26	
ternal Link Dist (ft)	376		80		406		1007		
ırn Bay Length (ft)		225		350		275			
ise Capacity (vph)	387	792	668	1018	1728	329	1527	755	
tarvation Cap Reductn	0	0	0	0	0	0	0	0	
pillback Cap Reductn	0	0	0	0	0	0	0	0	
orage Cap Reductn	0	0	0	0	0	0	0	0	
educed v/c Ratio	0.45	0.35	0.40	0.29	0.46	0.38	0.42	0.15	
ntersection Summary									

	-	\mathbf{r}	-	1	1	1	Ļ	∢	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	133	152	393	130	434	118	745	21	
v/c Ratio	0.29	0.27	0.79	0.35	0.29	0.49	0.50	0.03	
Control Delay	22.5	4.9	33.8	36.7	18.3	39.6	19.6	0.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	22.5	4.9	33.8	36.7	18.3	39.6	19.6	0.4	
Queue Length 50th (ft)	48	0	145	29	71	52	131	0	
Queue Length 95th (ft)	96	38	263	65	147	117	247	2	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	1090	1136	1085	922	1496	522	1490	698	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.12	0.13	0.36	0.14	0.29	0.23	0.50	0.03	
Intersection Summary									

Queues 1: Highway 1 & Capistrano Road

	-	\mathbf{i}	←	1	1	1	Ļ	-	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	170	205	278	249	870	183	563	45	
v/c Ratio	0.65	0.41	0.70	0.48	0.62	0.57	0.37	0.06	
Control Delay	37.2	6.3	29.6	30.7	20.5	33.7	15.5	2.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	37.2	6.3	29.6	30.7	20.5	33.7	15.5	2.2	
Queue Length 50th (ft)	64	0	82	48	143	69	78	0	
Queue Length 95th (ft)	135	48	171	94	278	143	155	11	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	508	791	715	1050	1398	567	1513	719	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.33	0.26	0.39	0.24	0.62	0.32	0.37	0.06	
Intersection Summary									

Queues 1: Highway 1 & Capistrano Road

	→	\mathbf{r}	←	•	Ť	1	Ļ	1	
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	181	288	269	303	787	125	647	116	
v/c Ratio	0.79	0.49	0.64	0.55	0.46	0.52	0.43	0.16	
Control Delay	51.8	6.2	26.3	34.3	16.6	40.4	18.1	3.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	51.8	6.2	26.3	34.3	16.6	40.4	18.1	3.9	
Queue Length 50th (ft)	81	0	84	69	131	56	107	0	
Queue Length 95th (ft)	157	55	163	119	238	121	205	30	
Internal Link Dist (ft)	376		80		406		1007		
Turn Bay Length (ft)		225		350		275			
Base Capacity (vph)	385	790	660	1004	1707	325	1500	744	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.47	0.36	0.41	0.30	0.46	0.38	0.43	0.16	
Intersection Summary									

ATTACHMENT



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT



1970 Broadway, Suite 740 Oakland, CA 94612-2219 510.763.2061 www.dksassociates.com

MEMORANDUM

DATE:	November 30, 2018
TO:	Ruemel Panglao, San Mateo County
FROM:	Josh Pilachowski, DKS Associates Erin Vaca, DKS Associates
SUBJECT:	Draft Peer Review of Princeton Harbor RV Park TIA

INTRODUCTION

This technical memorandum summarizes the results of a peer review of the Transportation Impact Assessment (TIA) done for the 280 Capistrano Road Princeton Harbor RV Park Project, prepared for the Point Pillar Project Developers, LLC.

The following document was reviewed as part of the peer review:

280 Capistrano Road Princeton Harbor RV Park Draft Traffic Impact Analysis (June 7, 2017) – prepared by Hexagon Transportation Consultants.

Comments are summarized in the following section which corresponds to the structure of the TIA. The final section summarizes the most critical comments and findings.

TIA REVIEW BY SECTION

Executive Summary

- Page i The intersection of Pillar Point Harbor Boulevard and Capistrano Road should be described as an "unsignalized" intersection in the first paragraph to clarify that the driveway entrance is not signalized.
- Page i *Just as a point of information*, the ITE Trip Generation Manual 9th Edition was used and referenced throughout the report. Although published after the TIA was prepared, there is a 10th edition now in use (Trip Generation Manual, 10th Edition, September 2017).
- Page ii Under project impacts, vehicles on stop-controlled approaches to the unsignalized intersection of Pillar Point Harbor Boulevard and Capistrano Road are said to "experience moderate delays." Impacts should focus instead on expected change due to the project, so this should be revised to say the intersection would "experience minimal increases in delay" between the no-project and project conditions. This comment applies to descriptions of project impacts throughout the document.



Chapter 1: Introduction

Scope of Study

- **Missing Requirements** Introduction should include parcel size, general terrain features, surrounding use, and existing/proposed zoning categories.
- Page 2 Figure 1: Legend should read "El Granada (unincorporated San Mateo County)". This change to the legend should be made on all the figures in the document.
- Page 4 Section is unlabeled and should have a section heading, such as "Analysis Scenarios": The reference to Synchro also belongs in the methodology section instead of scenario listing. It is also typical to specify the version of the Synchro software used, even though this information can be obtained from the worksheets in the Appendix D. This comment also applies anywhere the Synchro software package is mentioned..
- Page 4 The bullet point for Scenario 2 should note that the list of approved projects is included in Appendix **C** (not B). Also, it is standard to order Appendices in the order they appear in the report, so it is unusual to start with Appendix C. The previous appendices could be referenced in the description of Scenario 1.
- Page 4 Just as a point of information, the standard TIA order generally places Project description and Existing Plus Project scenario analysis before the introduction of Background and Background Plus Project, unless there is no Existing Plus Project analysis included. I don't think I've seen this scenario order before.
- Page 4 Section heading should read Level of Service Definitions and Analysis Methodologies as Standards are not discussed.

Methodology

- Page 5 Since Highway Capacity Manual (HCM) 2010 methods were used in the analysis, Table 1 should reference this source and not HCM 2000, even though the LOS definitions have not changed between the two references. The same comment applies to Table 2.
- Page 6 The second sentence of the paragraph under "CMP Roadway System" should be revised as follows, "Given that nNew SR 1 trips generated by the project are expected to be considerably less..."
- Page 6 In Table 3, the source of the existing roadway lanes and capacity is unclear. The first table note gives source as the "Level of Service and Performance Measure Monitoring Report – 2015". However, the 2015 CMP Appendix A, inventory lists State Route 1 (SR 1) from Santa Cruz County to Linda Mar Boulevard as a two-lane highway (while there are additional through and turning lanes at the intersection with Capistrano Road, SR-1 in the project vicinity is generally a two-lane highway). Appendix B of the 2015 CMP specifies that LOS for two-lane highways is to be based on two-way volume compared to a total capacity of 2,800 vehicles per hour (vph) and should not be separated by direction.



Revised analysis suggested - Table 3 should be revised to follow the methodology outlined in the 2015 CMP, combining project traffic into bi-directional volumes with accurate capacity. In addition, the same analysis should be shown for the Saturday midday period.

- Page 7 The section under "Intersection Operations" should specify whether the calculations were carried out by hand or using the Synchro software.
- Page 7 Revised Analysis suggested The Poisson arrivals analysis described under Intersection Operations is inadequate to fully analyze queue lengths as this method measures only arrivals and not the rate that vehicles can disperse based on gaps in conflicting traffic flows. Either use Synchro output or methodology from the 2010 Highway Capacity Manual for estimating queue lengths found in Chapters 18 and 19.

Chapter 2: Existing Conditions

Existing Transit Services

• Page 10 - Figure 3 should show the location of bus stops within walking distance to the project site.

Existing Intersection Levels of Service

• Page 13 – Peak Hours should be ordered as Weekday AM, Weekday PM, Saturday Midday. As presented it is easy to assume that midday analysis occurs during the weekday.

Chapter 3. Background Conditions

Roadway Network and Traffic Volumes

• Page 14 - The correct reference to the appendix containing a list of approved projects in the second paragraph is Appendix C and the correct reference to the appendix with the traffic volume tabulations is Appendix B.

Chapter 4 Project Conditions

Significant Impact Criteria

 Page 17 - The source document for the thresholds of significance for impacts should be cited.

Transportation Network Under Project Conditions

 Page 17 - The description of the transportation network under project conditions could be more clearly worded as, "The proposed project does not include any changes to the existing transportation network." This is not an assumption but based upon the project description.



Trip Generation

- Page 18 In Table 6, the total and number of inbound trips and outbound trips calculated from the survey data should not be averaged, as they describe different size parks. Instead in/out should be calculated as a rate similar to total and then averaged.
- Page 18 –In the report, the RV Park trip generation survey was said to have been conducted in March 2017. The first sheets in Appendix A are dated Tuesday and Wednesday in August of 2016. The trip generation sheets are also labelled as "AM Peak Hour" and "PM Peak Hour" and the peak volumes do not appear to correspond to the data in the table. We would suggest removing the unnecessary pages from the appendix.
- Page 19 **Revised analysis suggested** In Table 7, the trip generation calculations are based on 50 RV spaces, but the project definition also includes 7 tent spaces. There needs to be an explanation as to why these would not generate trips, or the generation/analysis needs to be revised. In addition, given the conservative assumption of 100 percent occupancy of the RV spaces (the ITE trip generation rate is per occupied space), it may have thought not to be necessary to include the tent spaces in the calculation. However, all assumptions should be clearly stated.

Chapter 5. Cumulative Conditions

- Page 25 The Roadway Network and Traffic Volumes methodology is confusing and should be rewritten for clarity. First, it's stated that 1% growth plus approved developments make up baseline cumulative. Then it's stated that 1% growth plus (presumably) trips from this project were added without restating addition of approved developments.
- Page 25 **Revised analysis suggested** Standard cumulative horizon period is 15-20 years. This cumulative analysis was done for a 5-year horizon period, which is more consistent with a near-term or background analysis. If needed, a source of year 2040 traffic forecasts for SR 1 is readily available in the C/CAG travel demand model. Otherwise, this section of the analysis should be removed if not deemed necessary by the County.

Chapter 6. Other Transportation Issues

• Page 28 – **Revised analysis suggested** - As stated in the Methodology section, the Poisson arrivals analysis described under Intersection Operations is not an appropriate methodology. Also, the methodology does not need to be completely restated in this section.



CONCLUSIONS

Analysis Requirements

Based upon the San Mateo County Traffic Impact Study Guidelines, the proposed development does not meet minimum threshold of 100 vehicles generated during a peak hour that would require a traffic study, however other considerations can prompt a similar study, such as community or staff concerns for potential impacts to the surrounding network. The traffic study as submitted meets San Mateo County Traffic Study with a couple notable omissions including general site description (parcel size, general terrain features, surrounding use, and existing/proposed zoning categories), daily roadway volumes, and 20-year traffic volumes and analysis (cumulative scenario is presented as 5-year analysis). The Local Coastal Program policies do not include any relevant information in conflict with the analysis as presented. The appropriate checklist is attached.

Environmental Requirements

From a CEQA standpoint, the analysis does not present any impacts, with the one exception being the potential of needing roadway analysis pending the corrected roadway capacity analysis to confirm if the project adds 1% to Highway 1 as an adjacent CMP facility. The appropriate checklist is attached.

Pending Analysis

- A final confirmation of the conclusions above is pending a revised roadway segment capacity evaluation, a corrected queueing analysis, a corrected trip generation analysis, and addition of an appropriate 20-year cumulative condition volume and analysis. Additionally, it should be noted that the organization of the report chapters is atypical and somewhat confusing. A more standard and easier-to-follow presentation would organize the discussion of conditions as follows:
 - Existing Conditions
 - o Existing plus Project Conditions
 - Background Conditions
 - Background plus Project Conditions
 - Cumulative Conditions

Cumulative plus Project Conditions

ATTACHMENT J



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

PPENDIX F

HAREOIZ VILLAGE RV PARK

			Compliance					
	Measure	Description & Performance Criteria	Complies	Does Not Comply	N/A	See Discussion		
1.1	Energy Upgrade California	Participate in an energy retrofit rebate program, to achieve a minimum of 30% energy savings.			\star	/		
1.2	Residential Energy Efficiency Financing	Participate in a residential energy efficiency financing program, to achieve 30% energy savings.			4	\checkmark		
1.3	Low-Income Weatherization	Complete weatherization, to achieve average energy savings of 25%.			\checkmark	\checkmark		
1.4	Tree Planting	Tree plantings to shade new or existing homes.	×					
1.5	Propane Switch	Switch from propane heater to more energy-efficient options, such as Energy Star furnaces or electric air-source pumps.			\checkmark	V		
2.1	Commercial and Industrial Efficiency	Complete energy efficiency upgrades through third-party programs.			Х	1		
2.2	Commercial Financing	Participate in commercial energy efficiency financing programs, to achieve a minimum of 30% energy savings.			×	V		
2.3	Institutional Energy Efficiency	Complete energy efficiency retrofits at large institutional facilities.			X	\checkmark		
3.1	Green Building Ordinance	Comply with the Green Building Ordinance and achieve CALGreen Tier 1 energy efficiency standards, for all construction projects subject to the Green Building Ordinance.	×					

PPENDIX F

APPENDIX F: EECAP DEVELOPMENT CHECKLIST

HORBOR VILLAGE RV PARK Compliance **Description & Performance** Does Measure See Criteria Complies N/A Not Discussion Comply Comply with the Green Building Ordinance and achieve CALGreen Green Building 3.2 Tier 1 energy efficiency standards, X Incentives regardless of applicability of the Green Building Ordinance. Install shading, "cool" surfaces design, and/or open-grid paving to **Urban Heat** reduce hardscape through 3.3 Island strategies such as interlocking concrete pavement, stones, or blocks. Procure and install energy-efficient Regional Energy equipment, through programs such 3.6 Efficiency as bulk-purchasing, to achieve a Efforts minimum of 8% energy savings. Install a solar photovoltaic system, using private resources and/or local Solar PV or state incentives, including 4.1 Incentives County incentives, and state rebates through the California Solar Initiative. Install solar water heaters, using private resources and/or local or Solar Water state incentives, including County 4.2 Heater incentives and state rebates Incentives through the California Solar Initiative. **Pre-Wired Solar** Pre-wire and pre-plumb for solar 4.3 Homes thermal or PV systems. ·V Install a solar photovoltaic system **Pilot Solar** 4.4 through a development project Program program. Install a solar photovoltaic system or solar water heater using Renewable 4.5 financing programs such as power Financing purchase agreements or Property Assessed Clean Energy.

APPENDIX F: EECAP DEVELOPMENT CHECKLIST

PPENDIX F

HORBOR VILLAGE NY PARK

		Description & Performance Criteria	Compliance					
	Measure		Complies	Does Not Comply	N/A	See Discussion		
4.7	Incentivize Wind Energy	Install small distributed generation wind power systems on existing development.			X	V		
4.9	Emissions Offset Programs	Participate in an energy offset program to purchase electricity generated from renewable sources off site.		X				
5.1	General Plan and Zoning Updates	Provide transit-oriented, mixed-use developments.			X	V		
5.3	Pedestrian Design	Incorporate pedestrian design elements to enhance walkability and connectivity, while balancing impacts on vehicle congestion.			X	~		
6.1	Neighborhood Retail	Provide neighborhood retail, daily service and commercial amenities in residential communities.			X	V		
6.2	Traffic Calming in New Construction	Incorporate appropriate traffic- calming features, such as marked crosswalks, countdown signal timers, planter strips with street trees, and curb extensions.			X	V		
6.4	Expand Transit	Enhance bus and safety shelter amenities to support public transit ridership.			¥	/		
7.1	Parking Ordinance	Provide staggered parking demand, reduced parking, or parking based on demand levels that is lower than required in the code, if supported by parking study findings or proximity to mixed-use and public transit services.			1 A	~		
7.3	Unbundled Parking	Price parking separately from rentals or leases, using strategies such as metered parking or parking permits.			X	\checkmark		

PENDIX F APPENDIX F: EECAP DEVELOPMENT CHECKLIST

	HARBORV	ILLAGE NY PARK	_			
				Comp	liance	
	Measure	Description & Performance Criteria	Complies	Does Not Comply	N/A	See Discussion
8.1	Employee Commute	Provide a Commute Trip Reduction program to discourage single- occupancy vehicle trips and encourage other modes of alternative transportation.			×	L
8.2	Workplace Parking	Implement workplace parking pricing programs.			×	V
8.3	Employer Transit Subsidies	Provide transit subsidies or transit passes to employees.			×	C
8.4	Work Shuttles	Expand worker shuttle programs.			×	1
10.1	Low Carbon Fuel Infrastructure	Install electric vehicle charging stations or provide neighborhood electric vehicle networks.		Х	ļ	
13.1	Use of Recycled Materials	Incorporate a minimum of 15% recycled materials into construction.		X		
13.2	Zero Waste	Provide trash, recycling, and composting collection enclosures.	X			
14.1	Smart Water Meters	Install smart water meters.	\star			
14.2	Water Reuse	Use grey, rain, and recycled water for landscaping or agricultural purposes.		\checkmark		
15.1	Construction Idling	Construction equipment for new development to comply with best management practices from Bay Area Air Quality Management District guidance.	\times			
15.2	Electrification in New Homes	Provide outdoor electrical outlets for charging outdoor household equipment.	X			

APPENDIX F: EECAP DEVELOPMENT CHECKLIST

PENDIX F

HARPOR VILLAGE RY PARK

1.00

Discussion (please list policy #)

* THE FOLLOWING POLICY NUMBERS 1.1, 1.2, 1.3, 2.1, 22, 23, 3.6, 4.3
AND 4.4 DILE HOT APPLICABLE SIDLE THE PROPOSED PROJECT
NON-12251 VENTIAL/COMMERCIAL DUOLELT.
Y TOTAL DIZIDID AND BIT ARE NOTAILLICABLE
ASTHE PARK WILL NOT HAVE ANY EMPLOYEES EXCEPT
ASTHE PARK WILL NOT HAVE ANY EMPLOYEES EXCEPT FOR THE PAVK MANAGENS WHO WILL HIVE ONSITE IN THERE RUS 24/7.
* POLICY # 4.5 THE PROJECT 15 NOT LANGE ENOUGH TO
WAVENT RENGE A DLE FINACING,
* POLICY # 4.7 THERE 15 NO EXISTING DEVELOPMENT IBE
WIND ENERSY IN CENTIVE.
+ POLICY NOMOGVS 511,5-2,6.1,6-2,6-4,7.1 +ND 7.3
THE WOJELI IS NOT HAVE ENOUGH TO WARRENT
THE SE WER-SOVES
* THE Proposed 869 SOFT LAWNOW BATH BULDING 15

POLICY # 4.2 NOT LANGE ENOUGH TO GENERATE RECYCLED WATER