## Fehr & Peers

# Memorandum

Subject:	2433 Mariner Square Drive Project – Site Access and Circulation Review
From:	Sam Tabibnia, Fehr and Peers
То:	Stephen Siri, Martin Mariner Square, LLC
Date:	July 10, 2025

OK24-2433

This memorandum summarizes the access and circulation review conducted by Fehr & Peers for the proposed development, consisting of a 356-unit multifamily residential building at 2433 Mariner Square Drive in the City of Alameda.

Based on our evaluation, the Project would accommodate access and circulation for automobiles, bicycles, and pedestrians, and would meet the City's requirements for automobile and bicycle parking. The following recommendations would improve access and circulation for the Project and the surrounding areas:

- Consider constructing a physical barrier, such as a narrow, raised median with soft-hit posts, on Mariner Square Loop extending for about 100 feet east of the signalized intersection to prohibit left-turns into and out of the Project driveways on Mariner Square Loop.
- 2. Consider one of the following at the Mariner Square Drive/Mariner Square Loop/Marina Village Parkway intersection to accommodate U-turns on eastbound Mariner Square Loop:
  - Provide fair-share contribution to convert the intersection from all-way stopcontrolled to a roundabout
  - Modify the eastbound intersection approach to accommodate U-Turns (coordinate with Recommendation 3 which recommends removing the porkchop island at the northwest corner of the intersection)
- 3. At the Mariner Square Drive/Mariner Square Loop/Marina Village Parkway intersection, consider removing the southbound right-turn lane and the adjacent porkchop island

The remainder of this memorandum provides more detail on our analysis assumptions, methodology, and findings.



#### 1. Project Description

The Project would construct a 356-unit multifamily residential building at 2433 Mariner Square Drive in the City of Alameda. The Project site is bound by Mariner Square Drive to the east, Mariner Square Loop to the south, and a surface parking lot owned by Caltrans to the northwest. The Project would provide 414 vehicular parking spaces in the following two facilities:

- 283 parking spaces in a garage occupying the bottom three levels of the apartment building accessed through one driveway on Mariner Square Loop about 70 feet east of Mitchell Avenue.
- 131 parking spaces leased in the adjacent Caltrans surface parking lot accessed through two driveways, one on Mariner Square Loop just east of Mitchell Avenue and one on Mariner Square Drive just north of the Project building.

The Project site is currently occupied by four office buildings with about 37,400 square feet of space that the Project would demolish. **Attachment A** shows the Project site plan June 26, 2025.

#### 2. Site Access and Circulation Analysis

This section summarizes an evaluation of access and circulation for all travel modes, based on the site plan dated June 26, 2025, and shown on Figure 1.

#### **Automobile Access and Circulation**

Access and circulation for the Project parking facilities are described below.

- Parking garage The Project parking garage would accommodate 283 parking spaces on the first three levels of the apartment building. The garage would be accessed through one gated two-way driveway on Mariner Square Loop about 70 feet east of the signalized intersection with Mitchell Avenue. The driveway would connect to the first level of the garage and the three levels would be connected through two-way ramps. Each parking level would provide two-way drive aisles to access the parking spaces.
- Surface lot The existing surface lot, located just west of the Project building, would continue to be used as a parking lot. The Project will lease this lot from Caltrans to provide 131 parking spaces. The Lot would be accessed through two two-way gated driveways, one on Mariner Square Loop just east of Mitchell Avenue and one on Mariner Square Drive just north of the Project building. Most parking spaces in the parking lot would be angled and accessed through one-way drive aisles with counterclockwise circulation.

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Based on a review of the Project site plan, the three Project driveways would provide adequate sight distance between exiting motorists and pedestrians on the adjacent sidewalk on each side of each driveway.<sup>1</sup>

The proposed garage driveway and the existing Caltrans lot driveway on Mariner Square Loop would be within 70 feet of the intersection with Mitchell Avenue. The proximity of the two driveways to each other and to the adjacent signalized intersection could result in vehicles waiting to turn left from eastbound Mariner Square Loop into either driveway to queue on eastbound Mariner Square Loop and spill back into the intersection. In addition, vehicles turning left out of either driveway may have limited sight distance to eastbound Mariner Square Loop. Therefore, it is recommended that both driveways on Mariner Square Loop be limited to right-in/right-out only through installation of a physical median barrier.

**Recommendation 1:** Consider constructing a physical barrier, such as a narrow, raised median with soft-hit posts, on Mariner Square Loop extending for about 100 feet east of the signalized intersection to prohibit left-turns into and out of the Project driveways on Mariner Square Loop.

The implementation of a median on Mariner Square Loop per Recommendation 1 would result in vehicles wanting to turn left into or out of the surface lot to use the driveway on Mariner Square Drive. Vehicles wanting to turn left into or out of the garage may need to take circuitous routes. Accommodating U-turns on eastbound Mariner Square Loop at the Mariner Square Drive/ Mariner Square Loop/Marina Village Parkway intersection would improve access for vehicles approaching the garage from eastbound Mariner Square Loop or Mitchell Avenue.

**Recommendation 2:** Consider one of the following at the Mariner Square Drive/Mariner Square Loop/Marina Village Parkway intersection to accommodate U-turns on eastbound Mariner Square Loop:

- Provide fair-share contribution to convert the intersection from all-way stopcontrolled to a roundabout
- Modify the eastbound intersection approach to accommodate U-Turns (coordinate with Recommendation 3 which recommends removing the porkchop island at the northwest corner of the intersection)

#### **Bicycle Access**

The Project site is currently served by the following bicycle facilities:

• Shared-use path east of Mariner Square Drive and south of Marina Village Parkway

<sup>&</sup>lt;sup>1</sup> Adequate sight distance is defined as a clear line-of-sight between a motorist ten feet back from the sidewalk and a pedestrian 10 feet away on each side of the driveway.



• Bike lanes on both directions of Mitchell Avenue, Mariner Square Loop, and Marina Village Parkway

The Bikeway Vision network in the *City of Alameda Active Transportation Plan* (December 2022) includes the following in the Project vicinity:

• Separated bike lanes on Mariner Square Drive along the eastern Project frontage connecting to separated bike lanes along Marina Village Parkway and extending to Wilma Chan Way.

Consistent with the Bikeway Vision network, the Project would eliminate the existing angled parking along the Project frontage on southbound Mariner Square Drive and construct a separated bike lane with parallel parking between the bike and automobile lanes.

#### **Pedestrian Access and Circulation**

Primary pedestrian access for the Project would be through the main lobby on the east side of the building on Mariner Square Drive, about 500 feet north of Mariner Square Loop and just south of the surface lot driveway. The main lobby would provide access to the garage, elevators, and building amenities such as fitness center and bike room. The building can also be accessed through a second lobby with one elevator located at the southwest corner of the building near the garage driveway on Mariner Square Loop. The Project building can also be accessed through stairs on the west side of the building adjacent to the surface lot and on the east side of the building on Mariner Square Drive. Each parking level provides multiple access points between the garage and the building corridors and elevators.

Both Mariner Square Drive and Mariner Square Loop currently provide five-foot sidewalks along the Project frontages. The Project would retain these sidewalks.

Pedestrian facilities at the intersections near the Project site include:

- Mariner Square Loop/Mitchell Avenue is a signalized three-way intersection. All three intersection approaches provide crosswalks marked by white lines, and all pedestrian crossings provide directional curb ramps with truncated domes, countdown signal heads, and pushbuttons.
- The Mariner Square Drive/Mariner Square Loop/Marina Village Parkway intersection is an all-way stop-controlled intersection with crosswalks marked by white lines across all four approaches. Three of the intersection corners provide directional curb ramps with truncated domes and the southwest corner provides one diagonal curb ramp with truncated domes. Porkchop islands on the northwest and southeast corners of the



intersection require multiple crossings by pedestrians. Thus, removing the porkchop island would reduce the pedestrian crossing distance at the intersection.

**Recommendation 3:** At the Mariner Square Drive/Mariner Square Loop/Marina Village Parkway intersection, consider removing the southbound right-turn lane and the adjacent porkchop island.

### 3. Parking Analysis

This section presents City Code requirements for both automobile and bicycle parking.

#### **Automobile Parking Requirements**

The *City of Alameda Municipal Code* (Section 30-7.3) requires off-street automobile parking for developments. As summarized in **Table 1**, the City has no minimum parking requirement, and requires a maximum of 1.5 parking spaces per dwelling unit, which corresponds to 531 spaces for the Project. The Project would provide 414 parking spaces, consisting of 283 parking spaces in the parking garage and 131 parking spaces leased in the adjacent surface lot, and would meet the Code's total parking requirements for the Project.

#### **Required Off-Street** Within Size Parking **Parking Supply** Use (DU)<sup>1</sup> Range? Supply Minimum<sup>2</sup> Maximum<sup>2</sup> Residential 356 0 534 414 Yes

#### **Table 1: Automobile Parking Requirements**

Notes:

1. DU = Dwelling Units

2. Per City of Alameda Municipal Code 30-7.3 – Off-Street Vehicle Parking Regulations, Table A: Allowable Maximum Off-Street Parking Requirements, Dwelling Units: 1.5 spaces required per dwelling unit

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All parking spaces in the garage would be standard spaces (8.5 feet by 18 feet). The surface lot would include 54 compact spaces (7.5 feet by 15 feet), which corresponds to about 41 percent of the spaces in the surface lot, which is consistent with the *Code* (Section 30-7.8) requirement that no more than 50 percent of parking spaces be compact.

All parking spaces in the garage would be perpendicular on minimum 22-foot drive aisles, and all the surface lot spaces would be angled at 60 degrees and served by minimum 22-foot drive aisles, meeting *Code* (Section 30-7.8) requirements for back-up area depth.

The parking garage would include 10 pairs of tandem parking spaces, for a total of 20 parking spaces. Since the *Code* does not specifically address tandem parking and the total Project parking supply would be within the range allowed by the Code, the tandem parking spaces are

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considered consistent with the Code. It is expected that each pair of tandem parking spaces would be assigned to a single residential unit.

#### Plug-in Electric Vehicle (EV) Charging Infrastructure

The *City of Alameda Municipal Code* (Section 30-7.5) requires projects to provide EV-ready spaces with a mix of Level 1 and Level 2 charging capacities. The *Code* requires a minimum of 25 percent of all parking spaces as Level 1 EV-ready and an additional 25 percent as Level 2 EV-ready spaces. Thus, as summarized in **Table 2**, Since the Project would provide 283 on-site parking spaces, it is required to provide at least 71 Level 1 and 71 Level 2 EV-ready parking spaces. Based on the Project site plan, the Project would provide 143 EV parking spaces, which would meet Code requirements.

#### **Table 2: Electric Vehicle Charging and Accessible Parking Requirements**

Parking Type	Size	Required	Provided	Meets Code Requirements?					
EV Charging Requirements									
Level 1 Spaces <sup>1</sup>	283 parking	71 spaces <sup>4</sup>	142 charges	Yes					
Level 2 Spaces <sup>2</sup>	spaces <sup>3</sup>	71 spaces <sup>4</sup>	143 spaces	res					
ADA-Accessible Parking Spaces									
Passenger Vehicle Accessible	356 units	7 spaces⁵	13 spaces	Yes					
Van Accessible		1 space <sup>6</sup>	4 spaces	Yes					

Notes:

1. Per *City of Alameda Municipal Code* Section 30-7.5.G.1, Level 1 EV Ready Space shall mean a space that is served by a complete electric circuit with a minimum of 110/120 volt, 20-ampere capacity including electrical panel capacity, and such additional elements deemed necessary by the Building Official.

- 2. Per *City of Alameda Municipal Code* Section 30-7.5.G.2, Level 2 EV Ready Space shall mean a space that is served by a complete electric circuit with a minimum of 208/240 volt, 40-ampere capacity including electrical panel capacity, and such additional elements deemed necessary by the Building Official, or b) electric vehicle supply equipment (EVSE) with a minimum output of 30 amperes.
- 3. Consists of the parking supply constructed by the Project and does not include the leased parking spaces in the adjacent parking lot.
- Per City of Alameda Municipal Code Section 30-7.5 Off-Street Electric Vehicle (EV) Charging Requirements, Residential Use – Multifamily Shared Parking Facilities, 25% of spaces shall be a Level 2 EV Ready Spaces, and an additional 25% shall be at least a Level 1 EV Ready Space.
- 5. Per *California Building Code* (CBC) Section 1109A.3, accessible parking spaces shall be provided at a minimum rate of two percent of the dwelling units. At least one space of each type of parking facility shall be made accessible even if the total number exceeds two percent.

6. Per CBC Section 1109A.8.6, one in every eight accessible spaces, but not less than one, shall be van accessible. Fehr & Peers, 2024.

#### ADA Accessible Parking

The *City of Alameda Municipal Code* (Section 30-7.4) requires Projects to adhere to *California Building Code* (Sections CBC 1109A.3 and 1109.8.6) accessible parking requirements. The *Code* 

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requires the Project to provide accessible spaces equal to two percent of the number of dwelling units with at least one of every eight accessible spaces as a van accessible space, as summarized in **Table 2**. The Project would provide 13 ADA accessible parking spaces consisting of nine spaces in the garage and four spaces in the surface lot, exceeding the ADA accessible parking requirements.

#### **Bicycle Parking**

The *City of Alameda Municipal Code (Section 30-7.6)* requires development projects to provide long- and short-term on-site bicycle parking, as summarized in **Table 3**. Long-term bicycle parking includes lockers or secured enclosures primarily intended for long-term use such as residents, and short-term bicycle parking includes bicycle racks primarily intended for short-term use such as visitors.

#### **Table 3: Bicycle Parking Requirements**

Use	Size	Long-Term Bicycle Parking		Short-Term Bicycle Parking	
Ose		Spaces per Unit	Spaces	Spaces per Unit	Spaces
Dwelling Unit	356DU <sup>1</sup>	1 per unit <sup>2</sup>	356	2 per 10 units, or portion thereof <sup>2</sup>	72
Minimum Require	ed Bicycle Parking	-	356	-	72
Proposed Parking	Spaces	-	356	-	72
Minimum Require	ment Met?	-	Yes	-	Yes

Notes:

1. DU = Dwelling Unit

 Per City of Alameda Municipal Code Section 30-7.6 – Off-Street Bicycle Parking Requirements, Table B, one longterm bicycle parking space is required per dwelling unit and two short-term bicycle parking spaces are required per 10 dwelling units, or portion thereof.

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The *City of Alameda Municipal Code (Section 30-7.6)* requires one long-term, secure bicycle parking per dwelling unit. For projects with greater than ten required spaces, at least ten percent of bicycle parking spaces shall accommodate bicycles that might not fit in traditional racks such as cargo bikes, adult tricycles, and electric bicycles with wider tires. The Project is required to provide 356 long-term spaces and it would provide 356, meeting *Code* requirements. The Project would also accommodate bicycle parking for 36 oversized bicycles, corresponding to ten percent of the long-term bicycle parking supply, which would meet *Code* requirements.

The Project would provide the long-term bicycle storage in two locations on Levels 1 and 3 of the building. The Level 1 bike room would accommodate 314 bikes, and the Level 3 bike room would accommodate 42 bikes. Both bike rooms would be located near the north end of the building, near the elevators, and would be accessed through one door.



The *City of Alameda Municipal Code (Section 30-7.6)* requires two short-term bicycle parking per ten dwelling units, or portion thereof. The Project is required to provide 72 short-term spaces and would provide 72, meeting *Code* requirements. The Project would provide short-term bicycle parking, in the form of bicycle racks, along the Project frontages on Mariner Square Loop, Mariner Square Drive, and the surface lot. The bicycle racks would not encroach onto the adjacent sidewalk or pedestrian walkways.

Please contact Sam (stabibnia@fehrandpeers.com or 510-835-1943) if you have questions or comments.

#### **Attachments**

Project Site Plan

## Attachment A Project Site Plan







2433 MARINER SQUARE LOOP



#### JUN 26, 2025

All drawings and written material appearing herein constitute original, and unpublished work of the architect and may not be duplicated, used or disclosed without the written consent of the architect.