


RODEO-HERCULES FIRE DISTRICT
M E M O R A N D U M

DATE: February 14, 2018

TO: Victor Carniglia, Planning Consultant

FROM: Mark Pedroia, Fire Protection Specialist 

SUBJECT: Hercules Bayfront – Parcels Q & R, 2225 John Muir Parkway

The Rodeo-Hercules Fire District (RHFD) has reviewed the Entitlement Package Resubmittal dated 1/23/2018. These conditions/comments are the result of the initial review and three meetings with the Design Team. In accordance with the provisions of the CA Fire Code (CFC), Building Code (CBC), Local Ordinances and adopted standards; we provide the following comments/conditions for the development:

1. Fire Department access roads shall be provided to within 150 feet path-of-travel distance of all portions of first floor exterior walls of all structures and hazardous materials use or storage areas. Access roads shall be designed to current Fire Department standards: 20 feet wide minimum for structures two-stories or less in height, and 26 feet wide minimum (with Aerial Apparatus Access compliance) for structures more than 30 feet in height. Turning radius 25 feet inside and 45 feet outside. Dead-end private access roads more than 150 feet in length shall have an apparatus turn-around per current Fire Department standards. CFC 503.

The issues below require resolution during the Building Permit review:

Apparatus Access issues:

- a. Sheet A-04.1 illustrates a 16' gate at the EVA connection to John Muir Parkway. The turning maneuver shown on Sheet C-500 illustrates the turning maneuver running over the gate/fence because the gate opening is too narrow.
- b. The turning maneuver from SB Loop Road to EB EVA access needs evaluation to demonstrate the location of curb cuts permits this maneuver.

Personnel Access issues:

- c. Catenary lights and cables remain on L3.03 over the East Podium and will likely interfere with placing and raising a ground ladder to rescue windows.
- d. Seat walls and planting areas in the Podiums will likely make footing a ground ladder difficult. One option would be to identify locations and provide ladder access pads below rescue windows.
- e. Gold Rush 2 on A-16 and Victorian Style on A-17 shows a balcony creating a covered walkway. Further review is needed to determine how a ground ladder reach a rescue window on Floor 2, 3 or 4 with this projection that appears to prevent the ladder from reaching the windowsill.

2. A Fire Flow Analysis including proposed building areas, type of construction, and calculated available fire flow at the proposed fire hydrants shall be provided to the Fire Department for review and approval concurrent with submittal of Grading plans. Minimum adjusted (50% sprinkler credit) Fire Flow for this commercial project is estimated at 4,000 gallons per minute with 20 residual psi in the water main. Applicant shall contact East Bay Municipal Utilities District to have a flow test performed for the nearest existing hydrant to be used for the hydraulic design prior to submitting the Fire Flow Analysis. The project does not incorporate "fire walls" without openings therefore the calculation floor area is uncontained and this creates the large fire flow. CFC 507.
3. Hydrant spacing for this commercial project shall comply with current Fire District standards of CA Fire Code Chapter 9 and Appendix C and three (3) copies of the final site plan shall be submitted for approval of hydrant locations. Location of Fire Department Connections (FDCs) for the required automatic fire sprinkler system and standpipe system are a deferred item but shall be on the street side of the development. FDC's for the large mixed-use building sprinkler and standpipe shall be inter-connected and located on the EVA aerial fire lane and another on John Muir Parkway. CFC Appendix C.
4. Private Underground Fire Mains (aka on-site mains behind the detector check) require a separate Fire Department permit. Public or private fire mains (shown on C-300) are expressly prohibited from running under buildings. CFC 507.
5. The Rodeo-Hercules Fire Protection District has adopted a local ordinance which requires automatic fire sprinkler systems in certain type/size of new construction. All structures shall be protected with automatic fire sprinkler systems in accordance with CA Fire Code Chapter 9 as adopted by the Fire District. CFC 903.
6. Project is required to provide a Class 1 standpipe system throughout. System shall be in-service prior to any construction occurring at or beyond 40'. CFC 905 & 3313.
7. The Fire District response to the Development Review Application is: The project is served by Fire Station 76 (Refugio Valley Road). Currently, units are dispatched from Fire Station 76 (1680 Refugio Valley Road, Hercules), Fire Station 75 (326 Third Street, Rodeo) and automatic aid from the Pinole Fire Department Fire Station 73 (880 Tennent, Pinole), the Contra Costa Fire Protection District Station 69 (4640 Appian Way) and the all-volunteer Crockett - Carquinez Fire Department (736 Loring Avenue, Crockett). Budgetary constraints have subjected Fire Station 74 (Pinole Valley Road, Pinole) to a closure 100% of the time (brown-out); significantly affecting response time and weight of fire attack. The arrival of the 1st alarm assignment that permits interior firefighting is delayed due to these conditions and the Fire District does not satisfy the Hercules General Plan Safety Element (VI.II.D.1) Fire Service Response Time Standard (5 min response 90% of the time). This property is underserved related to fire protection capability. The present Fire Service Development Impact Fee will not (by itself) overcome the cumulative impact of this project. This project and proposed adjacent developments will further erode emergency response times and fire protection delivery. The Fire District is evaluating long term mitigations to overcome this issue however the District will be requesting this developer to mitigate the impact of this development as an offset to the demand this development is creating.

8. The Applicant shall implement a smoke exhaust system with fan switches at the Fire Alarm Control Panel and at all stair enclosure openings to the Garage; all as a means to provide a form of smoke exhaust to provide a more tenable environment during firefighting (same as Block N (Creekside)) in the below-grade windowless parking garage and shall enlarge the SE stair enclosure (off JM Parkway) to 60" with 48" door assemblies along the fire access route. CBC 910.
9. An exit analysis shall be submitted with the Building permit set. Areas of Refuge or Areas of Assisted Rescue shall be identified and provided with a two-way communication system per CFC 1009. Preliminarily, the door swing on Residential Lounge's needs to be reversed to swing in the direction of exit travel. CFC 1003.
10. The height of the building exceeds the maximum reach of the RHFD ladder truck. As mitigation for delays in establishing rescue and fire attack aloft, the District will be evaluating built-in fire protection enhancements.
11. As mitigation for delays in response time, traffic signal pre-emption (Opticom or compatible) shall be provided on traffic signals lacking same. Locations within the response route to be identified by the District.
12. Review of the Environmental Site Assessment, re-use of the site and implementation of the construction program shall be approved by Certified Unified Program Agency (CUPA), Contra Costa Hazardous Materials Programs, 4585 Pacheco Blvd. Suite 100, Martinez, CA 94553, ccchazmat@hsd.cccounty.us (925-335-3200).
13. Site address signage per current Fire Department Standards shall be established and maintained during and after any combustible construction or intensification of site use. A complex directory shall be provided at the main entrances. CFC 505.
14. Elevators shall accommodate a medical stretcher. The fire resistive smoke assembly used for the elevator must be operable from the elevator cab (by first responders). CBC 607.
15. Required Fire Department access roads shall be signed "No Parking-Fire Lane" per current Fire Department standards and the CA Vehicle Code. CFC 503.
16. Traffic calming measures or controls (speed bumps, humps, undulations, gates, etc.) are not approved as a part of this review and require specific approval from the Fire Department. CFC 503.4.
17. Structures and lockable gates limiting vehicle access to commercial facilities shall be equipped with a Fire Department approved locking device or Fire Department approved key system ("Knox" lock or "Knox" keyed lock). Access controls on fire department response routes shall be electrically operated, equipped with pre-emption and Knox-key override (gates, barriers, retracting bollards, etc.). CFC 506.
18. A bi-directional public safety emergency responder radio system, designed and installed per current Fire Department standards, is required in all new structures. System can be building specific or a campus-wide system can be provided. CFC 510.

19. Rooftop Solar Photovoltaic Systems shall comply with the CA Fire Code and CA State Fire Marshal Guideline. CFC 605.
20. Required Fire Department permits that are eligible for deferred submittal: **Construction;** Underground Fire Main, Automatic Fire Sprinkler System, Fire Standpipe System, Fire Alarm System, Sprinkler Alarm Supervisor Service (water-flow monitoring), Fixed Extinguishing System (if cooking facilities), High Pile Combustible Storage (if >8' in retail or 12' in storage), Fire pump, Generator Fuel Storage (if proposed). **Operation;** Apartment Building, Bi-Directional Repeater System. CFC 105.
21. The developer shall remit the Development Impact Fee with the Building Permit submittal.
22. The developer shall remit the Rodeo-Hercules Fire District Review Fee 2.1 in the amount of \$729.00 for the planning review.
23. The developer shall submit a "Fire Safety During Construction" plan to the Fire District at the time of Building Permit submittal. CFC 3308.
24. Emergency Evacuation Guide and signage (entrances, stairwells, elevator lobbies) and Stairwell identification signage shall be provided and submitted to the RHFD for review to ensure all required information is provided in the plan and on the floor plans. CFC 403 & 1023.
25. Storage or use of any hazardous materials at the site (such as diesel fuel for the on-site generator or acid for batteries) will require a Hazardous Materials Business Plan be submitted to the CUPA. CFC 5001.
26. Access roads and water supplies for fire protection shall be installed and made serviceable prior to storage or construction of any combustible materials. CFC 3312.