



**COUNTY OF SAN MATEO**  
Inter-Departmental Correspondence  
Public Works



**Date:** February 19, 2014  
**Board Meeting Date:** April 22, 2014  
**Special Notice / Hearing:** None  
**Vote Required:** Majority

**To:** Honorable Board of Supervisors

**From:** James C. Porter, Director of Public Works

**Subject:** Report on the replacement of Skylonda and Pescadero Fire Stations

**RECOMMENDATION:**

Accept this report and provide guidance to staff on fire station replacement options.

**BACKGROUND:**

During the FY2013/14 – 2014/15 budget process, your Board approved funding for the replacement of fire stations in Skylonda and Pescadero. The Department of Public Works, along with design consultants and CAL FIRE staff, conducted surveys of the sites, structures, operations and logistics to determine each station's condition, concerns, and necessary improvements.

The original scope of work and cost estimates were based on replacing existing barracks and office structures on site. However, after a detailed investigation of the current conditions of the buildings and site challenges, it has become clear that additional work outside of the current scope of work is required. This report outlines several options available for proceeding with improvements to both fire stations. The current budget for the Skylonda Fire Station is \$4 million, and the Pescadero Fire Station is \$6 million, for a total of \$10 million. Preliminary analysis has revealed that the cost to execute any of the options evaluated at each location exceeds the funding amounts currently budgeted for both stations.

**DISCUSSION:**

Attachment A provides a summary of our findings for each site, with associated options and cost estimates. Staff is seeking direction from your Board in determining the desired option to pursue, and will request additional appropriations during the FY 2013/14 - 2014/15 mid-term budget update for each project based on your Board's direction.

Evaluating options considered for the replacement of these facilities contributes to the Shared Vision 2025 outcome of a Collaborative Community by advancing projects that provide regional benefits to San Mateo County residents.

**FISCAL IMPACT:**

Your Board has approved \$4 million and \$6 million respectively for the Skylonda and Pescadero Fire Station improvement projects. All options presented in Attachment A will require additional funding to complete construction. Staff will return to your Board during the FY 2013/14 - 2014/15 mid-term budget update to request additional appropriations for each project. The amount will vary depending on which option your Board directs staff to pursue. Project planning will proceed with funds currently budgeted.

Attachment A: Report on the Replacement of Skylonda and Pescadero Fire Stations

**Attachment A**  
**Report on the Replacement of Skylonda and Pescadero Fire Stations**

**Skylonda Fire Station**

Skylonda Fire Station No. 58 is located on Skyline Boulevard (State Route 35) adjacent to Alice's Restaurant (a local landmark) and consists of one office and one cabin-style barracks. Both are wood-framed structures, and were constructed in 1939. Fire engines are housed in a separate pre-fabricated steel-framed apparatus building erected around 1950.

The site itself has access, layout and waste treatment challenges. All three buildings at this facility are undersized, outdated, and not compliant with current building codes or industry standards, including "Essential Facility" code requirements, which is a level of construction necessary for all fire stations.

While the station's personnel have attempted upgrades over many decades, the main concerns identified in the study include:

1. The wooden office and barracks structures are inadequate in size and in general are quite deteriorated. The barracks' structure is so compromised that the barracks' exterior wall is detaching from the main structure.
2. Because the structures are dispersed over the site, the crews' path of travel from the barracks to apparatus vehicles when responding to emergencies is lengthy, uphill, uneven and potentially unsafe during night time, and in wet or frozen ground conditions.
3. The means of ingress and egress for apparatus from the facility is challenging. Access is provided via narrow, single lane winding drives located at each end of the site. Fire engines can only travel in one direction, or are otherwise forced to perform "three-point" maneuvers onto the highway. Parking and traffic at adjacent commercial and residential properties further obstruct the site's accessibility.
4. The Apparatus Building currently houses fire-fighting vehicles, a hazardous decontamination room, a self-contained breathing apparatus area, a workroom, lockers, a waste oil disposal tank, and miscellaneous storage. These support areas have been introduced over time in a haphazard manner, and are currently laid out in a manner that hinders both emergency response and daily operations. Replacement of the Apparatus Building is desirable, but not required at this time and can be deferred to a later date.
5. The sewage disposal system consists of a septic tank that pumps waste uphill and discharges into a leach field. This field has since been paved over, and serves as the access, parking and maneuvering area to fire-fighting vehicles. This "paved-over" condition is inconsistent with environmental regulations and best practices. Furthermore, sewage pump failures have resulted in sewage overflows in the barracks building.

Options considered in correcting these deficiencies included:

- A. Gradually replacing each structure maintaining current site layout, points of access and waste system;
- B. Providing new buildings near the current Apparatus Building, in a phased reorganization of the site, modifying points of access and adding new waste treatment; and
- C. Building a new station on another site.

The sequencing and logistics of each option and their ramifications were analyzed as to land availability, geological and environmental concerns, traffic, access and constructability, the need to maintain CAL FIRE's continuous operations, and probable costs.

Considerations for Option A - Replace each structure maintaining current layout:

- 1. Requires temporary modular trailers to accommodate the fire station personnel during construction adding cost, staging and operational challenges
- 2. Does not address a primary operational deficiency associated with the travel distance from the Barracks to the Office to the Apparatus Building, and the resulting impact to emergency response time and safety of the fire station personnel
- 3. The existing inadequate septic system will still require improvements to the existing leach field
- 4. Rebuilding on the same location does not address access issues to Skyline Blvd.
- 5. The total cost for Option A is \$6.15 million. This cost estimate contemplates a combined barracks/office at the existing barracks' location, and includes necessary housing/office/showers/toilet/storage temporary trailers, demolition of existing structures, and site grading for the new building.

Considerations for Option B - New structures near Apparatus Building on current site:

- 1. Fire station personnel can continue to utilize the existing office and barracks during construction
- 2. Combines Barracks and an Office/Command Post in a single building across from the Apparatus Building
- 3. Reduces the travel distance between the Barracks/Office and Apparatus Building, and the path of travel is essentially level
- 4. Allows for implementation of a new, gravity-fed septic system at the former Barracks location
- 5. Implementation of new unobstructed two-way central access to Skyline Blvd. in a future phase can be easily achieved

For this option, the Department, in conjunction with CAL FIRE and architectural consultants, would develop a new site plan for the existing location that addresses all deficiencies noted, reorganizing the operations of the station, and replacing structures in a phased-in approach so as to maintain uninterrupted fire-fighting operations while minimizing the impact to the environment, traffic and adjacent properties.

The sequence of improvements would occur as follows:

Phase I - Build a combined barracks/offices structure across from the existing Apparatus Building. This will provide for uninterrupted station operation, eliminate the need for temporary housing/office trailers, and result in a fire station complex with a direct, safe path of travel from the Barracks to the Apparatus Building straight across the paved lot. The estimated cost of this phase is \$6.4 million.

Phase II - Demolish the older structures and install a central, unobstructed two-way means of access/egress to the highway, and construct a new leach field system downhill from the new barracks/office. The estimated cost of this phase is \$1.6 million.

Phase III - Replace the Apparatus Building in its current location, decommission and abate the existing leach field and repave asphalt cover, at an estimated cost of \$5.3 million.

Total cost of the project is estimated at \$13.3 million. However, Phases 2 and 3 are optional and may be completed in future years, within the multi-year Capital Improvement Program.

Considerations for Option C - Building a new station at a new location:

1. Would allow for the least impact to operations during construction
2. To date, we have not found an available alternative site within the required proximity to meet the emergency response time criteria required within the geographical "Four Corners" area covered by Station No. 58
3. Property acquisition costs would likely be significant, and may not be off-set by a reduction in site development costs versus those identified for the existing site

Current funding available for the project is \$4 million. Please note that the cost estimates provided previously are conservative budget level estimates and will be refined as we proceed. Staff would work with the design consultant and CAL FIRE on value engineering to minimize project costs as design progresses from conceptual through schematics.

**Pescadero Fire Station**

Pescadero Fire Station No. 59 is located on Pescadero Creek Road halfway between the coast and the Town of Pescadero, and is adjacent to Butano Creek. The station consists of two buildings: a single-story wood framed barracks and a single-story pre-fabricated steel apparatus building. They were erected around 1957, and over time some office, storage and fitness areas were added to the apparatus building.

The station's emergency calls are primarily two types: mostly fire and medical related to the community and rural areas east of Butano Creek, and vehicular accident-related along Highway 1. The number of calls is roughly the same for each type of call.

In addition to identified problems related to the site's water well, septic tank, and small parking/maneuver area, the station's largest operational issue relates to the flooding of the site, mainly the barracks building, during rainy seasons. In normal years, water rises to the underside of the building's wood floor joists, introducing dry rot and mold. In heavy storms, the building has been flooded.

The site is located in a FEMA-designated flood plain and tsunami inundation area, and within the predicted limits of a 50-year sea-level rise. Flooding typically occurs each year along the Pescadero Creek Road which fronts the fire station, and serves as the main road connecting the Town of Pescadero to Highway 1. During winter flood events, some station personnel and equipment are mobilized east of Butano Creek, near Pescadero High School on Cloverdale Road.

The flooding issues in this area, and possible solutions, have been studied over several years. Any solution will be complex due to the presence of aquatic habitat and endangered species in the area and will require the approval of federal, state and local agencies, including the County. A full resolution to the flooding problem may be years away. Additionally, Pescadero is within the "coastal zone" and is subject to the Coastal Commission's approval of any new construction.

Options considered to improve the fire station include:

- A. Raising the Barracks Building above flood level;
- B. Replacing the Barracks with a new living quarters/command office building site at a slightly higher elevation adjacent to the Apparatus Building; and
- C. Building a new station on an alternate site outside the designated flood plain/zone.

The sequencing and logistics of each of option and their ramifications, were analyzed relative to FEMA maps, designated flood zones, land availability, geological and environmental concerns, permitting processes, traffic, access and constructability, the need to maintain CAL FIRE's continuous operations, and probable costs.

#### Considerations for Options A and B – Raising; Replacing at the current location:

Based on the complexity of the flooding issues and the long timeframe anticipated to mitigate flooding impacts, the most viable long-term option is to construct a new fire station outside of the designated flood plain on an alternate site. Based on consultation with the County's Planning and Building Department, Options A and B would be difficult to pursue since the building is within the floodway and would require an extensive flood water analysis, and a lengthy environmental review process. It is also possible that construction would not be permitted at the current location by the various State and Federal regulatory agencies that have permitting authority over such a project. However, if direction was given to pursue either of these two options, the cost to complete the project would likely range from \$7.6 million to \$8 million, depending on the complexity of the environmental review process and associated hydraulic studies.

#### Considerations for Option C - Building a new station at a new location:

For Option C, constructing a new fire station, including the associated site work and utility infrastructure at a location slightly east of the Town of Pescadero is estimated to cost \$7.6 million or about the same cost of reconstructing the facilities at their current location. This figure does not include land acquisition costs. Surveys of the area by Real Property staff have identified properties on Cloverdale Road, in the vicinity of the High School, as well as land at the High School, as available alternatives for a new facility. While the Cloverdale Road parcels will require grading and infrastructure work, the locations are outside of all areas subject to flood water inundation and future sea level rise. The land at Pescadero High School is relatively flat but will require infrastructure improvements.

Current available funding for this project is \$6 million. Please note that the cost estimates provided previously are conservative budget level estimates and will be refined as we proceed. Staff would work with the design consultant and CAL FIRE on value engineering to minimize project costs as design progresses from conceptual through schematics.