

Midpeninsula Regional Open Space District

R-17-68 Meeting 17-14 June 14, 2017

AGENDA ITEM

AGENDA ITEM 4

Demolition of Unoccupied Structure at 16075 Overlook Drive El Sereno Open Space Preserve

GENERAL MANAGER'S RECOMMENDATION

Approve the demolition of the unoccupied former employee residence at 16075 Overlook Drive El Sereno Open Space Preserve (OSP).

SUMMARY

A two-story 1500 sq. ft. residence was part of the purchase of the Hayes Property named as an addition to El Sereno OSP in 2004. It was an employee residence, until the resident identified evidence of structural damage in 2015. The District hired Mesiti Miller Engineering to complete a structural assessment. Their findings indicated that in the event of an earthquake, wind or landslide event, the residence would suffer significant damage and represent a safety risk. The employee resident relocated and the residence has remained unoccupied since that time. Due to the cost of repair or rebuilding, the availability of other employee residences for after-hour response, and the inherent instability of the steep site, the General Manager's recommendation is to demolish the building and restore the site.

DISCUSSION

On December 15, 2004, the Board of Directors approved the purchase of the Hayes Property as an addition to the El Sereno OSP (R-04-132). The property (see Attachment 1) provided an important segment of the Overlook Trail and an opportunity to develop a small permit parking area and trailhead for the preserve. The purchase also included a two-bedroom, two-bath, two-story, 1,500 square foot house, which provided a good location for an employee residence for better after-hours response for the southern part of the District. Another benefit was that the purchase eliminated conflicts caused by the rental residents and their dogs with District staff, neighbors, and the public.

The residence was built in 1972 under the permits required by the County of Santa Clara, including the County's seismic code. The residence survived the 1989 Loma Prieta earthquake with no damage. At the time of purchase, the residence required structural repairs to the support piers and deck, which were completed in 2006. The residence has experienced structural changes over time (See Attachment 2). In October 2015, Mesiti-Miller Engineering, a structural engineering firm, evaluated the residence. The employee resident had reported cracks in the drywall, door jams that were out of alignment, uneven and cracked tiles, and obvious highs and lows of the interior floors. After observation and measurement, Mesiti-Miller concluded that

under a potential seismic, wind or landslide condition, the residence would suffer significant damage and represent a safety risk (see Attachment 3). As a result, the employee resident relocated and the residence has remained unoccupied.

To evaluate options for disposition: 1) Demolish; 2) Repair; or 3) Rebuild, Mesiti-Miller and District staff developed a set of costs estimates for each option (See Attachment 4). The table below summarizes costs for each option:

Option	Total Cost
Demolish	\$94,256
Repair*	\$409,082
Rebuild*	\$1,262,686

*These are rough order of magnitude costs to be used as budgetary estimates and require a full schematic and documentation phase to refine their accuracy.

Policy Review

The *Factors to Consider in Structures Disposition* (Board Policy 4.09) provides a set of criteria for the Board to use when making decisions on the disposition of District improvements including demolition (see Attachment 5). This residence provided an after-hours response and an on-site presence for the Overlook permit parking lot and the south area of the District. However, given the steep hillsides and structural issues, this location does not provide a sustainable location for an employee residence. Staff is exploring alternate locations within the south area that provide adequate coverage for after-hours response and will provide a sustainable site for employee housing over the long-term. Currently there are four employee residences in the south area:

- Rancho San Antonio (1 ranger, 1 maintenance)
- Fremont Older (ranger)
- Sierra Azul -- Ranch de Guadalupe Area (maintenance).

The proposed demolition will visually improve the visitor experience entering the preserve. Instead of driving or walking through a resident's front yard, they will enter the preserve through a natural area. The residence is not historically significant and does not have regional significance.

Hazardous Materials

Hazardous Management Services Inc. inspected the residence in February 2017 and prepared a report that indicated the following:

- 1) Asbestos is located in certain sections of drywall (interior).
- 2) Lead is present in tiling (internal) as well as in exterior and interior paints (drywall and wood railing).

All hazardous materials will be remediated as part of the demolition. Hazardous materials monitoring will also be included as part of the demolition.

Biological Assessments

A pre-assessment for bats indicates that there are no bats residing at the residence. Full biological assessments for small mammals, bats and birds will be performed pre-demolition in addition to biomonitoring during the demolition process.

Salvageable Materials

During the course of de-construction, salvageable materials, whether suitable for structural or aesthetic purposes, will be source segregated on site. Base bids would include material salvage and segregation as well as a deductive alternate for limited or no salvage to compare costs. Small appliances and wood stoves would also be salvaged. Any salvageable materials that cannot be used by the District may be sold to local salvage companies for resale.

FISCAL IMPACT

The proposed demolition does not have cost implications for the FY2016-17 budget. Should the Board approve the General Manager's recommendation, a budget of \$94,246 has been included in the capital project budget for Unoccupied Structures Disposition for the proposed fiscal year 2017-18.

	FY2017-18
Unoccupied Structures Disposition Capital	\$414,050
Budget (Proposed)	
El Sereno Residence Demolition (Proposed)	\$94,246
Balance Remaining (Proposed):	\$319,804

This project is not eligible for Measure AA reimbursement.

BOARD COMMITTEE REVIEW

No Committee review has occurred for the above project.

PUBLIC NOTICE

Public notice was provided as required by the Brown Act, including The Montgomery Highlands Homeowner Association and adjacent neighbors.

CEQA COMPLIANCE

The house is not historically significant under the California Environmental Quality Act (CEQA). This demolition approval action is categorically exempt under section 15301, Existing Facilities, which exempts the repair, maintenance, or minor alteration of existing public or private structures, facilities, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination, including the demolition of individual small structures.

NEXT STEPS

If the Board approves the General Manager's recommendation, staff will solicit bids for the demolition in FY2017-18 and return to the Board for an award of contract. Demolition and septic removal permits would be obtained from Santa Clara County. Additional contracts would

be entered into for third-party hazardous materials monitors and biological monitors. Pending approval of permits, demolition of this residence is anticipated to occur in fall FY2017.

Attachments

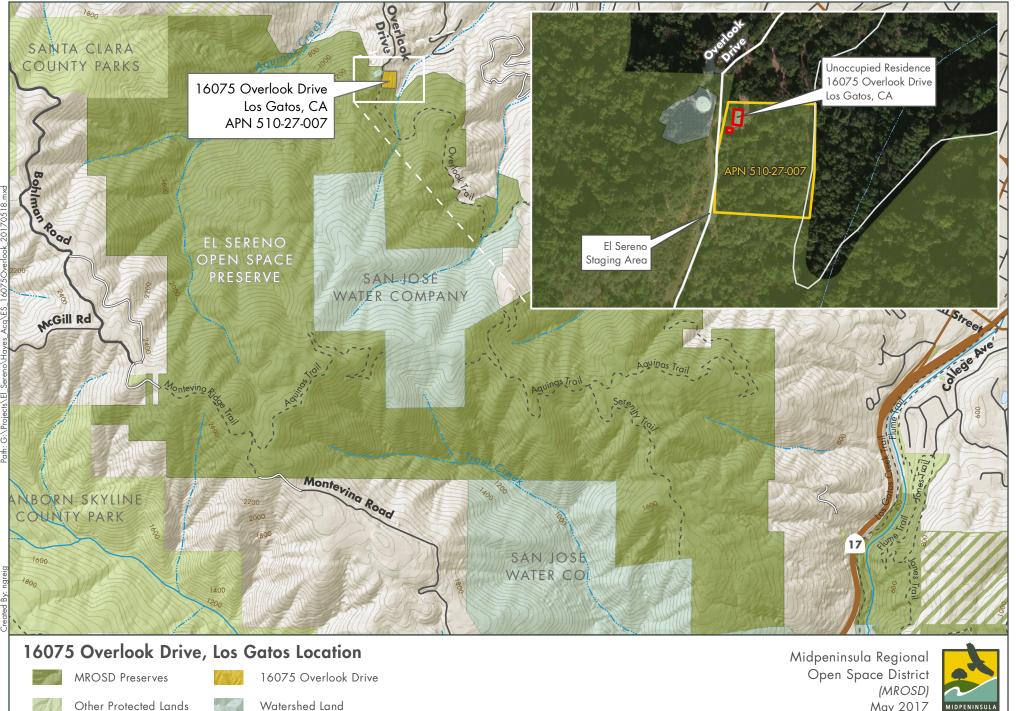
- 1. Map of 16075 Overlook Dr. Los Gatos
- 2. Structural History
- 3. Structural Assessment of El Sereno House
- 4. Cost Estimates for Demolition, Repair, and Rebuild
- 5. Factors to Consider in Structures Disposition

Responsible Department Head: Brian Malone, Manager Land and Facilities Services

Prepared by: Elaina Cuzick, Senior Property Management Specialist, Land and Facilities Services Department

Graphics prepared by: Nathan Grieg, GIS Technician

Attachment 1



Private Property

Watershed Land

May 2017

0.25

0



0.5

While the District strives to use the best available digital data, these data do not represent a legal survey and are merely a graphic illustration of geographic features.

Attachment 2

16075 Overlook Drive

Structural History

Year	Description				
2004	Structural Analysis -Jakaby Engineering				
	Recommended repair of the walking deck and railings.				
2006	Completed repair of deteriorated wood deck, deck railings, and deck support structure				
	– totaled \$93,429.				
Early	Employee resident reported noticing new cracks in the drywall, uneven tiles, and				
2014	other signs of structural movement of the residence.				
Early	Completed geotechnical investigation (Feb).				
2015	Completed design drawings for foundation upgrade and new shear walls (March).				
Summer	Submitted foundation design drawings to Santa Clara County for approvals.				
2015					
August	Employee resident submits additional new signs of structural movement of the				
2015	residence including photos of the deck continuing to separate from the main				
	residence, increasing drywall cracks, and uneven flooring.				
Fall	Structural Conditions Assessment - Mesiti-Miller Engineering				
2015	Findings indicated that under a potential seismic, wind or landslide condition the				
	residence would suffer significant damage and risk to life safety.				
Fall	Employee resident was relocated.				
2015					
Early	District staff and Mesiti – Miller Engineering develop cost estimates for demolition				
2016	and full replacement.				
2016	Residence remains unoccupied.				
until					
present					



Mesiti-Miller Engineering, Inc. Civil and Structural Engineering

October 2, 2015

Damon Adlao

Capital Project Manager Midpeninsula Regional Open Space District 330 Distel Circle Los Altos, CA 94022

Re: Structural Assessment of El Sereno House 16075 Overlook Drive, Los Gatos, CA MME Project No: 15205

Dear Mr. Adlao,

At your request, we have prepared this letter report summarizing our observations and findings regarding the structural condition assessment of the existing single family residence (SFR) located at 16075 Overlook Drive in Los Gatos, California. We visited the site with you on September 11 and October 1, 2015 to visually assess the condition of the existing structure.

The existing wood frame residence is constructed on a steep sloping site and is supported with wood poles. The building was reportedly constructed in the early 1970's. Due to the age of the building and the steep slope there are concerns regarding the existing condition of the building, the foundations, and the general stability and safety.

DESCRIPTION

The existing two story house of approximately 1,600 square feet is constructed of conventional wood framing on a sloping site. The upper floor of the house is at the main street level and the 1st floor level is down the slope below. The foundation is constructed of twelve tapered wood poles set into the sloping soil. An elevated wood deck wraps around three sides of the house at the upper level and only at the rear of the house on the lower level. The elevated deck is supported with wood posts on concrete piers at the front of the house only. The remainder of the decks are supported with treated wood poles similar to the house. Several of these poles have been repaired with steel channel splice plates near the top. The wood poles are braced with diagonal 2x braces with a single lag bolt to the pole at each end.

The exterior house walls are sheathed in thin plywood siding with vertical wood battens. The house is not tied into hillside and is set back from the top of bank approximately 15 to 20 feet. Wood decks provide access from the road. The roof is gabled with a center ridge beam. The perimeter of the roof has a mansard with asphalt shingles on all four exterior sides. The low slope roof within the mansard is built up roofing with gravel ballast. Internal roof drains are connected to exterior downspouts near each corner and no overflow scuppers exist.

DOCUMENTATION

We were provided the following documents:



- 1. "Foundation Upgrade & New Shear Walls" drawing 14-194, dated 3/30/15, 3 sheets, dated December 2014 prepared by A.C.&H. Civil Engineers.
- 2. Geotechnical Investigation Report by GeoForensics, Inc., dated February 2015.

OBSERVATIONS

The exterior plywood siding is buckled, wavy and delaminated in numerous locations. Moisture damage to the siding is very evident. We did not observe consistent nailing at floor or plate lines. The lack of nailing allows the wood siding to pull away from the building as it swells. The interior floors are unlevel with obvious high and low spots. Interior floor tiles were uneven and cracked. Interior drywall had numerous cracks and distress. Door jambs were out of alignment. We observed portions of the subfloor with evidence of moisture damage and decay. The exterior decks are very uneven.

Site drainage from the road and adjacent hillside appear to be concentrated near the entry gate to the deck and down the south side of the house. The ac paving is deteriorated in this area.

The existing wood poles supporting the house are leaning downhill. We verified the plumbness of the poles with a four foot smartlevel. Eleven of the twelve poles are leaning downhill. The measured slopes range from approximately 4% to 9%. The pole heights vary and range from approximately sixteen feet to four feet tall. The taller poles on the downhill side are over 12" out of plumb at the top. Some of the diagonal bracing to the poles has buckled out of plane and may be the result of the pole movement.

The exterior wall plumbness ranged from 0.1% to 0.9%.

We performed a floor level survey with a Ziplevel. The upper floor elevations range from 0.0 to 4.2 inches in elevation change. The upper level deck elevations range from 0.0 to 4.0 inches. The lower floor elevations range from 0.0 to 4.2 inches in elevation change. The lower level deck elevations range from 0.0 to 5.9 inches. The north-east corner of the house and deck is consistently the lowest point.

Our observations are limited to those specific areas readily visible and not all existing conditions were observed. No destructive testing was performed nor were finishes removed as part of this study. Our findings are based on the limited visual observations made in the field and as a result, other conditions may exist which would modify these findings and conclusions.

Waterproofing is not our area of expertise. A waterproofing consultant could be retained to provide an opinion of the existing building envelope if you want a detailed condition assessment of these systems.



FINDINGS

The house appears to have damage to finishes consistent with foundation or structural framing settlement or movement. The floor level survey indicates approximately 4" of vertical offset in each floor. From these observations we can surmise the floor and pole supports have settled over time. This would indicate some of the poles are not founded into competent material.

The pole foundation system would have to be embedded into stiff soil or rock to provide lateral resistance to lateral earth pressures. Steep slopes have a tendency to creep or move downhill, particularly when water is allowed to flow over the surface. This downward movement induces a horizontal force into embedded piles. As the embedment of the poles is unknown, but appear to not be into the bedrock, their ability to resist these creep forces is possibly compromised. This condition is reflected in the out of plumb conditions we recorded with displacements at the top of the poles of approximately one foot.

The exterior walls are severely deteriorated due to moisture damage and inadequate fasteners. The sub-floor has damage and deterioration near the exterior walls and appears to be due to moisture. We only observed a few areas with this condition.

The existing construction does not meet current standards in regards to an established lateral load resisting system. The wood sheathing on the exterior walls is too thin to provide reliable shear resistance to lateral loads. The current standards and codes require a minimum thickness of 3/8" for wall sheathing to resist lateral loads.

The cantilever pole foundation system as the only support for a hillside house has a poor history of performance to resist lateral loads. Cantilever piles are penalized in the building codes with a higher seismic load to ensure they remain elastic and to limit the deflections due to earthquake forces. In order for these systems to perform properly they must be embedded into good material and have adequate depth. Based on our observations of the vertical settlement and the lateral displacement it appears they do not meet these conditions. Cross bracing of the poles can help enhance their ability to resist lateral loads, however the location of the existing braces and the single lag bolt connection do not provide adequate additional bracing.

The overall stability of the hillside is beyond our area of expertise. The building relies on the underlaying soils for stability and any loss of support would render the building at risk. This is particularly critical under earthquake loading. Based on a review of the soils report provided the Geotechnical engineer states the site is in an area potentially subject to landsliding, particularly earthquake induced landslides. The site is also approximately 2 miles from the San Andreas Fault and has very high seismic design coefficients.

In general, the existing house is in poor repair and requires substantial upgrades and maintenance. The existing lateral and vertical displacements are troubling structurally due to their magnitude and potentially result in an unsafe condition. The building would not be classified as a "Dangerous Building" per the building code as we cannot conclude there is a significant risk of collapse due to service loads. However, under



potential seismic, wind or landslide conditions the house would suffer significant damage and represent a risk to life safety. The expected performance would be poor and upgrades to the foundation and lateral load resistance of the building should be implemented as soon as possible.

Thank you for the opportunity to assist you with your project. Should you have any guestions or comments or require further assistance, please call.

Respectfully yours,

ESSIOA No. S 3549 Exp. 03/31/16

Dale Hendsbee, S.E. Senior Structural Engineer

cc: project file

IN15205 MROSD - SE for Ranger's Residence, 16075 Overlook Dr., LG\15205rpt Bidg Eval 2015 10 01.docx

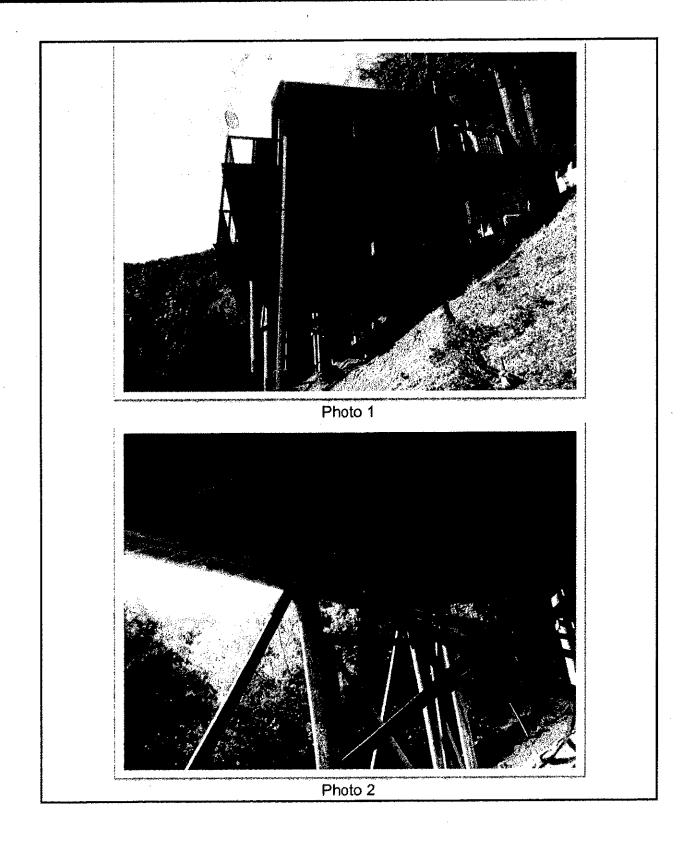


Attachment 3 Structural Assessment of 16075 Overlook Drive MME Project No: 15205 October 2, 2015 Page 5 of 9

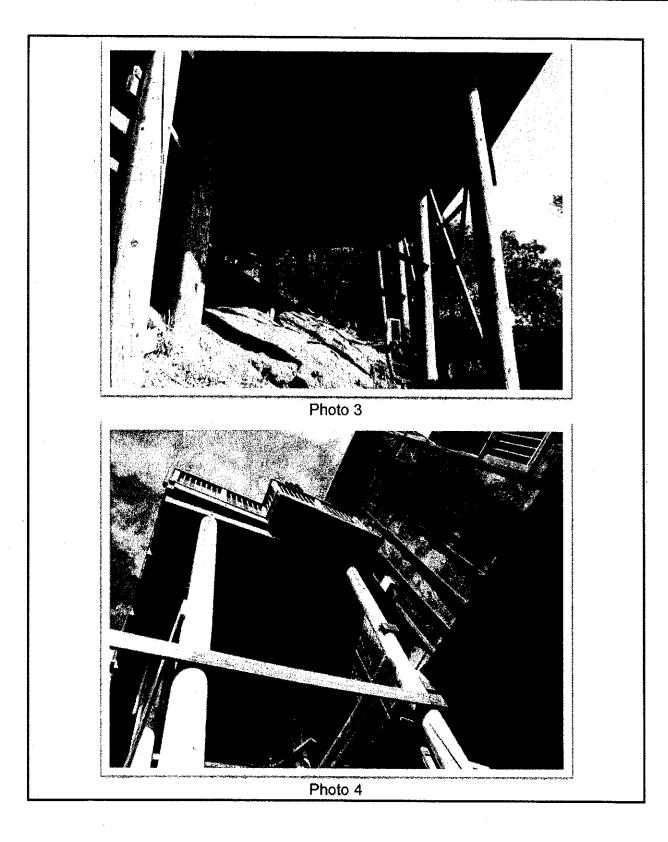
APPENDIX A - Photos

43 Printed on 100% Post-Consumer Recycled Paper with Soy Inks

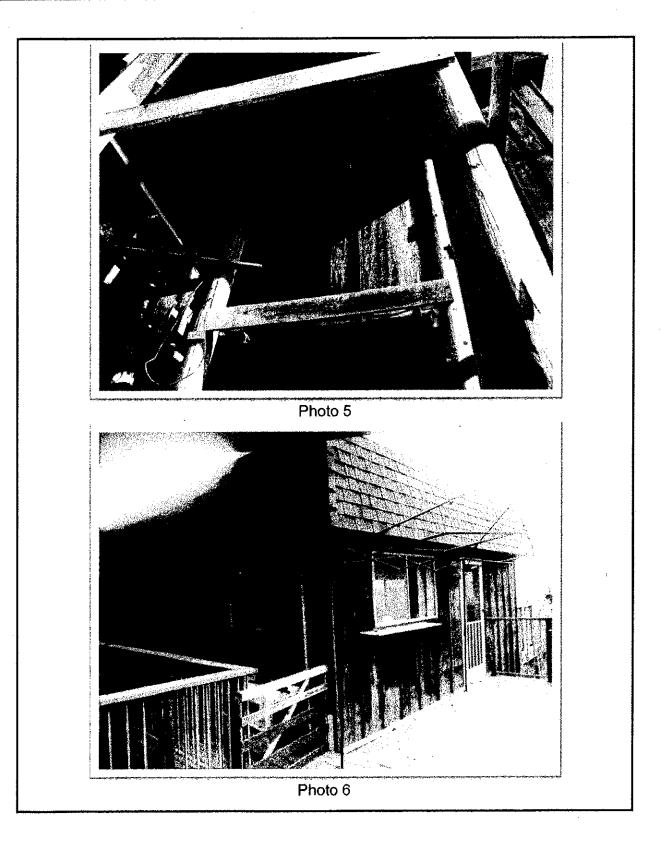




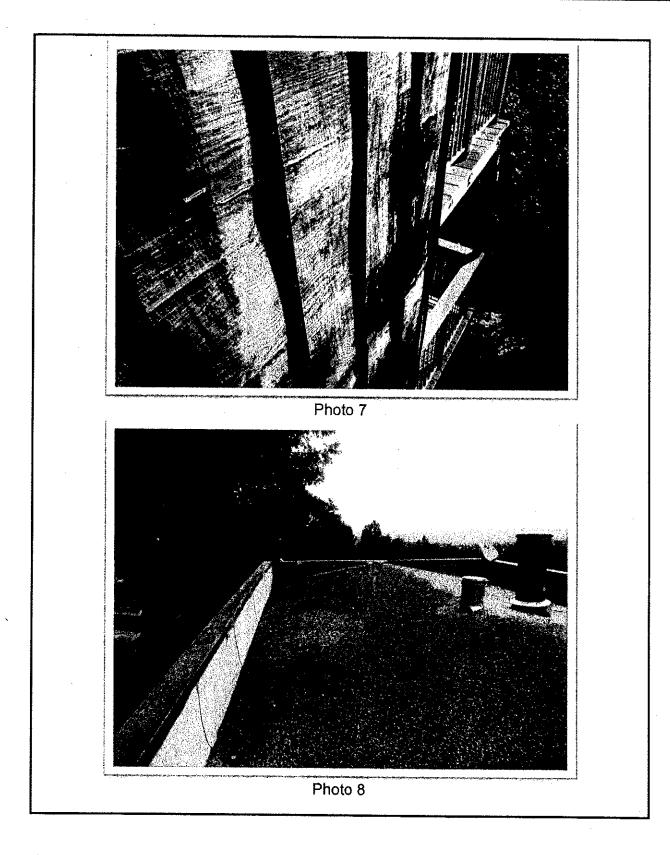












CONSTRUCTION COST ESTIMATE

EL SERENO HOUSE, CONSTRUCTION -- 3 Different Scenarios Planning/Preliminary Budget Estimate

SCENARIO 1 Complete Demolition		
Project Costs/Estimates**	Current	2017 Construction (7% Escalation per year).
Mobilization		
	\$4.500	
Roof	1\$3.800	
Walls_	1\$3.000	
Floors	\$10.000	
Wood Deck	\$8.000	· · ·
Foundation	\$3.800	
Haul Off Debris	\$6.500	· · · · · · · · · · · · · · · · · · ·
HazMat Abatement and Oversight (Allowance)	\$5.000	<u> </u>
	\$15,000	l
Biomonitor	\$10,000	· · · · · · · · · · · · · · · · · · ·
Construction Sub-Tota	\$69.600	
Soft Costs Allowance***	\$ 2 500	· · · · · · · · · · · · · · · · · · ·
Permitting	\$3.500	<u> </u>
	\$3,500	t
Project Sub-Tota	\$76.600	
Construction (15%)	\$11,490	
		1 0 / 0 10
TOTALS SCENARIO 2 – Existing Building Rennovation and Upgrades	288.090	\$94.256
SCENARIO 2 - Existing Building Rennovation and Upgrades		<u> </u>
Project Costs/Estimates*	Current	2017 Construction (7% Escalation per year)
Mobilization	\$7.600	
Selective Demolition	\$7.500	
	\$18.000	
Roof	\$27.000	<u></u>
Exterior Walls	\$42.000	
Foundation	\$120.000	
	\$9.500	· · ·
Interior Finishes	\$40.000	
Construction Sub-Tota	\$264.000	
Soft Costs (15%)***	\$39.600	
Permitting	\$15,000	
Project Sub-Tota	\$219.600	
	10000	
Construction and Design Contingency (20%)	\$63.720	
	000.720	
TOTALS	\$382.320	\$409.082
SCENARIO 3 – Complete Rebuild	·	<u>.</u>
Project Costs/Estimates**	Current	2017 Construction (7% Escalation per year)
Mobilization	\$10.000	<u> </u>
Complete Demolition	\$60.000	
Construct New House to Match Existing	\$600.000	·
New Exterior Deck	\$90.000	1
Foundation	\$100.000	1
	\$9.500	<u> </u>
Driveway/Additional Site Work	\$4.500	1
	1	t
Construction Sub-Tota	\$874.000	
	100	
Soft Costs (10%)***	\$87.400	
Permittina	\$22.000	<u></u>
Project Sub-Tota	\$983.400	<u> </u>
Construction and Design Contingency (20%)	\$196.680	
		A (000 000
	\$1.180.080	\$1.262.686
	·	<u> </u>

* Construction Numbers based on Mesiti-Miller Engineers Estimate dated

10-28-15 with an increase of 25% for prevailing wage.

** Construction Numbers based on Meslti-Miller Engineers Estimate dated

1-28-16 with an increase of 25% for prevailing wage.

*** Soft Costs typically include Design, Engineering, Special Inspection,

Project Management, and Construction Administration.

Attachment 5

16075 Overlook Drive

Factors to Consider in Structures Disposition Board Policy 4.09

	Board Toney 4.07		
Board-Adopted District Policies	The demolition of this residence is consistent with other structures related Board Policy including the recently revised <i>Improvement District Lands</i> (4.02).		
Compatibility with Open Space Character of the Site	Due to the close proximity of the residence to Overlook Drive and to the entrance of the El Sereno Open Space Preserve Overlook permit parking lot, the structure does visually detract from the open space experience for the public or adjoining neighbor.		
Historic and Educational Value	As the residence was built in 1972, it is less than fifty (50) years old. Consequently, a historic assessment is not required. There is no educational value to the structure.		
Partnership Opportunities/Cooperation	As this residence is not historically significant and/or not considered as an asset to the community, preservation of this structure is not desired. Consequently, partnership and cost sharing are not factors to consider.		
Potential Financial Cost, Including Liability and Management	Cost of repairing or rebuilding this residence is a consideration. Please see Fiscal Impact in the main report.		
Proposed and Potential Uses	This residence provided an employee residence for the south area of the District. This was valuable for after-hours response and on-site presence for the Overlook permit parking lot. Additionally, there are few employee residences in the south area to provide coverage. When discussing with Visitor Services, given the hillside location and condition of the foundation, they agreed that there are other locations in the south area that provide a more sustainable location for an employee residence.		
Agricultural Value	Not applicable,		
Regional Important or Value	Regionally, the public would not be familiar with this residence other than walking or driving past it when entering the Preserve under permit. Additionally, the requests for permits to enter the Preserve at this location have gone down over the last five years from 53 (2013) to 23 (2017).		
Strategic Fit	This residence, with the exception of providing an employee residence in the south area, does not provide strategic value to the District.		
Tradeoffs and Impacts on District Resources	Given an extensive District Action Plan in the upcoming fiscal year 2017- 18, repairing or rebuilding a residence at this location (steep hillside) does not merit the additional resources (financial and staff resources) when balanced with other MAA and capital projects. Additionally, there may be other locations in the south area for a more sustainable location for an employee residence.		
Visitor Experience Condition of the Structure	This residence does not add to the visitor open space experience. Given the location of this residence on a steep hillside and its age, it is understandable that it is experiencing structural instability. Repair may provide a period of stability for the structure with no long-term		
	guarantees. Rebuild of the residence is costly. Additionally rebuilding in this location is not optimal. Consequently, demolition is the least costly option for disposition.		