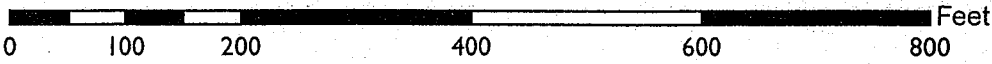


Location:	1261 Harrison Street (See map on reverse)
Assessors Parcel Number:	002-0063-002-00
Proposal:	Proposal to demolish the existing historic commercial building and construct a new mixed use tower of 440 feet in height that would include approximately 12,000 square feet of retail, 121,000 square feet of office, and 185 dwelling units. The proposal would include the inclusion of affordable units to take advantage of the affordable housing density bonus and concessions.
Applicant:	Ronnie Turner – (510)395-2766
Owner:	Pinnacle RED Group, Inc.
Planning Permits Required:	Regular Design Review for new construction and Category II Demolition Findings, Major Conditional Use Permits for a large project in the D-LM Zone in excess of 200,000 square feet and Height Exception to allow the D-LM 275 Height Zone regulations, Minor Conditional Use Permit to allow a base height of up to 85 feet, Minor Variance for loading berths (3 Required; 0 Proposed).
General Plan:	Central Business District
Zoning:	D-LM-4 Height Area – 85'
Environmental Determination:	Determination Pending, Demolition of the existing building would require the preparation of an Environmental Impact report since the structure is a Historic Resource under CEQA.
Historic Status:	Designated Historic Property (DHP); Rating C1+, contributor to the King Building Group Area of Primary Importance (API)
City Council District:	2
Status:	Pending
Action to be Taken:	Review development proposal and provide comments to staff and the Planning Commission.
For Further Information:	Contact case planner Peterson Z. Vollmann at 510-238-6167 or by e-mail at pvollmann@oaklandnet.com .

SUMMARY

The applicant is proposing a downtown mixed-use high-rise development. The proposed development would be approximately 440 feet tall at 36 stories and include a mix of ground floor retail, above ground level office and residential units within the upper levels of the tower. The project is located within the Lake Merritt Station Area Plan (LMSAP) within a block that was designated as an area with an 85-foot height limit. The block was limited in height because it consists of the King Building Group historic district which is an Area of Primary Importance (API). However, the resulting LMSAP zoning regulations allow for waivers of height areas to allow a limited number of towers that would be allowed to exceed the base zone height to a higher level up to 275 feet upon the granting of a Major Conditional Use Permit. Three such towers could be permitted within the 85-foot height area and three within the 175-foot height areas. At present, one has been granted in the 85-foot height area and one has been granted in the 175-foot height area, leaving two within the 85-foot height area applicable to



Case File: PLN17438
Applicant: Ronnie Turner
Address: 1261 Harrison Street
Zone: D-LM-4
Height Area: 85 ft

the subject property. If approved, only one more exception within the 85-foot height area would be allowed. The development proposal would be required to meet the Conditional Use Permit Criteria for the height district waiver to go up to 275 feet, the Category II Demolition Findings as well as the Design Review Findings for properties located within APIs.

During the pre-application submittal staff informed the applicant the project may not comply with the Design Review Findings and that it may not be supportable to grant one of the few available Major Conditional Use Permits to allow a height exception for this subject site since it would result in the loss of a historic building (CEQA historic resource) as well as potentially compromise the King Building Group API.

Staff intends to bring the proposal to the Planning Commission for an initial review before advising the applicant to proceed with the preparation of an Environmental Impact Report (EIR), which would be required due to the loss of the subject building which is a historic resource under CEQA. If the Planning Commission agrees with staff that the project does not meet the requirements for approval then staff will return with findings for denial of the project; if the Planning Commission believes the project may meet the requirements for approval, then staff will begin the process of preparing the required EIR. Staff is requesting input from the Landmarks Board at this time on the issues highlighted in this report prior to appearing before the Planning Commission on March 21, 2018.

PROPERTY DESCRIPTION

The subject property consists of an approximately 15,100 square foot site located at the southwest corner of Harrison and 13th Streets and is completely occupied by a one story commercial building. The property is one of five buildings on the city block that make up the King Building Group API or the "King Block". The subject building itself is listed as a City of Oakland Designated Historic Property and contains an Oakland Cultural Heritage Survey (OCHS) rating of C1+ meaning that it is a contributor to the API.

King Building Group, aka King Block

The five buildings and alley that comprise the King Building Group were developed between 1904 and 1922 by the Charles H. King family and constitute the principal surviving Oakland structures associated with the wheat and lumber baron Charles H. King and his locally prominent descendants. In addition, the group provides a good and somewhat unusual example of an early 20th century downtown development project that was carried out in phases. The buildings together fully occupy the block bounded by Webster, 12th, Harrison and 13th Streets. The buildings are visually related by zero setbacks, similar widths, pressed brick surfaces, black glazed tile store bases, skeletal articulation, Renaissance/ Baroque ornamentation and the lack of any vacant lots or intrusions. In its very mixed setting, the block is a strong unified presence. Horizontality dominates, as each building occupies long street frontages and rises only one to two stories, except for one four story focal building. The prominent use of arcades on three of the corner buildings is another unifying element. The alley entrances are masked within the facades of two of the buildings.

1261 Harrison, subject building

The OCHS records describe the subject building as an attached one-story brick masonry store building on a corner lot in an enframed semicircular arcade window-wall composition with ten bays along the 13th Street side and five bays along Harrison Street. The restrained ornamentation is Renaissance/Baroque. Surfaces are glazed white pressed brick with glazed lightly polychromed white terra cotta details. The second bay from the end on Harrison Street projects slightly outward and the opening is rectangular instead of arched and forms the Harrison Street entry to the alley which passes through the middle of the block to Webster Street. The building's arches are compound with brick headers, deep reveals and console keystones. They are supported by brick piers with elaborated terra cotta Tuscan caps. Small rectangular decorated terra cotta panels are in the spandrels. Projecting brick courses along the top form a shallow denticulated cornice above a frieze and architrave. A parapet extends above the cornice. The original storefront doors have been replaced with aluminum, but most of the storefronts retain their glazed white-banded black tile back splash panels and multiple-light clerestories set within the arches. Some of the clerestories have been painted over. The building otherwise appears unaltered.

PROJECT DESCRIPTION

The proposed project would demolish the existing commercial building to construct a new mixed use development with 36 stories reaching up to approximately 440 feet in height. The ground level of the building would contain retail activities, one of which is currently called out as a market that would have frontage onto 13th Street as well as into the midblock alley. The ground level would also include residential and office lobbies as well as an entry to an automated parking system along 13th Street. There would be one driveway each for incoming and outgoing traffic where cars would drive into a car lobby for people to get into and out of vehicles before and after the car is taken to one of the below grade levels where the vehicles are stored. Above the ground floor up to level 12 would consist of office uses totaling approximately 121,000 square feet, and above that up to the 36th floor would consist of residential uses totaling 185 dwelling units.

The proposed development would include 11% of the dwelling units as very-low income which would allow for a density bonus of up to 35%. The applicant is also requesting an affordable housing density bonus concession that would waive the requirements for tower setbacks as well as allowing the height to exceed the Conditionally Permitted maximum of 275 feet up to the proposed height of 440 feet.

GENERAL PLAN ANALYSIS

The General Plan's Land Use and Transportation Element (LUTE) classifies the project site as being located in the Central Business District (CBD) General Plan area. This land use classification is intended to encourage, support, and enhance the downtown area as a high density mixed use urban center of regional importance and a primary hub for business, communications, office, government, high technology, retail, entertainment, community facilities, and visitor uses. The CBD classification includes a mix of large-scale offices, commercial, urban high rise residential, institutional, open-space, cultural, educational, arts, entertainment, service, community facilities, and visitor uses.

Among the General Plan Land Use and Transportation policies and objectives applicable to the proposed Project are the following:

- Policy D10.1 – Encouraging Housing – Housing in the downtown should be encouraged as a vital component of a 24-hour community.
- Policy D10.2 – Locating Housing – Housing in the downtown should be encouraged in identifiable districts, within walking distance of the 12th Street, 19th Street, City Center, and Lake Merritt BART stations to encourage transit use, and in other locations where compatible with surrounding uses.
- Policy N3.1 – Facilitating Housing Construction – Facilitating the construction of housing units should be considered a high priority for the City of Oakland.
- Policy N3.2 – Encourage In-fill Development – In order to facilitate the construction of needed housing units, in-fill development that is consistent with the General Plan should take place throughout the City of Oakland.

The proposed Project is consistent with the referenced policies and objectives and the general intent of the Central Business District land use designation by constructing a new high density mixed use building containing 185 dwelling units and 121,000 square feet of office within close walking distance to the 12th Street and Lake Merritt BART stations.

Lake Merritt Station Area Plan

The Lake Merritt Station Area Plan (LMSAP) provides planning framework for future growth and development in the area surrounding the Lake Merritt BART Station. The Planning Area encompasses 315 acres in the heart of Oakland, a major urban center within the San Francisco Bay Area. Adjacent neighborhoods and destinations include Downtown Oakland, Lake Merritt, the Jack London District, Old Oakland, and Uptown.

Among the Specific Plan goals and policies applicable to the proposed Project, are as follows:

- **LMSAP Policy LU-2** - High intensity development potential. Support transit-oriented development and accommodate regional growth projections by promoting high intensity and high density development in the Planning Area.
- **LMSAP Policy LU-4** - Active ground floor uses. Encourage active uses in new buildings on key streets in neighborhood hubs in order to transform key streets into activated pedestrian connections over time and expand the vibrancy and activity that already exists in some areas, as shown in Figure 4.2. These active ground floor uses should be located at the street edge, or at the edge of parks, plazas, or other public spaces. Activated neighborhood hubs include the 14th Street Corridor.
- **LMSAP Policy LU-19** – King Block Alley. Encourage redevelopment of the King Block alley as an active use space that creates a unique destination.
- **LMSAP Policy OS-25** – King Block Alley. Work with owners and adjoining properties of the King Block alley to develop a unique, active use for the space that highlights the historic nature of the space. The City can provide technical assistance and waive certain standards and permits in order to promote revitalization of this alley. Potential uses include a café row, bocce ball courts or other games, and a sculpture garden.

The project site is located within the Upper Chinatown Area sub district of the LMSAP. This sub district contains six identified opportunity sites for future development, of which the project site is not one of. The site sits within the historic King Block, which is referenced specifically several times throughout the LMSAP. The vision for the King Block is for revitalization of the historic buildings and activation of the King Block Alley as a destination that is able to take advantage of the unique historic nature of the site (policies LU-19 & OS-25). The LMSAP also references limits on heights in historic districts in Chapter 4.2 stating that considerations for future building heights should take into account the surrounding historic building heights and character of historic districts, and specifically cites the King Block in Chapter 7.1 stating that the height limit in the King Block was limited to a maximum of 85 feet so to keep future development within the range of existing heights in the district.

While the proposed development would be consistent with a number of broadly stated development related goals to housing and economic development with the office proposal, it appears to fall short of specific goals identified within the LMSAP related to controls on location of development, limitation on building heights, and historic preservation.

ZONING ANALYSIS

The subject property is located within the D-LM-4 Zone. The site is also located within the D-LM Height Area 85. The intent of the D-LM-4 Zone is to designate areas of the Lake Merritt Station Area Plan District appropriate for a wide range of Residential, Commercial, and compatible Light Industrial Activities. The Height Area 85 allows for a maximum residential density of one dwelling unit per 225 square feet of lot area and a maximum commercial FAR of 5.0.

Parking and Loading

The proposed development project is located within the D-LM Zoning and as such no off-street parking is required. However, the development will include 185 off street parking stalls at a 1:1 ratio for the dwelling units located within a fully automated subterranean garage. The proposal also requires bike parking in the amount of 55 Long Term Stalls within the development and an additional 20 short term stalls that can be provided in bike racks around the exterior in the public right of way.

The proposal requires three off-street loading berths, one for the residential and two for the office use. The applicant has requested a variance to not provide any off-street loading.

Conditional Use Permit for Density/ Intensity

The D-LM Zones requires that any development that exceeds 200,000 square feet be required to obtain approval of a Major Conditional Use Permit.

The D-LM Zones also dictate allowed height and density based upon the height area in which the property is located. The subject property is located within a D-LM height area 85, in which for the 15,101-square foot site the maximum development allowed would be 67 dwelling units and 75,505 square feet of commercial floor area. The D-LM Zone allows for two exceptions west of the Lake Merritt Channel to jump to the D-LM height area 275 by the granting of a Major Conditional Use Permit, which for this site would allow the height to increase from a maximum of 85 feet to 275 feet.

The D-LM Zone also requires a Conditional Use permit to allow for an increase in the base height from 45 feet to 85 feet, which the applicant is also requesting as part of the application.

The proposed development site would allow the following density based upon the Height Areas that it is located within as compared to the allowances under the granting of the Major Conditional Use Permit to move the site into a 275 height area described in the table below:

Height Zone	Lot Area	Residential Density	Commercial FAR	Max Units/ Floor Area
85' Height Zone	15,101	1:225	5.0	67 dwellings / 75,505 sq.ft.
275' Height Zone w/ CUP	15,101	1:110	12.0	137 dwellings/ 181,212 sq.ft.

Density Bonus for Affordable Housing

The applicant has proposed as part of their development proposal to include affordable units within the project in order to take advantage of a density bonus and concessions pursuant to governing State law. The applicant proposes to include 11% of the 137 conditionally permitted dwelling units at Very Low Income (less than 50% of Median Income) resulting in 15 affordable units. This allows for a Density Bonus of 35% above the baseline number of 137 units resulting in a maximum density of 185 dwelling units on the site.

In addition to the bonus in density allowed on-site the applicant is also able to take advantage of two density bonus concessions/incentives that would relax other Zoning Regulations. The applicant has requested that to waive the required tower bulk regulations above the base height and the conditionally permitted height limit of 275 feet.

DESIGN REVIEW

The proposed development is required to undergo Design Review pursuant to Planning Code chapter 17.136 and is subject to several Design Review Criteria. Furthermore, pursuant to Section 17.136.055.C, the proposal is required to appear before the Landmarks Preservation Advisory Board for a recommendation prior to a decision being made upon the application. As such, this item is appearing before the Board for a recommendation on the application for the Planning Commission. Staff is requesting the Board to provide comments on the proposed development within the context of the listed design review criteria below in this section.

To date, staff has not performed a thorough review of the actual physical design of the building exterior due to the need to receive direction from the Board and Planning Commission on fundamental issues related to the project. Staff requests that comments be focused on the site planning, building massing and overall development concept including the demolition of the historic building, all within the context of the proposal being located within the King Building Group API. Staff has not provided comments to the applicant on the exterior design of the tower due to concerns that the overall concept of the development that includes the demolition of a historic building and a high-rise development within an API, and any such efforts at this point in time would be moot given that staff may end up recommending denial of the project given those issues. In the event that the Planning Commission

directs staff to proceed with review of the application regardless of these staff concerns then a thorough review of the exterior design of the building will commence along with the necessary environmental review of the development proposal.

The proposal must meet the following three sets of Design Review criteria. Each specific criterion that is not applicable to the project is shown in ~~strike through~~:

SECTION 17.136.050. A – REGULAR DESIGN REVIEW CRITERIA (Residential Facilities)

1. That the proposed design will create a building or set of buildings that are well related to the surrounding area in their setting, scale, bulk, height, materials, and textures;
2. That the proposed design will protect, preserve, or enhance desirable neighborhood characteristics;
3. That the proposed design will be sensitive to the topography and landscape;
4. That, if situated on a hill, the design and massing of the proposed building relates to the grade of the hill;
5. That the proposed design conforms in all significant respects with the Oakland General Plan and with any applicable design review guidelines or criteria, district plan, or development control map which have been adopted by the Planning Commission or City Council.

SECTION 17.136.055.B.2 - HISTORIC PROPERTIES IN THE D-LM & CBD

- a) Any proposed new construction is compatible with the existing API in terms of massing, siting, rhythm, composition, patterns of openings, quality of material, and intensity of detailing;
- b) New street frontage has forms that reflect the widths and rhythm of the facades on the street and entrances that reflect the patterns on the street;
- c) The proposal provides high visual interest that either reflects the level and quality of visual interest of the API contributors or otherwise enhances the visual interest of the API.
- d) The proposal is consistent with the visual cohesiveness of the API. For the purpose of this finding, visual cohesiveness is the architectural character, the sum of all visual aspects, features, and materials that defines the API. A new structure contributes to the visual cohesiveness of a district if it relates to the design characteristics of a historic district while also conveying its own time. New construction may do so by drawing upon some basic building features, such as the way in which a building is located on its site, the manner in which it relates to the street, its basic mass, form, direction or orientation (horizontal vs. vertical), recesses and projections, quality of materials, patterns of openings and level of detailing. When some combination of these design variables are arranged in a new building to relate to those seen traditionally in the area, but integral to the design and character of the proposed new construction, visual cohesiveness results;

- e) ~~Where height is a character-defining element of the API there are height transitions to any neighboring contributing historic buildings. "Character-defining elements" are those features of design, materials, workmanship, setting, location, and association that identify a property as representative of its period and contribute to its visual distinction or historical significance. APIs with a character-defining height and their character-defining height level are designated on the zoning maps; and~~
- f) ~~For additions, the proposal meets either: 1) Secretary of Interior's standards for the treatment of historic resources; 2) the proposal will not adversely affect the character of the property or API; or, 3) upon the granting of a conditional use permit, (see Chapter 17.134 for the CUP procedure) and a hearing in front of the Landmarks Preservation Advisory Board for its recommendations, a project meets the additional findings in Subsection g., below.~~
- g) For construction of new principal buildings:
- i. The project will not cause the API to lose its status as an API;
 - ii. The proposal will result in a building or addition with exterior visual quality, craftsmanship, detailing, and high quality and durable materials that is at least equal to that of the API contributors; and
 - iii. ~~The proposal contains elements that relate to the character-defining height of the API, if any, through the use of a combination of upper story setbacks, window patterns, change of materials, prominent cornice lines, or other techniques. APIs with a character-defining height and their character-defining height level are designated on the zoning maps.~~

SECTION 17.136.075.C – CATEGORY II DEMOLITION FINDINGS:

1. For the demolition of structures in the CIX-1A Zone; or contributors to an S-7 Zone, S-20 Zone, or API:
 - a. The applicant demonstrates that: i) the existing property has no reasonable use or cannot generate a reasonable economic return and that the development replacing it will provide such use or generates such return, or ii) the applicant demonstrates that the structure constitutes a hazard and is economically infeasible to rehabilitate on its present site. For this criterion, a hazard constitutes a threat to health and safety that is not immediate; and
 - b. It is economically, functionally, architecturally, or structurally infeasible to incorporate the historic structure, or existing structure in the CIX-1A Zone, into the proposed development.
2. ~~For the demolition of noncontributors to an S-7 Zone, S-20 Zone, or API: The existing structure is either: i) seriously deteriorated or a hazard; or ii) the existing design is undistinguished and does not warrant retention. For this finding, a hazard constitutes a threat to health and safety that is not immediate;~~
3. For the demolition of any structure in an S-7 Zone, S-20 Zone, or API:

- a. The design quality of the replacement structure is equal/superior to that of the existing structure; and
- b. The design of the replacement project is compatible with the character of the district, and there is no erosion of design quality at the replacement project site and in the surrounding area. This includes, but is not necessarily limited to, the following additional findings:
 - i. The replacement project is compatible with the district in terms of massing, siting, rhythm, composition, patterns of openings, quality of material, and intensity of detailing;
 - ii. New street frontage includes forms that reflect the widths and rhythm of the facades on the street and entrances that reflect the patterns on the street;
 - iii. The replacement project provides high visual interest that either reflects the level and quality of visual interest of the district contributors or otherwise enhances the visual interest of the district;
 - iv. If the design contrasts the new to the historic character, the replacement project enriches the historic character of the district;
 - v. The replacement project is consistent with the visual cohesiveness of the district. For the purpose of this item, visual cohesiveness is the architectural character, the sum of all visual aspects, features, and materials that defines the district. A new structure contributes to the visual cohesiveness of a district if it relates to the design characteristics of a historic district. New construction may do so by drawing upon some basic building features, such as the way in which a building is located on its site, the manner in which it relates to the street, its basic mass, form, direction or orientation (horizontal vs. vertical), recesses and projections, quality of materials, patterns of openings and level of detailing. When a combination of some of these design variables are arranged in a new building to relate to those seen traditionally in the area, but integral to the design and character of the proposed new construction, visual cohesiveness results; and
 - vi. The replacement project will not cause the district to lose its current historic status.

KEY ISSUES

While staff has concerns about the project's ability to comply with the required Conditional Use Permit criteria to allow the height zone exception within the D-LM Zone, that issue is outside of the purview of the LPAB and will be discussed more thoroughly with the Planning Commission. The main issues for LPAB review are compliance with the required Design Review Criteria and LMSAP Design Guidelines.

Design Consistency with the API Criteria

As required by the API Design Review criteria in the D-LM Zone projects are required to relate to the massing of other building within the API. Given scale and mass of the proposed tower at 440 feet in height is seems difficult to make the consistency finding given no other building in the King Building

Group API exceeds 70 feet in height. While the King Building Group API is not one of the downtown APIs that is considered to have a height context limitation, that provision was set forth to further limit heights in those areas below the maximum height within the zone. For example, the Cathedral District API is in a zone that allows buildings up to 55 feet in height, but the context is set at 45 feet further reducing allowances for height without special design considerations. For the purposes of the King Block the API wasn't designated one of these areas because most of the buildings are only one to two stories with the exception of the King Building which is four stories and approximately 65 feet in height.

Consistency with the Demolition Findings.

The applicant prepared proposed demolition findings for review by staff, and staff has concerns that the findings are not able to be met with the proposed development. The first issue is with the soundness report (Appendix F of the Demo Findings Submittal) in which a number of items are included in the primary and secondary costs that appear unnecessary such as all new windows and doors throughout, all new bathrooms and HVAC systems throughout, all new utilities to the main point of service. While a number of these upgrades may be preferable it seems that their inclusion in some instances is unnecessary in order to have a functioning commercial space as many of these items were permitted at the time the building was constructed and some of the costs seem high given the scope of the proposed work as well as the fact that most of the building is currently leased and occupied by tenants.

The second issue is that even considering the full scope of improvements and associated costs proposed in the soundness report it appears that the applicant's economic analysis (Appendix A of the Demo Findings Submittal) actually demonstrates that the building can generate a reasonable economic return contrary to the conclusion in the report. In the submitted economic analysis the costs for improvements is shown as being \$8,817,998 whereas the actual number for upgrades from the soundness report is \$3,077,669 for both primary and secondary upgrades. The cost differential is from the economic analysis including costs for seismic upgrades to current code which are prohibited in being included in upgrade costs under the Demolition Findings Ordinance. The economic analysis argues that the rate of return (which appears to be 7%) falls short by \$4,725,837 of the total investment of the building value of \$3,600,000 plus the \$8,817,998 improvements costs (page 39). However, when the actual improvement costs from the soundness report of \$3,077,669 are substituted, it appears that their economic return target is exceeded by over one million dollars.

LMSAP Design Guidelines

Another issue with concern for the project is consistency with the LMSAP Design Guidelines that were developed as part of the specific plan process. The issue is that the project appears to have consistency issues with the Historic Resources section of the Design Guidelines. The two guidelines at issue are:

- **DG-67 – Adaptive Reuse.** Retain and integrate historic and architecturally significant structures into larger projects with adaptive reuse.
- **DG-68 – Preservation.** Avoid Removal of and rehabilitate historic resources.

Based upon the two above mentioned guidelines it would seem that the proposed development should at the least attempt to incorporate the exterior components of the building as part of a redevelopment project at the site and restore exterior components. As presently submitted the proposal appears inconsistent with these two Design Guidelines since the development proposal would completely remove the historic building.

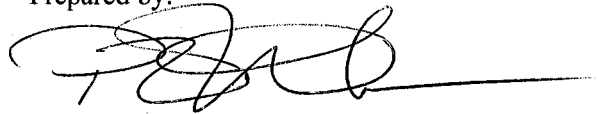
ENVIRONMENTAL DETERMINATION

Review of the project's compliance with CEQA has not been completed at this time. However, if the project does proceed, the development proposal would require the preparation of an Environmental Impact Report given that the proposal includes the demolition of a CEQA historic resource, which for purposes of CEQA review would comprise a project that may have a significant effect on the environment. Any future EIR that is prepared would appear before the LPAB for meetings for scoping, comments on the DEIR and any resulting Final EIR prior to certification.

RECOMMENDATIONS:

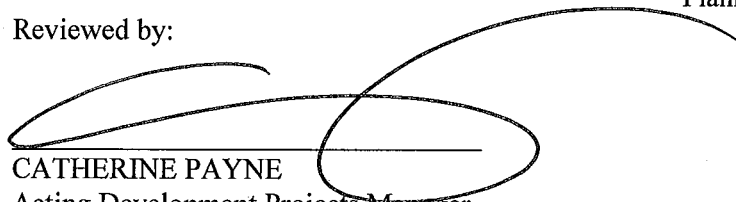
1. Receive any testimony from the applicant and/or interested parties.
2. Provide direction to staff as to whether or not the Board finds the project as proposed is compliant with the Design Review Criteria including the Category II Demolition Findings.

Prepared by:



PETERSON Z. VOLLMANN
Planner IV

Reviewed by:



CATHERINE PAYNE
Acting Development Projects Manager
Bureau of Planning

ATTACHMENTS:

- A. Project Plans

NOTE: The Demo Findings Submittal was provided under separate cover for review and consideration by the LPAB, and is available to the public at the Bureau of Planning office at 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, CA 94612 and on the City's website at:

<http://www2.oaklandnet.com/oakca1/groups/ceda/documents/agenda/oak069439.pdf>