



CITY OF GLENDALE, CALIFORNIA REPORT TO THE CITY COUNCIL

AGENDA ITEM

Hearing: Public Hearing on Appeal of Design Review Board's approval of Design Review Board Case No. 2004770 located at 1248 Corona Drive.

1. Resolution Adopting a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Project at 1248 Corona Drive
2. Motion to sustain the Design Review Board's decision to approve the Design Review Board application with conditions.
3. Motion to continue the matter, directing the City Attorney to draft findings reversing the Design Review Board's decision and denying the project.

COUNCIL ACTION

Item Type: Public Hearing

Approved for December 8, 2020 **calendar**

ADMINISTRATIVE ACTION

Submitted by:

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Prepared by:

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Reviewed by:

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Michael J. Garcia, City Attorney

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Jay Platt, Principal Planner

Approved by:

Roubik Golanian, P.E., Interim City Manager

RECOMMENDATION

Staff recommends the City Council sustain the Design Review Board's decision to approve Design Review Case No. PDR 2004770. If the Council wishes to reverse the Design Review Board's decision and deny the project, a second alternate motion is included to continue this matter and direct the City Attorney to prepare written findings in support of denying the Design Review Board case.

BACKGROUND/ANALYSIS

This hearing is an appeal of the decision made by the Design Review Board (DRB) on May 28, 2020, to approve Design Review Board Case No. PDR 2004770 to construct a new two-story, 2,299 square-foot, single-family dwelling with an attached 545 square-foot, two-car garage on a vacant, 8,889 square-foot lot, zoned R1R (FAR District III) with an average current slope of approximately 70%.

Appellant: Ms. Sophia Estrada

Status of Appellant: Neighbor

Owner: Aligned Properties, LLC

Project Applicant: Mr. Eduardo J. Carrillo

Assessor's Parcel Number: 5670-016-001, 5679-016-002 and 5679-016-024

Zone: R1R (Restricted Residential) Zone, Floor Area District II

Land Use Element: Low Density Residential

Existing Site Characteristics: The subject site is a vacant lot in the Adams Hill neighborhood with an up-sloping topography that steeply ascends from the western property line along Corona Drive to the rear property line. Surrounding the subject site are other R1R zoned properties with existing single-family dwellings to the east and west, and vacant lots to the north and south. The surface of the site is mostly bare, with patches of wild grass, weeds, and small trees and bushes scattered throughout the property. There are no protected indigenous tree species on or within 20 feet of the property.

Circulation Element: Corona Drive is classified as a local street by the Circulation Element of the General Plan.

Surrounding Land Use/Zoning: Surrounding the project site are R1R zoned properties with single-family residences to the east and west, and vacant hillside properties to the north and south.

Environmental Determination: An Initial Study was prepared and circulated from May 1, 2020 to May 21, 2020 for a 20-day review period. Significant impacts were identified for Geology; however, mitigation measures have been added to reduce identified impacts to less than significant levels.

GEO -1 All earth work, including at a minimum, site preparation, grading and compaction of fill shall be conducted under continuous observation and testing by a Registered Professional Engineer and/or Certified Engineering Geologist.

- An Engineering Geologist shall inspect the cut slopes at a point where five feet of bedrock is exposed to confirm the results of the geotechnical report's findings.
- Prior to placing any backfilling, a Soils Engineer and/or Engineering Geologist shall observe the excavation bottoms. All backfill materials shall be placed under engineering observation and in accordance to the guidelines of geotechnical report.
- Excavation activities and all structural foundations (footing and piles) shall be observed and approved by a Registered Professional Engineer and/or Certified Engineering Geologist before the reinforcing is placed.
- All shoring piles shall be inspected by a qualified professional, such as a Grading Deputy.

GEO -2 All slopes shall be covered with erosion resistant vegetation that are low water consumptive, fire retardant and deep rooted ground cover with proper irrigation to enhance soil cover stability.

The Final Mitigated Negative Declaration is attached as Exhibit 12.

Project History:

- | | |
|---------------------|---|
| August 26, 2016 - | Application was submitted and was deemed incomplete within 30-days. Additional materials, such as a soils report and slope analysis were required for environmental review. |
| February 22, 2018 – | The Design Review Board decided the project is to return for redesign (5-0 vote) with the conditions (Exhibit 9). |
| August 22, 2018 – | Applicant resubmitted an application with redesigned features to address the conditions outlined from the February 22, 2018 Design review Board meeting. |

January 10, 2019 –	The Design Review Board decided the project is to return for redesign (3-1 vote) with the conditions (Exhibit 7)
June 2, 2019 -	Applicant resubmitted an application with redesigned features to address the conditions outlined from the January 10, 2019 Design Review Board meeting.
May 28, 2020 -	The Design Review Board approved the project (3-2 vote) with the conditions (Exhibit 5)
June 15, 2020 -	An appeal was filed (Exhibit 10).

ANALYSIS

The appellant's arguments mainly focus on the belief that the Project is inconsistent with the City's Comprehensive Design Guidelines in regards to landform modification and the construction method of utilizing large retaining walls, as well as the accuracy of the geotechnical report, and potential impacts from vibration generated from construction.

The appellant contends that the Project is inconsistent with Glendale's Comprehensive Design Guidelines, the amount of grading, and the use of retaining walls should be minimized/avoided.

Staff's Response:

Chapter 3 (A) - Hillside Design Guidelines, Building Location, states that it is imperative that new homes follow the topography, and that the buildings are to terrace up the hillside or be built into the upslope in order to minimize the alteration of the landform.

The project site has an up-sloping topography that steeply ascends (approximately 70%) from the western property line along Corona Drive to the rear property line. The proposed dwelling will be constructed into the hillside to locate the majority of the building's mass into the slope and the building's profile will terrace with the natural topography. The vertical cuts from the planned grading (excavation) work will be supported by approximately 25-foot tall retaining walls that are part of the residence (impact wall along the rear of the structure). Code compliant setbacks are provided: 15-feet at the street front, 12-feet, 6-inches at the north (side), approximately 76-feet at the south (side), and 10-feet at the east (rear).

As stated above, staff believes the Project is consistent with this section of the guidelines, as the majority of the grading involves creating the cut area into which the house will be built, with the retaining walls at the rear and sides also serving as below-grade structural walls.

The appellant contends that the geotechnical investigation prepared for the Project is based on assumptions because the proposed grading will exceed 32

feet and the test pits discussed in the report explored only 5 feet into the ground. The Design Review Board did not take this in consideration before rendering a decision.

Staff's Response:

As part of the Design Review Board's consideration for the project, a mitigated negative declaration (MND) was prepared by staff to analyze the project's potential environmental effects. A Geotechnical Investigation was prepared by Applied Earth Sciences (AES) (Dated April 1, 2019) to study the subsurface materials of the site to evaluate slope stability and formulate recommendations for design and construction of temporary excavations, retaining walls, foundations, and grading. The investigation included geologic mapping, subsurface exploration, soil and bedrock sampling and laboratory testing, which bedrock was encountered in all six test pits at a depth of five feet. By the report's engineering-geologic considerations, the proposed dwelling will be founded in sandstone bedrock to sufficient depth. Bedrock was encountered in all of the test pits and was found to be moderately well indurated, crumbly to slightly friable, medium dense to dense, and slightly moist. The bedrock is expected to provide very good support for the Project through conventional spread footing. Piles will be used to support high walls where temporary shoring is used.

The vertical cuts from the planned grading (excavation) work will be supported by retaining walls. These walls will be designed as "restrained walls" and will be restrained against rotation. The upper most retaining wall supporting the ascending slope will be designed as cantilevered system. This retaining wall will have a freeboard of at least two feet and a concrete paved drain (swale) to divert surface water and collect normal erosion debris. For support of high cuts, use of temporary shoring will reduce the volume of over-excavation and the subsequent backfilling. The shoring will consist of cantilevered soldier piles. The piles will be incorporated into the retaining walls and be part of the permanent structures. The lower portions of the shoring piles (below the base of the excavation) will be used to provide vertical support through skin friction.

AES' geotechnical investigative report does disclaim that the conclusions and recommendations presented are based on exploration "window" borings and excavations, which is in conformance with accepted engineering practice. Some variations of subsurface conditions are common between "windows" and major variations are possible. Mitigations measures were applied requiring that site work should be made under continuous observation and testing to identify if significant variations are noted in the geologic features of the underlying bedrock to prevent on-site or off-site landslide, lateral spreading, subsidence, or collapse during site preparation and construction activities.

Compliance with Mitigation measures GEO-1 and GEO-2 will reduce potentially significant impacts to less than significant.

GEO-1. Site work should be made under continuous observation and testing to identify if significant variations are noted in the geologic features of the underlying bedrock.

- An Engineering Geologist shall inspect the cut slopes at a point where five feet of bedrock is exposed to confirm the results of the geotechnical report's findings.
- Prior to placing any backfilling, a Soils Engineer and/or Engineering Geologist shall observe the excavation bottoms. All backfill materials shall be placed under engineering observation and in accordance to the guidelines of geotechnical report.
- Excavation activities and all structural foundations (footing and piles) shall be observed and approved by a Registered Professional Engineer and/or Certified Engineering Geologist before the reinforcing is placed.
- All shoring piles shall be inspected by a qualified professional, such as a Grading Deputy.

GEO-2 All slopes shall be covered with erosion resistant vegetation that are low water consumptive, fire retardant and deep rooted ground cover with proper irrigation to enhance soil cover stability.

The appellant further contends the geotechnical report prepared by AES did not investigate or analyze potential risk of construction related vibration.

Staff's Response:

In response to the appellant's basis of the appeal, a Vibration Memorandum, prepared by Meridian Consultants, LLC. (dated October 28, 2020), was prepared to assess potential construction vibration related impacts onto the adjacent residential dwellings. The memorandum identified the existing residential dwellings immediately to the east and upslope, and the residential dwellings to the west and across Corona Drive. The concrete piles supporting the nearest residential building is located to the east 10 feet from the project's 5-foot tall retaining wall, and 15-feet from the dwelling's approximately 25-foot tall impact wall.

The project will utilize an excavator (CAT 420, 308, or 305) to create a pathway on the steep hill to provide access for drilling over a 3- to 5-day period. Once the hillside is accessible, drilling for shoring utilizing concrete caissons or soldier piles with a 24 to 30-inch diameter is anticipated with an approximate duration of 2 to 3 weeks. Concurrently, caissons rebar or soldier pile beam will be set into the holes and concrete poured. The placement of rebar/w-shape soldier piles will be done using a mobile crane located on the street along Corona Drive. Concrete will be poured with a regular pump and hose.

Excavated soil will be loaded directly to trucks on the street right of way along Corona Drive located approximately 60 feet from the adjacent neighbor.

While the City's municipal code does not currently have a significance vibration perception threshold to assess vibration impacts, the memorandum used the Federal Transportation Authority's (FTA) Transit Noise and Vibration Assessment (September, 2018) to evaluate potential impacts related to construction vibration. According to FTA guidelines, impacts relative to ground-borne vibration associated with potential building damage would be considered significant if the project construction activities cause ground-borne vibration levels to exceed 0.5 PPV (peak particle velocity) at the nearest off-site reinforced-concrete, steel, or timber building.

Per Table 1, heavy equipment, such as Pile Drivers (impact and sonic), would be able to exceed the 0.5 PPV threshold at a distance of 25-feet. However, the project will not use pile drivers, clam shovel drops, hydromills, or vibratory rollers as part of its construction. The expected construction equipment to be used for the project are a large and small bulldozer, caisson drilling, loaded trucks and jackhammers.

Table 1
Vibration Source Levels for Typical Construction Equipment

Equipment		PPV at 25 ft, in/sec	Approximately Lv at 25 ft
Pile Driver (impact)	Upper range	1.518	112
	Typical	0.644	104
Pile Driver (sonic)	Upper range	0.734	105
	Typical	0.17	93
Clam shovel drop (slurry wall)		0.202	94
Hydromill (slurry wall)	In soil	0.008	66
	In rock	0.017	75
Vibratory Roller		0.21	94
Hoe Ram		0.089	87
Large bulldozer		0.089	87
Caisson drilling		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58
Source: FTA, Transit Noise and Vibration Impact Assessment Manual, September 2018.			

Table 2 below presents the construction vibration impacts associated with building damage and analyzes the estimated vibration velocity for each equipment type at the adjusted distances at 10 and 15 feet, respectively. The forecasted vibration levels for the expected construction equipment (large and small bulldozers, caisson drilling, loaded trucks and jack hammers) will be below the 0.5 PPV significance threshold.

Table 2
On-Site Construction Vibration Impacts – Building Damage

Distance from Off-Site Building Structures	Estimated Vibration Velocity Levels at the Nearest Off-Site Structures from Typical Construction Equipment					Significance Threshold (PPV ips)	Exceeds Threshold?
	Large Bulldozer	Caisson Drilling	Loaded Trucks	Jack-hammer	Small bulldozer		
FTA Reference Vibration Levels at 25 feet							
	0.089	0.089	0.076	0.035	0.003	0.5	No
10 feet	0.352	0.352	0.300	0.138	0.012	0.5	No
15 feet	0.191	0.191	0.164	0.075	0.006	0.5	No

Source: US Department of Transportation, Federal Transportation Authority, Transit Noise and Vibration Impact Assessment.

*Note: Refer to **Appendix A** for construction vibration worksheets.*

As a result, impacts relating to building damage from on-site construction vibration would not be considered significant.

The Vibration Memorandum by Meridian Consultants, LLC is attached as Exhibit 13.

The appellant states that the Glendale Hillside Ordinance calls for terraced retaining walls where retaining walls are necessary. The proposed wall is one continuous wall over 32 feet high and 72 feet wide.

Staff's Response:

The Glendale Hillside Design Guidelines encourages minimizing the use of retaining walls that modify landform, especially those visible from the street to avoid the appearance and visual impacts of manufactured flat side and rear yards. Where retaining walls are necessary, they should terrace with the existing topography as much as possible. However, the appellant's referenced retaining wall will be integrated as a below grade part of the permanent structure at the rear and sides will be completely concealed by the building's volume.

As a result, the referenced retaining wall is compliant with the Glendale Hillside Ordinance.

SUMMARY

Based on the analysis of the appeal and the reasoning above, staff recommends that the City Council sustain the Design Review Board's decision to approve with conditions. The basis of the staff's decision includes the following:

Site Planning: The proposed site planning is appropriate, as modified by any conditions, to the site and its surroundings for the following reasons:

- The two-story dwelling will be built into the upsloping terrain, which will allow the building mass to be pushed into the hillside.
- The setbacks and driveway configurations for the building are considerate of the prevailing neighborhood pattern and will comply with code standards.
- The landscape design will complement the site design and provide a natural look to the hillside with a variety of California-friendly shrubs and trees. The overall landscape design will help blend the building into the natural hillside.
- In lieu of the hydroseed landscaping proposed at the southern portion of the lot, a conditioned is recommended for this area to be landscaped with a mix of California-friendly groundcovers and shrubs.

Mass and Scale: The proposed massing and scale are appropriate, as modified by any proposed conditions, to the site and its surroundings for the following reasons:

- The two-story dwelling will be built into the upslope side of the property to reduce the appearance of a monumental structure. The building's first level will be set back 15 feet from Corona Drive and the building's second level will be set back an additional three to five feet further to allow the building's profile to terrace with the hillside.
- The design of the dwelling is well articulated with multiple breaks and designed separate volumes further breaking up the mass of the building.
- The flat roof design is appropriate to the scale and proportions of the building. The roof line varies in height complementing the contemporary design of the new dwelling.

Design and Detailing: The proposed design and detailing are appropriate, as modified by any proposed conditions, to the site and its surroundings for the following reasons:

- The immediate neighborhood is comprised of a variety of simply styled single-family dwellings. The proposed Contemporary style of the dwelling is well designed and appropriate to the neighborhood context.
- The dwelling's finish materials include smooth stucco, vertical wooden rainscreen siding (Ipe wood), and a stainless steel railing system. These will provide an appropriate variety of textures and color that will enhance the design. Staff is recommending a condition that in lieu of stucco, additional siding material (such as vertical wood or metal panel) should be applied at the volume adjacent to the

building's front entry, as well as at the master bedroom's bathroom at the upper level to enhance the building's design.

- The windows and doors coordinate well with the design of the building. A combination of recessed aluminum-clad wood windows and aluminum framed storefront windows will be placed throughout the dwelling.

PUBLIC NOTICE

The Code requires public notice when the Council considers approval of entitlements such as design review. Staff has mailed copies of the notice to all property owners and occupants within 500' of the project. Also, a public notice was posted on-site.

FISCAL IMPACT

There is no fiscal impact to the City associated with this appeal.

ALTERNATIVES

In regards to the Design Review Board application, the City Council has the following three alternatives to consider:

Alternative 1: The City Council may sustain the Design Review Board's decision to adopt the final mitigated negative declaration and to approve the Design Review Board application with conditions

Alternative 2: The City Council may continue the matter, directing the City Attorney to draft findings reversing the Design Review Board's decision and denying the project.

Alternative 3: The City Council may also consider any other alternatives to design review submission not proposed by staff.

CAMPAIGN DISCLOSURE

In accordance with the City Campaign Finance Ordinance No. 5744, Exhibit 11 is attached and contains the names and business addresses of the members of the board of directors, the chairperson, CEO, COO, CFO, Subcontractors and any person or entity with more than 10% interest or more in the company proposed for contract in this Agenda Item.

EXHIBITS

1. Location Map
2. Photos of Existing Property
3. Neighborhood Survey and Photos of Surrounding Properties
4. Reduced Plans and Renderings (provided to the DRB on May 28, 2020)
5. DRB Staff Report and Record of Decision – May 28, 2020
6. Reduced Plans and Renderings (provided to the DRB on January 10, 2019)
7. DRB Staff Report and Record of Decision – January 10, 2019
8. Reduced Plans and Renderings (provided to the DRB on February 22, 2018)
9. DRB Staff Report and Record of Decision – February 22, 2018

- 10. Exhibit 10: Appeal Form (completed by the appellant)
- 11. Exhibit 11: Campaign Disclosure Form
- 12. Exhibit 12: Environmental Documents
- 13. Exhibit 13: Vibration Memorandum (prepared by Meridian Consultants, LLC., dated October 28, 2020)
- 14. Exhibit 14: Geotechnical Investigation (prepared by AES, dated April 1, 2019)