

TOWN *Of* **PARADISE VALLEY**



STAFF REPORT

TO: Chair and Board of Adjustment

FROM: Lisa Collins, Community Development Director
Paul Michaud, Planning Manager
George Burton, Senior Planner

DATE: September 1, 2021

DEPARTMENT: Planning Department
George Burton, 480-348-3525

AGENDA TITLE:
Behshad Variance – 5709 E Arroyo Road (APN 169-55-034A)
Case No. BA-21-07

MOTIONS

A. MOTION FOR APPROVAL

I move for **[approval]** of Case No. BA-21-07, a request by Keramat and Parvin Behshad, property owners of 5709 E. Arroyo Road; for a variance from the Zoning Ordinance Article XXII, Hillside Development Regulations, to allow for unscreened roof mounted solar panels (solar panels that are not hidden from view when viewed from the same or lower elevation) to be installed on a single-family residence with a pitched roof. The variance shall be subject to the following stipulations:

1. The improvement shall be in compliance with the submitted plans and documents:
 - a. The Narrative, pages 1 – 3, titled “Variance Narrative” and prepared by Elevation Solar LLC;
 - b. Cover Sheet, Sheet PV1, prepared by Elevation Solar LLC and dated January 15, 2021;
 - c. Site Plan, Sheet PV2, prepared by Elevation Solar LLC and dated January 21, 2021;
 - d. Site Plan, Sheet PV2.1, prepared by Elevation Solar LLC and dated July 16, 2021;
 - e. PV Layout, Sheet PV3, prepared by Elevation Solar LLC and dated January 21, 2021;
 - f. Details & Uplift Calculations, Sheet PV4, prepared by Elevation Solar LLC and dated January 21, 2021;
 - g. Panasonic HIT Photovoltaic Module AC Series - Solar Panel Detail sheets (two sheets);
 - h. IronRidge Lush Mount System Datasheets (two sheets); and

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- i. Site Plan, prepared by Elevation Solar LLC and dated July 16, 2021

Reasons for Approval:

I find that there are special circumstances, applicable to only the subject lot, meeting the variance criteria.

B. MOTION FOR DENIAL

I move for **[denial]** of Case No. BA-21-07, a request by Keramat and Parvin Behshad, property owners of 5709 E. Arroyo Road; for a variance from the Zoning Ordinance Article XXII, Hillside Development Regulations, to allow for unscreened roof mounted solar panels (solar panels that are not hidden from view when viewed from the same or lower elevation) to be installed on a single-family residence with a pitched roof.

Reasons for Denial:

I find that the variance requested does not meet the variance criteria.

BACKGROUND

Request

The applicant is proposing to place 5 unscreened roof mounted solar arrays (with a total of 42 solar panels) on the house. The house is mostly a pitched roof home (with only one small portion of flat roof) and Section 2207.II.E of the Town Zoning Ordinance requires all solar panels to be hidden from the same or lower elevation:

Section 2207.II.E. Solar panels may be allowed if they are integrated into the building design and hidden from view when viewed from the same or a lower elevation and approved by the Hillside Building Committee by a Combined Review. Solar panels may be allowed on pitched roofs when screened from the same or a lower elevation by the adjoining hillside or hillside cut and approved by the Hillside Building Committee by a Combined Review.

Stealth solar technology may also be used on roofs and may not be required to be hidden from view. Stealth solar technology shall be limited to solar shingles and solar tiles that are integrated to blend in with the building design, do not have a shiny metallic finish, have a light reflective value of 38% or less, and must be approved by the Hillside Building Committee by a Combined Review.

Typically, roof mounted solar panels are placed on flat portions of the roof and screened by the adjoining roof parapets. Since the house only has one small flat roofed area, the applicant is seeking a variance request to place unscreened solar panels on the pitched roof of the house.

Solar Panels	
Zoning Ordinance	Solar Arrays/Panels

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Roof Mounted Panels – Screened from Same Elevation or Lower	Unscreened Roof Mounted Solar Panels. Predominantly pitched roof house with only one area of flat roof
Roof Mounted Solar Tiles – Blend in with Design of Building	N/A – Due to inefficiency of solar tiles, the applicant is requesting roof mounted solar panels
Ground Mounted – Screened from Same Elevation or Lower and Included in Disturbed Area Calculation	N/A – Per the 1998 Hillside Committee application, the current house and driveway used all the allowable site disturbance

Lot Conditions

The property is zoned R-43 Hillside and is approximately 46,540 square feet in size (1.07 acres in size). The lot is “u” shaped and adjoins Arroyo Rd and Glenn Dr.

Lot History

The subject property is metes and bounds and is not located in a recorded subdivision. This area of the Town was annexed on September 28, 1961. The property also received Hillside Committee approval in 1998 to construct the house on the lot. The Behshad's are the original property owners and the following list of permits is a chronological history of the subject property:

February 25, 1999	Building permit for a new single-family residence
December 21, 1999	Building permit for a pool

DISCUSSION/ FACTS:

Variance criteria:

Town Code and Arizona Revised Statutes set criteria an applicant must meet before a Board of Adjustment may grant a variance request. If the Board finds an applicant meets all of these criteria, the Board may grant the variance. However, if the Board finds the applicant does not meet all of the criteria, the Board may not grant the variance. The following are staff's findings with regard to such variance criteria.

1. *“Such variance... will serve not merely as a convenience to the applicant, but [is] necessary to alleviate some demonstrable hardship or difficulty so great as to warrant a variance under the circumstances.” (Town Code Section 2-5-3(C)2).*

Findings in Favor (FIFs):

The slope of the lot and the design of the existing house create the hardships. The house is predominantly a pitched roof home with only one small area of flat roof that could screen solar panels. However, the size and location of the flat

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roofed area are unable to provide enough solar energy; thereby necessitating the request to place unscreened solar panels on the pitched roof.

Per the 1998 Hillside application, the development of the existing home used all the allowable site disturbance. As a result, ground mounted solar panels would require a variance from the disturbed area limit. The odd shape and steep topography of the lot also limit the location of ground mounted solar panels. Below is a summary of the site data from the 1998 Hillside application:

1998 Hillside Committee Application Data	
Lot Size	46,540
Building Pad Slope	32.9%
Allowable Disturbance	10.15% or 4,726 sq ft
Propoosed (1998)/Existing (2021) Disturbance	10.15% or 4,726 sq ft
No further site alterations have occurred since the original development. Therefore, the maximum disturbances are currently in place.	

Findings Opposed (FOPs):

Other alternatives exist. Although not ideal, the applicant may use solar tiles and place solar panels on the single/only portion of flat roof.

2. *The “special circumstances, hardship, or difficulty [do not] arise out of misunderstanding or mistake...” (Town Code Section 2-5-3(C)4(b)).*

FIFs:

The hardship is not out of mistake or misunderstanding. The shape and slope of the lot is the result of how the property was originally designed. Also, the development of the existing home used the maximum amount of allowable disturbance (thereby negating the use of ground mounted solar panels).

FOPs:

The applicant should be aware of all special circumstances on the property and plan any designs accordingly.

3. *“Such variance from ... the strict application of the terms of [the Zoning Ordinance] ... are in harmony with its general purposes and intents...” (Town Code Section 2-5-3(C)2).*



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FIFs:

The intent of the hillside ordinance is to minimize the amount of disturbance to the hillside and to preserve the visual openness and the natural features of the mountain. The request meets the intent of the hillside ordinance since the roof mounted solar panels will not increase the amount of disturbance, will not obstruct views, and has limited off-site visibility. The steepness of the property limits the visibility of the roof and solar panels from the neighboring properties situated below the home. Also, placing the solar panels on the ground will require a variance to exceed the allowable amount of site disturbance.

FOPs:

The variance does not meet the intent of the Zoning Ordinance since other alternatives exist. Although not ideal, the applicant can use solar tiles (which are not required to be screened per code).

4. *"The special circumstances, hardship or difficulty applicable to the property are [not] self-imposed by the property owner, or predecessor..." (Town Code Section 2-5-3(C)4).*

FIFs:

The request is not self-imposed. The applicant is trying to improve the house while utilizing existing conditions. The solar panels will not create additional disturbance to the hillside, will utilize the existing roof, and will not obstruct views.

FOPs:

Arizona Revised Statutes and the Town Code do not require the most optimal or profitable use of a property. The request is self-imposed since the applicant can use solar tiles instead of solar panels.

5. *Because of special circumstances applicable to the property, including its size, shape, topography, location, or surroundings, the strict application of the Zoning Ordinance will deprive such property of privileges enjoyed by other property of the same classification in the same zoning district." (Arizona Revised Statutes 9-462.06(G)(2)).*

FIFs:

The topography and location of the house on the hillside create the hardship and helps the solar panels meet the intent of the code. Ground mounted solar panels are not a viable option since the original development of the house utilized the maximum amount of site disturbance. Also, the steep slope of the lot (with a building pad slope of 32.9%) limits the visibility of the roof and solar panels from the neighboring properties below. Please reference the applicant's Site Plan

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dated July 16, 2021. This plan illustrates the lack of visibility of the roof of the house from adjoining areas of the neighborhood.

FOPs:

There is no property hardship that warrants the request. The size, shape, and topography of the lot do not prevent the applicant from using a code compliant solar option such as the use of solar tiles.

6. *The variance would not "constitute a grant of special privilege inconsistent with the limitations upon other properties in the vicinity and zone in which such property is located." (Arizona Revised Statutes 9-462.06(G)(2)).*

FIFs:

The request meets the intent of the hillside ordinance. The request does not increase the amount of disturbance to the hillside and the solar panels should have limited visibility due to the topography and steepness of the lot.

FOPs:

The request is a grant of special privilege since the applicant may use code compliant solar tiles instead of solar panels. Also, the request does not appear to be in character with the neighborhood. Based upon Maricopa County aerial photos, it appears that only three other homes in the area have roof mounted solar panels and the solar panels appear to be placed on the flat roofs.

COMMENTS: Staff received no inquiries nor comments regarding this request.

COMMUNITY IMPACT: None.

FISCAL IMPACT: None.

CODE VIOLATIONS: None.

ATTACHMENTS:

- A. Staff Report
 - B. Vicinity Map & Aerial Photo
 - C. Application
 - D. Narrative & Plans
 - E. Notification Materials
- C: Keramat Behshad and Caitlyn Proulx (Applicants)
Case File BA-21-07