



# SAN FRANCISCO PLANNING DEPARTMENT

## Discretionary Review Abbreviated Analysis HEARING DATE: JANUARY 24, 2019

1650 Mission St.  
Suite 400  
San Francisco,  
CA 94103-2479

Reception:  
**415.558.6378**

Fax:  
**415.558.6409**

Planning  
Information:  
**415.558.6377**

*Date:* January 11, 2019  
*Case No.:* **2017-013175DRP**  
*Project Address:* **1979 Funston Ave.**  
*Permit Application:* 2018.0417.6519  
*Zoning:* RH-1 [Residential House, One-Family]  
40-X Height and Bulk District  
*Block/Lot:* 2121A/016  
*Project Sponsor:* Cy and Celeste Prothro  
1979 Funston  
San Francisco, CA 94116  
*Staff Contact:* David Winslow – (415) 575-9159  
[David.Winslow@sfgov.org](mailto:David.Winslow@sfgov.org)  
*Recommendation:* **Do not take DR and approve**

### PROJECT DESCRIPTION

The project consists of construction of a vertical and horizontal rear addition to an existing 2-story single-family residence. The proposal also includes replacing the rear deck.

### SITE DESCRIPTION AND PRESENT USE

The site is approximately 31' wide x 142' deep with an existing 2-story, single family house built in 1940 that is significantly set back (40'=-) from the street. There is a common driveway easement to the North.

### SURROUNDING PROPERTIES AND NEIGHBORHOOD

This block of Funston Avenue consists of predominantly 2-story stucco and wood clad single-family houses, with a couple of 3-story buildings.

### BUILDING PERMIT NOTIFICATION

TYPE	REQUIRED PERIOD	NOTIFICATION DATES	DR FILE DATE	DR HEARING DATE	FILING TO HEARING TIME
311 Notice	30 days	September 26, 2018 – October 26, 2018	10.11. 2018	1.24. 2019	105 days

## HEARING NOTIFICATION

TYPE	REQUIRED PERIOD	REQUIRED NOTICE DATE	ACTUAL NOTICE DATE	ACTUAL PERIOD
Posted Notice	20 days	January 12,2019	January 12,2019	20 days
Mailed Notice	20 days	January 12,2019	January 12,2019	20 days

## PUBLIC COMMENT

	SUPPORT	OPPOSED	NO POSITION
Adjacent neighbor(s)	0	16	0
Other neighbors on the block or directly across the street	0	0	0
Neighborhood groups	0	0	0

## ENVIRONMENTAL REVIEW

The Department has determined that the proposed project is exempt/excluded from environmental review, pursuant to CEQA Guideline Section 15301 (Class One - Minor Alteration of Existing Facility, (e) Additions to existing structures provided that the addition will not result in an increase of more than 10,000 square feet).

## DR REQUESTOR

Denise Leadbetter, counsel for Keith Mostov and Emily Silverman of 1975 Funston Avenue, the adjacent neighbor to the North of the proposed project.

## DR REQUESTOR'S CONCERNS AND PROPOSED ALTERNATIVES

1. **Impacts to sunlight.** The vertical addition would block sun light to the DR requestor's roof thus preventing full use of future planned solar array.
2. Proposed alternative is to expand horizontally in the front and rear, or offset the 3<sup>rd</sup> floor by the width of the existing light well.

See attached *Discretionary Review Application*, dated October 26, 2018.

## PROJECT SPONSOR'S RESPONSE TO DR APPLICATION

The sponsor has complied with the Residential Design Guidelines (RDGs) in relation to the DR requestor's issues related to light.

See attached *Response to Discretionary Review*, dated November 8, 2018.

## RESIDENTIAL DESIGN TEAM REVIEW

1. The DR requestor's house to the North of the proposed project does currently have solar panels, and while it is unclear what the effect of the proposed addition may have on a yet-to-be - designed future solar system, solar panels are not protected as doing so would allow them to act as de facto impediments to development. There also seems to be opportunity for a reorientation of the panels on the DR requestor's roof to respond to the existing and future environmental conditions. This addition does not present an exceptional or extraordinary circumstance with respect to shading.

<b>RECOMMENDATION:</b>	<b>Do not take DR and approve project</b>
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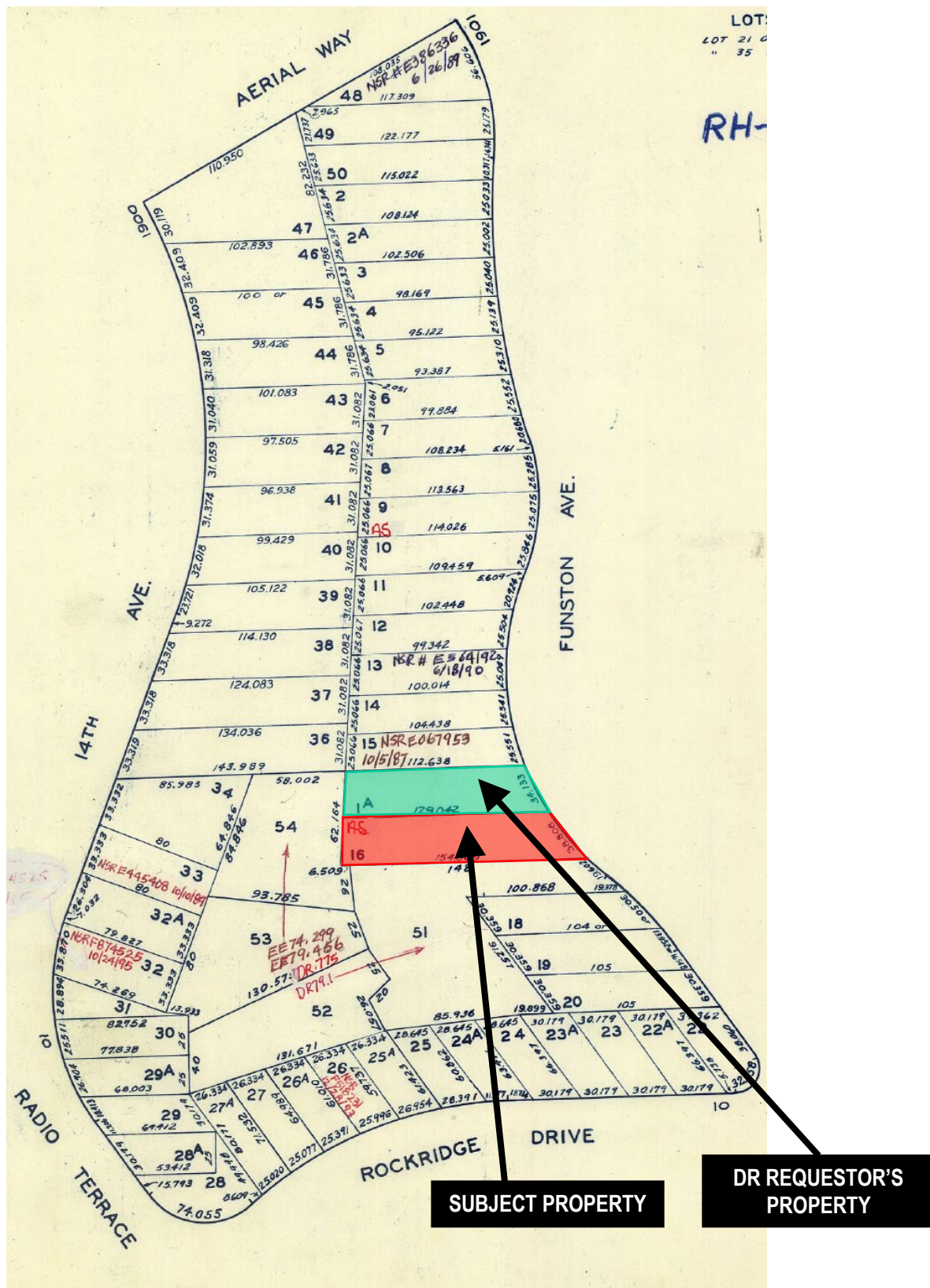
### Attachments:

Block Book Map  
Sanborn Map  
Zoning Map  
Aerial Photographs  
Context Photographs  
Section 311 Notice  
CEQA Determination  
DR Application  
Response to DR Application, drawings dated November 8, 2018  
Reduced Plans  
Shade analysis

# Exhibits

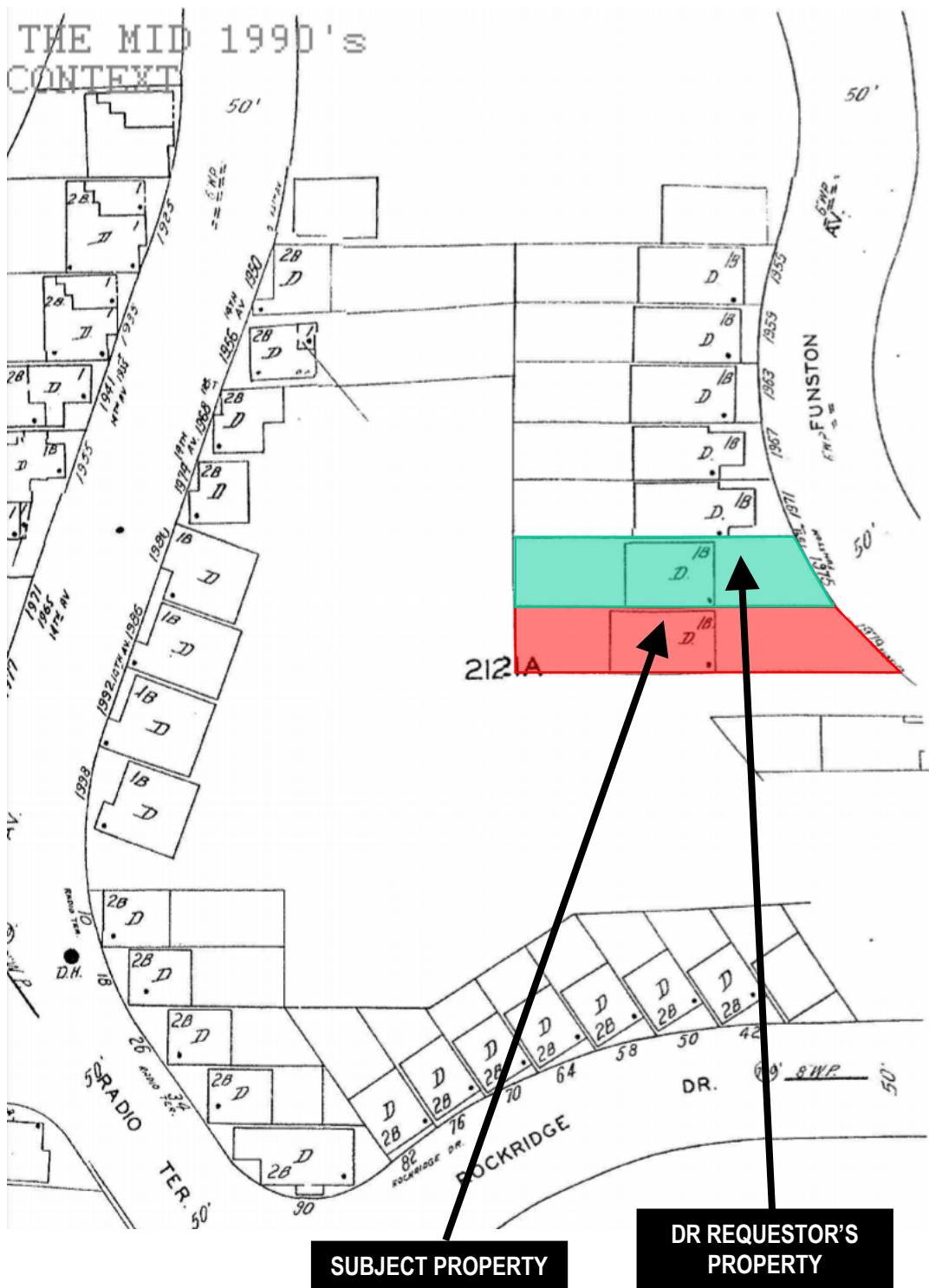


# Parcel Map



Discretionary Review Hearing  
Case Number 2017-013175DRP  
1979 Funston Avenue

# Sanborn Map\*

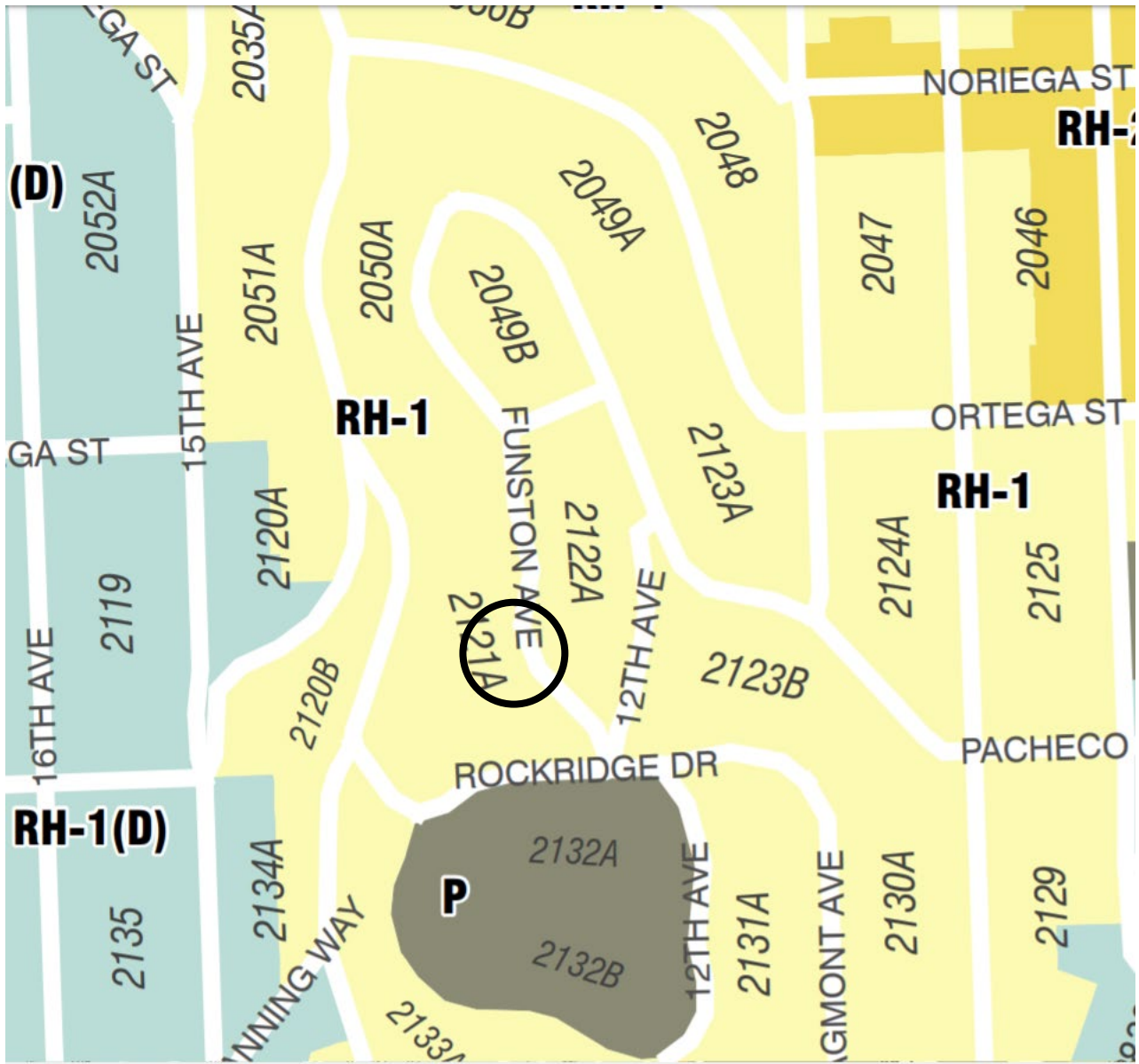


*\*The Sanborn Maps in San Francisco have not been updated since 1998, and this map may not accurately reflect existing conditions.*



Discretionary Review Hearing  
**Case Number 2017-013175DRP**  
 1979 Funston Avenue

# Zoning Map



Discretionary Review Hearing  
Case Number 2017-013175DRP  
1979 Funston Avenue



# Aerial Photo



**SUBJECT PROPERTY**

**DR REQUESTOR'S  
PROPERTY**



Discretionary Review Hearing  
Case Number 2017-013175DRP  
1979 Funston Avenue



# Aerial Photo



**SUBJECT PROPERTY**

**DR REQUESTOR'S  
PROPERTY**



Discretionary Review Hearing  
Case Number 2017-013175DRP  
1979 Funston Avenue



# Aerial Photo



DR REQUESTOR'S  
PROPERTY

SUBJECT PROPERTY



Discretionary Review Hearing  
Case Number 2017-013175DRP  
1979 Funston Avenue



# Aerial Photo





# Site Photo



**SUBJECT PROPERTY**





# SAN FRANCISCO PLANNING DEPARTMENT

1650 Mission Street Suite 400 San Francisco, CA 94103

## NOTICE OF BUILDING PERMIT APPLICATION (SECTION 311)

On **April 17, 2018**, the Applicant named below filed Building Permit Application No. **2018.04.17.6519** with the City and County of San Francisco.

PROJECT INFORMATION		APPLICANT INFORMATION	
Project Address:	<b>1979 Funston Avenue</b>	Applicant:	<b>Cy and Celeste Prothro</b>
Cross Street(s):	<b>Rockridge Drive</b>	Address:	<b>1979 Funston Avenue</b>
Block/Lot No.:	<b>2121A/016</b>	City, State:	<b>San Francisco, CA 94116</b>
Zoning District(s):	<b>RH-1 / 40-X</b>	Telephone:	<b>(323) 309-1272</b>
Record No.:	<b>2017-013175PRJ</b>	Email:	<a href="mailto:cy_prothro@yahoo.com">cy_prothro@yahoo.com</a>

You are receiving this notice as a property owner or resident within 150 feet of the proposed project. You are not required to take any action. For more information about the proposed project, or to express concerns about the project, please contact the Applicant listed above or the Planner named below as soon as possible. If you believe that there are exceptional or extraordinary circumstances associated with the project, you may request the Planning Commission to use its discretionary powers to review this application at a public hearing. Applications requesting a Discretionary Review hearing must be filed during the 30-day review period, prior to the close of business on the Expiration Date shown below, or the next business day if that date is on a week-end or a legal holiday. If no Requests for Discretionary Review are filed, this project will be approved by the Planning Department after the Expiration Date.

Members of the public are not required to provide personal identifying information when they communicate with the Commission or the Department. All written or oral communications, including submitted personal contact information, may be made available to the public for inspection and copying upon request and may appear on the Department's website or in other public documents.

PROJECT SCOPE		
<input type="checkbox"/> Demolition	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Alteration
<input type="checkbox"/> Change of Use	<input type="checkbox"/> Façade Alteration(s)	<input type="checkbox"/> Front Addition
<input checked="" type="checkbox"/> Rear Addition	<input type="checkbox"/> Side Addition	<input checked="" type="checkbox"/> Vertical Addition
PROJECT FEATURES	EXISTING	PROPOSED
Building Use	Residential	No Change
Front Setback	43 feet 9 inches at centerline	No Change
Side Setbacks	None	No Change
Building Depth	48 feet 11 inches	No Change
Rear Yard	44 feet 4 inches	No Change
Building Height	21 feet 1 inch	30 feet 1 inch
Number of Stories	Two	Three
Number of Dwelling Units	One	No Change
Number of Parking Spaces	One	No Change
PROJECT DESCRIPTION		
The proposal includes vertical and horizontal rear additions to an existing 2-story single-family residence. The proposal also includes replacing the rear deck.		
The issuance of the building permit by the Department of Building Inspection or the Planning Commission project approval at a discretionary review hearing would constitute as the Approval Action for the project for the purposes of CEQA, pursuant to Section 31.04(h) of the San Francisco Administrative Code.		

**For more information, please contact Planning Department staff:**

Planner: Veronica Flores  
Telephone: (415) 575-9173  
E-mail: [veronica.flores@sfgov.org](mailto:veronica.flores@sfgov.org)

Notice Date: 9/26/18  
Expiration Date: 10/26/18



# SAN FRANCISCO PLANNING DEPARTMENT

## CEQA Categorical Exemption Determination

### PROPERTY INFORMATION/PROJECT DESCRIPTION

Project Address		Block/Lot(s)	
1979 Funston Avenue		2121A/016	
Case No.	Permit No.	Plans Dated	
2017-013175ENV		10/4/2017	
<input checked="" type="checkbox"/> Addition/ Alteration	<input type="checkbox"/> Demolition (requires HRER if over 45 years old)	<input type="checkbox"/> New Construction	<input type="checkbox"/> Project Modification (GO TO STEP 7)
Project description for Planning Department approval. New 3rd-story addition and improvements to the existing 2-story dwelling. 3rd floor addition: adds master suite with bedroom, bath, walk-in closet and a small deck at the rear, and two additional bedrooms and one additional bath. 2nd story: existing two bedrooms shall be combined into a study/library. Exterior improvements: windows & patio doors shall be replaced and decayed wood siding shall be replaced with smooth hardiplank fiber-cement sidings.			

### STEP 1: EXEMPTION CLASS

TO BE COMPLETED BY PROJECT PLANNER

<b>*Note: If neither class applies, an <i>Environmental Evaluation Application</i> is required.*</b>	
<input checked="" type="checkbox"/>	<b>Class 1 – Existing Facilities.</b> Interior and exterior alterations; additions under 10,000 sq. ft.
<input type="checkbox"/>	<b>Class 3 – New Construction/ Conversion of Small Structures.</b> Up to three (3) new single-family residences or six (6) dwelling units in one building; commercial/office structures; utility extensions.; ; change of use under 10,000 sq. ft. if principally permitted or with a CU. Change of use under 10,000 sq. ft. if principally permitted or with a CU.
<input type="checkbox"/>	<b>Class</b> ___

### STEP 2: CEQA IMPACTS

TO BE COMPLETED BY PROJECT PLANNER

<b>If any box is checked below, an <i>Environmental Evaluation Application</i> is required.</b>	
<input type="checkbox"/>	<b>Air Quality:</b> Would the project add new sensitive receptors (specifically, schools, day care facilities, hospitals, residential dwellings, and senior-care facilities) within an Air Pollution Exposure Zone? Does the project have the potential to emit substantial pollutant concentrations (e.g., backup diesel generators, heavy industry, diesel trucks)? <i>Exceptions: do not check box if the applicant presents documentation of enrollment in the San Francisco Department of Public Health (DPH) Article 38 program and the project would not have the potential to emit substantial pollutant concentrations. (refer to EP_ArcMap &gt; CEQA Catex Determination Layers &gt; Air Pollutant Exposure Zone)</i>
<input type="checkbox"/>	<b>Hazardous Materials:</b> If the project site is located on the Maher map or is suspected of containing hazardous materials (based on a previous use such as gas station, auto repair, dry cleaners, or heavy manufacturing, or a site with underground storage tanks): Would the project involve 50 cubic yards or more of soil disturbance - or a change of use from industrial to residential? If yes, this box must be checked and the project applicant must submit an Environmental Application with a Phase I Environmental Site Assessment. <i>Exceptions: do not check box if the applicant presents documentation of enrollment in the San Francisco Department of Public Health (DPH) Maher program, a DPH waiver from the</i>

	<i>Maier program, or other documentation from Environmental Planning staff that hazardous material effects would be less than significant (refer to EP_ArcMap &gt; Maier layer).</i>
<input type="checkbox"/>	<b>Transportation:</b> Does the project create six (6) or more net new parking spaces or residential units? Does the project have the potential to adversely affect transit, pedestrian and/or bicycle safety (hazards) or the adequacy of nearby transit, pedestrian and/or bicycle facilities?
<input type="checkbox"/>	<b>Archeological Resources:</b> Would the project result in soil disturbance/modification greater than two (2) feet below grade in an archeological sensitive area or eight (8) feet in a non-archeological sensitive area? (refer to EP_ArcMap > CEQA Catex Determination Layers > Archeological Sensitive Area)
<input type="checkbox"/>	<b>Subdivision/Lot Line Adjustment:</b> Does the project site involve a subdivision or lot line adjustment on a lot with a slope average of 20% or more? (refer to EP_ArcMap > CEQA Catex Determination Layers > Topography)
<input type="checkbox"/>	<b>Slope = or &gt; 20%:</b> Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Topography) <b>If box is checked, a geotechnical report is required.</b>
<input type="checkbox"/>	<b>Seismic: Landslide Zone:</b> Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Seismic Hazard Zones) <b>If box is checked, a geotechnical report is required.</b>
<input type="checkbox"/>	<b>Seismic: Liquefaction Zone:</b> Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Seismic Hazard Zones) <b>If box is checked, a geotechnical report will likely be required.</b>
<b>If no boxes are checked above, GO TO STEP 3. If one or more boxes are checked above, an <u>Environmental Evaluation Application</u> is required, unless reviewed by an Environmental Planner.</b>	
<input checked="" type="checkbox"/>	<b>Project can proceed with categorical exemption review. The project does not trigger any of the CEQA impacts listed above.</b>
<b>Comments and Planner Signature (optional):</b> Laura Lynch <div style="font-size: small; float: right;"> Digitally signed by Laura Lynch  DN: cn=Lynch, o=City of San Francisco, ou=City Planning, email=Laura.Lynch@sfplanning.org  Date: 2017.10.06 14:10:22 -0700 </div>	
per email 10/6/2017. Escavation would not trigger further env review.	

### STEP 3: PROPERTY STATUS – HISTORIC RESOURCE TO BE COMPLETED BY PROJECT PLANNER

<b>PROPERTY IS ONE OF THE FOLLOWING: (refer to Parcel Information Map)</b>	
<input type="checkbox"/>	<b>Category A:</b> Known Historical Resource. <b>GO TO STEP 5.</b>
<input checked="" type="checkbox"/>	<b>Category B:</b> Potential Historical Resource (over 45 years of age). <b>GO TO STEP 4.</b>
<input type="checkbox"/>	<b>Category C:</b> Not a Historical Resource or Not Age Eligible (under 45 years of age). <b>GO TO STEP 6.</b>



**STEP 4: PROPOSED WORK CHECKLIST**  
TO BE COMPLETED BY PROJECT PLANNER

Check all that apply to the project.	
<input type="checkbox"/>	1. <b>Change of use and new construction.</b> Tenant improvements not included.
<input type="checkbox"/>	2. <b>Regular maintenance or repair</b> to correct or repair deterioration, decay, or damage to building.
<input type="checkbox"/>	3. <b>Window replacement</b> that meets the Department's <i>Window Replacement Standards</i> . Does not include storefront window alterations.
<input type="checkbox"/>	4. <b>Garage work.</b> A new opening that meets the <i>Guidelines for Adding Garages and Curb Cuts</i> , and/or replacement of a garage door in an existing opening that meets the Residential Design Guidelines.
<input type="checkbox"/>	5. <b>Deck, terrace construction, or fences</b> not visible from any immediately adjacent public right-of-way.
<input type="checkbox"/>	6. <b>Mechanical equipment installation</b> that is not visible from any immediately adjacent public right-of-way.
<input type="checkbox"/>	7. <b>Dormer installation</b> that meets the requirements for exemption from public notification under <i>Zoning Administrator Bulletin No. 3: Dormer Windows</i> .
<input type="checkbox"/>	8. <b>Addition(s)</b> that are not visible from any immediately adjacent public right-of-way for 150 feet in each direction; does not extend vertically beyond the floor level of the top story of the structure or is only a single story in height; does not have a footprint that is more than 50% larger than that of the original building; and does not cause the removal of architectural significant roofing features.
<b>Note: Project Planner must check box below before proceeding.</b>	
<input checked="" type="checkbox"/>	Project is not listed. <b>GO TO STEP 5.</b>
<input type="checkbox"/>	Project <b>does not conform</b> to the scopes of work. <b>GO TO STEP 5.</b>
<input type="checkbox"/>	Project involves <b>four or more</b> work descriptions. <b>GO TO STEP 5.</b>
<input type="checkbox"/>	Project involves <b>less than four</b> work descriptions. <b>GO TO STEP 6.</b>

**STEP 5: CEQA IMPACTS – ADVANCED HISTORICAL REVIEW**  
TO BE COMPLETED BY PRESERVATION PLANNER

Check all that apply to the project.	
<input type="checkbox"/>	1. Project involves a <b>known historical resource (CEQA Category A)</b> as determined by Step 3 and conforms entirely to proposed work checklist in Step 4.
<input type="checkbox"/>	2. <b>Interior alterations to publicly accessible spaces.</b>
<input type="checkbox"/>	3. <b>Window replacement</b> of original/historic windows that are not "in-kind" but are consistent with existing historic character.
<input type="checkbox"/>	4. <b>Façade/storefront alterations</b> that do not remove, alter, or obscure character-defining features.
<input type="checkbox"/>	5. <b>Raising the building</b> in a manner that does not remove, alter, or obscure character-defining features.
<input type="checkbox"/>	6. <b>Restoration</b> based upon documented evidence of a building's historic condition, such as historic photographs, plans, physical evidence, or similar buildings.
<input type="checkbox"/>	7. <b>Addition(s)</b> , including mechanical equipment that are minimally visible from a public right-of-way and meet the <i>Secretary of the Interior's Standards for Rehabilitation</i> .
<input type="checkbox"/>	8. <b>Other work consistent</b> with the <i>Secretary of the Interior Standards for the Treatment of Historic Properties</i> (specify or add comments):

<input type="checkbox"/>	<b>9. Other work</b> that would not materially impair a historic district (specify or add comments):  <i>(Requires approval by Senior Preservation Planner/Preservation Coordinator)</i> _____
<input checked="" type="checkbox"/>	<b>10. Reclassification of property status.</b> <i>(Requires approval by Senior Preservation Planner/Preservation Coordinator)</i> <input type="checkbox"/> Reclassify to Category A <input checked="" type="checkbox"/> Reclassify to Category C a. Per HRER dated: PTR form dated 12/8/17 <i>(attach HRER)</i> b. Other <i>(specify)</i> :
<b>Note: If ANY box in STEP 5 above is checked, a Preservation Planner MUST check one box below.</b>	
<input type="checkbox"/>	<b>Further environmental review required.</b> Based on the information provided, the project requires an <i>Environmental Evaluation Application</i> to be submitted. <b>GO TO STEP 6.</b>
<input checked="" type="checkbox"/>	<b>Project can proceed with categorical exemption review.</b> The project has been reviewed by the Preservation Planner and can proceed with categorical exemption review. <b>GO TO STEP 6.</b>
<b>Comments (optional):</b>  	
<b>Preservation Planner Signature:</b> Jorgen Cleemann      Digitally signed by Jorgen Cleemann Date: 2017.12.11 12:25:53 -08'00'	

**STEP 6: CATEGORICAL EXEMPTION DETERMINATION**  
**TO BE COMPLETED BY PROJECT PLANNER**

<input type="checkbox"/>	<b>Further environmental review required.</b> Proposed project does not meet scopes of work in either <i>(check all that apply)</i> : <input type="checkbox"/> Step 2 – CEQA Impacts <input type="checkbox"/> Step 5 – Advanced Historical Review <b>STOP! Must file an <i>Environmental Evaluation Application</i>.</b>	
<input checked="" type="checkbox"/>	<b>No further environmental review is required. The project is categorically exempt under CEQA.</b>	
	<b>Planner Name:</b> Jorgen Cleemann  <b>Project Approval Action:</b>  Building Permit  If Discretionary Review before the Planning Commission is requested, the Discretionary Review hearing is the Approval Action for the project.	<b>Signature:</b>  <b>Jorgen Cleemann</b>  Digitally signed by Jorgen Cleemann Date: 2017.12.11 12:26:12 -08'00'
Once signed or stamped and dated, this document constitutes a categorical exemption pursuant to CEQA Guidelines and Chapter 31 of the Administrative Code. In accordance with Chapter 31 of the San Francisco Administrative Code, an appeal of an exemption determination can only be filed within 30 days of the project receiving the first approval action.		



# SAN FRANCISCO PLANNING DEPARTMENT

## PRESERVATION TEAM REVIEW FORM

1650 Mission St.  
Suite 400  
San Francisco,  
CA 94103-2479

Reception:  
**415.558.6378**

Fax:  
**415.558.6409**

Planning  
Information:  
**415.558.6377**

<b>Preservation Team Meeting Date:</b>	10/24/2017	<b>Date of Form Completion</b>	12/8/2017
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PROJECT INFORMATION:		
Planner:	Address:	
Jørgen G. Cleemann	1979 Funston Avenue	
Block/Lot:	Cross Streets:	
2121A/016	Rockridge Drive and Aerial Way	
CEQA Category:	Art. 10/11:	BPA/Case No.:
B	N/A	2017-013175ENV

PURPOSE OF REVIEW:			PROJECT DESCRIPTION:	
<input checked="" type="radio"/> CEQA	<input type="radio"/> Article 10/11	<input type="radio"/> Preliminary/PIC	<input checked="" type="radio"/> Alteration	<input type="radio"/> Demo/New Construction

<b>DATE OF PLANS UNDER REVIEW:</b>	10/12/2017
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PROJECT ISSUES:	
<input checked="" type="checkbox"/>	Is the subject Property an eligible historic resource?
<input type="checkbox"/>	If so, are the proposed changes a significant impact?
Additional Notes:	
Submitted: Supplemental Information for Historic Resource Determination (dated 10/4/2017) prepared by the applicant	
Proposed Project: Vertical addition, facade alterations, interior alterations.	

PRESERVATION TEAM REVIEW:				
Category:		<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C
Individual		Historic District/Context		
Property is individually eligible for inclusion in a California Register under one or more of the following Criteria:		Property is in an eligible California Register Historic District/Context under one or more of the following Criteria:		
Criterion 1 - Event:	<input type="radio"/> Yes <input checked="" type="radio"/> No	Criterion 1 - Event:	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Criterion 2 - Persons:	<input type="radio"/> Yes <input checked="" type="radio"/> No	Criterion 2 - Persons:	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Criterion 3 - Architecture:	<input type="radio"/> Yes <input checked="" type="radio"/> No	Criterion 3 - Architecture:	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Criterion 4 - Info. Potential:	<input type="radio"/> Yes <input checked="" type="radio"/> No	Criterion 4 - Info. Potential:	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Period of Significance:	<input type="text"/>	Period of Significance:	<input type="text"/>	
		<input type="radio"/> Contributor <input type="radio"/> Non-Contributor		



Complies with the Secretary's Standards/Art 10/Art 11:	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
CEQA Material Impairment to the individual historic resource:	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
CEQA Material Impairment to the historic district:	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Requires Design Revisions:	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Defer to Residential Design Team:	<input checked="" type="radio"/> Yes	<input type="radio"/> No	


**PRESERVATION TEAM COMMENTS:**

According to the Supplemental Information for Historic Resource Determination (dated 10/12/2017) prepared by the applicant and information found in the Planning Department, the subject property at 1799 Funston Avenue contains a one-story over-garage, wood-frame, single-family residence located in San Francisco's Golden Gate Heights neighborhood. Constructed in 1951 to the designs of architect Harold C. Dow, the subject building's primary facade features a recessed basement story with a garage door, building entry, and glass block window. The first story contains a band of horizontal ribbon windows and a glass-block window, and is capped with a deeply projecting minimalist cornice. The rear facade features a partially enclosed porch. All facades are clad in painted horizontal wood siding. The only significant exterior alteration recorded in the permit history is the 1957 replacement of the siding on the secondary facades. An examination of a ca. 1976 photo shows that at least some of the building's current front facade windows are not original.

The subject building was surveyed in the Planning Department's 1976 Architectural Quality Survey, which was never formally adopted but can be consulted for informational purposes. The survey field form indicates that the building was "proposed for further investigation."

The subject building does not appear eligible for listing in the California Register of Historical Resources (CRHR) under Criterion 1 (events), 2 (persons), 3 (architecture), or 4 (information potential). The subject building does not have a specific association with any historical events or trends such that a finding of significance under Criterion 1 could be supported. From the time of its construction in 1951 until 2008, the subject building was owned and occupied by Otto H. Haake and his family. Haake achieved some renown as the longtime manager of—and preservation advocate for—San Francisco's Merchant Exchange Building. Haake's achievements in this area, however notable, are not sufficient to establish the significance of his private home, and therefore the subject building is not significant under Criterion 2. Architecturally, the subject building represents an unremarkable example of the Midcentury Modern style. Harold Dow designed a number of residences in San Francisco in this style (e.g., 311-319 Amber Drive), but no information has been located at this time to indicate that he is a master architect.

(continued)

Signature of a Senior Preservation Planner / Preservation Coordinator:	Date:
	12/8/17

(continued) The building does not possess high artistic values. Therefore, the subject building is not significant under Criterion 3. Finally, the subject building does not embody a rare construction type and therefore does not appear significant under Criterion 4 as it relates to buildings and structures. (The potential archeological significance of the site, as opposed to the building, is not addressed in this document.)

The surrounding neighborhood is a nondescript example of residential tract development and is not distinctive such that it would qualify for listing as a historic district.

Therefore the subject building is not eligible for listing in the CRHR either individually or as a contributor to a historic district.



**Figure 1.** 1979 Funston Avenue, 2017.



# RESPONSE TO DISCRETIONARY REVIEW (DRP)



**San Francisco**  
**Planning**

**SAN FRANCISCO PLANNING DEPARTMENT**  
1650 MISSION STREET, SUITE 400  
SAN FRANCISCO, CA 94103-2479  
MAIN: (415) 558-6378 SFPLANNING.ORG

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## Project Information

Property Address:

Zip Code:

Building Permit Application(s):

Record Number:

Assigned Planner:

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## Project Sponsor

Name:

Phone:

Email:

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## Required Questions

1. Given the concerns of the DR requester and other concerned parties, why do you feel your proposed project should be approved? (If you are not aware of the issues of concern to the DR requester, please meet the DR requester in addition to reviewing the attached DR application.)

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2. What alternatives or changes to the proposed project are you willing to make in order to address the concerns of the DR requester and other concerned parties? If you have already changed the project to meet neighborhood concerns, please explain those changes and indicate whether they were made before or after filing your application with the City.

---
3. If you are not willing to change the proposed project or pursue other alternatives, please state why you feel that your project would not have any adverse effect on the surrounding properties. Include an explanation of your needs for space or other personal requirements that prevent you from making the changes requested by the DR requester.

---

Project Features

Please provide the following information about the project for both the existing and proposed features. **Please attach an additional sheet with project features that are not included in this table.**

	EXISTING	PROPOSED
Dwelling Units (only one kitchen per unit - additional kitchens count as additional units)		
Occupied Stories (all levels with habitable rooms)		
Basement Levels (may include garage or windowless storage rooms)		
Parking Spaces (Off-Street)		
Bedrooms		
Height		
Building Depth		
Rental Value (monthly)		
Property Value		

I attest that the above information is true to the best of my knowledge.

Signature: <div>Cy Prothro</div>	Date:
Printed Name:	<div><input type="checkbox"/> Property Owner</div> <div><input type="checkbox"/> Authorized Agent</div>

*If you have any additional information that is not covered by this application, please feel free to attach additional sheets to this form.*



San Francisco  
**Planning**

PLANNING APPLICATION RECORD NUMBER

2017-013175DRP

## DISCRETIONARY REVIEW APPLICATION

### Property Owner's Information

Name: Keith E. Mostov and Emily L. Silverman, Mostov/Silverman Family Trust UDT dated December 6, 2000

Address: 1975 Funston Avenue, San Francisco, CA  
Email Address: Keith.Mostov@ucsf.edu and ebinah@gmail.com  
Telephone: 415-606-6308

### Applicant Information (if applicable)

Name: Denise A. Leadbetter, counsel for Keith Mostov and Emily Silverman Same as above ☐

Company/Organization: Law Offices of Denise A. Leadbetter

Address: 870 Market Street, Suite 450, San Francisco, Ca 94102  
Email Address: Denise@Leadbetterlaw.com  
Telephone: 415.713.8680

#### Please Select Billing Contact:

☐ Owner

☒ Applicant

☐ Other (see below for details)

Name: \_\_\_\_\_ Email: \_\_\_\_\_ Phone: \_\_\_\_\_

#### Please Select Primary Project Contact:

☐ Owner

☒ Applicant

☐ Billing

### Property Information

Project Address: 1979 Funston Avenue Block/Lot(s): 2121A/016

Plan Area: 3rd floor addition, full floor, encompassing existing building footprint

### Project Description:

Please provide a narrative project description that summarizes the project and its purpose.

From the owner (the "Project Sponsor") of 1979 Funston Street BPA description:

NEW 3RD STORY ADDITION W/ MASTER SUITE & 2 BEDROOMS & 1 BATH. REPLACE 2ND FLR STUDY W/ NEW 1ST & 2ND FLR REAR ADDITION. REPLACE (E) 2ND FLR REAR DECK W/ NEW. DRY ROT REPAIR & INTERIOR UPDATES.

**Project Details:**

- ☐ Change of Use    ☐ New Construction    ☐ Demolition    ☐ Facade Alterations    ☐ ROW Improvements  
☒ Additions    ☐ Legislative/Zoning Changes    ☐ Lot Line Adjustment-Subdivision    ☐ Other \_\_\_\_\_

**Estimated Construction Cost:** \$250,000

- Residential:**    ☐ Special Needs    ☐ Senior Housing    ☐ 100% Affordable    ☐ Student Housing    ☐ Dwelling Unit Legalization  
                  ☐ Inclusionary Housing Required    ☐ State Density Bonus    ☐ Accessory Dwelling Unit

- Non-Residential:**    ☐ Formula Retail    ☐ Medical Cannabis Dispensary    ☐ Tobacco Paraphernalia Establishment  
                          ☐ Financial Service    ☐ Massage Establishment    ☐ Other: \_\_\_\_\_

**Related Building Permits Applications**

Building Permit Applications No(s): 201804176519

### ACTIONS PRIOR TO A DISCRETIONARY REVIEW REQUEST

In reviewing applications for Certificate of Appropriateness the Historic Preservation Commission, Department staff, Board of Appeals and/or Board of Supervisors, and the Planning Commission shall be governed by *The Secretary of the Interior's Standards for the Treatment of Historic Properties* pursuant to Section 1006.6 of the Planning Code. Please respond to each statement completely (Note: Attach continuation sheets, if necessary). Give reasons as to *how* and *why* the project meets the ten Standards rather than merely concluding that it does so. IF A GIVEN REQUIREMENT DOES NOT APPLY TO YOUR PROJECT, EXPLAIN WHY IT DOES NOT.

PRIOR ACTION	YES	NO
Have you discussed this project with the permit applicant?	✓	
Did you discuss the project with the Planning Department permit review planner?	✓	
Did you participate in outside mediation on this case? (including Community Boards)		✓

### CHANGES MADE TO THE PROJECT AS A RESULT OF MEDIATION

If you have discussed the project with the applicant, planning staff or gone through mediation, please attach a summary of the result, including any changes that were made to the proposed project.

No mediation or changes in the project have occurred.

## DISCRETIONARY REVIEW REQUEST

In the space below and on separate paper, if necessary, please present facts sufficient to answer each question.

1. What are the reasons for requesting Discretionary Review? The project meets the standards of the Planning Code and the Residential Design Guidelines. What are the exceptional and extraordinary circumstances that justify Discretionary Review of the project? How does the project conflict with the City's General Plan or the Planning Code's Priority Policies or Residential Design Guidelines? Please be specific and site specific sections of the Residential Design Guidelines.

Months prior to PS submission of the BPA and plans, the DR Requestors obtained a permit for installation of solar panels on their roof that is situated c. 2 feet from the PS' existing home along the North property line. The PS had knowledge of the DR Requestors' solar panels, permit and planned installation. The solar system installed provides 100% of the energy, including heating and hot water, to the DR Requestors' home and family's needs, where they have resided for the past 26 years.

2. The Residential Design Guidelines assume some impacts to be reasonable and expected as part of construction. Please explain how this project would cause unreasonable impacts. If you believe your property, the property of others or the neighborhood would be unreasonably affected, please state who would be affected, and how.

Already located in a very shady area of the City, the DR Requestors' energy source shall be severely depleted by a vertical expansion of c. 12 feet high x 48 ft., the length of the entire existing structure, severely reducing the source of elec. power for the DR Requestor's family's needs. The Residential Design Guidelines indicate the need to respect the topography of the site and the surrounding area. Other factors in site design per the RDG include the site's relationship to adjacent properties.

3. What alternatives or changes to the proposed project, beyond the changes (if any) already made would respond to the exceptional and extraordinary circumstances and reduce the adverse effects noted above in question #1?

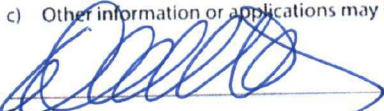
So as to reduce the negative impact and severe shading of the DR Requestors' pre-existing solar panels/system and construct the c. 2800 square feet planned, the PS can expand at current building height and into the 60 foot front yard of their property and continue the planned expansion into the c. 52.5 foot rear yard and/or offset the entire length of the North line of the 3rd floor expansion the width of the existing light well.



## APPLICANT'S AFFIDAVIT

Under penalty of perjury the following declarations are made:

- a) The undersigned is the owner or authorized agent of the owner of this property.
- b) The information presented is true and correct to the best of my knowledge.
- c) Other information or applications may be required.

  
Signature

Attorney for DR Requestors

Relationship to Project  
(i.e. Owner, Architect, etc.)

415.713.8680

Phone

Denise Leadbetter

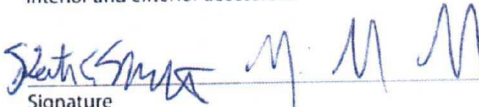
Name (Printed)

Denise@Leadbetterlaw.com

Email

## APPLICANT'S SITE VISIT CONSENT FORM

I hereby authorize City and County of San Francisco Planning staff to conduct a site visit of this property, making all portions of the interior and exterior accessible.

  
Signature

October 26, 2018

Date

Keith Mostov and Emily Silverman

Name (Printed)

For Department Use Only

Application received by Planning Department:

By: \_\_\_\_\_

Date: \_\_\_\_\_





Photo of  
space between  
existing homes



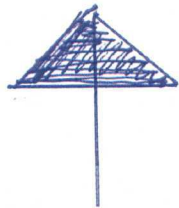


PROJECT SPONSOR'S  
PROPERTY  
1979 FUNSTON AVENUE

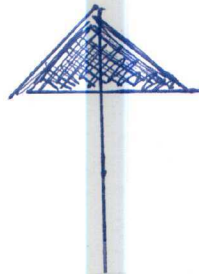
DR REQUESTOR'S PROPERTY  
1975 FUNSTON

**PHOTO OF BOTH EXISTING HOMES**





PROJECT SPONSOR'S  
PROPERTY  
1979 FUNSTON AVENUE



DR REQUESTOR'S PROPERTY  
1975 FUNSTON



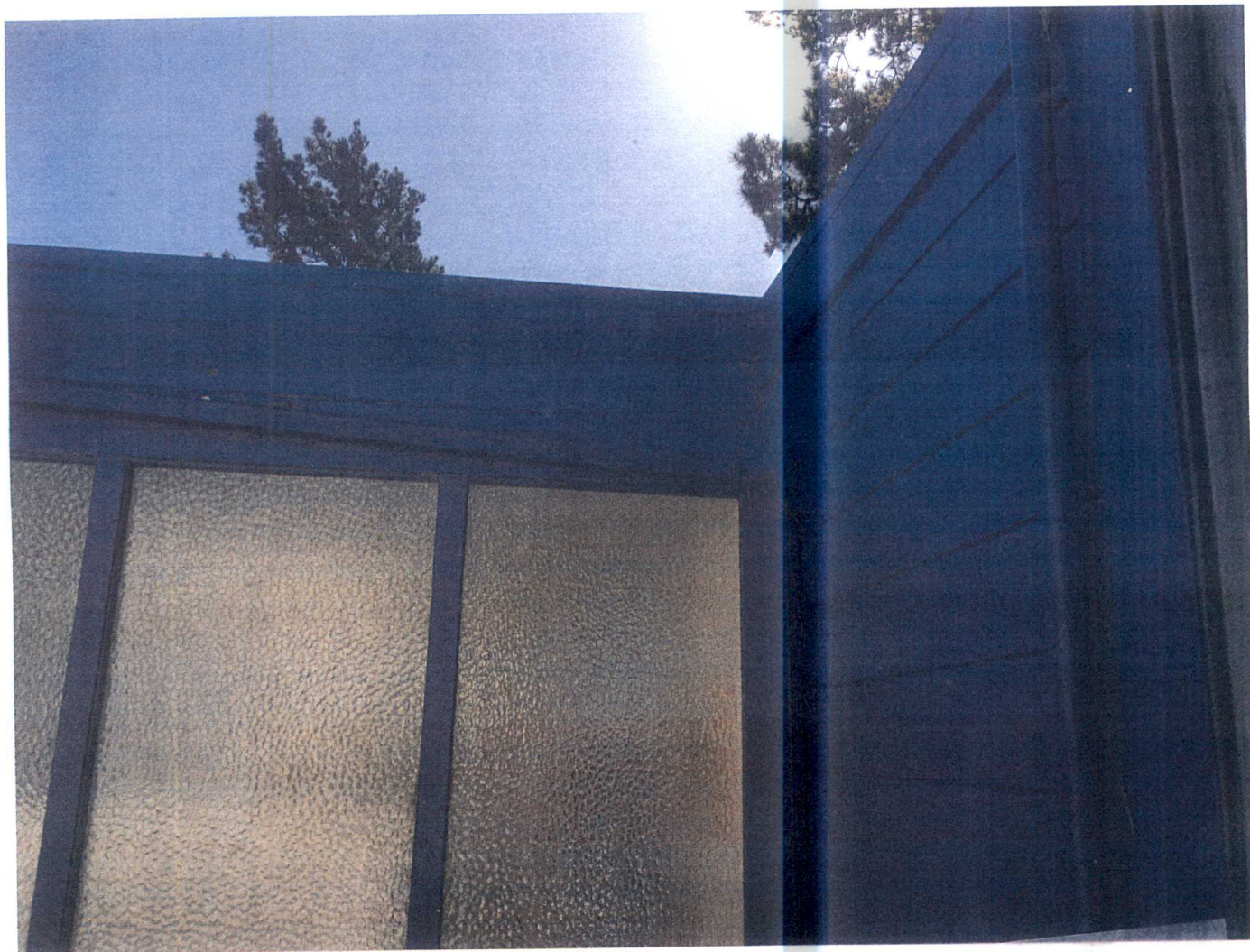


PHOTO TAKEN FROM DR REQUESTORS' KITCHEN WINDOW SHOWING AREA  
ABOVE EXISTING LIGHTWELL AT PROJECT SPONSOR'S PROPERTY.

**NEW 3<sup>RD</sup> FLOOR PROPOSED BY PROJECT SPONSOR  
SHALL BE APPROX. 12 FEET HIGHER.**

Answers to DRP Questions for 1979 Funston Ave, SF 94116

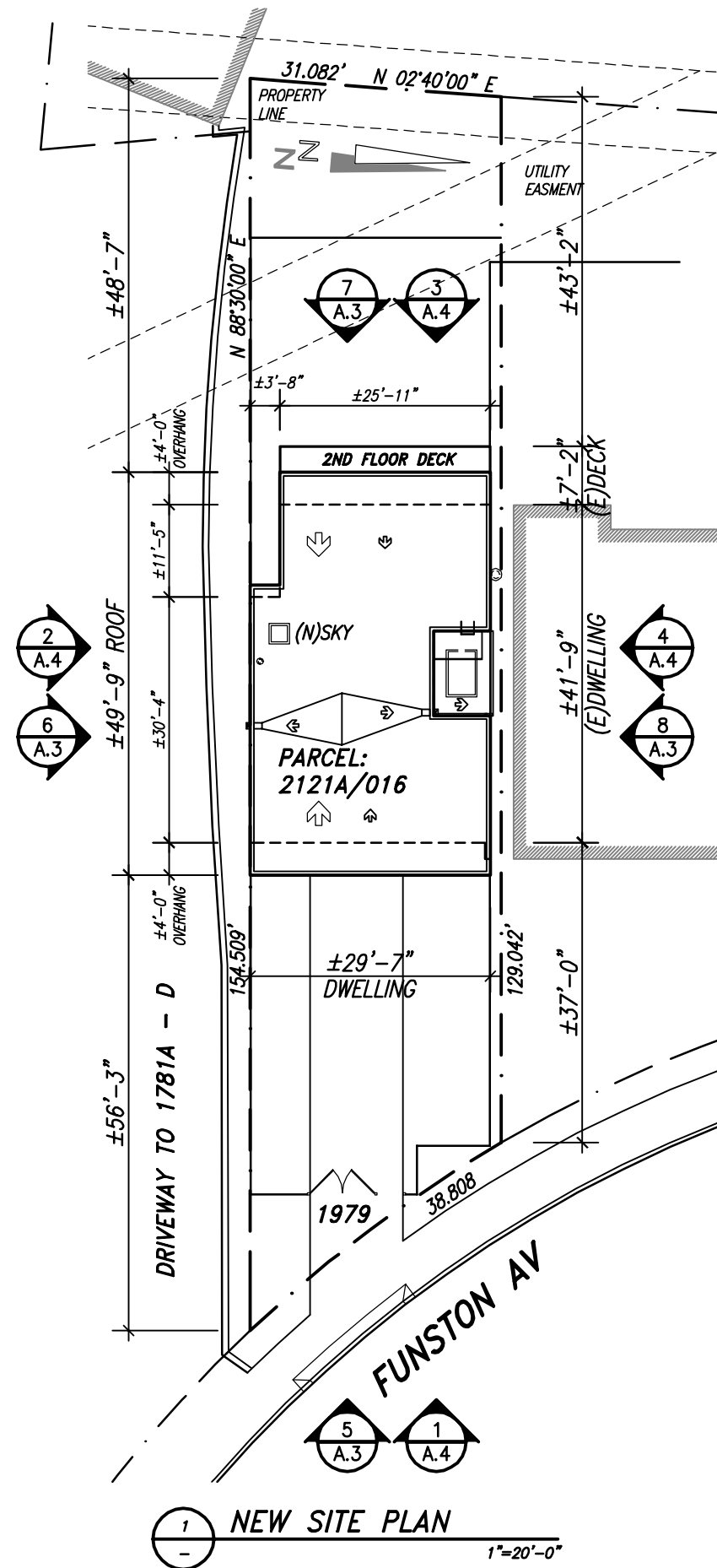
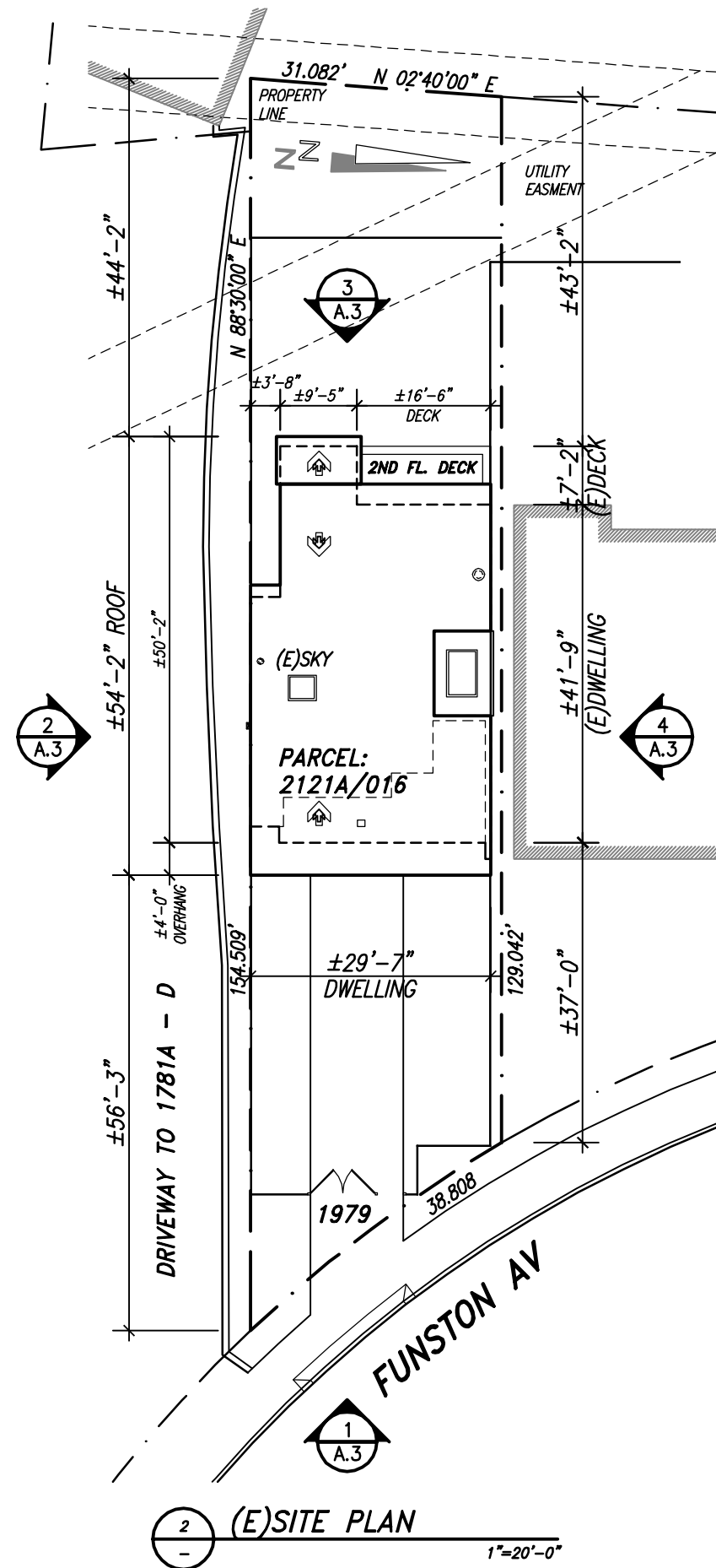
1. Keith Mostov attended our pre application meeting on 11/30/2017. He reviewed our plans to add a 3rd level to our home and made no comment or mention of his intention to add solar panels to his roof, which he installed several months later. We submitted our plans to the city in April 2018, which were found to be in compliance with current law.

2. We have offered to participate financially in changing the orientation of Mostov/Silverman's solar panels, to reduce the extent to which they are shaded by our addition. Mostov/Silverman have not responded to this offer.

3. We live in the Sunset district, which is often foggy. Moreover, on our two properties live 5 mature Monterey Pines, each of which is approximately 80 feet tall and significantly shade both our roofs. Our houses are 35 inches apart and our plan includes a light well that occupies 1/5 of the wall adjoining the Mostov/Silverman property. A shade study has not been conducted, but given our design and the already low solar access on our properties, it is unlikely that our addition would result in a significant loss of energy production.

As for our spatial needs, my wife and I currently have a somewhat cramped bedroom on the ground floor and my two daughters (8 and 10) share a bedroom on the 2<sup>nd</sup> floor. The intent of the addition is to build 3 bedrooms on the 3<sup>rd</sup> floor, a master and one for each of my daughters, both of whom are fervently advocating for their own rooms. The changes suggested by Mr. Mostov would eliminate 1/4 of the livable area in our addition, precluding this desire.

Submitted by Cy Prothro, owner of 1979 Funston Ave.  
November 9, 2018



## PROJECT DATA

**OWNER:**  
CY AND CELESTE PROTHRO  
1799 FUNSTON AVE.  
SAN FRANCISCO, CA 94116

**ZONING:**  
RH-1

**OCCUPANCY:**  
R-3 SINGLE FAMILY DWELLING  
U PRIVATE GARAGE

**CONSTRUCTION:**  
TYPE V-B

**LOT AREA:**  
4,251 SQ.FT.

**FLOOR AREAS:**

(E)1ST FLOOR LIVING	461 SQ.FT.
(E)2ND FLOOR LIVING	1,121 SQ.FT.
(E)LIVING AREA	1,582 SQ.FT.
(E)GARAGE	500 SQ.FT.
(E)COVERED ENTRY	231 SQ.FT.
(E)BUILDING AREA	2,313 SQ.FT.
(N)3RD FLOOR LIVING	1,056 SQ.FT.
(N)LIVING AREA	2,638 SQ.FT.
(N)BUILDING AREA	3,369 SQ.FT.
(E)2ND FLOOR DECK	186 SQ.FT.
(N)3RD FLOOR DECK	46 SQ.FT.

**(E)PARKING:**  
ONE CAR IN (E)GARAGE



942 KIRKHAM STREET  
SAN FRANCISCO, CA 94122  
TEL: 415.681.8268  
FAX: 415.681.9342  
email: mfr@mfrhlich.net



**3RD STORY ADDITION AND  
INTERIOR IMPROVEMENTS AT:**  
**1979 FUNSTON AVE**  
**SAN FRANCISCO, CA 94116**

## PLAN INDEX

- A.1 TITLE SHEET  
SITE PLAN  
PROJECT DATA
- A.2 (E)FLOOR PLANS  
NEW FLOOR PLANS
- A.3 (E)ELEVATIONS AND SECTIONS  
(N)ELEVATIONS AND SECTIONS
- A.4 NEW ELEVATIONS - ENLARGED

## SCOPE OF WORK

- NEW 3RD STORY WITH MASTER SUITE, PLUS TWO BEDROOMS AND ONE BATH
- CONVERT (E)2ND FLOOR BEDROOMS INTO LIBRARY AND STUDY
- REPAIR DRY-ROT AND WATER DAMAGE AT (E)WEST AND SOUTH FACING EXTERIOR WALL, REPLACE (E)WINDOWS WITH NEW

DATE: 10/04/2017

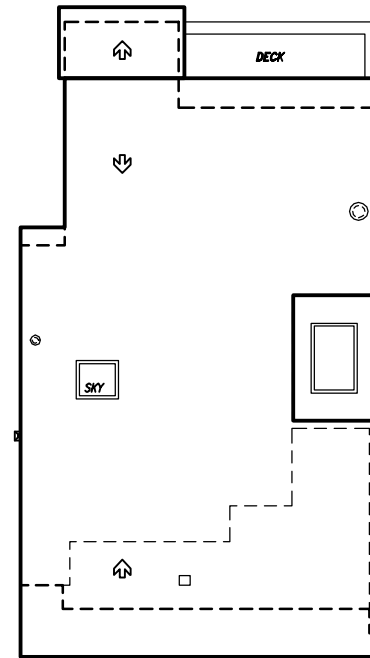
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DRAWN BY: MF

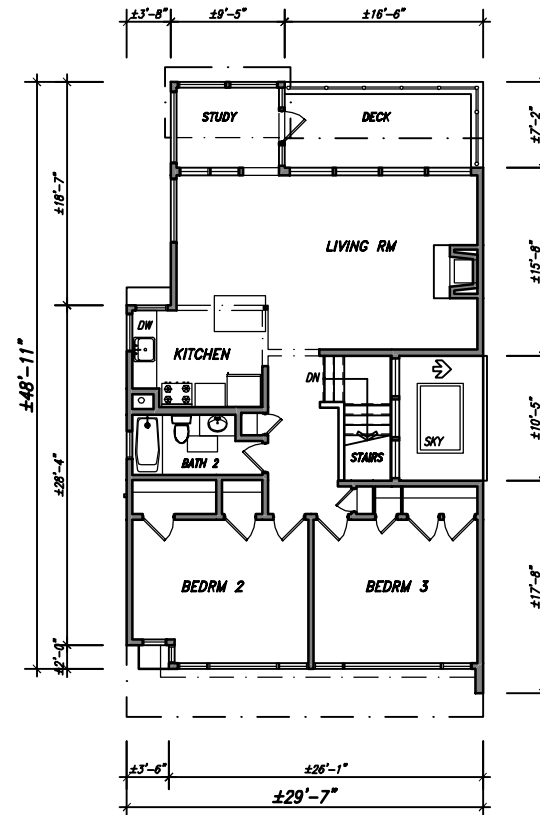
DRAWING NO.

**A.1**  
1 OF 4

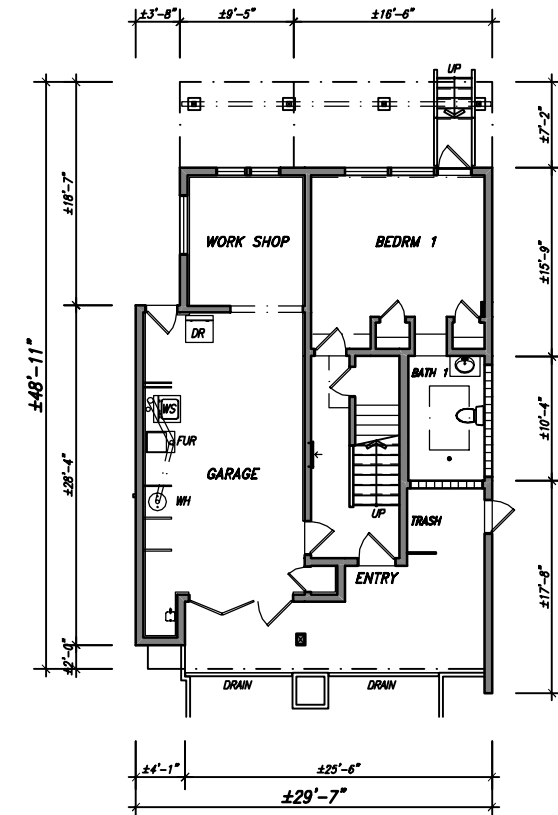
**SITE PLAN**



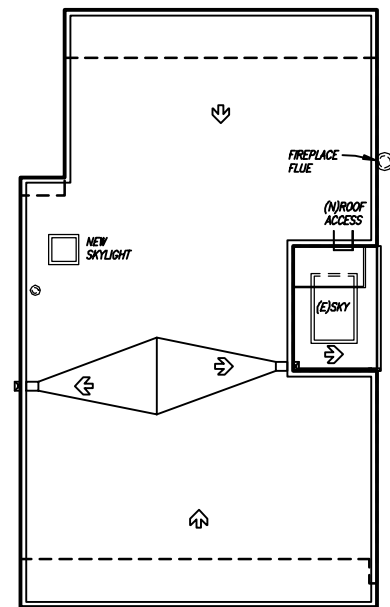
3 (E)ROOF PLAN  
1"=16'-0"



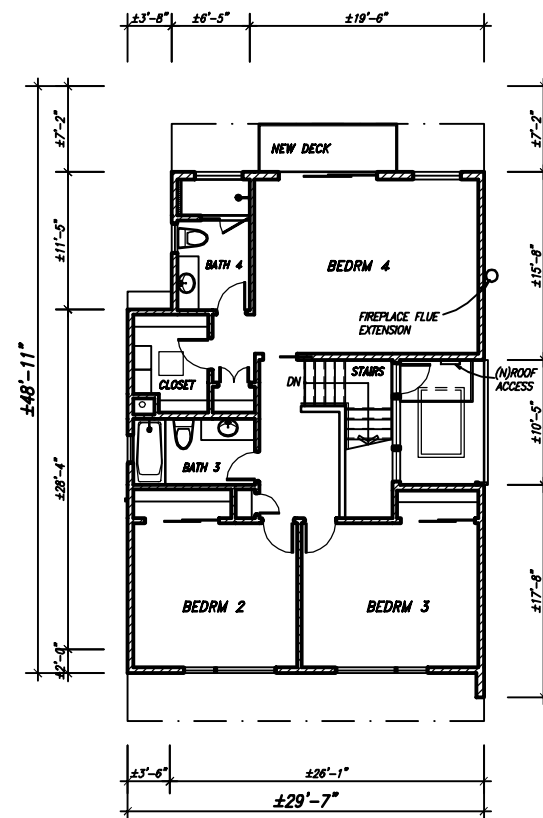
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1"=16'-0"



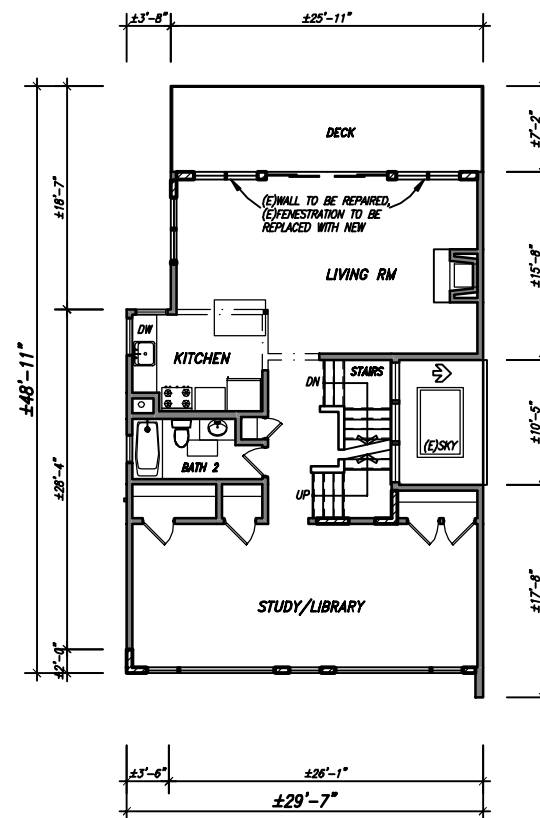
1 (E)1ST FLOOR PLAN  
1"=16'-0"



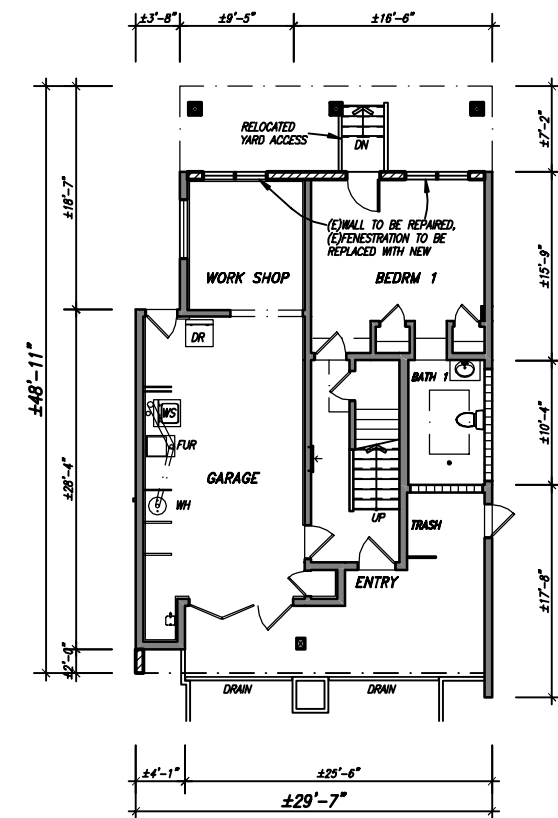
7 (N)ROOF PLAN  
1"=16'-0"



6 (N)3RD FLOOR PLAN  
1"=16'-0"



5 (N)2ND FLOOR PLAN  
1"=16'-0"



4 (N)1ST FLOOR PLAN  
1"=16'-0"



942 KIRKHAM STREET  
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email: mf@mfroehlich.net



3RD STORY ADDITION AND  
INTERIOR IMPROVEMENTS AT:  
1979 FUNSTON AVE  
SAN FRANCISCO, CA 94116

# FLOOR PLANS EXISTING AND NEW

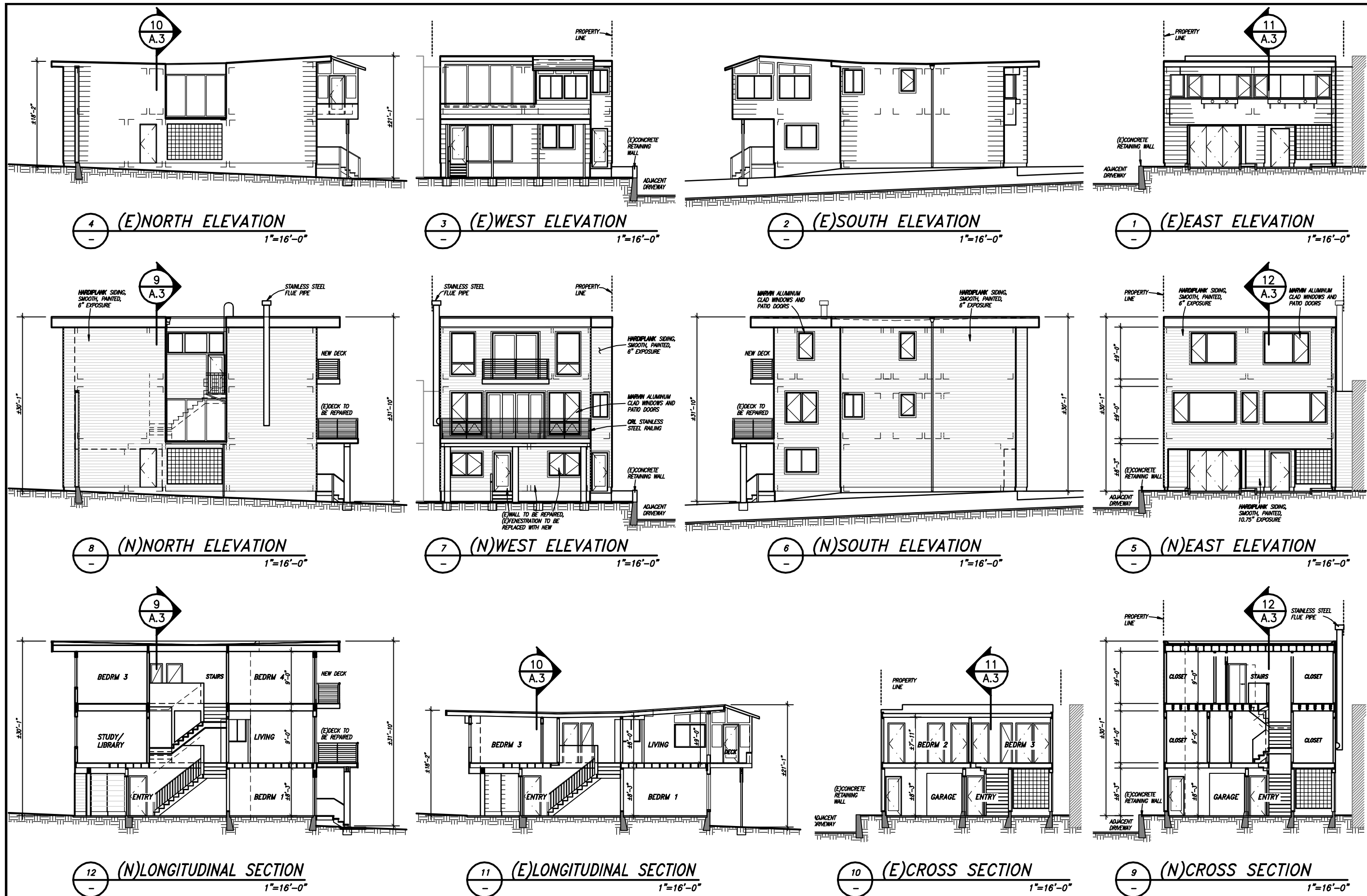
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PROJECT NO: 17.06

DRAWN BY: MF

DRAWING NO.

A.2  
2 OF 4



**Michael Froehlich**  
Architect  
942 KIRKHAM STREET  
SAN FRANCISCO, CA 94122  
TEL: 415.681.8268  
FAX: 415.681.9342  
email: mtf@mfrhlich.net

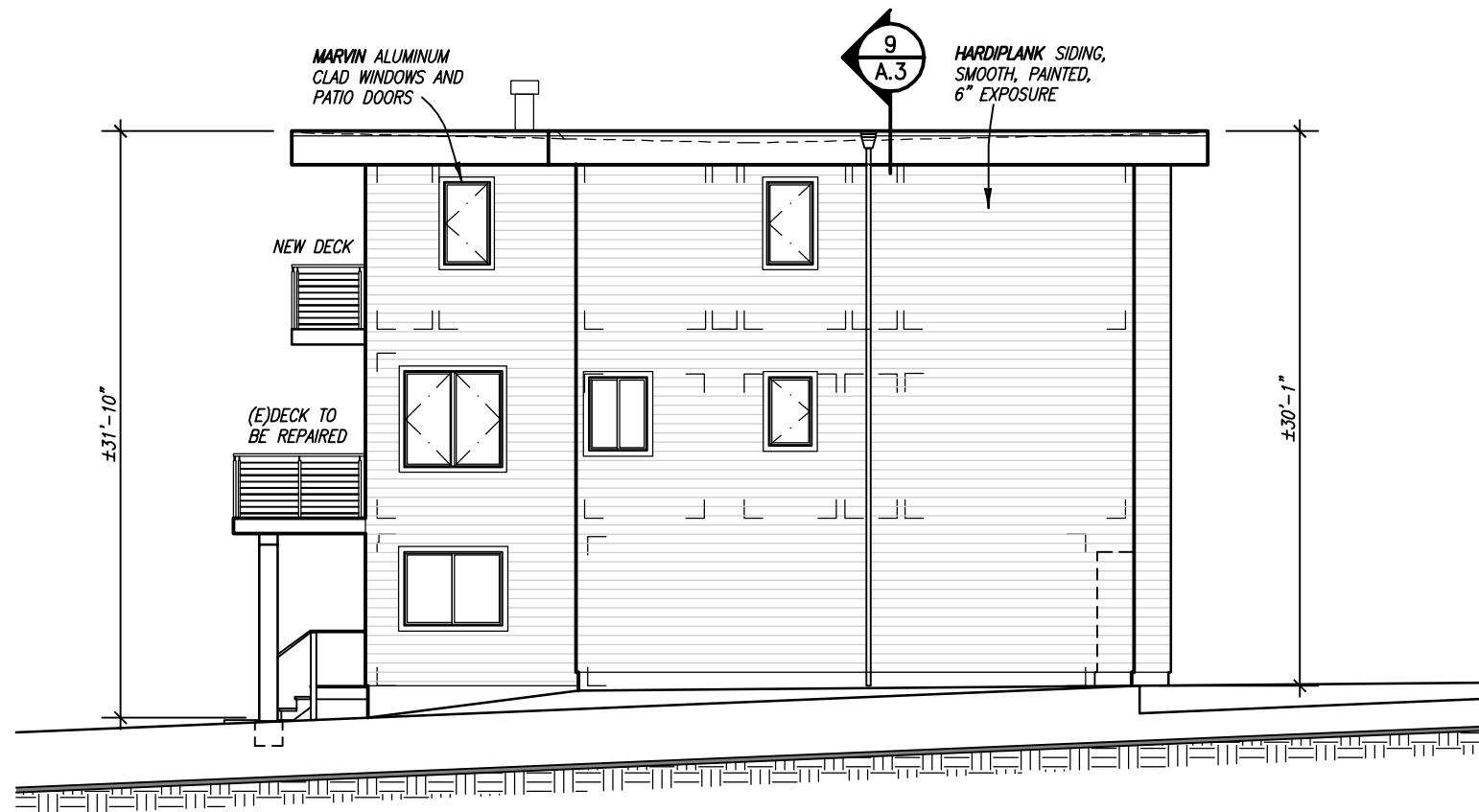


3RD STORY ADDITION AND  
INTERIOR IMPROVEMENTS AT:  
**1979 FUNSTON AVE**  
SAN FRANCISCO, CA 94116

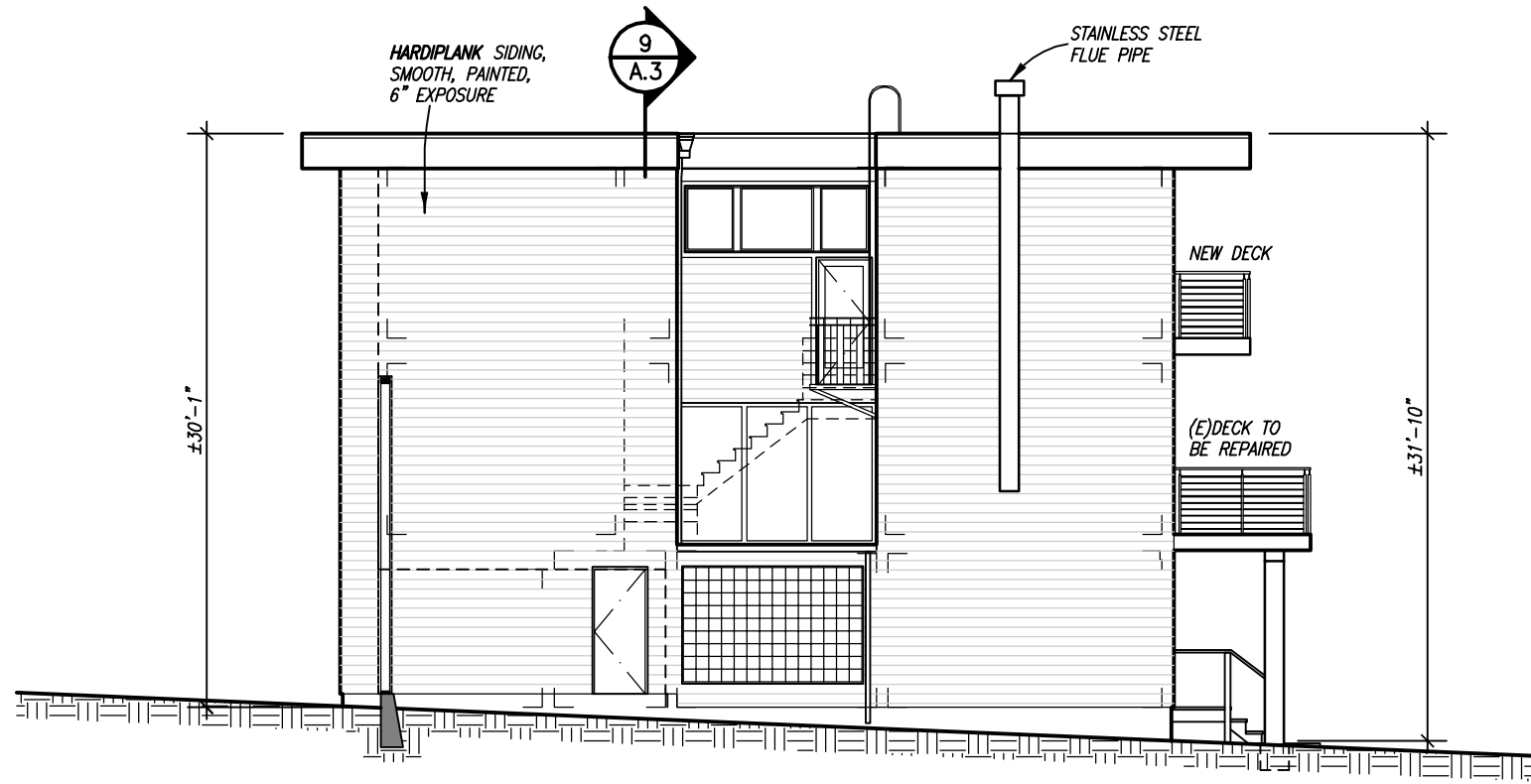
**EXTERIOR ELEVATIONS  
SECTIONS**

DATE: 10/04/2017  
PROJECT NO: 17.06  
DRAWN BY: MF

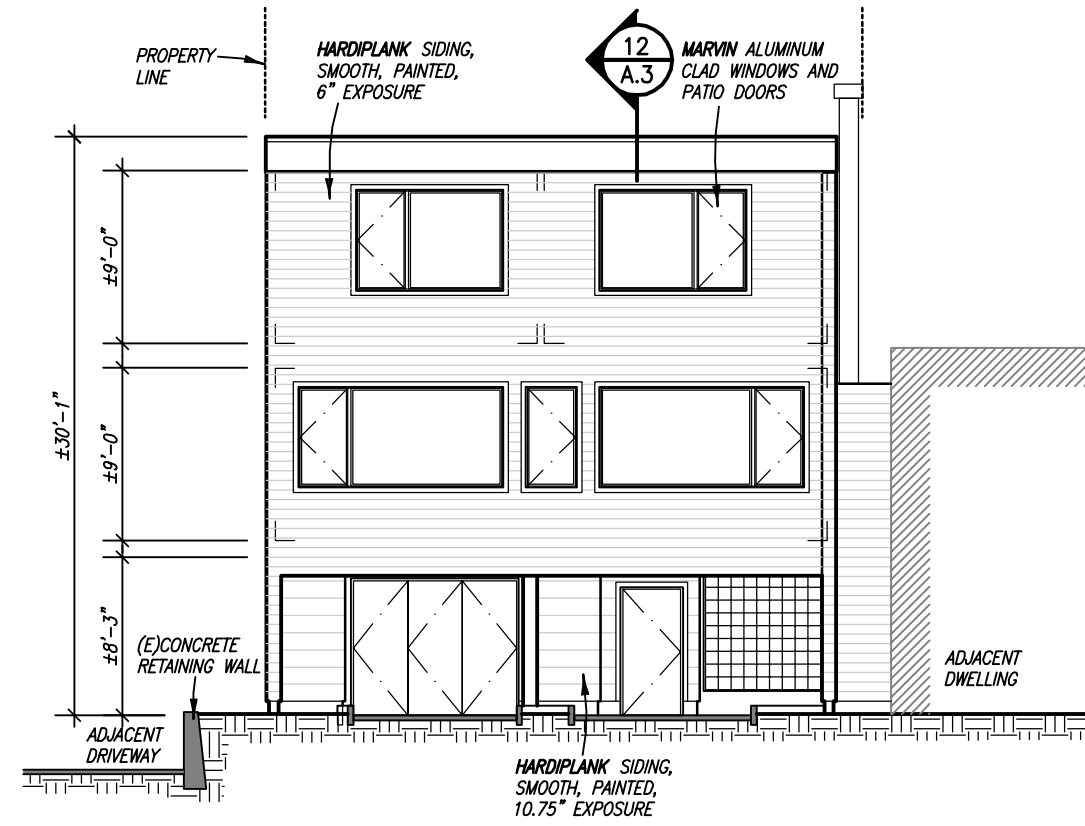
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**A.3**  
3 OF 4



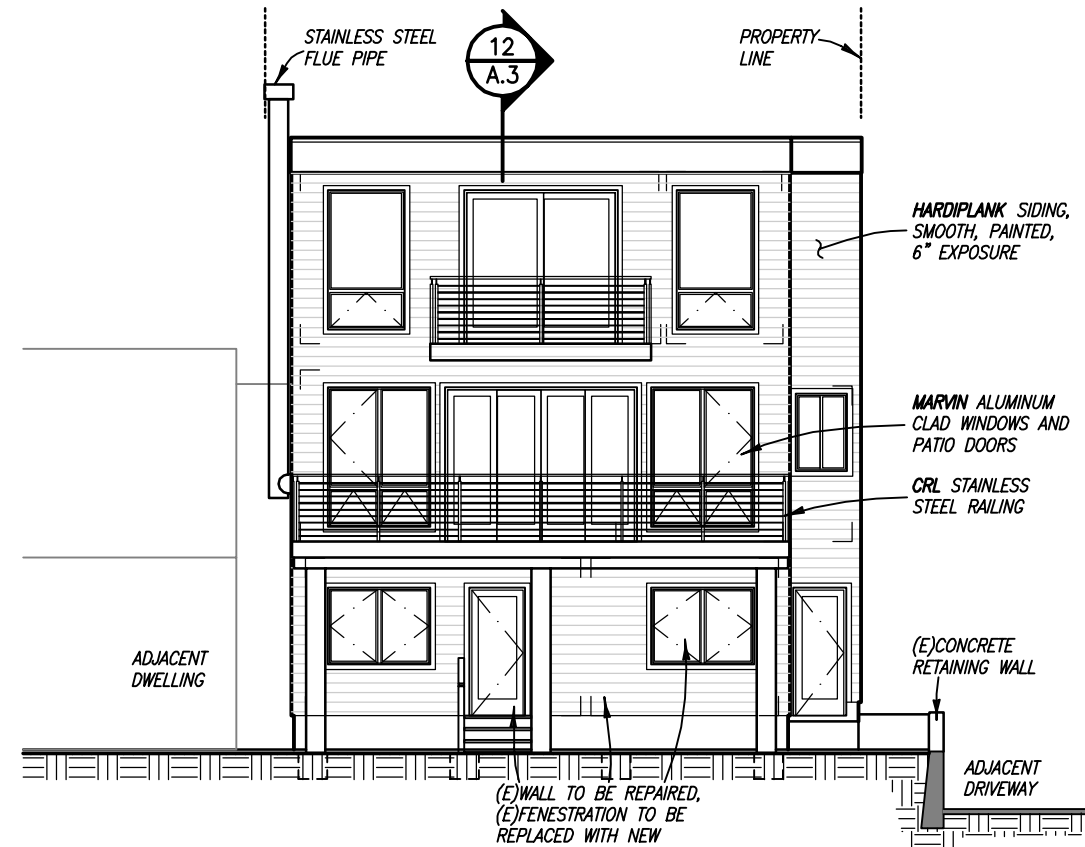
2 (N) SOUTH ELEVATION  
1"=10'-0"



4 (N) NORTH ELEVATION  
1"=10'-0"



1 (N) EAST ELEVATION  
1"=10'-0"



3 (N) WEST ELEVATION  
1"=10'-0"

**MF**  
**Michael Froehlich**  
Architect

942 KIRKHAM STREET  
SAN FRANCISCO, CA 94122  
TEL: 415.681.8268  
FAX: 415.681.9342  
email: mf@mfroehlich.net



**3RD STORY ADDITION AND  
INTERIOR IMPROVEMENTS AT:**  
**1979 FUNSTON AVE**  
**SAN FRANCISCO, CA 94116**

**EXTERIOR ELEVATIONS  
ENLARGED**

DATE: 10/04/2017

PROJECT NO: 17.06

DRAWN BY: MF

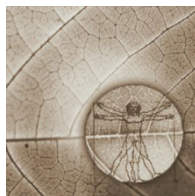
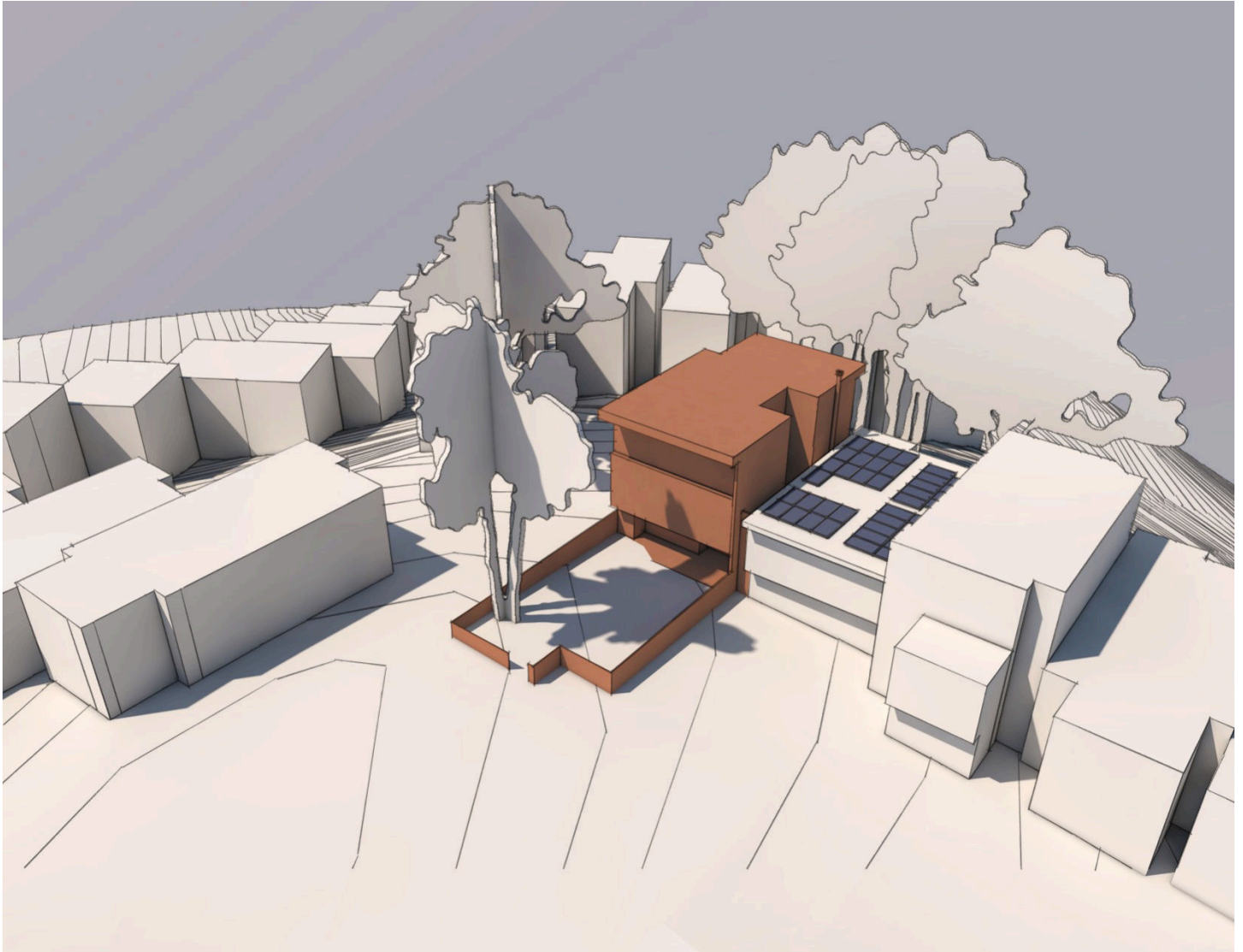
DRAWING NO.

**A.4**  
4 OF 4



# SHADING IMPACT ANALYSIS REPORT

FOR 1979 FUNSTON AVENUE | DECEMBER 31<sup>ST</sup> 2018



Report prepared by  
Olivier PENNETIER, LEED AP

**SYMPHYSIS**

Bioclimatic Design Consulting  
olivier@symphysis.net

## TABLE OF CONTENTS

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SHADING IMPACT ANALYSIS REPORT	1
I. INTRODUCTION & ANALYSIS SUMMARY	3
II. PROJECT LOCATION	4
III. PROPOSED PROJECT DESCRIPTION	5
IV. ANALYSIS METHODOLOGY & FINDINGS	7
V. APPENDICES	15

## I. INTRODUCTION & ANALYSIS SUMMARY

---

SYMPHYSIS was asked to perform a shading analysis to assess the shading impact of a proposed vertical addition, located at 1979 Funston Avenue, upon the adjacent neighbor's photovoltaic system located on the roof of 1975 Funston Avenue.

After performing the analysis, SYMPHYSIS concludes that **the proposed project at 1979 Funston Avenue would reduce global horizontal solar radiation by 9.5%** on the existing photovoltaic system at 1975 Funston Avenue. Most of the panels installed to the north of the roof would be impacted by less than 5%. If the existing solar system is a 13.8 kWh system, has high efficiency panels (19%) and a tilt angle of 5° toward 175° azimuth, the loss in savings from electrical production could be about \$300/year.

The report herein describes the proposed project, as well as the methodology used for the shading analysis along with its results. The appendices provide graphics of the analysis on key solar dates as well as aerial bird's eyes views of existing shading conditions. ■



Olivier A. Pannetier, MArch, LEED AP  
SYMPHYSIS Principal  
12/31/2018



## II. PROJECT LOCATION

The proposed project is located at 1779 Funston Avenue, in the Southwestern corner of the Inner Sunset neighborhood, block 2121A, lot 016. ■

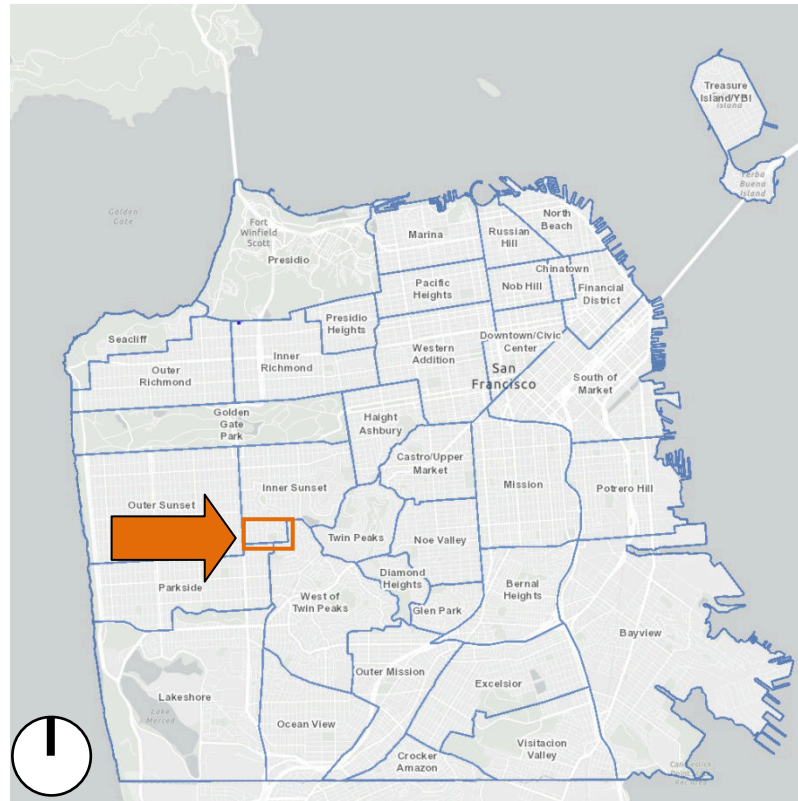


FIGURE 1: LOCATION MAP

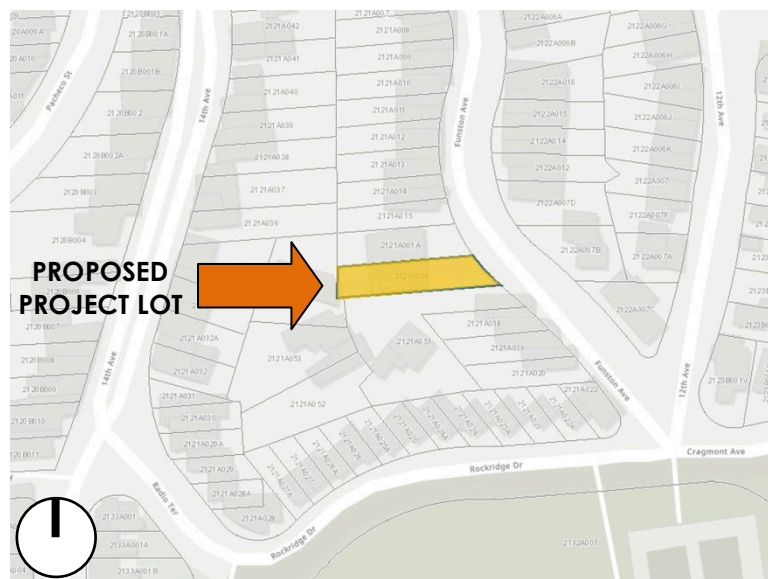


FIGURE 2: BLOCK MAP

### III. PROPOSED PROJECT DESCRIPTION

---

The proposed design features a new third story addition on top of an existing 2 story single family residence. The new addition will increase the height of the building by 11'-11", from 18'-2" to 30'-1", taken at the center of the front of the property.

The following images show the 3D massing models for the existing conditions and proposed design. ■

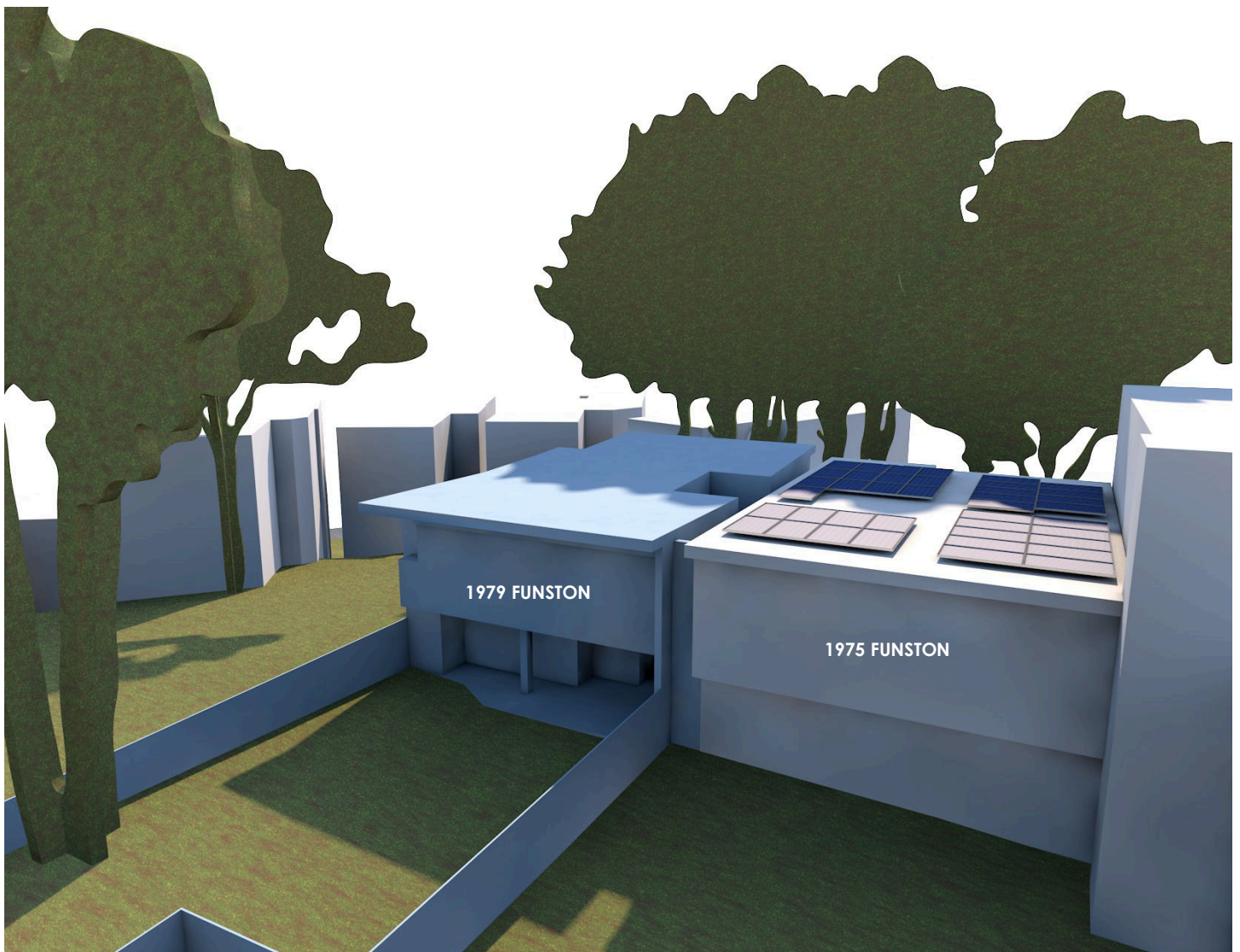


FIGURE 3: 3D MASSING MODEL OF THE EXISTING CONDITIONS.



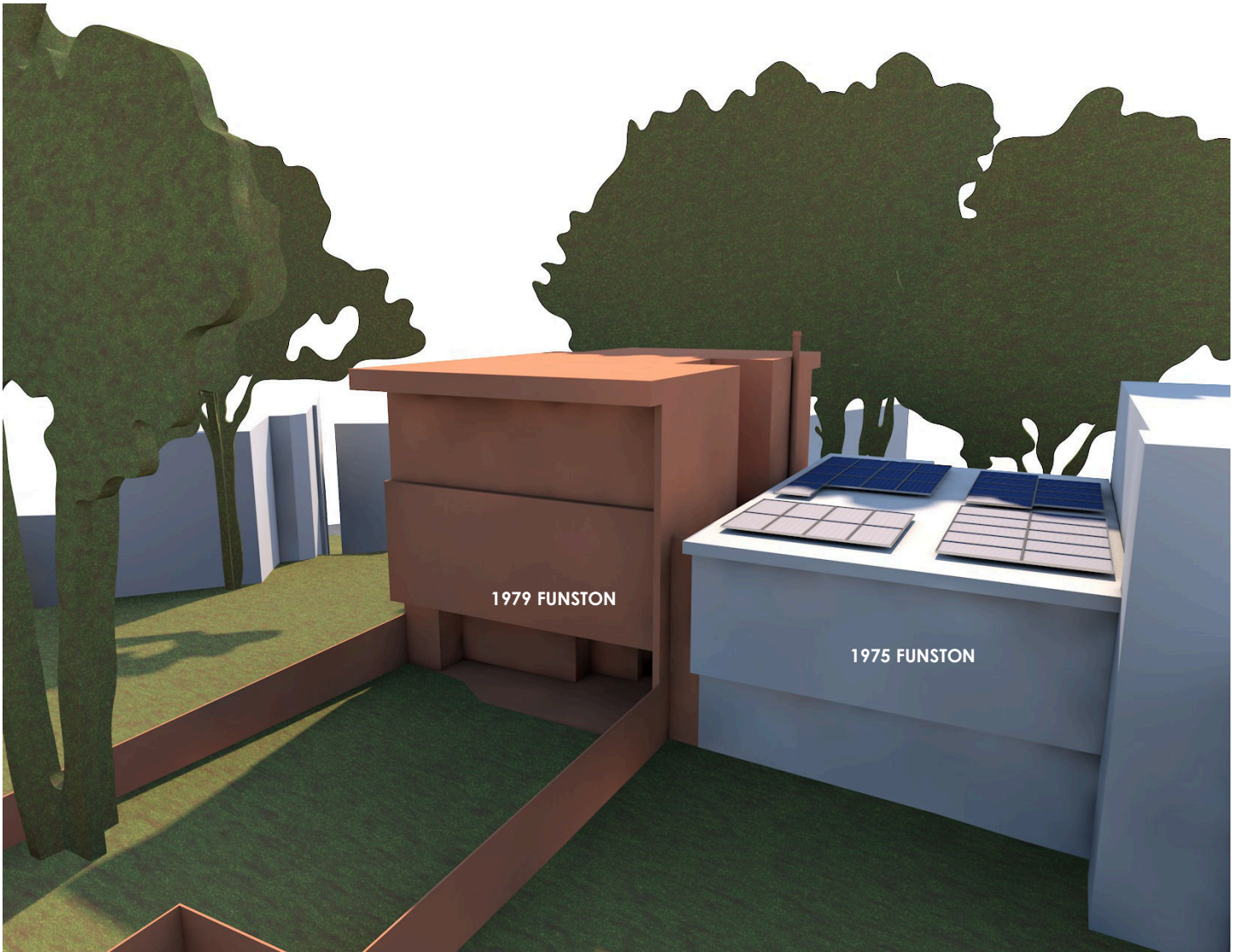


FIGURE 4: 3D MASSING MODEL OF THE PROPOSED DESIGN.



## IV. ANALYSIS METHODOLOGY & FINDINGS

SYMPHYSIS utilized various tools to develop this shading impact analysis. Here is a breakdown of the analysis process, and the tools used at each stage of the analysis:

- 1) A 3D model of the existing and proposed conditions was created within a CAD software (ArchiCAD), using the 2D drawings from the architect of the proposed project, Michael Froehlich. The terrain was developed in 3D from digital elevation model (DEM) from the USGS. The surrounding buildings were constructed from the latest GIS (Geographic Information System) layer of San Francisco building footprints obtainable at [data.sfgov.org](http://data.sfgov.org). The height of the buildings and adjacent trees were derived from photogrammetric model from Google Earth as well as USGS Lida GIS data (high accuracy). The size of the photovoltaic system located on the roof of the neighbor at 1975 Funston Avenue was estimated from visual inspection and aerial photograph.

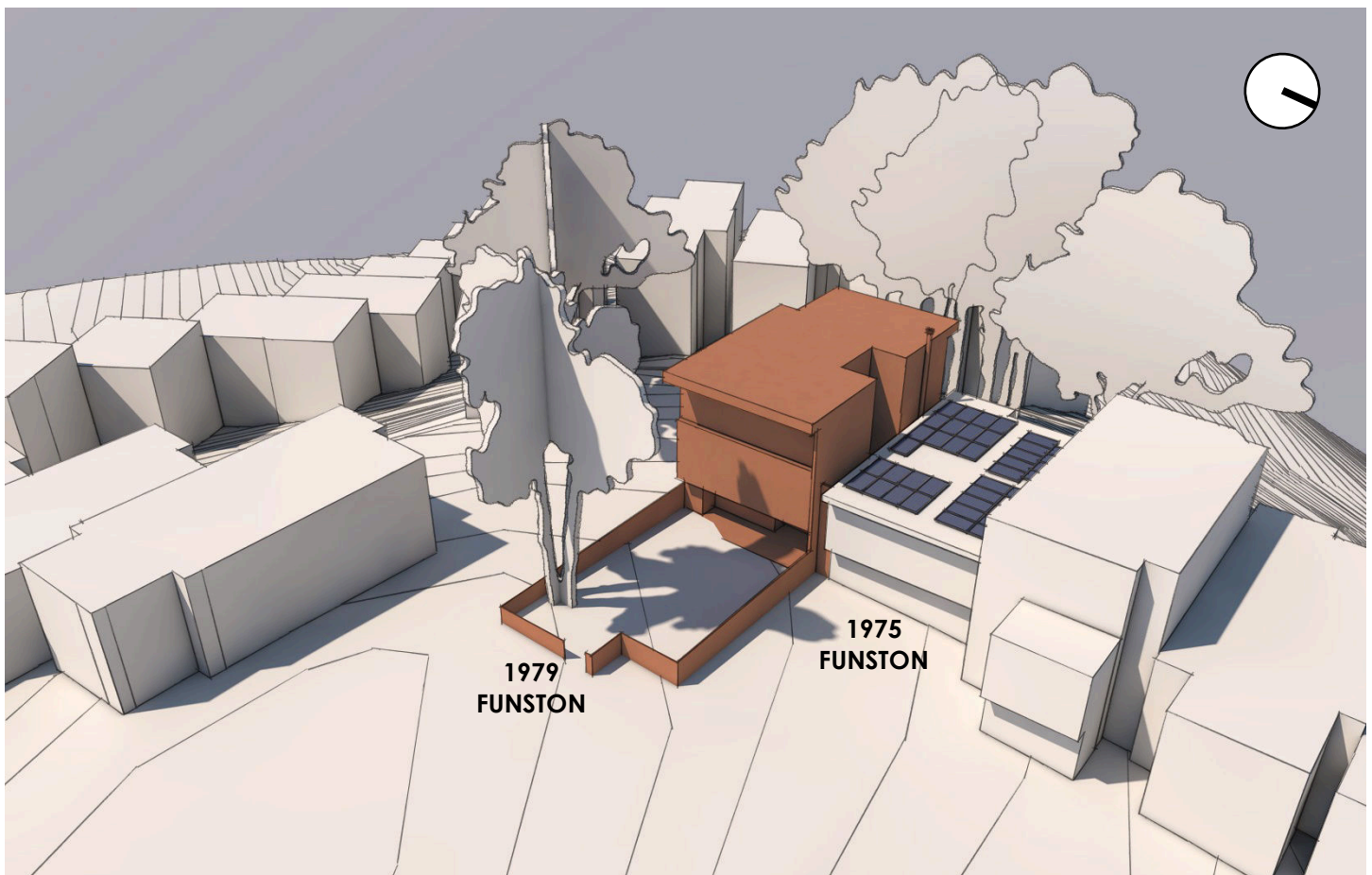


FIGURE 5: 3D MASSING MODEL OF PROPOSED CONDITIONS.



FIGURE 6: AERIAL PHOTOGRAPH OF THE PHOTOVOLTAIC SYSTEM AT 1975 FUNSTON AVENUE DATED 05/10/2018.

- 2) Solar radiation data was obtained from the nearest San Francisco Solar Monitoring Station located at Lincoln High School. This data was used with a Lidar map of the area (topographic map created using laser with high accuracy and featuring the terrain, buildings and vegetation) to create a solar map of the block where the project is located, to visualize overall neighborhood solar potential. The data shows that the project site falls in an region with the lowest amount of available solar radiation in the city of San Francisco, with an average of 4.12 kWh/m<sup>2</sup>/day.



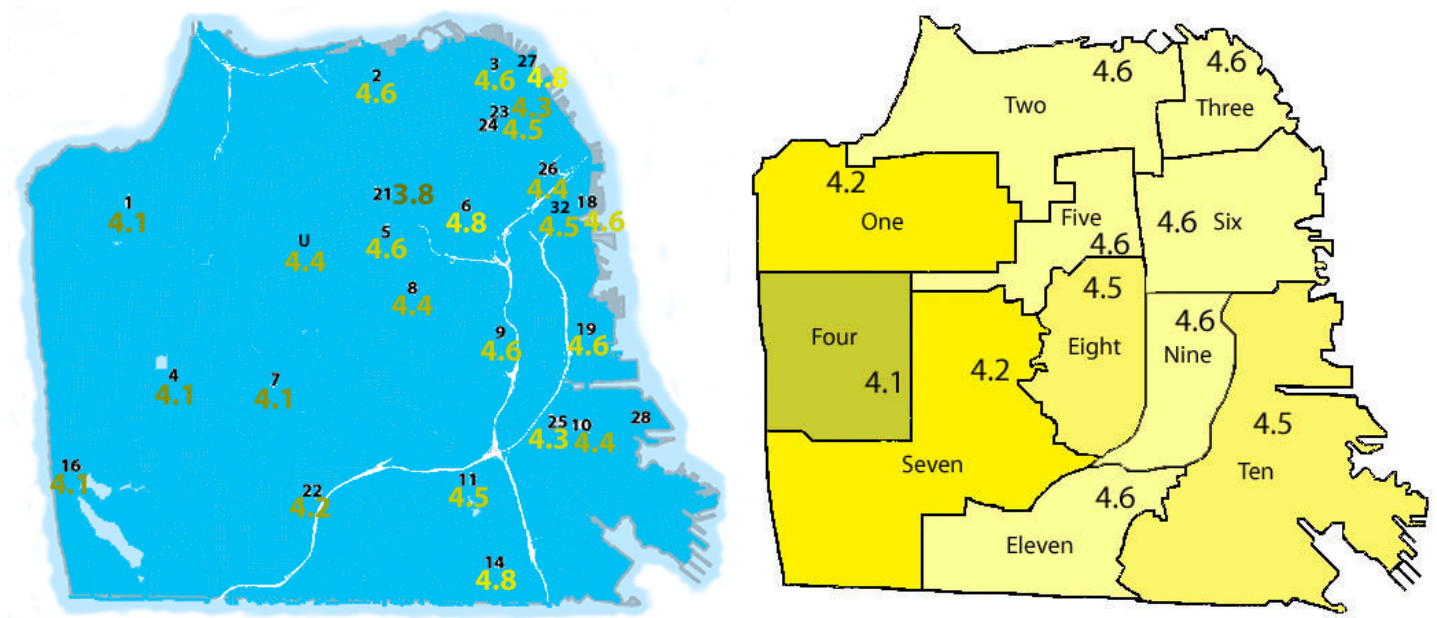


FIGURE 7: MAPS OF SOLAR MONITORING STATIONS AND AVERAGE DAILY INSOLATION ZONES. SOURCE: [www.sfog.us/solar/sfsolar.htm](http://www.sfog.us/solar/sfsolar.htm)



FIGURE 8: SOLAR MAP OF THE PROJECT'S BLOCK AND SURROUNDING.



- 3) The 3D models were sent into a building performance analysis tool called Autodesk Ecotect to calculate shading and solar radiation specifically at the roof level of the neighbor's property at 1975 Funston Avenue. First the calculations were computed for the existing conditions, then another pass with the proposed design. The difference between the two conditions highlights the areas of the photovoltaic system that are most impacted by the proposed project. The calculations were set for the entire year, and every hours of the day. Shading diagrams for the proposed project were taken for the summer solstice (June 21<sup>st</sup>), Fall equinox (September 21<sup>st</sup>) and Winter solstice (December 21<sup>st</sup>), from 1 hour after sunrise until 1 hour before sunset for every hours at the hour. These diagrams are found in the appendices of this report.

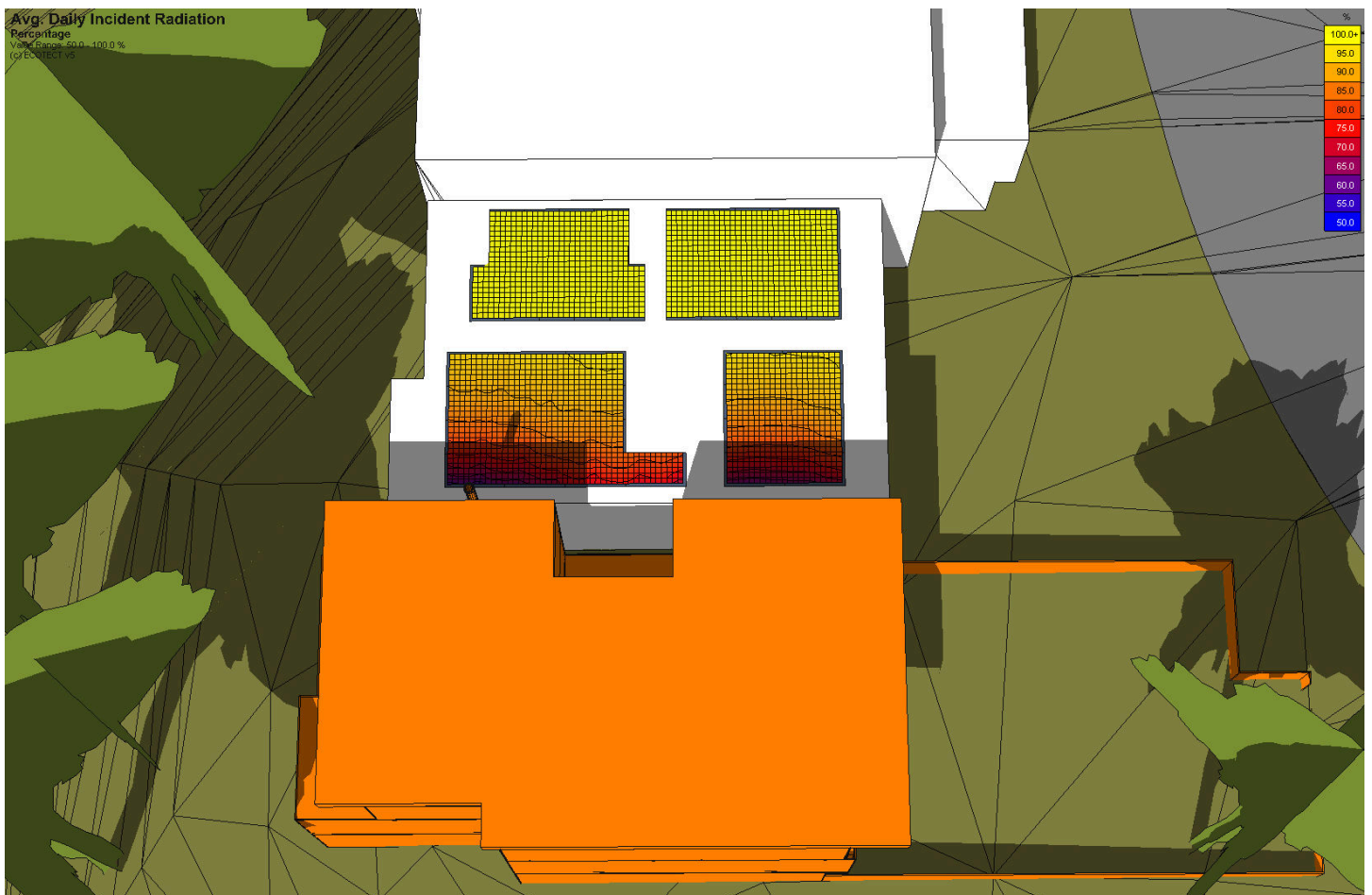


FIGURE 9: PERCENTAGE OF ANNUAL SOLAR RADIATION RECEIVED WITH THE PROPOSED PROJECT COMPARED TO EXISTING CONDITIONS.

- 4) Finally, the online software PVWatts Calculator from NREL was used to assess the electrical output of the photovoltaic system before and after the proposed project. The results were adjusted to reflect the more localized solar radiation data obtained prior. Currently, PVWatts uses a larger area of the city to average the solar radiation, so it uses 4.8 kWh/m<sup>2</sup>/day, instead of 4.12 kWh/m<sup>2</sup>/day. For this phase of the analysis, the photovoltaic system has been estimated at 13.8 kW (40 Sunpower panels @ 345 W each), with premium modules (~19% efficiency) tilted at 5° and oriented squarely with the roof with a 175° azimuth angle.

After compiling all the results of the various analyses, SYMPHYSIS concludes that the proposed project at 1979 Funston Avenue would reduce the amount of horizontal solar radiation on the existing photovoltaic system by 9.5%. Most of the impact would occur on the lower (southern) panels located closer to the proposed project, and mainly between Fall and Winter, time at which solar radiation is weakest. During the summer time, there would only be a 2.5% decrease in solar radiation, compared to a 30% reduction during the winter. Fortunately, the summer solar radiation gains would still be 4.4 times greater than the winter radiation gains. Table 1 below highlights these numbers.

TABLE 1: PERCENTAGE DECREASE IN GLOBAL HORIZONTAL RADIATION AT ROOF LEVEL

PERIOD	EXISTING CONDITIONS GLOBAL HORIZONTAL RADIATION (kWh/m <sup>2</sup> /day)	EXISTING CONDITIONS GLOBAL HORIZONTAL RADIATION (kWh/m <sup>2</sup> /day)	PERCENTAGE DECREASE
SUMMER	5,030	4,901	-2.5%
WINTER	1,589	1,122	-30%
YEAR	3,309	2,993	-9.5%

Of note is that the existing conditions for global horizontal radiation are about 80% of an unobstructed horizontal surface would receive, due to the amount and size of the existing trees on the southeast and west of the properties. Aerial bird's eye view photographs of the site clearly show the existing amount of shade already present – see appendices for sample aerials taken at different angles and time of year. Calculations show an existing 31% shading on the photovoltaic

system. The proposed project would push the shading on the panels to 42%, with the understanding that most of that shading would occur at times of the year when solar radiation is the weakest. The following graphic shows the location of the highest impact to the photovoltaic system, with up to 45% decrease in solar radiation (in blue). The top panels remain almost un-impacted, with no more than a 5% reduction in solar radiation over the entire year (in yellow).

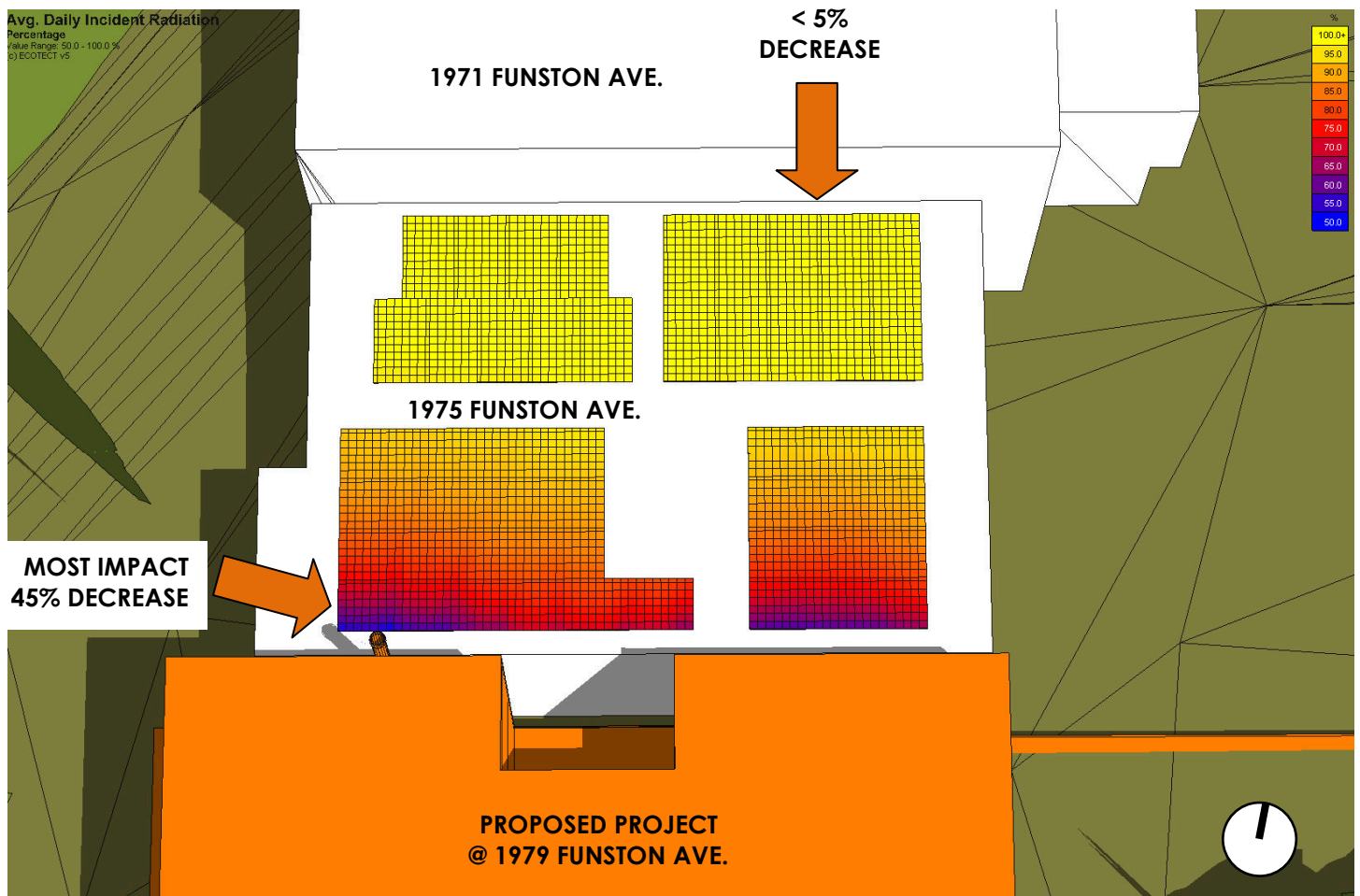


FIGURE 10: PERCENTAGE OF ANNUAL SOLAR RADIATION RECEIVED WITH THE PROPOSED PROJECT COMPARED TO EXISTING CONDITIONS.

SYMPHYSIS also calculated the amount of electricity that would not be produced by the existing photovoltaic system due to the proposed project. To do this, NREL's PVWatts tool was used, and the results calibrated to the local solar monitoring station. It has been assumed that the panels would be of premium types, which have a higher efficacy of about 19% compared to standard 15% efficacy panels. Also, it has been assumed that the solar system would have a tilt angle of 5° rather than being installed flat on the roof. This tilt angled was assumed after visual inspection of the actual photovoltaic arrays. From the aerial



photograph Figure 6, it is clear that the panels were installed square with the roof, so are aligned 5° East of due South at 175° azimuth angle. To account for the existing and proposed shading present at the site, the overall system lost was adjusted to reflect the 31% shading for existing conditions and 42% shading for proposed conditions. The rate of electricity was set to \$0.153/kWh. The following tables give the results for both existing and proposed conditions.

TABLE 2: ESTIMATED SOLAR POWER OUTPUT UNDER EXISTING CONDITIONS

MONTHS	SOLAR RADIATION (kWh/m2/day)	AC ENERGY (kWh)	VALUE (\$)
JANUARY	2.14	516	79
FEBRUARY	2.86	628	96
MARCH	4.27	1,019	156
APRIL	5.51	1,276	196
MAY	6.08	1,439	221
JUNE	6.53	1,485	228
JULY	6.06	1,410	216
AUGUST	5.40	1,256	193
SEPTEMBER	4.90	1,092	168
OCTOBER	3.64	853	131
NOVEMBER	2.62	598	92
DECEMBER	2.05	491	75
YEAR	4.34	12,062	1,850

TABLE 3: ESTIMATED SOLAR POWER OUTPUT UNDER PROPOSED CONDITIONS

MONTHS	SOLAR RADIATION (kWh/m2/day)	AC ENERGY (kWh)	VALUE (\$)
JANUARY	2.14	431	66
FEBRUARY	2.86	525	81
MARCH	4.27	854	131
APRIL	5.51	1,070	164
MAY	6.08	1,207	185
JUNE	6.53	1,246	191
JULY	6.06	1,183	181
AUGUST	5.40	1,054	162
SEPTEMBER	4.90	916	140
OCTOBER	3.64	714	110
NOVEMBER	2.62	500	77
DECEMBER	2.05	410	63
YEAR	4.34	10,110	1,551

It is important to note that the tables cannot reflect the shading variations throughout the year, but rather uses the annual shading percentage for the entire year, so the monthly values are not as representative as the yearly values. Also, the "Solar Radiation" values are prior to any system lost, including shading (hence the same numbers appear for existing and proposed conditions). From this analysis, we can see that the proposed project would impact the photovoltaic system with a loss of \$300 in savings per year, or about \$25/month. ■

## V. APPENDICES

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APPENDIX A – SUMMER SOLSTICE SHADING DIAGRAMS

APPENDIX B – FALL EQUINOX SHADING DIAGRAMS

APPENDIX C – WINTER SOLSTICE SHADING DIAGRAMS

APPENDIX D – BIRD'S EYE VIEWS OF EXISTING CONDITIONS

APPENDIX E – SHADING IMPACT ON ANNUAL SOLAR RADIATION




# A01


SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

06:48 AM [1 HR AFTER SUNRISE]

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.




# A02


SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

07:00 AM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# A03


SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

08:00 AM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# A04

SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

09:00 AM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.




# A05


SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

10:00 AM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# A06

SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

11:00 AM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# A07

SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

12:00 PM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.




# A08


SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

01:00 PM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# A09

SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

02:00 PM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# A10

SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

03:00 PM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.




# A11


SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

04:00 PM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# A12

SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

05:00 PM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# A13

SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

06:00 PM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.




# A14


SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

07:00 PM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# A15

SUMMER SOLSTICE

JUNE 21<sup>ST</sup>

07:35 PM [1 HR BEFORE SUNSET]

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# B01

FALL EQUINOX

SEPTEMBER 21<sup>ST</sup>

07:57 AM [1 HR AFTER SUNRISE]


 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.


 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.



 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# B03

FALL EQUINOX

SEPTEMBER 21<sup>ST</sup>

09:00 AM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.


 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.





 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.




# B05


FALL EQUINOX

SEPTEMBER 21<sup>ST</sup>

11:00 AM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.


 EXISTING SHADING  
@ 1975 FUNSTON AVE.


 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.





 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# B07

FALL EQUINOX

SEPTEMBER 21<sup>ST</sup>

01:00 PM


 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.


 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.



 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.


 EXISTING SHADING  
@ 1975 FUNSTON AVE.


 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.


 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.



 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.


 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.


 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.



 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.




 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.





SEPTEMBER 21<sup>ST</sup> 06:08 PM [1 HR BEFORE SUNSET]

-  PROPOSED PROJECT  
@ 1979 FUNSTON AVE.
-  EXISTING SHADING  
@ 1975 FUNSTON AVE.
-  ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.




# C01


WINTER SOLSTICE

DECEMBER 21<sup>ST</sup>

08:22 AM [1 HR AFTER SUNRISE]

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# C02

WINTER SOLSTICE

DECEMBER 21<sup>ST</sup>

09:00 AM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.




# C03


WINTER SOLSTICE

DECEMBER 21<sup>ST</sup>

10:00 AM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.






# C04

WINTER SOLSTICE

DECEMBER 21<sup>ST</sup>

11:00 AM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.




# C05


WINTER SOLSTICE

DECEMBER 21<sup>ST</sup>

12:00 PM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.


 EXISTING SHADING  
@ 1975 FUNSTON AVE.


 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.





 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.




# C07


WINTER SOLSTICE

DECEMBER 21<sup>ST</sup>

02:00 PM

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.


 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.





 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.




# C09


WINTER SOLSTICE

DECEMBER 21<sup>ST</sup>

03:55 PM [1 HR BEFORE SUNSET]

 PROPOSED PROJECT  
@ 1979 FUNSTON AVE.

 EXISTING SHADING  
@ 1975 FUNSTON AVE.

 ADDITIONAL SHADING  
@ 1975 FUNSTON AVE.





# D01

## BIRD'S EYE VIEW OF EXISTING SHADING CONDITIONS

06/13/14

### VIEW FROM WEST



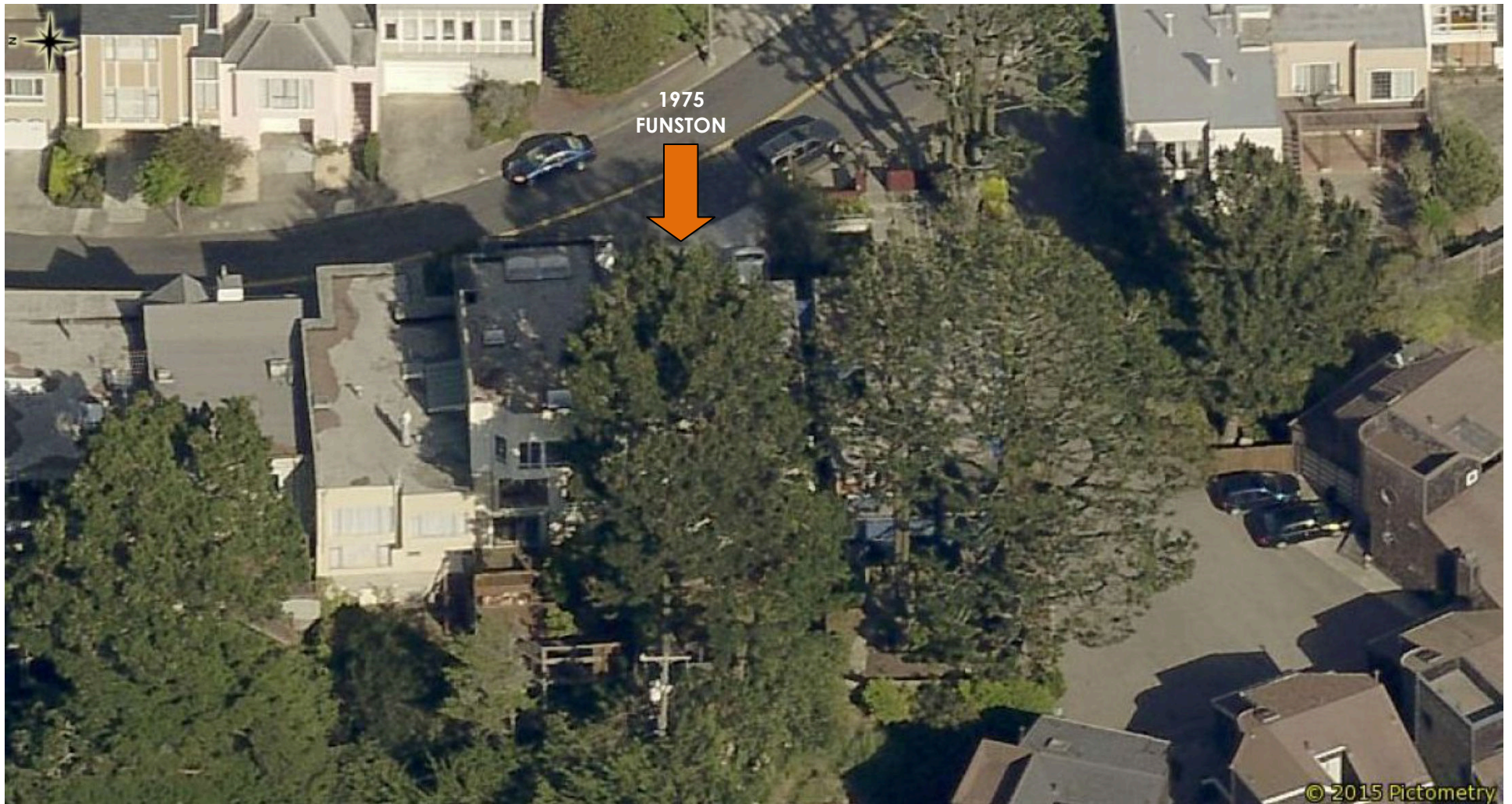


# D02

## BIRD'S EYE VIEW OF EXISTING SHADING CONDITIONS

09/25/14

### VIEW FROM WEST



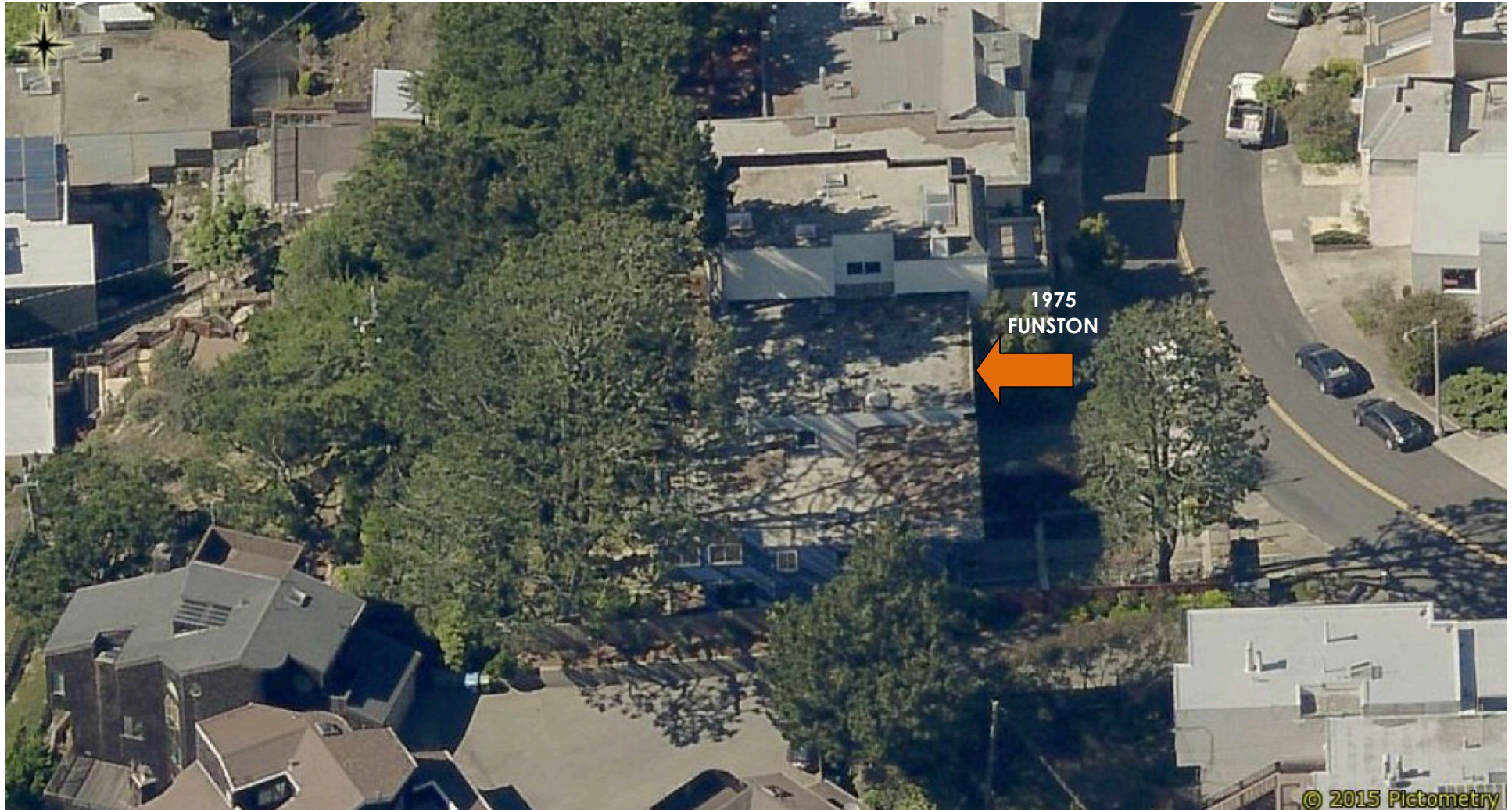


# D03

## BIRD'S EYE VIEW OF EXISTING SHADING CONDITIONS

08/12/15

### VIEW FROM SOUTH



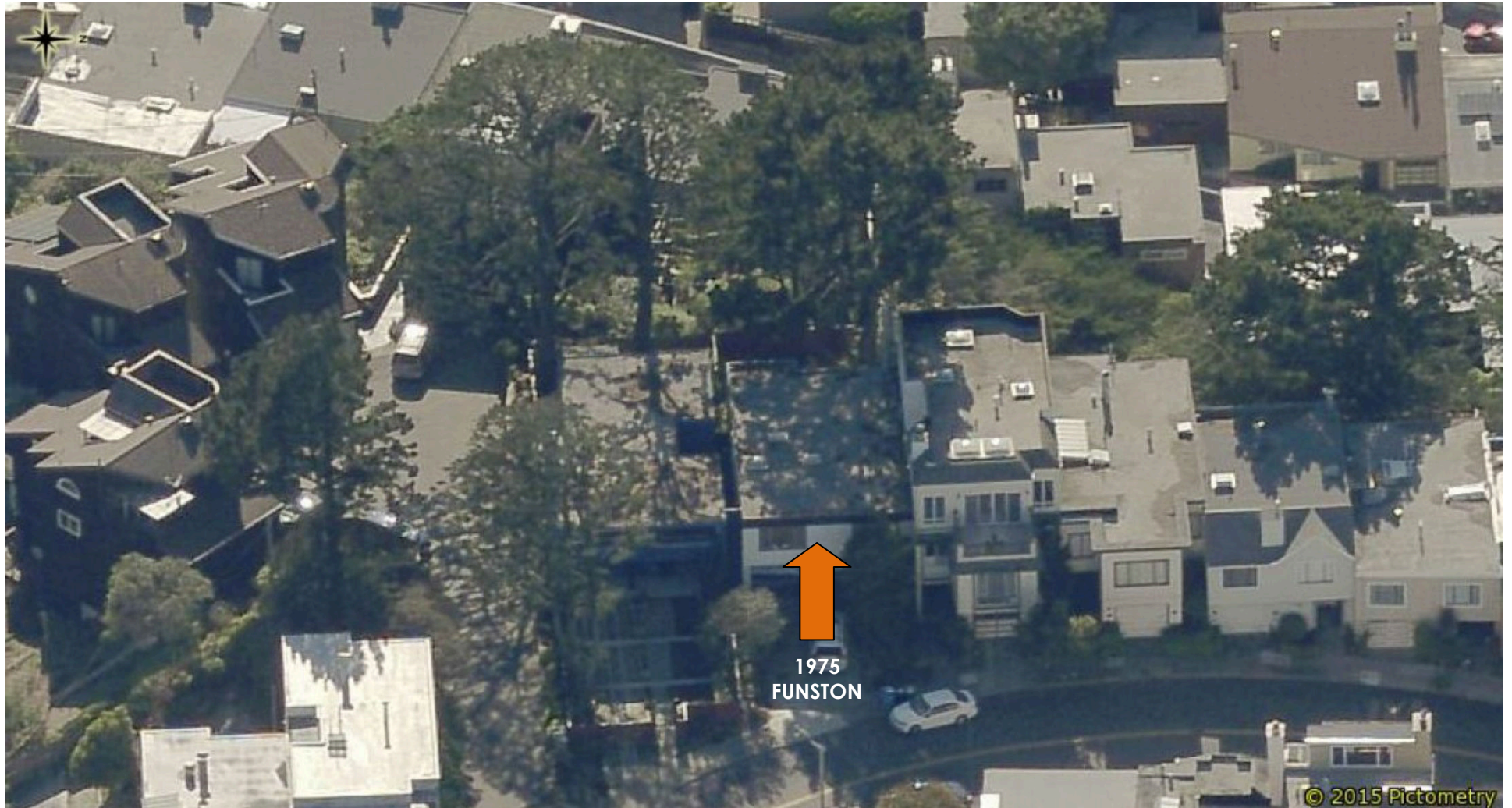


# D04

## BIRD'S EYE VIEW OF EXISTING SHADING CONDITIONS

08/12/15

### VIEW FROM EAST



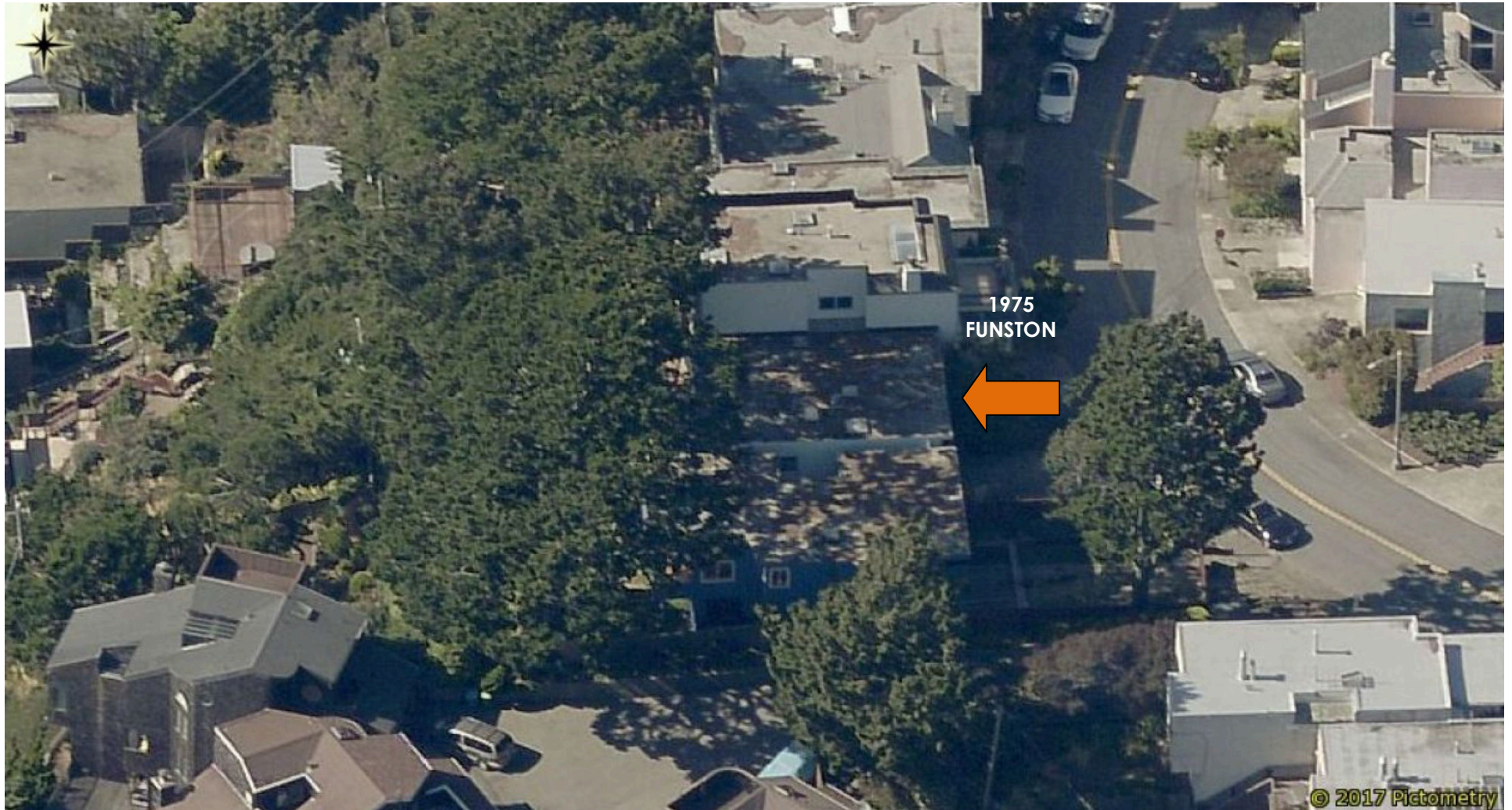


# D05

## BIRD'S EYE VIEW OF EXISTING SHADING CONDITIONS

07/19/17

### VIEW FROM SOUTH





# D06

## BIRD'S EYE VIEW OF EXISTING SHADING CONDITIONS

07/19/17

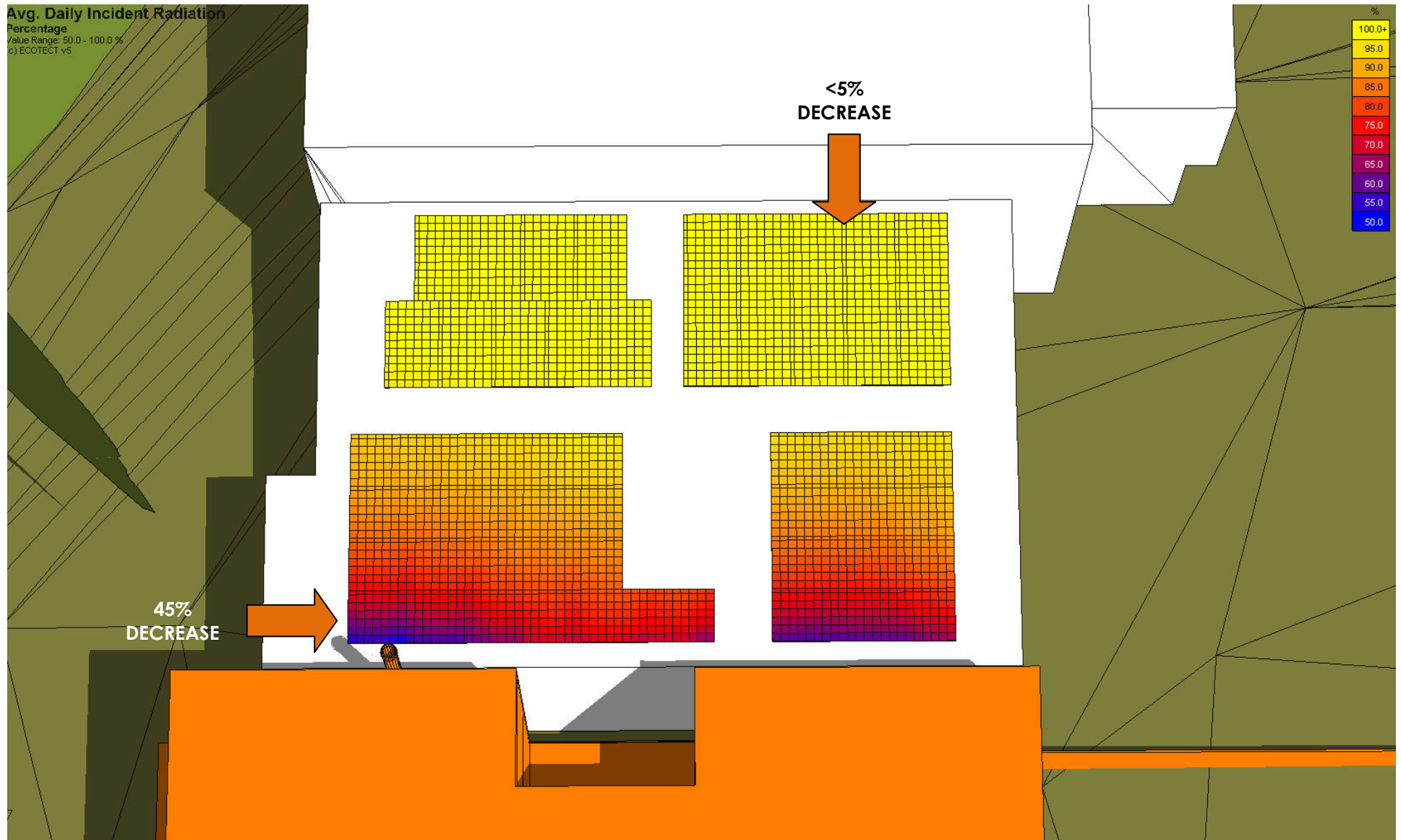
### VIEW FROM WEST





# E01

## SHADING IMPACT ON ANNUAL SOLAR RADIATION





## **SYMPHYSIS**

Bioclimatic Design Consulting

435 S. ALEXANDRIA AVENUE #308

LOS ANGELES CA 90020

[www.symphysis.net](http://www.symphysis.net)

[info@symphysis.net](mailto:info@symphysis.net)



1971 Funston Avenue  
San Francisco, CA 94116  
January 3, 2019

Re: Discretionary Review at 1979 Funston Ave

Dear SF Planning Commission:

We are writing to support the Prothro family's proposal to add a third story to their home located at 1979 Funston Avenue. We have lived at 1971 Funston since 1988. During that time, we and several of our neighbors have added third stories to their homes to accommodate the needs of growing families.

The Prothros moved in, two doors down from us, in 2008. Since arriving the Prothro family has grown with the addition of two children. The Prothros have been an asset to the community, hosting annual pumpkin carving parties, neighborhood watch events and generally being a friendly, welcoming presence in the neighborhood. We have enjoyed having them as neighbors.

In the spring of 2017, Cy Prothro verbally informed us of his intention to add a 3<sup>rd</sup> level to his home. Later that year we saw the plans for the addition and felt the proposal was consistent with the architectural style of the neighborhood and would actually improve the property's aesthetic.

We were surprised to learn that our neighbors at 1975 Funston protested the Prothro's proposed addition, particularly given that the solar panels, the alleged shading of which is the reason for the protest, were installed *well after* the Prothros informed the neighborhood of their plans to add a third story to their home.

Our neighborhood is shaded by large trees and is in the foggiest part of San Francisco. While a 3<sup>rd</sup> story on the Prothro residence may cast some additional shade, we find it unlikely that the addition will significantly reduce the solar capacity at 1975 Funston. We would also note that the Prothros have consistently maintained and thinned the trees on their property thus allowing for additional sunlight to fall on their home and the homes of their adjacent neighbors.

The Prothro family has invested in San Francisco. Cy Prothro teaches at Lowell High School. Celeste Prothro is a nurse at the Kaiser hospital on Geary. Their daughters attend Clarendon Elementary. We hope they stay in the neighborhood and we enthusiastically support their proposal to add a 3<sup>rd</sup> level to their home.

Sincerely,

Phil Arnold and Monique Zmuda  
1971 Funston Avenue  
San Francisco, CA 94116