



April 12, 2023

Delivered via email

To: Mayor Lesa Heebner
Deputy Mayor David Zito
Councilmembers Kristi Becker, Jewel Edson, Jill MacDonald
City of Solana Beach
Cc: City Manager Greg Wade, City of Solana Beach
Cc: District Manager Diana Lilly, California Coastal Commission San Diego Coast

Re: Item B1. DRP for 241 Pacific Avenue

Honorable Mayor, Deputy Mayor and Councilmembers,

The Surfrider Foundation is a nonprofit grassroots organization dedicated to the protection and enjoyment of our world's ocean, waves, and beaches through a powerful network. Thank you for the opportunity to comment on this project. For the last five years we have provided comment on various development projects concerning 241 Pacific Ave and its blufftop neighbors. This includes opposing shoreline protection in front of 245 Pacific Ave and requesting additional mitigation for these projects:

- 2018: Solana Beach CUP 17-17-27, 235, 241 & 245 Pacific Ave
- 2019: Coastal Commission Application No. 6-18-0288, Item Th20b, 245, 241, & 235 Pacific Ave,
- 2020: Coastal Commission Application No. 6-19-1291, Item Th10b, 249, 241, & 235 Pacific Ave
- 2021: Coastal Commission Application No. 6-21-0278, 235, 241, 245, & 249 Pacific Avenue, Solana Beach

241 Pacific Ave and its neighbors have all been allowed to persist in reckless development that has resulted in the destruction of the public's beaches and the defacement of the city's once-beautiful bluffs. There is now a continuous seawall from 475 Pacific Ave to 211 Pacific Ave, amounting to armoring over ¼ mile long, in front of 21 houses. This represents the majority of the homes in the northern half of the city.

There are important inconsistencies in the applicant's geotechnical report that should be corrected. As a result of these inconsistencies and errors, per Solana Beach's Certified Land Use Plan (LUP), council is not permitted to approve the proposed development. We are asking Council to deny the permit as the proposed development will all be seaward of the GSL inconsistent with LUP policy 4.17.

Policy 4.17: New development shall be set back a safe distance from the bluff edge, with a reasonable margin of safety, to eliminate the need for bluff retention devices to protect the new improvements. All new development, including additions to existing structures, on bluff property shall be landward of the Geologic Setback Line (GSL) as set forth in Policy 4.25..

The most glaring inconsistency is that the applicant is now contending that the setback line is significantly more seaward of the setback line established less than five years ago. This earlier setback was used to justify getting a seawall. The inconsistency may be an error, omission, or due to the incorrect reliance on a seawall in the new calculation of the bluff stability used to determine the setback. This is forbidden by LUP Policy 4.18:

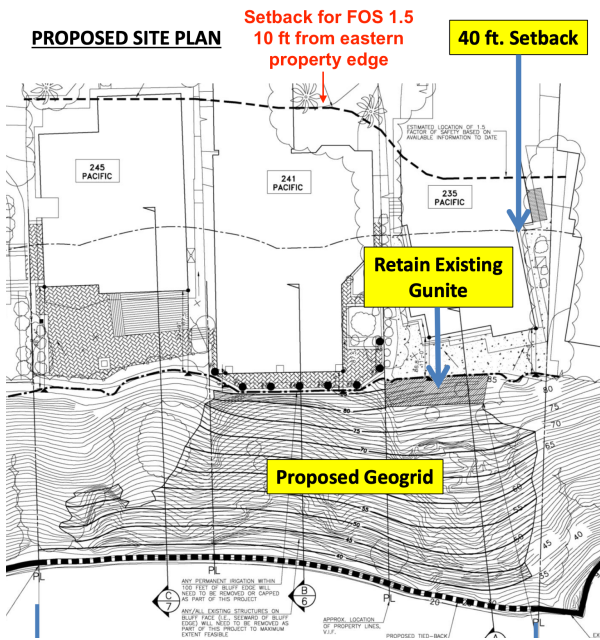
4.18: A legally permitted bluff retention device shall not be factored into setback calculations.

In the 2019 California Coastal Commission staff report for the approval of the seawall in front of 241 Pacific Ave, the following was in evidence showing the 1.5 Factor of Safety (FOS) was 10 feet from the eastern property line when calculating the setback, even absent consideration of the additional 75 years of erosion.

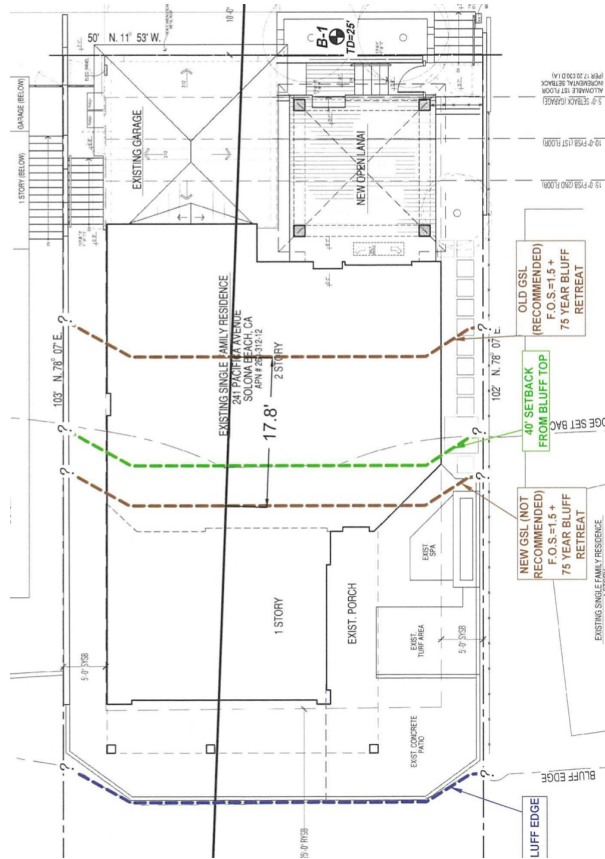
"Relocation is another alternative that is typically considered a reasonable and feasible alternative to consider. The Commission typically requires that new homes be sited landward of the Geologic Setback Line (GSL) on bluff top sites, which consists of the combination of the current 1.5 Factor of Safety (FOS) setback and 75 years of expected erosion. On the subject sites, it would not be feasible to construct homes landward of the GSL, as the identified 1.5 FOS Setback alone is located ~10 ft. from the eastern property line at 241 Pacific Avenue and ~25-35 ft. from the eastern property line at 235 Pacific Avenue." (emphasis added, page 31, Th20b-d-2019 report)¹

The 10 ft from the eastern property line data point is consistent with the 2019 Coastal Commission permit application, Exhibit No. 4, and is not consistent with the present application showing the setback seaward of the garage. In the 2019 Exhibit No. 4, the GSL traversed the middle of the garage.

¹ <https://documents.coastal.ca.gov/reports/2019/3/Th20b/Th20b-3-2019-report.pdf>



2019 Application No. 6-18-0288, Exhibit No. 4²



2023 Re-revised Bluff Retreat Map, Plate 1a (B.I. Updated Report)

Exhibit 4 from the 241 Pacific Staff 2019 Report shows the setback line (dashed line at top) for a Factor of Safety 1.5 approximately 10 feet from the eastern edge of the property and traversing through the garage. A factor of safety line at this location would prohibit any development since the factor of safety 1.5 line is the most conservative position of the GSL. When retreat rate due to SLR and waves are added the GSL is likely to be in the middle of Pacific Ave.

The applicant's latest inconsistent submission is not surprisingly labeled "re-revised". The "re-revised" calculation incorrectly shows the Factor of Safety 1.5 line considerably seaward of the line 10 feet from the eastern property edge used in the 2019 seawall application Staff Report.

In addition, the 75 year erosion rate used by the applicant is also suspect but due to

² <https://documents.coastal.ca.gov/reports/2019/3/Th20b/Th20b-3-2019-exhibits.pdf>

time constraints we do not address that in detail in this correspondence. A reasonable estimate is to use 0.4 ft/yr used in mitigation calculations and adding additional amounts for SLR. In addition, the Army Corps of Engineers assumes an erosion rate of 0.8-1.2 ft/yr. Both values are considerably greater than the applicant's assumptions.

Also inconsistent with the present application's assumptions is the factor of safety for the principal structure absent the seawall. As submitted by Terra Costa and concurred by the Coastal Commission engineer and geologist, a Slope static/pseudostatic stability Factor of safety of 1.12/0.90 was calculated at 241 Pacific Ave 20 feet inland of the bluff edge:

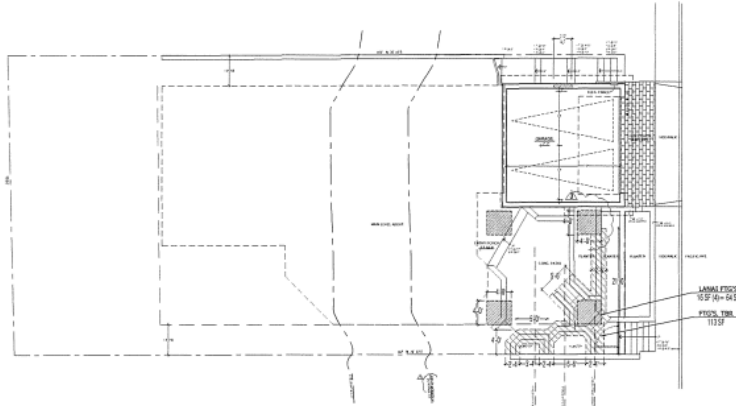
"At the subject site, an ~10 ft. thick clean sand layer is exposed across a 74 ft. long section of the bluff. The slope stability analysis performed by the applicants' engineer indicates that further collapse of the upper bluff would threaten the structures at the top of the bluff. Slope static/pseudostatic stability analyses for the bluff at 235 Pacific, 241 Pacific, and 245 Pacific demonstrate a factor of safety of 1.22/0.95, 1.12/0.90, and 0.99/0.80, respectively. These factors of safety alone may not necessitate shoreline protection. However, when taken in combination with the exposure of the clean sand layer, the Commission senior engineer and geologist agree that the applicants' geotechnical analysis conclusion that each of the three residences are at risk, and that shoreline protection is warranted." (page 28, Th20b-d-2019 report)¹.

"Slope stability analyses conducted for 241 Pacific Ave. provided by TerraCosta (2010) (Ref. 2) and SEC (2018a) (Ref. 8) report low minimum factors of safety (1.12 static / 0.90 seismic; Ref. 8) along critical surfaces daylighting approximately 20 feet inland of the bluff edge, which, as noted above, had by 2018 retreated to the margins of the existing drilled pier system (Ref. 10). Neither of these analyses included the existing piers and any stability benefits the system may still afford, making it difficult to evaluate the actual stability of the bluff under existing conditions." (Th20b-d-2019 Exhibits, Exhibit No. 15 Geotechnical Review Memorandum, page 3)²

As shown below the new foundation for the covered porch (lanai) is clearly seaward of the Factor of Safety 1.5 line as the porch is virtually parallel to the garage. This development cannot be allowed per LUP Policy 4.17:

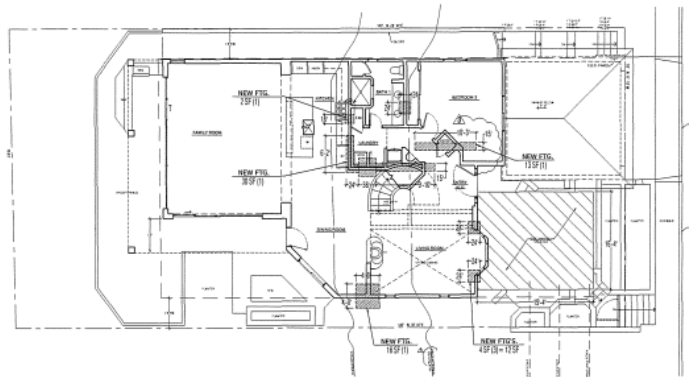
"...All new development, including additions to existing structures, on bluff property shall be landward of the Geologic Setback Line (GSL) as set forth in Policy 4.25. This requirement shall apply to the principal structure and accessory or ancillary structures as guesthouses, pools, tennis courts, cabanas,

and septic systems, etc. Accessory structures such as decks, patios, and walkways, which are at-grade and do not require structural foundations may extend into the setback area no closer than five feet from the bluff edge.” (emphasis added)



GARAGE FLOOR PLAN

EXISTING GARAGE LEVEL	
EXISTING GARAGE LEVEL AREA	425 SF
ALTERED @ LAMB ADDN / NEW FTGS	64 SF
ALTERED @ EX. GARDEN WALL FTGS TO BE REMOVED	113 SF
EX. GARAGE WALL AREA	232 SF
TOTAL N. ALTERED AREA	179.25 SF
TOTAL % OF EX. ALTERED	179.25 / 425 = 42%



MAIN FLOOR PLAN

EXISTING MAIN LEVEL	
EXISTING MAIN LEVEL AREA	1,884 SF
EX. ALTERED FOR NEW FTGS	73 SF
TOTAL % N. ALTERED AREA	73 SF / 1,884 SF = 4%

50% RULE CALCULATIONS	
EXISTING FOUNDATION	
(EX.) GARAGE	425 SF
(EX.) MAIN	1,884 SF
TOTAL EX. FOUNDATION	2,309 SF
ALTERED EXIST. FOUNDATION	
(ALT.) GARAGE	179.25 SF
(ALT.) MAIN	73 SF
TOTAL ALTERED FOUNDATION	252.25 SF
252.25 SF / 2,309 SF = 11% TOTAL ALT. FOUNDATION	

LEGEND	
	AREA OF NEW FOUNDATIONS
	AREA OF NEW LAMB AREA



SCHRAGER RESIDENCE
2411 PACIFIC AVENUE, SOLANA CA



MARTIN ARCHITECTURE
Tim Martin A.I.A.
2333 State Street, Suite 100, Carlsbad, CA 92008
760-729-3470 (C) 760-729-3473 (F) 858-349-3474 (C)
timmartinarchitecture.com

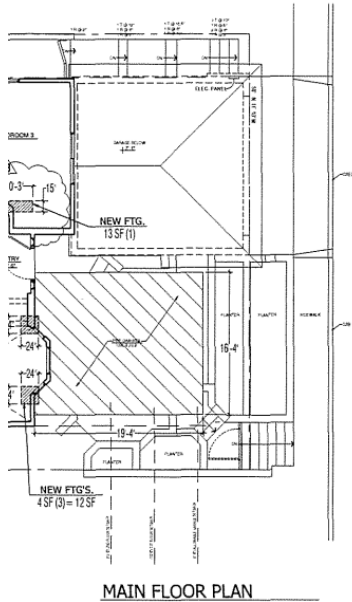
10-10-22
11-7-22

FOUNDATION ALTERATIONS
50% RULE EXHIBITS SCALE 1/8"=1FT NORTH

SHEET NO.
D7.2

GARAGE FLOOR PLAN

ALTERED @ LAMAI ADDN. (NEW FTGS)	64 SF
ALTERED @ EX. GARDEN WALL FTGS TO BE REMOVED	113 SF
EX. GARAGE WALL ALTERED	2.25 SF
TOTAL GL ALTERED AREA	179.25 SF
TOTAL % OF G.L. ALTERED	179.25 / 423 = 42%



EXISTING MAIN LEVEL	
EXISTING MAIN LEVEL AREA	1,884 SF
EX. ALTERED FOR NEW FTGS	73 SF
TOTAL % M.L. ALTERED AREA	73 SF / 1,884 SF = 4%

50 % RULE CALCULATIONS	
EXISTING FOUNDATION:	
(EX.) GARAGE:	423 SF
(EX.) MAIN:	1,884 SF
TOTAL EX. FOUNDATION:	2,307 SF
ALTERED EXIST. FOUNDATION:	
(ALT.) GARAGE:	179.25 SF
(ALT.) MAIN:	73 SF
TOTAL ALTERED FOUNDATION:	252.25 SF
252.25 SF / 2,307 SF = 11% TOTAL ALT. FOUNDATION	

LEGEND
 AREA OF NEW FOUNDATIONS
 AREA OF NEW DECK (LAIMA) AREA

MARTIN ARCHITECTURE
 Tim Martin A.I.A.
 2333 State Street, Suite 100, Carlsbad, CA 92008
 760-729-3470 (O) 760-729-3473 (F) 858-349-3474 (C)
 tim@martinarchitecture.com

10-10-22
 11-7-22

SHEET NO.



FOUNDATION ALTERATIONS



In view of the proper setback calculations previously established by the applicant to justify the need for a seawall, not the current “re-revised” calculations, per LUP Policy 4.17 Council may not permit any of the proposed development as it is landward of the GSL. This includes the new foundation for the porch as well as other proposed developments. In addition, if the applicant is relying on the existing seawall to calculate the “re-revised” GSL and Factor of Safety, this is improper and not permissible under LUP Policy 4.18.

We recommend denial of the permit as submitted.

Sincerely,

Kristin Brinner & Jim Jaffee
 Residents of Solana Beach
 Co-Leads of the Beach Preservation Committee
 San Diego County Chapter, Surfrider Foundation