Katherine Douglas Appellant letter - Heal the Ocean # 5

LATE DIST

From: hillary@healtheocean.org
Sent: Monday, December 9, 2024 10:13 AM
To: sbcob
Subject: December 10, 2024 Board of Supervisors Meeting Information - Miramar Appeal - req
Attachments: COVER LETTER TO BOS FOR INTEGRAL REPORT-MIRAMAR HEARING 12-10-2024.pdf; Miramar Development Memo rev.INTEGRAL REVIEW-HTO pdf.pdf

Dear Katherine:
Please submit the attached materials to the Board of Supervisors Appeal Hearing tomorrow Tuesday 12/10/2025.
I will follow through with Willow Brown re: our technical advisor ability to speak by Zoom during the hearing.
Thank you!
Hillary Hauser

Hillary Hauser, Executive Director
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HEAL THE OCEAN

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December 9, 2024

Santa Barbara County Board of Supervisors
105 East Anapamu Street
Santa Barbara, CA 93101

RE: BOS 12/10/2024 Hearing Agenda Item #5 - Miramar Hotel Appeal

Dear Chair Lavagnino & Honorable Supervisors:

Regarding the hydrology issues regarding Caruso Affiliates Proposal to expand the Miramar Hotel, Heal the Ocean had difficulty getting information from the County planner on questions we had about the hydrology reports submitted by the Applicant, namely:

Drainage Report
Sea Level Rise Report
Stormwater Control Report

Having no satisfactory answers, we send the Applicant's submitted reports to Integral Consulting Inc., an independent Environmental and Engineering consultant firm, to get their peer review of the above documents submitted by Caruso Affiliates. The Integral report is attached here.

There are statements in this report **serious enough that the Board of Supervisors needs to consider them immediately.** We would also request the report be submitted to Caruso Affiliates for review and response, but if not, we submit this report to the County for the record.

Thank you,

Hillary Hauser

Hillary Hauser, Executive Director

Attached: Integral, Inc. Report C4331 Proposed Miramar Development

Integral Consulting Inc.
1701 Pearl Street
Suite 200
Boulder, CO 80302

telephone: 303.404.2944
facsimile: 303.404.2945
www.integral-corp.com

MEMORANDUM

To:	Hillary Hauser and Noah Boland, Heal the Ocean
From:	Paul Wisniewski, Jeff Davis, Integral Consulting Inc.
Date:	12/06/2024
Subject:	Proposed Miramar Resort Development
Project No.:	C4331

Integral Consulting Inc. (Integral) conducted a review of stormwater control (Flowers & Associates, Inc. 2024a), drainage analysis (Flowers & Associates, Inc. 2024b), and sea level rise (SLR) (GeoSoils, Inc. 2024) studies documented by third parties for the proposed rezoning and redevelopment of the Miramar Resort located at 1759 S. Jameson Lane in the Montecito area of Santa Barbara County, California. The project proposes converting the Resort's two existing surface parking areas located in the northwest and northeast portions of the Resort, referred to as the Northwest Lot and the Northeast Lot. In the Northwest Lot, the project proponent proposes two 2-story mixed-use buildings (Buildings A and B) with retail space on the ground floor, eight resort apartments above the retail spaces, and a common subgrade parking level. In the Northeast Lot, proponents plan one 3-story residential building (Building C) with at-grade parking. Ground floor elevations of the proposed structures are anticipated to be relatively close to existing grades.

Integral identified concerns with the proposed project related to coastal hazards and SLR adaptation at the building sites. The Santa Barbara County Planning Commission has not fully acknowledged the existing and future climate related risks to stormwater controls and from flooding posed to the project site and those impacts to coastal resources exacerbated by this proposed development project and change of land use. Increasing climate risk (SLR and coastal hazards) increases the chance that the Northeast Lot would flood more frequently with longer duration and increasing stress on mitigative measures on the site.

PROJECT CONCERNS

1. **Tsunami and Flood Risk:** If developed as proposed, the Northeast Lot is subject to flooding from a tsunami, according to the geotechnical report prepared by

Geotechnical Professionals, Inc. (GPI) (GPI 2024). Residence units on the ground floor may be subject to inundation by sea water in the event of a tsunami. The Northeast lot, where the Affordable Housing element is proposed, is also within a FEMA mapped flood zone (zone AE), a special flood hazard area subject to inundation by the 100-year flood. The GPI report notes that the Northeast Lot ranges in elevation above current sea level from +26 in the north to +18 feet in the south with base flood elevations ranging from +23 to +25 feet, suggesting that the lot is subject to up to 7 feet of flooding. These flooding estimates do not account for projected SLR, which is on the order of 4.5 feet for this area. Accounting for SLR, the Northeast Lot, if flooded, could be up to 11.5 feet under water. In addition, the County of Santa Barbara Recovery Mapping website (noted in GPI 2024), indicated the overall Resort site is "...shown to be impacted during a flood event with flood depths ranging from approximately 0.5 feet to greater than 10 feet across the site." The eastern portions of the Northwest Lot are noted by the County as being in a flood hazard area with flood depths on the order of 0.5 to 1.0 feet. It is unclear if project mitigations adequately address the risk of tsunami caused flooding into ground level residential spaces in the Northeast Lot. The entire property is within the tsunami zone and that subgrade parking would be vulnerable under such a scenario at the Northwest Lot.

2. **Mudslide Risk:** In 2018, mudslides severely impacted the Montecito community. According to the USGS, the eastern portion of the Northeast Lot, including Oak Creek, is mapped as a known mudslide area. If developed as proposed, Building C and its occupants would be vulnerable to mudslides.
   https://www.arcgis.com/apps/mapviewer/index.html?webmap=72fa724b46814e8d8838f700b340425e
   In addition, Montecito Fire District included the eastern portion of the Northeast Lot in the Storm Impact Consideration Map.
   https://www.arcgis.com/apps/webappviewer/index.html?id=745f2e4e8819408fa8de71a02332d5d8

3. **Inadequate Adaptation Strategies:** Increasing SLR and higher frequency of intense precipitation events predicted by climate change models will stress the site in terms of potential for hydraulic pressure due to coastal water elevations, and higher compound flood volumes, and increased potential for groundwater shoaling. These stressors are projected to increase in the future, thereby putting more demand on the drainage system including maintaining the underground

stormwater detention basins and the outlet to Oak Creek, as further discussed below.

4. **Flawed Modeling and Inadequate Stormwater Controls:** The proposed stormwater control calculations do not account for climate change fueled storm events that will likely result in increased precipitation, particularly in the headwaters of coastal streams in the Montecito area (where mudslides are sourced). Storm surge fueled by global warming increases the frequency and intensity of storms, increasing the probability of flooding in low lying areas.

   Sizing calculations for Structural Control Measures tables provided in the Preliminary Drainage Analysis (Flowers & Associates 2024b) do not follow, in every case, the template provided by Central Coast Regional Water Quality Control Board (Water Board) as required by the County of Santa Barbara (https://www.countyofsb.org/2324/New-Redevelopment).

   Specific issues with the HydroCAD model presented by Flowers & Associates in the Preliminary Drainage Analysis (2024b) are outlined below. These issues, including several underlying assumptions and limitations, decrease confidence in the accuracy of the model in terms of predicting post-project stormwater flows based upon the proposed stormwater design.

   a. The HydroCAD model is misaligned with report text:
      i. While the model predicts a decrease in the overall project stormwater flows (Northwest and Northeast Lots combined), redevelopment in the Northeast Lot would result in increased stormwater flows as shown in the yellow-highlighted tables below, excerpted from the Flowers & Associates report.

Table 1. Pre-Project Peak Flows*

Existing Drainage Area	Area (SF)	Q2 (cfs)	Q5 (cfs)	Q10 (cfs)	Q25 (cfs)	Q50 (cfs)	Q100 (cfs)
Northwest Site	46,030	0.71	1.41	1.91	2.54	3.01	3.47
Northeast Site	64,510	0.93	1.89	2.58	3.46	4.12	4.76
Total	**110,540**	**1.64**	**3.30**	**4.49**	**6.00**	**7.13**	**8.23**

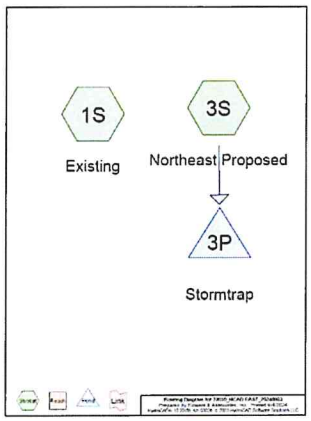
Table 2. Post Development Peak Flows*

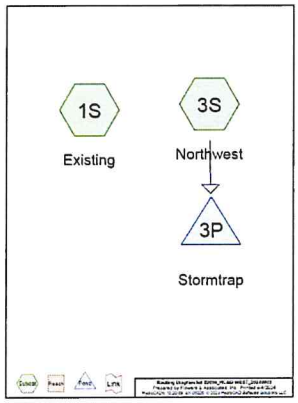
Post-Development Drainage Area	Area (SF)	Q2 (cfs)	Q5 (cfs)	Q10 (cfs)	Q25 (cfs)	Q50 (cfs)	Q100 (cfs)
Northwest Site	46,030	0.48	0.66	0.76	1.19	1.76	2.18
Northeast Site	64,510	1.11	2.31	3.12	4.04	4.69	5.28
Total	**110,540**	**1.59**	**2.97**	**3.88**	**5.23**	**6.45**	**7.46**

ii. The model shows different drainage areas than those discussed in the text of the report. Specifically, the text describes drainage management areas (DMAs or subcatchments) that are not shown in the model. The model fails to define the extent of the DMAs. Further, the model does not define or show DMAs in the report or drawings, preventing reliable interpretation of the model parameters or outputs.

See excerpts below from page 4 of the Preliminary Drainage Report text and HydroCAD hydrology calculations from Appendix A:

> Northwestern site runoff from Drainage Management Area B will be routed via sheet flow or swales to the proposed private storm drain system to be treated with the hydrodynamic separator or Flogard catch basin filter insert then retained / detained in the underground Stormtrap basin located in the Northwest driveway.
>
> Northwestern site runoff from Drainage Management Areas A, C, and D will be routed via sheet flow or swales to the existing private storm drain system to be treated / retained and detained in the underground Stormtrap basin in the Northeast site, as is the current condition, prior to discharging to Oak Creek.
>
> Northeastern site runoff from Drainage Management Area A will be routed via sheet flow to the private storm drain system to be treated in the hydrodynamic separator then retained/ detained in the underground Stormtrap basin located under the proposed parking lot. Northeastern site runoff from Drainage Management Area B will be routed via sheet flow to the private storm drain system to be treated with a Flogard catch basin filter insert then retained/ detained in the underground Stormtrap basin located under the proposed parking lot.





b. The HydroCAD model is flawed:
   i. Time of Concentration (Tc) for pre- versus post-project is unchanged in the model, and unlikely representative of actual conditions (e.g., 12.0 minutes Tc). Further, no additional data are provided to show the stormwater flow path (e.g., sheet flow, shallow concentrated flow, etc.).
   ii. Insufficient model output or metadata to evaluate various model parameters. For example, the report fails to define or show subcatchment areas.
   iii. Each DMA should include a separate Tc and its own pervious/impervious calculations in detail in the model and as discussed in the text but fails to do so.
   iv. The model uses hydraulic soil group A, which is much less conservative than group B, which is indicated for use at the site per the USDA Web Soil Survey (https://websoilsurvey.nrcs.usda.gov/app/). The resulting higher curve numbers (dimensionless parameters to estimate the amount of runoff) for group A soil that were used in the model resulted in lower discharge values that are not representative for the site. See below the yellow-highlighted values in one of the HydroCAD Hydrology Calculation forms for the Northeast Lot, excerpted from Appendix A.

Summary for Subcatchment 1S: Existing

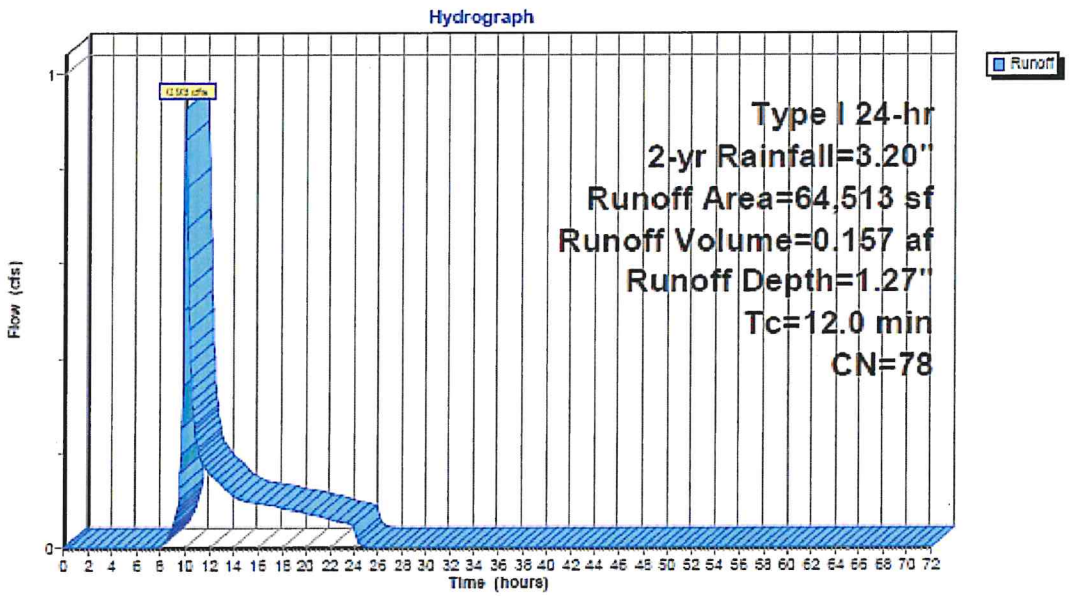
Runoff = 0.93 cfs @ 10.00 hrs, Volume= 0.157 af, Depth= 1.27"

Runoff by SBUH method, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-yr Rainfall=3.20"

Area (sf)	CN	Description
43,081	68	<50% Grass cover, Poor, HSG A
21,432	98	Paved parking, HSG A
64,513	78	Weighted Average
43,081		66.78% Pervious Area
21,432		33.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Subcatchment 1S: Existing



5. **Groundwater Intrusion:** Based on current design plans and studies that have been performed, there doesn't appear to be any potential with groundwater emergence/shoaling at either the Northwest Lot or the Northeast Lot. Both properties are at a distance from the coast that tidal signals in the groundwater are minimal. According to currently stated plans, construction activities for the project would include excavation for subterranean parking at the Northwest Lot. The high

groundwater level is 11 feet below ground surface and the project's deepest excavation of up to 7 feet would not reach this depth. The northeast lot does not have plans for below ground surface construction. If these current design plans are followed, no groundwater emergence is expected even with anticipated sea level rise.