



Staff Report to the Zoning Administrator

Application Number: **221092**

Applicant: Hogan Land Services
Owner: Ignatius & Pauline Lomonaco
APN: 043-082-08
Site Address: 317 Beach Drive, Aptos

Agenda Date: 9/16/22
Agenda Item #: 2
Time: After 9:00 a.m.

Project Description: Proposal to recognize work authorized under Emergency Coastal Development Permit 171316, to repair of a storm damaged coastal bluff by constructing a nine foot high retaining wall at the base of the bluff and a 11.5 foot high debris barrier on the slope above an existing single family dwelling.

Location: Property is located on the east side of Beach Drive approximately 1200 feet south of the intersection with Rio Del Mar Boulevard in the Aptos Planning Area.

Permits Required: Coastal Development Permit

Technical Reviews: Geotechnical and Geologic Report Review (REV17131)

Supervisory District: Second District (District Supervisor: Zach Friend)

Staff Recommendation:

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 221092, based on the attached findings and conditions.

Project Description & Setting

The project is situated among a row of homes sandwiched between the base of a coastal bluff and Beach Drive. The coastal bluff behind the project site is subject to continued erosion and failure. All of the homes along this portion of Beach Drive are within the mapped VE Flood Zone and subject to tidal and wave inundation. The west side of Beach Drive contains a sidewalk and public beach/access resulting in unimpeded views of the Monterey Bay. Many of the homes along this stretch of Beach Drive are two and three stories in height consisting of a variety of architectural styles.

Due to the location of the project site being within the mapped scenic area and between the ocean and the first through street, a Coastal Development Permit is required for the proposed improvements.

Project Background

On October 31, 2017, Emergency Coastal Development Permit 171316 was issued for the construction of an nine-foot-high retaining wall and installation of a 11.5 foot high coastal bluff debris impact fence above the existing home located at 317 Beach Drive. All work associated with the emergency repair is being completed under building permits B-174889 and B-224186. Geotechnical (soils) and Geologic Report have been prepared and submitted to the County for review and accepted by county staff under application REV171131. The project has been conditioned to require submittal of final letters from the project geologist and soils engineer to the County, to ensure all work is performed in accordance with the recommendations contained in the reports.

Zoning, General Plan & Local Coastal Program Consistency

The subject property is approximately 5,000 square feet in size, located in the R-1-6 (Single Family Residential - 6,000 square foot minimum) zone district, a designation which allows residential uses. The proposed retaining wall and debris fence is an allowed use within the zone district. The project is consistent with the site's R-UL (Urban Low Density Residential) General Plan designation.

The proposed retaining wall and debris impact fence is in conformance with the County's certified Local Coastal Program, in that the project has been designed to minimize impacts to coastal views. The structure has been sited behind the existing residence and at an elevation that optimizes safety of the occupants of the homes and is not readily visible from the public beach.

Geologic and geotechnical (soils) reports have been reviewed and accepted by the County of Santa Cruz (Exhibit G). The project has been conditioned to require Final inspection letters to ensure the project and all work will be performed in conformance with the approved plans (Exhibit D).

The project site is located between the shoreline and the first public road however, the project will not interfere with public access to the beach or ocean in that existing public access to the beach is located on the opposite side of Beach Drive from the subject parcel. The project site is not identified as a priority acquisition site in the County's Local Coastal Program.

Conclusion

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

Staff Recommendation

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- **APPROVAL** of Application Number **221092**, based on the attached findings and

conditions.

Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.sccoplanning.com

Report Prepared By: Nathan MacBeth
Santa Cruz County Planning Department
701 Ocean Street, 4th Floor
Santa Cruz CA 95060
Phone Number: (831) 454-3118
E-mail: nathan.macbeth@santacruzcounty.us

Exhibits

- A. Categorical Exemption (CEQA determination)
- B. Findings
- C. Conditions
- D. Project plans & Site photos
- E. Assessor's, Location, Zoning and General Plan Maps
- F. Parcel information
- G. Report review letters

CALIFORNIA ENVIRONMENTAL QUALITY ACT

NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 221092

Assessor Parcel Number: 043-082-08

Project Location: 317 Beach Drive, Aptos

Project Description: Recognize construction of a retaining wall and coastal bluff debris impact fence intended to protect existing single family dwellings

Person or Agency Proposing Project: Hogan Land Services

Contact Phone Number: (831) 425-1617

- A. ☐ The proposed activity is not a project under CEQA Guidelines Section 15378.
B. ☐ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).
C. ☐ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.
D. ☐ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).
E. ☒ **Categorical Exemption**

Specify type: Class 1 - Existing Facilities (Section 15301) & Class 3 - New Construction or Conversion of Small Structures (Section 15303)

F. Reasons why the project is exempt:

Recognize construction of a retaining wall and coastal bluff debris impact fence above existing single family dwelling in an area designated for residential uses.

In addition, none of the conditions described in Section 15300.2 apply to this project.

Nathan MacBeth, Project Planner

Date: _____

Coastal Development Permit Findings

1. That the project is a use allowed in one of the basic zone districts that are listed in LCP Section 13.10.170(D) as consistent with the LCP Land Use Plan designation of the site.

This finding can be made, in that the property is zoned R-1-6 (Single Family Residential - 6,000 square foot minimum), a designation which allows residential uses. The proposed retaining wall and impact debris fence is an allowed use in the zone district in that the installation is necessary to protect the existing home and occupants from threat of life and safety. The zoning is consistent with the site's R-UL (Urban Low Density Residential) General Plan designation.

The proposed retaining wall and coastal bluff face debris impact fence is consistent with General Plan Policy 6.2.16 in that it is necessary to ensure the safety of the home located at the base of the coastal bluff and life and safety of occupants and residents in the vicinity. Detailed technical studies have been reviewed and accepted which demonstrate the need for the proposed improvements. The project would not reduce or restrict existing beach access which is located across Beach Drive from the project site.

2. That the project does not conflict with any existing easement or development restrictions such as public access, utility, or open space easements.

This finding can be made, in that no such easements or restrictions are known to encumber the project site.

3. That the project is consistent with the design criteria and special use standards and conditions of this chapter pursuant to SCCC 13.20.130 and 13.20.140 et seq.

This finding can be made, in that the project is sited and designed to be visually compatible with the surrounding land uses and character of the neighborhood. The location of the retaining wall and debris impact fencing will not be readily visible from any nearby public viewshed in that it is situated behind the existing home at 317 Beach Drive. Consequently, the project would not result in an adverse impact to scenic resources. The development site is not on a prominent ridge or bluff top.

4. That the project conforms with the public access, recreation, and visitor-serving policies, standards and maps of the LCP Land Use Plan, including Chapter 2: Section 2.5 and Chapter 7.

This finding can be made, in that the project site is not identified as a priority acquisition site in the County Local Coastal Program and existing public beach access is available at across Beach Drive from the project site.

5. That the project conforms to all other applicable standards of the certified LCP.

This finding can be made, in that the structures are sited and designed to be visually compatible and integrated with the character of the surrounding neighborhood. Additionally, residential uses are allowed uses in the R-1-6 (Single Family Residential - 6,000 square foot minimum) zone district, as well as the General Plan and Local Coastal Program land use designation. Developed

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parcels in the area contain single family dwellings. Size and architectural styles vary in the area, and the design submitted is consistent with the pattern of development within the surrounding neighborhood.

6. If the project is located between the nearest through public road and the sea or the shoreline of any body of water located within the Coastal Zone, that the project conforms to the public access and public recreation policies of Chapter 3 of the Coastal Act.

This finding can be made, in that the project site is located between the shoreline and the first through public road however, the retaining wall and debris fence will not interfere with public access to the beach, ocean, or any nearby body of water. Further, the project site is not identified as a priority acquisition site in the County Local Coastal Program.

Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in an area designated for residential uses. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to ensure the optimum in safety and the conservation of energy and resources. The project has been conditioned to require recordation of a maintenance agreement to ensure long-term functionality of the retaining wall and debris fence.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the proposed location of the retaining wall and debris fence and the conditions under which they will be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the R-1-6 (Single Family Residential - 6,000 square foot minimum) zone district as the primary use of the property will continue to residential. Installation of the retaining wall and debris fencing was necessary to ensure safety of the existing residential structure at the base of the bluff and residents in the vicinity.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that an emergency coastal development permit (171316) and associated building permit were issued for the landslide repair due to an imminent risk to health and safety. The project has been designed in accordance with General Plan Policy 6.2.10 (Site development to Minimize Hazards). A Geologic Report prepared by Zinn Geology dated October 4, 2017 and Geotechnical Report prepared by Dees and Associates dated September 19, 2017, accepted by County staff under application REV17131 (Exhibit G) concluded that potential further failure of the bluff would result in a significant threat to the existing homes at the base of the coastal bluff.

Further, this finding can be made, in that the proposed residential use is consistent with the use and density requirements specified for the R-UL (Urban Low Density Residential) land use designation in the County General Plan.

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities, and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the construction of the proposed retaining wall and debris fence is to be constructed on an existing developed lot intended to protect the existing home and

occupants from further erosion and potential hazard associated with the instability of the coastal bluff. Beyond the construction phase, the project will not require the use of utilities and will not generate additional traffic on the streets in the vicinity.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the project is located along a coastal bluff which is subject to coastal erosion. The subject parcel is developed with existing single family dwelling. In terms of design, the project is consistent with retaining walls and debris fencing that has been approved and constructed in the vicinity. The proposed project will be located behind and below the roofline of the existing home therefore, will not result in potential impacts to visual resources. Construction of the retaining wall and debris fence to protect the existing home does not result in any change to the existing land use intensity and density of the neighborhood.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed project has been located behind existing single family dwelling and at an elevation that screens the structure from public view to the greatest extent feasible while providing the necessary protection to the homes at the base of the coastal bluff. Consequently, the project does not result in adverse impacts to coastal views and consistent with the Design Standards and Guidelines in SCC 13.11.070 through 13.11.076.

Conditions of Approval

Exhibit D: Project plans, prepared by Hogan Land Services, dated 10/06/2017.

- I. This permit authorizes the construction of a Coastal bluff debris impact fence as indicated on the approved Exhibit "D" for this permit. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:
 - A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.
 - B. Please submit a maintenance and monitoring *plan* prepared by the project civil engineer for the debris impact fence and wing walls.
 - C. A Maintenance and Monitoring *Agreement*, prepared by County staff, shall be recorded on the deed in the official records of the County of Santa Cruz (Office of the County Recorder) within 30 days from the effective date of this permit.
 - D. "Notice of Geologic Hazards, Acceptance of Risk, Liability Release, and Indemnification" shall be recorded on the parcel with the format and content of that document to be reviewed and accepted by the County of Santa Cruz prior to recordation. The Notice will provide for property owner (and all successors and assigns) agreement to an acknowledgement of coastal and geologic hazards, an acceptance of and assumption of risk, a waiver of liability against the County, and an indemnification of the County; the final language of such provisions will be consistent with the following:
 1. Coastal Hazards. That the site is subject to coastal hazards including but not limited to episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunamis, tidal scour, coastal flooding, liquefaction and the interaction of same;
 2. Assume Risks. To assume the risks to the Applicant and the properties that are the subject of this CDP of injury and damage from such coastal hazards in connection with the permitted development;
 3. Waive Liability. To unconditionally waive any claim of damage or liability against the County, its officers, agents, and employees for injury or damage from such coastal hazards in connection with the permitted development;
 4. Indemnification. To indemnify and hold harmless the County, its officers, agents, and employees with respect to the County's approval of the development against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to

such coastal hazards in connection with the permitted development; and

5. Property Owner Responsible. That any adverse effects to property caused by the permitted development shall be fully the responsibility of the property owner

II. Operational Conditions

- A. The Development Approval Holder(s) shall comply with the Maintenance and Monitoring *Agreement*.
- B. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.
- C. Pursuant to Sections 16.40.040 and 16.42.080 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.080, shall be observed.

III. Operational Conditions

- A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

IV. Indemnification

The applicant/owner shall indemnify, defend with counsel approved by the COUNTY, and hold harmless the COUNTY, its officers, employees, and agents from and against any claim (including reasonable attorney's fees, expert fees, and all other costs and fees of litigation), against the COUNTY, its officers, employees, and agents arising out of or in connection to this development approval or any subsequent amendment of this development approval which is requested by the applicant/owner, regardless of the COUNTY's passive negligence, but excepting such loss or damage which is caused by the sole active negligence or willful misconduct of the COUNTY. Should the COUNTY in its sole discretion find the applicant's/owner's legal counsel unacceptable, then the applicant/owner shall reimburse the COUNTY its costs of defense, including without limitation reasonable attorney's fees, expert fees, and all other costs and

fees of litigation. The applicant/owner shall promptly pay any final judgment rendered against the COUNTY (and its officers, employees, and agents) covered by this indemnity obligation. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this development approval.

- A. The COUNTY shall promptly notify the applicant/owner of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. The COUNTY shall cooperate fully in such defense.
- B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:
 - 1. COUNTY bears its own attorney's fees and costs; and
 - 2. COUNTY defends the action in good faith.
- C. Settlement. The applicant/owner shall not be required to pay or perform any settlement unless such applicant/owner has approved the settlement. When representing the COUNTY, the applicant/owner shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the COUNTY.
- D. Successors Bound. The "applicant/owner" shall include the applicant and/or the owner and the successor(s) in interest, transferee(s), and assign(s) of the applicant and/or the owner.

Minor variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

Please note: This permit expires three years from the effective date listed below unless the conditions of approval are complied with and the use commences before the expiration date.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Steve Guiney AICP
Deputy Zoning Administrator

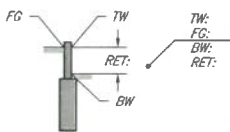
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Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.

Copyright 2005 Hogan Land Services, Inc. The drawing is an instrument of service and is the sole property of Hogan Land Services, Inc. Any use of this drawing without written consent by Hogan Land Services, Inc. is prohibited.

LEGEND

- RECORD BOUNDARY LINE
- (E) FLOWLINE
- (P) FLOWLINE
- EDGE OF GRAVEL ROAD
- WOOD FENCE
- WIRE FENCE
- DISTURBED AREA
- PROPOSED WORK
- FIBER ROLL BARRIER
- TREE PROTECTION
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- 12" CMP
- 6" PERF. PVC
- 12" CMP
- (E) ASPHALT CONCRETE SURFACE
- (P) ASPHALT CONCRETE SURFACE
- (E) GRAVEL SURFACE
- (P) GRAVEL SURFACE
- (E) CONCRETE SURFACE
- (P) CONCRETE SURFACE
- ROCK FINISH
- DECKING
- LA LANDSCAPE AREA SAD
- PROPOSED FILL
- WALL
- 3 RANDOM CONTROL POINT W/##
- EXISTING STORM DRAIN DROP INLET
- PROPOSED STORM DRAIN DROP INLET
- PROPOSED DOWNSPOUT LOCATION
- FIRE HYDRANT
- BOLLARD
- WELL
- SPOT ELEVATION
- FINISH ELEVATION
- TREE TYPE & DIA.
- TREE TO BE REMOVED
- WATER VALVE
- BUILDING CALLOUTS
- CONSTRUCTION KEYNOTES



ABBREVIATIONS

STMP	STUMP	RCP	REINFORCED CONCRETE PIPE
OAK	OAK TREE	INV	INVERT
LO	LIVE OAK TREE	FG	FINISHED GRADE
FIR	FIR TREE	FF	FINISHED FLOOR
RD	REDWOOD TREE	FS	FINISHED SURFACE
PN	PINE TREE	DI	DRAIN INLET
BAY	BAY TREE	SS	SANITARY SEWER
MINZ	MANZANITA TREE	CO	CLEAN OUT
LDS	LANDSCAPE TREE	CL	CENTERLINE
CLST	CLUSTER	TW	TOP OF WALL
SPP	SMOOTH PLASTIC PIPE	BW	BOTTOM OF WALL
SMP	SMOOTH METAL PIPE	AC	ASPHALT CONCRETE
CMP	CORRUGATED METAL PIPE	SAD	SEE ARCHITECTURAL DRAWINGS
TG	TOP OF GRADE	SSD	SEE STRUCTURAL DRAWINGS
AD	AREA DRAIN	LA	LANDSCAPE AREA
TBR	TO BE REMOVED	GB	GRADE BREAK
FSS	FIRE SAFE STANDARDS	UON	UNLESS OTHERWISE NOTED
(E)	EXISTING	DS	DOWNSPOUTS
(P)	PROPOSED	WL	WATER LEVEL
PERF	PERFORATE	OC	ON CENTER
O/	OVER	MIN	MINIMUM
EG	EXISTING GRADE	GEO	GEOTECHNICAL
		MAX	MAXIMUM

BUILDING DATA

PROJECT	RETAINING WALL EMERGENCY REPAIR
ADDRESS	317 BEACH DRIVE
CITY	APTOS, CA 95003
PARCEL #S	043-082-08
ZONING	R-1-E
TYPE OF CONSTRUCTION	II-B
LOT SIZE	4935 SFT
OCCUPANCY	U

LANDS OF LOMONACO RETAINING WALL DESIGN EMERGENCY REPAIR

317 BEACH DRIVE

APN: 043-082-08

Reference: Building Permit B-174899



GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

LOCATION OF PROPOSED
WORK UNDER THIS PERMIT

HARRIMAN
043-082-07

LOMONACO
043-082-08

043-082-09

RETAINING WALL NOTES

- INSTALL RETAINING WALL AND PERFORM GRADING AND DRAINAGE IMPROVEMENTS IN ACCORDANCE WITH THE SANTA CRUZ COUNTY CODE (SCCC), APPLICABLE SANTA CRUZ COUNTY REGULATIONS & SANTA CRUZ COUNTY ORDINANCES & PROJECT GEOTECHNICAL.
- ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD UPON DISCOVERING DISCREPANCIES, ERRORS, OR OMISSIONS IN THE PLANS. PRIOR TO PROCEEDING, THE OWNER SHALL HAVE THE PLANS REVISED TO CLARIFY IDENTIFIED DISCREPANCIES, ERRORS, OR OMISSIONS. THE APPROVED PLANS AND SPECIFICATIONS SHALL NOT BE CHANGED WITHOUT THE WRITTEN APPROVAL OF THE SANTA CRUZ COUNTY PLANNING DEPARTMENT. PROPOSED MODIFICATIONS TO THE APPROVED PLANS AND SPECIFICATIONS SHALL BE SUBMITTED TO THE PERMIT AUTHORITY IN WRITING, TOGETHER WITH ALL NECESSARY TECHNICAL INFORMATION AND DESIGN DETAILS.
- THE BUILDING PERMIT AND AN APPROVED COPY OF THE RETAINING WALL PLANS SHALL BE MAINTAINED ON THE PROJECT SITE THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.
- SANTA CRUZ COUNTY PLANNING DEPARTMENT MAY ORDER THAT ANY WORK STOP IMMEDIATELY IF IT IS PERFORMED CONTRARY TO THE SANTA CRUZ COUNTY CODE, THE APPROVED PLANS AND SPECIFICATIONS, PERMIT CONDITIONS, OR ANY WORK THAT HAS BECOME HAZARDOUS TO PROPERTY OR THE PUBLIC.
- ISSUANCE OF A BUILDING PERMIT BY SANTA CRUZ COUNTY PLANNING DEPARTMENT DOES NOT ELIMINATE THE RESPONSIBILITY OF THE OWNER TO SECURE PERMITS FROM OTHER AGENCIES WITH REGULATORY RESPONSIBILITIES FOR THE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE WORK ON THESE PLANS. FAILURE TO OBTAIN ALL REQUIRED PERMITS MAY RESULT IN FINES FROM THE RESPECTIVE AGENCY.
- EXISTING DRAINAGE COURSES RECEIVING WATERS FROM THIS SITE AND LOCATED THROUGHOUT THIS SITE SHALL REMAIN OPEN AND CLEAR OF DEBRIS TO PROPERLY CONVEY STORM WATER. IF EXISTING DRAINAGE COURSES RECEIVING WATERS FROM THIS SITE ARE LOCATED IN THE COUNTY RIGHT-OF-WAY AND NEED MAINTENANCE, CONTACT THE DEPARTMENT OF PUBLIC WORKS AT (831) 425-2180 FOR FURTHER ASSISTANCE. IN ANY EVENT, THE OWNER AND/OR CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.

ADDITIONAL NOTES

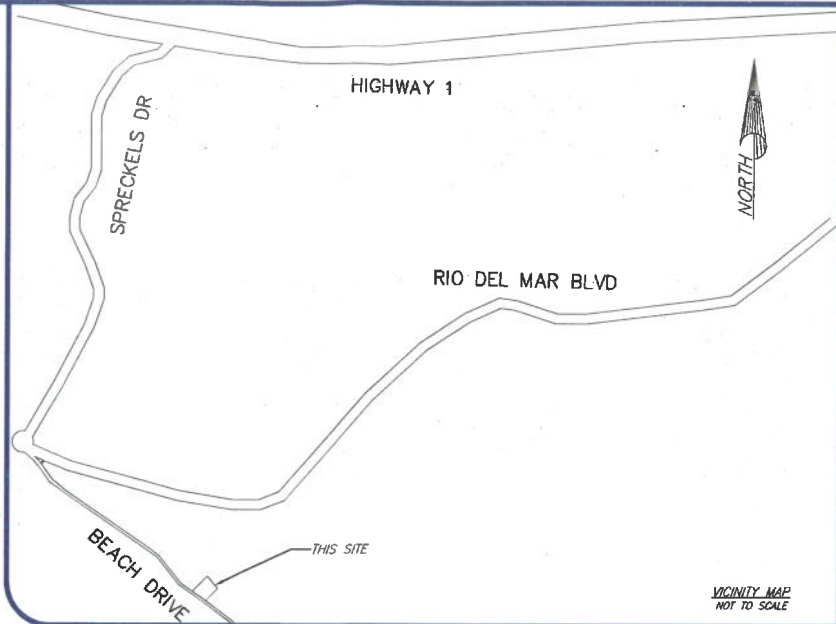
- FOR ALL PREFABRICATED CONSTRUCTION, AT COMPLETION OF FABRICATION THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE BUILDING INSPECTOR STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

UNAUTHORIZED CHANGES AND USES:

The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes or uses of these plans. All changes in the plans must be in writing and must be approved by the preparer of these plans.

JOB SITE CONDITIONS:

Construction contractor agrees that in accordance with generally accepted construction practices, the contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and contractor further agrees to defend, indemnify, and hold design professional harmless from any and all liability, real or alleged, in connection with performance of work on this project, excepting liability arising from the sole negligence of the design professional.



PROJECT INFORMATION

PROJECT STATEMENT:

RED TAG TO BE REMOVED AFTER THE CONSTRUCTION OF A SOLDIER BEAM RETAINING WALL WITH CONCRETE LAGGING TO REPLACE EXISTING WALL BEHIND THE EXISTING HOUSE AND CONSTRUCTION OF A SHALLOW LANDSLIDE BARRIER ABOVE PROPOSED WALL TO REDUCE POTENTIAL IMPACTS TO STRUCTURE FROM LANDSLIDE DEBRIS

PROPERTY OWNERS:

IGNATIUS LOMONACO
317 BEACH DRIVE
APTOS, CA 95003
(831) 251-2013

STEEL FABRICATOR (AISC CERTIFIED):

SOS STEEL CO., INC.
1160 RICHARD AVENUE
SANTA CLARA, CA 95050
(408) 727-6363

DESIGNER INFORMATION-CIVIL

HOGAN LAND SERVICES
802 ESTATES DRIVE, SUITE 100A
APTOS, CA 95003
(831) 425-1617

TOPOGRAPHIC INFORMATION PROVIDED BY:

HOGAN LAND SERVICES

LOT AREA = 4,922 S.F.
(CO. OF S.C. GIS EST.)

GEOTECHNICAL ENGINEERS:

DEES & ASSOCIATES
501 MISSION STREET, SUITE 8A
SANTA CRUZ, CA 95060
(831) 427-1770

CONSULTING GEOLOGIST

ZINN GEOLOGY
2231 40TH AVENUE
SANTA CRUZ, CA 95062
(831) 334-4833

GEOTECHNICAL REPORT:

"GEOTECHNICAL INVESTIGATION FOR PROPOSED DEBRIS FLOW PROTECTION WALL AND RETAINING WALL" BY DEES & ASSOCIATES, INC. DATED SEPTEMBER 2012, PROJECT NO. SCR-1349
"GEOTECHNICAL DESIGN CRITERIA FOR GROUTED TIEBACK ANCHORS" DATED FEBRUARY 5, 2019

GEOLOGIC REFERENCES:

"PRELIMINARY GEOLOGICAL FINDINGS AND RECOMMENDATIONS" BY ZINN GEOLOGY DATED 19, SEPT. 2017, JOB NO. 2017-005-G-SC

RETAINING WALL NOTES, CONT.

- CONTOURS, ELEVATIONS, AND SHAPES OF FINISHED SURFACES SHALL BE BLENDED WITH ADJACENT NATURAL TERRAIN TO ACHIEVE A CONSISTENT GRADE AND NATURAL APPEARANCE. THE TOP OF CUT SLOPES SHALL BE ROUNDED OFF TO BLEND WITH THE NATURAL TERRAIN. BORDERS OF CUT SLOPES AND FILLS SHALL BE ROUNDED OFF TO A MINIMUM RADIUS OF 5 FEET TO BLEND WITH THE NATURAL TERRAIN.
- FILL MATERIAL SHALL NOT INCLUDE ORGANIC, FROZEN, OR OTHER HAZARDOUS MATERIALS. NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL GREATER THAN 6 INCHES IN ANY DIMENSION SHALL BE INCLUDED IN FILLS EXCEPT WHERE APPROVED BY THE SOILS ENGINEER. FILLS SHALL BE CONSTRUCTED IN LIFTS NOT EXCEEDING 6 INCHES IN DEPTH. COMPLETED FILLS SHALL BE STABLE, WELL-INTERLACED, AND BONDED TO ADJACENT MATERIALS AND THE MATERIALS ON WHICH THEY REST. FILLS SHALL BE COMPETENT TO SUPPORT ANTICIPATED LOADS AND BE STABLE AT THE DESIGN SLOPES SHOWN ON THE APPROVED PLANS AND SPECIFICATIONS OR AS DIRECTED BY THE SOILS ENGINEER.
- GROUND SURFACES SHALL BE PREPARED TO RECEIVE FILL BY REMOVING VEGETATION, TOPSOIL, AND OTHER UNSUITABLE MATERIALS, AND SCARIFYING GROUND APPROXIMATELY 4" TO 6" TO PROVIDE A BOND WITH THE FILL MATERIAL.
- FILL SHALL NOT BE PLACED ON NATURAL SLOPES STEEPER THAN 2H:1V (50%) UNLESS SPECIFICALLY ALLOWED IN WRITING BY THE PROJECT GEOTECHNICAL ENGINEER AND APPROVED BY SANTA CRUZ COUNTY PLANNING DEPARTMENT.
- HOGAN LAND SERVICES HAS EXERCISED A REASONABLE AND ACCEPTABLE STANDARD OF CARE IN THE PREPARATION OF THESE PLANS, HOWEVER, THE DEVELOPMENT PROCESS INCLUDES ACTIVITIES OCCURRING THROUGHOUT CONSTRUCTION. THESE ACTIVITIES INCLUDE CALCULATIONS, PLAN CHECKS, AND VERIFICATIONS DURING CONSTRUCTION. SHOULD PERSONS OTHER THAN HOGAN LAND SERVICES PERFORM THE CONSTRUCTION STAKING OPERATION, THEY SHALL INDEMNIFY HOGAN LAND SERVICES FROM ANY DAMAGES RESULTING FROM FAILURE TO PERFORM THESE TASKS OR ANY EXPENSES OR DAMAGE RESULTING FROM OMISSION OR ERROR CONTAINED IN THE PLANS WHICH WOULD REASONABLY HAVE BEEN DISCOVERED AND CORRECTED BY HOGAN LAND SERVICES.
- REFER TO THE PROJECT GEOTECHNICAL REPORT FOR ADDITIONAL AND OVERRIDING SPECIFICATIONS.

SHEET INDEX

C1	TITLE SHEET
C2	RETAINING WALL PLAN & NOTES
C3	DRAINAGE PLAN
C4	CONSTRUCTION DETAILS
C5	GEOBRUGG DETAILS
C6	EROSION CONTROL

REVISION BLOCK

1	COMMENTS 2/18	GTF
2	COMMENTS 12/18	GTF
3	COMMENTS 9/19	GTF



THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECTION AT THE REQUEST OF IGNATIUS LOMONACO IN APRIL, 2017

DRN: GTF
CHK: RLD
PM: GTF
DATE: 10/01/17
JOB #: H0294

TEL (831) 425-1617
FAX (831) 425-0224

www.hoganls.com

2601 41ST AVENUE, SUITE A
SOQUEL, CA 95073

APN: 043-082-08

317 BEACH DRIVE
APTOS, CA 95003

EXHIBIT D

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RED	REDWOOD TREE
NG	NATURAL GRADE
FF	FINISH FLOOR
BC	BUILDING CORNER
BS	BOTTOM STEP
EC	EDGE OF CONCRETE
EP	EDGE OF PAVEMENT
FL	FLOWLINE
GB	GRADE BREAK
PROP BC	PROPOSED BUILDING
TS	TOP STEP
WR FNC	WIRE FENCE
D.S.	DOWN SPOUT

	RECORD BOUNDARY LINE
	ADJOINING BOUNDARY LINE
	FLOWLINE
	EASEMENT
	EDGE OF CONCRETE
	EDGE OF ASPHALT CONCRETE
	TOP OF BANK
	EDGE OF BUILDING
	SLOPE LIMITS
	MINOR CONTOUR
	MAJOR CONTOUR
	ASPHALT CONCRETE SURFACE
	CONCRETE SURFACE
	IRON PIPE
	NOT TO SCALE

LOWER WALL SOIL LATERAL LOADS E.F.P. 115 PCF PER GEOTECH REPORT
LOWER WALL FREEBOARD DESIGNED FOR 1000 PSF IMPACT FORCE
SEE LOWER WALL LOADING DIAGRAM SHEET C4
UPPER DEBRIS FLOW BARRIER DESIGNED FOR 6000 PSF IMPACT FORCE
FOUNDATION CRITERIA:
SOILS REPORT: PREPARED BY DEES & ASSOCIATES INC.

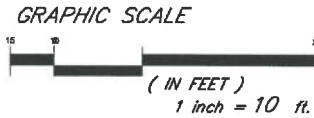
1. ALL STRUCTURAL STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST INTERNATIONAL BUILDING CODE, THE 2013 CALIFORNIA BUILDING CODE AND 2015 CALIFORNIA ELECTRICAL CODE, AS IT APPLIES TO THIS GOVERNING JURISDICTION AND THE CODE SPECIFICATIONS FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
2. ALL STRUCTURAL STEEL AND MISCELLANEOUS IRON SHALL CONFORM TO THE FOLLOWING GRADES (U.O.N.):
 - 2.1. SHAPES & PLATES ASTM A - 36
 - 2.2. TUBES ASTM - 500, GRADE B
 - 2.3. PIPE ASTM - A 53, GRADE B
3. ALL BOLTS SHALL CONFORM TO THE FOLLOWING GRADES U.O.N.:
 - 3.1. MACHINE BOLTS (M.B.) ASTM A - 307
 - 3.2. ANCHOR BOLTS (A.B.) ASTM A - 307
 - 3.3. HIGH STRENGTH BOLTS (H.S.B.) ASTM A - 325
4. WELDING ELECTRODES SHALL MEET AWS REQUIREMENTS AND ELECTRODES SHALL BE E70XX FOR SHIELDED METAL ARC, E70X - EXXX FOR SUMMERGARD ARE ARC E70 - X FOR METAL ARC U.O.N. PROVIDE SPSM INSURFACED STRUCTURAL WELDING AND HIGH STRENGTH BOLTING AS REQUIRED BY THE 2013 CBC SECTION 1701.
5. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING DEPARTMENT AND TO THE ENGINEER OR ARCHITECT OF RECORD.
6. METAL JOINTS SHALL BE 1/16-INCH LARGER THAN THE BOLT DIAMETER. METAL SHALL HAVE MINIMUM OF 3/16-INCH THICKNESS SURFACES TO RECEIVE WELDING. SHEAR BOLTS, OR PORTIONS TO BE ENCASED IN CONCRETE OR SPRAY REINFORCED.
7. GROUT UNDER COLUMN BASE PLATES SHALL BE MASTER BUILDERS EMBUDO # 713 NON-SHRINK GROUT.

1. CONCRETE SHALL BE NORMAL WEIGHT (150-POF) HARD ROCK CONCRETE AND SHALL DEVELOP A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS AND BE 5-SACK MIX, U.O.M. DOWELINGS IN SPSMC DESIGN CATEGORY D, D OR D SHALL USE 5-SACK MIX WHICH DEVELOPS ULTIMATE COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS AND BE 6-SACK MIX. DESIGN IS BASED ON COMPRESSIVE STRENGTH OF 2500 PSI U.O.M. SEE DESIGN CRITERIA. CONCRETE QUALITY, MIXING AND PLACING SHALL CONFORM WITH CBC SECTION 1905. GARAGE FLOOR SLAB AND STRUCTURAL FLOOR SLAB SHALL BE 3000 PSI AT 28 DAYS CONCRETE.
2. CONCRETE SHALL BE THOROUGHLY CONSOLIDATED BY MECHANICAL VIBRATION. TWO MECHANICAL VIBRATORS ARE TO BE ON SITE DURING PLACEMENT OF CONCRETE.
3. CONCRETE SHALL BE KEPT THOROUGHLY DAMP FOR 7 DAYS MINIMUM AFTER PLACEMENT BY COVERING WITH CURB OR PLASTIC. CURB OR PLASTIC SHALL BE REMOVED THOROUGHLY IN PLACE, OR AT SLABS WHERE FINISHES WILL NOT BE AFFECTED BY APPLYING CURE COMPOUND, APPLY COMPOUND AT TWICE THE MANUFACTURER'S RECOMMENDED RATE OF APPLICATION WITH A MINIMUM OF 2 COATS APPLIED AT 90° TO EACH OTHER. CURE COMPOUND SHALL BE APPROVED BY THE DISTRICT HIGHWAY OR OWNER'S REPRESENTATIVE. DIESEL FUEL IS NOT TO BE USED AS A SUBSTITUTE FOR A CURING COMPOUND CONTAINING.
4. ALL ANCHORS, BOLTS, INSERTS, AND ANY OTHER HARDWARE TO BE SET IN CONCRETE SHALL BE FINALLY SET IN POSITION BEFORE CONCRETE IS PLACED.

CONSTRUCTION JOINTS SHALL BE SANDBLASTED, OR OTHERWISE EQUIVALENT, REMOVING ALL UNBOUND CONCRETE AND LAYING EXPOSED FRESH AGGREGATE TO 1/4" MINIMUM AMPLITUDE. Dampen prior to placing new concrete.

- 6.1. NORMAL WEIGHT CONCRETE ASTM C330
- 6.2. LIGHTWEIGHT CONCRETE ASTM C330

7. MINIMUM MAXIMUM SIZE OF COURSE AGGREGATE SHALL BE NOT LARGER THAN:
 - 7.1. 1/2 THE MINORWEST DIMENSION BETWEEN FORMS, NOR
 - 7.2. 1/3 THE DEPTH OF SLABS, NOR
 - 7.3. 1/3 THE MINIMUM CLEAR SPACING BETWEEN INDIVIDUAL REINFORCING BARS.



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 10'

1. ALL WORK AS DESCRIBED HEREIN SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES IN EFFECT AT THE TIME OF INSTALLATION
2. HELICAL PIERS AS SPECIFIED SHALL CONFORM TO 2016 CALIFORNIA RESIDENTIAL CODE AND 2016 CALIFORNIA BUILDING CODE.
3. THE HELICAL LOAD SECTIONS AND EXTENSION SECTIONS SHALL BE SOLID STEEL, ROUND CORNERED SQUARE SHAFT, OR ROUND STEEL PIPE SHAFT, OR COMPOSITE STEEL AND GROUT SHAFT CONFIGURED WITH ONE OR MORE HELICAL BEARING PLATES WELDED TO THE SHAFT.
4. ALL PIERS SHALL BE CORROSION PROTECTED BY HOT DIP GALVANIZATION.
5. INSTALLATION UNITS SHALL CONSTRUCT OF A ROTARY TYPED TORQUE MOTOR WITH FORWARD AND REVERSE CAPABILITIES. THESE UNITS ARE TYPICALLY POWERED.
6. INSTALLATION UNITS SHALL BE CAPABLE OF DEVELOPING THE MINIMUM TORQUE AS REQ'D.
7. INSTALLATION UNITS SHALL BE CAPABLE OF POSITIONING THE HELICAL PIER AT THE PROPER INSTALLATION ANGLE. THIS ANGLE MAY VARY BETWEEN VERTICAL AND 5 DEGREES DEFENDING UPON APPLICATION AND TYPE OF LOAD TRANSFER DEVICE SPECIFIED OR REQUIRED.
8. INSTALLATION TORQUE SHALL BE MONITORED THROUGHOUT THE INSTALLATION PROCESS
9. HELICAL PIERS SHALL BE INSTALLED TO THE MINIMUM TORQUE VALUE REQUIRED TO PROVED THE LOAD CAPACITIES SHOWN ON THE PLANS.
10. THE APPROPRIATE STEEL NEW CONSTRUCTION LOAD TRANSFER DEVICE SHALL BE USED.
11. APPROPRIATE HELICAL PIER SELECTION WILL CONSIDER DESIGN LOAD PLUS SAFETY FACTOR, SOIL PARAMETERS AND THE INSTALLATION TORQUE VS. CAPACITY EQUATION AS PER THE MANUFACTURER'S RECOMMENDATIONS.

SAMPLE LISTING ONLY: SEE PLAN AND STRUCTURAL DETAIL FOR ALL TIEBACK INFORMATION

1. AN EXPERIENCED HELIX TIEBACK INSTALLATION CONTRACTOR USING EQUIPMENT CAPABLE OF 5000 POUNDS OF TORQUE SHALL INSTALL THE HELIX TIEBACKS IN LOCATIONS, MINIMUM DEPTHS AND AT CAPACITIES AS SHOWN ON THE PROJECT'S DRAWINGS AND SPECIFICATIONS.
2. THE INSTALLER SHALL KEEP A CONSTANT DOWN PRESSURE ON THE TIEBACK WHILE REVOLVING THE ROTARY DRIVE AT NO MORE THAN 20 REVOLUTIONS PER MINUTE.
3. THE INSTALLING CONTRACTOR SHALL NOTIFY THE SOILS ENGINEER AND/OR PROJECT ENGINEER IF CONDITIONS ARE NOT AS SHOWN ON THE DRAWING PRIOR TO PROCEEDING WITH DRIVING OF THE TIEBACK IN QUESTION.
4. HELIX SHALL BE INSTALLED A MINIMUM OF 5 DIAMETERS INTO COMPETENT SOIL.
5. ON COMPLETION OF THE PROJECT THE INSTALLING CONTRACTOR SHALL SUBMIT A DRAWING REPORT TO THE ENGINEER AND BUILDING DEPT. WHICH SHALL INDICATE THE FOLLOWING:
 - PIER OR TIEBACK IDENTIFICATION:
 - PIER OR TIEBACK DEPTH:
 - DEPTH AT SPECIFIED TORQUE:
 - TYPE OF PIER OR TIEBACK USED:
 - NUMBER AND SIZE OF HELICES:
 - DATE OF INSTALLATION:
 - ACTUAL CAPACITY:
 - DESIGN CAPACITY:
6. PROVIDED SPECIAL INSTRUCTIONS FOR HELIX PILE AND TIEBACK ANCHORS INSTALLATIONS IN ACCORDANCE WITH SECTION 1702 OF THE CURRENT CODE

1	COMMENTS 2/18	GTF
2	COMMENTS 12/18	GTF
3	COMMENTS 9/19	GTF

RETAINING WALL PLAN AND NOTES

APTOS, CA 95003

APN: 043-082-08
2601 41ST AVENUE, SUITE A
SOQUEL, CA 95073

www.hoganls.com

TEL (831) 425-1617
FAX (831) 425-0224

JOB #: H0294

GEOFF FLEISSNER R.C.E. 82889



THESE PLANS WERE PREPARED BY ME OR
UNDER MY DIRECTION AT THE REQUEST OF
IGNATIUS LOMONACO IN APRIL, 2017

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DRAINAGE PLAN

1

NORTH

BEACH DRIVE

043-081-15
ANDRE
(310 KINGSBURY DRIVE)

GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

ABBREVIATIONS

RED REDWOOD TREE
NG NATURAL GRADE
FF FINISH FLOOR
BC BUILDING CORNER
BS BOTTOM STEP
EC EDGE OF CONCRETE
EP EDGE OF PAVEMENT
FL FLOWLINE
GB GRADE BREAK
PROP BC PROPOSED BUILDING
TS TOP STEP
WR FNC WIRE FENCE
D.S. DOWN SPOUT

LEGEND

--- RECORD BOUNDARY LINE
--- ADJOINING BOUNDARY LINE
--- FLOWLINE
--- EASEMENT
--- EDGE OF CONCRETE
--- EDGE OF ASPHALT CONCRETE
--- TB TOP OF BANK
--- EDGE OF BUILDING
--- SLOPE LIMITS
--- MINOR CONTOUR
--- MAJOR CONTOUR
--- ASPHALT CONCRETE SURFACE
--- CONCRETE SURFACE
IP IRON PIPE
NTS NOT TO SCALE

APPROXIMATE WATERSHED
FROM ADJACENT PARCEL
043-081-15 310 KINGSBURY
DRIVE

DRAINAGE PIPES
CONVEYING
RUN-ON FROM
ADJACENT
PARCEL(S)

LOCATION OF
PROPOSED
RETAINING
WALLS

SET I.P.

WATERSHED MAP
1" = 50'

THE SITE RECEIVES RUNOFF FROM UPSTREAM/ADJACENT AREAS PER SECTION 6 PART 6.3 OF THE COUNTY OF SANTA CRUZ DESIGN CRITERIA. AS SHOWN ON THIS EXHIBIT THE HOMEOWNER WILL PROVIDE AN ACCEPTABLE RECORD DOCUMENT ON THE PARCEL DEED. THE RECORDED DOCUMENT SHALL ACKNOWLEDGE THAT THE PARCEL DOES AND WILL CONTINUE TO RECEIVE UPSTREAM RUNOFF. THAT THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTENANCE OF THE DRAINAGE PATHWAY (NATURAL AND/OR MAN-MADE) THROUGH THE PARCEL, AND THAT THE COUNTY & FLOOD CONTROL DISTRICT(S) ARE NOT RESPONSIBLE FOR THE UPSTREAM RUNOFF OR FOR THE MAINTENANCE OF THE DRAINAGE PATHWAY.

1

SURFACING SUMMARY

TYPE	SITE AREA (FT ²)
CONCRETE V-DITCH	53
TOTAL IMPERVIOUS AREA	53

NOTE: EXISTING AC DRIVEWAY TO BE REPAVED PER FIGURE DW-5 OF COUNTY OF SANTA CRUZ DESIGN CRITERIA

MAINTENANCE REQUIREMENTS

NO.	TYPE	MAINTENANCE	FREQUENCY	INSPECTIONS
1	BOWL INLET	INSPECT FOR DAMAGE, REMOVE TRASH & DEBRIS, REMOVE SEDIMENT, MONITOR OVERFLOW	MONTHLY	TWICE / YR
2	CONCRETE V-DITCH	INSPECT FOR DAMAGE, REMOVE TRASH & DEBRIS, REMOVE SEDIMENT, MONITOR OVERFLOW	MONTHLY	TWICE / YR
3	COLLECTOR PIPES	INSPECT FOR DAMAGE, DRAINAGE, REMOVE DEPOSITS, MONITOR FOR CLOGGING	MONTHLY	TWICE / YR

LICENSED ENGINEER TO PROVIDE ANNUAL REPORTS INCLUDING PHOTOS, INSPECTION REPORTS (INCLUDING DATE, INSPECTOR'S NAME, ETC.), MAINTENANCE, REPAIRS (IF ANY), AND SIGNS OF FAILURE.

MAINTENANCE SCHEDULE FOR MAINTENANCE AND MONITORING: OF ALL PERMANENT STORMWATER MANAGEMENT FACILITIES IN COMPLIANCE WITH COUNTY CODE 7.79. THIS EXHIBIT SHALL BE INCLUDED IN THE MAINTENANCE AGREEMENT AS A PACKET WHEN THE APPLICANT RECORDS AND NOTARIZES THEIR SWM-SSA FORM. IT WILL BE THE RESPONSIBILITY OF THE HOMEOWNER TO INSPECT AND MAINTAIN ALL DRAINAGE FEATURES.

INSPECTIONS SHOWN ABOVE TO BE PERFORMED TWICE A YEAR, SHALL BE PERFORMED BEFORE AND AFTER THE RAINY SEASON

REVISION BLOCK

1	COMMENTS 2/18	GTF
2	COMMENTS 12/18	GTF
3	COMMENTS 9/19	GTF

DRAINAGE PLAN

C3 OF 6

APTOS, CA 95003

APN: 043-082-08

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TEL (831) 425-1617
FAX (831) 425-0224

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A CALIFORNIA CORPORATION

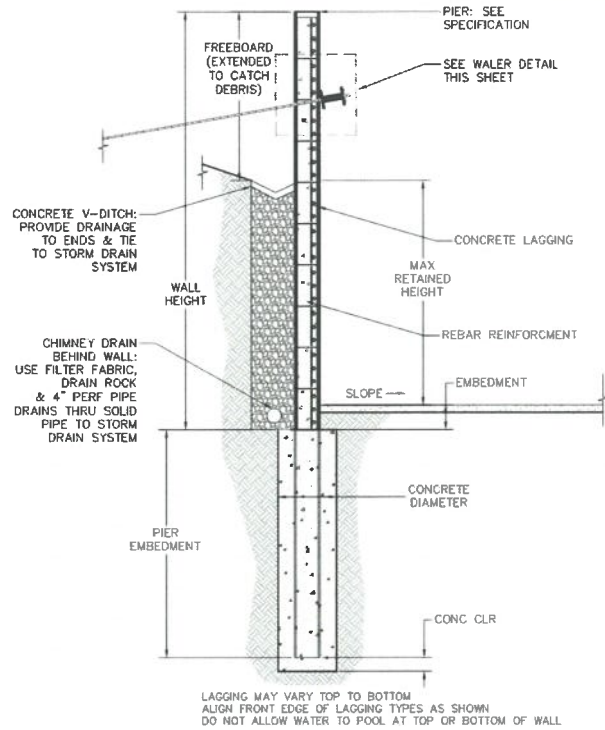


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IGNATIUS LOMONACO IN APRIL, 2017

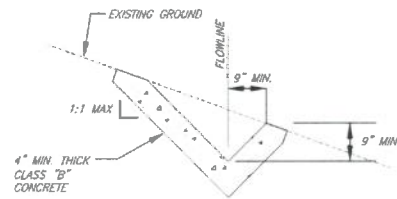
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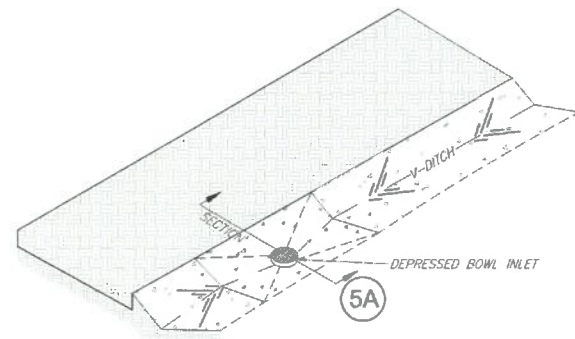
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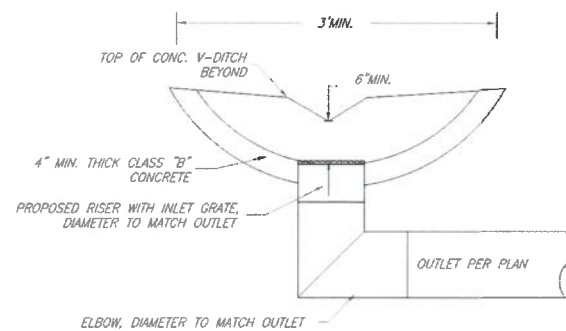
1 STEEL BEAM AND WOOD LAGGING RETAINING WALL
(SEE PLAN FOR LOCATION INFORMATION) N.T.S.



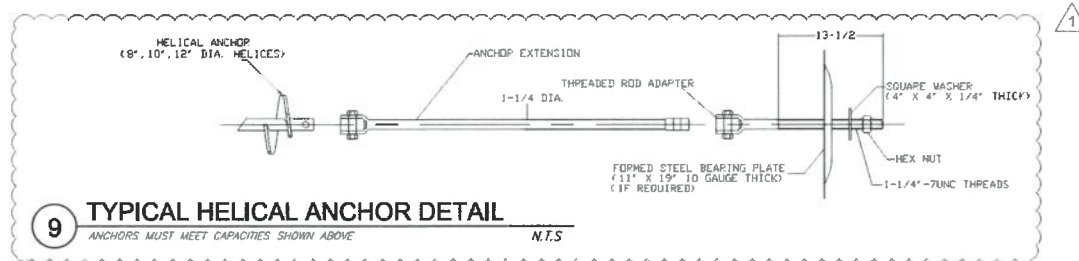
3 CONCRETE V-DITCH
(ACTUAL DESIGN SLOPE DIRECTIONS ARE AS PER PLAN.) N.T.S.



5 PROPOSED BOWL INLET N.T.S.



5A SECTION AT BOWL INLET N.T.S.



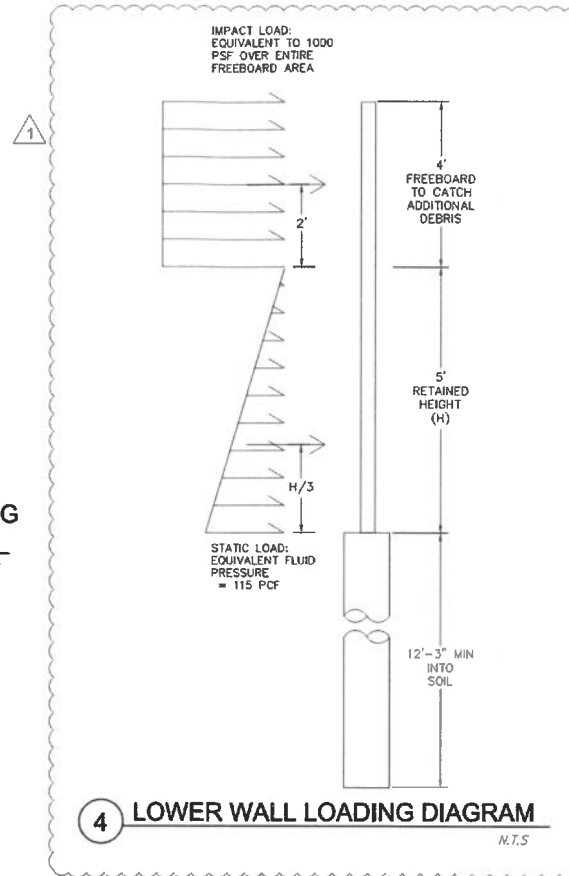
9 TYPICAL HELICAL ANCHOR DETAIL
ANCHORS MUST MEET CAPACITIES SHOWN ABOVE N.T.S.

PIER & LAGGING RETAINING WALL DESIGN	
WALL HEIGHT	9'-0"
MAX RETAINED HEIGHT	5'-0"
FREEBOARD	4'-0"
EMBEDMENT	0'-6" MIN
CONCRETE DIAMETER	1'-6" MIN
CONCRETE CLEAR DISTANCE	0'-3" MIN
CONCRETE SPECIFICATION	2500 PSI MIN
PIER TYPE	W6X16 I-BEAM
PIER SPACING	6'-0" MAX
PIER SPECIFICATION	50 KSI MIN YIELD
PIER EMBEDMENT	12'-3" MIN INTO SOIL
CONCRETE LAGGING DIMENSIONS	12" X 6", 2500 PSI
HORIZONTAL REBAR REINFORCEMENT	3 #4 @ 3" SPACING
VERTICAL REBAR REINFORCEMENT	#4 @ 12"

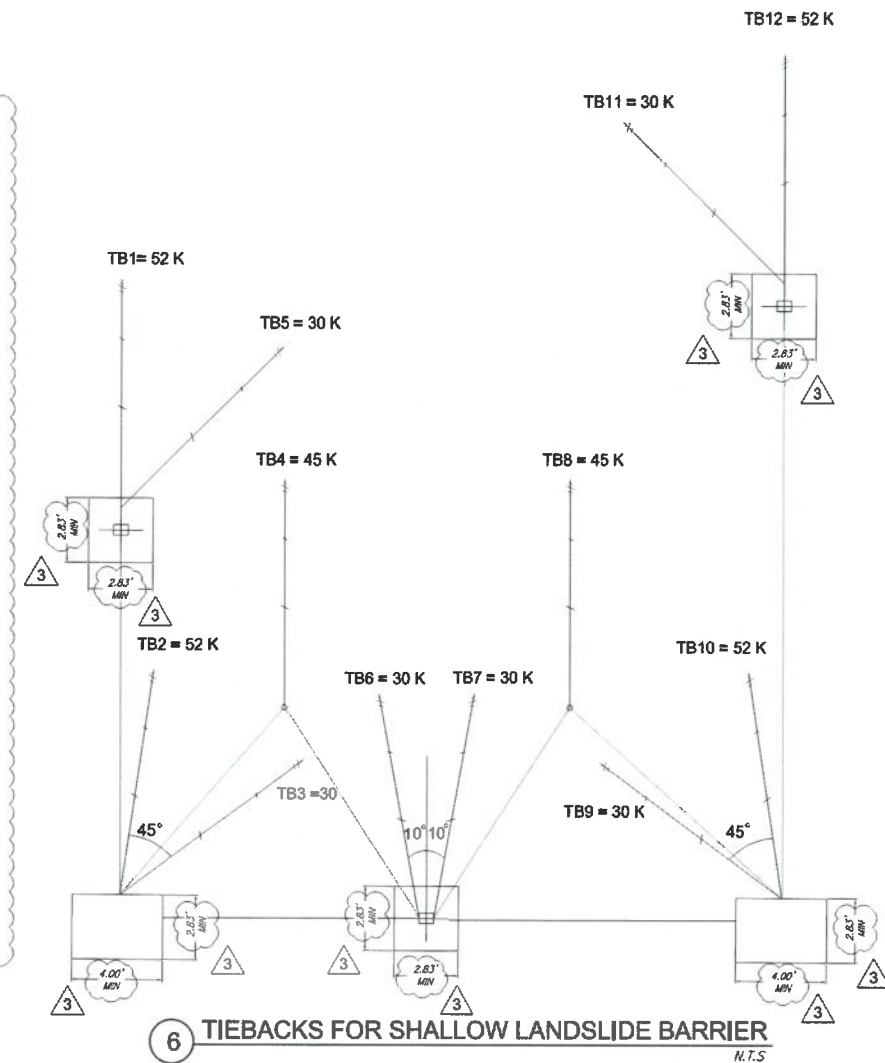
WALL HEIGHT UP TO 5'-0" RETAINED SOIL

2 STEEL BEAM AND CONCRETE LAGGING RETAINING WALL DESIGN
(SEE PLAN FOR LOCATION INFORMATION) N.T.S.

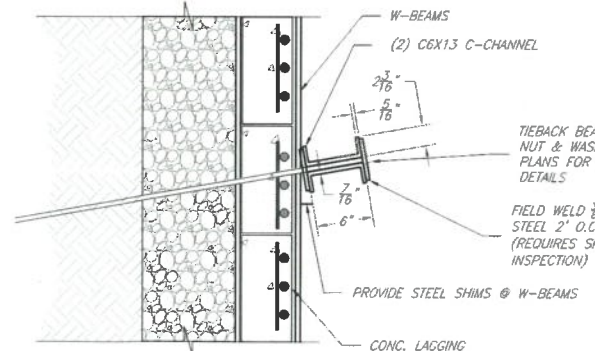
1 APPROXIMATE SQUARE FOOTAGE OF WALL IS 315 SQFT



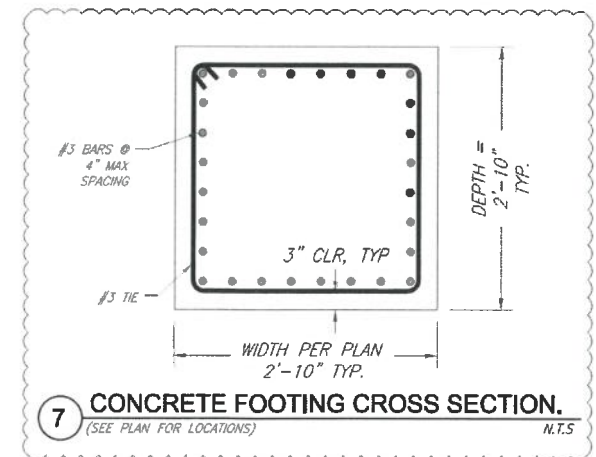
4 LOWER WALL LOADING DIAGRAM N.T.S.



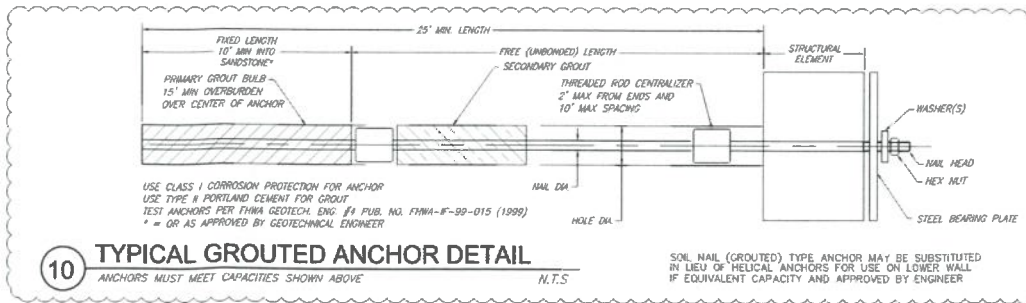
6 TIEBACKS FOR SHALLOW LANDSLIDE BARRIER N.T.S.



8 WALER DETAIL
ANCHORS MUST MEET CAPACITIES SHOWN ABOVE N.T.S.



7 CONCRETE FOOTING CROSS SECTION.
(SEE PLAN FOR LOCATIONS) N.T.S.



10 TYPICAL GROUTED ANCHOR DETAIL
ANCHORS MUST MEET CAPACITIES SHOWN ABOVE N.T.S.

REVISION BLOCK		
1	COMMENTS 2/18	GTF
2	COMMENTS 12/18	GTF
3	COMMENTS 9/18	GTF

CONSTRUCTION DETAILS

317 BEACH DRIVE
APTOS, CA 95003

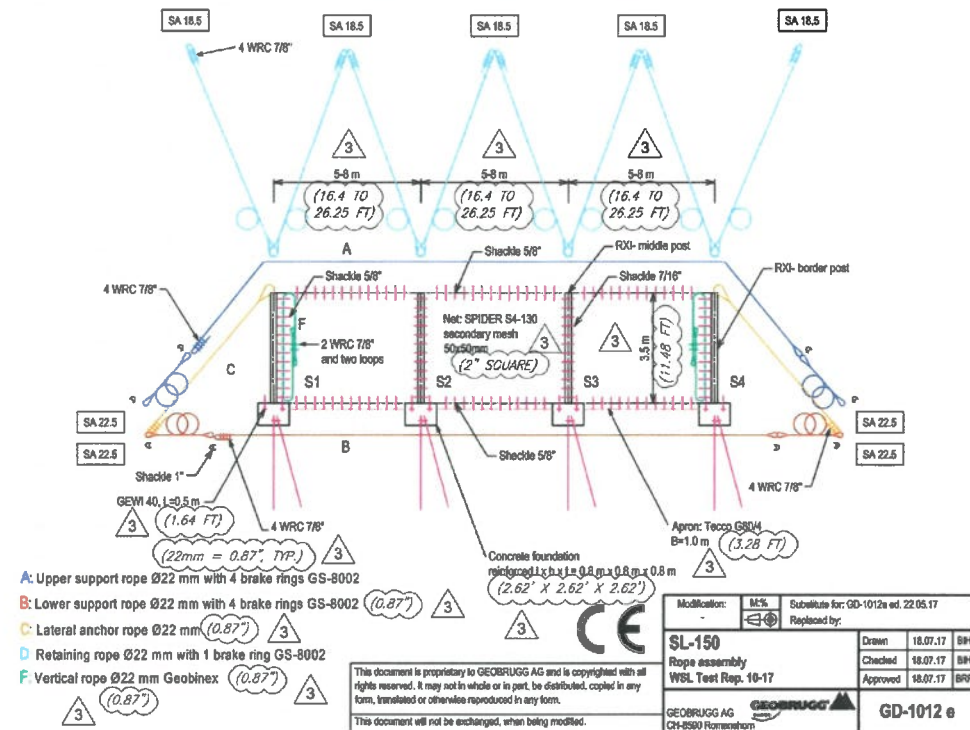
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A CALIFORNIA CORPORATION
2801 41ST AVENUE, SUITE A
SOQUEL, CA 95073
TEL (831) 425-1617
FAX (831) 425-0224
www.hoganls.com

PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
CIVIL
No. 82879
EXPIRATION DATE 12/31/2018

THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECTION AT THE REQUEST OF
IGNATIUS LOMONACO IN APRIL, 2017

DRN: GTF RLD GTF
CHK: CHN PKC DATE: 10-07-17 JOB #: H294
GEOFF FLEISSNER R.C.E. 82889



GEOBRUGG DETAILS

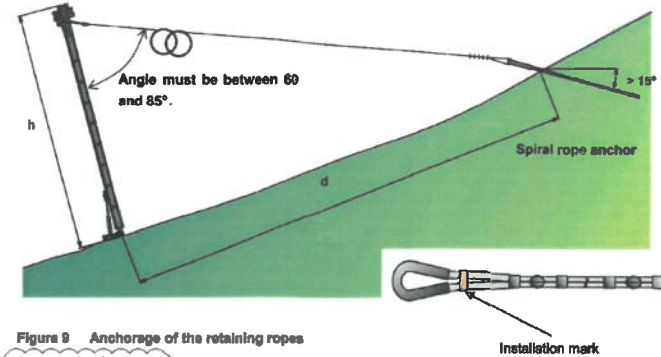


Figure 9 Anchorage of the retaining ropes

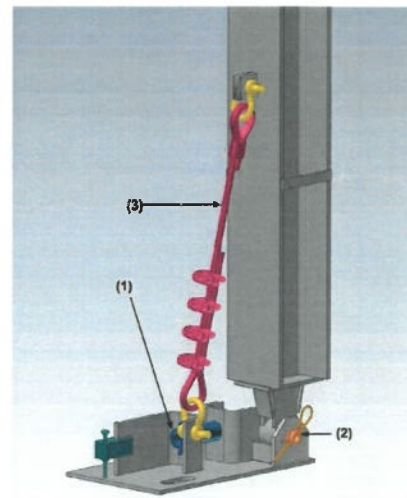
h	d
3.50 m	6.00 m

Table 3 Distances [m]

2 ANCHORAGE OF RETAINING ROPES

(SEE PLAN FOR LOCATION INFORMATION)

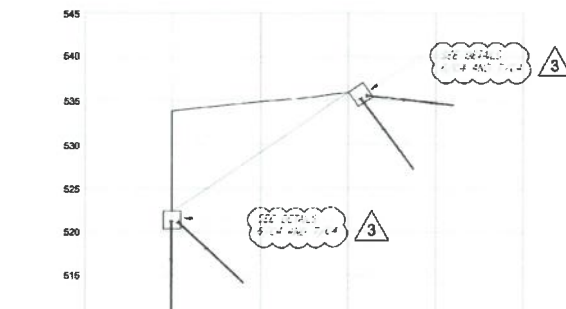
N.T.S.



5 BASE PLATE & OVERTURN SECURING ROPE

(SEE PLAN FOR LOCATION INFORMATION)

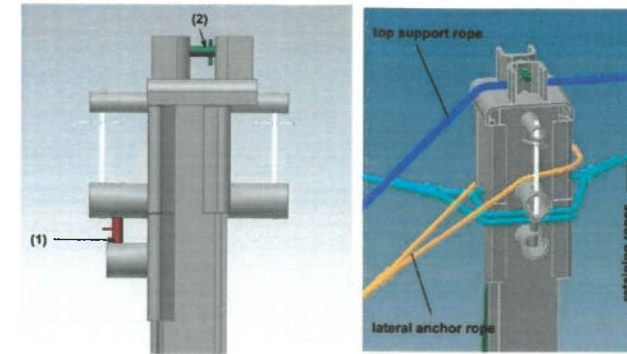
N.T.S.



8 UPCOAST WING WALL

(SEE PLAN FOR LOCATION INFORMATION)

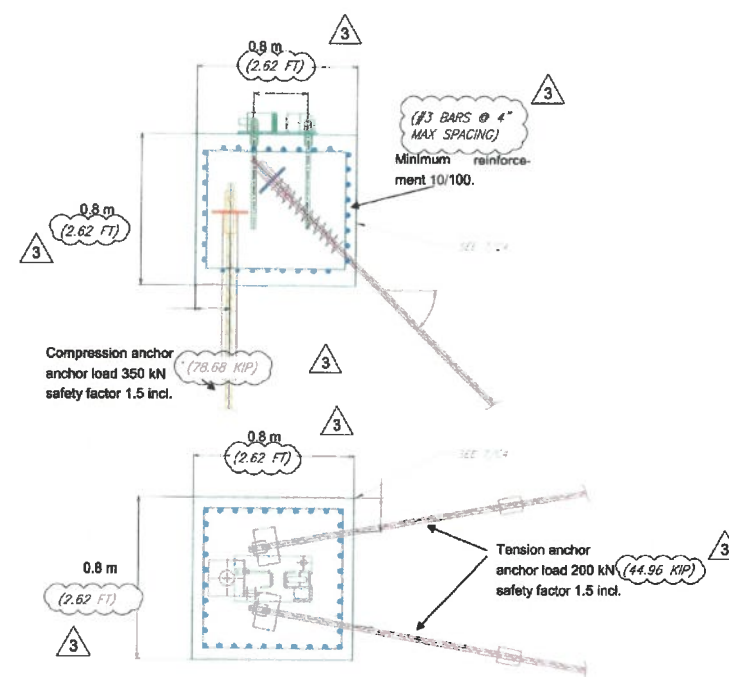
SCALE: 1"=10'



3 BORDER POSTS AND THEIR ROPES

(SEE PLAN FOR LOCATION INFORMATION)

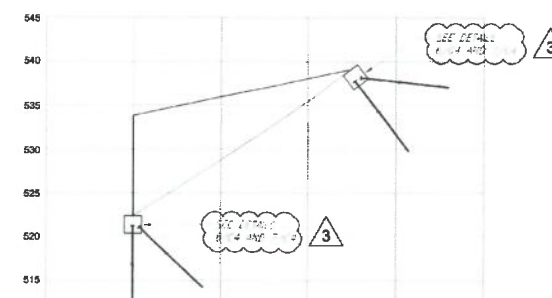
N.T.S.



6 POST FOUNDATION, SECTIONAL & PLAN VIEW

(SEE PLAN FOR LOCATION INFORMATION)

N.T.S.



9 DOWNCOAST WING WALL

(SEE PLAN FOR LOCATION INFORMATION)

SCALE: 1"=10'

REVISION BLOCK

NO.	DESCRIPTION	DATE
1	COMMENTS 2/18	GTF
2	COMMENTS 12/18	GTF
3	COMMENTS 9/19	GTF

GEOBRUGG DETAILS

HOGAN LAND SERVICES
A CALIFORNIA CORPORATION

2601 41ST AVENUE, SUITE A
SOQUEL, CA 95073

APN: 043-082-08

317 BEACH DRIVE
APTOS, CA 95003



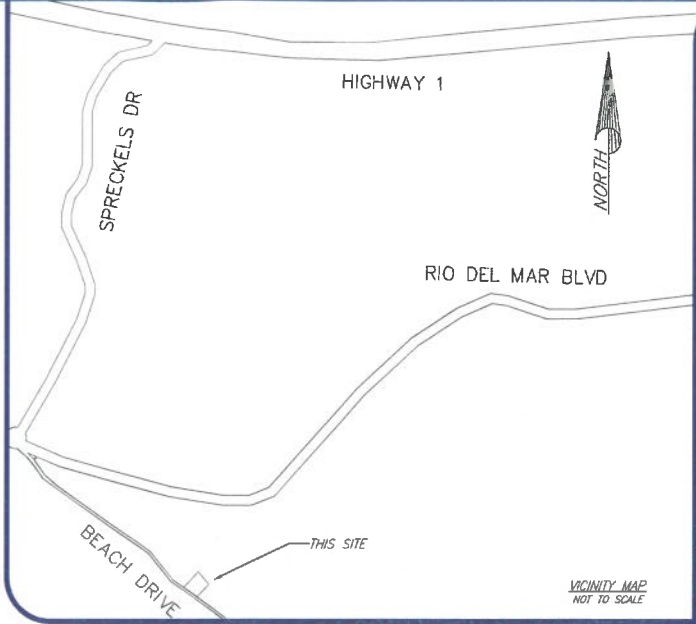
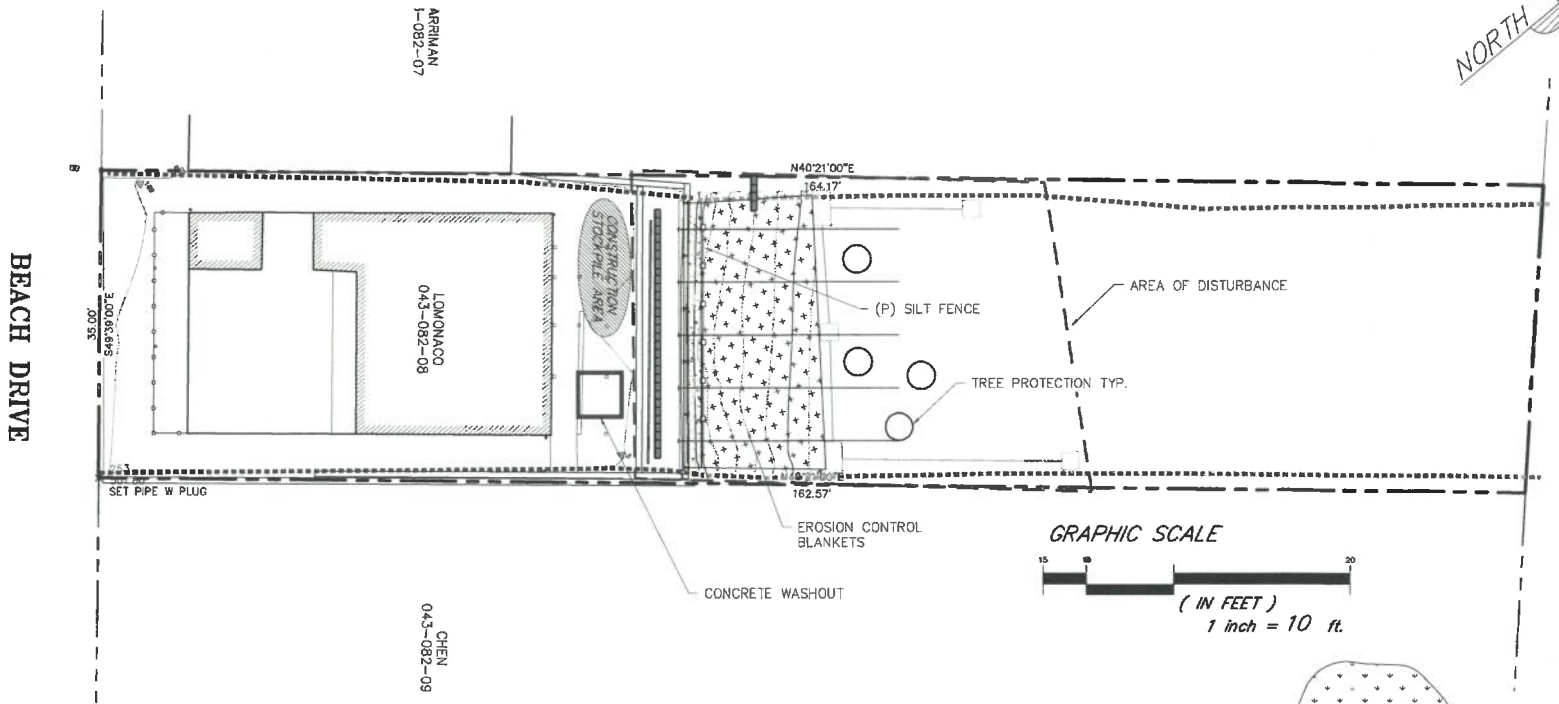
THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECTION AT THE REQUEST OF
IGNATIUS LOMONACO IN APRIL, 2017

DRN: GTF RLD: GTF
CHK: GTF DATE: 10-06-17
JOB #: 10294

GEOFF FLEISSNER R.C.E. 82869

EXHIBIT D

EROSION CONTROL PLAN



THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECTION AT THE REQUEST OF IGNATIUS LOMONACO IN APRIL, 2017

DRN: GTF
CHK: RLD
PM: GTF
DATE: 10-06-17
JOB #: H0234

GEDOFF FLEISSNER P.C.E. 82889

SITE HOUSEKEEPING REQUIREMENTS

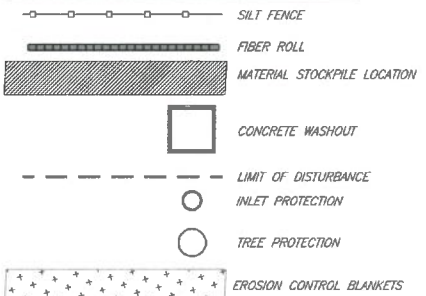
- CONSTRUCTION MATERIALS**
- ALL LOOSE STOCKPILED CONSTRUCTION MATERIALS THAT ARE NOT ACTIVELY BEING USED (I.E. SOIL, SPOILS, AGGREGATE, FLY-ASH, STUCCO, HYDRATED LIME, ETC.) SHALL BE COVERED AND BERMED.
 - ALL CHEMICALS SHALL BE STORED IN WATER-TIGHT CONTAINERS (WITH APPROPRIATE SECONDARY CONTAINMENT TO PREVENT ANY SPILLAGE OR LEAKAGE) OR IN A STORAGE SHED (COMPLETELY ENCLOSED).
 - EXPOSURE OF CONSTRUCTION MATERIALS TO PRECIPITATION SHALL BE MINIMIZED. THIS DOES NOT INCLUDE MATERIALS AND EQUIPMENT THAT ARE DESIGNATED TO BE OUTDOORS AND EXPOSED TO ENVIRONMENTAL CONDITIONS (I.E. POLES, EQUIPMENT PADS, CABINETS, CONDUCTORS, INSULATORS, BRICKS, ETC.).
 - BEST MANAGEMENT PRACTICES TO PREVENT THE OFF-SITE TRACKING OF LOOSE CONSTRUCTION AND LANDSCAPE MATERIALS SHALL BE IMPLEMENTED.

- WASTE MANAGEMENT**
- DISPOSAL OF AND RINSE OR WASH WATERS OR MATERIALS ON IMPERVIOUS OR PERVIOUS SITE SURFACES OR INTO THE STORM DRAIN SYSTEM SHALL BE PREVENTED.
 - SANITATION FACILITIES SHALL BE CONTAINED (E.G. PORTABLE TOILETS) TO PREVENT DISCHARGES OF POLLUTANTS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER, AND SHALL BE LOCATED A MINIMUM OF 20 FEET AWAY FROM AN INLET, STREET OR DRIVEWAY, STREAM, RIPARIAN AREA OR OTHER DRAINAGE FACILITY.
 - SANITATION FACILITIES SHALL BE INSPECTED REGULARLY FOR LEAKS AND SPILLS AND CLEANED OR REPLACED AS NECESSARY.
 - COVER WASTE DISPOSAL CONTAINERS AT THE END OF EVERY BUSINESS DAY AND DURING A RAIN EVENT.
 - DISCHARGES FROM WASTE DISPOSAL CONTAINERS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATERS SHALL BE PREVENTED.
 - STOCKPILED WASTE MATERIALS SHALL BE CONTAINED AND SECURELY PROTECTED FROM WIND AND RAIN AT ALL TIMES UNLESS ACTIVELY BEING USED.
 - PROCEDURES THAT EFFECTIVELY ADDRESS HAZARDOUS AND NON-HAZARDOUS SPILLS SHALL BE IMPLEMENTED.
 - EQUIPMENT AND MATERIALS FOR CLEANUP OF SPILLS SHALL BE AVAILABLE ON SITE AND THAT SPILLS AND LEAKS SHALL BE CLEANED UP IMMEDIATELY AND DISPOSED OF PROPERLY; AND
 - CONCRETE WASHOUT AREAS AND OTHER WASHOUT AREAS THAT MAY CONTAIN ADDITIONAL POLLUTANTS SHALL BE CONTAINED SO THERE IS NO DISCHARGE INTO THE UNDERLYING SOIL AND ONTO THE SURROUNDING AREAS.

- VEHICLE STORAGE AND MAINTENANCE**
- MEASURES SHALL BE TAKEN TO PREVENT OIL, GREASE, OR FUEL TO LEAK IN TO THE GROUND, STORM DRAINS OR SURFACE WATERS.
 - ALL EQUIPMENT OR VEHICLES, WHICH ARE TO BE FUELED, MAINTAINED AND STORED ONSITE SHALL BE IN A DESIGNATED AREA FITTED WITH APPROPRIATE BMPs.
 - LEAKS SHALL BE IMMEDIATELY CLEANED AND LEAKED MATERIALS SHALL BE DISPOSED OF PROPERLY.

- LANDSCAPE MATERIALS**
- CONTAIN STOCKPILED MATERIALS SUCH AS MULCHES AND TOPSOIL WHEN THEY ARE NOT ACTIVELY BEING USED.
 - CONTAIN FERTILIZERS AND OTHER LANDSCAPE MATERIALS WHEN THEY ARE NOT ACTIVELY BEING USED.
 - DISCONTINUE THE APPLICATION OF AND ERODIBLE LANDSCAPE MATERIAL WITHIN 2 DAYS BEFORE A FORECASTER RAIN EVENT OR DURING PERIODS OF PRECIPITATION.
 - APPLY ERODIBLE LANDSCAPE MATERIAL AT QUANTITIES AND APPLICATION RATES ACCORDING TO MANUFACTURE RECOMMENDATIONS OR BASED ON WRITTEN SPECIFICATIONS BY KNOWLEDGEABLE AND EXPERIENCED FIELD PERSONNEL.
 - STACK ERODIBLE LANDSCAPE MATERIAL ON PALLETS AND COVERING OR STORING SUCH MATERIALS WHEN NOT BEING USED OR APPLIED.

EROSION CONTROL LEGEND

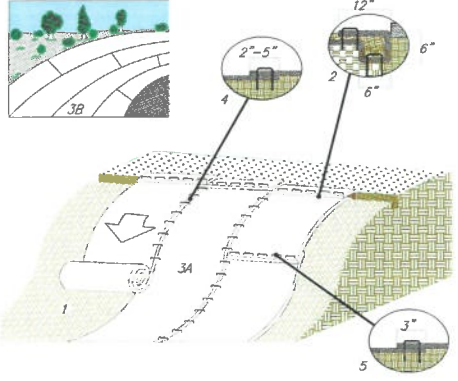


TREE PROTECTION DETAIL

NOT TO SCALE

- NOTES:
- FENCING TO CONSIST OF 1 1/2" WOOD STAKES AND ORANGE CONSTRUCTION NETTING, OR EQUIVALENT.
 - FENCING TO COVER LOWER 48" OF TRUNK, MIN. WHERE APPLICABLE.
 - FENCE PERIMETER TO BE SET TO PROTECT TREE TRUNK FROM HEAVY EQUIPMENT AND INCIDENTAL DAMAGE.

NOTE: EXPOSED SOIL SHOULD BE SEEDED AND PROTECTED FROM EROSION USING A COCONUT EROSION CONTROL BLANKET EQUIVALENT TO NORTH AMERICAN GREEN SC150 UNTIL A PERMANENT VEGETATIVE COVER CAN BE ESTABLISHED.

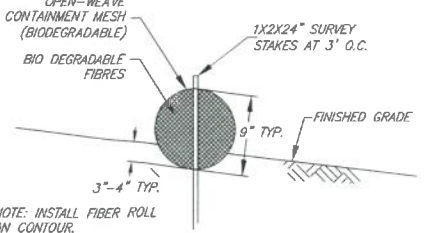


NET & BLANKET DETAIL

NOT TO SCALE

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE NETTING.

AT CONTRACTOR DESECCATION STOCK PILE AND CONCRETE WASHOUT SHALL BE PLACED AWAY FROM THE ROAD AND ALLOW VEHICLES TO PASS THROUGH DURING CONSTRUCTION.



FIBER ROLL BARRIER

NOT TO SCALE

PROJECT INFORMATION

OWNER/REPRESENTATIVE:
IGNATIUS LOMONACO
317 BEACH DRIVE
APTOS, CA 95003
(831) 251-2013

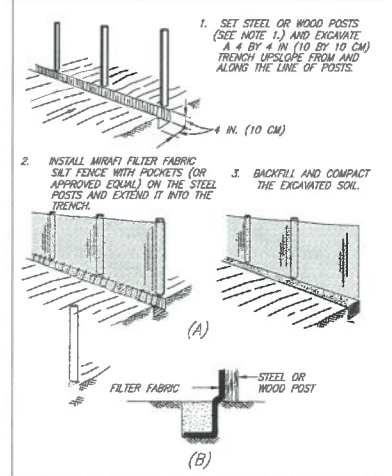
S.W.P.C.P. PRACTITIONER
HOGAN LAND SERVICES
2601 41ST AVE., STE. A
SOQUEL, CA 95073
(831) 425-1617
gfleissner@hoganls.com

TOTAL AREA OF DISTURBANCE = 0.04 ACRES (1733 S.F.)

INSTALLATION OF SILT FENCE SEDIMENT BARRIER

- LAY OUT A SUITABLE FENCE LINE AND SET POSTS ALONG IT. ON SLOPES, ALIGN THE FENCE ALONG THE CONTOUR AS CLOSELY AS POSSIBLE. IN SMALL SLOPES, CURVE THE FENCE LINE UPSTREAM AT THE SIDES TO DIRECT THE FLOW TOWARD THE MIDDLE OF THE FENCE. THE SIDES SHOULD BE HIGHER THAN THE CENTER AS ILLUSTRATED IN THE FIGURE AT RIGHT. SPACE POSTS ON 6' CENTERS AND DRIVE THEM A MINIMUM OF 12 IN (30 CM) INTO THE GROUND. POSTS FOR SILT FENCES CAN BE EITHER 1 1/2" (3.8 CM) MIN. DIA. HARD WOOD OR 1.33 LB/FT (1.97 KG/M) STEEL WITH A MINIMUM LENGTH OF 5 FT (1.5 M). STEEL POSTS MUST HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
- FASTEN THE FILTER FABRIC TO THE UPHILL SIDE OF THE FENCE POSTS, AND EXTEND TO 6 TO 8 IN (15 TO 20 CM) INTO THE TRENCH. THE HEIGHT OF THE FENCE SHOULD NOT EXCEED 36 IN (0.9 M). DO NOT STAPLE FABRIC ONTO TREES. CUT THE FILTER FABRIC FROM A CONTINUOUS ROLL TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, SPLICE THE FILTER CLOTH AT A SUPPORT POST, WITH A MINIMUM 6 IN (15 CM) OVERLAP, AND SECURELY FASTEN BOTH ENDS TO THE POST.
- BACKFILL THE TRENCH OVER THE TOE OF THE FABRIC AND COMPACT THE SOIL.
- PREFABRICATED SILT FENCE WITH POSTS MAY BE USED AS AN ALTERNATE TO SETTING STEEL OR WOOD POSTS.

NOTE: SILT FENCE SEDIMENT BARRIER MAY BE USED AS AN ALTERNATE TO THE STRAW BALE SEDIMENT BARRIER.



CONSTRUCTION OF A SILT FENCE. (A) INSTALLATION SEQUENCE. (B) EXTENSION OF FABRIC INTO THE TRENCH.

SILT FENCE SEDIMENT BARRIER

NOT TO SCALE

REVISION BLOCK

NO.	COMMENTS	DATE
1	COMMENTS 2/18	GTF
2	COMMENTS 12/18	GTF
3	COMMENTS 9/19	GTF

EROSION CONTROL PLAN

HOGAN LAND SERVICES
A CALIFORNIA CORPORATION

2601 41ST AVENUE, SUITE A
SOQUEL, CA 95073

APN: 043-082-08

APTOS, CA 95003

EXHIBIT D

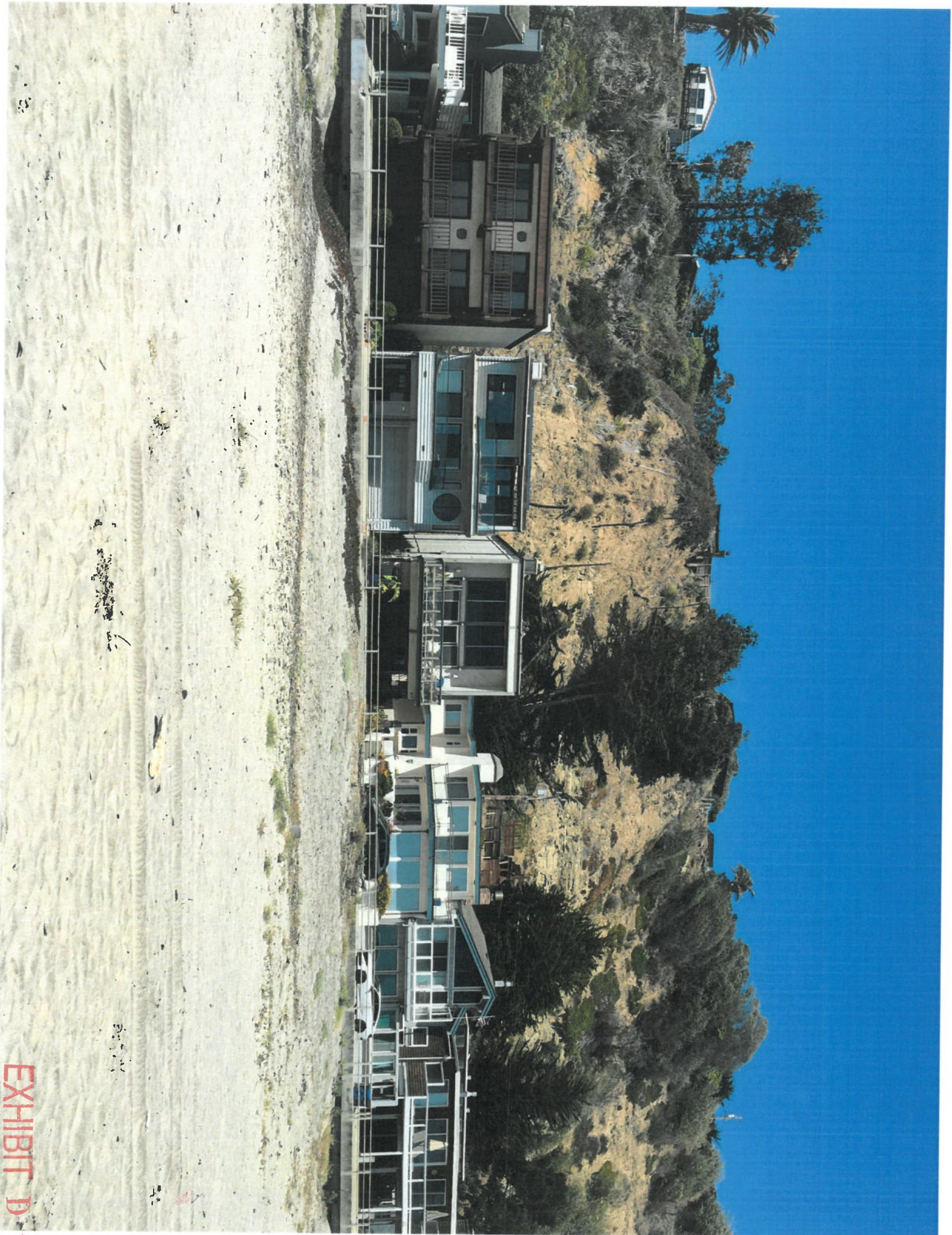


EXHIBIT D

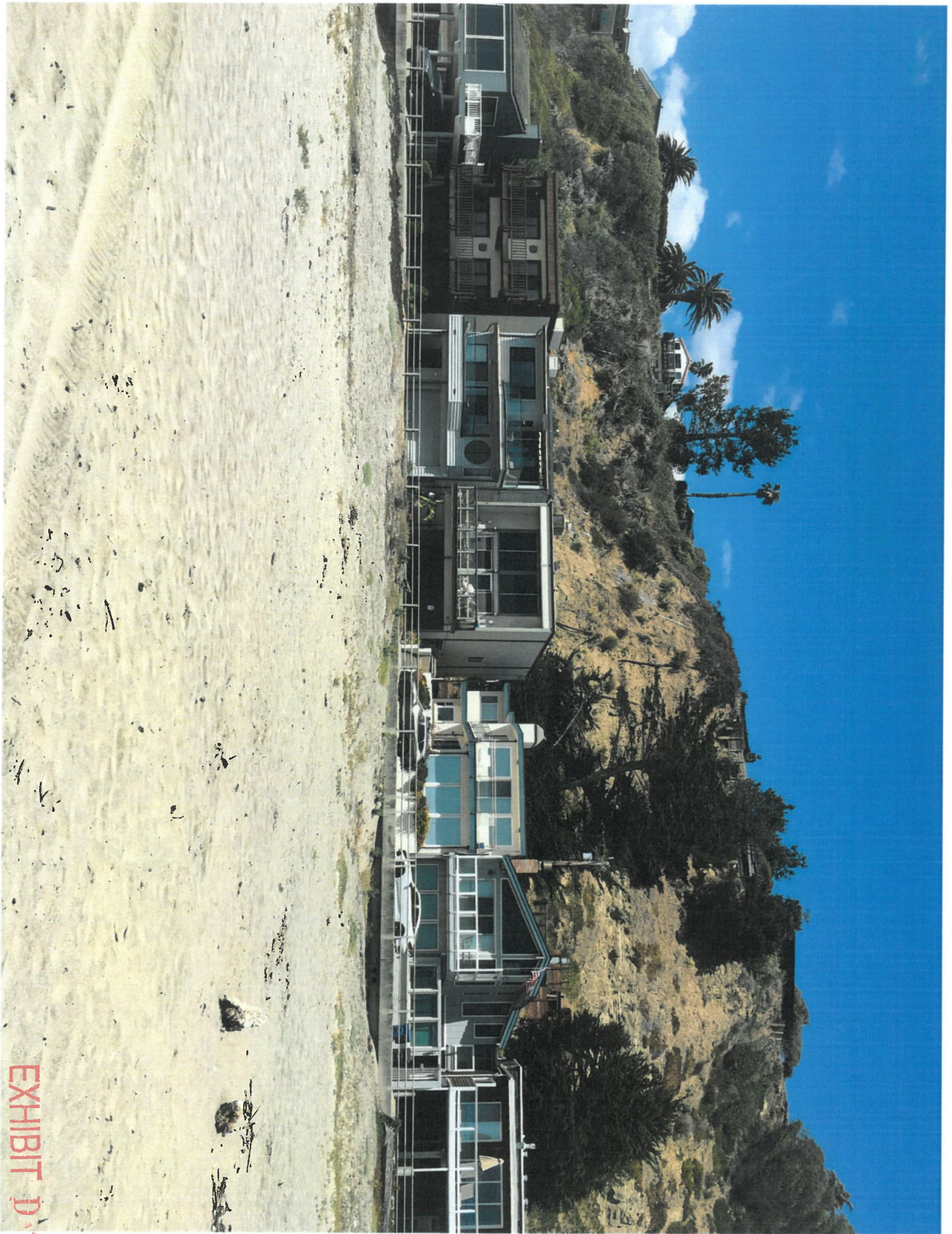
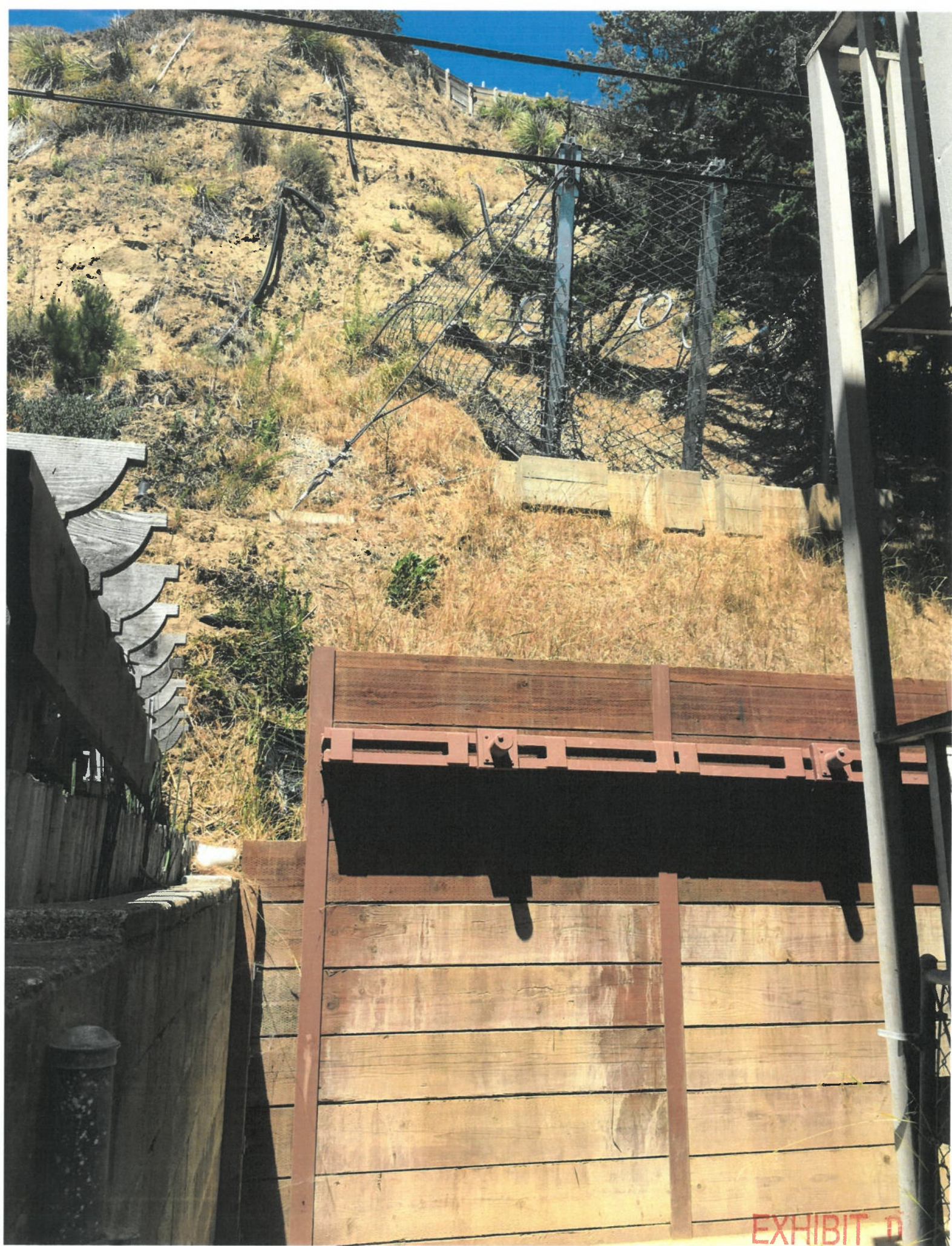


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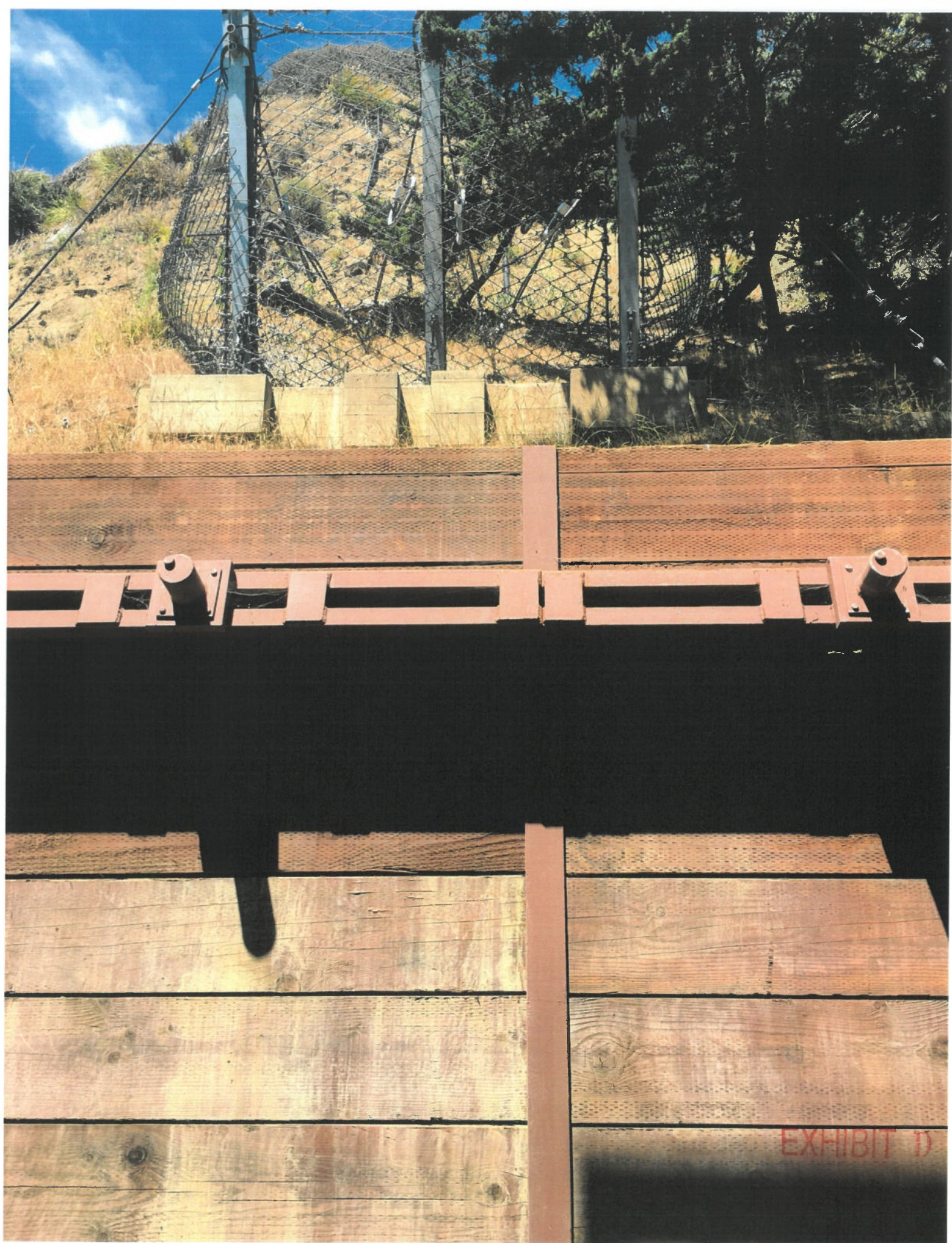


EXHIBIT D



EXHIBIT D 1

FOR TAX PURPOSES ONLY

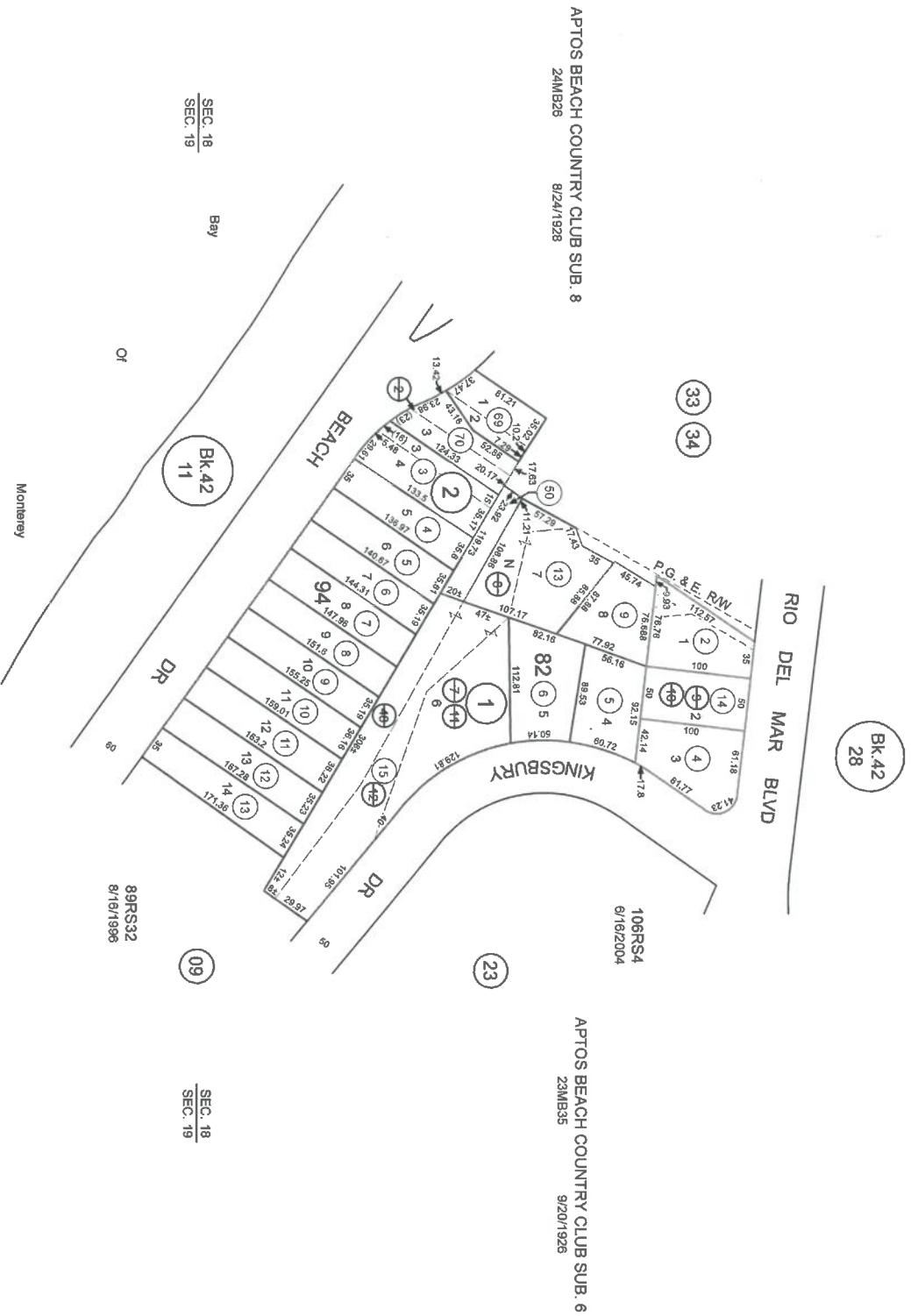
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POR. APTOS RANCHO
S.E. 1/4 SEC. 18, & N.E. 1/4
T.11S., R.1E., M.D.B. & M

Tax Area Code
69-273

43-08

EXHIBIT E



Electronically Redrawn 2/5/99 rw
Rev. 5/25/01 mvm (changed page refs.)
Rev. 5/29/04 CB (106RS4)
Rev. 3/31/05 DD (Cor. as per 106RS4, 1-02, 04 & 14)
Rev. 1/31/07 CB (Comb. form 1-15)
Rev. 9/23/13 mc (cor. to map ref, 23MB35)

Note - Assessor's Parcel & Block
Numbers Shown in Circles.

Assessor's Map No. 43-08
County of Santa Cruz, Calif.
February, 1999



SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel Location Map



Parcel: 04308208

- Study Parcel
- Assessor Parcel Boundary
- Existing Park

Map printed: 11 Aug. 2022

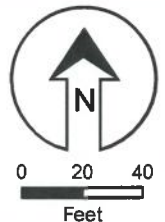


EXHIBIT E



SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel Zoning Map



Mapped
Area



- PR Parks, Recreation, & Open Space
- R-1 Single-Family Residential
- RM Residential Multi-Family

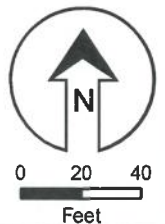


EXHIBIT E

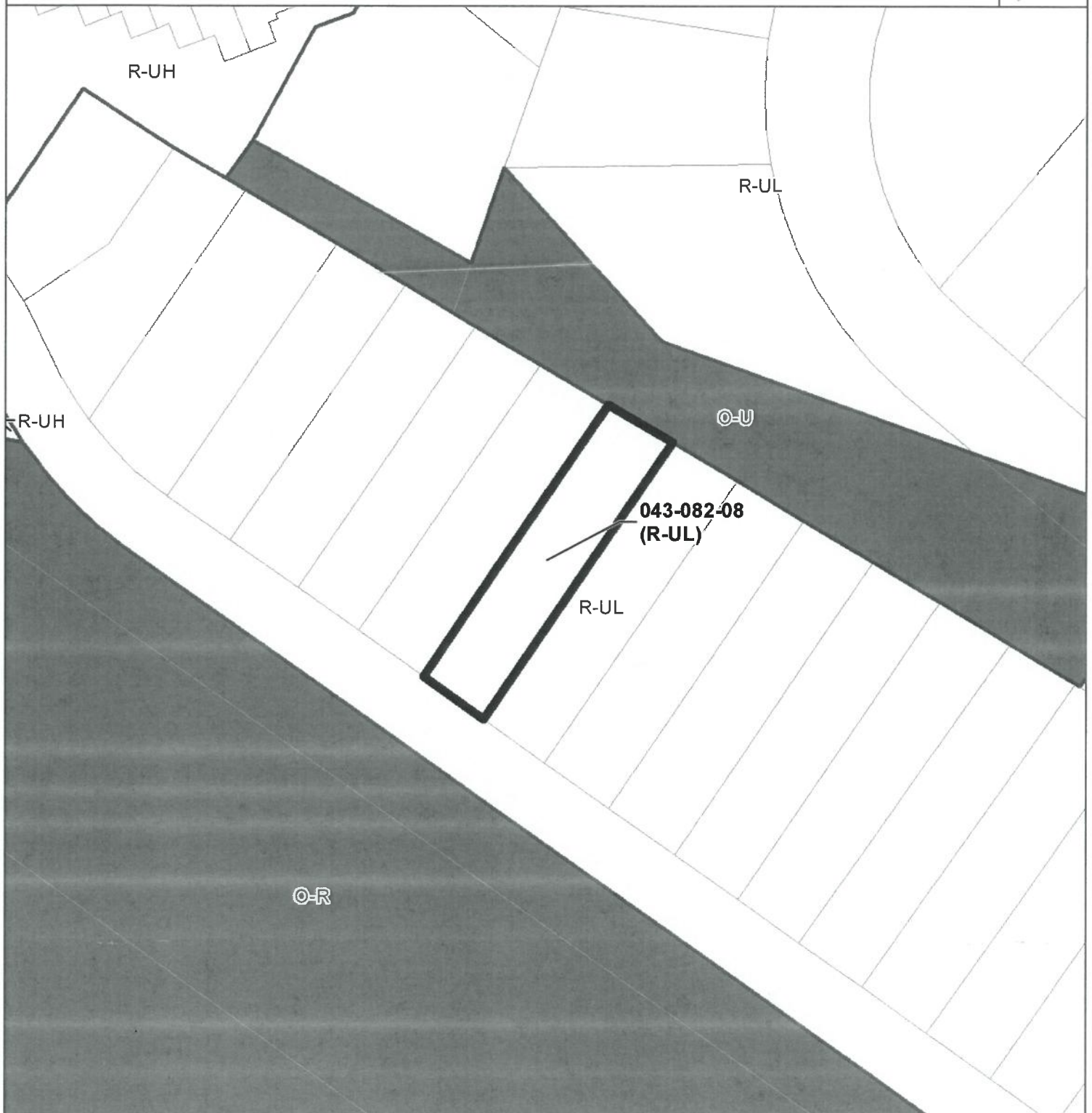






SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel General Plan Map



Mapped
Area



-  O-R Parks, Recreation & Open Space
-  O-U Urban Open Space
-  R-UH Res. Urban High Density
-  R-UL Res. Urban Low Density

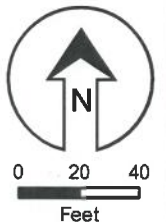


EXHIBIT E

Application #: 221092
APN: 043-082-08
Owner: Ignatius & Pauline Lomonaco

Parcel Information

Services Information

Urban/Rural Services Line:	<u> X </u> Inside <u> </u> Outside
Water Supply:	Soquel Creek Water District
Sewage Disposal:	County Sanitation District
Fire District:	Central Fire Protection District
Drainage District:	Flood Control District 6

Parcel Information

Parcel Size:	4,900 square feet
Existing Land Use - Parcel:	Residential
Existing Land Use - Surrounding:	Residential
Project Access:	Beach Drive
Planning Area:	Aptos
Land Use Designation:	R-UL (Urban Low Density Residential)
Zone District:	R-1-6 (Single family residential - 6,000 square feet)
Coastal Zone:	<u> X </u> Inside <u> </u> Outside
Appealable to Calif. Coastal Comm.	<u> X </u> Yes <u> </u> No

Technical Reviews: Geotechnical and Geologic Report Review (REV17131)

Environmental Information

Geologic Hazards:	Coastal Hazards (VE Flood Plain & Coastal Erosion)
Fire Hazard:	Not a mapped constraint
Slopes:	Coastal bluff behind home
Env. Sen. Habitat:	Not mapped/no physical evidence on site
Grading:	No grading proposed
Tree Removal:	No trees proposed to be removed
Scenic:	Mapped scenic resource
Archeology:	Not mapped



COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT

701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
KATHLEEN MOLLOY PREVISICH, PLANNING DIRECTOR

15 November 2017

Ken Wilson
119 Camino Pacifico
Aptos, CA 95003

Subject: Review of the Preliminary Geologic Findings and recommendations Regarding Debris Flows at 317 Beach Drive/APN 043-082-08 revised 4 October 2017 by Zinn Geology - Job #2017014-G-SC

Review of the Geotechnical Investigation for Proposed Debris Flow Protection Wall and Retaining Wall at 317 Beach Drive dated 19 September 2017 by Dees & Associates Inc. - Project No. SCR-1149

Project Site: 317 Beach Drive
APN 043-082-08
Application No: REV171131

Dear Applicant:

The purpose of this letter is to inform you that the Planning Department has accepted the subject reports and the following items shall be required:

1. All project design and construction shall comply with the recommendations of the reports.
2. Final plans shall reference the reports by titles, authors, and dates. Final Plans should also include a statement that the project shall conform to the reports' recommendations.
3. After plans are prepared that are acceptable to all reviewing agencies, please submit a completed Soils (Geotechnical) Engineer Plan Review Form and a completed Geologist Plan Review Form to Environmental Planning. The authors of the soils and geology reports shall sign and stamp their respective completed forms. Please note that the plan review forms must reference the final plan set by last revision date.

Any updates to report recommendations necessary to address conflicts between the reports and plans must be provided via a separate addendum to the soils report and/or geology report.

Electronic copies of all forms required to be completed by the Geotechnical Engineer may be found on our website: www.sccoplanning.com, under "Environmental", "Geology & Soils", and "Assistance & Forms".

After building permit issuance the soils engineer and engineering geologist *must remain involved with the project* during construction. Please review the Notice to Permits Holders (attached).

EXHIBIT G

Review of the Preliminary Geologic Findings and recommendations Regarding Debris Flows at 317 Beach Drive/APN 043-082-08 revised 4 October 2017 by Zinn Geology
Review of the Geotechnical Investigation for Proposed Debris Flow Protection Wall and Retaining Wall at 317 Beach Drive dated 19 September 2017 by Dees & Associates Inc.
APN 043-082-08
15 November 2017
Page 2 of 3

Our acceptance of the reports is limited to its technical content. Other project issues such as zoning, fire safety, septic or sewer approval, etc. may require resolution by other agencies.

Please note that this determination may be appealed within 14 calendar days of the date of service. Additional information regarding the appeals process may be found online at: http://www.sccoplanning.com/html/devrev/plnappeal_bldg.htm

Comment regarding the existing project plan set by Hogan Land Services dated 10/06/17:

1. The current project plan set shows approximately 630 square feet of Tecco stainless steel mesh with helical anchors being placed upslope of the proposed Geobrug Debris Flow Barrier/flexible ring net system. The Tecco stainless steel mesh slope surface stabilization is not mentioned in either of the subject reports. On 6 November 2017, the project geotechnical engineer, Rebecca Boyd, GE stated the Tecco net is not a requirement and she did not reduce the design slide mass volume for the Geobrug Debris Flow Barrier after the Tecco mesh was added to the project.

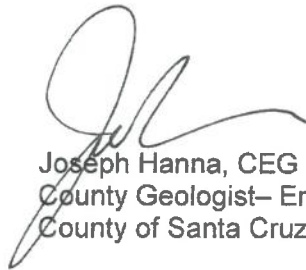
Based upon the discussion with Dees and Associates, the Tecco Mesh is not considered to be an emergency measure. A separate permit and geotechnical report review will be required to install the Tecco Mesh.

Please contact Rick Parks at (831) 454-3168/email: Rick.Parks@santacruzcounty.us or Joe Hanna at (831) 454-3175/Joseph.Hanna@santacruzcounty.us if we can be of any further assistance.

Sincerely,



Rick Parks, GE 2603
Civil Engineer – Environmental Planning
County of Santa Cruz Planning Department



Joseph Hanna, CEG 1313
County Geologist– Environmental Planning
County of Santa Cruz Planning Department

Cc: Environmental Planning, Attn: Jessica DeGrassi
Zinn Geology, Attn: Eric Zinn, CEG
Owner: Pauline Lomonaco

Attachments: Notice to Permit Holders

Review of the Preliminary Geologic Findings and recommendations Regarding Debris Flows at 317 Beach Drive/APN 043-082-08 revised 4 October 2017 by Zinn Geology
Review of the Geotechnical Investigation for Proposed Debris Flow Protection Wall and Retaining Wall at 317 Beach Drive dated 19 September 2017 by Dees & Associates Inc.
APN 043-082-08
15 November 2017
Page 3 of 3

NOTICE TO PERMIT HOLDERS WHEN SOILS AND GEOLOGY REPORTS HAVE BEEN PREPARED, REVIEWED AND ACCEPTED FOR THE PROJECT

After issuance of the building permit, the County requires your soils engineer and engineering geologist to be involved during construction.

1. **At the completion of construction, a *Soils (Geotechnical) Engineer Final Inspection Form* and a *Geologist Final Inspection Form* are required to be submitted to Environmental Planning that includes copies of all observations made during construction and is stamped and signed, certifying that the project was constructed in conformance with the recommendations of the soils and geology reports.**

If the *Final Inspection Form* identifies any portions of the project that were not observed by the soils engineer and/or geologist, you may be required to perform destructive testing in order for your permit to obtain a final inspection. The soils engineer and/or geologist then must complete and initial an *Exceptions Addendum Form* that certifies that the features not observed will not pose a life safety risk to occupants.