STAFF REPORT

Date: February 23, 2023

To: TRPA Hearings Officer

From: TRPA Staff

Subject: Al Tahoe Lakeview Townhouses Shorezone Protective Structure, 953 Lakeview Avenue, South Lake Tahoe, California, Assessor's Parcel Number (APN) 026-280-007, TRPA File Number ERSP2018-1042

Proposed Action: Hearings Officer action on the proposed project based on this staff summary, required findings (Attachment A), and subject to the conditions contained in the Draft Permit (Attachment B).

Summary and Staff Recommendation:
The applicant (Al Tahoe Lakeview Townhouses) is proposing to replace a failing concrete shorezone wall with a new steel sheet pile wall adjacent to 953 Lakeview Avenue, South Lake Tahoe, California. Staff recommends that the Hearings Officer make the required findings and approve the proposed project.

Project Description: The applicant (Al Tahoe Lakeview Townhouses) is proposing to replace a failing concrete shorezone wall with a new steel sheet pile wall adjacent to 953 Lakeview Avenue, South Lake Tahoe, California. Sections of the existing concrete wall have collapsed, the foundation of the wall is failing, and the material supporting the concrete surface is starting to erode. The existing concrete structure is in a City of South Lake Tahoe public access easement as well as the California State Lands Commission (CSLC) public trust access easement. The proposed new sheet pile wall will be located outside of the City's public access easement and the public trust access easement. Because of these easements, no sloping rock revetment is proposed lakeward of the steel sheet pile wall. A new concrete landing will be constructed above the High Water Mark and will connect to an existing wood pier. No other improvements are proposed. The new sheet pile wall will be installed via a barge to prevent disturbance to the shorezone and upland portion of the property.

The property is located in the Al Tahoe Plan Area Statement. The Land Use Classification is Residential. The proposed shorezone protective structure will be accessory to the primary residential use. Shorezone protective structures are identified as a special use and therefore requires Hearing Officer review in accordance with Chapter 2, Subsection 2.2.2, of the TRPA Code.

Shoreline Review Committee: The Tahoe Regional Planning Agency (TRPA) facilitates monthly Shoreline Review Committee (SRC) meetings for agencies with permitting jurisdiction along the shoreline and within Lake Tahoe to coordinate the permitting of projects. The subject project was reviewed and discussed at a SRC meeting on December 15, 2022. The discussion is summarized below:

> The original proposal was modified to get everything out of the City of South Lake Tahoe's public access easement. The current plans are reflective of a resolution with the City of South Lake Tahoe.

Removing the wall from the City's access easement makes a sloping revetment infeasible, so a vertical wall is proposed. In addition to TRPA, the project requires approval by the California State Lands Commission, the Lahontan Regional Water Quality Control Board, the Army Corps of Engineers, and the California Department of Fish and Wildlife. There are aquatic invasive species (AIS) plants in this area. The materials and equipment will need to be inspected before and after construction.

City of South Lake Tahoe Development Review Team (DRT): On January 26, 2023, TRPA reviewed the project with City staff at a DRT meeting. City staff is satisfied with the current proposal.

California State Lands Commission (CSLC): CSLC submitted a letter, dated January 9, 2023, confirming that the proposed sheet pile wall will not encroach into the public trust access easement. The letter is provided as Attachment E.

Shorezone Tolerance District/Construction Methodology: The site is mapped as Shorezone Tolerance District 4, which exhibits volcanic rock shorelines with moderate potential for erosion.

The following development standard is applicable to Shorezone Tolerance District 4:

A. Permitted development or continued use maybe conditioned upon installation and maintenance of vegetation to stabilized backshore areas and protect existing cliffs from accelerated erosion.

B. Projects shall not be permitted in the backshore unless TRPA finds that such project is unlikely to require the cliff area to be mechanically stabilized or that the project will not accelerate cliff crumbling, beach loss or erosion.

C. Access to the shoreline shall be restricted to stabilized access ways which minimize the impact to the backshore.

D. Access to buoys shall be designed to cause the least possible environmental harm to the foreshore and backshore.

E. Access to piers, floating platforms and boat ramps shall be designed to cause the least possible alteration to the natural backshore.

Littoral Drift Analysis: A Littoral Drift Analysis was prepared for the project by Reno Tahoe Geo Associates, Inc. The finding in the Analysis is that the proposed project's impact on littoral drift will be minor to negligible and the recommendation is that the project should be approved. The Littoral Drift Letter, dated January 23, 2023, is provided as Attachment F.

Environmental Documentation: The applicant completed an Initial Environmental Checklist (IEC) and TRPA staff completed the Project Review Conformance Checklist and Article V (g) Findings in order to assess the potential environmental impacts of the project. No significant environmental impacts were identified, and staff has concluded that the project will not have a significant adverse effect on the environment. The IEC and V(g) Findings are provided as Attachments G and H, respectively.

Required Actions: Staff recommends that the Hearings Officer take the following actions, based on this staff summary and evidence in the record:

1. Approve the findings contained in this staff summary, and a finding of no significant environmental effect (Attachment A).

2. Approve the project, based on the staff summary, and record evidence, subject to the conditions contained in the attached Draft Permit (Attachment B).

Contact Information: If you have any questions, please contact Brandy McMahon, AICP, Local Government Coordinator, at (775) 589-5274 or bmcmahon@trpa.gov.

Attachments:

A. Required Findings
B. Draft Permit
C. Site Photographs
D. Project Plan
E. California State Lands Commission Letter
F. Littoral Drift Analysis
G. Initial Environmental Checklist
H. V(g) Checklist

Attachment A

Required Findings

Required Findings

The following is a list of the required findings as set forth in Chapters 4, 21, 80, 81, 84, and 85 of the TRPA Code. Following each finding, Agency staff has indicated if there is sufficient evidence contained in the record to make the applicable findings or has briefly summarized the evidence on which the finding can be made.

1. Chapter 4 – Required Findings:

   (a) The project is consistent with and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, Plan Area Statements and maps, the Code and other TRPA plans and programs.

   There is no evidence in the file or record showing that the proposed project will have an adverse effect on the Land Use, Transportation, Conservation, Recreation, Scenic Quality Public Service and Facilities, or Implementation sub-elements of the Regional Plan. The proposed project has been designed to comply with the Al Tahoe Plan Area Statement and TRPA Code requirements.

   (b) The project will not cause the environmental threshold carrying capacities to be exceeded.

   TRPA staff has completed the "Project Review Conformance Checklist and Article V (g) Findings" in accordance with Section 4.4.2 of the TRPA Code of Ordinances. All responses contained on said checklist indicate compliance with the environmental threshold carrying capacities. Also, the applicant has completed an Initial Environmental Checklist (IEC) which was reviewed by TRPA staff. No significant environmental impacts were identified, and staff has concluded that the project will not have a significant effect on the environment.

   (c) Wherever federal, state, or local air and water quality standards apply for the Region, the strictest standards shall be attained, maintained, or exceeded pursuant to Article V (d) of the TPRA Compact.

   The project, as conditioned, will comply with all applicable air and water quality standards for the region. The project as designed will enhance water quality values through improved shoreline stability and reduced erosion.

2. Chapters 21 and 81 – Special Use Findings.

   (a) The project, and the related use, is of such a nature, scale, density, intensity and type to be appropriate for the project area, and the surrounding area.

   The property is located in the Al Tahoe Plan Area Statement. The Land Use Classification is Residential. The proposed shorezone protective structure will be accessory to the primary residential use. The proposed new steel sheet pile wall will

replace an existing concrete wall that is failing. The proposed project is an appropriate use for the project area.

(b) The project, and the related use, will not injure or disturb the health, safety, environmental quality, enjoyment of property, or general welfare of persons or property in the neighborhood, or in the region.

The project as designed will inhibit further erosion which will benefit on and off-site environmental conditions. The proposed project will not injure or disturb the health, safety, environmental quality, enjoyment of property, or general welfare of persons or property in the neighborhood, or in the region.

(c) The project, and the related use, will not change the character of the neighborhood, detrimentally affect or alter the purpose of any applicable plan area statement, community, redevelopment, specific, or master plan.

The proposed improvements are consistent with the configuration, size and location of the previously existing deteriorating shorezone protective structure and is in keeping with the general character of the shoreline. The project is not expected to affect or change the character of the neighborhood and does not affect or alter the purpose of the applicable plan area statement which lists shorezone protective structures as a special use. The project as designed and conditioned is compatible with, and will not adversely affect, the residential character of the surrounding neighborhood.

4. Chapter 80 – Shorezone Findings:

(a) Significant Harm: The project will not adversely impact littoral processes, fish spawning habitat, backshore stability, or on-shore wildlife habitat, including waterfowl nesting areas.

The proposed shorezone protective treatment is designed to protect the shorezone from the continued effects of erosion and therefore will not have negative effects on wildlife habitat. There are no known waterfowl nesting areas in the area and the area is no fish spawning habitat. The project will include the use of temporary BMPs as necessary to protect water quality.

(b) Accessory Facilities: There are sufficient accessory facilities to accommodate the project.

The property is located in the Al Tahoe Plan Area Statement. The Land Use Classification is Residential. The proposed shorezone protective structure will be accessory to the primary residential use. The proposed new sheet pile wall will be located outside of the City's public access easement and the public trust. A new concrete landing will be constructed above the High Water Mark and will connect to the existing wood pier.

(c) Compatibility: The project is compatible with existing shorezone and lakezone uses or structures on, or in the immediate vicinity of, the littoral parcel; or that modifications of such existing uses or structures will be undertaken to assure compatibility.

Shorezone protective structures are special uses in the applicable plan area. The design of the project will ensure access along the shoreline is maintained. The proposed steel sheet pile wall will replace and an existing failing concrete wall.

(d) Use: The use proposed in the foreshore or nearshore is water dependent.

The proposed project will address the effects of soil erosion and wave erosion. The design is water dependent.

(e) Hazardous Materials: Measures will be taken to prevent spills or discharges of hazardous materials.

Hazardous materials will not be used during construction. As a condition of final permit approval, the permittee shall provide an emergency spill prevention plan to be implemented for any emergency associated with leaking equipment.

(f) Construction: Construction and access techniques will be used to minimize disturbance to the ground and vegetation.

A construction methodology is required to be submitted prior to construction to ensure construction and access techniques will be used to minimize disturbance to the ground and vegetation. The new steel sheet pile wall will be installed via a barge to prevent disturbance to the shoreline and upland portion of the property. All construction wastes will be collected and disposed of at the nearest approved dumpster or sanitary landfill site.

(g) Navigation and Safety: The project will not adversely impact navigation or create a threat to public safety as determined by those agencies with jurisdiction over a lake's navigable waters.

The proposed project will not adversely impact navigation or create a threat to public safety.

(h) Other Agency Comments: TRPA has solicited comments from those public agencies having jurisdiction over the nearshore and foreshore and all such comments received were considered by TRPA, prior to action being taken on the project.

TRPA solicited comments from those public agencies having jurisdiction over the nearshore and foreshore at the SRC meeting on December 15, 2022. Comments received from other permitting agencies are summarized above and have been taken into consideration.

5. Chapter 84 - Shorezone Protective Structure Findings:

(a) Structures in the backshore or environmental threshold values will be enhanced by the construction and maintenance of the protective structures.

The proposed improvements will limit lakeshore erosion, dissipate wave energy, and decrease sediment entering Lake Tahoe.

(b) The protection of structures in the backshore or the enhancement of environmental threshold values more than offset the adverse environmental effects of the construction and maintenance of the shoreline protective structures.

The proposed shorezone protective structure will stabilize the shoreline that has experienced erosion due to wave action. The goals of the project are to increase shoreline stability that will minimize erosion and sediment transport into the lake.

(c) Each protective structure has been designed to be sloping and permeable; provided, however, that this finding is not necessary if TRPA concurrently makes the findings required under subparagraph 84.7.1.B.

The proposed new sheet pile wall will be located outside of the City's public access easement and the public trust access easement. Because of these easements, no sloping rock revetment is proposed lakeward of the new steel sheet pile wall. TRPA has made the finding required under subparagraph 84.7.1.B below.

(d) Each protective structure has been designed so that backshore erosion on adjacent properties will not be accelerated as a result of the erection of the protective structure.

A Littoral Drift Analysis was prepared for the project by Reno Tahoe Geo Associates, Inc. The finding in the letter is that the proposed project's impact on littoral drift will be minor to negligible and the recommendation is that the project should be approved.

Development Standards (84.7.1.B)

1. Sloping permeable revetments are the preferred design for shoreline protective structures. Bulk heads, gabions, and other vertical revetments shall not be permitted unless, in addition to the findings required above, TRPA finds that;

   (a) A sloping permeable revetment is not feasible; and

   (b) The alternative structure will not cause significant erosion or modification of the foreshore.

   The proposed new sheet pile wall will be located outside of the City's public access easement and the public trust access easement. Because of these easements, no sloping rock revetment is proposed lakeward of the new steel sheet pile wall. A Littoral Drift Analysis was prepared for the project by Reno Tahoe Geo Associates, Inc. The finding in the Analysis is that the proposed project's impact on littoral drift will be minor to negligible and the recommendation is that the project should be approved.

2. Where a shoreline protective structure is necessary, it shall be of sufficient strength and depth to prevent movement of backfill materials into lake waters; and

The proposed wall has been designed to prevent movement of backfill materials into lake waters.

3. Shoreline protective structures shall be constructed of natural materials to blend with the surrounding backshore or, if man-made materials are necessary, will be of earthtone colors.

The draft permit includes a condition that the wall be of earthtone colors.

6. Chapter 85 - Findings for Erosion Control and Similar Projects:

(a) The project, program, or facility is necessary for environmental protection.

The applicant proposes to construct a shorezone protective structure to stabilize the shoreline that has experienced erosion due to wave action.

(b) There is no reasonable alternative, which avoids or reduces the extent of encroachment in the backshore.

The proposed project will address erosion within the backshore and thus encroachment into the backshore cannot be avoided. The project design and construction methodology prescribe the minimum encroachment necessary to inhibit further degradation of the backshore. Without this work, erosion will continue.

Attachment B

Draft Permit

Draft Permit

PROJECT DESCRIPTION: Al Tahoe Lakeview Townhouses Shorezone Protective Structure

APN: 026-280-007 PERMITTEE: Al Tahoe Lakeview Townhouses

FILE #: ERSP2018-1042 CITY/LOCATION: South Lake Tahoe/953 Lakeview Ave.

Having made the findings required by Agency ordinances and rules, the TRPA Hearings Officer approved the project on _____, 2023, subject to the standard conditions of approval attached hereto (Attachments Q and S) and the special conditions found in this permit.

This permit shall expire on _____, 2026, without further notice unless the construction has commenced prior to this date and diligently pursued thereafter. Diligent pursuit is defined as completion of the project within the approved construction schedule. The expiration date shall not be extended unless the project is determined by TRPA to be the subject of legal action, which delayed or rendered impossible the diligent pursuit of the permit.

NO DEMOLITION, CONSTRUCTION OR GRADING SHALL COMMENCE UNTIL:

(1) TRPA RECEIVES A COPY OF THIS PERMIT UPON WHICH THE PERMITTEE(S) HAS ACKNOWLEDGED RECEIPT OF THE PERMIT AND ACCEPTANCE OF THE CONTENTS OF THE PERMIT;

(2) ALL PRE-CONSTRUCTION CONDITIONS OF APPROVAL ARE SATISFIED AS EVIDENCED BY TRPA'S ACKNOWLEDGEMENT OF THIS PERMIT;

(3) THE PERMITTEE OBTAINS APPROPRIATE COUNTY PERMIT. TRPA'S ACKNOWLEDGEMENT MAY BE NECESSARY TO OBTAIN A CITY PERMIT. THE CITY PERMIT AND THE TRPA PERMIT ARE INDEPENDENT OF EACH OTHER AND MAY HAVE DIFFERENT EXPIRATION DATES AND RULES REGARDING EXTENSIONS; AND

(4) A TRPA PRE-GRADING INSPECTION HAS BEEN CONDUCTED WITH THE PROPERTY OWNER AND/OR THE CONTRACTOR.

_____ _____

TRPA Executive Director/Designee Date

PERMITTEES' ACCEPTANCE: I have read the permit and the conditions of approval and understand and accept them. I also understand that I am responsible for compliance with all the conditions of the permit and am responsible for my agents' and employees' compliance with the permit conditions. I also understand that if the property is sold, I remain liable for the permit conditions until or unless the new owner acknowledges the transfer of the permit and notifies TRPA in writing of such acceptance. I also understand that certain mitigation fees associated with this permit are non-refundable once paid to TRPA. I understand that it is my sole responsibility to obtain any and all required approvals from any other state, local or federal agencies that may have jurisdiction over this project whether or not they are listed in this permit.

Signature of permittee(s) _____ Date_____

(PERMIT CONTINUED ON NEXT PAGE)

APN 026-280-007

FILE NO. ERSP2018-1042

Security Posted (1): Amount $5,000 Paid _____ Receipt No._____

Excess coverage mitigation fee (2): Amount $_____ Paid _____ Receipt No._____

Security Administrative Fee (3): Amount $_____ Paid _____ Receipt No._____

Notes:

(1) See Special Condition 3.C, below.
(2) See Special Condition 3.D, below.
(3) See TRPA Filing Fee Schedule.

Required plans determined to be in conformance with approval: Date: _____

TRPA ACKNOWLEDGEMENT: The permittee has complied with all pre-construction conditions of approval as of this date:

_____ _____

TRPA Executive Director/Designee Date

SPECIAL CONDITIONS

1. This permit authorizes the applicant (Al Tahoe Lakeview Townhouses) to replace a failing concrete shorezone wall with a new steel sheet pile wall adjacent to Lake Tahoe and 953 Lakeview Avenue, South Lake Tahoe, California. The proposed new sheet pile wall will be located outside of the City of South Lake Tahoe's public access easement and the public trust access easement. Because of these easements, no sloping rock revetment is proposed lakeward of the new steel sheet pile wall. A new concrete landing will also be constructed above the High Water Mark and will connect to the existing wood pier. No other improvements are proposed. The new steel sheet pile wall will be installed via a barge to prevent disturbance to the shorezone and upland portion of the property.

2. The Standard Conditions of Approval listed in Attachments Q and S shall apply to this permit.

3. Prior to permit acknowledgement, the following conditions of approval must be satisfied:

   A. The permittee shall submit a final construction sequence and methodology plan for TRPA review and approval.

   B. The permittee shall provide an emergency spill prevention plan to be implemented for emergencies associated with leaking construction equipment. The Plan shall require absorbent sheets/pads to be available within the project area. A contact list of all emergency response agencies shall always be available at the project site during construction.

C. The security required under Standard Condition I.B. of Attachment Q shall be $5,000. The security shall not be released until TRPA determines the project was constructed and all required water quality BMPs are installed in accordance with the permit.

D. The affected property has 2,487 square feet of excess land coverage (2,527 square feet of excess coverage – 40 square feet of previously mitigated excess coverage under permit 990783). The permittee shall mitigate a portion or all of the excess land coverage on this property by removing coverage within Hydrologic Transfer Area 5 – South Stateline or in a different hydrologically related area provided the restoration occurs on more sensitive land than the project area or by submitting an excess coverage mitigation fee.

To calculate the amount of excess coverage to be removed, use the following formula:

Estimated project construction cost multiplied by the fee percentage of 1% (as identified in Table 30.6.1, Chapter 30 of the TRPA Code of Ordinances) divided by the mitigation factor of 8. If you choose this option, please revise your final site plans and land coverage calculations to account for the permanent coverage removal.

An excess land coverage mitigation fee may be paid in lieu of permanently retiring land coverage. The excess coverage mitigation fee shall be calculated as follows:

Coverage reduction square footage (as determined by formula above) multiplied by the coverage mitigation cost fee of $8.50 for projects within Hydrologic Transfer Area 5 – South Stateline. Please provide a construction cost estimate for the structural elements of the structure by your licensed contractor, architect or engineer. The structural elements include, without limitation: pier pilings, bracing and supports, bearing walls, rafters, foundations, and base materials under asphalt or concrete. In no case shall the mitigation fee be less than $200.00.

E. The coverage table on the plans shall be revised as follows:

1) The backshore base allowable coverage shall be reflected as 1% of the total area within the backshore (refer to File No. 990783).
2) The maximum base allowable coverage shall be shown as 4,415 square feet (refer to File No. 990783).
3) The total verified coverage shall be shown on the plans (refer to File No. 990783).
4) Banked land coverage shall be added to the plans.

F. The permittee shall provide a sample of the wall material. The wall shall be an earthone color.

G. The permittee shall have a Tahoe Yellow Cress (TYC) inspection completed by TRPA staff, or a qualified professional botanist approved by TRPA. Inspections occur from June 15 to September 30 of each year and are valid for construction commencing through the beginning of the next survey period. If the inspection reveals that the site contains TYC plants, the applicants shall submit a TYC Management Plan for the subject parcel. The protection plan shall include methods used during construction for protection of the species and the habitat,

monitoring during construction, and also protection measures to be utilized long term. Construction methods must include vegetation fencing to prevent vehicular disturbance, pedestrian disturbance and storage of equipment on the beach. Long-term protection measures may include limiting beach raking, limiting access to the population/habitat, and/or avoiding population disturbance.

H. The permittee shall email final construction drawings to TRPA.

4. All landscaping and native vegetation shall be maintained in perpetuity in a condition consistent with this approval. The use of fertilizer in the backshore is prohibited.

5. The project shall be constructed in accordance with the recommendations of the approved construction methodology plan.

6. To the maximum extent allowable by law, the Permittee agrees to indemnify, defend, and hold harmless TRPA, its Governing Board (including individual members), its Planning Commission (including individual members), its agents, and its employees (collectively, TRPA) from and against any and all suits, losses, damages, injuries, liabilities, and claims by any person (a) for any injury (including death) or damage to person or property or (b) to set aside, attack, void, modify, amend, or annul any actions of TRPA. The foregoing indemnity obligation applies, without limitation, to any and all suits, losses, damages, injuries, liabilities, and claims by any person from any cause whatsoever arising out of or in connection with either directly or indirectly, and in whole or in part (1) the processing, conditioning, issuance, administrative appeal, or implementation of this permit; (2) any failure to comply with all applicable laws and regulations; or (3) the design, installation, or operation of any improvements, regardless of whether the actions or omissions are alleged to be caused by TRPA or Permittee.

   Included within the Permittee's indemnity obligation set forth herein, the Permittee agrees to pay all fees of TRPA's attorneys and all other costs and expenses of defenses as they are incurred, including reimbursement of TRPA as necessary for any and all costs and/or fees incurred by TRPA for actions arising directly or indirectly from issuance or implementation of this permit. TRPA will have the sole and exclusive control (including the right to be represented by attorneys of TRPA's choosing) over the defense of any claims against TRPA and over their settlement, compromise, or other disposition. Permittee shall also pay all costs, including attorneys' fees, incurred by TRPA to enforce this indemnification agreement. If any judgment is rendered against TRPA in any action subject to this indemnification, the Permittee shall, at its expense, satisfy and discharge the same.

7. It is the permittee’s responsibility to receive authorization and/or obtain any necessary permits from other responsible agencies for the proposed project.

8. There are aquatic invasive species (AIS) plants in this area. The materials and equipment need to be inspected before and after construction.

9. Disturbance of lakebed materials and the removal of rock materials from Lake Tahoe is prohibited.

10. All rock material (gravel, cobble, and/or boulders) imported to the site for use in the shorezone

construction area shall be thoroughly washed and shall be free of any silt and clay material.

11. The discharge of petroleum products, construction waste and litter (including sawdust), or earthen materials to the surface waters of the Lake Tahoe Basin is prohibited. All surplus construction waste materials shall be removed from the project and deposited only at approved points of disposal.

12. Grading and excavation is prohibited at any time of the year during periods of precipitation and for the resulting period of time when the site is covered with snow or is saturated, muddy or unstable.

13. Any normal construction activities creating noise in excess to the TRPA noise standards shall be considered exempt from said standards provided all such work is conducted between the hours of 8:00 A.M. and 6:30 P.M.

14. The shorezone protective structure shall be maintained in a condition consistent with the approved project plans in perpetuity.

15. All excavated materials shall be hauled away from the site to a legally acceptable location.

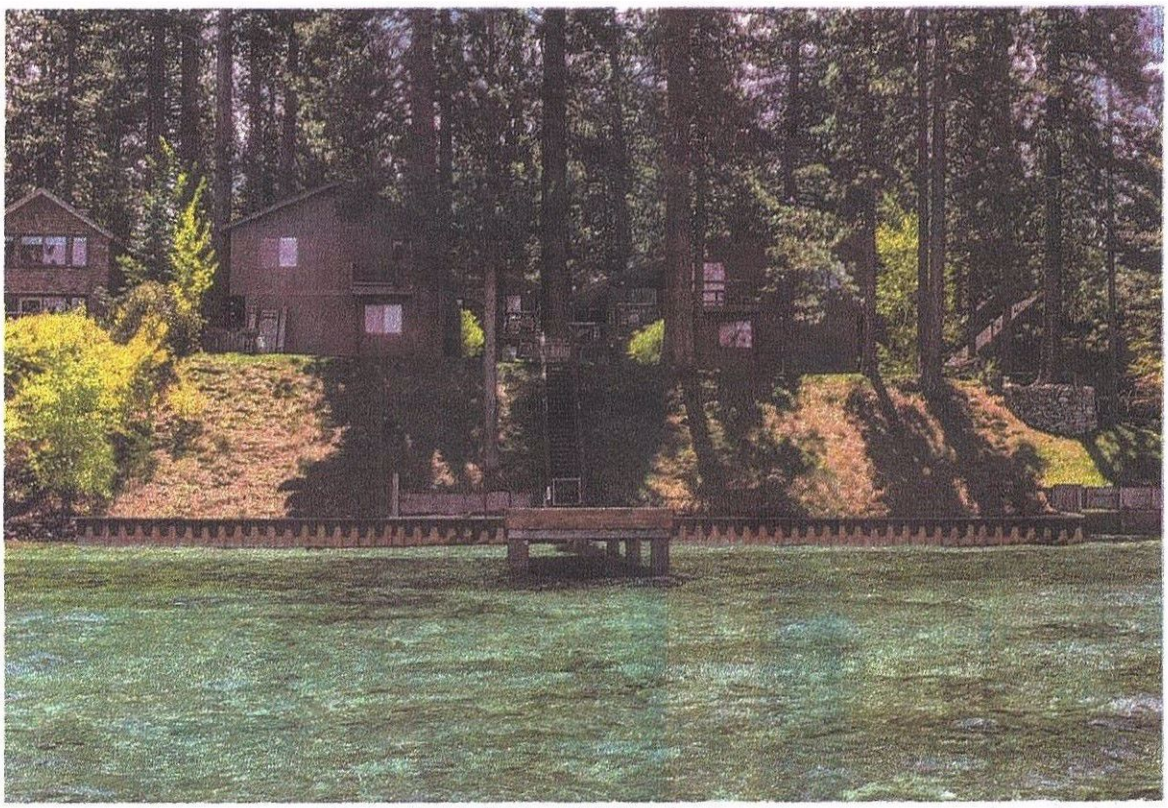
16. Any change to the project requires approval (except for TRPA exempt activities) of a TRPA plan revision permit prior to the changes being made to any element of the project (i.e. structural modifications, coverage, scenic, grading, BMPs, etc.). Failure to obtain prior approval for modifications may result in monetary penalties and removal of the unapproved elements.

END OF PERMIT

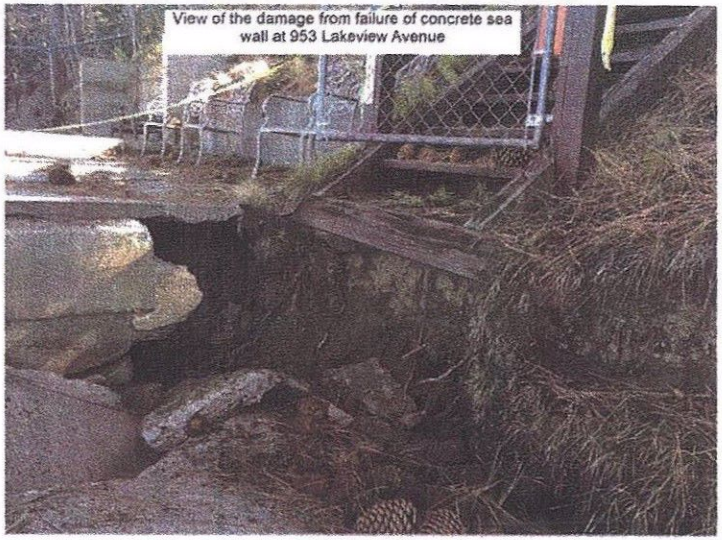
Attachment C

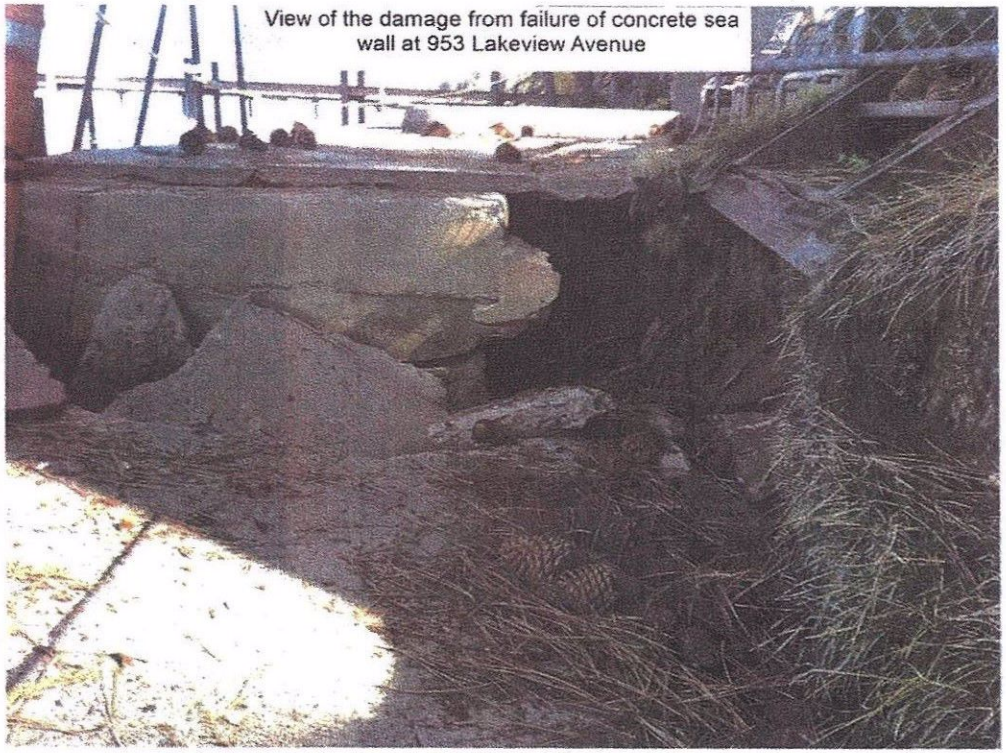
Site Photographs

Existing conditions at 953 Lakeview Avenue



Proposed conditions at 953 Lakeview Avenue


View of the damage from failure of concrete sea wall at 953 Lakeview Avenue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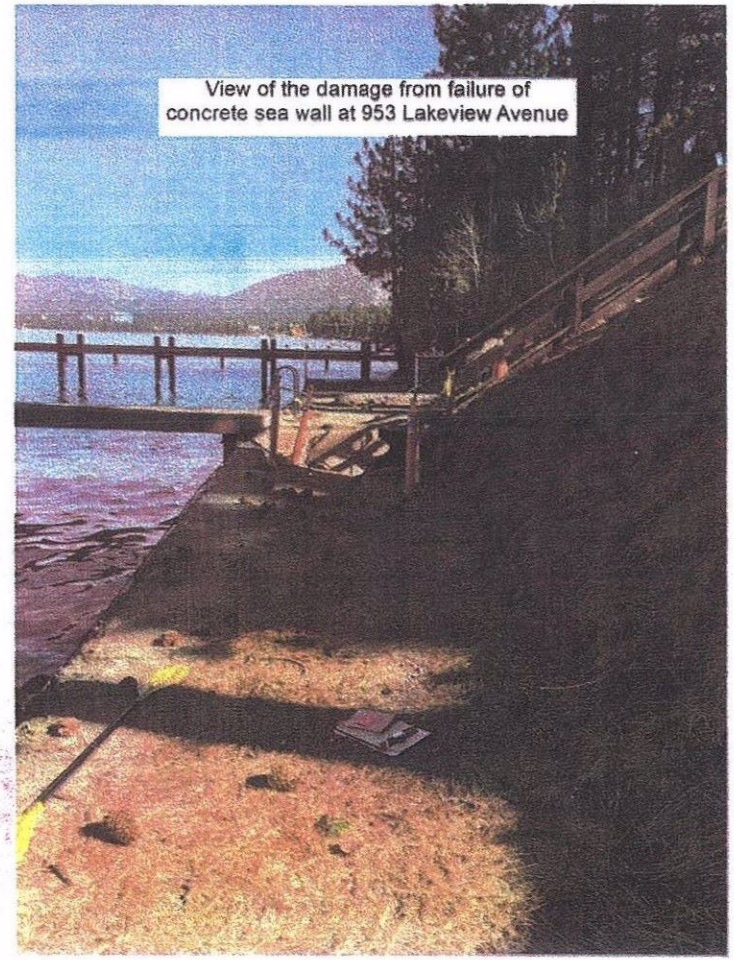
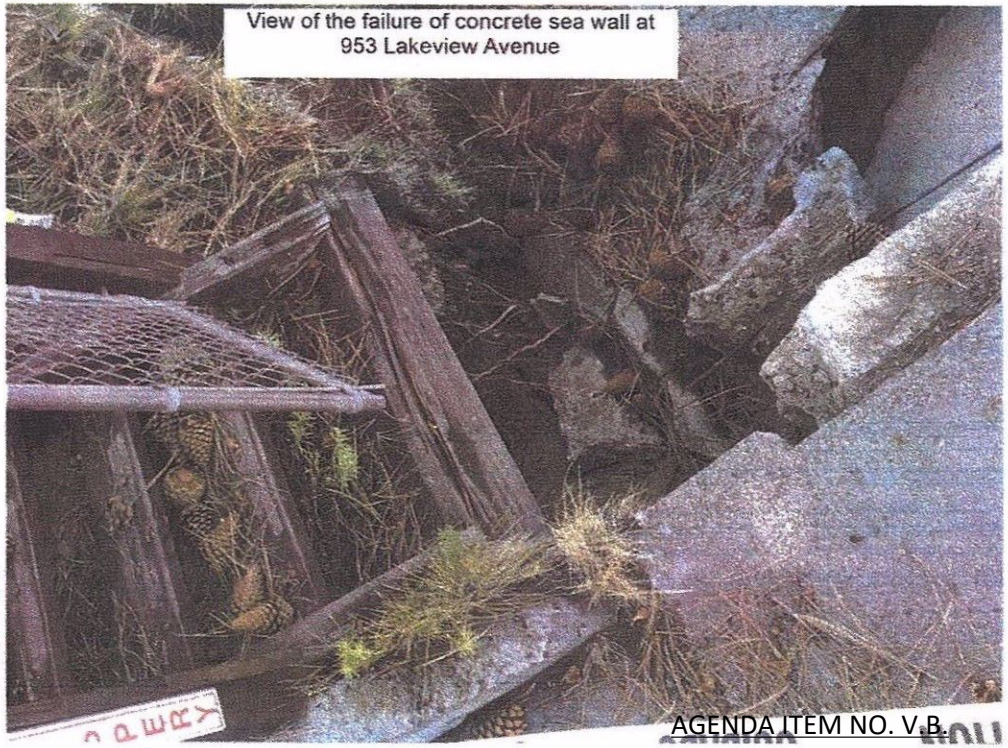
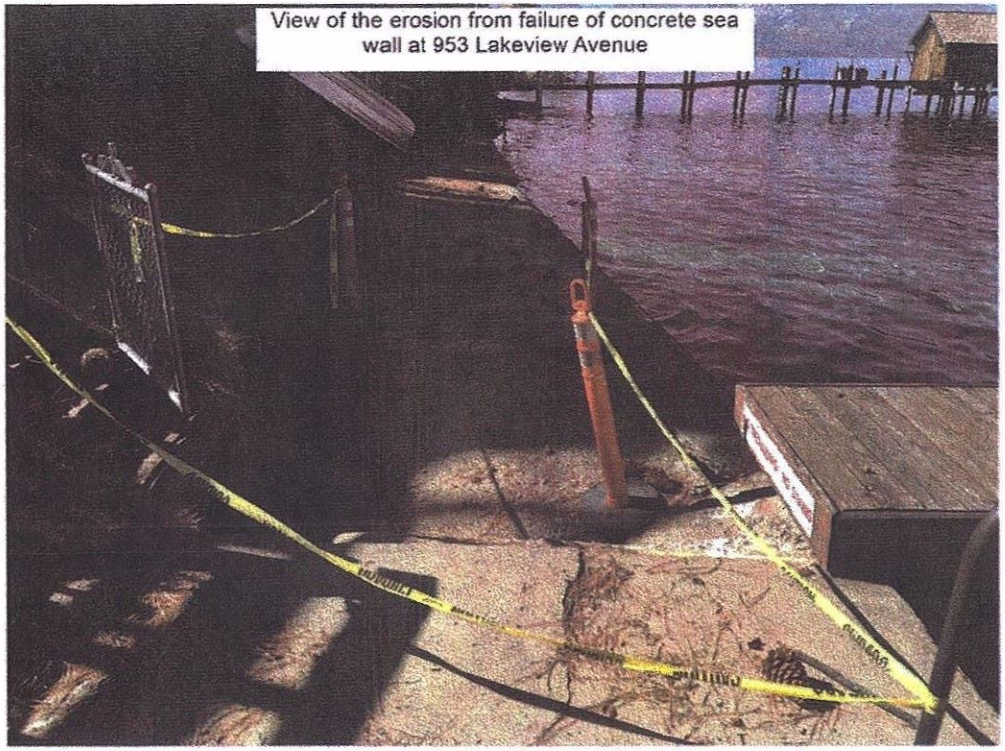
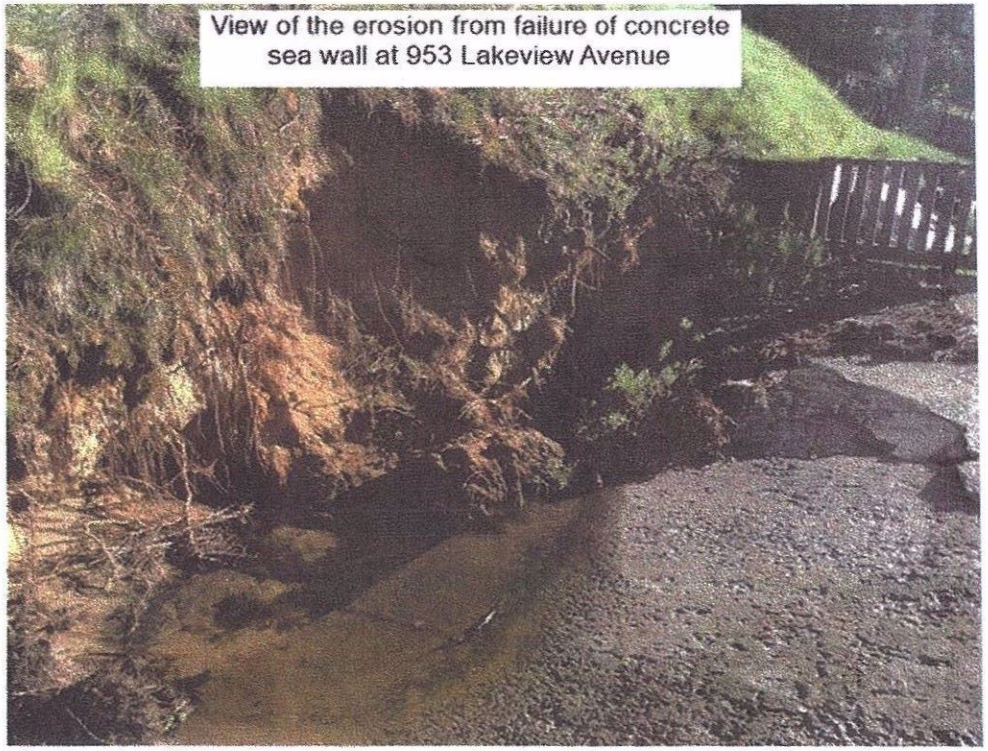
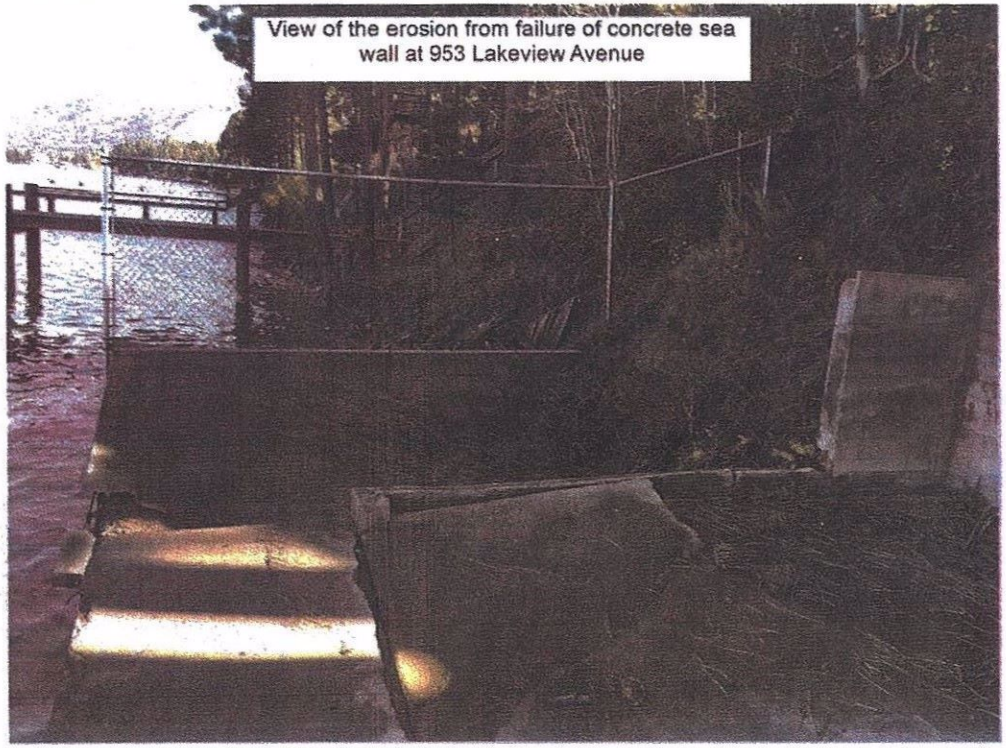
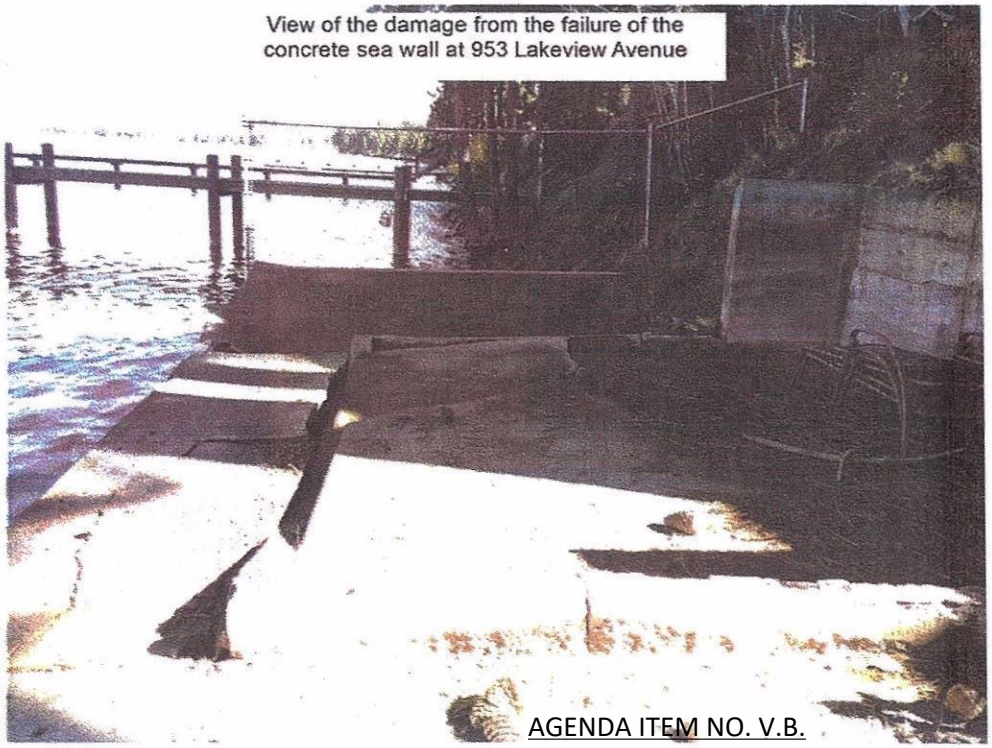

View of the damage from failure of concrete sea wall at 953 Lakeview Avenue

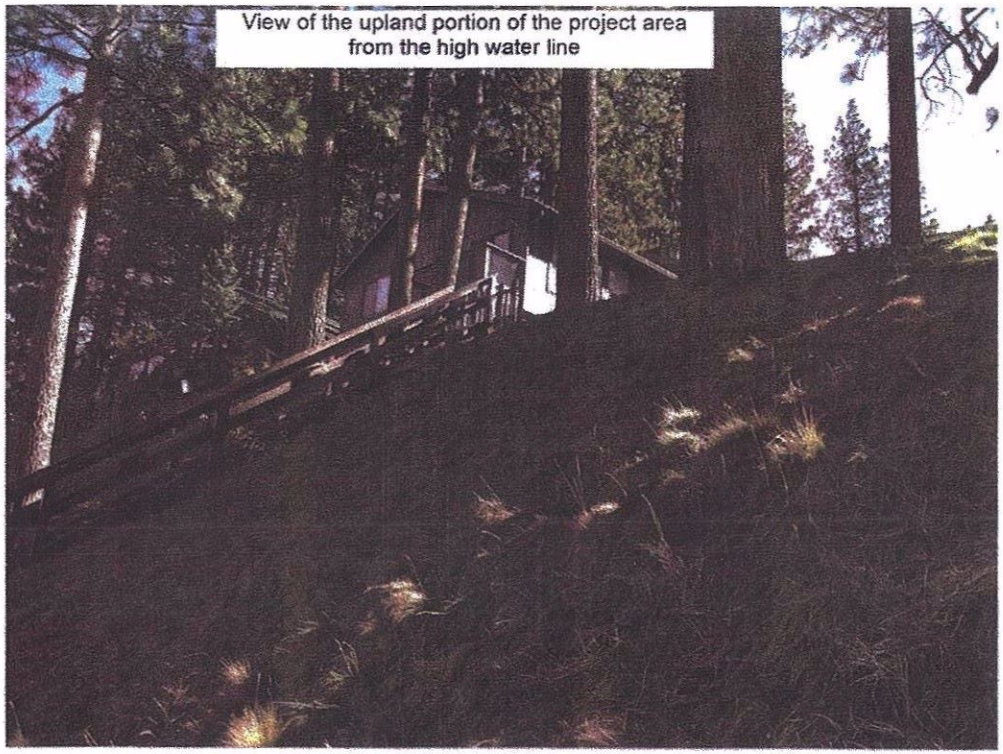

View of the failure of concrete sea wall at 953 Lakeview Avenue

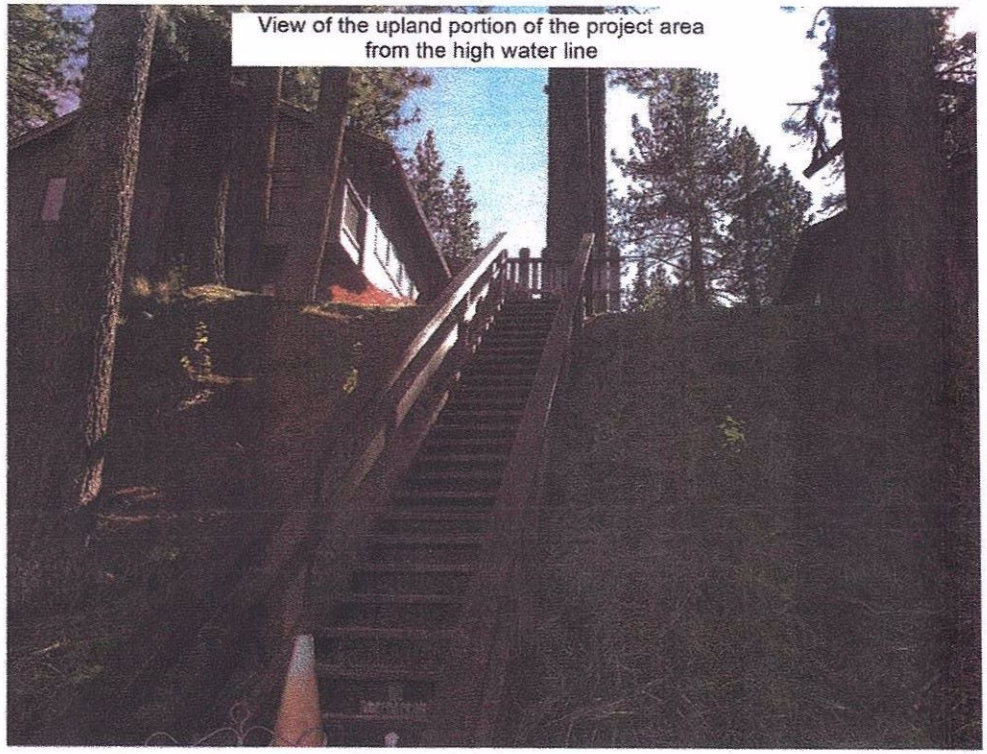

View of the erosion from failure of concrete sea wall at 953 Lakeview Avenue

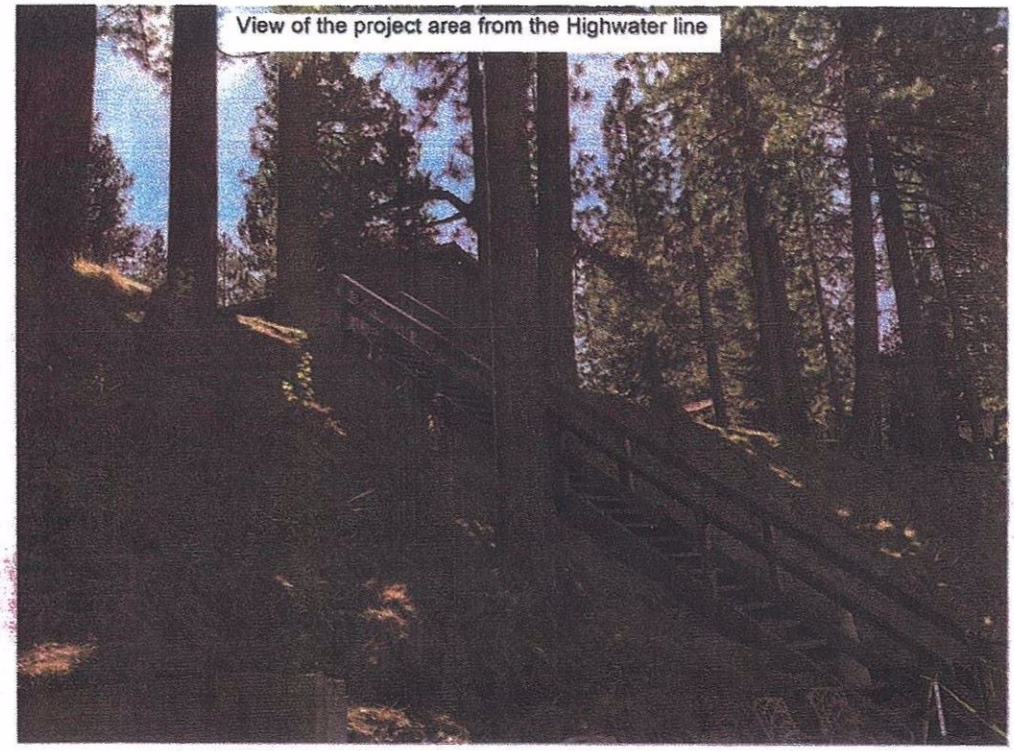

View of the erosion from failure of concrete sea wall at 953 Lakeview Avenue

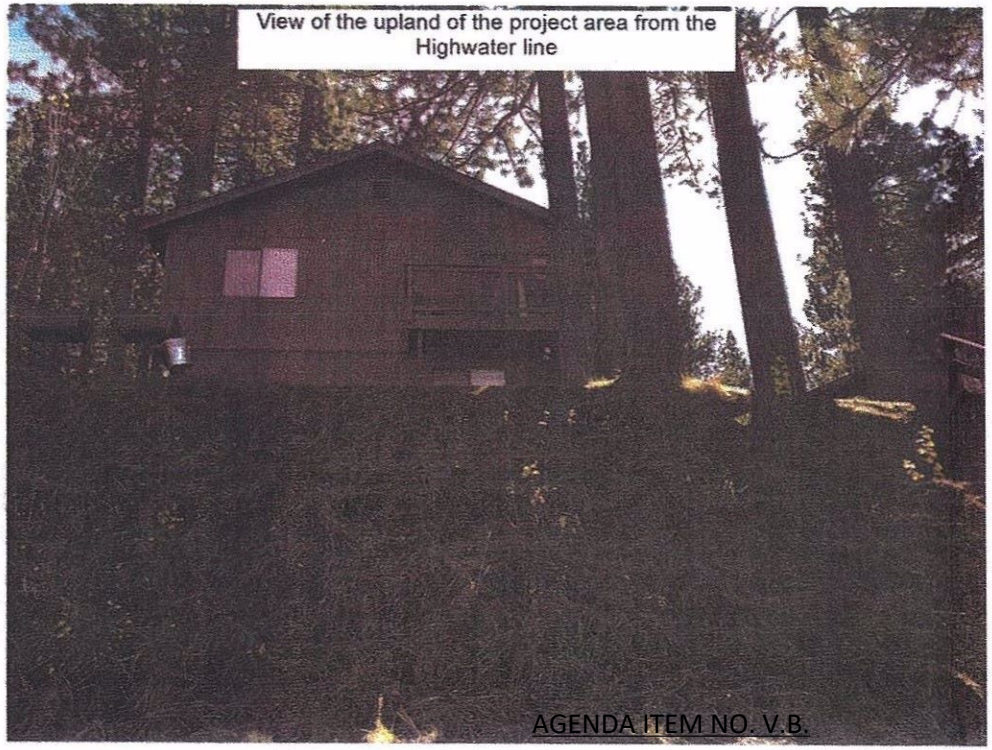

View of the erosion from failure of concrete sea wall at 953 Lakeview Avenue


View of the damage from the failure of the concrete sea wall at 953 Lakeview Avenue


View of the upland portion of the project area from the high water line


View of the upland portion of the project area from the high water line


View of the project area from the Highwater line


View of the upland of the project area from the Highwater line

View of the Al Tahoe Townhomes property from
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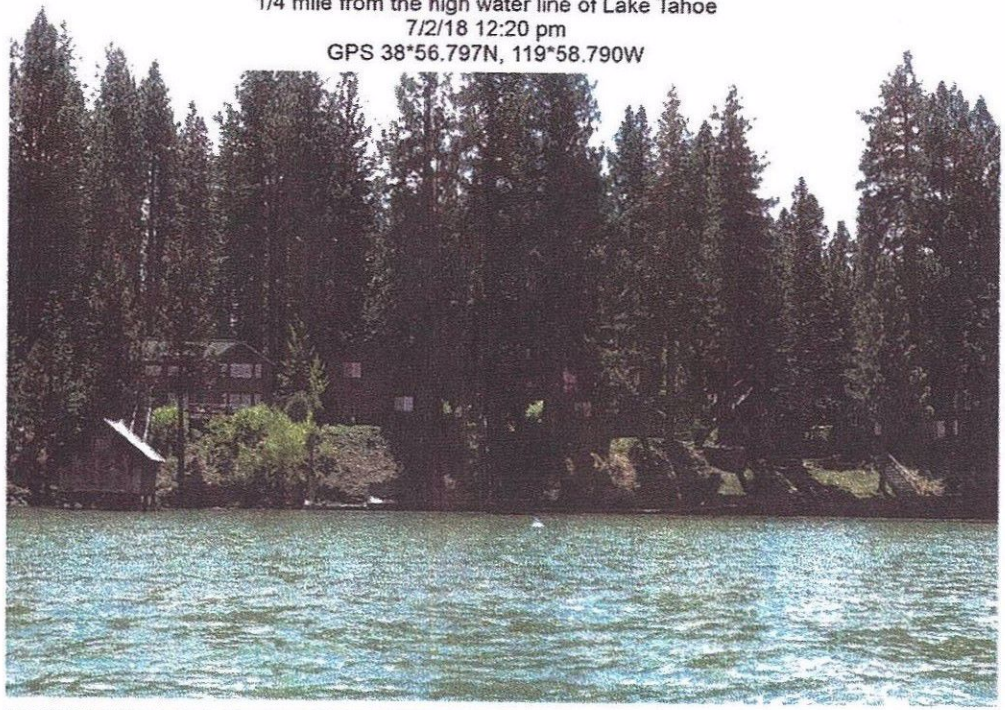
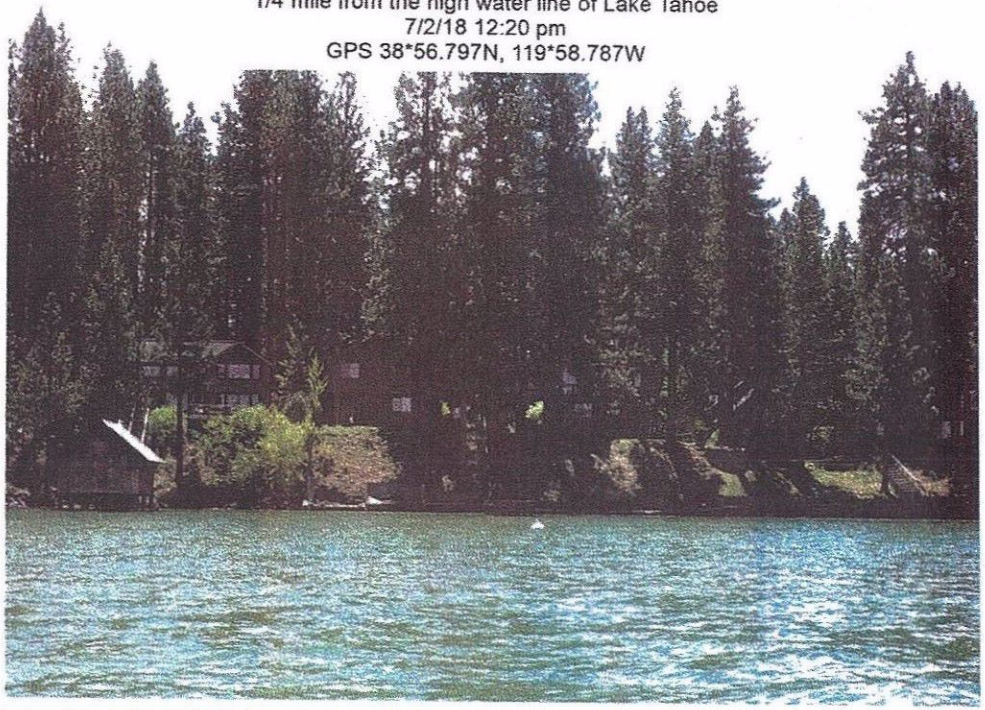
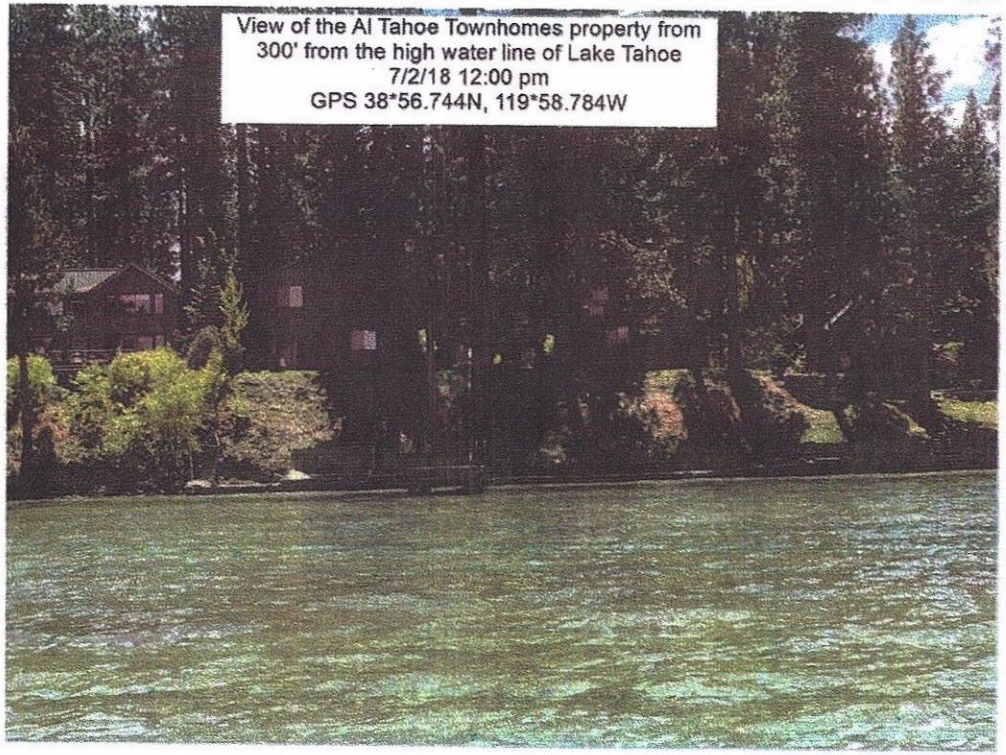
7/2/18 12:20 pm
GPS 38*56.797N, 119*58.790W



View of the Al Tahoe Townhomes property from
1/4 mile from the high water line of Lake Tahoe
7/2/18 12:20 pm
GPS 38*56.797N, 119*58.787W



View of the Al Tahoe Townhomes property from
300' from the high water line of Lake Tahoe
7/2/18 12:00 pm
GPS 38*56.744N, 119*58.784W



View of the Al Tahoe Townhomes property from
300' from the high water line of Lake Tahoe
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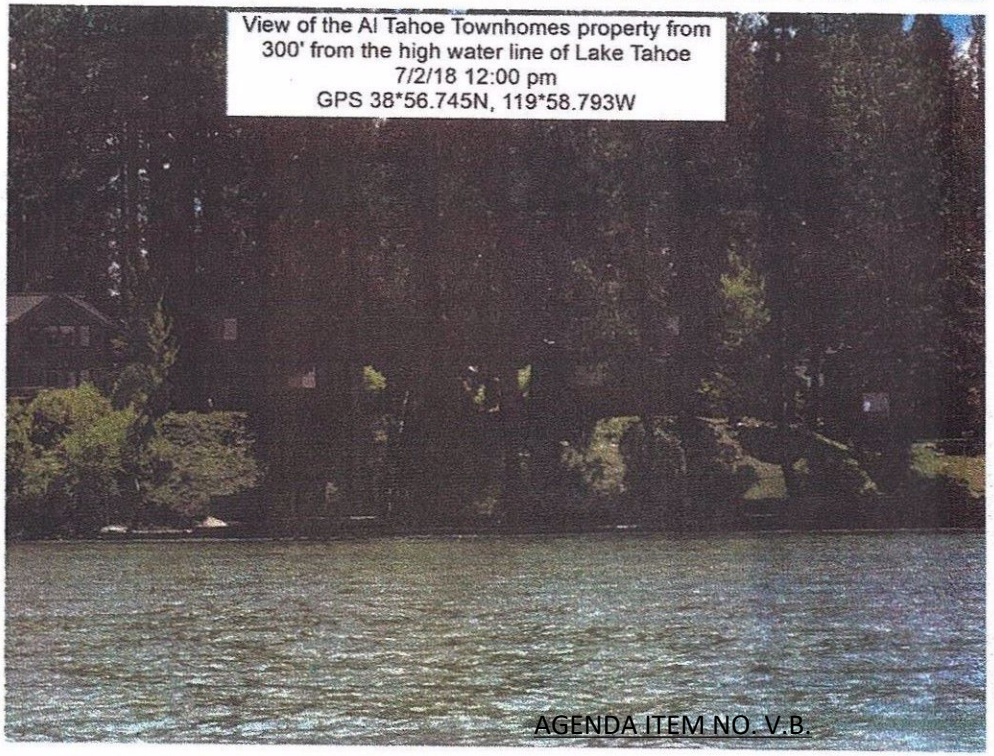
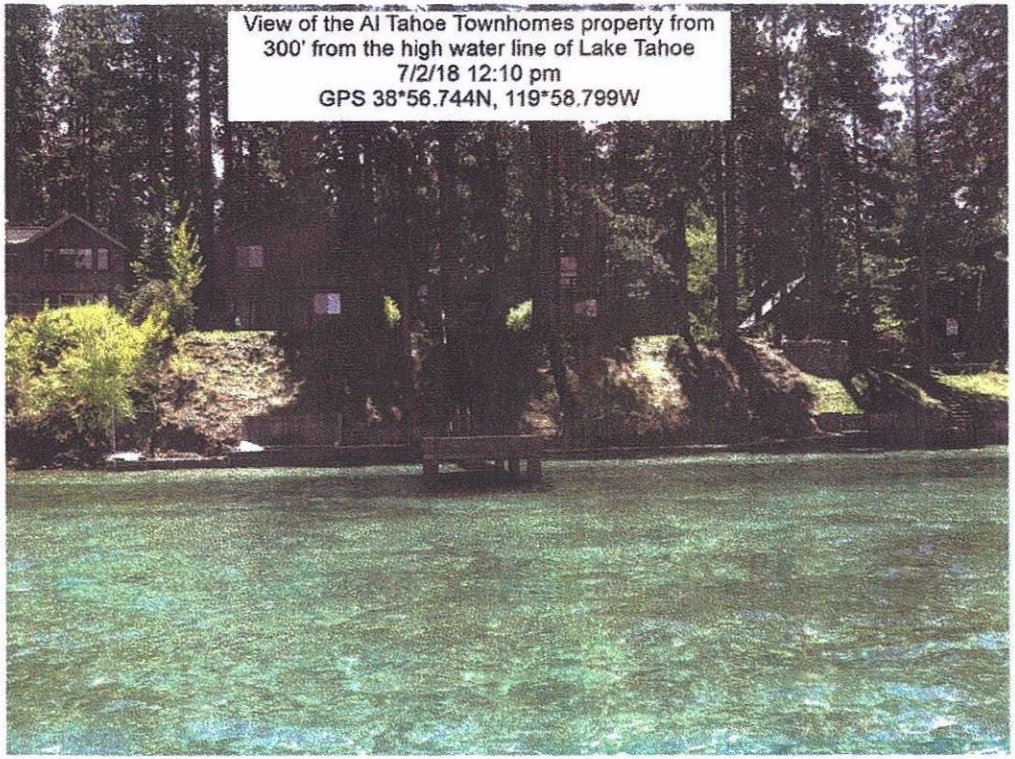
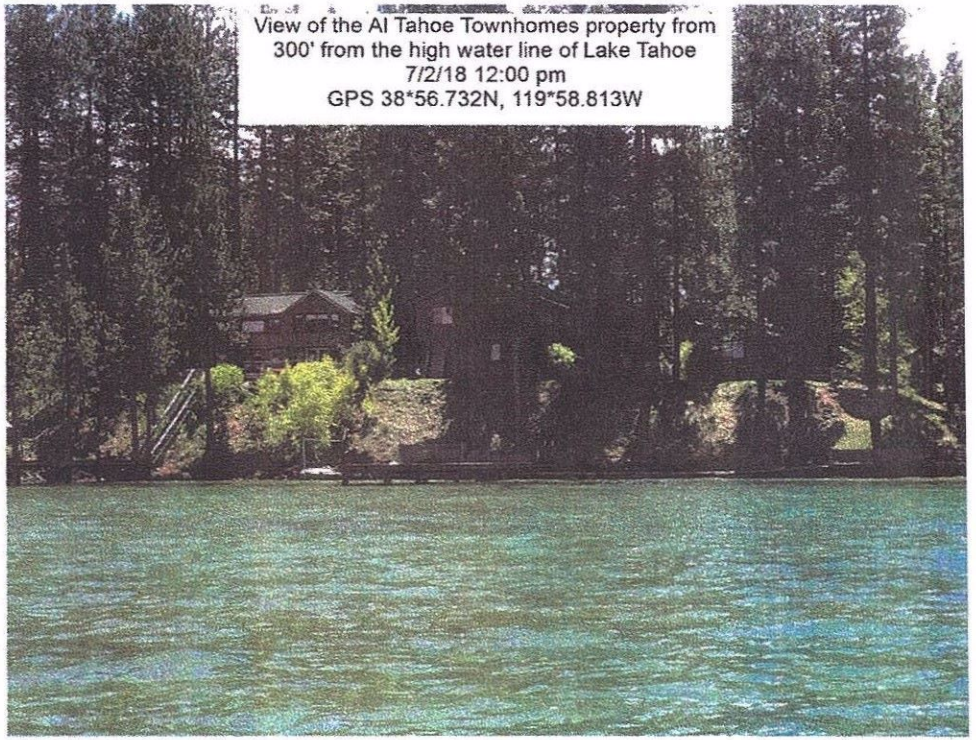



View of the Al Tahoe Townhomes property from
300' from the high water line of Lake Tahoe
7/2/18 12:10 pm
GPS 38*56.744N, 119*58.799W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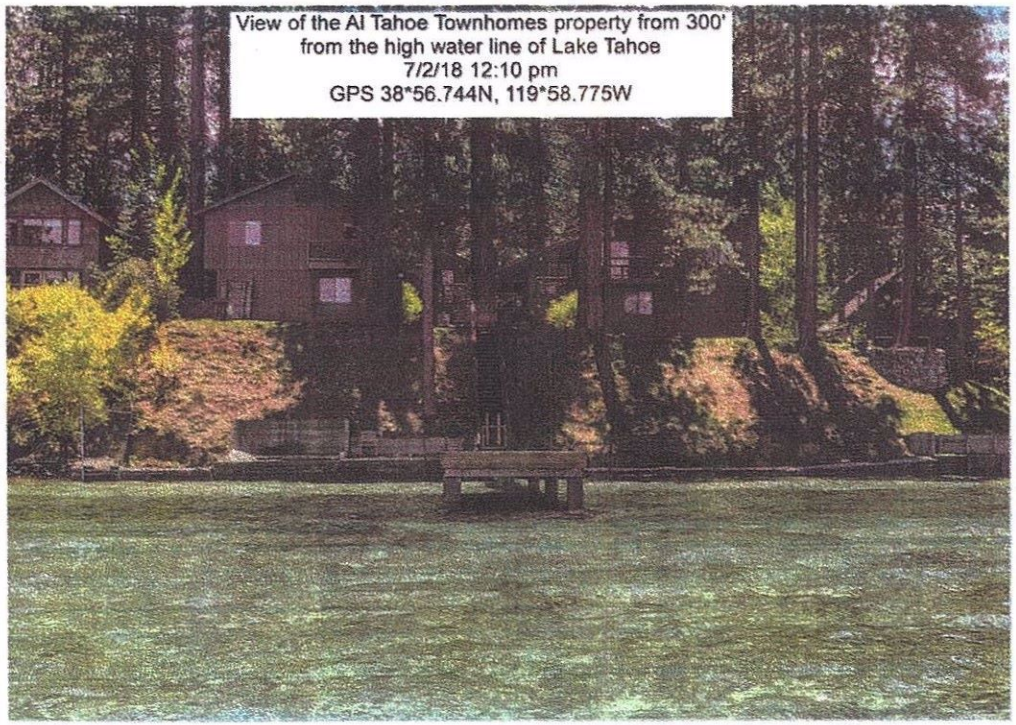
300' from the high water line of Lake Tahoe
7/2/18 12:00 pm
GPS 38*56.732N, 119*58.813W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from the high water line of Lake Tahoe
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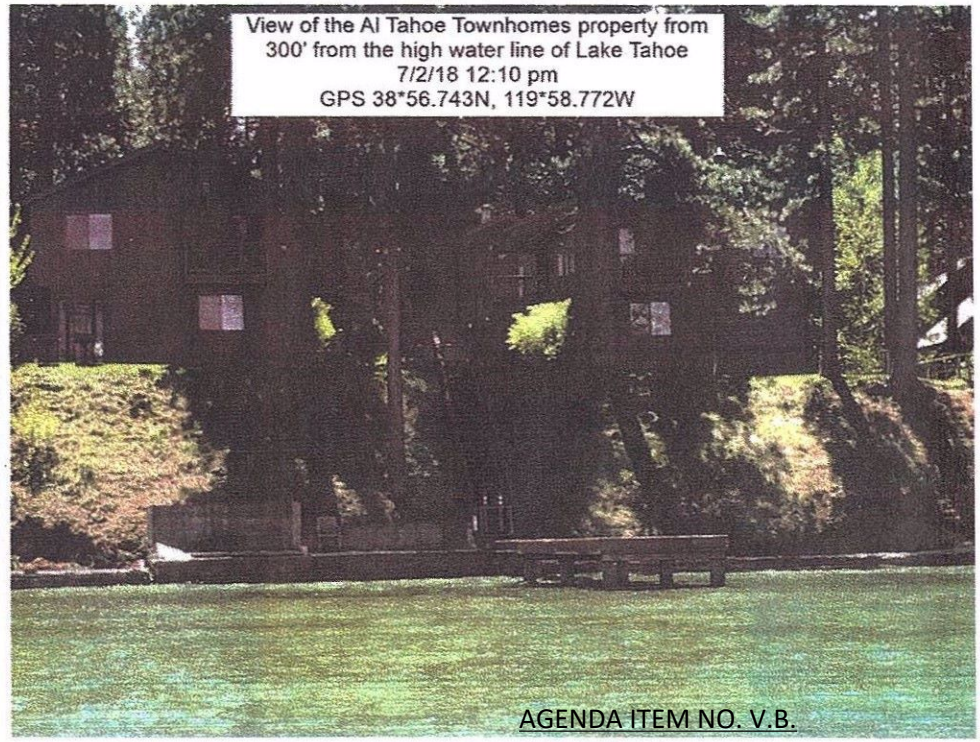
View of the Al Tahoe Townhomes property from
300' from the high water line of Lake Tahoe
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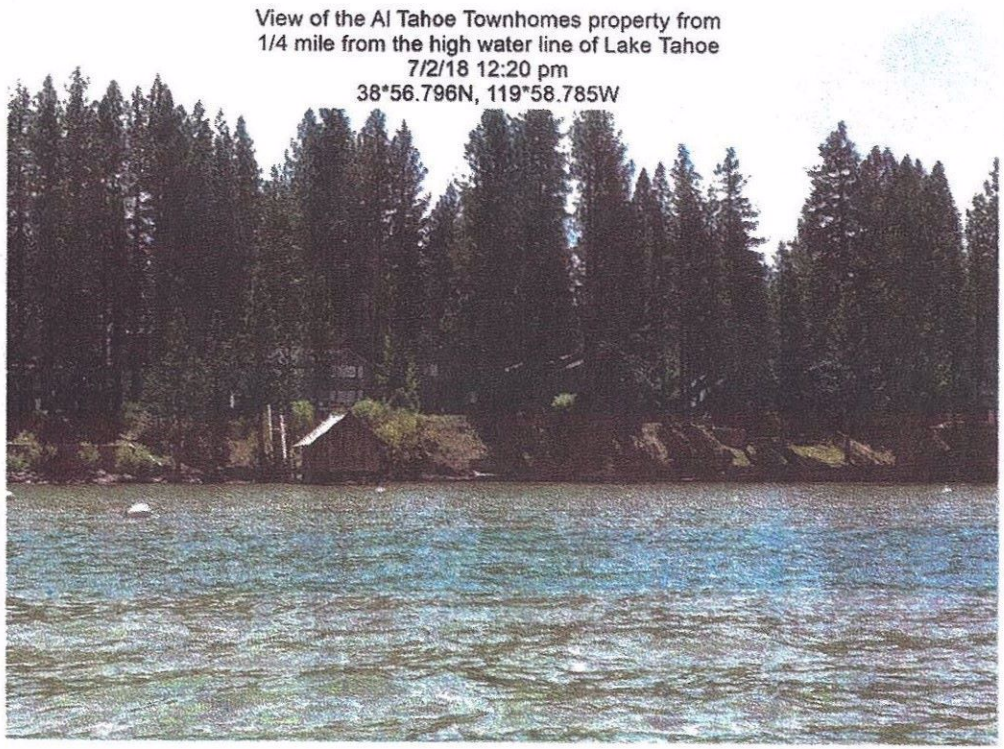
View of the Al Tahoe Townhomes property from
1/4 mile from the high water line of Lake Tahoe
7/2/18 12:20 pm
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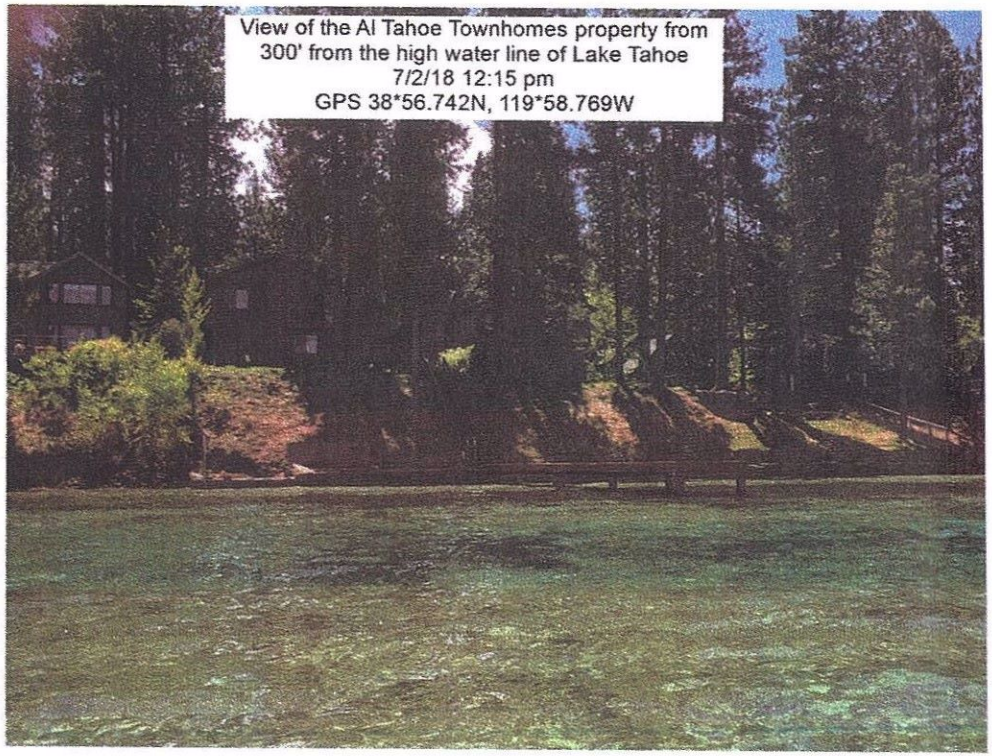
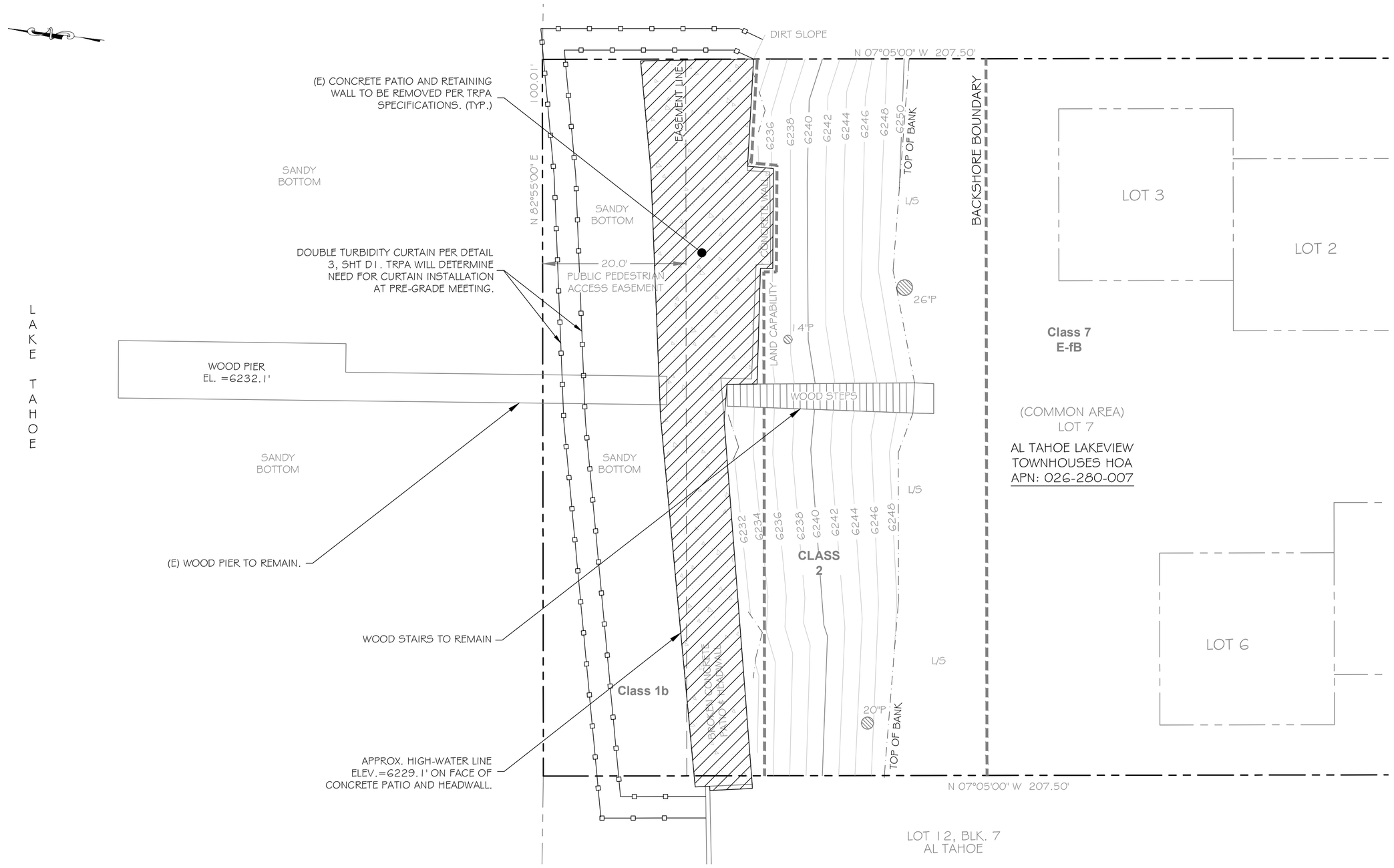

View of the Al Tahoe Townhomes property from
300' from the high water line of Lake Tahoe
7/2/18 12:15 pm
GPS 38*56.742N, 119*58.769W

AGENDA ITEM NO. V.B.

Attachment D

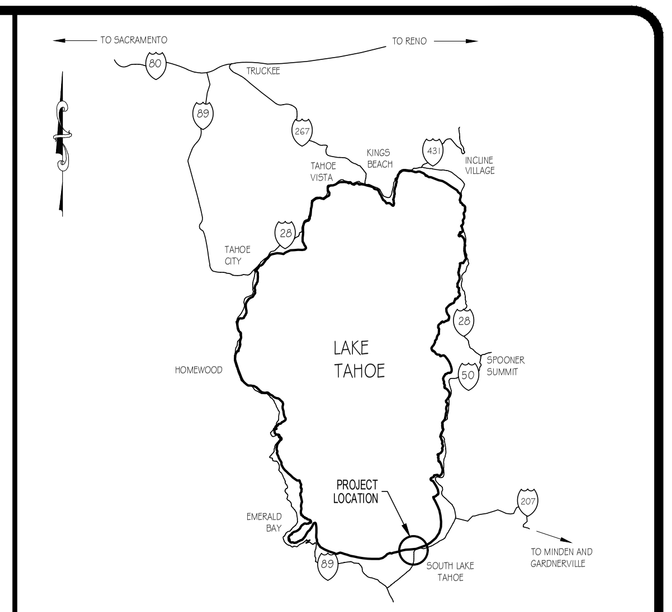
Project Plan

953 LAKEVIEW AVENUE
SEAWALL RECONSTRUCTION PROJECT PLANS



DEMO PLAN OVERVIEW

SCALE: 1"=10'-0"



AREA MAP N.T.S.

SURVEY/GENERAL NOTES:

1. THE PROPERTY LINE INFORMATION SHOWN HEREIN IS FROM RECORD DATA AND DOES NOT REPRESENT A BOUNDARY SURVEY.
2. THIS SURVEY HAS BEEN PREPARED WITHOUT USE OF A TITLE REPORT UNLESS REFERENCED HEREIN, FERRELL CIVIL ENGINEERING, ASSUMES NO RESPONSIBILITY FOR ANY EASEMENTS WHICH MAY AFFECT THIS PROPERTY.
3. PROPERTY OWNER AND/OR DESIGNER MUST VERIFY BUILDING SETBACKS AND ANY OTHER BUILDING RESTRICTIONS BEFORE ANY DESIGN OR CONSTRUCTION.
4. THIS DRAWING OR MAP IS THE PROPERTY OF FERRELL CIVIL ENGINEERING, AND MAY NOT BE USED OR REPRODUCED WITHOUT THE CONSENT OF FERRELL CIVIL ENGINEERING.
5. PIER DESIGN BASED ON SURVEY PROVIDED BY "TURNER AND ASSOCIATES INC.", DATED: OCTOBER, 2015, JOB NO. 15216. NO CHANGES TO PIER PROPOSED.
6. CONTRACTOR AND/OR OWNER TO VERIFY ALL EXISTING EASEMENTS WHICH MAY AFFECT THIS PROPERTY/PROJECT.
7. NO UTILITIES AND/OR FEATURES HAVE BEEN LOCATED. CONTRACTOR TO BE RESPONSIBLE FOR CONTACTING UNDERGROUND SERVICE ALERT PRIOR TO BEGINNING OF WORK, EVEN ON PRIVATE PROPERTY.
8. CONTRACTOR TO HAVE THE APPROVED TRPA PERMIT AND STAMPED PLANS ON SITE AT ALL TIMES DURING CONSTRUCTION.
9. CONTRACTOR SHALL COMPLY WITH THE TRPA SPECIAL AND STANDARD CONDITIONS OF APPROVAL SET FORTH IN THE PERMIT.
10. CAISSONS AND/OR A TURBIDITY CURTAIN WILL BE INSTALLED AT THE DISCRETION OF THE CONTRACTOR, SUBJECT TO THE APPROVAL OF THE TRPA PRE-GRADE FIELD INSPECTOR.

PROJECT INFORMATION:

OWNER:	AL TAHOE LAKEVIEW TOWNHOUSES HOA C/O THERESA BROCCHINI PO. BOX 192063 SACRAMENTO CA, 95819
PLANNER:	KAUFMAN EDWARDS PLANNING & CONSULTING ATTN: ABIGAIL EDWARDS 475 N LAKE BLVD #201 TAHOE CITY, CA 96145 (530) 546-4402
ENGINEER:	FERRELL CIVIL ENGINEERING ATTN: TIM FERRELL P.O. BOX 361 TAHOE VISTA, CA 96148 (530) 546-2752
PROJECT LOCATION:	953 LAKEVIEW AVE, SOUTH LAKE TAHOE, CA 96150

SHEET INDEX:

T1- TITLE SHEET/DEMO
C1- PROPOSED SEAWALL SHEET
D1- DETAILS SHEET

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY K. FERRELL
No. C55546
Exp. 12-31-22
CIVIL
STATE OF CALIFORNIA

ALLOWABLE COVERAGE:

ALLOWABLE COVERAGE PER LAND CAPABILITY	
1,152 SF Backshore (Class 1b) @ 1%	= 12 SF
2,711 SF Backshore (Class 2) @ 1%	= 27 SF
1,605 SF Backshore (Class 7) @ 30%	= 482 SF
14,532 SF Class 7 @ 30%	= 4,360 SF
TOTAL ALLOWABLE	4,881 SF

EXISTING COVERAGE:

	Class 1b	Backshore (Class 2)	Backshore (Class 7)	Class 7	Total
Conc. Patio:	1115 SF				1115 SF
Stairs:	16 SF	79 SF	12 SF		107 SF
Buildings:				4,940 SF	4,940 SF
AC Paving/Walkways:				1,051 SF	1,051 SF
TOTAL:	1131 SF	79 SF	12 SF	5,991 SF	7,213 SF

PROPOSED COVERAGE:

	Class 1b	Backshore (Class 2)	Backshore (Class 7)	Class 7	Total
Stairs:	16 SF	79 SF	12 SF		107 SF
Buildings:				4,940 SF	4,940 SF
AC Paving/Walkways:				1,051 SF	1,051 SF
Pavers:	319 SF				319 SF
Sheet Pile:	47 SF				47 SF
TOTAL:	382 SF	79 SF	12 SF	5,991 SF	6,464 SF

Call Two Working Days Before You Dig!

USA

Dig Safely. Dig Safely.

CALL: 811

DRAWN BY: KSL DESIGN BY: KSL

CHECKED BY: TKF DWG: P:\PIERS\LAKEVIEW 953\dwg

REVISION	DATE	DESCRIPTION	APPROVED	DATE

Ferrell Civil Engineering
CA #C 55546 NV #12927
P.O. Box 361, Tahoe Vista, CA 96148
www.ferrellcivilengineering.com
ferrell@ftcivil.com
ph: 530.546.2752
fax: 530.546.4469

953 LAKEVIEW AVENUE — A.P.N. 026-280-007

TITLE SHEET/DEMO PLAN

EL DORADO COUNTY — CALIFORNIA

DATE: AUGUST 24, 2022

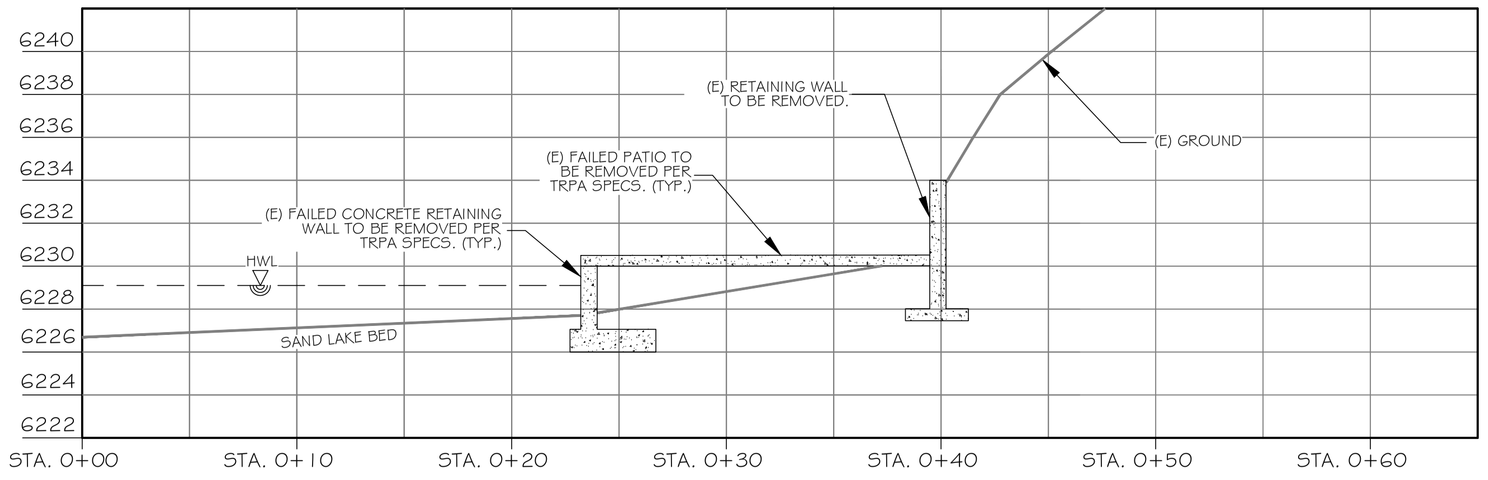
SCALE: 1"=10'-0"

W.O. NO. 953 LAKEVIEW AVENUE

SHEET T1 OF 3

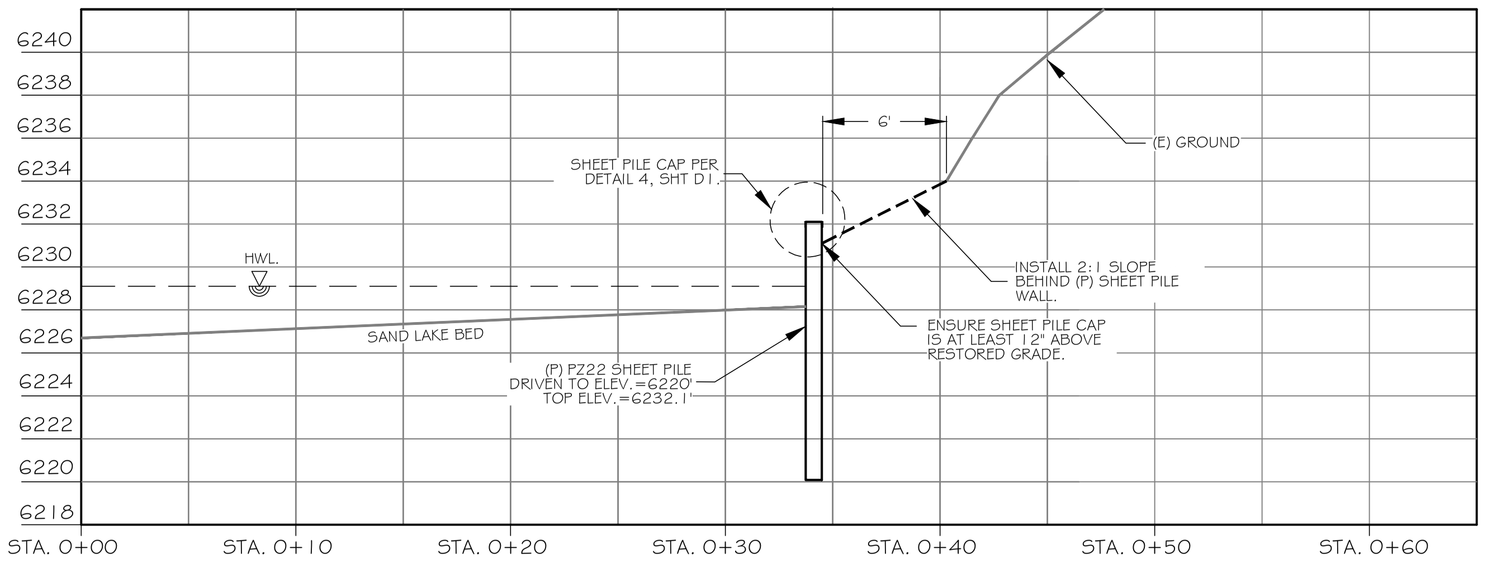
AGENDA ITEM NO. V.B.

Attachment D



SECTION A–A EXISTING

SCALE: HORIZONTAL: 1"=5'/VERTICAL: 1"=5'



SECTION A–A PROPOSED

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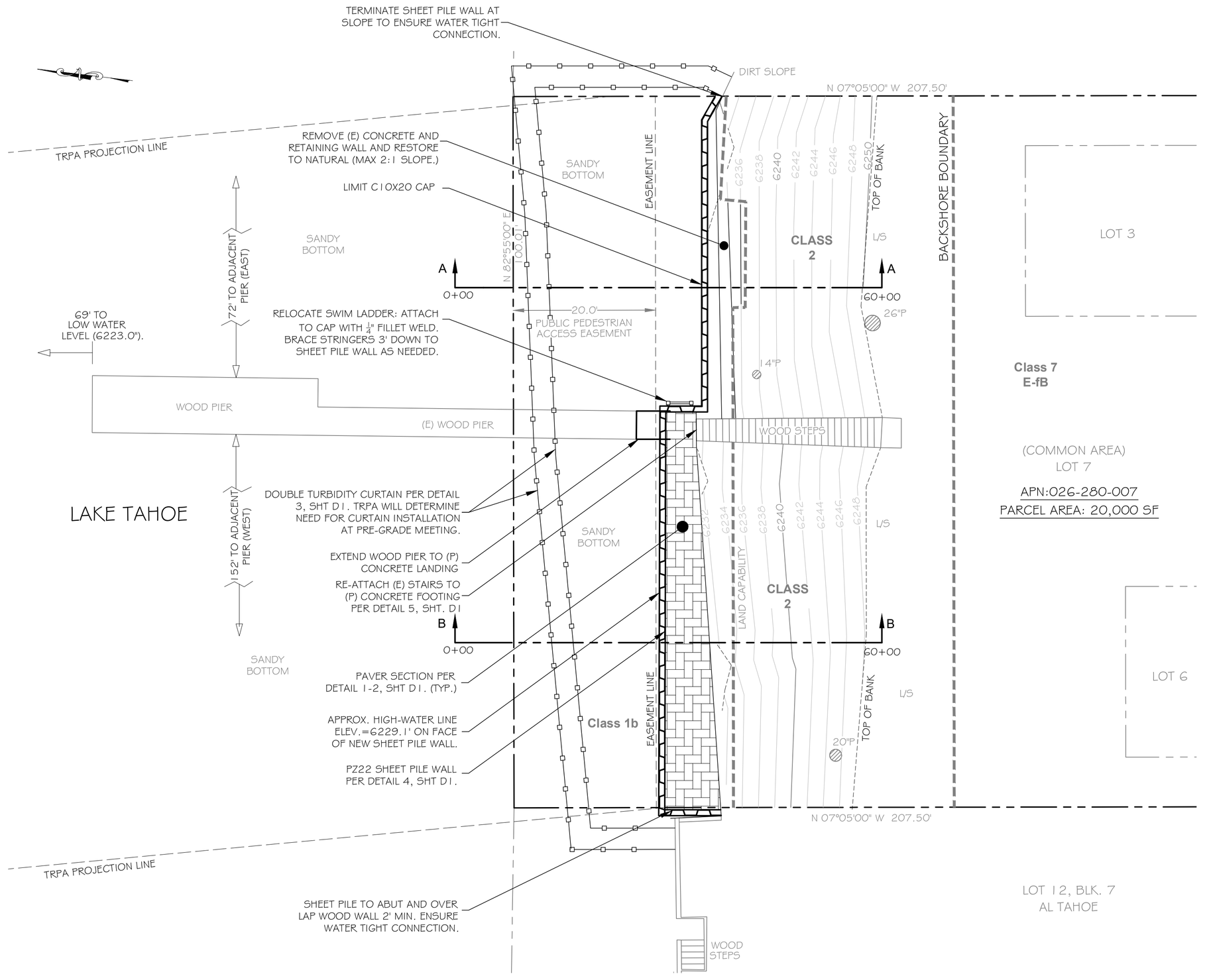
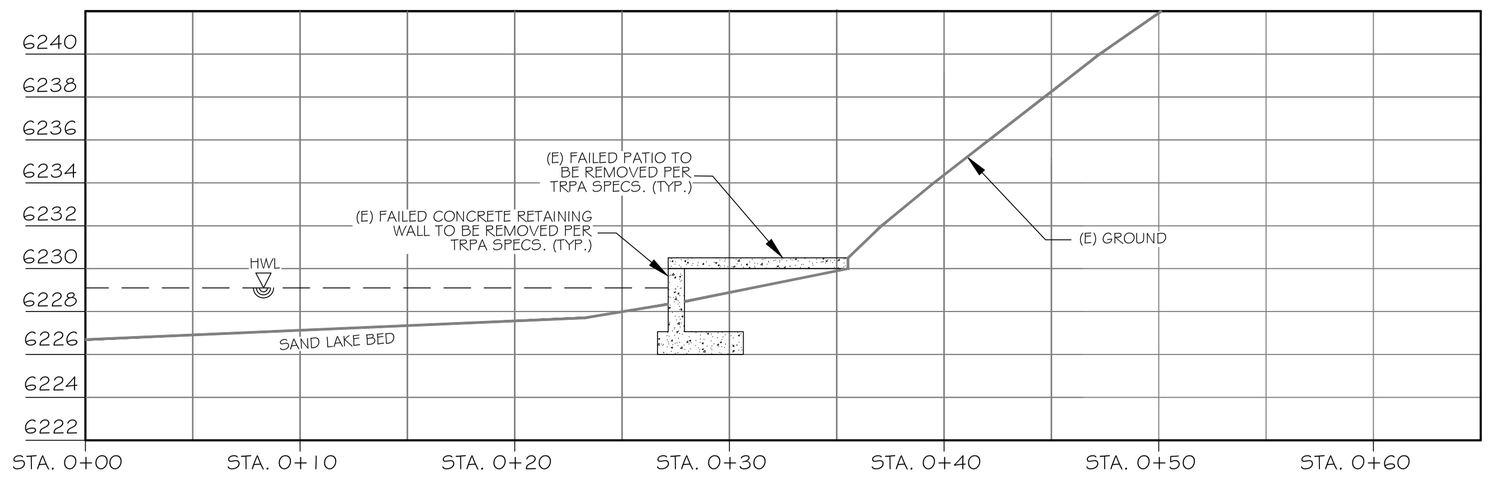


PROPOSED PLAN

SCALE: 1"=10'-0"



SECTION B–B EXISTING

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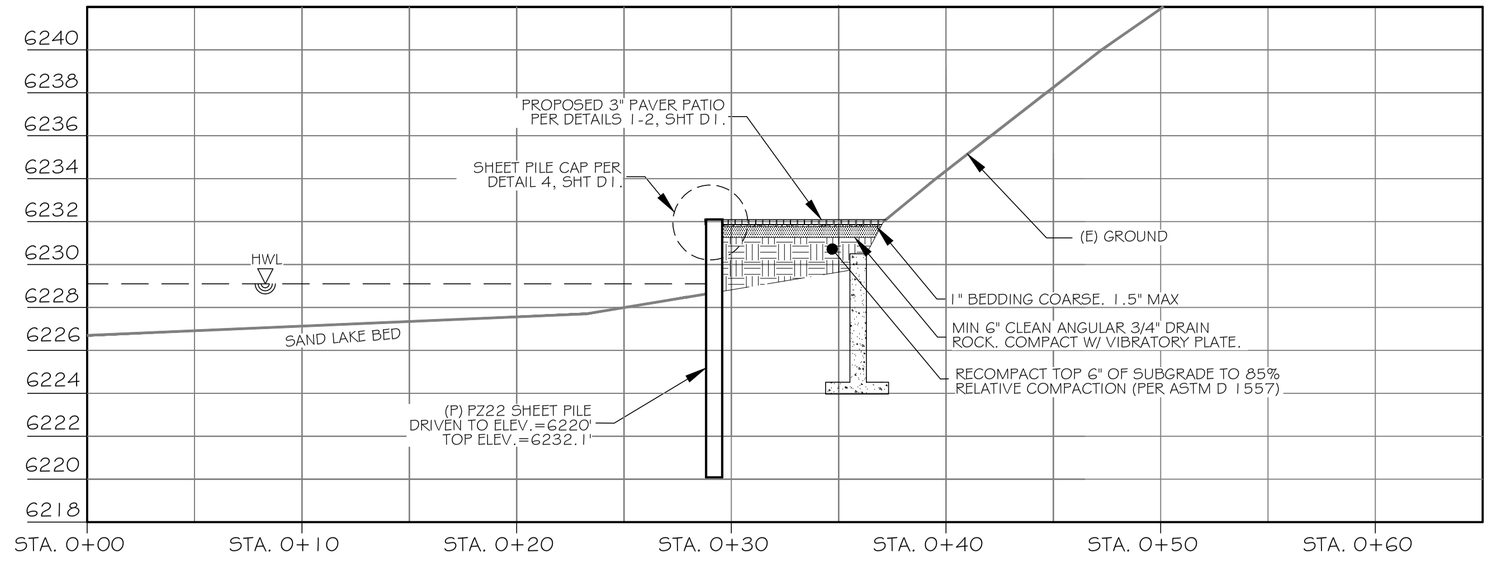


SECTION B–B PROPOSED

SCALE: HORIZONTAL: 1"=5'/VERTICAL: 1"=5'

AGENDA ITEM NO. V.B.

REV.	DATE	DESCRIPTION	APPROVED	DATE

COMP.: FCE DESIGN: TKF
DRWN: KSL PRJ.ENG.: TKF
WORK ORDER:
SCALE: 1"=10'-0"
HORIZONTAL:
VERTICAL:
CAD:
DATE: AUGUST 24, 2022

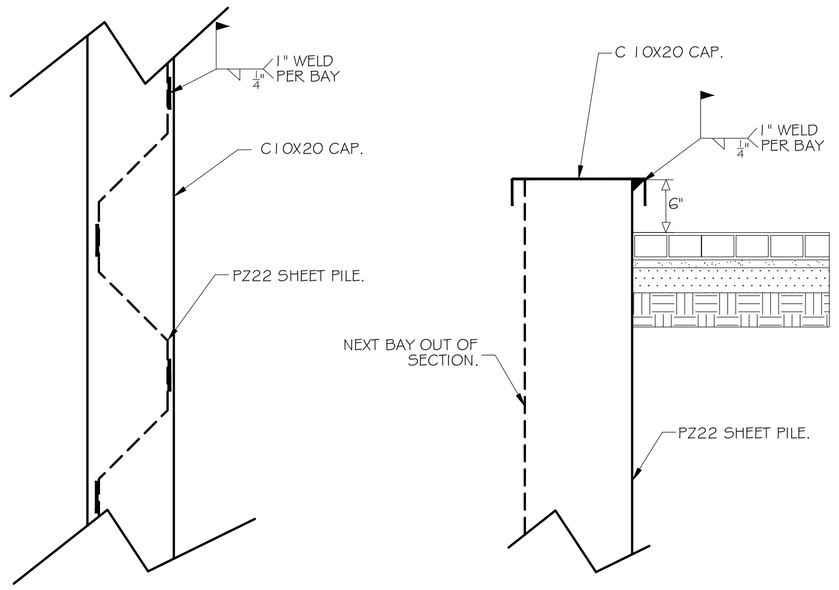
Ferrell Civil Engineering
CA #C-55546 NV #12927
P.O. Box 361, Tahoe Vista, CA 96148
ph: 530.546.2752
fax: 530.546.4469
ferrell@fecivil.com

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY K. FERRELL
No. C55546
Exp. 12-31-22
CIVIL
STATE OF CALIFORNIA

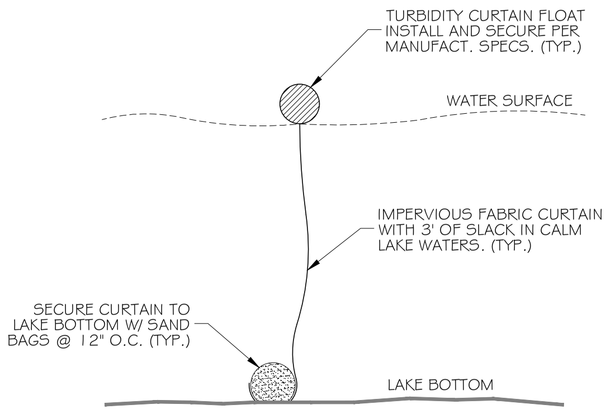
PROPOSED SEAWALL PLAN
953 LAKEVIEW PROJECT

953 LAKEVIEW AVE. A.P.N.: 026-280-007 SOUTH LAKE TAHOE, CA

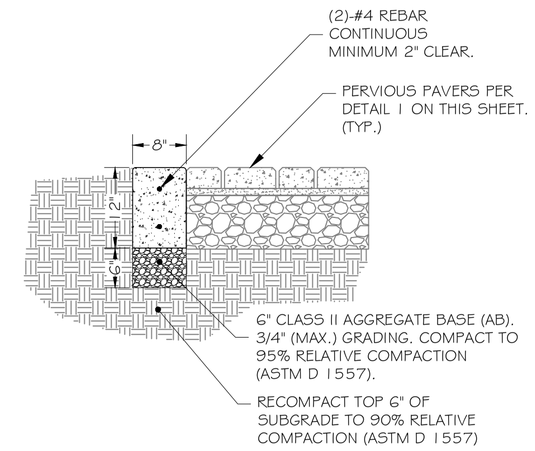
C1



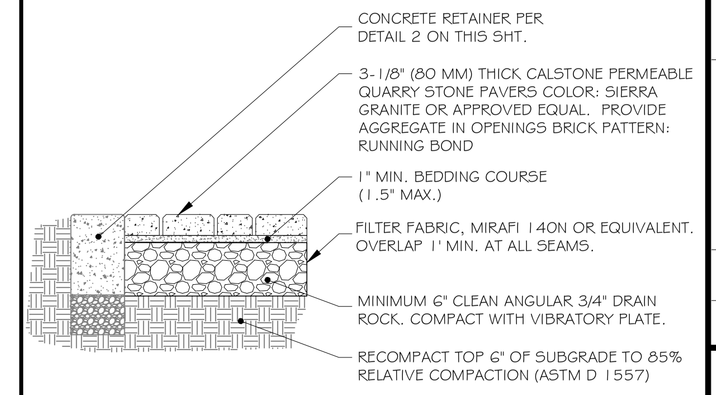
PILE CAP DETAIL NO SCALE 4



TURBIDITY CURTAIN DETAIL NO SCALE 3



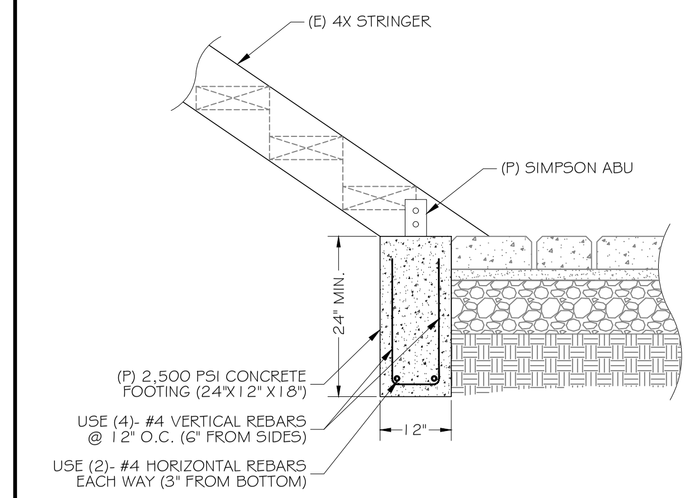
CONCRETE RETAINER DETAIL NO SCALE 2



NOTE:

1. INSTALL PAVERS PER MANUFACTURER'S RECOMMENDATIONS.

PERVIOUS PAVER INSTALLATION DETAIL NO SCALE 1



STAIR LANDING DETAIL NO SCALE 5

REV.	DATE	DESCRIPTION	APPROVED	DATE

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DRWN: KSL PRJ.ENG.: TKF
WORK ORDER:
SCALE: 1"=10'-0"
VERT.: HORIZONTAL:
VERTICAL:
CAD: DATE: AUGUST 24, 2022

Ferrell Civil Engineering
CA #C 55546 NV #12927
P.O. Box 361, Tahoe Vista, CA 96148
ph: 530.546.2752
fax: 530.546.4469
ferrell@fecivil.com

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY K. FERRELL
No. C55546
Exp. 12-31-22
CIVIL
STATE OF CALIFORNIA

PROPOSED SEAWALL PLAN
953 LAKEVIEW PROJECT

953 LAKEVIEW AVE. SOUTH LAKE TAHOE, CA
A.P.N.: 026-280-007

D1

AGENDA ITEM NO. V.B.

Attachment E

California State Lands Commission Letter

STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

Established in 1938

JENNIFER LUCCHESI, *Executive Officer*
916.574.1800
TTY CA Relay Service: **711** *or Phone* **800.735.2922**
from Voice Phone **800.735.2929**
or for Spanish **800.855.3000**

Contact Phone: (916) 574-1869

January 9, 2023

File Ref.: SD 2018-01-22.2

Abigail Edwards
Kaufman Edwards Planning and Consulting
P.O. Box 1253
Carnelian Bay, CA 96140

VIA ELECTRONIC MAIL ONLY (abby@tahoeplanning.com)

Subject: Sea Wall Repair Project in Lake Tahoe, adjacent to 953 Lakeview Avenue, South Lake Tahoe, El Dorado County

Dear Ms. Edwards,

This letter serves as a follow-up to our letter dated December 10, 2020 and is in response to your request for a review of the revised concrete sea wall repair project in Lake Tahoe, adjacent to 953 Lakeview Avenue, South Lake Tahoe.

Pursuant to a Memorandum of Understanding between the California State Lands Commission (Commission) and the Tahoe Regional Planning Agency (TRPA), an applicant must obtain a determination from the Commission as to whether the proposed project will encroach on the Public Trust easement or sovereign land. The boundaries of the Public Trust easement and sovereign land are defined by elevations dictated by a court decision. The Public Trust easement exists between the elevations of 6,223 feet (Low Water Mark) and 6,228.75 feet (High Water Mark) Lake Tahoe Datum. Land lying waterward of the Low Water Mark is sovereign land and within the Commission's leasing jurisdiction.

We understand that the project involves removal of a failing concrete sea wall that extends below the High Water Mark into the Public Trust easement and a deeded 20-foot-wide pedestrian easement belonging to the City of South Lake Tahoe (City). Your client is now proposing to construct a new steel sheet pile wall above the High Water Mark that will not encroach into the easement areas. A new concrete landing will also be constructed above the High Water Mark and

will connect to an existing wood pier. The approximately 80-foot long pier is built on pilings and does not extend onto sovereign land below the Low Water Mark. The shore area around the pier is flat and consists of sand and cobbles up to the existing concrete wall. During construction, a double turbidity curtain and/or caissons will be installed below the High Water Mark at the discretion of the contractor and subject to TRPA approval.

After review of the information provided and our in-house records, staff has confirmed that the proposed sheet pile wall will not encroach into the Public Trust easement. Once construction is complete, the wall will not interfere with public access. The existing pier encroaches into the Public Trust easement. However, because the pier is built on pilings, the public can navigate and walk next to and under the pier with up to approximately 9 feet of clearance. During periods of lower lake levels, the public can walk around the waterward end of the pier. To provide the public's continuous shoreline access to the Public Trust easement, access signage shall be posted on the pier stating public access allowed under the pier.

This determination is without prejudice to any future assertion of State ownership or public rights, should circumstances change, or should additional information come to our attention. In addition, this letter is not intended, nor should it be construed as, a waiver or limitation of any right, title, or interest of the State of California in any lands under its jurisdiction.

If you have any questions, please contact Ninette Lee, Public Land Manager, at (916) 574-1869 or by email at ninette.lee@slc.ca.gov.

Sincerely,

Brian Bugsch, Chief
Land Management Division

cc: Ninette Lee, CSLC
Warren Crunk, CSLC
Heather Stroud, City Attorney, City of South Lake Tahoe

Attachment F

Littoral Drift Analysis

Reno Tahoe Geo Associates, Inc.

Consulting Civil Engineers
P.O. Box 18449
Reno, Nevada 89511
PH (775) 853-9100

January 23, 2023
Project No.: 23001.001

A1 Tahoe Homeowners Association
Attn: Chris Brocchini
P.O. Box 192063
Sacramento, CA 95819
Email: cb@brocchini.biz
Email: abby@tahoeplanning.com

Subject: Littoral Drift Letter for Proposed Project
Shoreline Repair Project
953 Lakeview Drive (APN: 026-280-07)
South Lake Tahoe, El Dorado County, California

Dear Mr. Brocchini:

As per requested, this letter transmits Reno Tahoe Geo Associates' (RTGA's) discussion of potential littoral drift impacts due to the proposed shoreline repair/new revetment wall at 953 Lakeview Drive in South Lake Tahoe, California. Littoral drift is important in many areas of Lake Tahoe where sand and gravel may migrate along the shoreline. Manmade obstacles along the shoreline can result in sand or gravel collecting on the beach in the windward/up-current side of the project and depleting on the down-current side of the project. This letter is prepared to provide information requested by Tahoe Regional Planning Agency. The project vicinity is shown in Plate 1.

SHORELINE CHARACTERISTICS

The shore in the vicinity of this project is made up of very fine sand which is gently sloped at no more than 1 to 2 percent gradient toward deeper water, as shown in the photograph on Plate 2. Immediately at the shoreline, there is a steep sand bluff at approximately 1.5H:1V. This bluff periodically fails when wave erosion wears at its base, as shown on the neighboring property to the north on Plate 3. The adjacent property to the north has cobbles that are 9 to 18 inches in diameter which we believe to have been imported for failed erosion protection elements.

The existing shoreline on the subject parcel has a failing concrete revetment/retaining wall which supported a failed concrete deck several feet above lake level as shown on Plate 4. The water has broken the retaining wall and washed away the fine sand under the deck and undermined the soil slope above it. The former wall extended 5 to 15 feet beyond the toe of the existing bluff.

The proposed project plan is shown on Plate 5, which indicates that only half of the former wall and platform will be replaced. It will be replaced with a sheetpile wall which will stick out only 3 to 6 feet from the current base of the bluff which will support a paver patio. The eastern half of the property will have only a sheetpile wall at the base of the bluff which will only retain and protect the base of the slope and will not support a patio or walkway.

LITTORAL DRIFT

Adams, Minor and Panorska (2004, page 9) summarizes and updates previous studies on littoral drift, and for this area they show arrows indicating drift primarily in the eastward direction along the shoreline away from the outlet of the Upper Truckee River to the west. The referenced figure is included as Plate 6.

Adams Minor and Panorska (2004) states that:

a) the major sediment source for the gravel and cobble beaches is erosion of backshore areas and possibly nearshore erosion of older lakeshore deposits;

b) sand is primarily delivered to smaller sand beaches by weathering of local granodiorite bedrock and boulders; and

c) littoral sand transport is restricted to small, well-defined drift cells separated by closely spaced topographic barriers.

An exception to the statements above is that the Upper Truckee River is likely one of the few significant sediment sources into Lake Tahoe as shown by the extensive subaqueous delta west of the site, but the major source of sediment is also erosion of the bluffs themselves. Orme (1970) noted the specific example of El Dorado Beach ¼ mile to the west as a beach that was undernourished (had insufficient supply of sand) and that relied on sand from bluff erosion.

We interpret this information to indicate that:

1) The beach at the Lakeview property is primarily of sandy bottom, so has potential for littoral drift;
2) The previous retaining wall structure which existed for several decades does not appear to have caused accumulation or depletion of sand on the wide shoreline;
3) The proposed structure will have a considerably smaller width toward the lake than the original structure, with about 5 to 10 feet less width than the previous structure;
4) Given the similarity of the shape of the previous and existing structure, and the much narrower width of the proposed construction, it is our estimation that there would be only small change in available material on the subject property. These changes would neither significantly deplete nor recharge the beaches on the adjacent properties.

It is RTGA's recommendation that the proposed project's impact on littoral drift will be minor to negligible and the project should be approved.

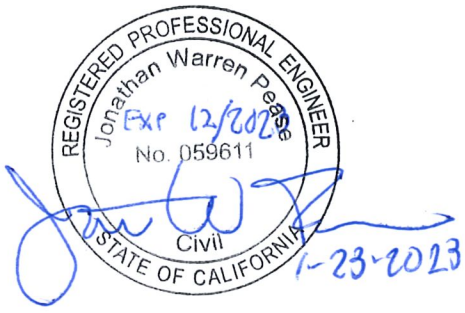
REFERENCES:

- Adams, Minor and Panorska, 2004, *Shorezone Erosion at Lake Tahoe: Historical Aspects, Processes, and Stochastic Modeling, Final Report* for the U.S. Bureau of Reclamation and Tahoe Regional Planning Agency, dated March 31, 2004
- Orme. A.R., 1971, *The Shore-Zone System for Lake Tahoe*: Tahoe Regional Planning Agency, Project No. NEV P-30.

CLOSURE

We hope this provides the information that you need at this time. If you have any questions regarding these comments and recommendations, please do not hesitate to contact our office.

Sincerely,
Reno Tahoe Geo Associates, Inc.

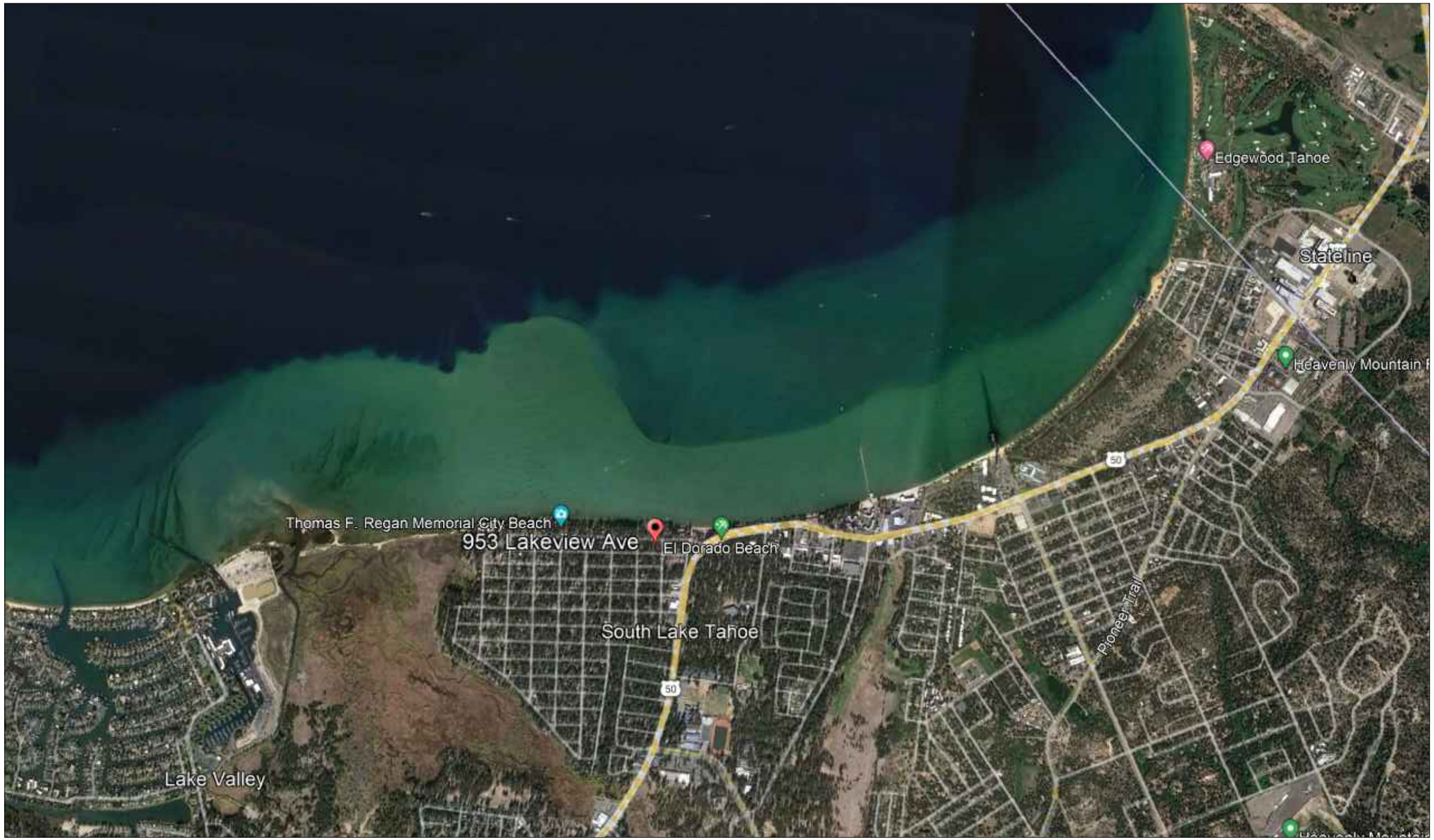


Pablo Becerra
Staff Professional I

Jonathan W. Pease, Ph.D., P.E., G.E.
Civil Engineering (CA) 59611

Attachments:

- Plate 1 – Site Vicinity Map
- Plate 2 – Photo
- Plate 3 – Photo
- Plate 4 - Photo
- Plate 5 - Map of Proposed Improvements
- Plate 6 – Littoral Drift Map



C:\Users\RTGA58~1\AppData\Local\Temp\AcPublish_40860\Plate 1 SANDY BOTTOM.dwg 1/20/23

Reno Tahoe Geo Associates, Inc. P.O. Box 18449 Reno, Nevada 89511 CONSULTING CIVIL ENGINEERS TEL (775)853-9100 FAX (775)853-9199 JOB # 23001.001 APPR: _____ DATE: 01/17/2023	SITE VICINITY MAP LITTORAL DRIFT LETTER 953 LAKEVIEW AVE SOUTH LAKE TAHOE El Dorado County California	PLATE 1

AGENDA ITEM NO. V.B.

Photo of Shoreline of Lakeview with beach sand bottom with lake level at about 6223.0 feet

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P.O. Box 18449
Reno, Nevada 89511
CONSULTING CIVIL ENGINEERS
TEL (775)853-9100
FAX (775)853-9199

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PHOTO

LITTORAL DRIFT LETTER
953 LAKEVIEW AVE
SOUTH LAKE TAHOE

EL DORADO COUNTY CALIFORNIA

PLATE 2

C:\Users\RTGA58~1\AppData\Local\Temp\AcPublish_40860\Plate 1 SANDY BOTTOM.dwg 1/20/23

Adjacent Neighbor's Slope to East

Reno Tahoe Geo Associates, Inc.
P.O. Box 18449
Reno, Nevada 89511
CONSULTING CIVIL ENGINEERS
TEL (775)853-9100
FAX (775)853-9199

JOB # 23001.001 APPR: JWP DATE: 1/17/2023

PHOTO

LITTORAL DRIFT LETTER
953 LAKEVIEW AVE
SOUTH LAKE TAHOE

EL DORADO COUNTY CALIFORNIA

PLATE 3

AGENDA ITEM NO. V.B.

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Photo of Collapsed Deck due to Erosion of Sand through Broken Wall

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Reno, Nevada 89511
CONSULTING CIVIL ENGINEERS
TEL (775)853-9100
FAX (775)853-9199

JOB # 23001.001 APPR: JWP DATE: 1/17/2023

PHOTO

LITTORAL DRIFT LETTER
953 LAKEVIEW AVE
SOUTH LAKE TAHOE

EL DORADO COUNTY CALIFORNIA

PLATE 4

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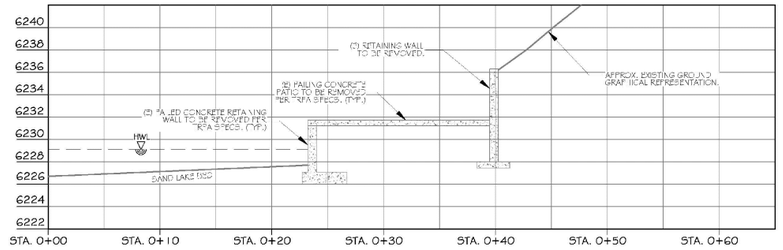
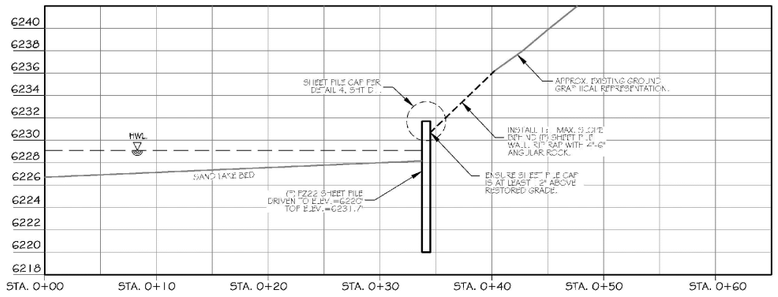


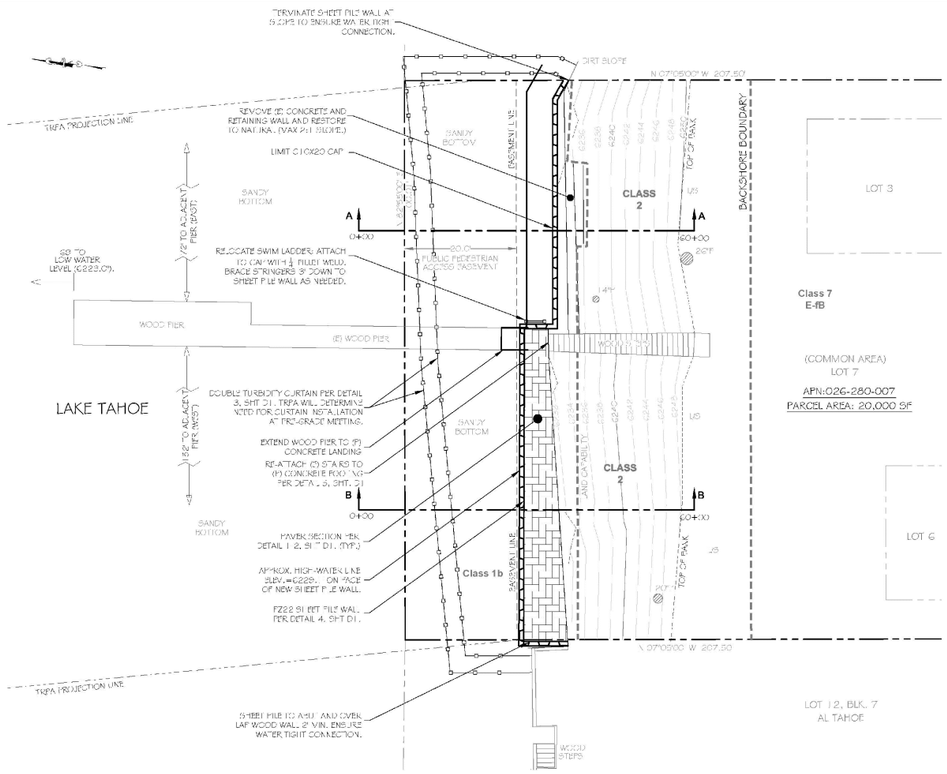
SECTION A–A EXISTING

SCALE: HORIZONTAL: 1"=5'/VERTICAL: 1"=5'



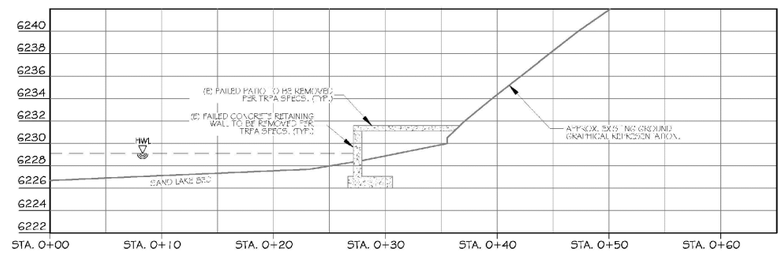
SECTION A–A PROPOSED

SCALE: HORIZONTAL: 1"=5'/VERTICAL: 1"=5'



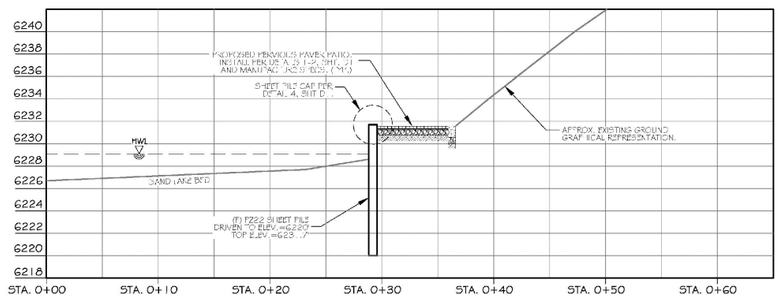
PROPOSED PLAN

SCALE: 1"=10'-0"



SECTION B–B EXISTING

SCALE: HORIZONTAL: 1"=5'/VERTICAL: 1"=5'



SECTION B–B PROPOSED

SCALE: HORIZONTAL: 1"=5'/VERTICAL: 1"=5'

COMP. / ECE	DESIGN: TKF
DRWN: KSS	PRJ.ENG.: TKF
WORK: DISTR:	
SCALE: 1"=10'-0" HORIZONTAL: VERTICAL:	
CAD:	DATE: DECEMBER 14, 2022

NO.	DATE	DESCRIPTION	APPROVED	DATE

Ferrell Civil Engineering
ph. 530.545.2321
fax. 530.545.4668
tferrell@sbcglobal.net
CA RCE 35648 Exp 9/30/23
CA RCE 35648 Exp 9/30/23
2108 Rio Del Mar, Tahoe Vista, CA 96148

PROPOSED SEAWALL PLAN
953 LAKEVIEW PROJECT
953 LAKEVIEW AVE
SOUTH LAKE TAHOE, CA
A.P.N.: 026-280-007

C1

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P.O. Box 18449
Reno, Nevada 89511
CONSULTING CIVIL ENGINEERS
TEL (775)853-9100
FAX (775)853-9199

JOB # 23001.001 APPR: _____ DATE: 01/17/23

MAP OF PROPOSED IMPROVEMENTS

LITTORAL DRIFT LETTER
Project Name
Project Location

EL DORADO COUNTY CALIFORNIA

PLATE 5

AGENDA ITEM NO. V.B.

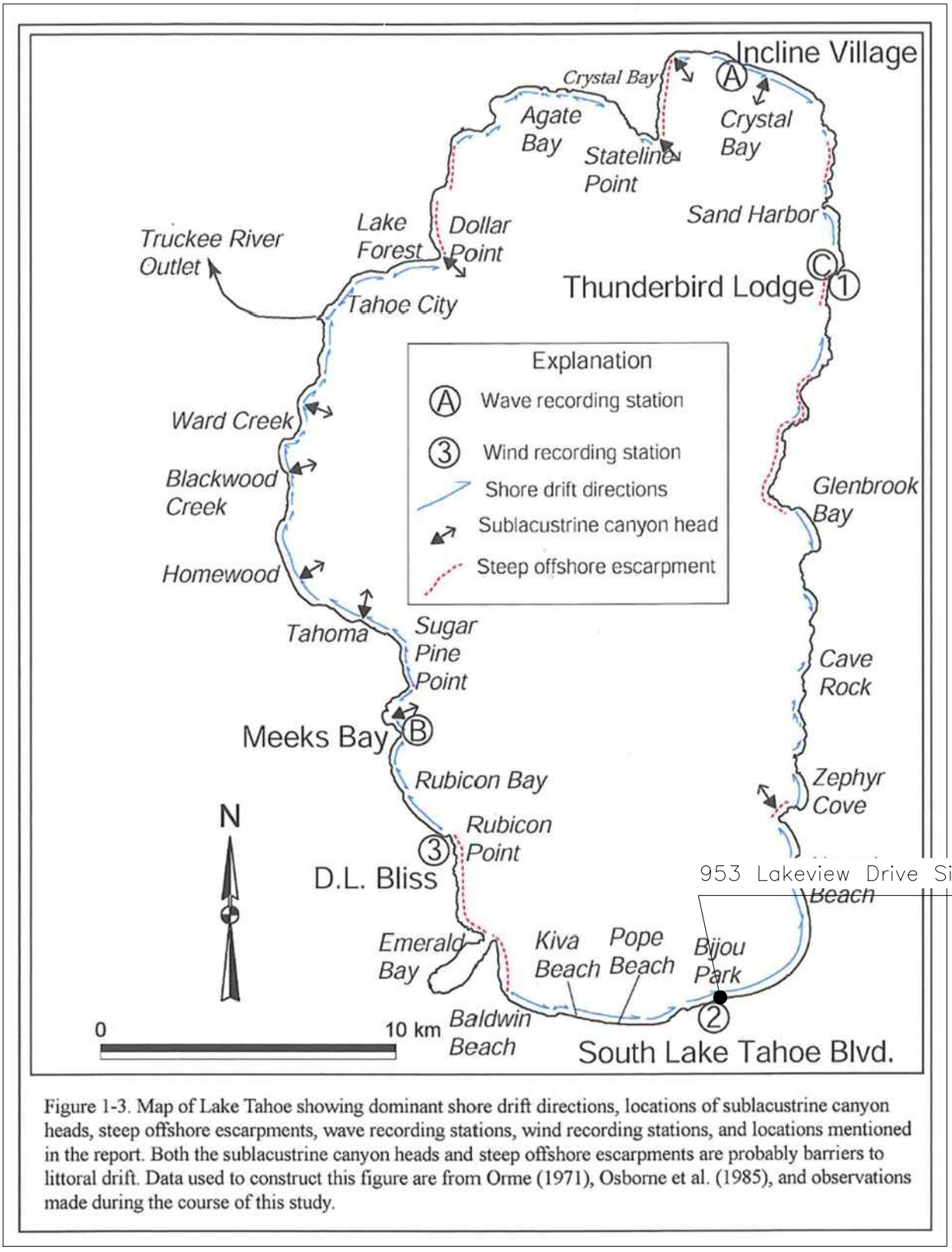

Figure 1-3. Map of Lake Tahoe showing dominant shore drift directions, locations of sublacustrine canyon heads, steep offshore escarpments, wave recording stations, wind recording stations, and locations mentioned in the report. Both the sublacustrine canyon heads and steep offshore escarpments are probably barriers to littoral drift. Data used to construct this figure are from Orme (1971), Osborne et al. (1985), and observations made during the course of this study.

Reno Tahoe Geo Associates, Inc.
P.O. Box 18449
Reno, Nevada 89511
CONSULTING CIVIL ENGINEERS
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JOB # 23001.001 APPR: JWP DATE: 01/17/2023

LITTORAL DRIFT MAP

LITTORAL DRIFT LETTER
953 LAKEVIEW AVE
SOUTH LAKE TAHOE

EL DORADO COUNTY CALIFORNIA

PLATE 6

AGENDA ITEM NO. V.B.

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Attachment G

Initial Environmental Checklist

TAHOE REGIONAL PLANNING AGENCY

OFFICE
128 Market St
Stateline, NV

MAIL
P.O. Box 5310
Stateline, NV 89449-5310

HOURS
Mon. Wed. Thurs. Fri
9 am-12 pm/1 pm-4 pm
Closed Tuesday

New Applications Until 3:00 pm

INITIAL ENVIRONMENTAL CHECKLIST FOR DETERMINATION OF ENVIRONMENTAL IMPACT

I. Assessor's Parcel Number (APN)/Project Location 026-280-07

Project Name Al Tahoe Townhouses Shoreline Repair

County/City El Dorado County

Brief Description of Project:

~~Repair of failing concrete shoreline wall by the installation of a new sheet pile wall located lakeward of the existing~~ concrete wall. The sheet pile wall will be the same height of the existing concrete shoreline wall. All ~~work, material transport and staging will be done via barge/amphibian. (Please refer to project description for details).~~

The applicant (Al Tahoe Lakeview Townhouses) is proposing to replace a failing concrete shoreline wall with a new steel sheet pile wall adjacent to Lake Tahoe and 953 Lakeview Avenue, South Lake Tahoe, California. Sections of the existing concrete wall have collapsed, the foundation of the wall is failing, and the material supporting the concrete surface is starting to erode. The existing concrete structure is in a City of South Lake Tahoe public access easement as well as the California State Lands (CSLC) public trust access easement. The proposed new sheet pile wall will be located outside of the City's public access easement and the public trust. Because of these easements, no sloping rock revetment is proposed lakeward of the steel sheet pile wall. A new concrete landing will be constructed above the High Water Mark and will connect to an existing wood pier. No other improvements are proposed. The new sheet pile wall will be installed via a barge to prevent disturbance to the shoreline and upland portion of the property.

The following questionnaire will be completed by the applicant based on evidence submitted with the application. All "Yes" and "No, With Mitigation" answers will require further written comments. Use the blank boxes to add any additional information. If more space is required for additional information, please attach separate sheets and reference the question number and letter.

II. ENVIRONMENTAL IMPACTS:

1. Land

Will the proposal result in:

a. Compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)?

☐ Yes ☒ No

☐ No, With Mitigation ☐ Data Insufficient

b. A change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions?

☐ Yes ☒ No

☐ No, With Mitigation ☐ Data Insufficient

c. Unstable soil conditions during or after completion of the proposal?

☐ Yes ☒ No

☐ No, With Mitigation ☐ Data Insufficient

d. Changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet?

☐ Yes ☒ No

☐ No, With Mitigation ☐ Data Insufficient

e. The continuation of or increase in wind or water erosion of soils either on or off the site?

☐ Yes ☒ No

☐ No, With Mitigation ☐ Data Insufficient

f. Changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake?

	☐ Yes	☐ No	
	☒ No, With Mitigation	☐ Data Insufficient	

g. Exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards?

	☐ Yes	☒ No	
	☐ No, With Mitigation	☐ Data Insufficient	

2. Air Quality

Will the proposal result in:

a. Substantial air pollutant emissions?

	☐ Yes	☒ No	
	☐ No, With Mitigation	☐ Data Insufficient	

b. Deterioration of ambient (existing) air quality?

	☐ Yes	☒ No	
	☐ No, With Mitigation	☐ Data Insufficient	

c. The creation of objectionable odors?

	☐ Yes	☒ No	
	☐ No, With Mitigation	☐ Data Insufficient	

d. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?

	☐ Yes	☒ No	
	☐ No, With Mitigation	☐ Data Insufficient	

e. Increased use of diesel fuel?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

3. Water Quality

Will the proposal result in:

a. Changes in currents, or the course or direction of water movements?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

c. Alterations to the course or flow of 100-yearflood waters?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

d. Change in the amount of surface water in any water body?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?

	☐ Yes	☐ No
	☒ No, With Mitigation	☐ Data Insufficient

f. Alteration of the direction or rate of flow of ground water?

	☐ Yes	☐ No
	☒ No, With Mitigation	☐ Data Insufficient

g. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

h. Substantial reduction in the amount of water otherwise available for public water supplies?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

i. Exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

j. The potential discharge of contaminants to the groundwater or any alteration of groundwater quality?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

k. Is the project located within 600 feet of a drinking water source?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

4. Vegetation

Will the proposal result in:

a. Removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

b. Removal of riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

c. Introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

d. Change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora and aquatic plants)?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

e. Reduction of the numbers of any unique, rare or endangered species of plants?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

f. Removal of stream bank and/or backshore vegetation, including woody vegetation such as willows?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

g. Removal of any native live, dead or dying trees30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

h. A change in the natural functioning of an old growth ecosystem?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

5. Wildlife

Will the proposal result in:

a. Change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

b. Reduction of the number of any unique, rare or endangered species of animals?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?

	☐ Yes	☒ No	
	☐ No, With Mitigation	☐ Data Insufficient	

d. Deterioration of existing fish or wildlife habitat quantity or quality?

	☐ Yes	☒ No	
	☐ No, With Mitigation	☐ Data Insufficient	

6. Noise

Will the proposal result in:

a. Increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Plan Area Statement, Community Plan or Master Plan?

	☐ Yes	☒ No	
	☐ No, With Mitigation	☐ Data Insufficient	

b. Exposure of people to severe noise levels?

	☐ Yes	☒ No	
	☐ No, With Mitigation	☐ Data Insufficient	

c. Single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold?

	☐ Yes	☒ No	
	☐ No, With Mitigation	☐ Data Insufficient	

d. The placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible?

	☐	Yes	☒ No
	☐	No, With Mitigation	☐ Data Insufficient

e. The placement of uses that would generate an incompatible noise level in close proximity to existing residential or tourist accommodation uses?

	☐	Yes	☒ No
	☐	No, With Mitigation	☐ Data Insufficient

f. Exposure of existing structures to levels of ground vibration that could result in structural damage?

	☐	Yes	☒ No
	☐	No, With Mitigation	☐ Data Insufficient

7. Light and Glare

Will the proposal:

a. Include new or modified sources of exterior lighting?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

b. Create new illumination which is more substantial than other lighting, if any, within the surrounding area?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

c. Cause light from exterior sources to be cast off -site or onto public lands?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

d. Create new sources of glare through the siting of the improvements or through the use of reflective materials?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

8. Land Use

Will the proposal:

a. Include uses which are not listed as permissible uses in the applicable Plan Area Statement, adopted Community Plan, or Master Plan?

	☐ Yes	☒ No
	☐ No, With Mitigation	☐ Data Insufficient

b. Expand or intensify an existing non-conforming use?

☐ Yes ☒ No

☐ No, With Mitigation ☐ Data Insufficient

9. Natural Resources

Will the proposal result in:

a. A substantial increase in the rate of use of any natural resources?

☐ Yes ☒ No

☐ No, With Mitigation ☐ Data Insufficient

b. Substantial depletion of any non-renewable natural resource?

☐ Yes ☒ No

☐ No, With Mitigation ☐ Data Insufficient

10. Risk of Upset

Will the proposal:

a. Involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions?

☐ Yes ☒ No

☐ No, With Mitigation ☐ Data Insufficient

b. Involve possible interference with an emergency evacuation plan?

☐ Yes ☒ No

☐ No, With Mitigation ☐ Data Insufficient

11. Population

Will the proposal:

a. Alter the location, distribution, density, or growth rate of the human population planned for the Region?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

b. Include or result in the temporary or permanent displacement of residents?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

12. Housing

Will the proposal:

a. Affect existing housing, or create a demand for additional housing?

To determine if the proposal will affect existing housing or create a demand for additional housing, please answer the following questions:

(1) Will the proposal decrease the amount of housing in the Tahoe Region?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

(2) Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

Number of Existing Dwelling Units: 6

Number of Proposed Dwelling Units: 6

b. Will the proposal result in the loss of housing for income and very-low-income households?

	Yes	[X] No
	No, With Mitigation	Data Insufficient

13. Transportation/Circulation

Will the proposal result in:

a. Generation of 100 or more new Daily Vehicle Trip Ends (DVTE)?

	Yes	[X] No
	No, With Mitigation	Data Insufficient

b. Changes to existing parking facilities, or demand for new parking?

	Yes	[X] No
	No, With Mitigation	Data Insufficient

c. Substantial impact upon existing transportation systems including highway, transit, bicycle or pedestrian facilities?

	Yes	[X] No
	No, With Mitigation	Data Insufficient

d. Alterations to present patterns of circulation or movement of people and/or goods?

	Yes	[X] No
	No, With Mitigation	Data Insufficient

e. Alterations to waterborne, rail or air traffic?

	Yes	[X] No
	No, With Mitigation	Data Insufficient

f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?

	Yes	[X]	No
	No, With Mitigation	[ ]	Data Insufficient

14. Public Services

Will the proposal have an unplanned effect upon, or result in a need for new or altered governmental services in any of the following areas?

a. Fire protection?

	Yes	[X]	No
	No, With Mitigation	[ ]	Data Insufficient

b. Police protection?

	Yes	[X]	No
	No, With Mitigation	[ ]	Data Insufficient

c. Schools?

	Yes	[X]	No
	No, With Mitigation	[ ]	Data Insufficient

d. Parks or other recreational facilities?

	Yes	[X]	No
	No, With Mitigation	[ ]	Data Insufficient

e. Maintenance of public facilities, including roads?

	Yes	[X]	No
	No, With Mitigation	[ ]	Data Insufficient

f. Other governmental services?

Yes [ ] No [X]

No, With Mitigation [ ] Data Insufficient [ ]

15. Energy

Will the proposal result in:

a. Use of substantial amounts of fuel or energy?

Yes [ ] No [X]

No, With Mitigation [ ] Data Insufficient [ ]

b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?

Yes [ ] No [X]

No, With Mitigation [ ] Data Insufficient [ ]

16. Utilities

Except for planned improvements, will the proposal result in a need for new systems, or substantial alterations to the following utilities

a. Power or natural gas?

Yes [ ] No [X]

No, With Mitigation [ ] Data Insufficient [ ]

b. Communication systems?

Yes [ ] No [X]

No, With Mitigation [ ] Data Insufficient [ ]

c. Utilize additional water which amount will exceed the maximum permitted capacity of the service provider?

Yes [ ] No [X]

No, With Mitigation [ ] Data Insufficient [ ]

d. Utilize additional sewage treatment capacity which ... exceed the maximum permitted capacity of the sewage ... provider?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

e. Storm water drainage?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

f. Solid waste and disposal?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

17. Human Health

Will the proposal result in:

a. Creation of any health hazard or potential health hazard (... mental health)?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

b. Exposure of people to potential health hazards?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

18. Scenic Resources/Community Design

Will the proposal:

a. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe?

	Yes	☐ No
	No, With Mitigation	☐ Data Insufficient

b. Be visible from any public recreation area or TRPA designated bicycle trail?

	Yes	☒ No
	No, With Mitigation	☐ Data Insufficient

c. Block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area?

	Yes	☒ No
	No, With Mitigation	☐ Data Insufficient

d. Be inconsistent with the height and design standards required by the applicable ordinance or Community Plan?

	Yes	☒ No
	No, With Mitigation	☐ Data Insufficient

e. Be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines?

	Yes	☒ No
	No, With Mitigation	☐ Data Insufficient

19. Recreation

Does the proposal:

a. Create additional demand for recreation facilities?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

b. Create additional recreation capacity?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

c. Have the potential to create conflicts between recreational use and other existing or proposed?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

d. Result in a decrease or loss of public access to any lake, waterway, or public lands?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

20. Archaeological/Historical

a. Will the proposal result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

b. Is the proposed project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

c. Is the property associated with any historically significant events and/or sites or persons?

	Yes	[ ] No
	No, With Mitigation	[ ] Data Insufficient

d. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?

	Yes	[ ] No
	No, With Mitigation	[ ] Data Insufficient

e. Will the proposal restrict historic or pre-historic religious or sacred uses within the potential impact area?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

21. Findings of Significance.

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory?

	Yes	[X] No
	No, With Mitigation	[ ] Data Insufficient

b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)

	Yes	[X] No
	Yes, With Mitigation	[ ] Data Insufficient

c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?)

	Yes	[X] No
	Yes, With Mitigation	[ ] Data Insufficient

d. Does the project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly?

	Yes	[X] No
	Yes, With Mitigation	[ ] Data Insufficient

DECLARATION:

I hereby certify that the statements furnished above and in the attached exhibits include the data and information required for this initial evaluation to the best ofmy ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signature: **(Original signature required.)**

Person Preparing Application

Date: 6/11/18

Applicant Written Comments: (Attach additional sheets if necessary)

Please refer to attached response to IEC.

FOR OFFICE USE

Date Received: _____

Determination:

On the basis of this evaluation:

a. The proposed project could not have a significant effect [illegible] and a finding of no significant effect shall be prepared in accordance with the TRPA's Rules of Procedure.

☐ Yes ☐ No

b. The proposed project could have a significant effect [illegible] due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA Rules and Procedures.

☐ Yes ☐ No

c. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with Chapter 3 of the TRPA Code of Ordinances and the Rules of Procedure.

☐ Yes ☐ No

_____ _____

Signature of Evaluator

_____

Title of Evaluator

Attachment H

V(g) Checklist

PROJECT REVIEW CONFORMANCE CHECKLIST & V (g) FINDINGS

(RESIDENTIAL)

Project Name: Al Tahoe Lakeview Townhouses Shorezone Protective Structure

Project Type: Shorezone

APN / Project Number: APN 026-280-007; ERSP2018-1042

Project Review Planner: Brandy McMahon Date of Review: 2/8/2023

NOTE: if the answer to question b. on any of the following questions is *no*, please provide a written justification on a separate sheet for making the findings required in subsections 4.4.1 and 4.4.2 of the code. If the answer to question b. is yes or if no answer is required, this checklist shall serve as justifications for making said findings. Any positive impacts of the project on the thresholds that have not been addressed in these questions should also be noted.

CATEGORY: AIR QUALITY

THRESHOLD: CARBON MONOXIDE (CO) INDICATOR: (CO) 8-hr. avg. Stateline CA station

1.	a.	Does the project generate new vehicle trips?	Y ☐ N ☒
	b.	If yes, is the project consistent with Subsection 65.2.4.B.1?	Y ☐ N ☐
2.	a.	Does the project create new points of vehicular access?	Y ☐ N ☒
	b.	If yes, is the project consistent with Subsection 34.3.2?	Y ☐ N ☐
3.	a.	Does the project include combustion appliances?	Y ☐ N ☒
	b.	If yes, is the project consistent with Subsection 65.1.4?	Y ☐ N ☐
4.	a.	Does the project include a new stationary source of CO?	Y ☐ N ☒
	b.	If yes, is the project consistent with Subsection 65.1.6?	Y ☐ N ☐

THRESHOLD: OZONE INDICATOR: Ozone, 1-hr. avg. Lk. Tahoe Blvd station

1.	a.	Does the project increase regional VMT?	Y ☐ N ☒
	b.	If yes, is the project consistent with Subsection 65.2.4?	Y ☐ N ☐
2.	a.	Does the project include new gas/oil space/water heaters?	Y ☐ N ☒
	b.	If yes, is the project consistent with Subsection 65.1.4?	Y ☐ N ☐
3.	a.	Does the project include a new stationary source of NO^2?	Y ☐ N ☒
	b.	If yes, is the project consistent with Subsection 65.1.6?	Y ☐ N ☐

THRESHOLD: PARTICULATE MATTER INDICATOR: Part. Matter, 24-hr. avg. Lk. Tahoe Blvd station

1.	a.	Does the project increase airborne dust emissions?	Y ☐ N ☒
	b.	If yes, is the project consistent with Subsection 60.4.3?	Y ☐ N ☐
2.	a.	Does the project include a new stationary source of particulate matter?	Y ☐ N ☒
	b.	If yes, is the project consistent with Subsection 65.1.6?	Y ☐ N ☐

3. a. Refer to question 1, Ozone, above.

THRESHOLD: VISIBILITY INDICATOR: miles of visibility, veg and subregional path

1. a. Refer to questions 1-3, Particulate Matter, above.

THRESHOLD: TRAFFIC VOLUME INDICATOR: traffic volume, US 50 at Park Ave.
US 50 CORRIDOR, WINTER, 4pm-12am Jan.-Mar. avg., 4pm-12am

1. a. Refer to question 1, CO, above.

THRESHOLD: NO^2 EMISSIONS INDICATOR: VMT

1. a. Refer to questions 1-2, VMT, below.

THRESHOLD: WOOD SMOKE INDICATOR: number of wood heaters

1. a. Does the project include any new wood heaters? Y ☐ N ☒
   b. If yes, is the project consistent with Subsection 65.1.4.B? Y ☐ N ☐

THRESHOLD: VMT INDICATOR: changes in number of trips and avg. trip length

1. a. Does the project increase average trip length? Y ☐ N ☒
   b. If yes, is the project consistent with Subsection 65.2.4.B? Y ☐ N ☐

2. a. refer to question 1, CO, above.

CATEGORY: WATER QUALITY

THRESHOLD: TURBIDITY INDICATOR: turbidity of indicator stations

1. a. Does the project increase impervious coverage or create permanent soil disturbance? Y ☒ N ☐
   b. If yes, is the project consistent with Subsection 60.2.3? Y ☒ N ☐

2. a. Does the project create temporary soil disturbance? Y ☒ N ☐
   b. If yes, is the project consistent with Subsection 60.4.3? Y ☒ N ☐

3. a. Does the project require the use of fertilizer? Y ☐ N ☒
   b. If yes, is the project consistent with Subsection 60.1.8? Y ☐ N ☐

4. a. Does the project include domestic wastewater discharge to the surface or groundwater? Y ☐ N ☒
   b. If yes, is the project consistent with Subsection 60.1.3.B? Y ☐ N ☐

5. a. Does the project disturb or encroach on an existing SEZ? Y ☒ N ☐
   b. If yes, is the project consistent with Subsection 30.5? Y ☒ N ☐

THRESHOLD: CLARITY, WINTER (IN LAKE)
INDICATOR: secch depth, Dec.-Mar. avg. TRG index station

1. a. Refer to questions 1-5, turbidity, above.

THRESHOLD: PHYTOPLANKTON PRIMARY PRODUCTIVITY (IN LAKE)
INDICATOR: phyto, primary productivity, ann. Avg., TRG index station

1. a. Refer to questions 1-5, turbidity, above.

THRESHOLD: DIN LOAD, SURFACE RUNOFF
INDICATOR: DIN x discharge, tributary network annual total 1

1. a. Refer to questions 1, 2, 3 and 5, turbidity, above.

THRESHOLD: DIN LOAD, GROUNDWATER
INDICATOR: DIN x discharge, grndwtr. Network, annual total

1. a. Refer to questions 2 & 3, turbidity, above.

THRESHOLD: DIN LOAD, ATMOSPHERIC
INDICATOR: NO3 + HNO, annual avg. Lake Tahoe Blvd station

1. a. Refer to question 4, turbidity, above.

THRESHOLD: NUTRIENT LOADS, GENERAL INDICATOR: sol. P x discharge sol. Fe x

1. a. Refer to questions 1-5, turbidity, above.

THRESHOLD: TOTAL N, P, Fe, (trib.) CA ONLY INDICATOR: single reading, tributary network

1. a. Refer to questions 1, 2, 3, and 5, turbidity, above.

THRESHOLD: DIN; SOL, P, Fe, SS (trib.) NV ONLY INDICATOR: single reading tributary network

1. a. Refer to questions 1, 2, 3 and 5, turbidity, above.

THRESHOLD: DIN, SOL, P, Fe, SS, GREASE/OIL DISCHARGED TO SURFACE WATER FROM RUNOFF INDICATOR: single reading runoff sites

1. a. Does the project route impervious surface runoff directly into Lake Tahoe or a major tributary? Y ☐ N ☒
   b. If yes, is the discharge structure consistent with BMP handbook? Y ☐ N ☐

2. a. Does the project create large impervious areas (e.g. parking lots) which may serve as a source of airborne pollutants, grease or oil? Y ☐ N ☒
   b. If yes, is the project consistent with Subsections 60.4.3, 60.4.6 and 60.4.9? Y ☐ N ☐

THRESHOLD: TOTAL N, TOTAL P, TOTAL Fe TURBIDITY, GREASE/OIL DISCHARGE TO GRDWTR FROM RUNOFF INDICATOR: single reading runoff site

1. a. Does the project include infiltration devices to infiltrate impervious surface runoff directly underground? Y ☒ N ☐
   b. If yes, is the project consistent with Subsection 60.4.6? Y ☒ N ☐

CATEGORY: SOIL CONSERVATION

THESHOLD: IMPERVIOUS COVERAGE — INDICATOR: area or coverage

1. a. Does the project include new or relocated coverage? Y ☐ N ☒
   b. If yes, is the project consistent with Subsection 30.4, 30.5 and 30.6? Y ☐ N ☐

THRESHOLD: NATURALLY-FUNCTIONING SEZ — INDICATOR: area of SEZ

1. a. Does the project disturb or encroach on a naturally-functioning SEZ? Y ☒ N ☐
   b. If yes, is the project consistent with Subsection 30.5? Y ☒ N ☐

CATEGORY: VEGETATION

THRESHOLD: PLANT & STRUCTURAL DIVERSITY — INDICATOR: plant & structural diversity

1. a. Does the project create a change in diversity? Y ☐ N ☐
   b. If yes, does the project include vegetation management techniques to increase diversity (reveg., thinning)? Y ☐ N ☐

THRESHOLD: MEADOW & RIPARIAN VEGETATION — INDICATOR: area of meadow & riparian veg.

1. a. Refer to question 5, turbidity, above.

THRESHOLD: DECIDUOUS RIPARIAN VEGETATION — INDICATOR: area of riparian vegetation

1. a. Refer to question 5, turbidity, above.

THRESHOLD: SHRUB ASSOCIATION — INDICATOR: area of shrub association

1. a. Does the project create an increase in the areal extent of the shrub association? Y ☐ N ☒
   b. If yes, has the additional area been calculated, and a determination been made that the total area is less than or equal to 25%? Y ☐ N ☐

THRESHOLD: YELLOW PINE ASSOCIATION (not mature) — INDICATOR: area of yellow pine assoc.

1. a. Does the project create a change in the areal extent of the immature yellow pine association? Y ☐ N ☒
   b. If yes, has the additional area been calculated, and a determination made that the total area in the Region is between 15 and 25%? Y ☐ N ☐

THRESHOLD: RED FIR ASSOCIATION — INDICATOR: area of red fir assoc.

1. a. Does the project create a change in the areal extent of the immature red fir association? Y ☐ N ☒
   b. If yes, has the additional are been calculated, and a determination made that the total area in the Region is between 15 and 25%? Y ☐ N ☐

THRESHOLD: FOREST OPENINGS — INDICATOR: size and location of forest openings

1. a. Does the project create new forest openings? Y ☐ N ☒
   b. If yes, is the new opening less than 8 acres? Y ☐ N ☐

2. a. Does the project create new forest openings adjacent to other openings? Y ☐ N ☐
   b. If yes, are the resultant adjacent openings not of the same relative age class or successional stage? Y ☐ N ☐

THRESHOLD: UNCOMMON PLANT COMMUNITITES — INDICATOR: habitat sites

1. a. Will the project impact the habitats for the deepwater sphagnum bog, Osgood Swamp, or the Freel Peak Cushing Plant Community? Y ☐ N ☒
   b. If yes, have modifications been included in the project to protect these plant communities? Y ☐ N ☐

THRESHOLD: SENSITIVE VEGETATION — INDICATOR: number of habitat sites

1. a. Will the project impact the habitats of the Carex paucifructus, the Lewis pyomaea longipetala, the Draba asterophora v., or the Rorippa subumbellata? Y ☒ N ☐
   b. If yes, have modifications been included in the project to protect these plant communities? Y ☒ N ☐

CATEGORY: WILDLIFE

THRESHOLD: SPECIAL INTEREST SPECIES — INDICATOR: number of habitat sites

1. a. Will the project result in the loss, modification or increased disturbance of habitat site for goshawk, osprey, bald eagle, (winter and nesting), golden eagle, peregrine falcon, waterfowl, or deer, as mapped on official TRPA maps? Y ☐ N ☒
   b. If yes, have modifications been included in the project to protect these habitat sites? Y ☐ N ☐

CATEGORY: FISHERIES

THRESHOLD: EXCELLENT STREAM HABITAT — INDICATOR: sites of excellent stream habitat

1. a. Does the project include stream channelization, stream dredging, removal of rock or gravel from a stream , culverts, bridges, or water diversions affecting a stream identified as fish habitat? Y ☐ N ☒
   b. If yes, have modifications been included in the project to offset impacts on stream habitat and contribute to the upgrading of stream habitat? Y ☐ N ☐

2. a. Will the project result in siltation, urban runoff, snow disposal, or litter that may affect water quality in a stream identified as fish habitat? Y ☐ N ☒
   b. If yes, is the project consistent with Subsections 60.4.3 and 60.4.6? Y ☐ N ☐

THRESHOLD: GOOD STREAM HABITAT — INDICATOR: miles of good stream habitat

1. a. Refer to questions 1 and 2, above.

THRESHOLD: MARGIANL STREAM HABITAT — INDICATOR: miles of marginal stream habitat

1. a. Refer to questions 1 and 2, above.

THRESHOLD: INSTREAM FLOWS — INDICATOR: increase flows

1.	a.	Does the project include new water diversions?	Y ☐	N ☒
	b.	If yes, is there evidence in the record to indicate that flows will remain within adopted TRPA standards or, in the absence of adopted standards, that flows will not be diminished?	Y ☐	N ☐
2.	a.	Does the project include new coverage or disturbance that could contribute to uncontrolled runoff reaching a stream identified as fish habitat?	Y ☐	N ☒
	b.	If yes, is the project consistent with Subsections 60.4.3 and 60.4.6?	Y ☐	N ☐
3.	a.	Refer to question 5, turbidity, above.		

THRESHOLD: LAKE HABITAT — INDICATOR: area of excellent habitat

1.	a.	Does the project include development in the shorezone, removal of rock or gravel from the lake, or removal of vegetation in the shorezone?	Y ☒	N ☐
	b.	If yes, is the project consistent with Chapters 80-86?	Y ☒	N ☐
2.	a.	Does the project increase the potential for siltation, runoff, or erosion entering Lake Tahoe?	Y ☒	N ☐
	b.	If yes, is the project consistent with Subsections 60.4.3 and 60.4.6?	Y ☒	N ☐

CATEGORY: NOISE

THRESHOLD: COMMUNITY NOISE EQUIVALENT LEVEL (CNEL) — INDICATOR: dBA, CNEL

1.	a.	Does the project involve the creation of a new or relocated land use?	Y ☐	N ☒
	b.	If yes, is the project consistent with the applicable plan area statement?	Y ☐	N ☐
2.	a.	Is the project located within a transportation corridor as mapped on TRPA maps?	Y ☐	N ☒
	b.	If yes, does the project include components to reduce the transmission of noise from the corridor, in accordance with the TRPA Design Review Guidelines?	Y ☐	N ☐

CATEGORY: SCENIC RESOURCES

THRESHOLD: ROADWAY AND SHORELINE RATINGS — INDICATOR: ratings

1.	a.	Is the project located within, or visible from, a roadway or shoreline unit targeted for scenic upgrading?	Y ☐	N ☒
	b.	If yes, is the project consistent with the TRPA Scenic Quality Implementation Program (SQUIP)?	Y ☐	N ☐
2.	a.	Is the project located within, or visible from, a roadway or shoreline unit not targeted for scenic upgrading?	Y ☒	N ☐
	b.	If yes, is there evidence in the record that the project will not cause a significant decrease in scenic quality, and is the project consistent with the TRPA Design Review Guidelines?	Y ☒	N ☐

CATEGORY: RECREATION

THRESHOLD: PRESERVE AND ENHANCE THE HIGH QUALITY RECREATION EXPERIENCE
INDICATOR: dispersed rec. capacity

1. a. Is the project located in a conservation or recreation plan area? Y ☐ N ☒
   b. If yes, is the project consistent with the applicable plan area statement? Y ☐ N ☐

CATEGORY: CODE/RULES OF PROCEDURE REQUIREMENTS

1. Does the project require Governing Board Review (Chapter 2)? Y ☐ N ☒

5. Does the project require notice to adjacent property owners (Art. XII Rules of Procedure)? Y ☒ N ☐

6. Is the project consistent with the following:

Chapter 2	(Project Review)	N/A	☐	Y	☒	N	☐
Chapter 6	(Tracking-Data Sheets/Log Book)	N/A	☐	Y	☒	N	☐
Chapter 21	(Permissible Uses)	N/A	☐	Y	☒	N	☐
Chapter 22	(Temporary Uses)	N/A	☒	Y	☐	N	☐
Chapter 30	(Coverage)	N/A	☐	Y	☒	N	☐
Chapter 31	(Density)	N/A	☒	Y	☐	N	☐
Chapter 32	(Basic Service)	N/A	☐	Y	☒	N	☐
Chapter 33.3	(Grading)	N/A	☐	Y	☒	N	☐
Chapter 33.4	(Special Reports)	N/A	☐	Y	☒	N	☐
Chapter 33.5	(Construction Schedule)	N/A	☐	Y	☒	N	☐
Chapter 33.6	(Vegetation Protection)	N/A	☐	Y	☒	N	☐
Chapter 34	(Driveways)	N/A	☒	Y	☐	N	☐
Chapter 34	(Parking)	N/A	☒	Y	☐	N	☐
Chapter 35	(Natural Hazards-Floodplain)	N/A	☐	Y	☒	N	☐
Chapter 36	(Design Standards)	N/A	☐	Y	☒	N	☐
Chapter 37	(Height)	N/A	☒	Y	☐	N	☐
Chapter 38	(Signs)	N/A	☒	Y	☐	N	☐
Chapter 50	(Allocations)	N/A	☒	Y	☐	N	☐
Chapter 51	(Transfers)	N/A	☒	Y	☐	N	☐
Chapter 52	(Bonus Units-MFD only)	N/A	☒	Y	☐	N	☐
Chapter 53	(IPES)	N/A	☒	Y	☐	N	☐
Chapter 60	(BMP's)	N/A	☐	Y	☒	N	☐
Chapter 60.1	(Water Quality)	N/A	☐	Y	☒	N	☐
Chapter 60.2	(Water Quality Mitigation)	N/A	☐	Y	☒	N	☐
Chapter 61.1	(Tree Removal)	N/A	☒	Y	☐	N	☐
Chapter 61.3.6	(Sensitive Plants/Fire Hazard)	N/A	☐	Y	☒	N	☐
Chapter 61.4	(Revegetation)	N/A	☐	Y	☒	N	☐
Chapter 62	(Wildlife)	N/A	☐	Y	☒	N	☐
Chapter 63	(Fish)	N/A	☐	Y	☒	N	☐
Chapter 65.1	(Air Quality)	N/A	☐	Y	☒	N	☐
Chapter 65.2	(Traffic/Air Quality Mitigation)	N/A	☐	Y	☒	N	☐
Chapter 67	(Historic Resource)	N/A	☐	Y	☒	N	☐