

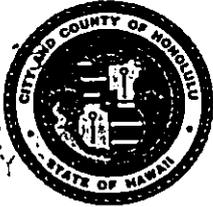
DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813 • (808) 523-4432

RECEIVED

FRANK F. FASI
MAYOR

'93 NOV
OFF. OF ENV.
QUALITY



DONALD A. CLEGG
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

93/SV-012 (JT)

November 12, 1993

Mr. Brian J. J. Choy, Director
Office of Environmental Quality Control
220 S. King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Mr. Choy:

CHAPTER 343, HRS
Environmental Assessment/Determination
Negative Declaration

Recorded Owners/ Applicant :	Thomas L. & Betty C. Chee; Floyd W. & Christine K. Barty; Elizabeth Herndon; and Episcopal Church in Hawaii
Agent :	Kenneth W. Zitz
Location :	68-709, 68-711, 68-713 and 68-715 Farrington Highway - Mokuleia
Tax Map Keys :	6-8-10: 27-30
Request :	Shoreline Setback Variance
Proposed Action:	To construct a seawall within the shoreline setback
Determination :	A Negative Declaration is Issued

Attached and incorporated by reference is the final environmental assessment prepared by the applicant for the project. Based on the significance criteria outlined in Chapter 200, State Administrative Rules, we have determined that preparation of an Environmental Impact Statement is not required.

Very truly yours,

Handwritten signature of Donald A. Clegg in cursive.

DONALD A. CLEGG
Director of Land Utilization

DAC:ak
Attachment
g:6810nd.jht

1993-12-08-DA-FEA-Mokuleia Seawall

DEC 8 1993

**ENVIRONMENTAL ASSESSMENT
FOR
SEAWALL REPAIR
TMKs 6-8-10:27, 28, 29, & 30**

I. GENERAL INFORMATION

A. Applicant: Kenneth Zitz Ph. 637-6241 (work)
68-729 Farrington Highway
Waialua, Hawaii 96791

B. Recorded Fee Owners:

LOT 7 - TMK 6-8-10: 30 The Episcopal Church in Hawaii Ph. (808) 536-7776
Peter Pereira
229 Queen Emma Square
Honolulu, Hawaii 96813

LOT 8 - TMK 6-8-10: 29 Elizabeth Herdon Ph. (808) 637-5847
68-713 Farrington Highway
Waialua, Hawaii 96791

LOT 7 - TMK 6-8-10: 28 Floyd W. & Christine K. Barty Ph. (808) 637-5583
68-711 Farrington Highway
Waialua, Hawaii 96791

LOT 6 - TMK 6-8-10: 27 Thomas L. & Betty Chee Ph. (808) 988-7143
68-709 Farrington Highway
Waialua, Hawaii 96791

C. Agent: SAME AS APPLICANT

D. & E. Tax Map Key and Lot Areas:

TMK: 6-8-10: 30 , AREA = 8307 SF
TMK: 6-8-10: 29 , AREA = 8293 SF
TMK: 6-8-10: 28 , AREA = 8003 SF
TMK: 6-8-10: 27 , AREA = 7714 SF

F. Agencies Consulted in Making Assessment:

1. City & County of Honolulu - Department of Land Utilization

a. Telephone confirmation with Joan Takano regarding the filing procedures for the shoreline setback variance.

II. DESCRIPTION OF THE PROPOSED ACTION

- A. General Description: The applicant proposes to repair an existing seawall in front of four contiguous lots in Mokuleia. The lots are located on the makai side of Farrington Highway near the east entrance of Dillingham Airfield. The existing seawall is located within the 40-foot shoreline setback area and the replacement wall will be located within the footprint of the existing wall. The new wall will not encroach seaward of the current certified shoreline which is at the foot of the existing wall. The foundation of the existing wall is inadequate and has been undermined by wave action. If the wall is not replaced, the houses on each of the four lots will be lost. Recognizing this, the four owners are working cooperatively to facilitate the construction and approval process. A location map is included on the title sheet of the attached construction plans.
- B. Technical Characteristics: The proposed new seawall will completely replace the existing seawall. It will be constructed of concrete rubble masonry, will be approximately 240 feet long, and will have a base width of 11 to 14 feet. The new wall height will match the existing wall elevations along the four lots. Construction plan sheets T-1, C-1, C-2, and S-1 illustrate these dimensions and provide other information required for the variance.

The existing beach will not be altered by this work, since the new seawall will duplicate the existing seawall's dimensions. The primary difference between the existing and new wall will be the foundation. The existing wall is constructed on top of loose beach sand. The footing of the new wall will be deeper and imbedded in the basement rock.

III. AFFECTED ENVIRONMENT

- A. Project Site Description: The project is located along the northwest shoreline of Oahu in Mokuleia. The lots involved are bounded by the existing shoreline and Farrington Highway. The lot depths, measured from the current certified shoreline to the existing highway right-of-way, are 80 to 85 feet. The remaining portions of each lot extend seaward of the certified shoreline another 45 to 60 feet. The existing homes are built within 20 to 30 feet of the existing seawall. The current zoning for this area is R-5 Residential District.
- B. Federal FIRM Zone: The Federal Flood Insurance Rate Map (FIRM), Panel 150001 0035B revised September 4, 1987, shows the four lots in Zone A, an area subject to flooding by the 100-year flood, with no base flood elevations determined. The Special Flood Hazard Zone with Coastal Base Flood Elevation of 11 feet above mean sea level extends inland to the seawall.
- C. Coastal Views: The existing wall is different at each lot and in various stages of complete collapse. The new wall would be of consistent appearance and, as such, it would be a visual improvement.
- D. Shoreline Access: The nearest public access to the shoreline is through Mokuleia Beach Park which is located 0.8 mile to the west of the proposed project site. Public access will not be affected by this project.

IV. PROJECT IMPACTS

Because the new wall will be in the exact location of the existing wall, no change to the shoreline's stability is anticipated. The only impacts will be due to the temporary disturbance of construction. The construction period is estimated to be 6 to 8 weeks long.

If the existing seawall is not replaced, the four homes are very likely to be destroyed by the force of waves.

**OVERSIZED
DRAWING/MAP**

**PLEASE SEE
35MM ROLL**

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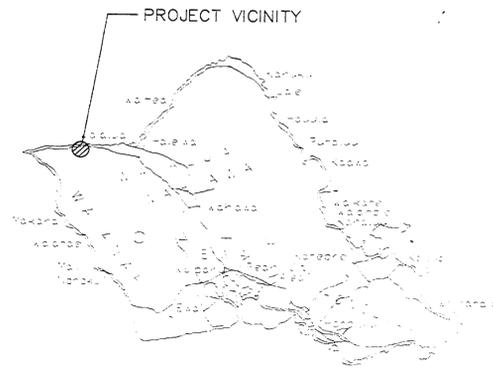
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CONSTRUCTION PLANS FOR SEAWALL REPAIR

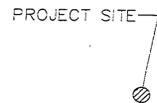
LOCATED AT
MOKULEIA, HAWAII
TMK: 6-8-10: LOTS 27, 28, 29 & 30

PREPARED FOR:
CAMP MOKULEIA
68-729 FARRINGTON HIGHWAY
WAIALUA, OAHU, HAWAII

PREPARED BY:
TOM NANCE WATER
RESOURCE ENGINEERING



ISLAND OF OAHU
SCALE: 1" = 6 MILES



VICINITY MAP
SCALE: 1" = 1000'

NO.	DESCRIPTION
T-1	TITLE SHEET & CONSTRUCTION NOTES
C-1	SITE PLAN
C-2	SITE SECTIONS
S-1	GENERAL NOTES, CRM WALL DETAIL AND PROJECTED WALL PROFILE

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PROVIDE A SURVEY CONTROL STAKEOUT BY A REGISTERED SURVEYOR. CONTRACTOR TO PROVIDE CONTROL POINTS AND BENCH MARKS FOR FUTURE REFERENCE. THE CERTIFIED SHORELINE SHALL BE STAKED AND REFERENCED FOR THE LOTS SHOWN TO PROVIDE CONTROL POINTS DURING THE CONSTRUCTION OF THE NEW SEAWALL.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, AND SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF SAME IN THE EVENT OF DAMAGES DUE TO HIS CONSTRUCTION PRACTICES. BEFORE DISRUPTING SERVICE OF ANY UTILITY, THE CONTRACTOR SHALL CONTACT AND COORDINATE HIS WORK WITH THE RESPONSIBLE UTILITY AUTHORITY.
3. TOPOGRAPHIC MAP WAS DONE ON FIELD SURVEY BY ENGINEERS SURVEYORS HAWAII, INC ON OCTOBER 6, 1992.
4. ELEVATIONS SHOWN ON PLANS ARE BASED ON MEAN SEA LEVEL (MSL).
5. DIMENSIONS TAKE PRECEDENCE OVER SCALE.
6. THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS, CONDITIONS AND ESPECIALLY THE DEPTH TO THE CORAL BASEMENT ELEVATIONS PRIOR TO STARTING WORK. IF DIMENSIONAL ERRORS OR CONFLICTS ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND SHALL WAIT FOR CLARIFICATION BEFORE RESUMING OR COMMENCING WORK ON THE DISCREPANCY ITEM.
7. THE CONTRACTOR SHALL OBTAIN AND PAY FOR REQUIRED PERMITS FROM APPROPRIATE GOVERNMENT AGENCIES.
8. THE CONTRACTOR SHALL COORDINATE THE STORAGE OF HIS MATERIAL AND EQUIPMENT WITH THE OWNER'S REPRESENTATIVE.
9. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR UTILITIES SUCH AS ELECTRICITY, WATER, ETC. REQUIRED FOR HIS OPERATIONS AND ALL COST SHALL BE BORNE BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER "AS BUILT" DRAWINGS OF ALL NEW UTILITIES AND STRUCTURES UPON COMPLETION OF WORK.
11. ALL WASTES GENERATED BY CONSTRUCTION INCLUDING GRUBBING, EXCESS AND SUITABLE EXCAVATION MATERIAL SHALL BE DISPOSED BY THE CONTRACTOR AT THE NEAREST SUITABLE DISPOSAL SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITTING AND COSTS FOR DISPOSAL OF THIS MATERIAL.
12. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES TO INSTALL THE NEW SEAWALL. THIS WORK TO INCLUDE ALL NECESSARY SHORING, LAGGERS AND STRUCTURAL PROTECTION OF ALL ADJACENT PROPERTIES, HOMES AND UTILITIES AS APPLICABLE TO CONSTRUCT TO NEW SEAWALL. ALL COSTS FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACTOR'S COST FOR THIS PROJECT.

TOM NANCE
1800 Ala Moana Boulevard, Suite 402, Honolulu, Hawaii 96813
Phone: 808-531-1141, Fax: 808-538-7757

Professional Engineer
No. 10001

DEPT OF LAND AND NATURAL RESOURCES
JUL 6 1993

THOMAS P. NANCE
REGISTERED PROFESSIONAL ENGINEER
No. 10001
HAWAII, USA

DESIGNED BY: T.N. O.F.
DRAWN BY: G.S.
DATE: JULY 1993
PROJECT NO.: 93-23

CAMP MOKULEIA
68-729 FARRINGTON HIGHWAY
WAIALUA, HAWAII 96791

SEAWALL REPAIR

TITLE SHEET
& CONSTRUCTION NOTES

DESIGNED BY: T.N. O.F.
DRAWN BY: G.S.
DATE: JULY 1993
PROJECT NO.: 93-23

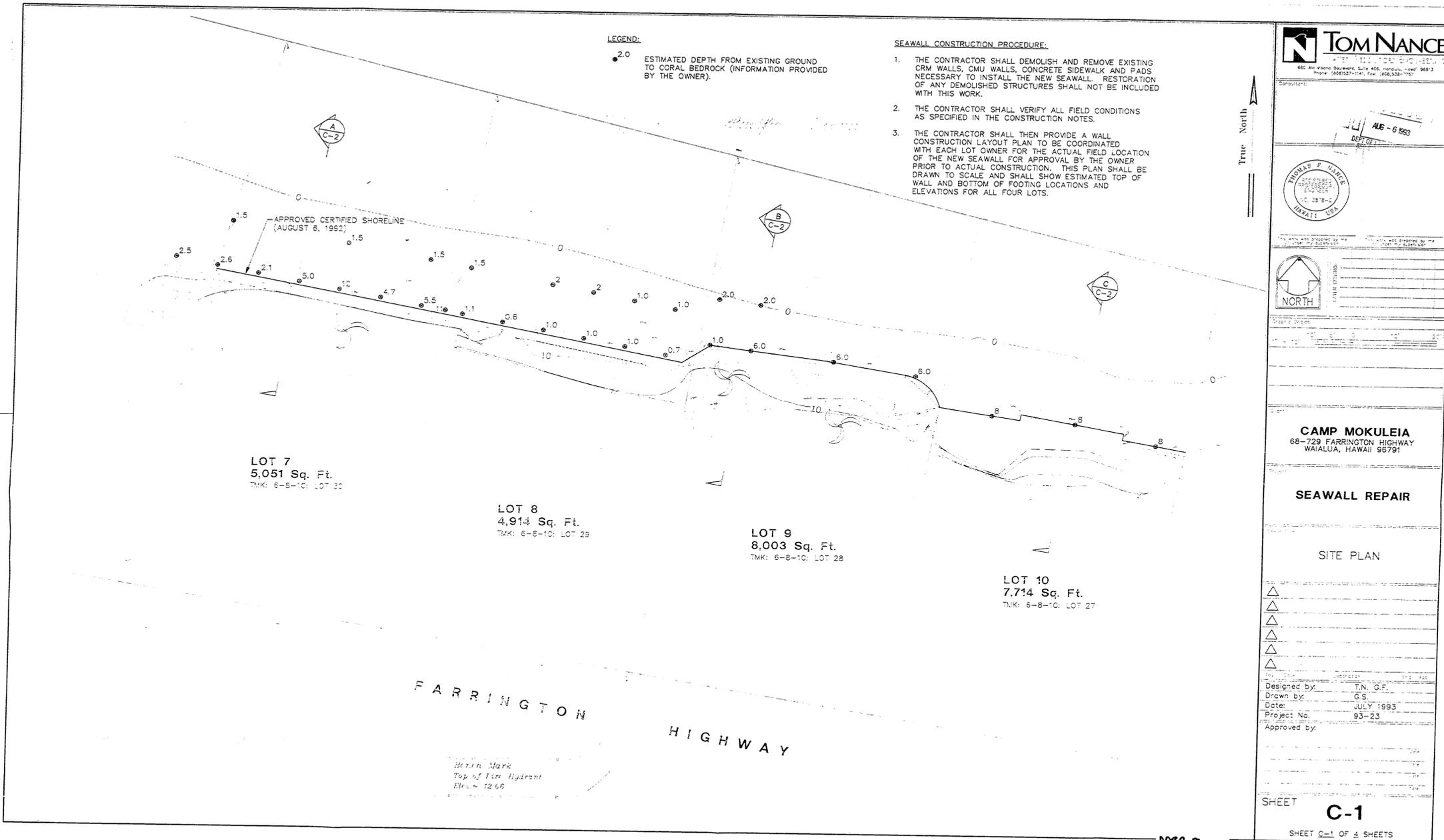
APPROVED BY:
SHEET T-1
SHEET 1-1 OF 4 SHEETS

**OVERSIZED
DRAWING/MAP**

**PLEASE SEE
35MM ROLL**

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FOLLOWS



TOM NANCE
ARCHITECT & ENGINEER
685 ALI DRIVE, SUITE 405, HONOLULU, HAWAII 96813
PHONE: (808) 537-1141, FAX: (808) 537-1142

Computer:
ALB-61993
DEPT. 021

THOMAS F. NANCE
REGISTERED PROFESSIONAL ENGINEER
NO. 3878-C
HAWAII, USA

DATE: 7/1/93
SCALE: AS SHOWN
PROJECT NO.: 93-23

CAMP MOKULEIA
68-729 FARRINGTON HIGHWAY
WAILUA, HAWAII 96791

SEAWALL REPAIR

SITE PLAN

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△
△
△
△

Designed by: T.N. G.F.
Drawn by: G.S.
Date: JULY 1993
Project No.: 93-23
Approved by:

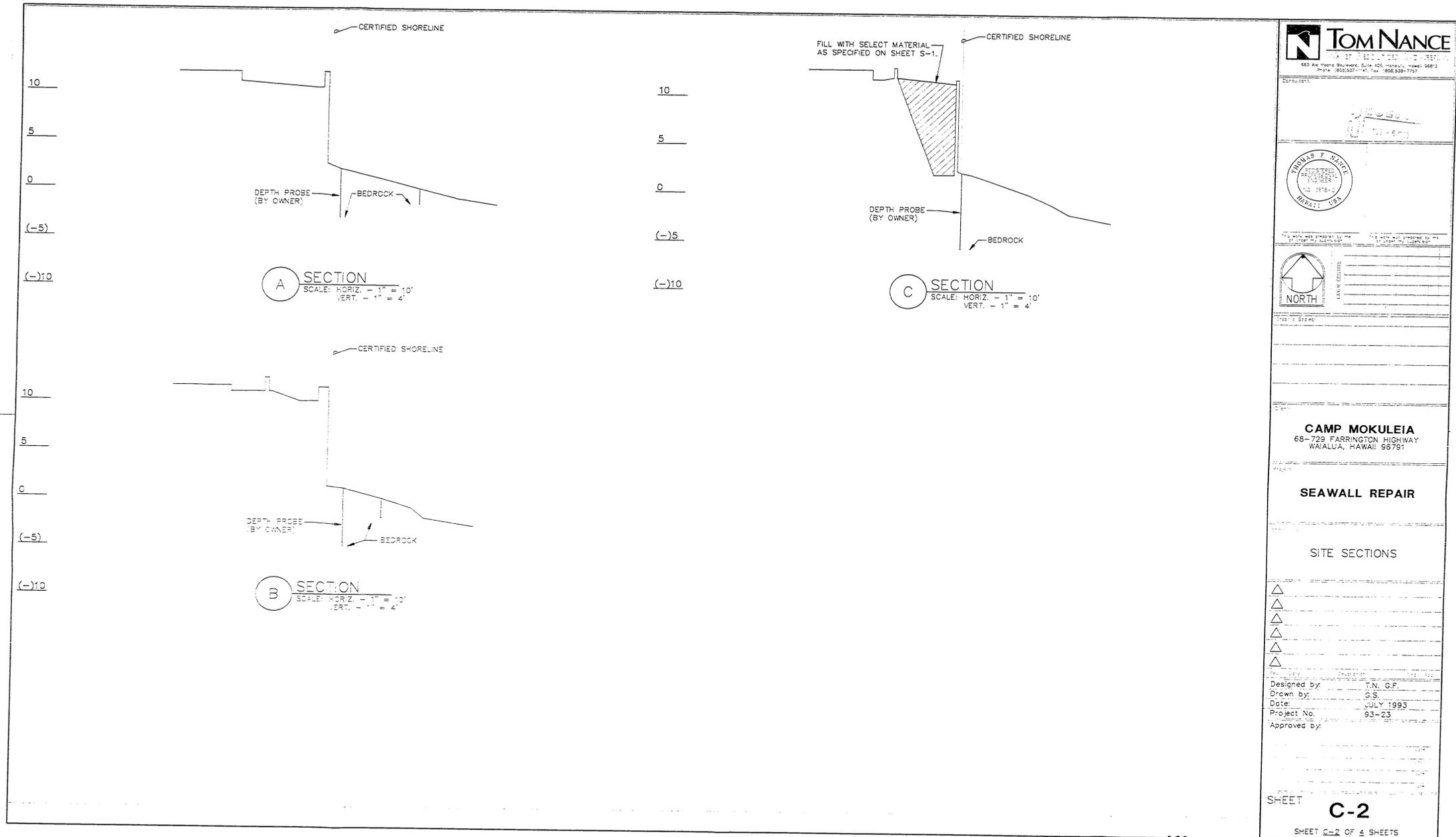
SHEET **C-1**
SHEET C-1 OF 4 SHEETS

**OVERSIZED
DRAWING/MAP**

**PLEASE SEE
35MM ROLL**

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RECEIVED AS
FOLLOWS



TOM NANCE
1420 Ala Moana Boulevard, Suite 425, Honolulu, Hawaii 96813
Phone: (808) 537-1141, Fax: (808) 538-7157



CAMP MOKULEIA
68-729 FARRINGTON HIGHWAY
WAILUA, HAWAII 96791

SEAWALL REPAIR

SITE SECTIONS

Designed by: T.N. G.F.
Drawn by: G.S.
Date: JULY 1993
Project No: 93-23

SHEET **C-2**

SHEET C-2 OF 4 SHEETS

0062 c

**OVERSIZED
DRAWING/MAP**

**PLEASE SEE
35MM ROLL**

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FOLLOWS

- GENERAL NOTES:**
- CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK. ALL DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT.
 - ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE STARTING ANY WORK SO INVOLVED.
 - ALL WORK SHALL CONFORM TO THE UNIFORM BUILDING CODE, CURRENT EDITION, INCLUDING AMENDMENTS AS ADOPTED BY THE CITY AND COUNTY OF HONOLULU.
 - DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE SAFETY. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE DESIGN AND PROVISION OF ALL TEMPORARY BRACING, SHORING, CUTS, ETC.
 - THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING SHORING, LAGGING, AND PROTECTION OF ADJACENT PROPERTIES AND UTILITIES.

STRUCTURAL DESIGN PARAMETERS:

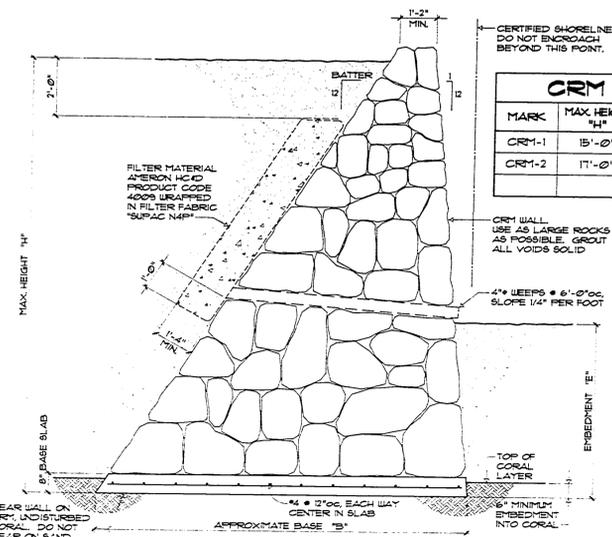
- MATERIAL UNIT WEIGHTS:**
 - SAND: 120 PCF
 - SUBMERGED SAND: 58 PCF
 - CRM WALL: 140 PCF
 - SUBMERGED CRM WALL: 78 PCF
- ACTIVE SOIL PRESSURES:**
 - ABOVE WATER LINE: 40 PCF
 - BELOW WATER LINE: 30 PCF
- FRICITION FACTOR:** 0.40 IN DEAD LOADS
- ALLOWABLE BEARING ON CORAL:** 5000 PSF
- PASSIVE PRESSURE SUBMERGED WALL:** 62 PCF

- CONCRETE:**
- ALL CONCRETE WORK SHALL CONFORM TO ACI 318-83.
 - 28 DAY COMPRESSIVE STRENGTH, AGGREGATE SIZE AND SLUMP SHALL BE AS FOLLOWS:
- | STRENGTH | MAXIMUM AGGREGATE | SLUMP |
|----------|-------------------|-------|
| 3000 | 3/4" | 4" |
| 2500 | 3/4" | 3" |

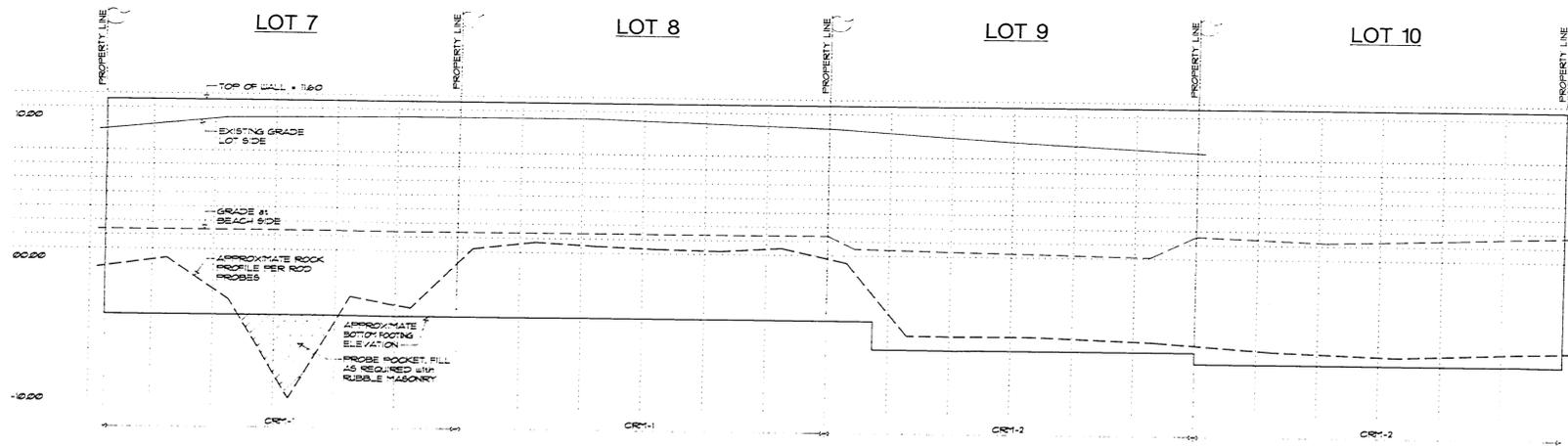
- TREMBLE CONCRETE SHALL BE PLACED IN STRICT CONFORMANCE WITH ACI-304 CHAPTER 8. TREMBLE CONCRETE SHALL BE PLACED WITH A HOPPER AND DROP PIPE. PIPE SHALL BE CONSTANTLY SUBMERGED IN FRESH CONCRETE. CONCRETE SHALL BE ALLOWED TO FLOW CONSTANTLY INTO PLACE WITH MINIMAL DISTURBANCE.

RETAINING WALL NOTES:

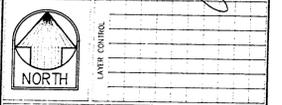
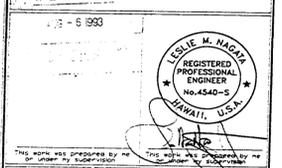
- BACKFILL BEHIND RETAINING WALL SHALL BE SANDY, NON-EXPANSIVE MATERIAL WITH PARTICLES NOT GREATER THAN 4" AND NOT MORE THAN 20% PASSING THE #20 SIEVE. PLASTICITY INDEX SHALL NOT BE MORE THAN 10.
- FILL BEHIND RETAINING WALLS SHALL BE COMPACTED IN 6" LOOSE LIFTS TO 90% RELATIVE COMPACTION PER ASTM D1557. COMPACTION SHALL BE DONE BY A HAND OPERATED COMPACTOR. DO NOT OVER COMPACT FILL BEHIND RETAINING WALL.
- AT ALL RETAINING WALLS PROVIDE 4" DIAMETER WEERS AT 6'-0" O.C. BED ALL WEERS WITH A LAYER OF FILTER GRAVEL SURMOUNTED IN GEOTEXTILE FILTER FABRIC.
- ALL GRADE DISCREPANCIES AND DISCREPANCIES IN THE HEIGHT OF THE RETAINING WALLS SHALL BE REPORTED TO THE ENGINEER.
- ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED CORAL FORMATION. NO FOOTING SHALL BEAR ON SAND. EMBED FOOTING (BOTTOM OF CRM WALL) A MINIMUM OF 6 INCH INTO CORAL.
- ALL RETAINING WALL BASES SHALL BE PLACED ON LEVEL BENCHES. DO NOT PLACE FOOTINGS ON A SLOPE. STEP BOTTOM OF WALL AS REQUIRED.
- GRADES SHOWN ON WALL PROFILE IS APPROXIMATE ONLY. THIS PROFILE IS GENERATED FROM DATA PROVIDED TO US BY OWNER. CONTRACTOR TO VERIFY ALL ELEVATIONS.



MARK	MAX. HEIGHT "H"	BATTER X : Y	APPROX. BASE "B"	EMBEDMENT "E"
CRM-1	15'-0"	1:25	11'-6"	6'-0"
CRM-2	17'-0"	2:20	13'-10"	8'-0"



Consultant:
STRUCTURAL ANALYSIS GROUP, INC.
2353 S. Beretania St. #201
Honolulu, Hawaii 96826



Client:
CAMP MOKULEIA
68-729 FARRINGTON HIGHWAY
WAILUA, HAWAII 96791

Project:
SEAWALL REPAIR

Sheet Title:
**GENERAL NOTES,
CRM WALL DETAIL and
PROJECTED WALL PROFILE**

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- △
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Rev.	Date	Description	Eng. App.
Designed by:			LMN
Drawn by:			SMT
Date:			
Project No.:			
Approved by:			

SHEET **S-1**
SHEET S-1 OF 2 SHEETS

0064-SI-25-178-3-93

0092 v