

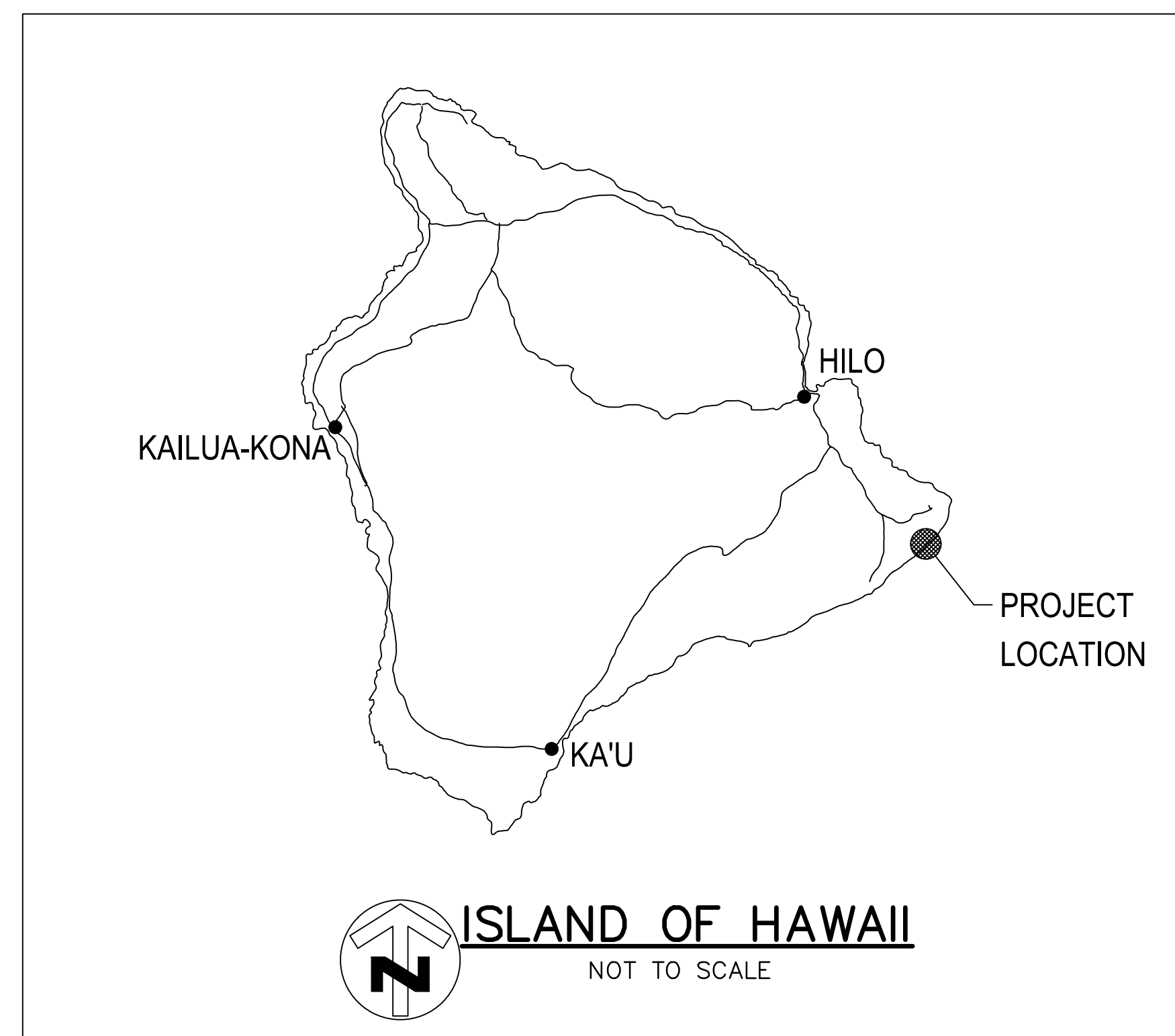
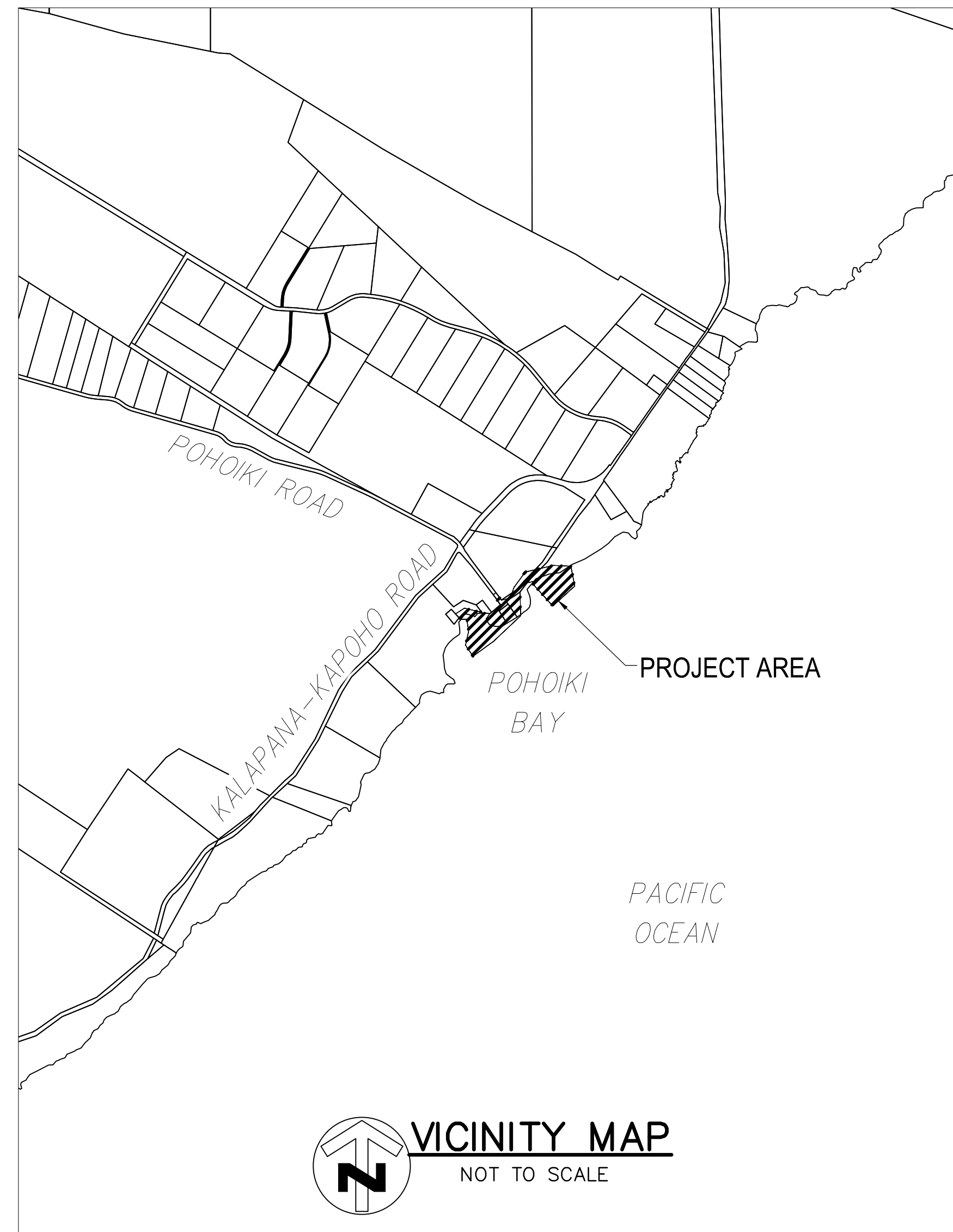
STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 DIVISION OF BOATING AND OCEAN RECREATION

JOB NO. B00CH80A

POHOIKI BOAT RAMP EXCAVATION AND DREDGING OF VOLCANIC DEBRIS

PUNA, HAWAII ISLAND, HAWAII

TMK: (3) 1-3-008:097, (3) 1-3-008:013, (3) 1-3-008:033,
 (3) 1-3-008:034, (3) 1-3-008:086, (3) 1-3-008:014,
 (3) 1-3-008:021, (3) 1-3-008:016, (3) 1-4-093:048,



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APPROVED:

Jun 25, 2024

EDWARD R. UNDERWOOD
 ADMINISTRATOR
 DIVISION OF BOATING AND OCEAN RECREATION
 DEPARTMENT OF LAND AND NATURAL RESOURCES

DATE

STEVE PAUSE
 DIRECTOR
 COUNTY OF HAWAII
 DEPARTMENT OF PUBLIC WORKS

DATE

DRAWING NO.
T01

CONSTRUCTION NOTES

- EXISTING TOPOGRAPHIC SURVEY WAS CONDUCTED ON MAY 2, 2022 BY DUDEK & ASSOCIATES. THIS TOPOGRAPHIC SURVEY WAS BASED ON THE BEST AVAILABLE INFORMATION AND ACCURACY MUST BE VERIFIED PRIOR TO STARTING CONSTRUCTION.
- VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR DIRECTION.
- AT ALL TIMES DURING PERFORMANCE OF THIS CONTRACT, ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE SITE SAFETY CONDITIONS FOR ALL PERSONS AND PROPERTY.
- HARD BOULDERS AND MEDIUM HARD TO HARD BASALT ROCK MAY BE ENCOUNTERED NEAR OR AT THE SITE. APPROPRIATE EQUIPMENT FOR EXCAVATING THE MEDIUM HARD TO HARD BASALT SHALL BE REQUIRED.
- NO BLASTING SHALL BE ALLOWED.
- IN THE EVENT HISTORIC REMAINS, SUCH AS ARTIFACTS, BURIALS, CONCENTRATIONS OF SHELL OR CHARCOAL, BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, WORK SHALL IMMEDIATELY CEASE IN THE IMMEDIATE VICINITY OF THE ENCOUNTER. IMMEDIATELY NOTIFY THE STATE HISTORIC PRESERVATION DIVISION AT (808) 692-8015, WHO WILL ASSESS THE ENCOUNTER AND RECOMMEND THE APPROPRIATE MITIGATION MEASURES.
- CONSTRUCT TEMPORARY BARRICADES DURING CONSTRUCTION, FOR SAFETY AND THE PROTECTION OF LIFE AND PROPERTY.
- THE ISAAC HALE BEACH PARK SHALL REMAIN OPEN DURING THE CONSTRUCTION PERIOD. PROVIDE TEMPORARY BARRICADES AND WARNING SIGNS TO SAFETY AND PROTECT THE PUBLIC DURING THE CONSTRUCTION PERIOD. PROVIDE AND MAINTAIN FOR SAFE PEDESTRIAN ACCESS AND VEHICLE ACCESS TO THE FACILITY THROUGHOUT THE CONSTRUCTION PERIOD, AS REQUIRED.
- PROVIDE AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND TAKE NECESSARY PRECAUTIONS FOR THE PROTECTION CONVENIENCE AND SAFETY OF THE PUBLIC.
- EXISTING PEDESTRIAN WALKWAYS SHALL BE MAINTAINED IN A PASSABLE CONDITION OR PROVIDE FOR ALTERNATE/TEMPORARY ACCESSIBLE PEDESTRIAN ACCESS ROUTES AND FACILITIES PER THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN CHAPTER 2 AND ADAAG 201.3 AND ADAAG 206.1.
- NO PERFORMANCE OF ANY CONSTRUCTION ACTIVITIES THAT CAUSES FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATER COURSES. ALL COSTS INCURRED FOR VIOLATIONS PAID AND SUBSEQUENT REMEDIAL ACTION UNDERTAKEN AT NO ADDITIONAL COST TO THE STATE.
- COORDINATE CONSTRUCTION ACTIVITIES WITH ANY AND ALL ADJACENT OR RELATED CONSTRUCTION ACTIVITIES ON ANOTHER CONSTRUCTION SITE. AVOID DELAY OR HINDRANCE IN THE PERFORMANCE OF THEIR RESPECTIVE CONTRACTS.
- COORDINATE WITH ALL AGENCIES AND UTILITY COMPANIES TO VERIFY THE ACTUAL LOCATION OF ALL SITE UTILITIES IN THE PROJECT AREA PRIOR TO EXCAVATING.
- NOTIFY AND COORINATE ALL SITE WORK WITH "THE ONE CALL CENTER" AT (866) 423-7287 AT LEAST 5 WORKING DAYS PRIOR TO THE START OF EXCAVATION OR TRENCHING.
- MAKE ARRANGEMENTS FOR TEMPORARY CONSTRUCTION SITE UTILITIES SUCH AS ELECTRICITY, WATER, ETC. AT NO ADDITIONAL COST TO THE STATE.
- ALL EXISTING UTILITIES, SHOWN ON THE PLANS OR ENCOUNTERED, SHALL BE PROTECTED AT ALL TIMES DURING CONSTRUCTION AND ANY DAMAGED UTILITIES, AS RESULT OF CONCTOR OPERATIONS, SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST TO THE STATE.
- CONFORM WITH THE APPLICABLE PROVISIONS OF CHAPTER 54, WATER QUALITY STANDARDS, AND CHAPTER 55, WATER POLLUTION CONTROL, OF TITLE 11, HAWAII ADMINISTRATIVE RULES OF THE STATE DEPARTMENT OF HEALTH.
- PLAN, CONSTRUCT AND UTILIZE ALL BEST MANAGEMENT PRACTICES (BMP) AS REQUIRED TO COMPLY WITH THE LAWS, STANDARDS, RULES, AND/OR POLICIES OF THE COUNTY, STATE, OR FEDERAL REGULATORY AGENCIES.
- OBTAIN AND PAY FOR ALL REQUIRED PERMITS FROM THE APPROPRIATE GOVERNMENT AGENCIES.
- RESTORE ALL AREAS DISTRUBED AS A RESULT OF ALL CONSTRUCTION ACTIVITIES, TO EQUAL OR BETTER CONDITION(S), INCLUDING BUT NOT LIMITED TO VEGETATION, PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALKWAYS, FENCES, ETC. UNLESS SPECIFICALLY OTHERWISE NOTED OTHERWISE.
- IF ONE (1) OR MORE ACRE OF LAND IS DISTURBED, DO NOT START ANY GROUND DISTRUBANCE UNTIL A NPDES PERMIT IS OBTAINED FROM THE DEPARTMENT OF HEALTH, STATE OF HAWAII, AND HAS SATISFIED ALL APPLICABLE REQUIREMENTS OF THE NPDES PERMIT PROGRAM. FOR WORK ON COUNTY PROPERTY, PROVIDE A WRITTEN COPY OF THE NPDES PERMIT TO THE APPROPRIATE COUNTY OR GOVERNMENTAL AGENCY PER THEIR REQUIREMENTS.
- PROVIDE ALL INCIDENTAL AND NECESSARY MATERIALS AND WORK TO COMPLETE THE PROJECT.
- THE JOB SITE SHALL BE LEFT IN A SAFE AND SECURE CONDITION AT THE END OF EACH CONSTRUCTION WORKDAY. CLEAN UP AND REMOVE ALL RUBBISH. MAINTAIN THE WORK AREA AND PREMISES IN A CLEAN ORDERLY CONDITION AT ALL TIMES.
- UPON COMPLETION OF CONSTRUCTION, THE ENTIRE JOB SITE SHALL BE CLEANED OF ALL RUBBISH AND DEBRIS.

GRADING NOTES


- ALL GRADING WORK SHALL BE IN ACCORDANCE WITH CHAPTER 10 – "EROSION AND SEDIMENTATION CONTROL" OF THE HAWAII COUNTY CODE AND AS SHOWN ON THE APPROVED PLAN.
- THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS RESULTING FROM HIS WORK. THE COSTS INCURRED FOR ANY NECESSARY REMEDIAL ACTION BY THE DPW SHALL BE PAYABLE BY THE CONTRACTOR.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND SURROUNDING AREAS FREE FROM DUST NUISANCES. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL RULES OF THE STATE DEPARTMENT OF HEALTH, HAR 11-60.1, FUGITIVE DUST.
- ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 55, WATER POLLUTION CONTROL AND CHAPTER 54, WATER QUALITY STANDARDS, AND TO THE EROSION AND SEDIMENTATION CONTROL STANDARDS AND GUIDELINES OF THE DEPARTMENT OF PUBLIC WORKS, COUNTY OF HAWAII.
- THE CONTRACTOR SHALL INFORM THE CONTRACTING OFFICER OF THE LOCATION OF THE DISPOSAL AND/OR BORROW SITE(S) REQUIRED FOR THIS PROJECT WHEN AN APPLICATION FOR A GRADING PERMIT IS MADE. THE DISPOSAL AND/OR BORROW SITE(S) MUST ALSO FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE.
- NO GRADING WORK SHALL BE DONE ON SATURDAY, SUNDAY AND HOLIDAYS ANYTIME WITHOUT PRIOR APPROVAL FROM THE CONTRACTING OFFICER, PROVIDED SUCH GRADING WORK IS ALSO IN CONFORMANCE WITH THE COMMUNITY NOISE CONTROL STANDARDS CONTAINED IN THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 46, "COMMUNITY NOISE CONTROL".

PUBLIC HEALTH SAFETY AND CONVENIENCE NOTES

- CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH. THE CITY MAY REQUIRE SUPPLEMENTARY MEASURES IF REQUIRED AT NO ADDITIONAL COST TO THE CITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND REMOVAL OF ALL SILT AND DEBRIS GENERATED BY HIS WORK AND DEPOSITED AND ACCUMULATED WITHIN DOWNSTREAM WATERWAYS, DITCHES AND DRAIN PIPES AND PUBLIC AND PRIVATE ROADWAYS. THE CONTRACTOR AGREES TO REIMBURSE THE CITY AND COUNTY OF HONOLULU FOR ALL COSTS EXPENDED IN PERFORMANCE OF ABOVE WORK IF REQUIRED FOR PUBLIC HEALTH AND SAFETY OR MADE NECESSARY BY NON-PERFORMANCE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL NOT PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING CITY DRAINAGE SYSTEMS, OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO CHAPTER 46, PUBLIC HEALTH REGULATIONS, DEPARTMENT OF HEALTH, STATE OF HAWAII, "COMMUNITY NOISE CONTROL," IN WHICH MAXIMUM PERMISSIBLE NOISE LEVELS HAVE BEEN SET. IF THE CONSTRUCTION WORK REQUIRES A PERMIT FROM THE DIRECTOR OF HEALTH, THE CONTRACTOR SHALL OBTAIN A COPY OF CHAPTER 46 AND BECOME FAMILIAR WITH THE NOISE LEVEL RESTRICTIONS AND THE PROCEDURES FOR OBTAINING A PERMIT FOR THE CONSTRUCTION ACTIVITIES. APPLICATION AND INFORMATION ON VARIANCES ARE AVAILABLE FROM THE ENVIRONMENTAL PROTECTION AND HEALTH SERVICES DIVISION, 99-945 HALAWA VALLEY STREET, HONOLULU, HI 96701 OR BY TELEPHONE (586-4400).

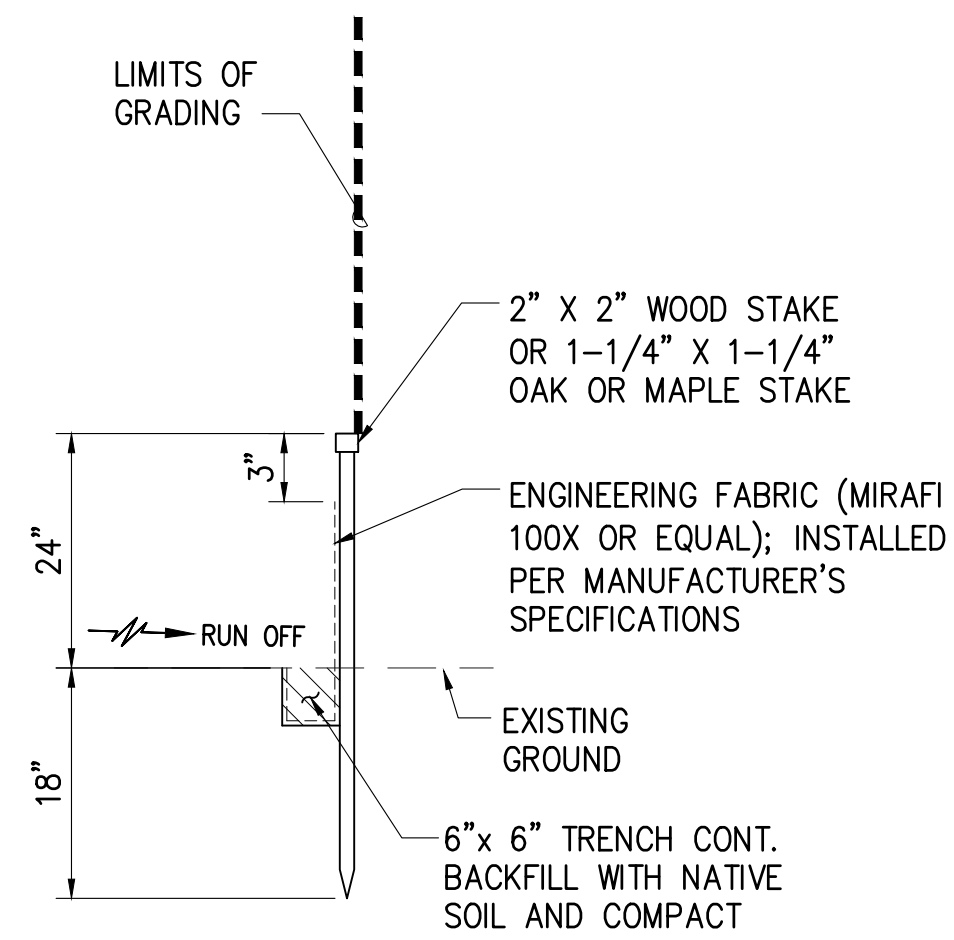
ARCHAEOLOGICAL NOTES

- PURSUANT TO CHAPTER 6E, HRS, IN THE EVENT ANY ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE HAWAII POLICE DEPARTMENT AND THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES, HISTORIC PRESERVATION DIVISION (692-8015).

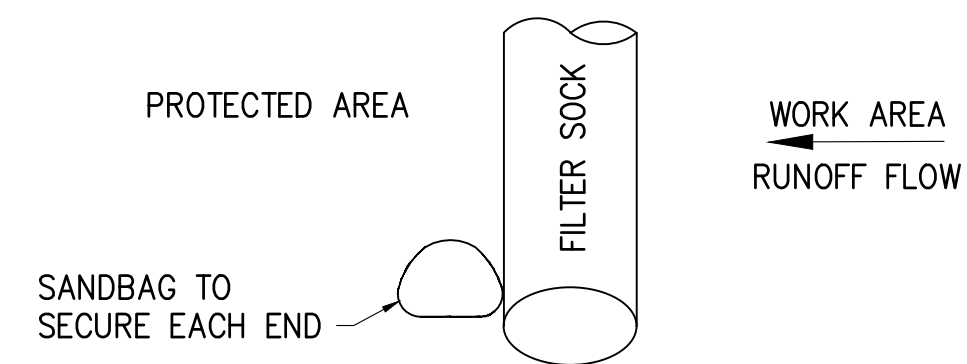
| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|---|------|---|----------------------|-------------|----------|
|  | | STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION | | | |
| | | POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS | | | |
| NOTES | | | | | |
| DESIGNED: TV | | | SUBMITTED: JUNE 2024 | | |
| DRAWN: IE | | | DATE: JUNE 2024 | | |
| CHECKED: KK | | | SCALE: NOT TO SCALE | | |
| APPROVED: _____ | | | | DRAWING NO. | |
| CHIEF ENGINEER | | | | T02 | |
| Signature _____ Date _____ | | | | DATE _____ | |

BEST MANAGEMENT PRACTICES (BMPs):

1. THE CONTRACTOR, AT THEIR OWN EXPENSE, SHALL KEEP THE PROJECT AREAS AND SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE DONE IN CONFORMANCE WITH AIR POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES: CHAPTER 11-60, "AIR POLLUTION CONTROL".
2. MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY CONSTRUCTION IS INITIATED. THESE MEASURES SHALL BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
3. CONTRACTOR SHALL OBSERVE AND COMPLY WITH THE STATE DEPARTMENT OF HEALTH REGULATIONS REGARDING STORMWATER DISCHARGE.
4. ALL EROSION CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY, FOR EXAMPLE, WEEKLY IN DRY PERIODS AND WITHIN TWENTY-FOUR HOURS AFTER ANY RAINFALL OF 0.5 INCHES OR GREATER WITHIN A 24-HOUR PERIOD. DURING AN EVENT OF ABOVE NORMAL RAINFALL, THE CONTRACTOR SHALL REMOVE THE SEDIMENT AND DRAIN INLET FILTER AND REPLACE AFTER THE EVENT HAS PASSED. THE CONTRACTOR SHALL MAINTAIN RECORDS OF ALL CHECKS AND REPAIRS AND A COPY SHALL BE AVAILABLE IN THE FIELD OFFICE.
5. GOOD HOUSEKEEPING SHALL BE UTILIZED TO ENSURE PROTECTION OF ROADWAYS FROM MUD, DIRT, AND DEBRIS.
6. THE CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES FOR THEIR CONSTRUCTION, STAGING, AND STORAGE AREAS AND SHALL INSPECT AND MONITOR THEIR CONSTRUCTION, STAGING, AND STORAGE AREAS TO ENSURE THAT NON-STORM WATER DISCHARGES ARE EMITTED. IF SUCH SOURCES ARE IDENTIFIED THE CONTRACTOR SHALL PROVIDE IMMEDIATE MITIGATIVE MEASURES.
7. NO SEDIMENT LADEN RUNOFF SHALL LEAVE THE SITE.
8. THE FINAL LIFT OF EACH DAYS WORK SHALL BE COMPACTED TO PREVENT EROSION OF FILL MATERIALS.
9. THE CONTRACTOR SHALL DISPOSE OF VEGETATION, EQUIPMENT, WASTE MATERIALS AND HYDRAULIC OILS OFF-SITE.
10. AT THE END OF CONSTRUCTION, THE EXISTING DRAIN SYSTEM SURROUNDING THE PROJECT SITE SHALL BE INSPECTED AND ANY ACCUMULATED SEDIMENT AND DEBRIS FOUND SHALL BE REMOVED. FLUSHING INTO THE DRAINAGE SYSTEM IS PROHIBITED.



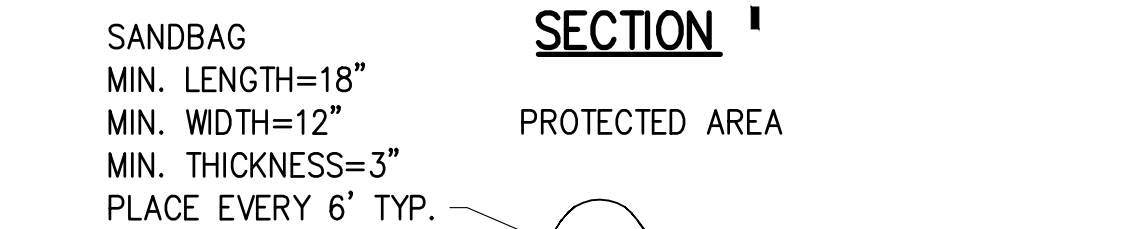
2 SILT FENCE DETAIL
T03 NOT TO SCALE



PLAN



SECTION

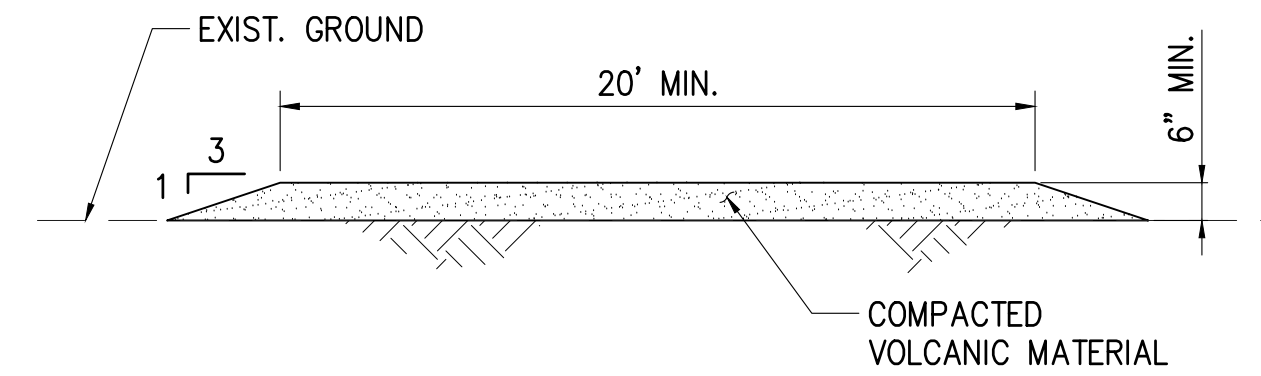


OVERLAP

3 FILTER SOCK DETAIL
T03 NOT TO SCALE

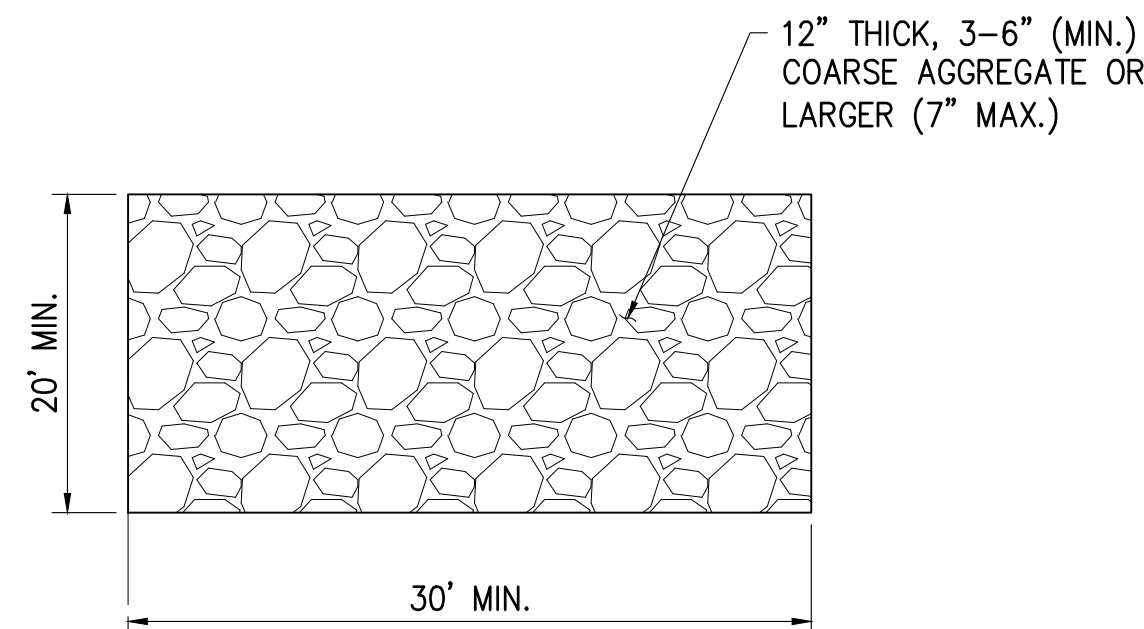
NOTES:

1. REMOVE ACCUMULATED SEDIMENT WHEN DEPTH REACHES 1/3 THE BARRIER HEIGHT.
2. AT COMPLETION OF PROJECT, FILTER SOCKS MATERIAL INCLUDING THE COMPOST SHALL BE REMOVED FROM SITE & DISPOSED OF PROPERLY.
3. FILTER SOCK SHALL MEET THE REQUIREMENTS OF THE STATE CONSTRUCTION BMP FIELD MANUAL, SC-6 COMPOST FILTER BERM.
4. COMPOST SHALL NOT CONTAIN BIOSOLIDS AND SHOULD BE CONSISTENT WITH EPA GUIDELINES.
5. CONTRACTOR IS NOT REQUIRED TO STAKE COMPOST FILTER SOCKS BUT SHALL ENSURE FILTER SOCKS REMAIN IN PLACE TO PROVIDE ADEQUATE PROTECTION.

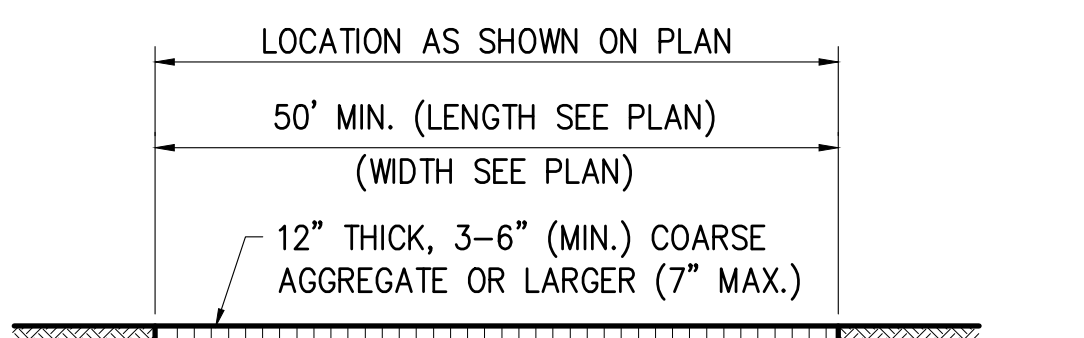


NOTE:
COMPACTED VOLCANIC MATERIAL SHALL BE PLACED ON NON-PAVED AREAS ONLY.

4 TEMPORARY CONSTRUCTION HAUL ROAD
T03 NOT TO SCALE



PLAN



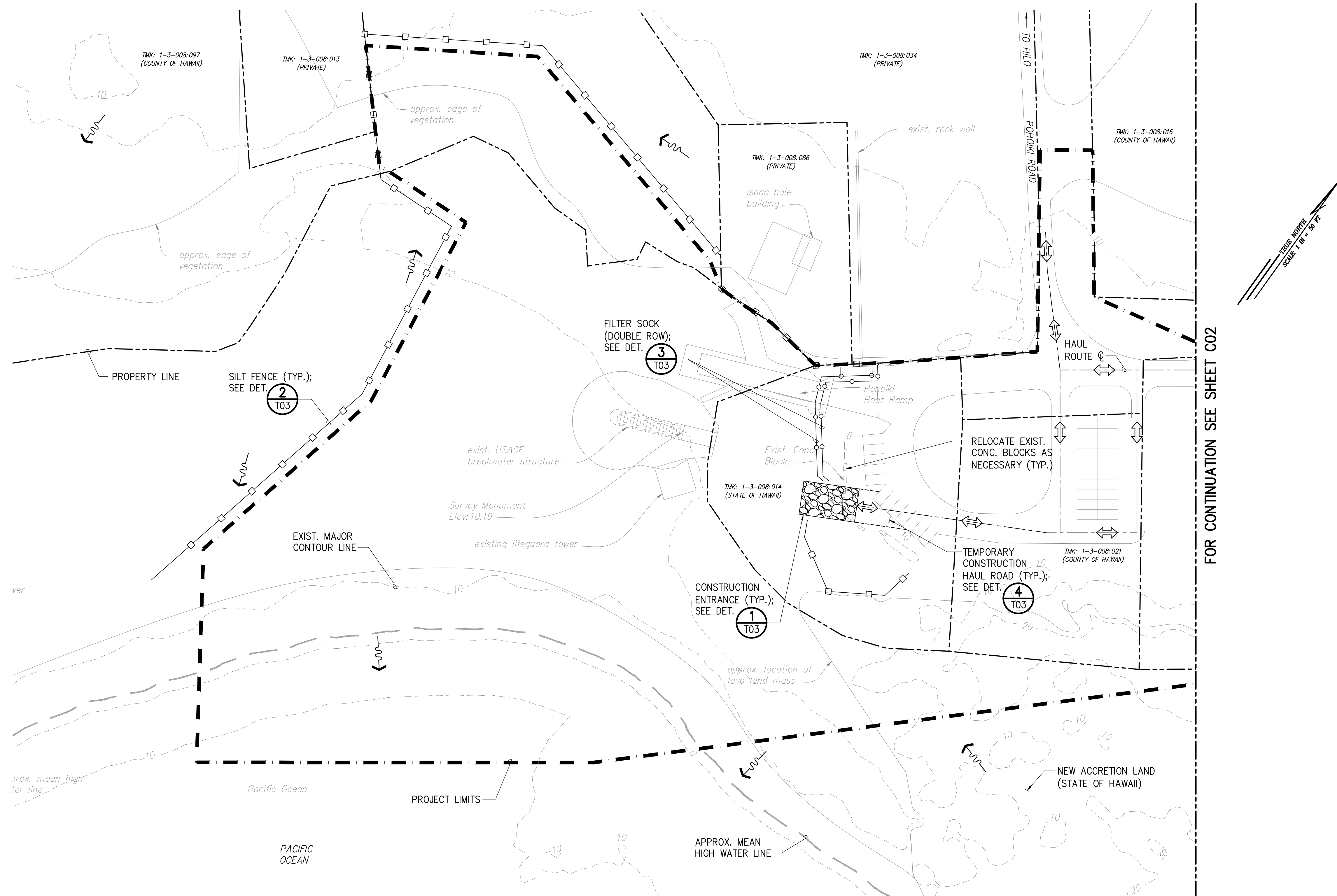
SECTION

GEOTEXTILE FILTER FABRIC; SEE TABLE

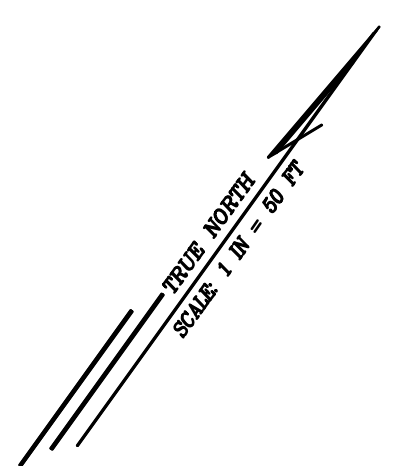
1 CONSTRUCTION ENTRANCE DETAIL
T03 NOT TO SCALE

| GEOTEXTILE REQUIREMENTS | |
|-------------------------|--|
| PHYSICAL PROPERTY | REQUIREMENTS |
| GRAB TENSILE STRENGTH | 220 LB (ASTM D1682) |
| ELONGATION FAILURE | 60% (ASTM D1682) |
| MULLEN BURST STRENGTH | 430 LB (ASTM D3768) |
| PUNCTURE STRENGTH | 125 LB (ASTM D751, MODIFIED) |
| EQUIVALENT OPENING | SIZE 40-80 (U.S. STD. SIEVE, CW-02215) |

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--|------|--|---------|--------------|----------|
| <p>STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION</p> <p>POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS</p> <p>EROSION AND SEDIMENT CONTROL NOTES AND DETAILS</p> | | | | | |
| <p>DESIGNED: TV</p> | | <p>SUBMITTED: JUNE 2024</p> | | | |
| <p>DRAWN: IE</p> | | <p>DATE: JUNE 2024</p> | | | |
| <p>CHECKED: KK</p> | | <p>SCALE: NOT TO SCALE</p> | | | |
| <p>APPROVED:</p> | | <p>DRAWING NO.</p> | | <p>T03</p> | |
| <p>Signature _____ Date _____</p> | | <p>CHIEF ENGINEER _____ DATE _____</p> | | <p>_____</p> | |



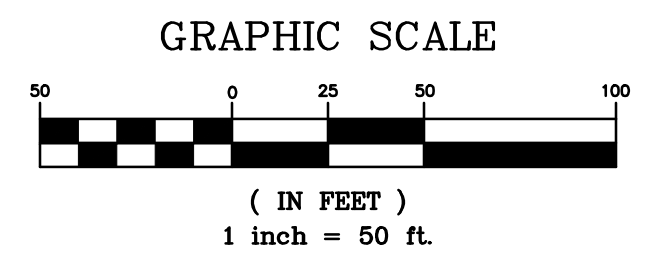
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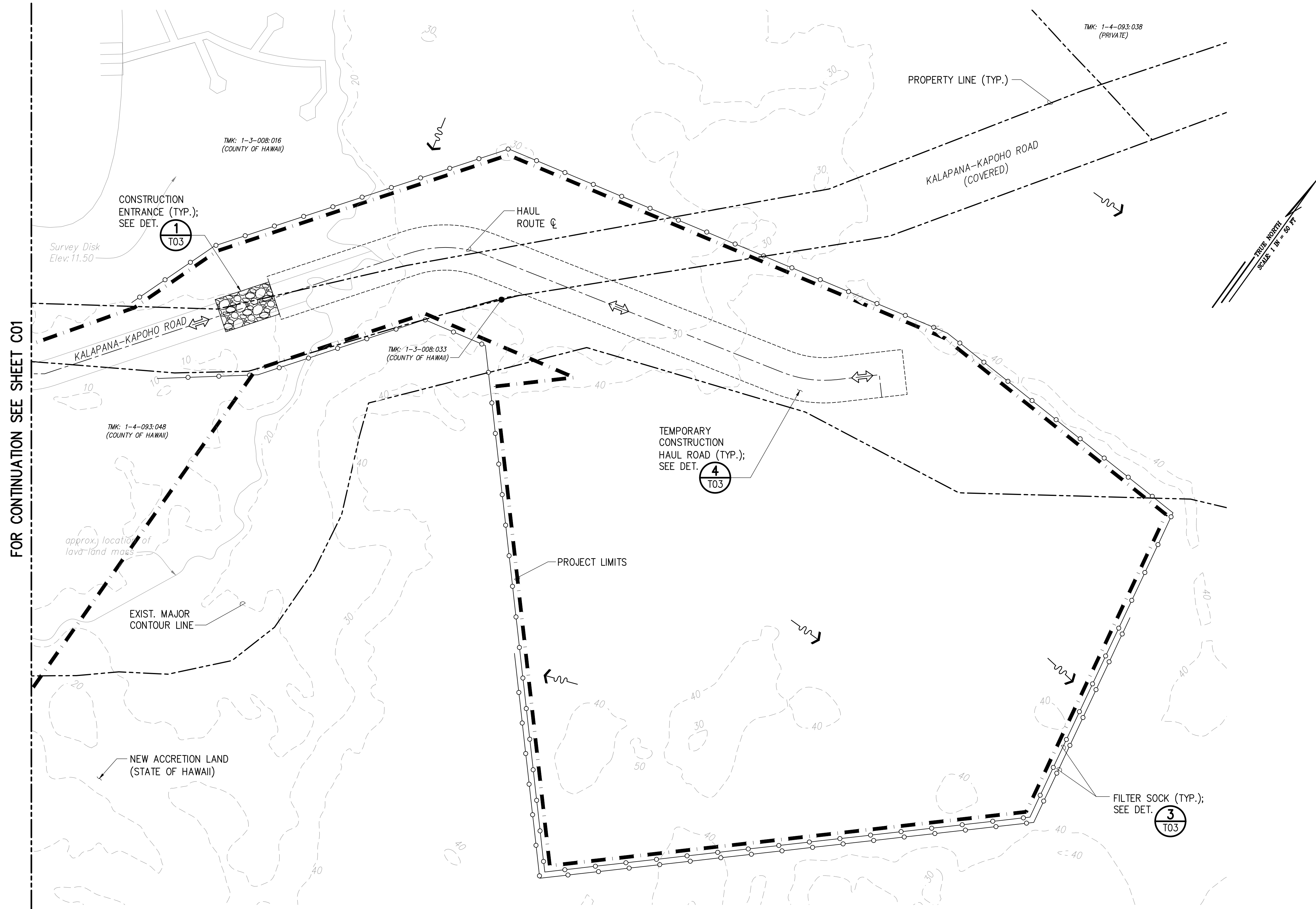
NOTES:
 1. ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.

EROSION AND SEDIMENT CONTROL PLAN 1
 SCALE: 1"=50'

| | | | |
|-------|---------------------------|--------|---|
| ----- | PROPERTY LINE | ----- | TEMPORARY CONSTRUCTION HAUL ROAD LIMITS |
| ----- | PROJECT LIMITS | ○----- | TEMP. FILTER SOCK |
| ----- | MEAN HIGH WATER LINE | □----- | SILT FENCE |
| -10- | EXIST. MAJOR CONTOUR LINE | → | DIRECTION OF SURFACE RUNOFF |
| ----- | HAUL ROUTE CENTERLINE | ▨ | CONSTRUCTION ENTRANCE |



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| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS EROSION AND SEDIMENT CONTROL PLAN 1 | | | | | |
| DESIGNED: TV DRAWN: IE CHECKED: KK APPROVED: | | | SUBMITTED: JUNE 2024 DATE: JUNE 2024 SCALE: 1"=50' DRAWING NO. | | |
| Signature: _____ Date: _____ | | | CHIEF ENGINEER _____ DATE _____ | | |
| C01 | | | | | |

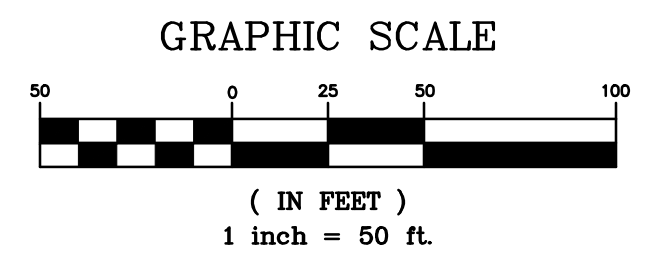



FOR CONTINUATION SEE SHEET C01

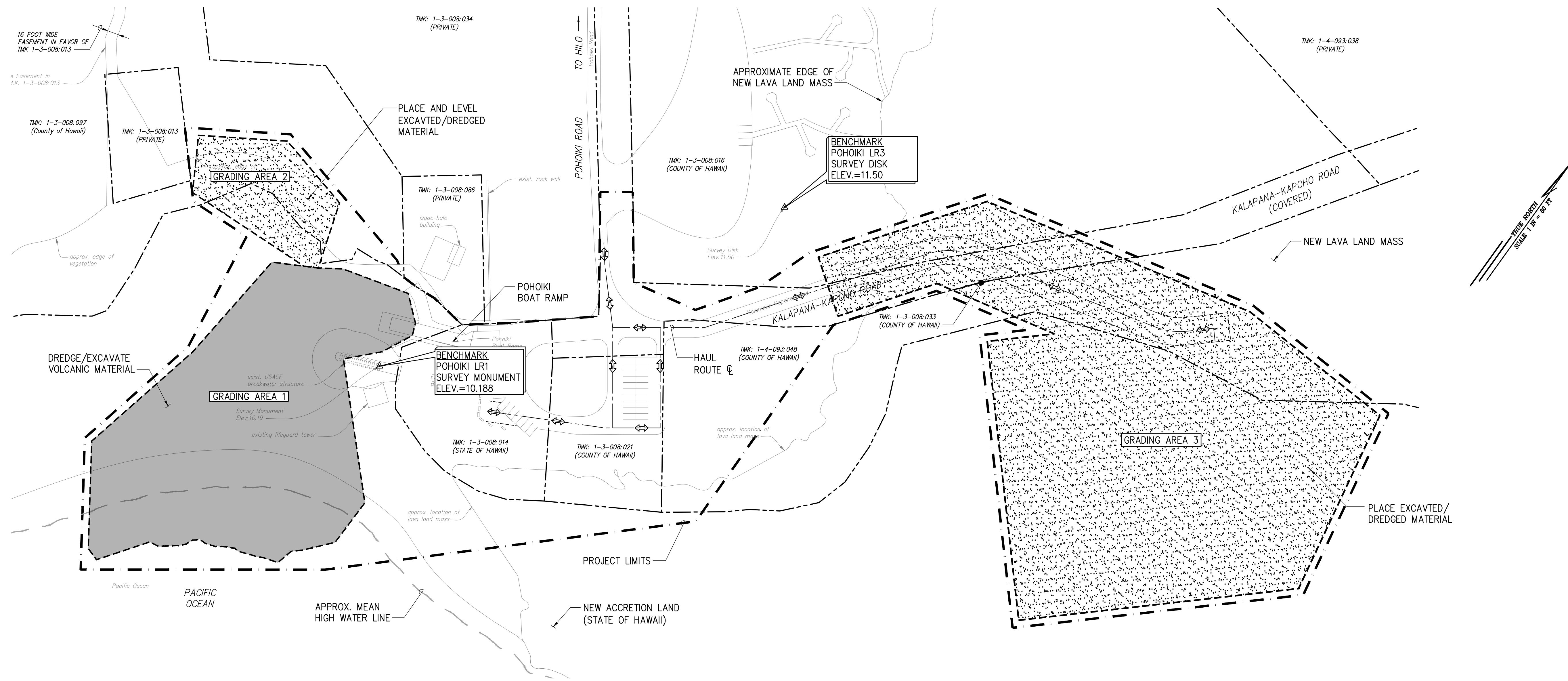
NOTES:
 1. ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.

EROSION AND SEDIMENT CONTROL PLAN 2
 SCALE: 1"=50'

- LEGEND**
- PROPERTY LINE
 - TEMPORARY CONSTRUCTION HAUL ROAD LIMITS
 - PROJECT LIMITS
 - TEMP. FILTER SOCK
 - MEAN HIGH WATER LINE
 - DIRECTION OF SURFACE RUNOFF
 - 10--- EXIST. MAJOR CONTOUR LINE
 - CONSTRUCTION ENTRANCE
 - HAUL ROUTE CENTERLINE



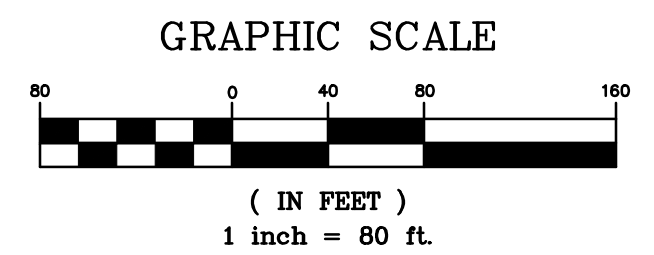
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| <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  04/30/2026 EXP. DATE </div> <div style="text-align: center;"> STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS EROSION AND SEDIMENT CONTROL PLAN 2 </div> </div> | | | | | |
| DESIGNED: TV | | | SUBMITTED: JUNE 2024 | | |
| DRAWN: IE | | | DATE: JUNE 2024 | | |
| CHECKED: KK | | | SCALE: 1"=50' | | |
| APPROVED: | | | DRAWING NO. | | |
| Signature _____ | | | C02 | | |
| Date _____ | | | DATE _____ | | |
| CHIEF ENGINEER | | | DATE | | |



GENERAL SITE PLAN
SCALE: 1"=80'

NOTE:
1. ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.

- LEGEND**
- DREDGING/EXCAVATION AREA
 - FILL AREA
 - PROJECT LIMITS
 - GRADING LIMITS
 - MEAN HIGH WATER LINE
 - TEMPORARY CONSTRUCTION HAUL ROAD LIMITS
 - HAUL ROUTE CENTERLINE



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| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS GENERAL SITE PLAN | | | | | |
| 04/30/2026 EXP. DATE | | DESIGNED: TV DRAWN: IE CHECKED: KK APPROVED: _____ CHIEF ENGINEER | | | |
| | | SUBMITTED: JUNE 2024 DATE: JUNE 2024 SCALE: 1"=80' | | DRAWING NO. C03 | |
| Signature _____ | | Date _____ | | DATE _____ | |

| CURVE DATA | | | | | | |
|------------|-----------|-----------|-----|--------|--------|--------|
| Δ | Δ/2 | R | T | C | L | |
| 1 | 80°12'12" | 40°06'06" | 66' | 55.58' | 85.03' | 92.39' |

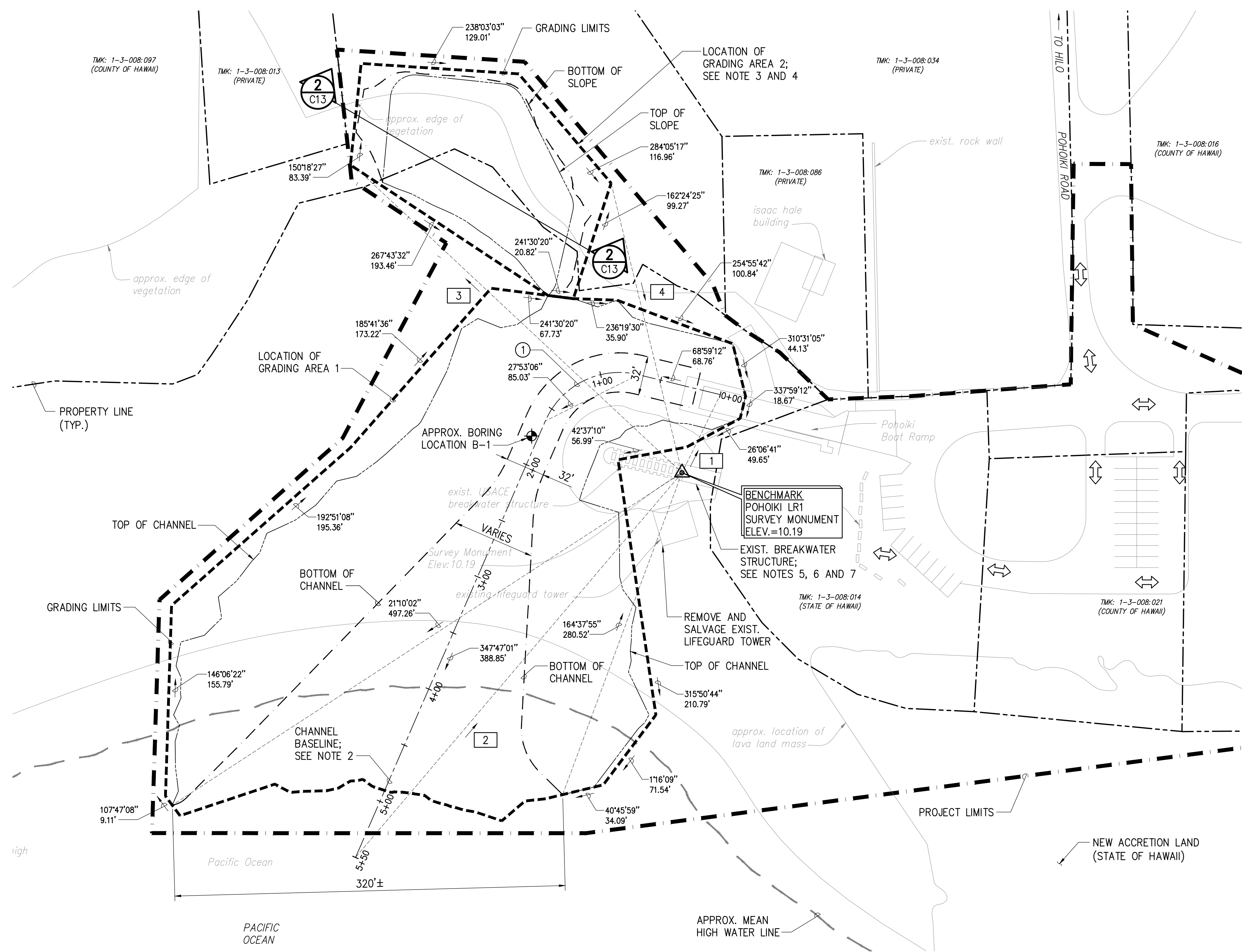
| COORDINATE CONTROL | | | |
|--------------------|------------|----------|---|
| | AZIMUTH | DISTANCE | DESCRIPTION |
| 1 | 170°23'43" | 71.04' | BENCHMARK LR1 TO CHANNEL BASELINE STA. 0+00 |
| 2 | 184°36'10" | 412.26' | CHANNEL BASELINE STA. 5+50 TO BENCHMARK LR1 |
| 3 | 97°21'03" | 361.84' | BENCHMARK LR1 TO EDGE OF GRADING AREA 2 |
| 4 | 310°30'56" | 243.54' | EDGE OF GRADING AREA 2 TO BENCHMARK LR1 |

- NOTES:**
- ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.
 - SEE SHEET C08 FOR CHANNEL PROFILE VIEW.
 - SEE SHEETS C09 TO C11 FOR CHANNEL BASELINE SECTION VIEWS.
 - SEE SHEET C13 FOR GRADING AREA 2 BASELINE SITE SECTION.
 - EXCAVATED/DREDGED VOLCANIC MATERIAL SHALL BE PLACED IN GRADING AREAS 2 AND 3. CONTRACTOR TO COORDINATE WITH ENGINEER IN FINAL PLACEMENT OF FILL.
 - ANY DAMAGE TO THE EXIST. BREAKWATER STRUCTURE SHALL BE REPAIRED TO THE SATISFACTION OF THE U.S. ARMY CORPS OF ENGINEERS AT NO ADDITIONAL COST TO THE STATE.
 - SETTLED SAND AND COBBLES ON AND/OR THE BREAKWATER STRUCTURE SHALL BE MANUALLY REMOVED WITH THE USE OF HAND TOOLS.
 - HEAVY EQUIPMENT UTILIZED FOR THE PROJECT SHALL BE PROHIBITED FROM TRAVELING OVER AND NEAR THE EXISTING BREAKWATER FOOTPRINT. SEE DET.

1
C13

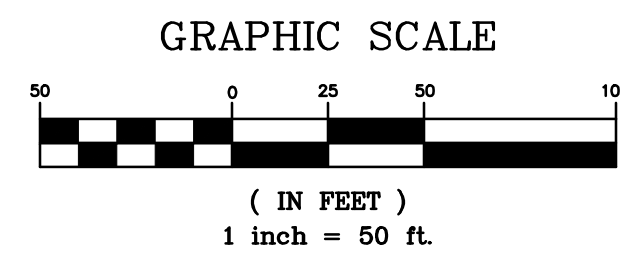
LEGEND

- PROPERTY LINE
- TOP OF SLOPE/CHANNEL
- PROJECT LIMITS
- GRADING LIMITS
- MEAN HIGH WATER LINE
- BOTTOM OF SLOPE/CHANNEL



SITE PLAN 1

SCALE: 1"=50'



FOR CONTINUATION SEE SHEET C05

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--|------|-------------|---|------|----------|
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS SITE PLAN 1 | | | | | |
| DESIGNED: TV DRAWN: IE CHECKED: KK APPROVED: | | | SUBMITTED: JUNE 2024 DATE: JUNE 2024 SCALE: 1"=50' DRAWING NO. | | |
| CHIEF ENGINEER | | | DATE | | |
| Signature _____ Date _____ | | | C04 | | |

| CURVE DATA | | | | | | |
|------------|-----------|-----------|------|--------|--------|--------|
| Δ | Δ/2 | R | T | C | L | |
| 2 | 39°51'52" | 19°55'56" | 100' | 36.26' | 68.18' | 69.58' |
| 3 | 28°00'14" | 14°00'07" | 100' | 24.94' | 48.39' | 48.88' |

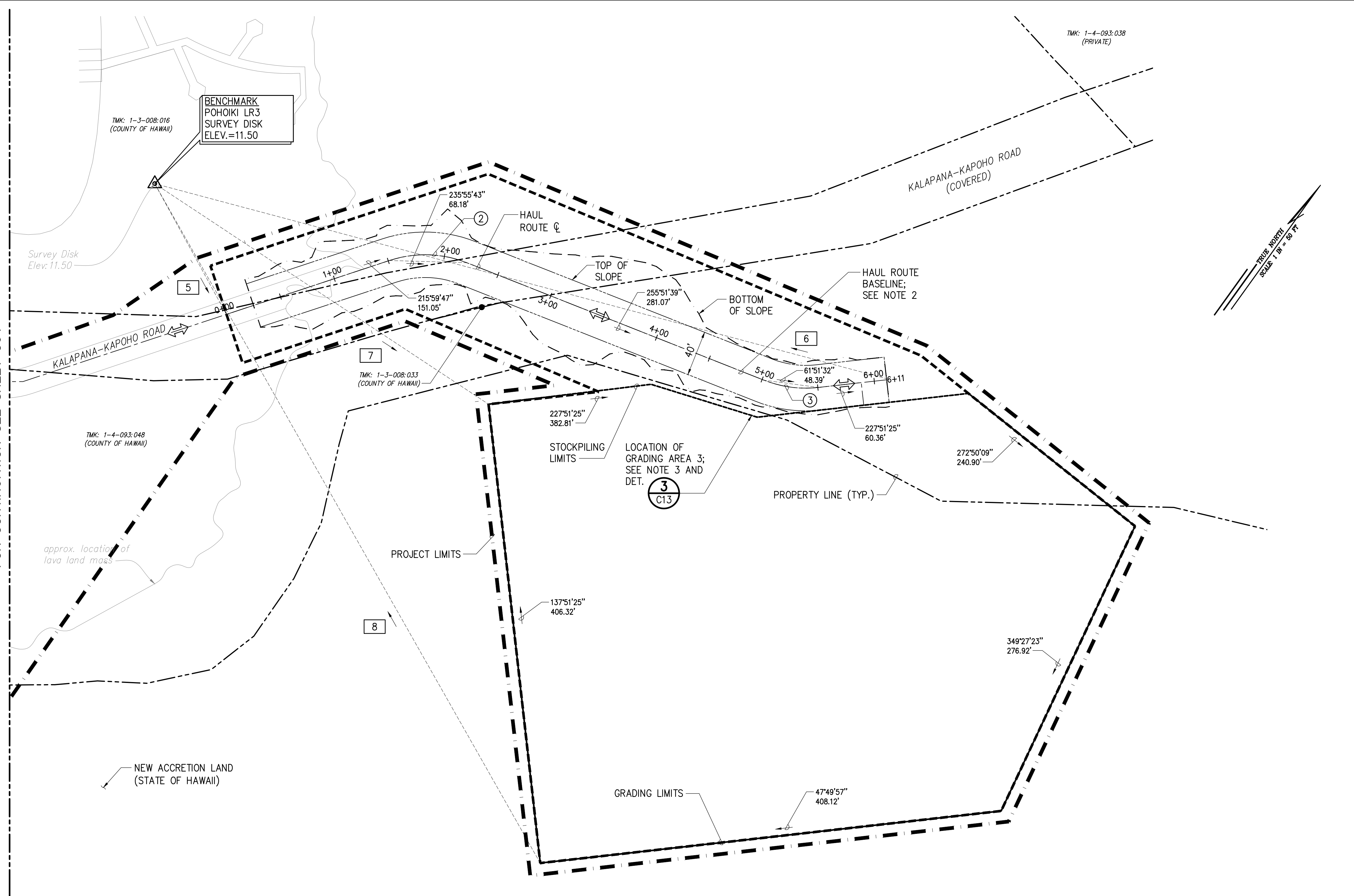
| COORDINATE CONTROL | | | |
|--------------------|------------|----------|--|
| | AZIMUTH | DISTANCE | DESCRIPTION |
| 5 | 295°32'02" | 131.14' | BENCHMARK LR3 TO HAUL ROUTE BASELINE STA. 0+00 |
| 6 | 69°12'05" | 666.32' | HAUL ROUTE BASELINE STA. 6+11 TO BENCHMARK LR3 |
| 7 | 267°44'14" | 352.05' | BENCHMARK LR3 TO CORNER OF STOCKPILING LIMITS |
| 8 | 114°42'50" | 687.36' | CORNER OF STOCKPILING LIMITS TO BENCHMARK LR3 |

- NOTES:**
- ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.
 - SEE SHEET C08 FOR HAUL ROUTE PROFILE VIEW AND SHEET C12 FOR HAUL ROUTE SECTION VIEWS.
 - EXCAVATED/DREDGED VOLCANIC MATERIAL SHALL BE PLACED IN GRADING AREAS 2 AND 3. CONTRACTOR IS TO COORDINATE WITH ENGINEER IN FINAL PLACEMENT OF FILL.

LEGEND

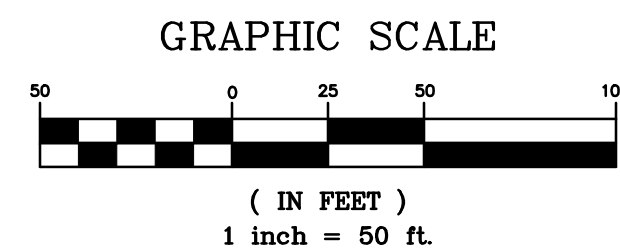
- PROPERTY LINE
- TOP OF SLOPE
- PROJECT LIMITS
- BOTTOM OF SLOPE
- GRADING LIMITS
- STOCKPILING LIMITS
- HAUL ROUTE CENTERLINE

FOR CONTINUATION SEE SHEET C04

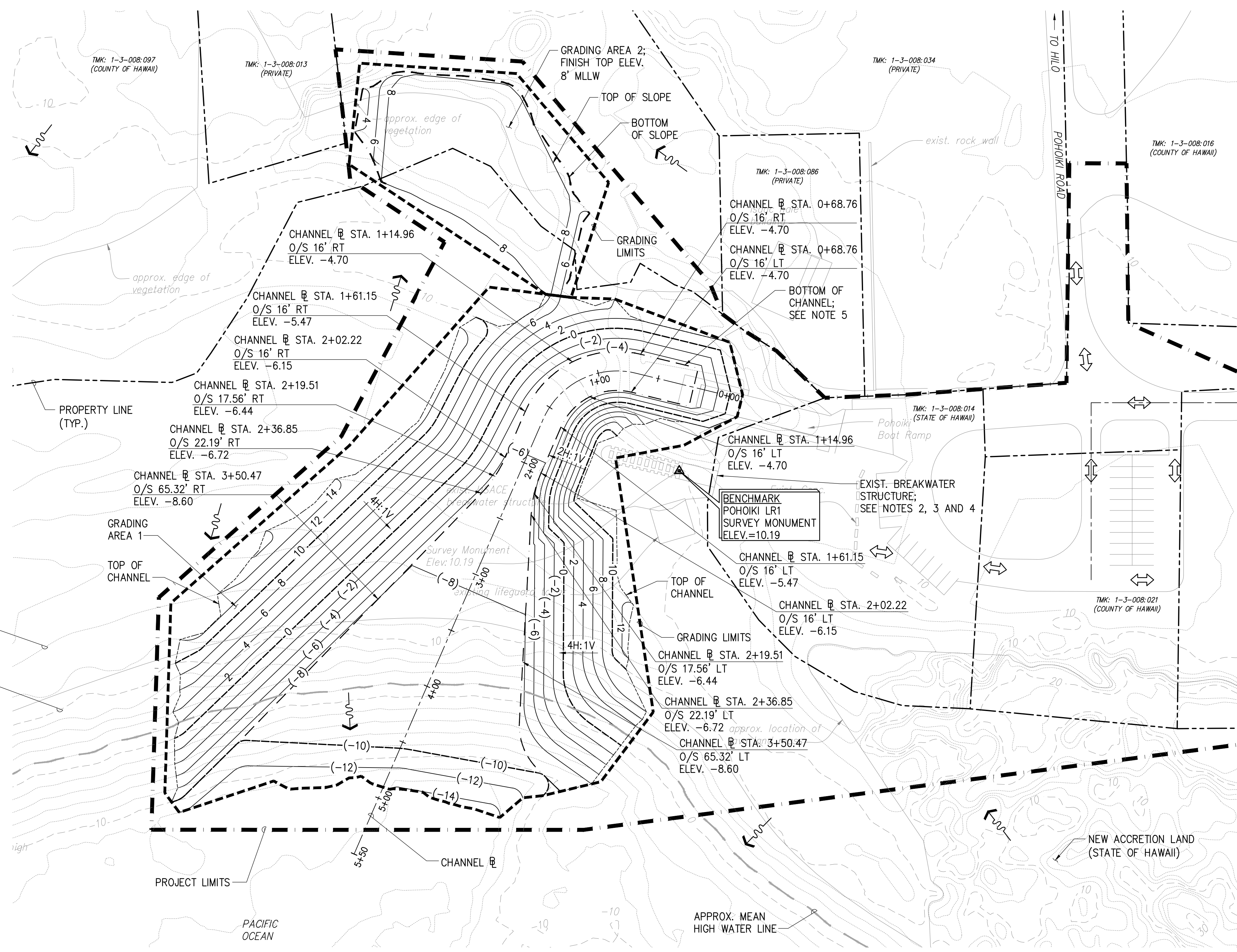


SITE PLAN 2

SCALE: 1"=50'



| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--|------|----------------------|---------|-------------|----------|
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS SITE PLAN 2 | | | | | |
| DESIGNED: TV | | SUBMITTED: JUNE 2024 | | | |
| DRAWN: IE | | DATE: JUNE 2024 | | | |
| CHECKED: KK | | SCALE: 1"=50' | | | |
| APPROVED: | | DATE | | DRAWING NO. | |
| Signature _____ | | Date _____ | | C05 | |
| CHIEF ENGINEER | | DATE | | | |



FOR CONTINUATION SEE SHEET C07

| GRADING QUANTITY SUMMARY | |
|--------------------------|-------------|
| EXCAVATION | 42,000 C.Y. |
| EMBANKMENT | 42,000 C.Y. |

NOTES:

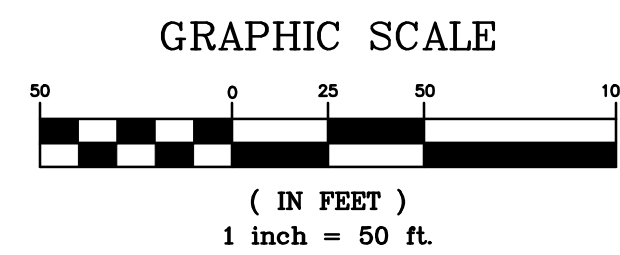
- ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.
- ANY DAMAGE TO THE EXIST. BREAKWATER STRUCTURE SHALL BE REPAIRED TO THE SATISFACTION OF THE U.S. ARMY CORPS OF ENGINEERS AT THE CONTRACTOR'S EXPENSE.
- SETTLED SAND AND COBBLES ON AND/OR OVER THE BREAKWATER STRUCTURE MAY BE MANUALLY REMOVED WITH THE USE OF HAND TOOLS.
- HEAVY EQUIPMENT UTILIZED FOR THE PROJECT SHALL BE PROHIBITED FROM TRAVELING OVER AND NEAR THE EXISTING BREAKWATER FOOTPRINT. SEE DET.
- THE CONTRACTOR SHALL ONLY EXCAVATE ACCUMULATED VOLCANIC DEBRIS. PRE ERUPTION MATERIAL SHALL REMAIN UNDISTURBED IF ENCOUNTERED DURING CONSTRUCTION.



LEGEND

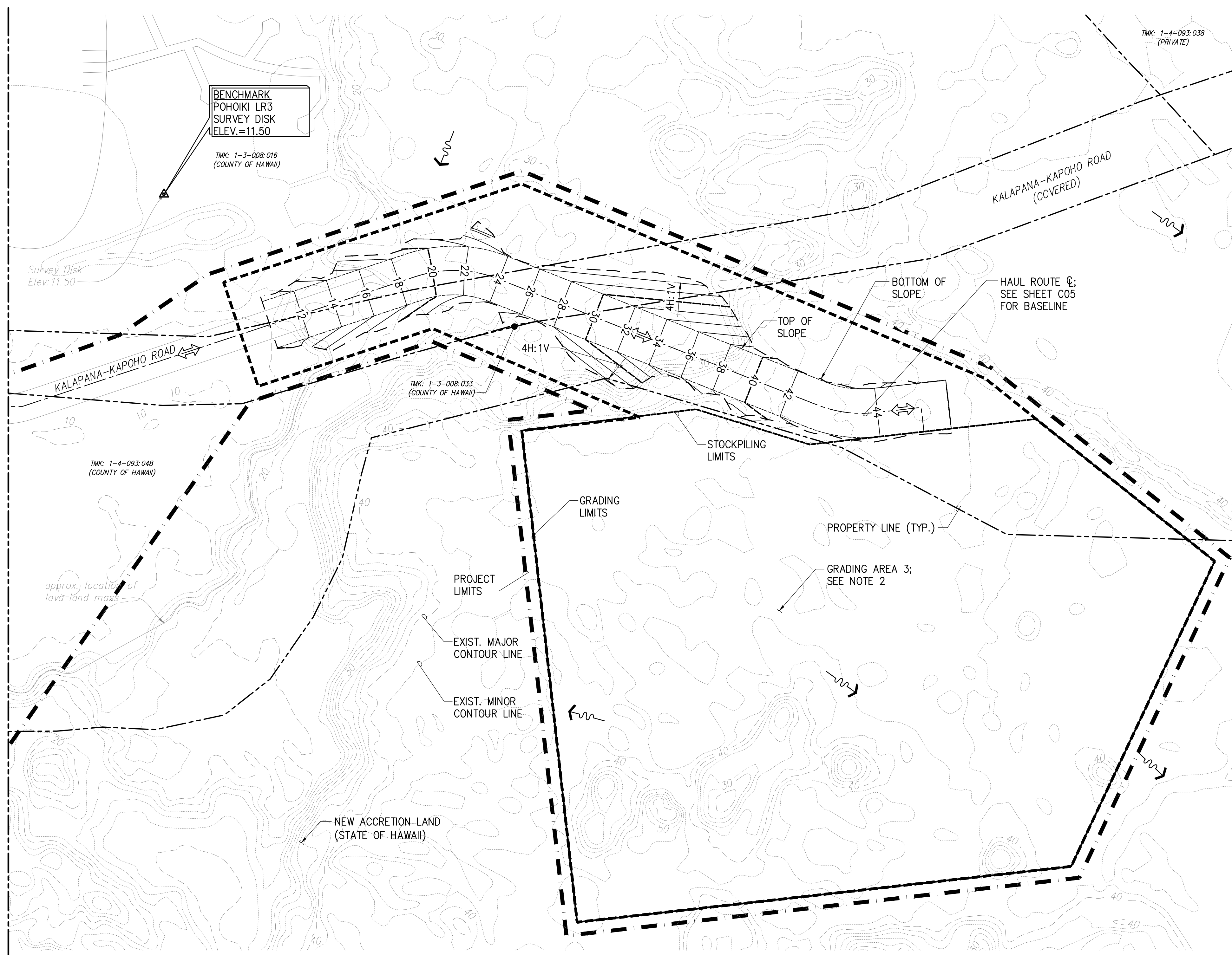
- PROPERTY LINE
- EXIST. MINOR CONTOUR LINE
- PROJECT LIMITS
- 10 --- NEW MAJOR CONTOUR LINE
- GRADING LIMITS
- 8 --- NEW MINOR CONTOUR LINE
- HAUL ROUTE CENTERLINE
- > DIRECTION OF SURFACE RUNOFF
- 10 --- EXIST. MAJOR CONTOUR LINE
- --- BOTTOM OF SLOPE/CHANNEL
- TOP OF SLOPE/CHANNEL

GRADING PLAN 1
SCALE: 1"=50'



| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|---|------|-------------|---|------|----------|
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS GRADING PLAN 1 | | | | | |
| DESIGNED: TV DRAWN: IE CHECKED: KK APPROVED: | | | SUBMITTED: JUNE 2024 DATE: JUNE 2024 SCALE: 1"=50' DRAWING NO. | | |
| Signature: _____ CHIEF ENGINEER | | | Date: _____ DATE | | |

FOR CONTINUATION SEE SHEET C06

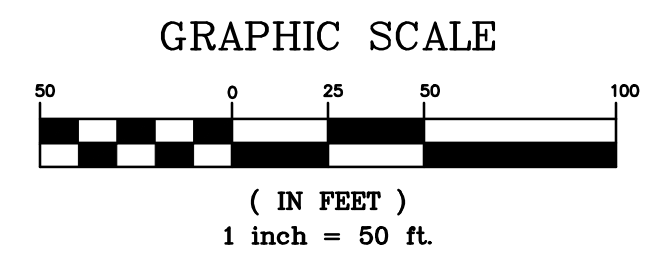


GRADING PLAN 2
SCALE: 1"=50'

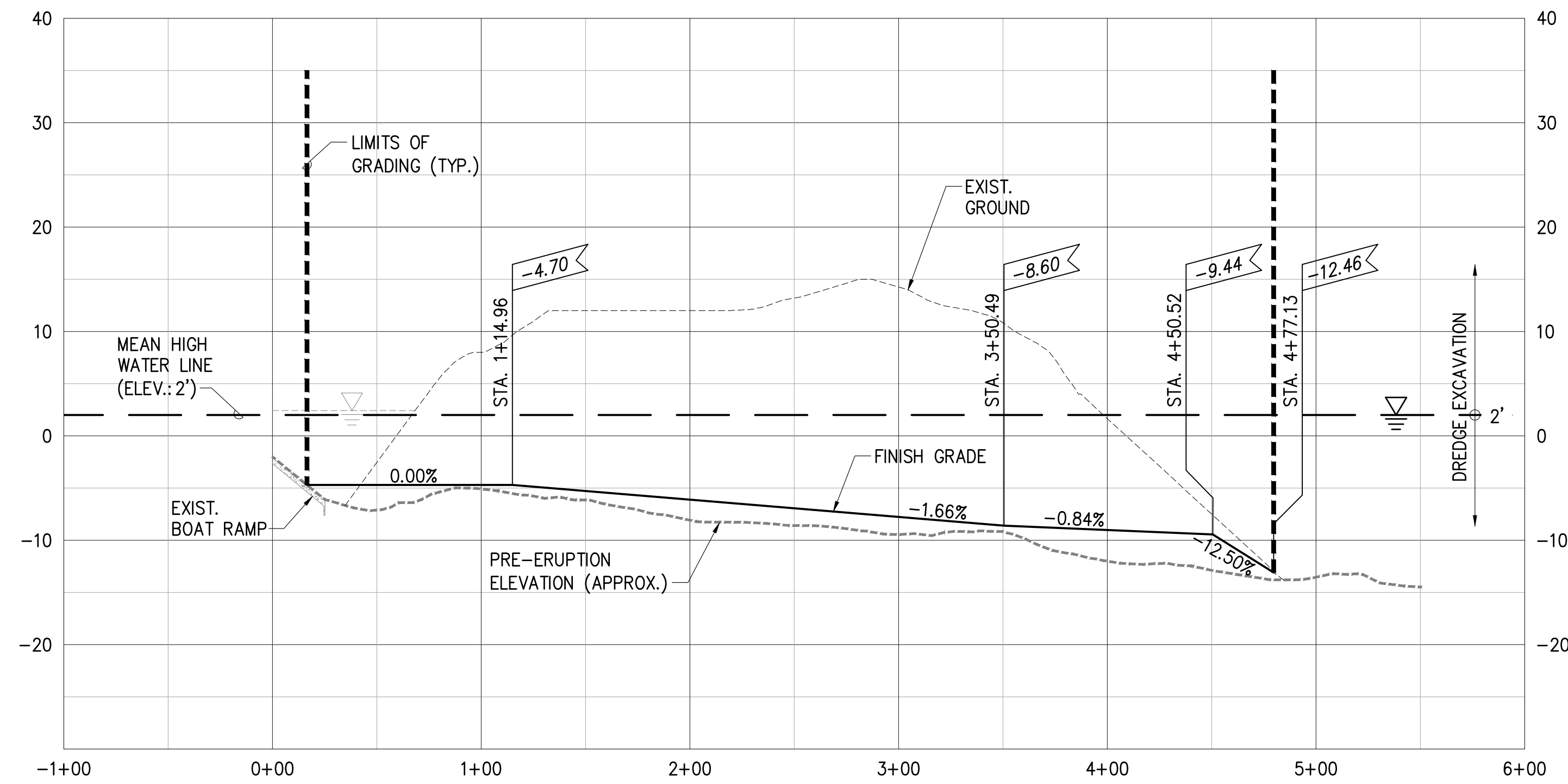
- NOTES:**
- ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.
 - CONTRACTOR TO FLATTEN AREA AS NECESSARY TO PLACE FILL.

LEGEND

- PROPERTY LINE
- PROJECT LIMITS
- GRADING LIMITS
- STOCKPILING LIMITS
- HAUL ROUTE CENTERLINE
- EXIST. MAJOR CONTOUR LINE
- EXIST. MINOR CONTOUR LINE
- NEW MAJOR CONTOUR LINE
- NEW MINOR CONTOUR LINE
- DIRECTION OF SURFACE RUNOFF
- BOTTOM OF SLOPE
- TOP OF SLOPE

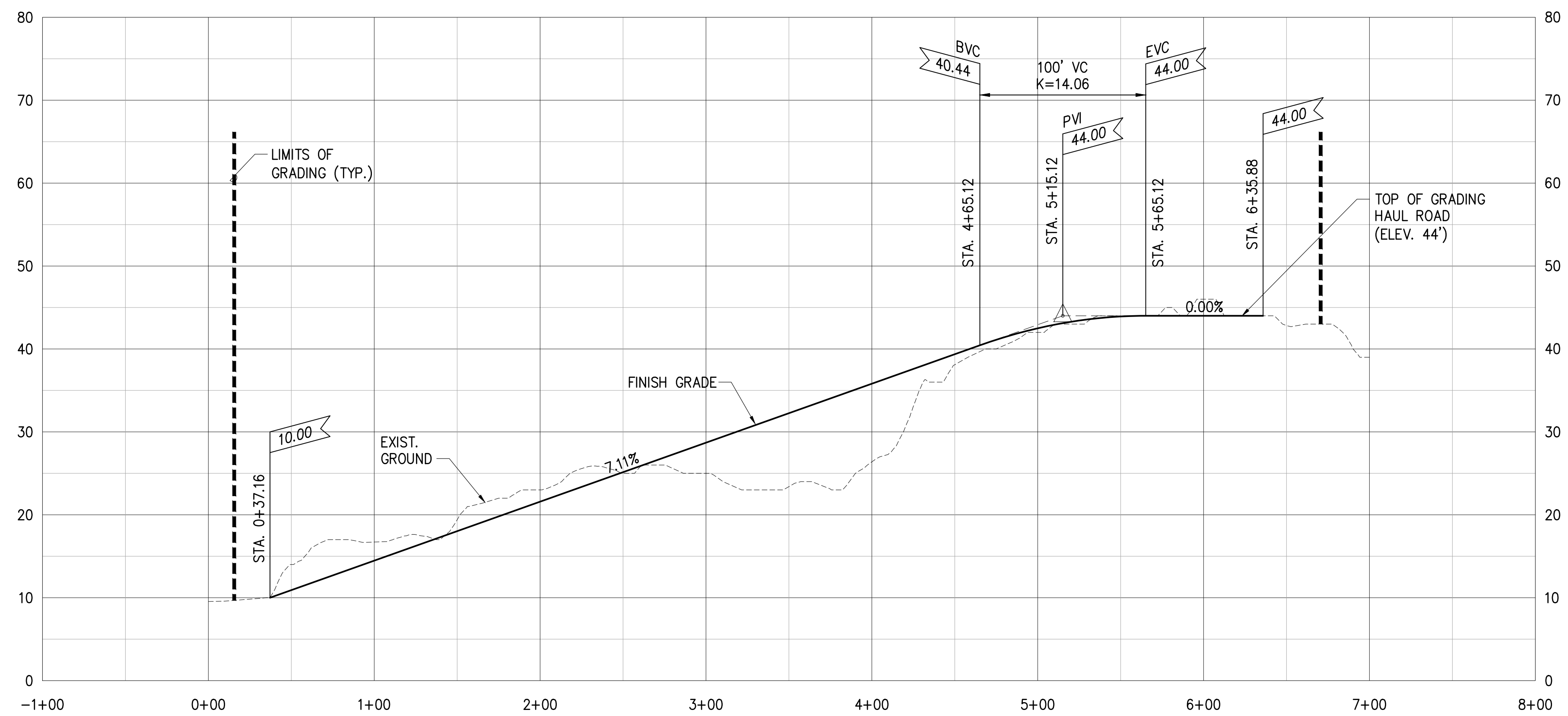


| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--|------|-----------------------------|---------|-----------------------------|----------|
| <p>STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION</p> <p>POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS</p> <p>GRADING PLAN 2</p> | | | | | |
| <p>DESIGNED: TV</p> | | <p>SUBMITTED: JUNE 2024</p> | | | |
| <p>DRAWN: IE</p> | | <p>DATE: JUNE 2024</p> | | | |
| <p>CHECKED: KK</p> | | <p>SCALE: 1"=50'</p> | | | |
| <p>APPROVED:</p> | | <p>DRAWING NO.</p> | | <p>C07</p> | |
| <p>Signature _____</p> | | <p>DATE _____</p> | | <p>CHIEF ENGINEER _____</p> | |




CHANNEL BASELINE PROFILE

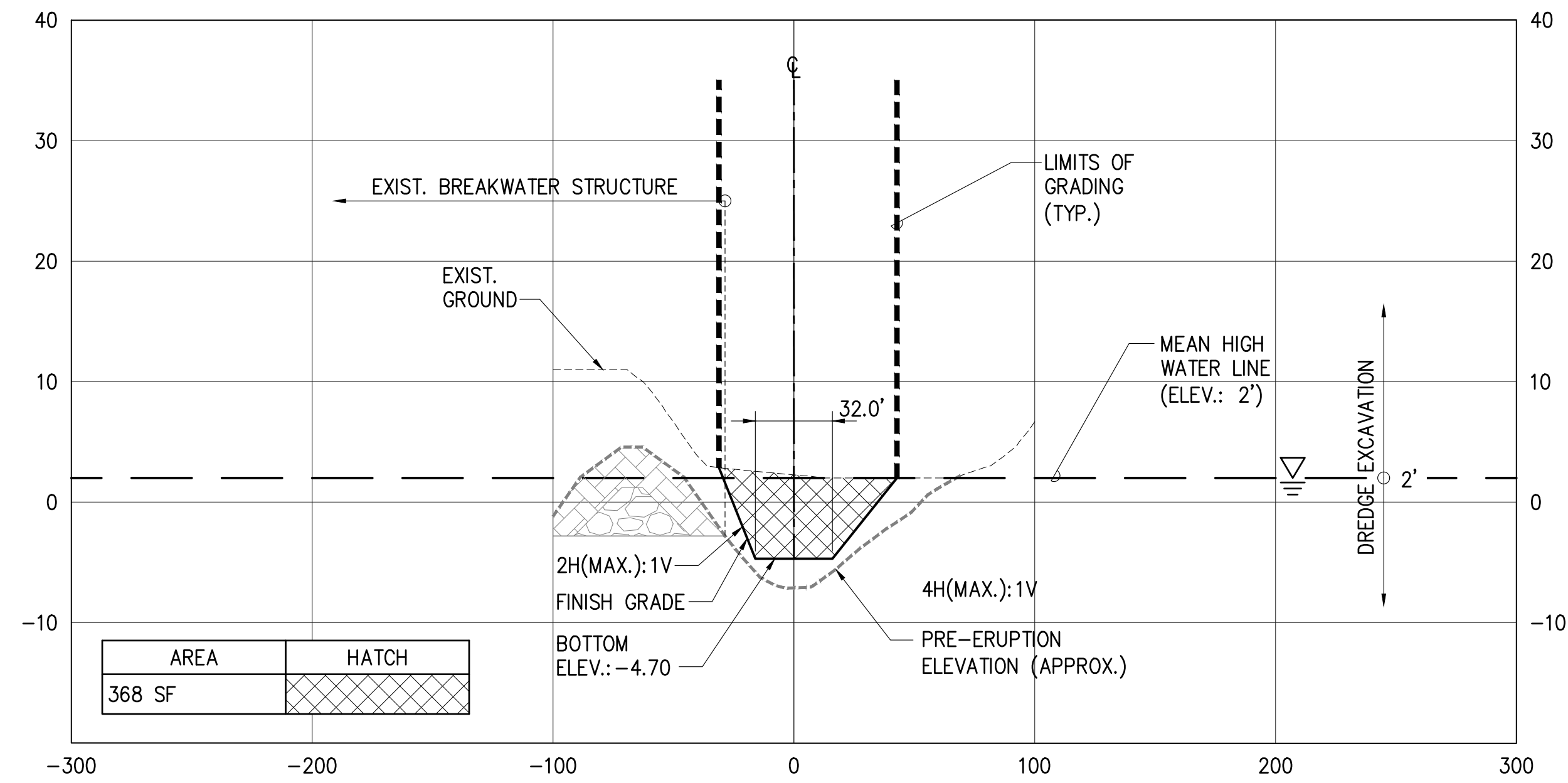
SCALE: HORIZONTAL 1"=50'
VERTICAL 1"=10'



HAUL ROAD BASELINE PROFILE

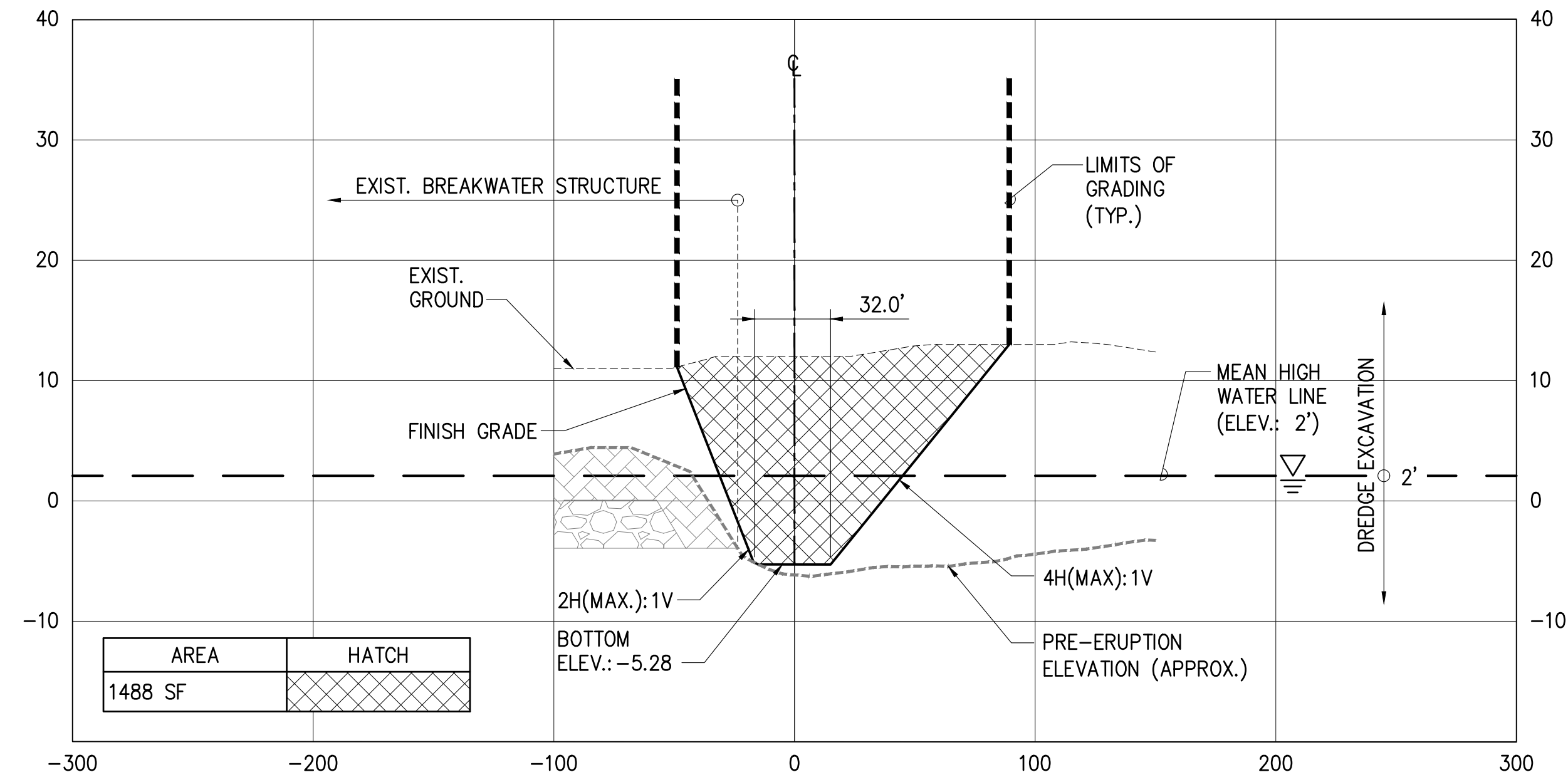
SCALE: HORIZONTAL 1"=50'
VERTICAL 1"=10'

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|---|------|---|------------|---------------------------|----------|
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS CHANNEL AND HAUL ROAD PROFILES | | | | | |
|  04/30/2026 EXP. DATE | | DESIGNED: TV DRAWN: IE CHECKED: KK APPROVED: _____ CHIEF ENGINEER | | | |
| THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION | | SUBMITTED: JUNE 2024 DATE: JUNE 2024 SCALE: AS NOTED | | DRAWING NO. C08 | |
| Signature _____ | | | Date _____ | | |



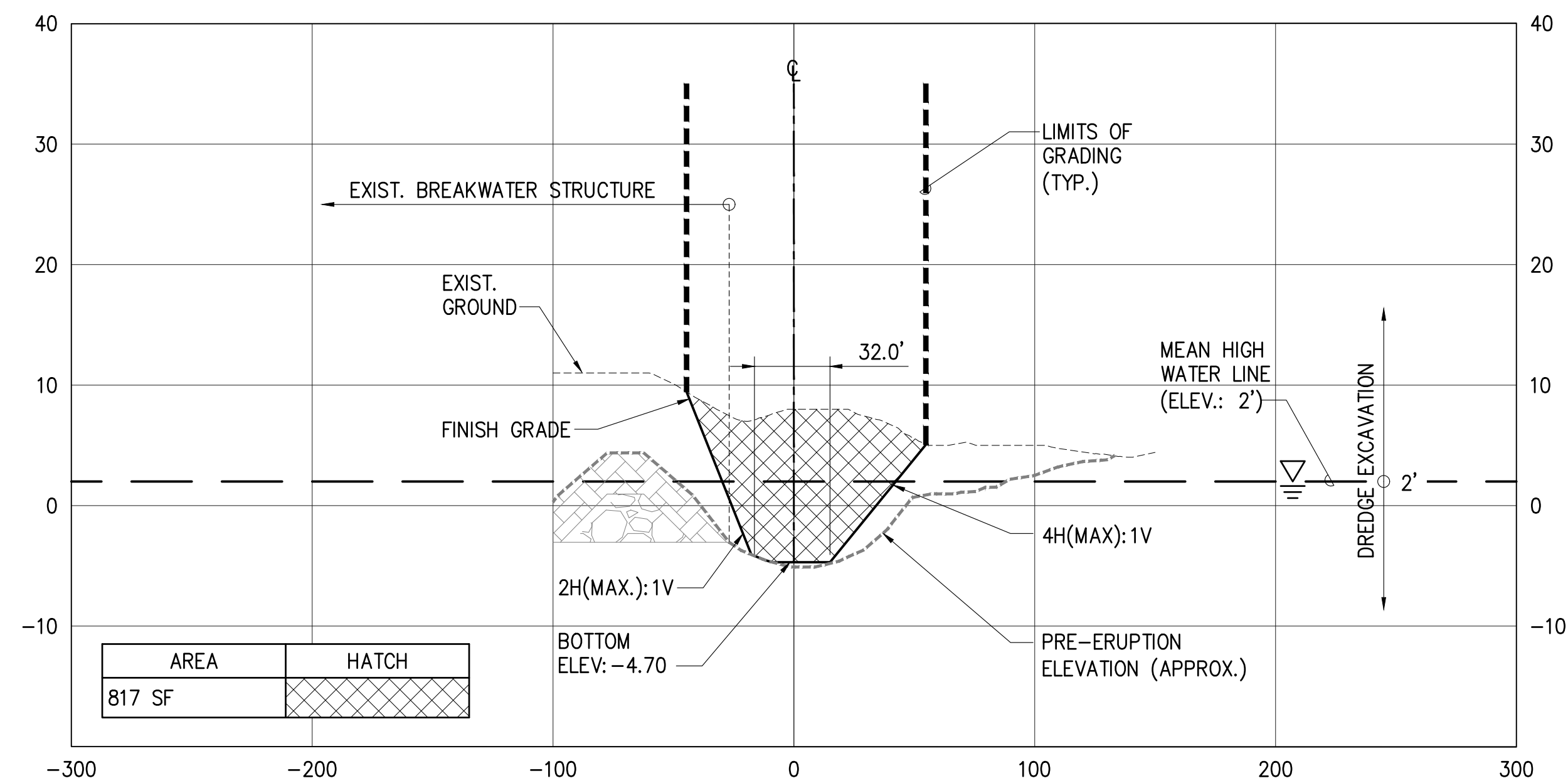
CHANNEL BASELINE SECTION – STA. 0+50

SCALE: HORIZ. 1"=50'
VERT. 1"=10'



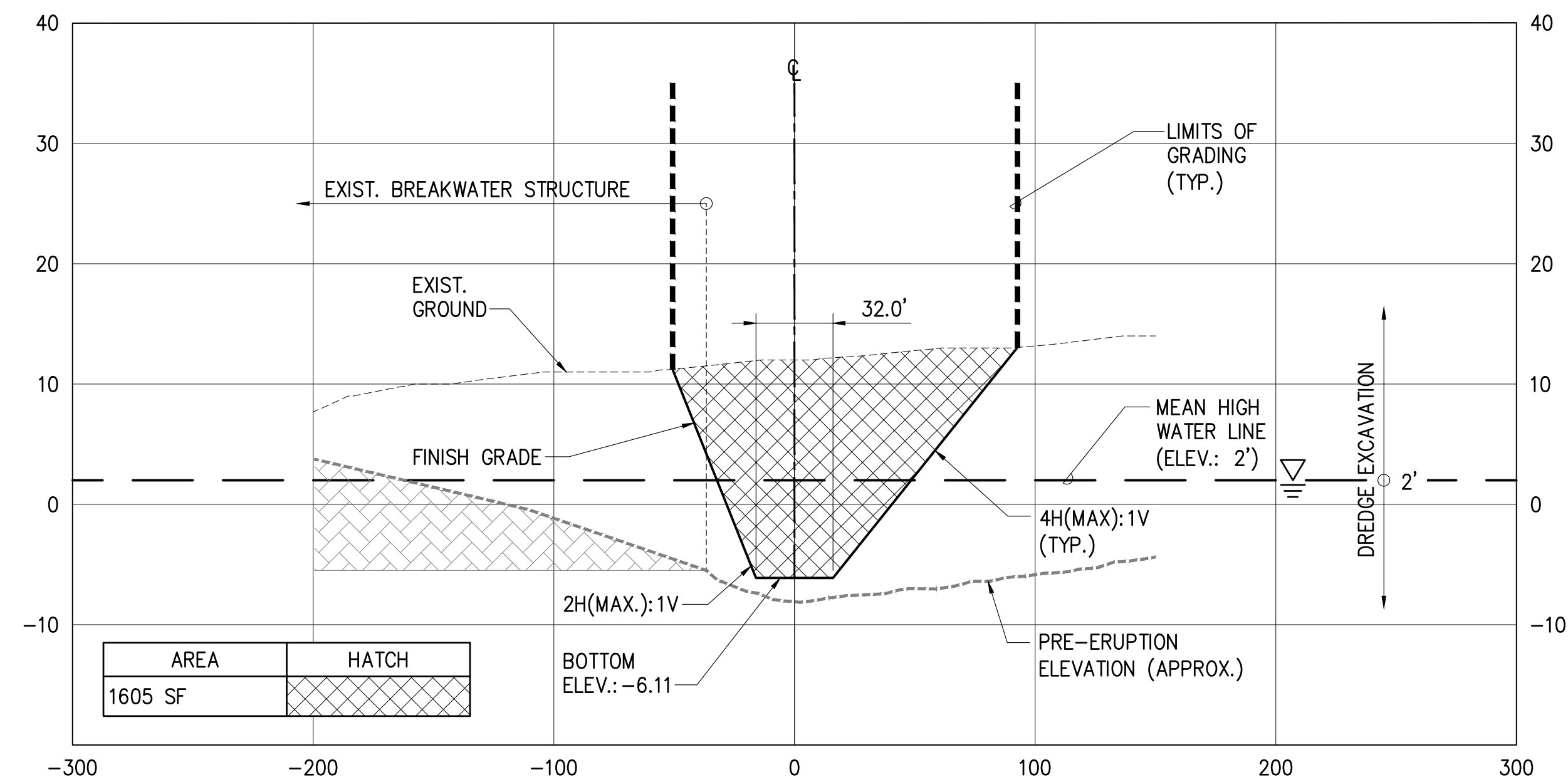
CHANNEL BASELINE SECTION – STA. 1+50

SCALE: HORIZ. 1"=50'
VERT. 1"=10'



CHANNEL BASELINE SECTION – STA. 1+00


SCALE: HORIZ. 1"=50'
VERT. 1"=10'

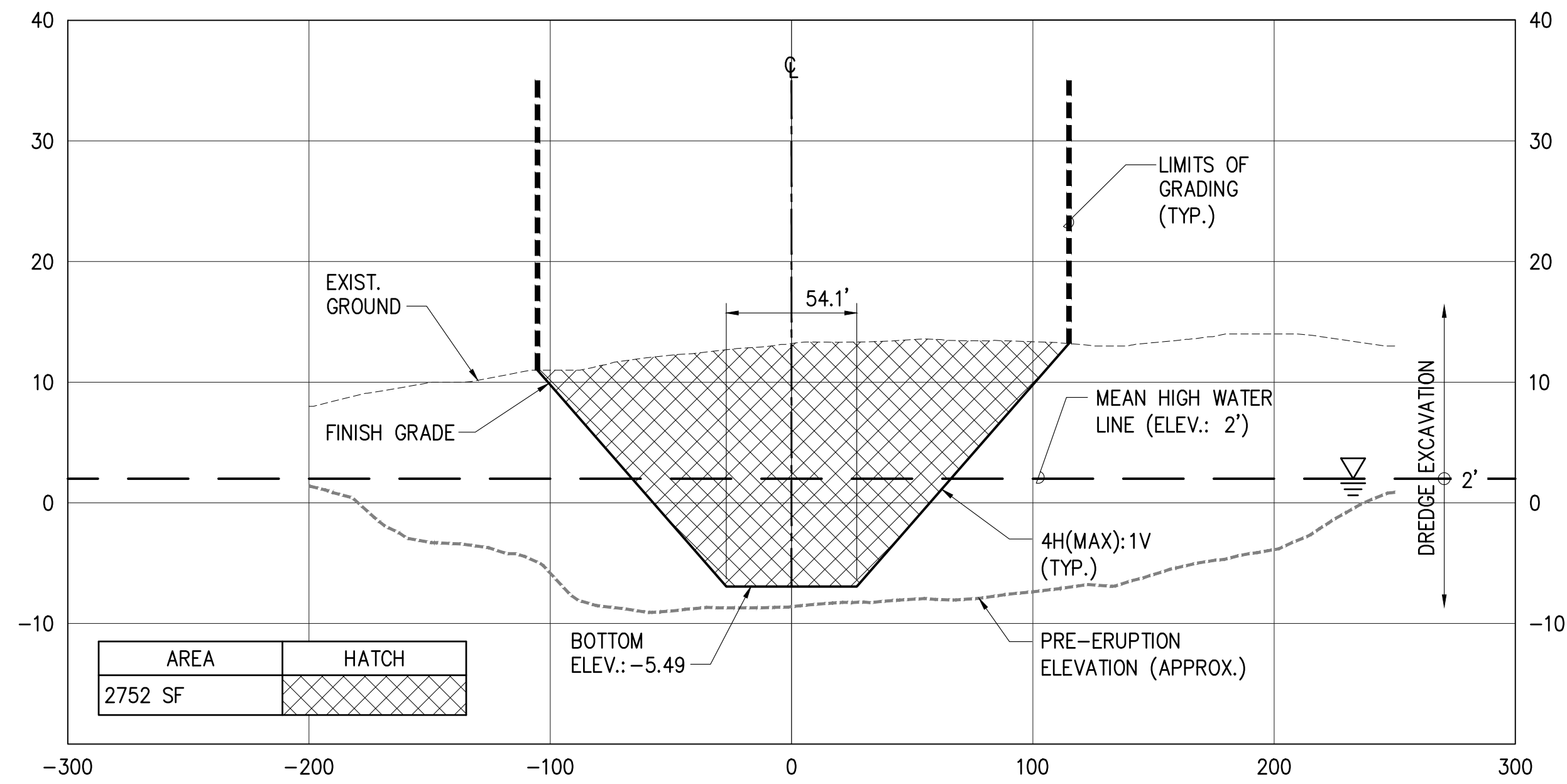


CHANNEL BASELINE SECTION – STA. 2+00

SCALE: HORIZ. 1"=50'
VERT. 1"=10'

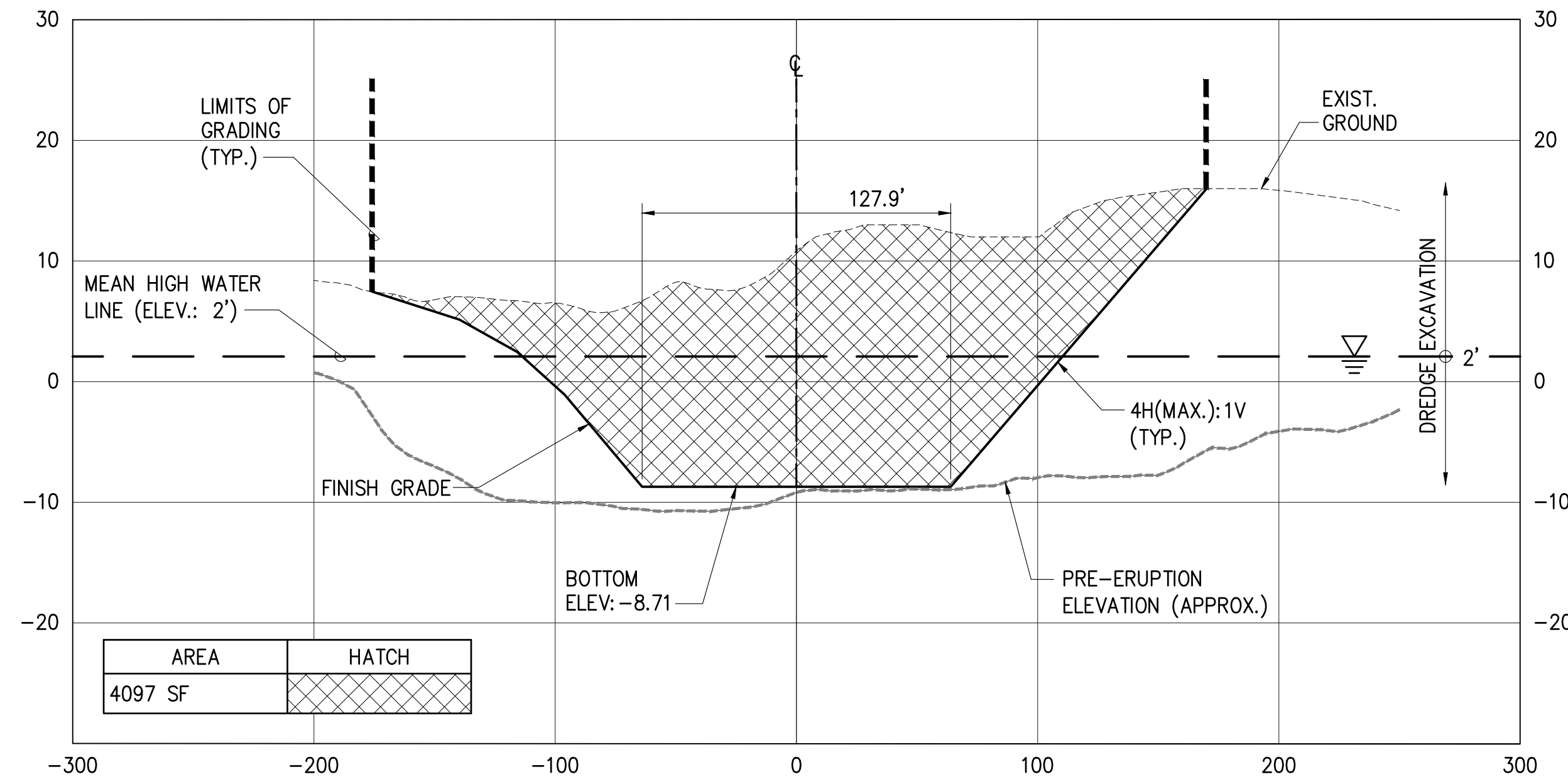
NOTE:
1. ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|---|------|--|---------|---------------------------|----------|
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS SECTION VIEWS 1 | | | | | |
|  04/30/2026 EXP. DATE | | DESIGNED: TV DRAWN: IE CHECKED: KK APPROVED: | | | |
| THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION | | SUBMITTED: JUNE 2024 DATE: JUNE 2024 SCALE: AS NOTED | | DRAWING NO. C09 | |
| Signature _____ Date _____ | | CHIEF ENGINEER _____ DATE _____ | | | |



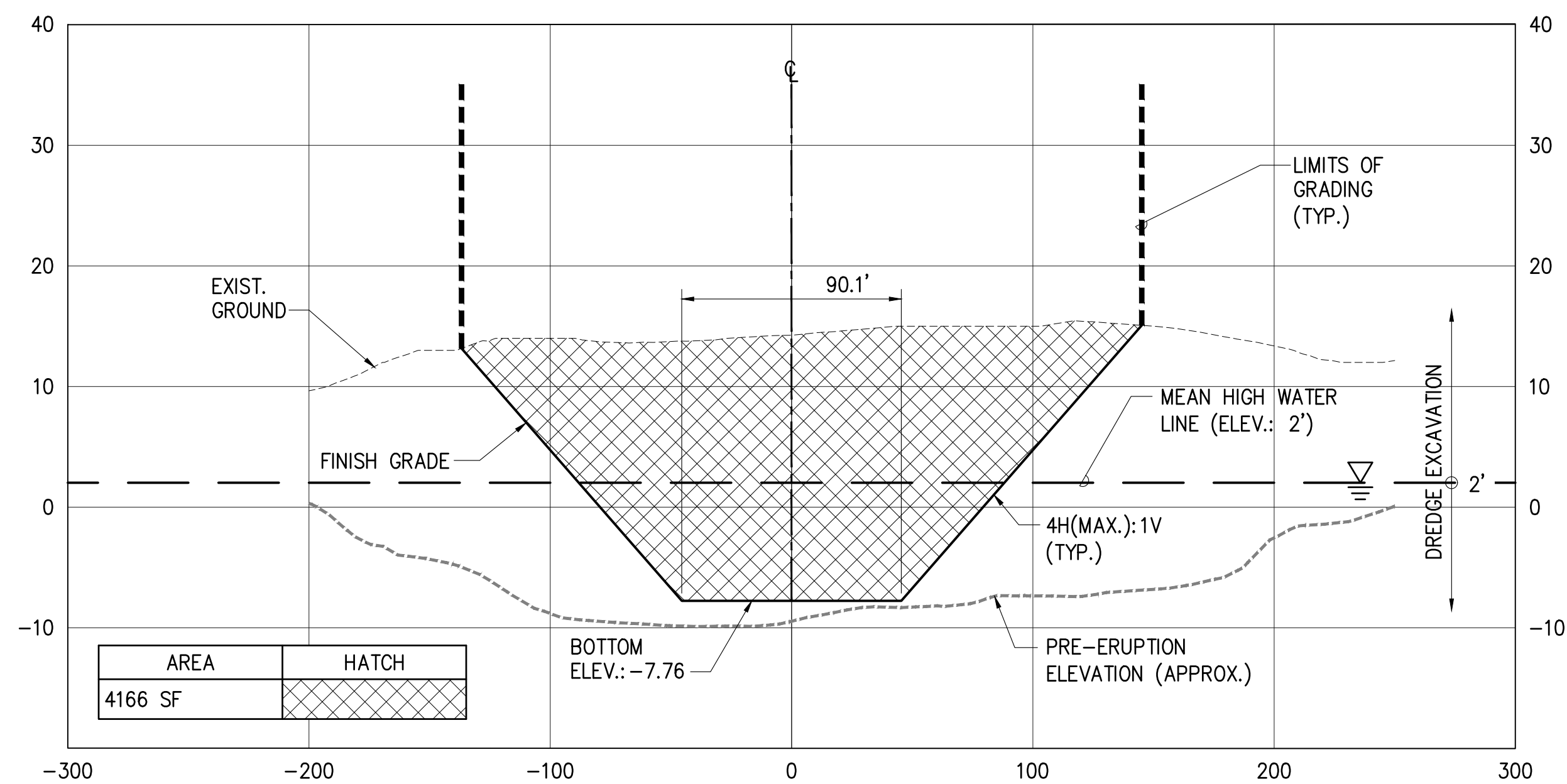
CHANNEL BASELINE SECTION – STA. 2+50

SCALE: HORIZ. 1"=50'
VERT. 1"=10'



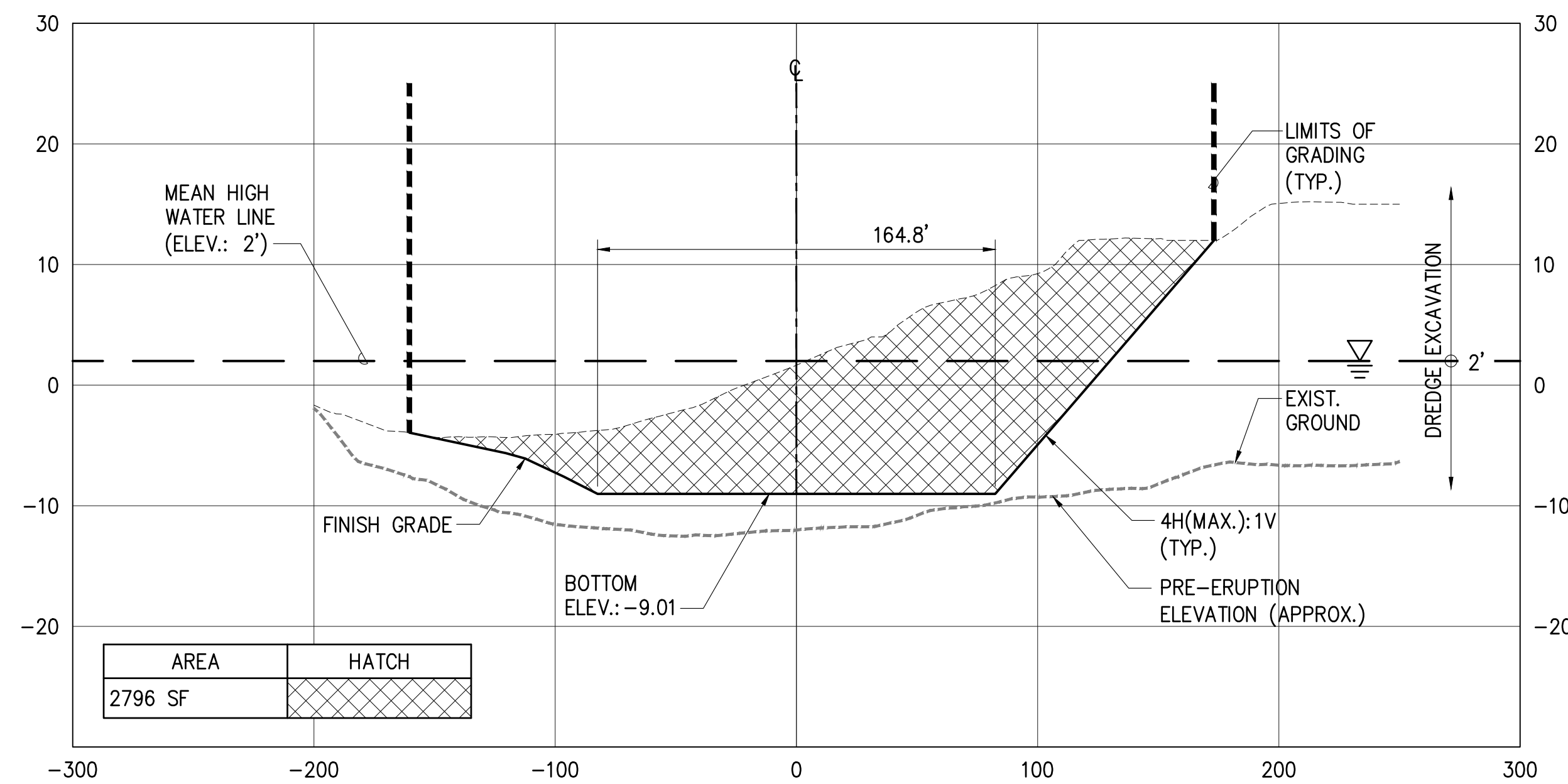
CHANNEL BASELINE SECTION – STA. 3+50

SCALE: HORIZ. 1"=50'
VERT. 1"=10'



CHANNEL BASELINE SECTION – STA. 3+00

SCALE: HORIZ. 1"=50'
VERT. 1"=10'

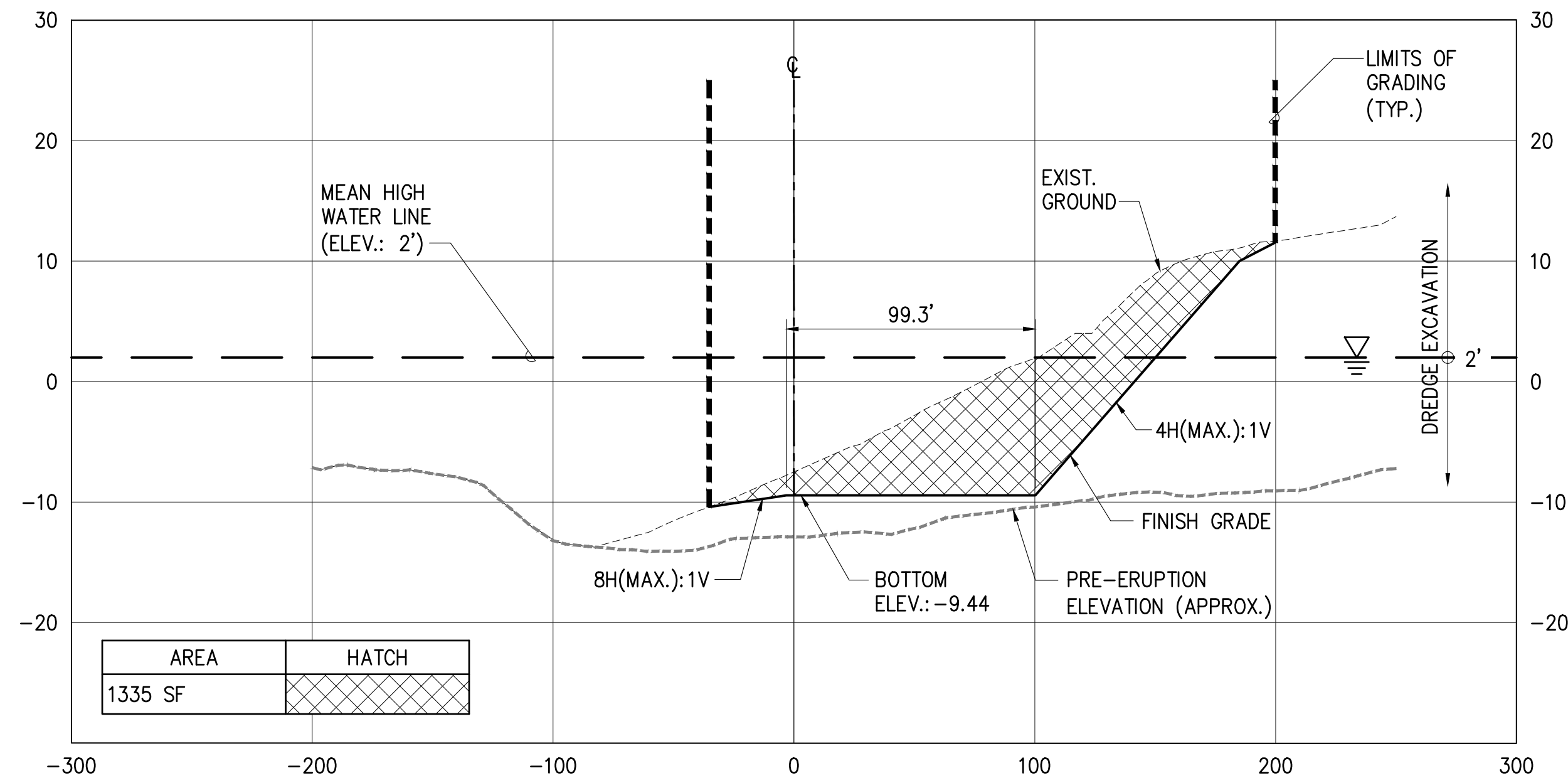


CHANNEL BASELINE SECTION – STA. 4+00

SCALE: HORIZ. 1"=50'
VERT. 1"=10'

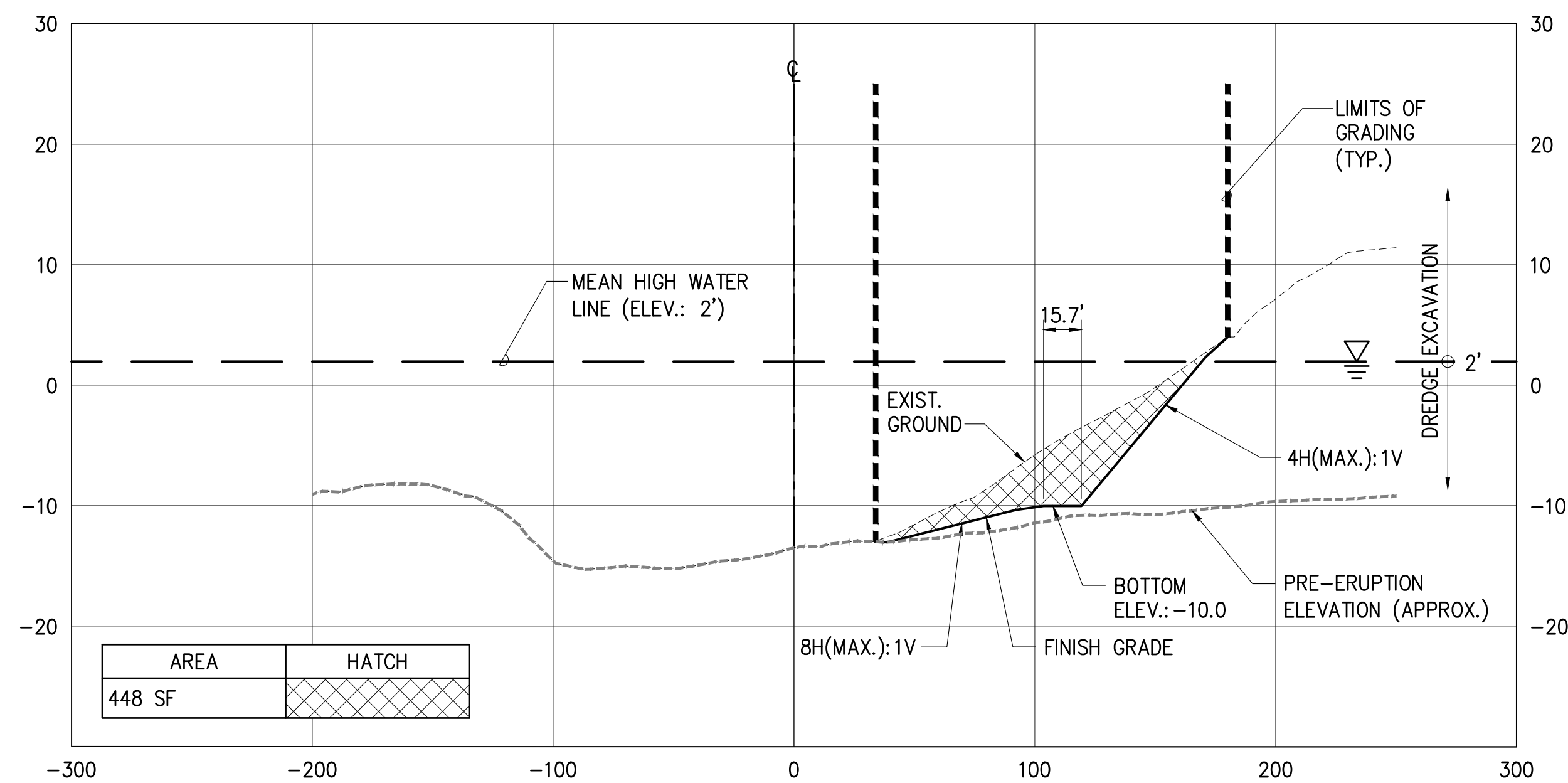
NOTE:
1. ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|---|------|-------------|---|------|----------------------------|
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS SECTION VIEWS 2 | | | | | |
| TREVOR R. YAGI LICENSED PROFESSIONAL ENGINEER No. 14993-C HAWAII U.S.A. 04/30/2026 EXP. DATE | | | | | |
| DESIGNED: TV DRAWN: IE CHECKED: KK APPROVED: _____ CHIEF ENGINEER | | | SUBMITTED: JUNE 2024 DATE: JUNE 2024 SCALE: AS NOTED DATE: _____ DATE | | |
| THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION | | | | | DRAWING NO. C10 |



CHANNEL BASELINE SECTION – STA. 4+50


SCALE: HORIZ. 1"=50'
VERT. 1"=10'

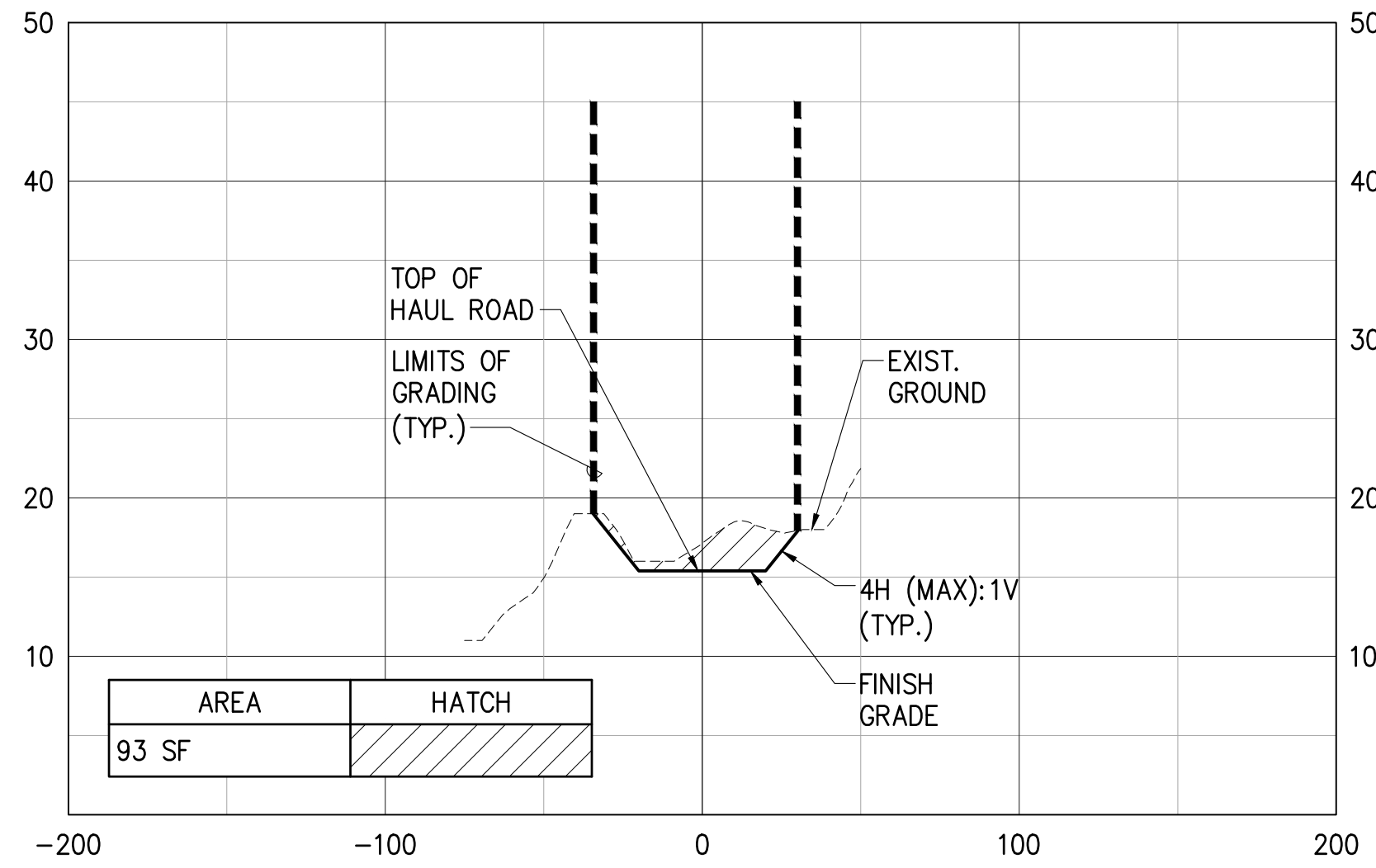


CHANNEL BASELINE SECTION – STA. 5+00

SCALE: HORIZ. 1"=50'
VERT. 1"=10'

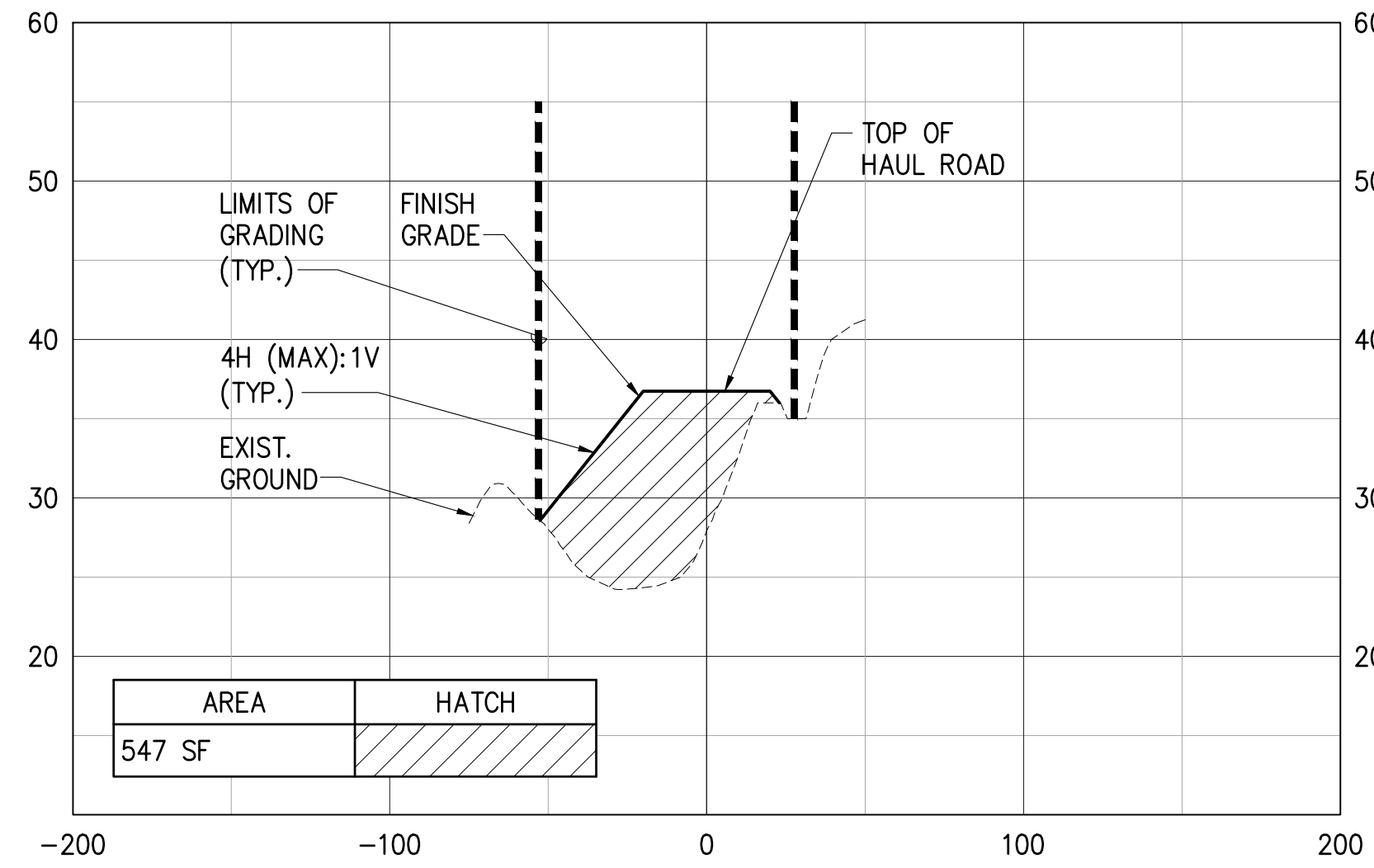
NOTE:
1. ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--|------|----------------------|---------|------------|----------|
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS SECTIONS VIEWS 3 | | | | | |
|  04/30/2026 EXP. DATE | | | | | |
| DESIGNED: TV | | SUBMITTED: JUNE 2024 | | | |
| DRAWN: IE | | DATE: JUNE 2024 | | | |
| CHECKED: KK | | SCALE: AS NOTED | | | |
| APPROVED: | | DRAWING NO. | | C11 | |
| CHIEF ENGINEER | | DATE | | | |



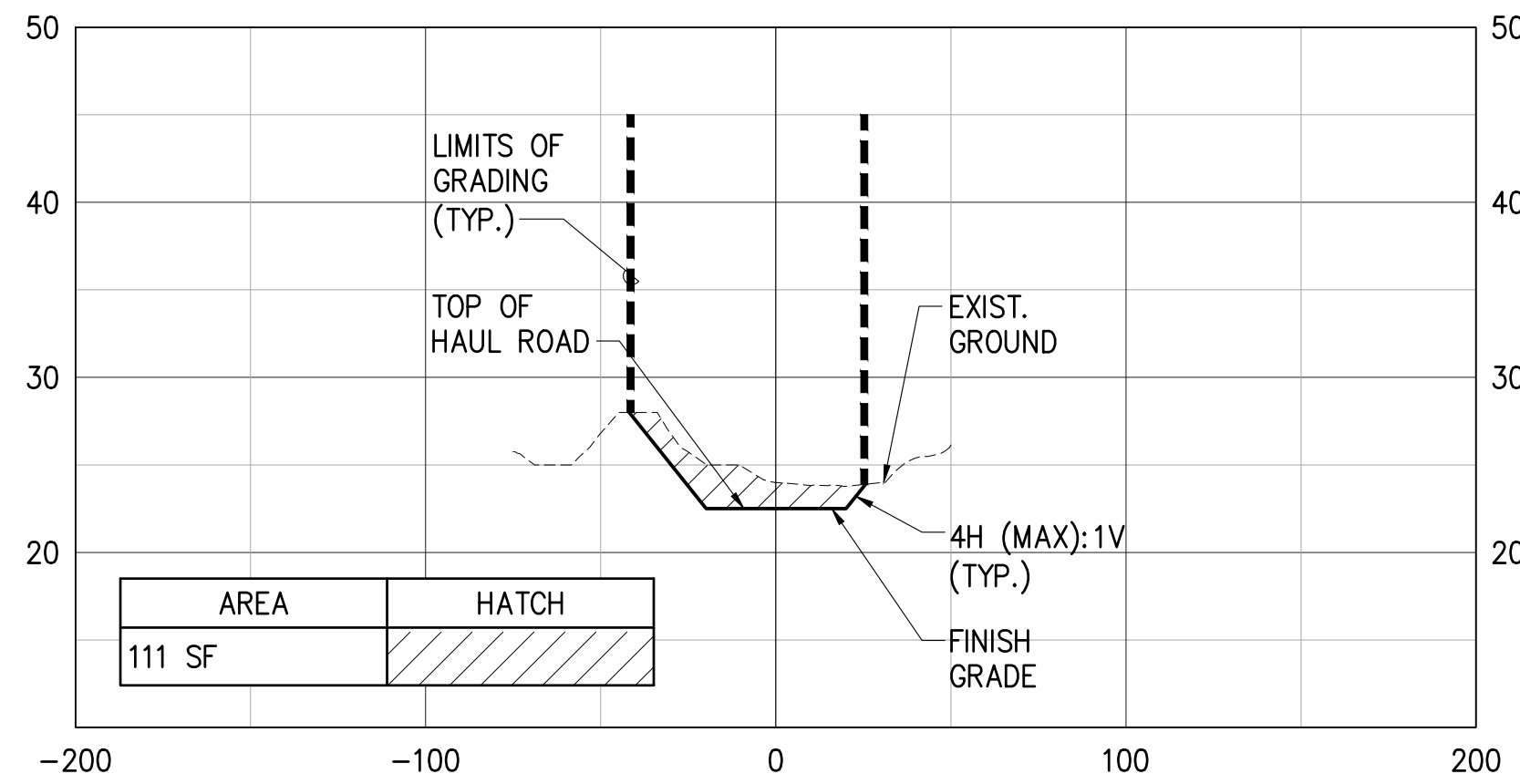
**HAUL ROAD BASELINE
SECTION - STA. 1+00**

SCALE: HORIZ. 1"=50'
VERT. 1"=10'



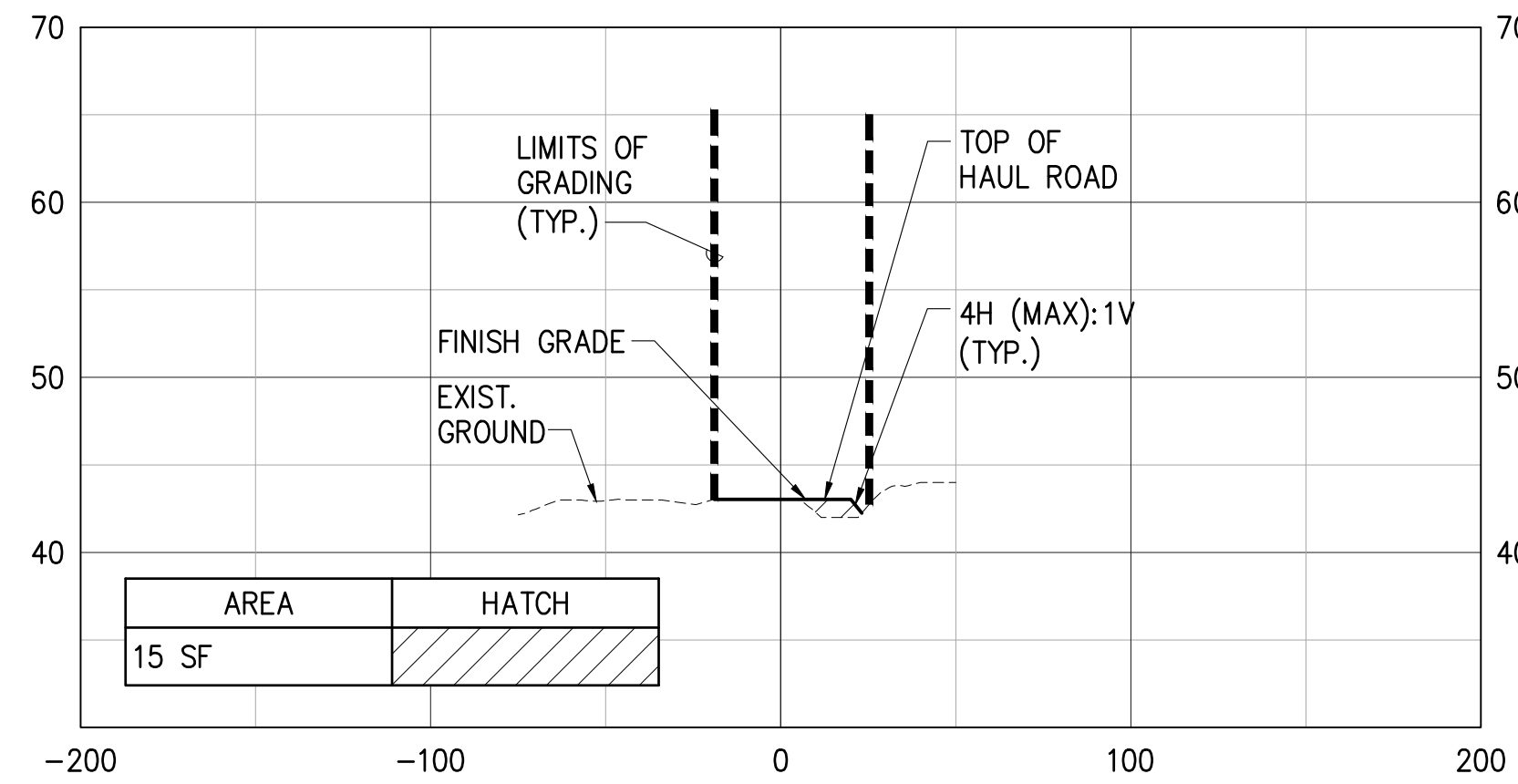
**HAUL ROAD BASELINE
SECTION - STA. 4+00**

SCALE: HORIZ. 1"=50'
VERT. 1"=10'



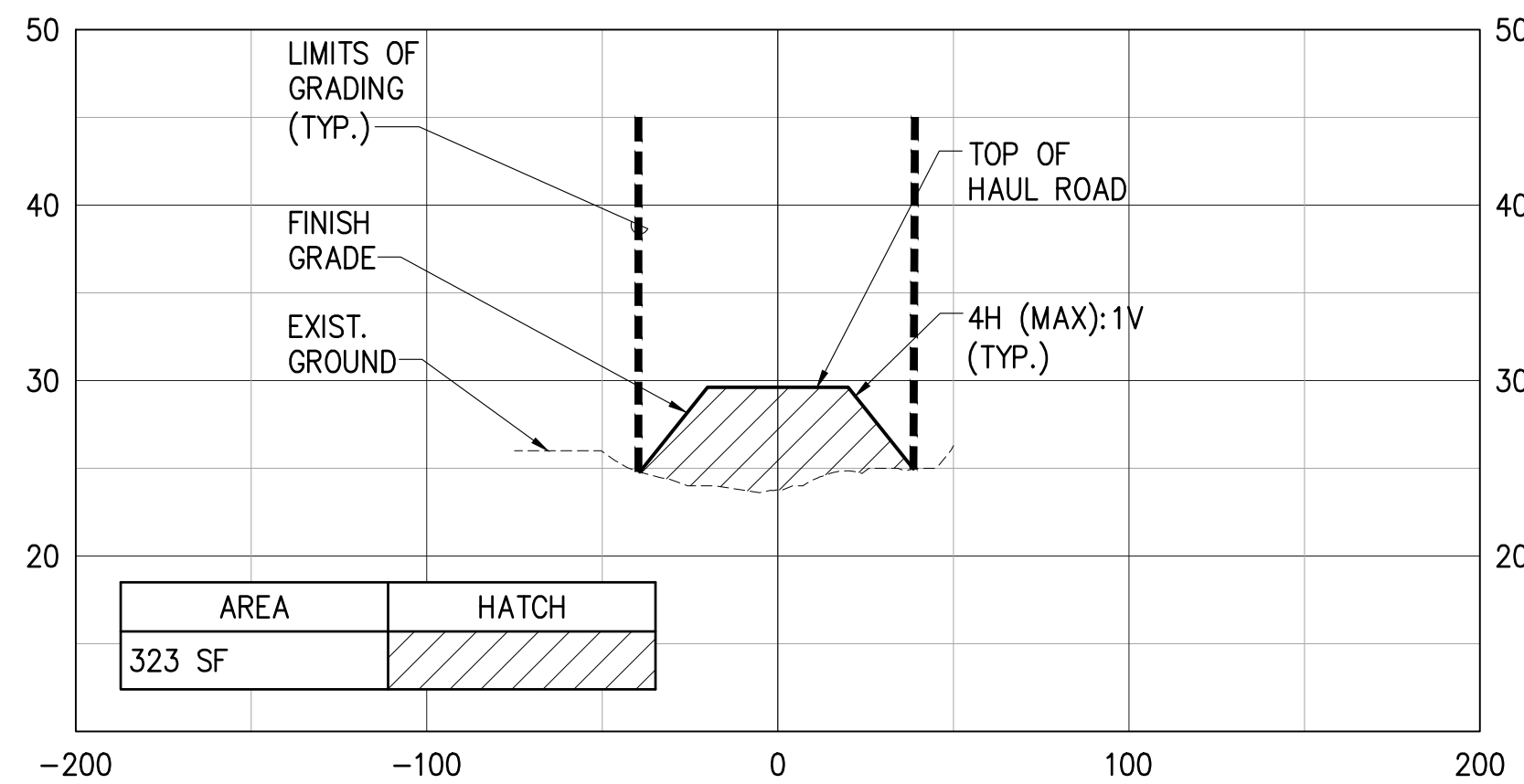
**HAUL ROAD BASELINE
SECTION - STA. 2+00**

SCALE: HORIZ. 1"=50'
VERT. 1"=10'



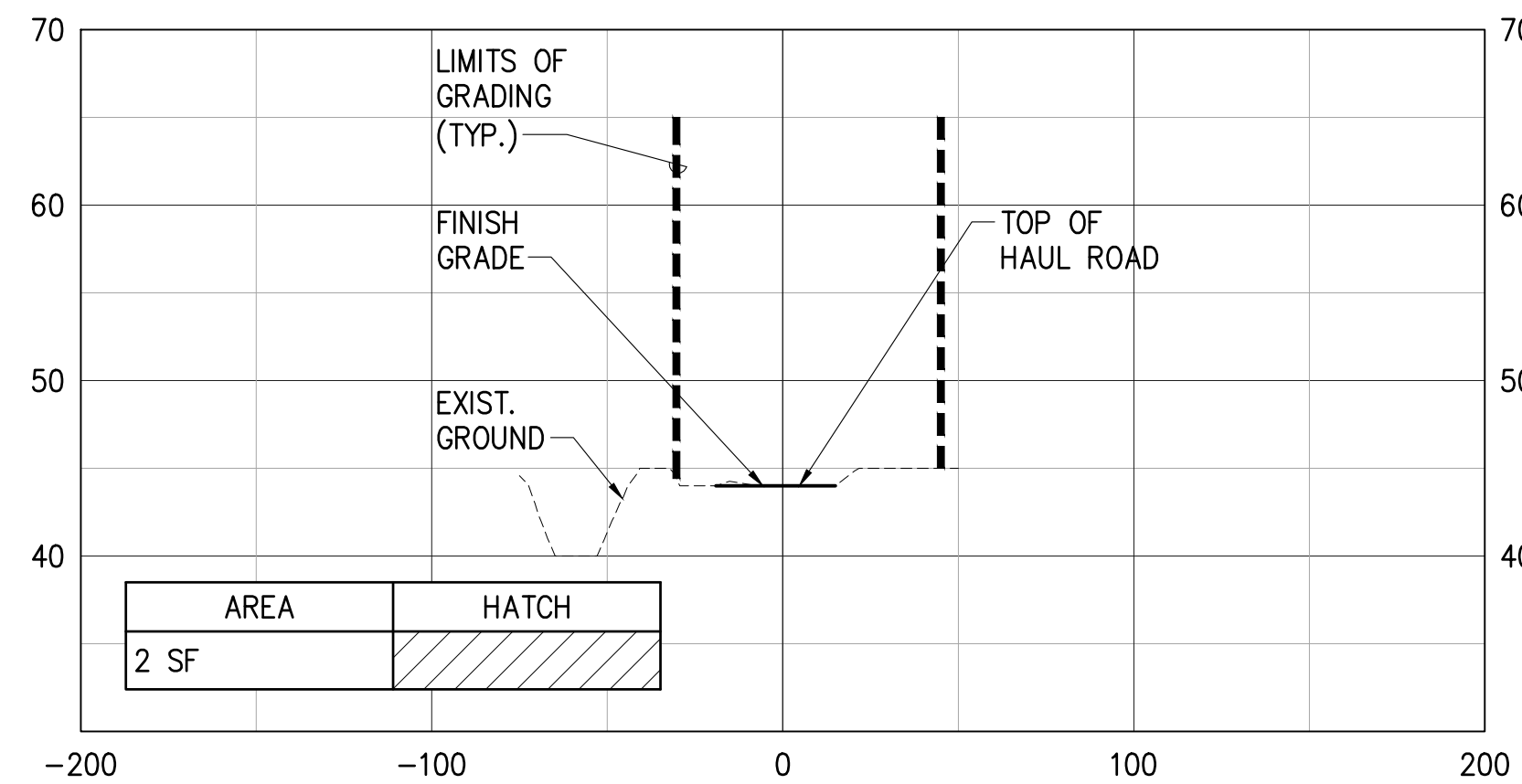
**HAUL ROAD BASELINE
SECTION - STA. 5+00**

SCALE: HORIZ. 1"=50'
VERT. 1"=10'



**HAUL ROAD BASELINE
SECTION - STA. 3+00**

SCALE: HORIZ. 1"=50'
VERT. 1"=10'

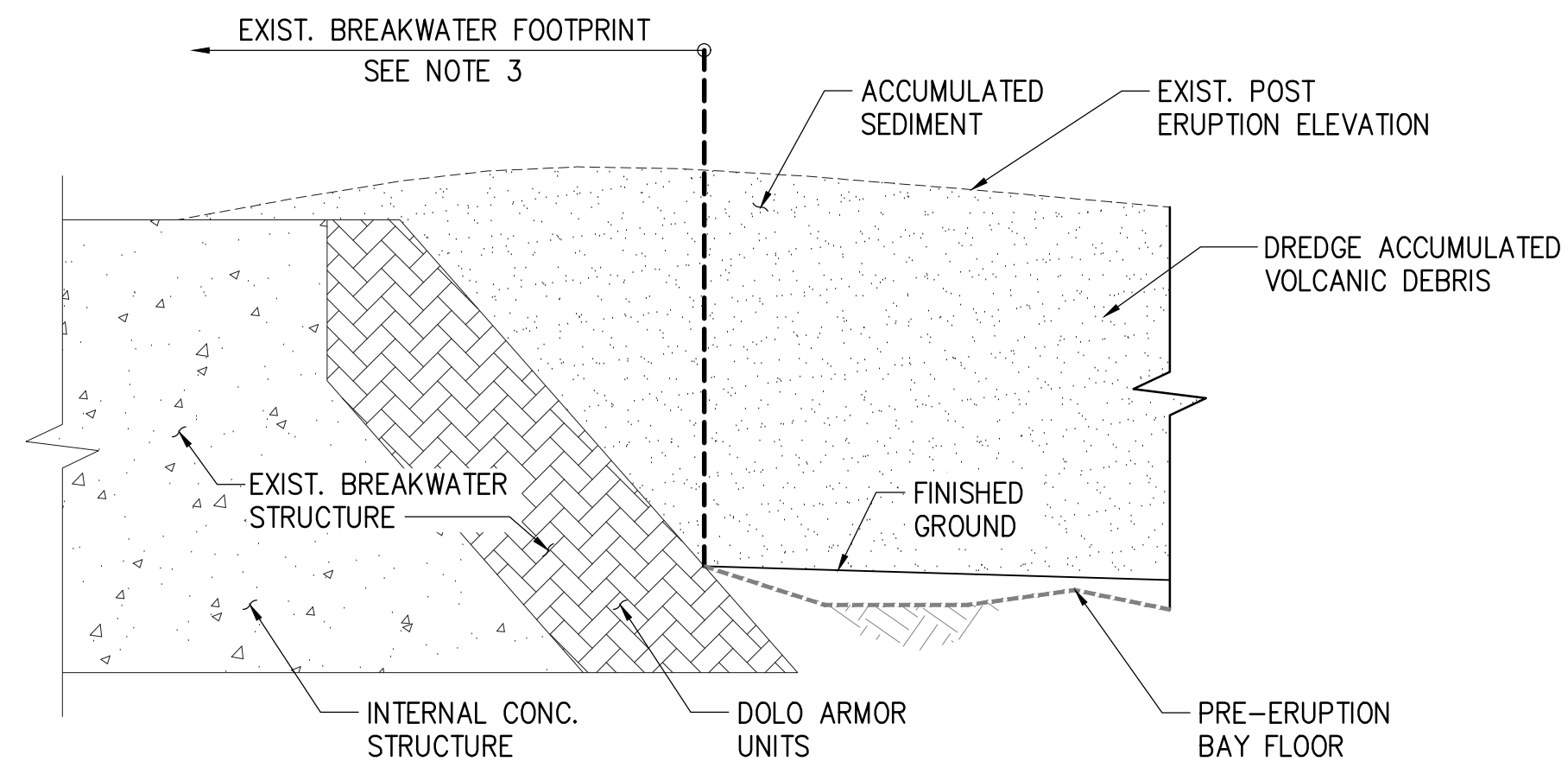


**HAUL ROAD BASELINE
SECTION - STA. 6+00**

SCALE: HORIZ. 1"=50'
VERT. 1"=10'

NOTE:
1. ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.

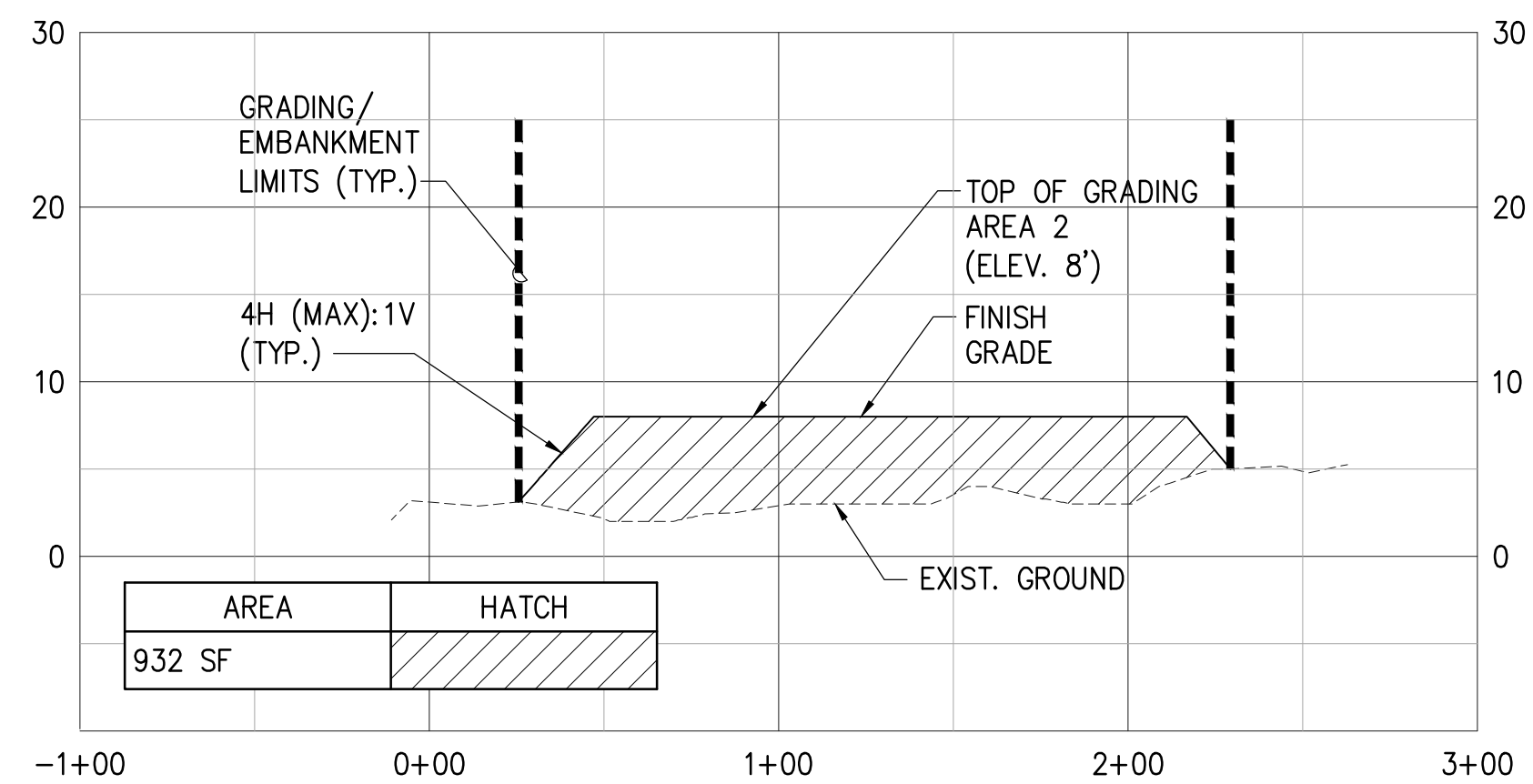
| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|---|------|-------------|---|------|---------------------------|
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS SECTION VIEWS 4 | | | | | |
| 04/30/2026 EXP. DATE | | | | | |
| DESIGNED: TV DRAWN: IE CHECKED: KK APPROVED: _____ CHIEF ENGINEER | | | SUBMITTED: JUNE 2024 DATE: JUNE 2024 SCALE: AS NOTED DATE: _____ DATE | | |
| THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION | | | | | C12 DRAWING NO. |



NOTES:

1. THE CONTRACTOR SHALL ENSURE EXISTING BREAKWATER STRUCTURE IS PROTECTED FROM DAMAGE DURING CONSTRUCTION.
2. HEAVY EQUIPMENT UTILIZED FOR THE PROJECT SHALL BE PROHIBITED FROM TRAVELING OVER AND NEAR THE EXISTING BREAKWATER FOOTPRINT.
3. SETTLED SAND AND COBBLES ON AND/OR OVER THE BREAKWATER STRUCTURE MAY BE MANUALLY REMOVED WITH THE USE OF HAND TOOLS.
4. ANY DAMAGE TO THE EXISTING BREAKWATER STRUCTURE SHALL BE REPAIRED TO THE SATISFACTION OF U.S. ARMY COPRS OF ENGINEERS AT THE CONTRACTOR'S EXPENSE.

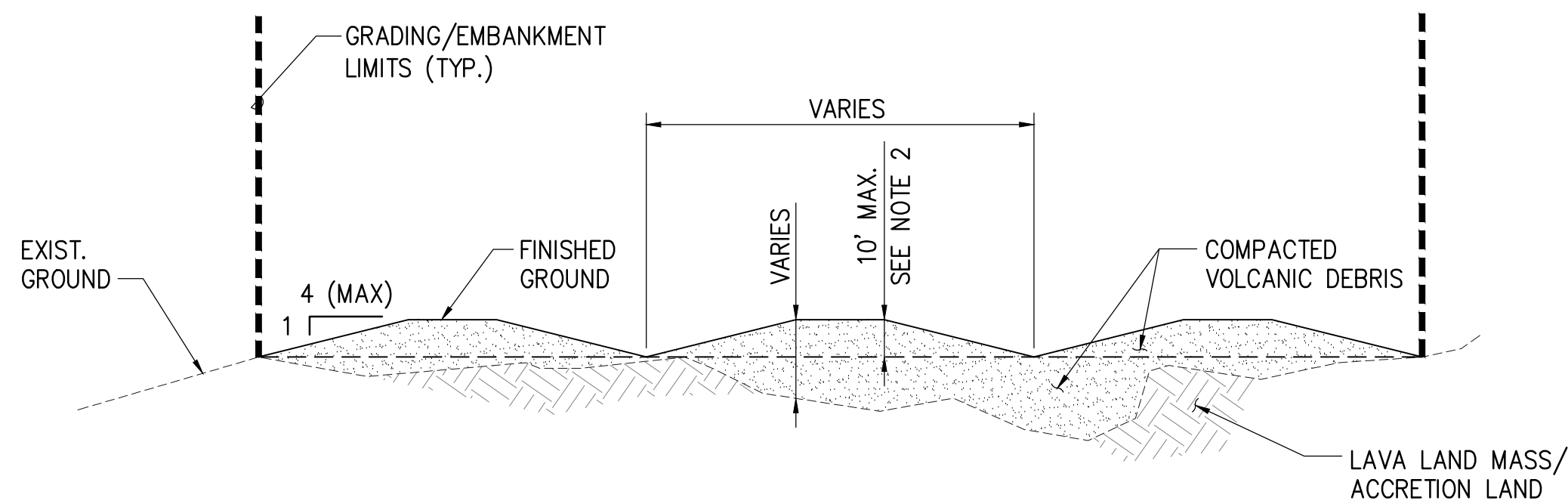
1 TYPICAL BREAKWATER DREDGE SECTION
C13 NOT TO SCALE



NOTE:

1. ELEVATIONS SHOWN USE THE LOCAL MEAN LOWER LOW WATER (MLLW) ELEVATION AS THEIR DATUM.

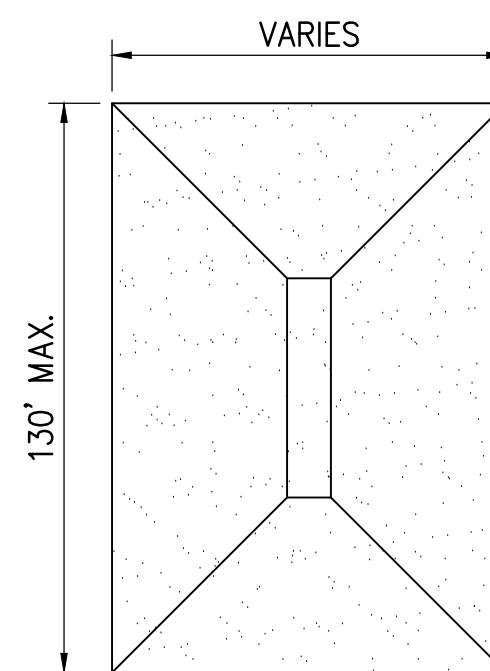
2 GRADING AREA 2 SITE SECTION
C13 NOT TO SCALE



NOTES:

1. VOIDS WITHIN EXISTING STOCKPILING AREA SHALL BE FILLED WITH COMPACTED VOLCANIC DEBRIS TO CREATE A LEVEL SURFACE PRIOR TO PLACING ADDITIONAL STOCKPILING MATERIAL.
2. REMAINING VOLCANIC DEBRIS SHALL BE PLACED IN MOUNDS WITH A MAXIMUM MOUND HEIGHT OF 10 FEET ABOVE LEVELED SURFACE.
3. MOUNDS SHALL BE LAID OUT SUCH THAT THEY ARE ACCESSIBLE FROM AT LEAST ONE SIDE AT ALL TIMES.

SECTION



PLAN

3 TYPICAL STOCKPILE DETAIL
C13 NOT TO SCALE

| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
|--|------|-------------|---|------|----------------------------|
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION POHOIKI BOAT RAMP DREDGING AND EXCAVATION OF VOLCANIC DEBRIS DETAILS | | | | | |
| 04/30/2026 EXP. DATE | | | | | |
| DESIGNED: TV DRAWN: IE CHECKED: KK APPROVED: _____ CHIEF ENGINEER | | | SUBMITTED: JUNE 2024 DATE: JUNE 2024 SCALE: AS NOTED DATE: _____ DATE | | |
| THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION | | | | | DRAWING NO. C13 |