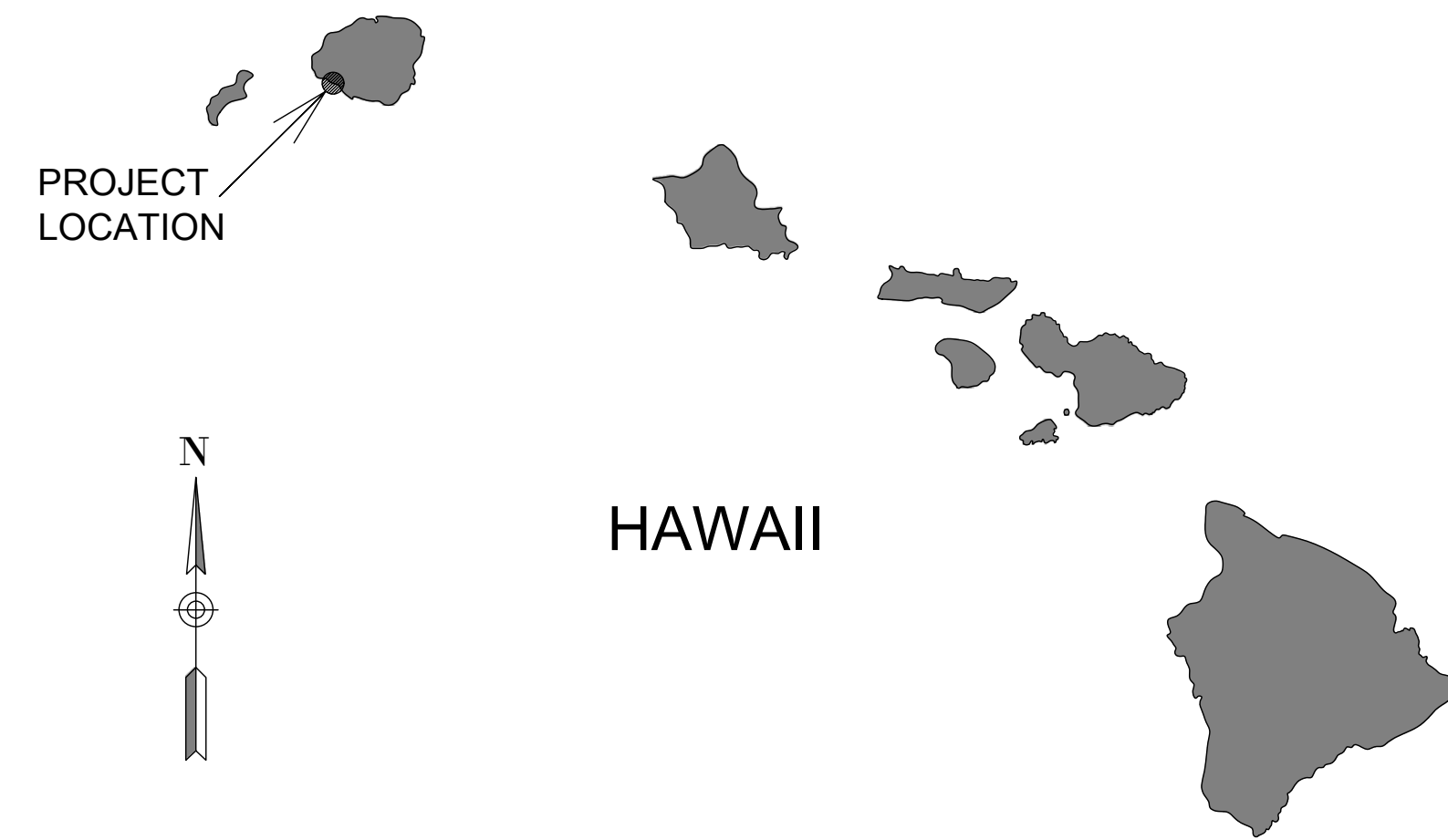


**STATE OF HAWAII DEPARTMENT OF LAND
AND NATURAL RESOURCES**
DIVISION OF BOATING AND OCEAN RECREATION
JOB NO. B95CK77A

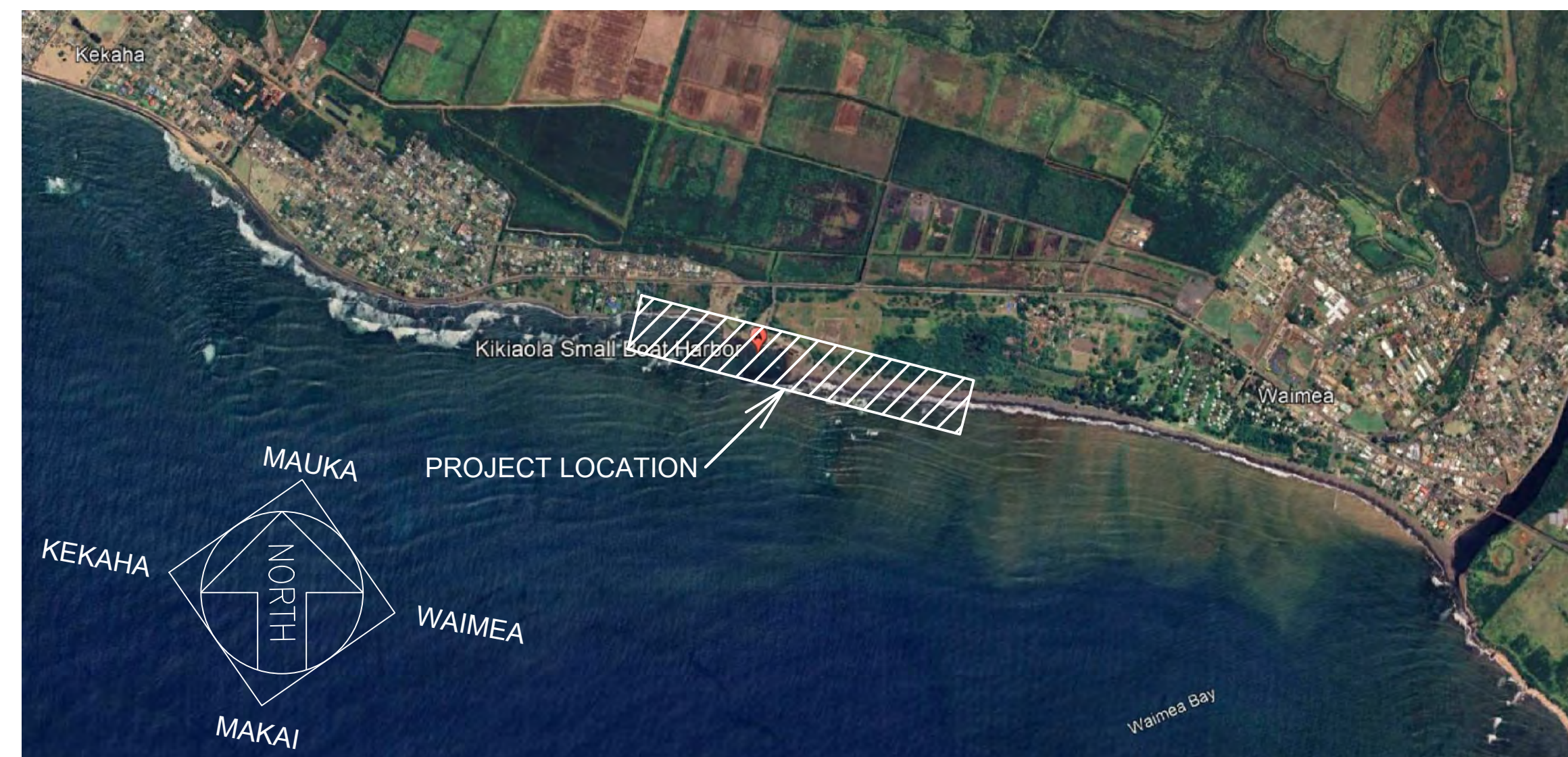
KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING

KEKAHA, KAUAI, HAWAII

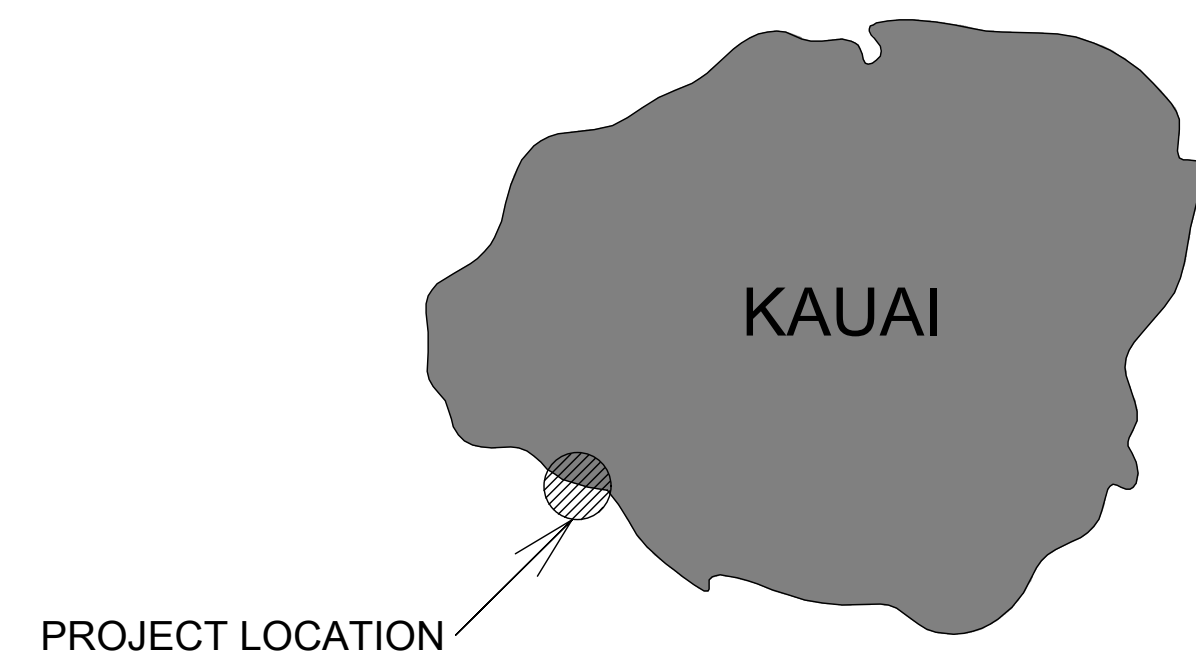
SHEET INDEX		
SHEET NO.	DWG NO.	DESCRIPTION
1		COVER, SHEET INDEX, VICINITY MAPS
2	C0	GENERAL NOTES
3	C1	PROJECT CONTROL AND BASELINE
4	D1	EXISTING CONDITIONS - OVERALL
5	D2	EXISTING CONDITIONS - EAST
6	D3	EXISTING CONDITIONS - WEST
7	D4	HAUL ROUTE & LAYDOWN AREA
8	D5	PROPOSED BORROW AREA PLAN
9	D6	BORROW SECTIONS 1
10	D7	BORROW SECTIONS 2
11	D8	BORROW SECTIONS 3
12	D9	PROPOSED BEACH FILL PLAN
13	D10	BEACH FILL SECTIONS 1
14	D11	BEACH FILL SECTIONS 2
15	D12	PROPOSED HARBOR BASIN DREDGING (ADD ALTERNATE NO. 1)
16	C2	EROSION AND SEDIMENT CONTROL DETAILS
17	C3	EROSION AND SEDIMENT CONTROL NOTES
18	C4	GRADING NOTES



REGIONAL MAP



VICINITY MAP



LOCATION MAP

CONSULTANT:



APPROVED: _____

DATE: _____

FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION

MEGHAN L. STATTS
ADMINISTRATOR
DIVISION OF BOATING AND OCEAN RECREATION
DEPARTMENT OF LAND AND NATURAL RESOURCES

GENERAL NOTES

- ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF THE STATE OF HAWAII DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2005, AND THE 1984 "STANDARD DETAILS" FOR PUBLIC WORKS CONSTRUCTION OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF KAUAI, AS AMENDED.
- ALL WORK SHALL BE INCLUDED IN THE BASE BID UNLESS OTHERWISE INDICATED. WORK CALLED FOR ON THE PLANS AND NOT ITEMIZED IN THE PROPOSAL, AND ALL WORK NOT CALLED FOR BUT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, AND SHALL BE RESPONSIBLE FOR THE REPAIR, RELOCATION OR REPLACEMENT OF SAME IN THE EVENT OF DAMAGES DUE TO HIS CONSTRUCTION PRACTICES, OR INTERFERENCES WITH CONSTRUCTION WORK, THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE RESPECTIVE UTILITY COMPANIES AND THE STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION (DLNR-DOBOR).
- THE CONTRACTOR SHALL VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- FIELD ADJUSTMENTS SHALL BE MADE AS APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL COORDINATE HIS OPERATIONS WITH THOSE OF OTHER CONTRACTORS WHO MAY BE EMPLOYED ON ADJACENT OR RELATED STATE PROJECTS AND AVOID UNNECESSARY DELAY OR HINDRANCE IN THE PERFORMANCE OF THEIR RESPECTIVE CONTRACTS.
- NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING DRAINAGE SYSTEMS OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY TAKE ALL REMEDIAL ACTIONS NECESSARY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS IN HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS" AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL", AS WELL AS CHAPTER 14 OF THE REVISED ORDINANCES OF KAUAI, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PLAN AND CONSTRUCT BEST MANAGEMENT PRACTICES (BMP) AS REQUIRED BY HIS OPERATIONS TO COMPLY WITH THE LAWS, STANDARDS, RULES, AND/OR POLICIES OF THE COUNTY, STATE OR FEDERAL REGULATORY AGENCIES. PRIOR TO ACCEPTANCE OF THE PROJECT BY THE STATE, THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL BEST MANAGEMENT PRACTICES AND RESTORE THE PROJECT SITE TO ITS ORIGINAL CONDITION OR BETTER.
- THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH THE ADMINISTRATIVE RULES IN THE STATE OF HAWAII DEPARTMENT OF HEALTH REGARDING NOISE CONTROL.
- ALL EXISTING TREES TO REMAIN SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION.
- PURSUANT TO CHAPTER 6E OF THE HAWAII REVISED STATUTES (HRS), IN THE EVENT ANY ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE KAUAI POLICE DEPARTMENT, THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES—HISTORIC PRESERVATION DIVISION (PH. 808-692-8015).
- IN PERFORMING ALL WORK, THE CONTRACTOR SHALL EXERCISE DUE CARE AND CAUTION NECESSARY TO AVOID ANY DAMAGE INFLICTED TO AND IMPAIRMENT IN THE USE OF ANY EXISTING UTILITY LINE. ANY DAMAGE INFLICTED ON EXISTING UTILITY LINES RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE IMMEDIATELY REPAIRED OR RESTORED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY; AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE STATE AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE STATE OR ENGINEER.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM RUBBISH, DUST, NOISE, EROSION, ETC. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONED AND OTHER PROTECTIVE MEASURES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC. THE CONTRACTOR SHALL ENSURE TEMPORARY SAFE PEDESTRIAN PASSAGEWAYS AROUND THE CONSTRUCTION SITE AS PER THE AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) 206.1 & 402.1.

- THE CONTRACTOR SHALL RESTORE TO ORIGINAL OR BETTER CONDITION, ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL. DEMOLITION AND RESTORATION OF EXISTING ITEMS SHALL BE INCIDENTAL AND INCLUDED WITHIN THE AMOUNT PAID FOR INSTALLATION OF NEW ITEMS.
- ALL EXISTING UTILITIES TO REMAIN IN USE, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE PROTECTED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION UNLESS SPECIFIED ON THE PLANS TO BE ABANDONED. ANY DAMAGES TO EXISTING UTILITIES SHALL BE REPAIRED AND PAID FOR BY THE CONTRACTOR.
- CONTRACTOR SHALL MAKE ARRANGEMENTS FOR TEMPORARY UTILITIES SUCH AS ELECTRICITY, WATER, ETC. REQUIRED FOR THEIR OPERATIONS. ALL COSTS FOR TEMPORARY UTILITIES SHALL BE BORNE BY THE CONTRACTOR.
- DIMENSIONS SHALL BE TAKE PRECEDENCE OVER SCALE. IF DIMENSIONAL ERRORS OR CONFLICTS ARISE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SHALL WAIT FOR CLARIFICATION BEFORE RESUMING OR COMMENCING WORK ON THE DISCREPANCY ITEM.
- THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY, AND ENVIRONMENTAL QUALITY.
- DUE TO LIMITED SPACE AT THE JOB SITE THE STATE RECOGNIZES THE NEED FOR A CONSTRUCTION STAGING AREA FOR TEMPORARY STORAGE OF CONTRACTOR'S EQUIPMENT AND MATERIALS. LOCATIONS OF POSSIBLE CONSTRUCTION STAGING AREAS ARE SHOWN ON SHEET D4.
- THE CONTRACTOR SHALL INSTALL ADEQUATE TEMPORARY BARRICADES AND WARNING SIGNS TO PROTECT THE PUBLIC DURING THE CONSTRUCTION PERIOD. PROVIDE AND MAINTAIN A SAFE PEDESTRIAN ACCESS AND VEHICLE ACCESS TO THE FACILITY THROUGHOUT THE CONSTRUCTION PERIOD.
- WITH THE EXCEPTION OF THE IMMEDIATE AREA OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ACCESS TO AND FROM PARKING AREAS, HARBOR FACILITIES, AND PUBLIC STREETS AT ALL TIMES UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL ERECT AND MAINTAIN A CONTINUOUS TURBIDITY CURTAIN TO ENCLOSE AREAS OF IN- OR OVER-WATER CONSTRUCTION ACTIVITIES. LIMITS OF TURBIDITY CURTAIN SHALL BE ADJUSTED TO MINIMIZE THE AREA OF CONTAINMENT REQUIRED

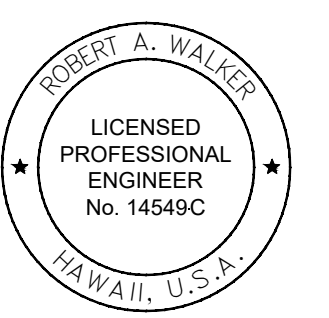
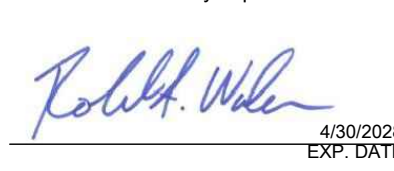
PUBLIC HEALTH SAFETY & CONVENIENCE NOTES

- THE 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 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 TITLE 11, DEPARTMENT OF HEALTH, CHAPTER 46, COMMUNITY NOISE CONTROL, IN WHICH MAXIMUM ALLOWABLE NOISE LEVELS HAVE BEEN SET. IF THE CONSTRUCTION WILL BE REQUIRED TO OBTAIN A PERMIT FROM THE DIRECTOR OF THE DEPARTMENT 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 CONSTRUCTION ACTIVITIES. APPLICATION AND INFORMATION ON VARIANCES FROM THE ENVIRONMENTAL HEALTH SERVICES DIVISION, 591 ALA MOANA BLVD., RM. 125, HONOLULU, HAWAII OR BY TELEPHONE 586-4576.
- WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN PASSABLE CONDITION OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. TEMPORARY PASSAGE WAYS SHALL BE ACCESSIBLE AND COMPLY PER ADAAG 206.1 & 402.1.

FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION

ABBREVIATIONS:

AC	ASPHALTIC CONCRETE	HORIZ	HORIZONTAL	ST	STREET
&	AND	ID	INSIDE DIAMETER	STA	STATION
APPROX	APPROXIMATE, APPROXIMATELY	LF	LINEAR FOOT	STD	STANDARD
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	LIN	LINEAR	SY	SQUARE YARD
@	AT	LB(S)	POUND(S)	T	TOP
B, BOT	BOTTOM	MAX	MAXIMUM	THK	THICK
BW	BOTTOM OF WALL	MISC	MISCELLANEOUS	TOW	TOP OF WALL
CIP	CAST IN PLACE	MIN	MINIMUM	TYP	TYPICAL
CFS	CUBIC FT PER SECOND	MON	MONUMENT	VERT	VERTICAL
CONT.	CONTINUOUS	N	NEW		
CY	CUBIC YARD	NTS	NOT TO SCALE		
DET.	DETAIL	NO	NUMBER		
DIA	DIAMETER	OC	ON CENTER		
DPP	DEPARTMENT OF PLANNING & PERMITTING	OD	OUTSIDE DIAMETER		
DPW	DEPARTMENT OF PUBLIC WORKS DOWN	PSF	POUNDS PER SQUARE FOOT		
DWG	DRAWING	PL	PROPERTY LINE, PLACE		
E	EXISTING	PVC	POLYVINYL CHLORIDE		
EA	EACH	PSI	POUNDS PER SQUARE INCH		
EJ	EXPANSION JOINT	REQ'D	REQUIRED		
ELEC	ELECTRIC, ELECTRICAL	REINF	REINFORCEMENT		
EP	EDGE OF PAVEMENT	REV	REVISION/REVISED		
ELEV, EL	ELEVATION	SCH	SCHEDULE		
EQ	EQUAL	SF	SQUARE FOOT		
EXIST	EXISTING	SPEC	SPECIFICATION		
FT	FOOT, FEET	SQ	SQUARE		
FG	FINISH GRADE	SST	STAINLESS STEEL		
GALV	GALVANIZED				

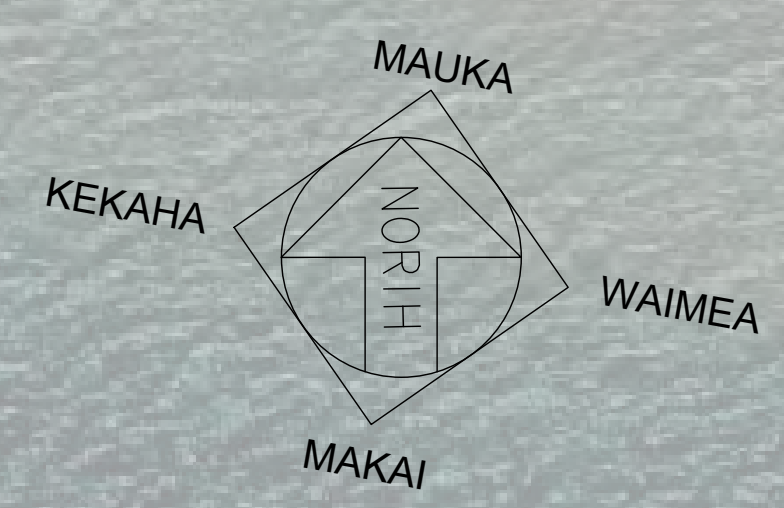
 This work was prepared by me or under my supervision  4/30/2028 EXP. DATE		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII GENERAL NOTES	
DESIGNED: RAW/TMC/AJW	SUBMITTED:		
DRAWN: TMC	DATE: 2026-05-06		
CHECKED: RAW	SCALE: AS NOTED		
APPROVED:	DATE	DRAWING NO. C0	
CHIEF ENGINEER	DATE		

- NOTES**
1. TOPOGRAPHIC AND HYDROGRAPHIC SURVEYS PERFORMED BY INTEGRAL CONSULTING, INC. ON FEBRUARY 11-13, 2025 USING A COMBINATION OF RTK GPS AND TOTAL STATION METHODOLOGIES.
 2. HIGH-RESOLUTION ORTHOMOSAIC BACKGROUND IMAGE CREATED USING AERIAL PHOTOGRAPHS COLLECTED ON FEBRUARY 12, 2025 BY INTEGRAL CONSULTING, INC.
 3. SATELLITE BACKGROUND IMAGE COURTESY OF MAXAR.
 4. VERTICAL DATUM: MSL PER NOAA TIDE GAUGE 1611400 (NAWILIWILI) FOR THE 1983-2001 TIDAL EPOCH.
 5. VERTICAL ELEVATIONS IN FEET, REFERENCED TO NGS BENCHMARK "KIKI 4"
 6. HORIZONTAL COORDINATE SYSTEM: NAD83, HAWAII STATE PLANE ZONE 4, US SURVEY FEET
 7. HORIZONTAL COORDINATES REFERENCED TO NGS BENCHMARKS "KIKI 2" AND "KIKI 3"



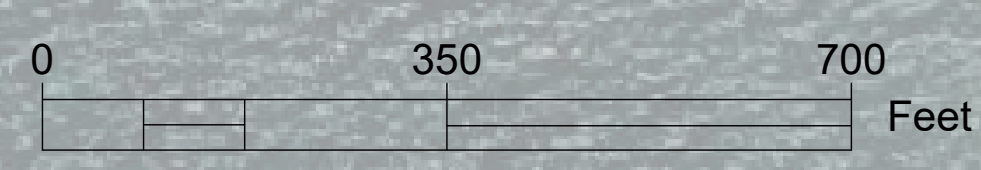
BASELINE CONTROL POINTS

POINT	Easting	Northing
1	1573423.19	46187.52
2	1573618.14	46226.11
3	1574418.30	46226.12
4	1574615.04	46191.58
5	1574932.32	46043.60
6	1575951.09	45524.99
7	1576438.10	45312.36
8	1578264.76	45088.01



BASELINE CONTROL POINTS

NAME	EASTING	NORTHING	ELEVATION (MSL)
KIKI 2	1575382.84	45773.09	4.00
KIKI 3	1575600.08	45767.63	8.49
KIKI 4	1575460.56	45818.60	6.66



LINETYPE LEGEND

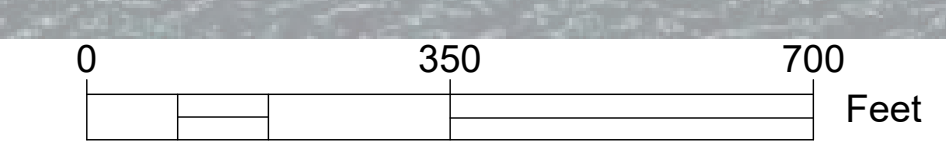
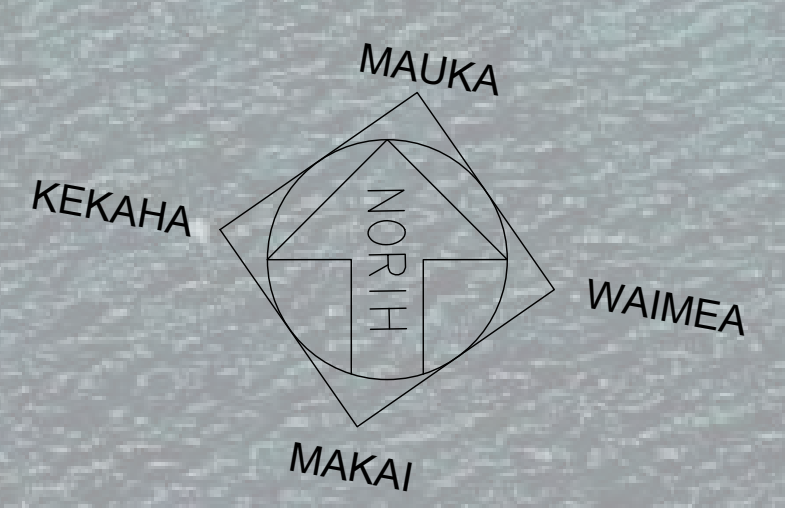
BASELINE: — — — — —

**FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION**

<p>ROBERT A. WALKER LICENSED PROFESSIONAL ENGINEER No. 14549C HAWAII, U.S.A.</p> <p><i>Robert A. Walker</i> 4/30/2028 EXP. DATE</p>	STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
	KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
PROJECT CONTROL AND BASELINE		
DESIGNED: RAW/TMC/AJW	SUBMITTED:	
DRAWN: TMC	DATE: 2026-05-06	
CHECKED: RAW	SCALE: AS NOTED	
APPROVED:	DATE:	DRAWING NO.
CHIEF ENGINEER	DATE:	C1

NOTES

1. TOPOGRAPHIC AND HYDROGRAPHIC SURVEYS PERFORMED BY INTEGRAL CONSULTING, INC. ON FEBRUARY 11-13, 2025 USING A COMBINATION OF RTK GPS AND TOTAL STATION METHODOLOGIES.
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4. TOPOGRAPHIC AND BATHYMETRIC DATA WEST OF STATION 11+00 WERE OBTAINED FROM VARIOUS SOURCES AND COMPILED FOR THE PURPOSES OF THESE BID PLANS. UPDATED TOPOGRAPHIC AND BATHYMETRIC SURVEY DATA FOR THIS AREA WILL BE COLLECTED BY THE ENGINEER PRIOR TO CONSTRUCTION AND INCORPORATED INTO THE FINAL ISSUED FOR CONSTRUCTION (IFC) PLAN SET.
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**FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION**

LINETYPE LEGEND

BASELINE:	— — — — —
EXISTING CONTOUR:	- - - - -
MHHW (+1.01 FT MSL):	— — — — —

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
EXISTING CONDITIONS - OVERALL	
DESIGNED: RAW/TMC/AJW	SUBMITTED:
DRAWN: TMC	DATE: 2026-05-06
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APPROVED:	DRAWING NO.
CHIEF ENGINEER	D1
DATE	

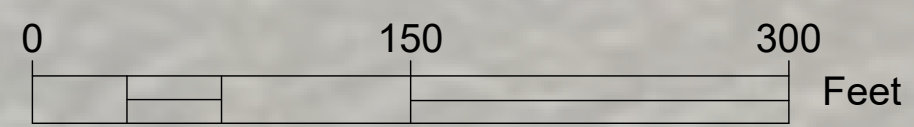
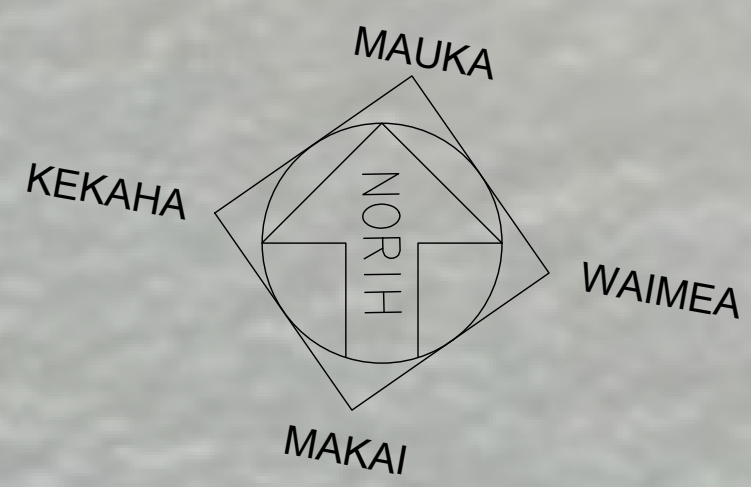
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PROJECT BASELINE (TYP.)

EAST BREAKWATER

PACIFIC OCEAN



FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION

LINETYPE LEGEND

BASILINE:	---
SECTION LINE:	---
EXISTING CONTOUR:	- - - -2 - - - -
MHHW (+1.01 FT MSL):	---

This work was prepared by me or under my supervision

Robert A. Walker

4/30/2028
EXP. DATE

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
EXISTING CONDITIONS - EAST	
DESIGNED: RAW/TMC/AJW	SUBMITTED:
DRAWN: TMC	DATE: 2026-05-06
CHECKED: RAW	SCALE: AS NOTED
APPROVED:	DRAWING NO.
CHIEF ENGINEER	DATE
	D2

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9. FOR BASELINE CONTROL COORDINATES, SEE SHEET C1.



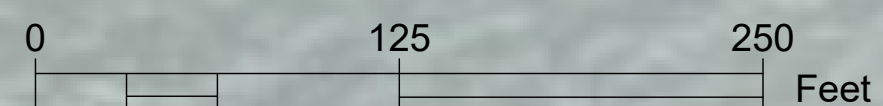
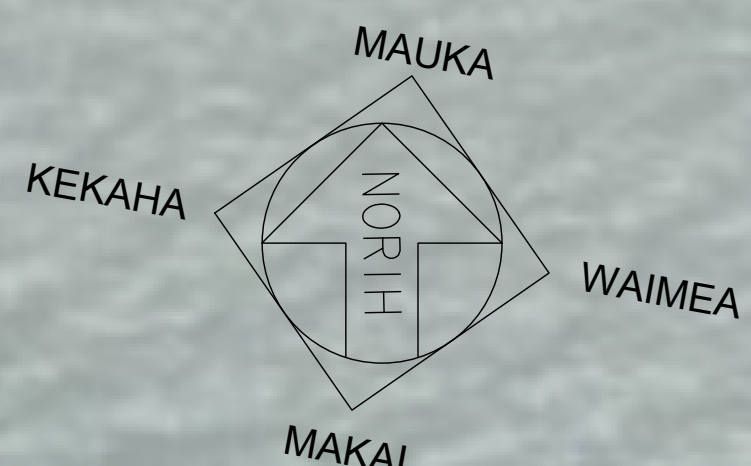
EXIST. ROCK REVETMENT
(STA. 13+80 TO 15+50, APPROX.)

EXIST. SANDBAG REVETMENT
(STA. 11+10 TO 13+80, APPROX.)

PROJECT BASELINE (TYP.)

PACIFIC OCEAN

WEST BREAKWATER



FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION

LINETYPE LEGEND

BASELINE:	---
EXISTING CONTOUR:	- - - -
MHHW (+1.01 FT MSL):	---



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or under my supervision

Robert A. Walker

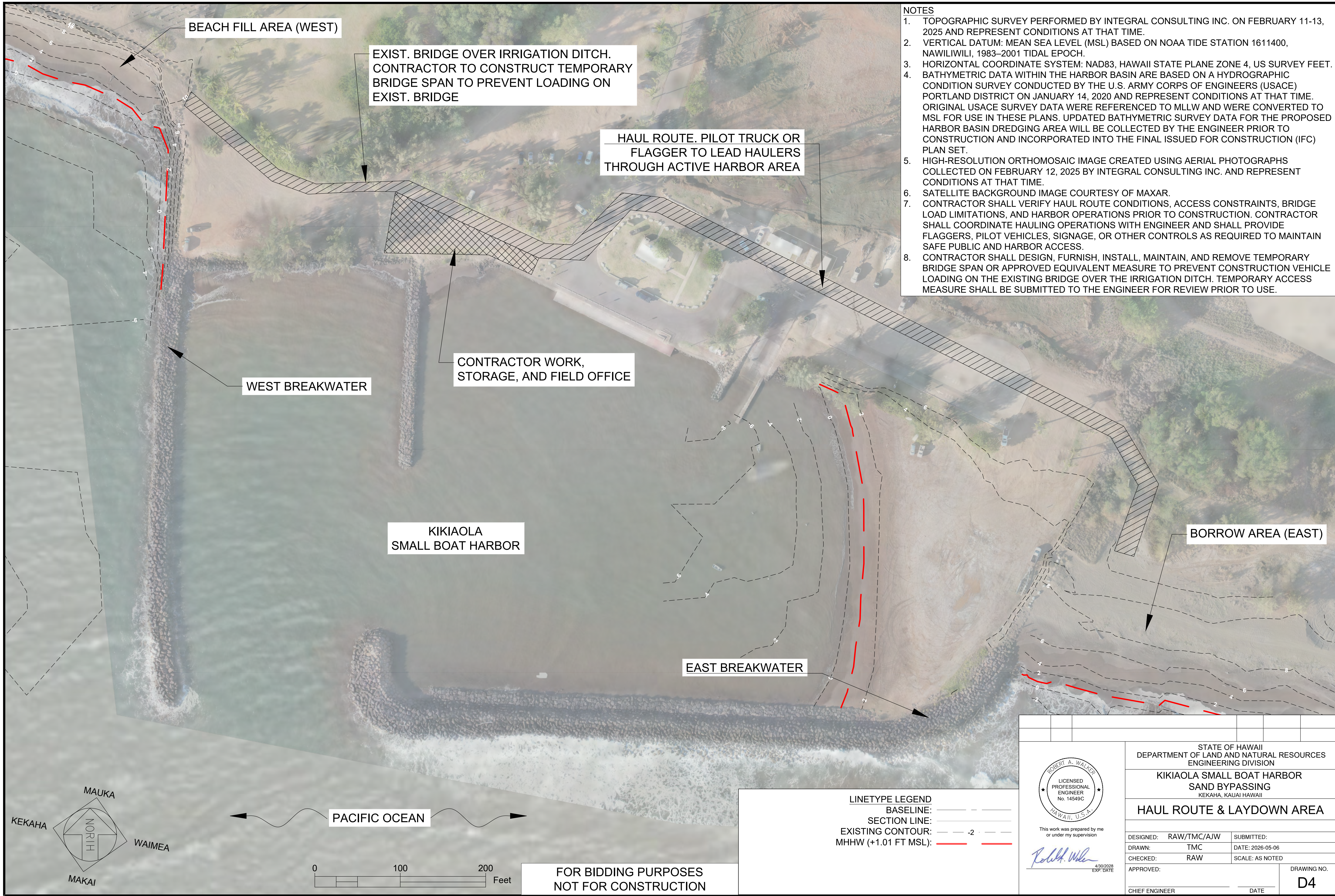
4/30/2028
EXP. DATE

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

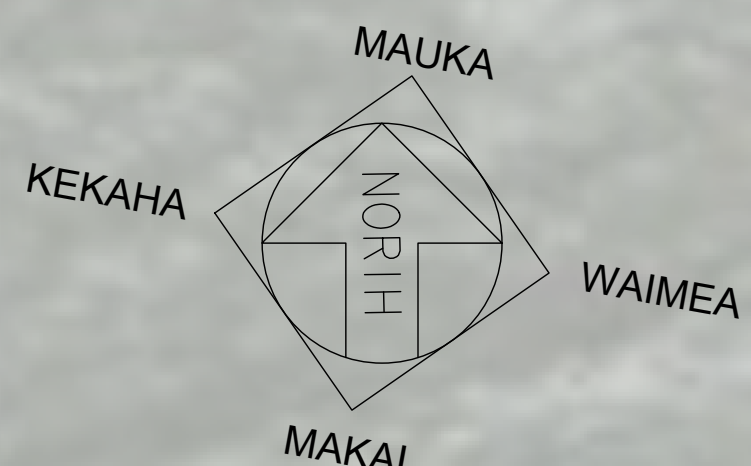
KIKIAOLA SMALL BOAT HARBOR
SAND BYPASSING
KEKAHA, KAUAI HAWAII

EXISTING CONDITIONS - WEST

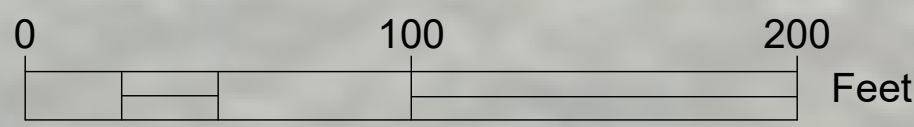
DESIGNED: RAW/TMC/AJW	SUBMITTED:
DRAWN: TMC	DATE: 2026-05-06
CHECKED: RAW	SCALE: AS NOTED
APPROVED:	DRAWING NO.
CHIEF ENGINEER	DATE
	D3



- NOTES**
1. TOPOGRAPHIC SURVEY PERFORMED BY INTEGRAL CONSULTING INC. ON FEBRUARY 11-13, 2025 AND REPRESENT CONDITIONS AT THAT TIME.
 2. VERTICAL DATUM: MEAN SEA LEVEL (MSL) BASED ON NOAA TIDE STATION 1611400, NAWILIWILI, 1983-2001 TIDAL EPOCH.
 3. HORIZONTAL COORDINATE SYSTEM: NAD83, HAWAII STATE PLANE ZONE 4, US SURVEY FEET.
 4. BATHYMETRIC DATA WITHIN THE HARBOR BASIN ARE BASED ON A HYDROGRAPHIC CONDITION SURVEY CONDUCTED BY THE U.S. ARMY CORPS OF ENGINEERS (USACE) PORTLAND DISTRICT ON JANUARY 14, 2020 AND REPRESENT CONDITIONS AT THAT TIME. ORIGINAL USACE SURVEY DATA WERE REFERENCED TO MLLW AND WERE CONVERTED TO MSL FOR USE IN THESE PLANS. UPDATED BATHYMETRIC SURVEY DATA FOR THE PROPOSED HARBOR BASIN DREDGING AREA WILL BE COLLECTED BY THE ENGINEER PRIOR TO CONSTRUCTION AND INCORPORATED INTO THE FINAL ISSUED FOR CONSTRUCTION (IFC) PLAN SET.
 5. HIGH-RESOLUTION ORTHOMOSAIC IMAGE CREATED USING AERIAL PHOTOGRAPHS COLLECTED ON FEBRUARY 12, 2025 BY INTEGRAL CONSULTING INC. AND REPRESENT CONDITIONS AT THAT TIME.
 6. SATELLITE BACKGROUND IMAGE COURTESY OF MAXAR.
 7. CONTRACTOR SHALL VERIFY HAUL ROUTE CONDITIONS, ACCESS CONSTRAINTS, BRIDGE LOAD LIMITATIONS, AND HARBOR OPERATIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE HAULING OPERATIONS WITH ENGINEER AND SHALL PROVIDE FLAGGERS, PILOT VEHICLES, SIGNAGE, OR OTHER CONTROLS AS REQUIRED TO MAINTAIN SAFE PUBLIC AND HARBOR ACCESS.
 8. CONTRACTOR SHALL DESIGN, FURNISH, INSTALL, MAINTAIN, AND REMOVE TEMPORARY BRIDGE SPAN OR APPROVED EQUIVALENT MEASURE TO PREVENT CONSTRUCTION VEHICLE LOADING ON THE EXISTING BRIDGE OVER THE IRRIGATION DITCH. TEMPORARY ACCESS MEASURE SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO USE.



PACIFIC OCEAN



FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION

LINETYPE LEGEND

BASILINE:	---
SECTION LINE:	---
EXISTING CONTOUR:	- - - - 2 - - - -
MHHW (+1.01 FT MSL):	---

This work was prepared by me or under my supervision

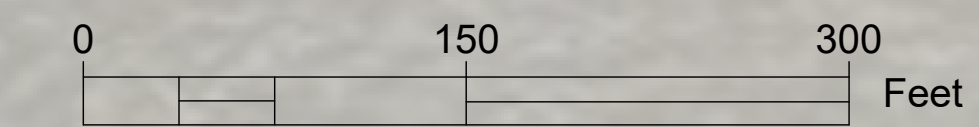
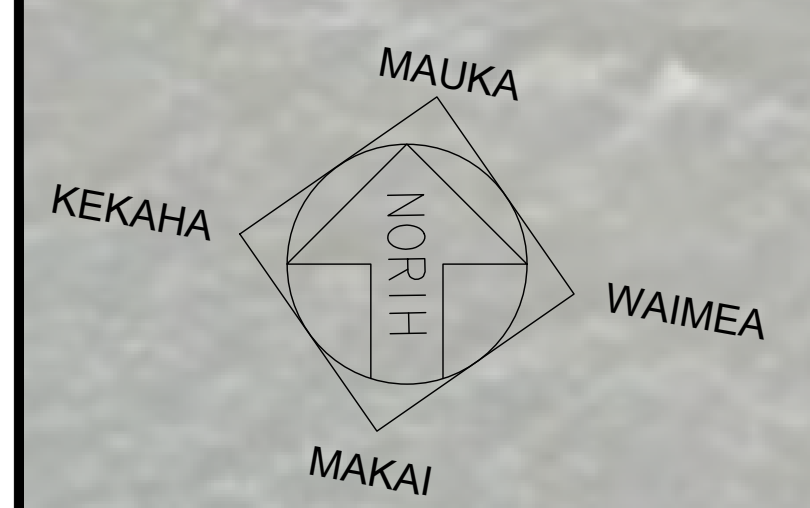
Robert A. Walker

4/30/2028
EXP. DATE

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
HAUL ROUTE & LAYDOWN AREA	
DESIGNED: RAW/TMC/AJW	SUBMITTED:
DRAWN: TMC	DATE: 2026-05-06
CHECKED: RAW	SCALE: AS NOTED
APPROVED:	DRAWING NO.
CHIEF ENGINEER	D4
DATE	

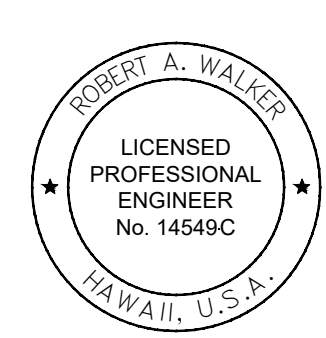
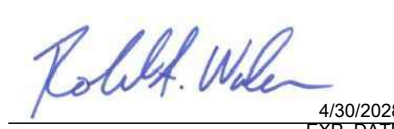
NOTES

1. TOPOGRAPHIC AND BATHYMETRIC SURVEYS PERFORMED BY INTEGRAL CONSULTING INC. ON FEBRUARY 11-13, 2025 AND REPRESENT CONDITIONS AT THAT TIME.
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3. HORIZONTAL COORDINATE SYSTEM: NAD83, HAWAII STATE PLANE ZONE 4, US SURVEY FEET.
4. HIGH-RESOLUTION ORTHOMOSAIC IMAGE CREATED USING AERIAL PHOTOGRAPHS COLLECTED ON FEBRUARY 12, 2025 BY INTEGRAL CONSULTING INC. AND REPRESENT CONDITIONS AT THAT TIME.
5. SATELLITE BACKGROUND IMAGE COURTESY OF MAXAR.
6. CONTRACTOR SHALL EXCAVATE ONLY WITHIN THE PROPOSED BORROW AREA BOUNDARY AND SHALL NOT EXCAVATE BELOW THE PROPOSED GRADES SHOWN ON THE BORROW SECTIONS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
7. FOR BASELINE CONTROL COORDINATES, SEE SHEET C1.



**FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION**

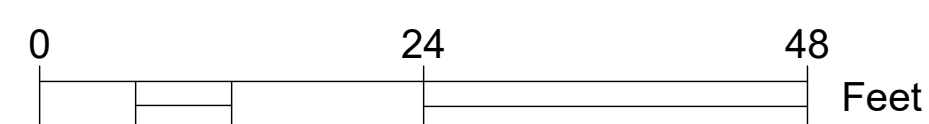
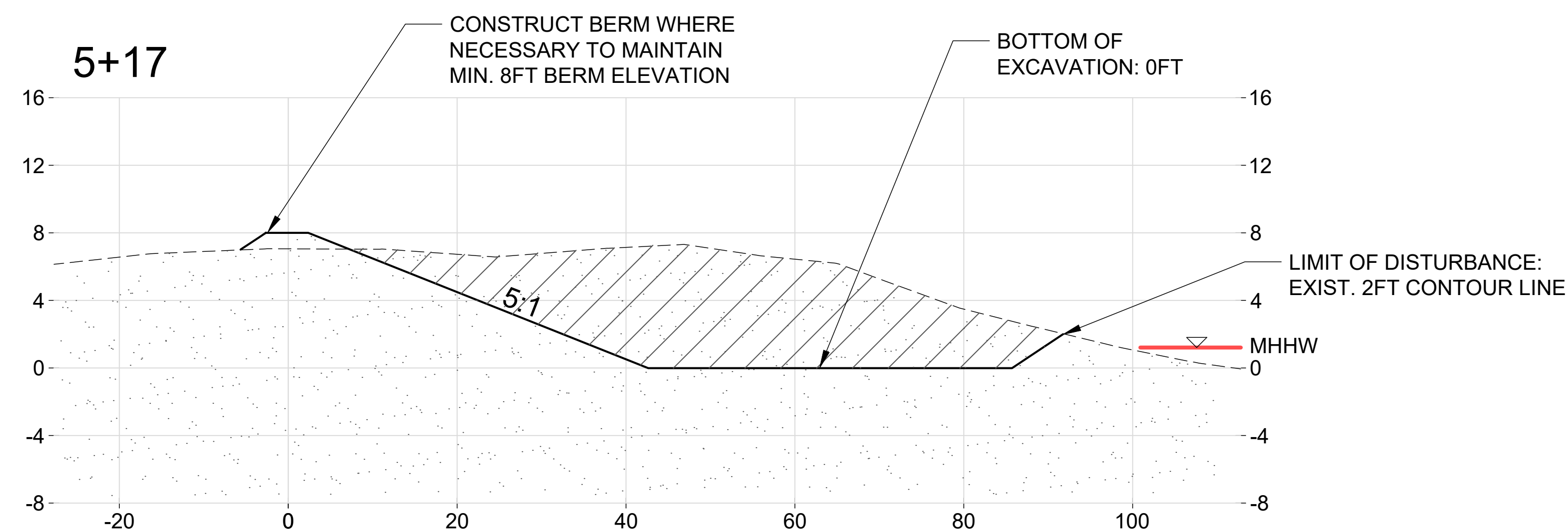
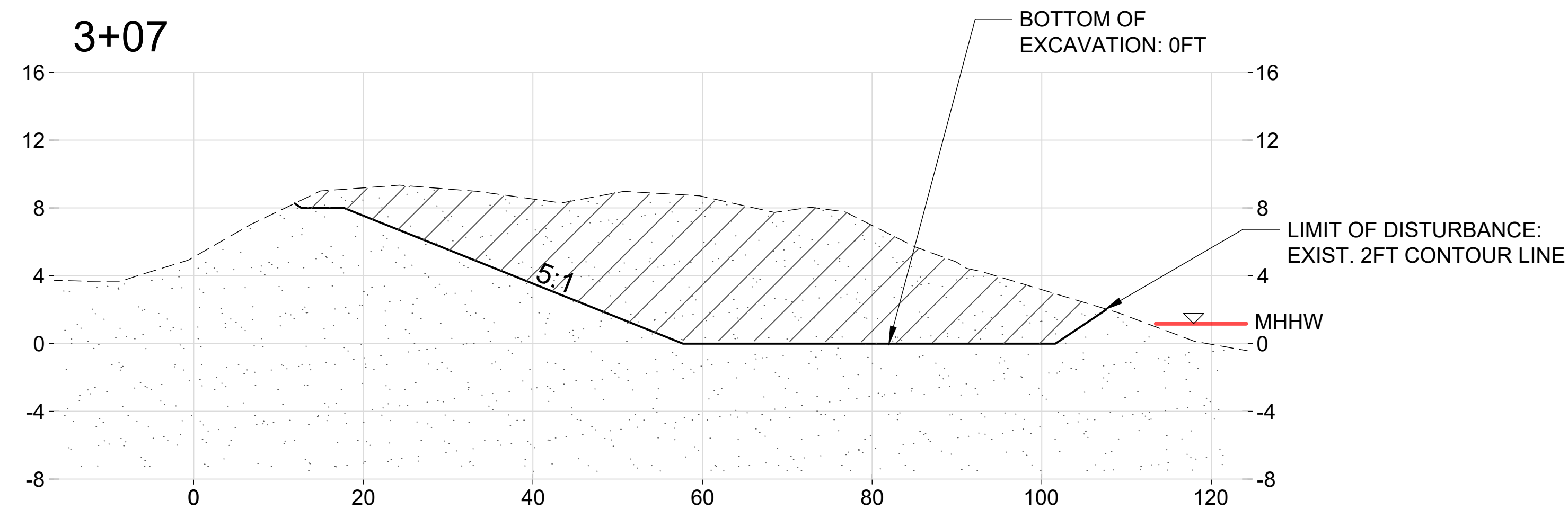
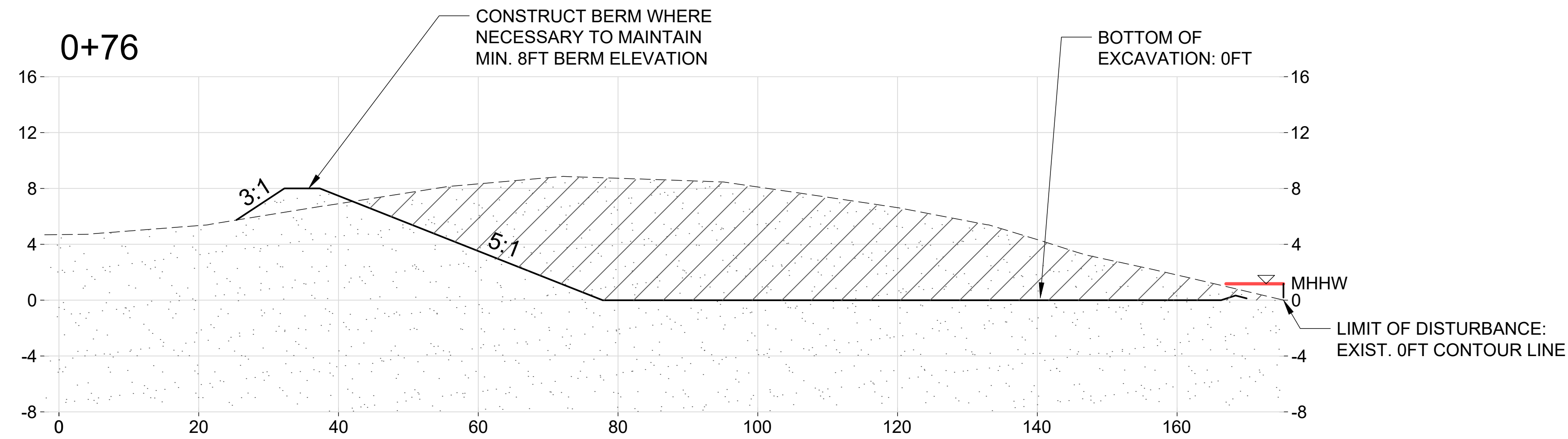
LINETYPE LEGEND	
BASLINE:	— — — —
SECTION LINE:	— — — —
EXISTING CONTOUR:	— — — — 2 — — — —
MHHW (+1.01 FT MSL):	— — — —
PROPOSED BORROW AREA BOUNDARY:	— — — —
PROPOSED CONTOUR (MAJOR):	— 2 — — — —
PROPOSED CONTOUR (MINOR):	— 2 — — — —


 This work was prepared by me or under my supervision

 4/30/2028 EXP. DATE

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION			
KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII			
PROPOSED BORROW AREA PLAN			
DESIGNED: RAW/TMC/AJW	SUBMITTED:		
DRAWN: TMC	DATE: 2026-05-06		
CHECKED: RAW	SCALE: AS NOTED		
APPROVED:	DATE:	DRAWING NO.	
CHIEF ENGINEER	DATE:	D5	

NOTES

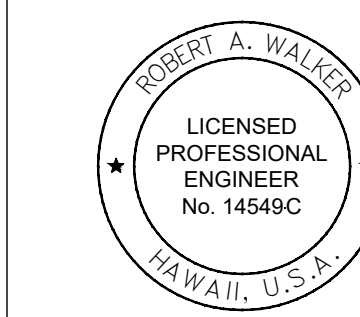
1. TOPOGRAPHIC AND BATHYMETRIC SURVEYS PERFORMED BY INTEGRAL CONSULTING INC. ON FEBRUARY 11-13, 2025 AND REPRESENT CONDITIONS AT THAT TIME.
2. VERTICAL DATUM: MEAN SEA LEVEL (MSL) BASED ON NOAA TIDE STATION 1611400, NAWILIWILI, 1983-2001 TIDAL EPOCH.
3. HORIZONTAL COORDINATE SYSTEM: NAD83, HAWAII STATE PLANE ZONE 4, US SURVEY FEET.
4. X-AXES: DISTANCE FROM BASELINE (FEET)
5. Y-AXES: ELEVATION ABOVE MSL (FEET)
6. WHERE EXISTING GROUND IS BELOW ELEV. +8.0 FT MSL ALONG THE LANDWARD EDGE OF THE BORROW AREA, CONTRACTOR SHALL CONSTRUCT A TEMPORARY OR FINISHED BERM TO MAINTAIN A MINIMUM CREST ELEVATION OF +8.0 FT MSL. MAUKA FACE SHALL BE GRADED AT 3H:1V OR FLATTER.
7. PROPOSED BEACH SLOPE: 5H:1V
8. PROPOSED BOTTOM OF EXCAVATION: 0FT
9. PROPOSED SEAWARD LIMIT OF DISTURBANCE OF THE BORROW AREA SHALL BE THE EXISTING +2 FT CONTOUR, EXCEPT WITHIN 200 FT OF THE EAST BREAKWATER (BETWEEN STA. -0+22 AND STA. 1+10, APPROX.) WHERE THE SEAWARD LIMIT IS EXTENDED TO THE 0.0 FT CONTOUR.



VERTICAL EXAGGERATION: 2X

**FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION**

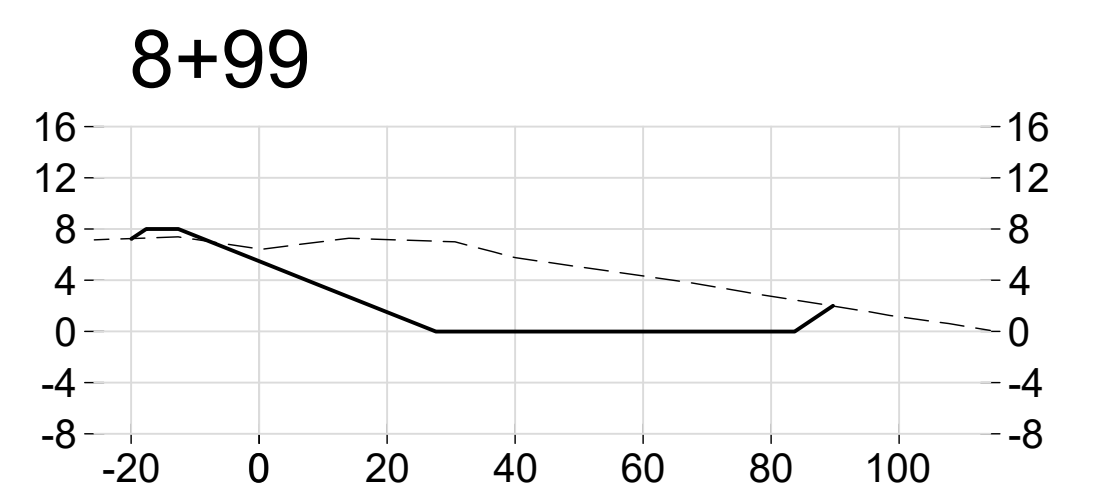
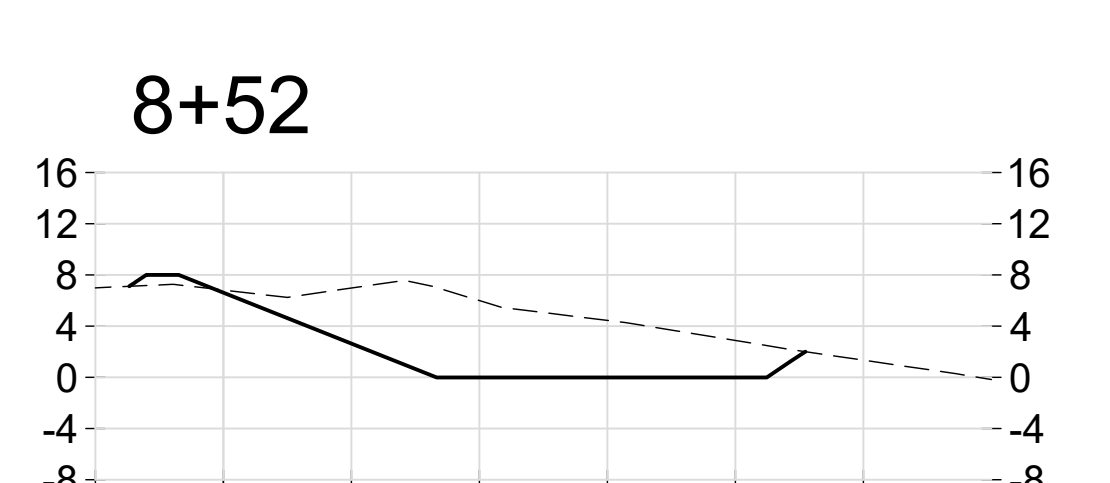
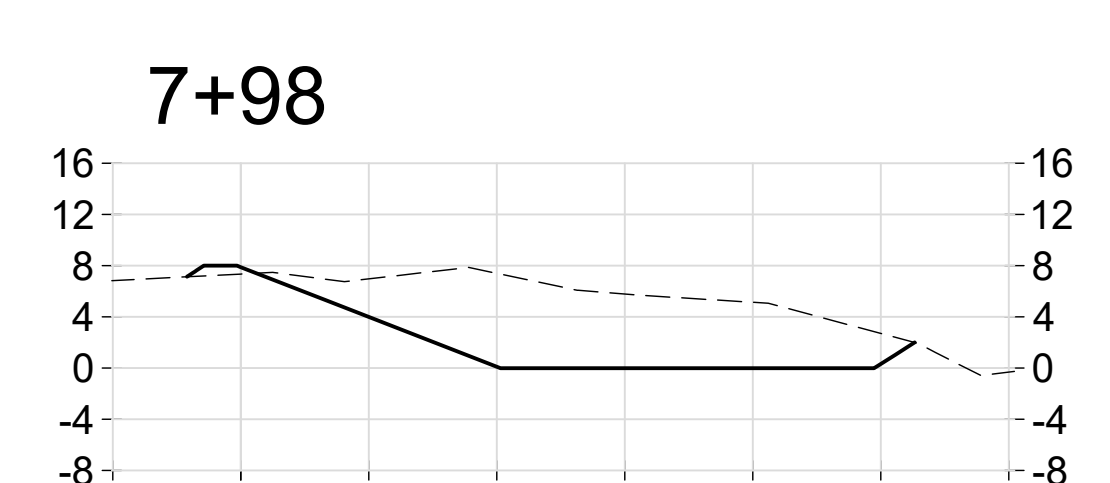
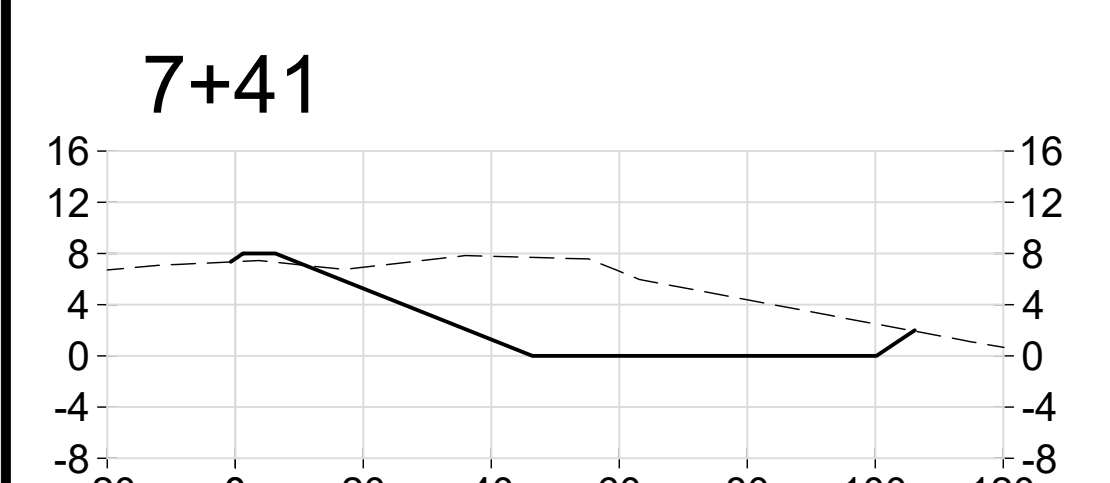
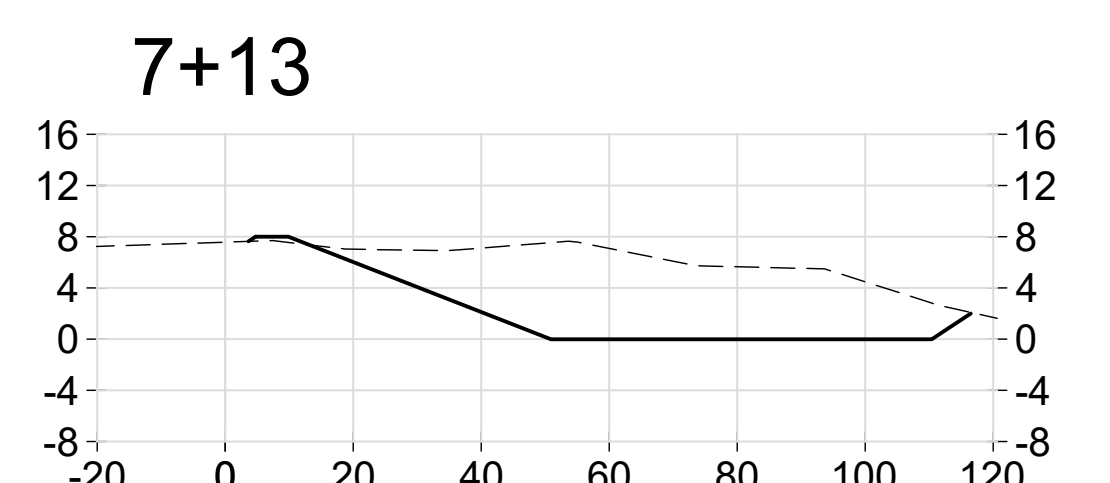
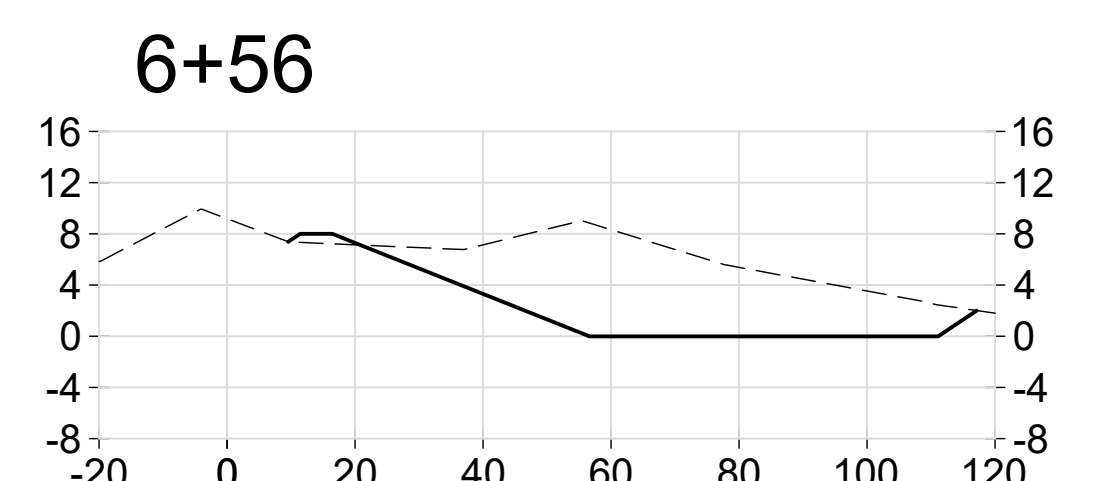
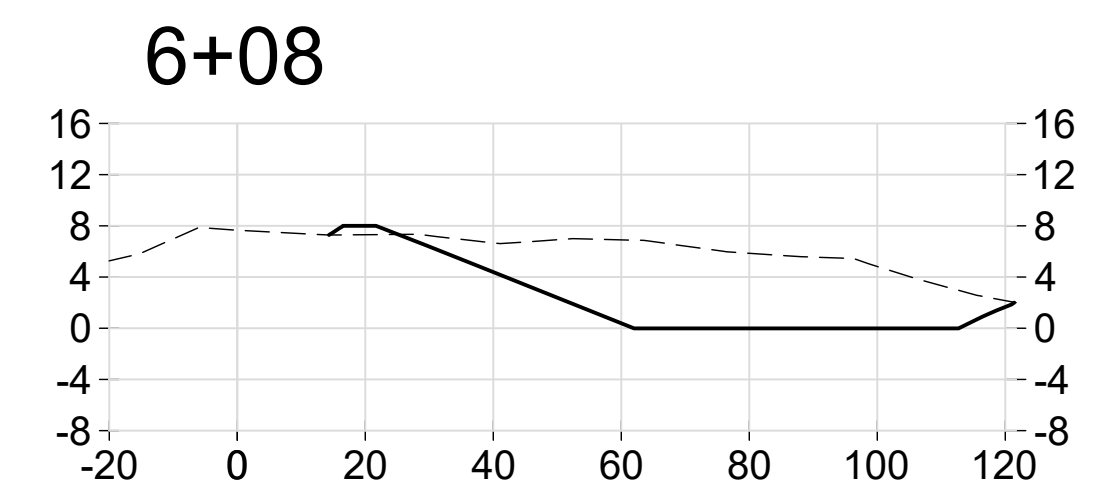
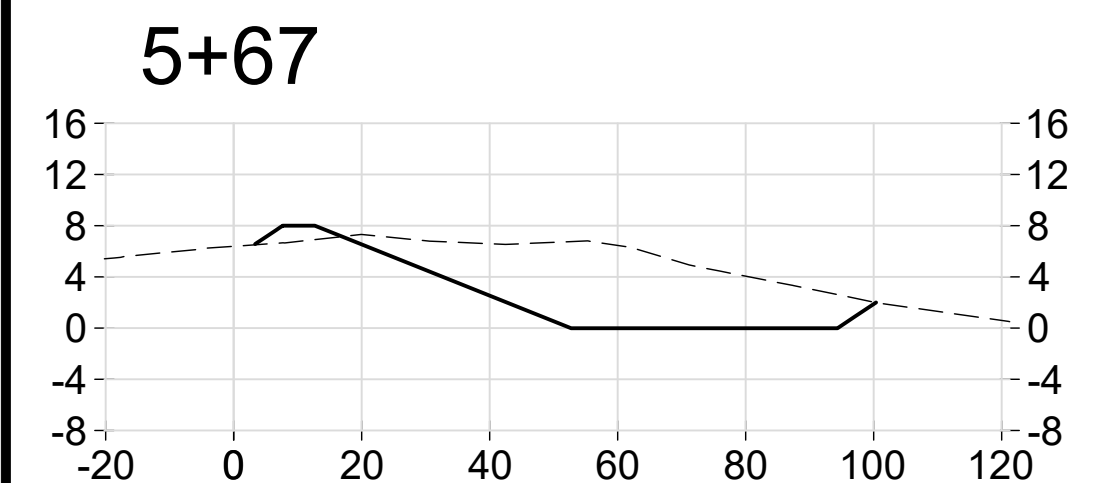
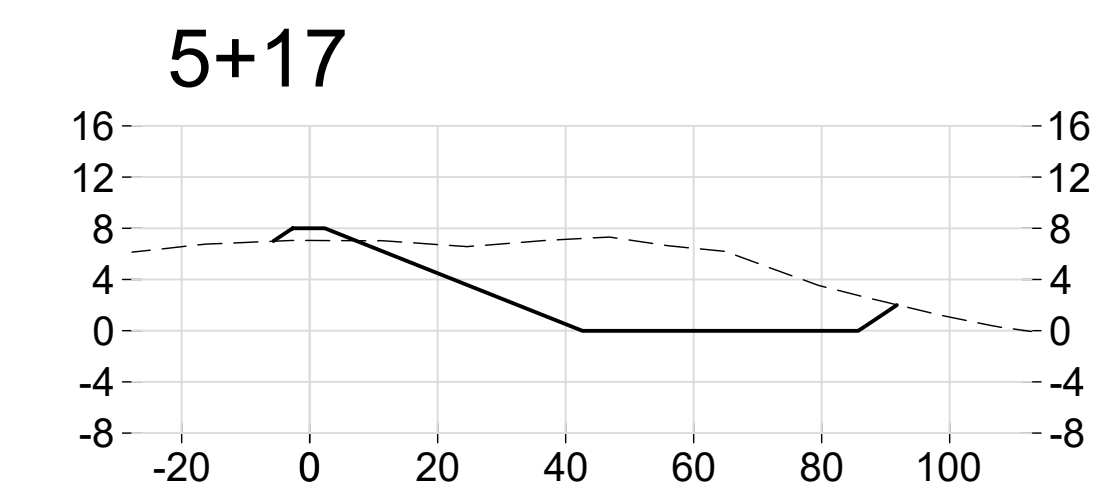
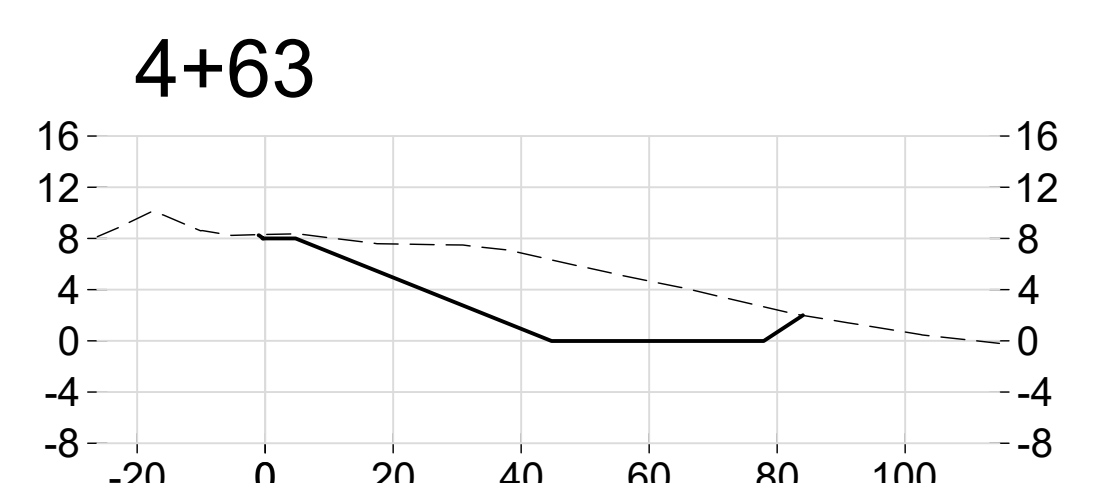
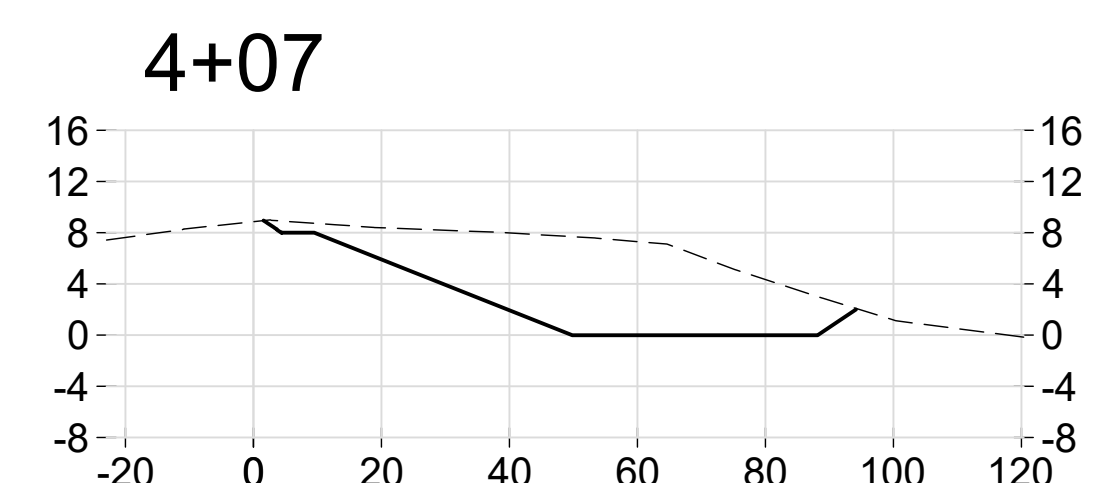
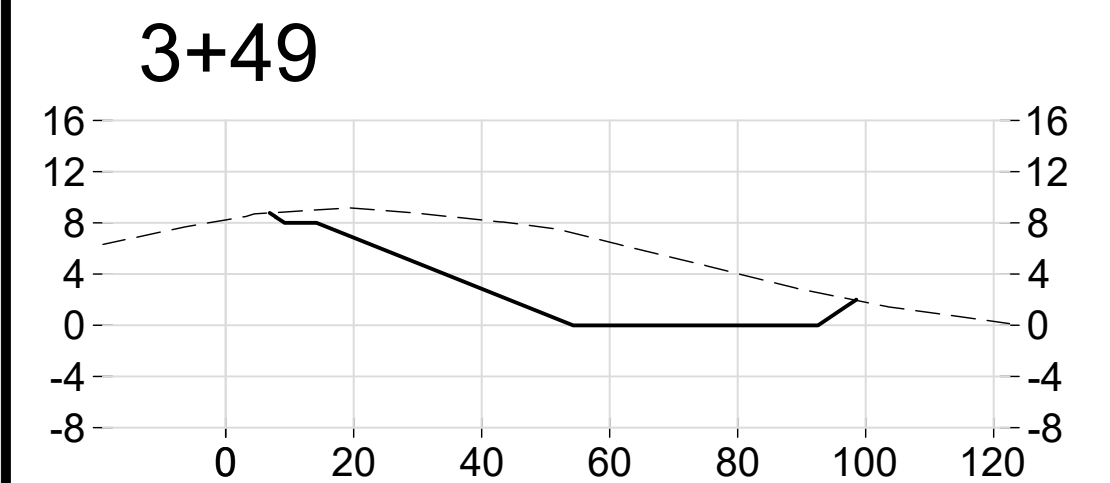
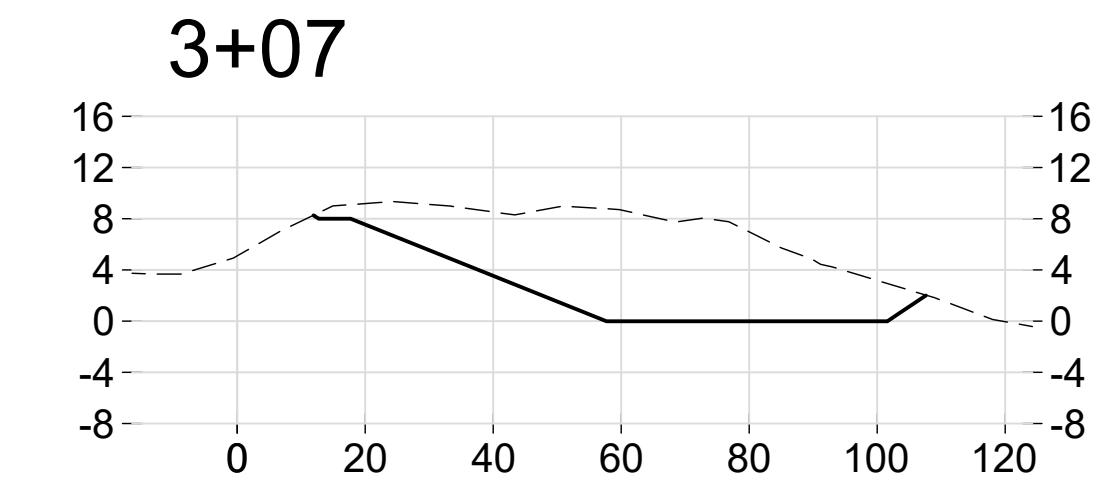
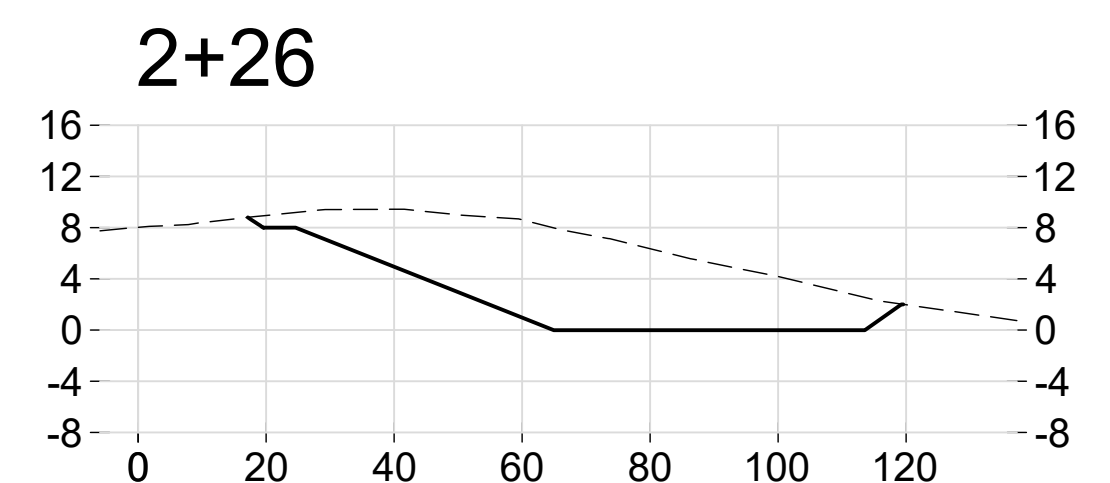
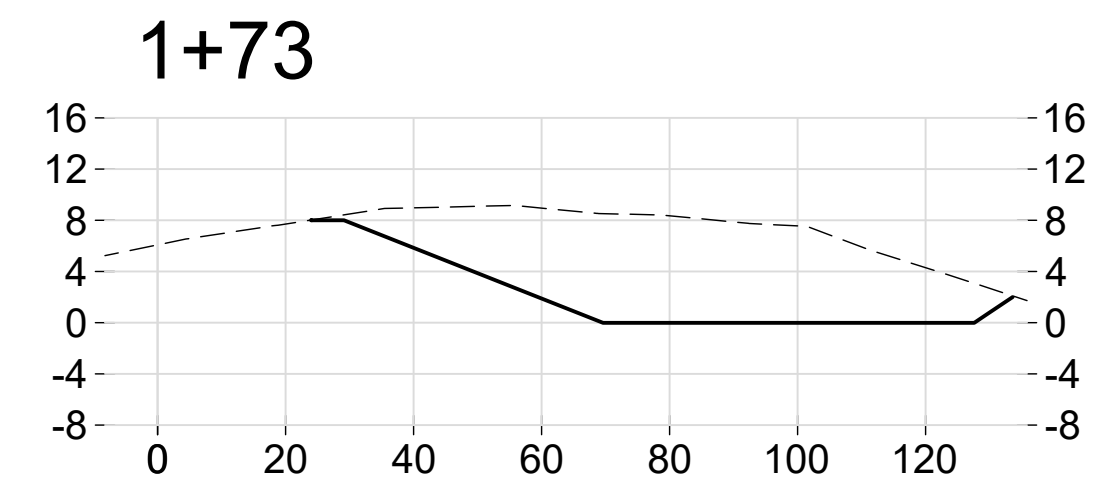
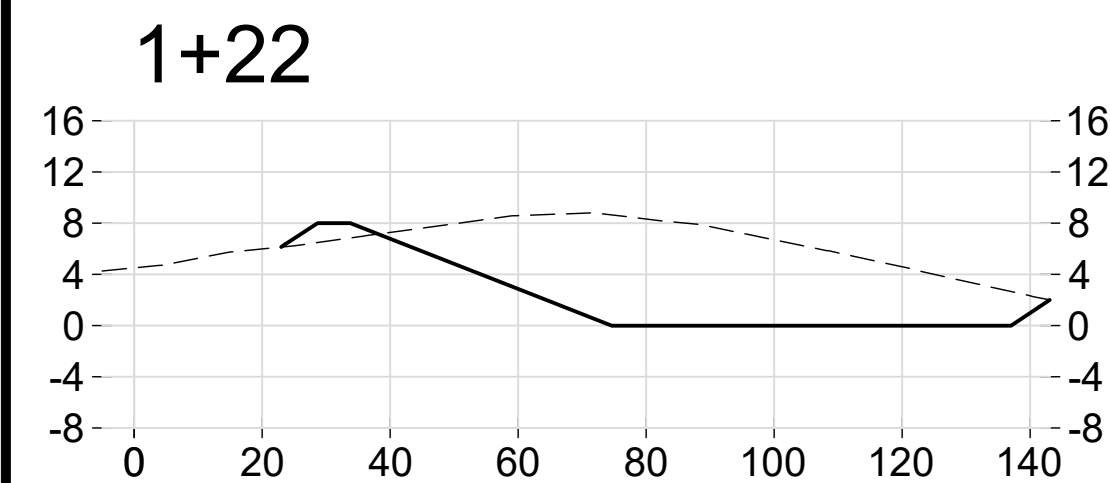
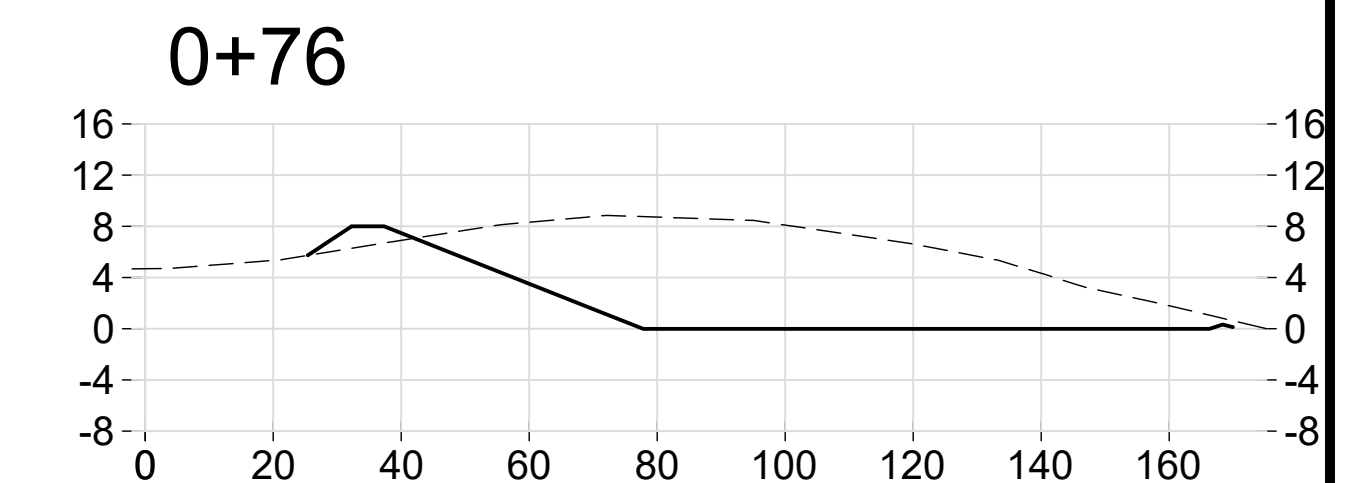
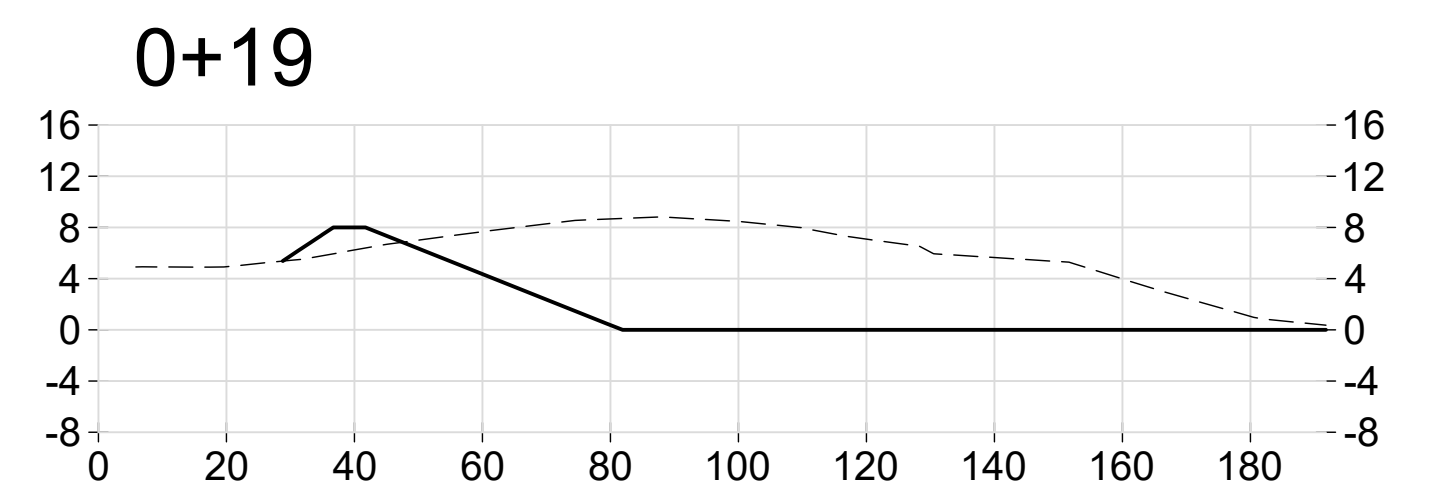
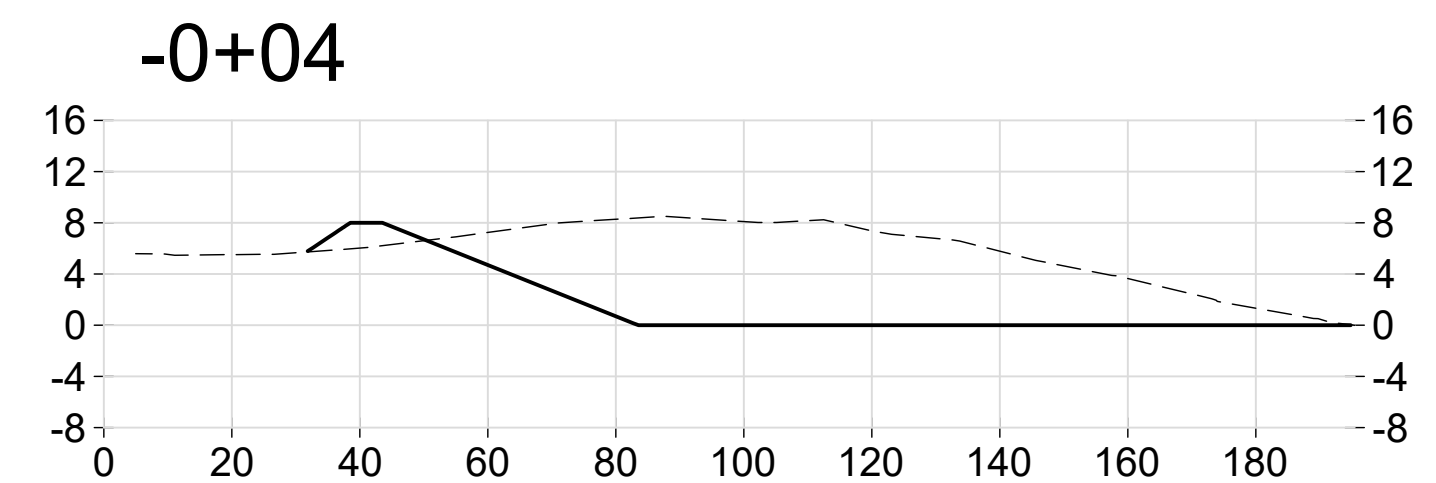
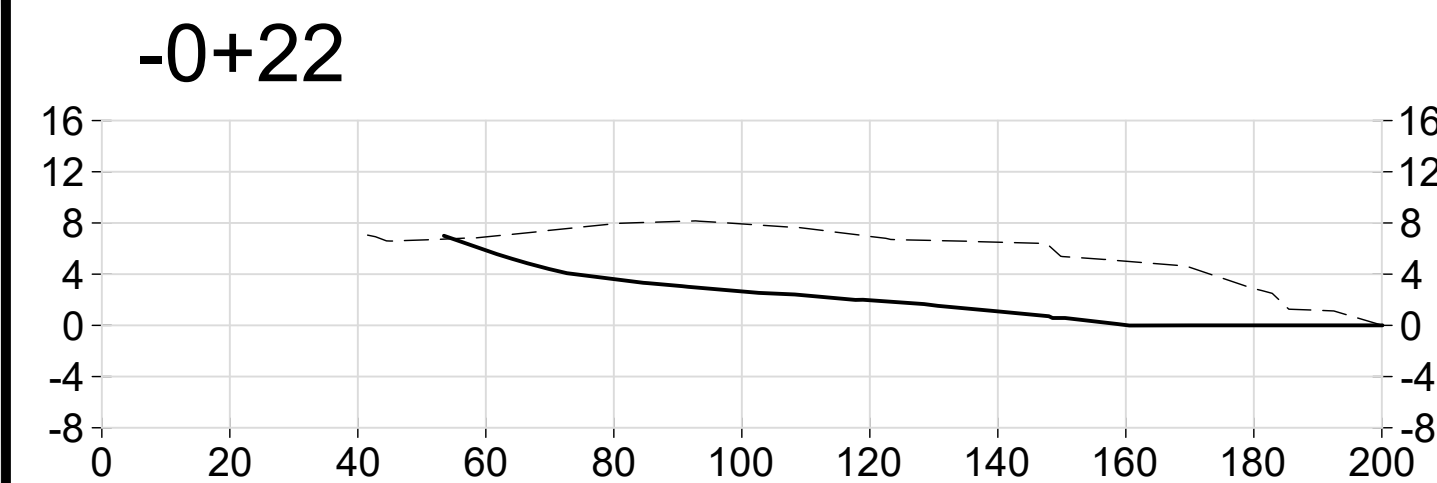
LINETYPE LEGEND
 EXISTING SURFACE: - - - - -
 PROPOSED SURFACE: _____
 MHHW (+1.01 FT MSL): ————



This work was prepared by me or under my supervision
Robert A. Walker
 4/30/2028
 EXP. DATE

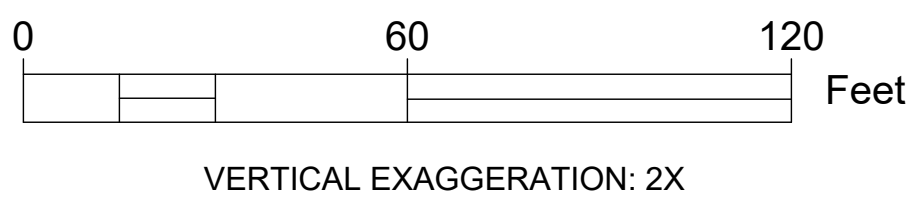
STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 ENGINEERING DIVISION
**KIKIAOLA SMALL BOAT HARBOR
 SAND BYPASSING
 KEKAHA, KAUAI HAWAII**
BORROW SECTIONS 1

DESIGNED: RAW/TMC/AJW	SUBMITTED:
DRAWN: TMC	DATE: 2026-05-06
CHECKED: RAW	SCALE: AS NOTED
APPROVED:	DRAWING NO. D6
CHIEF ENGINEER	DATE



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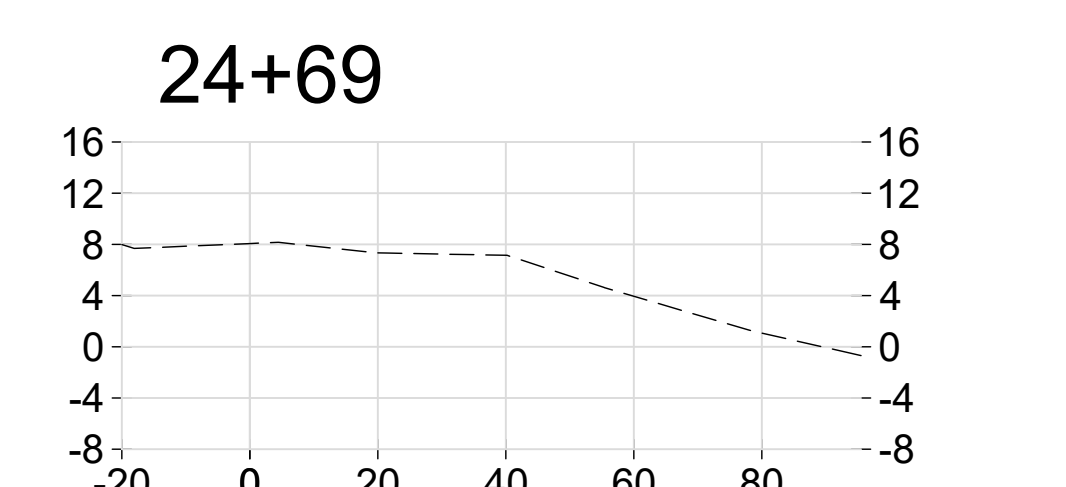
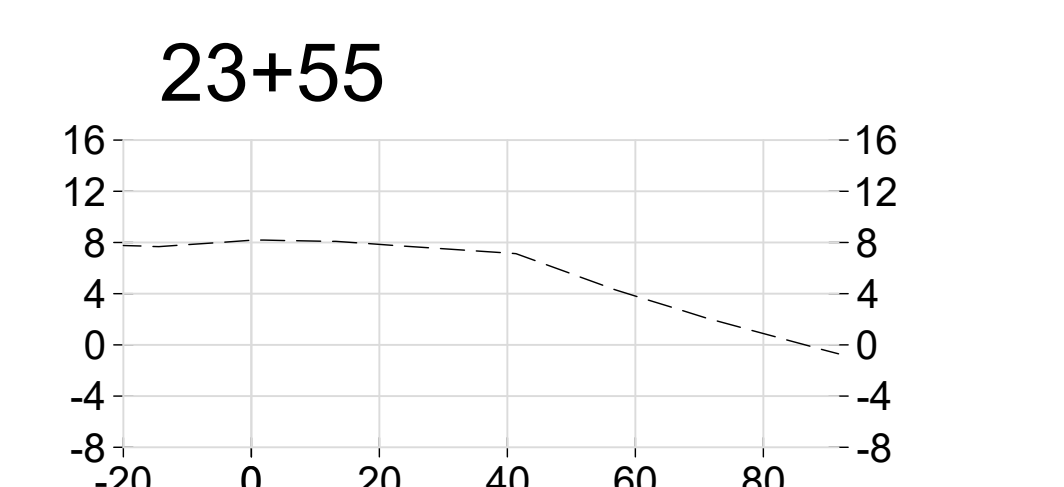
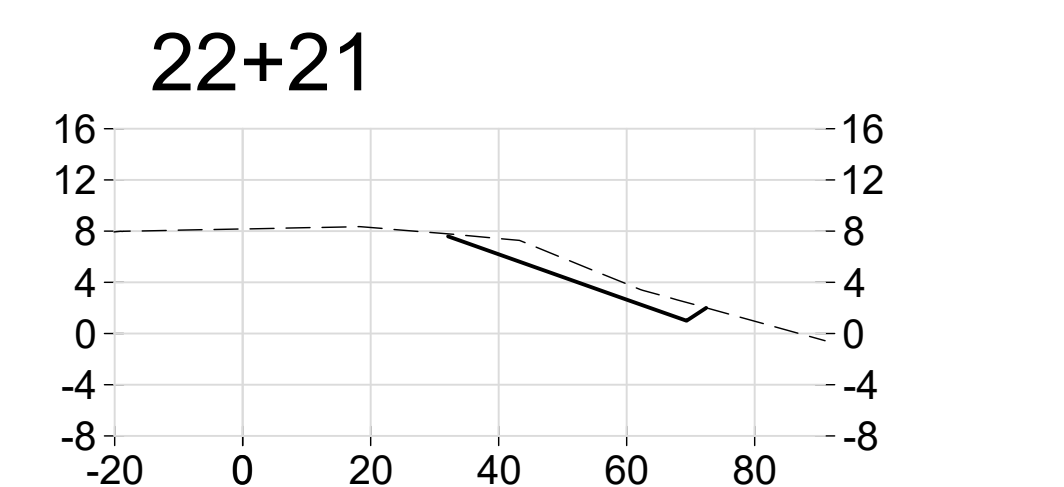
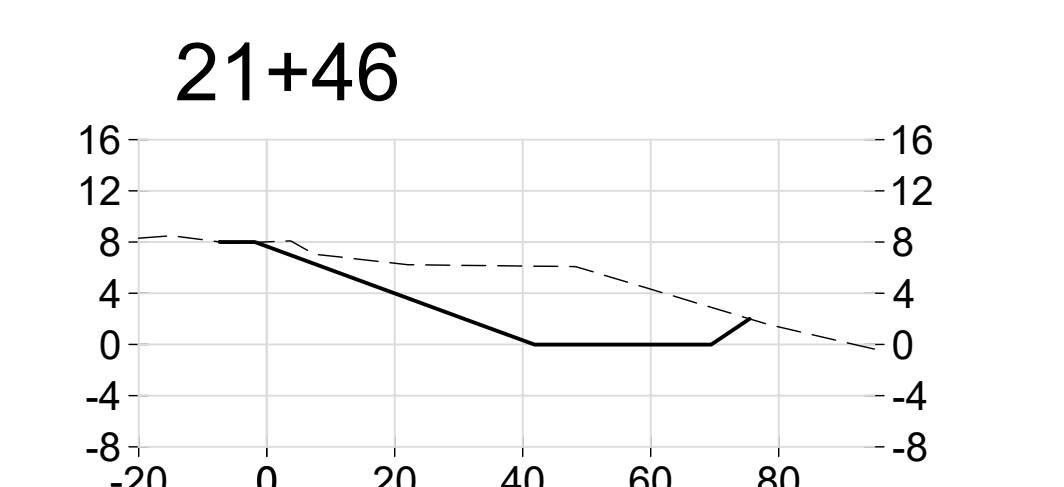
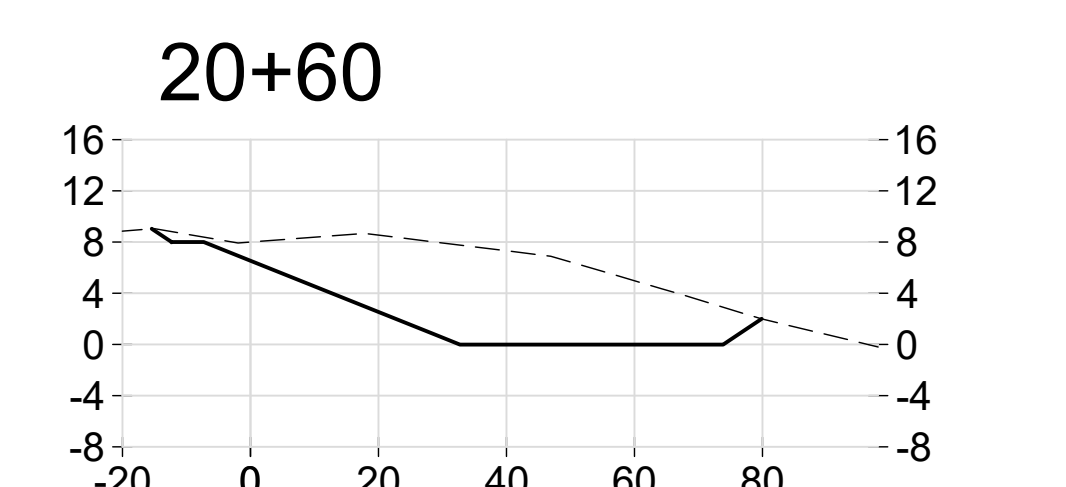
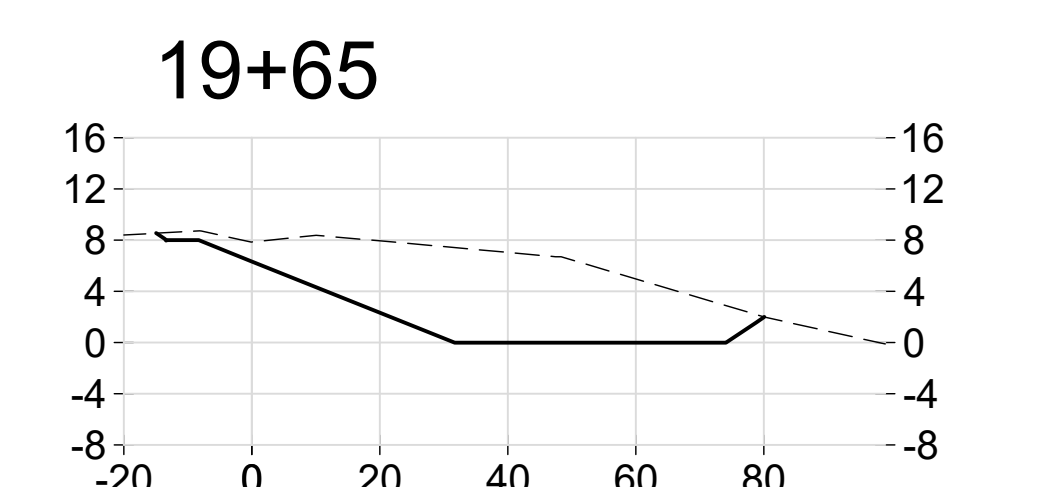
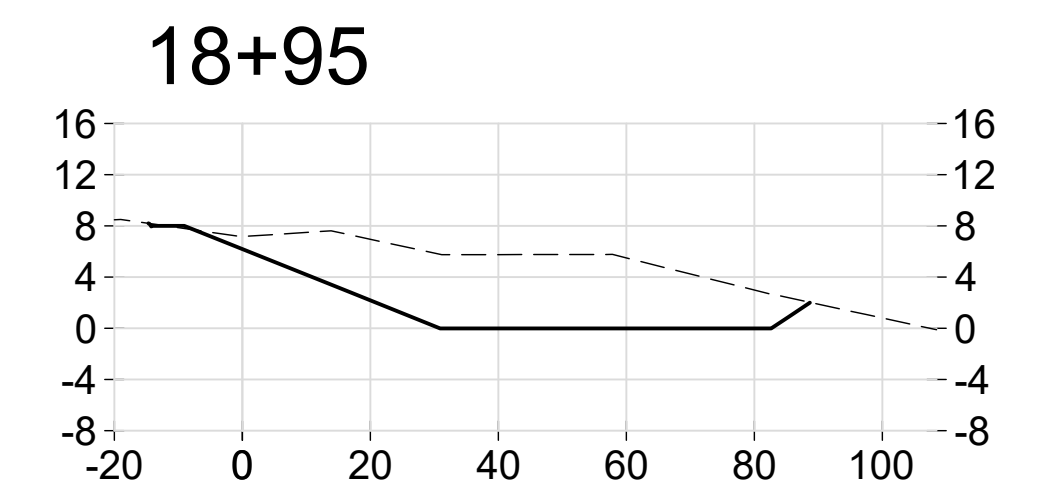
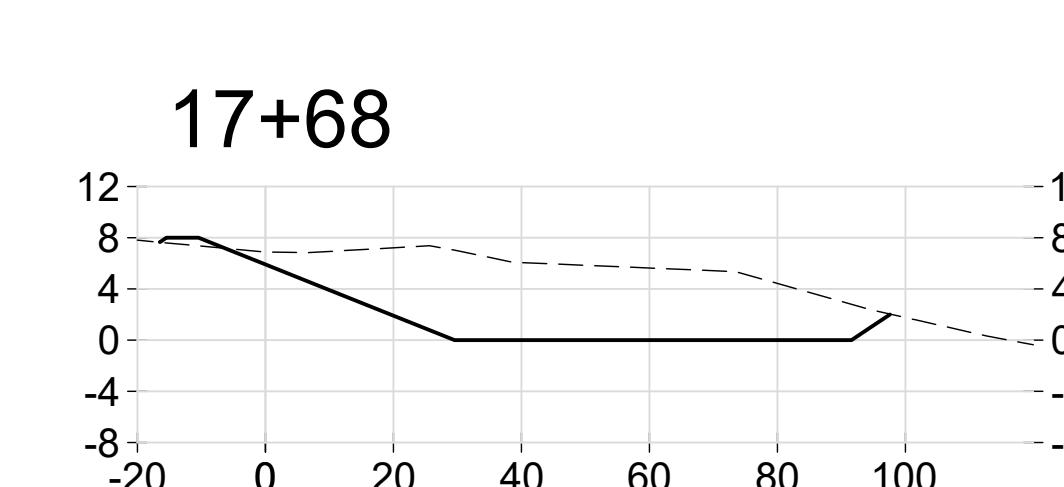
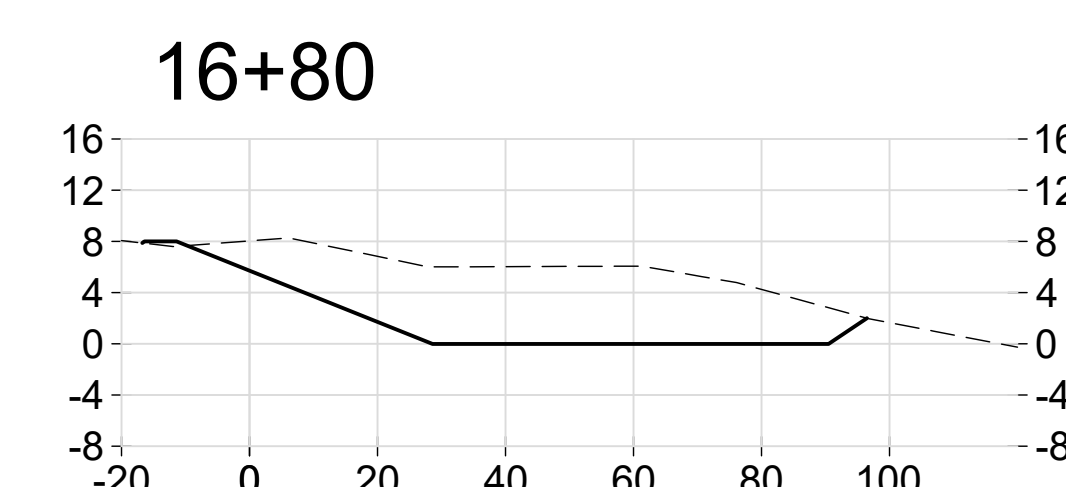
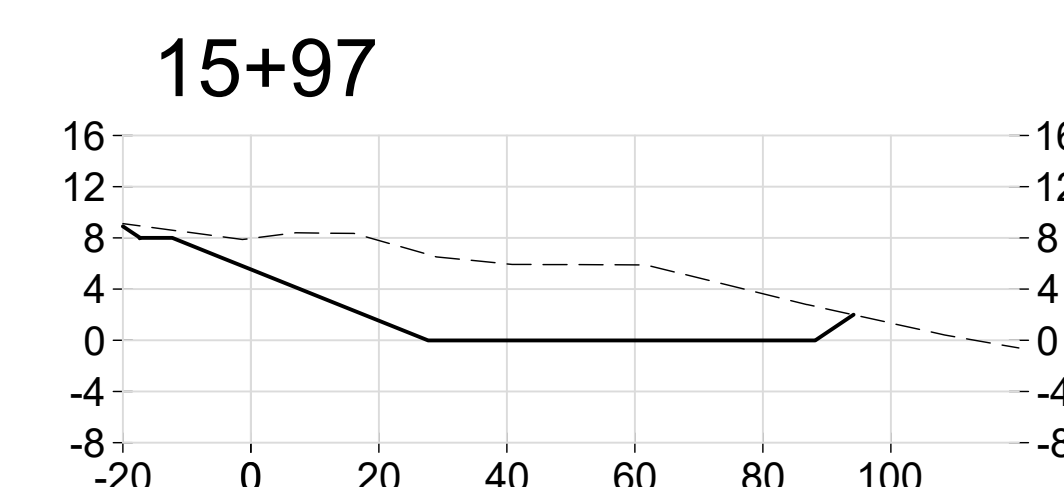
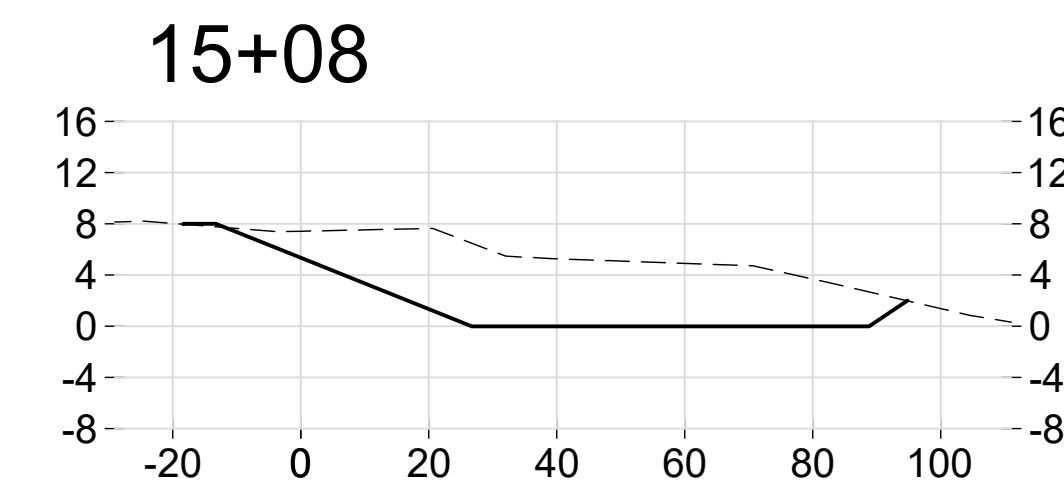
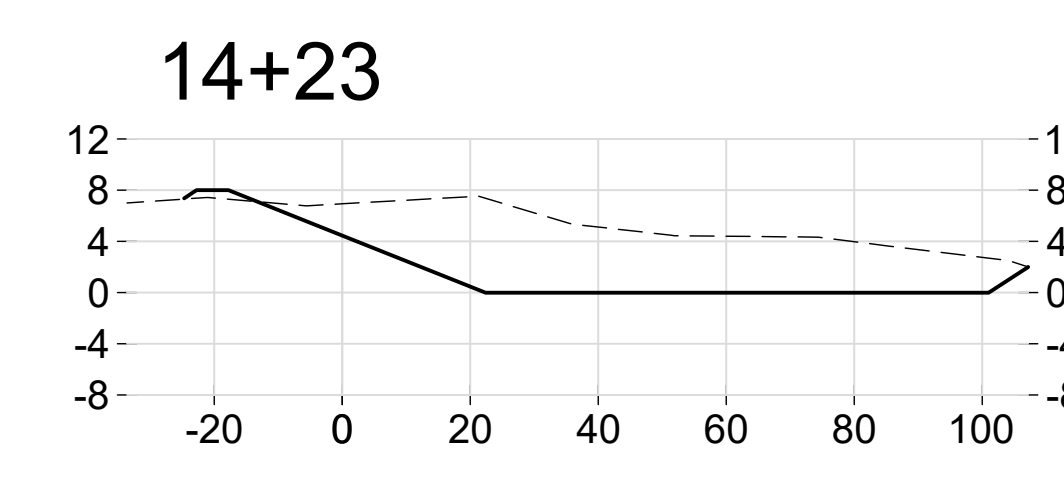
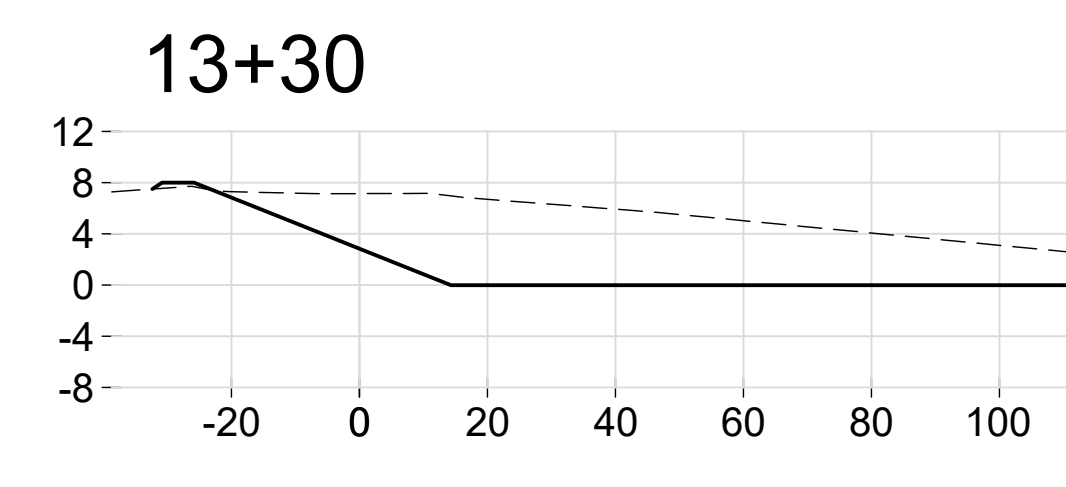
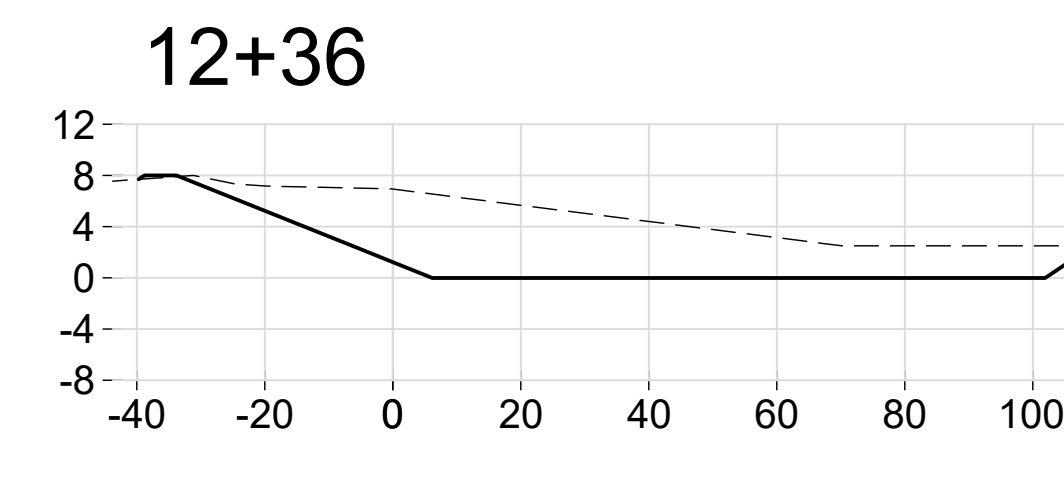
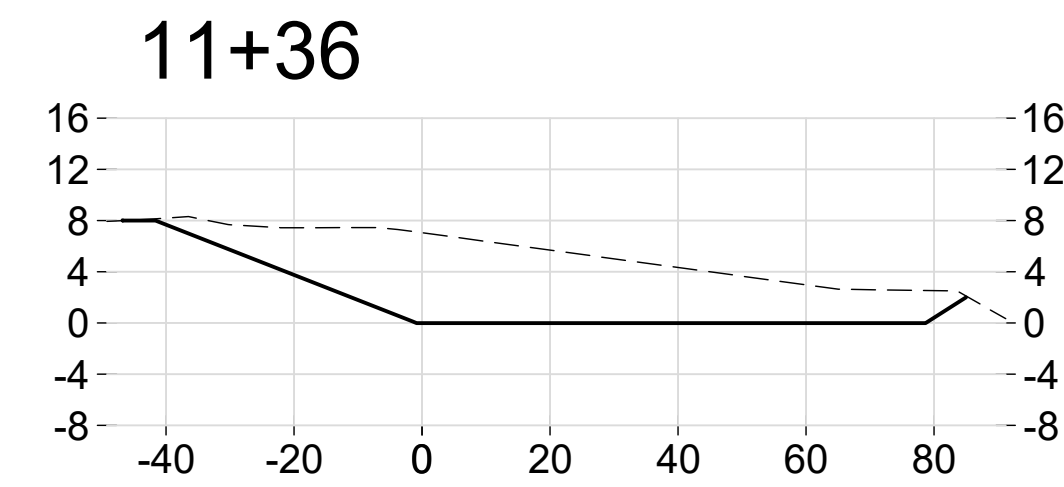
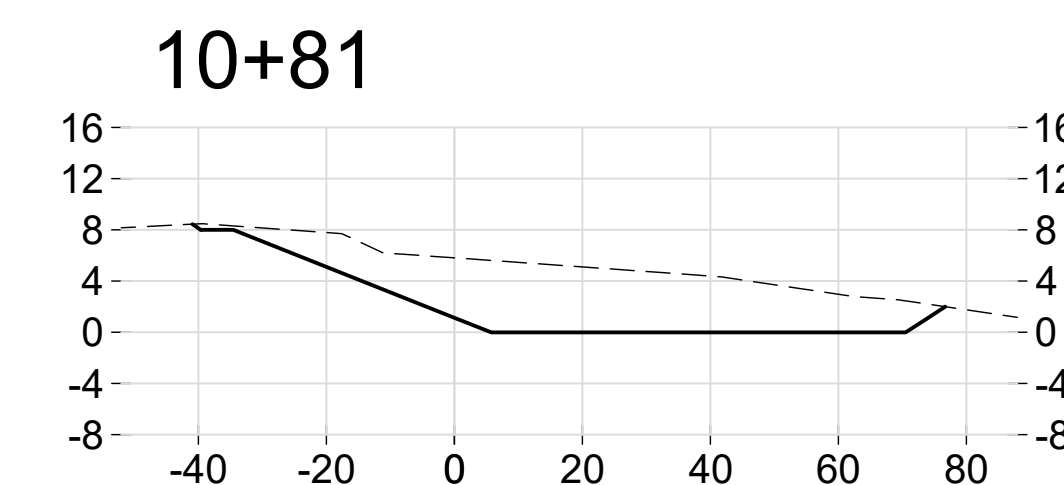
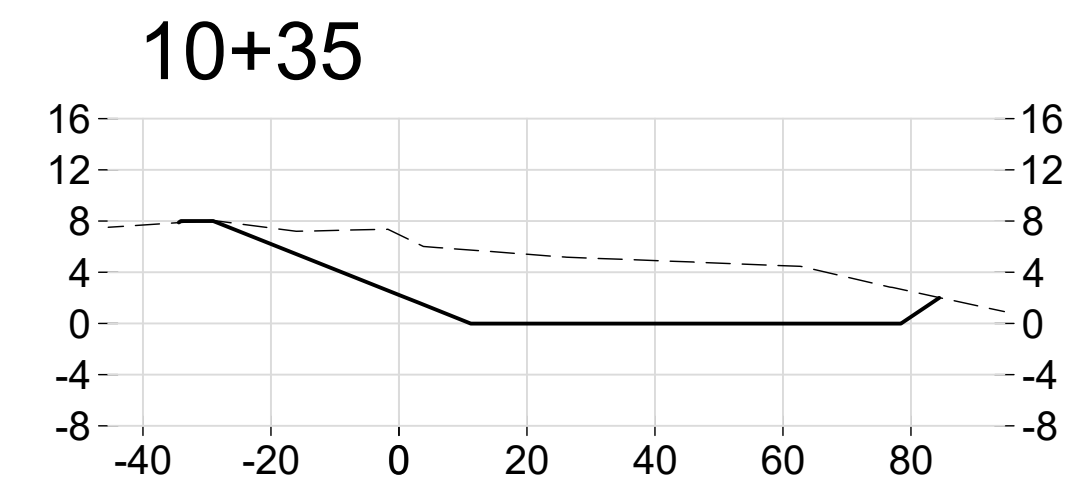
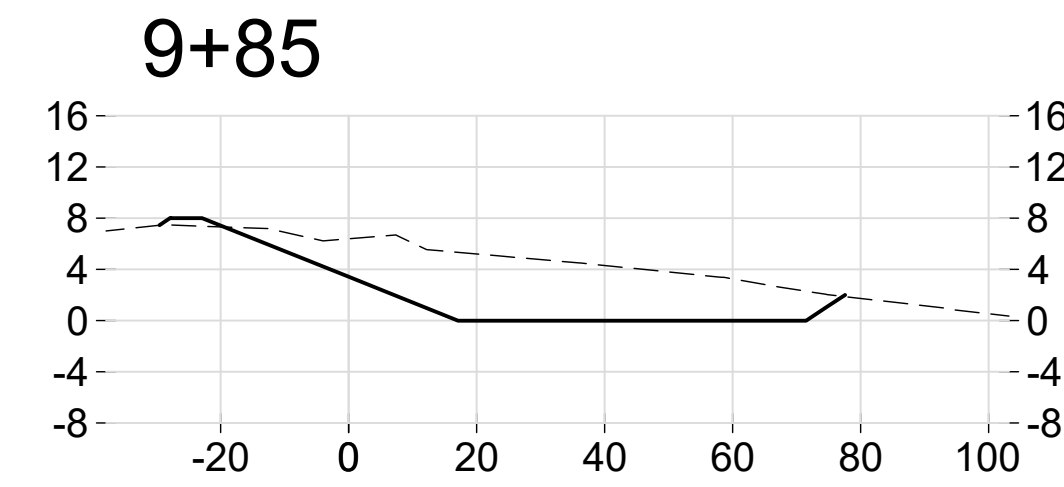
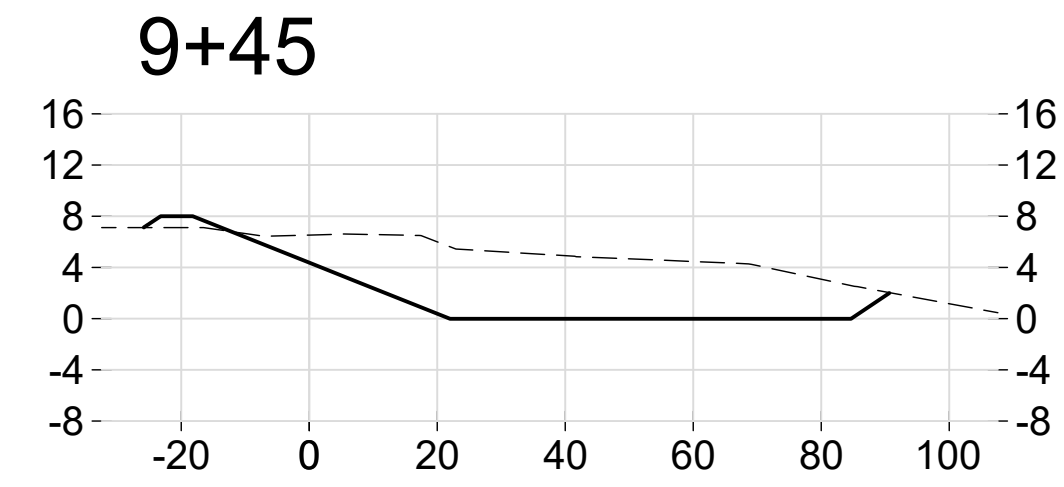
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2. VERTICAL DATUM: MEAN SEA LEVEL (MSL) BASED ON NOAA TIDE STATION 1611400, NAWILIWILI, 1983-2001 TIDAL EPOCH.
3. HORIZONTAL COORDINATE SYSTEM: NAD83, HAWAII STATE PLANE ZONE 4, US SURVEY FEET.
4. X-AXES: DISTANCE FROM BASELINE (FEET)
5. Y-AXES: ELEVATION ABOVE MSL (FEET)
6. WHERE EXISTING GROUND IS BELOW ELEV. +8.0 FT MSL ALONG THE LANDWARD EDGE OF THE BORROW AREA, CONTRACTOR SHALL CONSTRUCT A TEMPORARY OR FINISHED BERM TO MAINTAIN A MINIMUM CREST ELEVATION OF +8.0 FT MSL. MAUKA FACE SHALL BE GRADED AT 3H:1V OR FLATTER.
7. PROPOSED BEACH SLOPE: 5H:1V
8. PROPOSED BOTTOM OF EXCAVATION: 0FT
9. PROPOSED SEAWARD LIMIT OF DISTURBANCE OF THE BORROW AREA SHALL BE THE EXISTING +2 FT CONTOUR, EXCEPT WITHIN 200 FT OF THE EAST BREAKWATER (BETWEEN STA. -0+22 AND STA. 1+10, APPROX.) WHERE THE SEAWARD LIMIT IS EXTENDED TO THE 0.0 FT CONTOUR.



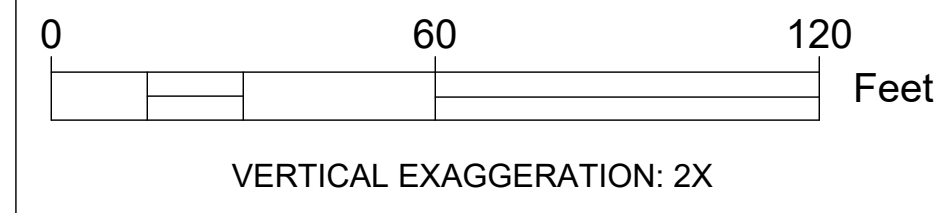
**FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION**

LINETYPE LEGEND	
EXISTING SURFACE:	-----
PROPOSED SURFACE:	—————

	STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
	KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
	BORROW SECTIONS 2	
	DESIGNED: RAW/TMC/AJW	SUBMITTED:
DRAWN: TMC	DATE: 2026-05-06	
CHECKED: RAW	SCALE: AS NOTED	
APPROVED:	DRAWING NO. D7	
CHIEF ENGINEER	DATE	



- NOTES**
1. TOPOGRAPHIC AND BATHYMETRIC SURVEYS PERFORMED BY INTEGRAL CONSULTING INC. ON FEBRUARY 11-13, 2025 AND REPRESENT CONDITIONS AT THAT TIME.
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**FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION**

LINETYPE LEGEND

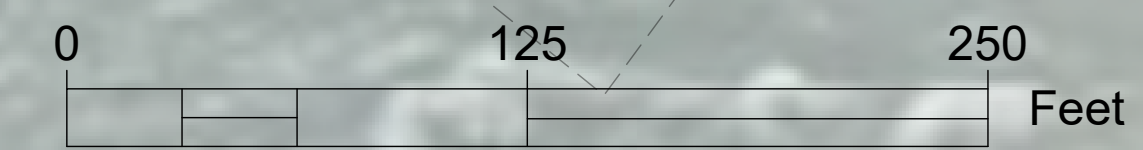
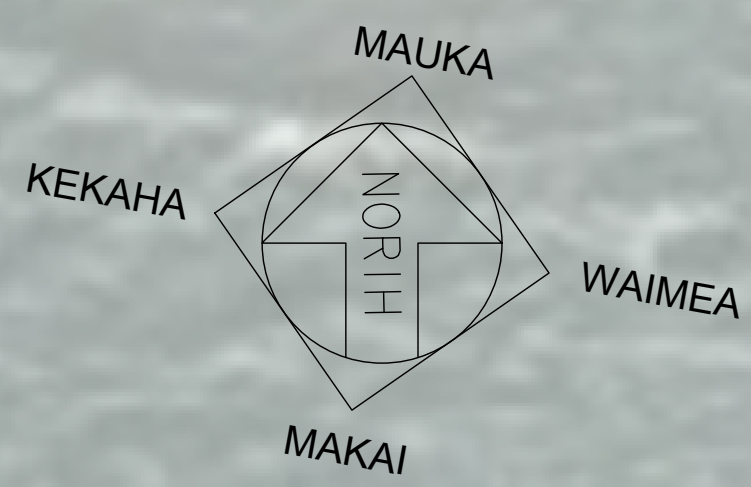
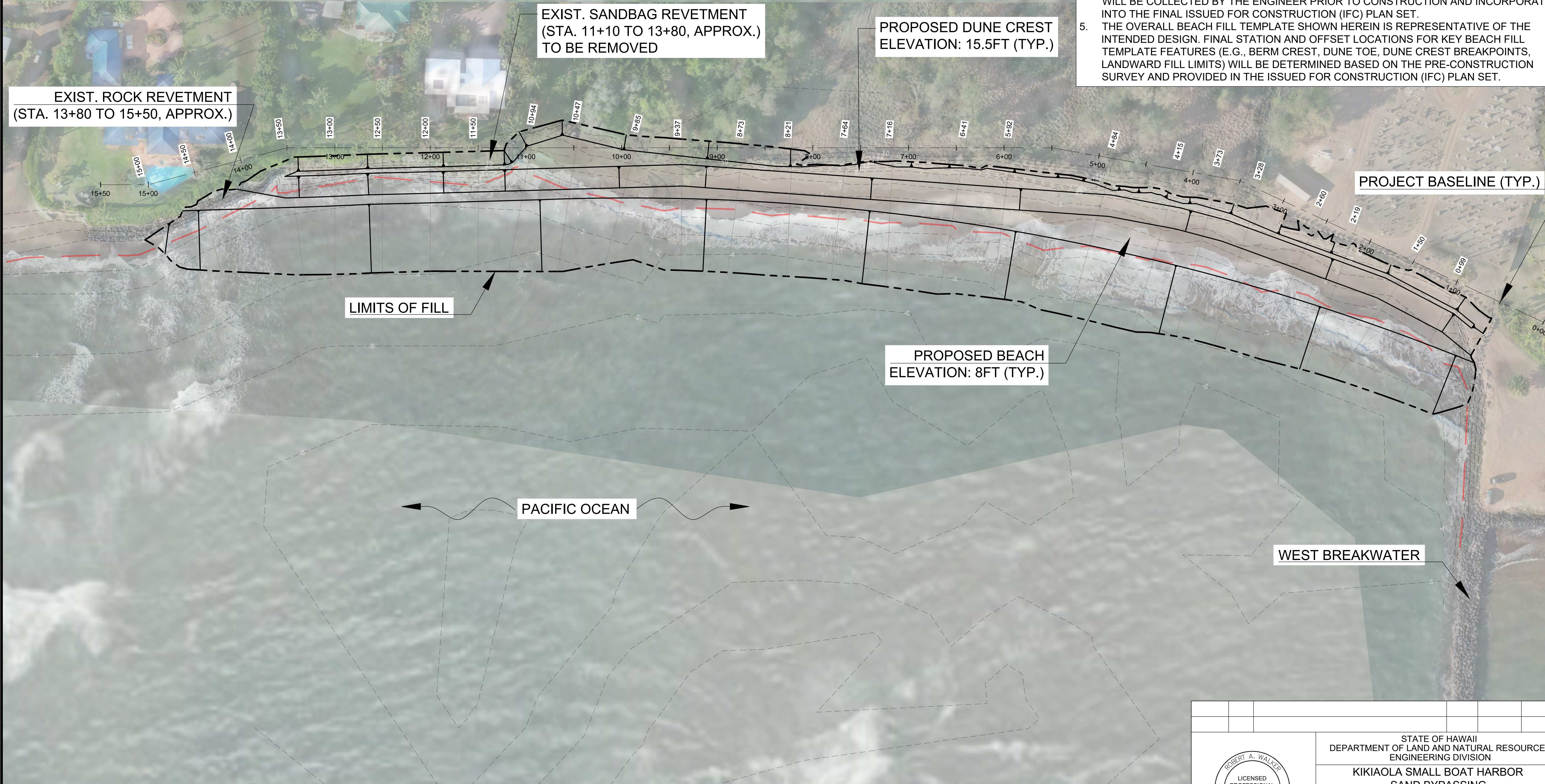
EXISTING SURFACE: - - - - -

PROPOSED SURFACE: _____

<p>ROBERT A. WALKER LICENSED PROFESSIONAL ENGINEER No. 14549C HAWAII, U.S.A.</p> <p><i>Robert A. Walker</i> 4/30/2028 EXP. DATE</p>	STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
	KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
	BORROW SECTIONS 3	
	DESIGNED: RAW/TMC/AJW	SUBMITTED:
DRAWN: TMC	DATE: 2026-05-06	
CHECKED: RAW	SCALE: AS NOTED	
APPROVED:	DRAWING NO. D8	
CHIEF ENGINEER	DATE	

NOTES

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2. VERTICAL DATUM: MEAN SEA LEVEL (MSL) BASED ON NOAA TIDE STATION 1611400, NAWILIWILI, 1983-2001 TIDAL EPOCH.
3. HORIZONTAL COORDINATE SYSTEM: NAD83, HAWAII STATE PLANE ZONE 4, US SURVEY FEET.
4. EXISTING TOPOGRAPHIC AND BATHYMETRIC DATA WEST OF STATION 11+00 WERE OBTAINED FROM VARIOUS SOURCES AND COMPILED FOR THE PURPOSES OF THESE BID PLANS. UPDATED TOPOGRAPHIC AND BATHYMETRIC SURVEY DATA FOR THIS AREA WILL BE COLLECTED BY THE ENGINEER PRIOR TO CONSTRUCTION AND INCORPORATED INTO THE FINAL ISSUED FOR CONSTRUCTION (IFC) PLAN SET.
5. THE OVERALL BEACH FILL TEMPLATE SHOWN HEREIN IS REPRESENTATIVE OF THE INTENDED DESIGN. FINAL STATION AND OFFSET LOCATIONS FOR KEY BEACH FILL TEMPLATE FEATURES (E.G., BERM CREST, DUNE TOE, DUNE CREST BREAKPOINTS, LANDWARD FILL LIMITS) WILL BE DETERMINED BASED ON THE PRE-CONSTRUCTION SURVEY AND PROVIDED IN THE ISSUED FOR CONSTRUCTION (IFC) PLAN SET.

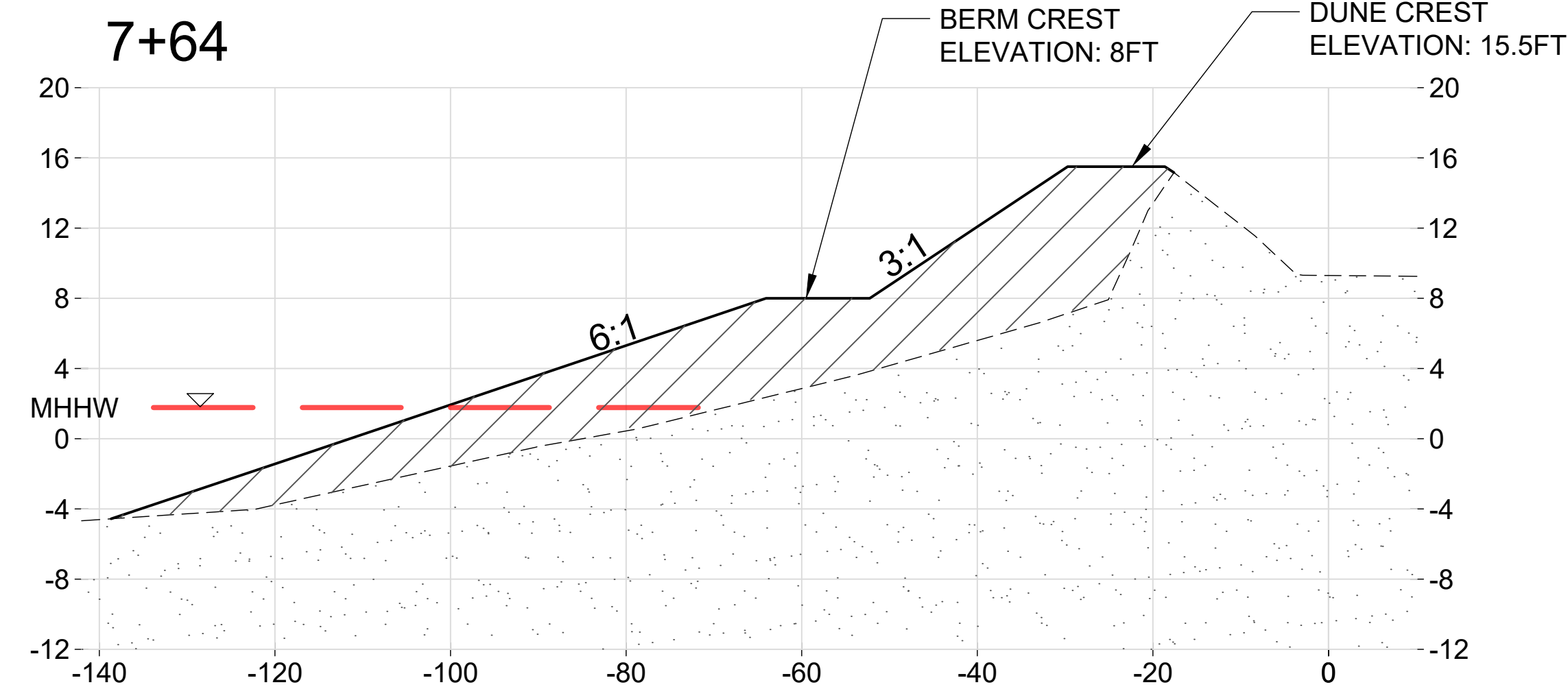


**FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION**

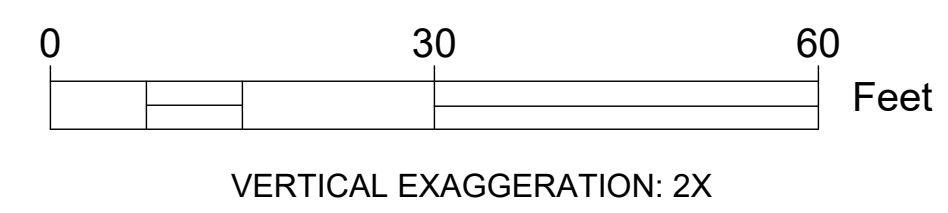
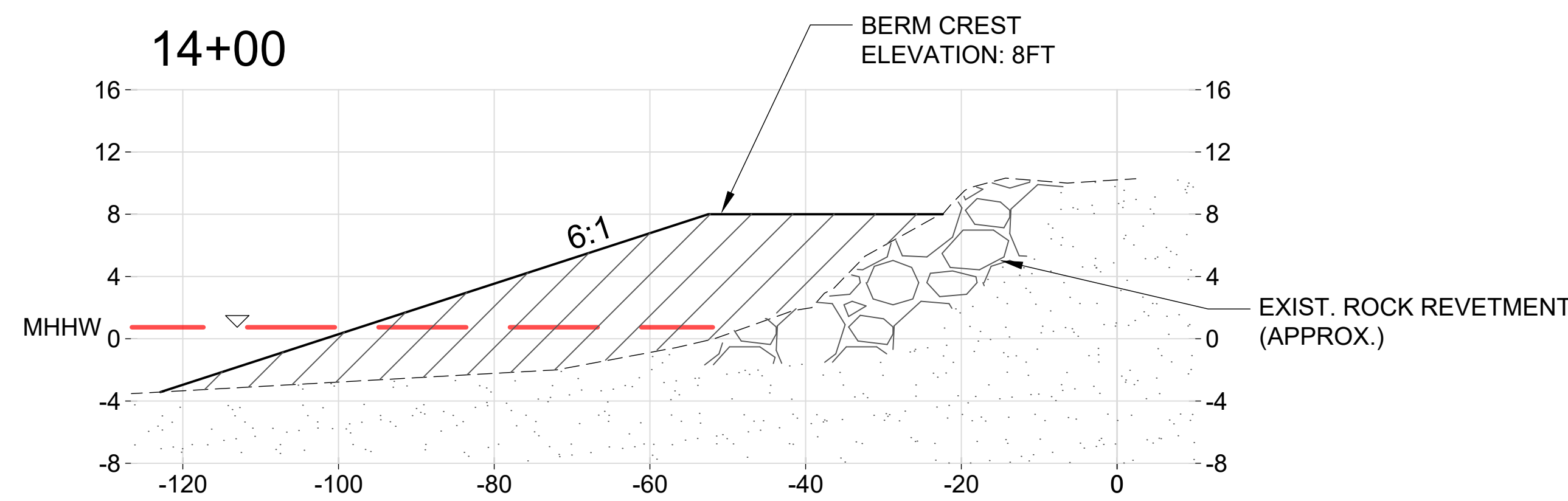
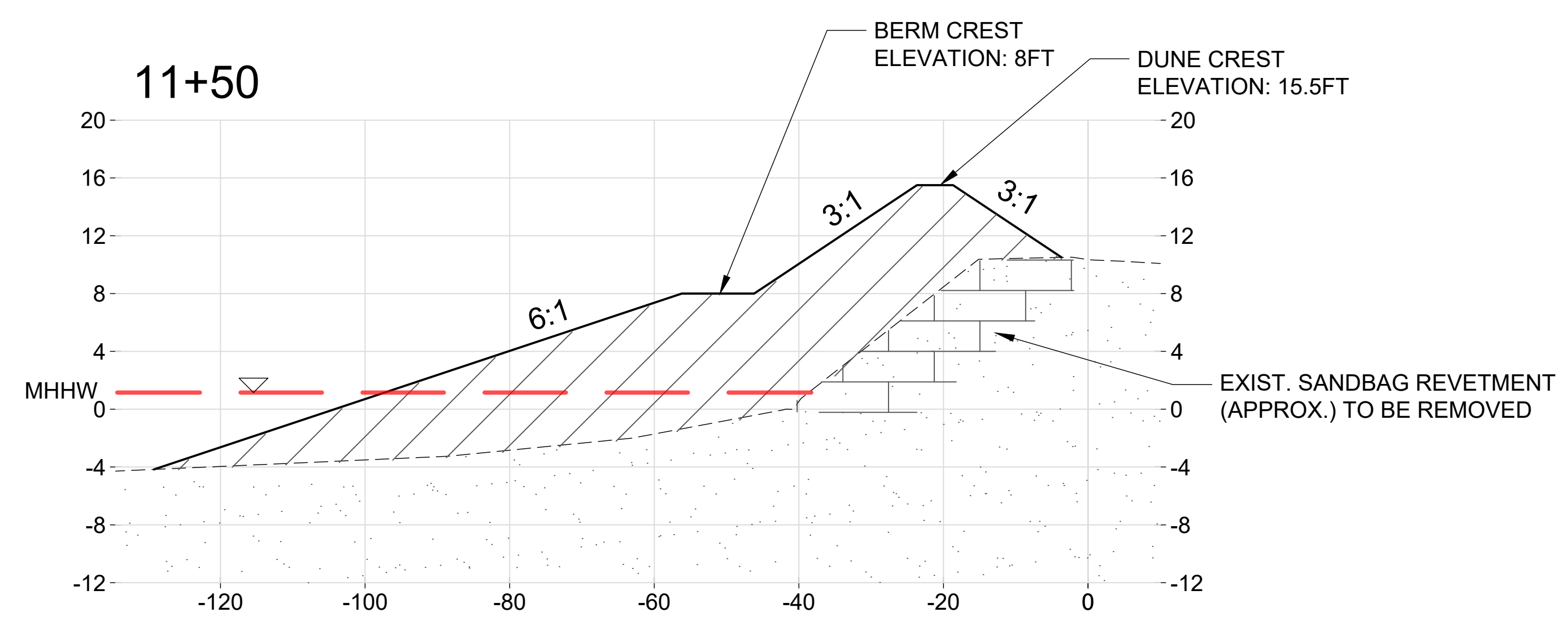
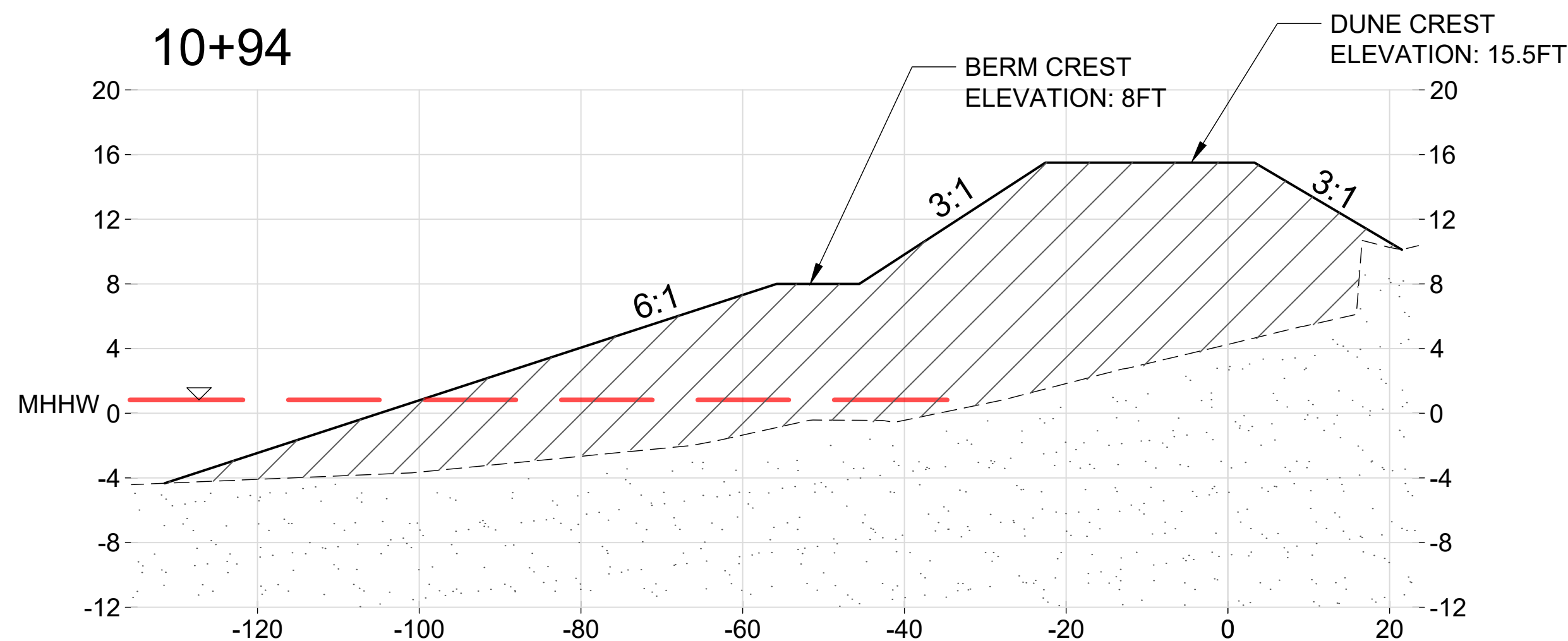
LINETYPE LEGEND

BASILINE:	---
SECTION LINE:	---
EXISTING CONTOUR:	---
MHHW (+1.01 FT MSL):	---
PROPOSED FILL AREA BOUNDARY:	---
PROPOSED GRADE BREAK:	---
PROPOSED SLOPE LINE:	---

<p>This work was prepared by me or under my supervision</p> <p><i>Robert A. Walker</i></p> <p>4/30/2028 EXP. DATE</p>		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
		KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
PROPOSED BEACH FILL PLAN		DESIGNED: RAW/TMC/AJW	SUBMITTED:
DRAWN: TMC	CHECKED: RAW	DATE: 2026-05-06	SCALE: AS NOTED
APPROVED:	CHIEF ENGINEER	DATE	DRAWING NO. D9



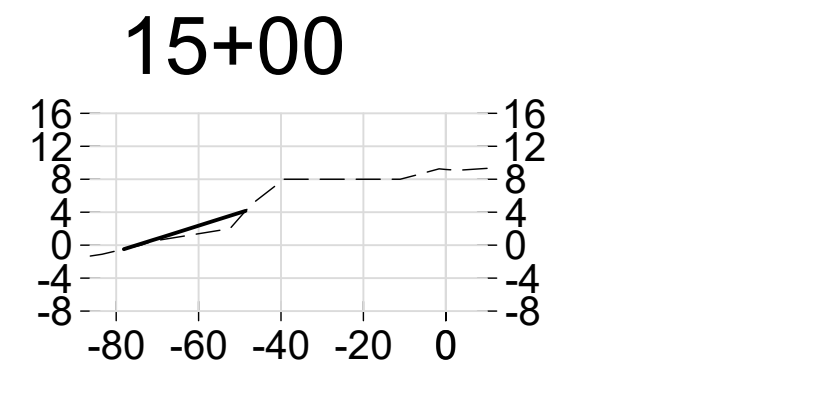
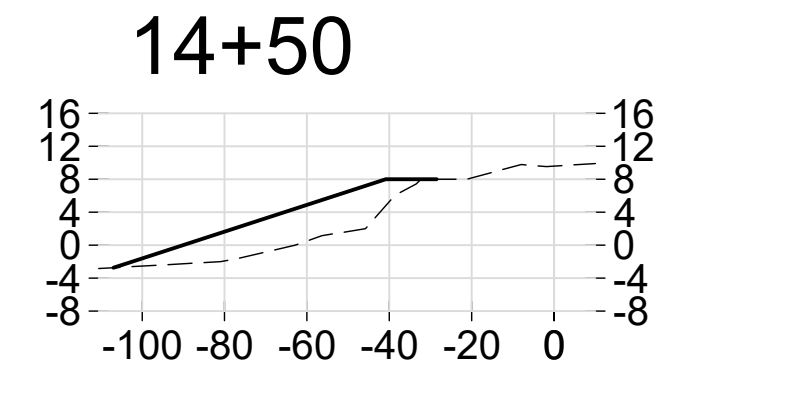
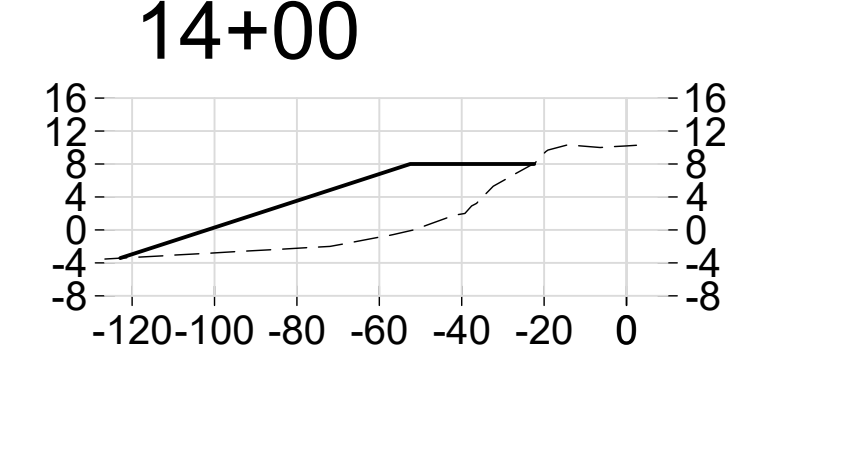
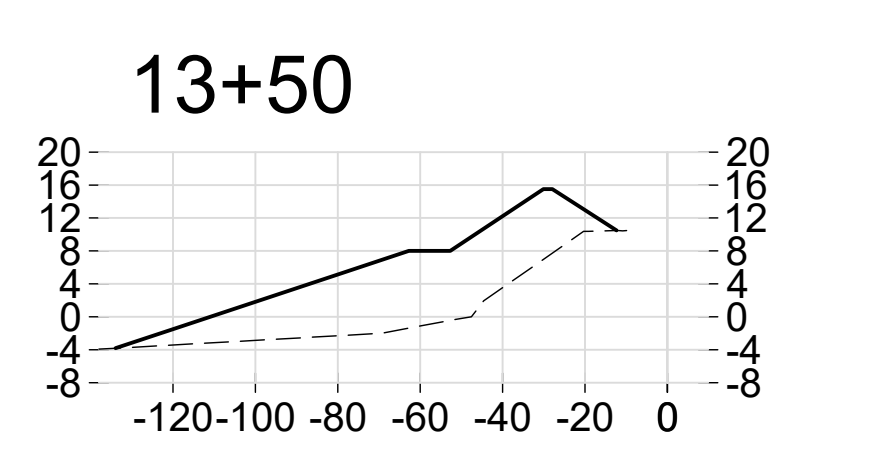
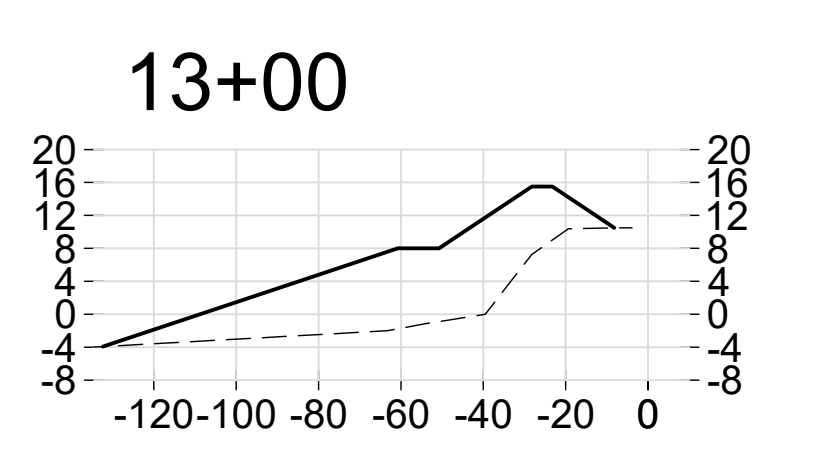
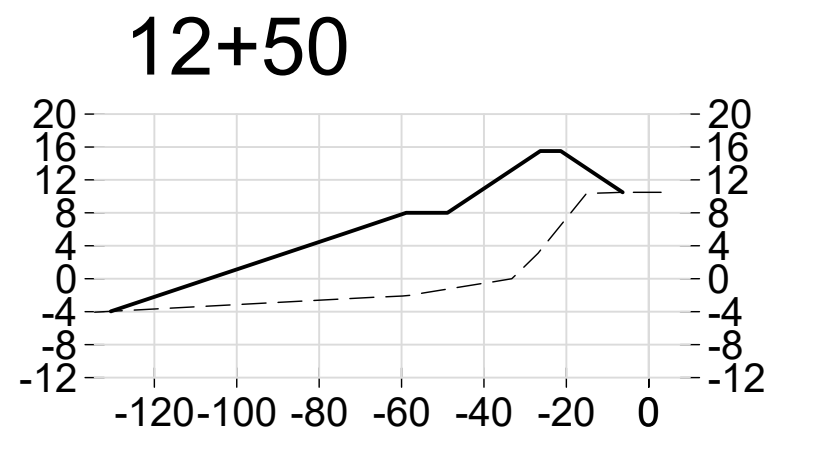
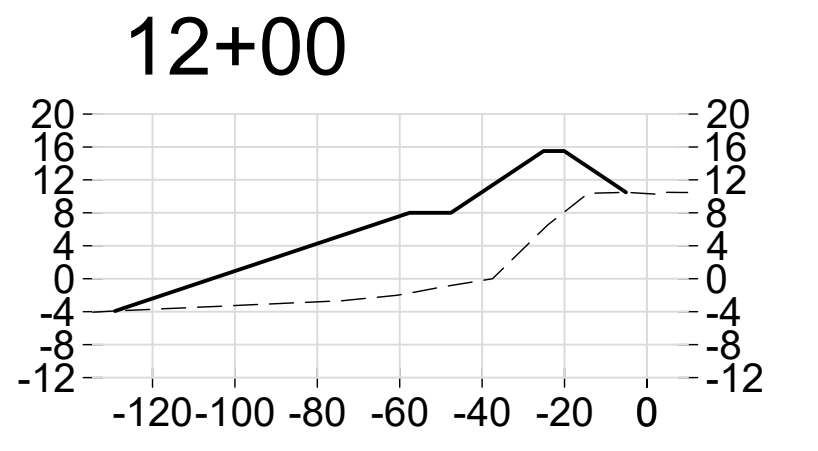
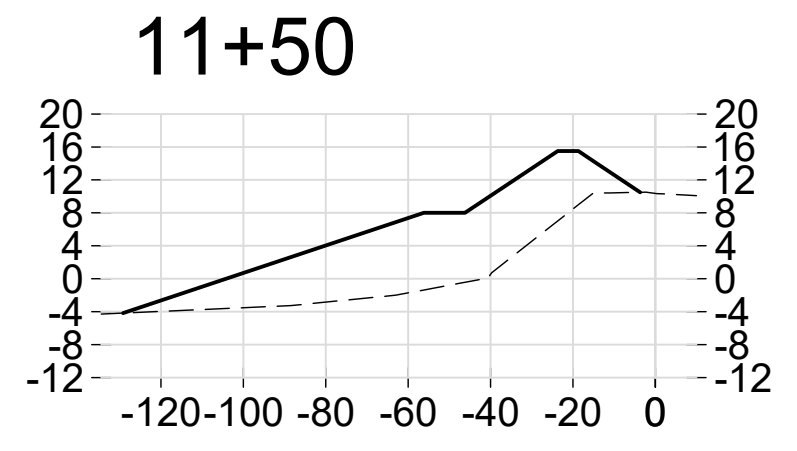
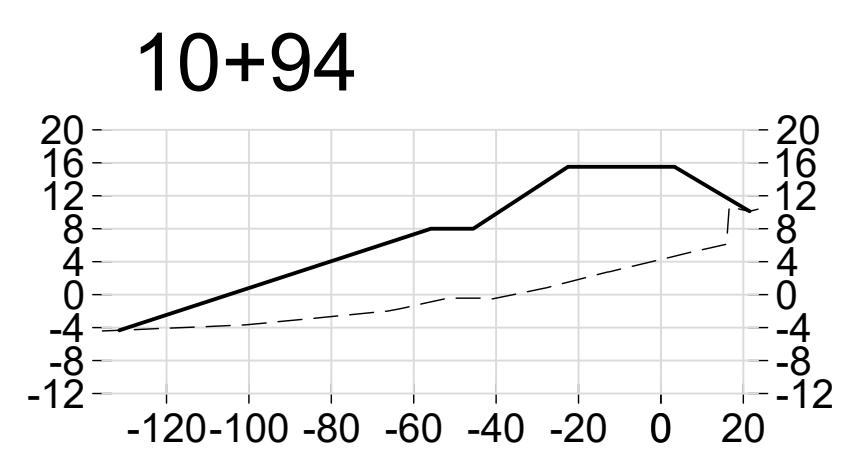
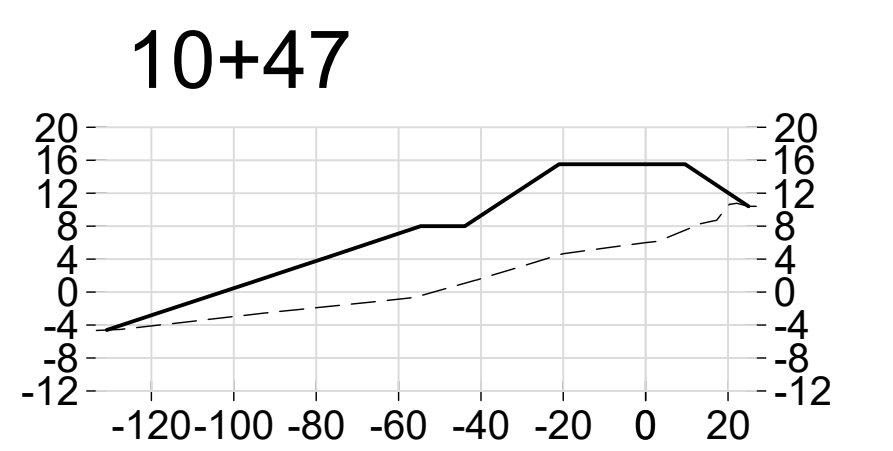
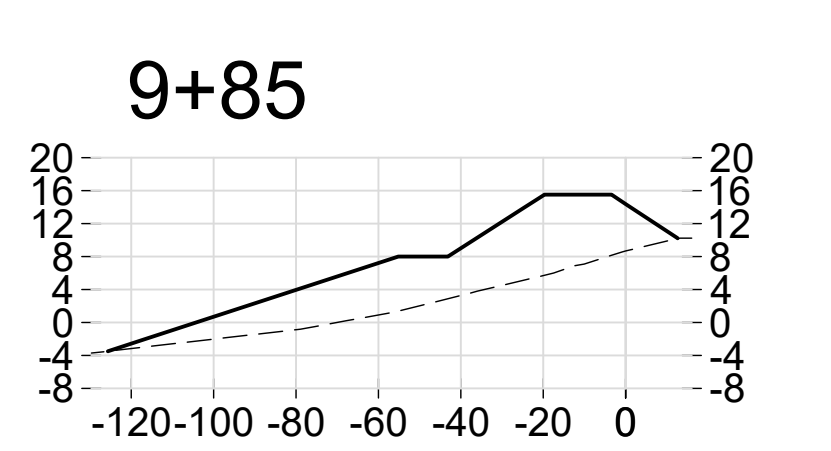
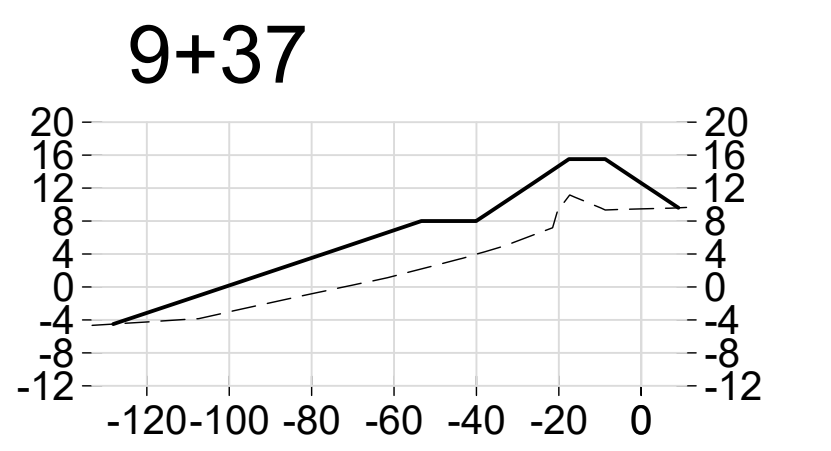
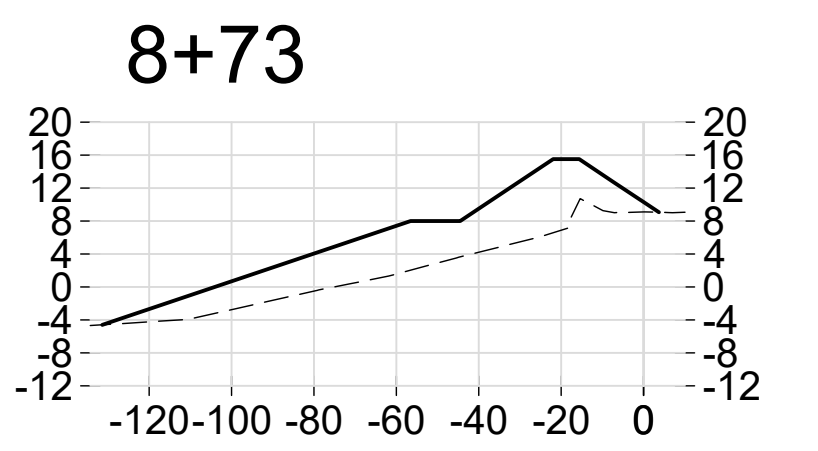
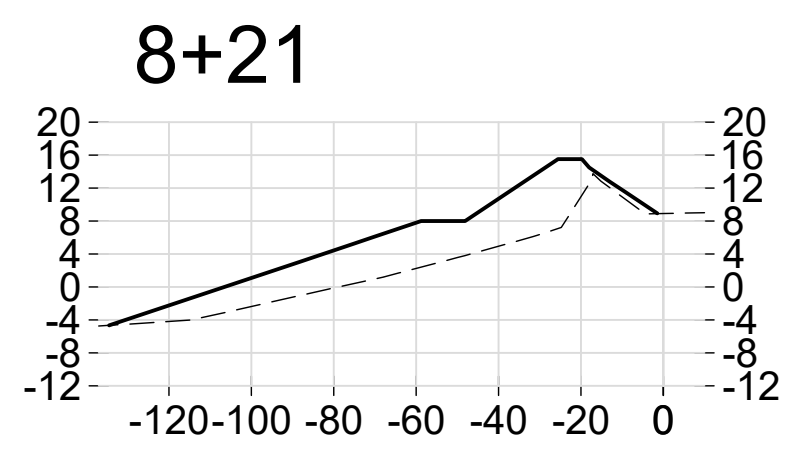
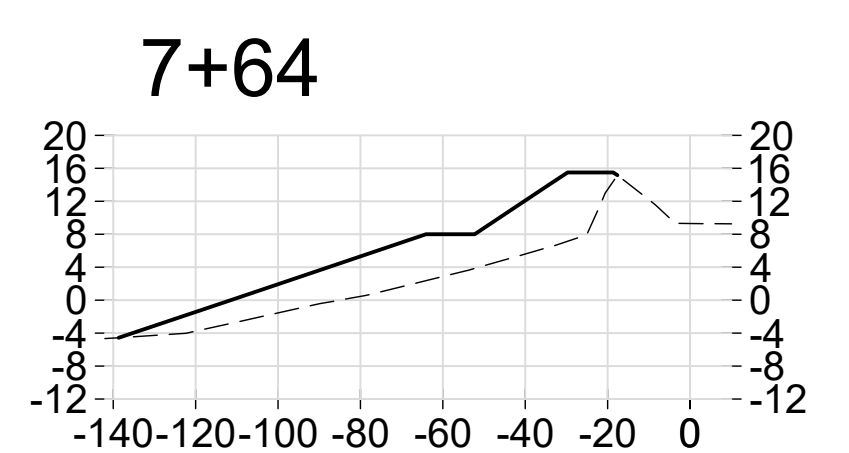
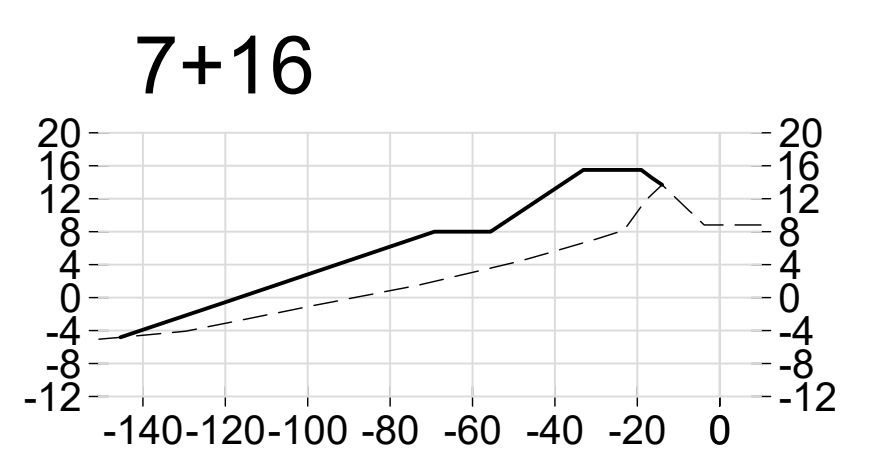
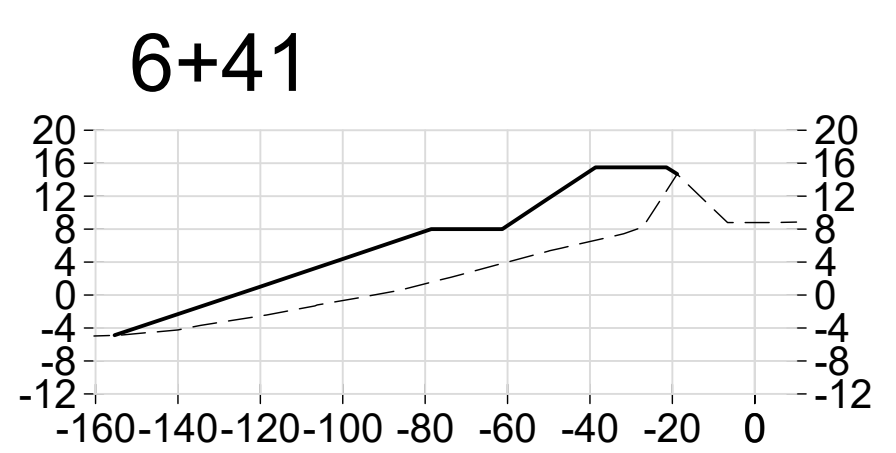
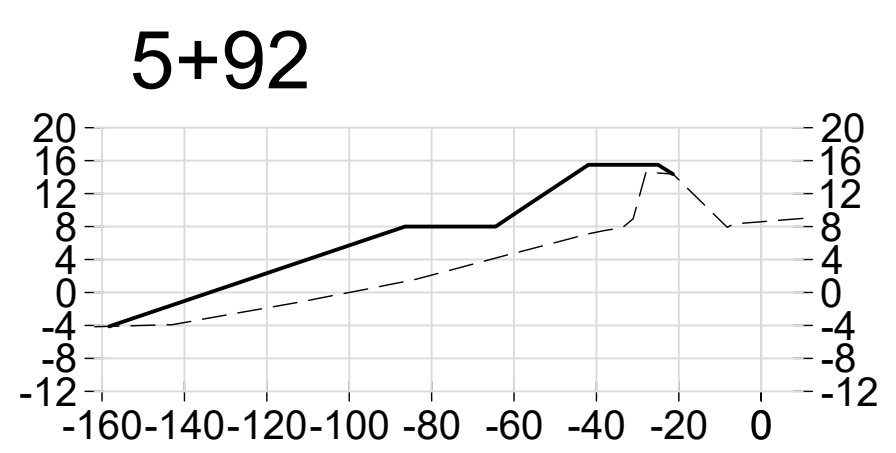
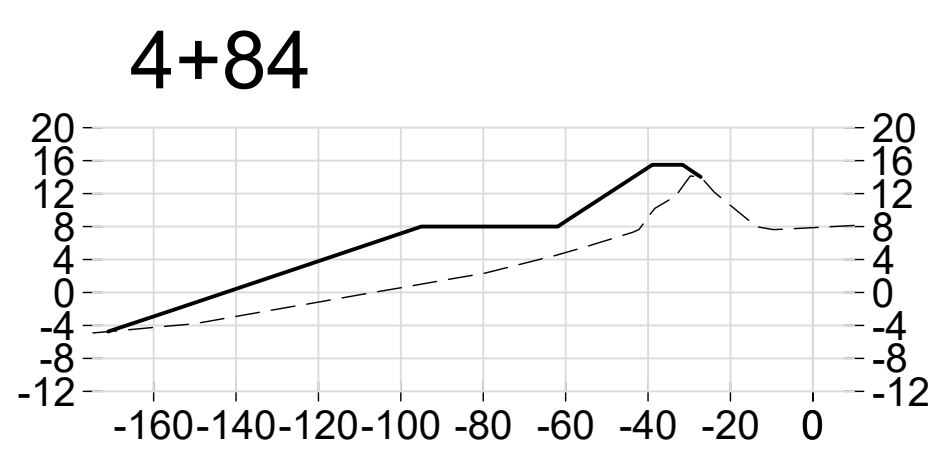
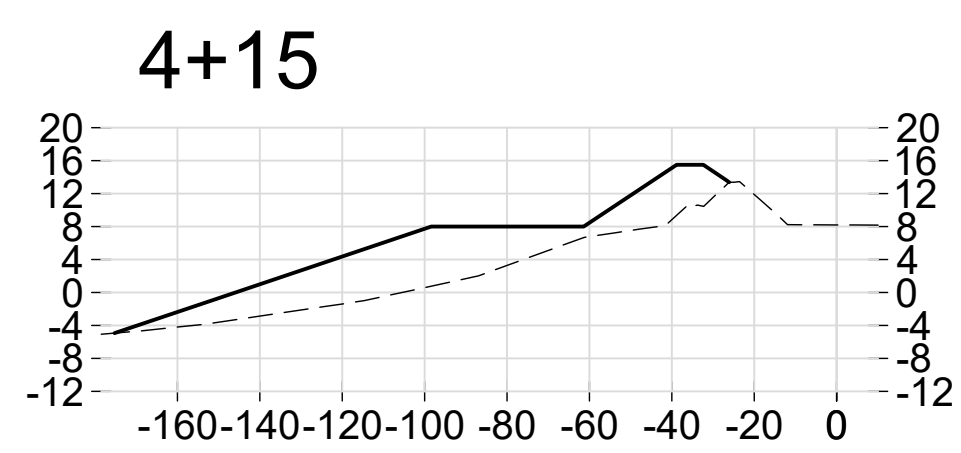
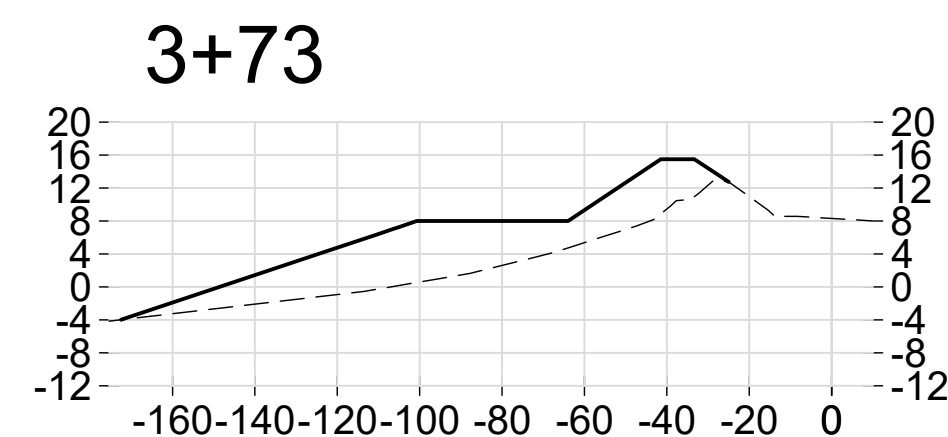
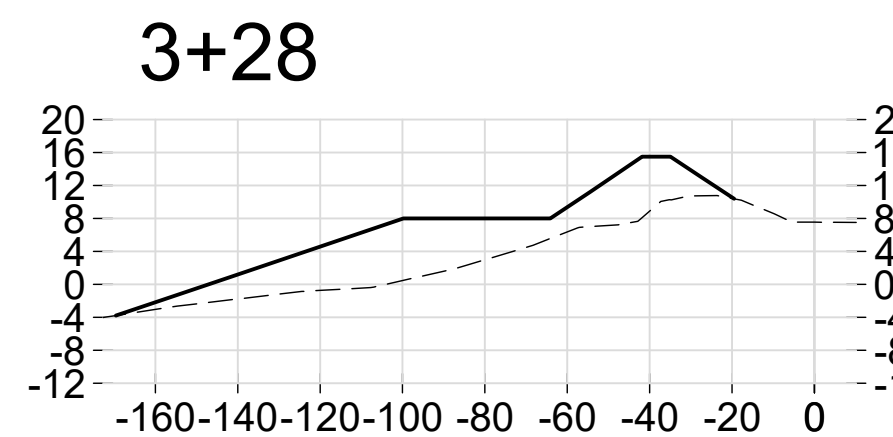
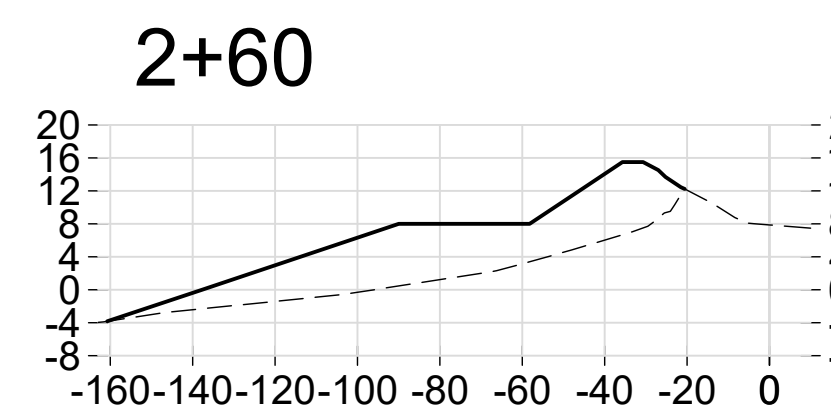
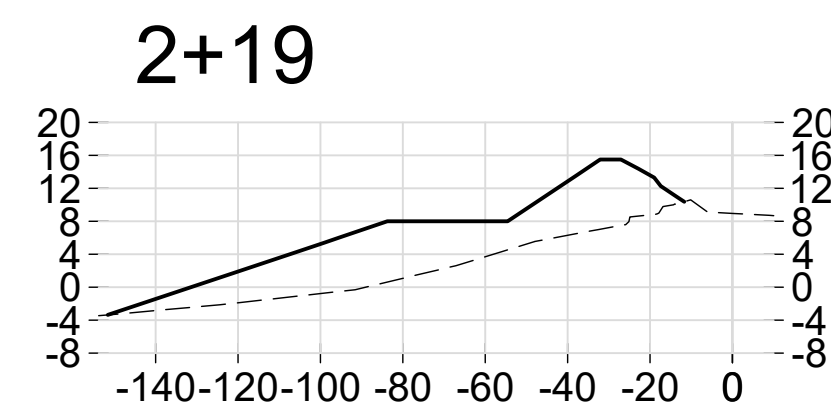
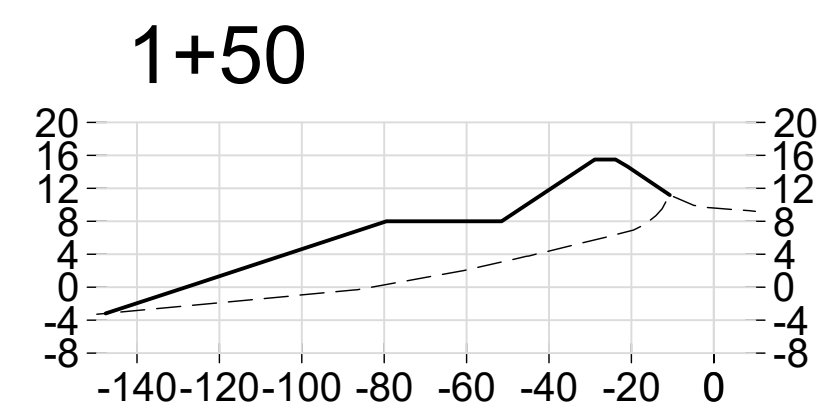
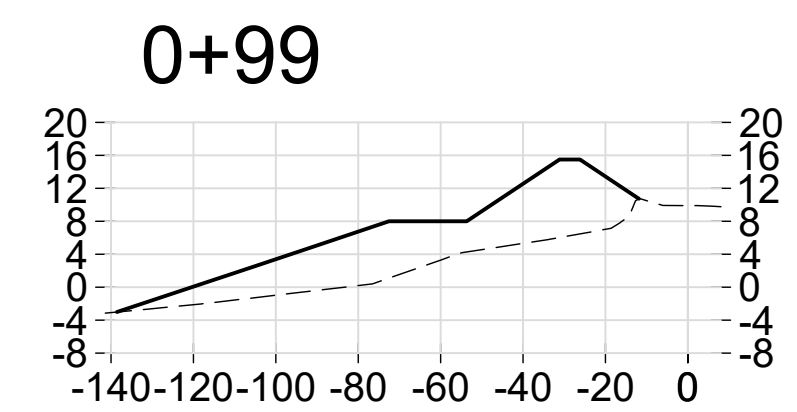
- NOTES:**
1. TOPOGRAPHIC AND BATHYMETRIC SURVEYS PERFORMED BY INTEGRAL CONSULTING INC. ON FEBRUARY 11-13, 2025 AND REPRESENT CONDITIONS AT THAT TIME.
 2. VERTICAL DATUM: MEAN SEA LEVEL (MSL) BASED ON NOAA TIDE STATION 1611400, NAWILIWILI, 1983-2001 TIDAL EPOCH.
 3. HORIZONTAL COORDINATE SYSTEM: NAD83, HAWAII STATE PLANE ZONE 4, US SURVEY FEET.
 4. X-AXES: DISTANCE FROM BASELINE (FEET)
 5. Y-AXES: ELEVATION ABOVE MSL (FEET)
 6. PROPOSED BEACH SLOPE: 6H:1V
 7. PROPOSED BEACH BERM CREST ELEVATION: 8FT
 8. PROPOSED MIN. BEACH WIDTH: 10FT
 9. PROPOSED MINIMUM BEACH BERM WIDTH IS 10 FT, MEASURED FROM THE DUNE TOE TO THE BERM CREST UNLESS OTHERWISE SHOWN.
 10. PROPOSED DUNE SLOPE: 3H:1V
 11. PROPOSED DUNE CREST ELEVATION: 15.5FT
 12. PROPOSED MIN. DUNE CREST WIDTH: 5FT
 13. THE OVERALL BEACH FILL TEMPLATE SHOWN HEREIN IS REPRESENTATIVE OF THE INTENDED DESIGN. FINAL STATION AND OFFSET LOCATIONS FOR KEY BEACH FILL TEMPLATE FEATURES (E.G., BERM CREST, DUNE TOE, DUNE CREST BREAKPOINTS, LANDWARD FILL LIMITS) WILL BE DETERMINED BASED ON THE PRE-CONSTRUCTION SURVEY AND PROVIDED IN THE ISSUED FOR CONSTRUCTION (IFC) PLAN SET.
 14. EXISTING SANDBAG REVETMENT (TO BE REMOVED) SPANS APPROXIMATELY FROM STA. 11+10 TO 13+80.
 15. EXISTING ROCK REVETMENT (TO REMAIN) SPANS APPROXIMATELY FROM STA. 13+80 TO 15+50.



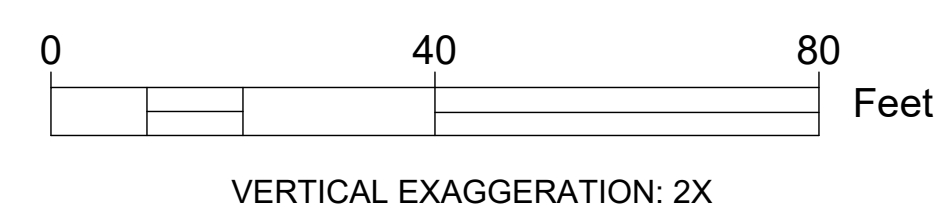
**FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION**

LINETYPE LEGEND
 EXISTING SURFACE: - - - - -
 PROPOSED SURFACE: _____
 MHHW (+1.01 FT MSL): - - - - -

		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
		KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
		BEACH FILL SECTIONS 1	
DESIGNED: RAW/TMC/AJW	SUBMITTED:		
DRAWN: TMC	DATE: 2026-05-06		
CHECKED: RAW	SCALE: AS NOTED		
APPROVED:		DRAWING NO. D10	
CHIEF ENGINEER	DATE		



- NOTES:**
1. TOPOGRAPHIC AND BATHYMETRIC SURVEYS PERFORMED BY INTEGRAL CONSULTING INC. ON FEBRUARY 11-13, 2025 AND REPRESENT CONDITIONS AT THAT TIME.
 2. VERTICAL DATUM: MEAN SEA LEVEL (MSL) BASED ON NOAA TIDE STATION 1611400, NAWILIWILI, 1983-2001 TIDAL EPOCH.
 3. HORIZONTAL COORDINATE SYSTEM: NAD83, HAWAII STATE PLANE ZONE 4, US SURVEY FEET.
 4. X-AXES: DISTANCE FROM BASELINE (FEET)
 5. Y-AXES: ELEVATION ABOVE MSL (FEET)
 6. PROPOSED BEACH SLOPE: 6H:1V
 7. PROPOSED BEACH BERM CREST ELEVATION: 8FT
 8. PROPOSED MIN. BEACH WIDTH: 10FT
 9. PROPOSED MINIMUM BEACH BERM WIDTH IS 10 FT, MEASURED FROM THE DUNE TOE TO THE BERM CREST UNLESS OTHERWISE SHOWN.
 10. PROPOSED DUNE SLOPE: 3H:1V
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 15. EXISTING ROCK REVETMENT (TO REMAIN) SPANS APPROXIMATELY FROM STA. 13+80 TO 15+50.

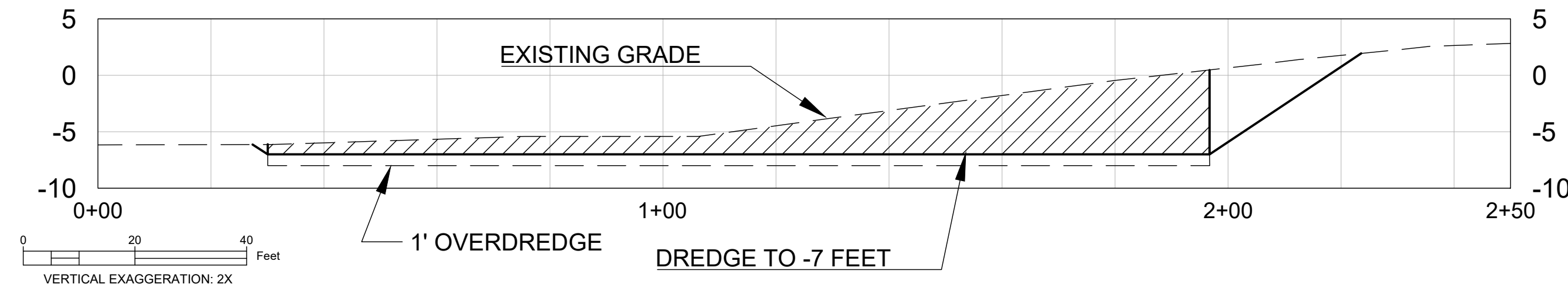


**FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION**

LINETYPE LEGEND	
EXISTING SURFACE:	-----
PROPOSED SURFACE:	—————

<p>Robert A. Walker 4/30/2028 EXP. DATE</p>	STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
	KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
	BEACH FILL SECTIONS 2	
	DESIGNED: RAW/TMC/AJW	SUBMITTED:
DRAWN: TMC	DATE: 2026-05-06	
CHECKED: RAW	SCALE: AS NOTED	
APPROVED:	DRAWING NO. D11	
CHIEF ENGINEER	DATE	

BASIN DREDGING CROSS-SECTION



NOTES

1. TOPOGRAPHIC SURVEY PERFORMED BY INTEGRAL CONSULTING INC. ON FEBRUARY 11-13, 2025 AND REPRESENT CONDITIONS AT THAT TIME.
2. VERTICAL DATUM: MEAN SEA LEVEL (MSL) BASED ON NOAA TIDE STATION 1611400, NAWILIWILI, 1983-2001 TIDAL EPOCH.
3. HORIZONTAL COORDINATE SYSTEM: NAD83, HAWAII STATE PLANE ZONE 4, US SURVEY FEET.
4. BATHYMETRIC DATA WITHIN THE HARBOR BASIN ARE BASED ON A HYDROGRAPHIC CONDITION SURVEY CONDUCTED BY THE U.S. ARMY CORPS OF ENGINEERS (USACE) PORTLAND DISTRICT ON JANUARY 14, 2020 AND REPRESENT CONDITIONS AT THAT TIME. ORIGINAL USACE SURVEY DATA WERE REFERENCED TO MLLW AND WERE CONVERTED TO MSL FOR USE IN THESE PLANS. UPDATED BATHYMETRIC SURVEY DATA FOR THE PROPOSED HARBOR BASIN DREDGING AREA WILL BE COLLECTED BY THE ENGINEER PRIOR TO CONSTRUCTION AND INCORPORATED INTO THE FINAL ISSUED FOR CONSTRUCTION (IFC) PLAN SET.
5. BATHYMETRIC DATA BETWEEN THE LIMITS OF THE 2020 USACE HARBOR BASIN SURVEY AND ADJACENT SURVEY DATA COLLECTED IN 2025 WERE INTERPOLATED FOR THE PURPOSES OF THESE BID PLANS.
6. DREDGED MATERIAL SHALL BE TEMPORARILY STOCKPILED AND RETAINED ABOVE MHHW AS NECESSARY TO ALLOW DRYING PRIOR TO HAULING OR BEACH FILL PLACEMENT. CONTRACTOR SHALL IMPLEMENT BMPs TO PREVENT TURBID RUNOFF OR SEDIMENT DISCHARGE TO WATERS.
7. FEDERALLY MAINTAINED ACCESS CHANNEL SHOWN FOR REFERENCE. CONTRACTOR SHALL NOT OBSTRUCT OR CONDUCT WORK WITHIN THE FEDERAL ACCESS CHANNEL UNLESS OTHERWISE AUTHORIZED.

**KIKIAOLA
SMALL BOAT HARBOR**

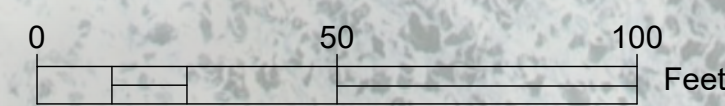
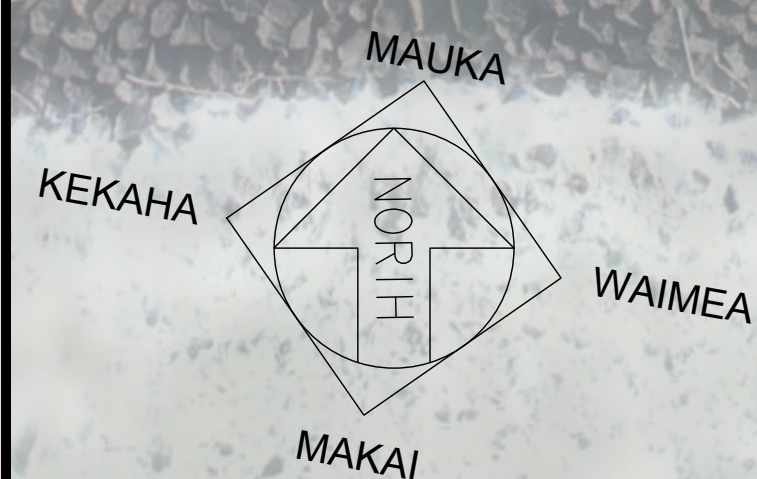
**ACCESS CHANNEL
(FEDERALLY MAINTAINED)**

**DREDGE TO ELEV.
-7 FEET MSL**

BORROW AREA (EAST)

**STOCKPILE AREA
(ABOVE MHHW)**

EAST BREAKWATER



**FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION**

LINETYPE LEGEND

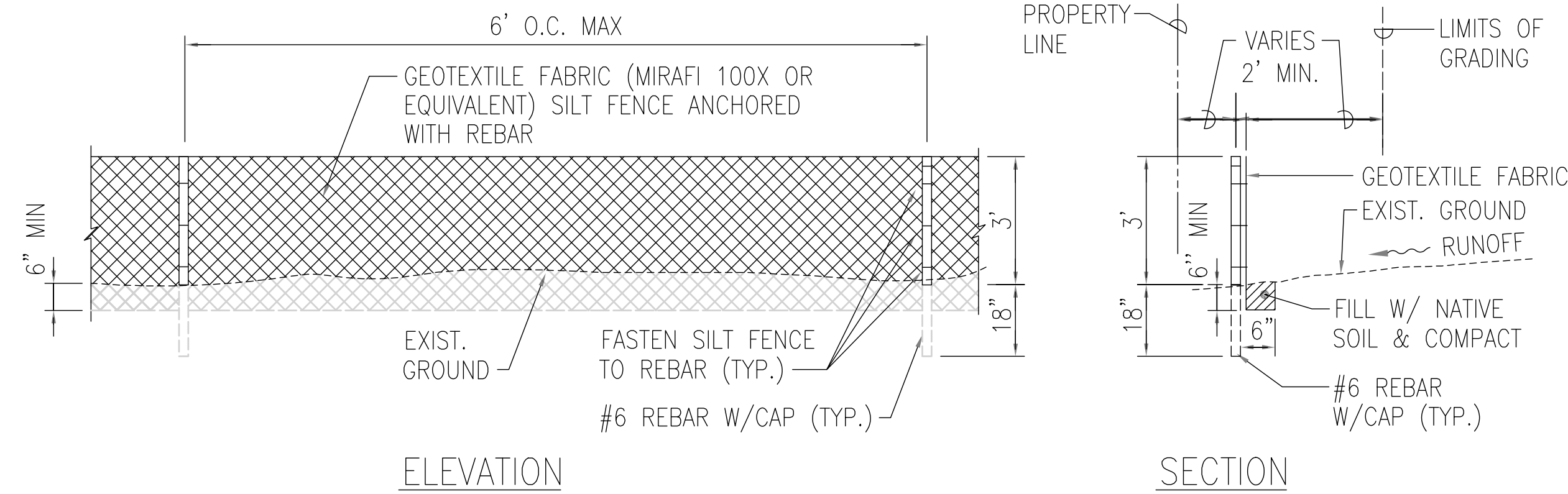
DREDGE AREA	
BASELINE:	
SECTION LINE:	
EXISTING CONTOUR:	
MHHW (+1.01 FT MSL):	
FEDERAL ACCESS CHANNEL LIMITS:	

This work was prepared by me or under my supervision

Robert A. Walker

4/30/2028
EXP. DATE

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
PROPOSED HARBOR BASIN DREDGING (ADD ALTERNATE NO. 1)	
DESIGNED: RAW/TMC/AJW	SUBMITTED:
DRAWN: TMC	DATE: 2026-05-06
CHECKED: RAW	SCALE: AS NOTED
APPROVED:	DATE
CHIEF ENGINEER	DATE
D12	



1 **SILT FENCE DETAIL**

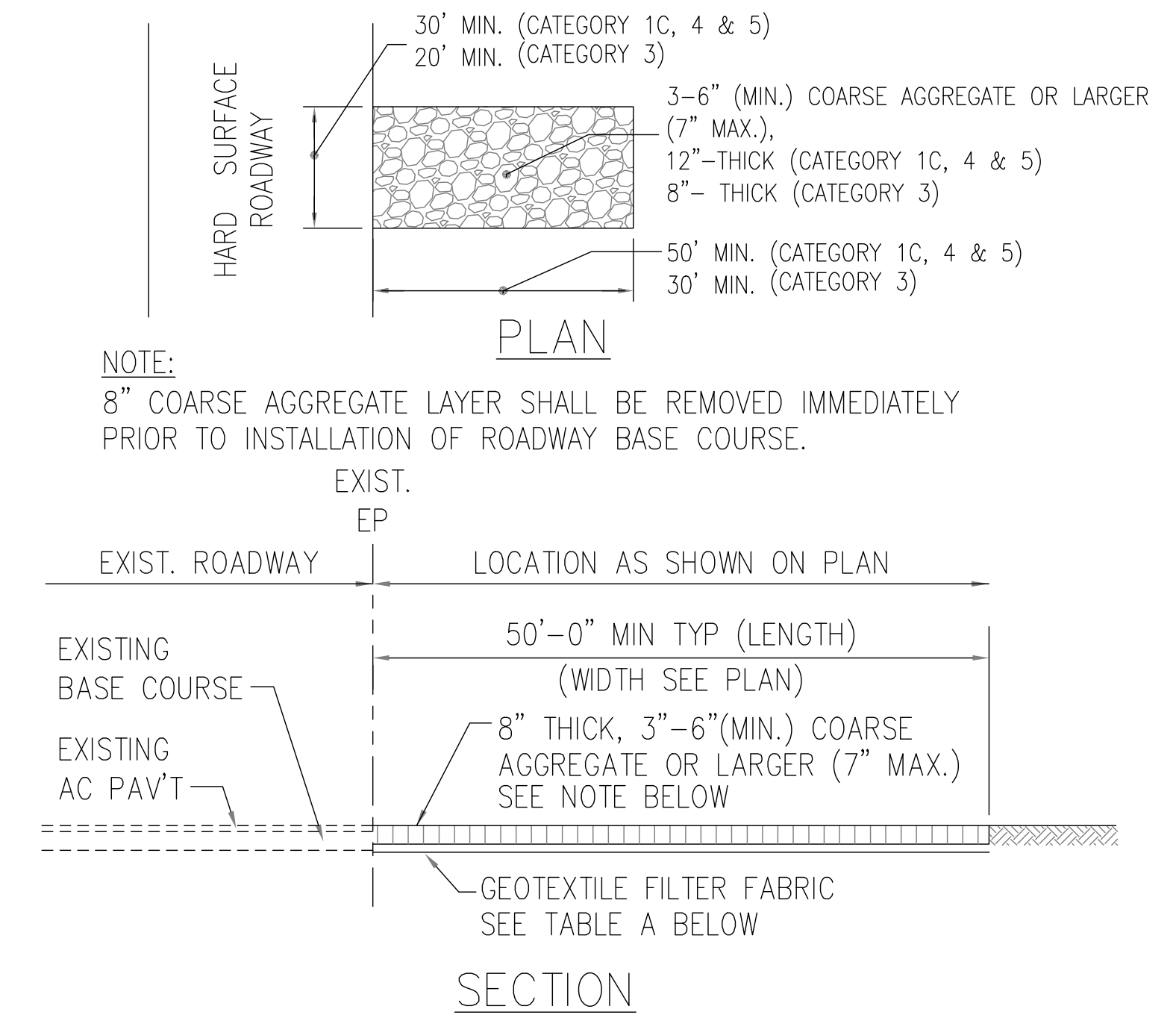
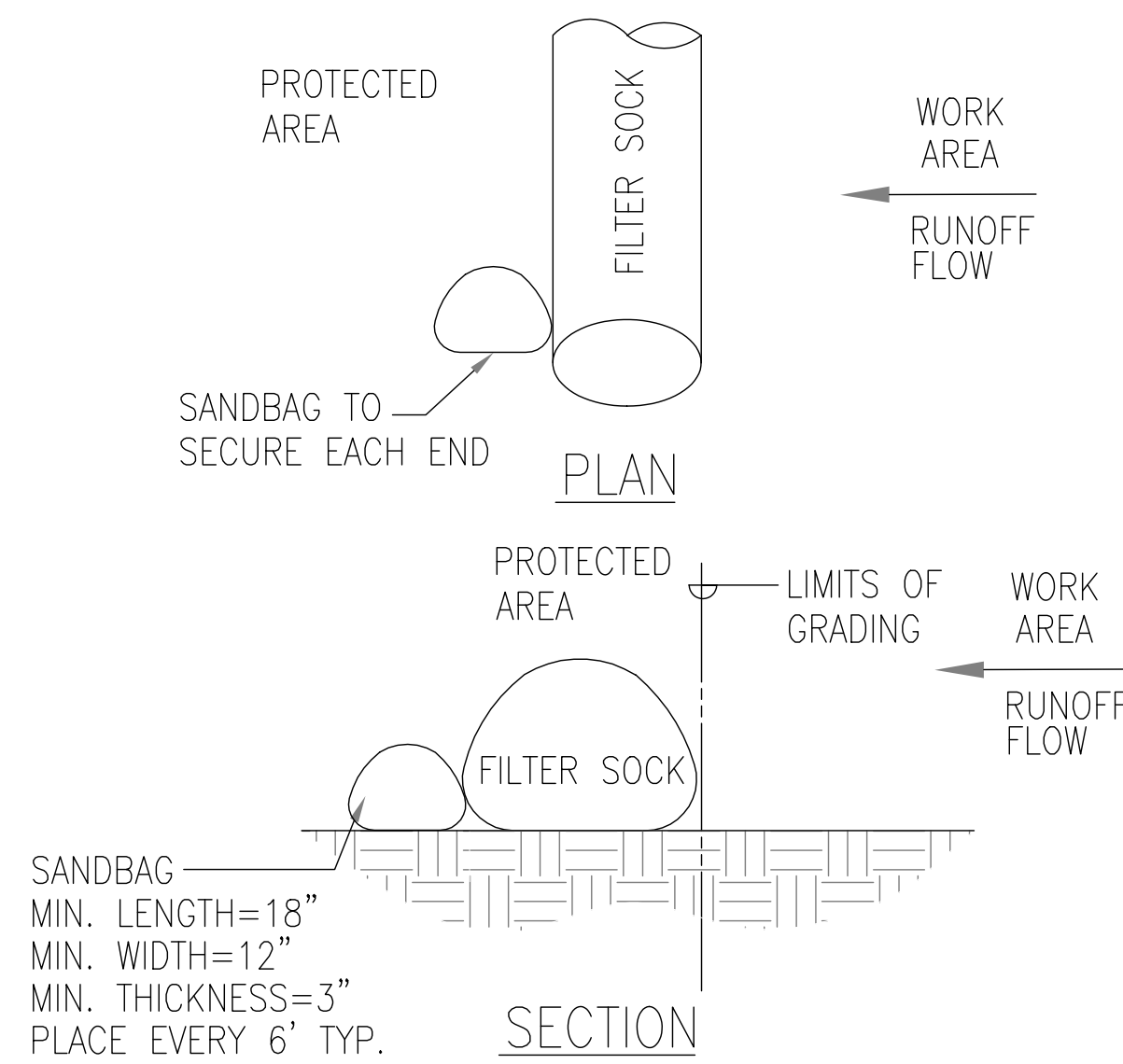
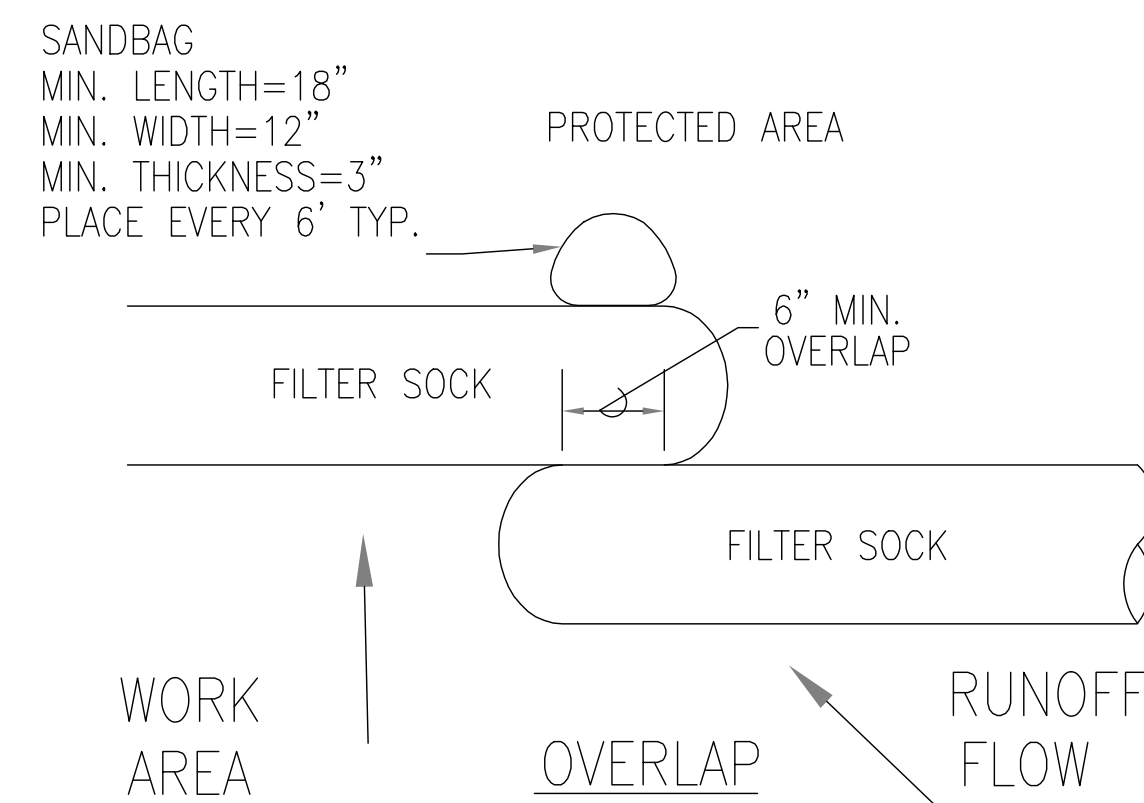


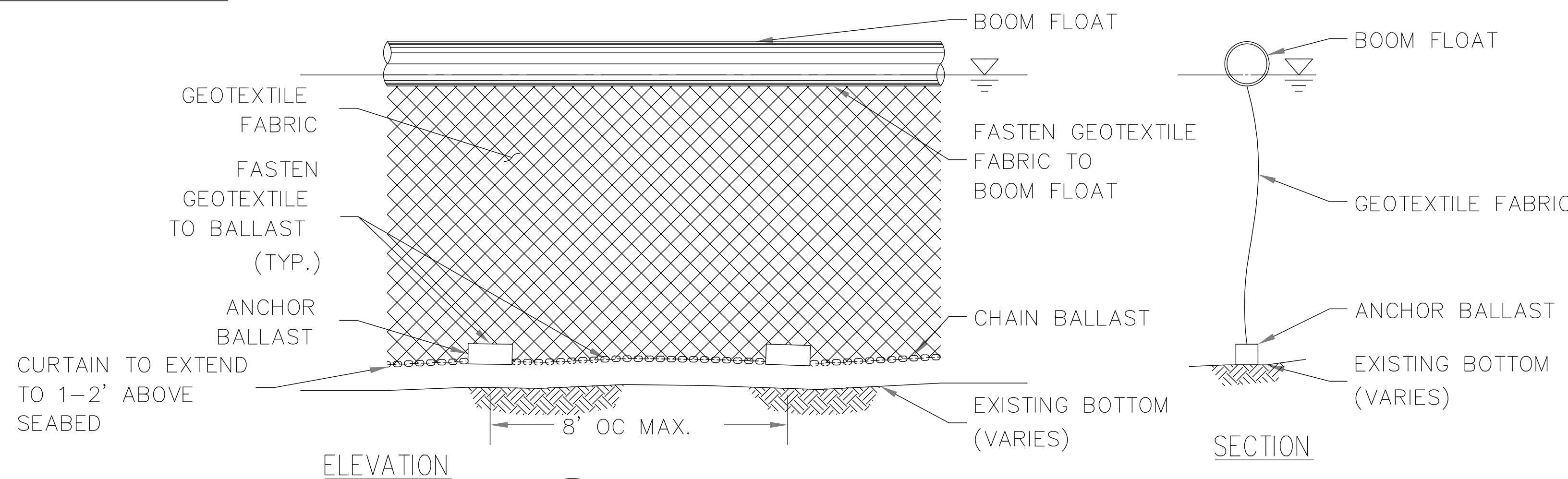
TABLE A GEOTEXTILE REQUIREMENTS

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)

3 **CONSTRUCTION INGRESS/EGRESS DETAILS**



2 **FILTER SOCK DETAIL**



4 **TURBIDITY CURTAIN DETAIL**

FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION

<p>ROBERT A. WALKER LICENSED PROFESSIONAL ENGINEER No. 14549C HAWAII, U.S.A.</p> <p>This work was prepared by me or under my supervision</p> <p><i>Robert A. Walker</i></p> <p>4/30/2028 EXP. DATE</p>		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
		EROSION AND SEDIMENT CONTROL DETAILS	
DESIGNED: RAW/TMC/AJW	SUBMITTED:		
DRAWN: TMC	DATE: 2026-05-06		
CHECKED: RAW	SCALE: AS NOTED		
APPROVED:		DRAWING NO.	
CHIEF ENGINEER	DATE	C2	

EROSION PREVENTION/ SEDIMENT CONTROL NOTES:

1. THE CONTRACTOR SHALL FOLLOW THE GUIDELINES IN THE CITY AND COUNTY OF KAUAI'S "RULES RELATING TO WATER QUALITY".
2. MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY EARTHWORK IS INITIATED.
3. MINIMIZE SOIL COMPACTION
AREAS WHERE FINAL STABILIZATION OR INFILTRATION PRACTICES WILL BE INSTALLED SHALL BE PROTECTED FROM EXCESSIVE COMPACTION DURING CONSTRUCTION. VEHICLE AND EQUIPMENT USE SHALL BE RESTRICTED OR TECHNIQUES TO CONDITION THE SOILS TO SUPPORT VEGETATION SHALL BE IMPLEMENTED IN THE AREAS THAT HAVE BEEN COMPACTED AND ARE DESIGNATED TO REMAIN VEGETATIVE OR POST-CONSTRUCTION INFILTRATION AREAS. CLEARLY MARK THE AREAS TO BE AVOIDED WITH FLAGS OR TEMPORARY FENCING. WHERE TEMPORARY FENCING IS USED, FENCING MUST BE ADEQUATELY SUPPORTED BY POSTS AND MAINTAINED IN AN, UPRIGHT POSITION.
4. PERIMETER CONTROLS
PERIMETER CONTROLS ARE REQUIRED DOWN SLOPE OF ALL DISTURBED AREAS (OTHER THAN BORROW AND FILL AREAS). MAINTAIN DOWNSTREAM VEGETATE BUFFER AREA
5. SEDIMENT BARRIERS AND FENCES
SEDIMENT FENCES OR BARRIERS SHALL BE USED DOWNSLOPE OF ALL DISTURBED AREAS (OTHER THAN BORROW AND FILL AREAS). UNTIL SLOPES ARE STABILIZED A SEDIMENT FENCE OR BARRIERS SHALL BE INSTALLED AT THE TOE OF THE SLOPE AND ON CONTOURS AT THE FOLLOWING SPACING:
SLOPE ≥ 2:1 10 FEET SPACING
SLOPE ≥ 4:1 AND < 2 1 15 FEET SPACING
SLOPE < 4:1 20 FEET SPACING
6. TRACKING CONTROL
 - MINIMIZE SEDIMENT TRACK-OUT ONTO OFF-SITE STREETS, OTHER PAVED AIREAS, AIND SIDEWALKS FROM VEHICLES EXITING THE CONSTRUCTION SITE BY RESTRICTING VEHICLE TRAFFIC TO PROPERLY DESIGNATED AREAS AND USING ADDITIONAL CONTROLS TO REMOVE SEDIMENT FROM VEHICLE TIRES PRIOR TO EXITING THE SITE.
 - VEHICULAR PARKING AND MOVEMENTS ON PROJECT SITES MUST BE CONFINED TO PAVED SURFACES OR PREDEFINED PARKING AREAS AND VEHICLE PATHS, WHICH SHALL BE MARKED WITH FLAGS OR BOUNDARY FENCING.
 - ALL POLLUTANTS AND MATERIALS THAT ARE DROPPED, WASHED, TRACKED, SPILLED, OR OTHERWISE DISCHARGED FROM A PROJECT SITE TO OFF-SITE STREETS, OTHER PAVED AREAS, SIDEWALKS OR THE MS4 MUST BE CLEANED USING DRY METHODS SUCH AS SWEEPING OR VACUUMING
 - WASHING POLLUTANTS AND MATERIALS THAT ARE DISCHARGED FROM THE PROJECT SITE TO THE MS4 INTO DRAIN INLETS OR CATCH BASINS IS PROHIBITED UNLESS THE MATERIAL IS SEDIMENT AND THE INLETS ARE DIRECTED TO A SEDIMENT BASIN OR SEDIMENT TRAP.
7. BEST MANAGEMENT PRACTICES (BMPS) SHALL NOT BE REMOVED UNTIL FINAL STABILIZATION IS COMPLETE FOR THAT PHASE.
8. REFER TO CITY AND COUNTY OF KAUAI BEST MANAGEMENT PRACTICES MANUAL- CONSTRUCTION, FOR MORE INFORMATION ON BMPS.

EROSION AND SEDIMENT CONTROL PLAN SCHEDULE AND RAIN RESPONSE PLAN:

PROJECT SEQUENCE:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE, PERIMETER CONTROLS, INLET PROTECTION, AND TEMPORARY FENCING FOR PROTECTED AREAS, CLEARING AND GRUBBING AS NECESSARY FOR THE INSTALLATION OF THESE BMPS.
2. CLEAR, GRUB, AND GRADE THE SITE, REFER TO THE SITE PLAN. RELOCATE, RECONSTRUCT AND MAINTAIN BMPS AS NEEDED TO KEEP THEM EFFECTIVE AT ALL TIMES. INITIATE TEMPORARY STABILIZATION IMMEDIATELY ONCE GRADING IS COMPLETED IN EACH PHASE.
3. PROCEED WITH CONSTRUCTION WITH LEAST POSSIBLE DISTURBANCE OF VEGETATIVE AREAS AND TEMPORARY STRUCTURES.
4. REMOVE OR DISMANTLE TEMPORARY EROSION CONTROL STRUCTURES AFTER FULL ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
5. PRACTICE GOOD HOUSEKEEPING MEASURES THROUGHOUT THE DURATION OF CONSTRUCTION
6. INSPECTIONS WILL BE PERFORMED WEEKLY.

RAIN RESPONSE PLAN:

1. THE FOLLOWING WILL BE PERFORMED WHEN HEAVY RAINS, TROPICAL STORM OR HURRICANE IS IMMINENT OR IS FORECASTED IN THE NEXT 48 HOURS:
 - TEMPORARY SUSPENSION OF ACTIVE GRADING, GRUBBING AND TRENCHING.
 - INSPECT ALL PERIMETER CONTROLS, AND MAINTAIN AS NEEDED. REINSTALL ANY PERIMETER CONTROLS THAT WERE REMOVED DUE TO ACTIVE WORK IN THE AREA. IF A SEVERE STORM IS EXPECTED,
 - COVER OR RELOCATE MATERIAL STOCKPILES AND LIQUID MATERIAL CONTAINERS TO AVOID CONTACT WITH RAINWATER.
 - PLACE SPILL PANS OR OIL-ONLY SPILL PADS UNDER CONSTRUCTION VEHICLES TO PREVENT RUNOFF FROM CONTACTING ANY SPILLED PETROLEUM PRODUCTS. PROPERLY DISPOSE OF ANY ACCUMULATED OILY WATER AFTER THE RAIN EVENT.
 - RE-INSPECT AFTER THE APPROACHING HEAVY RAINS, TROPICAL STORM OR HURRICANE AND REPLACE OR MAINTAIN BMPS AS NEEDED.

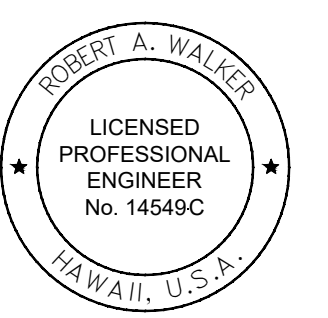
GOOD HOUSEKEEPING BMPS:

1. INSPECT BMPS AND SITE WEEKLY MAINTAIN BMPS AND SITE AS REQUIRED TO ENSURE CONTINUED PERFORMANCE.
2. DUST CONTROL DUST FROM THE PROJECT SITE SHALL NOT BE TRANSPORTED OR DISCHARGED TO OFFSITE AREAS. WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION STANDARDS CONTAINED IN THE "HAWAII ADMINISTRATIVE RULES TITLE 11, CHAPTER 60.1 AIR QUALITY CONTROL.
3. STREET SWEEPING AND VACUUMING. ALL POLLUTANTS DISCHARGED FROM CONSTRUCTION SITE TO OFF-SITE AREAS MUST BE SWEPT OR VACUUMED EACH DAY BEFORE LEAVING THE JOB SITE.
4. MATERIALS DELIVERY, STORAGE AND USE MANAGEMENT. PREVENT, REDUCE, OR ELIMINATE THE DISCHARGE OF POLLUTANTS FROM MATERIAL DELIVERY, STORAGE, AND USE TO THE STORM WATER SYSTEM OR WATERCOURSES BY MINIMIZING THE STORAGE OF HAZARDOUS MATERIALS ONSITE, STORING MATERIALS IN A DESIGNATED AREA, INSTALLING SECONDARY CONTAINMENT. CONSTRUCTION MATERIALS, WASTE, TOXIC AND HAZARDOUS SUBSTANCES, STOCKPILES AND OTHER SOURCES OF POLLUTION SHALL NOT BE STORED IN BUFFER AREAS, NEAR AREAS OF CONCENTRATED FLOW, OR AREAS ABUTTING THE MS4, RECEIVING WATERS, OR DRAINAGE IMPROVEMENTS THAT DISCHARGE OFF-SITE. PRIMARY AND SECONDARY CONTAINMENT CONTROLS AND COVERS SHALL BE IMPLEMENTED TO THE MEP.
5. SPILL PREVENTION AND CONTROL. CREATE AND IMPLEMENT SPILL PREVENTION AND RESPONSE PLANS TO ELIMINATE AND MINIMIZE THE DISCHARGE OF POLLUTANTS TO THE MS4 AND RECEIVING WATERS FROM LEAKS AND SPILLS BY REDUCING THE CHANCE FOR SPILLS, ABSORBING, CONTAINING, AND CLEANING UP SPILLS AND PROPERLY DISPOSING OF SPILL MATERIALS. AT A MINIMUM, ALL PROJECTS SHALL CLEANUP ALL LEAKS AND SPILLS IMMEDIATELY.
6. HAZARDOUS MATERIALS. PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM HAZARDOUS WASTE THROUGH PROPER MATERIAL USE AND WASTE DISPOSAL. IN THE EVENT THAT HAZARDOUS MATERIALS ARE DISCHARGED TO THE MS4, THE PROPERTY OWNER OR ESCP COORDINATOR SHALL IMMEDIATELY NOTIFY THE DEPARTMENT OF FACILITIES MAINTENANCE, KAUAI FIRE DEPARTMENT, AND KAUAI POLICE DEPARTMENT OF THE DISCHARGE BY TELEPHONE. A WRITTEN REPORT DESCRIBING THE POLLUTANTS THAT WERE DISCHARGED, THE REASONS FOR THE DISCHARGE, AND THE MEASURES THAT HAVE BEEN TAKEN OR WILL BE TAKEN TO PREVENT A REOCCURRENCE OF THE DISCHARGE SHALL BE SUBMITTED TO THE DIRECTOR NO LESS THAN 3 DAYS AFTER NOTIFICATION BY PHONE.
7. NONHAZARDOUS MATERIALS. IN THE EVENT THAT NONHAZARDOUS MATERIALS ARE DISCHARGED TO THE MS4, THE PROPERTY OWNER OR ESCP COORDINATOR SHALL NOTIFY THE CITY DEPARTMENT OF FACILITIES MAINTENANCE BY TELEPHONE NO LATER THAN THE NEXT BUSINESS DAY. A WRITTEN REPORT DESCRIBING THE POLLUTANTS THAT WERE DISCHARGED, THE REASONS FOR THE DISCHARGE, AND THE MEASURES THAT HAVE BEEN TAKEN OR WILL BE TAKEN TO PREVENT A REOCCURRENCE OF THE DISCHARGE SHALL BE SUBMITTED TO THE DIRECTOR NO LESS THAN 3 DAYS AFTER NOTIFICATION BY PHONE.
8. VEHICLE AND EQUIPMENT CLEANING. ELIMINATE AND MINIMIZE THE DISCHARGE OF POLLUTANTS TO

STORM WATER FROM VEHICLE AND EQUIPMENT CLEANING OPERATIONS BY USING OFF-SITE FACILITIES WHEN FEASIBLE, WASHING IN DESIGNATED, CONTAINED AREAS ONLY, AND ELIMINATING DISCHARGES TO THE STORM DRAIN SYSTEM BY EVAPORATING AND/OR TREATING WASH WATER, AS APPROPRIATE OR INFILTRATING WASH WATER FOR EXTERIOR CLEANING ACTIVITIES THAT USE WATER ONLY.

9. VEHICLE AND EQUIPMENT FUELING. PREVENT FUEL SPILLS AND LEAKS BY USING OFF-SITE FACILITIES, FUELING ONLY IN DESIGNATED AREAS, ENCLOSING OR COVERING STORED FUEL, AND IMPLEMENTING SPILL CONTROLS SUCH AS SECONDARY CONTAINMENT AND ACTIVE MEASURES USING SPILL RESPONSE KITS.
10. VEHICLE AND EQUIPMENT MAINTENANCE. ELIMINATE AND MINIMIZE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM VEHICLE AND EQUIPMENT MAINTENANCE OPERATIONS BY USING OFF-SITE FACILITIES WHEN FEASIBLE, PERFORMING WORK IN DESIGNATED AREAS ONLY, USING SPILL PADS UNDER VEHICLES AND EQUIPMENT, CHECKING FOR LEAKS AND SPILLS, AND CONTAINING AND CLEANING UP SPILLS IMMEDIATELY.
11. SOLID WASTE MANAGEMENT. PREVENT OR REDUCE DISCHARGE OF POLLUTANTS TO THE LAND, GROUNDWATER, AND IN STORM WATER FROM SOLID WASTE OR CONSTRUCTION AND DEMOLITION WASTE BY PROVIDING DESIGNATED WASTE COLLECTION AREAS, COLLECT SITE TRASH DAILY, AND ENSURING THAT CONSTRUCTION WASTE IS COLLECTED, REMOVED, AND DISPOSED OF ONLY AT AUTHORIZED DISPOSAL AREAS.
12. SANITARY/SEPTIC WASTE MANAGEMENT. TEMPORARY AND PORTABLE SANITARY AND SEPTIC WASTE SYSTEMS SHALL BE MOUNTED OR STAKED IN, WELL-MAINTAINED AND SCHEDULED FOR REGULAR WASTE DISPOSAL AND SERVICING. SOURCES OF SANITARY AND/DR SEPTIC WASTE SHALL NOT BE STORED NEAR THE MS4 OR RECEIVING WATERS.
13. STOCKPILE MANAGEMENT. STOCKPILES SHALL NOT BE LOCATED IN DRAINAGE WAYS, WITHIN 50 FEET FROM AREAS OF CONCENTRATED FLOWS, AND ARE NOT ALLOWED IN THE CITY RIGHT-OF-WAY. SEDIMENT BARRIERS OR SILT FENCES SHALL BE USED AROUND THE BASE OF ALL STOCKPILES. STOCKPILES SHALL NOT EXCEED 15 FEET IN HEIGHT. STOCKPILES MUST BE COVERED WITH PLASTIC SHEETING DR A COMPARABLE MATERIAL IF THEY WILL NOT BE ACTIVELY USED WITHIN 7 DAYS.
14. LIQUID WASTE MANAGEMENT. LIQUID WASTE SHALL BE CONTAINED IN A CONTROLLED AREA SUCH AS A HOLDING PIT, SEDIMENT BASIN, ROLL-OFF BIN, OR PORTABLE TANK OF SUFFICIENT VOLUME AND TO CONTAIN THE LIQUID WASTES GENERATED. CONTAINMENT AREAS DR DEVICES MUST BE IMPERMEABLE AND LEAK FREE AND SHOULD NOT BE LOCATED WHERE ACCIDENTAL RELEASE OF THE CONTAINED LIQUID CAN DISCHARGE TO WATER BODIES, CHANNELS, OR STORM DRAINS.
15. CONCRETE WASTE MANAGEMENT. PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE OR PERFORMING ONSITE WASHOUT IN A DESIGNATED AREA CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MILLIMETER POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL. CONTAINMENT AREAS OR DEVICES SHOULD NOT BE LOCATED WHERE ACCIDENTAL RELEASE OF THE CONTAINED LIQUID CAN DISCHARGE TO WATER BODIES, CHANNELS, OR STORM DRAINS. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75 PERCENT FULL. ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF AS SOLID WASTES.
16. CONTAMINATED SOIL MANAGEMENT. AT MINIMUM CONTAIN CONTAMINATED MATERIAL SOIL BY SURROUNDING WITH IMPERMEABLE LINED BERMS OR COVER EXPOSED CONTAMINATED MATERIAL WITH PLASTIC SHEETING. CONTAMINATED SOIL SHOULD BE DISPOSED OF PROPERLY IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

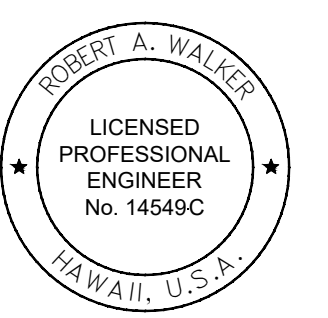
**FOR BIDDING PURPOSES
NOT FOR CONSTRUCTION**

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
KIKIAOLA SMALL BOAT HARBOR SAND BYPASSING KEKAHA, KAUAI HAWAII	
EROSION AND SEDIMENT CONTROL NOTES	
 <p>This work was prepared by me or under my supervision</p> <p><i>Robert A. Walker</i> 4/30/2028 EXP. DATE</p>	
DESIGNED: RAW/TMC/AJW	SUBMITTED:
DRAWN: TMC	DATE: 2026-05-06
CHECKED: RAW	SCALE: AS NOTED
APPROVED:	DRAWING NO.
CHIEF ENGINEER	C3

GRADING NOTES:

1. ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH CHAPTER 14, ARTICLES 13, 14, 15 AND 16, AS RELATED TO GRADING, SOIL EROSION AND SEDIMENT CONTROL OF THE REVISED ORDINANCES OF KAUAI, 1990, AS AMENDED, AND SOILS REPORT BY SHORELINE SCIENCE & ENGINEERING DATED MAY 2019.
2. NO CONTRACTOR SHALL PERFORM ANY GRADING OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO 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.
3. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS CONTAINED IN THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 60.1, "AIR POLLUTION CONTROL".
4. WITH EXCEPTION OF IRRIGATION LINES, THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM THIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHEREVER CONNECTIONS OF NEW UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.
5. ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE SITE.
6. NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR NOTICE TO THE DIRECTOR, D.P.P., 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".
7. THE GENERAL CONTRACTOR/DEVELOPER/OWNER OF THE PROJECT SHALL BE RESPONSIBLE FOR ALL GRADING OPERATIONS TO BE PERFORMED IN CONFORMANCE WITH APPLICABLE PROVISIONS OF THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS," AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL", AS WELL AS CHAPTER 14 OF THE REVISED ORDINANCES OF KAUAI, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.
8. IN ACCORDANCE WITH STATE LAW, ALL DISCHARGES RELATED TO PROJECT CONSTRUCTION OR OPERATIONS ARE REQUIRED TO COMPLY WITH STATE WATER QUALITY STANDARDS (HAWAII ADMINISTRATIVE RULES, CHAPTER 11-54). BEST MANAGEMENT PRACTICES SHALL BE USED TO MINIMIZE OR PREVENT THE DISCHARGE OF SEDIMENT, DEBRIS, AND OTHER POLLUTANTS TO STATE WATERS. PERMIT COVERAGE IS AVAILABLE FROM THE DEPARTMENT OF HEALTH, CLEAN WATER BRANCH AT [HTTP://HEALTH.HAWAII.GOV/CWB](http://health.hawaii.gov/cwb). THE OWNER/DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR OBTAINING OTHER FEDERAL, STATE, OR LOCAL AUTHORIZATIONS AS REQUIRED BY LAW.
9. WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY EARTH MOVING PHASE OF THE GRADING IS INITIATED.
10. TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
11. IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.
12. 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 KAUAI POLICE DEPARTMENT, THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES-HISTORIC PRESERVATION DIVISION (692-8015). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM THE CIVIL ENGINEERING BRANCH, D.P.P. (768-8084); AND FOR CITY PROJECTS, NOTIFY THE RESPONSIBLE CITY AGENCY.
13. ALL GRADING AND CONSTRUCTION WORK SHALL IMPLEMENT MEASURES TO ENSURE THAT THE DISCHARGE OF POLLUTANTS FROM THE CONSTRUCTION SITE WILL BE REDUCED TO THE MAXIMUM EXTENT PRACTICABLE AND WILL NOT CAUSE OR CONTRIBUTE TO AN EXCEEDANCE OF WATER QUALITY STANDARDS.
14. NON-COMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHALL COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE VIOLATOR. FURTHERMORE, VIOLATORS SHALL BE SUBJECT TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.
15. FOR BENCH MARK, SEE SHEET C1.

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