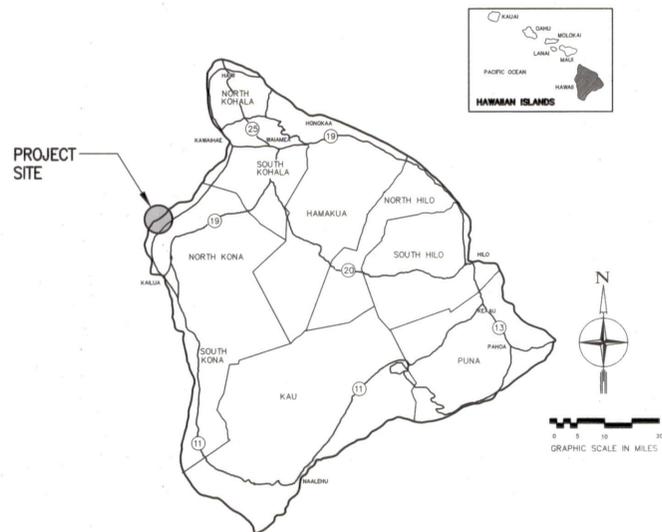


STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 ENGINEERING DIVISION
 FOR
 DIVISION OF STATE PARKS

JOB NO. H87C836B

KEKAHA KAI STATE PARK ACCESS ROAD IMPROVEMENTS

NORTH KONA, HAWAII
 TMK: 3rd. DIV. 7-2-005: 002 & 003
 TMK: 3rd. DIV. 7-3-043: 001



ISLAND OF HAWAII
 NOT TO SCALE

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- C-2 TO C-8 ACCESS ROAD PLAN AND PROFILE
- C-9 PHOTO LOG OF ROAD REPAIR AREAS
- C-10 TYPICAL SECTIONS AND MISCELLANEOUS DETAILS

APPROVED:

C. Cottrell 4.25.16

 CURT A. COTTRELL
 ADMINISTRATOR
 DIVISION OF STATE PARKS
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 DATE

C. Chang 4/25/16

 CARTY S. CHANG, P.E.
 CHIEF ENGINEER,
 ENGINEERING DIVISION
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 DATE

 DIRECTOR, DEPARTMENT OF PUBLIC WORKS
 COUNTY OF HAWAII
 DATE

C:\UPROD\2015\15-008-MAUI\04-KEKAHA-KAI STATE PARKS\KAI ACCESS ROAD\CAD\DWG\SHEETS\2130986-T.DWG SCALE=1:1

JOB NO. H87C836B, KEKAHA KAI STATE PARK, ACCESS ROAD IMPROVEMENTS

CONSTRUCTION NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE COUNTY OF HAWAII DEPARTMENT OF PUBLIC WORKS "STANDARD DETAILS" DATED SEPT. 1984, "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" DATED SEPT. 1986, AS AMENDED, AND ALL OTHER PUBLICATIONS REFERENCED IN THE TECHNICAL SPECIFICATIONS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS TO ENSURE PROPER ACCEPTANCE OF THE WORK. IF AT ANY TIME DURING CONSTRUCTION A DISCREPANCY OR CONFLICT IS DISCOVERED, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE STATE IMMEDIATELY. THE CONTRACTOR SHALL NOT PROCEED WITH THE CONSTRUCTION UNTIL THE DISCREPANCY OR CONFLICT HAS BEEN RESOLVED, AS DETERMINED BY THE STATE.
- ANY UTILITIES OR STRUCTURES THAT ARE DAMAGED BY THE CONTRACTOR DURING PROGRESS OF THE WORK, WHETHER SHOWN OR NOT IN THE CONTRACT DOCUMENTS, SHALL BE REPAIRED TO ITS ORIGINAL CONDITION OR BETTER AT NO ADDITIONAL COST TO THE STATE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE STATE OF ANY DAMAGES.
- ALL WORK NOT CALLED FOR ON THE PLANS BUT REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO OTHER CONTRACT ITEMS.
- 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, THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES-HISTORIC PRESERVATION DIVISION (692-8015). IN ADDITION, THE CONTRACTOR SHALL INFORM THE ENGINEERING DIVISION, DEPARTMENT OF PUBLIC WORKS (961-8327) AND THE CONTRACTING OFFICER.
- THE CONTRACTOR SHALL SUBMIT THEIR TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO ANY WORK, AND SHALL COORDINATE ANY ROAD CLOSURES WITH DLNR. CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- AT THE END OF EACH DAY'S WORK THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND OTHER OBSTRUCTIONS TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY ACCESSIBLE ROUTES AROUND CONSTRUCTION IN ACCORDANCE WITH ADAAG 4.1.1(4). CONTRACTOR SHALL COORDINATE REPAIR OF ANY DAMAGED ACCESSIBLE ROUTES WITH THE STATE AND IN ACCORDANCE WITH ADAAG 4.3.1. THE CONTRACTOR SHALL SUBMIT AN ACCESSIBLE ROUTE PLAN TO THE STATE.
- BACKGROUND BASED ON THE FOLLOWING REFERENCE DRAWINGS: "KEKAHA KAI STATE PARK ENTRY ROAD IMPROVEMENTS", DLNR JOB NO. H87B836B. BACKGROUNDS GENERATED FROM REFERENCE DRAWINGS ARE APPROXIMATE ONLY, CONTRACTOR TO VERIFY EXISTING CONDITIONS.
- THE IMPROVEMENT AREAS SHOWN IN THESE PLANS ARE APPROXIMATE BASED ON VISUAL INSPECTION AND ROUGH FIELD MEASUREMENTS. CONTRACTOR SHALL MARK THE LOCATIONS INDICATED ON THE PLANS FOR DLNR REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION. DLNR MAY RECOMMEND ADJUSTMENTS TO THE IMPROVEMENT AREAS IN THE FIELD AS NEEDED.
- THE ACCESS ROAD SHALL BE OPEN TO THE PUBLIC ON SATURDAY AND SUNDAY, AND SHALL NOT BE CLOSED MORE THAN THIRTY (30) WORKING DAYS. THE CONTRACTOR SHALL CLEAN UP THE ACCESS ROAD BY THE END OF THE WORKING DAYS PRIOR TO THE DAYS OPEN TO THE PUBLIC.
- NO CONSTRUCTION WORK SHALL BE PERMITTED DURING THE FOLLOWING PERIODS (COORDINATE WITH DLNR):
 - IRONMAN WEEK.
 - SPRING BREAK.
 - THANKSGIVING TO NEW YEAR.
- PRIOR TO BEGINNING CONSTRUCTION WORK, CONTRACTOR SHALL CONTACT TRACY TAM-SING OF DLNR ARCHAEOLOGY BRANCH TO COORDINATE ARCHAEOLOGICAL MONITORING FOR THE DURATION OF CONSTRUCTION.

EROSION AND SEDIMENT CONTROL NOTES

- CONSTRUCTION MANAGEMENT TECHNIQUES**
- CLEARING AND GRUBBING SHALL BE HELD TO THE MINIMUM NECESSARY FOR GRADING AND EQUIPMENT OPERATION. LIMITS OF THE CLEARING AND GRUBBING SHALL BE STAKED PRIOR TO THE START OF CONSTRUCTION.
 - CONSTRUCTION SHALL BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF THE CLEARED SURFACE AREA.
 - CONSTRUCTION SHALL BE STAGED OR PHASED FOR LARGE PROJECTS. AREAS OF ONE PHASE SHALL BE STABILIZED BEFORE ANOTHER PHASE IS INITIATED. STABILIZATION SHALL BE ACCOMPANIED BY TEMPORARILY OR PERMANENTLY PROTECTING THE DISTURBED SOIL SURFACE FROM RAINFALL IMPACTS AND RUNOFF.
 - EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATIONS BEGIN. THESE MEASURES SHALL BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. PERMANENT RETENTION AREAS SHOULD BE CONSTRUCTED PRIOR TO ANY OTHER CLEARING, GRUBBING, OR GRADING OPERATION. SILT FENCES SHALL BE INSTALLED ALONG THE ENTIRE DOWNSLOPE SIDE OF THE ACTIVE CONSTRUCTION ZONE IN AREAS WHERE ON-SITE RUNOFF FLOWS OFF THE PROJECT SITE.
 - ALL 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 PROLONGED RAINFALL, DAILY CHECKING IS NECESSARY. THE PERMITTEE SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS.
 - THE PERMITTEE SHALL MAINTAIN RECORDS OF THE DURATION AND ESTIMATED VOLUME OF STORM WATER DISCHARGE(S).
 - A SPECIFIC INDIVIDUAL SHALL BE DESIGNATED TO BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS ON EACH PROJECT SITE.
 - NO HYDRO-TESTING EFFLUENT SHALL BE DISPOSED OF OFF-SITE.

VEGETATION CONTROLS

- PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN TWENTY CALENDAR DAYS PRIOR TO LAND DISTURBANCE.
- TEMPORARY SOIL STABILIZATION WITH APPROPRIATE VEGETATION SHALL BE APPLIED ON AREAS THAT WILL REMAIN UNFINISHED FOR MORE THAN THIRTY CALENDAR DAYS.
- PERMANENT SOIL STABILIZATION WITH PERENNIAL VEGETATION OR PAVEMENT SHALL BE APPLIED AS SOON AS PRACTICAL AFTER FINAL GRADING. IRRIGATION AND MAINTENANCE OF THE PERENNIAL VEGETATION SHALL BE PROVIDED FOR NINETY CALENDAR DAYS OR UNTIL THE VEGETATION TAKES ROOT, WHICHEVER IS SHORTER.

STRUCTURAL CONTROLS

- STORM WATER FLOWING TOWARD THE CONSTRUCTION AREA SHALL BE DIVERTED BY USING APPROPRIATE CONTROL MEASURES, AS PRACTICAL.
- EROSION CONTROL MEASURES SHALL BE DESIGNED ACCORDING TO THE SIZE OF DISTURBED OR DRAINAGE AREAS TO DETAIN RUNOFF AND TRAP SEDIMENT AND APPROVED BY THE DESIGNER OF RECORD.
- WATER MUST BE DISCHARGED IN A MANNER THAT THE DISCHARGE SHALL NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE BASIC WATER QUALITY CRITERIA AS SPECIFIED IN SECTION 11-54-04 OF THE HAR.

GRADING NOTES

- ALL GRADING WORK SHALL CONFORM TO CHAPTER 10 OF THE HAWAII COUNTY CODE. SHOULD A GRADING PERMIT BE REQUIRED, NO WORK SHALL COMMENCE UNTIL THE DEPARTMENT OF PUBLIC WORKS (DPW) APPROVES A GRADING PERMIT.
- 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 SOD OR PLANT ALL SLOPES AND EXPOSED AREAS IMMEDIATELY AFTER THE GRADING WORK HAS BEEN COMPLETED, AS CALLED FOR IN THE PLANS.
- FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE KEYS.
- THE CONTRACTOR SHALL INFORM THE DPW 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 SATURDAYS, SUNDAYS AND HOLIDAYS ANYTIME WITHOUT PRIOR APPROVAL FROM THE DEPARTMENT OF PUBLIC WORKS. GRADING WORK ON NORMAL WORKING DAYS SHALL BE BETWEEN THE HOURS OF 7:00 AM TO 3:30 PM.
- FILLS SHALL BE COMPACTED TO 90 PERCENT (90%) OF MAXIMUM DENSITY PER ASTM D-1557 TEST.
- THE CONTRACTOR SHALL REMOVE ALL VEGETATION BEFORE PLACING FILLS ON NATURAL GROUND SURFACE.

GRADING NOTES, CONT'D.

- CONTRACTOR SHALL PREPARE AND SUBMIT THE SITE SPECIFIC BEST MANAGEMENT PRACTICES PLAN AND ALL OTHER MATERIALS NECESSARY FOR COMPLETION OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO THE DEPT. OF HEALTH, CLEAN WATER BRANCH AT LEAST 30 DAYS PRIOR TO THE START OF CONSTRUCTION. GROUND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL THE PERMIT IS ISSUED AND SHALL BE PERFORMED ONLY WITHIN THE AREAS IDENTIFIED, IN ACCORDANCE WITH THE NPDES PERMIT.

EARTHWORK QUANTITIES

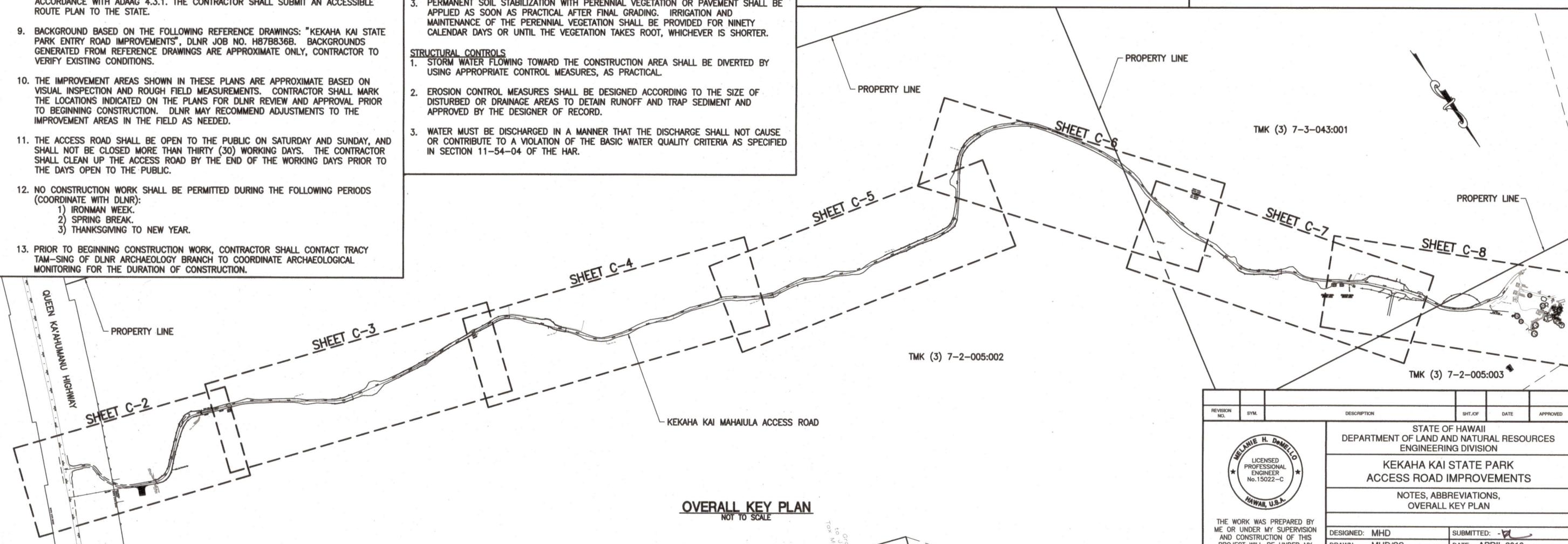
APPROX. TOTAL DISTURBED AREA (INC. ROAD REPAIR): 2 ACRES
 APPROX. DISTURBED AREA (OUTSIDE ROADWAY): 0.38 ACRES*
 APPROX. EXCAVATION/EMBANKMENT: N/A

* APPROX. BULLDOZING AND COMPACTION AREA FOR THE "ADDITIONAL PARKING AREAS" ADJACENT TO THE EXIST. ROADWAY.

EARTHWORK QUANTITIES SHOWN ARE FOR PERMIT PURPOSES ONLY; CONTRACTOR SHALL PERFORM THEIR OWN QUANTITY TAKE-OFF AND QUALITY ASSESSMENT.

ABBREVIATIONS

AC	ASPHALT CONCRETE
APPROX.	APPROXIMATE
CONT.	CONTINUATION
DLNR	DEPARTMENT OF LAND AND NATURAL RESOURCES
D.O.T.	DEPARTMENT OF TRANSPORTATION
ELEV.	ELEVATION
EXIST.	EXISTING
MIN.	MINIMUM
NO.	NUMBER
O.C.	ON CENTER
PVMT.	PAVEMENT
R.O.W.	RIGHT OF WAY
SCH.	SCHEDULE
SQ. FT.	SQUARE FEET
TMK	TAX MAP KEY
TP.	TYPICAL



IF THIS SHEET IS LESS THAN 34"x22", IT IS A REDUCED PRINT. SCALE REDUCED ACCORDINGLY.

OVERALL KEY PLAN
NOT TO SCALE

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED

MELANIE H. DANELLO
 LICENSED PROFESSIONAL ENGINEER
 No. 15022-C
 HAWAII, U.S.A.

STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 ENGINEERING DIVISION

**KEKAHA KAI STATE PARK
 ACCESS ROAD IMPROVEMENTS**

NOTES, ABBREVIATIONS,
 OVERALL KEY PLAN

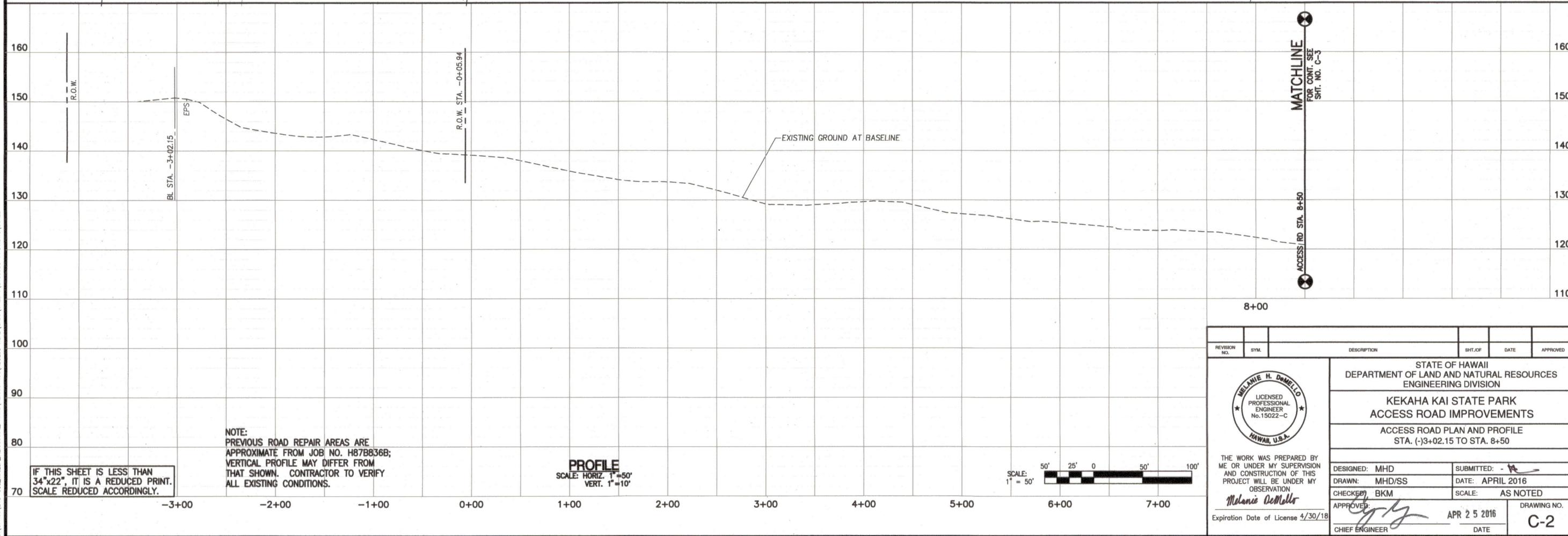
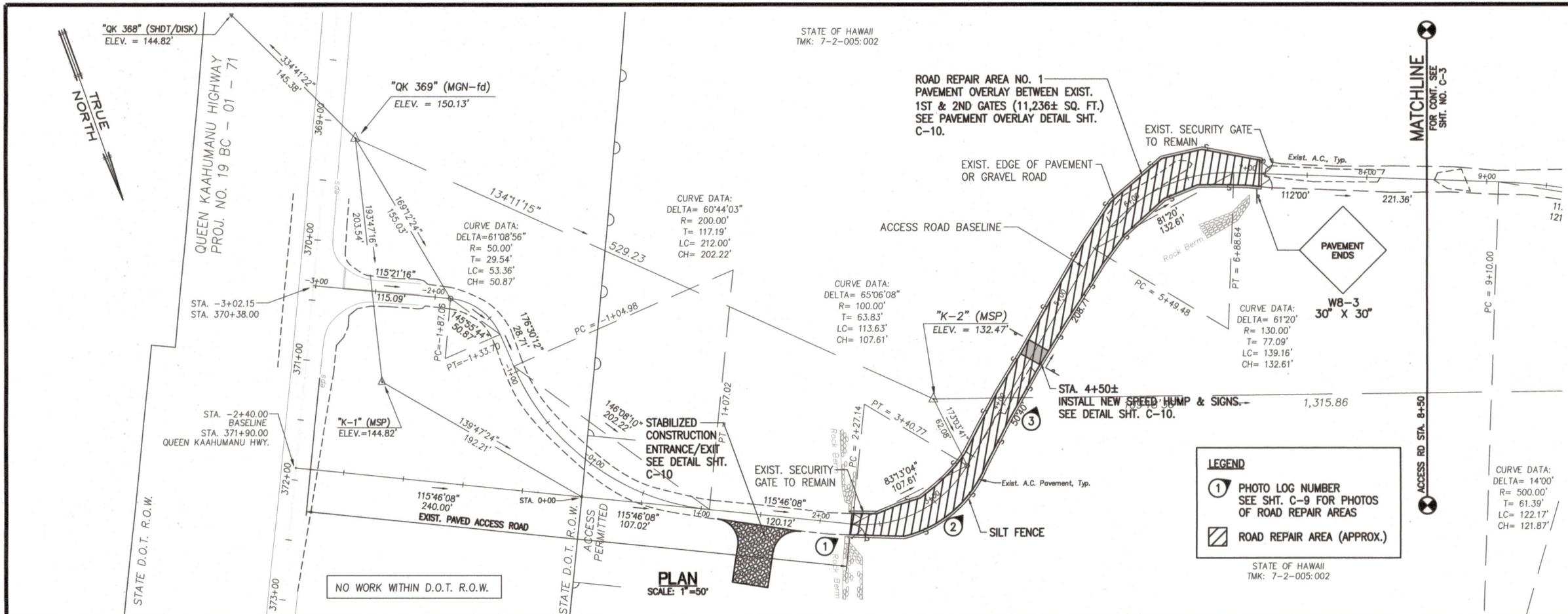
DESIGNED: MHD
 DRAWN: MHD/SS
 CHECKED: BKM
 APPROVED: *[Signature]*
 CHIEF ENGINEER

SUBMITTED: *[Signature]*
 DATE: APRIL 2016
 SCALE: AS NOTED
 APR 25 2016
 DATE:
 DRAWING NO. C-1

THE WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

Expiration Date of License 4/30/18

- NOTES:
- CONTRACTOR SHALL STAKE REPAIR AREAS FOR DLNR REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION. DLNR MAY RECOMMEND ADJUSTMENTS IN THE FIELD AS NEEDED.
 - ROAD LAYOUT INFORMATION (CURVE DATA, AZIMUTHS, ETC.) PROVIDED FOR REFERENCE ONLY.



REVISION NO.	SYMBOL	DESCRIPTION	SHT. OF	DATE	APPROVED

DESIGNED: MHD
DRAWN: MHD/SS
CHECKED: BKM
APPROVED: *Melanie DeMello*
CHIEF ENGINEER

SUBMITTED: -
DATE: APRIL 2016
SCALE: AS NOTED

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

**KEKAHA KAI STATE PARK
ACCESS ROAD IMPROVEMENTS**

ACCESS ROAD PLAN AND PROFILE
STA. (-)3+02.15 TO STA. 8+50

EXPIRATION DATE OF LICENSE 4/30/18

APR 25 2016

DATE

DRAWING NO. C-2

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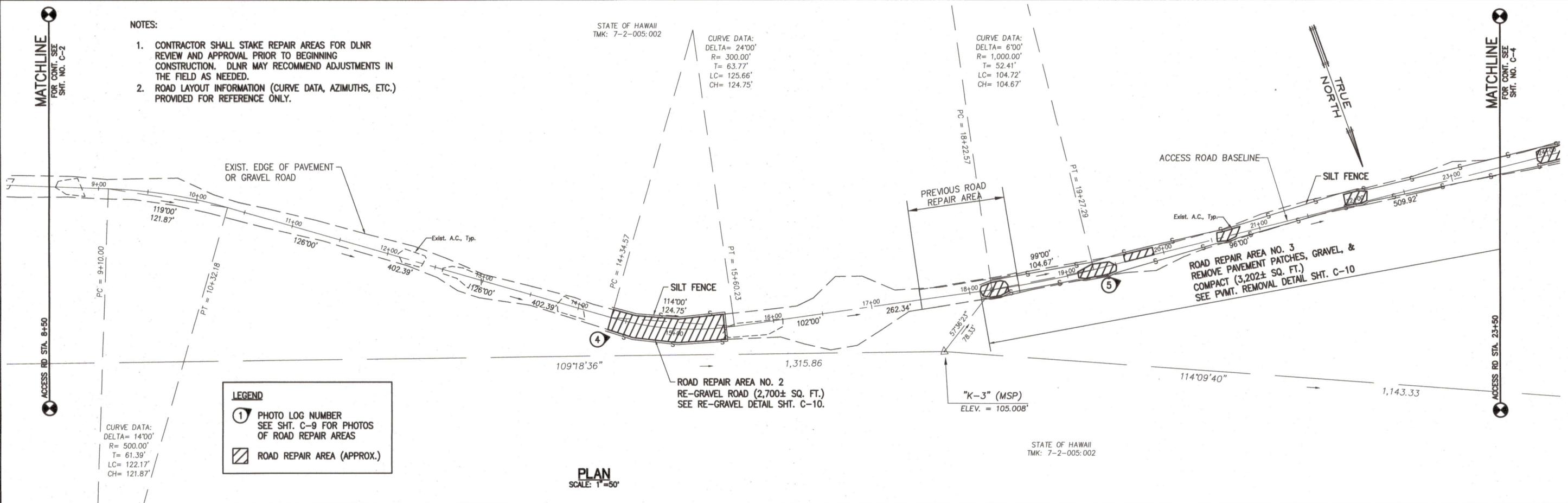
NOTES:

- CONTRACTOR SHALL STAKE REPAIR AREAS FOR DLNR REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION. DLNR MAY RECOMMEND ADJUSTMENTS IN THE FIELD AS NEEDED.
- ROAD LAYOUT INFORMATION (CURVE DATA, AZIMUTHS, ETC.) PROVIDED FOR REFERENCE ONLY.

STATE OF HAWAII
TMK: 7-2-005:002

CURVE DATA:
DELTA= 24'00"
R= 300.00'
T= 63.77'
LC= 125.66'
CH= 124.75'

CURVE DATA:
DELTA= 6'00"
R= 1,000.00'
T= 52.41'
LC= 104.72'
CH= 104.67'

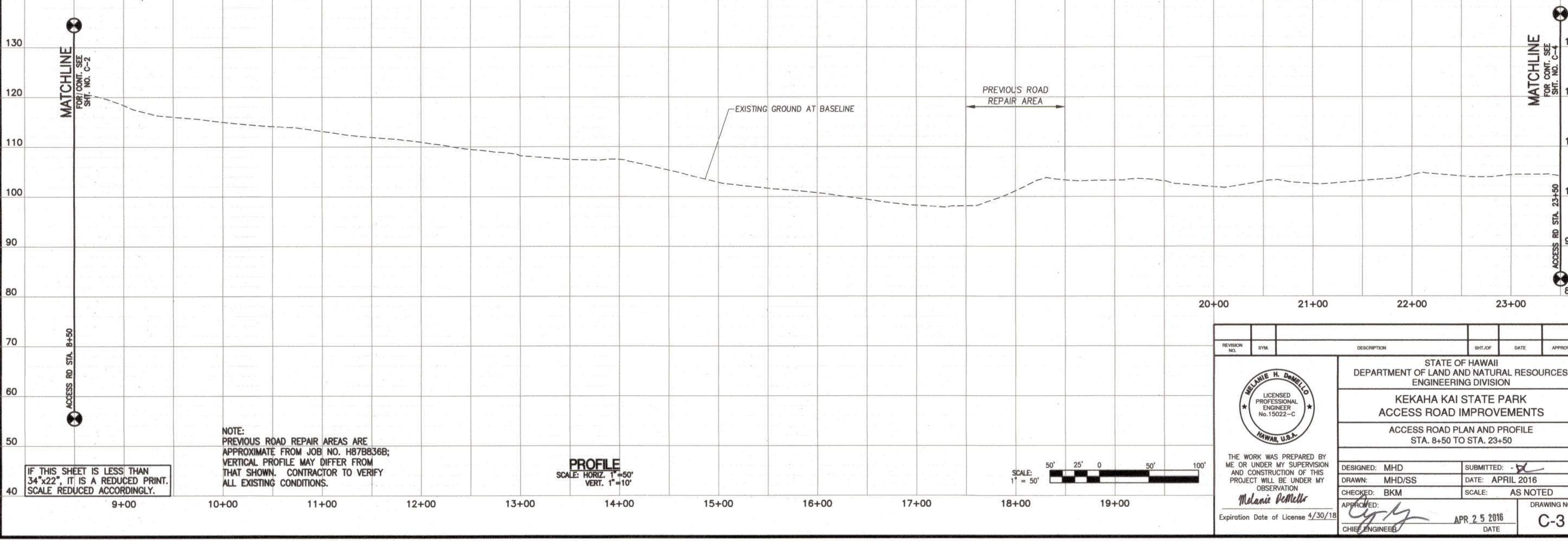


LEGEND

① PHOTO LOG NUMBER
SEE SHT. C-9 FOR PHOTOS
OF ROAD REPAIR AREAS

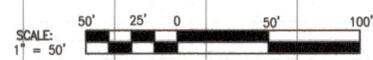
▨ ROAD REPAIR AREA (APPROX.)

PLAN
SCALE: 1"=50'



NOTE:
PREVIOUS ROAD REPAIR AREAS ARE
APPROXIMATE FROM JOB NO. H87B836B;
VERTICAL PROFILE MAY DIFFER FROM
THAT SHOWN. CONTRACTOR TO VERIFY
ALL EXISTING CONDITIONS.

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



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34"x22", IT IS A REDUCED PRINT.
SCALE REDUCED ACCORDINGLY.

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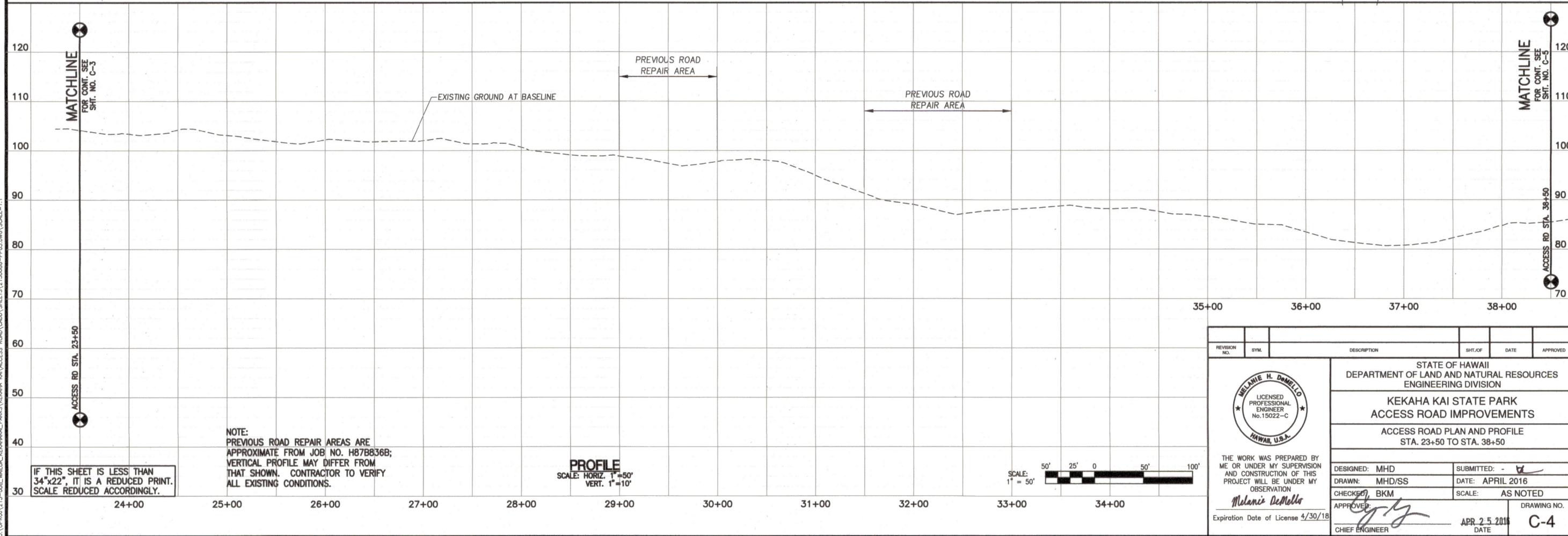
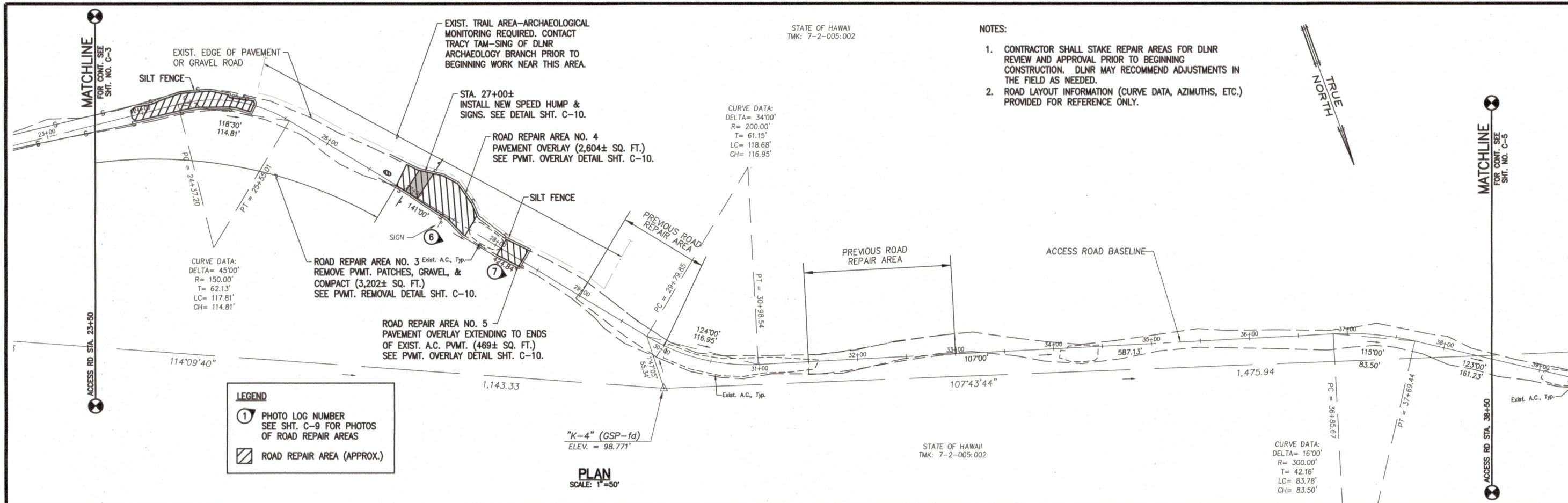
Melanie H. Donello
Professional Engineer
No. 15022-C
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

**KEKAHA KAI STATE PARK
ACCESS ROAD IMPROVEMENTS**

ACCESS ROAD PLAN AND PROFILE
STA. 8+50 TO STA. 23+50

DESIGNED: MHD	SUBMITTED: -
DRAWN: MHD/SS	DATE: APRIL 2016
CHECKED: BKM	SCALE: AS NOTED
APPROVED: <i>[Signature]</i>	DRAWING NO. C-3
Expiration Date of License 4/30/18	DATE: APR 25 2016



REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED

THE WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

Melanie H. Demello
CHIEF ENGINEER

Expiration Date of License 4/30/18

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

**KEKAHA KAI STATE PARK
ACCESS ROAD IMPROVEMENTS**

ACCESS ROAD PLAN AND PROFILE
STA. 23+50 TO STA. 38+50

DESIGNED: MHD
DRAWN: MHD/SS
CHECKED: BKM
APPROVED: *[Signature]*
CHIEF ENGINEER

SUBMITTED: -
DATE: APRIL 2016
SCALE: AS NOTED

DRAWING NO.
C-4