

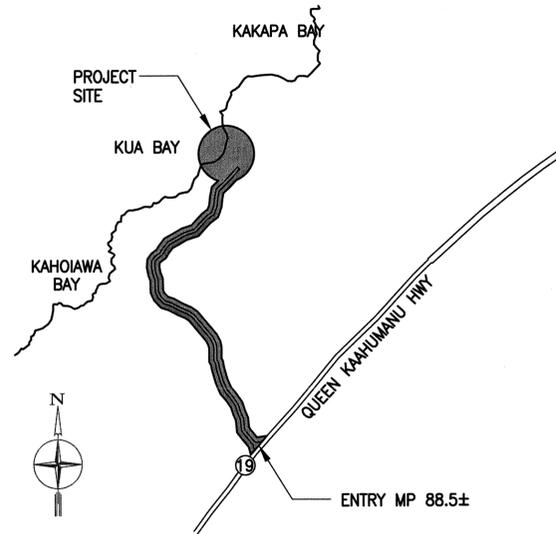
STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 ENGINEERING DIVISION
 FOR
 DIVISION OF STATE PARKS

JOB NO. H87C836C

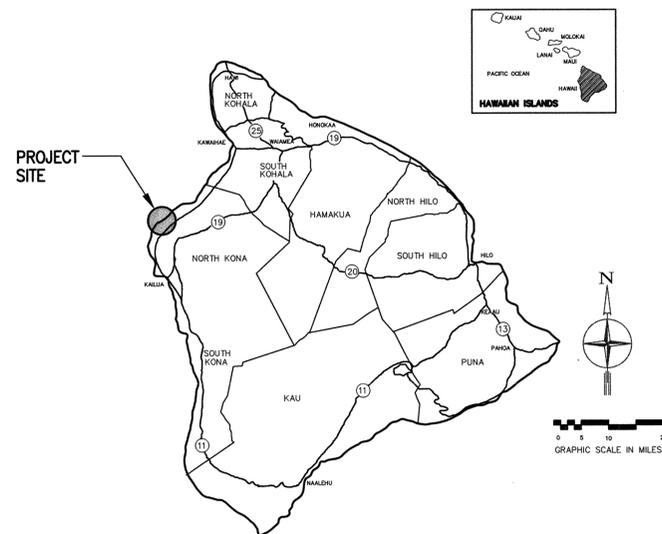
KEKAHA KAI STATE PARK KUA BAY IMPROVEMENTS

NORTH KONA, HAWAII

TMK: 3rd. DIV. 7-2-004: 009,017,019



LOCATION PLAN
NOT TO SCALE



ISLAND OF HAWAII
NOT TO SCALE

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APPROVED:

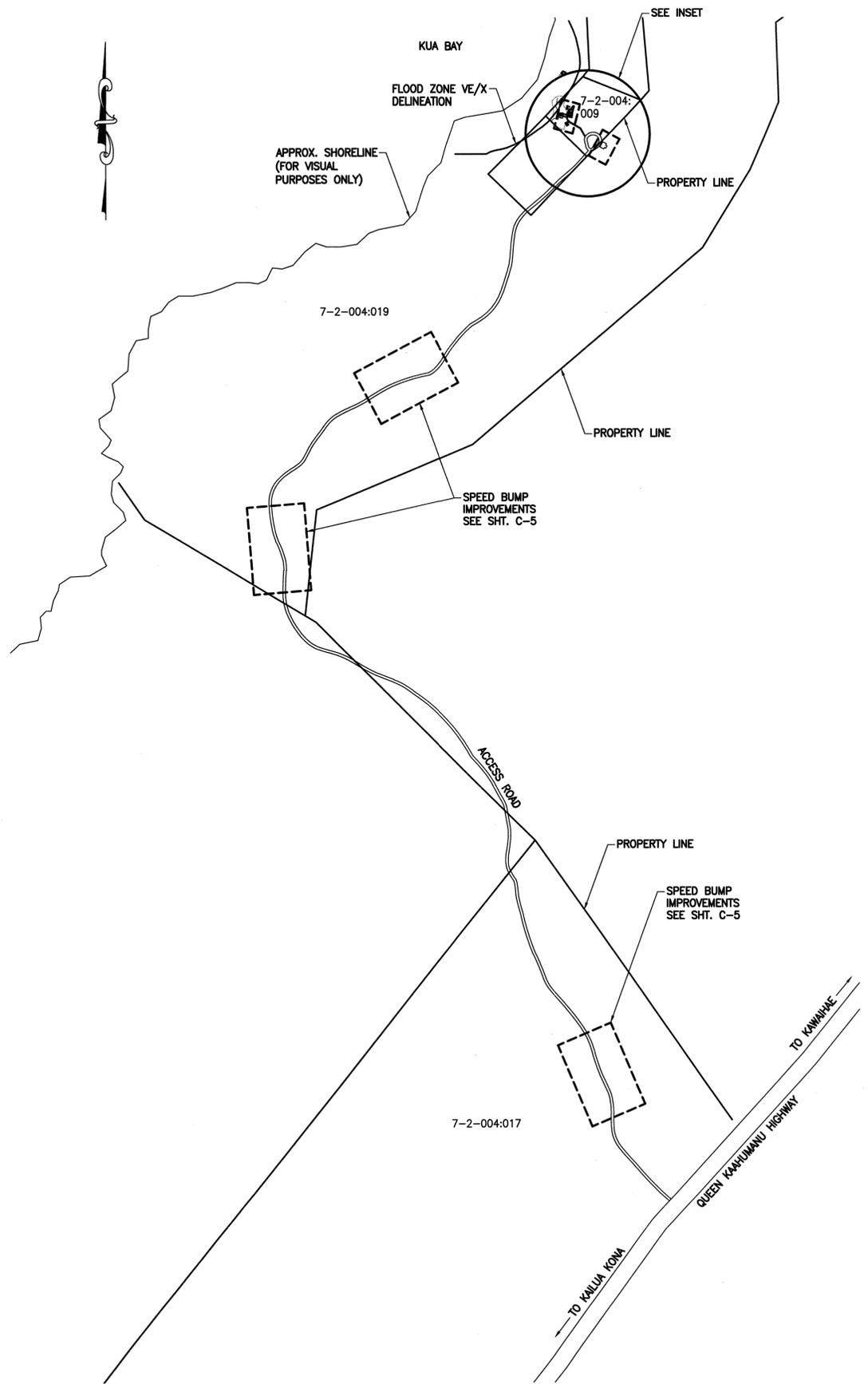
Curt A. Cottrell 4.26.16
 CURT A. COTTRELL DATE
 ADMINISTRATOR
 DIVISION OF STATE PARKS
 DEPARTMENT OF LAND AND NATURAL RESOURCES

Carty S. Chang 4/25/16
 CARTY S. CHANG P.E. DATE
 CHIEF ENGINEER,
 ENGINEERING DIVISION
 DEPARTMENT OF LAND AND NATURAL RESOURCES

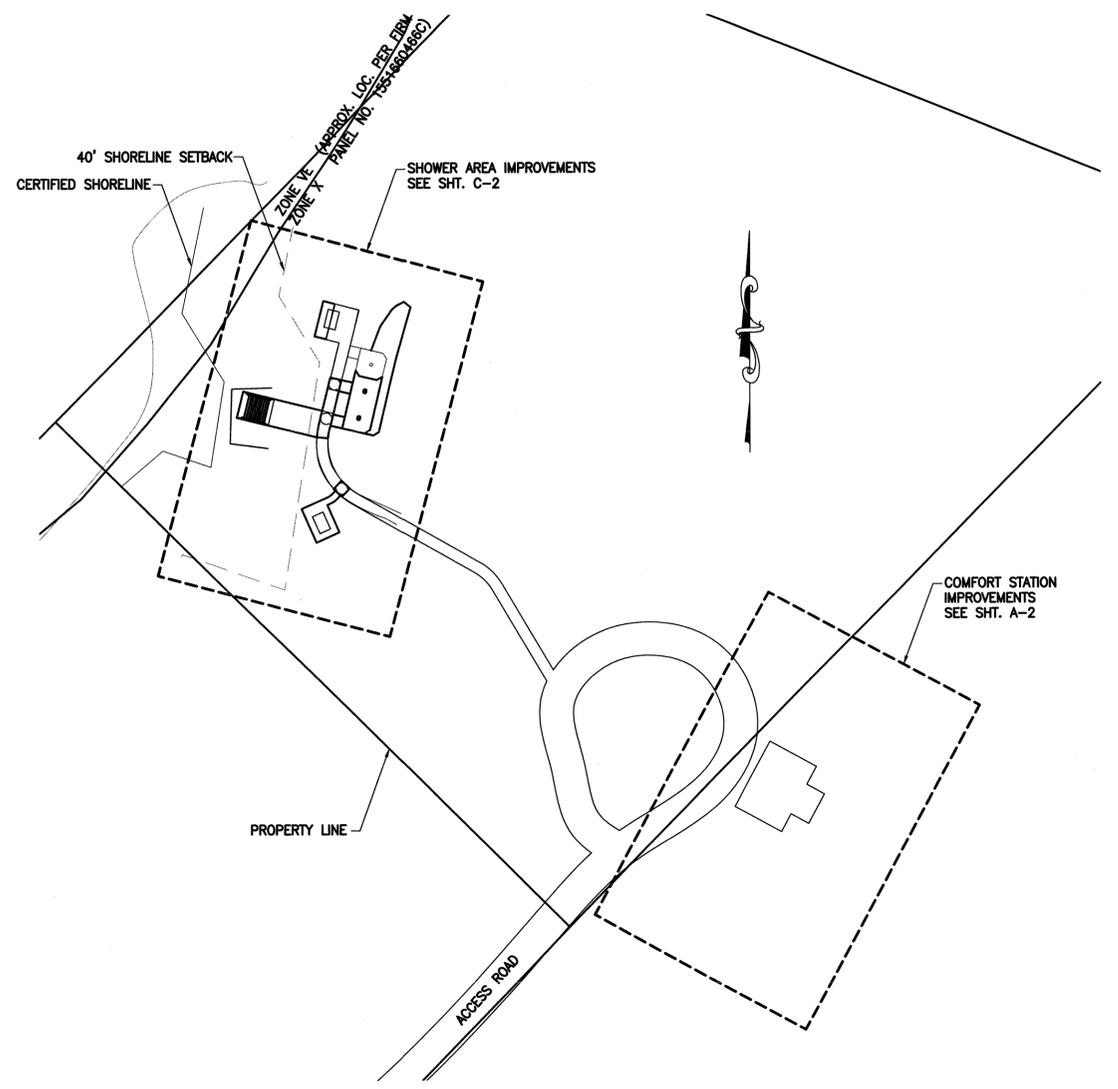
 DIRECTOR, DEPARTMENT OF PUBLIC WORKS DATE
 COUNTY OF HAWAII

C:\DPROA\2013\213-008_MALDIA\KEKAHA\KAI KUA BAY\CAD\DWG\SHEETS\2130836C-T.DWG SCALE=1:1

JOB NO. H87C836C; KEKAHA KAI STATE PARK; KUA BAY IMPROVEMENTS



GENERAL ARRANGEMENT PLAN
NOT TO SCALE



INSET
NOT TO SCALE

C:\UPROA\2013\213-008_MALCOLM KEKAHA KAI PARKS\KEKAHA KAI BAY\CADD\SHEETS\213008C-T2.DWG SCALE=1:1

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

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 DeMello
Melanie DeMello
Expiration Date of License 4/30/18

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

**KEKAHA KAI STATE PARK
KUA BAY IMPROVEMENTS**

GENERAL ARRANGEMENT PLAN

DESIGNED: MHD	SUBMITTED: <i>al</i>
DRAWN: SS/MHD	DATE: APRIL 2016
CHECKED: BKM	SCALE: AS NOTED
APPROVED: <i>[Signature]</i>	DATE: APR 25 2016
CHIEF ENGINEER	DATE

DRAWING NO.
T-2

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 TONE THE AREAS TO BE EXCAVATED TO ASCERTAIN THE LOCATION OF UNDOCUMENTED UTILITIES AND STRUCTURES AND VERIFY THE LOCATIONS OF THOSE IMPROVEMENTS SHOWN. THE COST OF TONING SHALL BE MADE A PART OF THE COST TO THE CONTRACT.
- 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.
- WHEN THE PLANS CALL FOR CONNECTION OF NEW UTILITIES TO EXISTING UTILITIES, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINE AT THE PROPOSED CONNECTION POINT TO VERIFY LOCATION AND INVERT ELEVATION PRIOR TO EXCAVATION FOR THE NEW UTILITIES.
- 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.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL ENSURE THAT ALL ROADWAYS REMAIN OPEN AND THAT ACCESS IS PROVIDED TO ALL BUILDINGS ADJACENT TO THE WORK AREA UNLESS OTHERWISE SPECIFIED.
- 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.
- THE COMFORT STATION RENOVATION WORK SHALL BE COMPLETED WITHIN 30 CALENDAR DAYS.
- THE CONTRACTOR SHALL PROVIDE ONE (1) ADA ACCESSIBLE AND THREE (3) STANDARD PORTABLE TOILETS FOR THE DURATION OF THE RESTROOM CLOSURE FOR THE RENOVATION. TOILETS SHALL BE SERVICED A MINIMUM OF FOUR (4) TIMES (MONDAY, WEDNESDAY, FRIDAY AND SATURDAY) A WEEK AND SHALL BE MAINTAINED IN ACCORDANCE WITH THE PUBLIC HEALTH REGULATIONS BY THE DEPARTMENT OF HEALTH. LOCATION OF THE PORTABLE TOILETS SHALL BE DETERMINED BY THE ENGINEER.
- ALL NEW EXTERIOR IMPROVEMENTS (PICNIC TABLES, SHOWERS, WALKWAYS, STAIRS) SHALL COMPLY WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, DEPARTMENT OF JUSTICE, DATED SEPTEMBER 15, 2010, AS WELL AS THE DRAFT FINAL ACCESSIBILITY GUIDELINES FOR OUTDOOR DEVELOPED AREAS DATED OCTOBER 2009.
- ALL REBAR SHALL BE EPOXY COATED.

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 KEYED.
- 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.

SURVEY NOTES

- TOPOGRAPHIC SURVEY PREPARED BY WES THOMAS ASSOCIATES, DATED MAY 31, 2013 AND REVISED DATE MAY 30, 2014 (ADDITIONAL TOPO).
- AZIMUTHS AND COORDINATES ARE REFERRED TO GOVERNMENT SURVEY TRIANGULATION STATION "KUIL" Δ .
- THE FEATURES, SHOWN HEREON, WERE LOCATED BY AN ACTUAL SURVEY ON THE GROUND DONE BETWEEN MAY 10, 2013 AND APRIL 25, 2014.
- AS PER THE SCOPE OF WORK, ONLY TREES WITH TRUNK DIAMETERS OF 0.5 FT AND GREATER WERE LOCATED.
- SHORELINE SURVEY PREPARED BY WES THOMAS ASSOCIATES, DATED SEPTEMBER 30, 2014 AND CERTIFIED BY DLNR LAND DIVISION ON FEBRUARY 18, 2015.

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.

ENVIRONMENTAL PROTECTION NOTES

- STATE OF HAWAII, DEPARTMENT OF LAND AND NATURAL RESOURCES, STATE PARKS ARCHAEOLOGY BRANCH HAS DETERMINED THAT ARCHAEOLOGICAL SITES EXIST ON THE PROJECT SITE. THE CONTRACTOR SHALL CONTACT TRACY TAM-SING OF THE ARCHAEOLOGY BRANCH PRIOR TO CONSTRUCTION, AND SHALL FOLLOW ALL REQUIREMENTS OF THESE DOCUMENTS TO PROTECT SAID ARCHAEOLOGICAL SITES. THE CONTRACTOR SHALL NOT REMOVE, MODIFY, OR DAMAGE ANY ARCHAEOLOGICAL SITE IDENTIFIED TO BE PROTECTED DURING THE COURSE OF THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ANY NEGATIVE IMPACTS TO SUCH SITES CAUSED BY THE CONSTRUCTION WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING HIS/HER OWN OPERATIONS SO AS NOT TO IMPACT ENVIRONMENTALLY SENSITIVE WATER BODIES (THE OCEAN AND ANY PONDS) IN THE VICINITY OF THE PROPOSED IMPROVEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO KNOW THE LOCATIONS OF THE CERTIFIED SHORELINE, SHORELINE SET BACK, TIDAL FLUCTUATION ZONES, AND TO ENSURE THAT ALL OPERATIONS WITHIN THESE AREAS COMPLY WITH APPLICABLE REGULATIONS AND DO NOT ADVERSELY IMPACT THESE WATER BODIES. THE CONTRACTOR SHALL ENSURE THAT NO DEBRIS OR SILT RUNOFF IS DEPOSITED INTO THE OCEAN OR ANY EXISTING POND ON THE PROJECT SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REMEDIATION MEASURES NECESSARY TO MITIGATE WATER POLLUTION CAUSED BY THE CONTRACTOR'S OPERATIONS.
- SPECIAL MANAGEMENT AREA (SMA) USE PERMIT: CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE SMA PERMIT.

ABBREVIATIONS

AC	ASPHALT CONCRETE
ADA	AMERICANS WITH DISABILITIES ACT
APPROX.	APPROXIMATE
BOS	BOTTOM OF SWALE
BS	BOTTOM OF STAIR
BTWN.	BETWEEN
CLR.	CLEAR
CONC.	CONCRETE
CRM	CEMENT RUBBLE MASONRY
D	TRUNK DIAMETER
EQ. SP.	EQUAL SPACING
E.W.	EACH WAY
EXIST.	EXISTING
H	HEIGHT
MAX.	MAXIMUM
MIN.	MINIMUM
NTS	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTER DIAMETER
PSI	POUNDS PER SQUARE INCH
RET.	RETAINING
S	CANOPY SPREAD DIAMETER
SHT.	SHEET
TS	TOP OF STAIR
TYP.	TYPICAL

0:\SPRWA\2013\1215-008-1\LOCAL\KEKAHA\KAI PARK\KUA BAY\CAO\130808C-C1.DWG SCALE=1:1

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

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
KEKAHA KAI STATE PARK KUA BAY IMPROVEMENTS					
CIVIL NOTES					
DESIGNED: MHD	SUBMITTED: <i>gc</i>				
DRAWN: SS/MHD	DATE: APRIL 2016				
CHECKED: BKM	SCALE: AS NOTED				
APPROVED: <i>Melanie DeMello</i>	DATE: APR 25 2016		DRAWING NO. C-1		
Exp. Date of License 4/30/18		DATE			

NOTES:

1. ALL IMPROVEMENTS SHOWN ON THIS SHEET (OUTDOOR SHOWER, WALKWAY, STAIRS, AND PICNIC TABLE PADS) SHALL BE ACCESSIBLE AND CONSTRUCTED IN ACCORDANCE WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, DEPARTMENT OF JUSTICE, DATED SEPTEMBER 15, 2010, AS WELL AS THE DRAFT FINAL ACCESSIBILITY GUIDELINES FOR OUTDOOR DEVELOPED AREAS DATED OCTOBER 2009.
2. VERTICAL CHANGES IN LEVEL ALONG ACCESSIBLE ROUTES SHALL NOT BE GREATER THAN 1/4 INCH, IN ACCORDANCE WITH ADA STANDARDS.
3. APPROXIMATE EXTENT OF NEW CRM RETAINING WALL TO BE CONSTRUCTED UNDER STAIRWAY. SEE DETAIL SHT. C-4.
4. EXISTING WALKWAY SHALL BE RECONSTRUCTED AS NECESSARY TO PROVIDE A 60" DIAMETER ACCESSIBLE TURNING SPACE (1:48 MAX SLOPE ALL DIRECTIONS) FOR THE PROPOSED IMPROVEMENTS.

LEGEND

-  NEW CONCRETE
-  SILT FENCE
-  ORANGE FENCING (FOR ARCHAEOLOGICAL SITE PROTECTION)
-  60" DIAMETER ACCESSIBLE TURNING SPACE (1:48 MAX. SLOPE)

INSTALL TEMPORARY ORANGE CONSTRUCTION FENCING TO PROTECT ARCHAEOLOGICAL SITES (5' BEYOND EXIST. CRM RAMP ON NORTH SIDE, 10' BEYOND ON OTHER SIDES). ORANGE FENCING TO REMAIN DURING ENTIRE DURATION OF DEMOLITION WORK. NO CONSTRUCTION WORK SHALL OCCUR OUTSIDE OF ORANGE FENCE. CONTACT TRACY TAM-SING OF DLNR ARCHAEOLOGY BRANCH PRIOR TO INSTALLATION OF FENCING.

NEW ACCESSIBLE CONC. STAIRS WITH HANDRAILS SEE DETAIL SHT. C-4 CONTRACTOR SHALL STAKE LAYOUT AND VERIFY WITH DLNR PRIOR TO CONSTRUCTION

14.03 (CUT DOWN EXIST. LAVA ROCK AND GRADE TO MATCH NEW STAIRWAY)

CUT BACK EXIST. LAVA ROCK OUTCROP FOR NEW STAIRWAY, 1:1 MAXIMUM CUT SLOPE

EXIST. PICNIC TABLE TO REMAIN (LOCATION AND SIZE SHOWN ARE APPROXIMATE)

TO OCEAN SHORELINE NOT CERTIFIED SEE SHT. T-2
 LOT B 21.19 ACRES
 ZONE VE (APPROX. LOC. PER FIRM ZONE X PANEL NO. 1551660466C)

EXIST. PICNIC TABLE TO BE RELOCATED AS DIRECTED BY THE STATE (LOCATION AND SIZE SHOWN ARE APPROXIMATE)

EXIST. TREE TO REMAIN

EXIST. ROCK WALL TO REMAIN CONTRACTOR SHALL NOT DAMAGE OR UNDERMINE EXIST. WALL DURING CONSTRUCTION

EXIST. CRM RAMP TO BE REMOVED

EXIST. TREE TO REMAIN

NEW ACCESSIBLE CONC. WALKWAY SEE DETAIL SHT. C-4

40' SHORELINE SETBACK (SHORELINE CERTIFIED)

EXIST. 5' WIDE CONC. WALKWAY

NEW ACCESSIBLE PICNIC TABLE AND CONC. PAD EXTEND EXIST. CONC. PAD SEE CONC. PAD DETAIL SHT. C-4 & TABLE DETAIL SHT. A-3

APPROX. EXIST. FLOW PATH TO BE COVERED BY CONC. SWALE. EXTEND CONC. 2'± BEYOND EXIST. FLOW PATH.

EXIST. CONC. SHOWER PAD

END OF EXIST. ROCK WALL

NEW ACCESSIBLE OUTDOOR SHOWERS SEE DETAILS SHTS. C-3, P-1, & P-2

NEW CONC. SWALE SEE DETAIL SHT. C-3

SILT FENCE OR OTHER APPROVED TEMPORARY EROSION CONTROL MEASURE, TYP.

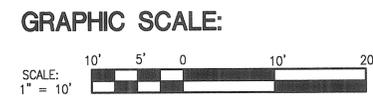
TEMPORARY BENCHMARK
 NAIL ON WALL
 3422.35 N
 1108.51 E
 ELEV.=22.21 (MSL)

NEW ACCESSIBLE PICNIC TABLE AND CONC. PAD (TYP. 2) SEE CONC. PAD DETAIL SHT. C-4 & TABLE DETAIL SHT. A-3

TIE NAIL TO NEW ADA PICNIC TABLE WALKWAY CONNECTION POINT 199°52'23" 32.11'

20.24± (MATCH EXIST., SEE NOTE 2)

TIE NAIL TO CORNER OF NEW OUTDOOR SHOWER 191°16'28" 60.69'



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

SITE PLAN
 SCALE: 1"=5'

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED



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

STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 ENGINEERING DIVISION

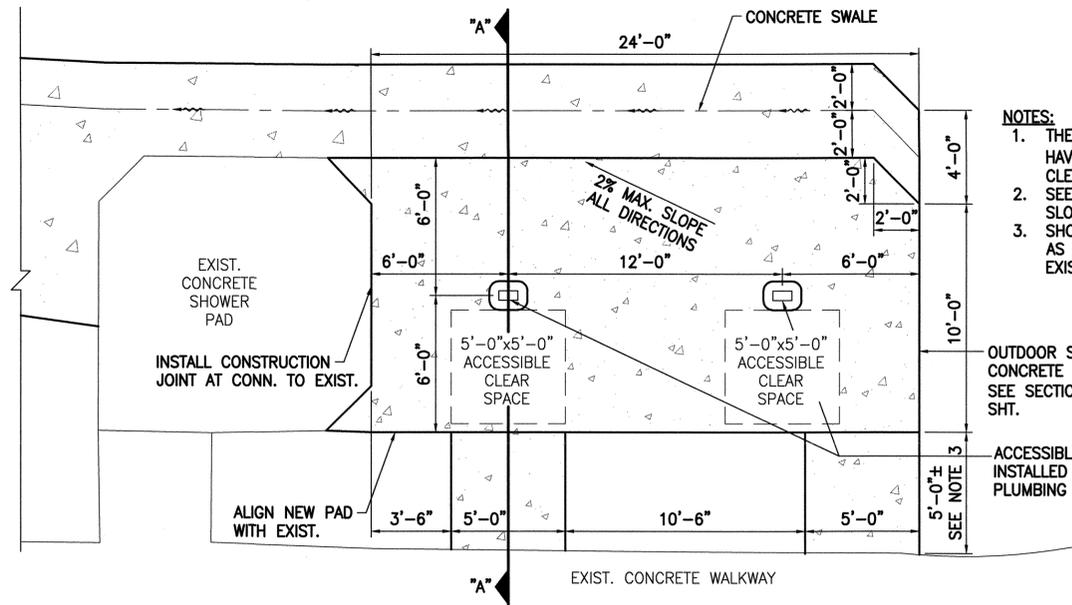
**KEKAHA KAI STATE PARK
 KUA BAY IMPROVEMENTS**

SITE PLAN

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

SUBMITTED: *[Signature]*
 DATE: APRIL 2016
 SCALE: AS NOTED
 APR 25 2016
 DATE

DRAWING NO. **C-2**



- NOTES:**
1. THE ACCESSIBLE SHOWER LOCATION SHALL HAVE A 5'-0" BY 5'-0" ACCESSIBLE CLEAR SPACE.
 2. SEE SITE PLAN FOR SPOT GRADES, SLOPES, AND OTHER INFORMATION. SHOWER PAD WALKWAY LENGTH SHALL BE AS NECESSARY TO CONNECT NEW PAD TO EXIST. WALKWAY.

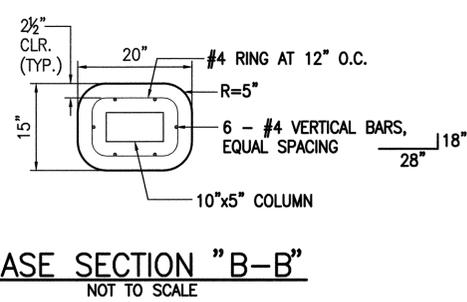
OUTDOOR SHOWER CONCRETE PAD
SEE SECTION "A-A" THIS SHT.

ACCESSIBLE SHOWER HEADS SHALL BE INSTALLED FACING EXIST. WALKWAY. SEE PLUMBING SHEETS FOR DETAILS.

OUTDOOR SHOWER CONCRETE PAD PLAN
NOT TO SCALE

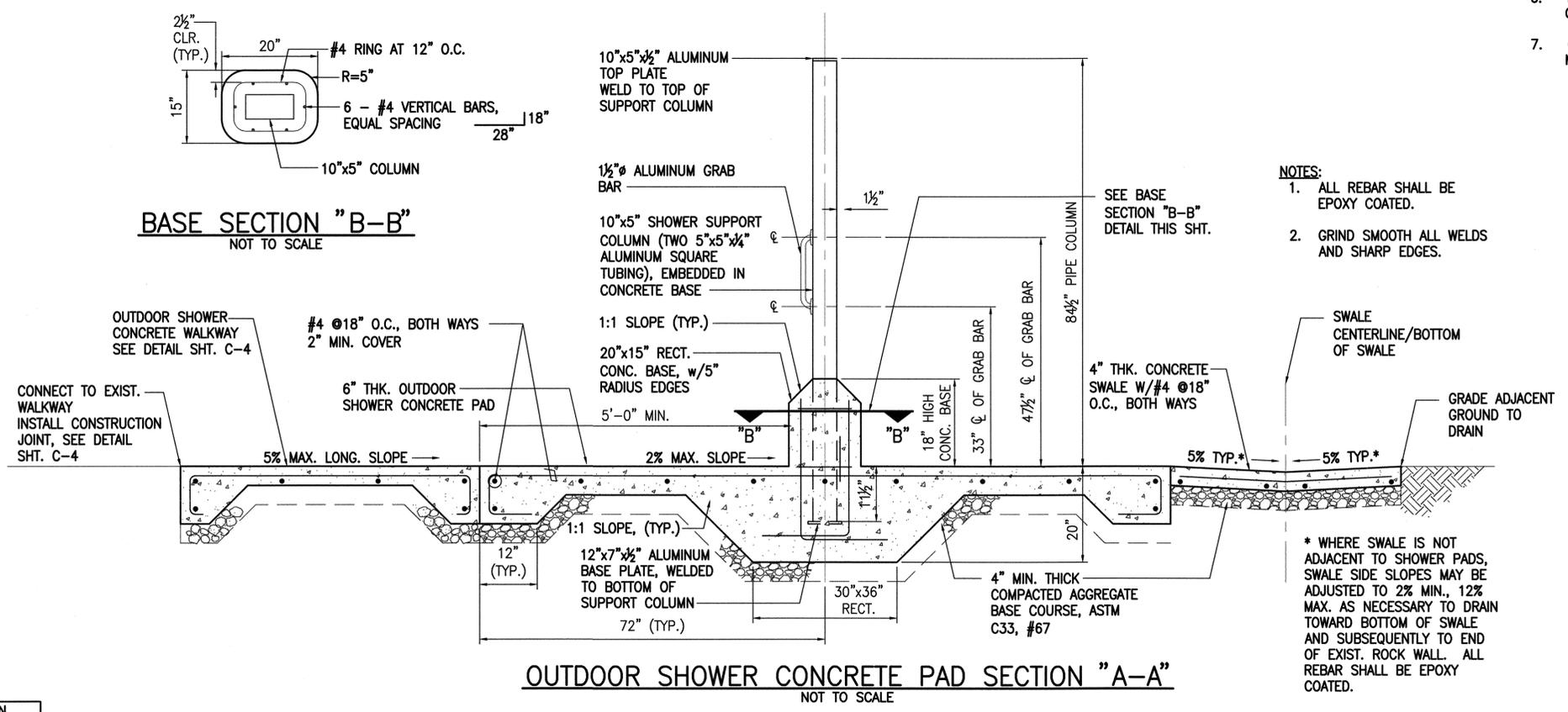
JOINT NOTES:

1. MAXIMUM SPACING BETWEEN ANY TWO CONSECUTIVE CONTROL JOINTS SHALL BE 5 FEET. CONTROL JOINTS SHALL BE PLACED IN THE LONGITUDINAL AND TRANSVERSE DIRECTIONS ON SIDEWALKS, AND AS SHOWN ON THE PLANS.
2. CONTROL JOINTS SHALL BE SAW CUT WITHIN 24 HOURS PRIOR TO PLACEMENT OF JOINT SEALANTS.
3. ALL SAW CUT JOINTS SHALL BE CLEAN AND FREE OF DIRT, DUST, AND WATER PRIOR TO PLACEMENTS OF JOINT SEALANT.
4. ALL CONTROL JOINTS SHALL BE STRAIGHT AND PERPENDICULAR TO CENTERLINE OF WALKWAY.
5. ALL EXTERIOR EXPOSED CONCRETE SHALL BE BROOM FINISHED, UNLESS OTHERWISE NOTED.
6. EXPANSION JOINTS SHALL BE PLACED AT 20 FEET MAX. SPACING, AT THE END OF CURB RETURNS, AND AS SHOWN ON THE PLANS.
7. CONSTRUCTION JOINTS SHALL BE PLACED AT ALL LOCATIONS WHERE NEW CONCRETE MATCHES EXISTING.



BASE SECTION "B-B"
NOT TO SCALE

- NOTES:**
1. ALL REBAR SHALL BE EPOXY COATED.
 2. GRIND SMOOTH ALL WELDS AND SHARP EDGES.



OUTDOOR SHOWER CONCRETE PAD SECTION "A-A"
NOT TO SCALE

* WHERE SWALE IS NOT ADJACENT TO SHOWER PADS, SWALE SIDE SLOPES MAY BE ADJUSTED TO 2% MIN., 12% MAX. AS NECESSARY TO DRAIN TOWARD BOTTOM OF SWALE AND SUBSEQUENTLY TO END OF EXIST. ROCK WALL. ALL REBAR SHALL BE EPOXY COATED.

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OUTDOOR SHOWER CONCRETE PAD DETAILS					
DESIGNED: MHD		SUBMITTED: <i>gc</i>		DATE: APRIL 2016	
DRAWN: SS/MHD		CHECKED: BKM		SCALE: AS NOTED	
APPROVED: <i>Melanie DeMello</i>		DATE: APR 25 2016		DRAWING NO. C-3	
CHIEF ENGINEER		DATE			