

STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 ENGINEERING DIVISION

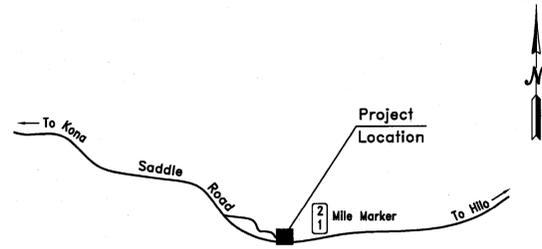
FOR

DIVISION OF FORESTRY AND WILDLIFE

JOB NO. D01CH65A

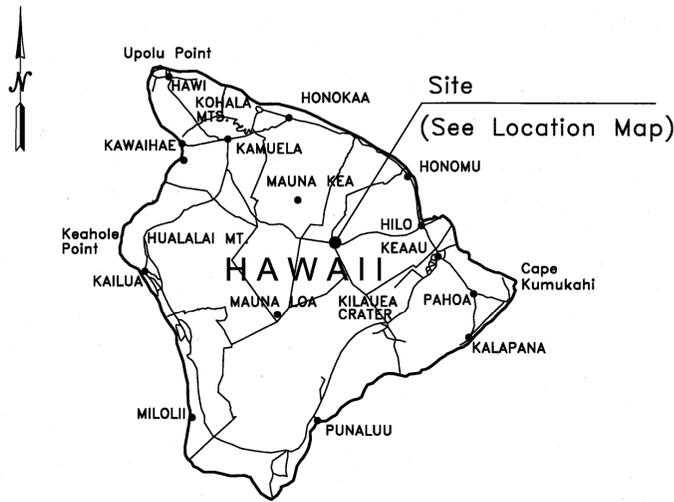
**KAULANA MANU NATIVE BIRD & PLANT SANCTUARY  
 VIEWING AREA AND PARKING LOT  
 KIPUKA 21, UPPER WAIAKEA FOREST RESERVE  
 SOUTH HILO, ISLAND OF HAWAI'I, HAWAI'I**

TMK: (3) 2-4-08 : 08



LOCATION MAP

NOT TO SCALE



VICINITY MAP

NOT TO SCALE

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APPROVED BY:

\_\_\_\_\_  
 DIRECTOR, PLANNING DEPARTMENT  
 COUNTY OF HAWAII

DATE

*Kelly James*  
 \_\_\_\_\_  
 DIRECTOR, DEPARTMENT OF PUBLIC WORKS  
 COUNTY OF HAWAII  
 (FOR GRADING PURPOSES ONLY)

4/18/16  
 DATE

*[Signature]*  
 \_\_\_\_\_  
 DAVID SMITH  
 ADMINISTRATOR  
 DIVISION OF FORESTRY AND WILDLIFE  
 DEPARTMENT OF LAND AND NATURAL RESOURCES

5/2/16  
 DATE

*[Signature]*  
 \_\_\_\_\_  
 CARY S. CHANG  
 CHIEF ENGINEER  
 ENGINEERING DIVISION  
 DEPARTMENT OF LAND AND NATURAL RESOURCES

5/3/16  
 DATE

**CONSTRUCTION NOTES:**

- ALL WORKS SHALL BE DONE IN ACCORDANCE WITH "HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2005" AND ITS AMENDMENTS, THE COUNTY OF HAWAII DEPARTMENT OF PUBLIC WORKS "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION", DATED SEPTEMBER 1984, AND "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" DATED SEPTEMBER 1986.
- THE ENGINEER RESERVES THE RIGHT TO MAKE CHANGES TO THE DRAINAGE SYSTEM AS SUCH CHANGES ARE FOUND TO BE NECESSARY AS THE LAND IS CLEARED AND EROSION CONTROL CONSTRUCTION PROGRESSES.
- ALL CONSTRUCTION LINES, GRADES AND SURVEY MONUMENT STAKEOUTS SHALL BE MADE BY LICENSED SURVEYORS.
- CONTRACTOR SHALL NOTIFY THE ENGINEER SUFFICIENTLY IN ADVANCE OF OPENING ANY OR UTILIZING EXISTING BORROW PITS OR ON SITE BORROW, SO THAT A DETERMINATION CAN BE MADE AS TO THE SUITABILITY OF THE BORROW MATERIAL TO BE INCORPORATED INTO THE ROAD CONSTRUCTION.
- THE CONTRACTOR SHALL CONDUCT ALL TESTS AS REQUESTED BY THE ENGINEER AND BE RESPONSIBLE FOR ALL EXPENSES INCURRED IN CONDUCTING THESE TESTS.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, AND SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF SAME IN THE EVENT OF DAMAGES DUE TO HIS CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE RESPECTIVE UTILITY COMPANIES.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL, DEVICES FOR STREETS AND HIGHWAYS", AND TO THE SATISFACTION OF THE ENGINEER.
- ELEVATIONS SHOWN ON THE PLANS ARE BASED ON VERTICAL CONTROL TAKEN FROM CONSTRUCTION PLAN FOR SADDLE ROAD PROJECT HI A-AD/STP 6(3) & 200(1) "ROAD WAY PLAN & PROFILE", SHEET D52. THE DESIGN ELEVATION OF BASELINE P.T. STATION 1050+83.40 WAS CALCULATED FROM THE PLAN PROFILE AND ADOPTED FOR SURVEY WORK.
- THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR UTILITIES SUCH AS ELECTRICITY, WATER, ETC. REQUIRED FOR HIS OPERATIONS AND ALL COSTS SHALL BE BORNE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER "AS BUILT" DRAWINGS OF ALL NEW UTILITIES AND STRUCTURES UPON COMPLETION OF WORK.
- DIMENSIONS TAKE PRECEDENCE OVER SCALE.
- IF DIMENSION ERRORS OR CONFLICTS OCCUR, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND THE CONSTRUCTION ENGINEER AND SHALL WAIT FOR CLARIFICATION BEFORE RESUMING OR COMMENCING WORK ON THE DISCREPANCY ITEM.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR REQUIRED PERMITS FROM APPROPRIATE GOVERNMENT AGENCIES.
- THE CONTRACTOR SHALL COORDINATE THE STORAGE OF HIS MATERIAL AND EQUIPMENT WITH THE OWNER'S REPRESENTATIVE.
- EXISTING UTILITY LOCATIONS ARE FROM CONSTRUCTION AS-BUILTS. CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
- CONTRACT LIMITS ARE 10 FEET OUTSIDE THOSE AREAS TO BE GRADED. THE CONTRACTOR SHALL RESTRICT HIS WORK ACTIVITIES, EQUIPMENTS AND MATERIALS TO WITHIN THE CONTRACT LIMITS, UNLESS PERMITTED BY OWNER'S REPRESENTATIVE.
- SHOULD ANY UNANTICIPATED ARCHEOLOGICAL SITES OR FEATURES BE UNCOVERED DURING LAND PREPARATION ACTIVITIES, WORK WITHIN THE AFFECTED AREA SHALL IMMEDIATELY CEASE AND THE PLANNING DEPARTMENT AND THE OWNER'S DESIGNATED REPRESENTATIVE NOTIFIED, NO WORK WITHIN THE AFFECTED AREA SHALL RESUME UNTIL CLEARANCE IS OBTAINED FROM THE PLANNING DEPARTMENT, THROUGH THE OWNER'S DESIGNATED REPRESENTATIVE.

**EROSION / TEMPORARY DUST CONTROL:**

- DURING CONSTRUCTION, PREVENTIVE MEASURES SHALL BE USED TO CONTROL FORESEEABLE DUST, EROSION OR SEDIMENTATION PROBLEMS WHICH MAY ARISE AS THE JOB PROGRESSES.
- DRAINAGE SYSTEMS AS SHOWN ON THE CONSTRUCTION PLANS SHALL BE CONSTRUCTED AS EARLY AS PRACTICALLY POSSIBLE
- THE CONTRACTOR SHALL CONDUCT HIS GRADING OPERATIONS SO THAT EXCAVATED, EMBANKMENT AND IMPORTED MATERIAL SHALL BE DAMPENED WITH WATER DURING HIS GRADING OPERATIONS AT ALL TIMES.
- WATER TRUCK AND/OR TEMPORARY SPRINKLERS SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES TO ENSURE BARE EARTH DOES NOT CREATE A DUST PROBLEM.
- FUGITIVE DUST AND SOLID WASTE DISPOSAL DURING GRUBBING AND GRADING ACTIVITIES SHALL MEET REQUIREMENTS OF ADMINISTRATIVE RULES, TITLE 11, CHAPTER 60, AIR POLLUTION CONTROL AND CHAPTER 56, SOLID WASTE MANAGEMENT CONTROL.

**ENVIRONMENTAL CONTROL NOTES:**

- IN ACCORDANCE WITH CHAPTER 11-60.1, AIR POLLUTION CONTROL, TITLE 11, HAWAII ADMINISTRATIVE RULES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT EFFECTIVE CONTROL MEASURES ARE PROVIDED TO MINIMIZE OR PREVENT ANY VISIBLE DUST EMISSION CAUSED BY THE CONSTRUCTION WORK FROM IMPACTING THE SURROUNDING AREAS INCLUDING THE OFF-SITE ROADWAYS USED TO ENTER/EXIT THE PROJECT. THESE MEASURES INCLUDE BUT ARE NOT LIMITED TO THE USE OF WATER WAGONS, SPRINKLER SYSTEMS, DUST FENCES, ETC.
- IN ACCORDANCE WITH CHAPTER 11-55, WATER POLLUTION CONTROL AND CHAPTER 11-54, WATER QUALITY STANDARDS, TITLE 11, HAWAII ADMINISTRATIVE RULES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE BEST MANAGEMENT PRACTICE (BMP) TO MINIMIZE OR PREVENT THE DISCHARGE OF SEDIMENTS, DEBRIS AND OTHER WATER POLLUTANT INTO STATE WATERS ARE PROVIDED AT ALL TIMES.
- IN ACCORDANCE WITH CHAPTER 11-58, SOLID WASTE MANAGEMENT CONTROL, TITLE 11 HAWAII ADMINISTRATIVE RULES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT GRUB MATERIAL, DEMOLITION WASTE AND CONSTRUCTION WASTE GENERATED BY THE PROJECT ARE DISPOSED OF IN A MANNER OR AT A SITE APPROVED BY THE STATE DEPARTMENT OF HEALTH. DISPOSAL OF ANY OF THESE WASTE BY BURNING IS PROHIBITED.
- THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS RESULTING FROM WORK AND DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COST INCURRED FOR ANY NECESSARY REMEDIAL ACTION BY THE COUNTY ENGINEER SHALL BE PAYABLE BY THE CONTRACTOR.
- BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE EMPLOYED AT ALL TIMES TO THE MAXIMUM EXTENT PRACTICABLE PREVENT DAMAGE BY SEDIMENTATION, EROSION OR DUST TO STREAMS, WATERCOURSE, NATURAL AREAS AND THE PROPERTY OF OTHERS.
- THE CONTRACTOR SHALL OBTAIN AND COMPLY WITH NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS FOR ALL PROJECTS WHICH WILL DISTURB ONE (1) ACRE OR MORE OF LAND. THE CONTRACTOR SHALL NOT START CONSTRUCTION UNTIL NOTICE OF GENERAL PERMIT COVERAGE (NGPC) IS RECEIVED FROM THE DEPARTMENT OF HEALTH, STATE OF HAWAII AND HAS SATISFIED ANY OTHER APPLICABLE REQUIREMENTS OF THE NPDES PERMIT PROGRAM.

**GRADING NOTES:**

- ALL GRADING WORK SHALL CONFORM TO CHAPTER 10 OF THE HAWAII COUNTY CODE. A GRADING PERMIT IS 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 ACTIONS 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.
- 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 THE 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 A.M. TO 3:30 P.M.
- FILLS SHALL BE COMPACTED TO 90 PERCENT (90%) OF MAXIMUM DENSITY PER ASTM D-L 557 TEST.
- THE CONTRACTOR SHALL REMOVE ALL VEGETATION BEFORE PLACING FILLS ON NATURAL GROUND SURFACE.
- THE CONTRACTOR SHALL OBTAIN A GRADING PERMIT TWO WEEKS PRIOR TO BEGINNING OF GRADING WORK FROM THE DEPARTMENT OF PUBLIC WORKS PERMIT SECTION, GRADING FEES SHALL BE PAID BY THE CONTRACTOR.
- THE LIMITS OF THE GRADED AREA SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF GRADING WORK.
- THE CONTRACTOR SHALL CONFINE ALL HIS GRADING OPERATIONS WITHIN CONTRACT LIMITS AND SHALL PROTECT EXISTING FEATURES CLOSE TO LIMITS.
- SHOULD ANY UNIDENTIFIED SITES OR REMAINS SUCH AS ARTIFACTS, SHELL, BONE OR CHARCOAL DEPOSITS, HUMAN BURIALS, ROCK OR CORAL ALIGNMENTS, PAVINGS OR WALLS BE ENCOUNTERED, WORK IN THE AFFECTED AREA SHALL CEASE AND THE PLANNING DEPARTMENT AND THE OWNER'S DESIGNATED REPRESENTATIVE IMMEDIATELY NOTIFIED, SUBSEQUENT WORK SHALL PROCEED UPON AN ARCHEOLOGICAL CLEARANCE FROM THE PLANNING DEPARTMENT, THROUGH THE OWNER'S DESIGNATED REPRESENTATIVE, WHEN IT FINDS THAT SUFFICIENT MITIGATIVE MEASURES HAVE BEEN TAKEN.
- THE FOLLOWING QUANTITIES ARE PROVIDED FOR PERMIT PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING HIS OWN QUANTITIES, ESTIMATED EARTHWORK QUANTITIES:  
 EXCAVATION = 848 CU. YDS.  
 EMBANKMENT = 628 CU. YDS.
- ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH THE COUNTY'S GRADING ORDINANCE.
- HARD BOULDERS AND MEDIUM TO HARD BASALT ROCK SHALL BE ENCOUNTERED NEAR OR AT THE SITE. THEREFORE, APPROPRIATE EQUIPMENT FOR EXCAVATING THE MEDIUM HARD TO HARD BASALT ROCK SHALL BE REQUIRED.

**TOPOGRAPHIC SURVEY NOTES:**

- ALL COORDINATES AND AZIMUTHS ARE BASED ON "HALAI" TRIANGULATION STATION.
- ALL ELEVATIONS AND DISTANCES SHOWN ARE IN FEET.

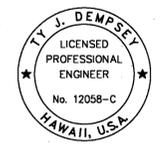
**ABBREVIATIONS:**

&	AND	MAX	MAXIMUM
⊙	AT	MIN	MINIMUM
APP, APPROX	APPROXIMATE	MSL	MEAN SEA LEVEL
		MTR	METER
℞	BASELINE		
BOT.	BOTTOM	N	NORTH
BV	BOTTOM VERTICAL	NGL	NATURAL GRADE LINE
		NO./#	NUMBER
℄	CENTERLINE		
CFS/cfs	CUBIC FEET PER SECOND	O/S	OFFSET
CL	CLASS	O.C.	ON CENTER
CLR	CLEARANCE		
CONC	CONCRETE	℞	PROPERTY LINE
CONN	CONNECTION	PERF	PERFORATED
CORP	CORPORATION	PC	POINT OF CURVATURE
CY	CUBIC YARDS	POC	POINT OF CONNECTION
		PROF	PROFILE
		PROP.	PROPOSED
		PT	POINT OF TANGENCY
D	DRAIN		
DEFL	DEFLECTION		
DET	DETAIL		
DIA.	DIAMETER	RD	ROAD
DOT	DEPARTMENT OF TRANSPORTATION	RECONN	RECONNECT
DPW	DEPARTMENT OF PUBLIC WORKS	REINF	REINFORCED
DRWY	DRIVEWAY	REQ'D	REQUIRED
		RT	RIGHT
		R/W	RIGHT-OF-WAY
E	EAST		
EG	EXISTING GROUND		
EL, ELEV	ELEVATION	S	SLOPE
EXIST, EX	EXIST, EXISTING	SHT	SHEET
		STA	STATION
		STD	STANDARD
		SYMM	SYMMETRICAL
		THK	THICK
		TMK	TAX MAP KEY
		TYP	TYPICAL
HORIZ/HOR	HORIZONTAL		
HP	HIGH POINT		
HT, H	HEIGHT		
HWY	HIGHWAY	VC	VERTICAL CURVE
		V, VERT	VERTICAL
IE	INVERT ELEVATION		
IN	INCHES	W	WEST
INV	INVERT	W/	WITH

**LEGENDS:**

---	PROPERTY LINE
--- 8 ---	EXIST. CONTOUR
--- 10 ---	PROPOSED CONTOUR
~ ~ ~	DIRECTION OF EXISTING SURFACE FLOW
---	LIMITS OF GRADING
--- x --- x ---	SILT FENCE

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED



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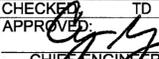
DATE: MAY 2, 2016

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

**KAULANA MANU NATIVE BIRD & PLANT SANCTUARY  
VIEWING AREA AND PARKING LOT**  
TMK: (3) 2-4-008 : 008  
Kipuka 21, Upper Waiakoa Forest Reserve, South Hilo, Hawaii

**GENERAL NOTES & ABBREVIATIONS**

**Dempsey Pacific Inc.** Civil Engineering Design and Consulting Services

DESIGNED: TD	SUBMITTED: <input checked="" type="checkbox"/>
DRAWN: TD	DATE: 04/21/2016
CHECKED: TD	SCALE: NO SCALE
APPROVED: 	DRAWING NO. C-1

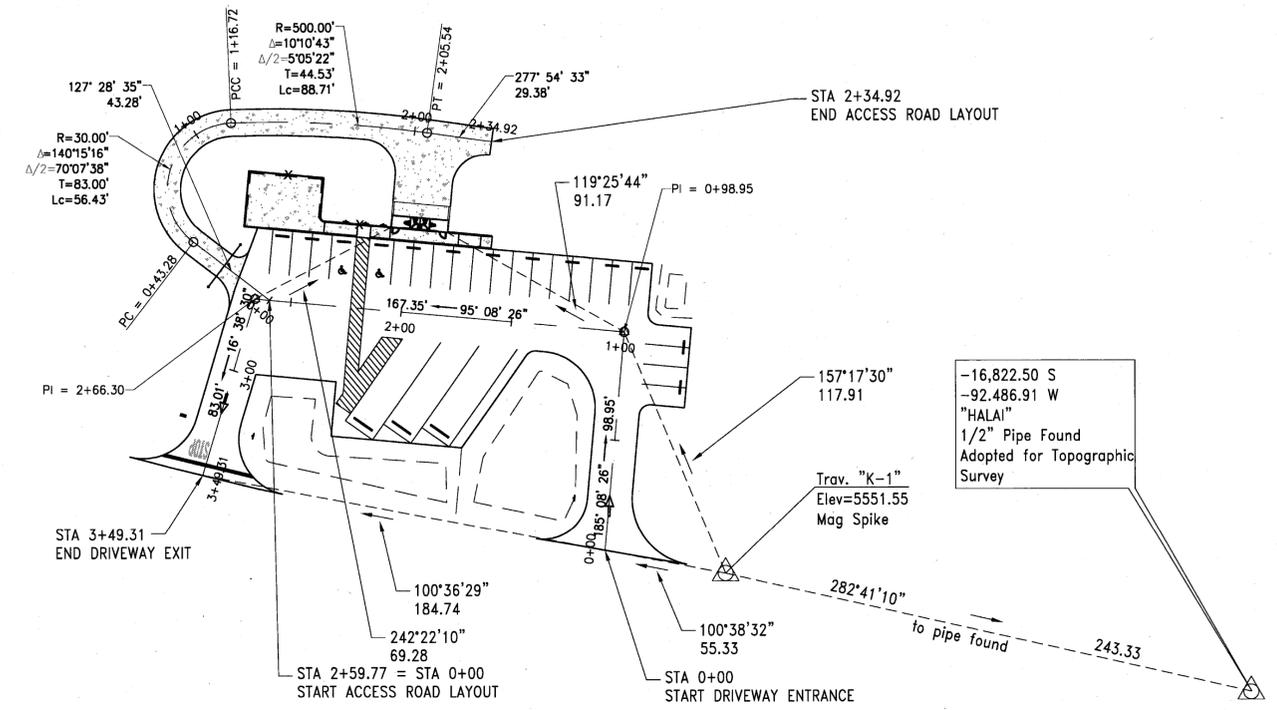
CHIEF ENGINEER DATE: MAY 2, 2016

**ZONING AND BUILDING CODE INFORMATION:**

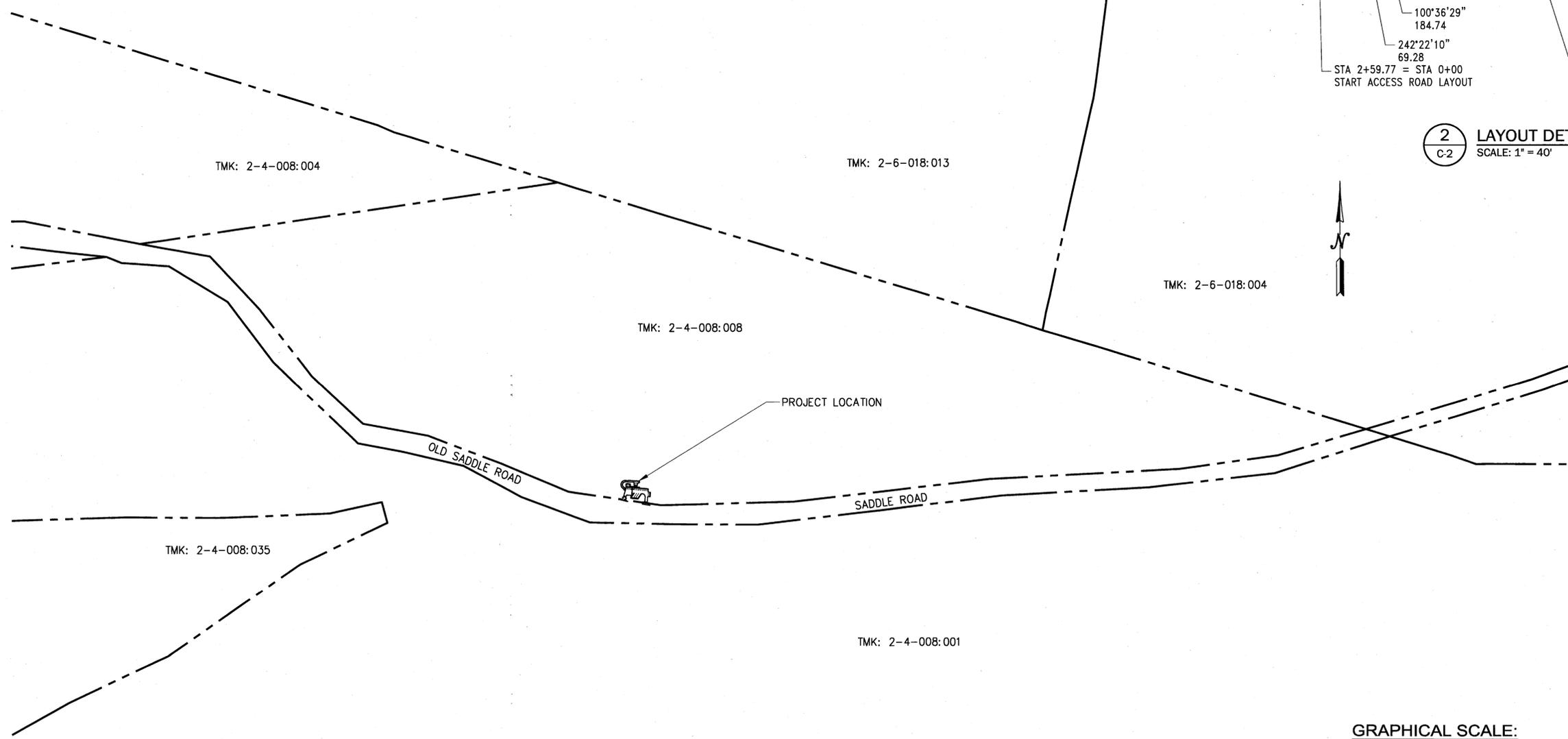
DESCRIPTION: VIEWING AREA, PARKING LOT AND COMPOSTING TOILET FACILITY  
 ADDRESS: KIPUKA 21, SADDLE ROAD, HILO, HAWAII 96720  
 TMK: (3) 2-4-008:008  
 PROPERTY CLASS: CONSERVATION  
 LAND AREA: 367 ACRES (15,986,520 SF)  
 STATE LAND USE: CONSERVATION  
 ZONING: FOREST RESERVE (CONSERVATION DISTRICT)  
 BUILDING CODE: INTERNATIONAL BUILDING CODE 2006 W/ COUNTY OF HAWAII AMENDMENTS  
 FLOOR AREA: 480 SF  
 CONSTRUCTION TYPE: VB

**PARKING COUNTS:**

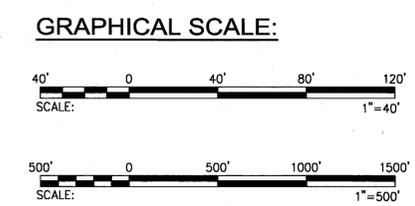
STANDARD PARKING STALLS: 20  
 BUS PARKING STALLS: 3  
 ADA STALL (VAN ACCESSIBLE): 1  
 ADA STALL (STANDARD): 1  
 TOTAL PARKING STALLS: 25



**2 LAYOUT DETAILS**  
 SCALE: 1" = 40'



**1 PLOT PLAN**  
 SCALE: 1" = 500'



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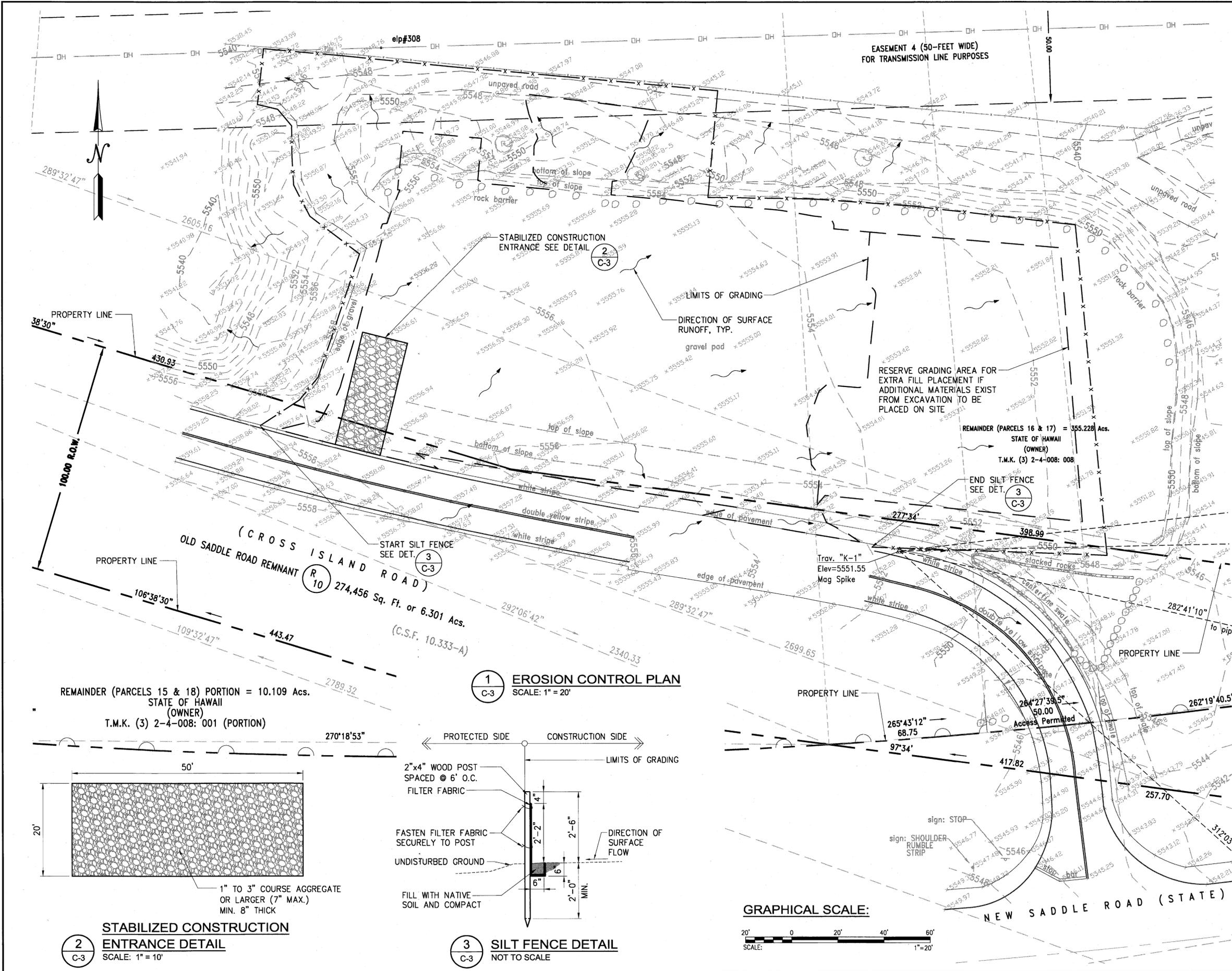
STATE OF HAWAII  
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 TMK: (3) 2-4-008 : 008  
 Kipuka 21, Upper Waiakea Forest Reserve, South Hilo, Hawaii

**PLOT PLAN**

**Dempsey Pacific Inc.** civil engineering design and consulting services

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 DRAWN: TD      DATE: 04/21/2016  
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 APPROVED: *[Signature]*      MAY -3 2016  
 CHIEF ENGINEER      DATE      DRAWING NO. C-2

JOB NO. D01CH65A      SHEET NO. 3 OF 13 SHEETS



- EROSION & TEMPORARY DUST CONTROL:**
1. DURING CONSTRUCTION, PREVENTATIVE MEASURES SHALL BE USED TO CONTROL FORESEEABLE DUST, EROSION OR SEDIMENTATION PROBLEMS WHICH MAY ARISE AS THE JOB PROGRESSES.
  2. SOLID WASTE DISPOSAL DURING GRUBBING AND GRADING ACTIVITIES SHALL MEET REQUIREMENTS OF ADMINISTRATIVE RULES, TITLE II, CHAPTER 60, AIR POLLUTION CONTROL AND CHAPTER 58, SOLID WASTE MANAGEMENT CONTROL.
  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 AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.

- BEST MANAGEMENT PRACTICES:**
1. MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY WORK IS INITIATED. THESE MEASURES SHALL BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
  2. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY.
  3. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED BY THE CONTRACTOR AFTER COMPLETION OF THE PROJECT PRIOR TO FINAL ACCEPTANCE OR AS DIRECTED BY THE ENGINEER IN THE FIELD.
  4. GRAVEL SURFACES SHALL BE 4" THICK WITH THE FOLLOWING AGGREGATE GRAVEL SIEVE PASSING GRADATION:
 

1-1/2"	100%
3/4"	65-95%
#4	30-65%
#16	15-30%
#200	10-15%

- NOTES:**
1. STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AT THE EGRESS AND INGRESS TO THE SITE
  2. DUST CONTROL SHOULD BE APPLIED TO REDUCE DUST EMISSIONS. CONTRACTOR SHALL WATER DURING CONSTRUCTION TO CONTROL DUST.

**LEGEND:**

PROPERTY LINE	---
SILT FENCE	-x-x-x-x-x-
EXIST. CONTOUR	- - - - -
EXIST. SURFACE FLOW	~ ~ ~ ~ ~
LIMITS OF GRADING	---x---

**1 EROSION CONTROL PLAN**  
SCALE: 1" = 20'

**2 STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
SCALE: 1" = 10'

**3 SILT FENCE DETAIL**  
NOT TO SCALE

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED

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DEPARTMENT OF LAND AND NATURAL RESOURCES  
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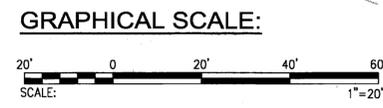
**EROSION CONTROL PLAN**

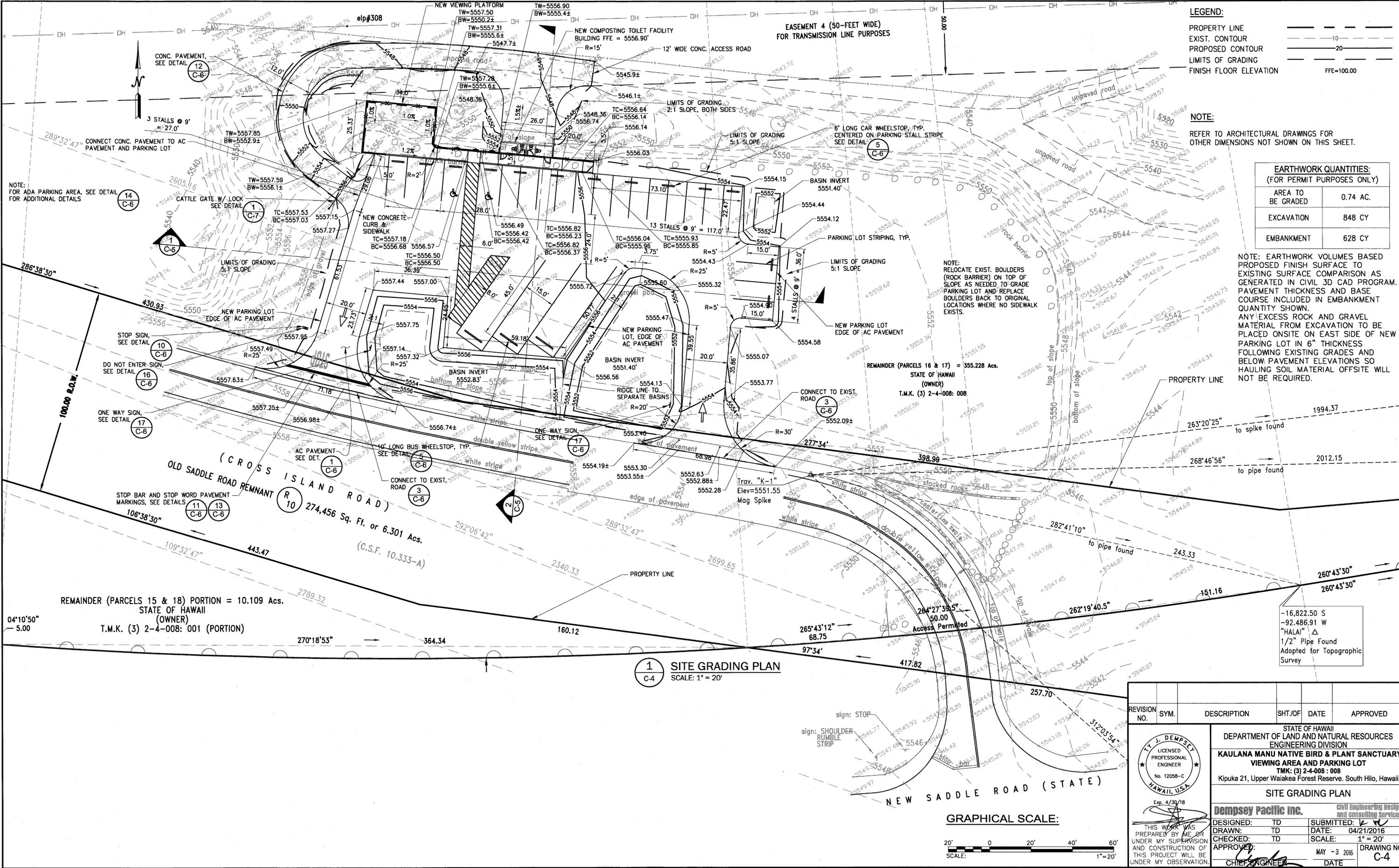
**Dempsey Pacific Inc.** Civil Engineering Design and Consulting Services

DESIGNED: TD	SUBMITTED: TD
DRAWN: TD	DATE: 04/21/2016
CHECKED: TD	SCALE: AS SHOWN
APPROVED: <i>[Signature]</i>	MAY -3 2016
CHIEF ENGINEER	DATE

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JOB NO. D01CH65A SHEET NO. 4 OF 13 SHEETS





**LEGEND:**

PROPERTY LINE	---
EXIST. CONTOUR	---10---
PROPOSED CONTOUR	---20---
LIMITS OF GRADING	---
FINISH FLOOR ELEVATION	FFE=100.00

**NOTE:**  
REFER TO ARCHITECTURAL DRAWINGS FOR OTHER DIMENSIONS NOT SHOWN ON THIS SHEET.

**EARTHWORK QUANTITIES:**  
(FOR PERMIT PURPOSES ONLY)

AREA TO BE GRADED	0.74 AC.
EXCAVATION	848 CY
EMBANKMENT	628 CY

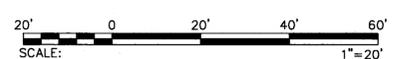
**NOTE:** EARTHWORK VOLUMES BASED PROPOSED FINISH SURFACE TO EXISTING SURFACE COMPARISON AS GENERATED IN CIVIL 3D CAD PROGRAM. PAVEMENT THICKNESS AND BASE COURSE INCLUDED IN EMBANKMENT QUANTITY SHOWN. ANY EXCESS ROCK AND GRAVEL MATERIAL FROM EXCAVATION TO BE PLACED ONSITE ON EAST SIDE OF NEW PARKING LOT IN 6" THICKNESS FOLLOWING EXISTING GRADES AND BELOW PAVEMENT ELEVATIONS SO HAULING SOIL MATERIAL OFFSITE WILL NOT BE REQUIRED.

NOTE: FOR ADA PARKING AREA, SEE DETAIL FOR ADDITIONAL DETAILS

NOTE: RELOCATE EXIST. BOULDERS (ROCK BARRIER) ON TOP OF SLOPE AS NEEDED TO GRADE PARKING LOT AND REPLACE BOULDERS BACK TO ORIGINAL LOCATIONS WHERE NO SIDEWALK EXISTS.

**1 SITE GRADING PLAN**  
SCALE: 1" = 20'

**GRAPHICAL SCALE:**



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED

**TY J. DEMPSEY**  
LICENSED PROFESSIONAL ENGINEER  
No. 12058-C  
HAWAII, U.S.A.  
Exp. 4/30/18

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
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TMK: (3) 2-4-008: 008  
Kipuka 21, Upper Waiakea Forest Reserve, South Hilo, Hawaii

**SITE GRADING PLAN**

**Dempsey Pacific Inc.** Civil Engineering Design and Consulting Services

DESIGNED: TD      SUBMITTED: *[Signature]*  
DRAWN: TD      DATE: 04/21/2016  
CHECKED: TD      SCALE: 1" = 20'  
APPROVED: *[Signature]*      MAY -3 2016      DRAWING NO. C-4

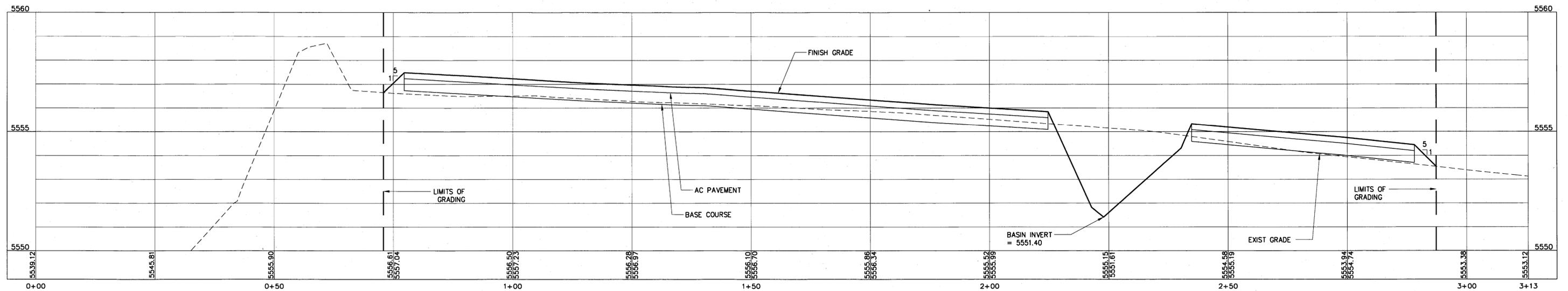
Exp. 4/30/18

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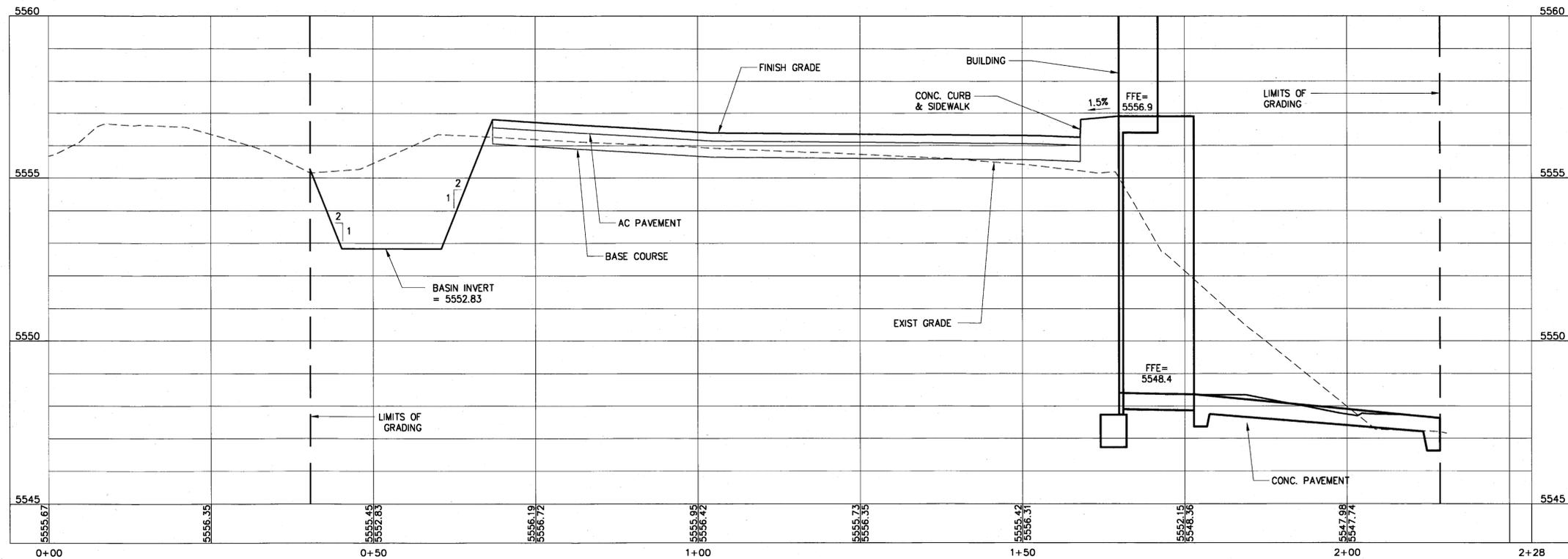
CHIEF ENGINEER

JOB NO. D01CH65A      SHEET NO. 5 OF 13 SHEETS

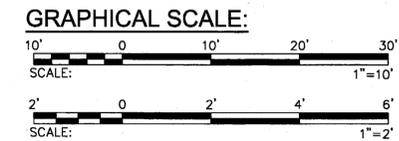
-16.822.50 S  
-92.486.91 W  
"HALAI" 1/2"  
1/2" Pipe Found  
Adopted for Topographic Survey



**1** SECTION  
C-5  
SCALE: VERT: 1" = 2'  
HOR: 1" = 10'



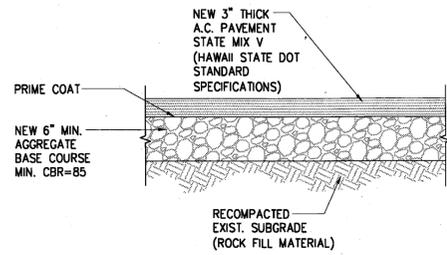
**2** SECTION  
C-5  
SCALE: VERT: 1" = 2'  
HOR: 1" = 10'



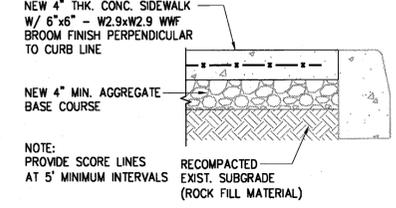
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED

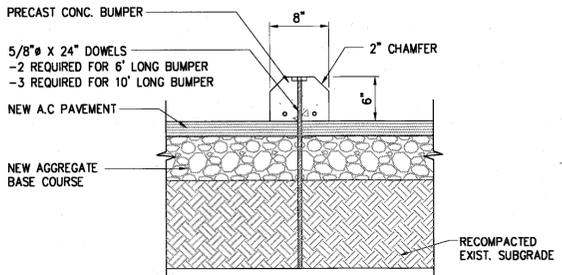
	STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION		
	KAULANA MANU NATIVE BIRD & PLANT SANCTUARY VIEWING AREA AND PARKING LOT TMK: (3) 2-4-008 : 008 Kipuka 21, Upper Waiakaea Forest Reserve, South Hilo, Hawaii		
	CROSS SECTIONS		
<b>Dempsey Pacific Inc.</b> <small>Civil Engineering Design and Consulting Services</small>			
DESIGNED: TD	SUBMITTED: <i>[Signature]</i>		
DRAWN: TD	DATE: 04/21/2016		
CHECKED: TD	SCALE: AS SHOWN		
APPROVED: <i>[Signature]</i>	MAY -3 2016	DRAWING NO. C-5	
CHIEF ENGINEER	DATE		



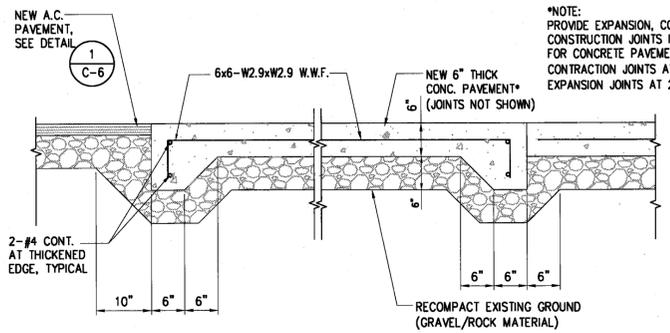
**1 AC PAVEMENT DETAIL**  
C-6 NOT TO SCALE



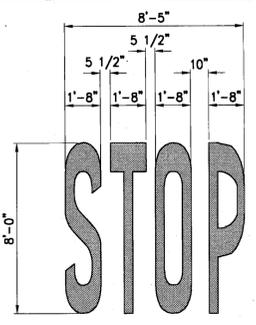
**4 CONC. SIDEWALK DETAIL**  
C-6 NOT TO SCALE



**5 CONCRETE WHEELSTOP DETAIL**  
C-6 NOT TO SCALE



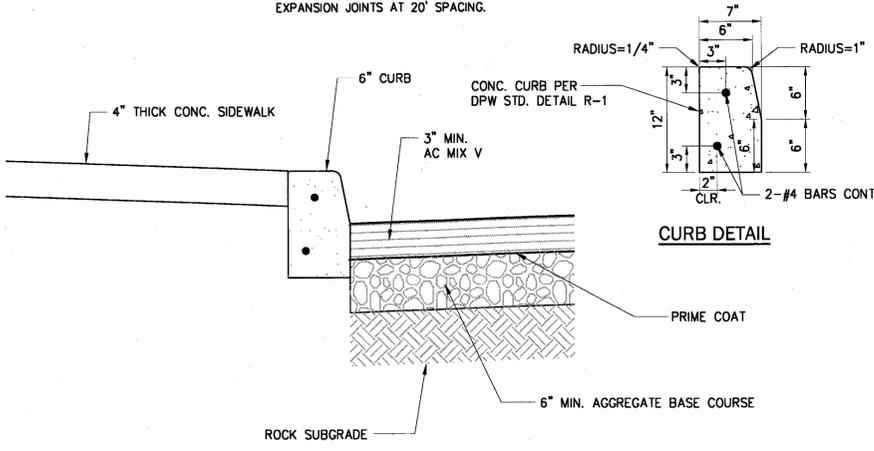
**12 CONCRETE PAVEMENT DETAIL**  
C-6 NOT TO SCALE



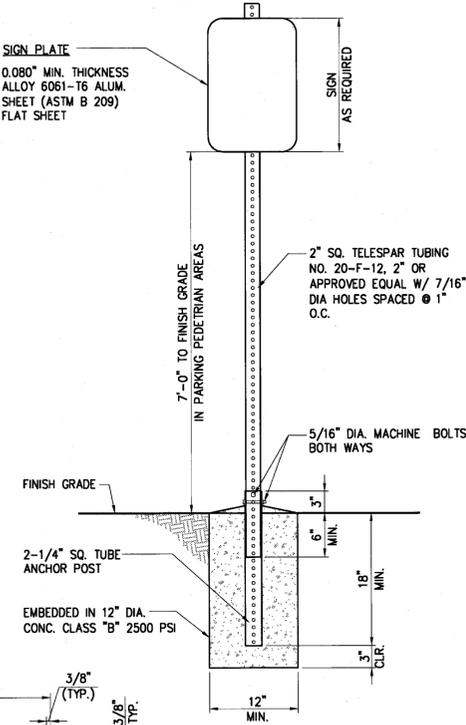
**13 "STOP" WORD**  
C-6 NOT TO SCALE

**CONCRETE PAVEMENT NOTE:**

FOR ALL CONCRETE WALKWAYS, CURBS & SLABS PROVIDE CONTRACTION JOINTS AT 5' SPACING AND EXPANSION JOINTS AT 20' SPACING.



**CURB DETAIL**



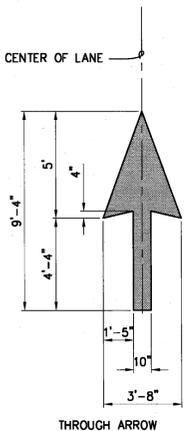
**6 NEW SIGN AND POST DETAIL**  
C-6 NOT TO SCALE

**GENERAL NOTES:**

- SIGN DETAILS SHALL CONFORM TO THE LATEST EDITIONS OF FHWA PUBLICATIONS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", "STANDARD ALPHABETS FOR HIGHWAY SIGNS", AND "STANDARD HIGHWAY SIGNS", AND AS AMENDED.
- SIGNS SHALL BE ALUM. T6061 SHEET COVERED W/ HIGH INTENSITY REFLECTIVE SHEETING.
- SIGN SHALL HAVE 3/8" BOLT HOLES DRILLED AT APPROXIMATE LOCATIONS.
- SIGN LETTERING SHALL BE UPPERCASE LETTERS OF THE TYPE APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
- ELEMENTS (TEXT & GRAPHIC) REQ'D. ON SIGN MAY BE PLACED ON MORE THAN ONE SIGN DIMENSIONS OF ELEMENTS ON SIGN ARE MINIMUM REQUIREMENTS.
- PRIVATE SIGNS AND POSTS WITHIN PRIVATE PROPERTY TO BE PROVIDED BY PRIVATE SIGN CONTRACTOR. PRIVATE SIGNS MAY USE ALTERNATE MATERIALS.

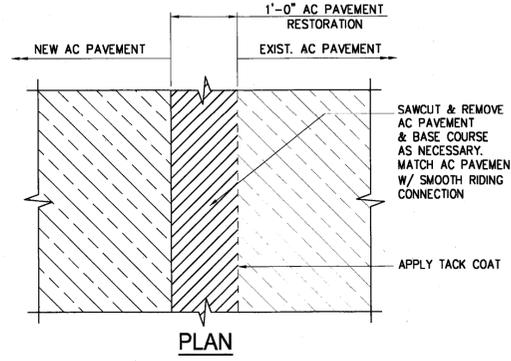
**NOTE:**

THE INSIDE OF THE 2-1/4" ANCHOR POST MUST BE KEPT FREE OF IMPEDIMENTS TO ASSURE EASY INSERTION OF THE 2" SIGN POST

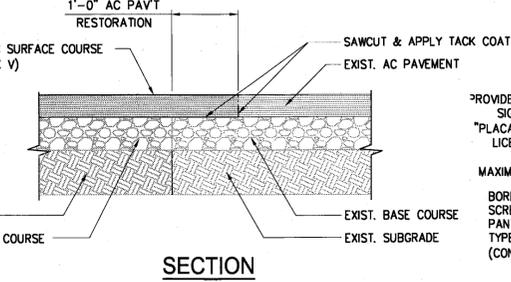


**15 PAVEMENT ARROW DETAIL**  
C-6 SCALE: NOT TO SCALE

**2 CONC. CURB & SIDEWALK DETAIL**  
C-6 NOT TO SCALE

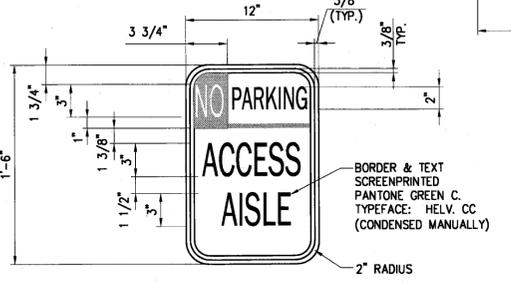


**PLAN**

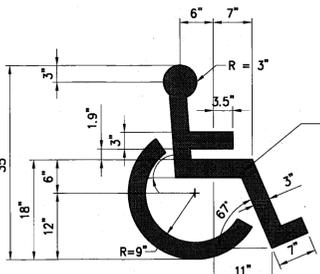


**SECTION**

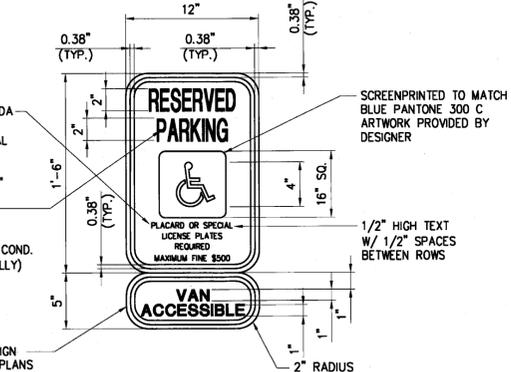
**3 AC PAVEMENT RESTORATION DETAIL**  
C-6 NOT TO SCALE



**7 ACCESS AISLE SIGN**  
C-6 NOT TO SCALE



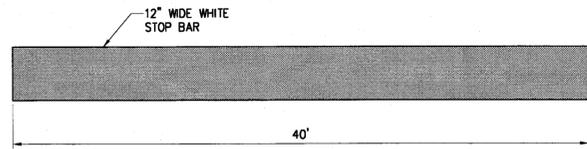
**9 INTERNATIONAL SYMBOL OF ACCESSIBILITY**  
C-6 NOT TO SCALE



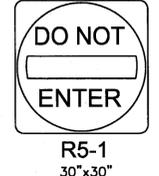
**8 ACCESSIBLE PARKING SIGN**  
C-6 NOT TO SCALE



**10 STOP SIGN DETAIL**  
C-6 NOT TO SCALE



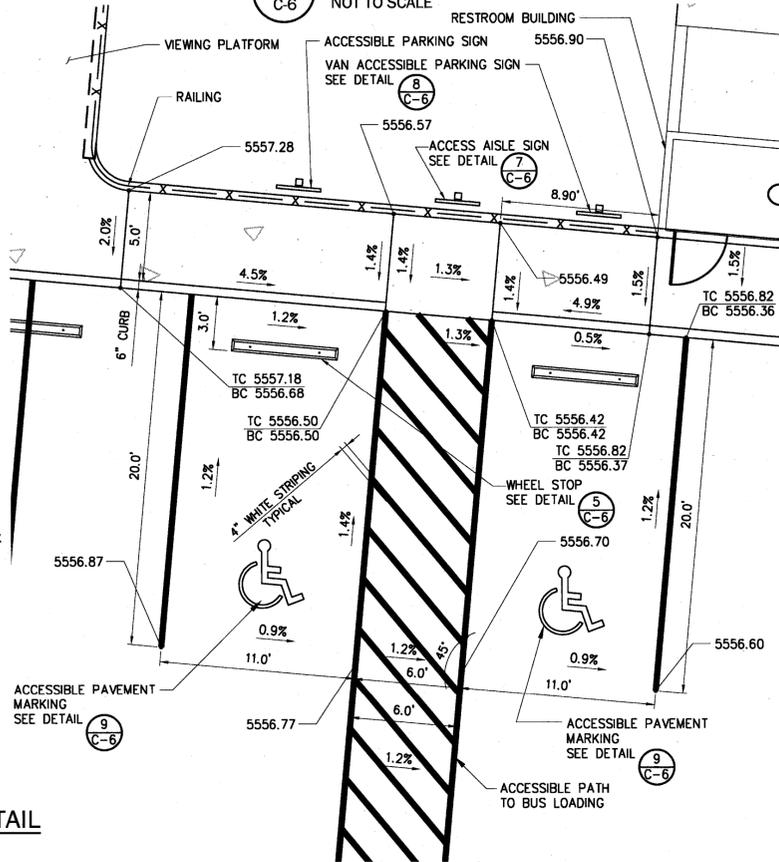
**11 STOP BAR PAVEMENT MARKING**  
C-6 NOT TO SCALE



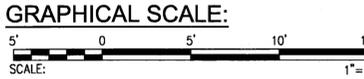
**16 DO NOT ENTER SIGN DETAIL**  
C-6 NOT TO SCALE



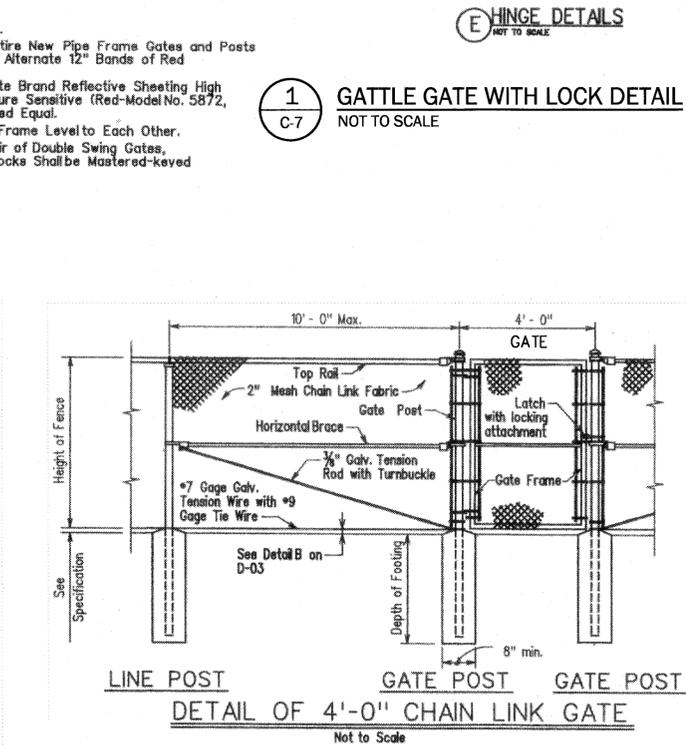
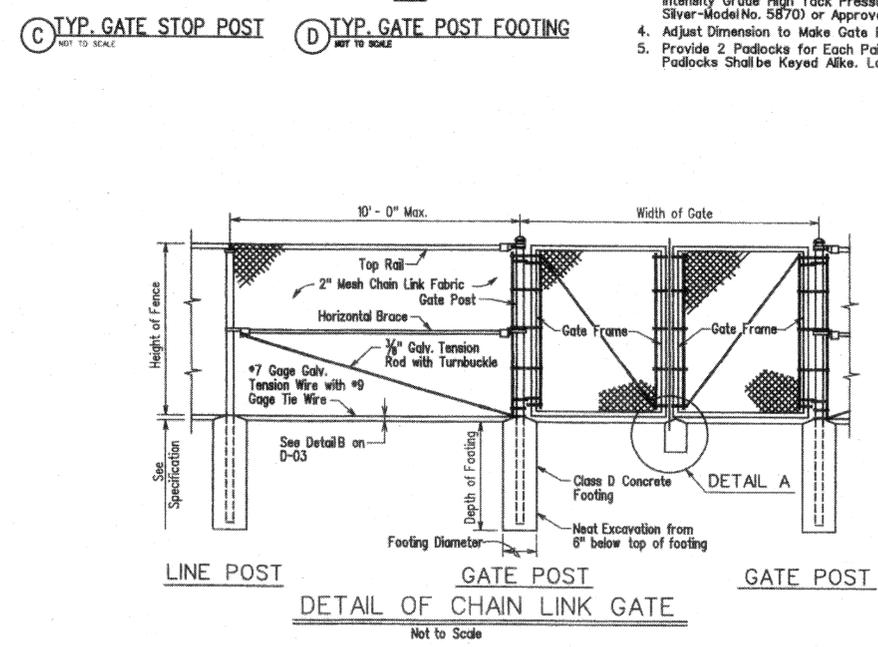
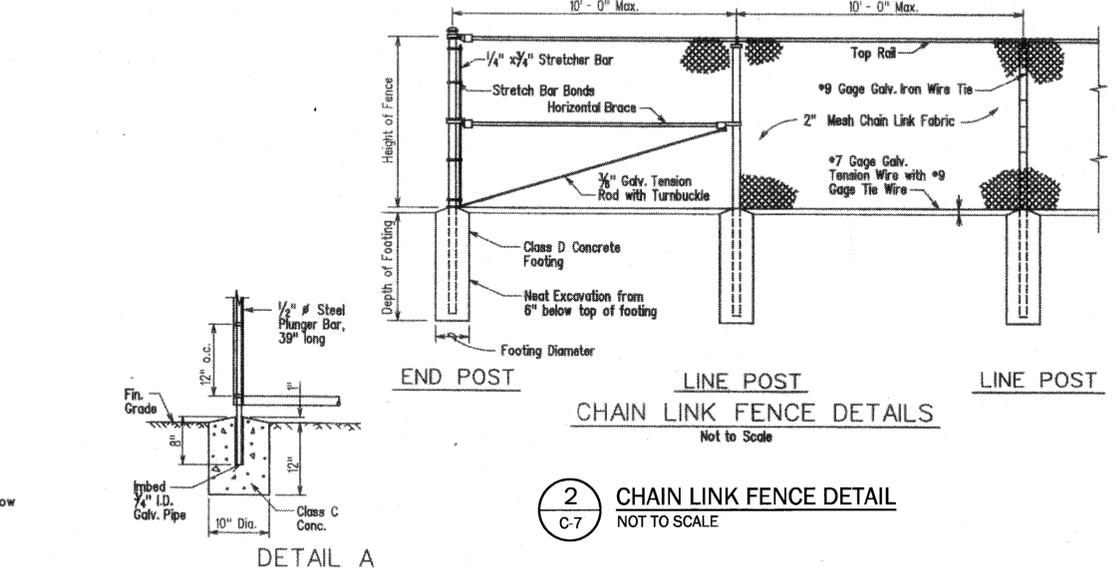
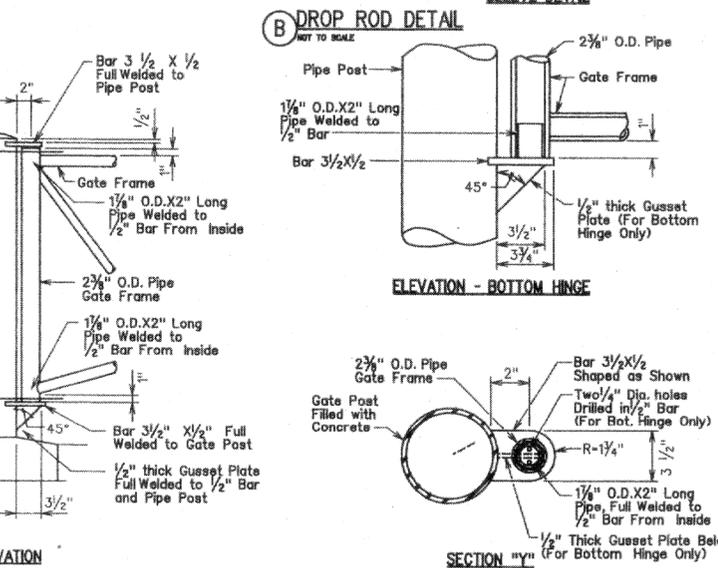
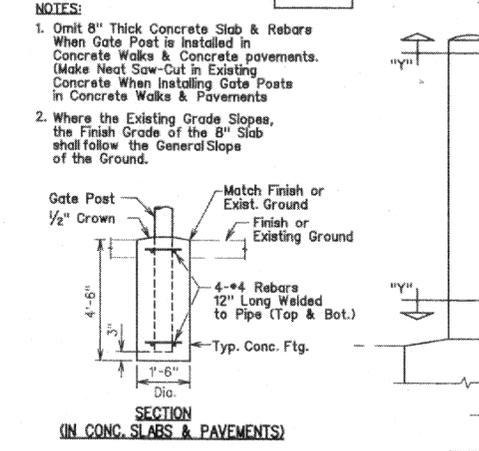
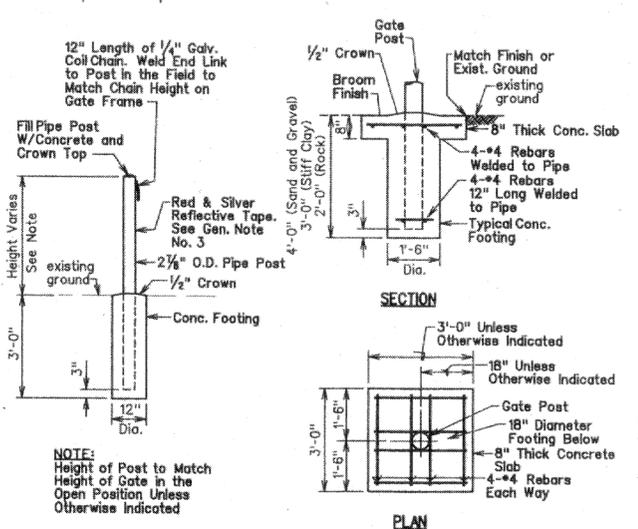
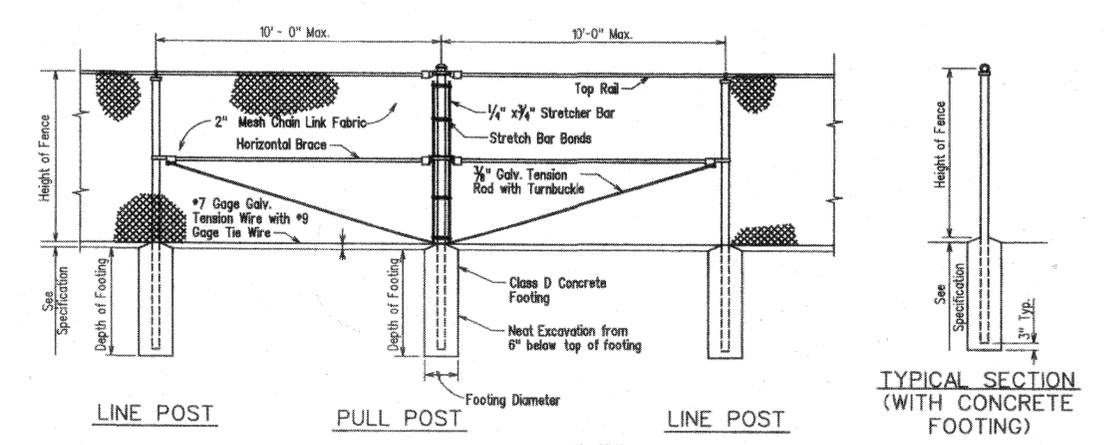
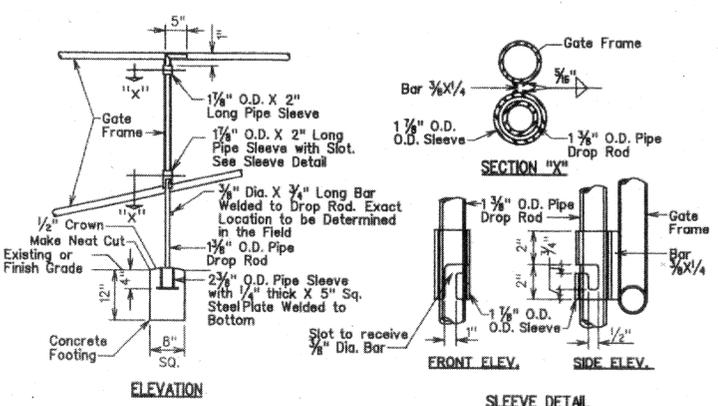
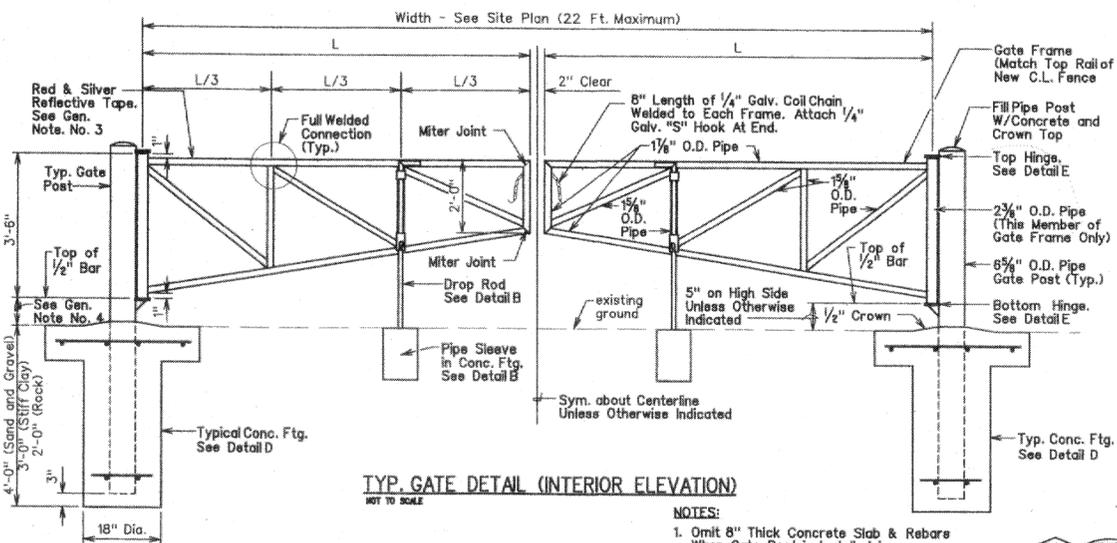
**17 ONE WAY SIGN DETAIL**  
C-6 NOT TO SCALE



**14 ADA PARKING PLAN**  
C-6 SCALE: 1" = 5'



REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
<p>STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION <b>KAULANA MANU NATIVE BIRD &amp; PLANT SANCTUARY</b> VIEWING AREA AND PARKING LOT TMK: (3) 2-4-008 : 008 Kipuka 21, Upper Waiakea Forest Reserve, South Hilo, Hawaii</p> <p><b>DETAILS 1</b></p> <p><b>Dempsey Pacific Inc.</b> Civil Engineering Design and Consulting Services</p> <p>DESIGNED: TD SUBMITTED: 04/21/2016 DRAWN: TD DATE: 04/21/2016 CHECKED: TD SCALE: AS SHOWN APPROVED: [Signature] DATE: MAY -3 2016 DRAWING NO. C-6</p> <p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</p> <p>CHIEF ENGINEER</p>					
<p>JOB NO. D01CH65A SHEET NO. 7 OF 13 SHEETS</p>					



**CHAIN LINK FENCE AND GATE NOTE:**  
FOOTINGS FOR FENCE TO BE MODIFIED IN BUILDING AREA AS SHOWN IN ARCHITECTURAL AND STRUCTURAL PLANS TO PROVIDE EMBEDMENT POCKET FOR BOTTOM OF POSTS AND CONNECTION BRACKET FOR TOP OF POSTS TO BUILDING STRUCTURE.

**CHAIN LINK GATES DETAIL**  
NOT TO SCALE

**GENERAL NOTES:**  
A. MATERIALS  
1. Chain link fabric, fittings, and hardware shall conform to AASHTO M161.  
2. Tension wire shall have a minimum of two ounces of zinc coating per square feet.  
B. FOUNDATION  
1. Shaft head deflection is limited to 1/2 inch or less.  
2. Factor of safety - 2.  
3. Lateral loading is based on 10 pcf over the fence area.  
4. Average unit weight of soils used:  
i. Sands and gravels - 120 pcf  
ii. Stiff Clay - 135 pcf  
iii. Rock - 140 pcf  
5. Friction Angle  
i. Sands and gravels - 33 degrees  
6. Cohesion  
i. Stiff Clay = 1000 pcf  
ii. Rock = 5000 pcf  
7. Soil Modulus  
i. Sands and gravel - 90 pci  
8. Ground condition is assumed to be level.

**C. CONSTRUCTION NOTES**  
1. Gate frames shall be mitered and welded at corners.  
D. GENERAL  
1. Payment for sleeves and grout shall be incidental to cost of fence.  
2. Gate fork latch and lock, flush plate and anchor, and plunger shall be installed with gates, and shall be considered as incidental to chain link fence gate.

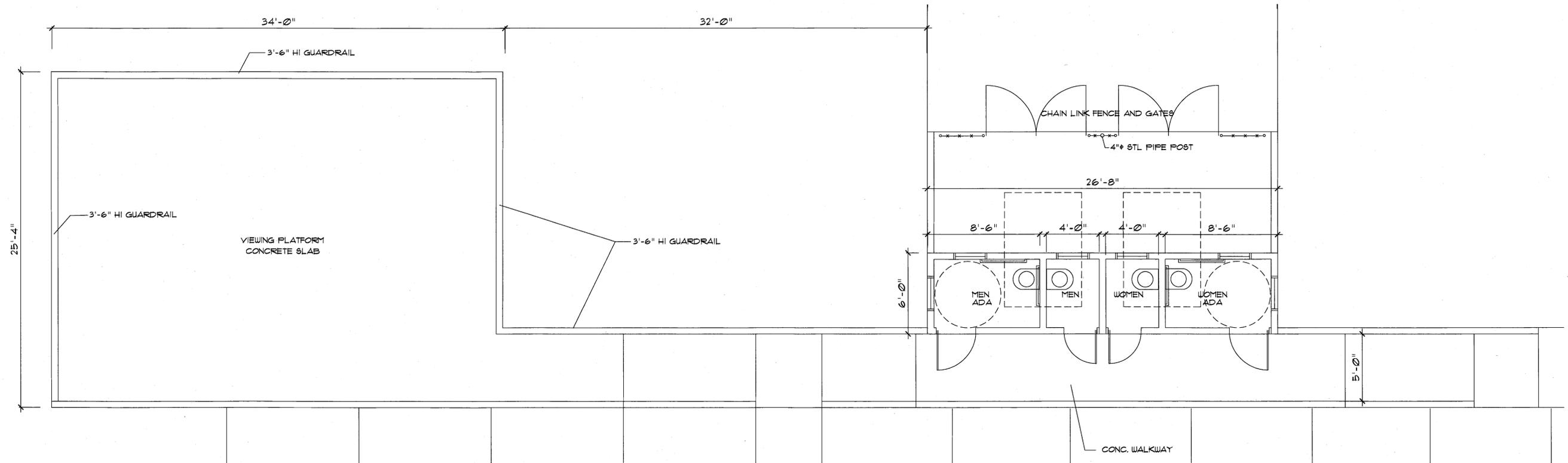
**REVISION NO.** SYM. DESCRIPTION SHT./OF DATE APPROVED

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION  
KAULANA MANU NATIVE BIRD & PLANT SANCTUARY  
VIEWING AREA AND PARKING LOT  
TMK: (3) 2-4-008 : 008  
Kipuka 21, Upper Waiakea Forest Reserve, South Hilo, Hawaii

**DETAILS 2**

**Dempsey Pacific Inc.** CIVIL ENGINEERING DESIGN AND CONSULTING SERVICES  
DESIGNED: TD SUBMITTED: ✓  
DRAWN: TD DATE: 04/21/2016  
CHECKED: TD SCALE: AS SHOWN  
APPROVED: [Signature] DRAWING NO. C-7  
CHIEF ENGINEER DATE: MAY -3 2016

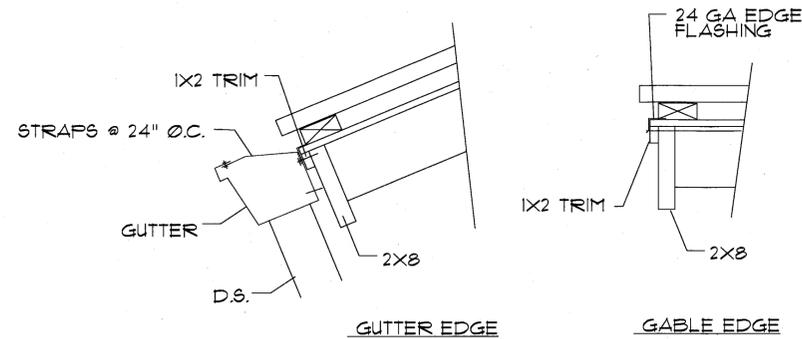
JOB NO. D01CH65A SHEET NO. 8 OF 13 SHEETS



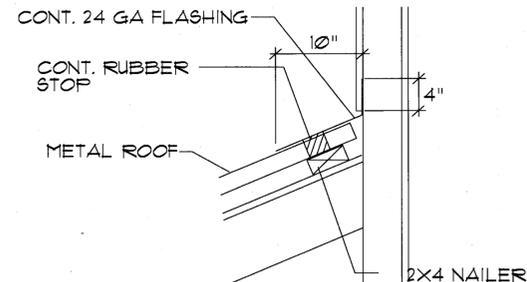
**FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

**NOTE:**

CLIVUS COMPOSTING TOILETS TO BE PROVIDED BY STATE CONTRACTOR TO INSTALL  
FRP PANEL SHALL BE MARLITE OR EQUAL PROVIDE BASE, CROWN, AND JOINT TRIMS

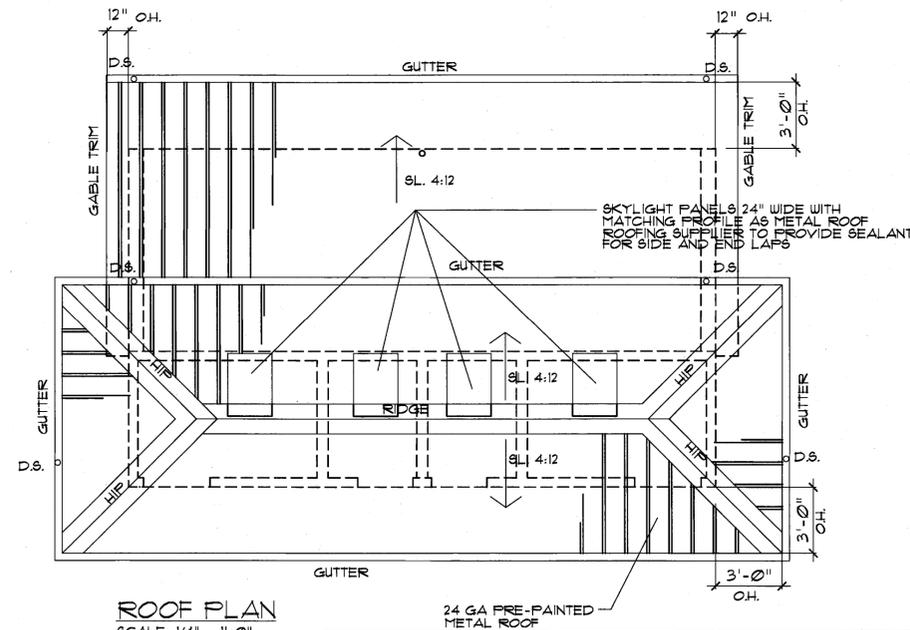


**1 TYPICAL ROOF EDGE DETAIL**  
SCALE: 1/2" = 1'-0"

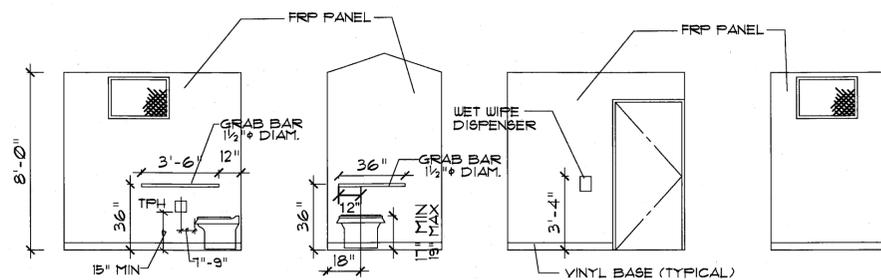


FLASHING SHALL BE SAME MATERIAL AS ROOFING

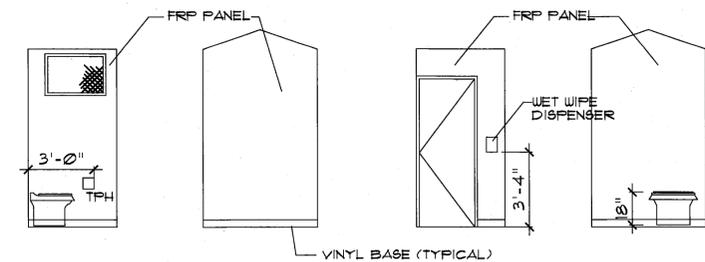
**2 WALL FLASHING DETAIL**  
SCALE: 1/2" = 1'-0"



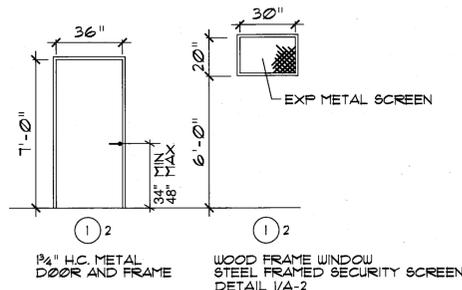
**ROOF PLAN**  
SCALE: 1/4" = 1'-0"



**MEN'S ADA BATHROOM INT. ELEV. (WOMEN'S SIMILAR)**  
SCALE: 1/4" = 1'-0"

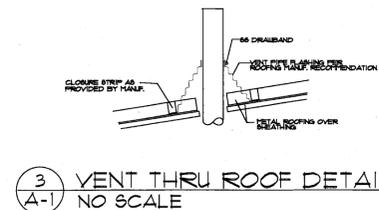


**MEN'S BATHROOM INT. ELEV. (WOMEN'S SIMILAR)**  
SCALE: 1/4" = 1'-0"



**DOOR AND WINDOW SCHEDULE**  
SCALE: 1/4" = 1'-0" DETAIL 2/A-2

DOOR LOCK SHALL BE LEVER TYPE COMPLYING TO ADAAG 309.4.



**3 VENT THRU ROOF DETAIL**  
NO SCALE

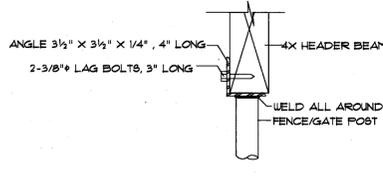
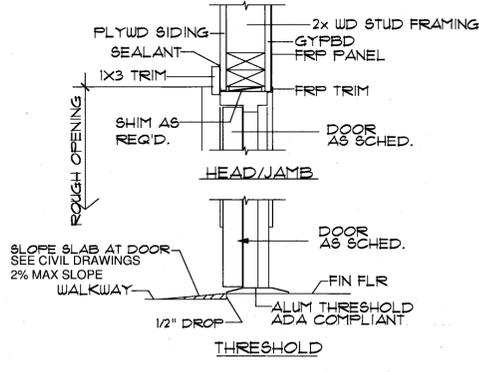
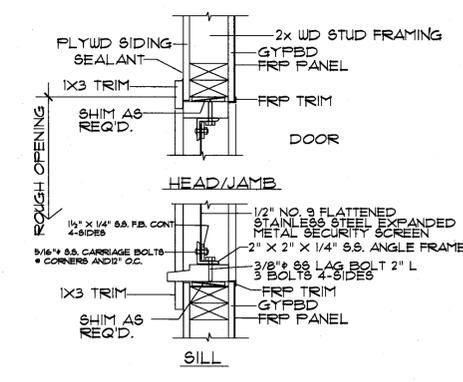
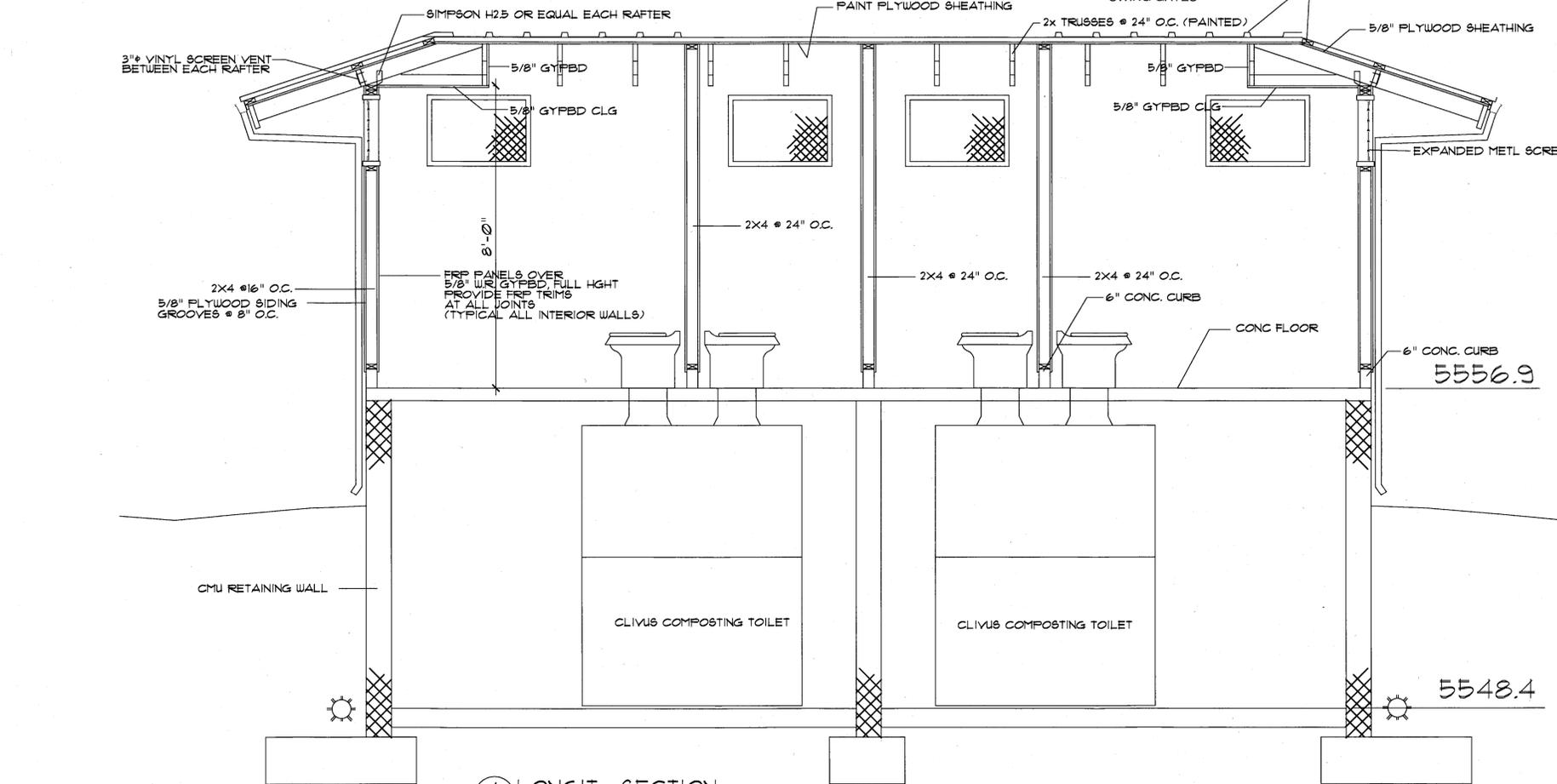
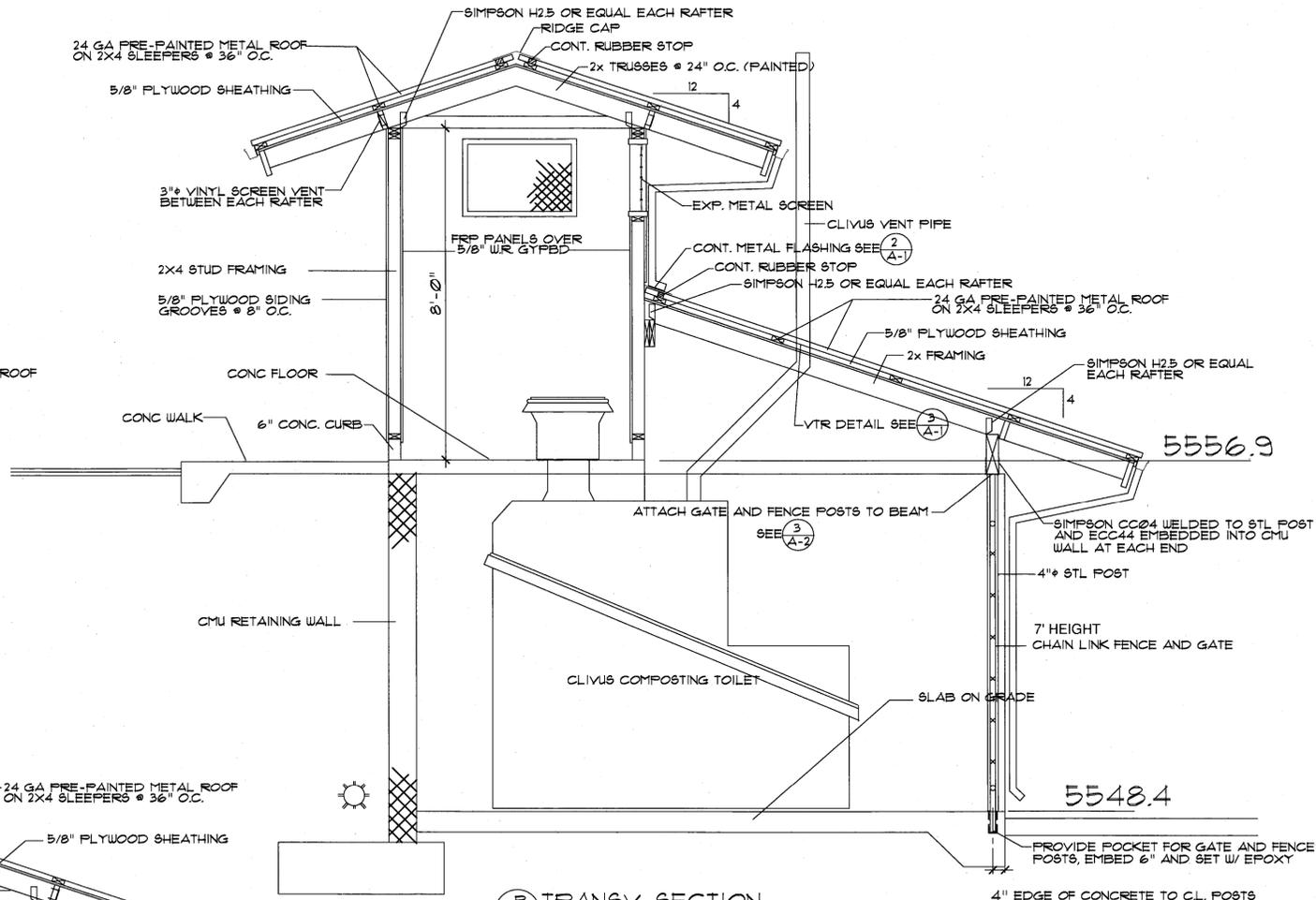
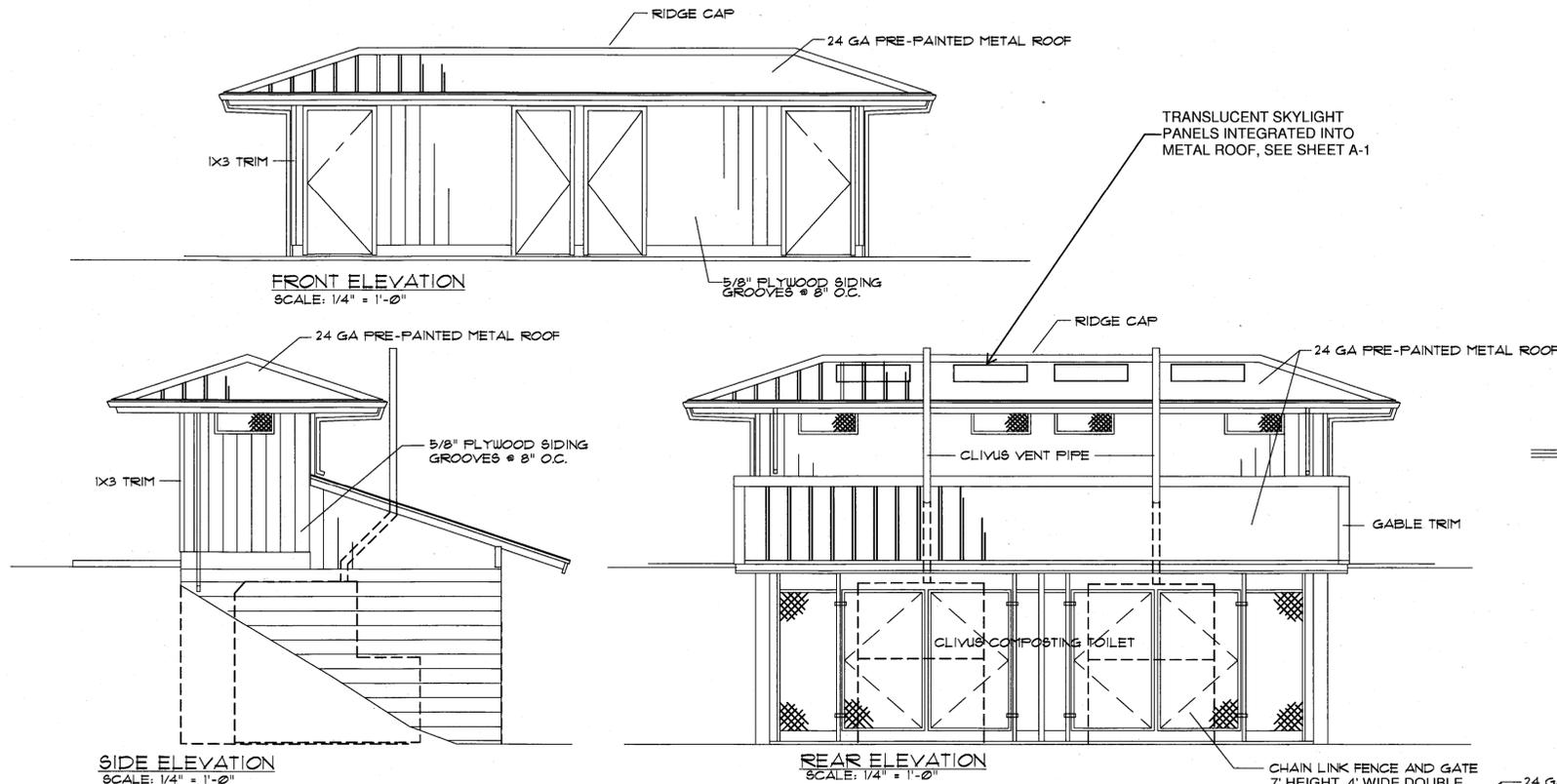
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STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION  
**KAULANA MANU NATIVE BIRD & PLANT SANCTUARY  
VIEWING AREA AND PARKING LOT**  
TMK: (3) 2-4-008 : 008  
Kipuka 21, Upper Waiakea Forest Reserve, South Hilo, Hawaii

OVERALL FLOOR PLAN, INTERIOR ELEVATIONS

DESIGNED: _____	SUBMITTED: ✓
DRAWN: _____	DATE: 01/28/2016
CHECKED: _____	SCALE: _____
APPROVED: _____	MAY -3 2016 DATE
CHIEF ENGINEER	DRAWING NO. A-1

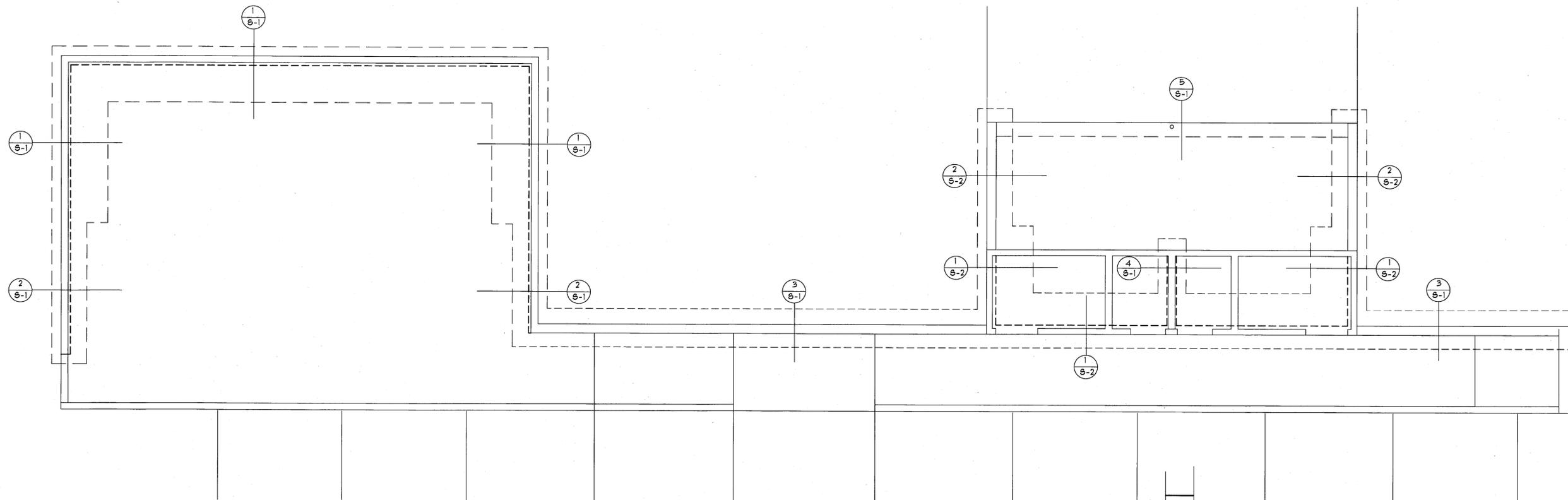
JOB NO. D01CH65A SHEET NO. 9 OF 13 SHEETS



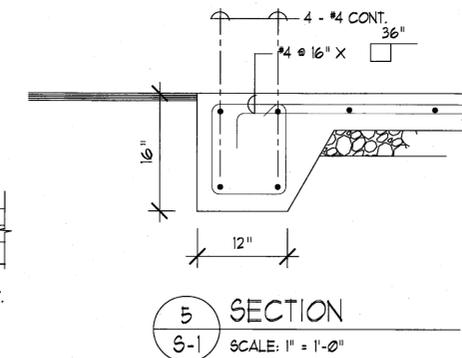
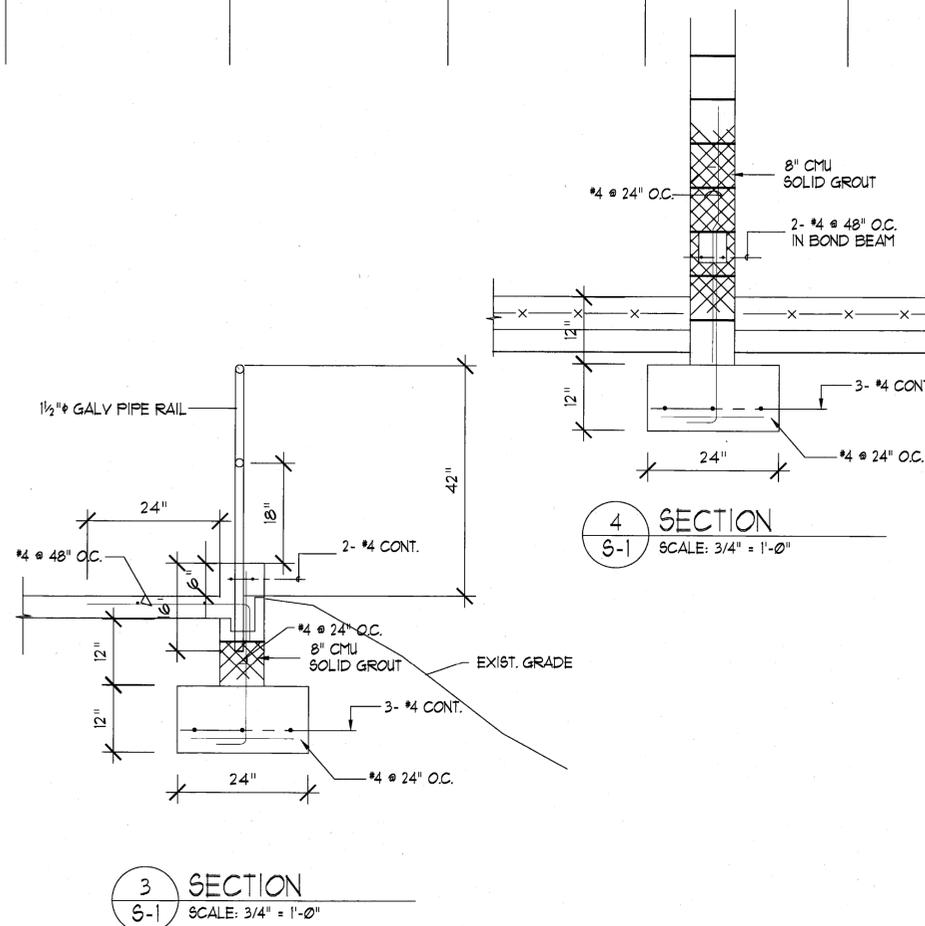
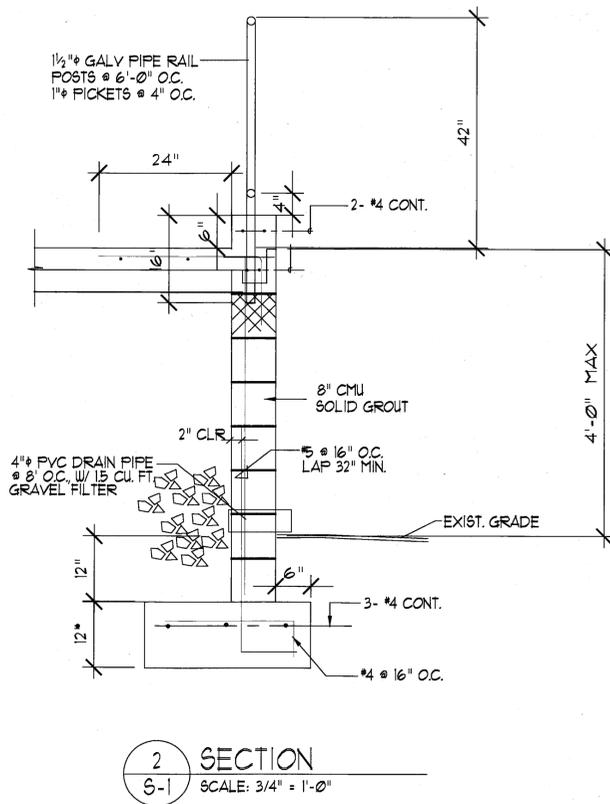
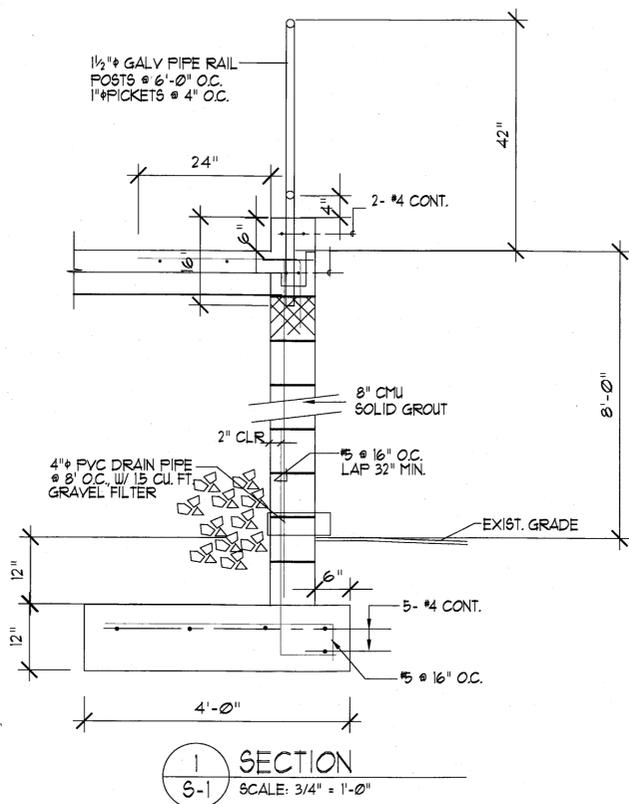
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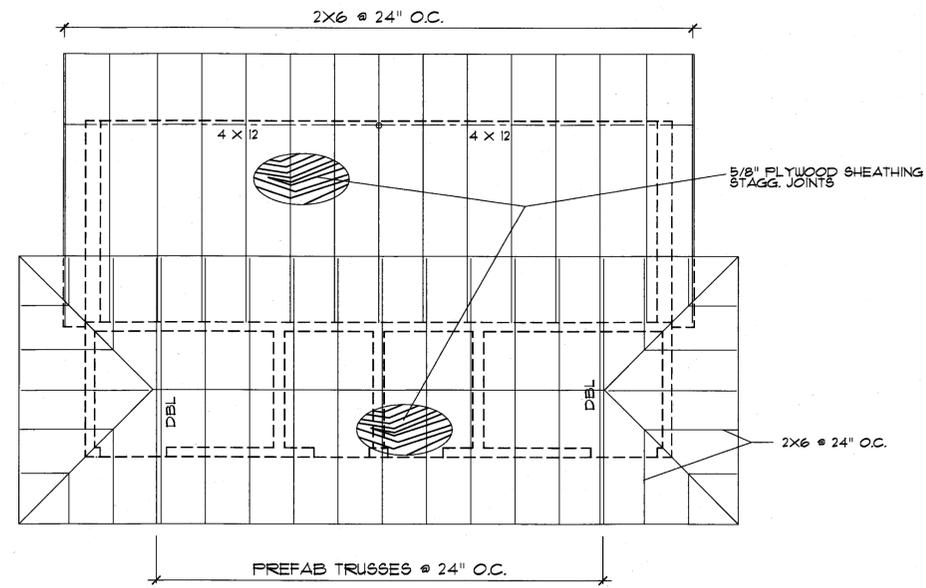
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		DEPARTMENT OF LAND AND NATURAL RESOURCES	
REGISTERED PROFESSIONAL ARCHITECT		ENGINEERING DIVISION	
NO. 5533		KAULANA MANU NATIVE BIRD & PLANT SANCTUARY	
HAWAII, U.S.A.		VIEWING AREA AND PARKING LOT	
		TMK: (3) 2-4-008 : 008	
		Kipuka 21, Upper Waiakaa Forest Reserve, South Hilo, Hawaii	
		BUILDING SECTIONS, EXT. ELEVATIONS	
DESIGNED:	SUBMITTED:	DATE:	
DRAWN:	CHECKED:	DATE:	01/28/2016
APPROVED:	CHEIF ENGINEER	DATE:	MAY -3 2016
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.		DRAWING NO.	A-2



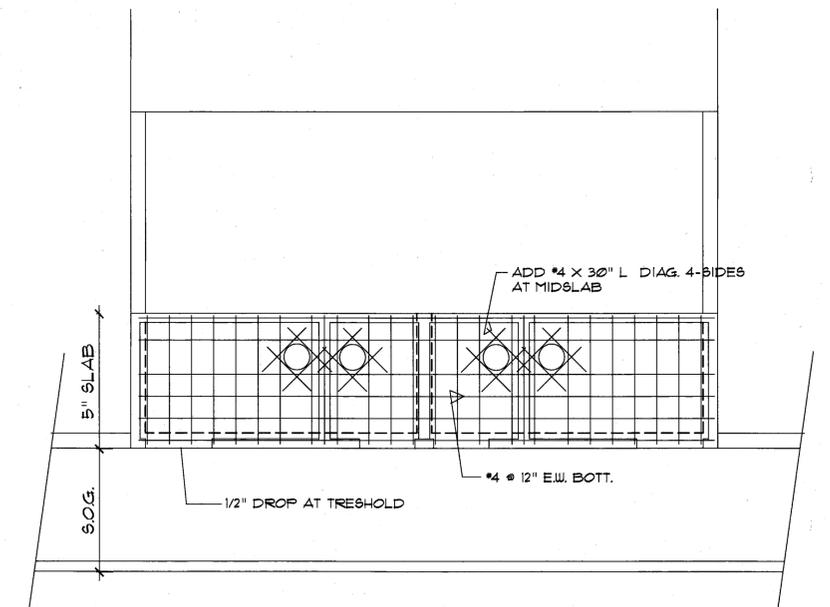
FOUNDATION PLAN  
SCALE: 1/4" = 1'-0"



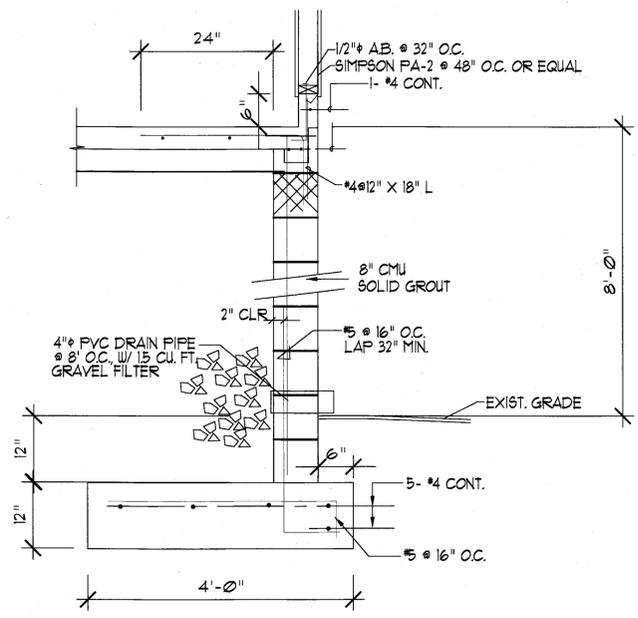
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STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION KAULANA MANU NATIVE BIRD & PLANT SANCTUARY VIEWING AREA AND PARKING LOT TKMK: (3) 2-4-008 : 008 Kipuka 21, Upper Waialeale Forest Reserve, South Hilo, Hawaii					
FOUNDATION PLAN					
DESIGNED: [Signature]			SUBMITTED: [Signature]		
DRAWN: [Signature]			DATE: 01/28/2016		
CHECKED: [Signature]			SCALE:		
APPROVED: [Signature]			MAY -3 2016		
CHIEF ENGINEER			DATE		
JOB NO. D01CH65A			SHEET NO. 11 OF 13 SHEETS		



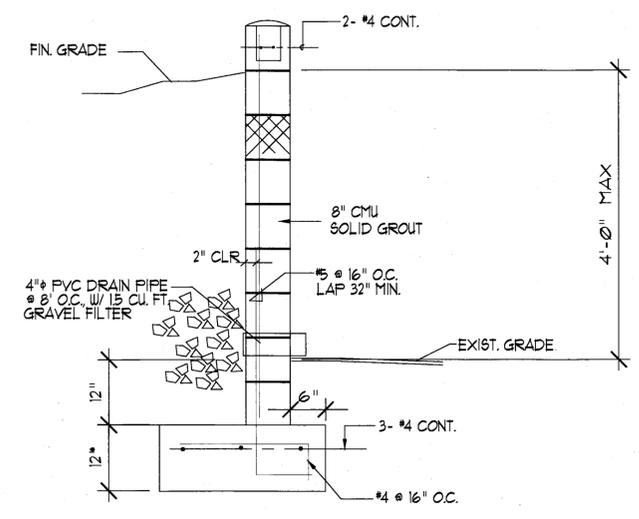
**ROOF FRAMING PLAN**  
SCALE: 1/4" = 1'-0"



**FLOOR FRAMING PLAN**  
SCALE: 1/4" = 1'-0"



**1 SECTION**  
SCALE: 3/4" = 1'-0"



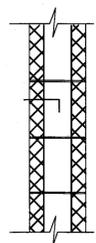
**2 SECTION**  
SCALE: 3/4" = 1'-0"

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED

	<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>ENGINEERING DIVISION</b> <b>KAULANA MANU NATIVE BIRD &amp; PLANT SANCTUARY</b> <b>VIEWING AREA AND PARKING LOT</b> <b>TRK: (3) 2-4-008 : 008</b> <b>Kipuka 21, Upper Waialeale Forest Reserve, South Hilo, Hawaii</b>	
	<b>FLOOR AND ROOF FRAMING PLAN</b>	
DESIGNED: _____ DRAWN: _____ CHECKED: _____ APPROVED: _____ CHIEF ENGINEER	SUBMITTED: <u>12</u> / <u>18</u> DATE: <u>01/28/2018</u> SCALE: _____ MAY -3 2016 DATE	DRAWING NO. <u>S-2</u>

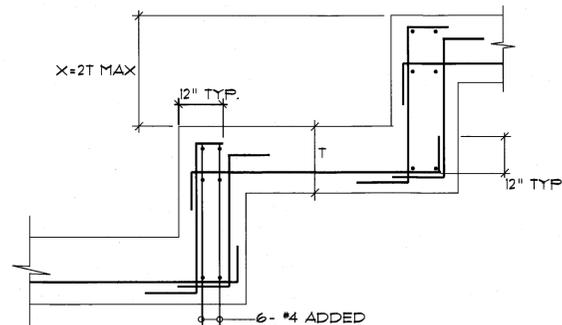
JOB NO. D01CH65A SHEET NO. 12 OF 13 SHEETS



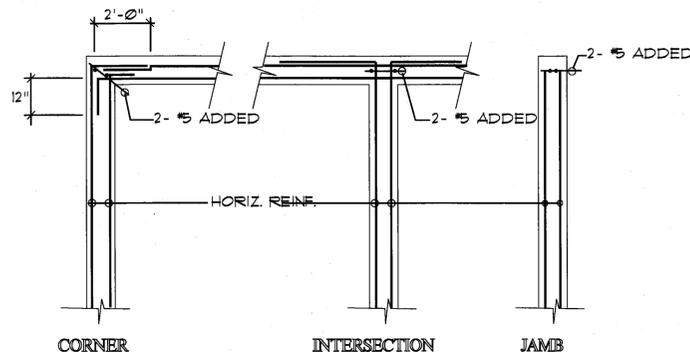
SIZE	EMBEDMENT L
1/2"	4"
5/8"	4"
3/4"	5"
7/8"	6"
1"	7"

SECTION

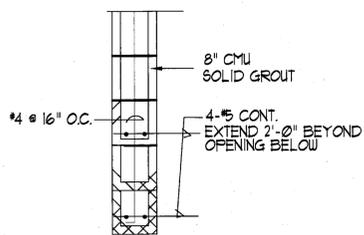
1 ANCHOR BOLT EMBEDMENT  
S-3 NTS



2 STEP FOOTING DETAIL  
S-3 NTS



3 TYP. CMU WALL REINF. DETAIL  
S-3 NTS



4 LINTEL BEAM DETAIL  
S-3 SCALE: 3/4" = 1'-0"

GENERAL NOTES

A. CONCRETE & REINFORCING

- CONTRACTOR SHALL VERIFY LOCATIONS AND SIZES OF ALL ANCHORS, INSERTS, ELECTRICAL AND MECHANICAL WORK PRIOR TO POURING CONCRETE.
- ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH AS FOLLOWS:

FOUNDATION & PEDESTALS	3,000 PSI
SLAB ON GRADE	3,000 PSI

- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCING #4 AND SMALLER MAY BE GRADE 40.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM 105 WITH FY-60 KSI
- MINIMUM CONCRETE COVERAGE FOR REINFORCING STEEL AS FOLLOWS:

CONCRETE AGAINST EARTH	3"
WALLS	1"
FORMED SURFACES AGAINST EARTH	2"

- ALL BARS MARKED CONTINUOUS SHALL BE LAPPED A MINIMUM OF 40 BAR DIAMETERS AT ALL SPLICES UNLESS NOTED OTHERWISE.

B. MISC. STEEL

- CONTRACTOR SHALL VERIFY LOCATIONS AND SIZES OF ALL ANCHORS, INSERTS, ELECTRICAL AND MECHANICAL WORK PRIOR TO POURING CONCRETE.
- ALL BOLTS, CLIPS, CONNECTION PLATES, ETC. SHALL BE STAINLESS STEEL MATERIAL.
- WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST AISC AND AWS CODES.

C. CONCRETE MASONRY UNITS

- UNLESS NOTED OTHERWISE ALL CONCRETE MASONRY WALLS SHALL BE REINFORCED WITH 1-#4 @ 24" O.C. WITH HORIZONTAL JOINT REINFORCING @ 16" O.C. PROVIDE BOND BEAM AS INDICATED ON DRAWINGS WITH A MINIMUM OF 2-#4 CONTINUOUS. ADD 2-#5 VERTICALLY AT ALL ENDS, JAMBS, CORNERS AND INTERSECTIONS.
- ALL BLOCKS SHALL CONFORM TO ASTM C-90 GRADE "N-11" UNITS.
- ALL CELLS CONTAINING REINFORCING, INSERTS OR ANCHORS SHALL BE GROUTED SOLID WITH 2,500 PSI GROUT.

D. WOOD

- ALL STRUCTURAL LUMBER SHALL CONFORM TO WESTERN WOOD PRODUCTS ASSOCIATION GRADING STANDARDS. ALL LUMBER SHALL BE DOUGLAS FIR WITH MINIMUM STRENGTH AS FOLLOWS:

FB (BENDING STRESS)	1,200 PSI
FV (SHEAR STRESS)	95 PSI
E (MODULUS OF ELASTICITY)	1,500,000 PSI

- ALL PLYWOOD SHALL BE STRUCTURAL I CONFORMING TO AMERICAN PLYWOOD ASSOCIATION STANDARDS.
- ALL FRAMING MEMBERS SHALL BE PRESSURE TREATED.
- GLUE LAMINATED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F. LAMINATION SHALL BE 1-1/2" AND GLUED WITH EXTERIOR TYPE GLUE.
- PRE-ENGINEERED, PREFABRICATED WOOD TRUSSES SHALL BE FABRICATED WITH STAINLESS STEEL CONNECTION PLATES AND DESIGNED IN ACCORDANCE TO ANSI/TPI.

E. FOUNDATION NOTES

- ALL FOOTING SHALL BEAR ON EXISTING GRADE OR PROPERLY COMPACTED FILL WITH BEARING CAPACITY OF 2,000 PSF. IF ANY DISCREPANCIES OR ADVERSE SOIL CONDITIONS ARE ENCOUNTERED DURING EXCAVATION OF FOOTINGS, THE COUNTY SHALL BE NOTIFIED.
- BOTTOM OF FOOTING ELEVATIONS VARY ACCORDING TO THE TOPOGRAPHY BUT AT NO TIME WILL IT BE LESS THAN THE MINIMUM DEPTH ESTABLISHED ON THE DRAWINGS.

F. DESIGN LOADS

FLOOR	125 PSF
ROOF	20 PSF
WIND	PER IBC, V=105 EXPOSURE C
SEISMIC	IBC CATEGORY I-A

G. CONSTRUCTION NOTES

- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO STARTING CONSTRUCTION.
- ALL FRAMING MEMBERS AND CMU WALLS SHALL BE ADEQUATELY BRACED UNTIL ALL CONNECTIONS ARE MADE AMONG THE VARIOUS ELEMENTS, AND THE STRUCTURE IS CAPABLE OF RESISTING LATERAL LOADS.
- THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT THE STRUCTURE DURING CONSTRUCTION, SUCH AS BRACING AND SHORING FOR LOADS DUE TO CONSTRUCTION.

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION KAULANA MANU NATIVE BIRD & PLANT SANCTUARY VIEWING AREA AND PARKING LOT TRK: (3) 2-4-008 : 008 Kipuka 21, Upper Waialeale Forest Reserve, South Hilo, Hawaii NOTES AND DETAILS					
		DESIGNED: _____ DRAWN: _____ CHECKED: _____ APPROVED: _____			
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.		SUBMITTED: _____ DATE: 01/28/2016 SCALE: _____ DATE: MAY -3 2016		DRAWING NO. S-3 SHEET NO. 13 OF 13 SHEETS	