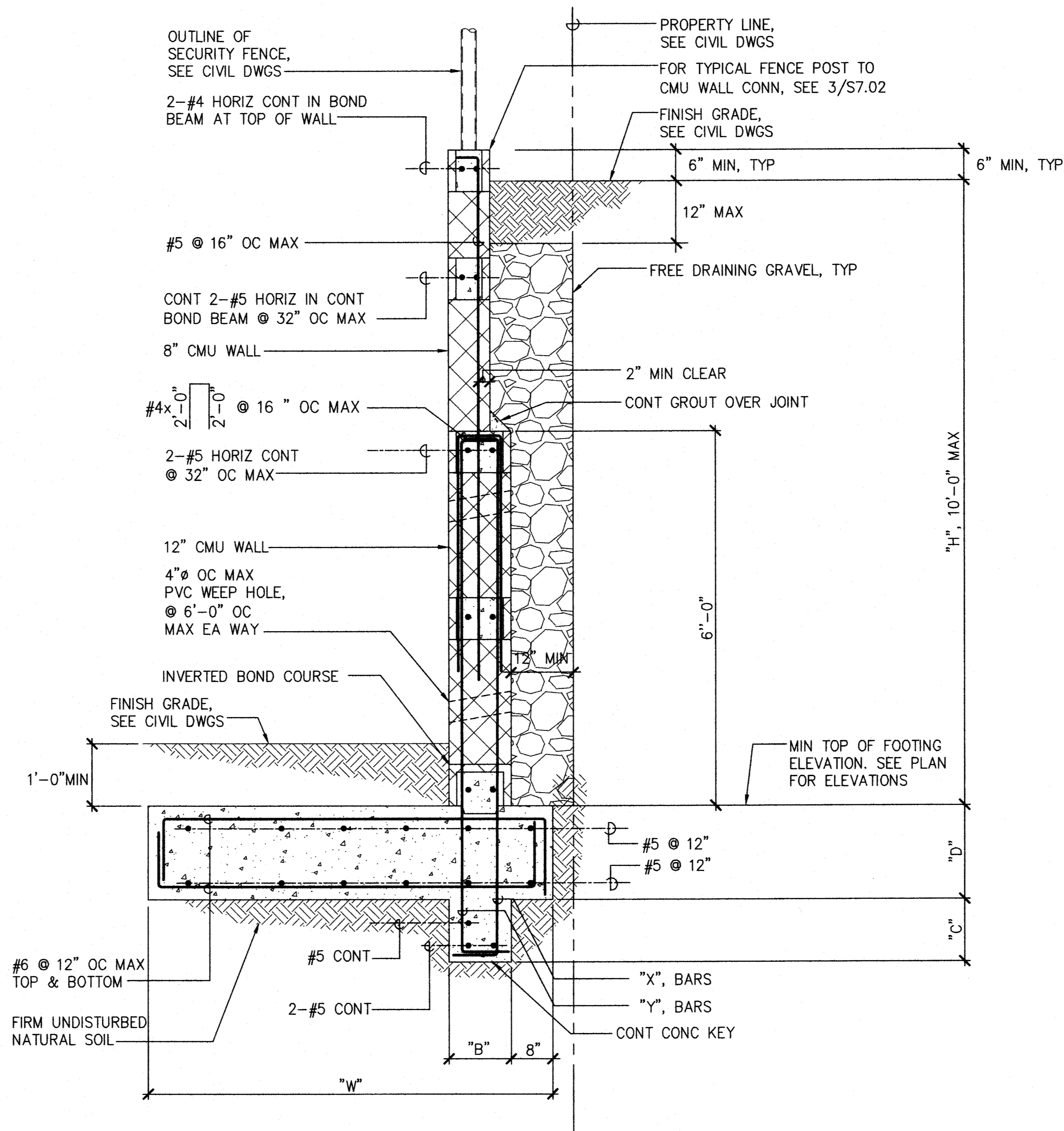


RETAINING $H \leq 6'-0"$ SECTION
NOT TO SCALE



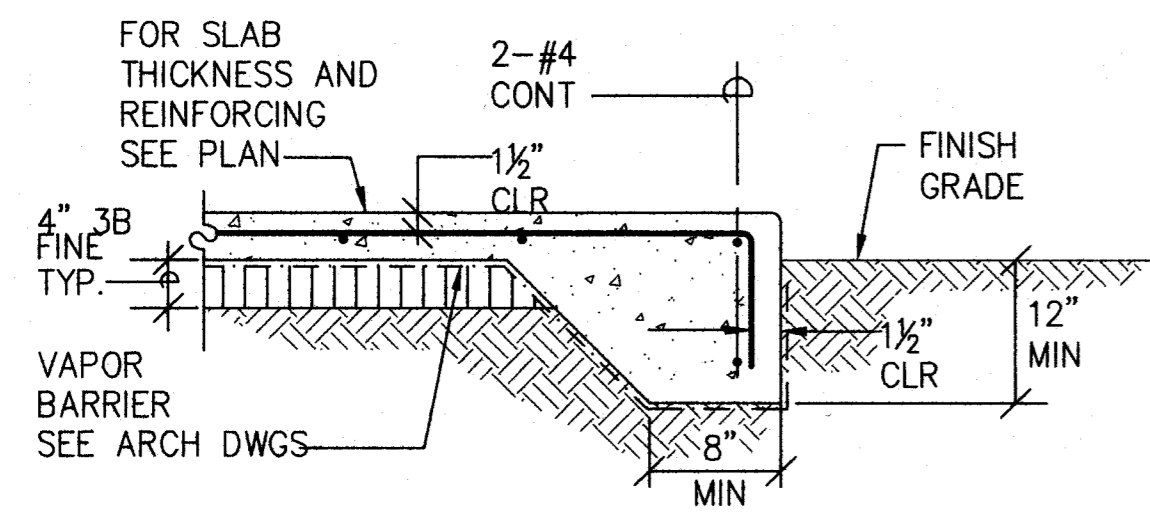
RETAINING $6'-0" < H \leq 10'-0"$ SECTION
NOT TO SCALE

CMU RETAINING WALL SCHEDULE								
HEIGHT "H"	"D"	"W"	"B"	"C"	"X1" BARS	"X2" BARS	"Y1" BARS	"Z" BARS
$H \leq 6'-0"$	1'-6"	4'-6"	1'-0"	1'-0"	#5 AT 16"	#5 AT 16"	#4 AT 16"	#4 AT 12"
$6'-1" < H \leq 10'-0"$	1'-6"	6'-6"	1'-0"	1'-0"	#6 AT 16"	#5 AT 16"	#6 AT 16"	#4 AT 12"

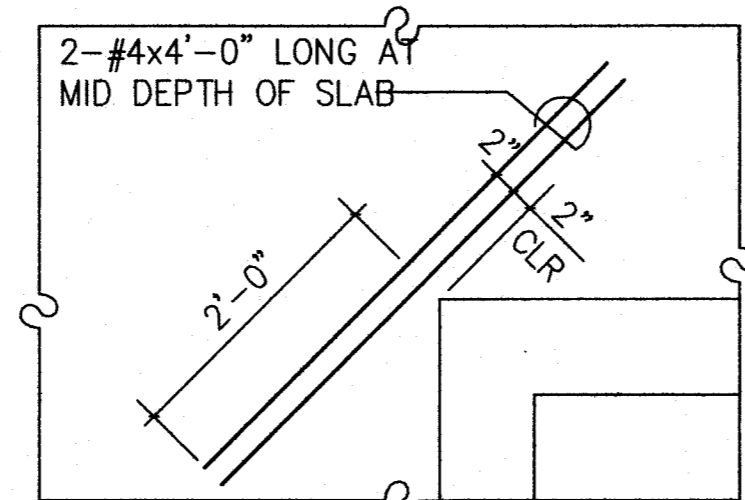
- NOTES:
- CONTROL JOINTS SHALL BE LOCATED IN WALLS AT 12'-0" MAX INTERVALS.
 - FOR RETAINING WALL DRAINAGE DETAILS, SEE CIVIL DRAWINGS.
 - FOR RETAINING WALL LOCATION IN REFERENCE TO PROPERTY LINE, SEE CIVIL DWGS

1 CMU SITE RETAINING WALL SCHEDULE
S6.01 NOT TO SCALE

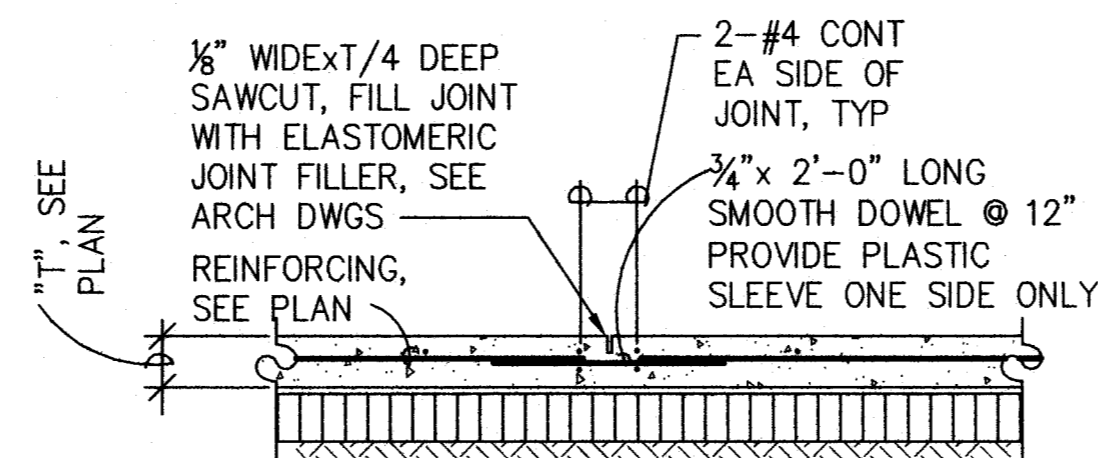
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
CMU SITE RETAINING WALL DETAILS					
DESIGNED: RI		SUBMITTED: <i>ec ml</i>			
DRAWN: IB		DATE: 03/15/2016			
CHECKED: RI		SCALE:			
APPROVED: <i>Rml</i> CHIEF ENGINEER		DATE: MAR 23 2016		DRAWING NO. S6.01	



AT SLAB EDGE



REINF AT REENTRANT CORNERS



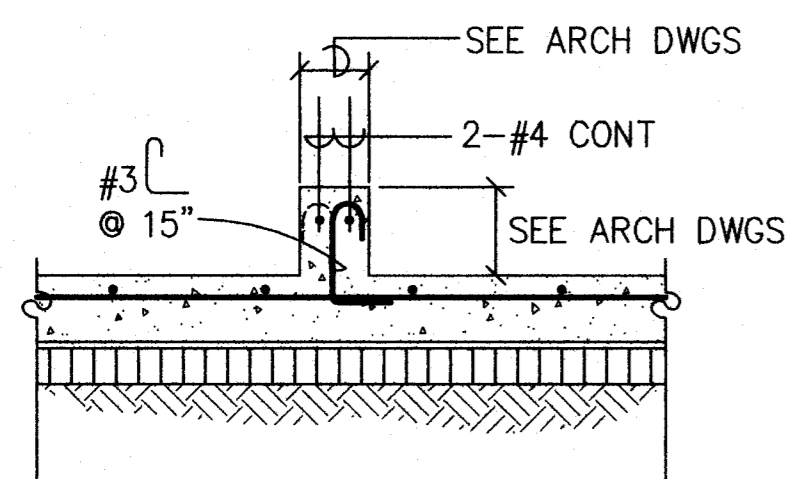
CONTROL JOINT - CJ-1

(PROVIDE PERPENDICULAR TO CONSTRUCTION JOINTS AND CONTROL JOINTS)

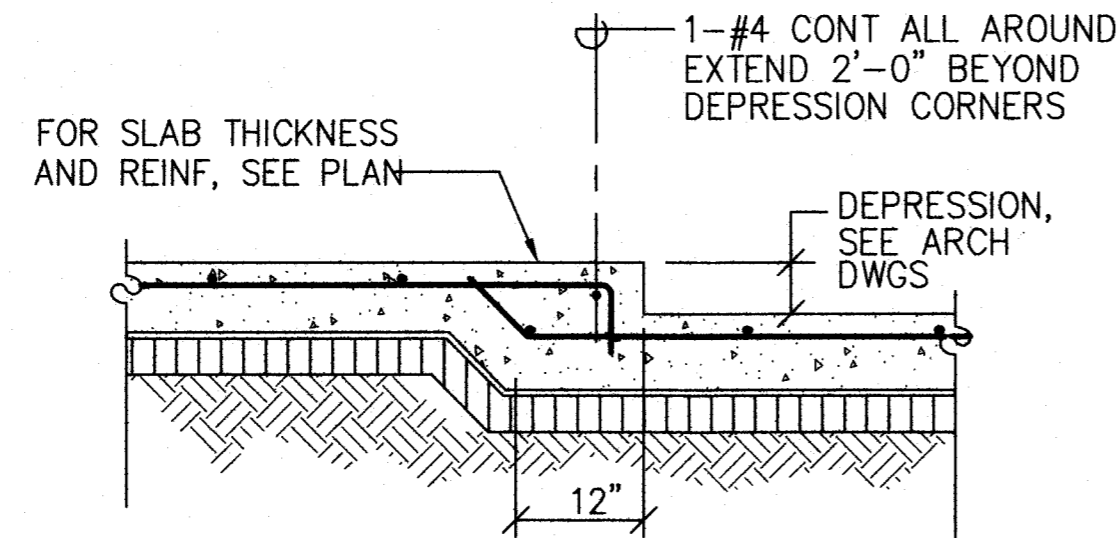
NOTE:
SAW CUTTING SHALL OCCUR AS SOON AS CONCRETE SURFACE IS FIRM ENOUGH TO NOT BE TORN BY CUTTING BLADE AND BEFORE SHRINKAGE CRACKING OCCURS, BUT NO LATER THAN 12 HOURS AFTER CONCRETE HAS BEEN POURED.

BOLT DIAMETER	MINIMUM EMBEDMENT
1/2"	4"
5/8"	5"
3/4"	6"

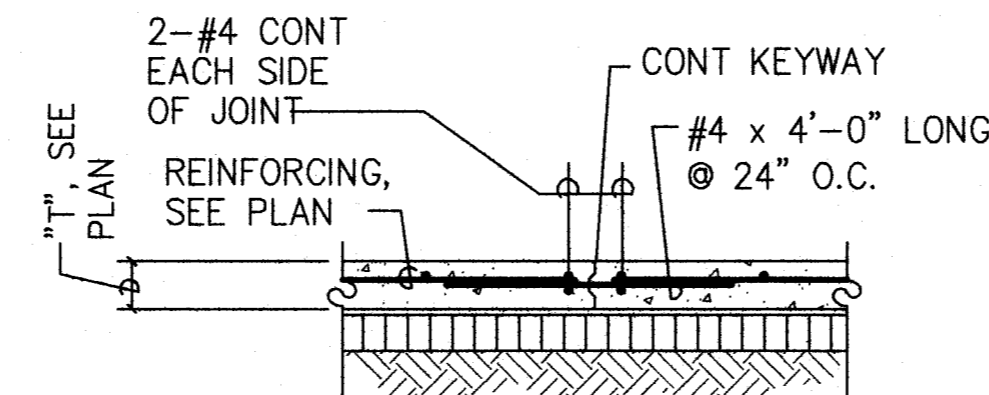
NOTE: POSSIBLE INSTALLATION PROCEDURE NUMBERED FOR MASONRY



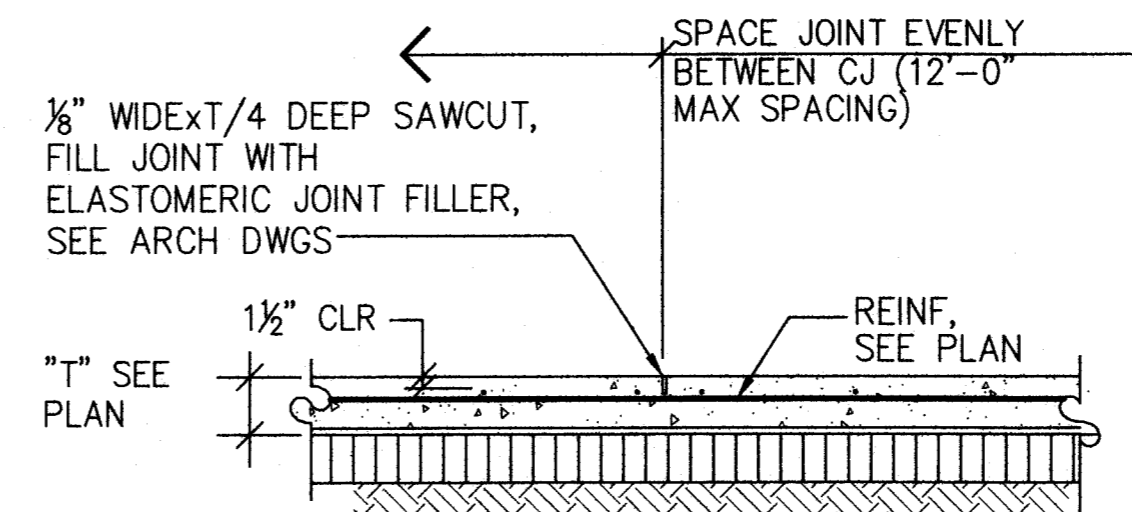
AT CURB



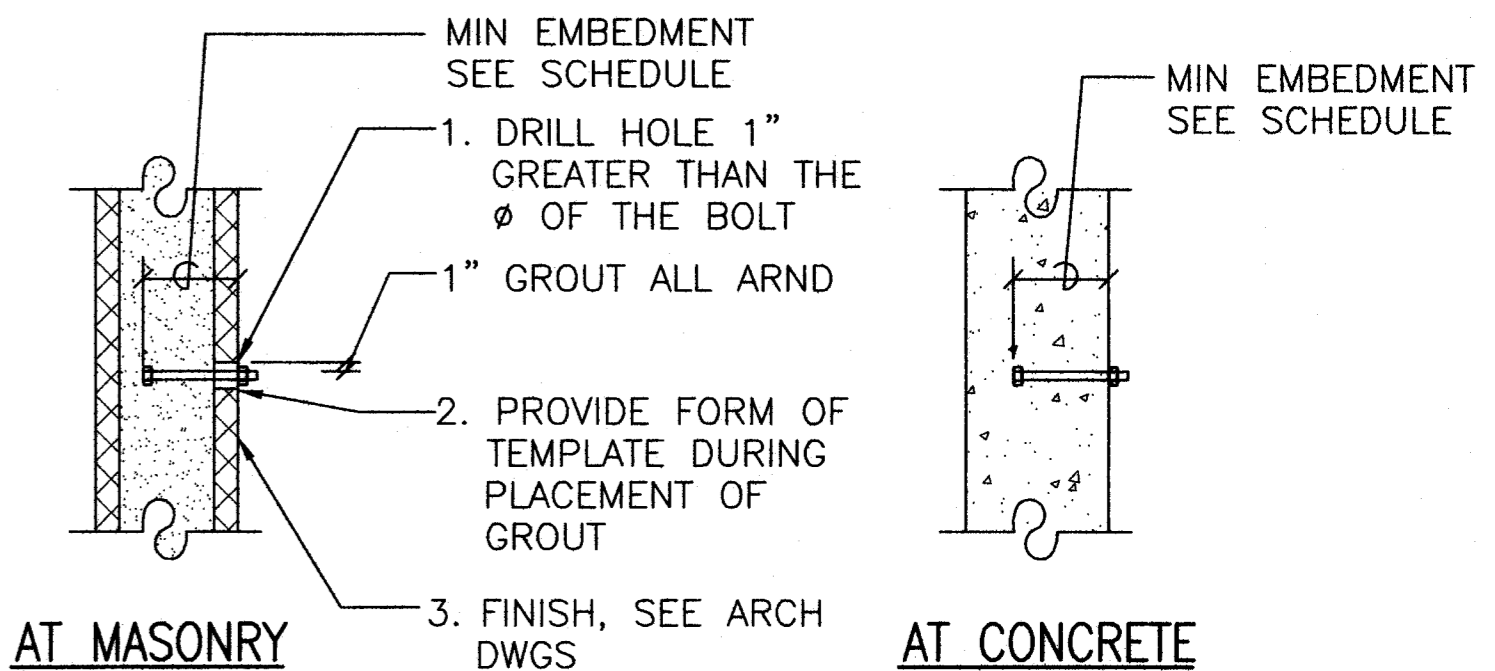
AT DEPRESSED SLAB



CONSTRUCTION JOINT- CJ-2



SAWCUT JOINT



AT MASONRY

AT CONCRETE

1 TYPICAL SLAB-ON-GRADE DETAILS

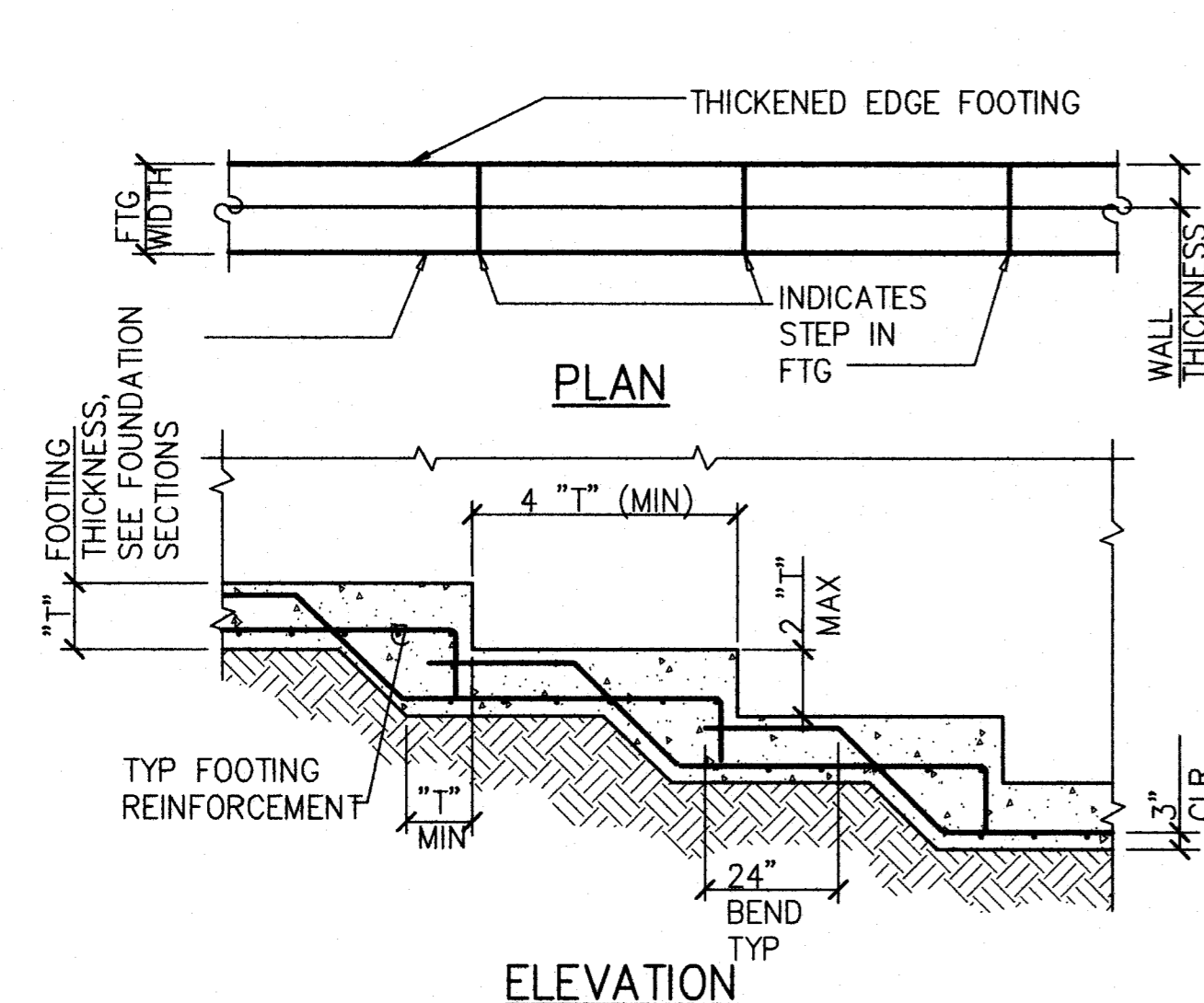
\$7.00 NOT TO SCALE

2 TYPICAL SLAB JOINT DETAIL

\$7.00 NOT TO SCALE

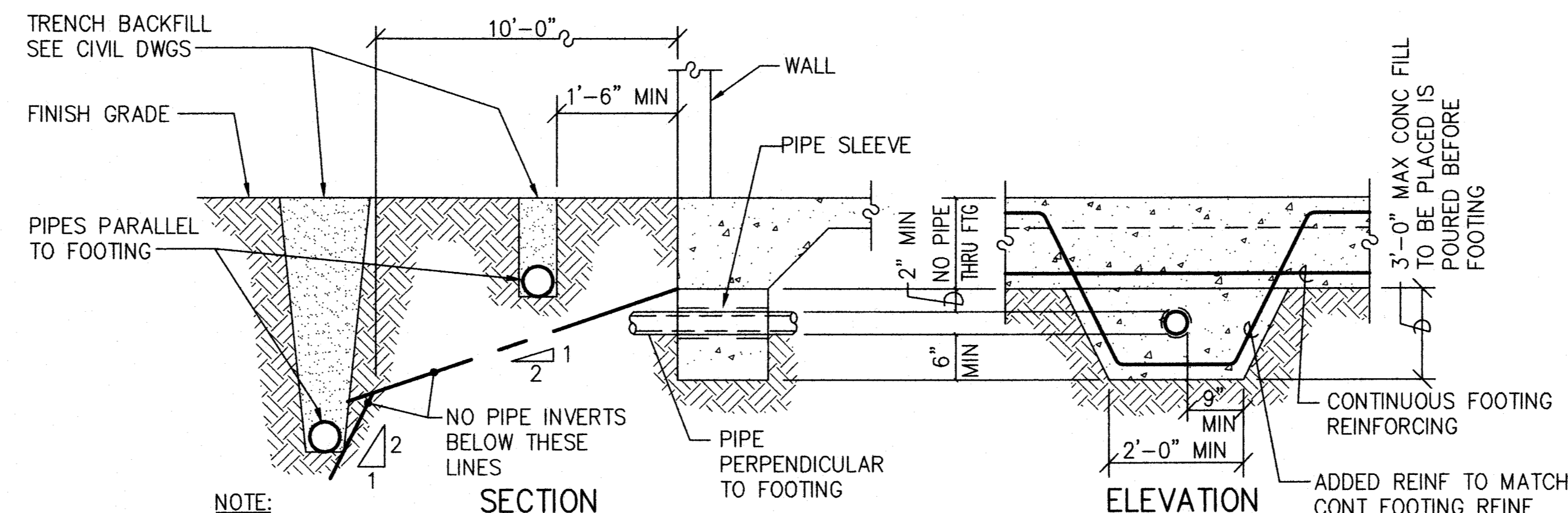
3 TYPICAL ANCHOR BOLT DETAIL

\$7.00 NOT TO SCALE



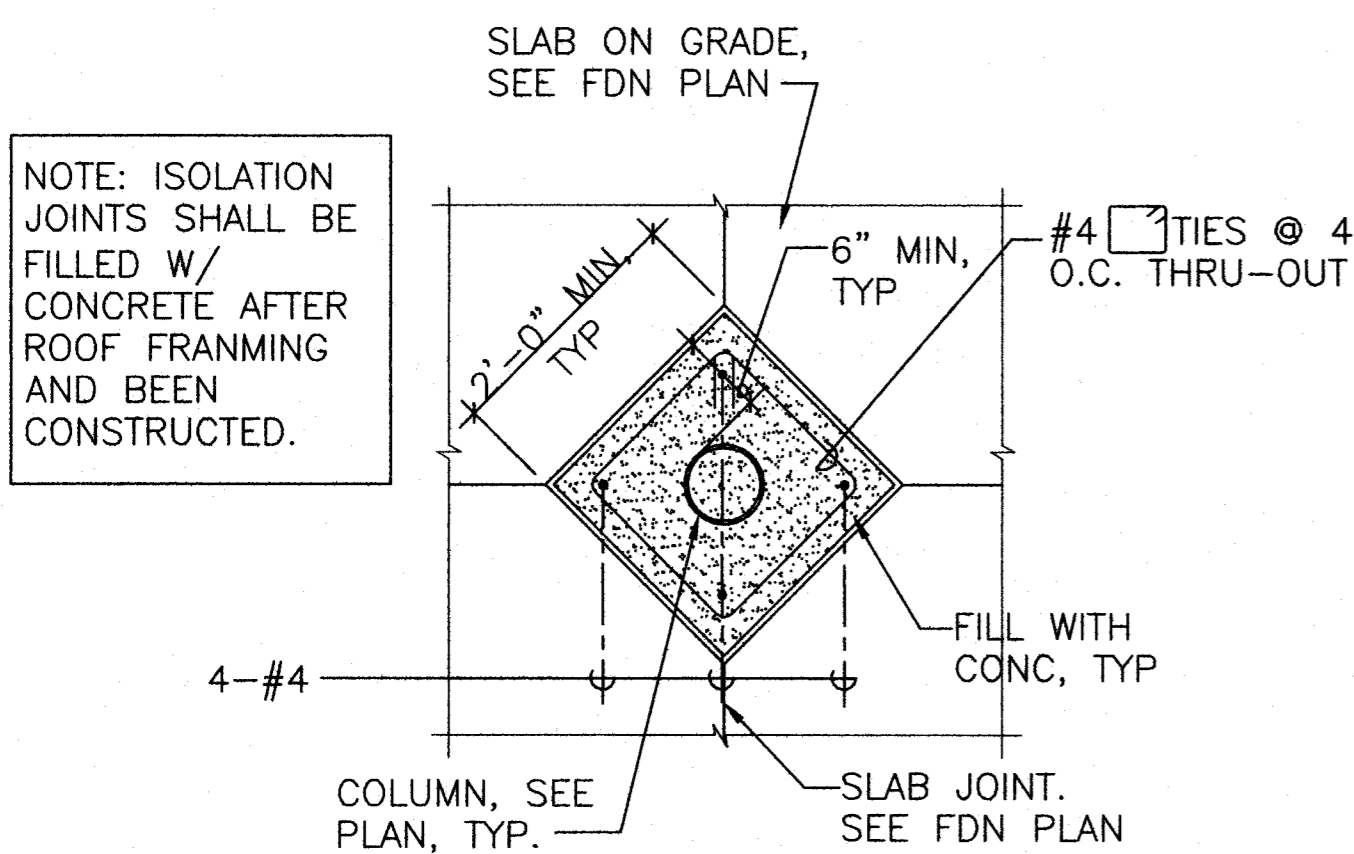
4 TYPICAL STEPPED FOOTING DETAIL

\$7.00 NOT TO SCALE



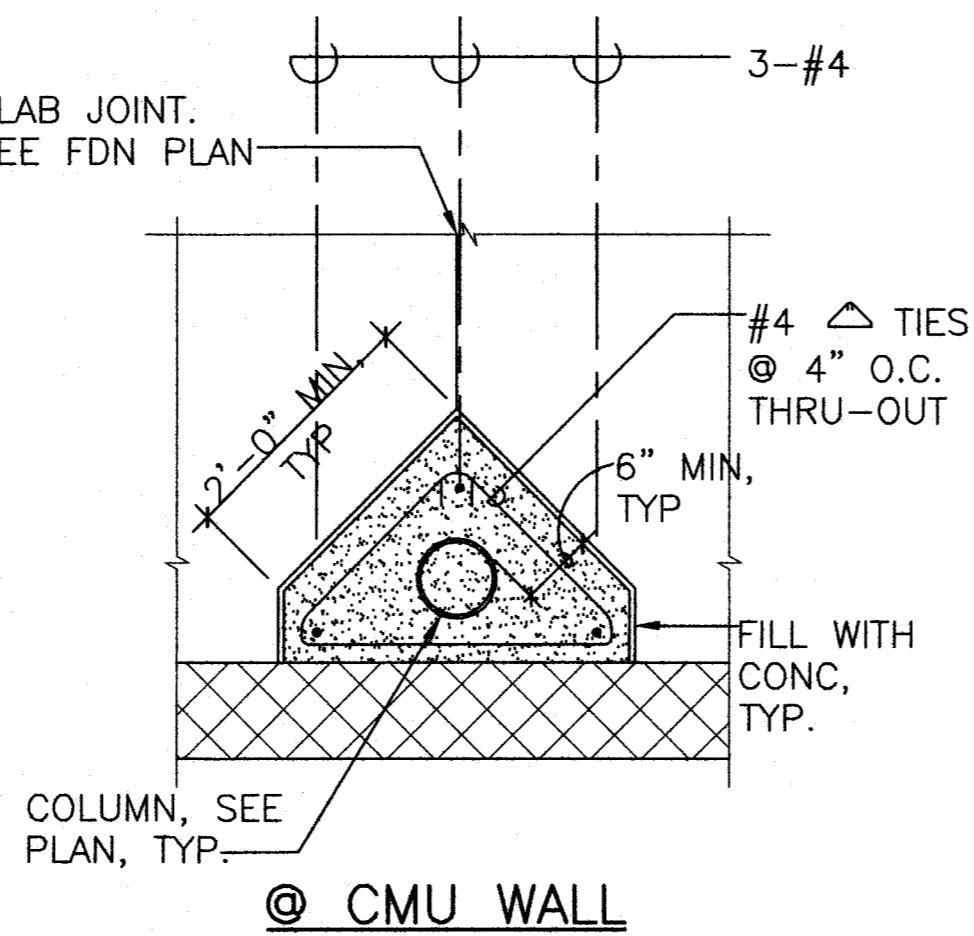
5 TYPICAL PIPE AT FOOTING DETAIL

\$7.00 NOT TO SCALE



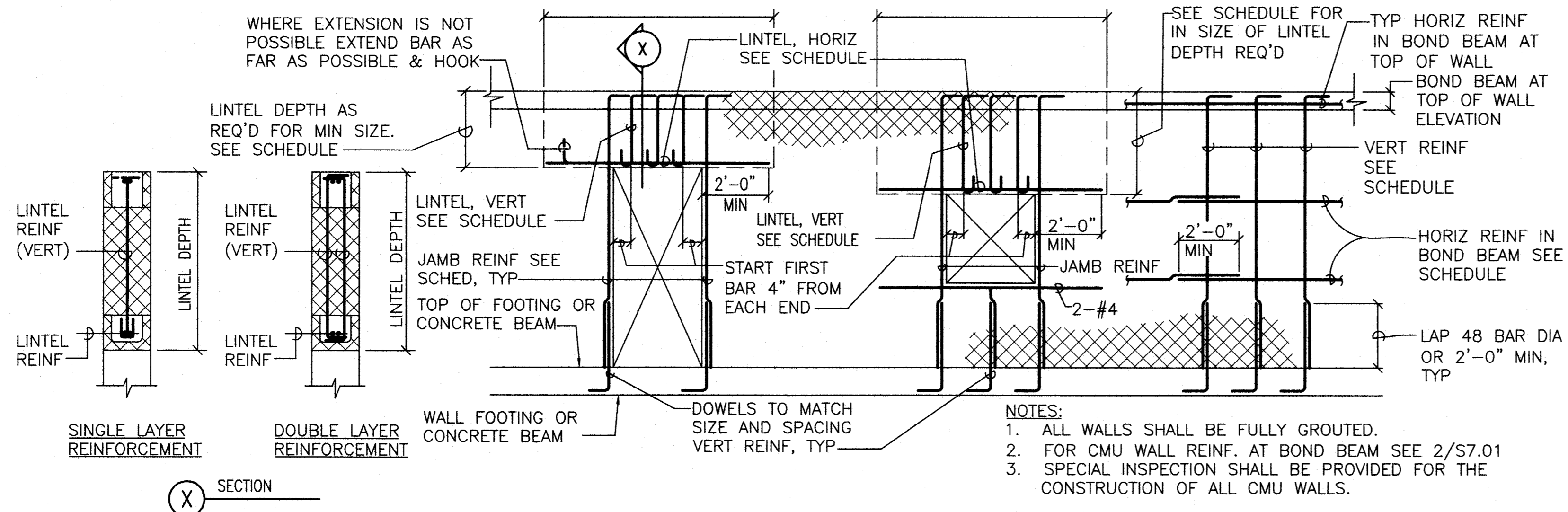
6 TYPICAL COLUMN ISOLATION JOINT

\$7.00 NOT TO SCALE



@ CMU WALL

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII TYPICAL DETAILS					
DESIGNED: RI		SUBMITTED: <i>RI</i>			
DRAWN: IB		DATE: 03/15/2016			
CHECKED: RI		SCALE:			
APPROVED: <i>[Signature]</i> CHIEF ENGINEER			MAR 23 2016 DATE		DRAWING NO. \$7.00

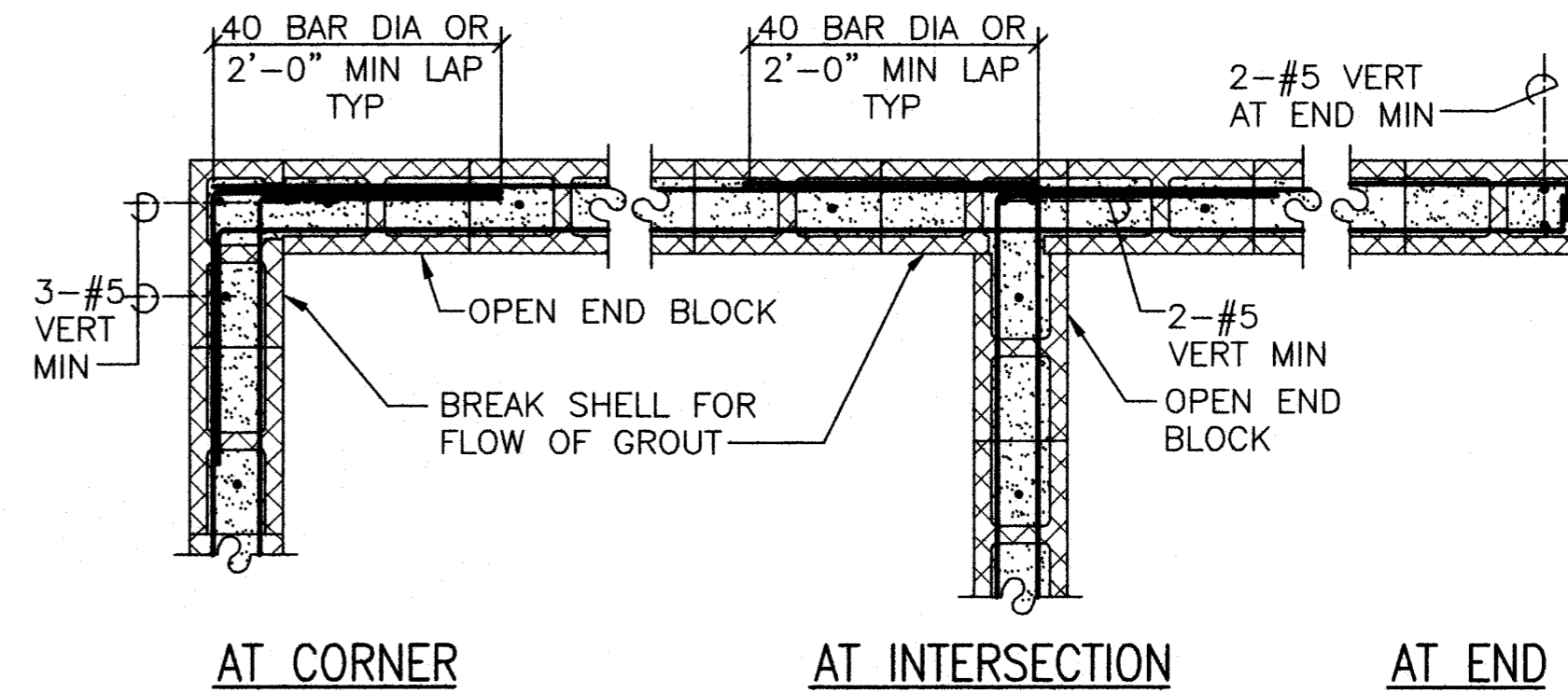


- NOTES:
1. ALL WALLS SHALL BE FULLY GROUTED.
 2. FOR CMU WALL REINF. AT BOND BEAM SEE 2/S7.01
 3. SPECIAL INSPECTION SHALL BE PROVIDED FOR THE CONSTRUCTION OF ALL CMU WALLS.

ONE STORY WALL ELEVATION

CMU WALL REINFORCING SCHEDULE				
LOCATION	WALL THICKNESS	BAR SIZE AND SPACING		
		HORIZ	VERT	REMARKS
W-1	8"	2-#4 AT 48"	#5 AT 16" CENTERED	TYPICAL
W-2	8"	2-#4 AT 24"	#5 AT 16" CENTERED	

OPENING WIDTH	LINTEL DEPTH	REINFORCING			
		JAMB	LINTEL HORIZ U.O.N.	LINTEL VERT	REMARKS
$W \leq 4'-0"$	1'-4"	2-#5	2-#5	#4 AT 16"	
$4'-0" < W \leq 10'-0"$	2'-0"	2-#6	2-#5	#4 AT 8"	
$W > 10'-0"$	3'-4"	2-#6	2-#6	#5 AT 8"	

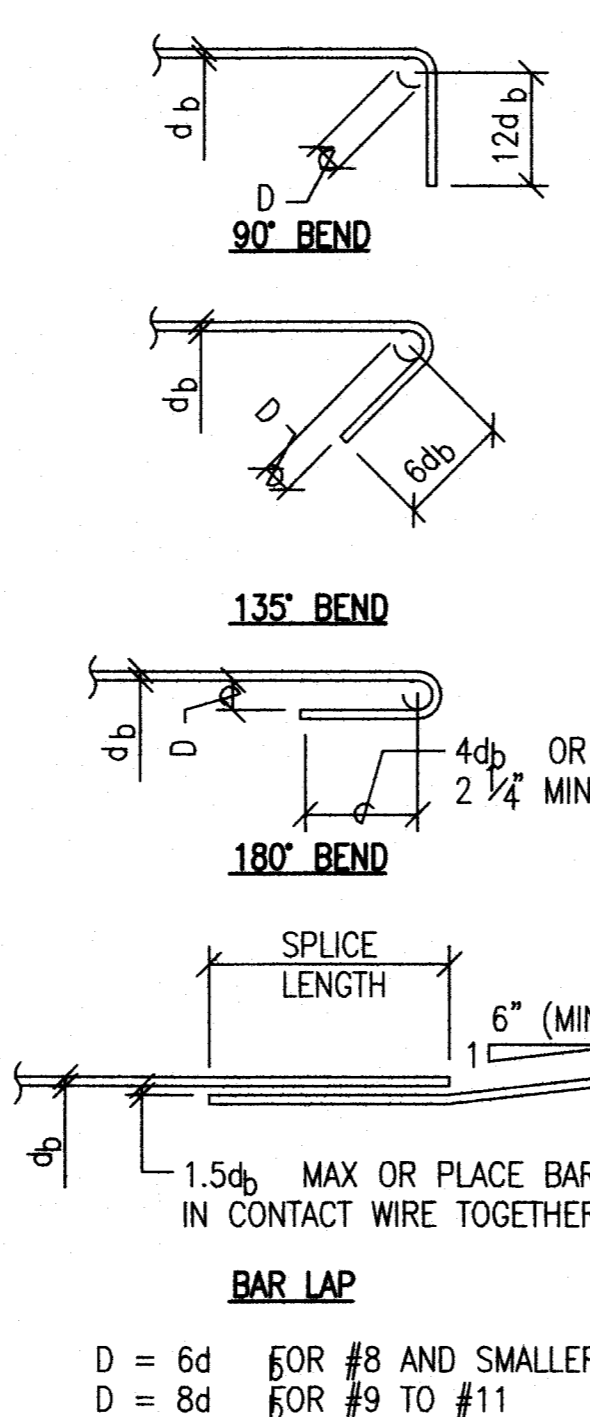


2 TYPICAL CMU WALL REINFORCING AT BOND BEAM

1 TYPICAL CMU WALL ELEVATION

BAR SIZE	LAP SPLICE		EMBEDMENT		
	BOT BAR OR WALL BAR	TOP BAR	STRAIGHT		W/ STD HOOK
			BOT BAR OR WALL BAR	TOP BAR	
#3, #4	29"	38"	22"	29"	11"
#5	36"	47"	28"	36"	14"
#6	43"	56"	33"	43"	17"
#7	63"	82"	48"	63"	20"

BAR SIZE	LAP SPLICE		EMBEDMENT		
	EDGE BAR	CENTERED BAR	STRAIGHT		W/ STD HOOK
			EDGE BAR	CENTERED BAR	
#3, #4	26"	24"	26"	24"	11"
#5	40"	30"	40"	30"	14"
#6	74"	36"	74"	36"	17"



- NOTES:
1. LENGTHS ARE FOR CONCRETE BEAMS & COLUMNS WITH REBAR SPACED 1 BAR DIAMETER MIN OC. AND CONCRETE WALLS WITH REBARS SPACED 2 BAR DIAMETERS MIN OC INCREASE BAR LENGTH 50% FOR BARS SPACED CLOSER THAN MINIMUMS SPECIFIED.
 2. "TOP BARS" ARE HORIZONTAL BARS WITH 12" OR MORE OF CONCRETE CAST BELOW.
 3. BEND & HOOKS SHALL BE "STANDARD HOOKS" IN ACCORDANCE WITH ACI 318

3 TYPICAL REBAR SPLICE & EMBEDMENT LENGTH SCHEDULE

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

MAUI OFFICE ANNEX
WAILUKU, MAUI, HAWAII

TYPICAL DETAILS

ROY E. IWANAGA
LICENSED PROFESSIONAL ENGINEER
No. 8871-S
HAWAII, U.S.A.

DESIGNED: RI
DRAWN: IB
CHECKED: RI

SUBMITTED: *ce*
DATE: 03/15/2016
SCALE:

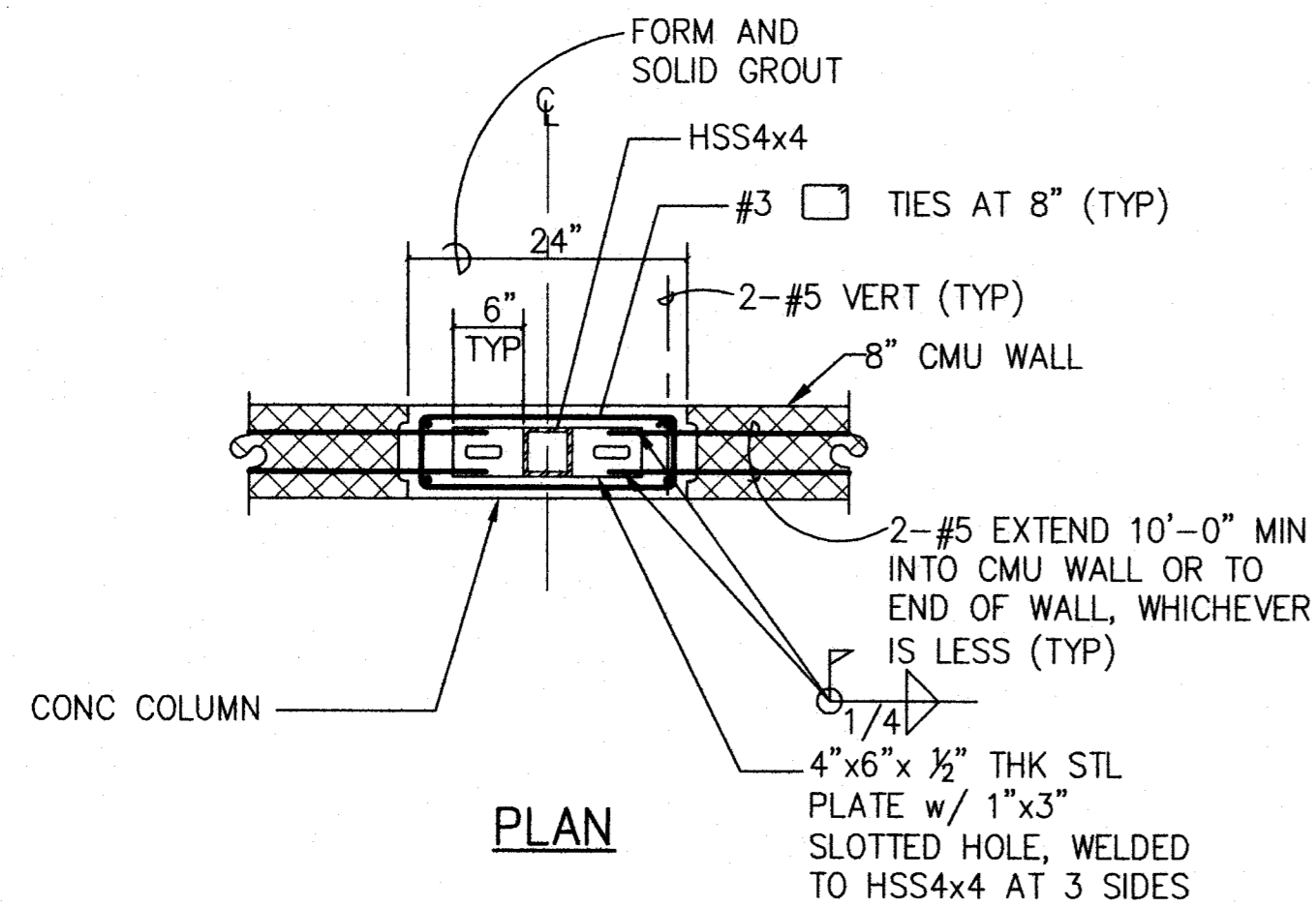
APPROVED: *R. Iwanaga*
CHIEF ENGINEER

MAR 23 2016
DATE

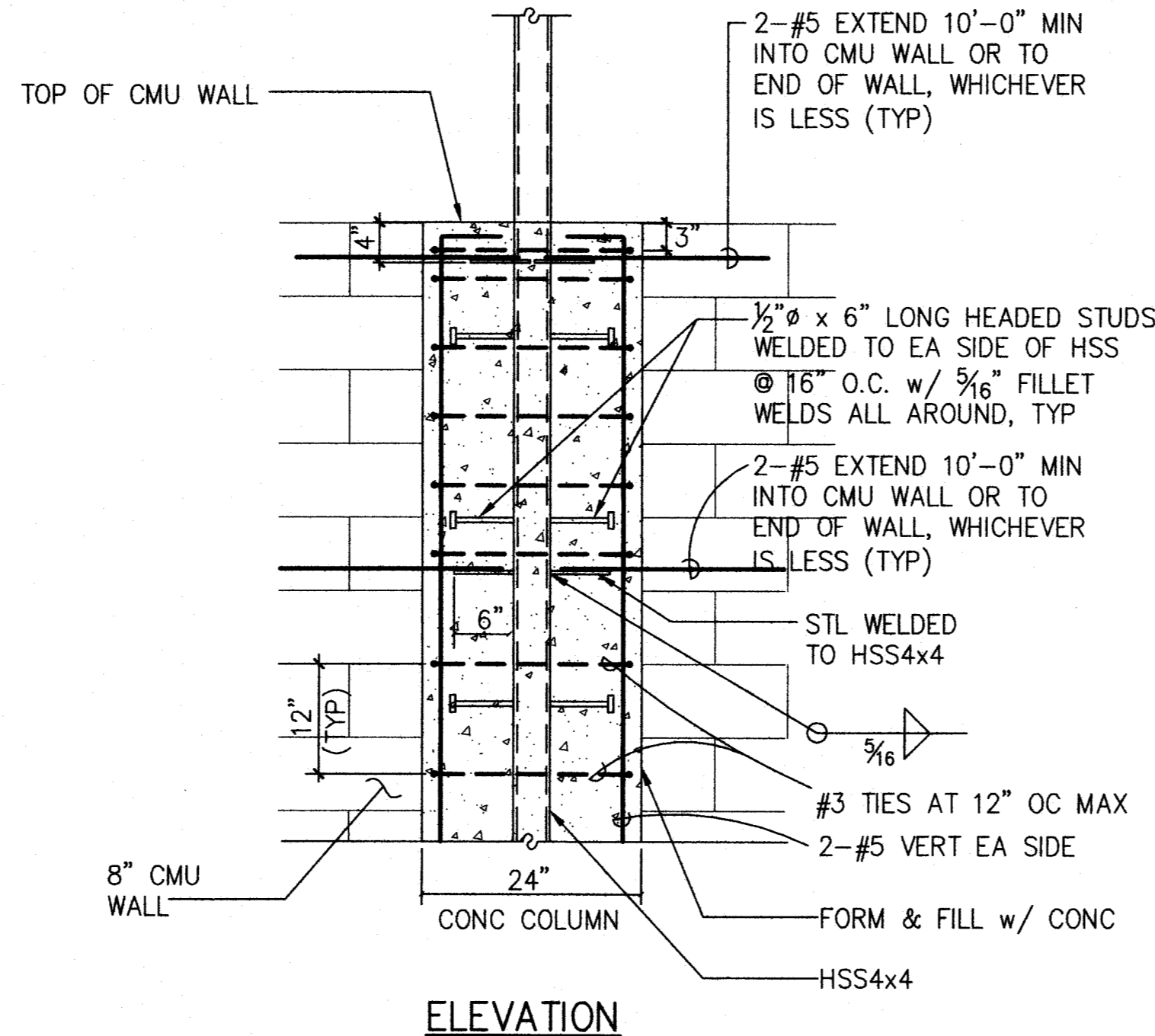
DRAWING NO. **S7.01**

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

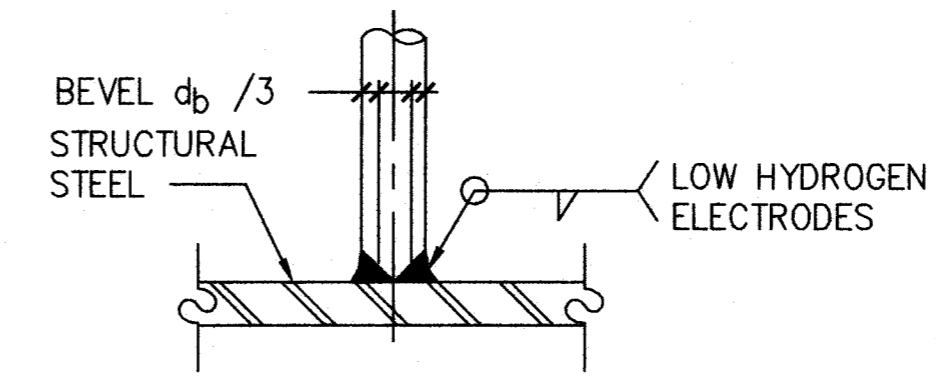
NOTE:
 1. SEE GENERAL NOTES FOR WELDED REINFORCING STEEL REQUIREMENTS.
 2. SEE 2/S7.02 FOR TYPICAL REBAR AND HEADED STUD WELDING DETAILS.



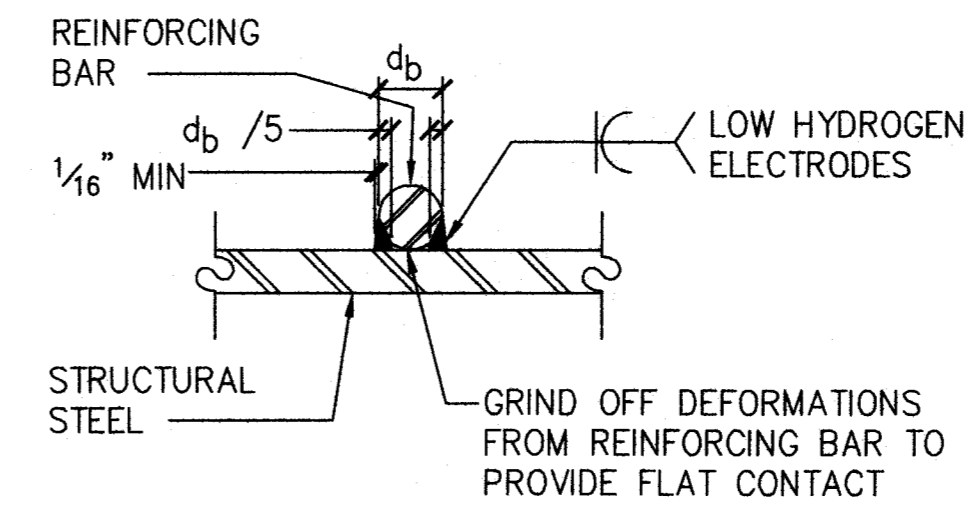
STEEL COLUMN AT CONTINUOUS WALL



ELEVATION



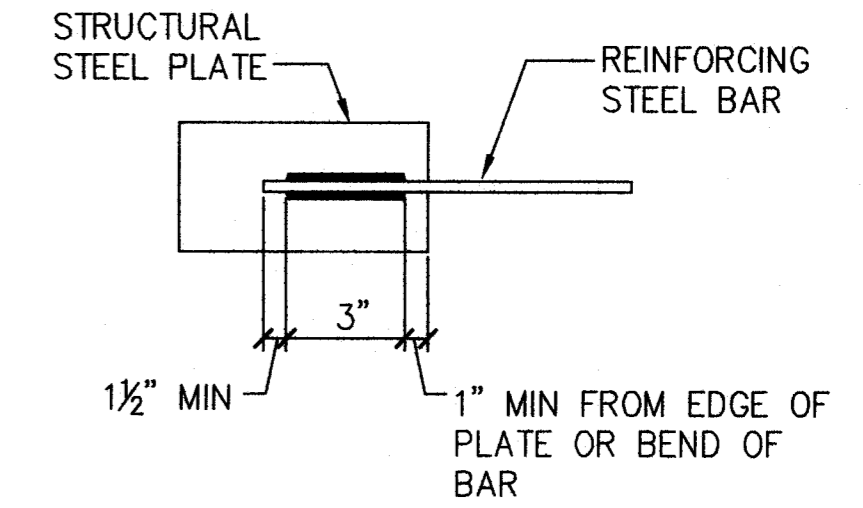
HEADED STUD PERPENDICULAR TO STRUCTURAL STEEL



BAR PARALLEL TO STRUCTURAL STEEL

NOTES:
 1. ALL WELDING SHALL CONFORM TO AWS D1.4

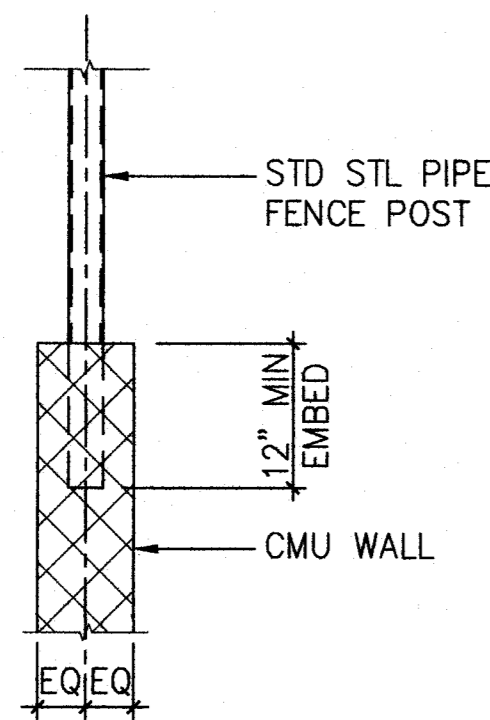
db	FILLET WELD
5/8"φ	3/16
3/4"φ	3/8



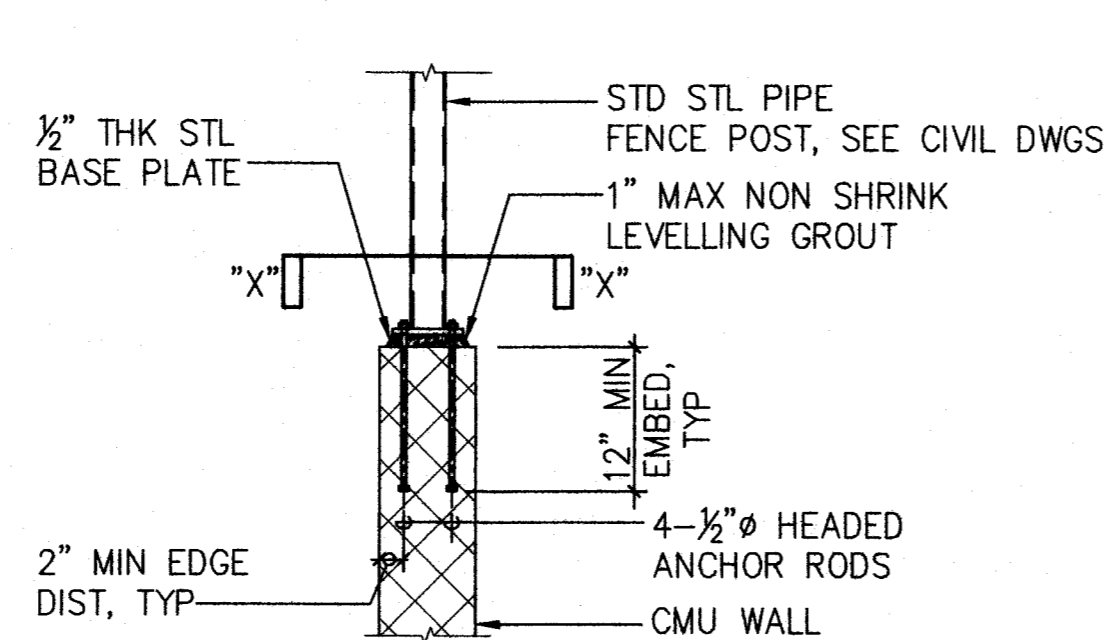
PLAN

1 TYPICAL CMU WALL REINFORCING AT BOND BEAM
 S7.02 NOT TO SCALE

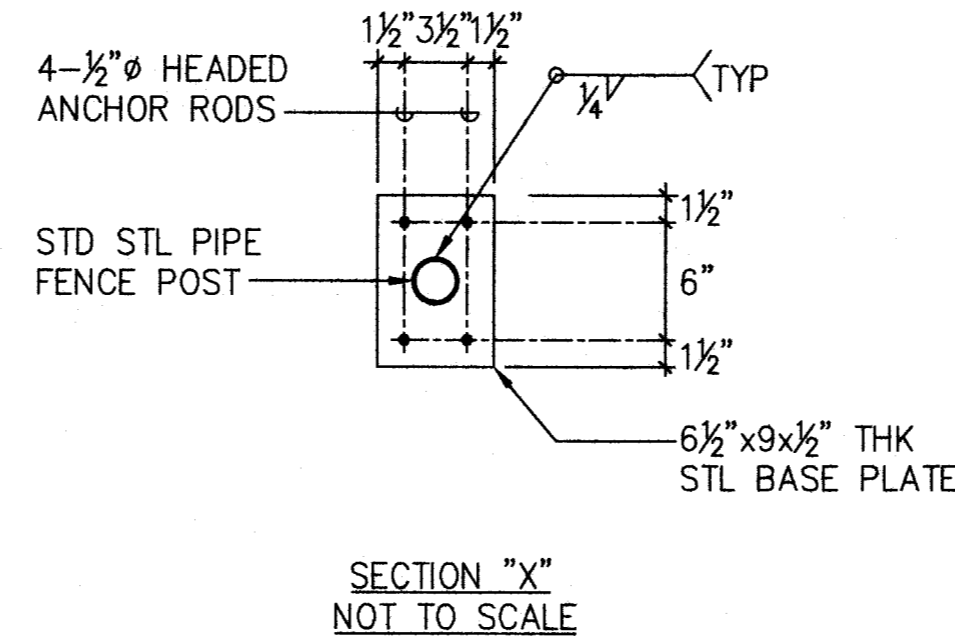
2 TYPICAL REBAR & STUD WELDING DETAIL
 S7.02 NOT TO SCALE



CONDITION @ 2 1/2"φ STD STL PIPE POST



CONDITION @ 3 1/2"φ STD STL PIPE POST

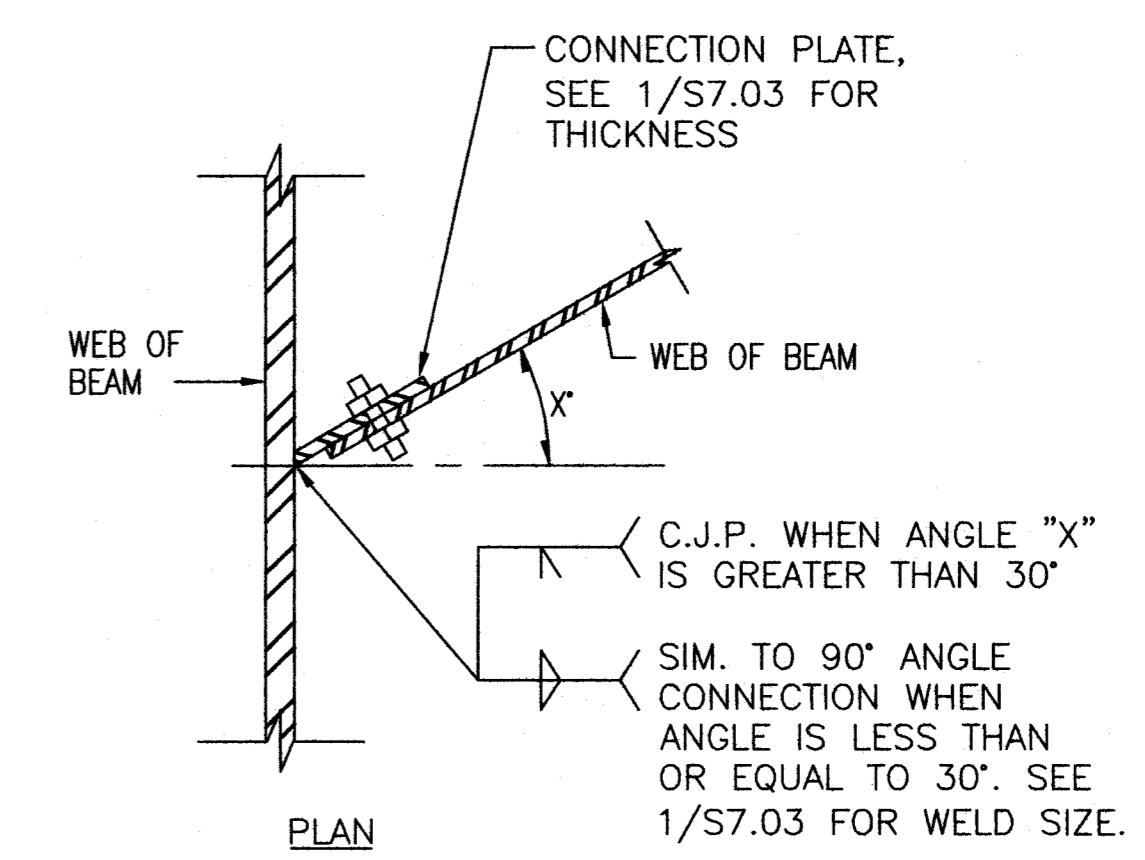
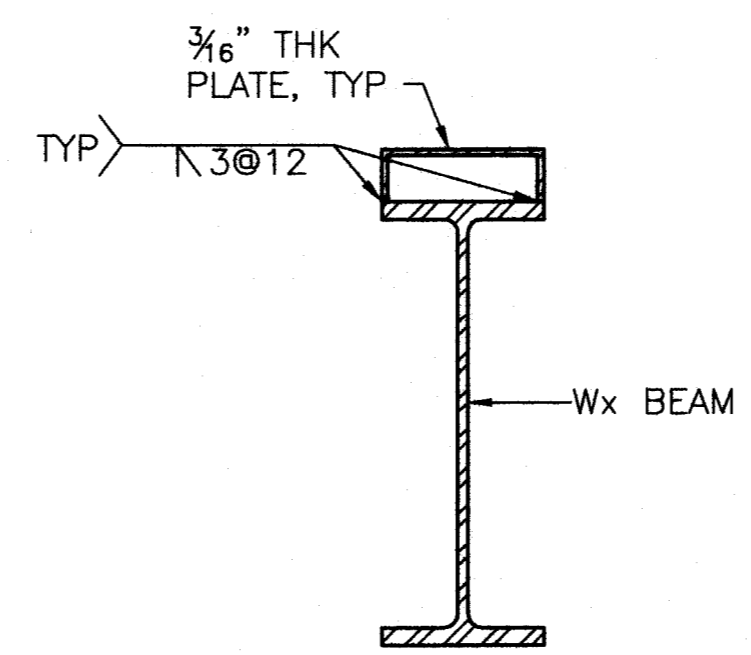
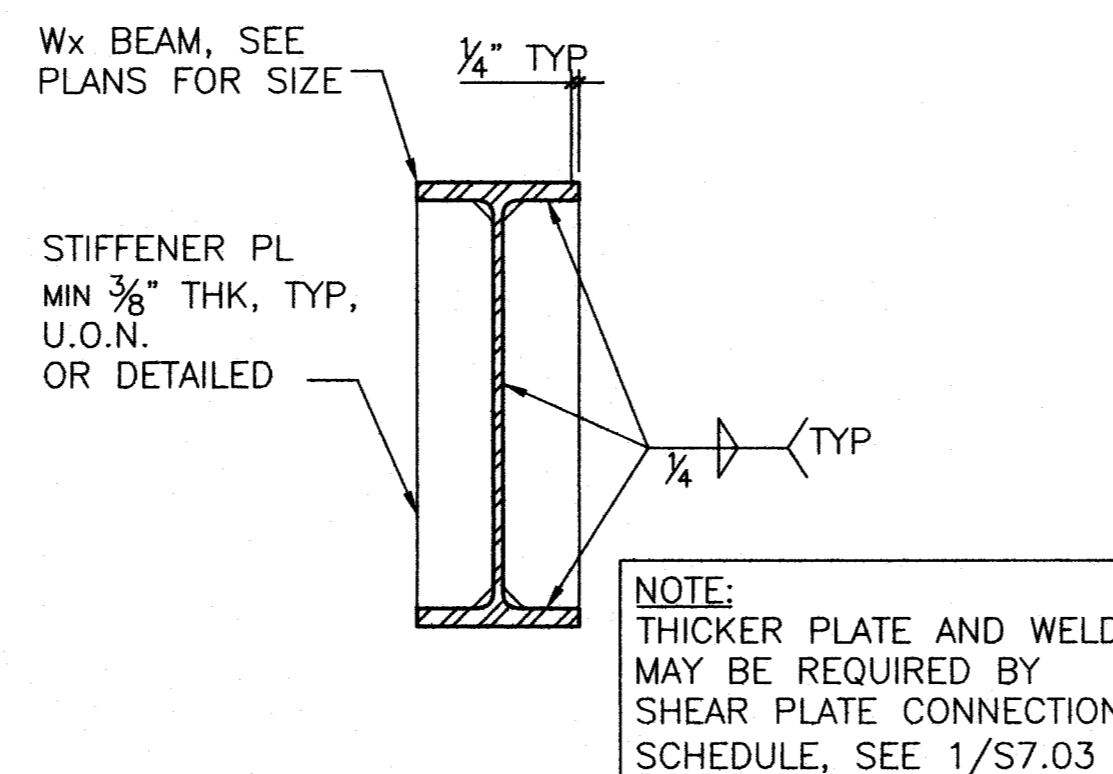


SECTION "X" NOT TO SCALE

3 TYPICAL STD STL PIPE FENCE POST TO CMU WALL DETAIL
 S7.02 NOT TO SCALE

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
TYPICAL DETAILS					
DESIGNED:	RI	SUBMITTED:	sc		
DRAWN:	IB	DATE:	03/15/2016		
CHECKED:	RI	SCALE:			
APPROVED:	 Ron E. Iwamoto CHIEF ENGINEER		MAR 23 2016 DATE	DRAWING NO. S7.02	

SHEAR PLATE CONNECTION SCHEDULE					
TYPE OF BEAM	ROOF FRAMING MEMBERS				
BEAM SIZE	W6x	WBx, W10x	W12x, W14x	W16x	W18x
CONNECTION PLATE THICKNESS	1/4"	1/4"	3/8"	1/2"	1/2"
BOLT TYPE	A325N	A325N	A325N	A325N	A325N
BOLT DIAMETER	5/8"	3/4"	3/4"	3/4"	3/4"
NUMBER OF BOLTS*	2	2	3	4	5
MIN BOLT SPACING*	3	3	3	3	3
MIN EDGE DISTANCE*	1 1/4"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
FILLET WELD	3/16"	1/4"	1/4"	5/16"	5/16"
* UNLESS NOTED OTHERWISE OR INDICATED ON SECTIONS					

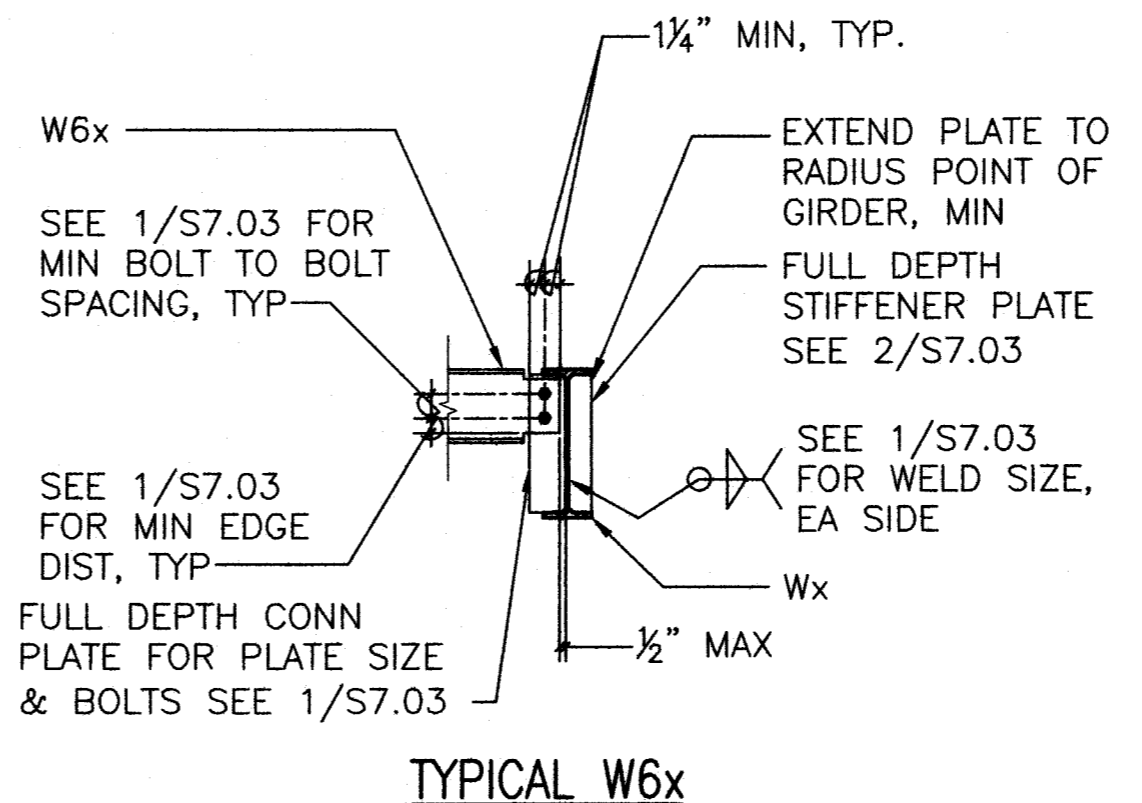
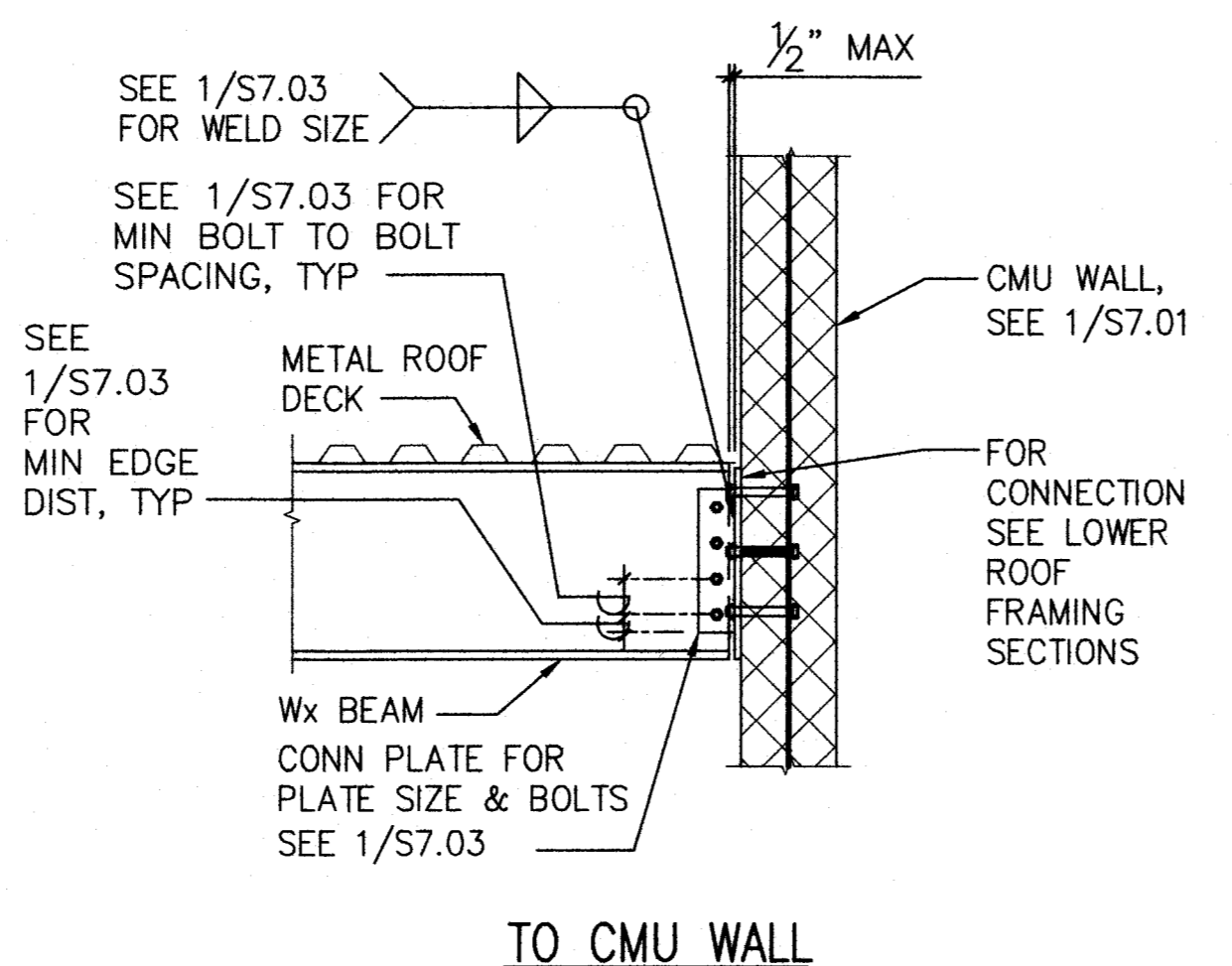
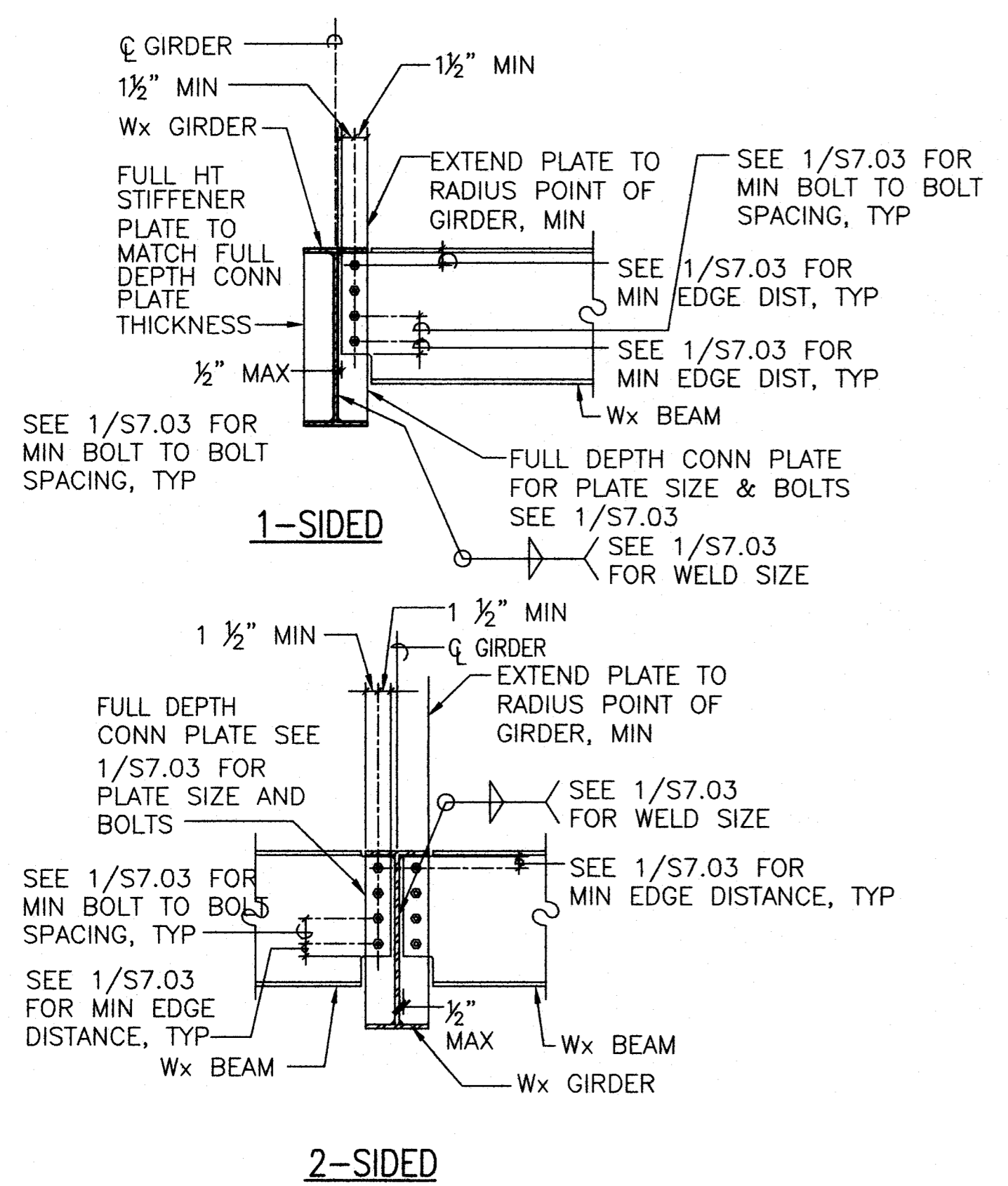


1 TYPICAL SHEAR PLATE CONNECTION SCHEDULE
S7.03 NOT TO SCALE

2 TYPICAL STIFFENER PLATE DETAIL
S7.03 NOT TO SCALE

3 TYPICAL BENT PLATE DETAIL
S7.03 NOT TO SCALE

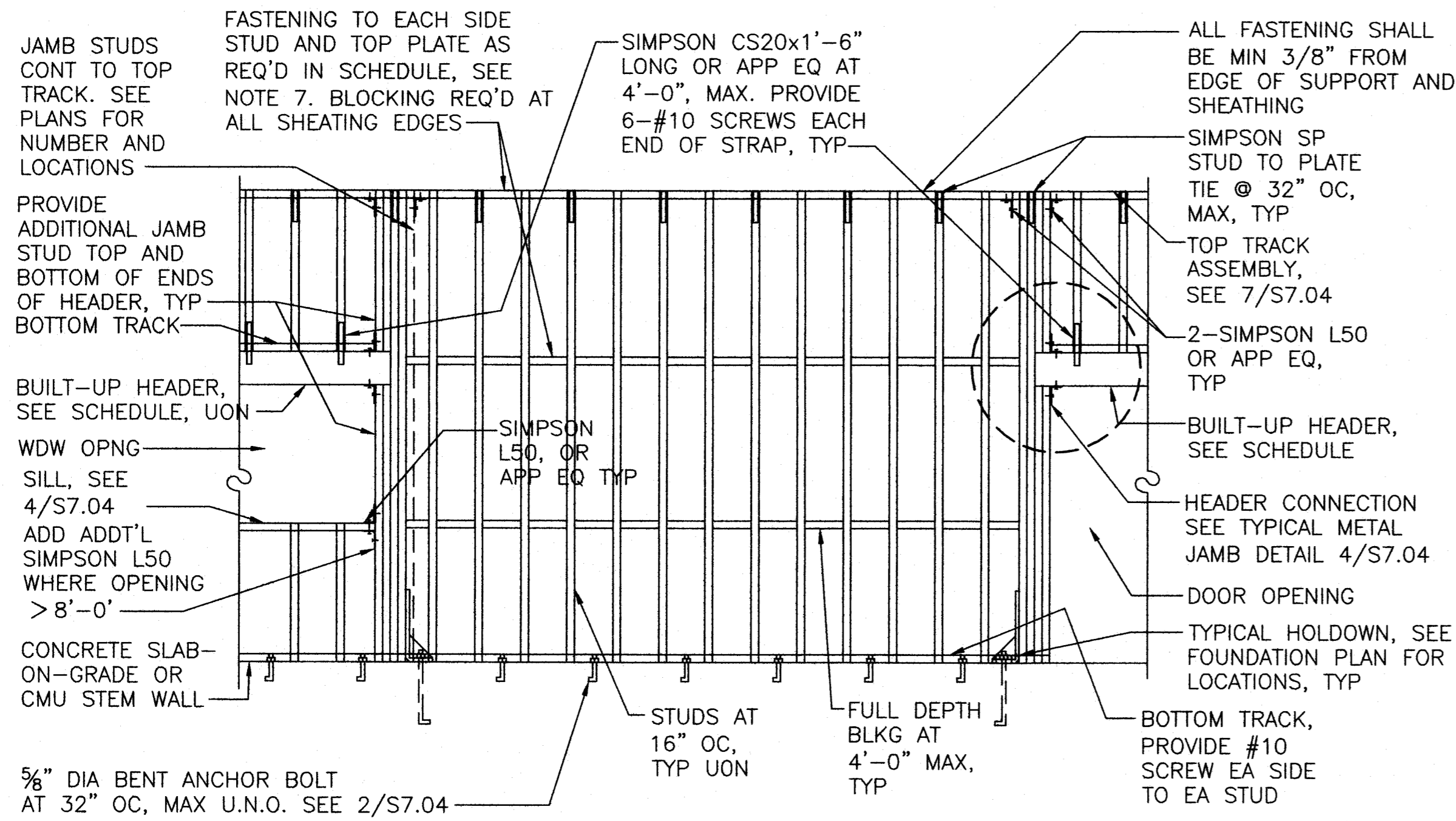
4 TYPICAL SKEWED BEAM CONNECTION DETAIL
S7.03 NOT TO SCALE



5 TYPICAL BEAM TO GIRDER OR SHEAR PLATE CONNECTIONS
S7.03 NOT TO SCALE

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
TYPICAL DETAILS					
DESIGNED: RI		SUBMITTED: <i>gc rd</i>			
DRAWN: IB		DATE: 03/15/2016			
CHECKED: RI		SCALE:			
APPROVED: <i>Paul E. Iwamoto</i>		DATE: MAR 23 2016		DRAWING NO. S7.03	
CHIEF ENGINEER		DATE			

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



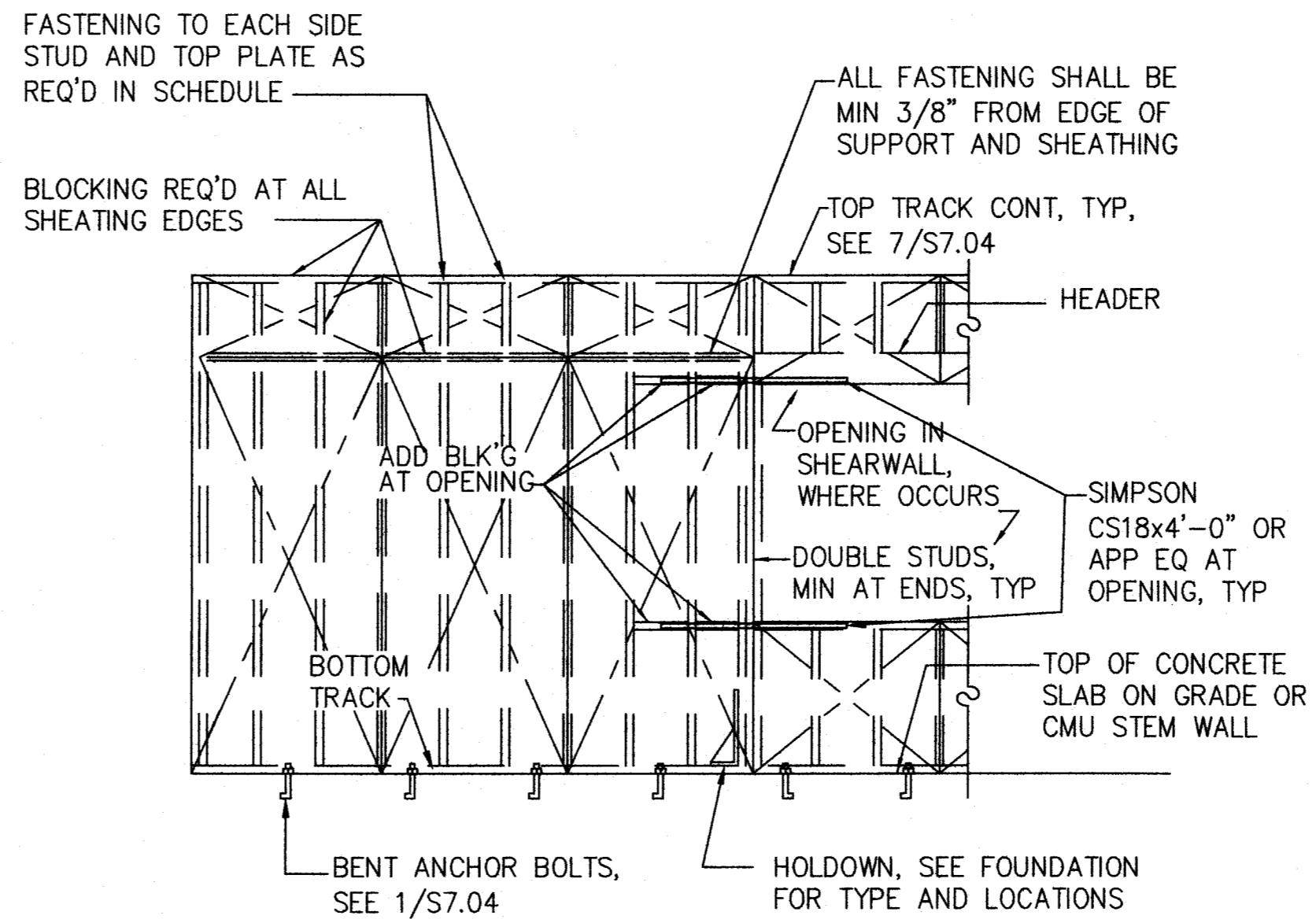
- NOTES:**
- SEE 1/S7.05 FOR TOP TRACK ASSEMBLY DETAIL.
 - BOTTOM TRACKS SHALL BE TYPE "T200" AND SHALL BE MINIMUM 20 GAGE.
 - JAMB STUDS AND STUD BLOCKING SHALL BE OF THE SAME TYPE, WIDTH, UNLESS OTHERWISE NOTED. AND GAGE AS THE TYPICAL STUD.
 - #10 SCREWS SHALL BE USED FOR ALL METAL STUD CONNECTIONS, UNLESS OTHERWISE NOTED.
 - MINIMUM EDGE DISTANCE AND SPACING FOR #10 SCREWS SHALL BE 1".
 - UNLESS OTHERWISE NOTED ON PLANS, SEE HEADER SCHEDULE FOR HEADER SIZES.
 - GYPSUM SHEATHING TO BE FASTENED AT ALL EDGES OF EACH PIECE AS FOLLOWS:
EDGE - #10 SCREWS @ 4" OC
FIELD - #10 SCREWS @ 12" OC

362S- STUDWALL HEADER SCHEDULE

WIDTH OF OPENING	HEADER	REMARKS
UP TO 6'-0"	DOUBLE 600S200-54	SEE 4/S7.04

600S- STUDWALL HEADER SCHEDULE

WIDTH OF OPENING	HEADER	REMARKS
UP TO 14'-0"	DOUBLE 1000S300-54	SEE 4/S7.04



- NOTES:**
- SHEATHING TO BE FASTENED AT ALL EDGES OF EACH PIECE PER SCHEDULE.
 - INDIVIDUAL PIECES OF SHEATHING SHALL BE 1'-4" (MINIMUM) IN LEAST DIMENSION AND NOT LESS THAN 8 SQ FT TOTAL AREA.

SHEAR PANEL SCHEDULE

TYPE	NAILING		ANCHOR BOLTS TO CONCRETE SLAB	SHEATHING
	EDGE	FIELD		
SW-1	#10 SCREWS @ 4" OC	#10 SCREWS @ 12" OC	5/8" BENT ANCHOR BOLTS @ 32" OC, MAX	1/2" THK PLYWOOD SHEATHING ONE FACE
SW-2	#10 SCREWS @ 4" OC	#10 SCREWS @ 12" OC	5/8" BENT ANCHOR BOLTS @ 16" OC, MAX	1/2" THK PLYWOOD SHEATHING BOTH FACES

2 SHEATHED SHEARWALL SCHEDULE
NOT TO SCALE

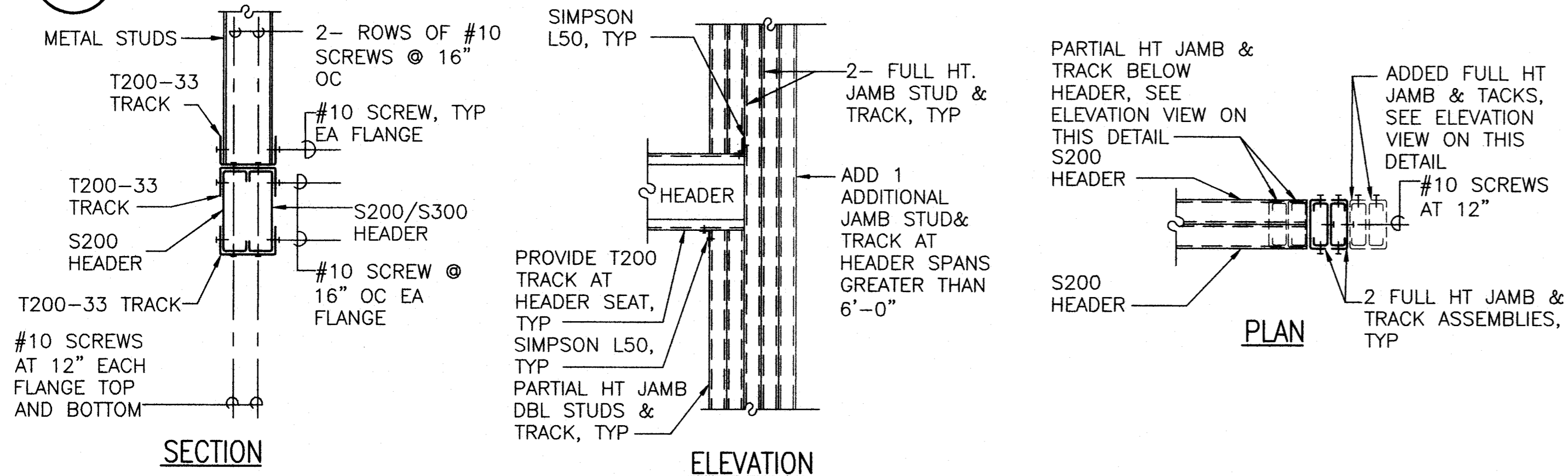
FASTENING SCHEDULE

MATERIALS	FASTENER	QUANTITY
STUD TO PLATE TRACK (BOTTOM)	3/4" #10 SCREWS LOW PROFILE PAN HEAD	1 AT EACH FLANGE
STUD TO PLATE TRACK (TOP)	3/4" #10 SCREWS LOW PROFILE PAN HEAD	1 AT EACH FLANGE
STUD TO TRACK (NESTED)	3/4" #10 SCREWS PAN HEAD	1 AT 12" OC THROUGH FLANGE
STUD TO STUD (BACK TO BACK)	3/4" #10 SCREWS PAN HEAD	1 AT 12" OC THROUGH WEB
STUD TO STUD (AT WALL INTERSECTION)	3/4" #10 SCREWS PAN HEAD	1 AT 24" OC OR 1 AT EACH BLOCKING
LINTEL TO STUD	3/4" #10 SCREWS PAN HEAD	QUANTITY AND SPACING AS PER DETAILS

- NOTES:**
- LOW PROFILE PAN HEAD IS USED IN LIEU OF PAN HEAD WHERE LEAST PROJECTION OF FASTENER IS DESIRED.
 - S-7 POINT SHALL SUBSTITUTE S-12 WHEN ATTACHING .07" MEMBERS TOGETHER.

3 TYPICAL COLD-FORMED STEEL FASTENING SCHEDULE
NOT TO SCALE

1 TYPICAL COLD-FORMED STEEL STUDWALL ELEVATION
NOT TO SCALE



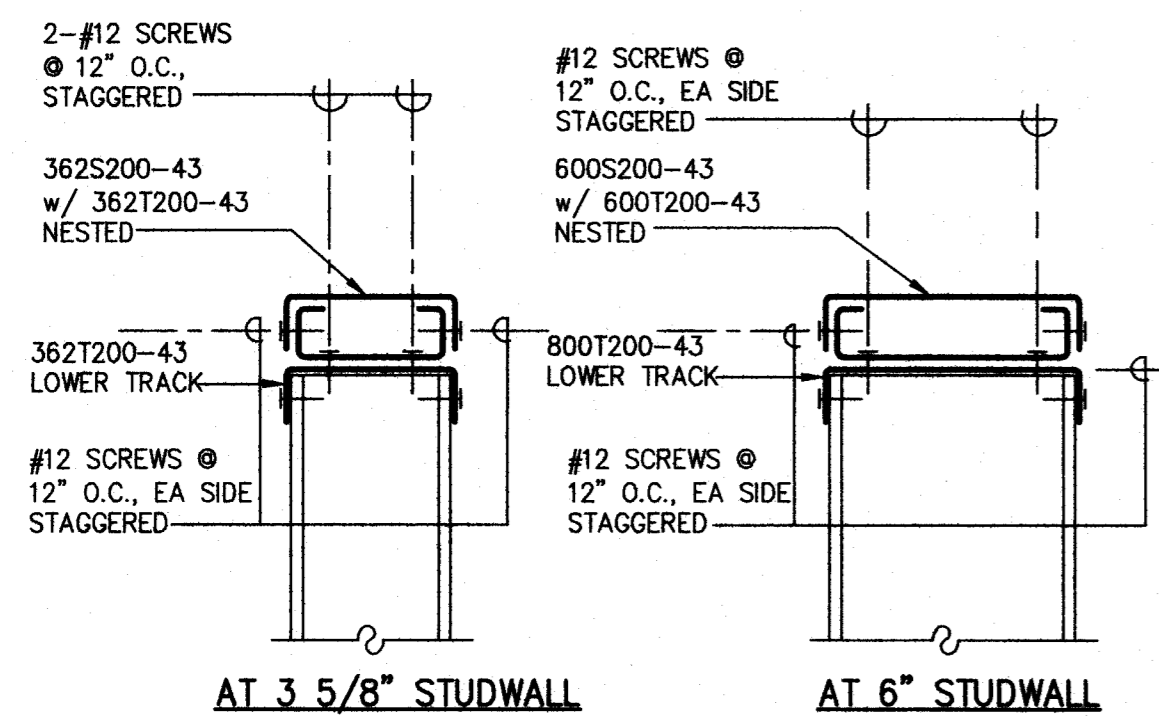
- NOTES:**
- JAMB TACKS SHALL BE TYPE "T200" AND OF THE SAME WIDTH AND GAGE AS THE TYPICAL JAMB STUD.
 - CONNECTO JAMB TACKS TO JAMB STUDS WITH #10 SCREWS AT 12" OC EACH FLANGE.
 - TYPICAL STUD FRAMING NOT SHOWN FOR CLARITY.

4 TYPICAL COLD-FORMED STEEL STUDWALL JAMB DETAIL
NOT TO SCALE

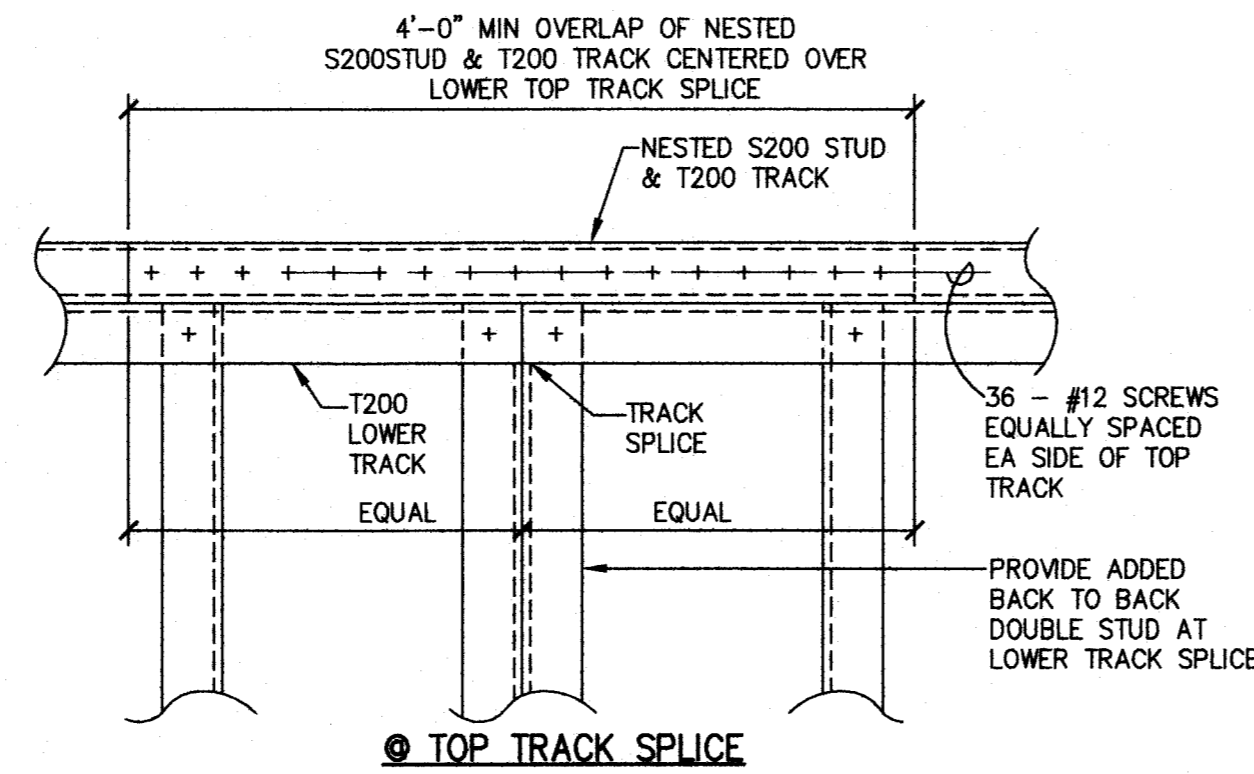
5 TYPICAL STUDWALL SILL DETAIL
NOT TO SCALE

6 TYPICAL STUDWALL TOP TRACK CORNER & INTERSECTION DETAIL
NOT TO SCALE

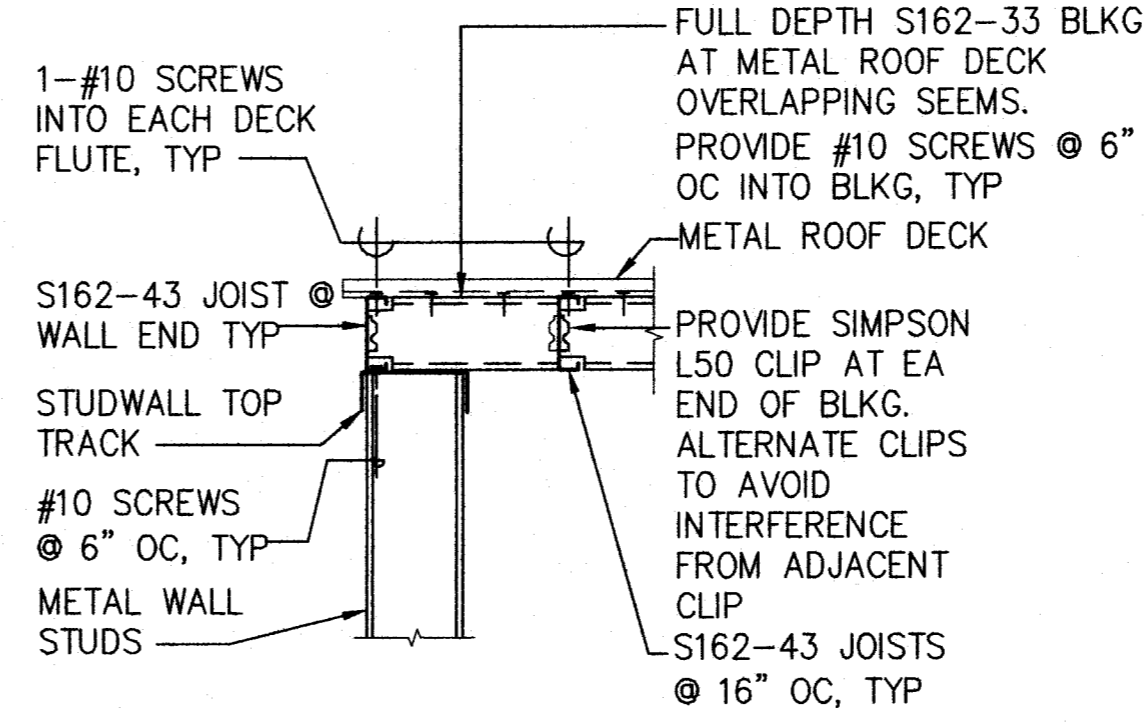
REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII TYPICAL DETAILS					
		DESIGNED: RI	SUBMITTED: <i>RI</i>		
		DRAWN: IB	DATE: 03/15/2016		
		CHECKED: RI	SCALE:		
4/30/16 EXP. DATE <i>Paul J. ...</i> CHIEF ENGINEER		APPROVED: <i>Paul J. ...</i>	MAR 23 2016 DATE	DRAWING NO. S7.04	



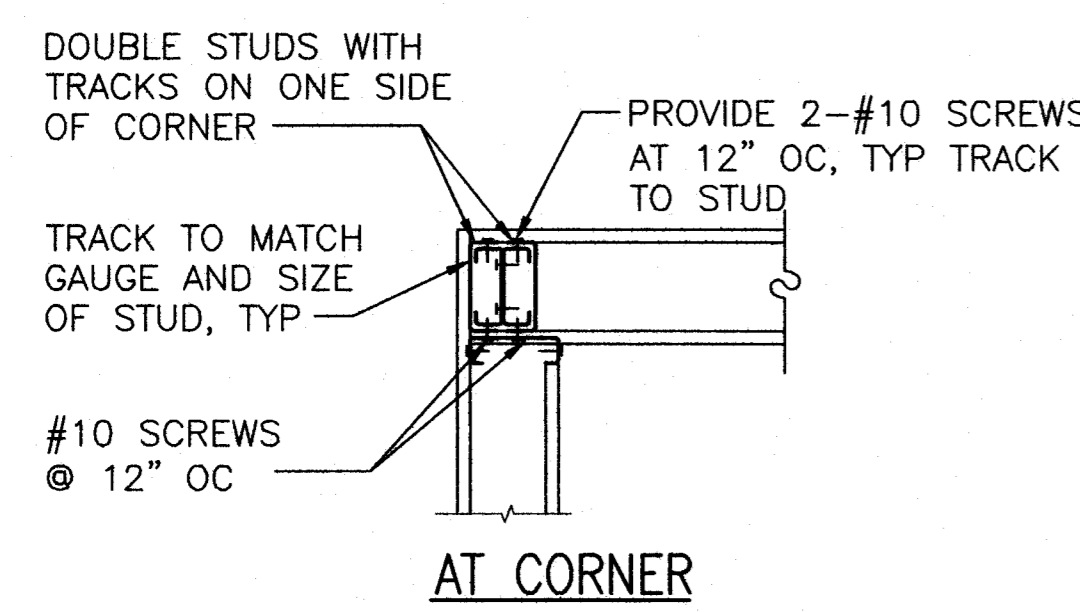
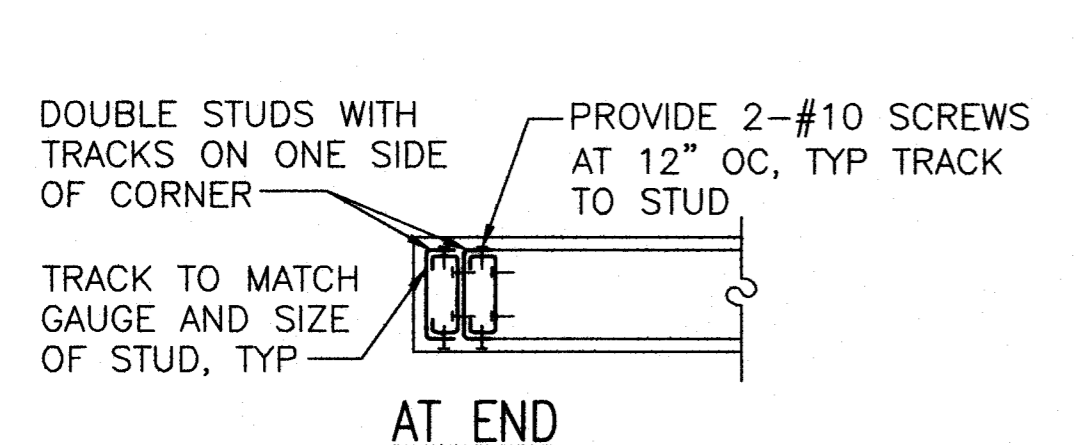
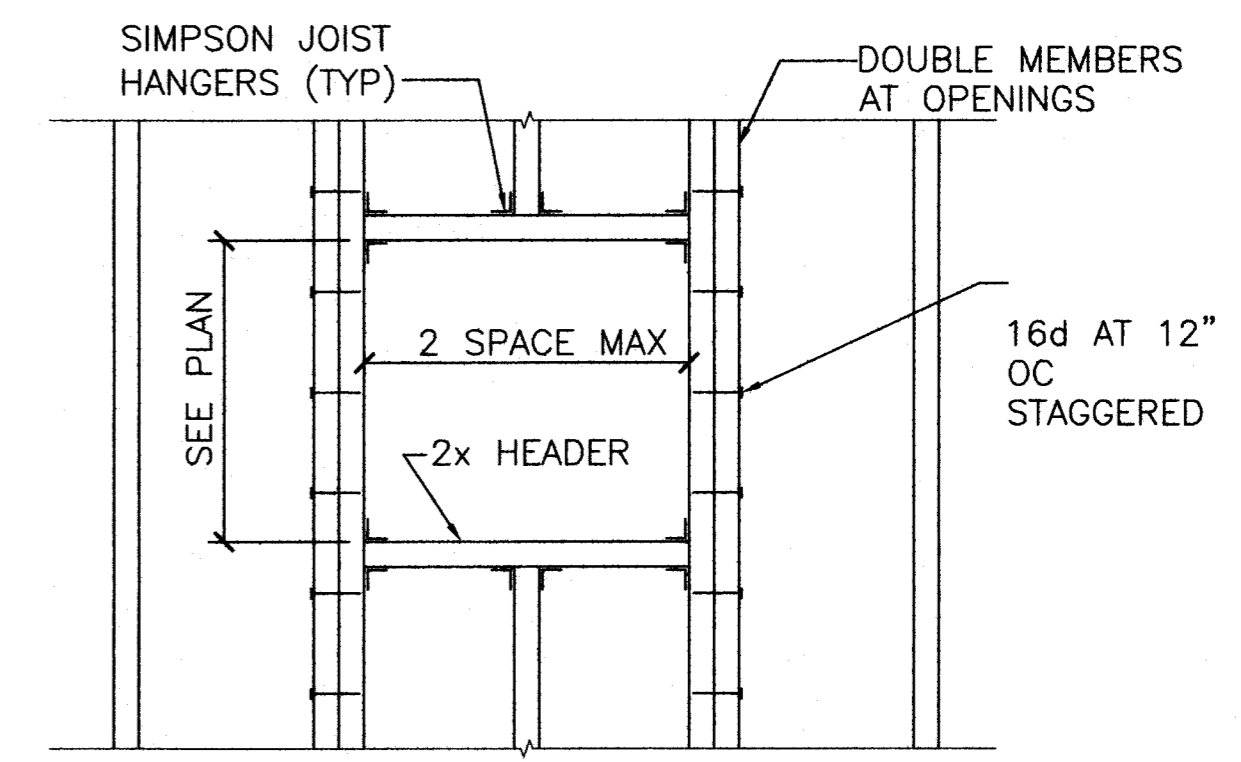
1 TYPICAL STUDWALL TOP TRACK DETAIL
S7.05 NOT TO SCALE



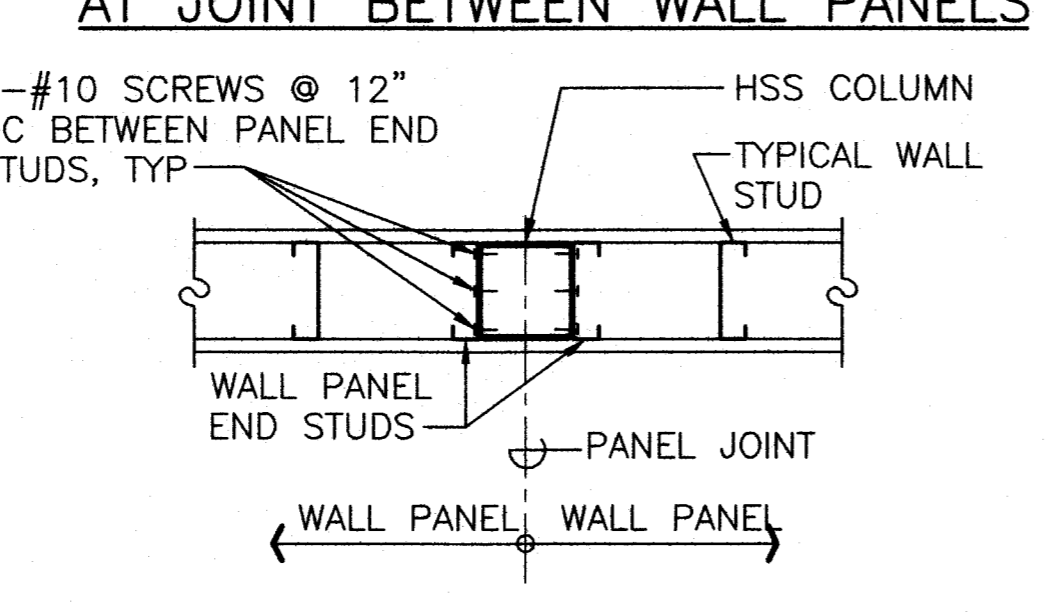
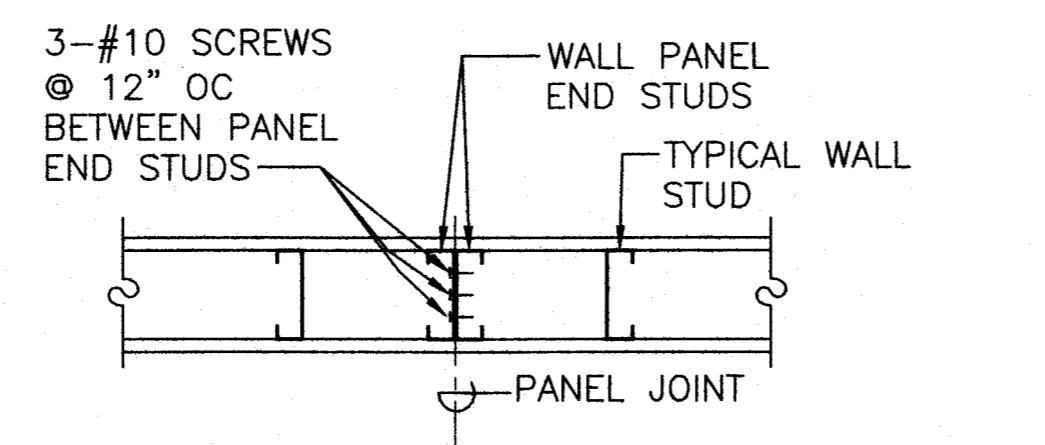
2 AT ROOF EDGES
TYPICAL ROOF JOIST TO STUDWALL DETAIL
S7.05 NOT TO SCALE



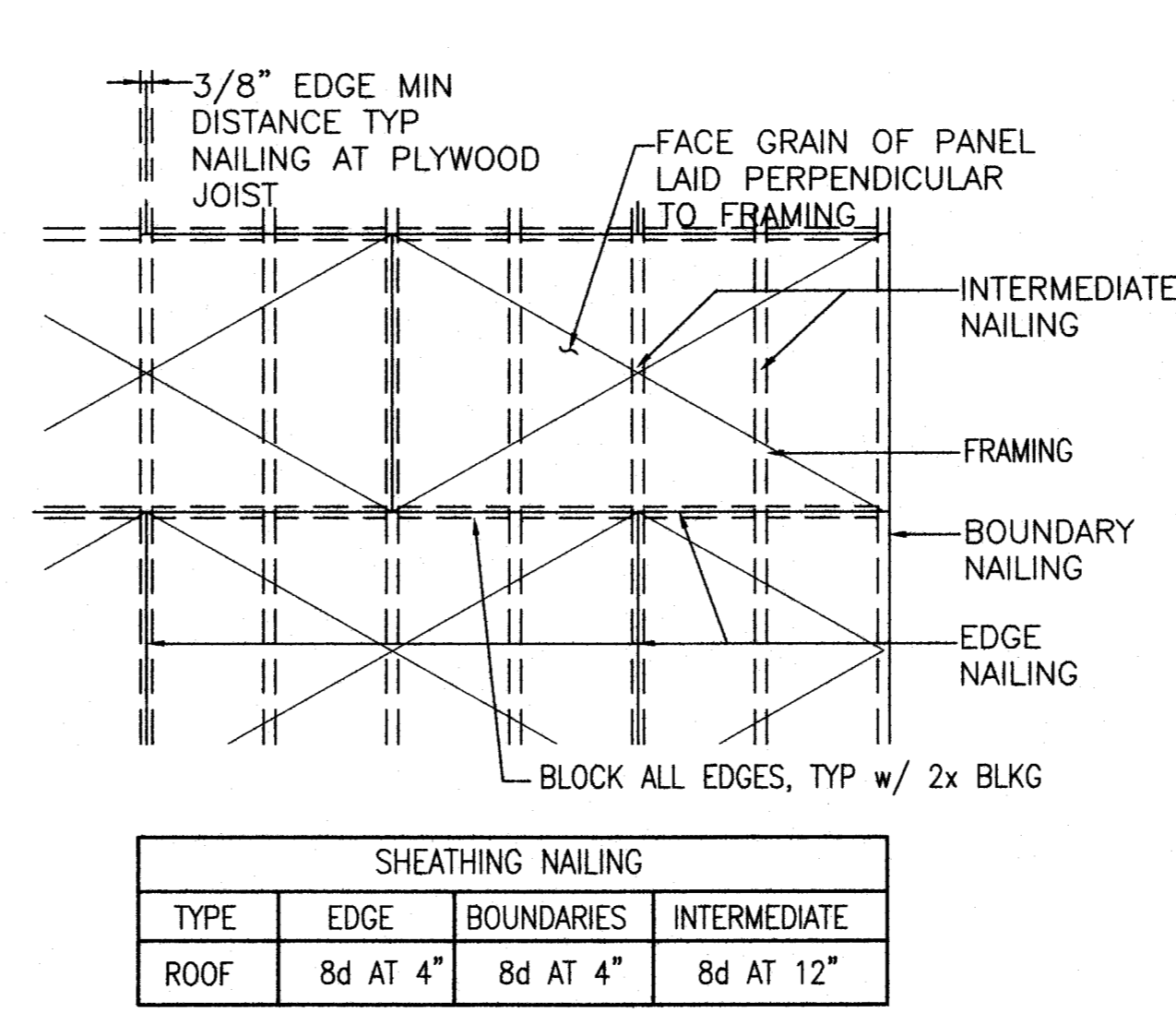
6 ROOF FRAMING OPENING
S7.05 NOT TO SCALE



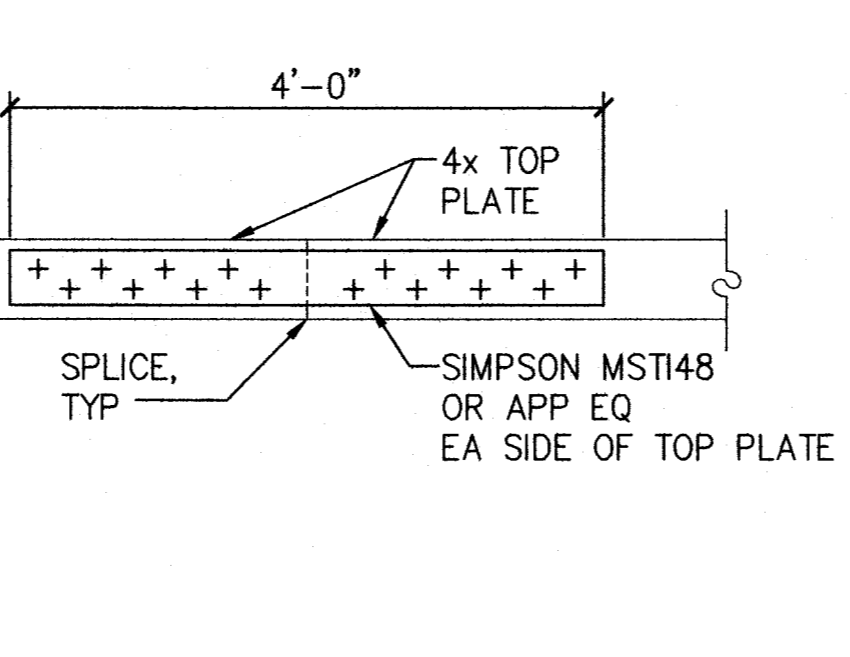
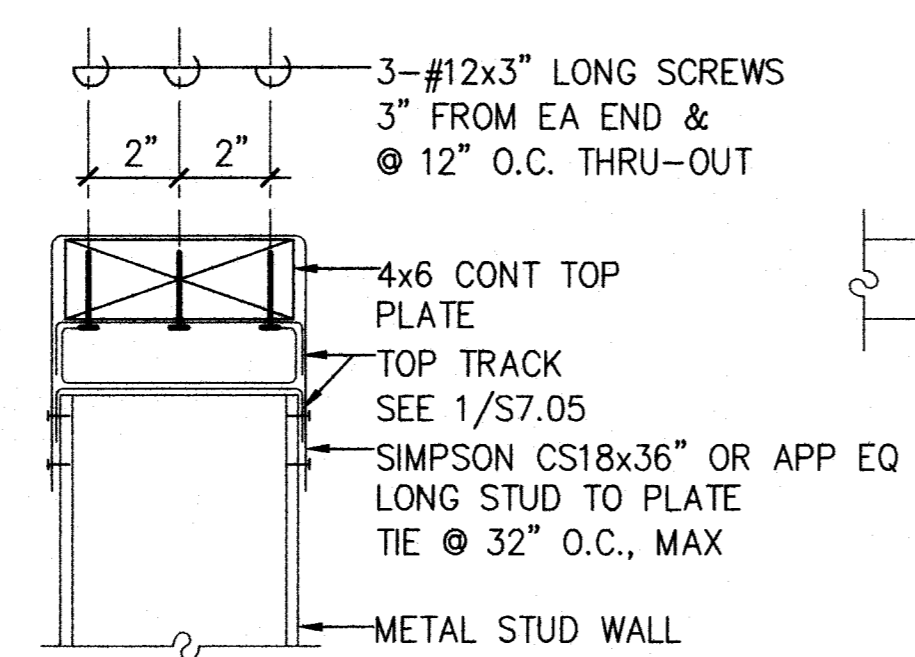
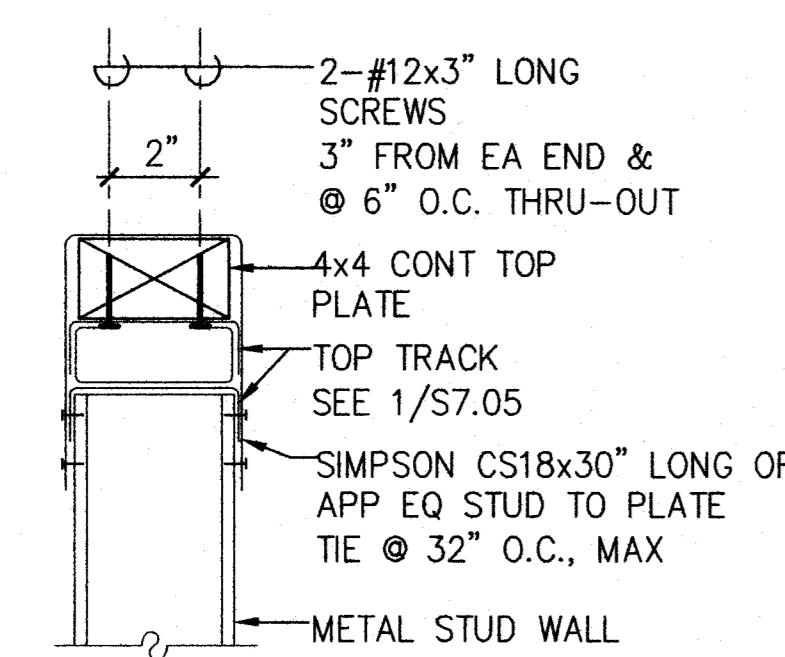
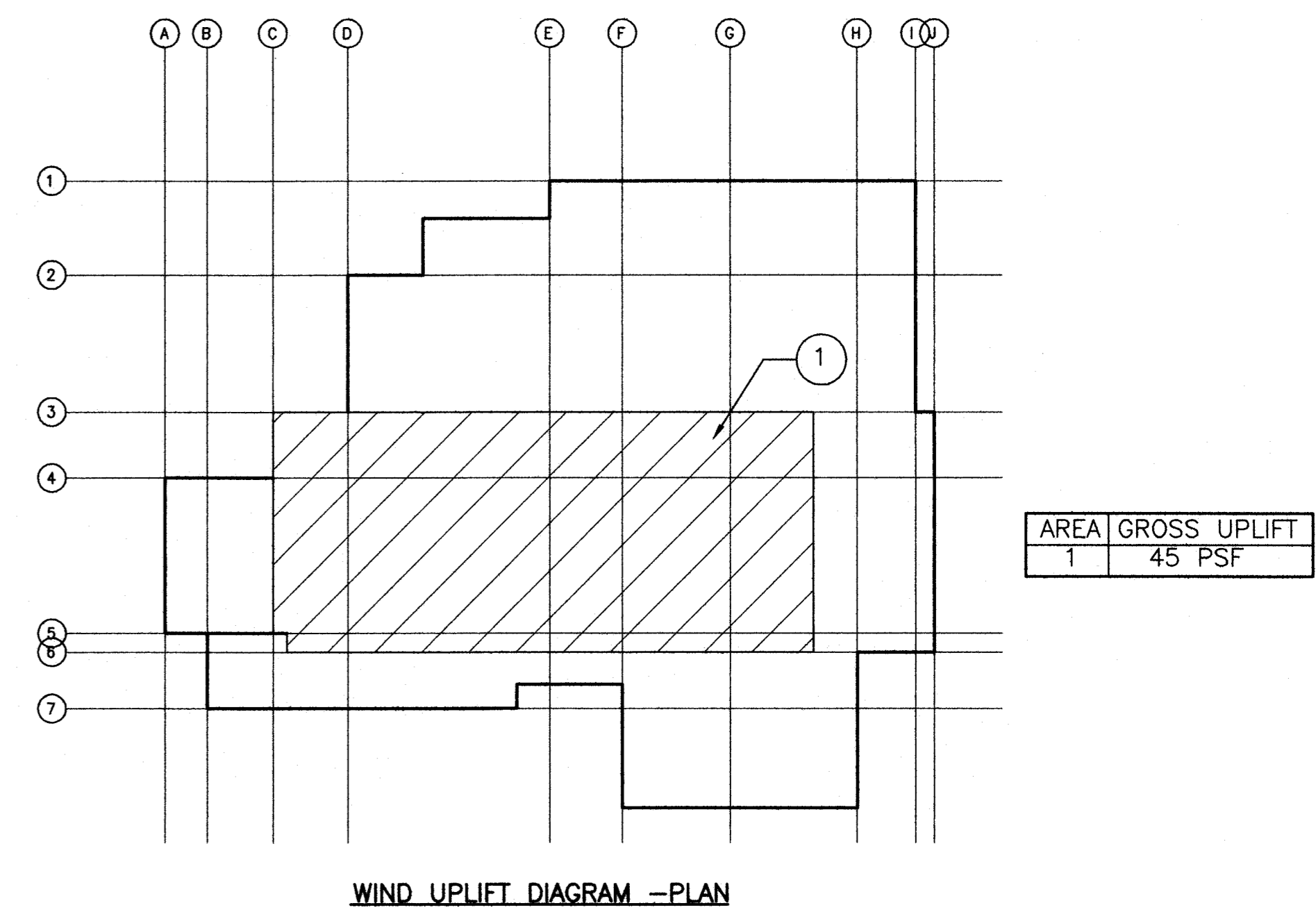
3 TYPICAL WALL STUD INTERSECTION/ END DETAIL
S7.05 NOT TO SCALE



5 AT JOINT BETWEEN WALL PANELS
PLYWOOD ROOF SHEATHING NAILING
S7.05 NOT TO SCALE

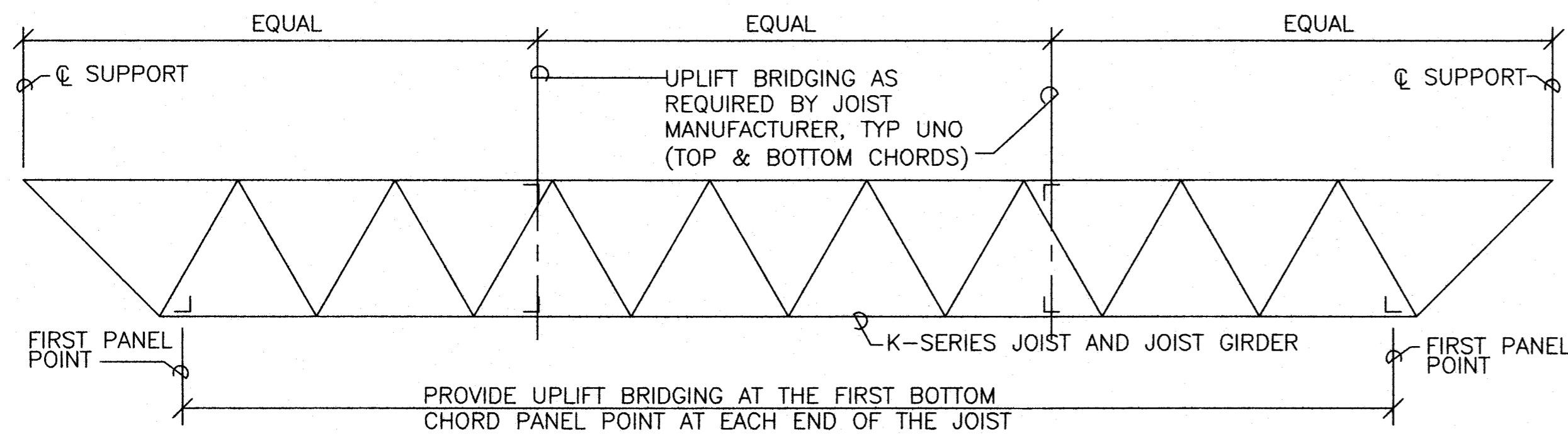


7 ROOF PLAN UPLIFT DIAGRAM
S7.05 NOT TO SCALE



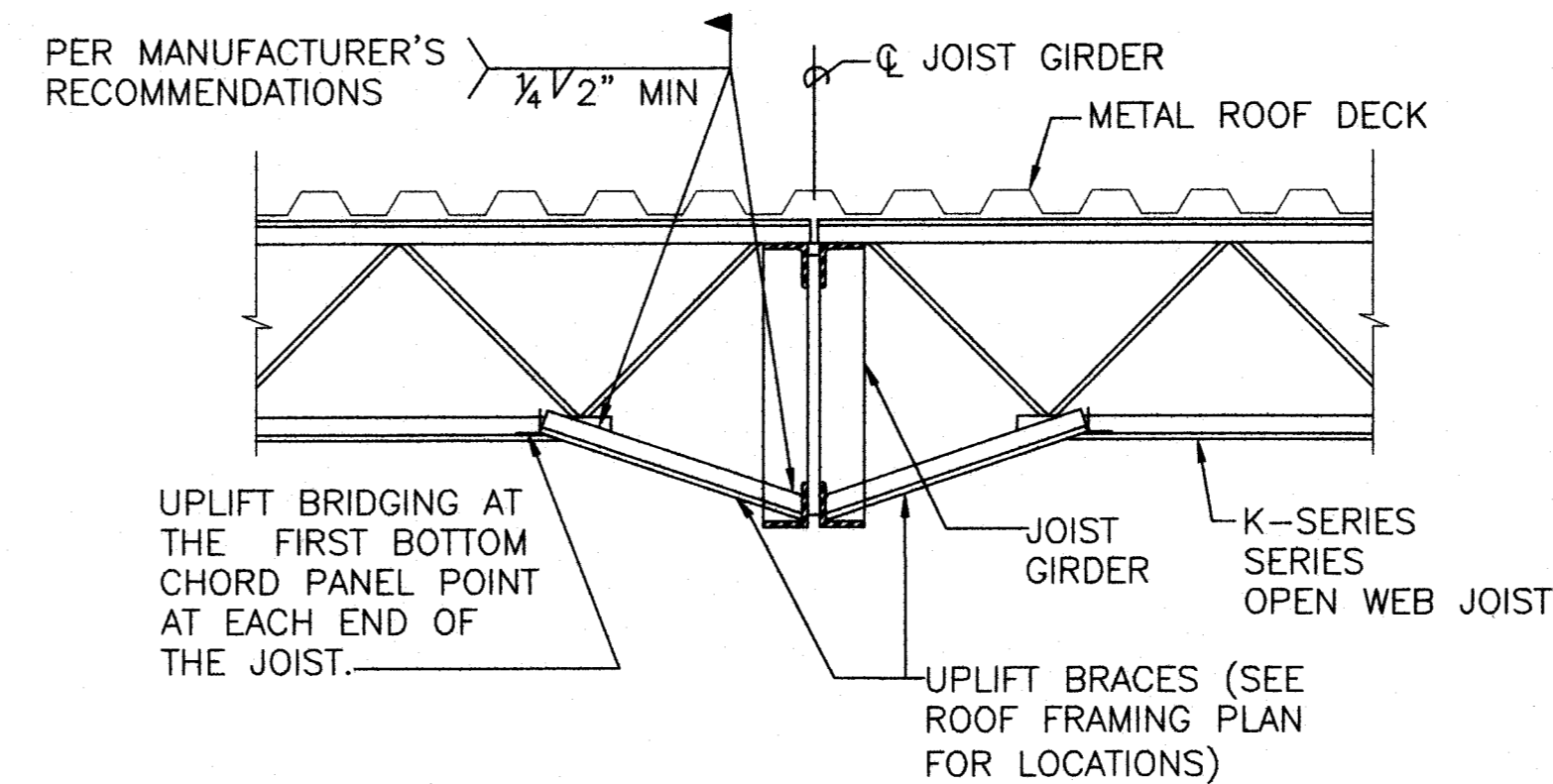
4 TYPICAL TOP PLATE DETAIL
S7.05 SCALE: 3/4" = 1'-0"

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII TYPICAL DETAILS					
DESIGNED:	RI	SUBMITTED:	6	DATE:	03/15/2016
DRAWN:	IB	CHECKED:	RI	SCALE:	
APPROVED:			DATE:	MAR 23 2016	DRAWING NO. S7.05
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.					



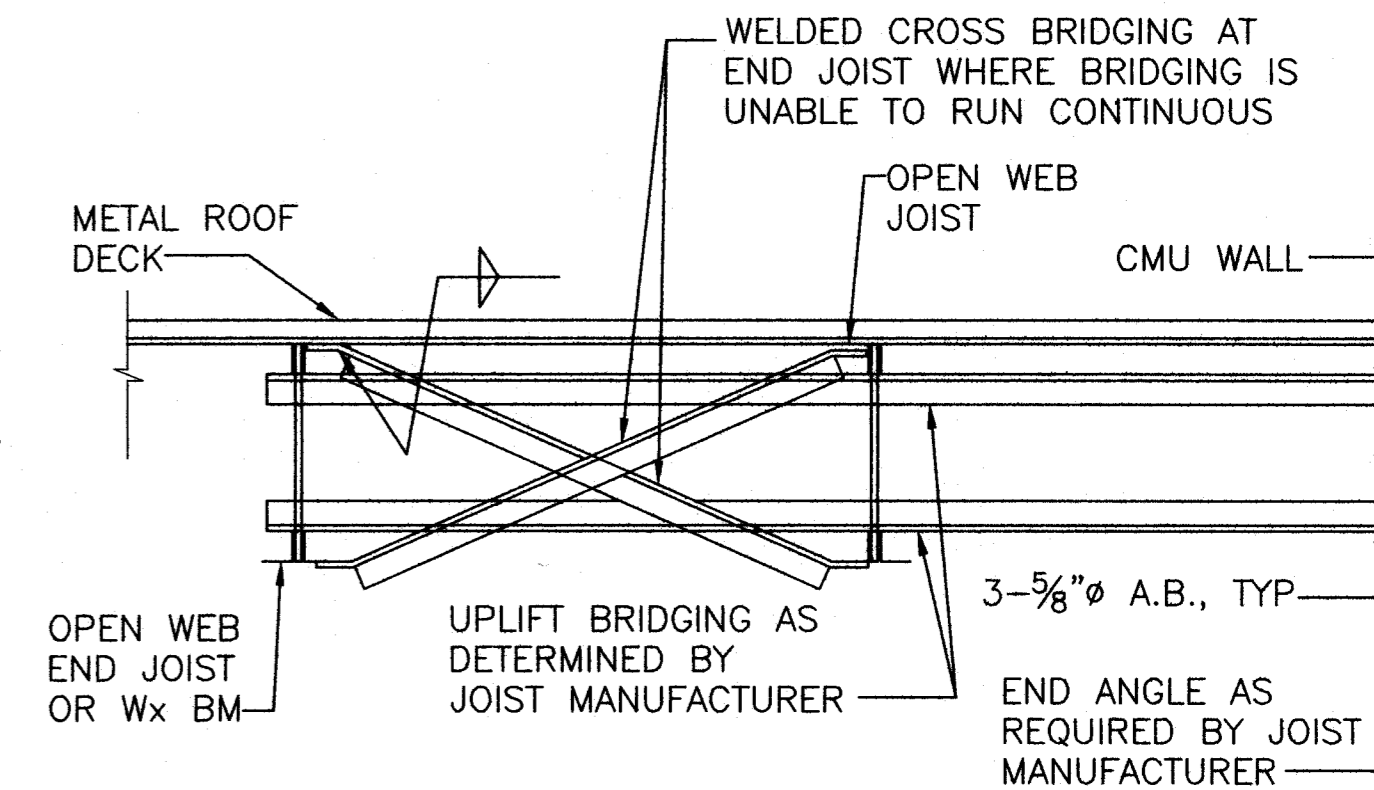
- NOTES:
- SEE 2/S7.06 FOR TYPICAL UPLIFT BRIDGING CONNECTION DETAIL.
 - JOIST MANUFACTURER SHALL DESIGN JOIST PROFILE UPLIFT BRIDGING, ANCHORS, AND CONNECTIONS, TYP.

1 TYPICAL UPLIFT BRIDGING DETAIL
S7.06 NOT TO SCALE



- NOTES:
- JOIST MANUFACTURER SHALL DESIGN UPLIFT BRACES AS REQUIRED.
 - BRACES SHALL BE INSTALLED AFTER METAL DECK IS INSTALLED.

2 TYPICAL UPLIFT BRACING DETAIL
S7.06 NOT TO SCALE



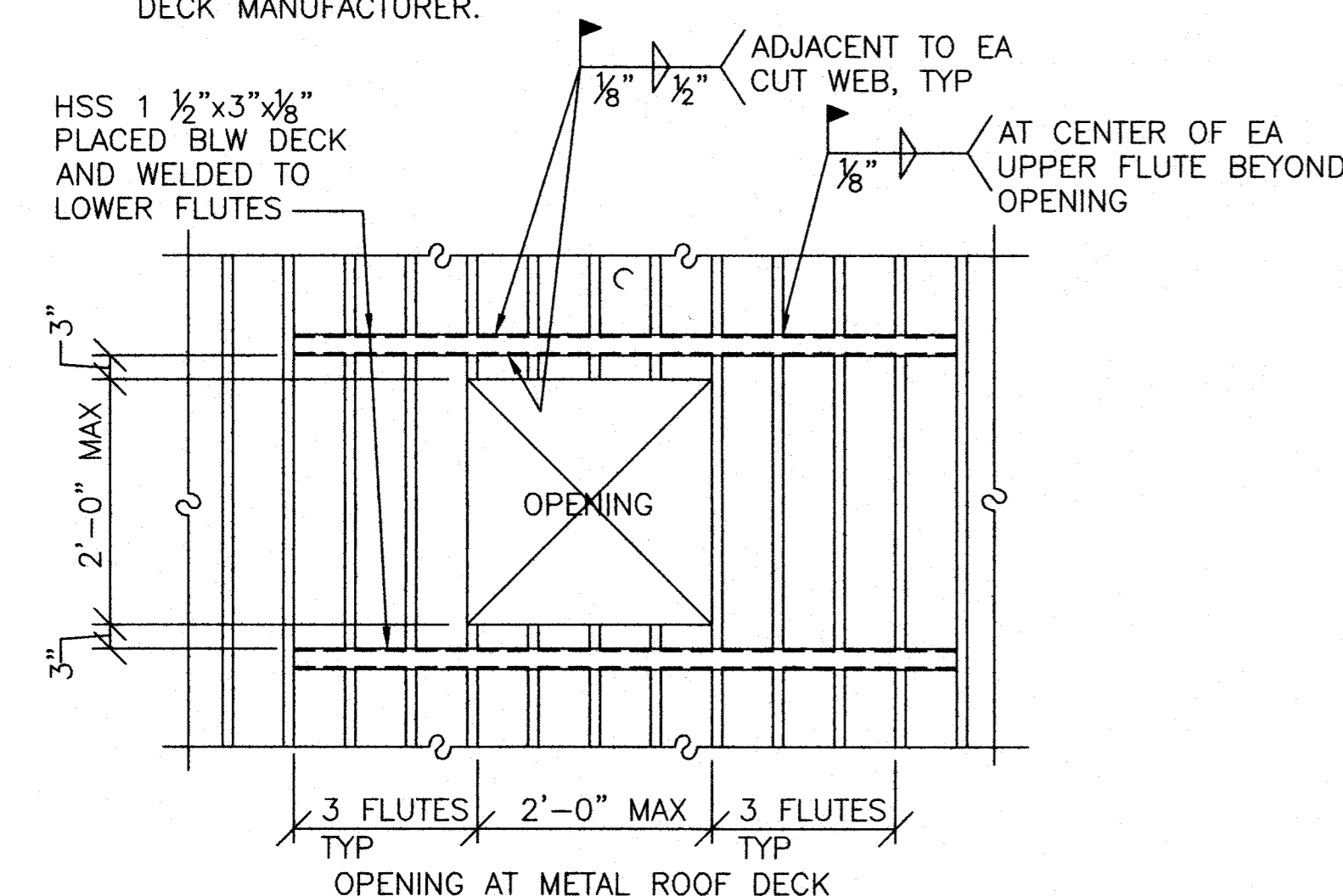
3 TYPICAL UPLIFT BRIDGING CONNECTION DETAIL
S7.06 NOT TO SCALE

METAL ROOF DECK SCHEDULE				
TYPE GAGE	MINIMUM SECTION PROPERTIES			SECTION
	1 in 4/FT	+Sin ³ /FT	-Sin ³ /FT	
1 1/2" VERCO/HSB-36 20 GA ROOF DECK	0.216	0.235	0.248	

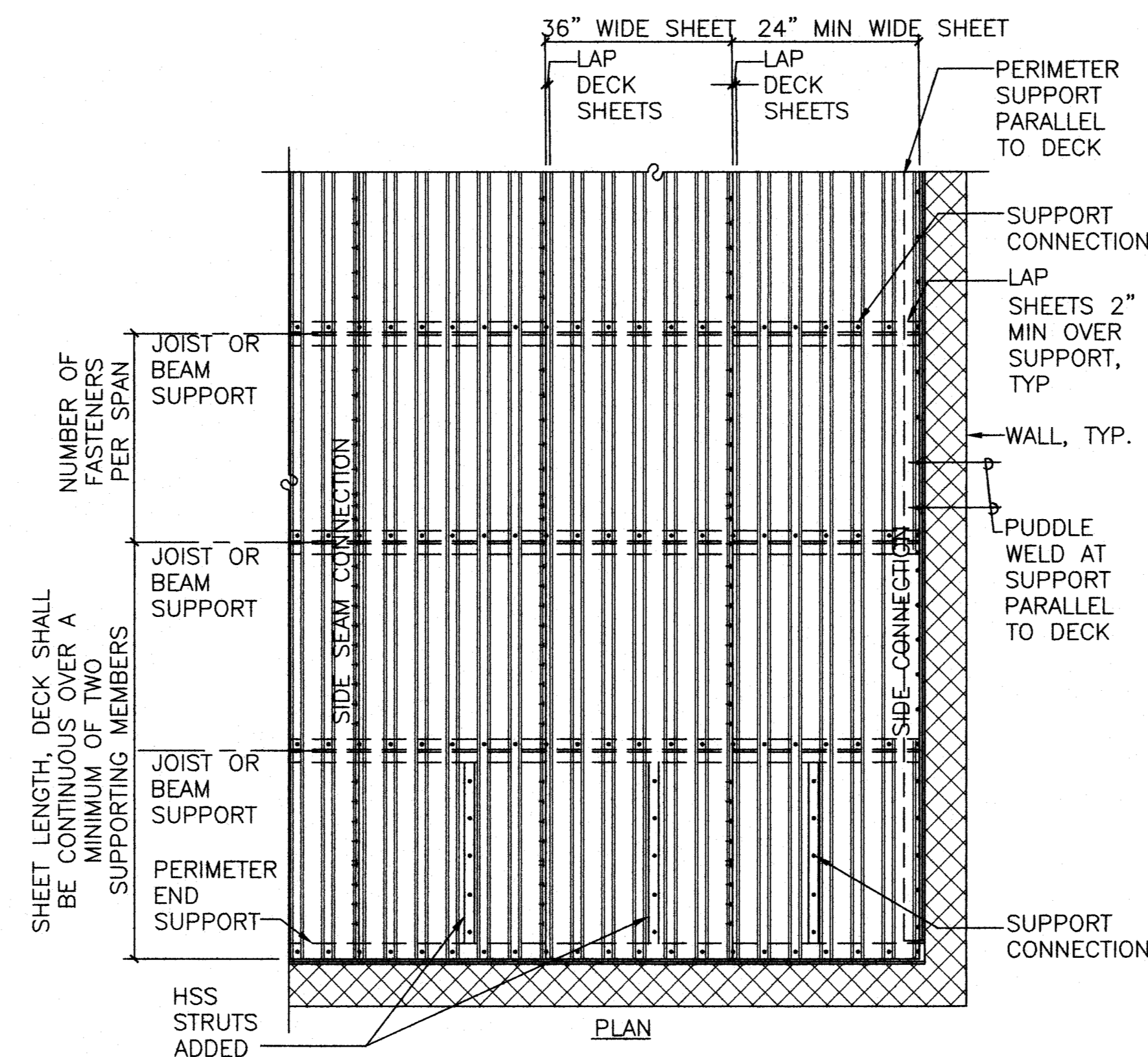
- NOTES:
- SEE PLANS FOR EXTENT AND ORIENTATION OF METAL DECK.
 - SEE 6/S7.06 FOR METAL DECK FASTENING TO SUPPORTS.

4 METAL ROOF DECK SCHEDULE
S7.06 NOT TO SCALE

- NOTES:
- REINFORCING IS NOT REQUIRED FOR HOLES LESS THAN 6 INCHES IN DIAMETER AND CUTTING NO MORE THAN 1 WEB.
 - FRAMING TO BE FURNISHED AND INSTALLED BY DECK MANUFACTURER.

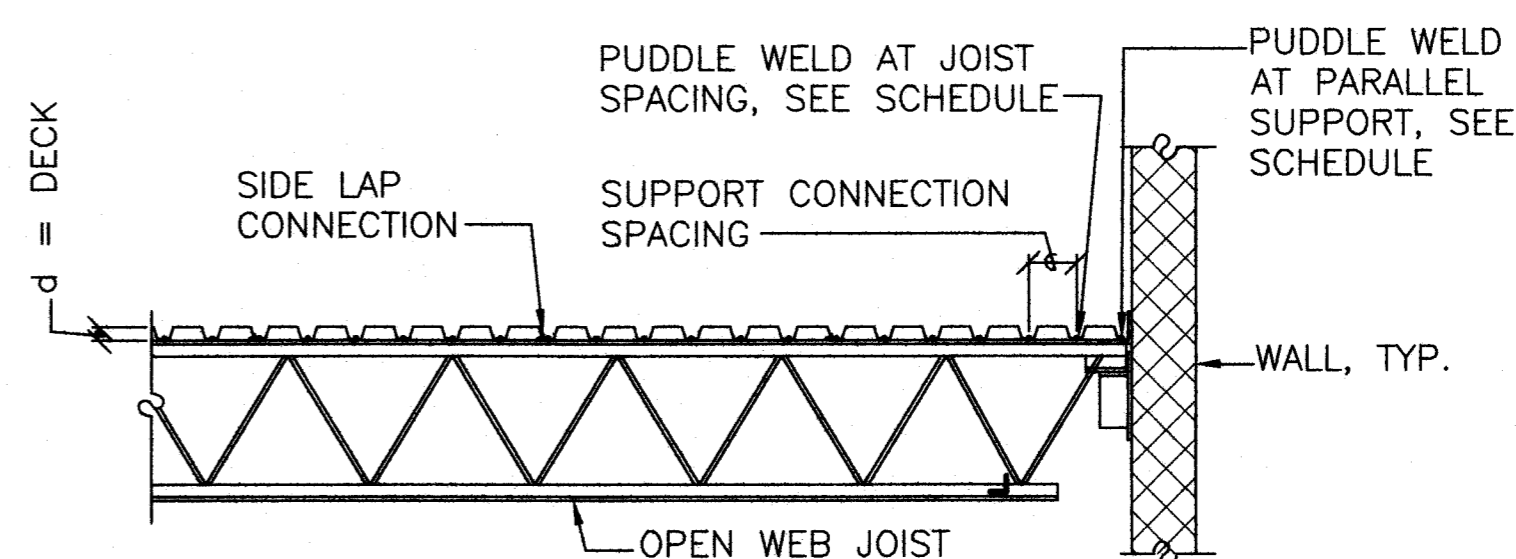


5 TYPICAL OPENING AT ROOF DECK
S7.06 NOT TO SCALE

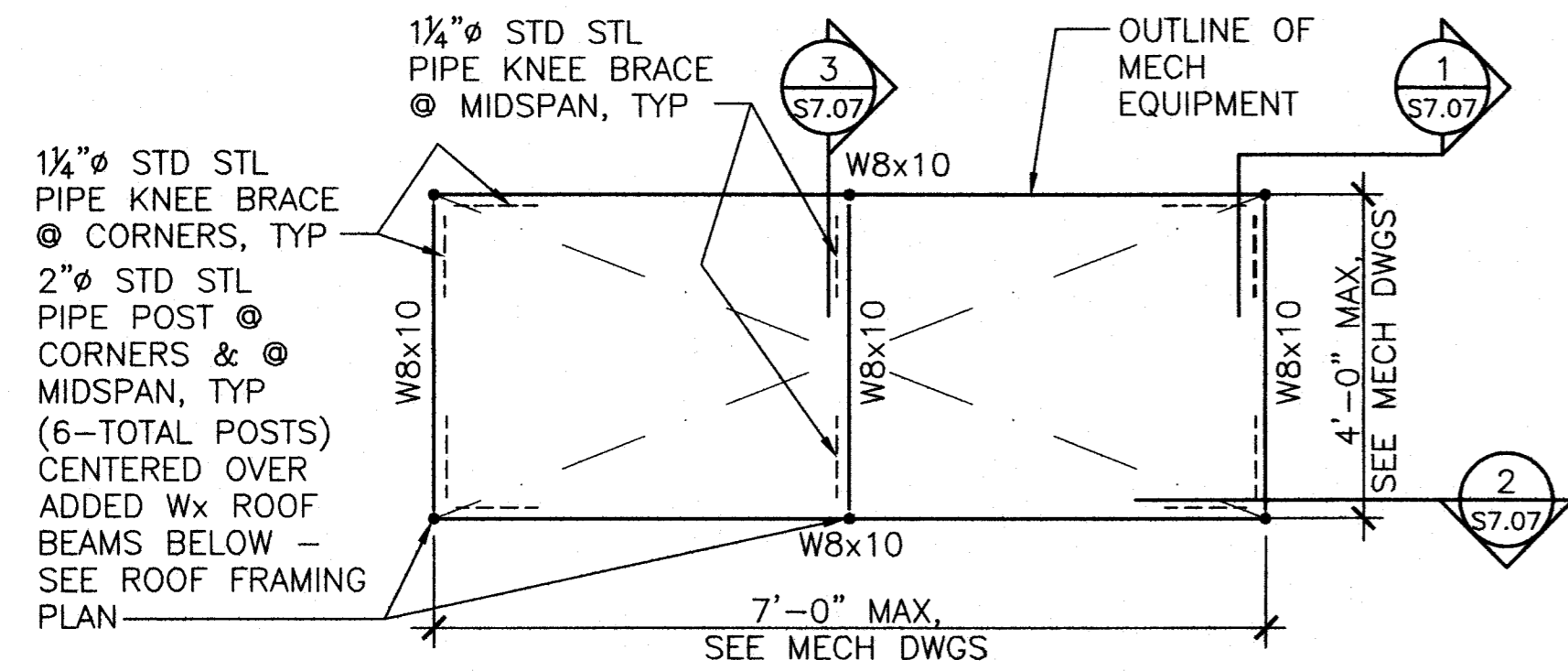


6 TYPICAL METAL ROOF DECK FASTENING SCHEDULE
S7.06 NOT TO SCALE

DIAPHRAGM CONNECTION		
AT SUPPORT PER 36" SHEET WIDTH	SIDE LAP CONNECTION	AT SUPPORT PARALLEL TO DECK
5-5/8" Ø PUDDLE WELDS	1 1/2" TOP SEAM WELD @ 24" O.C.	5/8" Ø PUDDLE WELDS @ 12"



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
TYPICAL DETAILS					
DESIGNED:	RI	SUBMITTED:			
DRAWN:	IB	DATE:	03/15/2016		
CHECKED:	RI	SCALE:			
APPROVED:			DATE:	MAR 23 2016	
CHIEF ENGINEER			DRAWING NO.	S7.06	



TYPICAL MECH EQUIPMENT SUPPORT FRAMING PLAN

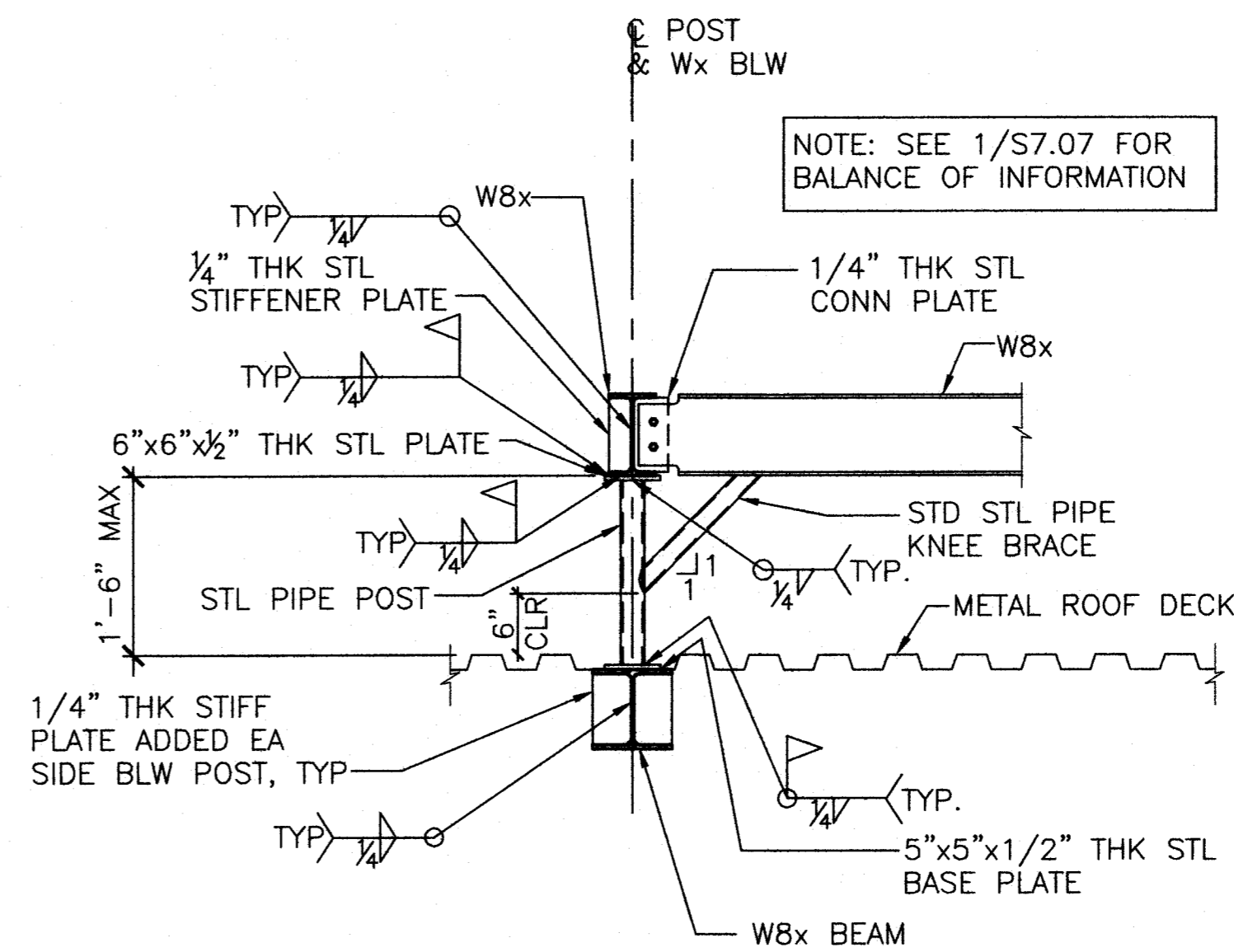
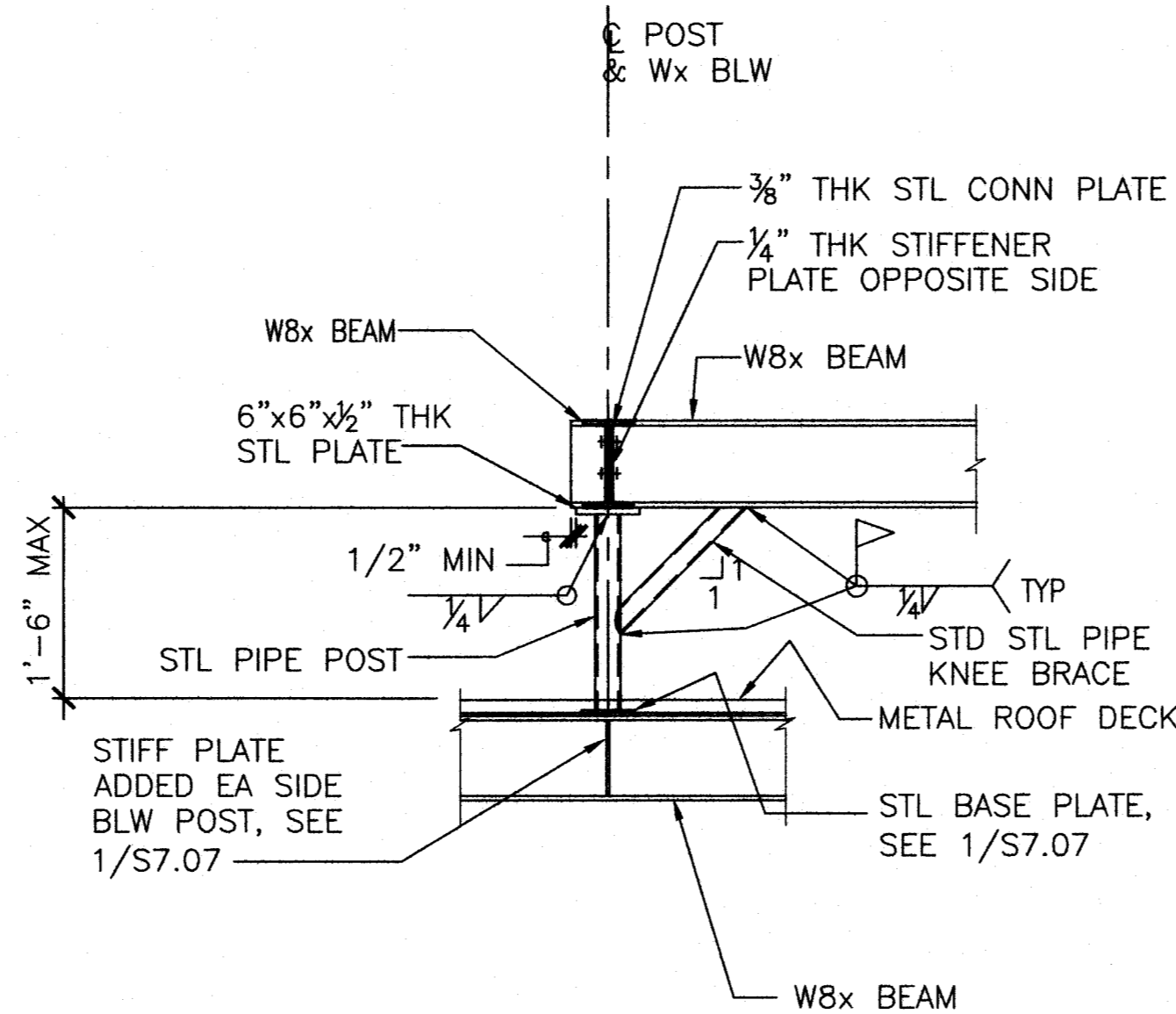
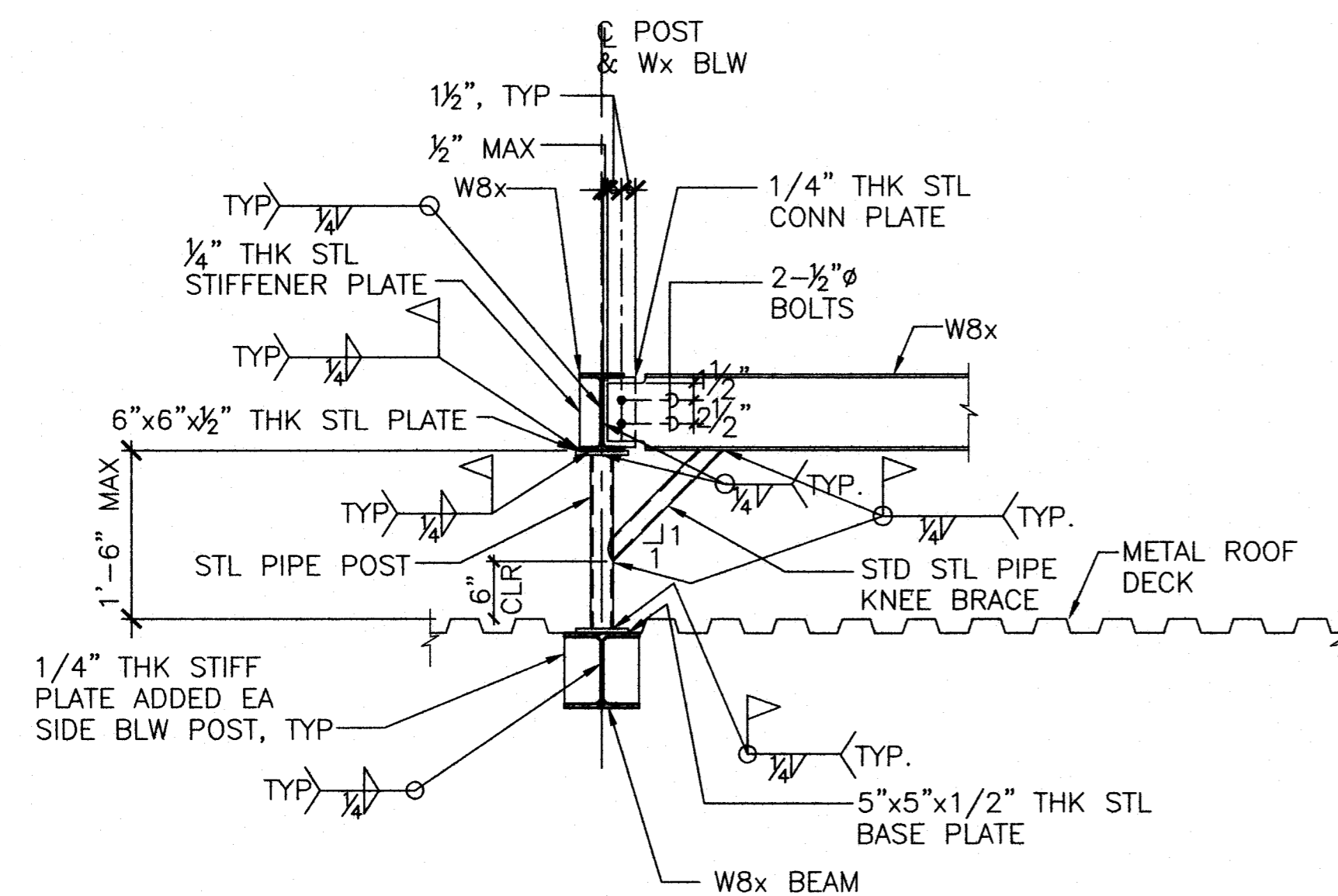
SCALE: 1/4" = 1'-0"

NOTE: STD STL PIPE KNEE BRACE IN OPP DIRECTION NOT SHOWN FOR CLARITY

NOTE: STD STL PIPE KNEE BRACE IN OTHER DIRECTION NOT SHOWN FOR CLARITY

NOTE: STD STL PIPE KNEE BRACE IN OTHER DIRECTION NOT SHOWN FOR CLARITY

NOTE: SEE 1/S7.07 FOR BALANCE OF INFORMATION



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

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

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

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII TYPICAL MECH EQUIP SUPPORT FRAMING PLAN & SECTIONS					
DESIGNED: RI		SUBMITTED: <i>ge</i>			
DRAWN: IB		DATE: 03/15/2016			
CHECKED: RI		SCALE:			
APPROVED: <i>Paul J. Dur</i>		DATE: MAR 23 2016		DRAWING NO. S7.07	
<small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</small>					

GENERAL NOTES:

- CONFORM TO ALL REQUIREMENTS OF THE BUILDING, PLUMBING, AND ELECTRICAL CODES OF MAUI COUNTY, STATE OF HAWAII HEALTH REGULATIONS, FIRE DEPARTMENT REGULATIONS, MANUFACTURER'S RECOMMENDATIONS AND OTHER APPLICABLE REGULATIONS.
- EXAMINE ALL PROJECT PLANS AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS AND THE EXTENT OF REMOVAL, RELOCATION AND/OR NEW WORK PRIOR TO BIDDING. NOTIFY AND COORDINATE WITH THE ENGINEER FOR ANY MAJOR DEVIATIONS OR DISCREPANCIES DISCOVERED IN THE PLANS AND SPECIFICATIONS DUE TO UNFORESEEN OR VARYING FIELD CONDITIONS.
- INSTALLATION SHALL BE GUARANTEED TO BE FREE FROM DEFECTS FOR ONE (1) YEAR FROM FINAL DATE OF ACCEPTANCE OF THE PROJECT AS A WHOLE.
- CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO BID AND CONSTRUCTION.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING LINE SIZES, CONDITIONS, AND INVERTS PRIOR TO BID AND CONSTRUCTION.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER THE COMPLETE INSTALLATION OF SYSTEMS TO FUNCTION AS DESCRIBED AND SPECIFIED. THE OMISSION OF REFERENCE TO ANY NECESSARY ITEM OF LABOR OR MATERIAL SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH LABOR AND MATERIAL AT NO ADDITIONAL COST TO THE STATE.
- PAY FOR ALL PERMITS AND APPLICATIONS.
- CAULK ALL PENETRATIONS WATERTIGHT. PROVIDE ALL CUTTING, PATCHING, AND RESTORING OF EXISTING SURFACES TO MATCH ORIGINAL SURFACE FINISHES. SPOT PAINT TO MATCH EXISTING SURFACES/COLOR.
- PREPARE SIX (6) SETS OF SHOP DRAWINGS SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF WORK. NO REPRODUCTIONS OF ANY KIND OF THE CONTRACT DOCUMENTS SHALL BE ACCEPTABLE AS SHOP DRAWINGS. PROVIDE ONE (1) SET OF REPRODUCIBLE AS-BUILT DRAWINGS SHOWING THE ACTUAL INSTALLED CONDITIONS AND SUBMIT TO THE STATES UPON COMPLETION OF WORK.
- ALL EQUIPMENT AND FIXTURES SHALL BE CAPABLE OF FITTING INTO THE SPACES ALLOTTED WHILE MEETING THE MANUFACTURER'S RECOMMENDED ACCESS REQUIREMENTS. REVIEW ALL SPACES WHERE EQUIPMENT AND FIXTURES ARE TO BE INSTALLED PRIOR TO ORDERING OF ITEMS AND NOTIFY THE ARCHITECT/ENGINEER OF ANY INADEQUATE CLEARANCES OR CONDITIONS THAT WILL PREVENT THE PROPER INSTALLATION, MAINTENANCE, AND OPERATION OF THE EQUIPMENT AND FIXTURES.
- DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT SHOW EVERY EXACT DETAIL OF PIPING AND DUCTWORK. PROVIDE OFFSETS AS NECESSARY TO AVOID LOCAL OBSTRUCTIONS OR INTERFERENCES WITH OTHER TRADES. REVIEW ALL PIPING AND DUCT RUNS PRIOR TO FABRICATION AND IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER OF ANY INTERFERENCES AND/OR LACK OF ADEQUATE CLEARANCES.
- SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, MARK SUCH CHANGES ON THE AS-BUILT DRAWINGS. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE APPROVED BY THE CONTRACT DOCUMENTS, SUBMIT SHOP DRAWINGS SHOWING THE PROPOSED ALTERNATE METHODS TO THE ARCHITECT/ENGINEER FOR REVIEW/APPROVAL PRIOR TO PROCEEDING WITH WORK.
- COORDINATE ALL WORK WHICH WILL AFFECT AREAS WITH CONTRACTING OFFICER. SCHEDULE OFF-HOUR WORK WHEN REQUIRED TO MINIMIZE DISRUPTIONS.
- COORDINATE ALL SWITCH, THERMOSTAT, FIRE EXTINGUISHER, ETC. LOCATIONS WITH USER/ENGINEER PRIOR TO INSTALLATION TO AVOID INTERFERENCES WITH PAINTING, BULLETIN BOARDS, FURNITURE, ETC. ANY ITEM NOT PROPERLY COORDINATED SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE STATE.
- ALL STEEL SHALL BE HOT DIPPED GALVANIZED. GALVANIZED STEEL EXPOSED TO WEATHER SHALL HAVE WEATHER PROOF PAINT TO MATCH SURFACES. PROVIDE TWO EXTRA COATS OF EPOXY PAINT.
- ALL ELECTRICAL AND CONTROL WIRING SHALL BE IN CONDUIT. PROVIDE GALVANIZED STEEL PIPE CONDUIT FOR CONDUIT EXPOSED TO WEATHER.
- ALL SWITCHES, TIMECLOCKS, THERMOSTATS, AND CONTROL ITEMS SHALL BE ADA ACCESSIBLE AND SHALL BE MOUNTED AT 44" AFF AS PER ADA REQUIREMENTS OR ACCORDING TO STATE'S INSTRUCTIONS.
- COORDINATE ALL WORK WITH OTHER TRADES TO AVOID INTERFERENCES AND DELAYS.
- SEISMICALLY BRACE ALL EQUIPMENT, PIPING, AND DUCTWORK IN ACCORDANCE WITH THE CURRENT BUILDING CODE AND THERE RESPECTIVE SEISMIC ZONE LOCATIONS.
- TONE AND LOCATE ALL UTILITY LINES OR OTHER INTERFERENCES IN AREAS OF PROPOSED TRENCH WORK PRIOR TO START OF EXCAVATION. REPAIR OR PAY FOR ALL DAMAGES TO EXISTING UTILITIES.
- PROVIDE DIELECTRIC UNIONS OR SEPARATIONS AT ALL DISSIMILAR METALS. PROVIDE UNIONS AFTER ALL SHUTOFF VALVES.
- PROVIDE ACCESS PANELS FOR ALL ITEMS UNDER THIS SECTION REQUIRING SERVICING, INSPECTION, MAINTENANCE, AND ADJUSTMENT.
- PROVIDE ESCUTCHEON PLATES AT ALL EXPOSED WALL PENETRATIONS IN FINISHED AREAS, EXTERIOR WALL, ETC.
- ALL PENETRATIONS THRU EXISTING WALLS, FOUNDATIONS, AND FLOOR SLABS SHALL BE IN TOTAL COMPLIANCE WITH ARCHITECTURAL/STRUCTURAL PROCEDURES AND DRAWINGS.
- ALL PENETRATIONS THRU RATED WALLS AND CEILINGS SHALL BE EQUIPPED WITH APPROVED FIRE STOPPING AND/OR FIRE & SMOKE DAMPERS.
- DRAWING FILES WILL NOT BE AVAILABLE TO CONTRACTORS FOR SHOP DRAWINGS OR ANY OTHER PURPOSE.
- PROVIDE ISOLATION VALVES ON PIPING BRANCH LINES AND VOLUME DAMPERS ON DUCTWORK BRANCH LINES WHETHER SHOWN ON THE DRAWINGS OR NOT.
- CONTRACTOR SHALL SCHEDULE, TAG, AND LABEL ALL VALVES AND PIPING. ALL PIPING SHALL ALSO BE LABELED WITH DIRECTION OF FLOW.
- ALL EXTERIOR NUTS, BOLTS, SCREWS, WASHERS, FASTENERS, SUPPORTS STRAPS, ETC. SHALL BE TYP 304 STAINLESS STEEL.

MECHANICAL LEGEND

SYMBOL	ABBREV.	DESCRIPTION	SYMBOL	ABBREV.	DESCRIPTION
GENERAL			PLUMBING		
	AP	ACCESS PANEL		ADF	ACCESSIBLE DRINKING FOUNTAIN
	DN	DOWN		ALAV	ACCESSIBLE LAVATORY
	EA	EACH		AWC	ACCESSIBLE WATER CLOSET
(E)	EXIST'G	EXISTING (TO REMAIN)	— φ —	COTG	CLEANOUT TO GRADE
(N)		NEW	— · —	CW	COLD WATER
(R)		REMOVE		EWH	ELECTRIC WATER HEATER
(RE)		RELOCATE	— φ —	FCO	FLOOR CLEANOUT
	POC	POINT OF CONNECTION		FD	FLOOR DRAIN
	POR	POINT OF REMOVAL		FS	FLOOR SINK
	(TYP)	TYPICAL		GPD	GALLONS PER DAY
	W/	WITH		GPM	GALLONS PER MINUTE
HVAC				HB	HOSE BIBB
	ACCU	AIR COOLED CONDENSING UNIT	— · —	HW	HOT WATER
— CD —	CD	CONDENSATE DRAIN		INV	INVERT
	CFM	CUBIC FEET PER MINUTE		LAV	LAVATORY
	DT	DUCT		M/S	MOP SINK
☑	EAR	EXHAUST AIR REGISTER		S	SANITARY/WASTE
	EXH	EXHAUST		SD	STORM
	EF	EXHAUST FAN		SK	SINK
	FCU	FAN COIL UNIT	⊗	SOV	SHUT OFF VALVE
~		FLEX DUCTWORK		S/S	SERVICE SINK
	NK	NECK		TP	TRAP PRIMER
	OA	OUTSIDE AIR		U/C	UNDERCUT DOOR
	OAG	OUTSIDE AIR GRILL		UR	URINAL
—	OBVD	OPPOSED BLADE VOLUME DAMPER	— · —	V	VENT
☑	RAR	RETURN AIR REGISTER	J _i L	VTR	VENT THRU ROOF
	RAR	RETURN AIR REGISTER		VB	VACUUM BREAKER
	RL	REFRIGERANT LIQUID		WC	WATER CLOSET
	RS	REFRIGERANT SUCTION		WCO	WALL CLEANOUT
☒	SAD	SUPPLY AIR DIFFUSER		WHA	WATER HAMMER ARRESTER
⌋	TV	TURNING VANES		FE	FIRE EXTINGUISHER
—	VD	VOLUME DAMPER			

COUNTY OF MAUI
MAUI COUNTY CODE, CHAPTER 16.16A ENERGY CODE

TO THE BEST OF MY KNOWLEDGE, THIS PROJECT'S DESIGN SUBSTANTIALLY CONFORMS TO THE ENERGY CODE FOR:

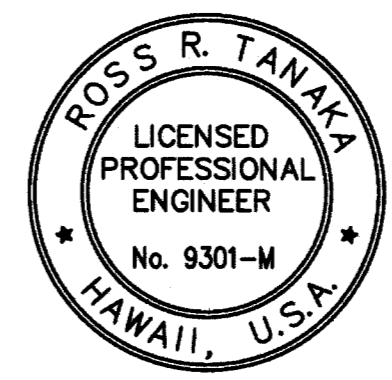
✓ MECHANICAL COMPONENT SYSTEMS

SIGNATURE: [Signature] DATE: 3/15/2016

NAME: ROSS R. TANAKA

TITLE: VICE PRESIDENT

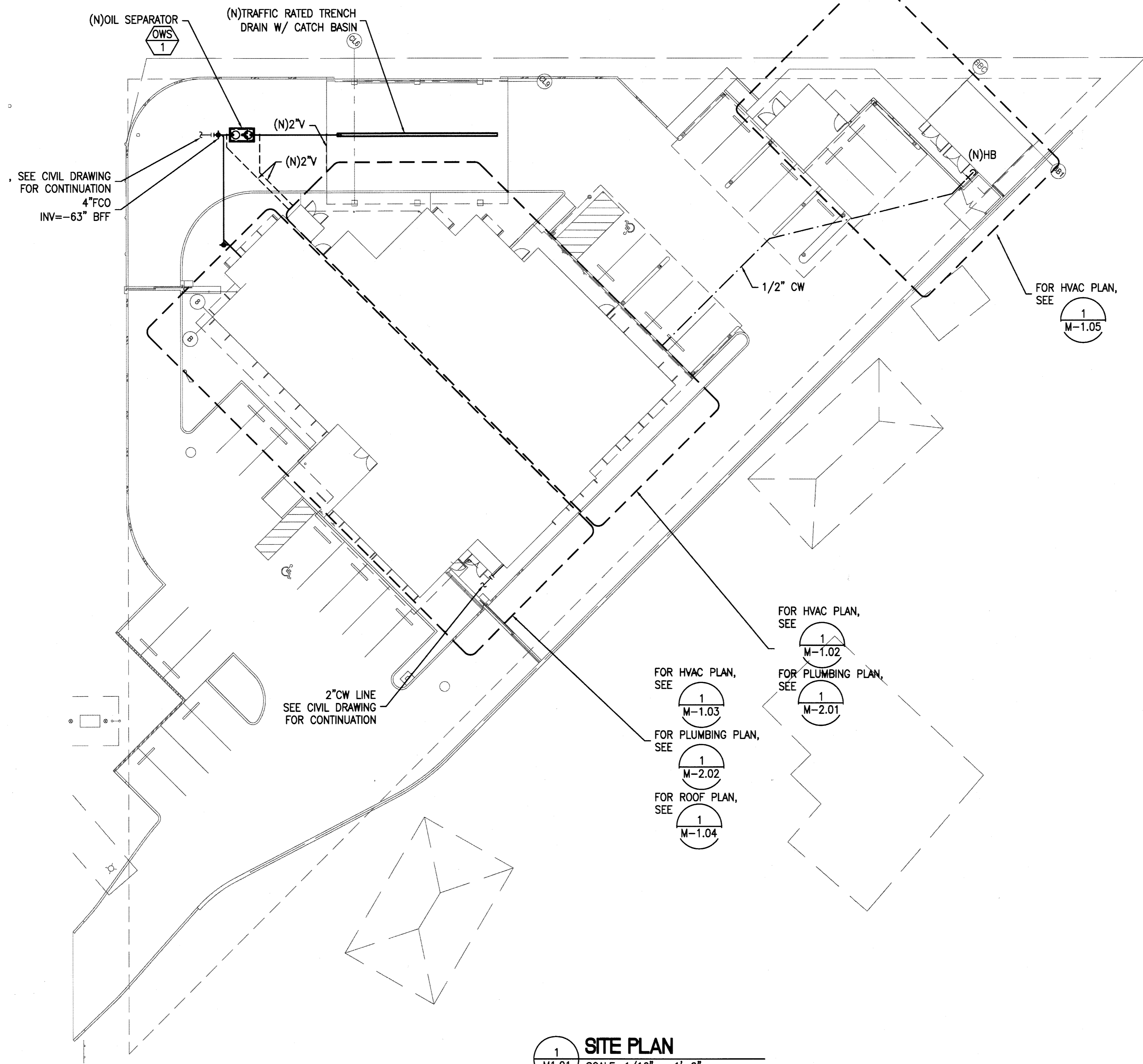
LICENSE NO.: 9301-M



Expiration Date: 4/30/16

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
GENERAL NOTES, LEGEND					
DESIGNED: RRT		SUBMITTED: [Signature]			
DRAWN: MEI		DATE: 03/15/16			
CHECKED: RRT		SCALE:			
APPROVED: [Signature]		DATE: MAR 23 2016		DRAWING NO. M1.00	
CHIEF ENGINEER		DATE			

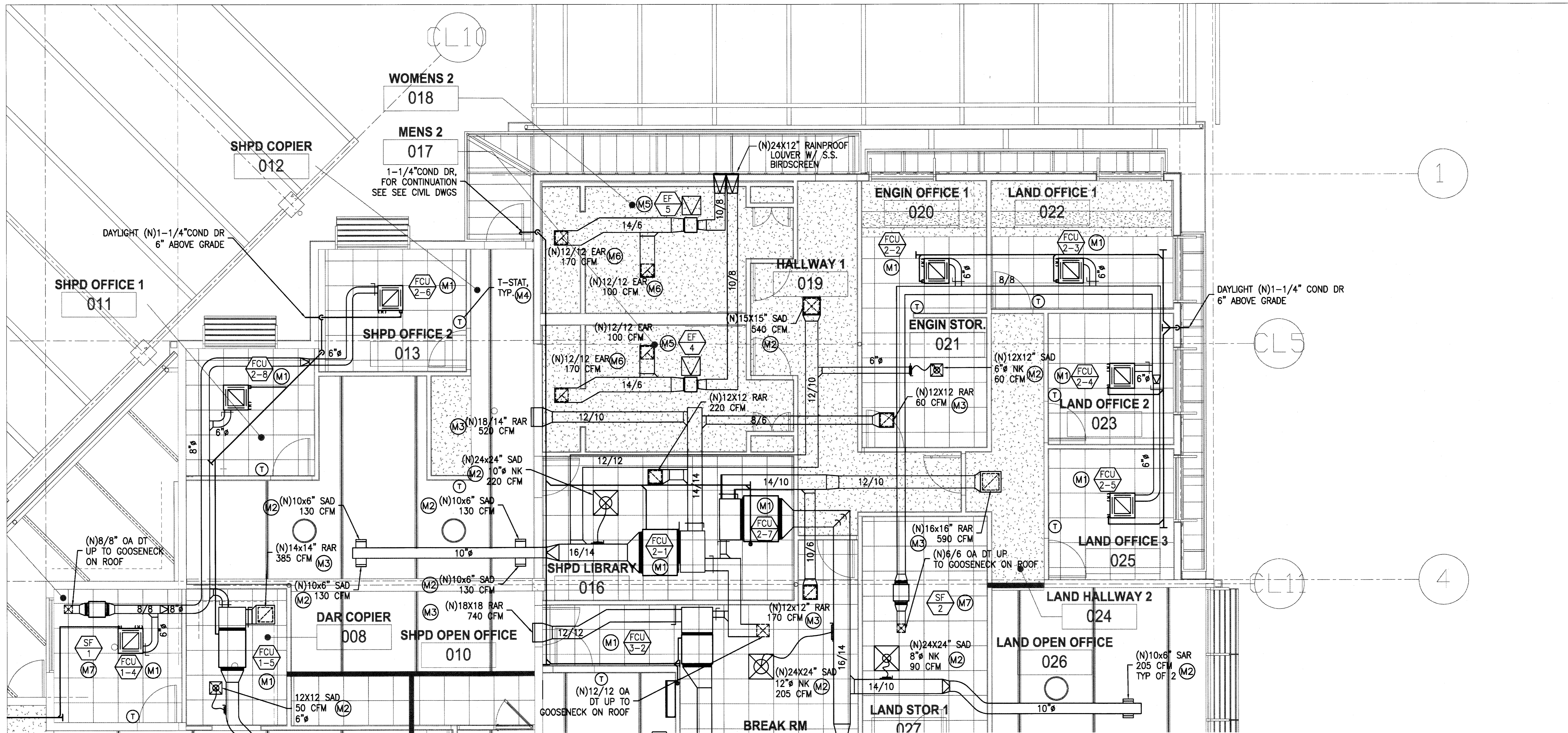
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.



1 SITE PLAN
M1.01 SCALE: 1/16" = 1'-0"



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
SITE PLAN					
DESIGNED:	RRT	SUBMITTED:	gc		
DRAWN:	MEI	DATE:	03/15/16		
CHECKED:	RRT	SCALE:			
APPROVED:			DATE:	MAR 23 2016	DRAWING NO.
CHIEF ENGINEER					M1.01

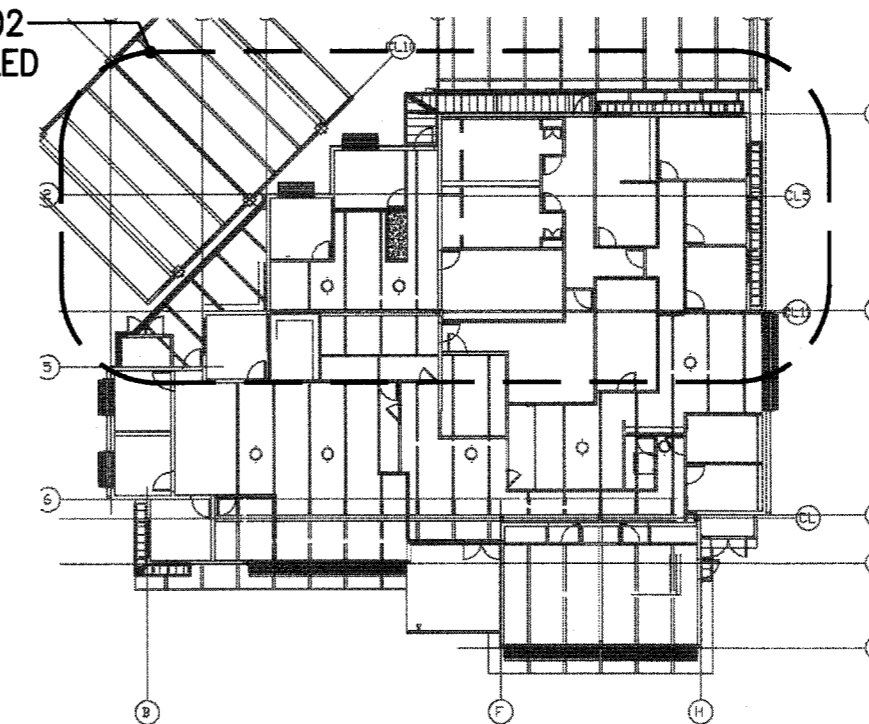


1 PARTIAL MECHANICAL PLAN
M1.02 SCALE: 1/4" = 1'-0"

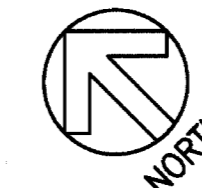
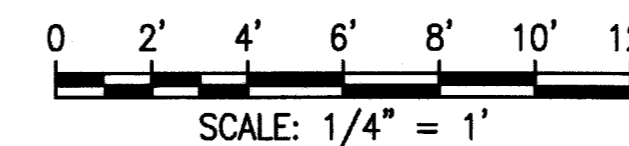
NEW MECHANICAL WORK NOTES:

- (M1) PROVIDE NEW FAN COIL UNIT AT LOCATION SHOWN. PROVIDE NEW CONDENSATE DRAIN, REFRIGERANT PIPING, AND DUCTWORK ETC. AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.
- (M2) PROVIDE NEW SUPPLY AIR DIFFUSER AT LOCATION SHOWN. PROVIDE SUPPLY DUCTWORK AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.
- (M3) PROVIDE NEW RETURN AIR REGISTER AT LOCATION SHOWN. PROVIDE RETURN DUCTWORK AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.
- (M4) PROVIDE NEW THERMOSTAT AND CONTROL WIRING AS REQUIRED TO CONNECT TO FCU. MOUNT NEW THERMOSTAT AT 48" AFF. CONTRACTOR TO FIELD VERIFY WITH OWNER/ARCH. ON FINAL LOCATION.
- (M5) PROVIDE NEW EXHAUST FAN COMPLETE. PROVIDE EXHAUST DUCTWORK AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.
- (M6) PROVIDE NEW EXHAUST AIR REGISTER AT LOCATION SHOWN. PROVIDE EXHAUST DUCTWORK AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.
- (M7) PROVIDE NEW SUPPLY FAN COMPLETE. PROVIDE OUTSIDE AIR SUPPLY DUCTWORK AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.

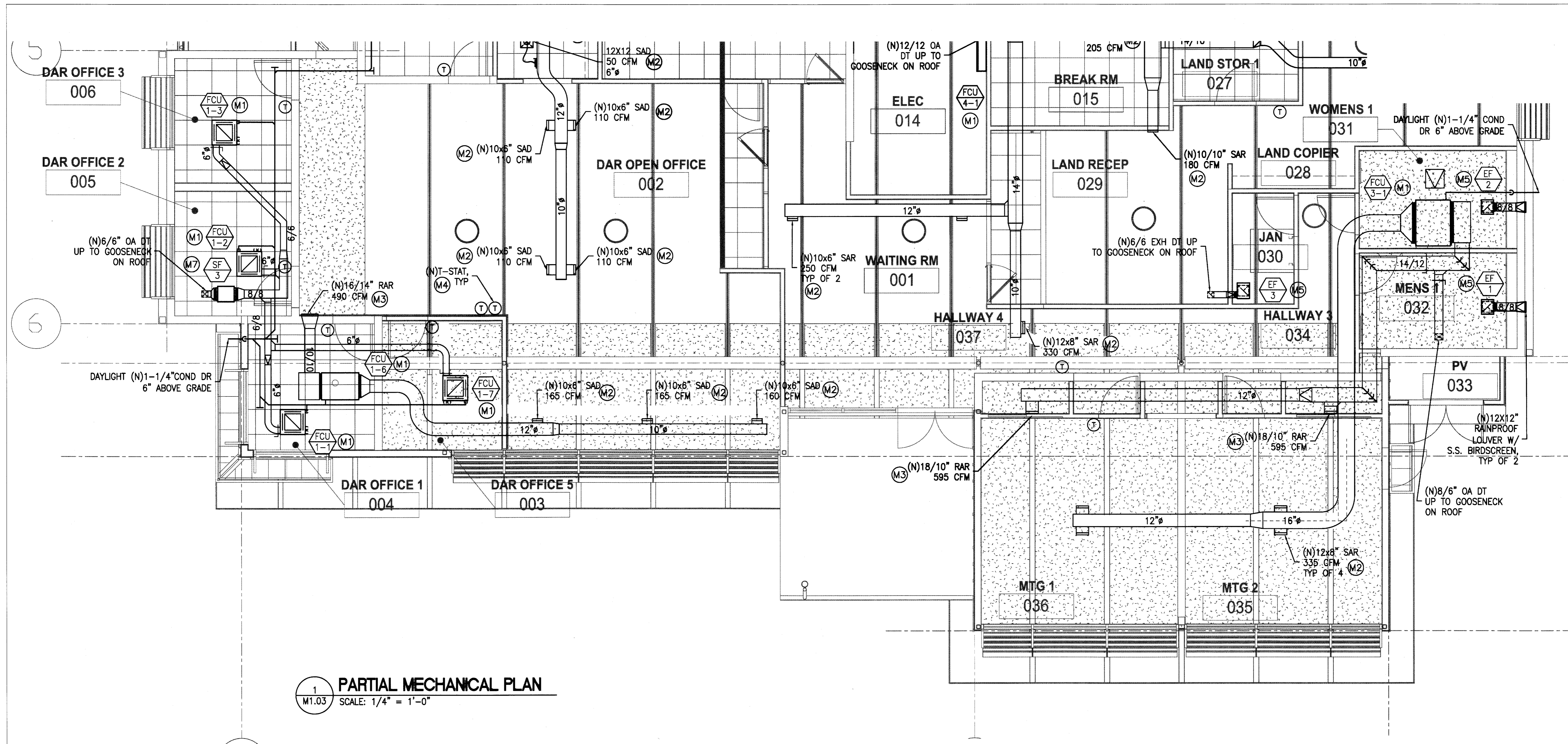
SEE 1/M102 FOR DETAILED PLAN



2 KEY PLAN
M1.02 SCALE: NTS



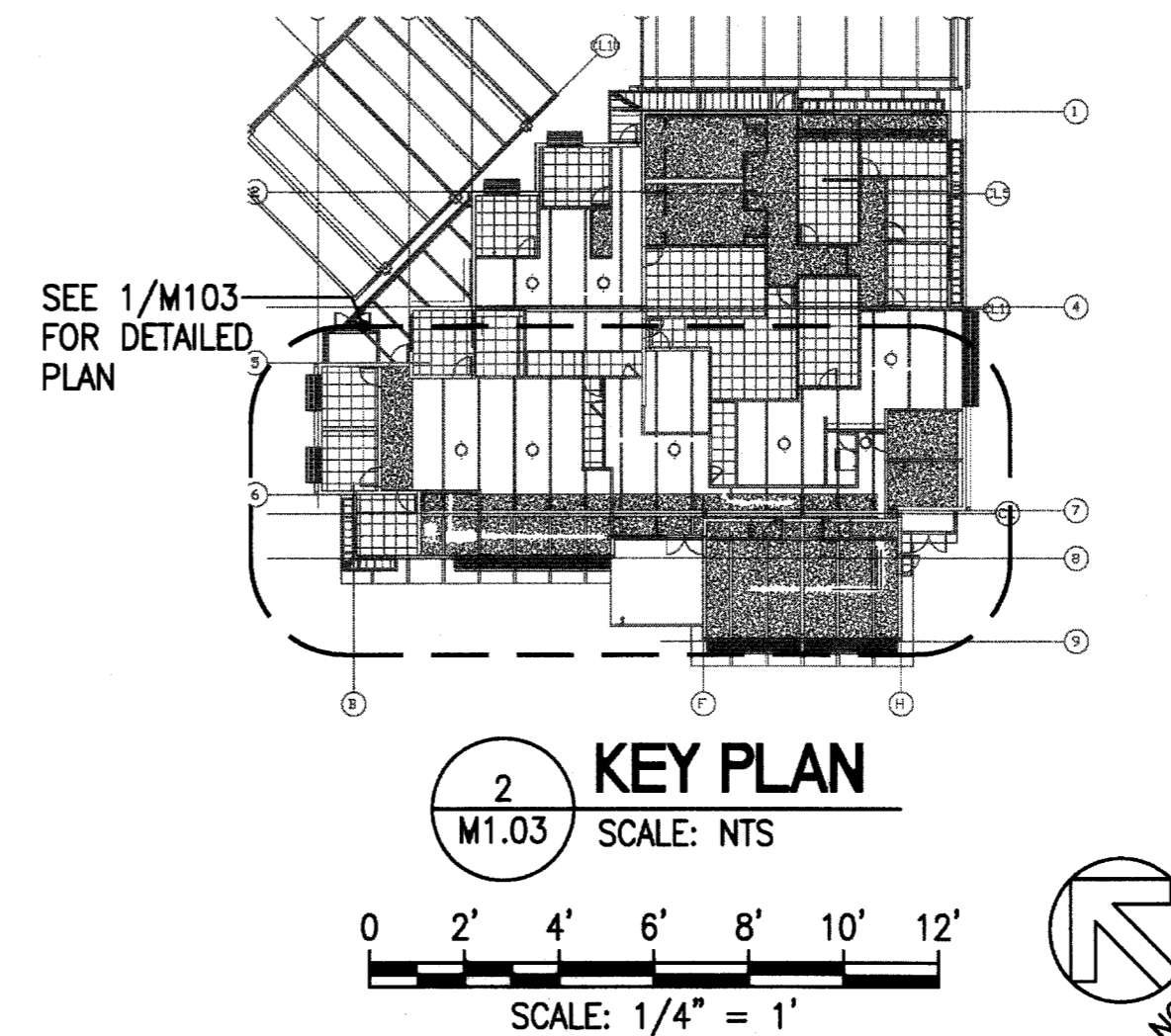
REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
PARTIAL MECHANICAL PLAN					
DESIGNED:	RRT	SUBMITTED:			
DRAWN:	MEI	DATE:	03/15/16		
CHECKED:	RRT	SCALE:			
APPROVED:	<i>[Signature]</i>	DATE:	MAR 23 2016		
CHIEF ENGINEER		DRAWING NO.	M1.02		



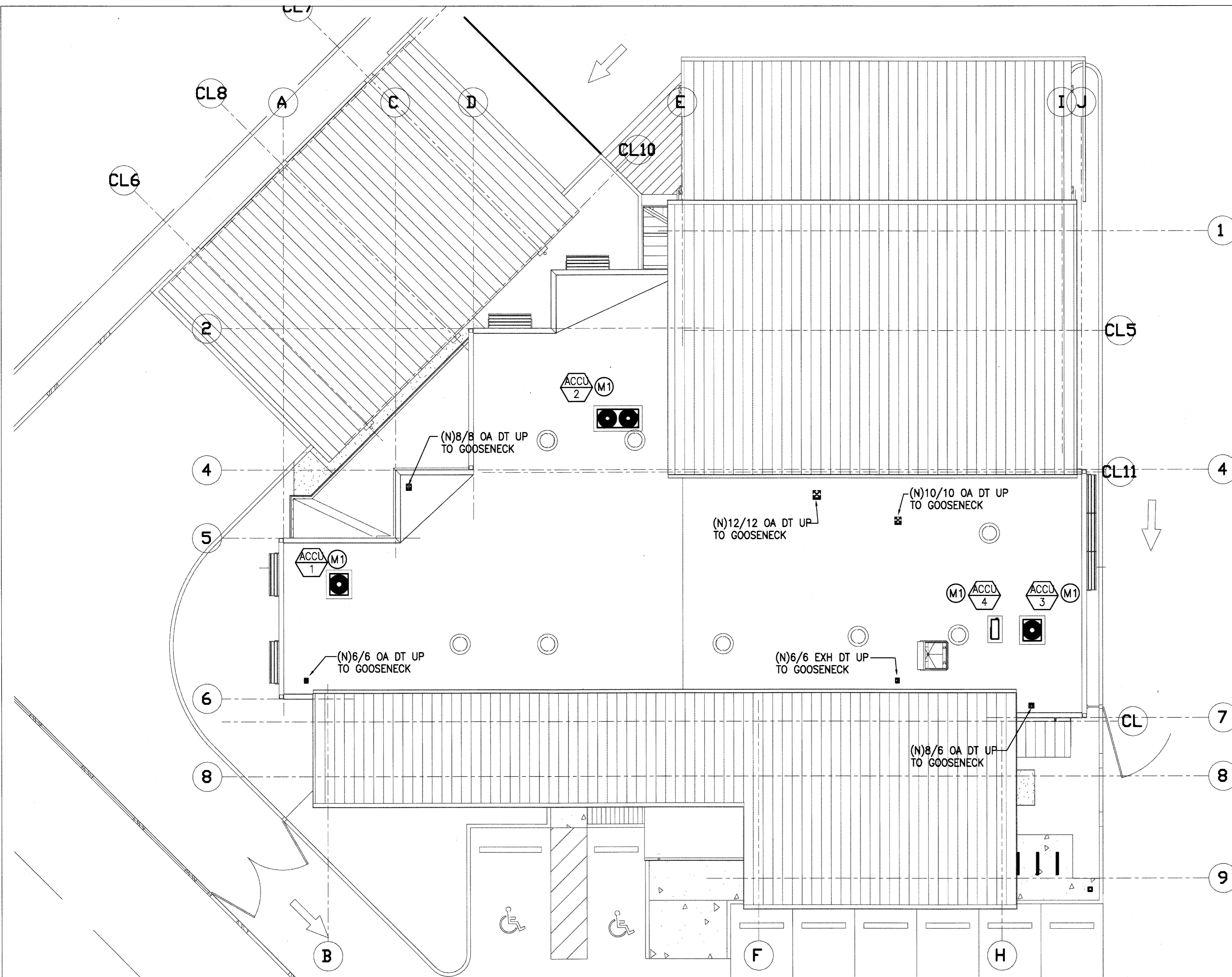
1 PARTIAL MECHANICAL PLAN
M1.03 SCALE: 1/4" = 1'-0"

NEW MECHANICAL WORK NOTES:

- (M1) PROVIDE NEW FAN COIL UNIT AT LOCATION SHOWN. PROVIDE NEW CONDENSATE DRAIN, REFRIGERANT PIPING, AND DUCTWORK ETC. AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.
- (M2) PROVIDE NEW SUPPLY AIR DIFFUSER AT LOCATION SHOWN. PROVIDE SUPPLY DUCTWORK AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.
- (M3) PROVIDE NEW RETURN AIR REGISTER AT LOCATION SHOWN. PROVIDE RETURN DUCTWORK AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.
- (M4) PROVIDE NEW THERMOSTAT AND CONTROL WIRING AS REQUIRED TO CONNECT TO FCU. MOUNT NEW THERMOSTAT AT 48" AFF. CONTRACTOR TO FIELD VERIFY WITH OWNER/ARCH. ON FINAL LOCATION.
- (M5) PROVIDE NEW EXHAUST FAN COMPLETE. PROVIDE EXHAUST DUCTWORK AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.
- (M6) PROVIDE NEW EXHAUST AIR REGISTER AT LOCATION SHOWN. PROVIDE EXHAUST DUCTWORK AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.
- (M7) PROVIDE NEW SUPPLY FAN COMPLETE. PROVIDE OUTSIDE AIR SUPPLY DUCTWORK AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.



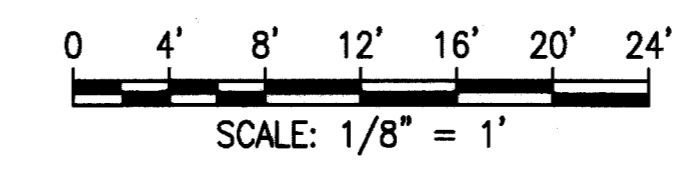
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
PARTIAL MECHANICAL PLAN					
DESIGNED:	RRT	SUBMITTED:	<i>[Signature]</i>		
DRAWN:	MEI	DATE:	03/15/16		
CHECKED:	RRT	SCALE:			
APPROVED:	<i>[Signature]</i>		DATE:	MAR 23 2016	
CHIEF ENGINEER				M1.03	



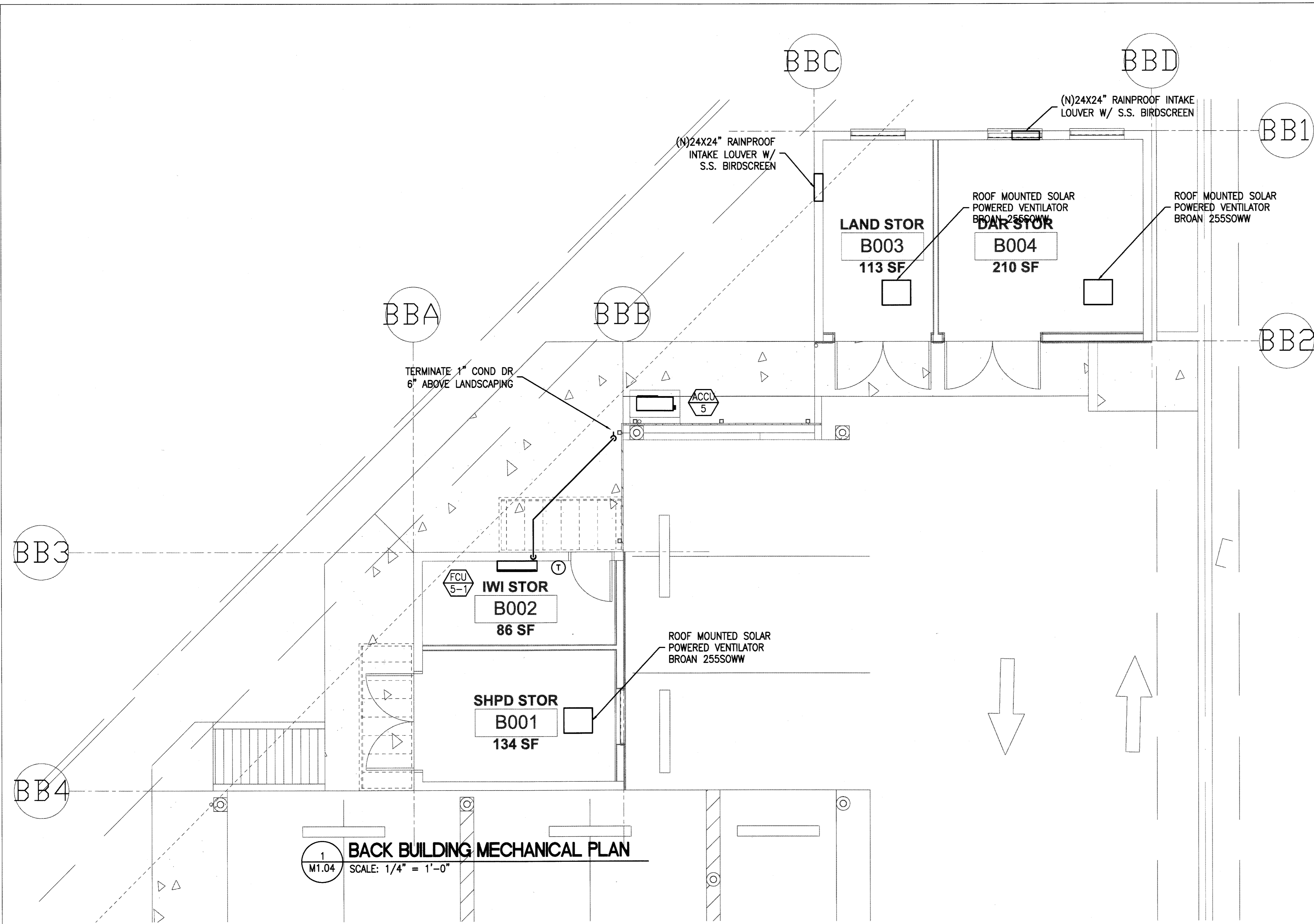
NEW MECHANICAL WORK NOTES:

- (M1) PROVIDE NEW AIR COOLED CONDENSING UNIT ON ROOF AT LOCATION SHOWN. PROVIDE NEW CONCRETE PAD ETC. PROVIDE NEW REFRIGERANT PIPING AS REQUIRED. CONTRACTOR TO FIELD VERIFY. PATCH/REPAIR TO MATCH EXISTING.

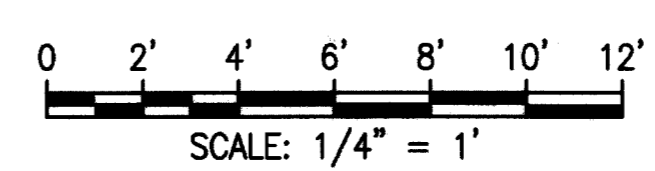
1 MECHANICAL ROOF PLAN
 M1.03 SCALE: 1/8" = 1'-0"



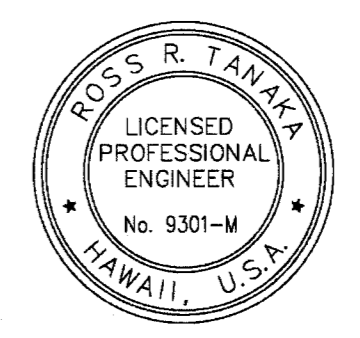
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
MECHANICAL ROOF PLAN					
DESIGNED: RRT		SUBMITTED: <i>MEI</i>			
DRAWN: MEI		DATE: 03/15/16			
CHECKED: RRT		SCALE:			
APPROVED: <i>[Signature]</i>		DATE: MAR 23 2016		DRAWING NO. M1.04	
CHIEF ENGINEER					



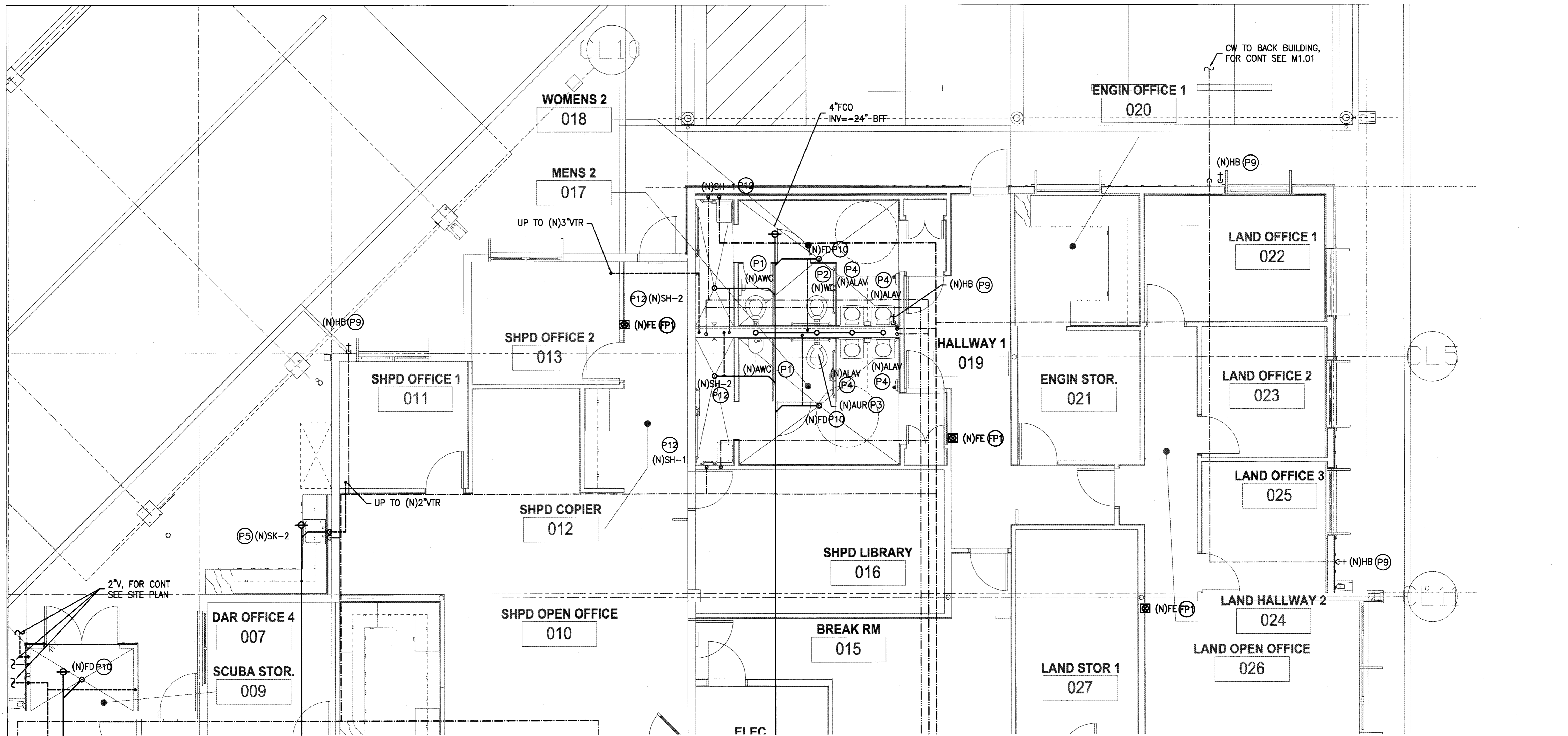
1
M1.04 BACK BUILDING MECHANICAL PLAN
SCALE: 1/4" = 1'-0"



REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
BACK BUILDING MECHANICAL PLAN					
DESIGNED:	RRT	SUBMITTED:	gc	DATE:	03/15/16
DRAWN:	MEI	CHECKED:	RRT	SCALE:	
APPROVED:	<i>[Signature]</i>	DATE:	MAR 23 2016	DRAWING NO.:	M1.05
CHIEF ENGINEER					



4/30/2016
EXP. DATE
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.



1 PARTIAL PLUMBING PLAN
M2.01 SCALE: 1/4" = 1'-0"

NEW PLUMBING WORK NOTES:

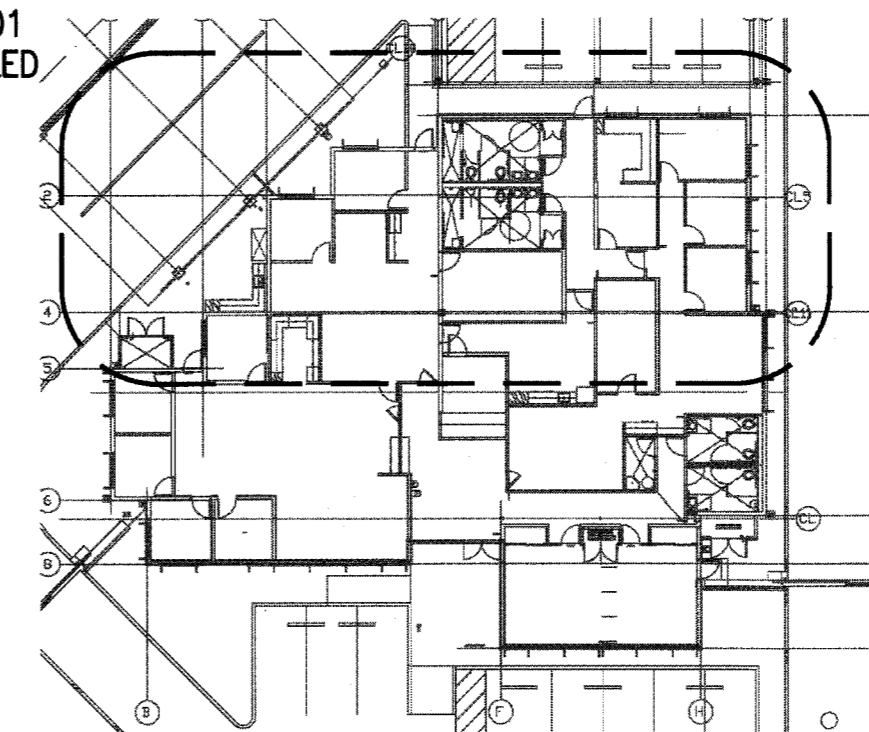
- (P1) PROVIDE NEW ACCESSIBLE WATER CLOSET COMPLETE. PROVIDE NEW WASTE, WATER AND VENT PIPING AS REQUIRED. INSTALL ACCORDING TO ADA GUIDELINES.
- (P2) PROVIDE NEW WATER CLOSET COMPLETE. PROVIDE NEW WASTE, WATER AND VENT PIPING AS REQUIRED.
- (P3) PROVIDE NEW ACCESSIBLE URINAL COMPLETE. PROVIDE NEW WASTE, WATER AND VENT PIPING AS REQUIRED. INSTALL ACCORDING TO ADA GUIDELINES.
- (P4) PROVIDE NEW ACCESSIBLE LAVATORY COMPLETE. PROVIDE NEW WASTE, WATER AND VENT PIPING AS REQUIRED. INSTALL ACCORDING TO ADA GUIDELINES.
- (P5) PROVIDE NEW SINK COMPLETE. PROVIDE NEW WASTE, WATER AND VENT PIPING AS REQUIRED.
- (P6) PROVIDE NEW MOP SINK COMPLETE. PROVIDE NEW WASTE, VENT AND WATER PIPING AS REQUIRED. CONTRACTOR TO FIELD VERIFY FINAL LOCATION OF FAUCET.
- (P7) PROVIDE HOT WATER RECIRCULATING PUMP AT LOCATION SHOWN. PROVIDE NEW WATER PIPING AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.

- (PB) PROVIDE ELECTRIC WATER HEATER COMPLETELY. PROVIDE NEW WATER PIPING AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING. T&P TO MOP SINK.
- (P9) PROVIDE NEW HOSE BIBB COMPLETE. PROVIDE NEW WATER VENT PIPING AS REQUIRED.
- (F10) PROVIDE FLOOR DRAIN WITH TRAP PRIMER COMPLETE PROVIDE NEW WASTE, VENT AND WATER PIPING AS REQUIRED.
- (F11) PROVIDE ACCESSIBLE WATER FOUNTAIN COMPLETE PROVIDE NEW WASTE, VENT AND WATER PIPING AS REQUIRED. MOUNT PER ADA REQUIREMENTS.
- (F12) PROVIDE SHOWER COMPLETE PROVIDE NEW WASTE, VENT AND WATER PIPING AS REQUIRED.

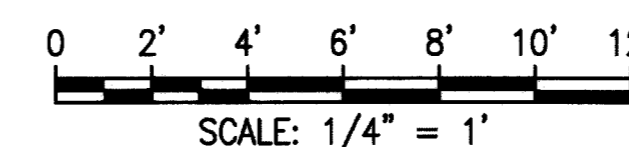
NEW FIRE PROTECTION WORK NOTES:

- (FP1) (N)10 LB CAPACITY FE W/ SEMI-RECESSED CABINET, 4A:80B:C UL RATING. FINAL LOCATION SHALL BE IN ACCORDANCE WITH NFPA 10.

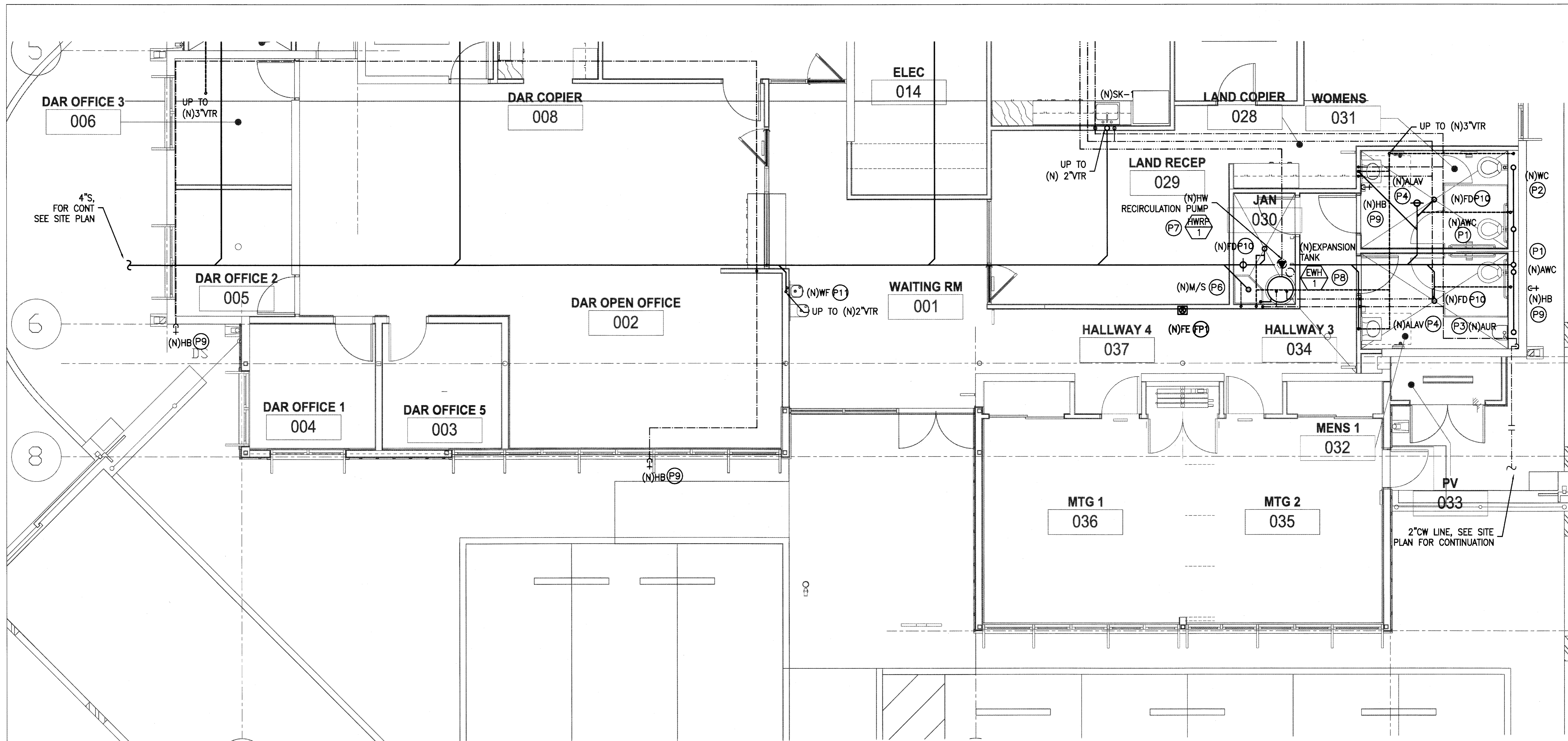
SEE 1/M201 FOR DETAILED PLAN



2 KEY PLAN
M2.01 SCALE: NTS



REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
PARTIAL PLUMBING PLAN					
DESIGNED:	RRT	SUBMITTED:			
DRAWN:	MEI	DATE:	03/15/16		
CHECKED:	RRT	SCALE:			
APPROVED:			DATE:	MAR 23 2016	
CHIEF ENGINEER			DATE:	M2.01	



1 PARTIAL PLUMBING PLAN
 M2.02 SCALE: 1/4" = 1'-0"

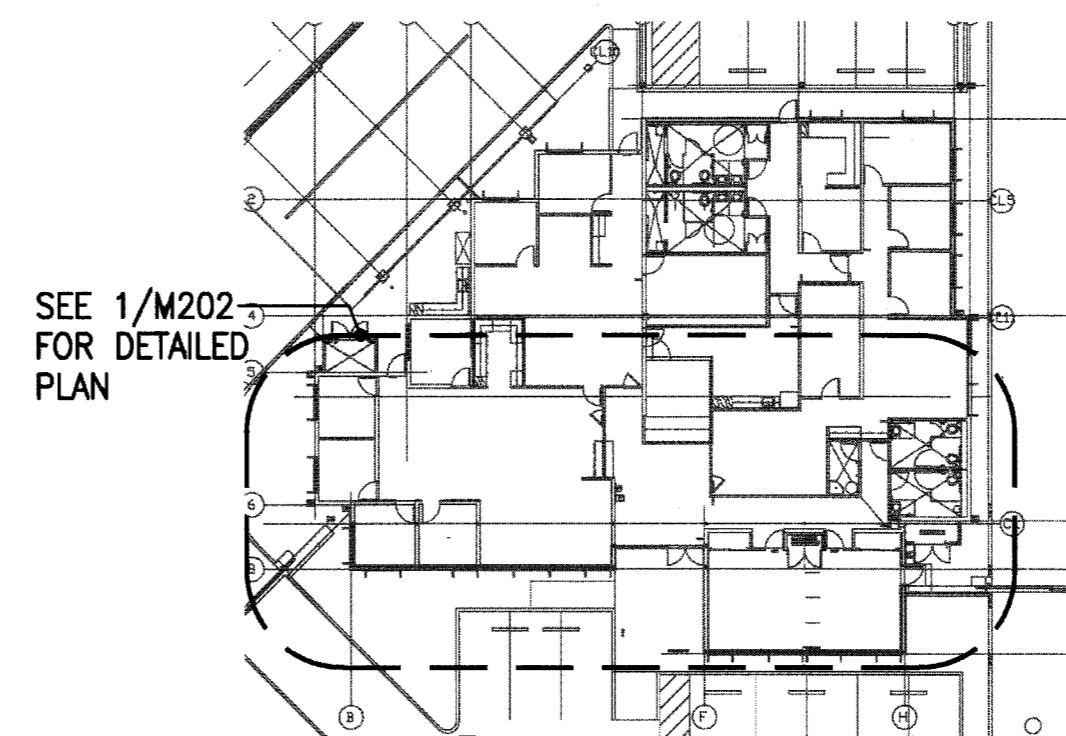
NEW PLUMBING WORK NOTES:

- (P1) PROVIDE NEW ACCESSIBLE WATER CLOSET COMPLETE. PROVIDE NEW WASTE, WATER AND VENT PIPING AS REQUIRED. INSTALL ACCORDING TO ADA GUIDELINES.
- (P2) PROVIDE NEW WATER CLOSET COMPLETE. PROVIDE NEW WASTE, WATER AND VENT PIPING AS REQUIRED.
- (P3) PROVIDE NEW ACCESSIBLE URINAL COMPLETE. PROVIDE NEW WASTE, WATER AND VENT PIPING AS REQUIRED. INSTALL ACCORDING TO ADA GUIDELINES.
- (P4) PROVIDE NEW ACCESSIBLE LAVATORY COMPLETE. PROVIDE NEW WASTE, WATER AND VENT PIPING AS REQUIRED. INSTALL ACCORDING TO ADA GUIDELINES.
- (P5) PROVIDE NEW SINK COMPLETE. PROVIDE NEW WASTE, WATER AND VENT PIPING AS REQUIRED.
- (P6) PROVIDE NEW MOP SINK COMPLETE. PROVIDE NEW WASTE, VENT AND WATER PIPING AS REQUIRED. CONTRACTOR TO FIELD VERIFY FINAL LOCATION OF FAUCET.
- (P7) PROVIDE HOT WATER RECIRCULATING PUMP AT LOCATION SHOWN. PROVIDE NEW WATER PIPING AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING.

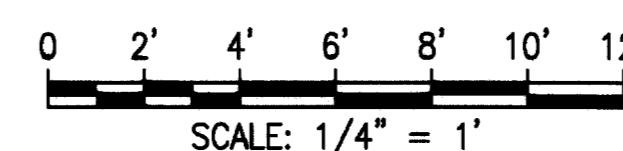
- (PB) PROVIDE ELECTRIC WATER HEATER COMPLETELY. PROVIDE NEW WATER PIPING AS REQUIRED. PATCH/REPAIR TO MATCH EXISTING. T&P TO MOP SINK.
- (P9) PROVIDE NEW HOSE BIBB COMPLETE. PROVIDE NEW WATER VENT PIPING AS REQUIRED.
- (F10) PROVIDE FLOOR DRAIN WITH TRAP PRIMER COMPLETE PROVIDE NEW WASTE, VENT AND WATER PIPING AS REQUIRED.
- (P11) PROVIDE ACCESSIBLE WATER FOUNTAIN COMPLETE PROVIDE NEW WASTE, VENT AND WATER PIPING AS REQUIRED. MOUNT PER ADA REQUIREMENTS.
- (F12) PROVIDE SHOWER COMPLETE PROVIDE NEW WASTE, VENT AND WATER PIPING AS REQUIRED.

NEW FIRE PROTECTION WORK NOTES:

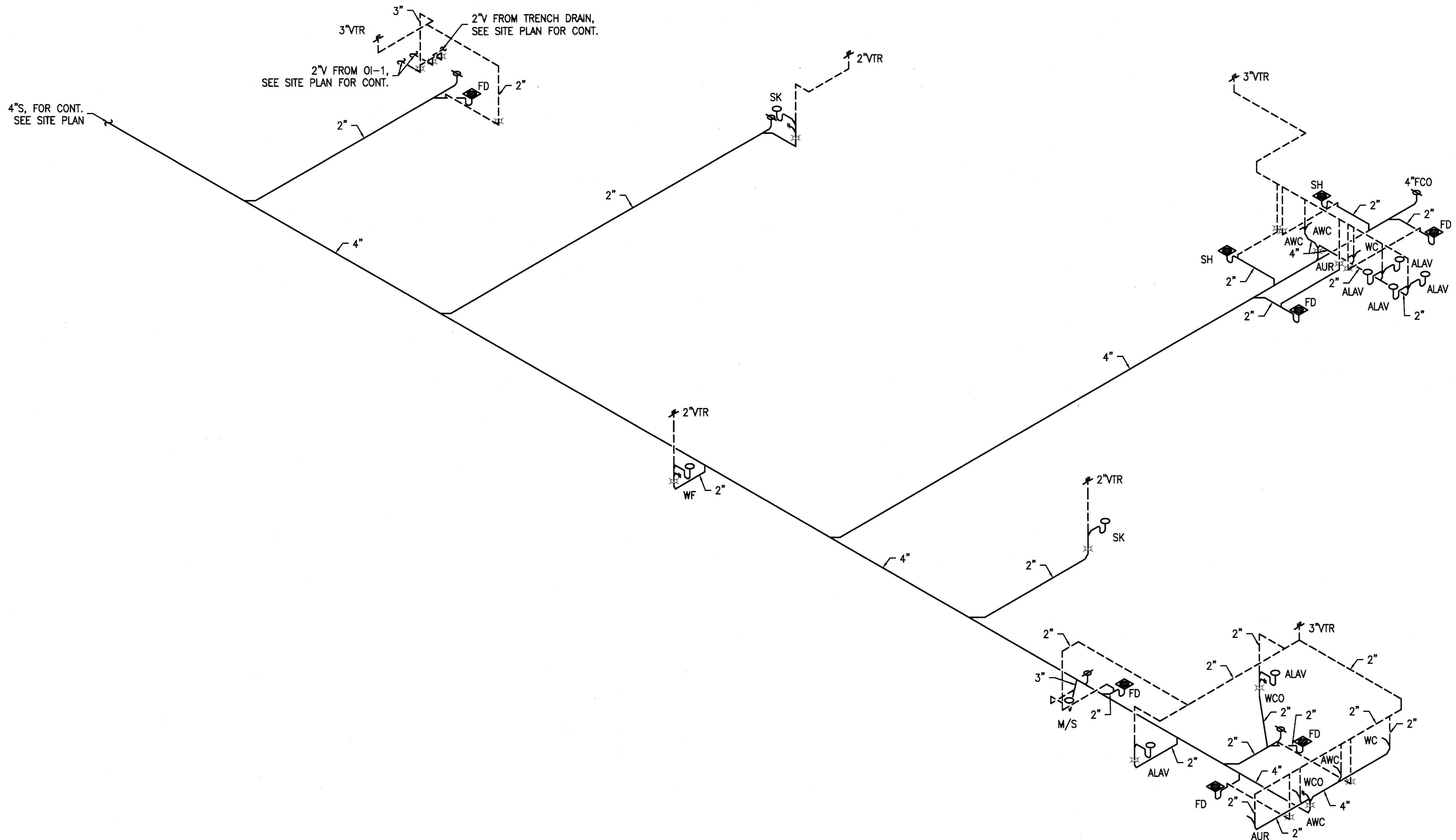
- (FP1) (N)10 LB CAPACITY FE W/ SEMI-RECESSED CABINET, 4A:80B:C UL RATING. FINAL LOCATION SHALL BE IN ACCORDANCE WITH NFPA 10.



2 KEY PLAN
 M2.02 SCALE: NTS



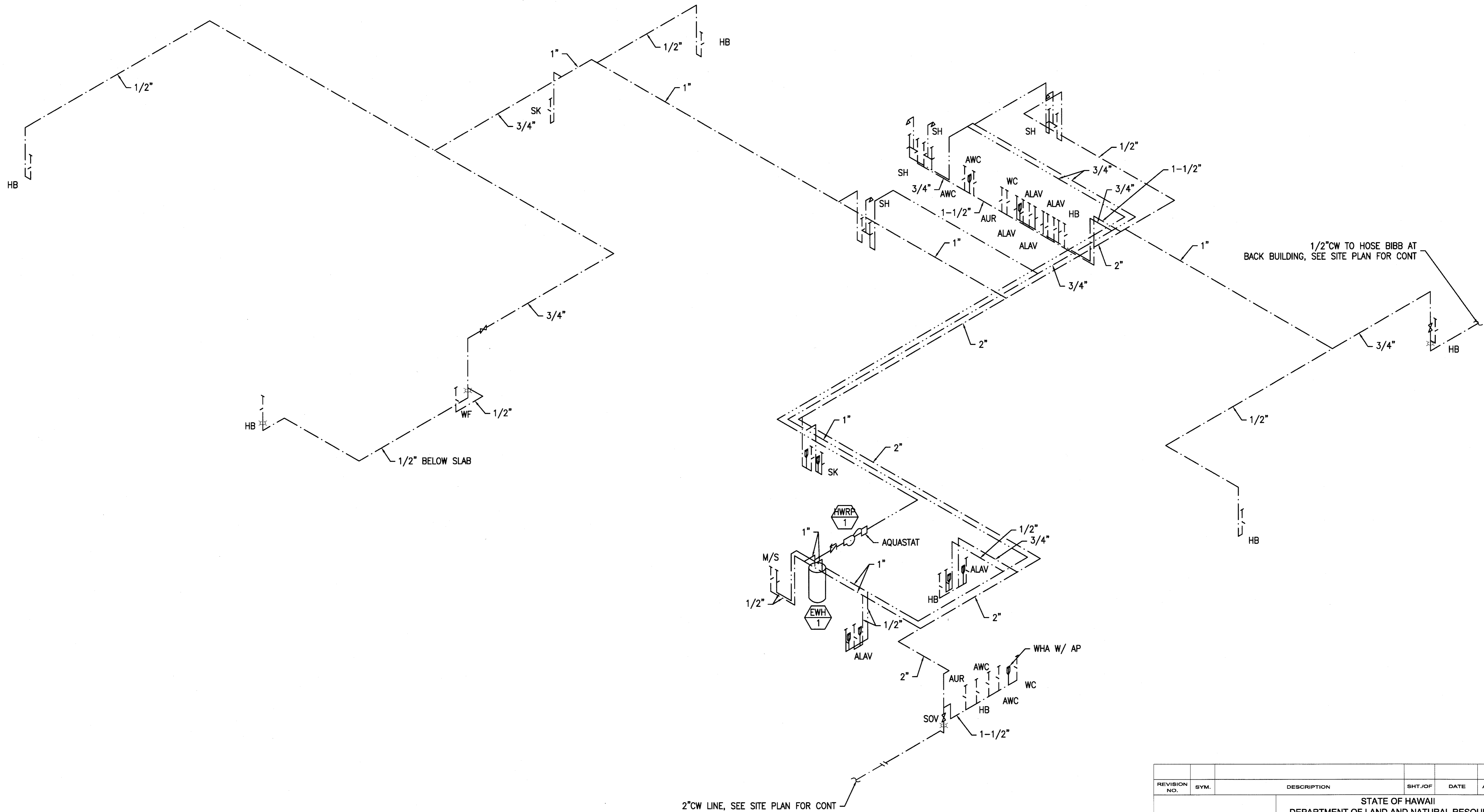
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII PARTIAL PLUMBING PLAN					
DESIGNED:	RRT	SUBMITTED:			
DRAWN:	MEI	DATE:	03/15/16		
CHECKED:	RRT	SCALE:			
APPROVED:			DATE:	MAR 23 2016	
CHIEF ENGINEER			DRAWING NO.	M2.02	



1
M2.03
SANITARY PIPING DIAGRAM
NOT TO SCALE

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII SANITARY PIPING DIAGRAM					
DESIGNED:	RRT	SUBMITTED:	<i>[Signature]</i>		
DRAWN:	MEI	DATE:	03/15/16		
CHECKED:	RRT	SCALE:			
APPROVED:	<i>[Signature]</i>		DATE:	MAR 23 2016	
CHIEF ENGINEER			DRAWING NO.	M2.03	

4/30/2016
 EXP. DATE
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.



1 WATER PIPING DIAGRAM
M2.04 NOT TO SCALE

2" CW LINE, SEE SITE PLAN FOR CONT

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII WATER PIPING DIAGRAM					
DESIGNED: RRT		SUBMITTED: <i>GC</i>			
DRAWN: MEI		DATE: 03/15/16			
CHECKED: RRT		SCALE:			
APPROVED: <i>[Signature]</i> CHIEF ENGINEER			DATE: MAR 23 2016		DRAWING NO.: M2.04

MECHANICAL EQUIPMENT SCHEDULE

PROVIDE MAGNETIC STARTER/DISCONNECTS WITH AUTOMATIC RESET FOR ALL UNITS. PROVIDE NEMA-4X STARTER ENCLOSURE FOR ALL OUTDOOR EQUIPMENT. ALL OUTDOOR EQUIPMENT SHALL HAVE POLYSILOXANE COATING PROTECTION ON INSIDE AND OUTSIDE OF HOUSING. COILS (CONDENSER) SHALL HAVE BLYGOLD POLIUAL COATING. ADSIL MICROGUARD CORROSION PROTECTION MAY BE USED IN LIEU OF POLYSILOXANE/BLYGOLD POLIUAL. PROVIDE HORIZONTALLY AND VERTICALLY RESTRAINED SPRING ISOLATORS WITH NEOPRENE DIPPED SPRINGS AND GALV. HOUSINGS ON ALL EQUIPMENT. PROVIDE PLASTIC COATED CABLE SWAY BRACING ALL SUSPENDED EQUIPMENT. PROVIDE FLEXIBLE DUCT CONNECTIONS AT ALL EQUIPMENT. PROVIDE S.S. BIRDSCREEN AT ALL NEW OA INTAKES. PROVIDE PHASE FAILURE/PHASE REVERSAL/OVER VOLTAGE/UNDER VOLTAGE ELECTRICAL PROTECTION PROVIDE CONTROL VOLTAGE TRANSFORMERS.

VRF SPLIT-SYSTEM AIR CONDITIONING UNIT SCHEDULE - ACCU-1																			
INDOOR UNITS																			
UNIT NO.	MANUFACTURER AND MODEL OR APPROVED EQUAL	AREA SERVED	TYPE	MAX SUPPLY AIR, CFM	OUTSIDE AIR, CFM	TOTAL CAPACITY (BTUH)	ENT AIR TEMP		ELECTRICAL					REFRIG LINES*		COND DRAIN	MAX SOUND LEVEL (dBA)	OPR WT (LBS)	REMARKS
							db (°F)	wb (°F)	V	Ø	Hz	MCA	MOCP	LIQ	GAS				
FDU-1	mitsubishi PLY-P08NCMU-ER4	DAR OFFICE 1	CEILING CASSETTE	350	15	8,000	80	67	208	1	60	0.29	15	1/4"	1/2"	1-1/4"	38	34	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-2	mitsubishi PLY-P08NCMU-ER4	DAR OFFICE 2	CEILING CASSETTE	350	15	8,000	80	67	208	1	60	0.29	15	1/4"	1/2"	1-1/4"	38	34	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-3	mitsubishi PLY-P08NCMU-ER4	DAR OFFICE 3	CEILING CASSETTE	350	15	8,000	80	67	208	1	60	0.29	15	1/4"	1/2"	1-1/4"	38	34	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-4	mitsubishi PLY-P08NCMU-ER4	DAR OFFICE 4	CEILING CASSETTE	350	15	8,000	80	67	208	1	60	0.29	15	1/4"	1/2"	1-1/4"	38	34	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-5	mitsubishi PEFY-P15NMHU-E2	DAR OPEN OFFICE	CONCEALED DUCTED	490	105	15,000	80	67	208	1	60	1.63/1.50	15	1/4"	1/2"	1-1/4"	45	98	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-6	mitsubishi PEFY-P15NMHU-E2	DAR OPEN OFFICE	CONCEALED DUCTED	490	0	15,000	80	67	208	1	60	1.63/1.50	15	1/4"	1/2"	1-1/4"	45	98	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-7	mitsubishi PLY-P08NCMU-ER4	SHPD OFFICE 1	CEILING CASSETTE	350	15	8,000	80	67	208	1	60	0.29	15	1/4"	1/2"	1-1/4"	38	34	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP

*CONTRACTOR SHALL CONFIRM REFRIGERANT PIPE SIZES WITH MANUFACTURER PRIOR TO PROCUREMENT.

OUTDOOR UNIT																	
UNIT NO.	MANUFACTURER AND MODEL OR APPROVED EQUAL	LOCATION	TYPE	REFRIG	NOMINAL CAPACITY (TONS)	TOTAL CAPACITY (BTUH)	AMBIENT AIR TEMP (°F)	ELECTRICAL					OPR WT (LBS)	REMARKS			
								V	Ø	Hz	MCA	MOCP					
ACCU-1	mitsubishi PUHY-P72TKMU-BS	ROOF	VARIABLE REFRIG FLOW	R-410a	6	72,000	95	208	3	60	34	40	532	"INVERTER" DRIVEN COMPRESSOR; PROVIDE NEOPRENE ISOLATORS, INTEGRAL STARTER AND DISCONNECT, FACTORY APPLIED CORROSION INHIBITOR COATING ON CONDENSER COIL AND CASING.			

VRF SPLIT-SYSTEM AIR CONDITIONING UNIT SCHEDULE - ACCU-2																			
INDOOR UNITS																			
UNIT NO.	MANUFACTURER AND MODEL OR APPROVED EQUAL	AREA SERVED	TYPE	MAX SUPPLY AIR, CFM	OUTSIDE AIR, CFM	TOTAL CAPACITY (BTUH)	ENT AIR TEMP		ELECTRICAL					REFRIG LINES*		COND DRAIN	MAX SOUND LEVEL (dBA)	OPR WT (LBS)	REMARKS
							db (°F)	wb (°F)	V	Ø	Hz	MCA	MOCP	LIQ	GAS				
FDU-1	mitsubishi PEFY-P48NMHSU-E2	SHPD OPEN OFFICE, ETC.	CONCEALED DUCTED	1340	540	48,000	80	67	208	1	60	4.16	15	3/8"	5/8"	1-1/4"	46	153	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-2	mitsubishi PLY-P08NCMU-ER4	ENGINEERING OFFICE 1	CEILING CASSETTE	350	15	8,000	80	67	208	1	60	0.29	15	1/4"	1/2"	1-1/4"	38	34	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-3	mitsubishi PLY-P08NCMU-ER4	LAND OFFICE 1	CEILING CASSETTE	350	15	8,000	80	67	208	1	60	0.29	15	1/4"	1/2"	1-1/4"	38	34	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-4	mitsubishi PLY-P08NCMU-ER4	LAND OFFICE 2	CEILING CASSETTE	350	15	8,000	80	67	208	1	60	0.29	15	1/4"	1/2"	1-1/4"	38	34	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-5	mitsubishi PLY-P08NCMU-ER4	LAND OFFICE 3	CEILING CASSETTE	350	15	8,000	80	67	208	1	60	0.29	15	1/4"	1/2"	1-1/4"	38	34	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-6	mitsubishi PLY-P08NCMU-ER4	SHPD OFFICE 2	CEILING CASSETTE	350	15	8,000	80	67	208	1	60	0.29	15	1/4"	1/2"	1-1/4"	38	34	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-7	mitsubishi PEFY-P30NMHU-E2	LAND OPEN OFFICE, ETC.	CONCEALED DUCTED	880	120	30,000	80	67	208	1	60	2.7	15	3/8"	5/8"	1-1/4"	44	124	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-8	mitsubishi PLY-P08NCMU-ER4	SHPD OFFICE 1	CEILING CASSETTE	350	15	8,000	80	67	208	1	60	0.29	15	1/4"	1/2"	1-1/4"	38	34	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP

*CONTRACTOR SHALL CONFIRM REFRIGERANT PIPE SIZES WITH MANUFACTURER PRIOR TO PROCUREMENT.

OUTDOOR UNIT																	
UNIT NO.	MANUFACTURER AND MODEL OR APPROVED EQUAL	LOCATION	TYPE	REFRIG	NOMINAL CAPACITY (TONS)	TOTAL CAPACITY (BTUH)	AMBIENT AIR TEMP (°F)	ELECTRICAL					OPR WT (LBS)	REMARKS			
								V	Ø	Hz	MCA	MOCP					
ACCU-2	mitsubishi PUHY-P144TKMU-BS	ROOF	VARIABLE REFRIG FLOW	R-410a	12	144,000	95	208	3	60	53/49	60	697	"INVERTER" DRIVEN COMPRESSOR; PROVIDE NEOPRENE ISOLATORS, INTEGRAL STARTER AND DISCONNECT, FACTORY APPLIED CORROSION INHIBITOR COATING ON CONDENSER COIL AND CASING.			

VRF SPLIT-SYSTEM AIR CONDITIONING UNIT SCHEDULE - ACCU-3																			
INDOOR UNIT																			
UNIT NO.	MANUFACTURER AND MODEL OR APPROVED EQUAL	AREA SERVED	TYPE	MAX SUPPLY AIR, CFM	OUTSIDE AIR, CFM	TOTAL CAPACITY (BTUH)	ENT AIR TEMP		ELECTRICAL					REFRIG LINES*		COND DRAIN	MAX SOUND LEVEL (dBA)	OPR WT (LBS)	REMARKS
							db (°F)	wb (°F)	V	Ø	Hz	MCA	MOCP	LIQ	GAS				
FDU-1	mitsubishi PEFY-P36NMHU-E2	MEETING RM 1 & 2	CONCEALED DUCTED	1340	150	36,000	80	67	208	1	60	4.16	15	3/8"	5/8"	1-1/4"	46	153	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
FDU-2	mitsubishi PEFY-P24NMHU-E2	WAITING RM	CONCEALED DUCTED	880	140	24,000	80	67	208	1	60	2.11	15	3/8"	5/8"	1-1/4"	40	111	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP

*CONTRACTOR SHALL CONFIRM REFRIGERANT PIPE SIZES WITH MANUFACTURER PRIOR TO PROCUREMENT.

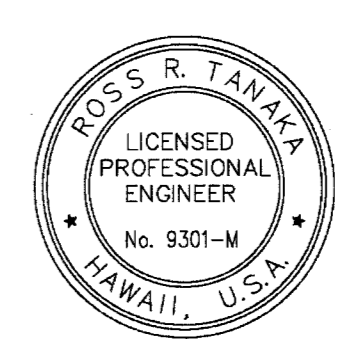
OUTDOOR UNIT																	
UNIT NO.	MANUFACTURER AND MODEL OR APPROVED EQUAL	LOCATION	TYPE	REFRIG	NOMINAL CAPACITY (TONS)	TOTAL CAPACITY (BTUH)	AMBIENT AIR TEMP (°F)	ELECTRICAL					OPR WT (LBS)	REMARKS			
								V	Ø	Hz	MCA	MOCP					
ACCU-3	mitsubishi PUHY-P72TKMU-BS	ROOF	VARIABLE REFRIG FLOW	R410A	6	72,000	95	208	3	60	25	30	430	"INVERTER" DRIVEN COMPRESSOR; PROVIDE NEOPRENE ISOLATORS, INTEGRAL STARTER AND DISCONNECT, FACTORY APPLIED CORROSION INHIBITOR COATING ON CONDENSER COIL AND CASING.			

DX SPLIT-SYSTEM AIR CONDITIONING UNIT SCHEDULE - ACCU-4																	
INDOOR UNIT																	
UNIT NO.	MANUFACTURER AND MODEL OR APPROVED EQUAL	AREA SERVED	TYPE	MAX SUPPLY AIR, CFM	OUTSIDE AIR, CFM	TOTAL CAPACITY (BTUH)	ENT AIR TEMP		REFRIG LINES*		COND DRAIN	MAX SOUND LEVEL (dBA)	OPR WT (LBS)	REMARKS			
							db (°F)	wb (°F)	LIQ	GAS							
FDU-1	mitsubishi PKA-A12HA6	ELEC RM	WALL MOUNTED	425	0	12,000	80	67	3/8"	5/8"	1"	43	29	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP			

*CONTRACTOR SHALL CONFIRM REFRIGERANT PIPE SIZES WITH MANUFACTURER PRIOR TO PROCUREMENT.

OUTDOOR UNIT																	
UNIT NO.	MANUFACTURER AND MODEL OR APPROVED EQUAL	LOCATION	TYPE	REFRIG	TOTAL CAPACITY (BTUH)	AMBIENT AIR TEMP (°F)	ELECTRICAL					OPR WT (LBS)	REMARKS				
							V	Ø	Hz	MCA	FLA						
ACCU-4	mitsubishi PUY-A12NAH6-BS	ROOF	DX SPLIT SINGLE-ZONE	R410A	12,000	95	208	1	60	13	20	82	PROVIDE NEOPRENE ISOLATORS, STARTER AND DISCONNECT, FACTORY APPLIED CORROSION INHIBITOR COATING ON CONDENSER COIL AND CASING. PROVIDE WIRING AND PIPING TO INDOOR UNIT				

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



ROSS R. TANAKA
LICENSED PROFESSIONAL ENGINEER
No. 9301-M
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

MAUI OFFICE ANNEX
WAILUKU, MAUI, HAWAII

MECHANICAL SCHEDULE

DESIGNED: RRT	SUBMITTED: <i>[Signature]</i>
DRAWN: MEI	DATE: 03/15/16
CHECKED: RRT	SCALE:
APPROVED: <i>[Signature]</i>	DRAWING NO. M3.00
CHIEF ENGINEER	DATE: MAR 23 2016

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

DX SPLIT-SYSTEM AIR CONDITIONING UNIT SCHEDULE - ACCU-5

INDOOR UNIT														
UNIT NO.	MANUFACTURER AND MODEL OR APPROVED EQUAL	AREA SERVED	TYPE	MAX SUPPLY AIR, CFM	OUTSIDE AIR, CFM	TOTAL CAPACITY (BTUH)	ENT AIR TEMP		REFRIG LINES*		COND DRAIN	MAX SOUND LEVEL (dBA)	OPR WT (LBS)	REMARKS
							db (°F)	wb (°F)	LIQ	GAS				
FDU-1	mitsubishi PKA-A12HA6	'IMI STORAGE	WALL MOUNTED	425	0	12,000	80	67	1/4"	1/2"	1"	43	29	PROVIDE WITH DISCONNECT, ISOLATION MOUNTS, & INTEGRAL CONDENSATE PUMP
*CONTRACTOR SHALL CONFIRM REFRIGERANT PIPE SIZES WITH MANUFACTURER PRIOR TO PROCUREMENT.														
OUTDOOR UNIT														
UNIT NO.	MANUFACTURER AND MODEL OR APPROVED EQUAL	LOCATION	TYPE	REFRIG	TOTAL CAPACITY (BTUH)	AMBIENT AIR TEMP (°F)	ELECTRICAL				OPR WT (LBS)	REMARKS		
							V	Ø	Hz	MCA	MOCP			
ACU-3	mitsubishi PUY-A12NAH6-BS	OUTSIDE	DX SPLIT SINGLE-ZONE	R410A	12,000	95	208	1	60	13	20	82	PROVIDE NEOPRENE ISOLATORS, STARTER AND DISCONNECT, FACTORY APPLIED CORROSION INHIBITOR COATING ON CONDENSER COIL AND CASING. PROVIDE WIRING AND PIPING TO INDOOR UNIT	

EXHAUST FAN SCHEDULE

UNIT	AREA SERVED	TYPE	CFM	ESP (INCH WG)	FAN RPM	ELECTRICAL				MAX SONE	MAKE & MODEL OR APPROVED EQUAL	REMARKS
						WATTS	V	PH	HZ			
EF 1	MENS 1	CENTRIFUGAL CEILING CABINET	100	0.25	940	8	115	1	60	1.4	GREENHECK SP-110-VG	PROVIDE WITH BACKDRAFT DAMPER, ISOLATION MOUNTS, & SOLID STATE FAN SPEED CONTROLLER MOUNTED ON UNIT. INTERLOCK WITH LIGHT SWITCH.
EF 2	WOMENS 1	CENTRIFUGAL CEILING CABINET	100	0.25	940	8	115	1	60	1.4	GREENHECK SP-110-VG	PROVIDE WITH BACKDRAFT DAMPER, ISOLATION MOUNTS, & SOLID STATE FAN SPEED CONTROLLER MOUNTED ON UNIT. INTERLOCK WITH LIGHT SWITCH.
EF 3	JANITOR	CENTRIFUGAL CEILING CABINET	90	0.25	950	100	115	1	60	2.0	GREENHECK SP-B110	PROVIDE WITH BACKDRAFT DAMPER, ISOLATION MOUNTS, & SOLID STATE FAN SPEED CONTROLLER MOUNTED ON UNIT. INTERLOCK WITH LIGHT SWITCH.
EF 4	MENS 2	CENTRIFUGAL INLINE	270	0.25	1350	150	115	1	60	3.5	GREENHECK CSP-A390	PROVIDE WITH BACKDRAFT DAMPER, ISOLATION MOUNTS, & SOLID STATE FAN SPEED CONTROLLER MOUNTED ON UNIT. INTERLOCK WITH LIGHT SWITCH.
EF 5	WOMENS 2	CENTRIFUGAL INLINE	270	0.25	1350	150	115	1	60	3.5	GREENHECK CSP-A390	PROVIDE WITH BACKDRAFT DAMPER, ISOLATION MOUNTS, & SOLID STATE FAN SPEED CONTROLLER MOUNTED ON UNIT. INTERLOCK WITH LIGHT SWITCH.

SUPPLY FAN SCHEDULE

UNIT	AREA SERVED	TYPE	CFM	ESP (INCH WG)	FAN RPM	ELECTRICAL				MAX SONE	MAKE & MODEL OR APPROVED EQUAL	REMARKS
						WATTS	V	PH	HZ			
SF 1	DAR OFFICES, SHPD OFFICES	CENTRIFUGAL SQUARE INLINE	150	0.35	1725	29.8	115	1	60	3.0	GREENHECK SQ-70-VG	PROVIDE NEW WITH BACKDRAFT DAMPER, ISOLATION MOUNTS, & SOLID STATE FAN SPEED CONTROLLER MOUNTED ON UNIT. INTERLOCK WITH ACCU/1.
SF 2	DAR OFFICES	CENTRIFUGAL SQUARE INLINE	60	0.35	1725	22.4	115	1	60	5.4	GREENHECK SQ-80-VG	PROVIDE NEW WITH BACKDRAFT DAMPER, ISOLATION MOUNTS, & SOLID STATE FAN SPEED CONTROLLER MOUNTED ON UNIT. INTERLOCK WITH ACCU/2.
SF 3	ENGIN OFFICE, LAND OFFICES	CENTRIFUGAL SQUARE INLINE	60	0.35	1725	22.4	115	1	60	5.4	GREENHECK SQ-80-VG	PROVIDE NEW WITH BACKDRAFT DAMPER, ISOLATION MOUNTS, & SOLID STATE FAN SPEED CONTROLLER MOUNTED ON UNIT. INTERLOCK WITH ACCU/1.

ELECTRIC WATER HEATER SCHEDULE

UNIT	MAKE & MODEL OR APPROVED EQUAL	LOCATION	CAPACITY (GAL.)	RECOVERY @ 90°F TEMP. RISE (GPH)	STANDARD ELECT. INPUT (kW)	ELECTRICAL			WEIGHT (LBS.)	DIMENSIONS (IN.)		REMARKS
						V	Ø	HZ		HEIGHT	DIAMETER	
EWH 1	AO SMITH ECRT-80	JANITORS CLOSET	80	21	4.5	208	3	60	191	61-1/2	25	NON-SIMULTANEOUS OPERATION. PROVIDE W/ INTEGRAL HEAT TRAPS, TEMPERATURE & PRESSURE RELIEF VALVE, & STAINLESS STEEL DRAIN PAN.

OIL WATER SEPARATOR SCHEDULE

UNIT NO.	MANUFACTURER AND MODEL	AREA SERVED	INLET/OUTLET SIZE	CAPACITY (GALLONS)	OVERALL DIMENSIONS			REMARKS
					H	L	W	
OWS 1	JENSEN PRECAST HJ320SO	BOAT WASH	4"	320	5'-0"	6'-8"	3'-8"	

CIRCULATING PUMP SCHEDULE

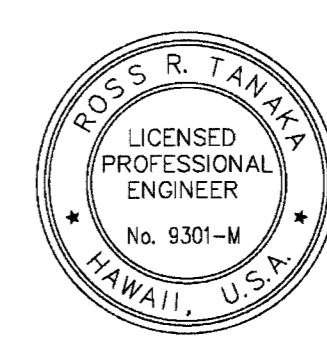
UNIT	AREA SERVED	TYPE	GPM	TOTAL HEAD (FT)	ELECTRICAL				WEIGHT (LB)	REMARKS
					HP	V	PH	HZ		
CP 1	HW CIRCULATION LOOP	CIRC. PUMP	2.2	2.0	1/25	115	1	60	5.5	GRUNDFOS UPS-15-10 OR APPROVED EQUAL. PROVIDE AQUA-STAT, CONTROL WIRING, VALVES, ETC. AS REQUIRED FOR COMPLETE SYSTEM.

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

MAUI OFFICE ANNEX
WAILUKU, MAUI, HAWAII

MECHANICAL SCHEDULE



4/30/2016
EXP. DATE

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

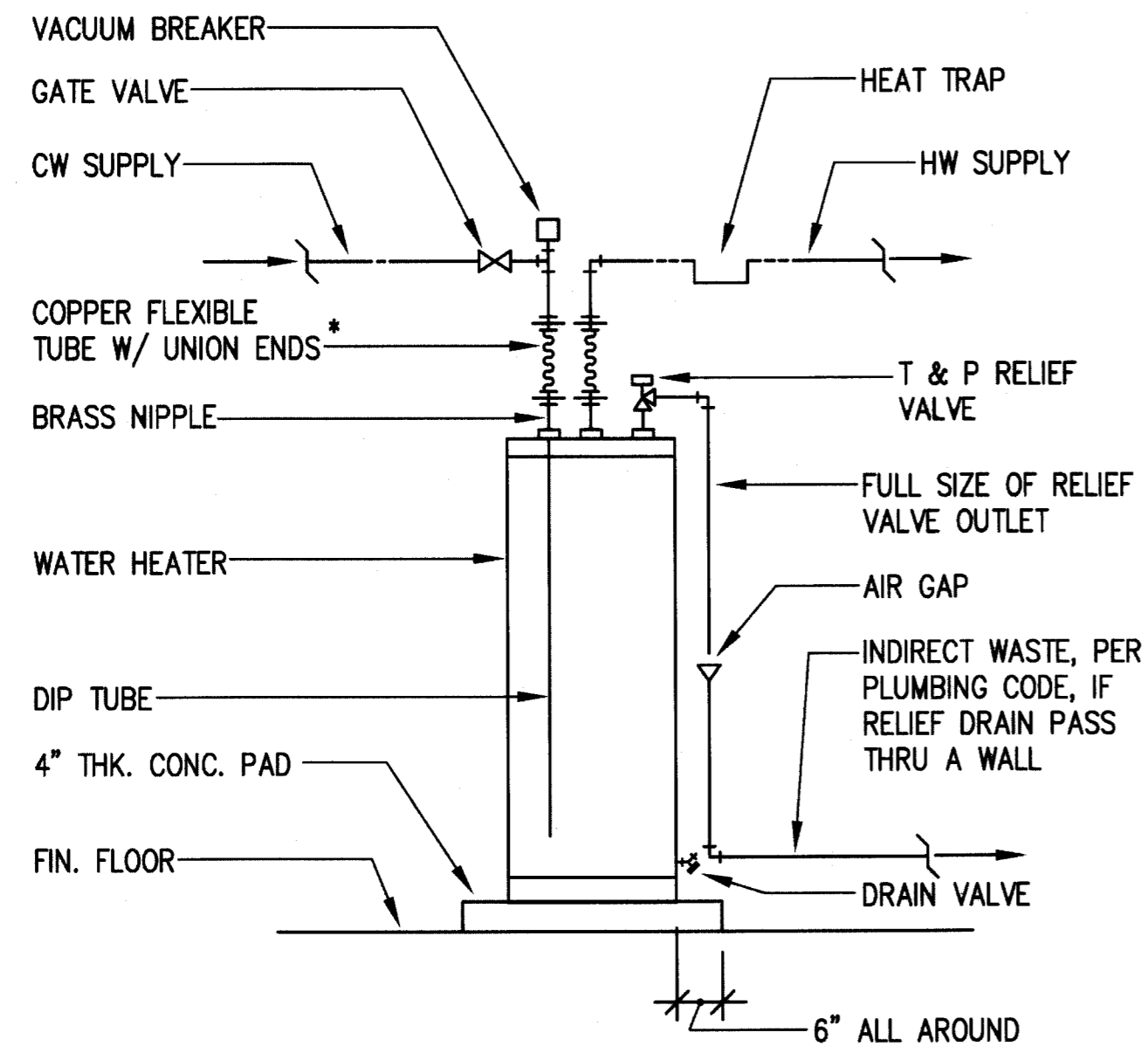
DESIGNED: RRT SUBMITTED: *[Signature]*

DRAWN: MEI DATE: 03/15/16

CHECKED: RRT SCALE:

APPROVED: *[Signature]* DRAWING NO. M3.01

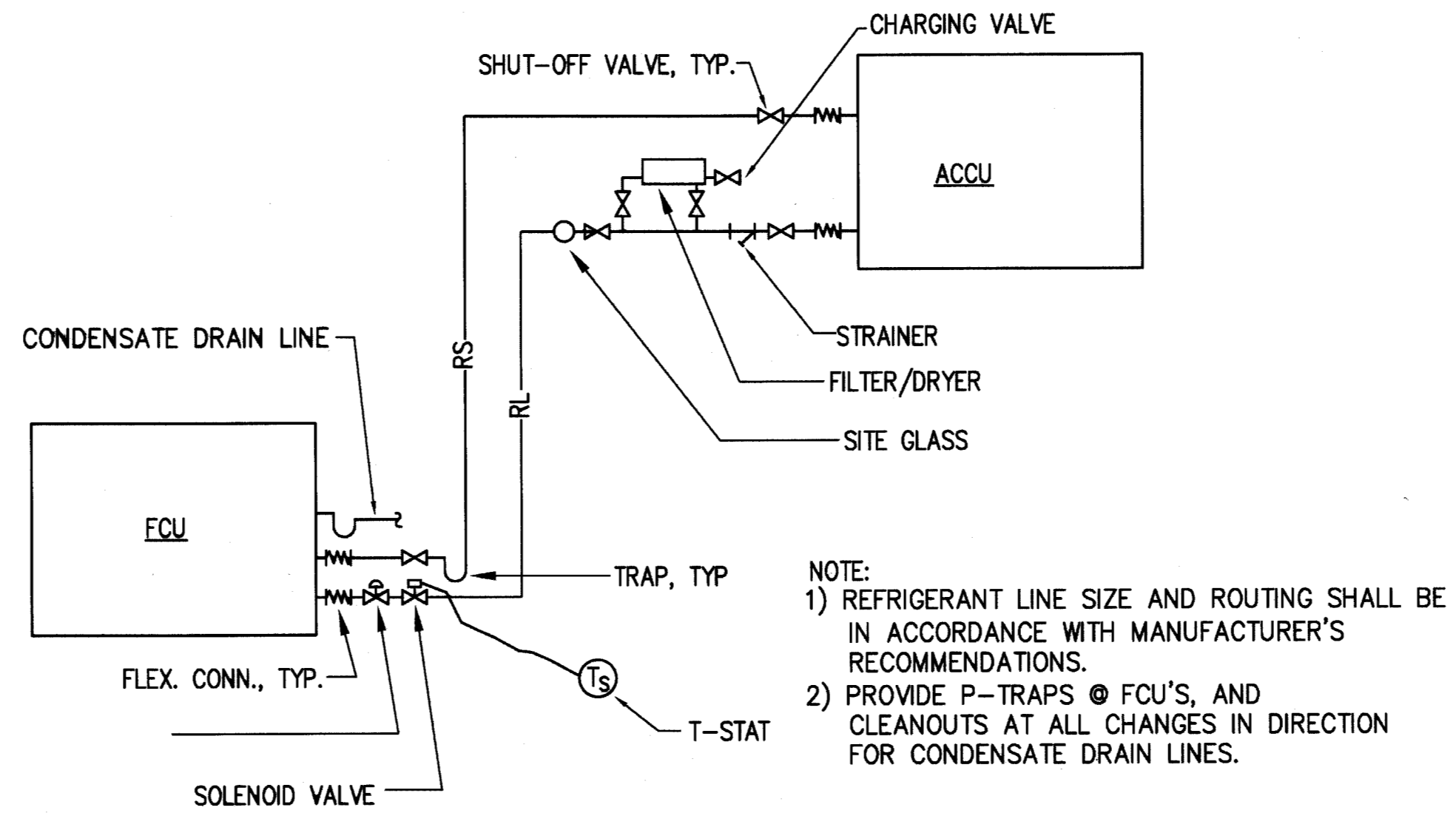
CHIEF ENGINEER MAR 23 2016 DATE



* COPPER FLEXIBLE TUBE WITH DIELECTRIC UNION ENDS (HW & CW SUPPLY ONLY)

TYPICAL ELECTRIC WATER HEATER

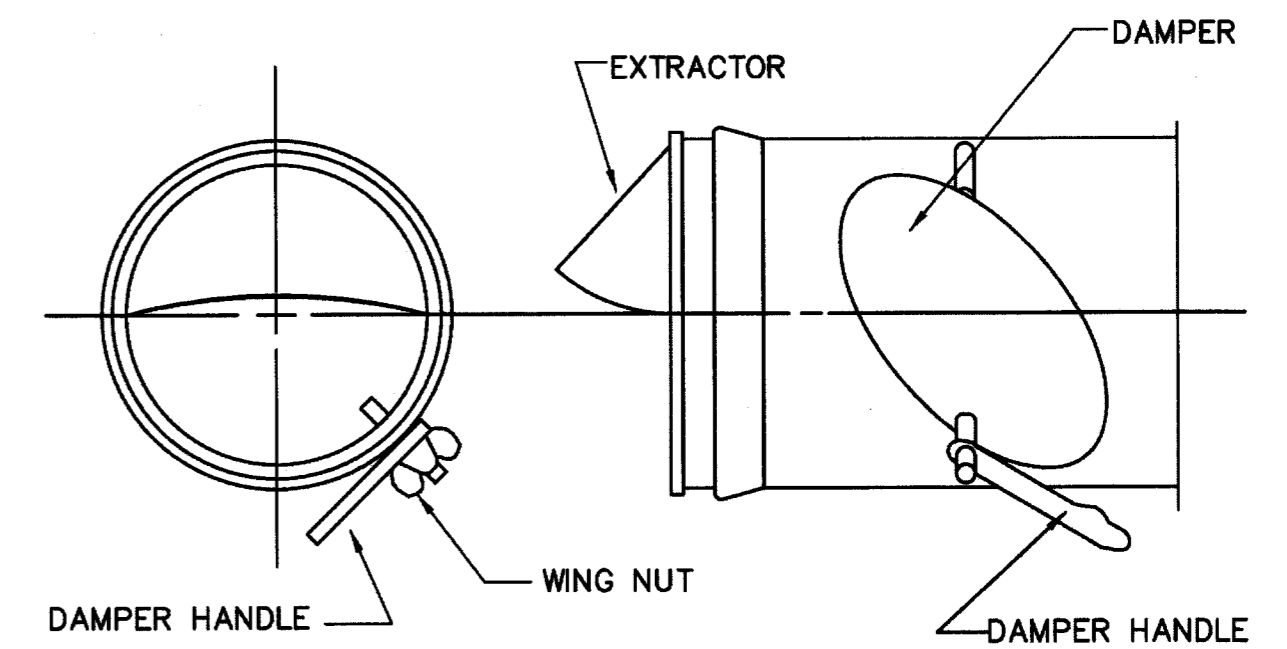
NTS



NOTE:
 1) REFRIGERANT LINE SIZE AND ROUTING SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 2) PROVIDE P-TRAPS @ FCU'S, AND CLEANOUTS AT ALL CHANGES IN DIRECTION FOR CONDENSATE DRAIN LINES.

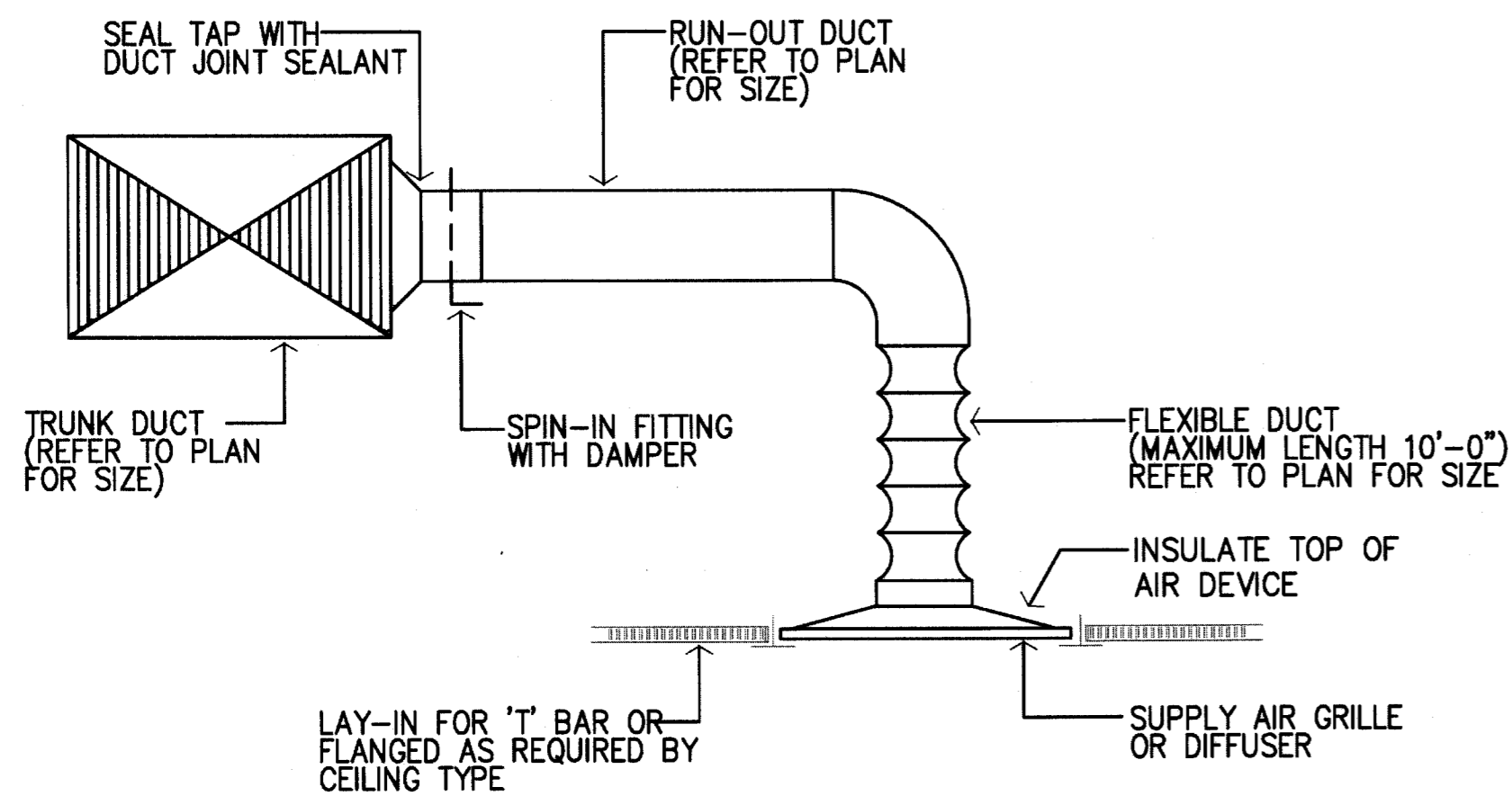
TYPICAL REFRIGERANT PIPING DIAGRAM

NTS



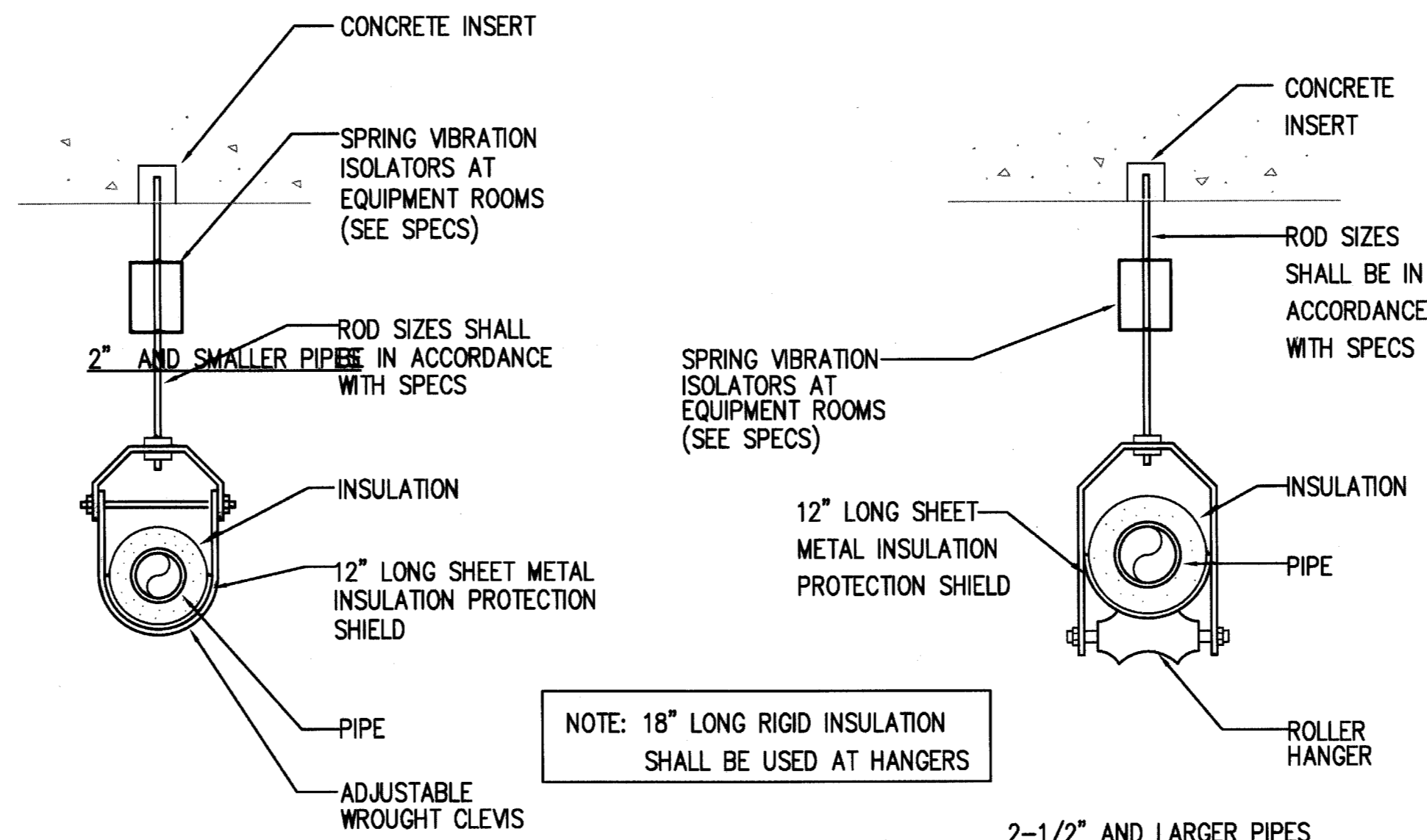
SPIN TAP DETAIL

NTS



SPINTAP & CLG. DIFFUSER CONNECTION DETAIL

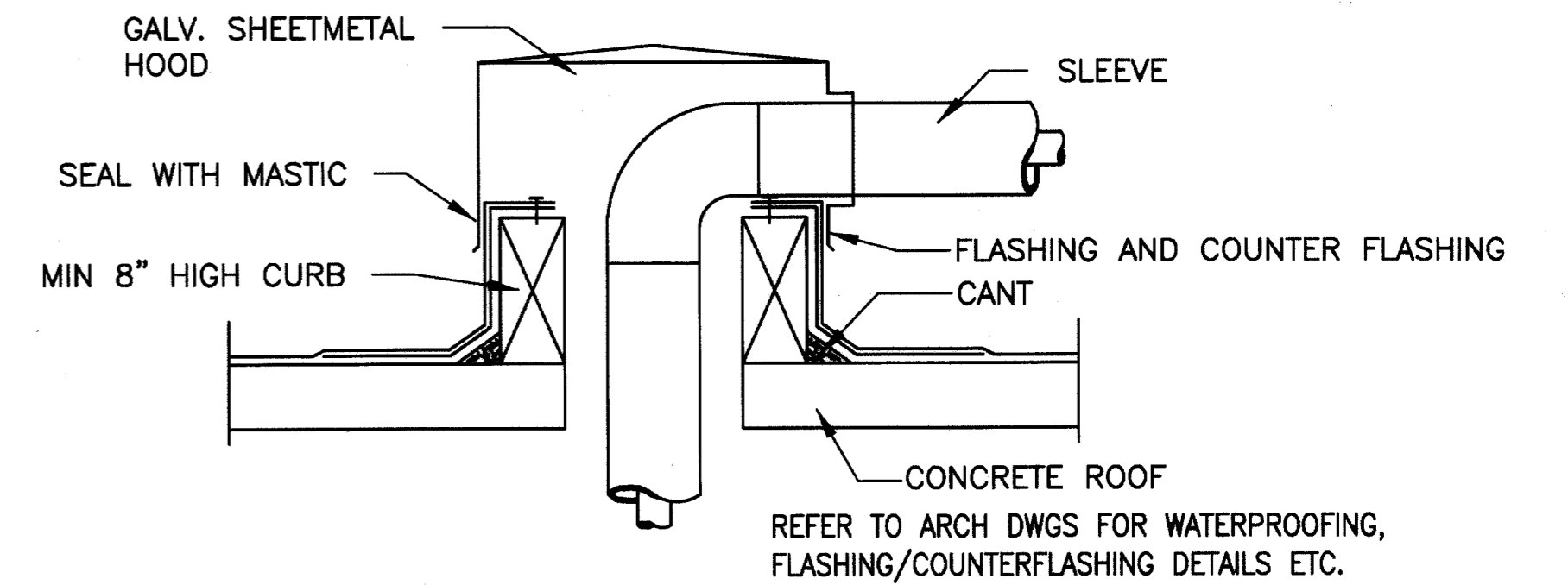
NOT TO SCALE



NOTE: 18" LONG RIGID INSULATION SHALL BE USED AT HANGERS

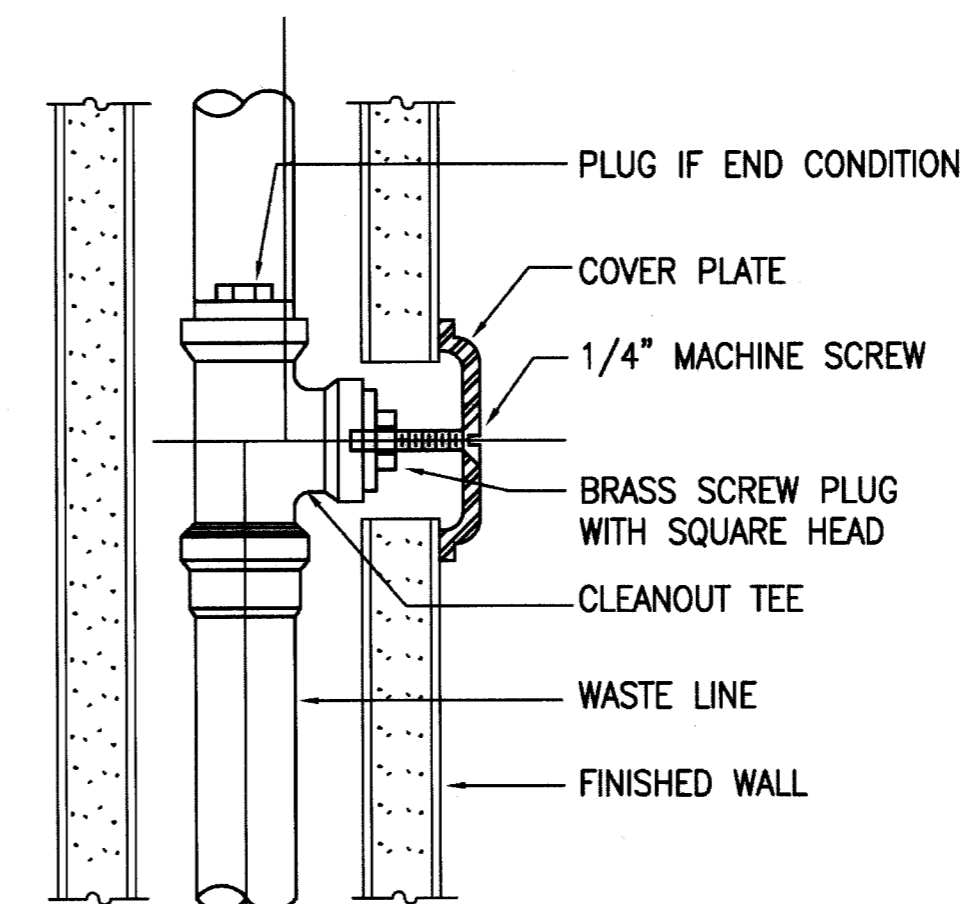
PIPE HANGER DETAIL

NTS



PIPE THRU ROOF DETAIL

NOT TO SCALE



WALL CLEANOUT

NTS

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
DETAILS					
DESIGNED:	RRT	SUBMITTED:	<i>[Signature]</i>		
DRAWN:	MEI	DATE:	03/15/16		
CHECKED:	RRT	SCALE:			
APPROVED:	<i>[Signature]</i>		DATE:	MAR 23 2016	DRAWING NO. M4.00
<small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</small>					

ELECTRICAL SYMBOL LIST / MOUNTING HEIGHT SCHEDULE

MOUNTING HEIGHT FROM FLOOR TO		(SPECIAL MOUNTING HEIGHTS INDICATED ON PLAN)		MOUNTING HEIGHT FROM FLOOR TO		(SPECIAL MOUNTING HEIGHTS INDICATED ON PLAN)		MOUNTING HEIGHT FROM FLOOR TO		(SPECIAL MOUNTING HEIGHTS INDICATED ON PLAN)	
TOP	CL	SYMBOL	DESCRIPTION	TOP	CL	SYMBOL	DESCRIPTION	TOP	CL	SYMBOL	DESCRIPTION
			LED LUMINAIRE, CEILING MOUNTED (NUMERAL IN CIRCLE CORRESPONDS TO LUMINAIRE SCHEDULE)				ELECTRICAL EQUIPMENT TYPE AS INDICATED			DB	DIRECT BUIRED
			LUMINAIRE, CEILING MOUNTED (NUMERAL IN CIRCLE CORRESPONDS TO LUMINAIRE SCHEDULE)	6'-0"			PANELBOARD			HH	HANDHOLE
			LUMINAIRE, WALL MOUNTED (NUMERAL IN CIRCLE CORRESPONDS TO LUMINAIRE SCHEDULE)	6'-0"			TELEPHONE BACKBOARD			HT	HAWAIIAN TELCOM
			LED LUMINAIRE, WALL MOUNTED (NUMERAL IN CIRCLE CORRESPONDS TO LUMINAIRE SCHEDULE)				HOMERUN ARROW TO PANELBOARD. LETTER INDICATES PANELBOARD, NUMBERS INDICATES CIRCUITS (HASHMARKS INDICATE 3 CURRENT CARRYING CONDUCTORS AND 1 GROUND CONDUCTOR WITHIN, ALL OTHERS SIMILAR).			KVA	KILOVOLT-AMPERE
			ILLUMINATED EXIT SIGN, WALL MOUNTED, DIRECTIONAL ARROWS AS INDICATED				INTERIOR WORK: CONCEALED CONDUIT IN FINISHED FLOOR OR BELOW GRADE (NO HASHMARKS INDICATE 2 CURRENT CARRYING CONDUCTORS AND 1 GROUND CONDUCTOR WITHIN, ALL OTHERS SIMILAR).			KW	KILOWATT
			ILLUMINATED EXIT SIGN, CEILING MOUNTED, DIRECTIONAL ARROWS AS INDICATED				EXTERIOR WORK: CONCRETE ENCASED UNDERGROUND DUCTLINE, SEE DUCT SECTION INDICATOR AND SCHEDULE.			KWH	KILOWATT-HOUR
	44"		LIGHT SWITCH, FLUSH WALL MOUNTED, 1P20A, 120/277V, 1HP MAX. (LOWERCASE LETTER INDICATES LUMINAIRES CONTROLLED, CAPITAL D INDICATES DIMMING SWITCH)				CONCEALED CONDUIT IN CEILING OR WALLS, (HASHMARKS INDICATE 3 CURRENT CARRYING CONDUCTORS AND 1 GROUND CONDUCTOR WITHIN, ALL OTHERS SIMILAR).			MECo	MAUI ELECTRIC COMPANY
			120V ELECTRONIC TIMER SWITCH, 20A, ADJUSTABLE TO 2 HOURS.				EXPOSED RACEWAY, PROVIDE STRAP AT INTERVALS NOT EXCEEDING 10'-0"			TMGB	TELECOMMUNICATION MAIN GROUNDING BUSBAR
	44"		OCCUPANCY SENSOR LIGHT SWITCH				LIQUID-TIGHT FLEXIBLE CONDUIT			WP	WEATHERPROOF
			LOW VOLTAGE LIGHT CONTROL STATION, FLUSH WALL MOUNTED. (LOWERCASE LETTER INDICATES LUMINAIRES CONTROLLED, CAPITAL D INDICATES DIMMING SWITCH)				EXISTING UNDERGROUND DUCTLINE				DUCT SECTION INDICATOR, SEE SHEET E1.03
			OCCUPANCY SENSOR HEAD, CEILING MOUNTED, DUAL TECHNOLOGY (LOWERCASE LETTER INDICATES LUMINAIRES CONTROLLED)				EXISTING OVERHEAD LINES				NOTE INDICATOR
	7'-6"		OCCUPANCY SENSOR HEAD, WALL MOUNTED, DUAL TECHNOLOGY (LOWERCASE LETTER INDICATES LUMINAIRES CONTROLLED)				OVERHEAD LINES				DETAIL INDICATOR: TOP HALF DENOTES DETAIL NUMBER, BOTTOM HALF DENOTES SHEET NUMBER
	18"		RECEPTACLE, DUPLEX, GROUNDING TYPE, 125V, NEMA TYPE 5-20R				TEL/DATA RACEWAY, 1" MINIMUM CONDUIT, WITH PULLSTRING				POWER TRANSFORMER
	18"		RECEPTACLE, DUPLEX, GFCI TYPE, 125V, NEMA TYPE 5-20R				LOW VOLTAGE RACEWAY, 3/4" MINIMUM CONDUIT, WITH CABLES INDICATED ON SHEET E5.03				GROUND
	18"		RECEPTACLE, QUADRUPLEX, GROUNDING TYPE, 125V, NEMA TYPE 5-20R				HANDHOLE - SIZE AND TYPE AS INDICATED				CIRCUIT BREAKER
	24"		RECEPTACLE, SINGLE, SPECIAL PURPOSE, TYPE AS NOTED				LIGHTING PULL BOX				NON-FUSED DISCONNECT SWITCH
			CONCEALED SERVICE, FLUSH FLOOR OUTLET BOX, SEE				A.F.F. ABOVE FINISHED FLOOR				NORMALLY OPEN (NO) CONTACT
	18"		TELEPHONE/DATA OUTLET BOX, WALL MOUNTED WITH BLANK DEVICE PLATE				CATV CABLE TELEVISION				TRANSFER SWITCH
	18"		CATV OUTLET BOX, WALL MOUNTED WITH BLANK DEVICE PLATE								METER SOCKET
	44"		ACCESS CONTROL FOB PAD								PARKING LOT POLE LIGHT ASSEMBLY SEE
			JUNCTION BOX, HORIZONTALLY MOUNTED								TIME SWITCH
	18"		JUNCTION BOX, WALL MOUNTED								
			JUNCTION BOX, LARGE, WALL MOUNTED								
			JUNCTION BOX, LARGE, HORIZONTALLY MOUNTED								
			EQUIPMENT TERMINATION WITH FLEXIBLE CONDUIT WHIP								
	5'-0"		NON-FUSED DISCONNECT SWITCH, 3P30A UNLESS OTHERWISE NOTED, VOLTAGE TO MATCH CIRCUITING								
	5'-0"		ENCLOSED CIRCUIT BREAKER								

MAUI COUNTY CODE, CHAPTER 16.16A ENERGY CODE

To the best of my knowledge, this project's design substantially conforms to the Energy Code for:

Building Component Systems
 Electrical Component Systems
 Mechanical Component Systems

Signature: Date: 03/15/16

Name: MICHELE N. ADOLPHO

Title: ELECTRICAL ENGINEER

License No: 10017-E

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

APRIL 30, 2016
EXP. DATE

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

MAUI OFFICE ANNEX
WAILUKU, MAUI, HAWAII

ELECTRICAL SYMBOL LIST

DESIGNED: RP	SUBMITTED:
DRAWN: MC	DATE: 03/15/2016
CHECKED: MA	SCALE: AS SHOWN

APPROVED:
CHIEF ENGINEER

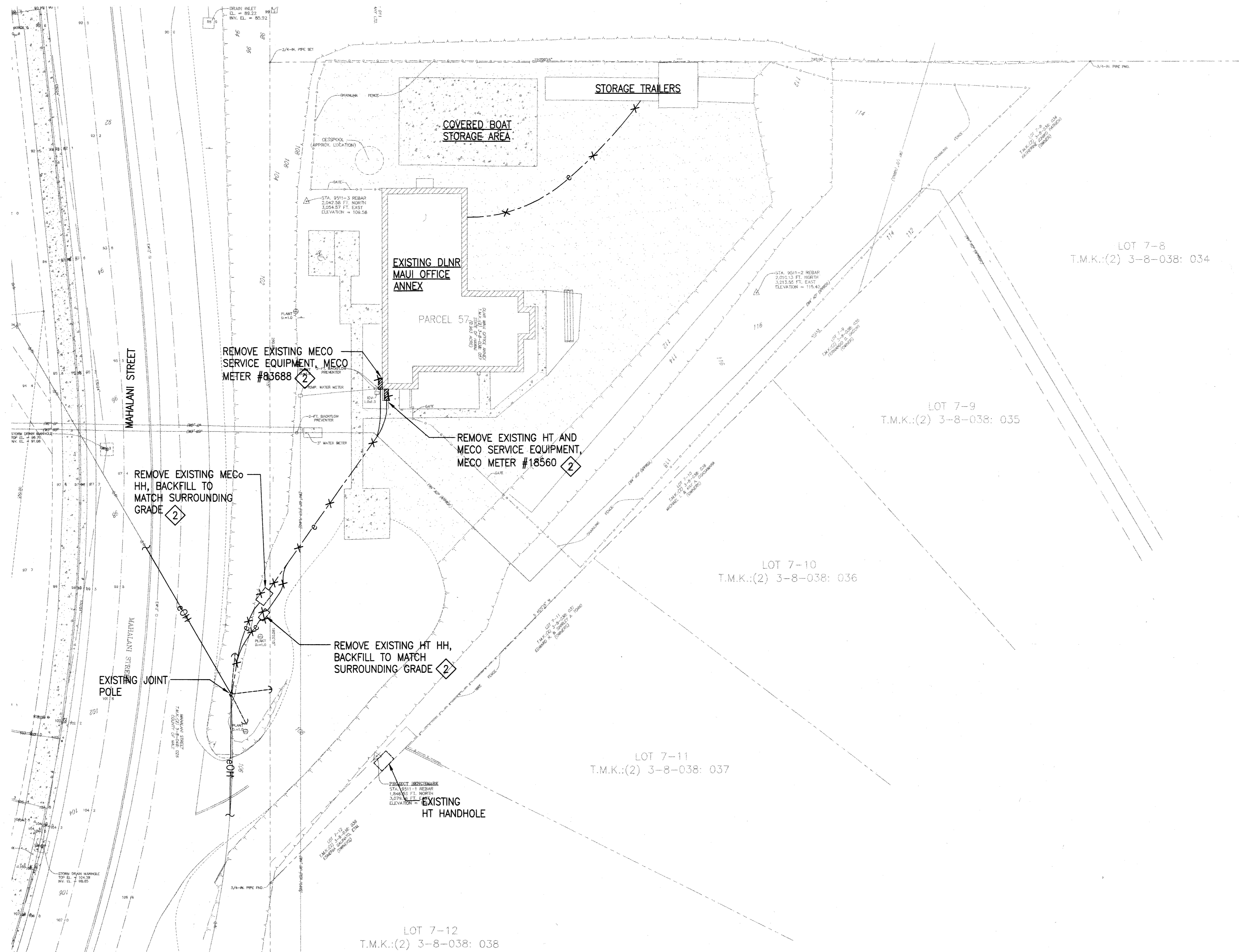
MAR 23 2016
DATE

3/17/16-11:31 Y:\148\148.026\148.026-EO.01.dwg

GENERAL ELECTRICAL NOTES:

1. ALL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL ELECTRICAL SAFETY CODE. CONSTRUCTION PRACTICES SHALL CONFORM TO THE LATEST EDITION OF AMERICAN ELECTRICIANS' HANDBOOK BY CROFT, AND APPLICABLE INSTRUCTIONS OF MANUFACTURERS OF EQUIPMENT AND MATERIAL SUPPLIED FOR THIS PROJECT.
2. ALL WORK SHOWN ON THE ELECTRICAL DRAWINGS IS NEW UNLESS OTHERWISE NOTED.
3. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO COMMENCEMENT OF NEW WORK.
4. PROVIDE A SEPARATE INSULATED GREEN GROUND CONDUCTOR SIZED IN ACCORDANCE WITH THE NEC IN ALL FEEDER AND BRANCH CIRCUIT RACEWAYS.
5. VERIFY RATINGS OF ALL ELECTRICALLY OPERATED OR CONTROLLED EQUIPMENT PROVIDED BY OTHER TRADES. COORDINATE RATINGS OF OVERCURRENT EQUIPMENT, DEVICES, DISCONNECT SWITCHES, CONDUIT AND WIRING, TO MATCH THE ACTUAL EQUIPMENT SUPPLIED, AT NO ADDITIONAL COST TO THE STATE.
6. COORDINATE CONDUIT STUB-UP LOCATIONS FOR ALL EQUIPMENT WITH THE RESPECTIVE EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN WORK.
7. REFER TO MECHANICAL DRAWINGS FOR FURTHER DESCRIPTION OF INTERDISCIPLINARY ELECTRICAL POWER REQUIREMENTS.
8. PROVIDE SEPARATE NEUTRAL FOR ALL 120V BRANCH CIRCUITS. COMMON NEUTRAL NOT ACCEPTABLE.
9. BACK-TO-BACK OUTLET BOXES NOT PERMITTED. OUTLET BOXES SHALL BE STAGGERED AND SEPARATED BY 1-STUD SPACE AND 12" CENTER-TO-CENTER SPACING.
10. THE LOCATION OF ALL ELECTRICAL APPARATUS AND DEVICES ARE APPROXIMATE AND BEFORE INSTALLING, STUDY THE ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DETAILS AND MAKE INSTALLATION IN THE MOST LOGICAL MANNER.
11. ALL CONDUIT ROUTING AND JUNCTION BOX LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL ROUTE CONDUITS AND MOUNT JUNCTION BOXES IN A LOGICAL AND CONSTRUCTIBLE MANNER. EXPOSED CONDUITS SHALL BE ROUTED PARALLEL AND/OR PERPENDICULAR TO EXISTING ARCHITECTURAL AND STRUCTURAL ELEMENTS.
12. ALL CONTROL DEVICES, CONTROL CONDUIT, CONTROL WIRING AND SEPARATELY ENCLOSED MOTOR STARTERS ARE PROVIDED UNDER APPLICABLE SPECIFICATION SECTIONS. ALL POWER TO ELECTRICALLY OPERATED EQUIPMENT PROVIDED UNDER ELECTRICAL SPECIFICATIONS.
13. PROVIDE NYLON PULLSTRINGS IN ALL EMPTY CONDUITS UNLESS OTHERWISE INDICATED.
14. THE TELECOMMUNICATIONS RACEWAY SYSTEM INSTALLATION SHALL COMPLY WITH TIA/EIA-569-A UNLESS OTHERWISE NOTED.
15. CONDUIT BODIES (e.g. LB, LR, etc.) SHALL NOT BE PERMITTED IN THE TELECOMMUNICATIONS RACEWAY SYSTEMS UNLESS SPECIFICALLY INDICATED TO BE UTILIZED AND LISTED FOR TELECOMMUNICATIONS SYSTEM USE.
16. PROVIDE INSULATED BUSHINGS AT ALL TELECOMMUNICATIONS CONDUIT TERMINATIONS AT ALL BOXES, BACKBOARDS, AND CONDUIT STUBS.
17. UTILITY COMPANY STANDARDS
 - a. 3' X 5' HT HANDHOLE: PRECAST CONCRETE WITH 2-PIECE POLYMER CONCRETE COVER, PER GTS 8395.
 - b. 2' X 4' CATV HANDHOLE: PRECAST CONCRETE WITH POLYMER CONCRETE COVERS SIMILAR TO HTCO TYPE 435TB EXCEPT WITH "CATV" INSCRIBED ON COVER
18. CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS AND PAY ALL EXPENSES FOR UTILITIES USAGE (INCLUDING MONTHLY USAGE, DEMAND, CUSTORMER, SURCHARGES AND BASE RATE CHARGES) UNTIL THE PROJECT IS COMPLETED AND ACCEPTED BY THE STATE. SEE INFORMATION AND INSTRUCTIONS TO BIDDERS FOR ADDITIONAL REQUIREMENT.
19. THE CONTRACTOR SHALL COORDINATE ALL ELECTRICAL, TELEPHONE, AND CABLE TELEVISION UTILITY WORK WITH THE RESPECTIVE UTILITY COMPANIES PRIOR TO STARTING WORK. CONTRACTOR SHALL INCLUDE ALLOWANCE AS PART OF CONSTRUCTION COST TO PAY FOR ALL UTILITY COMPANIES' SERVICE CONNECTION CHARGES (INCLUDING METER INSTALLATION AND PHOTOVOLTAIC NET METERING AND/OR INTERCONNECTION). SEE INFORMATION AND INSTRUCTIONS TO BIDDERS FOR ADDITIONAL REQUIREMENT.

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
GENERAL ELECTRICAL NOTES					
DESIGNED: RP		SUBMITTED: <i>[Signature]</i>			
DRAWN: MC		DATE: 03/15/2016			
CHECKED: MA		SCALE: AS SHOWN			
APPROVED: <i>[Signature]</i> CHIEF ENGINEER		DATE: MAR 23 2016		DRAWING NO. E0.01	



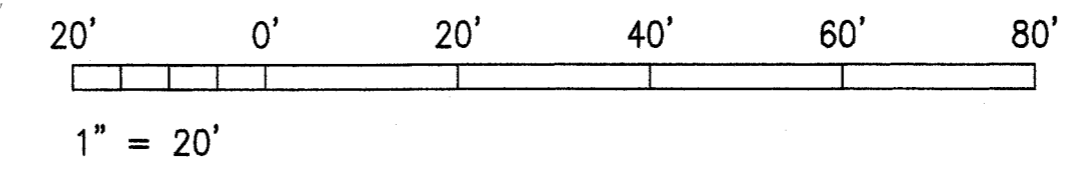
NOTES:

1. REMOVE ALL EXISTING DUCTLINES INDICATED FOR DEMOLITION. DO NOT ABANDON IN PLACE.
2. COORDINATE REMOVAL WITH RESPECTIVE UTILITIES.



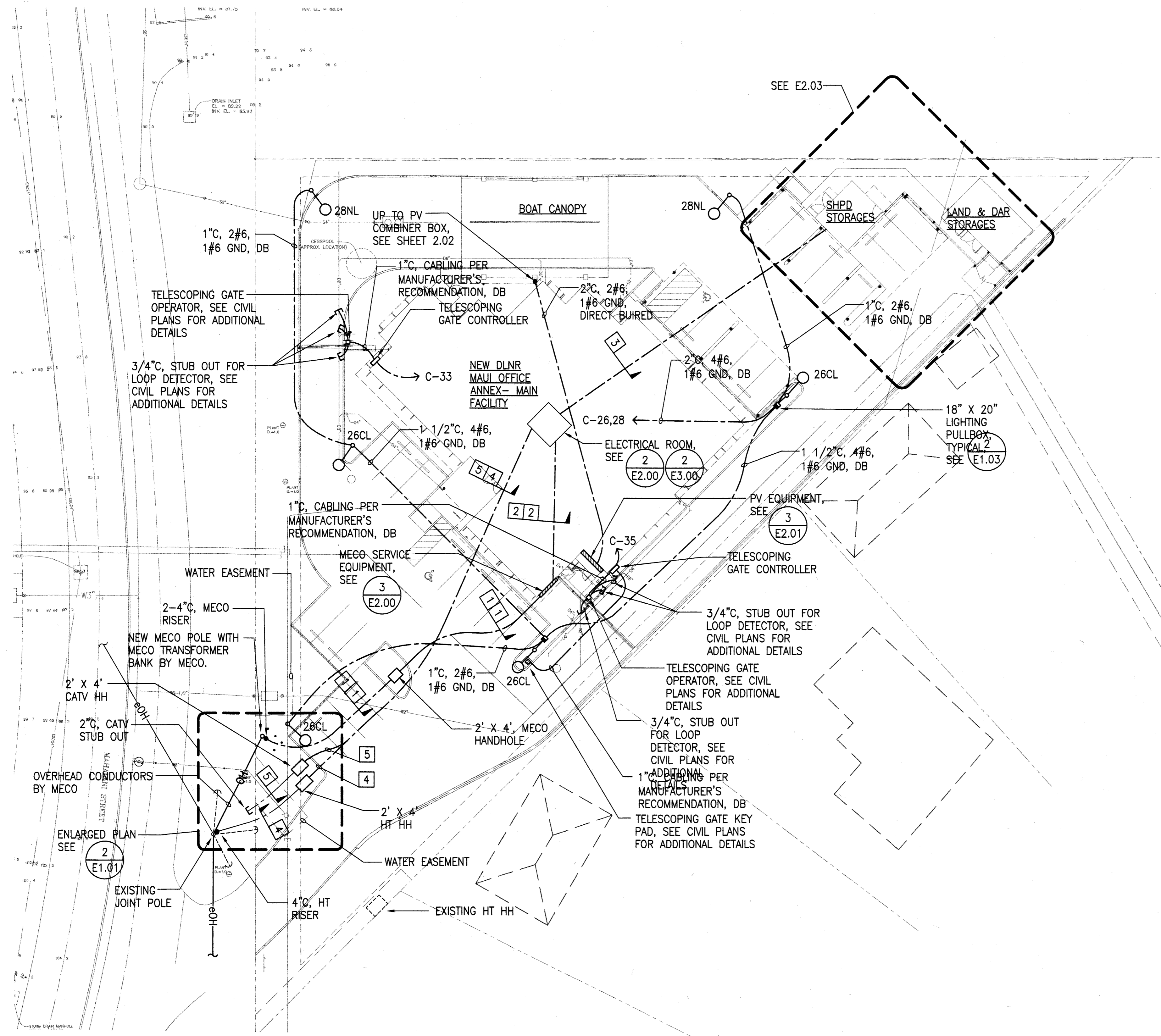
ELECTRICAL DEMOLITION SITE PLAN
SCALE: 1" = 20'

GRAPHIC SCALE

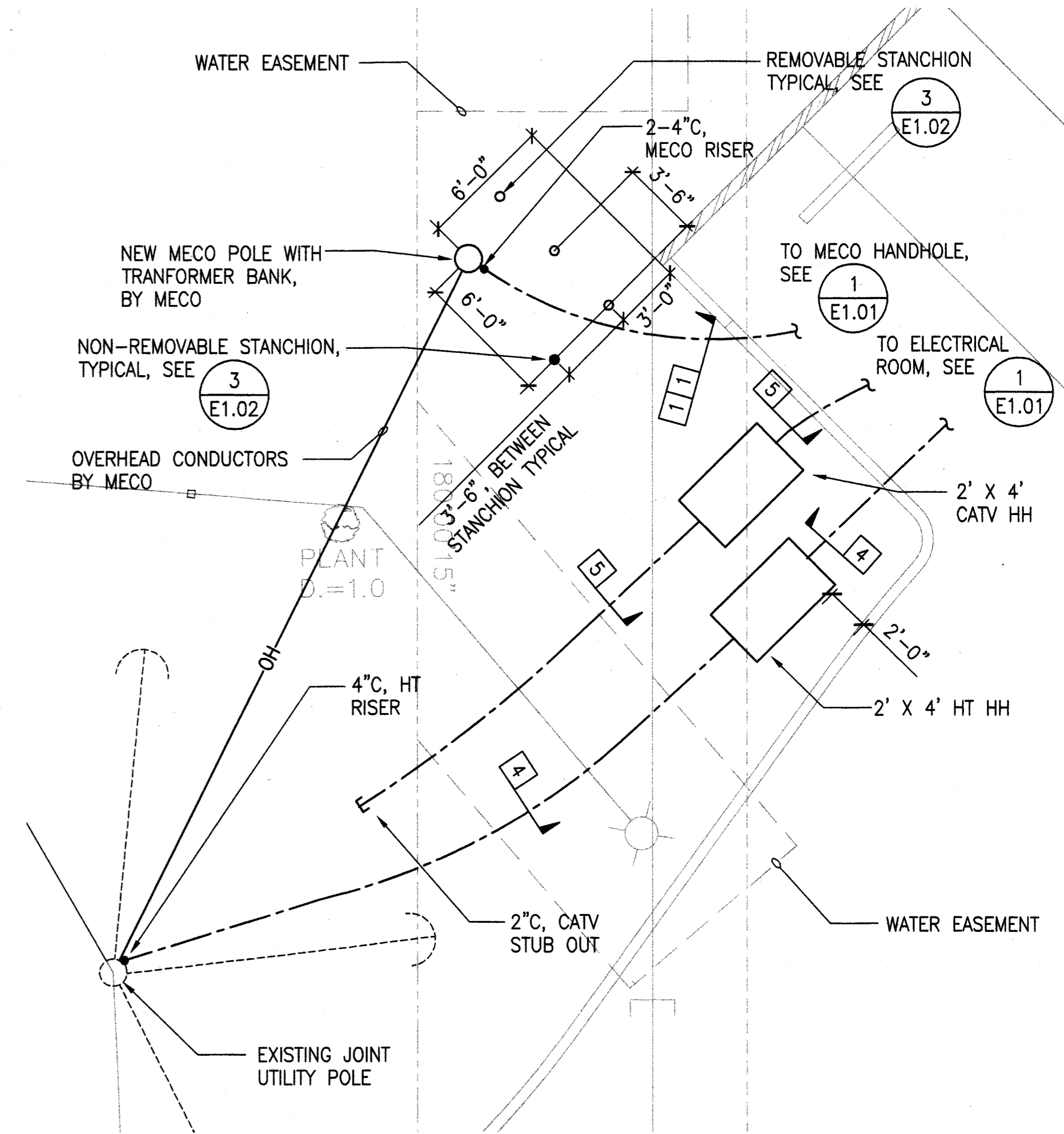


REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
ELECTRICAL DEMOLITION SITE PLAN					
DESIGNED:	RP	SUBMITTED:	<i>gc</i>		
DRAWN:	MC	DATE:	03/15/2016		
CHECKED:	MA	SCALE:	AS SHOWN		
APPROVED:	<i>gc</i>		DATE:	MAR 23 2016	
CHIEF ENGINEER				DRAWING NO. E1.00	

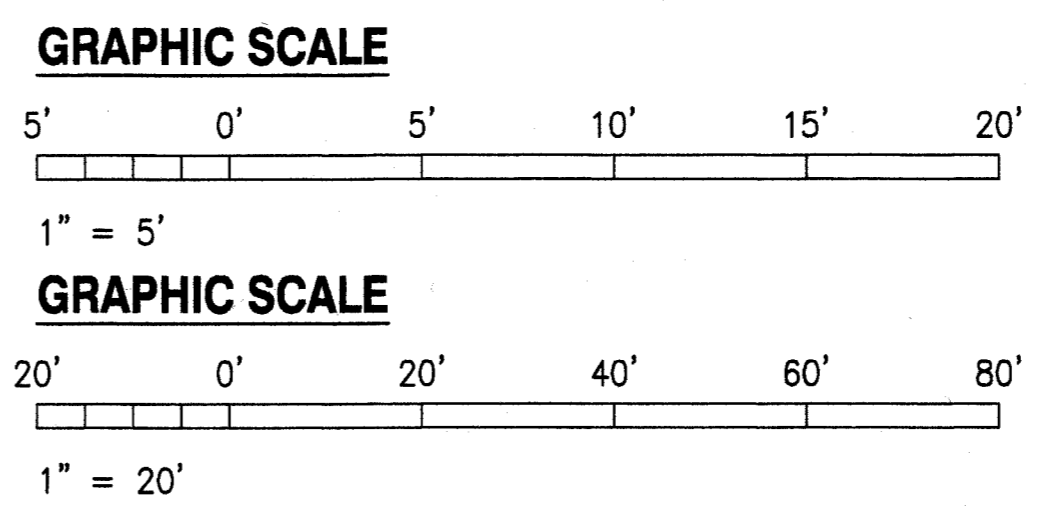
3/17/16-11:30 Y:\148\148.026\148.026 E:100.DM01.dwg



1 ELECTRICAL SITE PLAN
 E1.01 SCALE: 1" = 20'

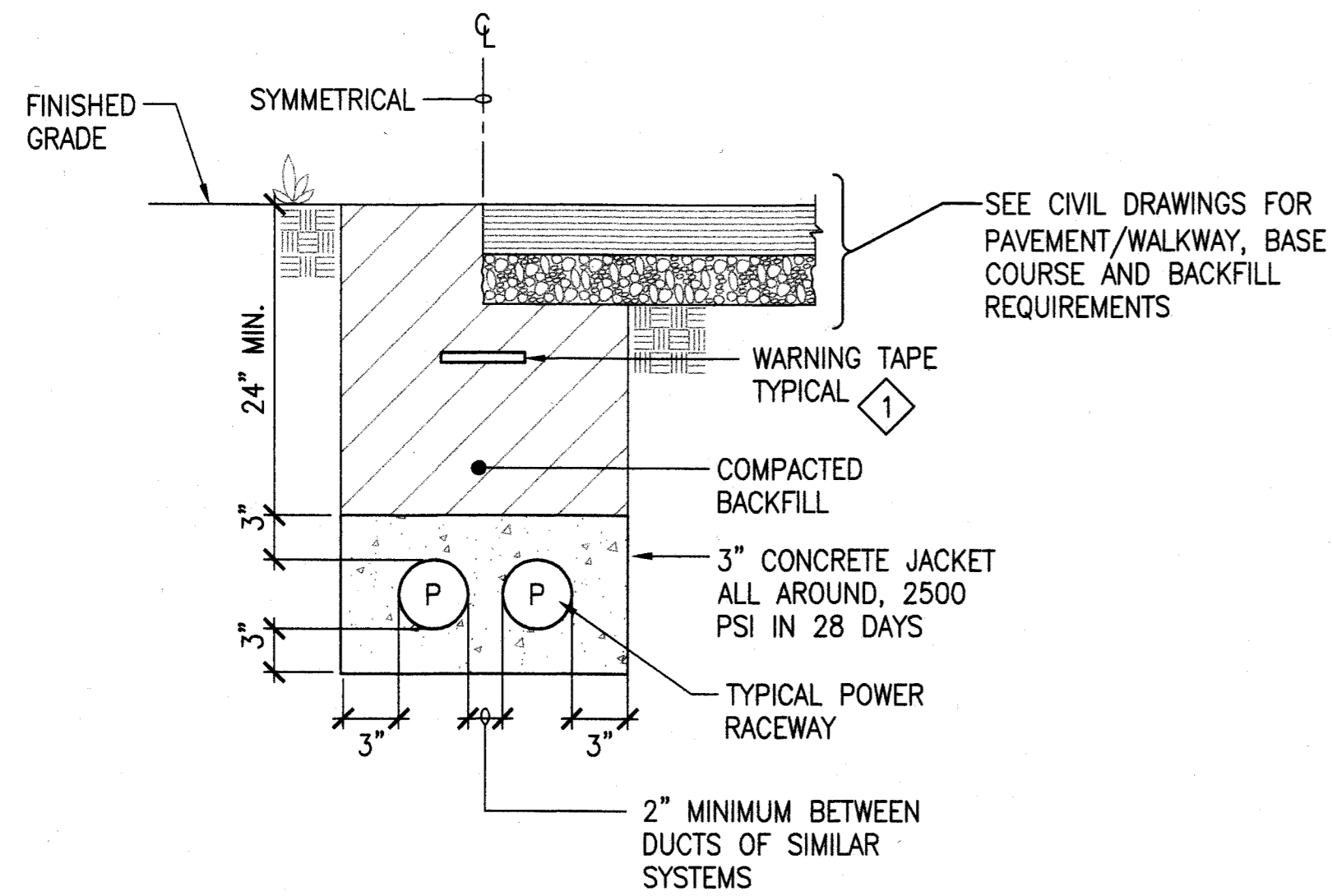


2 ENLARGED ELECTRICAL SITE PLAN
 E1.01 SCALE: 1" = 5'

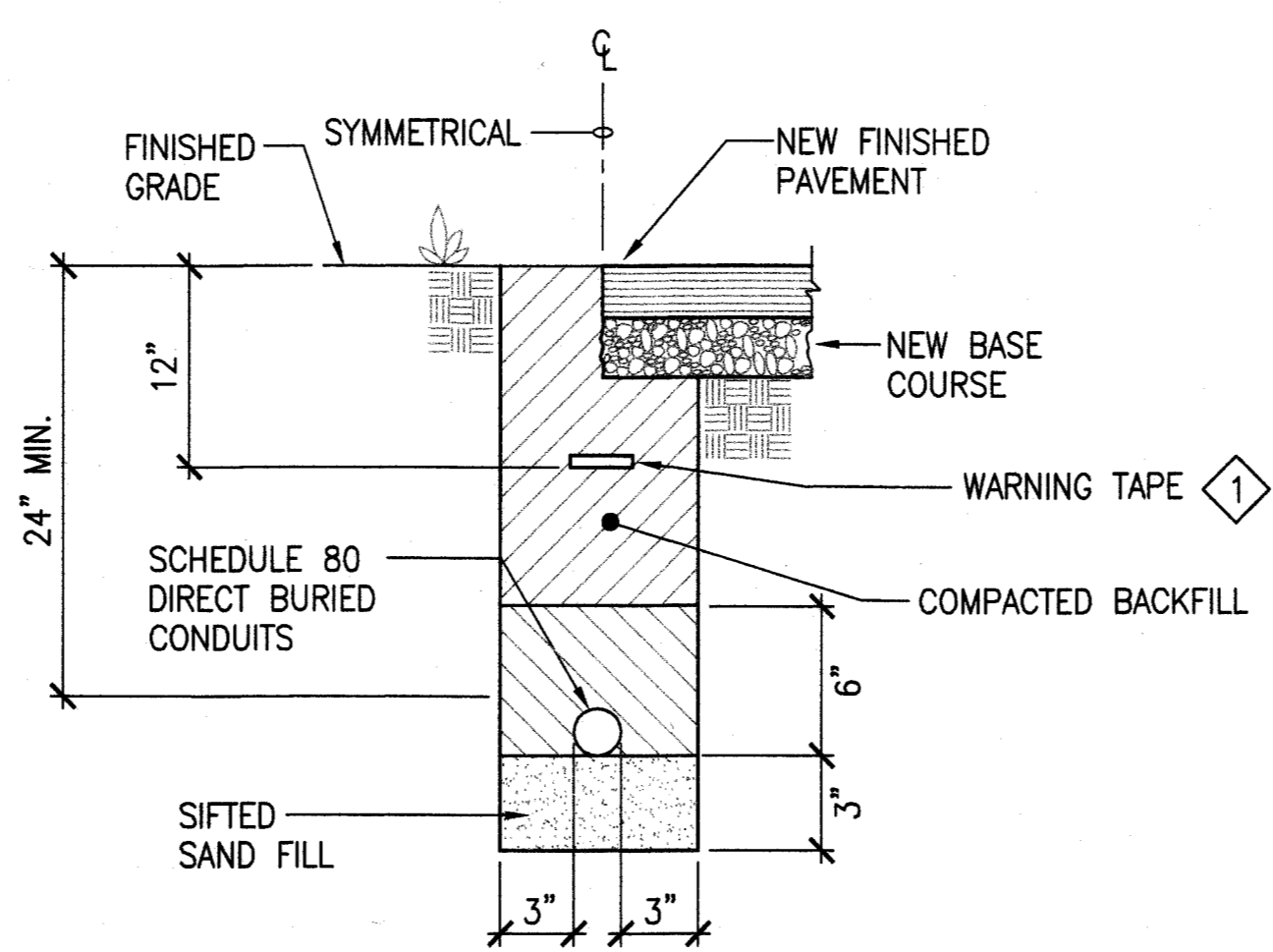


REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
ELECTRICAL SITE PLANS					
DESIGNED:	RP	SUBMITTED:			
DRAWN:	MC	DATE:	03/15/2016		
CHECKED:	MA	SCALE:	AS SHOWN		
APPROVED:			DATE:	MAR 23 2016	
CHIEF ENGINEER				DRAWING NO.	E1.01

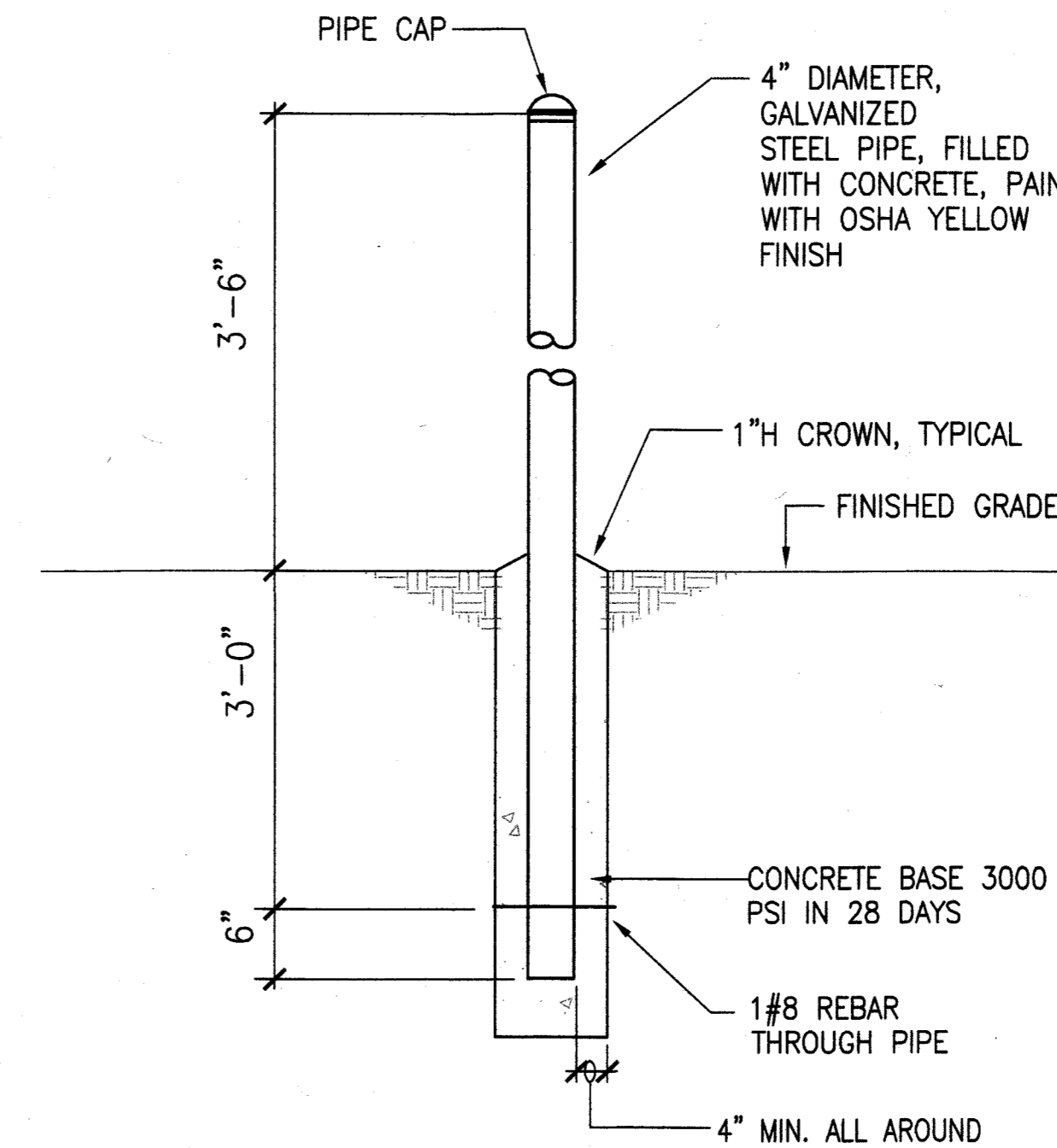
3/17/16-11:29 X:\148\148.026\148.026 E1.01.S01.dwg



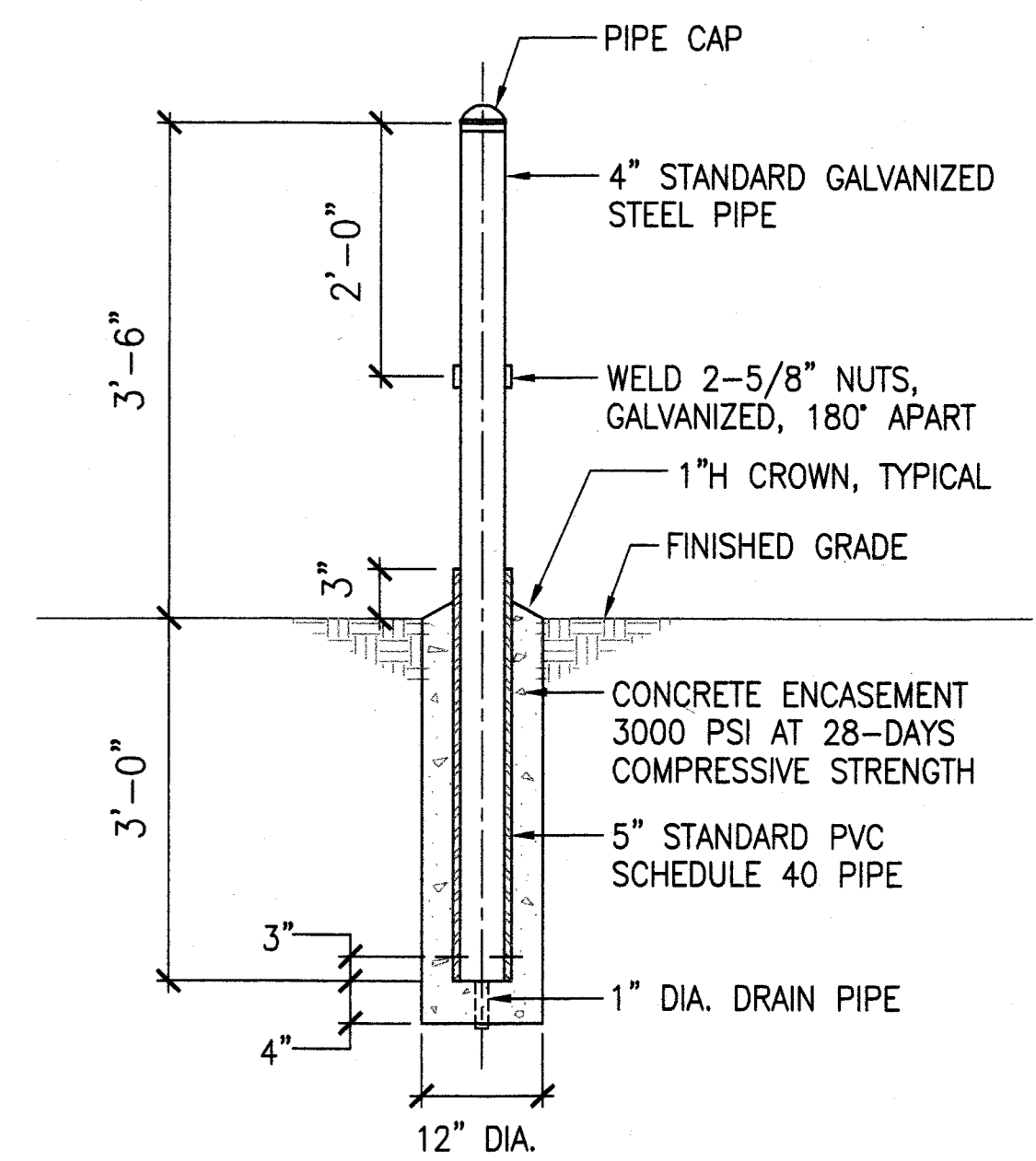
TYPICAL CONCRETE ENCASED POWER DUCTLINE



TYPICAL DIRECT BURIED LIGHTING DUCTLINE



NON-REMOVABLE

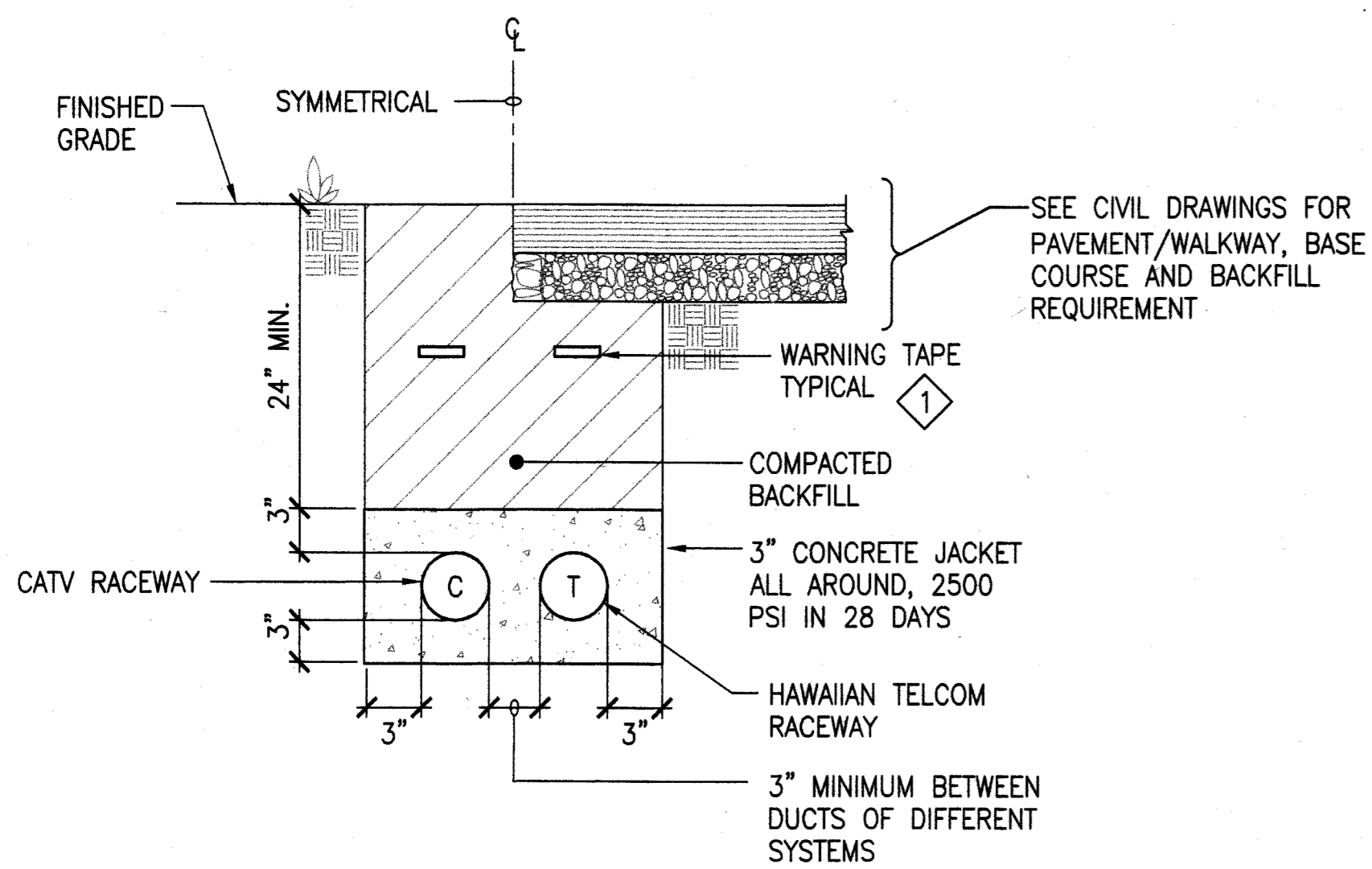


REMOVABLE

NOTES:

1. BARRIER POSTS ARE TO BE PAINTED YELLOW AS PER ANSI SPEC Z535.1 TO COMPLY WITH OSHA STANDARDS FOR COLORING CODE.
2. THE PIPE THAT IS TO BE PLACED DIRECTLY IN FRONT OF THE DOORS SHALL NOT BE FILLED WITH CONCRETE. THE PIPE SHALL BE CAPPED AND THE WELDED NUTS ARE FOR SCREWING IN BOLTS TO ACT AS "HANDLES" FOR LIFTING. THE BOLTS ARE TO BE REMOVED AFTER INSTALLATION.

3 PROTECTIVE PIPE STANCHION
E1.02 NOT TO SCALE

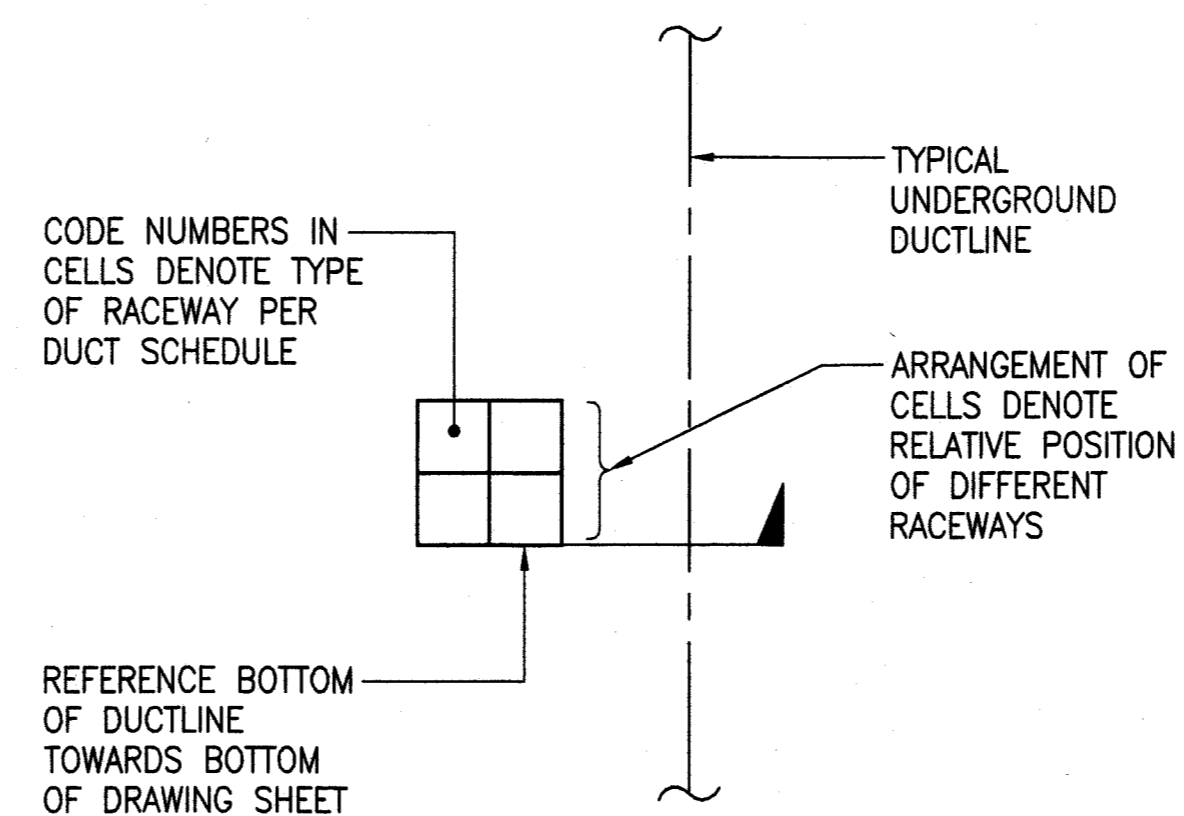


TYPICAL CONCRETE ENCASED HT/CATV SERVICE DUCTLINE

NOTE:

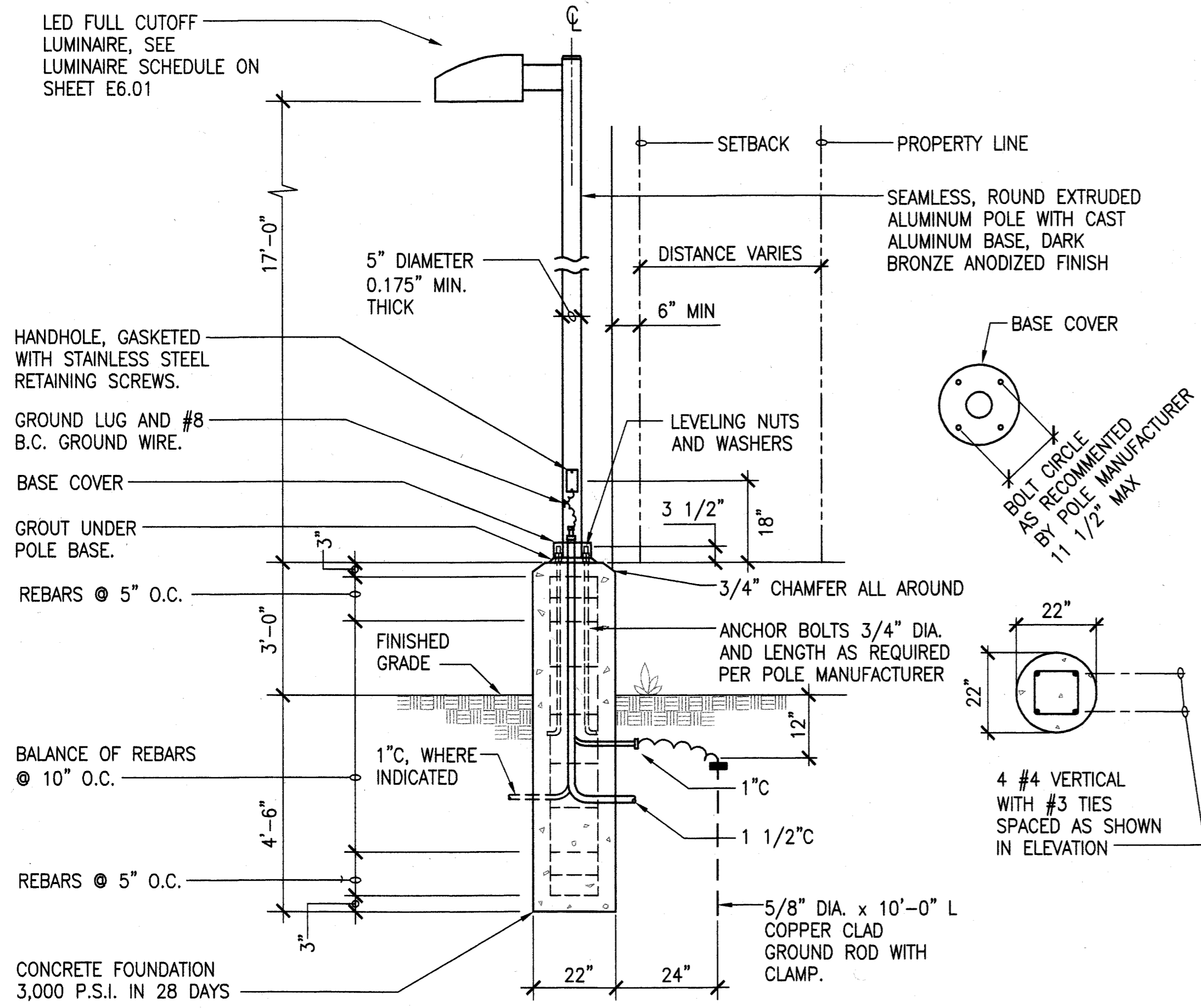
8 MIL THICK COLORED PLASTIC WARNING TAPE. 3" WIDE WITH CONTINUOUS METALLIC BACKING AND CORROSION RESISTANT FOIL CORE. RED COLORED WARNING TAPE ABOVE MECO DUCTLINE WITH INSCRIPTION "CAUTION-ELECTRICAL LINE BURIED BELOW" IN BLACK LETTERING, REPEATED AT 36" INTERVALS. ORANGE COLORED WARNING TAPE PER HT STANDARD 34028 ABOVE HT DUCTLINE AND WARNING TAPE PER OTWC STANDARD ABOVE CATV DUCTLINE. YELLOW COLORED WARNING TAPE ABOVE NON-UTILITY ELECTRICAL DUCTLINE WITH INSCRIPTION "CAUTION-ELECTRICAL LINE BURIED BELOW" IN BLACK LETTERING.

1 DUCT SECTION
E1.02 NOT TO SCALE



2 DUCT SECTION FLAG CODE
E1.02 NOT TO SCALE

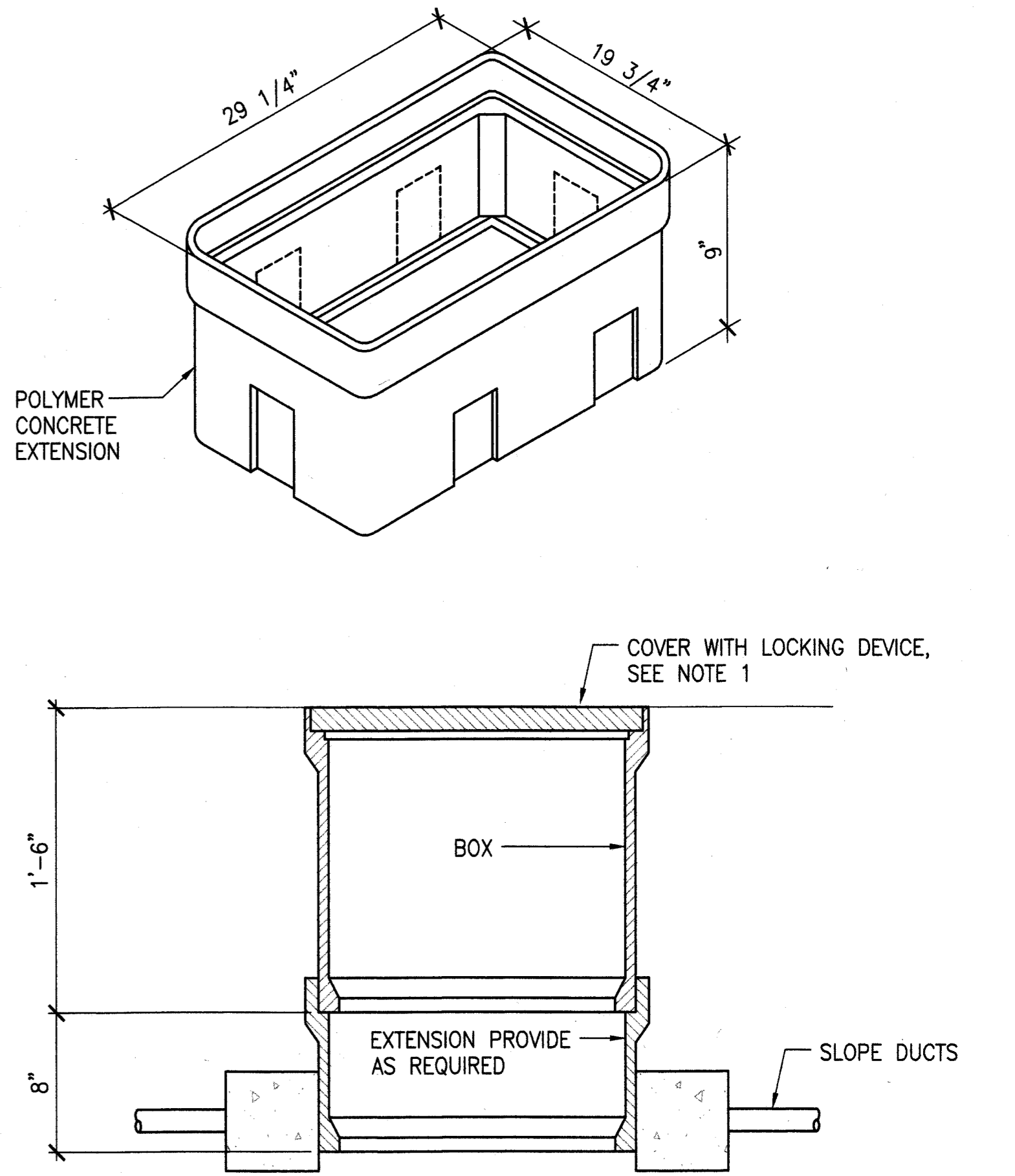
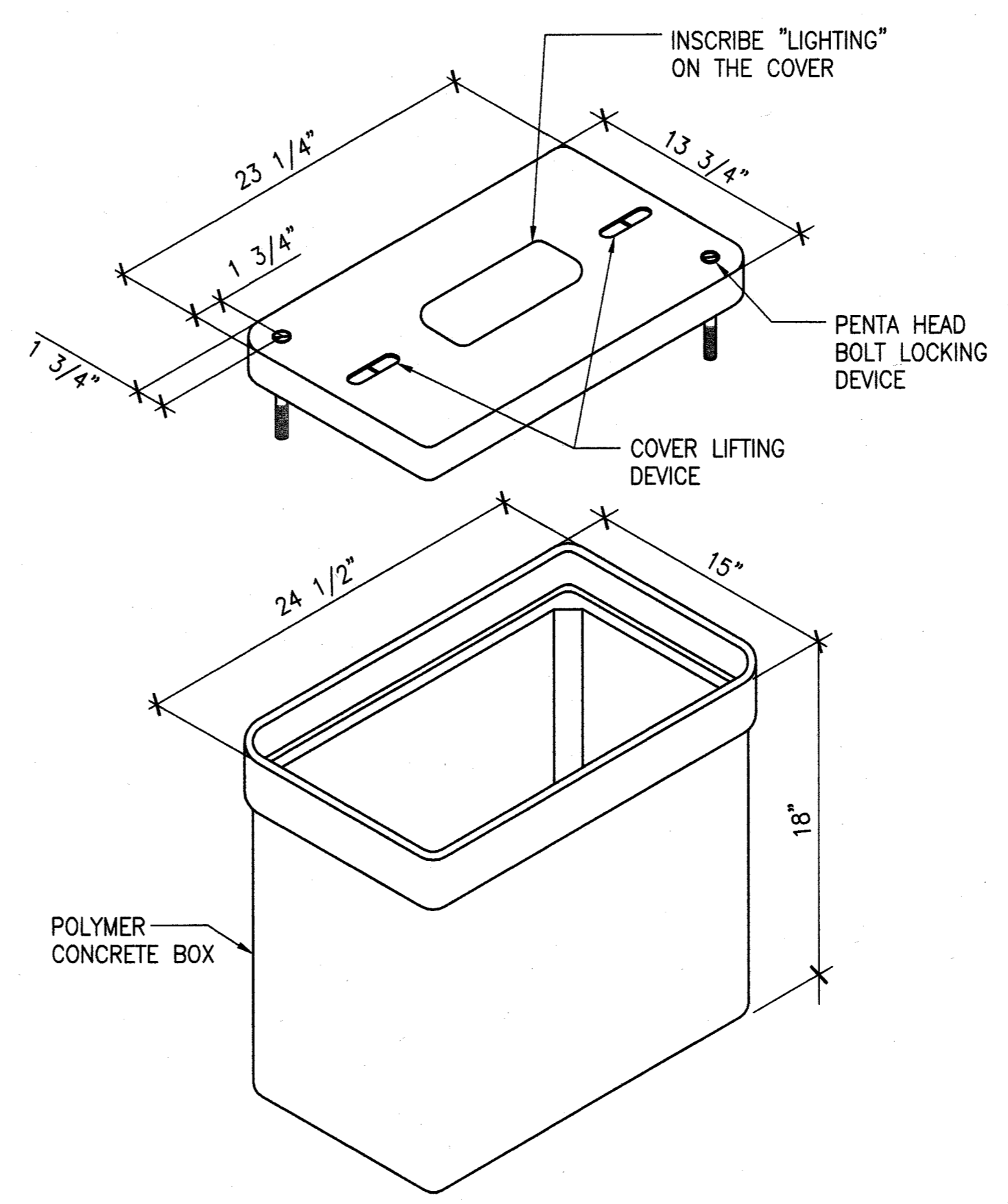
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
DUCT SECTION AND STANCHION DETAILS					
DESIGNED:	RP	SUBMITTED:	gc		
DRAWN:	MC	DATE:	03/15/2016		
CHECKED:	MA	SCALE:	AS SHOWN		
APPROVED:	<i>[Signature]</i> CHIEF ENGINEER		DATE:	MAR 23 2016	DRAWING NO.
				E1.02	



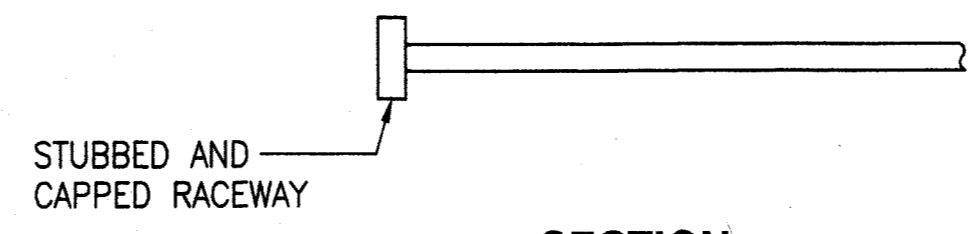
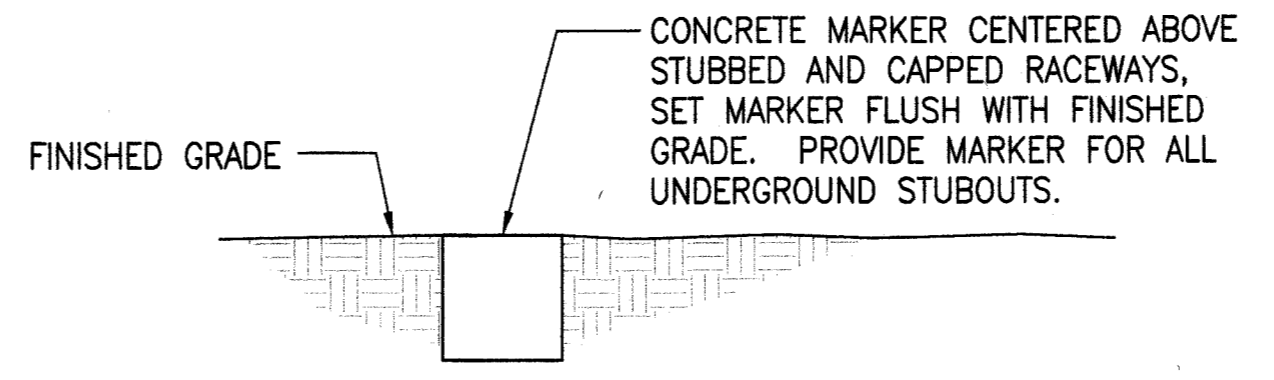
NOTE:
PARKING LIGHT ASSEMBLY, INCLUDING POLE, LUMINAIRE AND FOUNDATION SHALL WITHSTAND WINDS UP TO 108 MPH GUSTING WITHOUT PERMANENT DEFORMATION.

1 PARKING LOT LIGHT POLE ASSEMBLY
E1.03 NOT TO SCALE

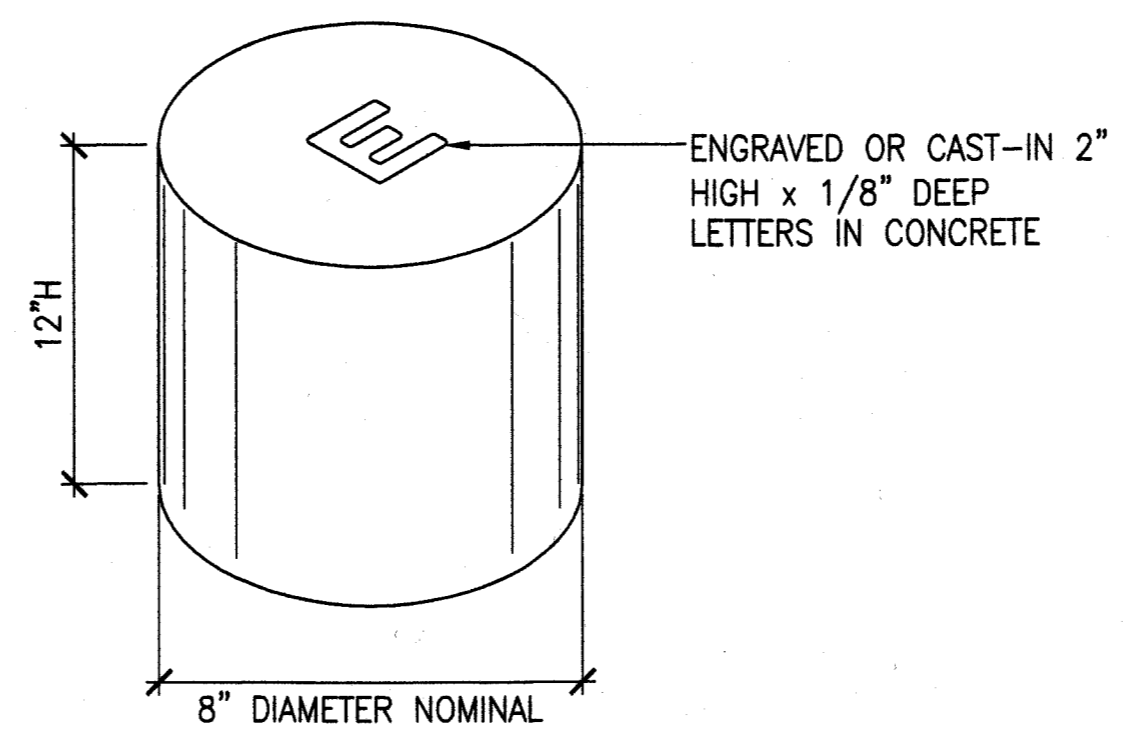
DUCT SCHEDULE		
TYPE	DESCRIPTION	CONDUCTORS
1	HECO, 4" PVC SCHEDULE 40, CONCRETE ENCASED	WITH PULLSTRING
2	POWER, 4" PVC SCHEDULE 40, CONCRETE ENCASED	SEE ONE LINE DIAGRAM FOR CONDUCTOR SIZES AND QUANTITIES
3	POWER, 2" PVC SCHEDULE 40, CONCRETE ENCASED	SEE ONE LINE DIAGRAM FOR CONDUCTOR SIZES AND QUANTITIES
4	TELEPHONE, 4" PVC SCHEDULE 40, CONCRETE ENCASED	WITH MULETAPE
5	CATV, 2" PVC SCHEDULE 40, CONCRETE ENCASED	WITH MULETAPE



- NOTES:**
- TO PROPERLY SECURE THE COVER, BE SURE THAT THE PENTAHEAD BOLTS ARE IN PLACE AND TIGHTENED. THE PENTA BOLTS SHALL BE FASTENED SECURELY TO THE COVERS (BY MEANS OF A COTTER PIN, FOR EXAMPLE), SO THE BOLTS CANNOT BE EASILY REMOVED FROM THE COVERS, EVEN WHEN THE COVERS ARE REMOVED FROM THE BOXES.
 - GROUND ROD SHALL BE INSTALLED IN THE CORNER, 6" FROM EACH WALL AND 6" ABOVE FINAL FLOOR GRADE.
 - NON-CONCRETE BOXES, COVERS, AND EXTENSIONS SHALL BE RATED FOR A VERTICAL LOAD OF 20,000 LBS (20K) MINIMUM.



SECTION



3 CONCRETE MARKER DETAIL
E1.03 NOT TO SCALE

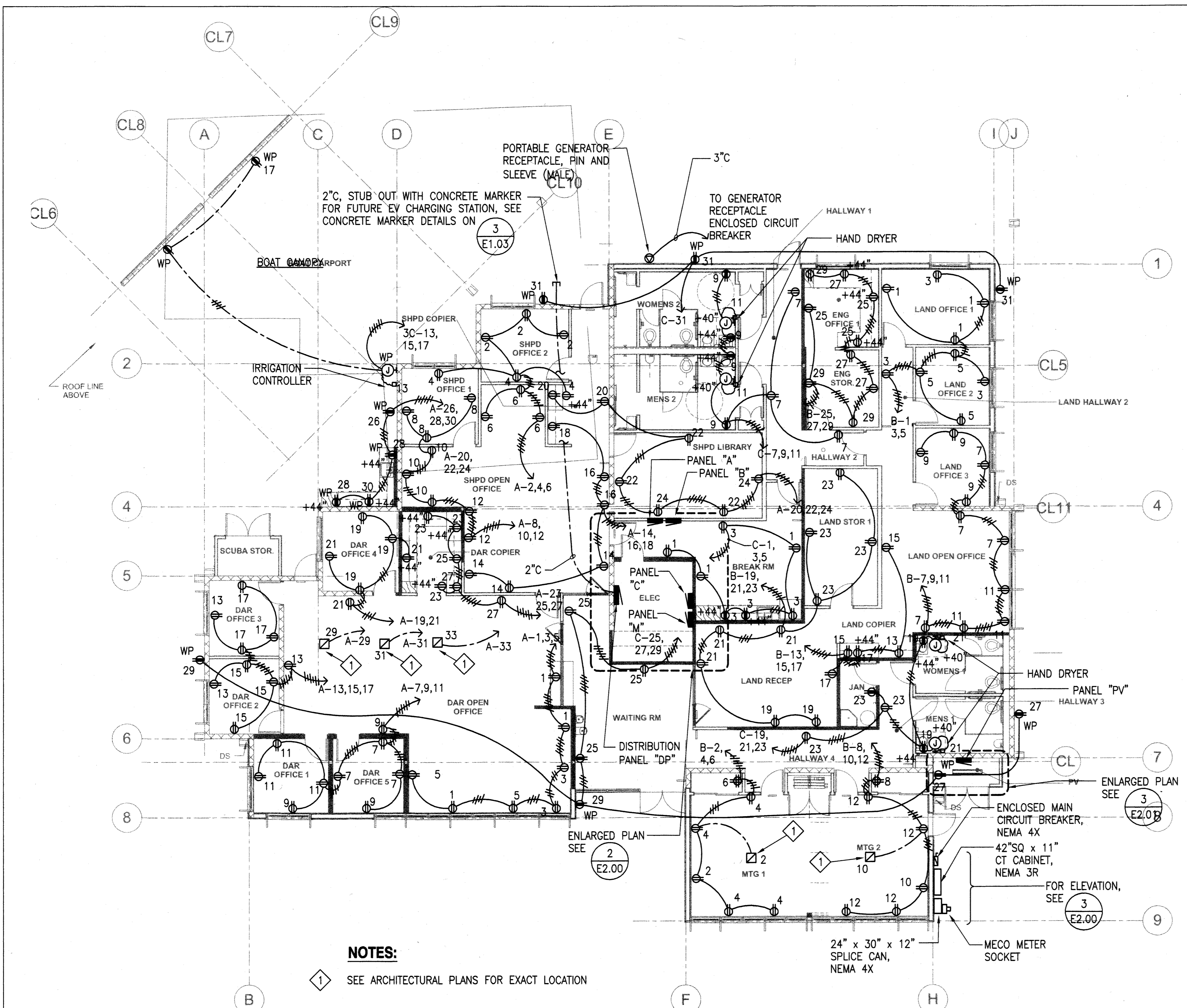
2 LIGHTING PULLBOX
E1.03 NOT TO SCALE

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
POLE LIGHT AND HANDHOLE DETAILS AND DUCT SCHEDULE					
DESIGNED:	RP	SUBMITTED:	[Signature]		
DRAWN:	MC	DATE:	03/15/2016		
CHECKED:	MA	SCALE:	AS SHOWN		
APPROVED:	[Signature]		DATE:	MAR 23 2016	
CHIEF ENGINEER		DATE		E1.03	

APRIL 30, 2016
EXP. DATE

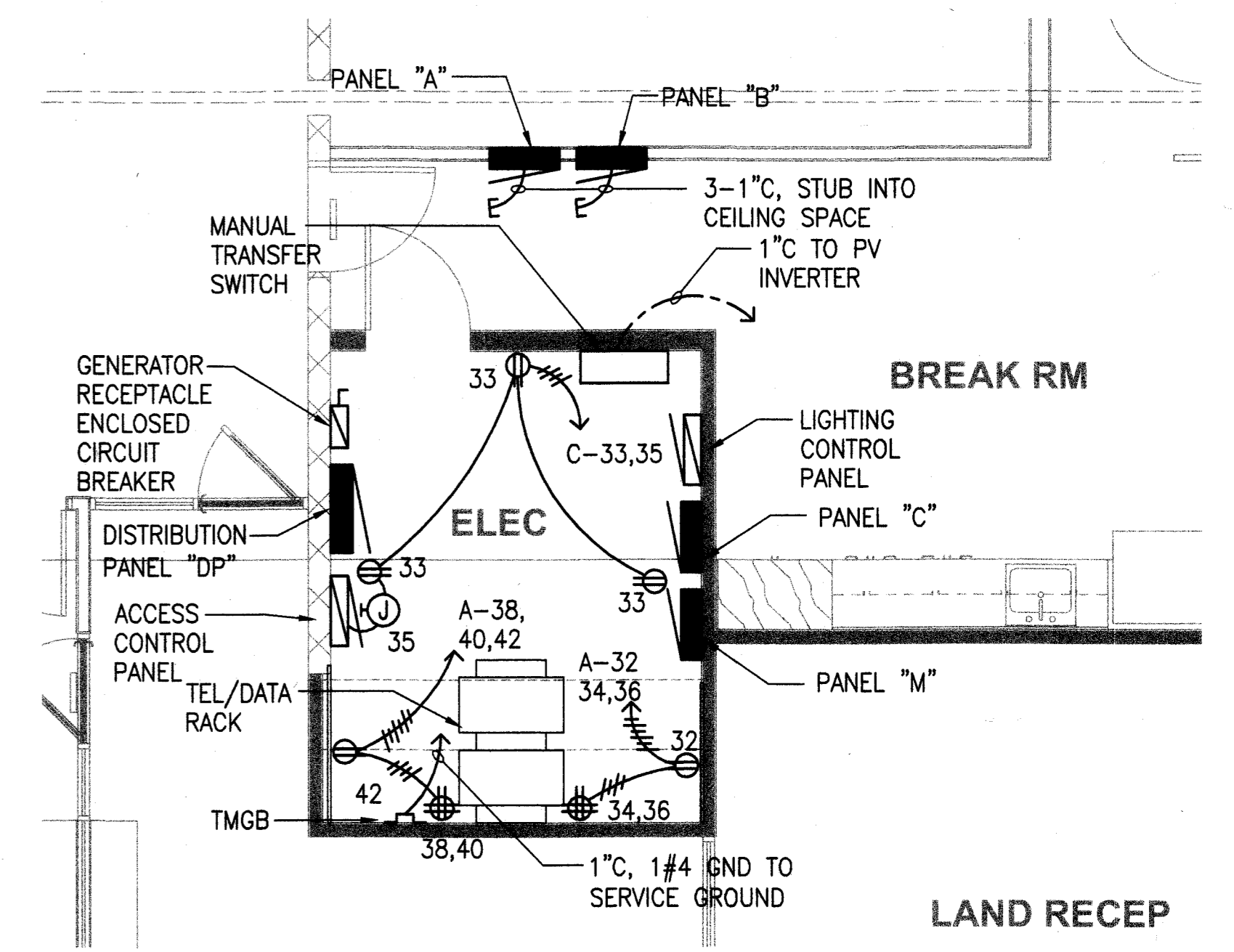
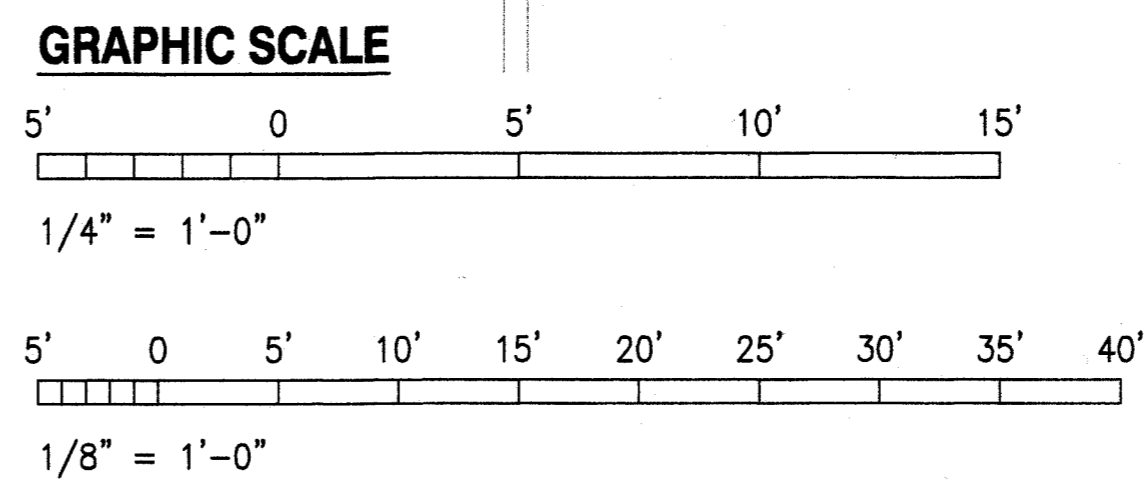
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

3/7/16-11:29 Y:\148\148.026\148.026 E1.03.DWG

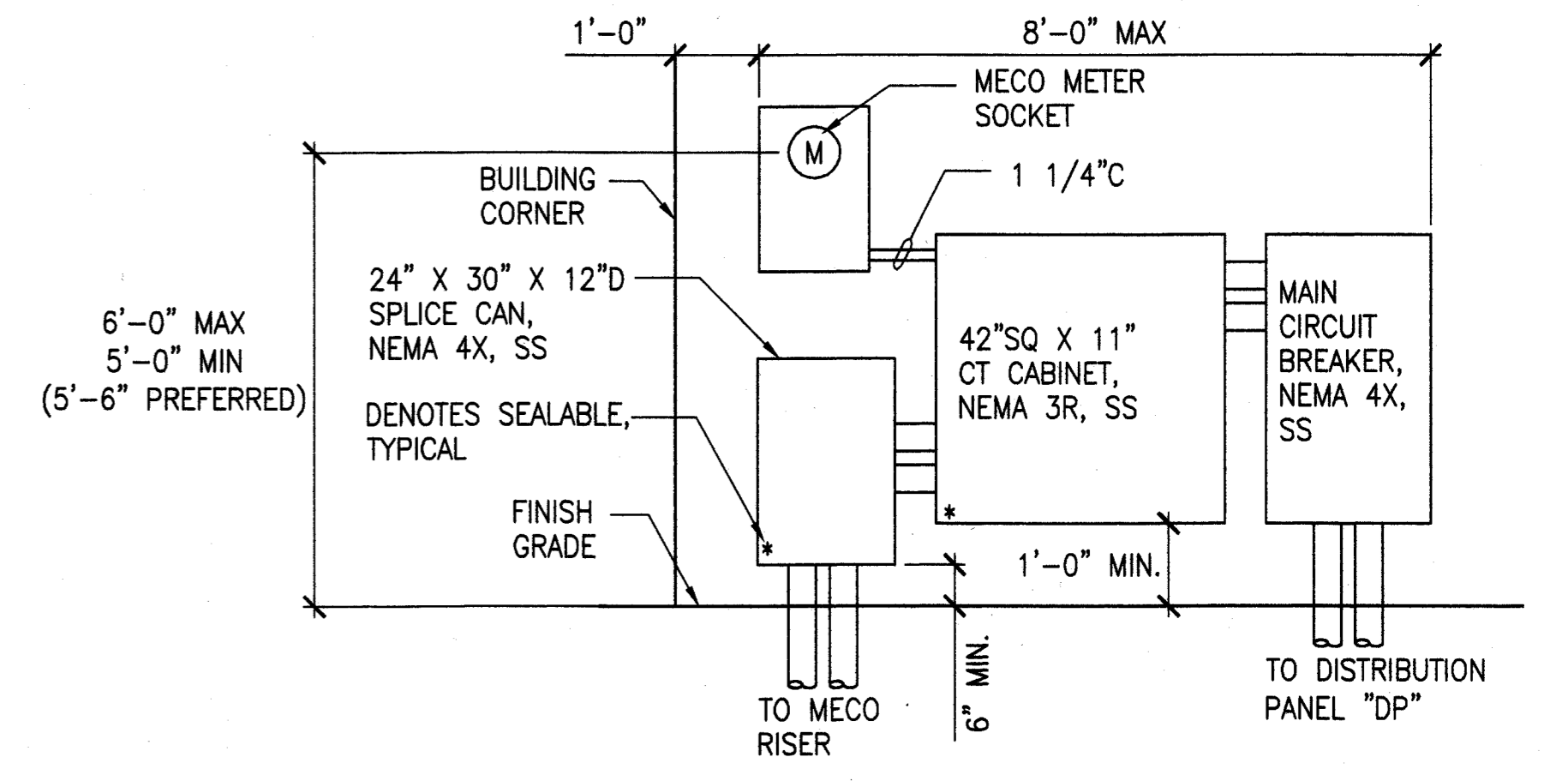


NOTES:
 1 SEE ARCHITECTURAL PLANS FOR EXACT LOCATION

1 MAIN FACILITY POWER PLAN
 E2.00 SCALE: 1/8" = 1'-0"



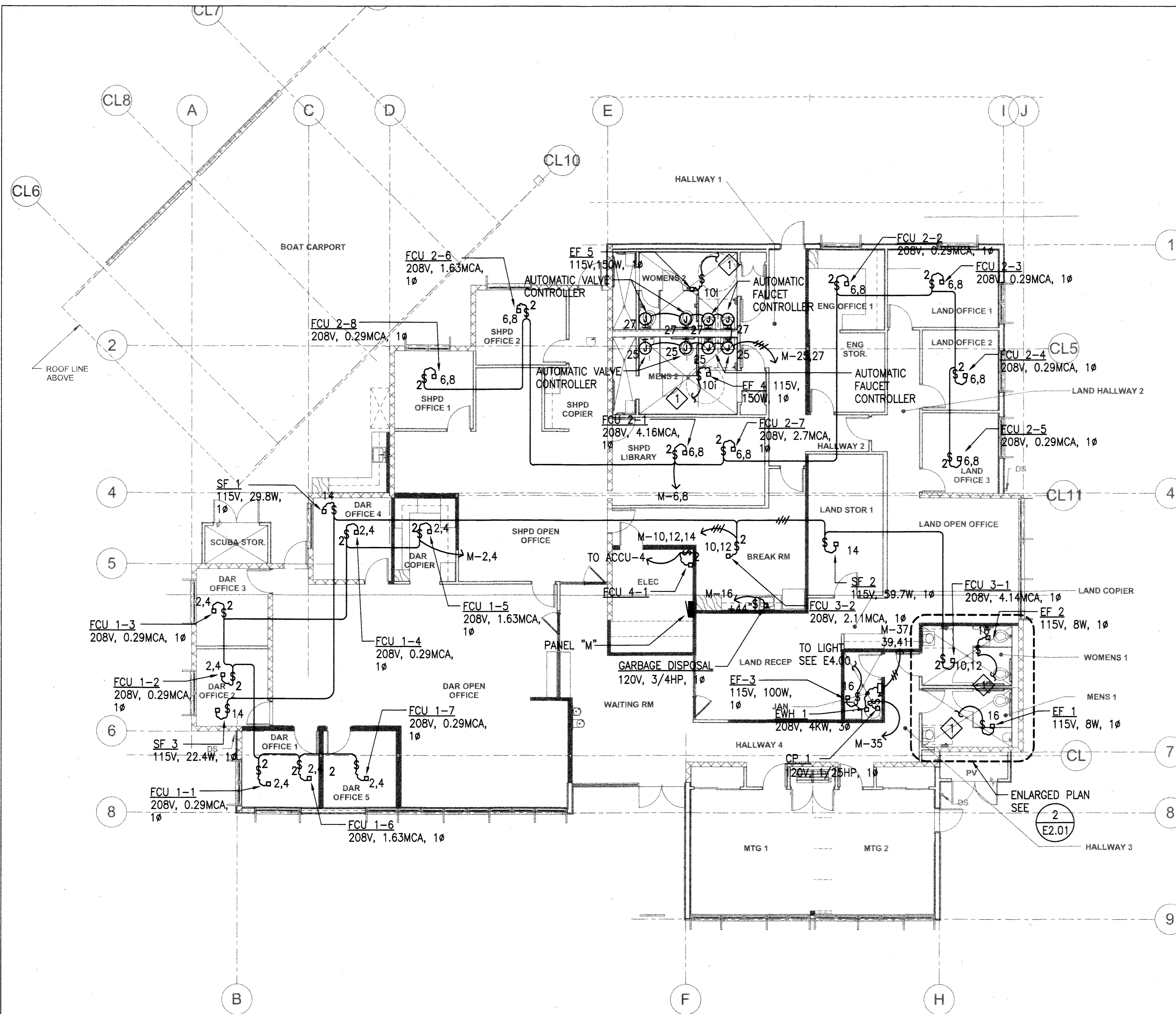
2 ENLARGED ELECTRICAL ROOM PLAN
 E2.00 SCALE: 1/4" = 1'-0"



3 METER ELEVATION
 E2.00 NOT TO SCALE

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
MAIN FACILITY POWER PLANS AND METER ELEVATION					
DESIGNED:	RP	SUBMITTED:	[Signature]		
DRAWN:	MC	DATE:	03/15/2016		
CHECKED:	MA	SCALE:	AS SHOWN		
APPROVED:	[Signature]	DATE:	MAR 23 2016		
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.		CHIEF ENGINEER	DATE		E2.00

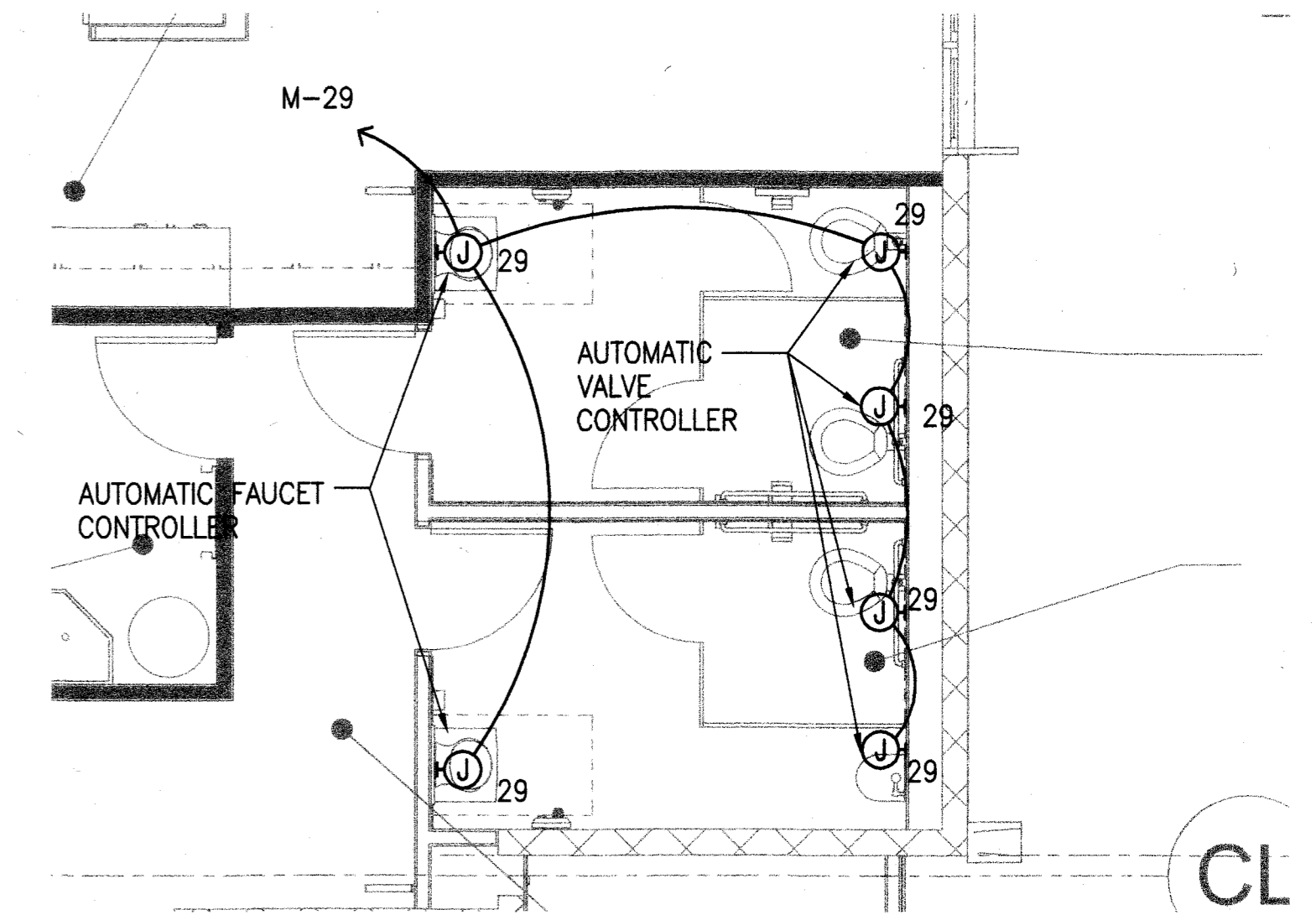
3/17/16-11:28 Y:\148\148.026\148.026 E2.00.P03.dwg



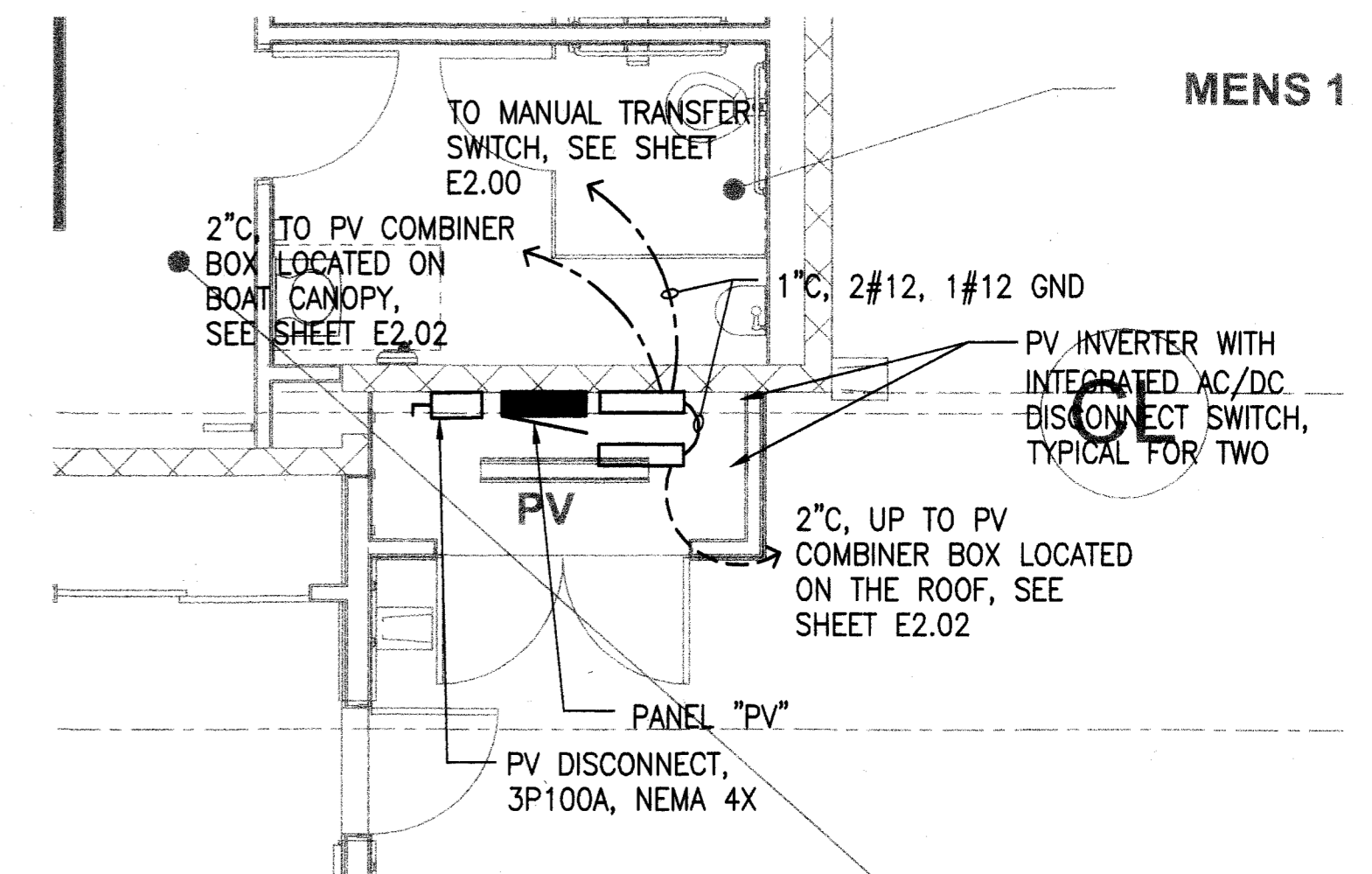
NOTE:

① TO LIGHT, SEE SHEET E4.00.

1 MAIN FACILITY MECHANICAL POWER PLAN
E2.01 SCALE: 1/8" = 1'-0"

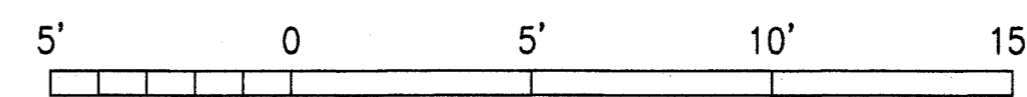


2 ENLARGED RESTROOM POWER PLAN
E2.01 SCALE: 1/4" = 1'-0"

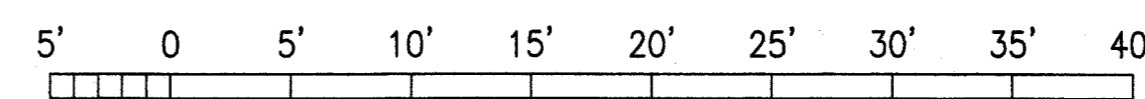


3 ENLARGED PV CLOSET POWER PLAN
E2.01 SCALE: 1/4" = 1'-0"

GRAPHIC SCALE

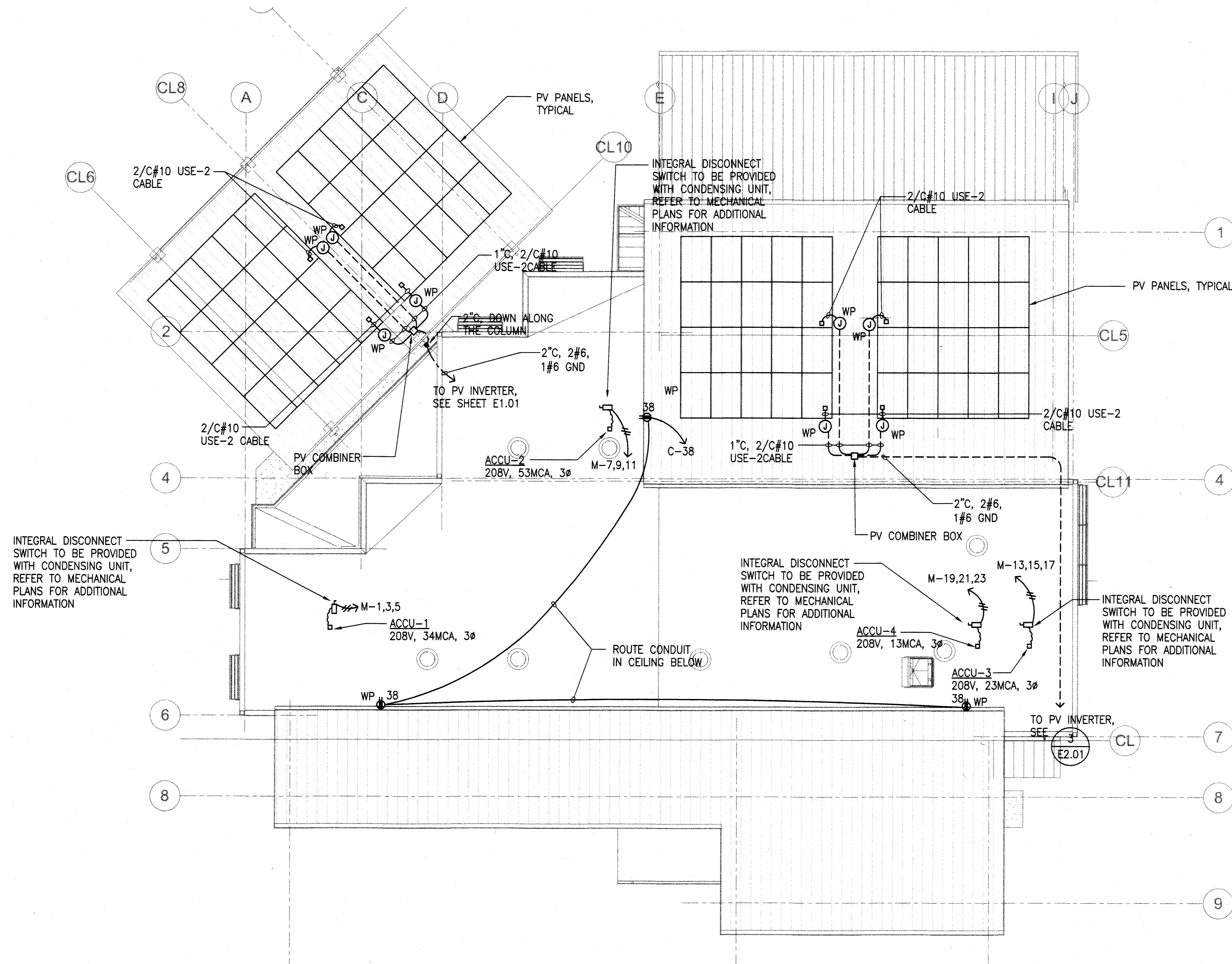


1/4" = 1'-0"

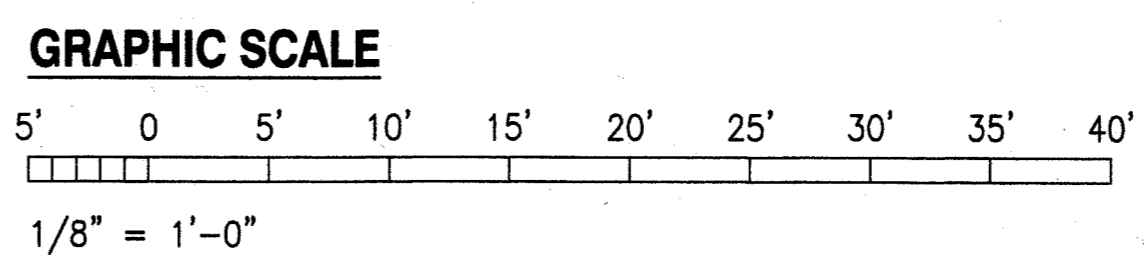


1/8" = 1'-0"

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
MAIN FACILITY MECHANICAL AND PV CLOSET POWER PLANS					
DESIGNED:	RP	SUBMITTED:	[Signature]		
DRAWN:	MC	DATE:	03/15/2016		
CHECKED:	MA	SCALE:	AS SHOWN		
APPROVED:	[Signature]	DATE:	MAR 23 2016		
CHIEF ENGINEER			E2.01		

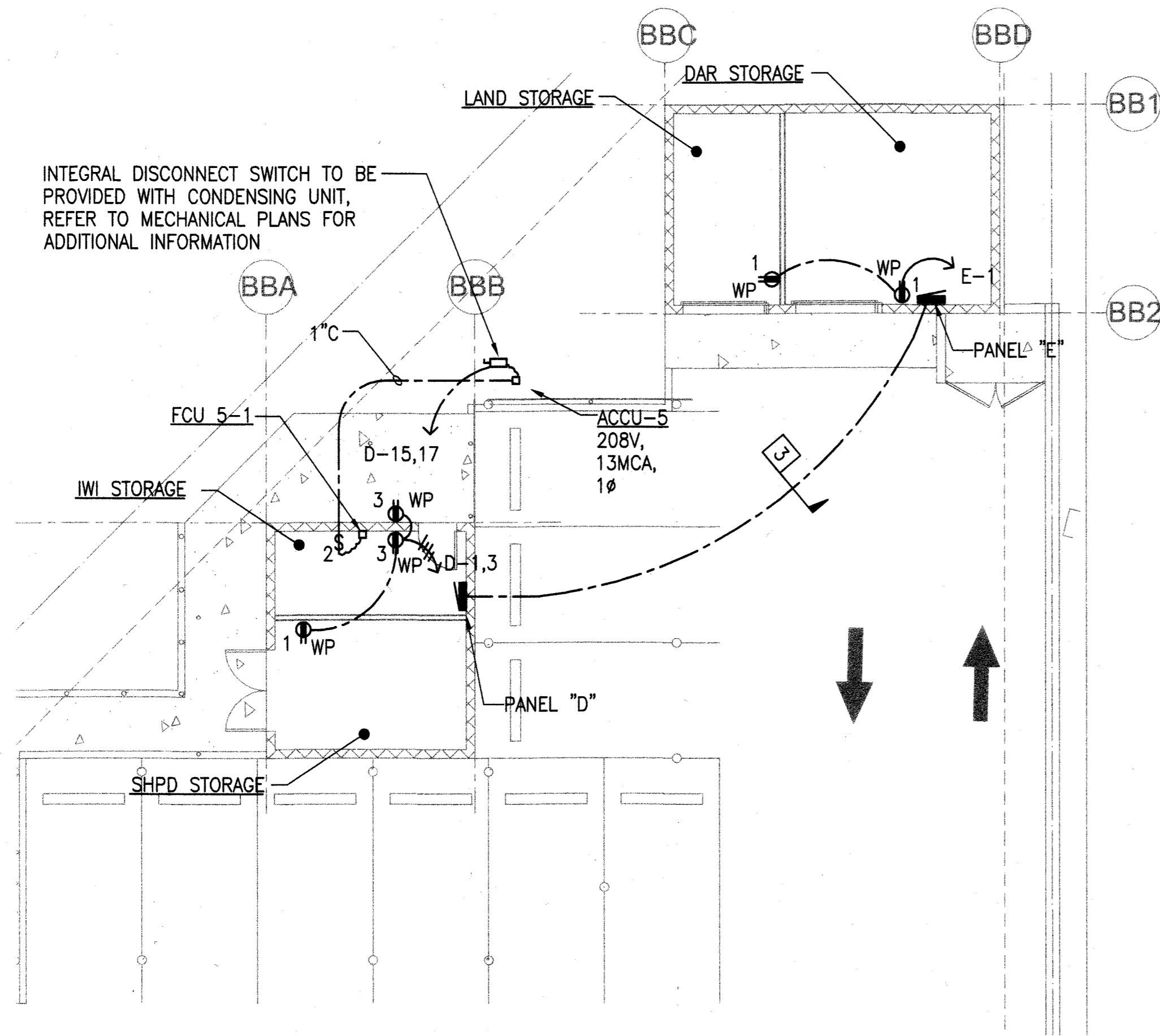


MAIN FACILITY ROOF POWER PLAN
SCALE: 1/8" = 1'-0"

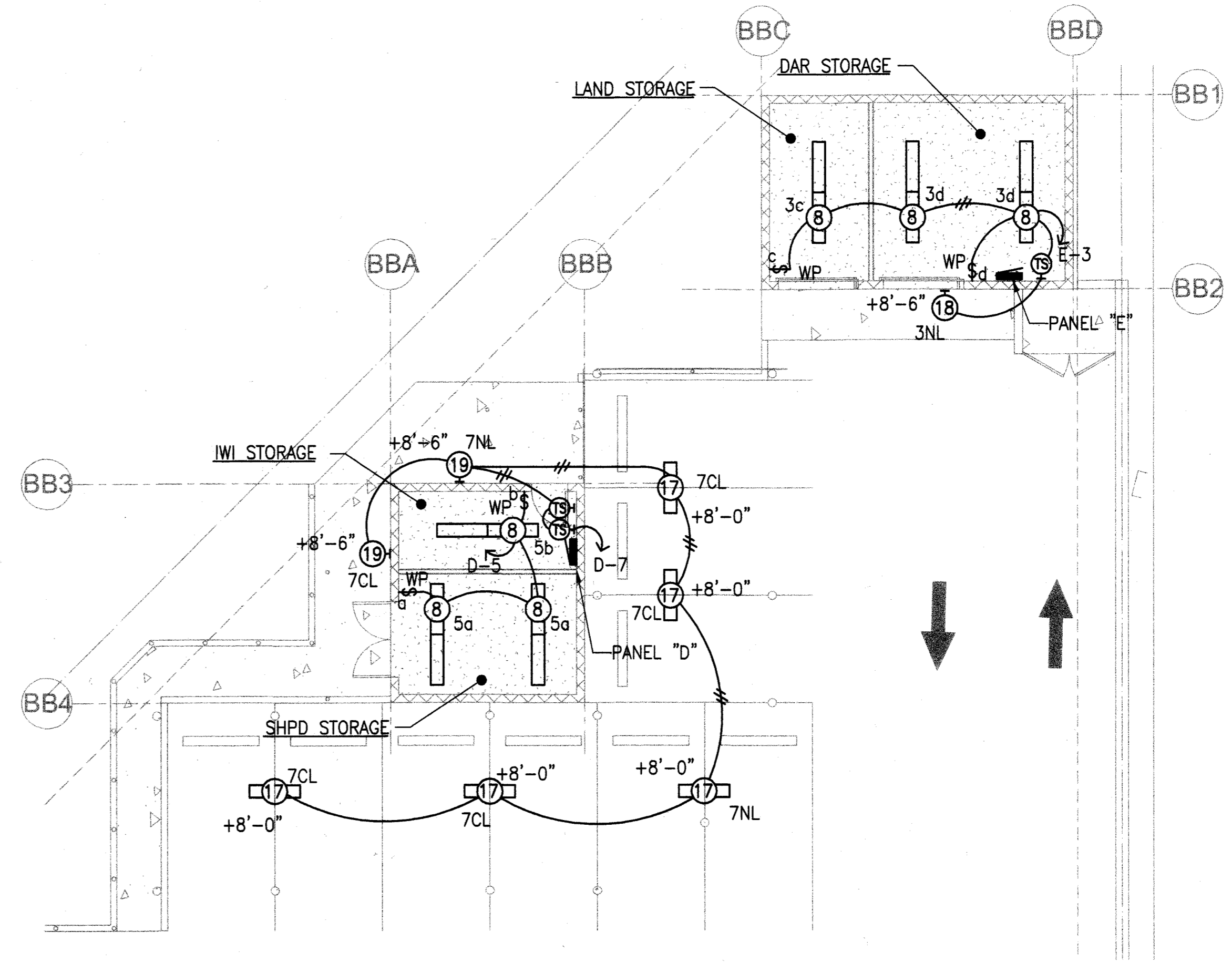


REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
MAIN FACILITY ROOF POWER PLAN					
DESIGNED:	RP	SUBMITTED:	6	DATE:	03/15/2016
DRAWN:	MC	CHECKED:	MA	SCALE:	AS SHOWN
APPROVED:		DATE:		DRAWING NO.	
MICHELE N. ADDI PRO LICENSED PROFESSIONAL ENGINEER No. 10017-E HAWAII, U.S.A.		MAR 23 2016		E2.02	
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.					

3/17/16-11:27 Y:\48\148.026\148.026 E2.02.RF01.dwg

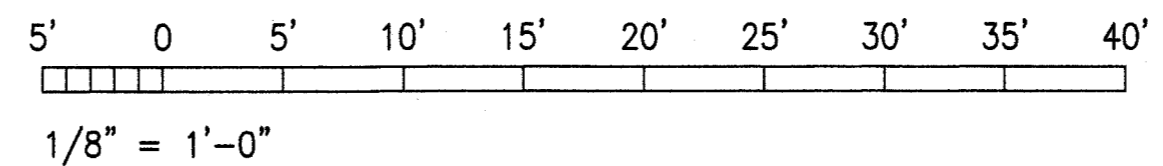


1 STORAGE BUILDINGS POWER PLAN
E-2.03 SCALE: 1/8" = 1'-0"

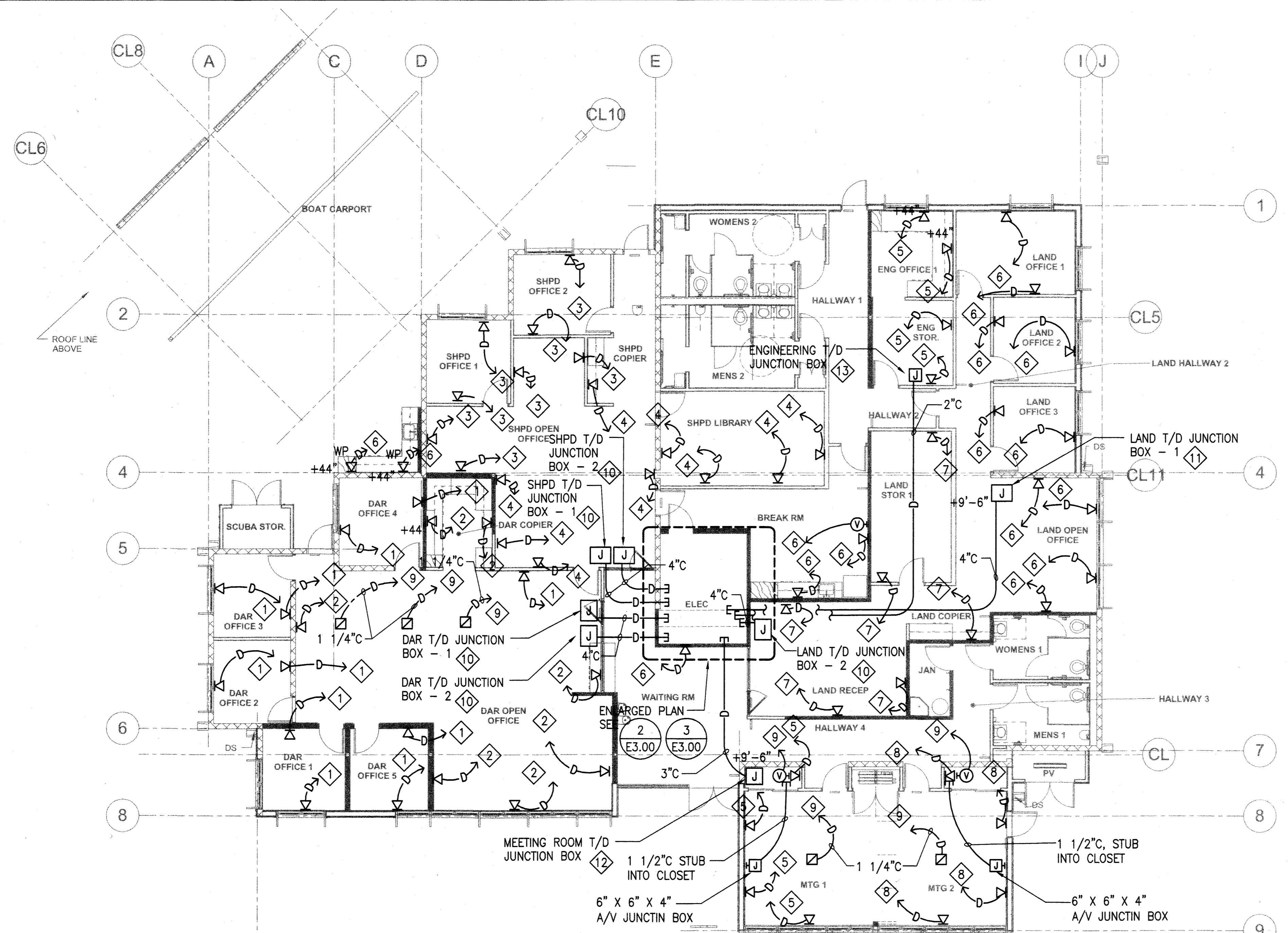


2 STORAGE BUILDINGS LIGHTING PLAN
E-2.03 SCALE: 1/8" = 1'-0"

GRAPHIC SCALE



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
STORAGE BUILDINGS POWER AND LIGHTING PLANS					
DESIGNED:	RP	SUBMITTED:	[Signature]		
DRAWN:	MC	DATE:	03/15/2016		
CHECKED:	MA	SCALE:	AS SHOWN		
APPROVED:	[Signature]		DATE:	MAR 23 2016	
CHIEF ENGINEER				E2.03	

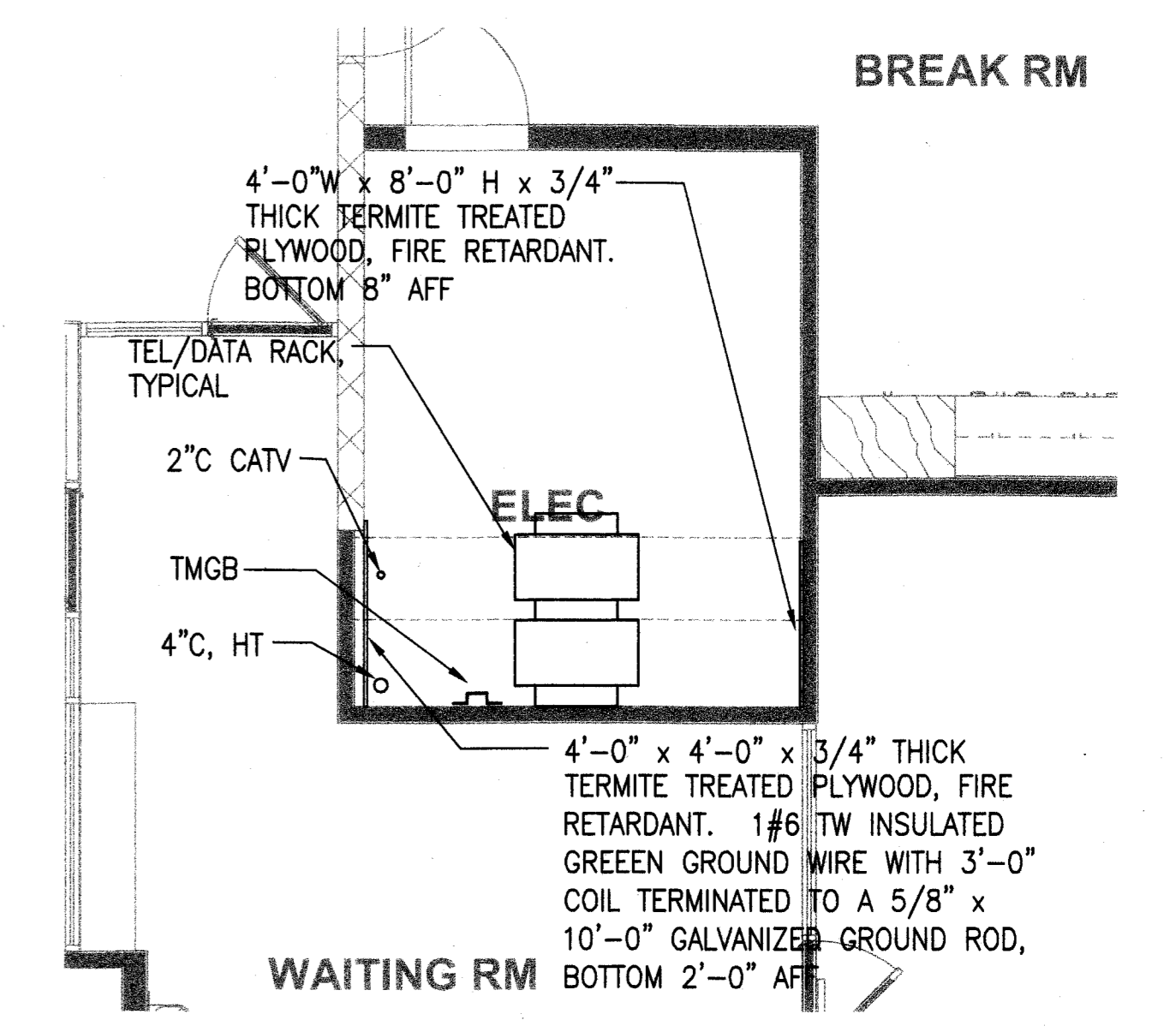
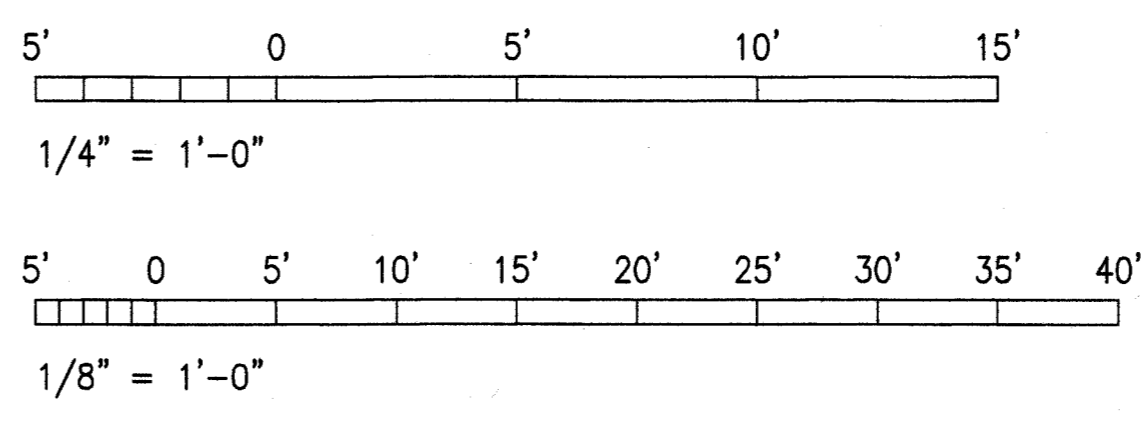


NOTES:

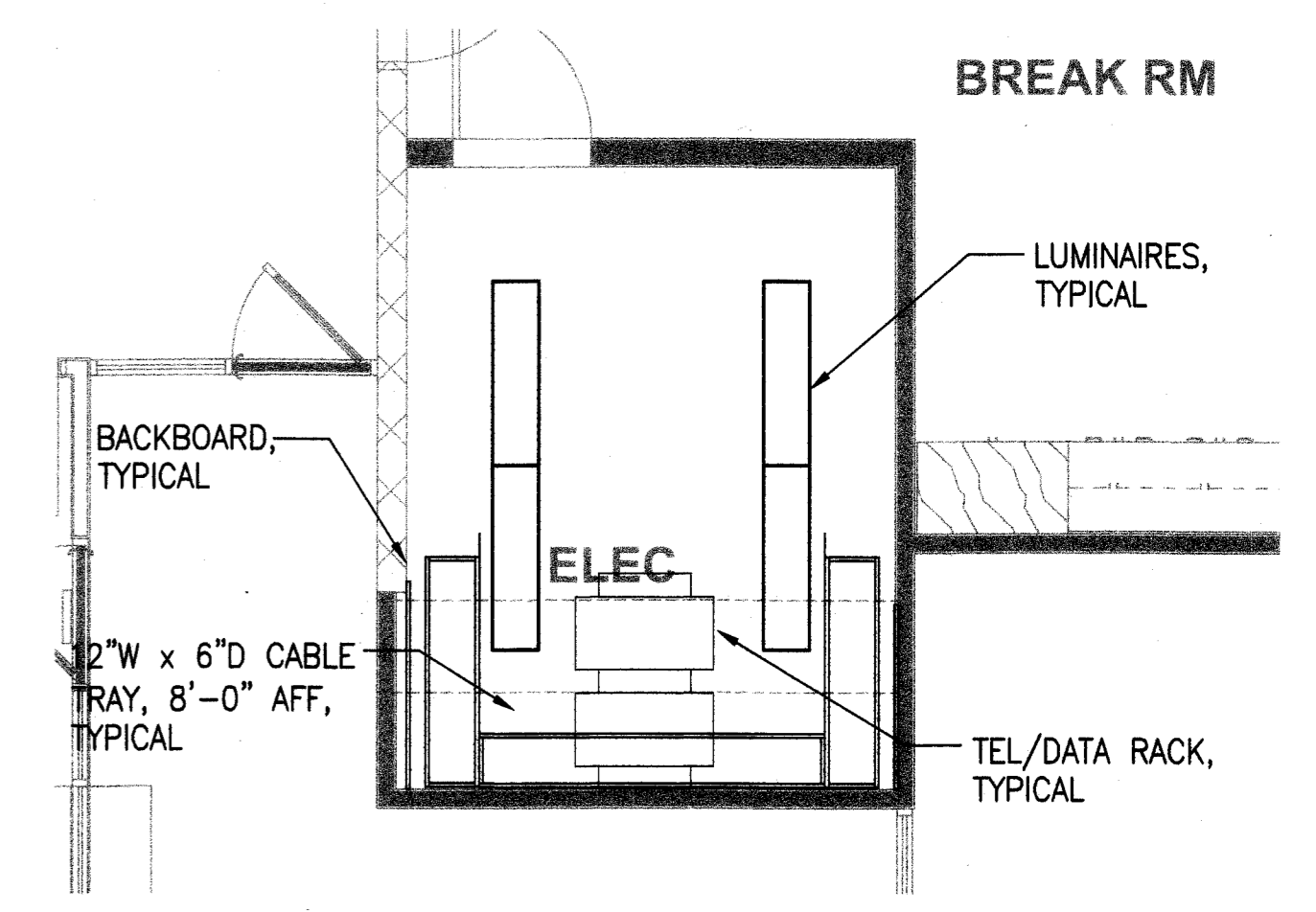
- 1 TO DAR T/D JUNCTION BOX - 1.
- 2 TO DAR T/D JUNCTION BOX - 2.
- 3 TO SHPD T/D JUNCTION BOX - 1.
- 4 TO SHPD T/D JUNCTION BOX - 2.
- 5 TO ENGINEERING T/D JUNCTION BOX.
- 6 TO LAND T/D JUNCTION BOX - 1.
- 7 TO LAND T/D JUNCTION BOX - 2.
- 8 TO CONFERENCE T/D JUNCTION BOX.
- 9 TO TEL/DATA RACK.
- 10 30" x 24" x 8" JUNCTION BOX, MOUNTED WITHIN ACCESSIBLE CEILING SPACE.
- 11 30" x 24" x 8" JUNCTION BOX.
- 12 24" x 24" x 8" JUNCTION BOX.
- 13 18" x 18" x 6" JUNCTION BOX, MOUNTED WITHIN ACCESSIBLE CEILING SPACE.

1 MAIN FACILITY SIGNAL PLAN
 E3.00 SCALE: 1/8" = 1'-0"

GRAPHIC SCALE



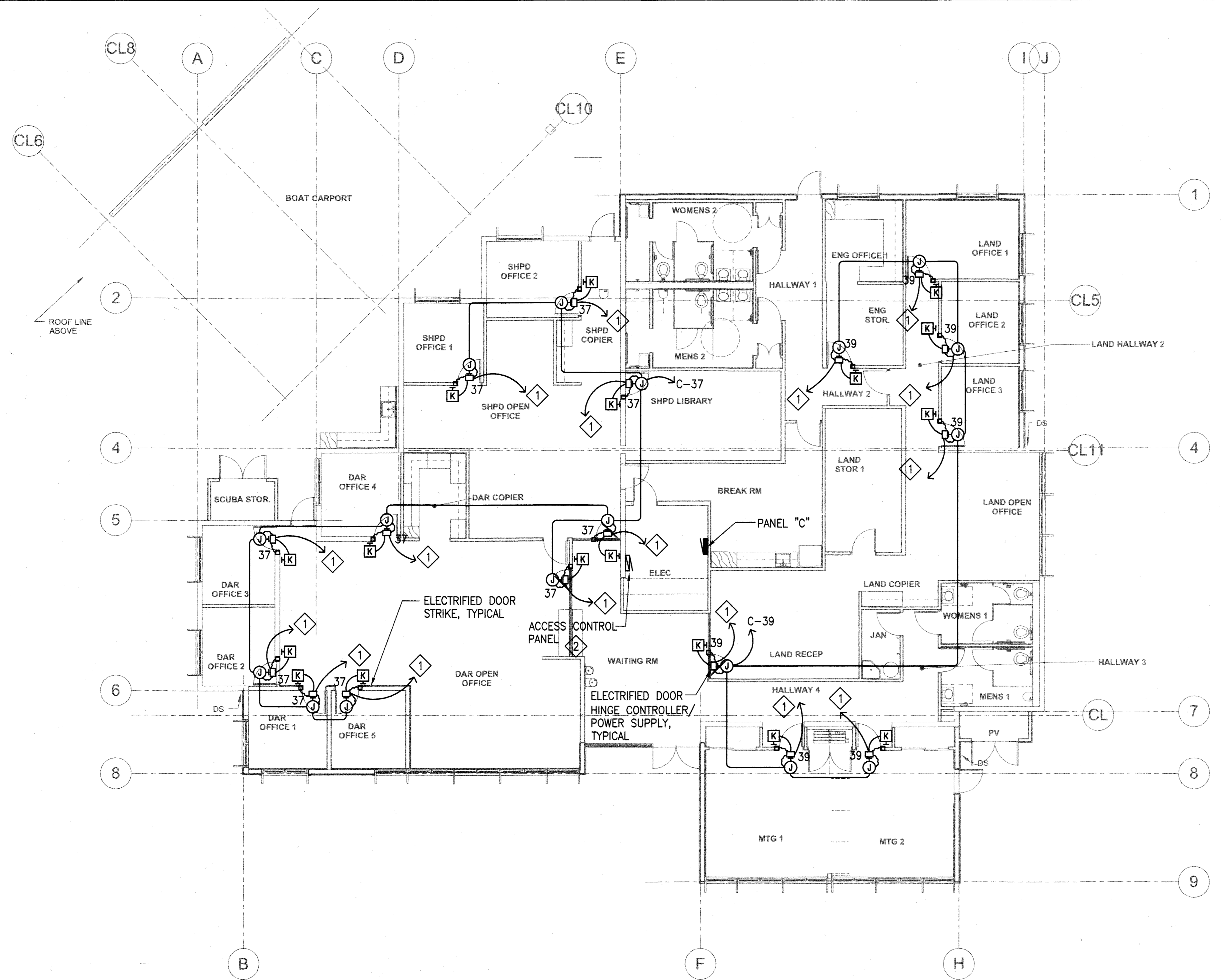
2 ENLARGED ELECTRICAL ROOM PLAN
 E3.00 SCALE: 1/4" = 1'-0"



3 ENLARGED ELECTRICAL ROOM CEILING PLAN
 E3.00 SCALE: 1/4" = 1'-0"

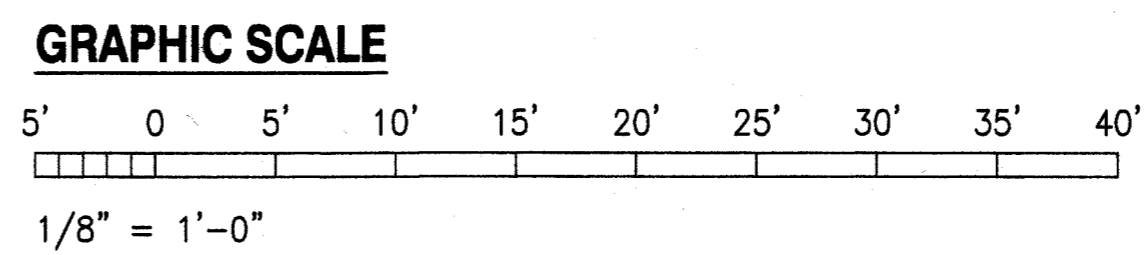
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
MAIN FACILITY SIGNAL PLANS					
DESIGNED:	RP	SUBMITTED:			
DRAWN:	MC	DATE:	03/15/2016		
CHECKED:	MA	SCALE:	AS SHOWN		
APPROVED:	<i>[Signature]</i> CHIEF ENGINEER		DATE:	MAR 23 2016	
					DRAWING NO. E3.00

3/17/16-11:27 Y:\148\148.026\148.026 E3.00.C01.dwg

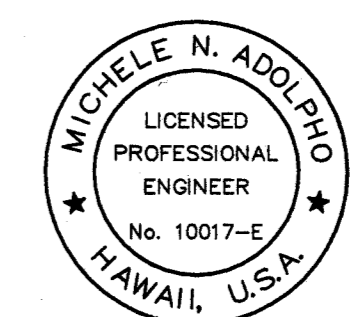


- NOTES:**
- ① 1" WITH PULL STRING TO ACCESS CONTROL PANEL.
 - ② PROVIDED BY THE STATE'S ACCESS CONTROLLER SYSTEM CONTRACTOR.

MAIN FACILITY ACCESS CONTROL PLAN
SCALE: 1/8" = 1'-0"



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
MAUI OFFICE ANNEX WAILUKU, MAUI, HAWAII					
MAIN FACILITY ACCESS CONTROL PLAN					
DESIGNED:	RP	SUBMITTED:			
DRAWN:	MC	DATE:	03/15/2016		
CHECKED:	MA	SCALE:	AS SHOWN		
APPROVED:	<i>[Signature]</i> CHIEF ENGINEER		DATE:	MAR 23 2016	
				DRAWING NO.	E3.01



APRIL 30, 2016
EXP. DATE

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

3/17/16-11:26 Y:\148\148.026\148.026 E3.01.ACC01.dwg