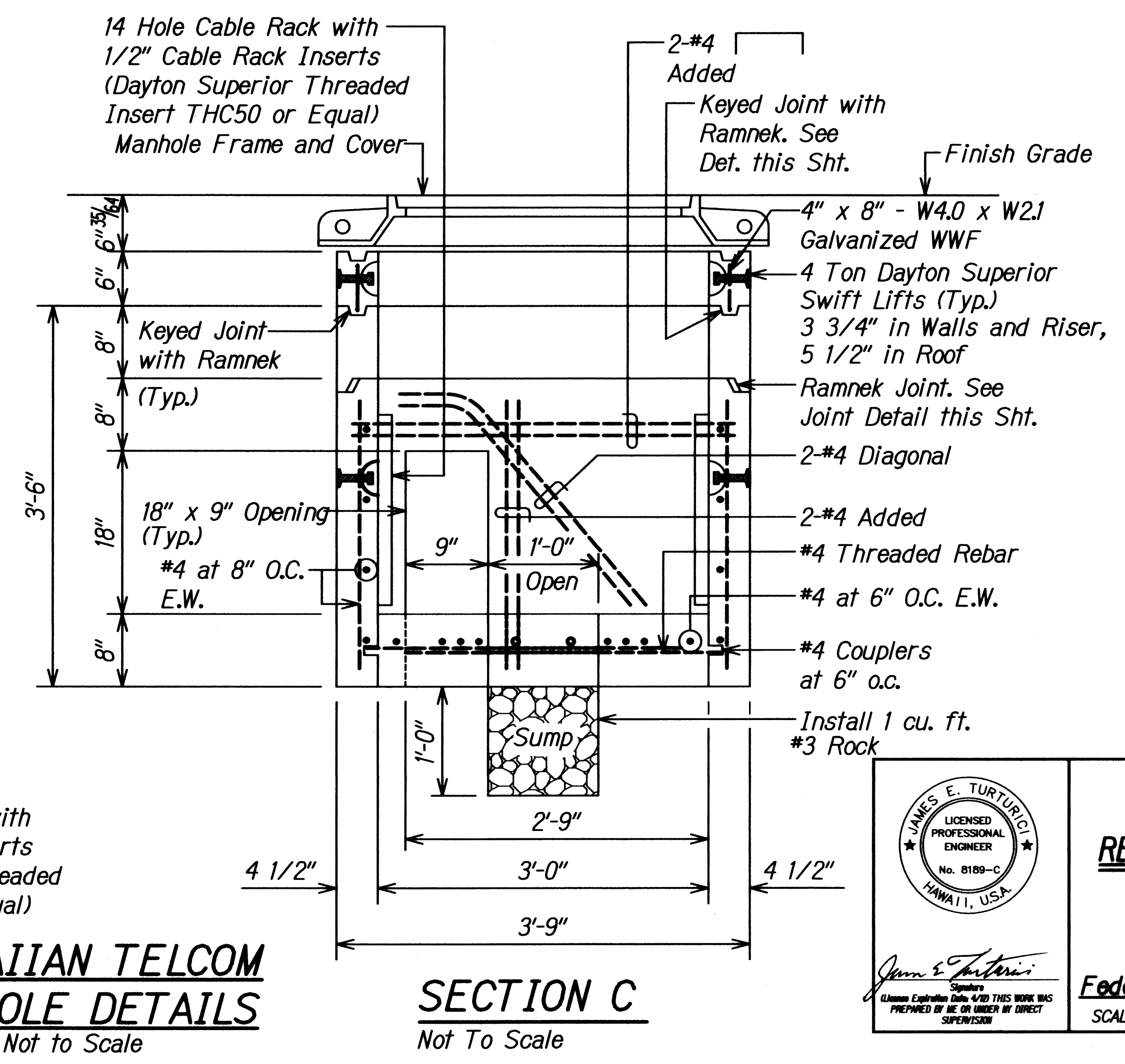
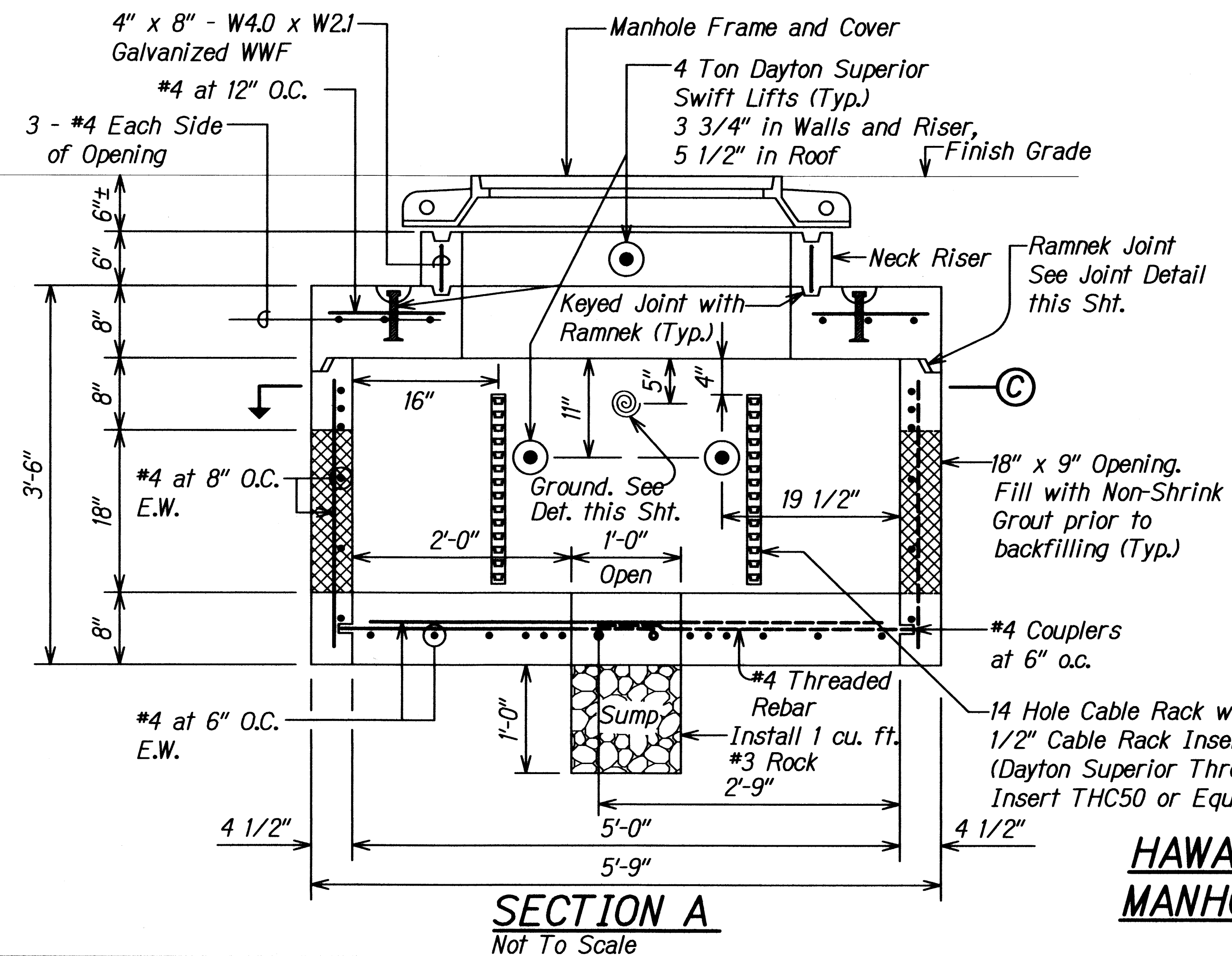
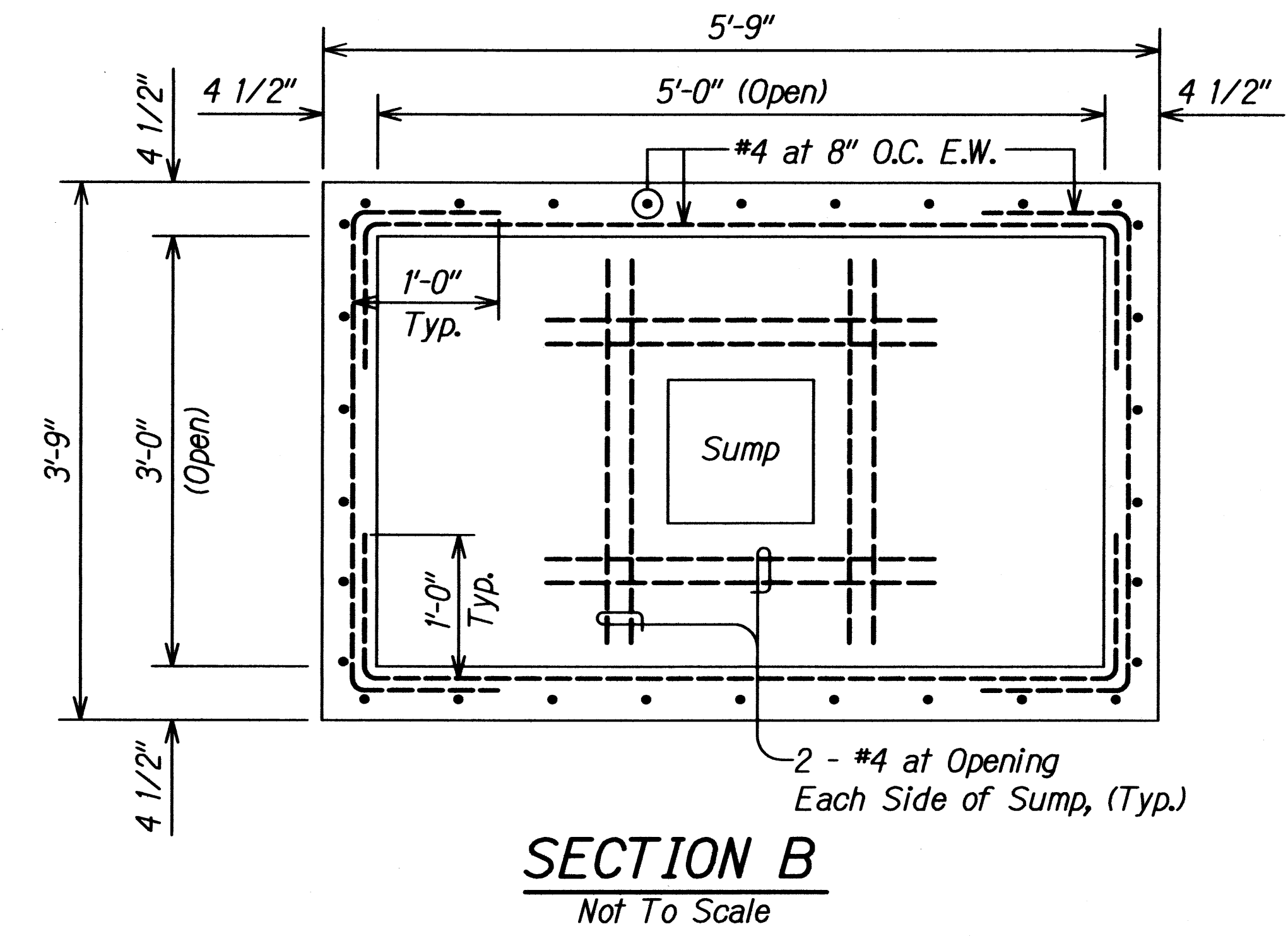
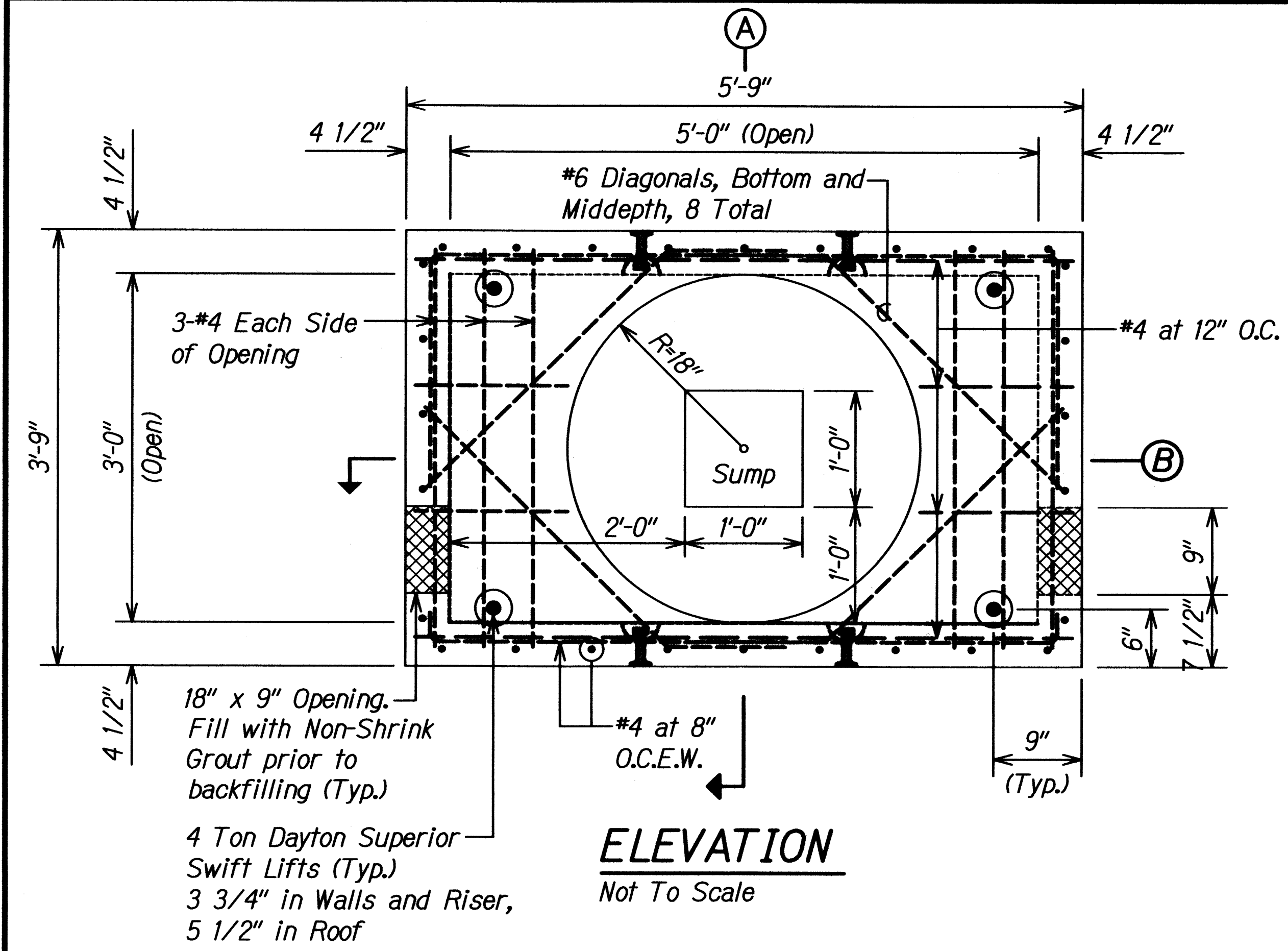
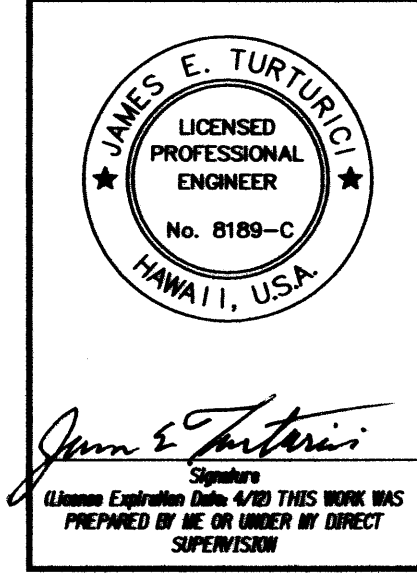


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-056-1(54)	2010	24	48



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	DATE
DRAWN BY	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
NOTED BY	DATE
NO.	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

REPLACE HAWAIIAN TELCOM BOX

KUHIO HIGHWAY
Intersection Improvements
at Kapule Highway
Federal Aid Project No. HSIP-056-1(54)

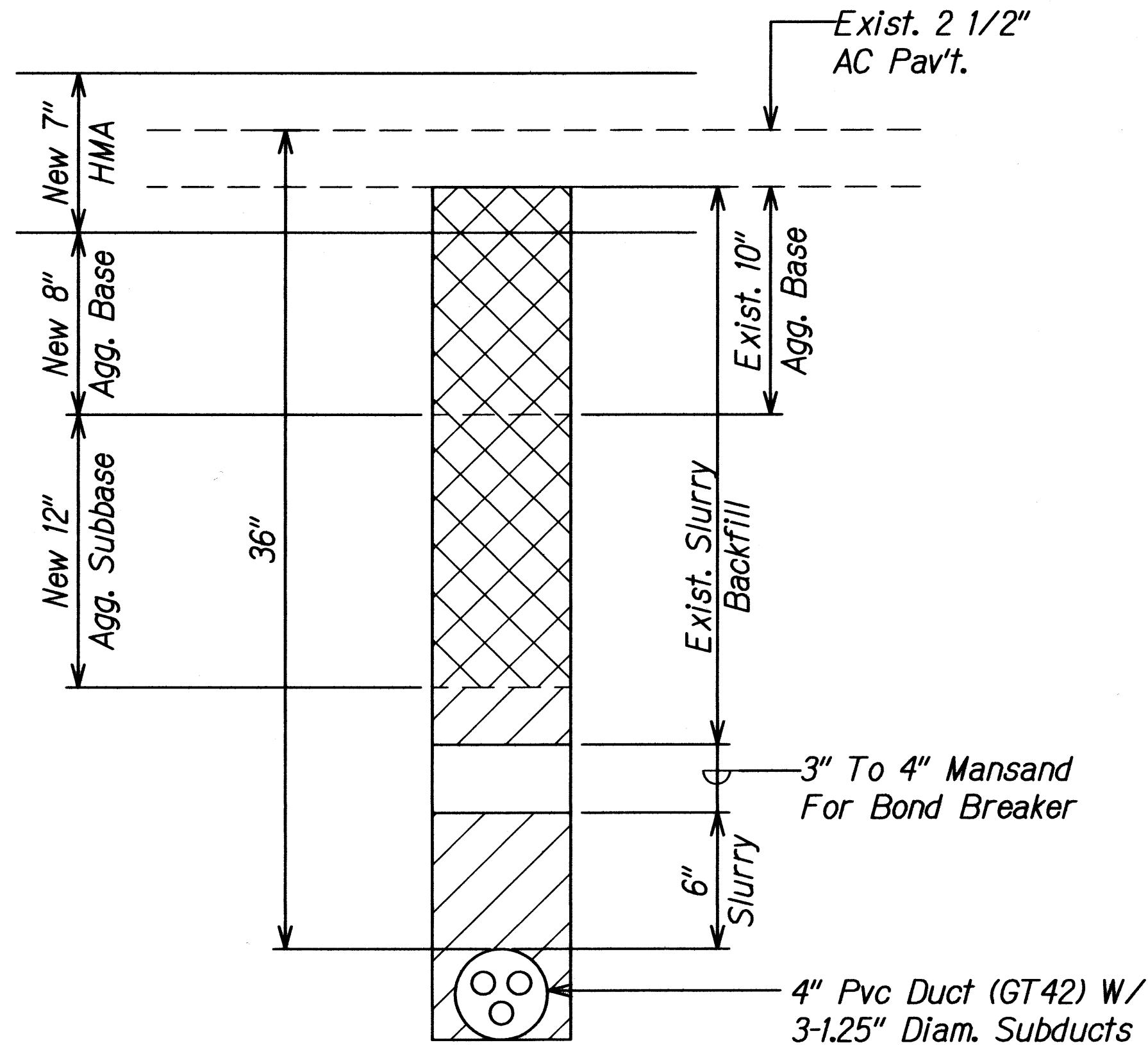
SCALE: As Noted Date: August 2010

SHEET No. 1 OF 2 SHEETS

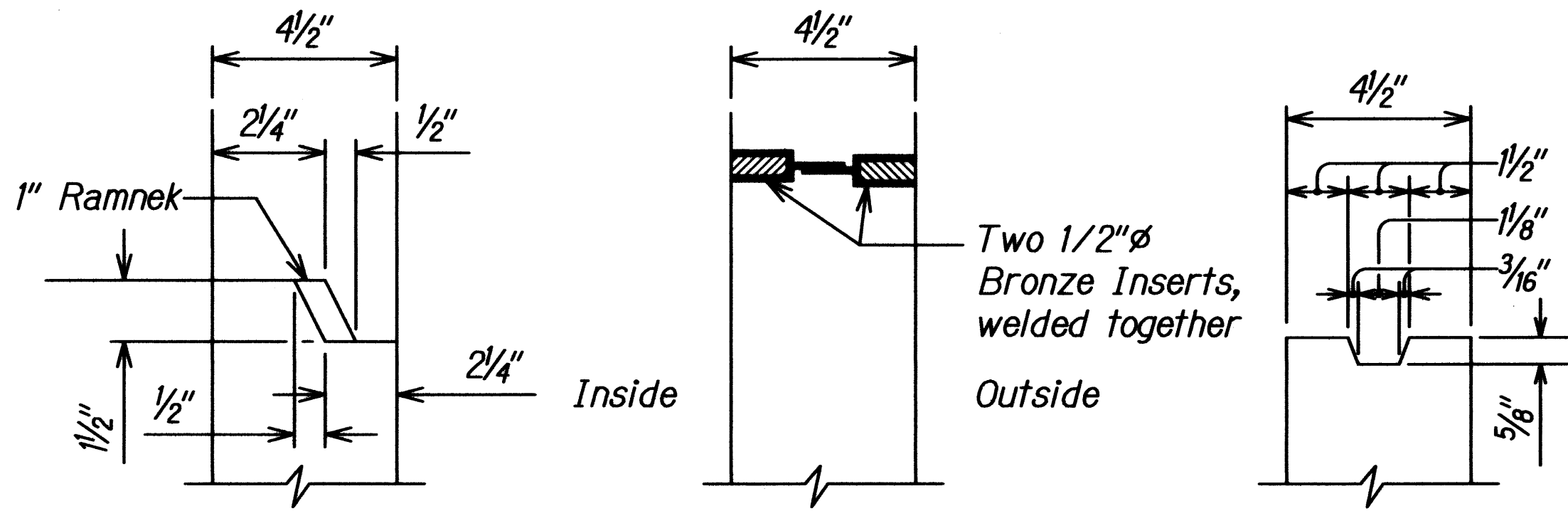
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HAWAII	HAW.	HSIP-056-1(54)	2010	25	48

NOTES:

- Concrete shall have a compressive strength of 5,000 p.s.i. at 28 days.
- All reinforcing steel shall be new stock deformed bars conforming to ASTM A706W grade 60 unless otherwise noted. Placement of rebars shall be in accordance with ACI-315 & ACI-318. All bars shall be clean of rust, grease or other materials likely to impair bond. All bends shall be made cold.
- All reinforcing bars shall be accurately & securely placed. All reinforcing shall be lapped 40 bar diameters or eighteen (18) inches, whichever is greater at splices. All splices shall be made away from point of maximum stress.
- Concrete cover to reinforcing steel shall be 1-1/2" minimum.
- Allow concrete to cure a minimum of 7 days prior to shipping.
 - AASHTO HS20-44 loading
 - Active earth pressure above the water table = 40 PCF
 - Soil unit weight = 110 PCF
- Manhole shall not be placed below the water table.
- Manhole Frame and Cover shall be Neenah Foundry Catalog 8. No. R-1750-C1 or equal and acceptable to the Engineer with Penta Head Bolts Part #0-8666-01.
- Install 5/8" x 8'-0" long ground rod and connect to grounding insert.
- Slope bottom slab to drain to sump.



KAPULE HWY. - KUHIO HWY.
SOUTH BOUND - RIGHT TURN LANE CLOSED
 Not to Scale



HAWAIIAN TELCOM MANHOLE DETAILS
 Not to Scale

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
NOTE BOOK		
No.		

STATE OF HAWAII
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REPLACE HAWAIIAN TELCOM BOX

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SCALE: As Noted Date: August 2010

SHEET No. 2 OF 2 SHEETS