

GENERAL NOTES:

1. Azimuths are referred to Opihilala Trig. Station.
2. B.M. Elevations are referred to Mean Sea Level.
3. Install $\pm$ Monuments along center line of Right-of-Way as staked by the Engineer.
4. All fences, within Right-of-Way, to be abandoned shall be removed as directed by the Engineer. (Incidental to Roadway Excavation).
5. Existing pavements, within Right-of-Way, to be abandoned shall be scarified and graded. (Incidental to Roadway Excavation).
6. Electric and Telephone poles shall be relocated by others.
7. Houses within Right-of-Way shall be relocated by others.
8. Where the existing water lines are disturbed by the new construction they shall be relocated and/or lowered as shown on the plans or as directed by the Engineer.
9. Construct furrow ditches where shown on plans or where directed by the Engineer.
10. ReflectORIZED Delineators shall be spaced 200' apart. For details see sheet #5954.2

$\pm$ Future Construction

Right-of-Way Symbols

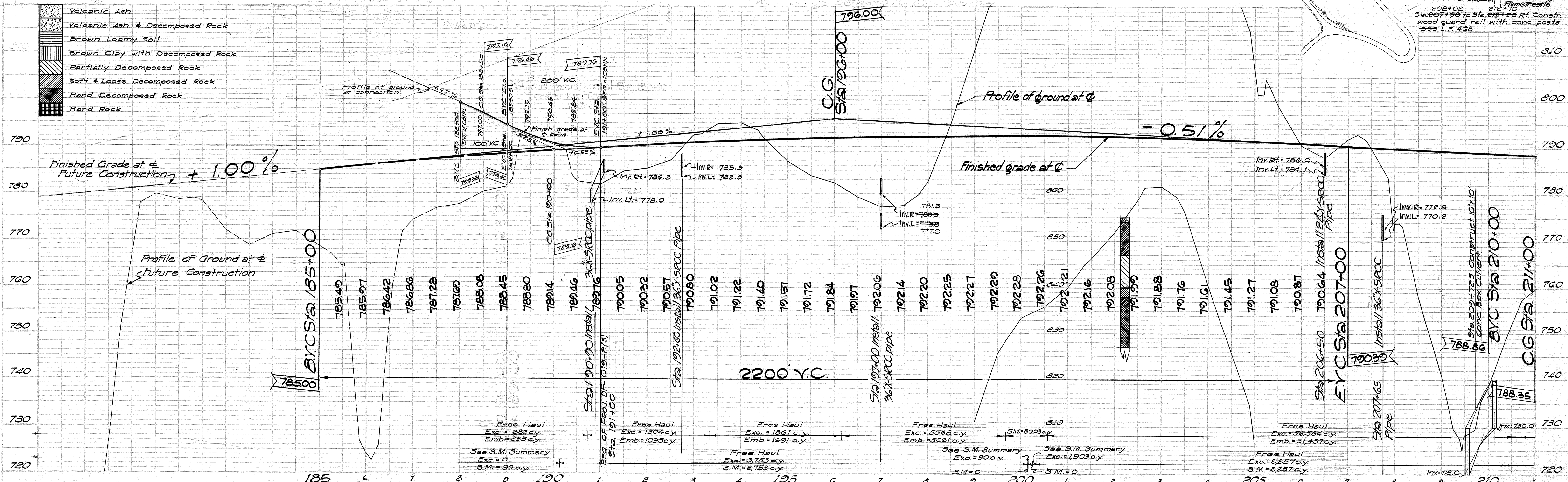
- No vehicular access permitted.
- Vehicular access permitted

Note to Contractor

The data shown on these soil profile sheets are for design purpose only and are intended for the convenience of the Engineer in the control of earthwork. The borings were carefully made and are believed to be reliable, but the Engineer does not guarantee the accuracy of same. The Contractor is hereby advised and will be presumed to have made his own investigation on the site prior to submission of his bid. The Territory will not be responsible for the data shown on this sheet.

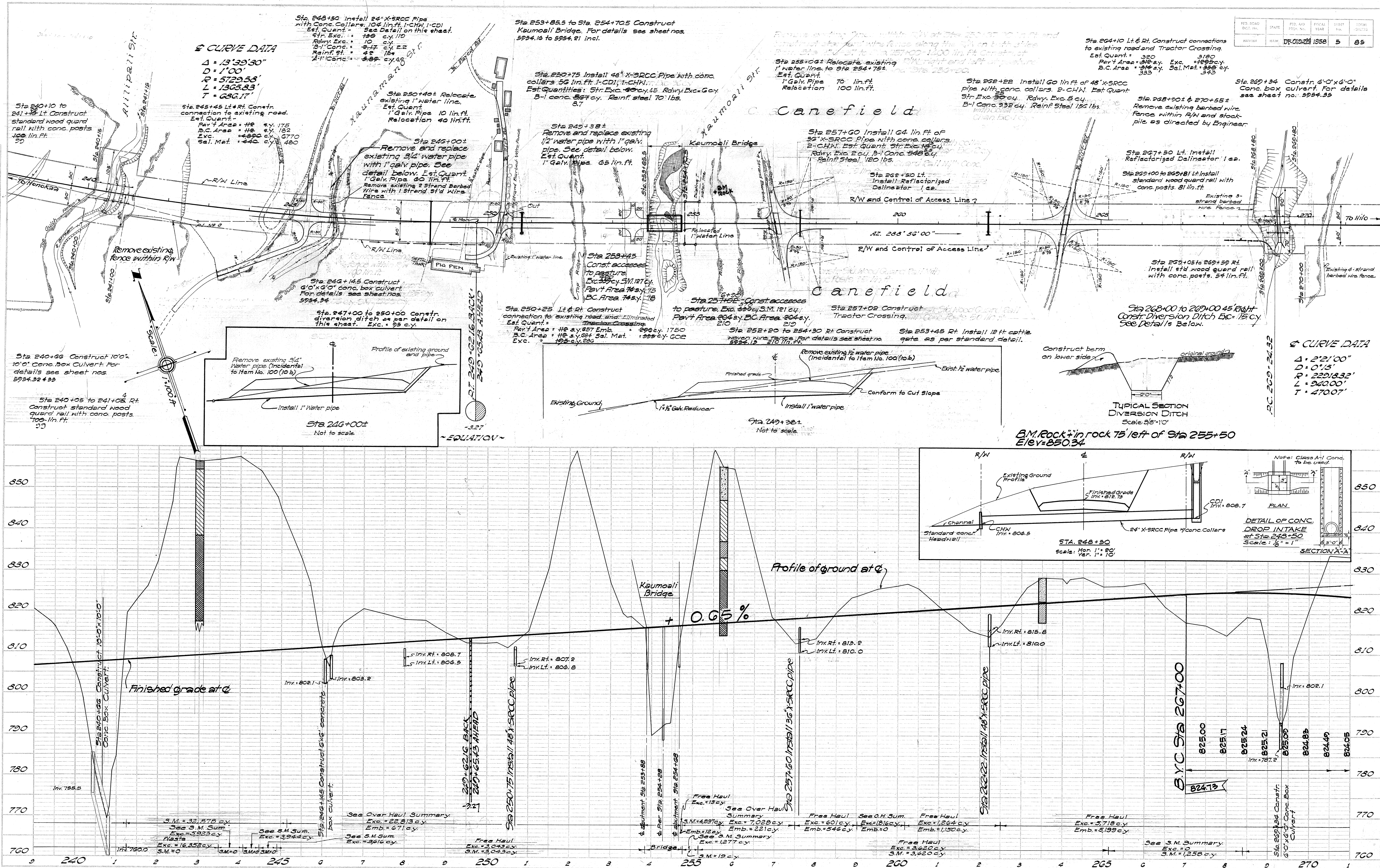
LEGEND

- Volcanic Ash
- Volcanic Ash & Decomposed Rock
- Brown Loamy Soil
- Brown Clay with Decomposed Rock
- Partially Decomposed Rock
- Soft & Loose Decomposed Rock
- Hard Decomposed Rock
- Hard Rock



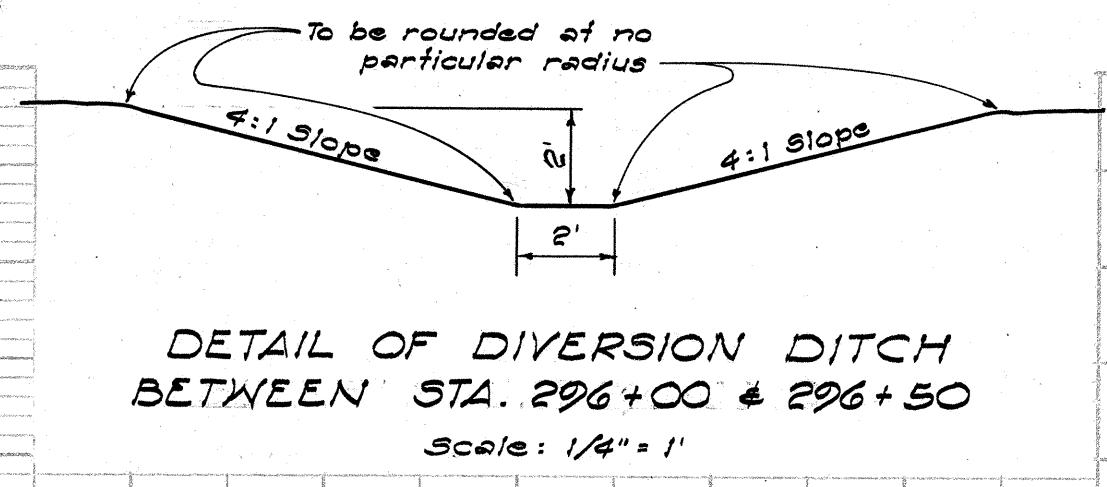
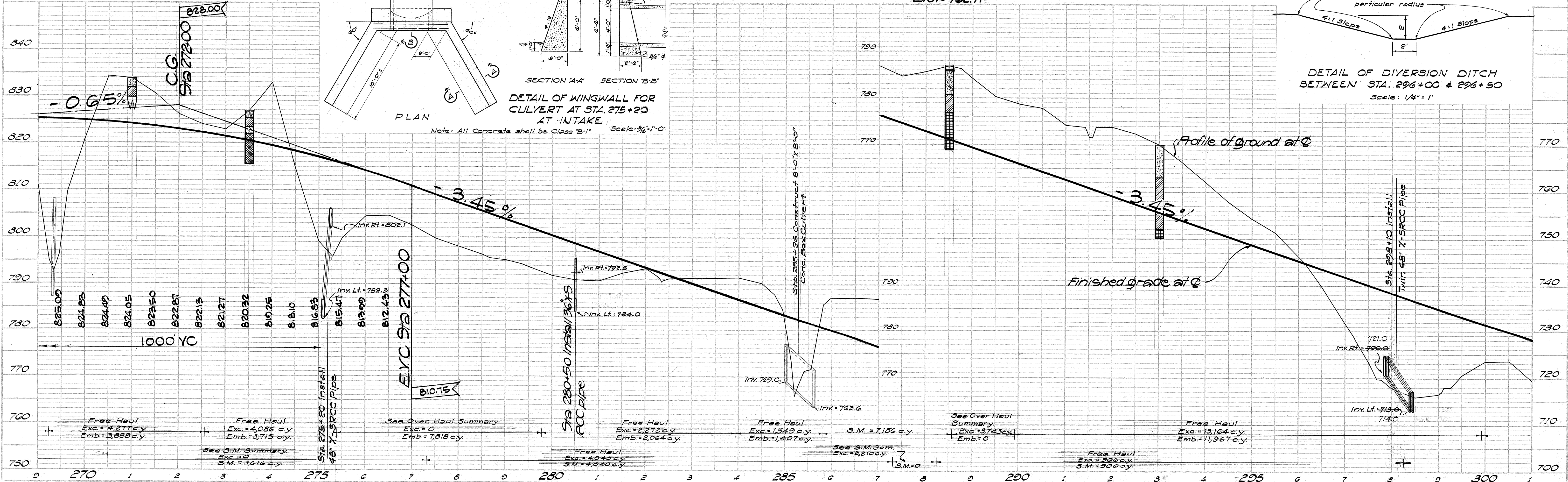
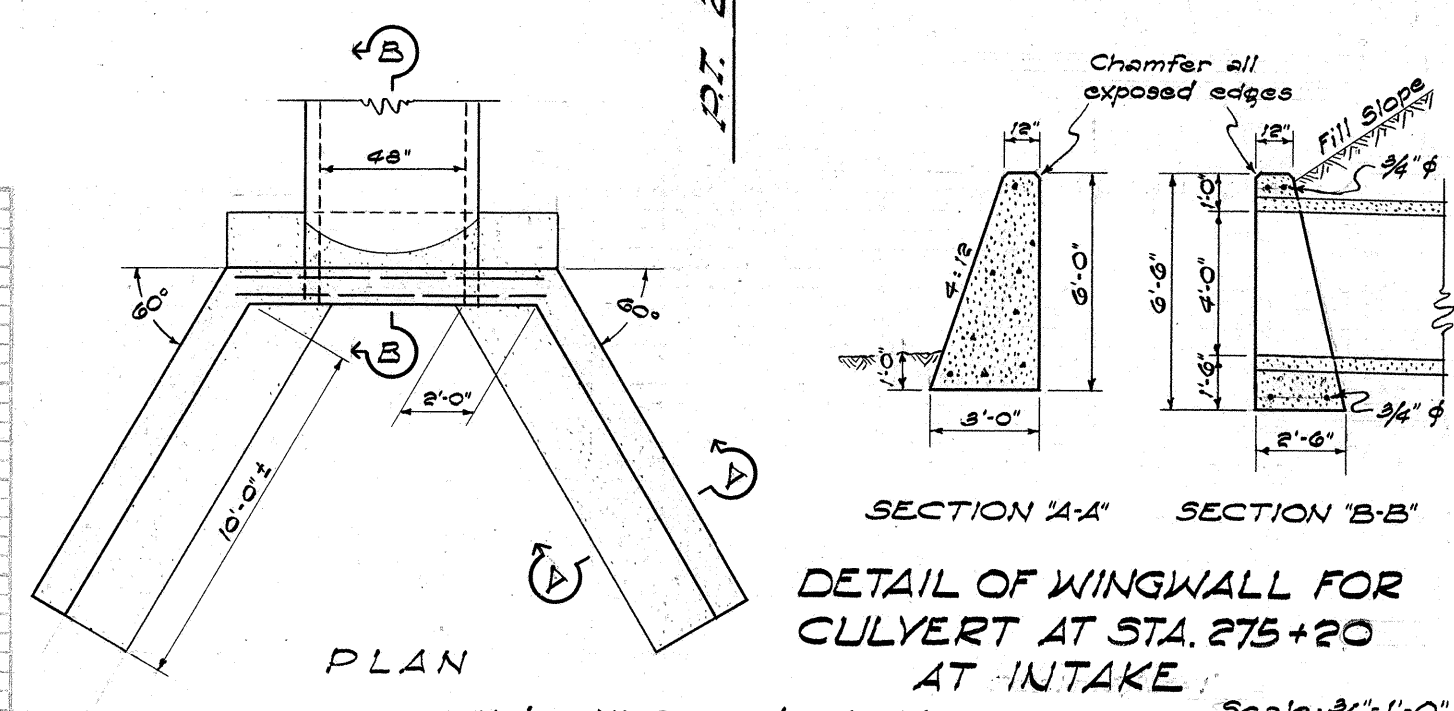
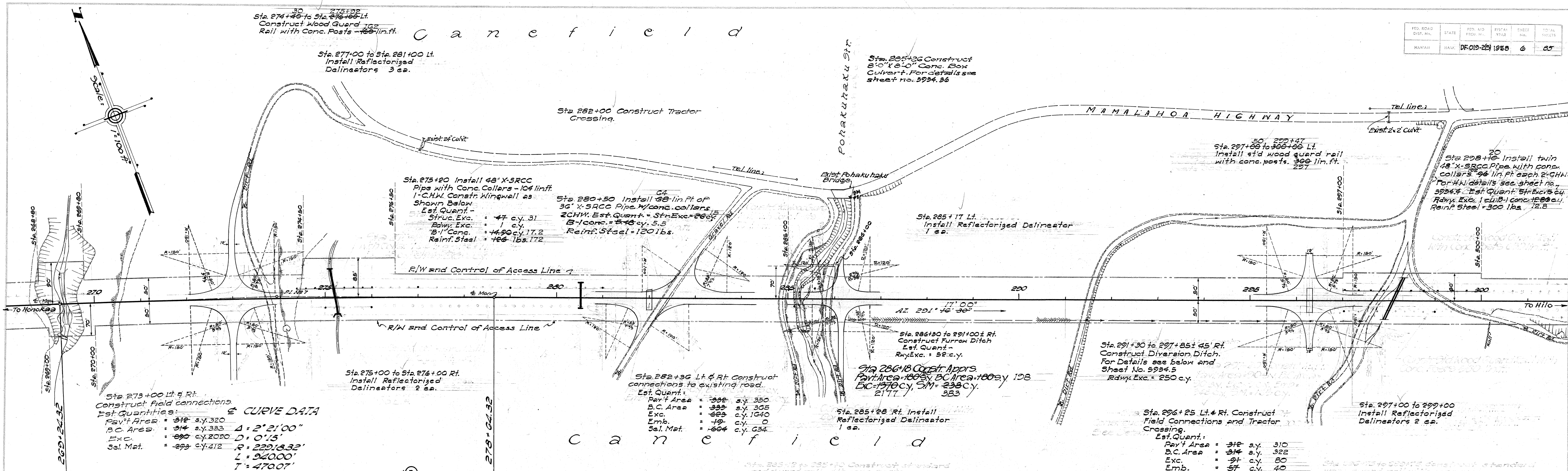
PLAN	SURVIVED	SY	DATE
NOTE BOOK	PLOTTED		
NO.	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		

PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	GRADES CHECKED		
	B. M.S. NOTED		
	STRUCTURE NOTATIONS		

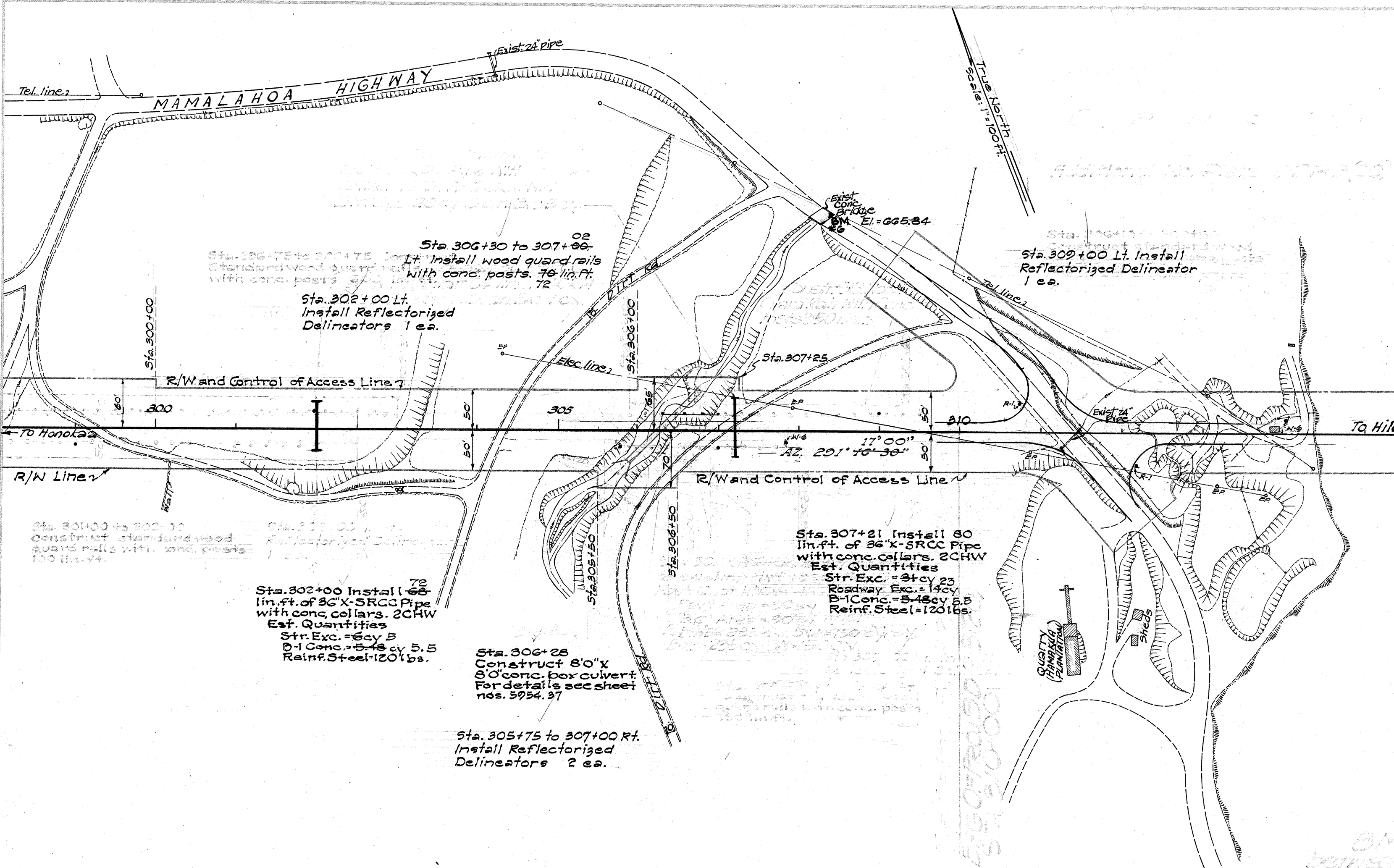


DATE: _____
BY: _____
SURVEYED: _____
PLOTTED: _____
NOTE BOOK: _____
ALIGNMENT CHECKED: _____
RT. OF WAY CHECKED: _____
NO. _____

DATE: _____
BY: _____
SURVEYED: _____
PLOTTED: _____
NOTE BOOK: _____
S.M. NOTED: _____
STRUCTURE NOTATIONS CHECKED: _____
NO. _____

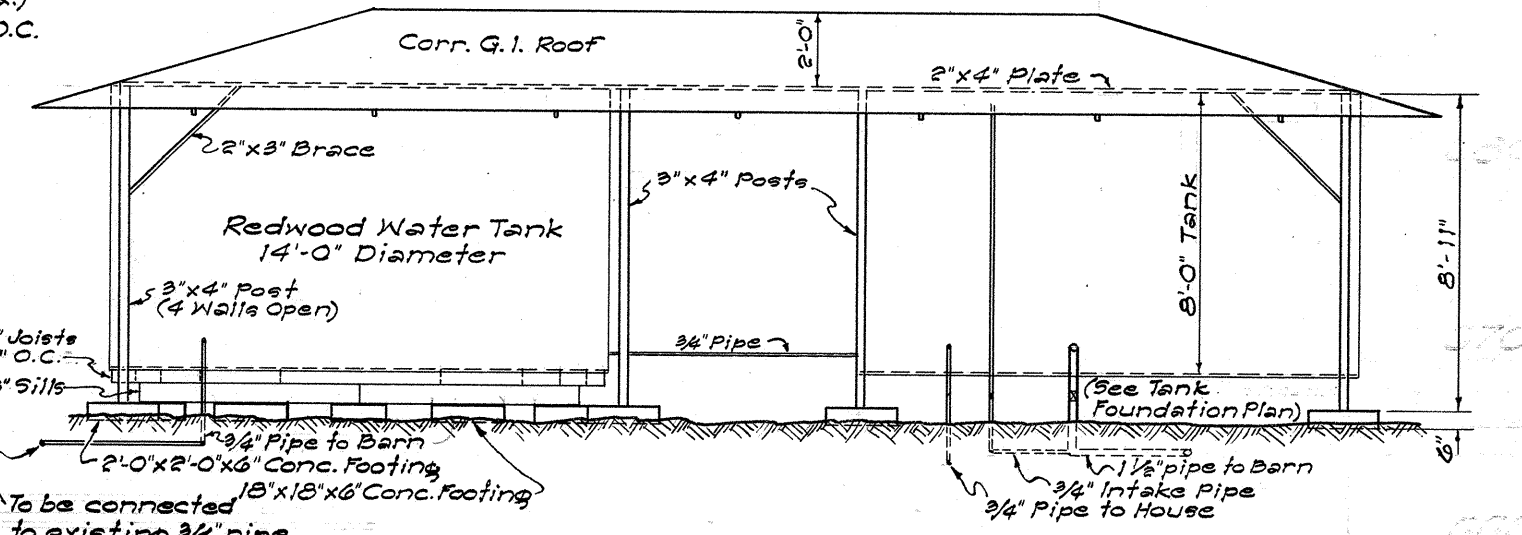
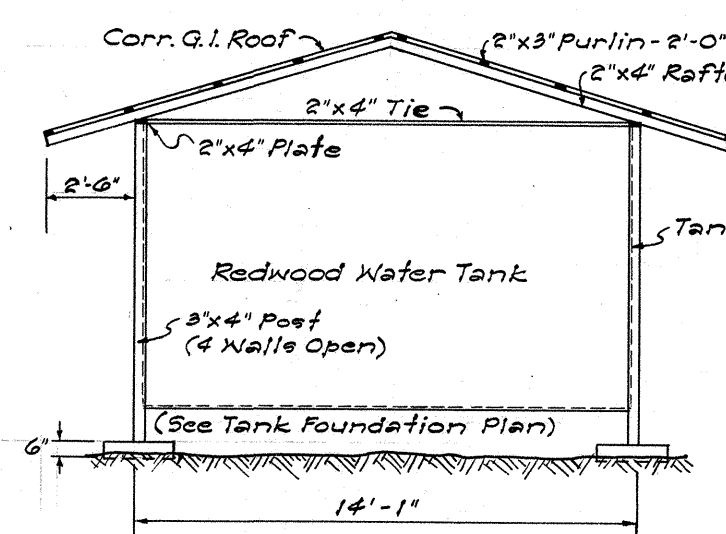
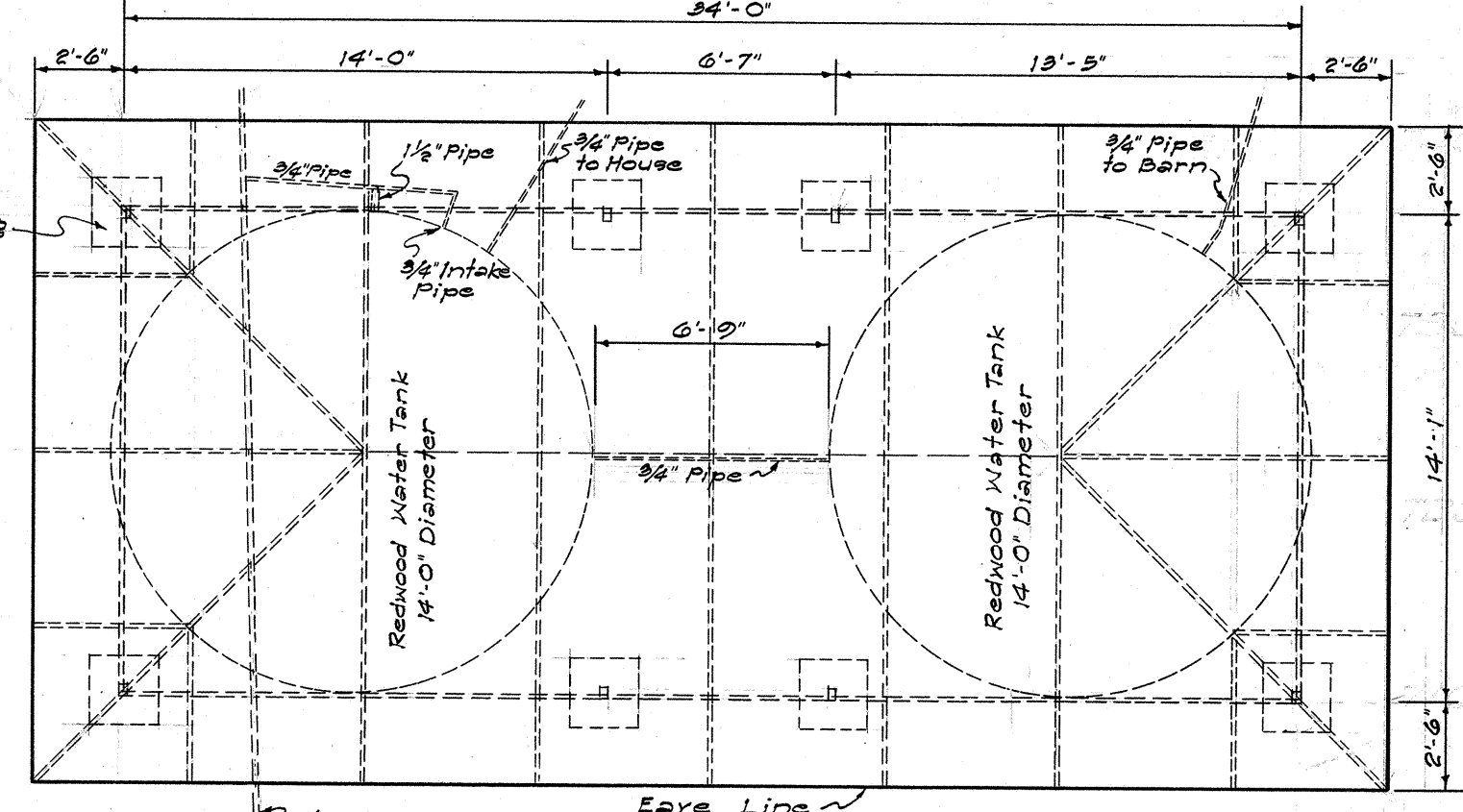
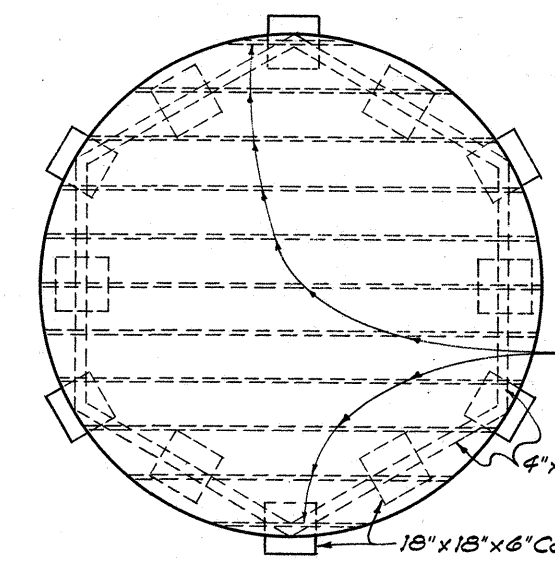
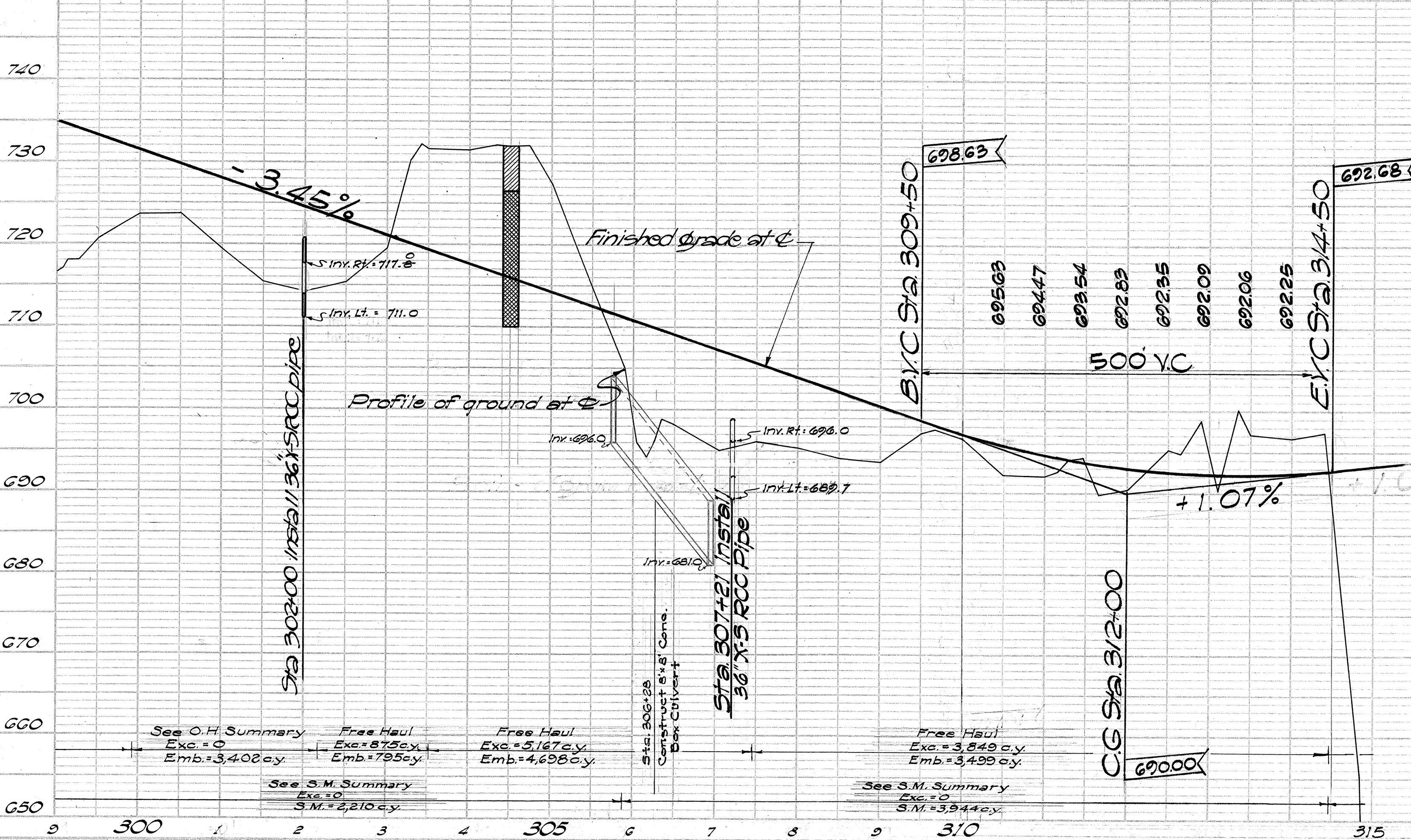


PLAN	DATE
SURVEYED	
NOTE BOOK	
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	
NO.	



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	DF-019-25	1958	7	85

PROFILE	DATE
SURVEYED	
NOTE BOOK	
GRADES CHECKED	
STRUCTURE NOTATION CHNG.	
NO.	



DETAILS OF EXISTING WATER TANKS & LINES AT STA. 236+50±
Scale: 3/8" = 1'-0"

5954.7

DATE	BY	REVISION
		1. SURVEYED
		2. PLOTTED
		3. NOTE BOOK
		4. ALIGNED CHECKED
		5. BY OF WAT. CHECKED
		6. NO.

DATE	BY	REVISION
		1. SURVEYED
		2. PLOTTED
		3. NOTE BOOK
		4. GRADES CHECKED
		5. B.M. NOTED
		6. STRUCTURE NOTED AS CHD.
		7. NO.

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HA	DF03-29	1958	8	85

Sta. 311+40 Construct connection to Mamalahoa Highway. See Detail Sht. No. 5954.14

EST. QUANT.
 Pav't Area 4080 sq. yd.
 B.C. Area 425 sq. yd.
 Exc. 715 cy
 Emb. 490 cy
 Sel. Mat. 994 cy

Sta. 311+40 Install 48" X-SRCC Pipe w/conc. collars - 72 lin. ft. - ECDL - 1 CHN

EST. QUANT.
 Str. Exc. 88 cy
 B-1 Conc. 8,67 cy
 Steel 78 lbs

Sta. 326+50 Lt. Construct field connection and Tractor Crossing.

EST. QUANT.
 Pav't Area 312 sq. yd.
 B.C. Area 314 sq. yd.
 Exc. 455 cy
 Emb. 92 cy
 Sel. Mat. 310 cy

Sta. 336+80 Rt. Fill existing cesspool and construct new cesspool and relocate 4" sewer lines as shown.

Sta. 334+55 Lt. Rt. Construct connection to Plantation Road

EST. QUANT.
 Pav't Area 314 sq. yd.
 B.C. Area 314 sq. yd.
 Exc. 455 cy
 Emb. 92 cy
 Sel. Mat. 310 cy

Sta. 334+55 Install 36" X-SRCC Pipe w/conc. collars - 124 lin. ft. - 1 CHN

EST. QUANT.
 Str. Exc. 265 cy
 B-1 Conc. 541 cy
 Reinf. Steel 60 lbs

Sta. 331+90 Install 48" X-SRCC Pipe w/conc. collars - 104 lin. ft. - 2 CHN

EST. QUANT.
 Str. Exc. 149 cy
 Roadway Exc. 1 cy
 B-1 Conc. 282 cy
 Reinf. Steel 136 lbs

Sta. 334+00 Lt. Install ReflectORIZED Delineator 4 ea. Eliminated

Sta. 335+00 to 341+00 Lt. Install ReflectORIZED Delineators 4 ea.

Sta. 327+35 Install 36" X-SRCC Pipe w/conc. collars - 96 lin. ft. - 2 CHN

EST. QUANT.
 Str. Exc. 24 cy
 Roadway Exc. 1 cy
 B-1 Conc. 548 cy
 Reinf. Steel 120 lbs

Sta. 326+50 48" Rt. Install 24" X-SRCC Pipe with Conc. Collars - 52 lin. ft.

EST. QUANT.
 Str. Exc. 46 cy
 B-1 Conc. 2,76 cy
 Reinf. Steel 84 lbs

Sta. 316+50 to 341+00 Rt. Constr. Furrow Ditch.

Est. Quant. Rwy. Exc. = 272 cy.

Sta. 324+00 to 327+12 48" Rt. Constr. Diversion Ditch. See Detail Below.

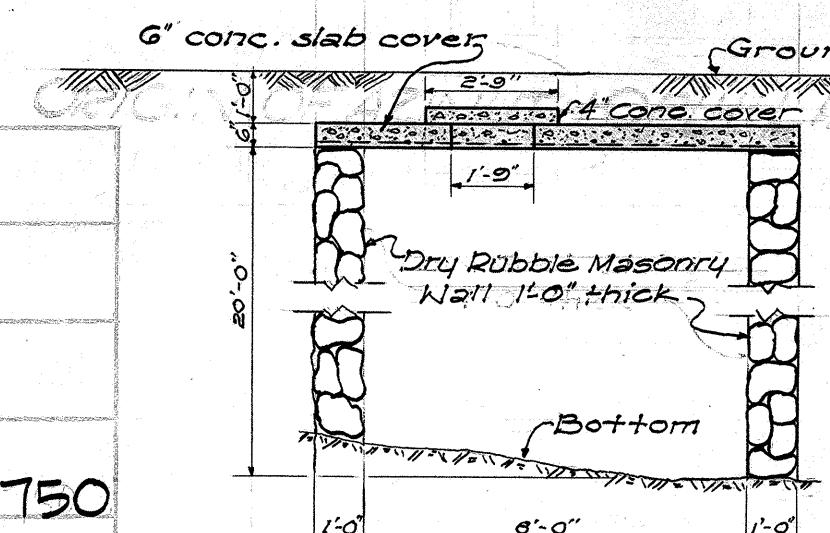
Est. Quant. Roadway Exc. = 289 cy.

Sta. 314+46.875 to 316+31.25 Construct Waipunahina Bridge

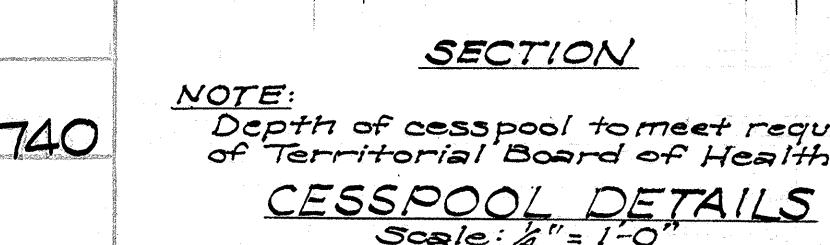
For details see sheet nos. 5954.22 to sheet no. 5954.29 incl.

Sta. 311+40 Remove existing 24" Pipe Culvert (Incidental to Rdwy. Exc.)

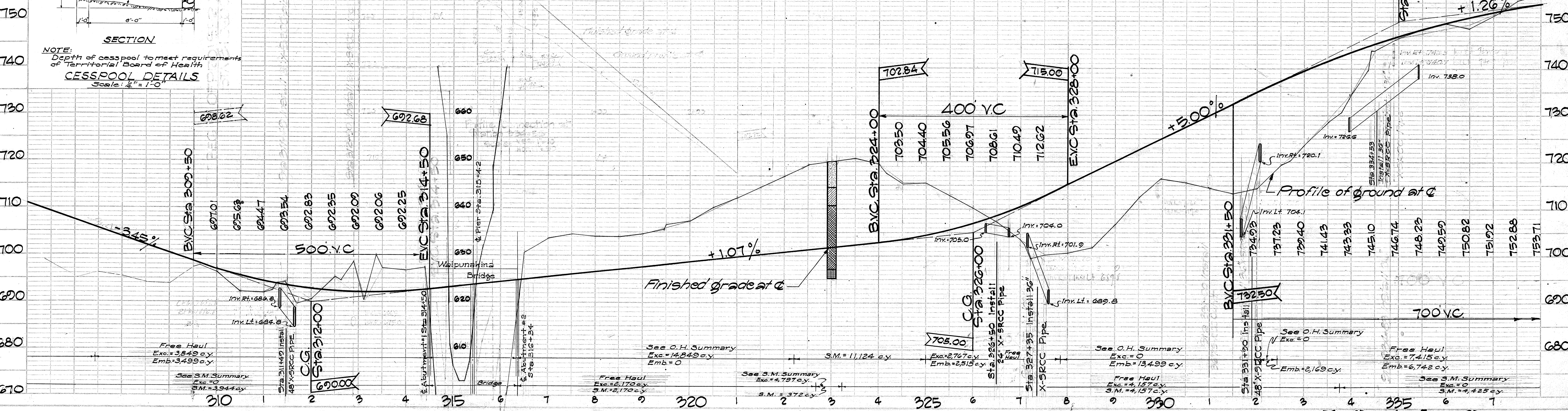
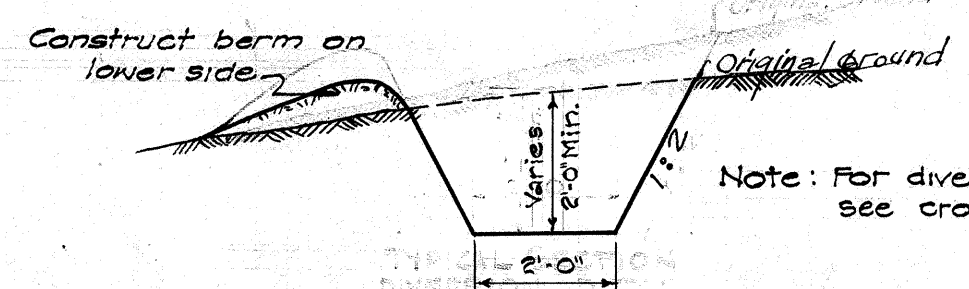
PLAN OF SLAB REINFORCING



SECTION

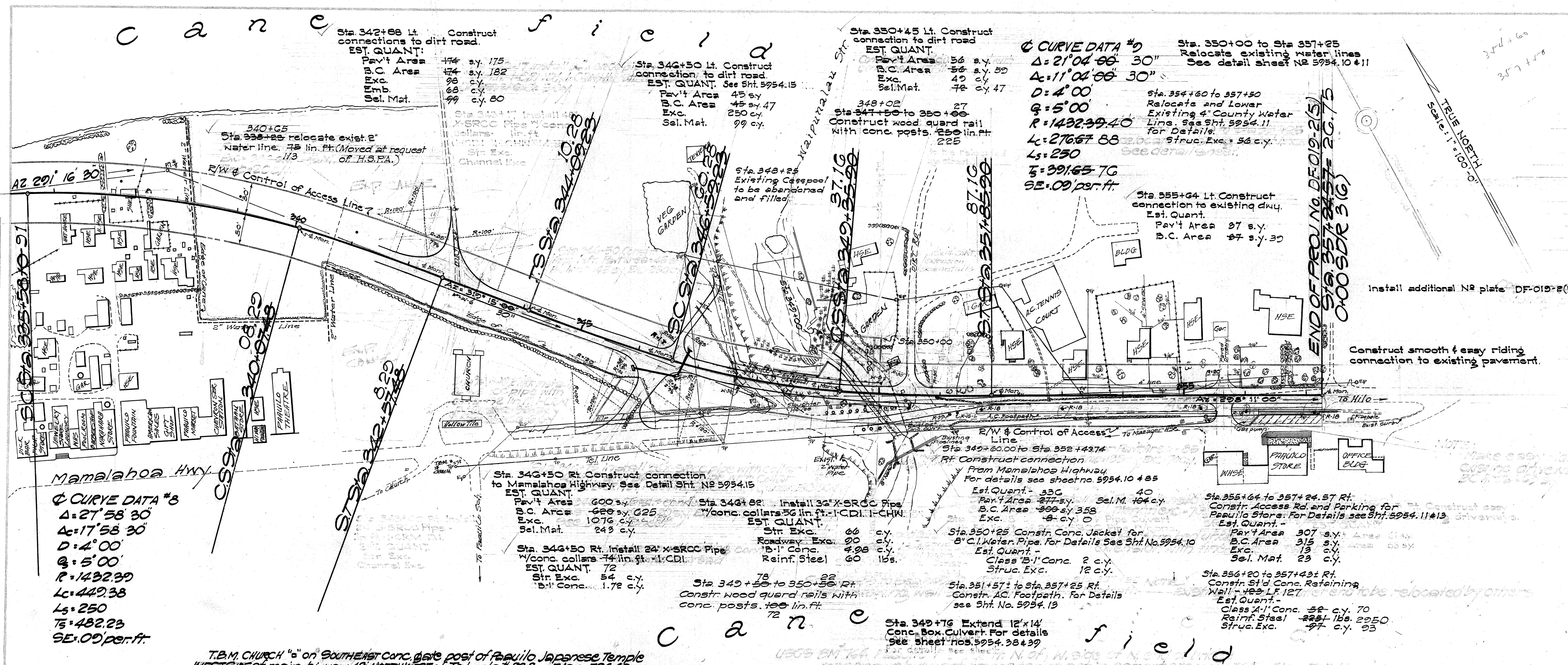


DETAIL OF DIVERSION DITCH



PLAN
SURVEYED
PLOTTED
NOTE BOOK
ALIGNMENT CHECKED
FT. OF WAY CHECKED
NO.

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
ELEVATION CHECKED
STRUCTURE NOTED
NO.



POINTS OF ACCESS		
STATION	WIDTH OF ACCESS	
	Left	Right
193 + 10	77.47'	80.00'
208 + 10	58.11'	57.43'
220 + 33	60.00'	60.00'
229 + 46	50.00'	50.00'
243 + 43	39.98'	40.01'
250 + 23	40.00'	40.00'
253 + 43	40.00'	40.00'
257 + 02	40.00'	40.00'
264 + 10	50.00'	50.00'
273 + 00	50.11'	49.89'
282 + 36	60.00'	60.00'
286 + 18	40.00'	40.00'
293 + 23	60.00'	60.00'
311 + 49	100.00'	100.00'
326 + 30	50.00'	50.00'
336 + 33	42.16'	40.01'
342 + 28	40.00'	None
343 + 50	43.33'	100.00'
349 + 50	None	133.00'
350 + 43	40.01'	None
355 + 64	20.00'	None
356 + 00	None	245.00'

SUMMARY OF REGULATORY AND WARNING SIGNS		
TYPE	MESSAGE	QUANTITY
R-1	STOP	12
R-16-L	ONE WAY	1
R-18	NO PARKING ANY TIME	5
R-39	YIELD RIGHT OF WAY	1
W-2-L		1
W-6		12
W-36	MERGING TRAFFIC	1
W-42		4
TOTAL		37

OVERHAUL SUMMARY					
FROM STA.	TO STA.	NET DIST.	VOLUME	STA. YD.	MI. YD.
235 + 12.85	223 + 23.06	1.00 Sta.	2,781	18,684	
248 + 06.99	211 + 60.43	0.52 MI.	22,074		11,478
256 + 14.44	277 + 85.57	0.22 MI.	6,783		1,423
259 + 68.73	273 + 61.49	5.99 Sta.	1,816	10,878	
289 + 21.48	301 + 21.99	2.00 Sta.	3,743	7,486	
312 + 06.19	330 + 37.02	0.41 Sta.	15,849	6,068	
343 + 70.43	332 + 26.14	1.44 Sta.	1,239	2,792	
Free Haul			134,408		
SUB-TOTALS			215,393	45,828	12,971

SELECT MATERIAL SUMMARY					
FROM STA.	TO STA.	NET DIST.	VOLUME	STA. YD.	MI. YD.
200 + 13.89	189 + 81.11	0.33 Sta.	90	30	
200 + 24.72	212 + 82.20	2.57 Sta.	1,903	4,891	
236 + 71.73	220 + 62.97	6.09 Sta.	4,662	28,391	
243 + 78.46	349 + 26.18	1.82 MI.	5,923		10,780
244 + 28.14	310 + 89.20	1.07 MI.	3,944		4,220
244 + 89.46	272 + 83.23	0.34 MI.	3,616		1,229
255 + 03.38	266 + 88.58	1.85 Sta.	1,258	2,327	
287 + 81.83	301 + 04.73	3.23 Sta.	2,210	7,138	
323 + 21.76	338 + 44.42	5.23 Sta.	4,423	23,143	
337 + 18.00	None		1,447		
342 + 2200	None		16,352		
Free Haul			30,074		
SUB-TOTALS			75,904	65,920	16,229
OVERHAUL SUB-TOTALS			215,393	45,828	12,971
GRAND TOTALS			291,297	111,748	29,200

