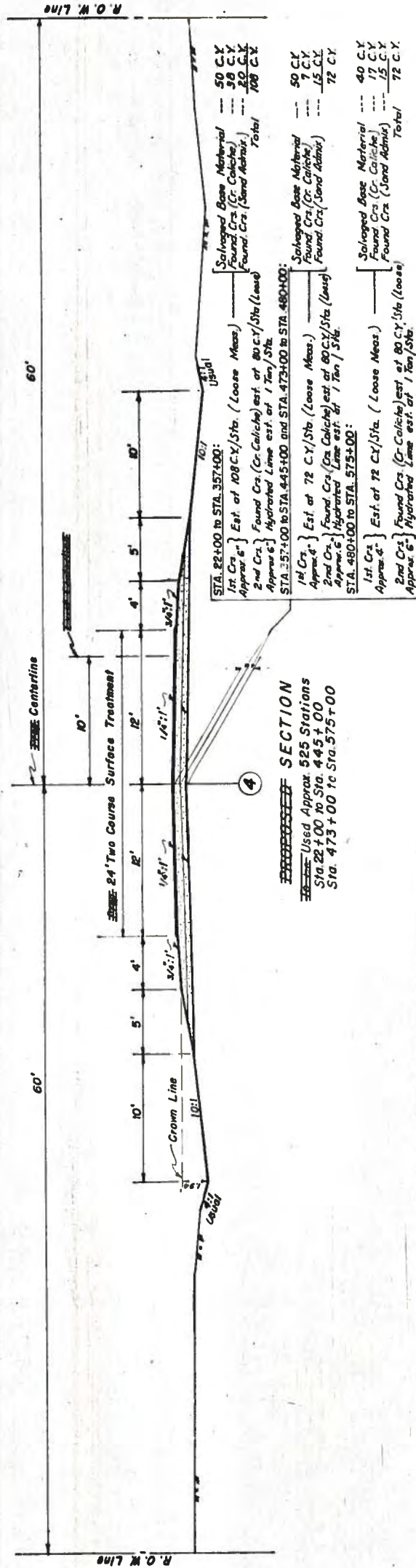


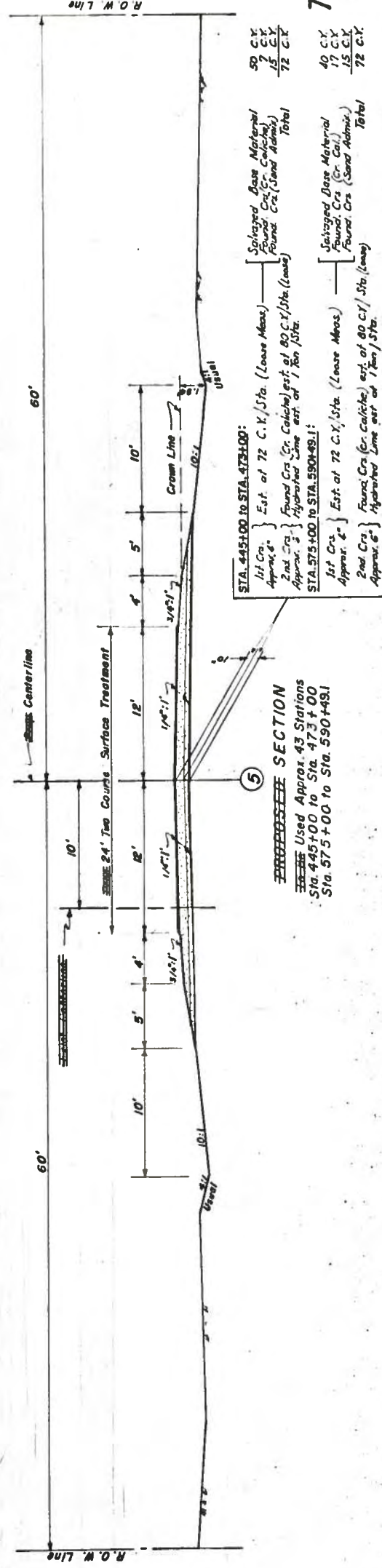
~~PROPOSED~~ SUBGRADE SECTION

~~Rate~~ Used Approx. 568 Stns.
Sta. 22 + 00 to Sta. 590 + 49.1



~~PROPERTY~~ SECTION

~~Rate~~ Used Approx. 525 Stations
Sta. 22+00 to Sta. 445+00
Sta. 473+00 to Sta. 575+00



~~PROPERTY~~ SECTION

~~To be~~ Used Approx. 43 Stations
Sta. 445+00 to Sta. 473+00
Sta. 575+00 to Sta. 590+49.1

GENERAL NOTES

The top 6" of Found Crs. ~~shall be~~ stabilized by the addition of 1.00 % (by weight) of Hydrated Lime.

The Two Course Surface Treatment ~~shall be~~ applied to the finished base as soon as is practical after the curing of the lime stabilized base has been completed.

It is intended that the Found Crs. ~~shall be~~ placed and surfaced in increments of length to preclude the necessity of reworking the lime stabilized base after curing has been completed.

In the event that circumstances are such as to require reworking of the lime stabilized base, additional time as determined by the Engineer, shall be added and mix-
ed with the base as directed.

The use of a mechanical road mixer ~~is~~ required to obtain proper mixture of the base material and hydrated Lime. The mechanical road mixer will also be required for the mixing of the existing base with new Colicrete and Sand Admixture. After mixing with the mechanical road mixer, the material ~~is~~ bladed into windrows prior to compaction of layers as specified.

TYPICAL CROSS SECTIONS

8108 L3HS

FILE NO	STATE	STATE PRODUCT NO.	UNIT
6	TEXAS	R-989-1-7	3
STATE	COUNTY	CASE	MACGILLIS
16	Jim Wells	989	7 FM 624

STRUCTURE SUMMARY (CULVERTS)

PLAN-PROFILE SHEET NO.	STATION	SIZE		DESIGN		EXTENSION		DESCRIPTION	Unclass. Struct. Excav. Cu. Yd.	Class A Concrete (Headwells) Cu. Yd.	Reinf. Steel Lb.	18" R.C. Pipe Class III Lin. Ft.	24" R.C. Pipe Class III Lin. Ft.	30" R.C. Pipe Class III Lin. Ft.	36" R.C. Pipe Class III Lin. Ft.	CGM Pipe Arch Des. No. 2 Lin. Ft.	Relay Curb Pipe - 18" Dia. B Under Curb Inlet Lin. Ft.	Class B Concrete (Curb Inlet) Cu. Yd.	Class A Concrete (Headwells) Cu. Yd.
		Existing	Proposed	Barrel	Headwall	Left	Right												
	2+93		2'-CGM Pipe Arch, Des. No. 2 x 70'	Spl.	CH-7-AC-N R.C. Curb Inlet Lt.			CGM Pipe Arch, Des. No. 2, CH-7-AC-N Hdwall Rt., Curb Inlet Lt.	43	108	329					140			182
	25+46	3'-30" x 40" R.C. Pipes, Cam. Stab. Hdwalls.	3'-30" x 48" R.C. Pipes	Spl.	CH-IIA	4'	4'	R.C. Pipes, CH-IIA Headwalls	9	626	403			24					
	36+98	24"x36" R.C. Pipe Arch	4'-24" x 48" R.C. Pipes	Spl.	CH-IIA	16'		Exist. R.C. Pipe Ext. 16' Lt. using 12" new pipe & 4' relaid from Rt. End, 3' addit. pipes added, CH-IIA Headwalls.	64	535	316			24					
	30+Lt. 40+51.4	15' x 24" R.C. Pipe	15' x 24" R.C. Pipe					Exist. Pipe to be relaid from 20' Lt. Sta. 40+00.	4										
	32+Rt. 48+15	2'-12" x 15" Conc. Pipes	2'-12" x 15" Conc. Pipes					Exist. Pipes to be relaid from 49' Rt.	4										
	32+Lt. 50+72	2'-15" x 16" Conc. Pipes	2'-15" x 16" Conc. Pipes					Exist. Pipes to be relaid from 29' Lt.	5										
	32+Rt. 50+80	2'-12" x 15" Conc. Pipes	2'-12" x 15" Conc. Pipes					Exist. Pipes to be relaid from 51' Rt.	4										
	55+82.7	CGM Pipe Arch, Des. 2-36"-O, CH-9 Hdwall.	4'-CGM Pipe Arch, Des. 2-44"-O, CH-7-AC-N Hdwall.	Spl.	CH-7-AC-N	8'		Exist. Pipe to be relaid & extended 8' on Lt. end, 3' addit. pipes added, CH-7-AC-N Headwalls	30	326	380					220+77.9			
	31+Lt. 70+72	12' x 27" Conc. Pipe	12' x 27" Conc. Pipe					Exist. Pipe to be relaid from 24' Lt.	4										
	32+Lt. 19+52	2'-15" x 18" Conc. Pipes	2'-15" x 18" Conc. Pipes					Exist. Pipe to be relaid from 27' Lt.	6										
	47+Rt. 19+55	18' x 32" Conc. Pipe	18' x 32" Conc. Pipe		CH-IIA			Exist. Pipe to be relaid from 47' Rt., CH-IIA Headwalls	16	219	165								
	33+Lt. 44+58	15' x 24" Conc. Pipes	15' x 24" Conc. Pipes					Exist. Pipes to be relaid from 49' Rt.	14										
	43+Rt. 156+90	2'-15" x 24" Conc. Pipes	2'-15" x 24" Conc. Pipes					Exist. Pipes to be relaid from 49' Rt.	14										
	33+Lt. 44+58	15' x 24" Conc. Pipes	15' x 24" Conc. Pipes					Exist. Pipes to be relaid from 49' Rt.	14										
	190+78	24"x36" R.C. Pipe Arch, Des. 2-14A-01	24"x36" R.C. Pipes	Spl.	CH-IIA Lt.	16'		R.C. Pipe CH-IIA Hdwall Lt., Exist. M.R.M. Hdwall Rt.	3	158	112								
	228+20	6'-36" x 36" R.C. Pipe	6'-36" x 36" R.C. Pipes	Spl.	CH-IIA/Lt. & R.	16'		R.C. Pipe, CH-IIA/Lt. & R., Exist. M.R.M. Hdwall Lt.	3	691	465			336+99.8					
	31+Rt. 251+63	18' x 15" Conc. Pipe	18' x 15" Conc. Pipe					Exist. Pipe to be relaid from 47' Rt.	3										
	31+Lt. 1268+82	2'-15" x 32" Conc. Pipes	2'-15" x 32" Conc. Pipes					Exist. Pipes to be relaid from 26' Lt.	9										
	31+Rt. 287+21	15' x 16" Conc. Pipe	15' x 16" Conc. Pipe					Exist. Pipes to be relaid from 49' Rt.	3										
	305+47	3'-36" x 36" R.C. Pipe Arch, Des. 2-14A-01	3'-36" x 36" R.C. Pipes	Spl.	CH-IIA Lt.	16'		R.C. Pipe, CH-IIA Hdwall Lt., Exist. M.R.M. Hdwall Rt.	7	468	253								
	321+92	4'-36" x 36" R.C. Pipe	4'-36" x 36" R.C. Pipes					Exist. Pipes to be relaid from 26' Lt.	9										
	337+46	2'-12" x 15" Conc. Pipes	2'-12" x 15" Conc. Pipes					Exist. Pipes to be relaid from 49' Rt.	1	542	283								
	358+13	3'-36" x 36" R.C. Pipe	3'-36" x 36" R.C. Pipes					Exist. Pipes to be relaid from 49' Rt.	1	542	283								
	383+53	4'-36" x 36" R.C. Pipe	4'-36" x 36" R.C. Pipes					Exist. Pipes to be relaid from 49' Rt.	1	542	283								
	405+76	2'-12" x 15" Conc. Pipes	2'-12" x 15" Conc. Pipes					Exist. Pipes to be relaid from 49' Rt.	1	542	283								
	421+14	2'-36" x 36" R.C. Pipe	2'-36" x 36" R.C. Pipes					Exist. Pipes to be relaid from 49' Rt.	1	542	283								
	445+48	2'-36" x 36" R.C. Pipe	2'-36" x 36" R.C. Pipes					Exist. Pipes to be relaid from 49' Rt.	1	542	283								
	464+56	2'-36" x 36" R.C. Pipe	2'-36" x 36" R.C. Pipes					Exist. Pipes to be relaid from 49' Rt.	1	542	283								
	478+55	2'-36" x 36" R.C. Pipe	2'-36" x 36" R.C. Pipes					Exist. Pipes to be relaid from 49' Rt.	1	542	283								
	495+53	2'-36" x 36" R.C. Pipe	2'-36" x 36" R.C. Pipes					Exist. Pipes to be relaid from 49' Rt.	1	542	283								
	524+05	30" Lt. 182+49	2'-15" x 18" CGM Pipe Arch					Exist. Pipe to be relaid from 30' Lt.	2	194	127								
	537+19	2'-24" x 36" R.C. Pipe Arch	2'-24" x 36" R.C. Pipes					R.C. Pipes, CH-IIA Hdwall Lt., Exist. M.R.M. Hdwall Rt.	2	194	127								
	564+18	24" x 36" R.C. Pipe	24" x 36" R.C. Pipes					Exist. Pipes to be relaid from 49' Rt.	5	158	112								
	31+Rt. 190+26	12' x 21" Conc. Pipe	12' x 21" Conc. Pipe					Exist. Pipes to be relaid from 49' Rt.	3										
	550+178	3'-24" x 36" R.C. Pipes, Cam. Stab. Hdwall.	3'-24" x 36" R.C. Pipes		CH-7-AC-N R.C. Pipe Arch	36'	8'	R.C. Pipes, CH-7-AC-N Hdwall Lt. and Rt.	10										
	37+Lt. 235+11	2'-18" x 20" Conc. Pipe	2'-18" x 20" Conc. Pipe					Existing Pipe to be relaid from 20' Lt.	8										
TOTALS									350	7394	4850			24					

* See Culvert Cross Section Sheet No. 40 for Reinforcing Steel required.

* 6.34 CY Curb Conc. Riprap Used To Tie New Curb To Existing Sidewalk.

* 810.66

524.36

317.90

465.42

437.33

24

182

182

BASIS OF ESTIMATE

ITEM	DESCRIPTION	RATE		ESTIMATED QUANTITY		UNIT
		Estimated	Final	Final	Total	
202	Sprinkling (Emb. & Subgr.)	4.00	3.202 M. Gal./Sta.	1,886.95	1,886.95	M. Gal.
202	Sprinkling (New Catch B Sand Adm.)	20.00	57.583 Gal./C.Y.	4,413.40	4,413.40	M. Gal.
202	Sprinkling (Item 207)	20.00	0.54 Gal./C.Y.	155.95	155.95	M. Gal.
203	Rolling (Foundation Course)	20.00	0.1587 Hr./Sta.	93.5	93.5	Hour
Sp.	Rolling, Grid (Item 207)	20.00	0.1434 Hr./Sta.	84.5	84.5	Hour
203A	Rolling (Subgrade)	20.00	0.8374 Hr./Sta.	493.5	493.5	Hour
203B	Rolling (New Catch B Sand Adm.)	20.00	24.78 Hr./Mi.	276.5	276.5	Hour
203B	Rolling (Item 207)	20.00	72.925 CY/Hour	1,051.0	1,051.0	Hour
113B Sp.	Scrapers Work	20.00	36.0 CY/Hour	26.6	26.6	Hour
Sp.	Hydrated Lime	20.00	170.102 CY/Station	2,586.70	2,586.70	Ton
112	Blading	20.00	10.3 % of Top 6"	621.595	621.595	Ton

* Foundation Course (Cr. Caliche) / Weight Estimated at 2500 Lb./CY.

Blading used at county road intersections to improve drainage as directed by the Engineer.

OLD STRUCTURES TO BE REMOVED

STATION	DESCRIPTION
3+07	18"x88" Concrete Pipe
23 Rt. 3+76	15"x72" Concrete Pipe
29 Lt. 6+80	15"x96" Concrete Pipe w/ Grate Inlets and 2 Manholes with Rings and Covers
10+21	17"x118" CGM Pipe Arch with Reinf. Conc. Headwells
21 Rt. 4+18	21"x180" Conc. Box Culv.
10+58	17"x152" CGM Pipe Arch with Reinf. Conc. Headwells
30 Rt. 6+50	4'x2'60" Conc. Box Culv.
1+90	18"x36" CGM Pipe
30 Lt. 40+51	15"x24" Conc. Pipe
30 Lt. 142+81	15"x24" Conc. Pipe
30 Lt. 174+92	12"x18" Conc. Pipe
30 Lt. 182+49	12"x18" Conc. Pipe
Rt. 190+112+35	Old R.R. Signal Light Base Poles

SPECIFICATION DATA	
ITEM 218 Foundation Course (Crushed Caliche & Lime Admixture)	ITEM 218 Foundation Course (Crushed Caliche & Lime Admixture)
Grading Requirements: Passing 2" screen.....100% Retained on 40 mesh sieve.....100%	Grading Requirements: Passing 2" screen.....100% Retained on 40 mesh sieve.....100%
Material passing the 1/2" screen shall be known as "Binder" and that portion of the binder material passing the 40 mesh sieve shall be known as "Soil Binder" and shall meet the following requirements when tested in accordance with TxDOT-53 procedure:	
The liquid limit shall not exceed 55	The liquid limit shall not exceed 55
The plasticity index shall not exceed 18	The plasticity index shall not exceed 18
The linear shrinkage shall not exceed 9%	The linear shrinkage shall not exceed 9%

Note: The linear shrinkage shall be calculated from the volumetric shrinkage of the liquid limit.

SPECIFICATION DATA FOR 18.2 COURSE SURFACE TREATMENT

DESCRIPTION	ONE COURSE		TWO COURSE	
	First	Second	First	Second
Asphalt (Type)	OA-175	OA-175	OA-175	OA-175
Asphalt Rate (Gal./Sq. Yd.)	0.35	0.35	0.35	0.35
Aggregate, Type (Precomp.)	B	B	B	B
Aggregate, Grade	2	2	2	2
Aggregate, Rate (CY/Sq. Yd.)	1.30	1.30	1.30	1.30
Rolling, 203 (Hrs./Mile)	3.07	3.07	3.07	3.07
Rolling, 203B (Hrs./Mile)	3.30	3.30	3.30	3.30
Surface Treatment Area (Sq. Yd.)	158,919	158,919	158,919	158,919

Concrete Structures Shall Retain A Type B Finish.

The Work of Removing Headwells From Existing Pipe Structures Lined Or Relined Shall Not Be Paid For Directly, But Shall Be Considered As Subsidiary To "New Conc. Pipe"

ESTIMATE AND QUANTITY SHEET

EST. NO.	SHEET	STATE	PROJECT
16	JIM WELLS	989	1
17	JIM WELLS	989	2
18	JIM WELLS	989	3
19	JIM WELLS	989	4
20	JIM WELLS	989	5
21	JIM WELLS	989	6
22	JIM WELLS	989	7
23	JIM WELLS	989	8
24	JIM WELLS	989	9
25	JIM WELLS	989	10
26	JIM WELLS	989	11
27	JIM WELLS	989	12
28	JIM WELLS	989	13
29	JIM WELLS	989	14
30	JIM WELLS	989	15
31	JIM WELLS	989	16
32	JIM WELLS	989	17
33	JIM WELLS	989	18
34	JIM WELLS	989	19
35	JIM WELLS	989	20
36	JIM WELLS	989	21
37	JIM WELLS	989	22
38	JIM WELLS	989	23
39	JIM WELLS	989	24
40	JIM WELLS	989	25
41	JIM WELLS	989	26
42	JIM WELLS	989	27
43	JIM WELLS	989	28
44	JIM WELLS	989	29
45	JIM WELLS	989	30
46	JIM WELLS	989	31
47	JIM WELLS	989	32
48	JIM WELLS	989	33
49	JIM WELLS	989	34
50	JIM WELLS	989	35
51	JIM WELLS	989	36
52	JIM WELLS	989	37
53	JIM WELLS	989	38
54	JIM WELLS	989	39
55	JIM WELLS	989	40
56	JIM WELLS	989	41
57	JIM WELLS	989	42
58	JIM WELLS	989	43
59	JIM WELLS	989	44
60	JIM WELLS	989	45
61	JIM WELLS	989	46
62	JIM WELLS	989	47
63	JIM WELLS	989	48
64	JIM WELLS	989	49
65	JIM WELLS	989	50
66	JIM WELLS	989	51
67	JIM WELLS	989	52
68	JIM WELLS	989	53
69	JIM WELLS	989	54
70	JIM WELLS	989	55
71	JIM WELLS	989	56
72	JIM WELLS	989	57
73	JIM WELLS	989	58
74	JIM WELLS	989	59
75	JIM WELLS	989	60
76	JIM WELLS	989	61
77	JIM WELLS	989	62
78	JIM WELLS	989	63
79	JIM WELLS	989	64
80	JIM WELLS	989	65
81	JIM WELLS	989	66
82	JIM WELLS	989	67
83	JIM WELLS	989	68
84	JIM WELLS	989	69
85	JIM WELLS	989	70
86	JIM WELLS	989	71
87	JIM WELLS	989	72
88	JIM WELLS	989	73
89	JIM WELLS	989	74
90	JIM WELLS	989	75
91	JIM WELLS	989	76
92	JIM WELLS	989	77
93	JIM WELLS	989	78
94	JIM WELLS	989	79
95	JIM WELLS	989	80
96	JIM WELLS	989	81
97	JIM WELLS	989	82
98	JIM WELLS	989	83
99	JIM WELLS	989	84
100	JIM WELLS	989	85
101	JIM WELLS	989	86
102	JIM WELLS	989	87
103	JIM WELLS	989	88
104	JIM WELLS	989	89
105	JIM WELLS	989	90

QUANTITY

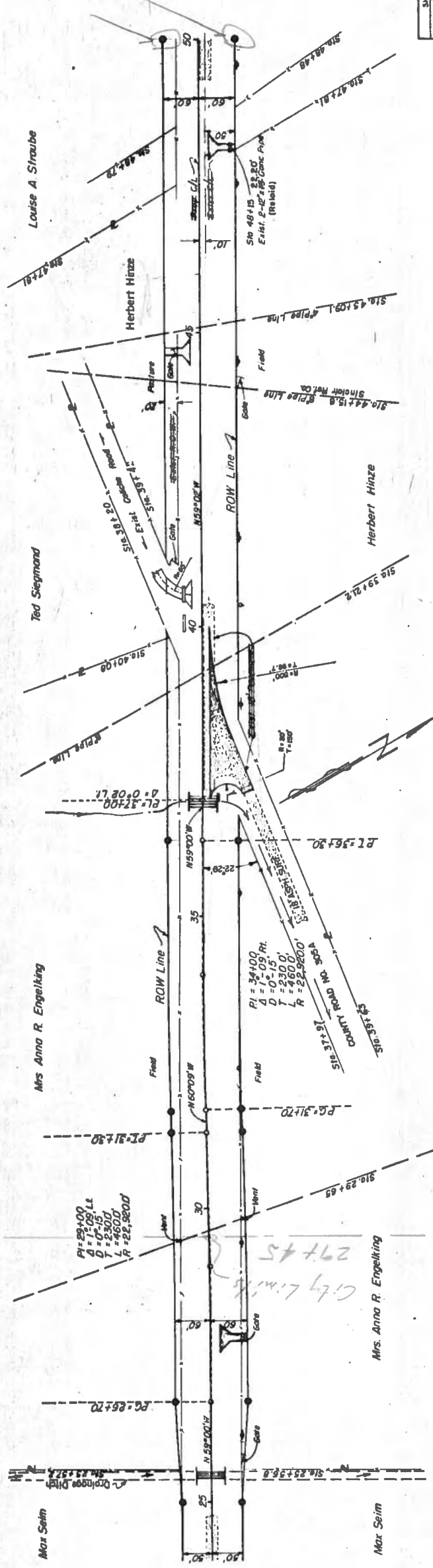
SUMMARY

ITEM	DESCRIPTION	UNIT	ROADWAY				TOTAL	
			Financed by Jim Wells County		Financed by the State			
			Estimate	Final	Estimate	Final		
100	CLEARING AND GRUBBING	ACRE			6,452	6,452	6,452	6,452
101BSP	COMMON ROAD EXCAVATION	C.Y.			4844	4,844.	4844	4,844.
103BSP	COMMON CHANNEL EXCAVATION	C.Y.			212	212	212	212
104	UNCLASSIFIED STRUCTURAL EXCAVATION	C.Y.			350	350	350	350
108	ROAD GRADER WORK	STA.			565.4	565.4	565.4	565.4
109	STRIPPING	C.Y.			3,000	4,565	3,000	4,565
112	BLADING	HR.			10	13	10	13
113 & SP.	SCRAPER WORK	YD. HR.			1697	2,585.7	1697	2,585.7
202	SPRINKLING	M. G.			9,778	6,456.3	9,778	6,456.3
203	ROLLING	HR.			365	177.0	365	177.0
203 A	ROLLING	HR.			442	493.5	442	493.5
203 B	ROLLING	HR.			2,002	1,336.0	2,002	1,336.0
SP.	ROLLING (Grid Roller)	HR.			295	84.5	295	84.5
207	SALVAGING & REPLACING FLEXIBLE BASE	STA.			589.3	589.3	589.3	589.3
218	FOUNDATION COURSE (Crushed Caliche)	C.Y.			66,752	65,964	66,752	65,964
218	FOUNDATION COURSE (Sand Admixture)	C.Y.			10,854	10,680	10,854	10,680
218	ADDTL. QUARTER MILE HAUL	C.Y.			1,209,873	1,202,682	1,209,873	1,202,682
304	ASPHALT (OA-175)	GAL.			2,300	2,865	2,300	2,865
304	AGGREGATE (Type B-Grade 2, Precoated)	C.Y.			102	114.5	102	114.5
305	ASPHALT (OA-175)	GAL.			71,300	71,675	71,300	71,675
305	AGGREGATE (Type B-Grade 2, Precoated)	C.Y.			1,864	1,864	1,864	1,864
305	AGGREGATE (Type B-Grade 8, Precoated)	C.Y.			1,132	1,134	1,132	1,134
314BSP	TACK COAT (RC-2)	GAL.			500	700	500	700
314BSP	COLD MIX LMS1N ROCK ASPH. PAVMT. (Type B, Mod.)	TON			462	484,325	462	484,3125
403BSP	CLASS A CONCRETE (Headwalls)	C.Y.			73.94	73.94	73.94	73.94
403BSP	CLASS A CONCRETE (Inlets)	C.Y.			182	1.82	1.82	1.82
405BSP	REINFORCING STEEL	LB.			4,850	4,850	4,850	4,850
413 B SP	C.G.M. PIPE ARCH, DESIGN NO. 2	L.F.			280	317.9	280	317.9
414	RELAYING CULVERT PIPE (18" Diam & Under)	L.F.			530	465.42	530	465.42
423	CLASS B CONCRETE RIPRAP (Headwalls)	C.Y.			775	10.66	775	10.66
SP.	24" REINF. CONCRETE PIPE - CLASS III	L.F.			436	437.33	436	437.33
SP	30" REINF. CONCRETE PIPE- CLASS III	L.F.			24	24	24	24
SP	36" REINF. CONCRETE PIPE- CLASS III	L.F.			508	524.36	508	524.36
500	REMOVING OLD STRUCTURES (Small)	EA.			6	13.	6	13.
513	CONCRETE CURB & GUTTER	L.F.	2,491	2,475.78			2,491	2,475.78
514	RIGHT-OF-WAY MARKERS (Type I)	EA.			76	76	76	76.
518	REMOVING OLD CONCRETE (Walks & Drives)	S.Y.			102	144.40	102	144.40
518	REMOVING OLD CONCRETE (Curb)	L.F.			208	216	208	216
SP.	HYDRATED LIME	TON			604	621.595	604	621.595
ALTERNA-TIVES								
314BSP	TACK COAT	GAL.			500		500	
314BSP	COLD MIX C&G AND ASPH. PAVMT. - EXCAVATION	TON			462		462	
314BSP	TACK COAT	GAL.			500		500	
314BSP	ASPHALT	GAL.			24		24	
314BSP	AGGREGATE	TON			404		404	

QUANTITY SUMMARY SHEET

FILE NO.	STATE	SHEET	PROJECT NO.	DATE
16	ILL.	299	299-1-7	5
16	ILL.	299	299-1-7	5
16	ILL.	299	299-1-7	5

CROSS SECTION DATA	TYPICAL X-SECTION NO.
STATION NUMBER	
SLOPE (RATIO TO H)	
DITCH DEPTH FT.	
DITCH WIDTH FT.	
SLOPE (RATIO TO H)	
CROWN WIDTH (FEET)	
SLOPE (RATIO TO H)	
DITCH WIDTH FT.	
DITCH DEPTH FT.	
SLOPE (RATIO TO H)	
AVERAGE GROUND SLOPE PER ROD	



SHEET TOTALS		
EST.	FINAL	UNIT

Road Grader Work

Scraper Work

Common Road Excavation

R.Q.W. Workers (Type I)

SHEET NOTES

B.M. - $1\frac{1}{2}$ " Rod in ground 82' L.S. 25457 - El. 196.98
B.M. - U.S.C. & G.S. Bench Mark 50' Rn. 36 + 70
EL. 197.12
B.M. - Nail in Tel. Pole 59' Rn. 44 + 39 - El. 198.35

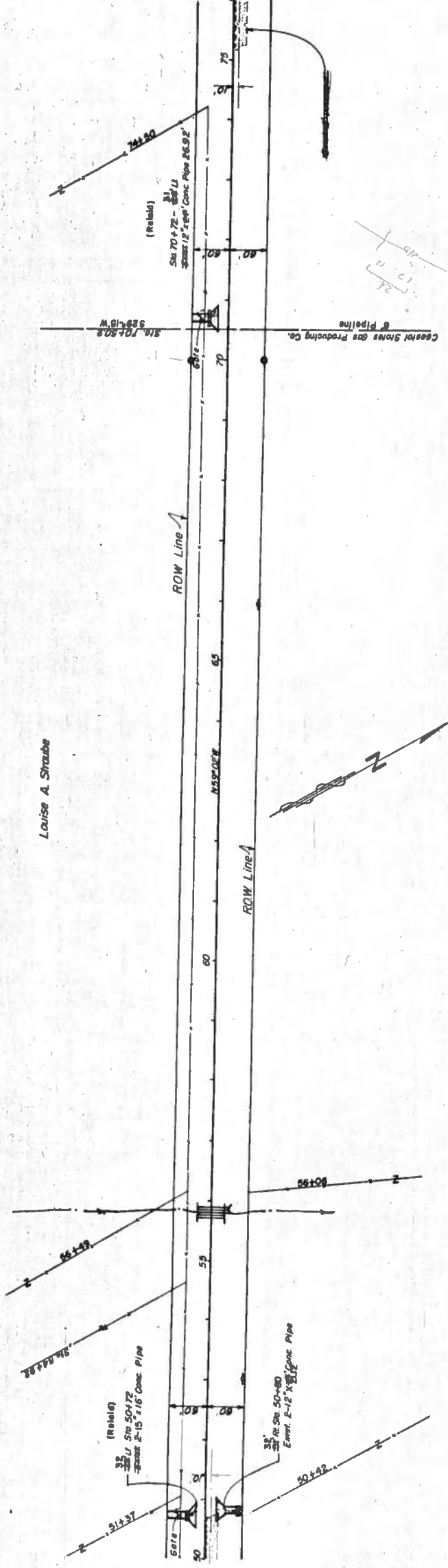
STATION	FIND CURSOR CAL.)	SURF AREA(SX)
RI 27+65	12	0
RI 38+80	95	780
LI 40+51.4	12	0.14
LI 44+52	12	0
RI 48+15	12	0

989	MAIL	STATE	STATE PROJECT	SAFETY	8
6	73-2-3	R 989-1-7		MAINT	EM
16	Jim Wells	989	1	7	624

[illegible]

PLAN • PROFILE • NEW STYLE

Louise A. Strube



SHEET TOTALS		
EST.	QUANT.	UNIT
26	26	SIO.
122	195	Yd. Hr.
2	2	EQ.

- 183 - 720 Yd. Hrs.

- Salvage & Replace Flex. Base

R.O.W. Works

R.O.W. Works

R. Q. W. Morbets (Tr. 1)

SHEET NOTES

B.M. - Nail in Tel. Pole 55' Rt. 68+95 E. 198.00

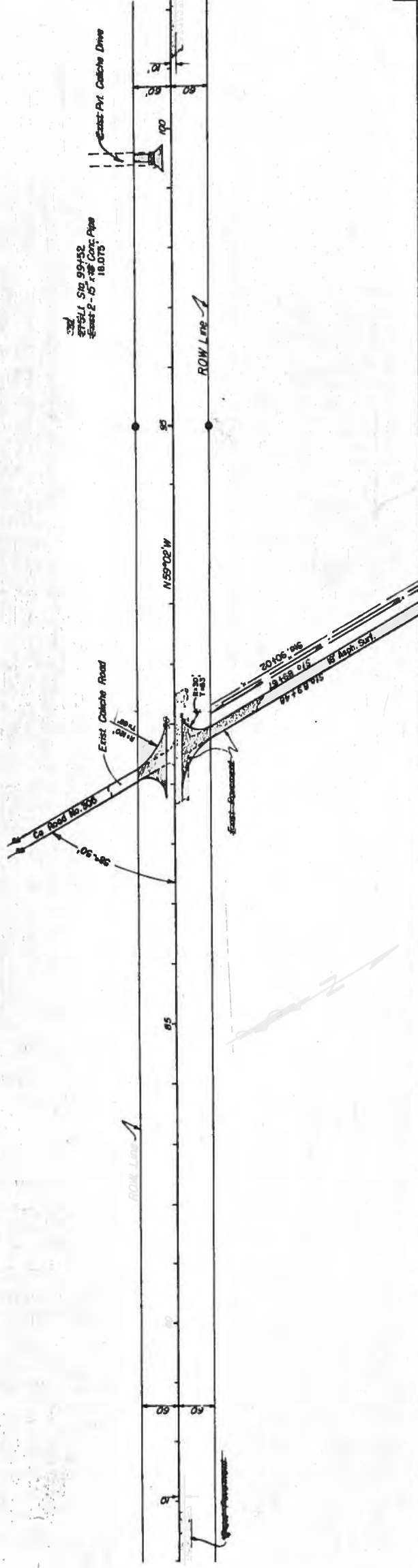
From Sta. 53+00 to Sta. 59+00, the existing flexible base ~~subgrade~~ salvaged and the subgrade built up to obtain cover over pipe structure as shown. New embankment ~~subgrade~~ placed by Scraper Work.

STATION	FND. CRS. (CR. CAL)	SURF. (S. Y.)
LI 50 + 72	12	0
RI 50 + 80	12	0
LI 70 + 12	12	0

STATION	DATE	STATE	PROJECT	SECTION	DATE	DATE	DATE
6	TEAS.	STATE	R209-1-7	SECTION	DATE	DATE	DATE
16	Jim Wells	989	1	7	FM	624	

PLAN : PROFILE - NEW STYLE

CROSS SECTION DATA	TYPICAL X-SECT. NO.
STATION NUMBER	
SLOPE RATIO TO 1)	
DITCH DEPTH FT	
DITCH WIDTH FT	
SLOPE RATIO TO 1)	
CROWN WIDTH FEET)	
SLOPE RATIO TO 1)	
DITCH DEPTH FT	
DITCH WIDTH FT	
SLOPE RATIO TO 1)	
AVERAGE CROWN	
SLOPE PER 100	



SHEET TOTALS			
EST	PRIAL	UN	
26	26		Sta.
3	12		Yd Hrs
3	2		Ed

Road Grader Work
Scanner Work

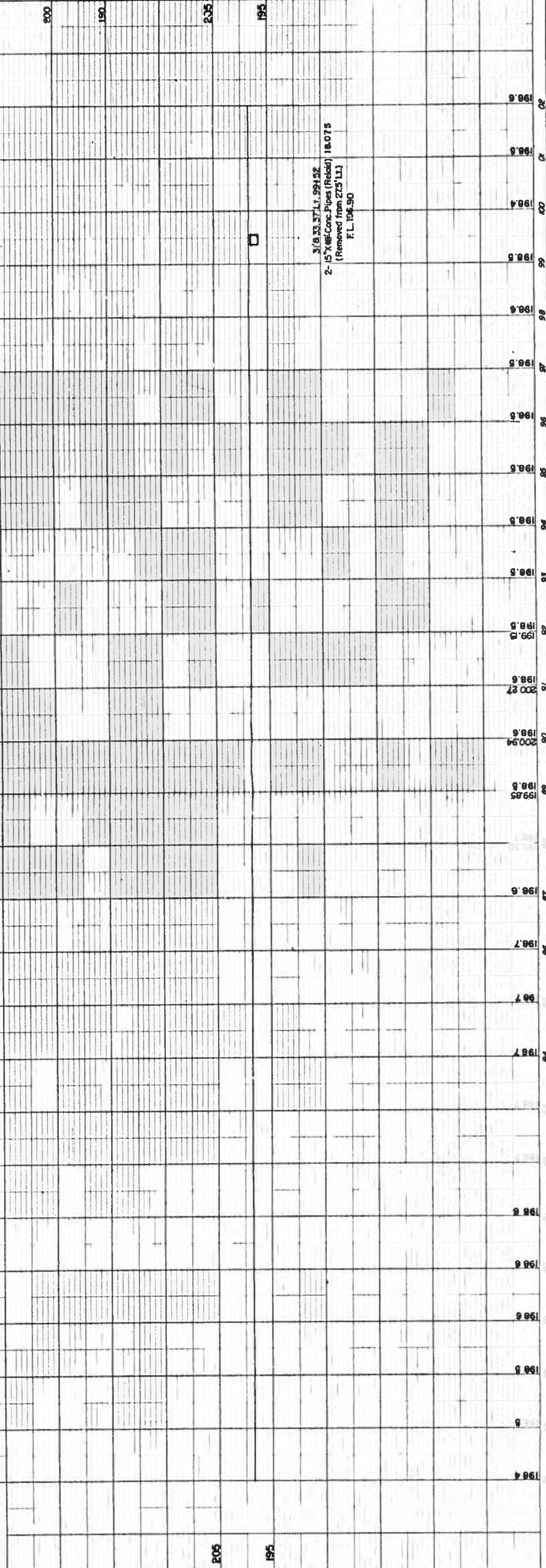
ROW Markers (T.1)

SHEET NOTES

B M - Nail in Power Pole 59' Rt. 79+60 - El 199.63
B M - " " " 59' Rt. 90+33 - El 199.57

STATION	FWD. CRS. (R. CAL.)	SURF. (S. CAL.)
RL 89+59	65	248
LL 89+59	65	268
LL 99+52	12	0

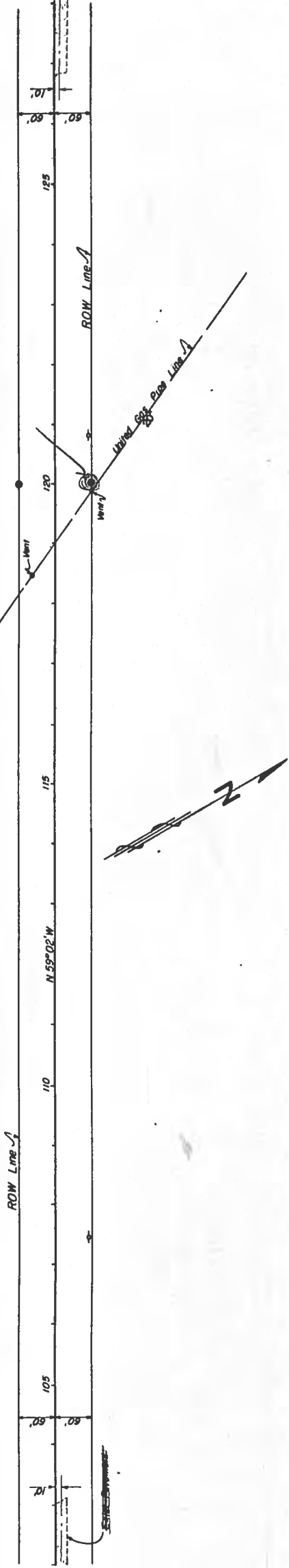
Pt	HEAD	TATE	STATE PRINCEST			SAT 9-17
6	11AAS	R	989-1-7	N		
U.S.A. SPR 88	COURT 1	LASTED IN TIME HRS		F.M.		624
16	Jim Molts	989	1	7		



PLAN PROFILE • NEW STYLE

CROSS SECTION DATA

STATION NUMBER	
SLOPE (RATIO TO H)	
DITCH DEPTH (FT)	
DITCH WIDTH (FT)	
SLOPE (RATIO TO H)	
CHOWN WIDTH (FEET)	
SLOPE (RATIO TO H)	
DITCH DEPTH (FT)	
DITCH WIDTH (FT)	
SLOPE (RATIO TO H)	
AVERAGE GROUND	
SLOPE (RATIO TO H)	
TYPICAL 1-SECT. NO.	

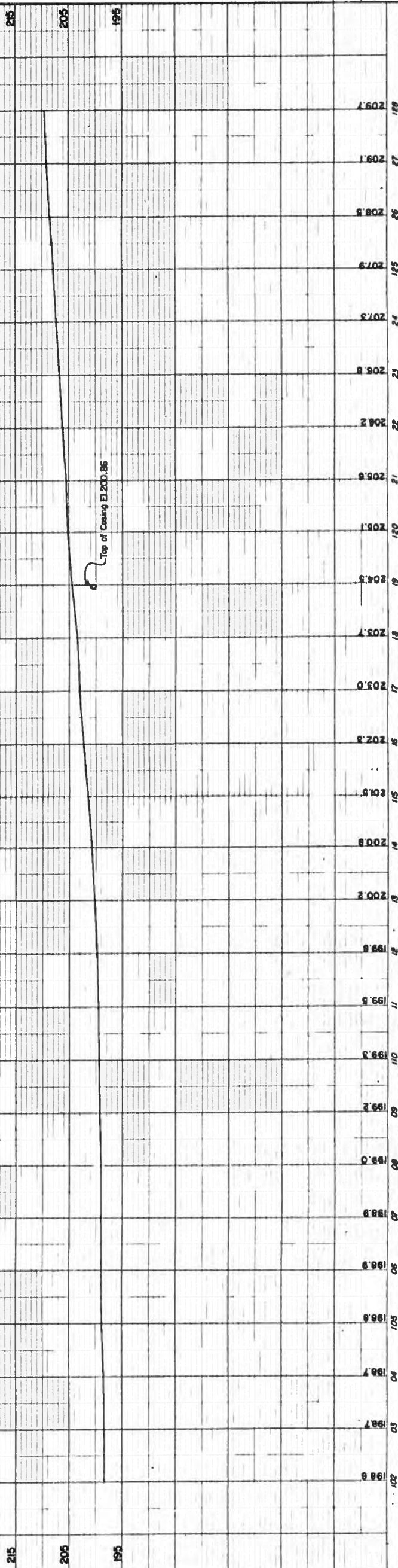


SHEET TOTALS		
EST.	FINAL	DIFF.
25	26	Sta
2	2	Eq.

Road Grader Work
R.O.W. Markers (Type I)

SHEET NOTES

B.M. - Nail in Power Pole 58' R/L: 107+42 - EL. 200.18
B.M. - " " " " 58' R/L: 127+54 - EL. 210.76

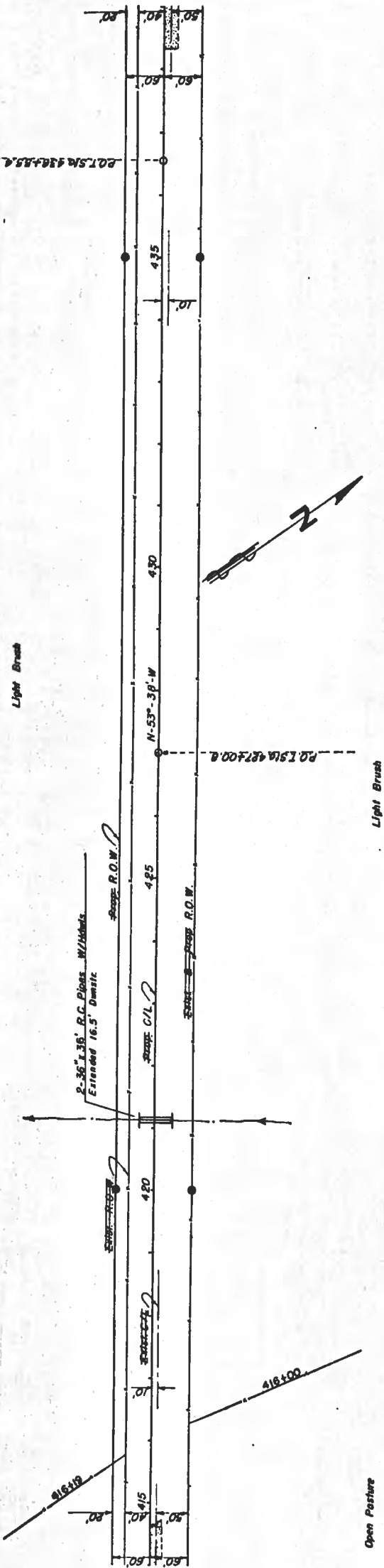


PLAN - PROFILE - NEW STYLE

DATE	11/11/11	STATE PROJECT	11
BY	11/11/11	PROJECT NO.	11
CHKD	11/11/11	COUNTY	11
APP'D	11/11/11	DATE	11/11/11
16	Jim Wells	989	1 7 624

CROSS SECTION DATA

TYPICAL X SECT NO.	STATION NUMBER
AVERAGE GROUND	
SLOPE (RATIO TO H)	
DITCH DEPTH FT	
DITCH WIDTH FT	
SLOPE (RATIO TO H)	
CROWN WIDTH (FEET)	
SLOPE (RATIO TO H)	
DITCH DEPTH FT	
DITCH WIDTH FT	
SLOPE (RATIO TO H)	



SHEET TOTALS		
EST	FINAL	UNIT

Road Grader Work
Scraper Work
R.O.W. Markers (Type I)

SHEET NOTES

8 M. Nail in Power Pole 60' Ht. 486+60-El 884.74

205	25	Sta.
205	122	Yd. Ht.
205	4	Eq.

122.85 Yd. Ht.

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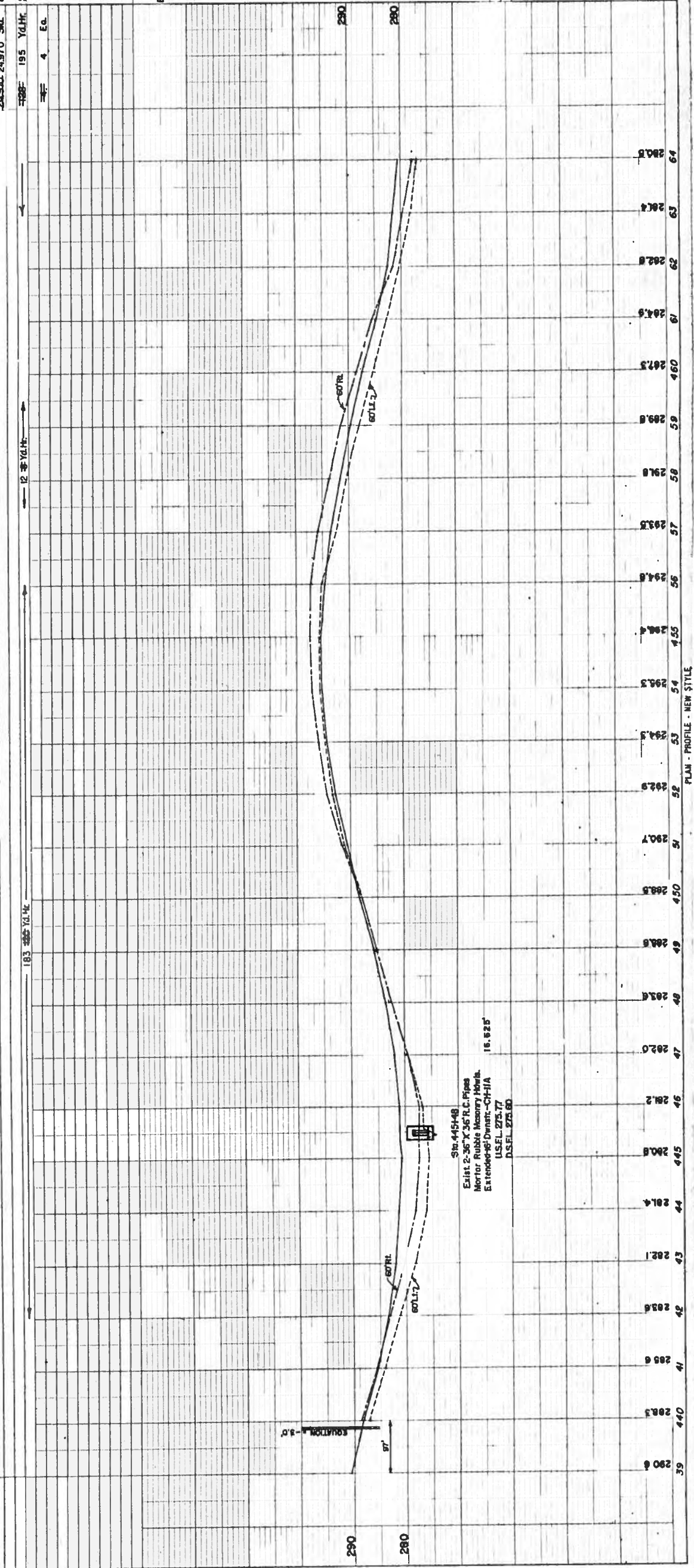
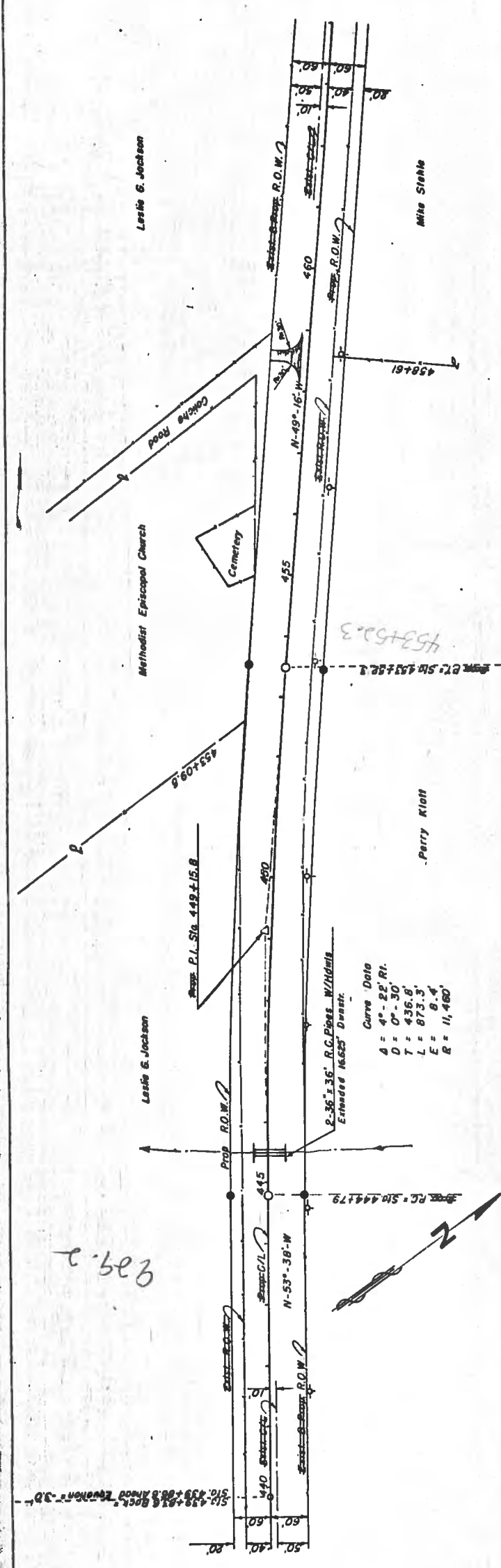
122.

[illegible]

SHEET TOTALS	
EST	Final
24,970	24,970
128	195
4	4
EQ	EQ

SHEET NOTES

STATION	FINDERS (LOCAL)	SURF (S.V.)
LA 458 + 55	35	139

[illegible]

[illegible]

SHEET TOTALS	
EST	FINAL
00	00

Flood Grader Work

Scrapper Work

R.Q.W. Mortars (Ty. 1)

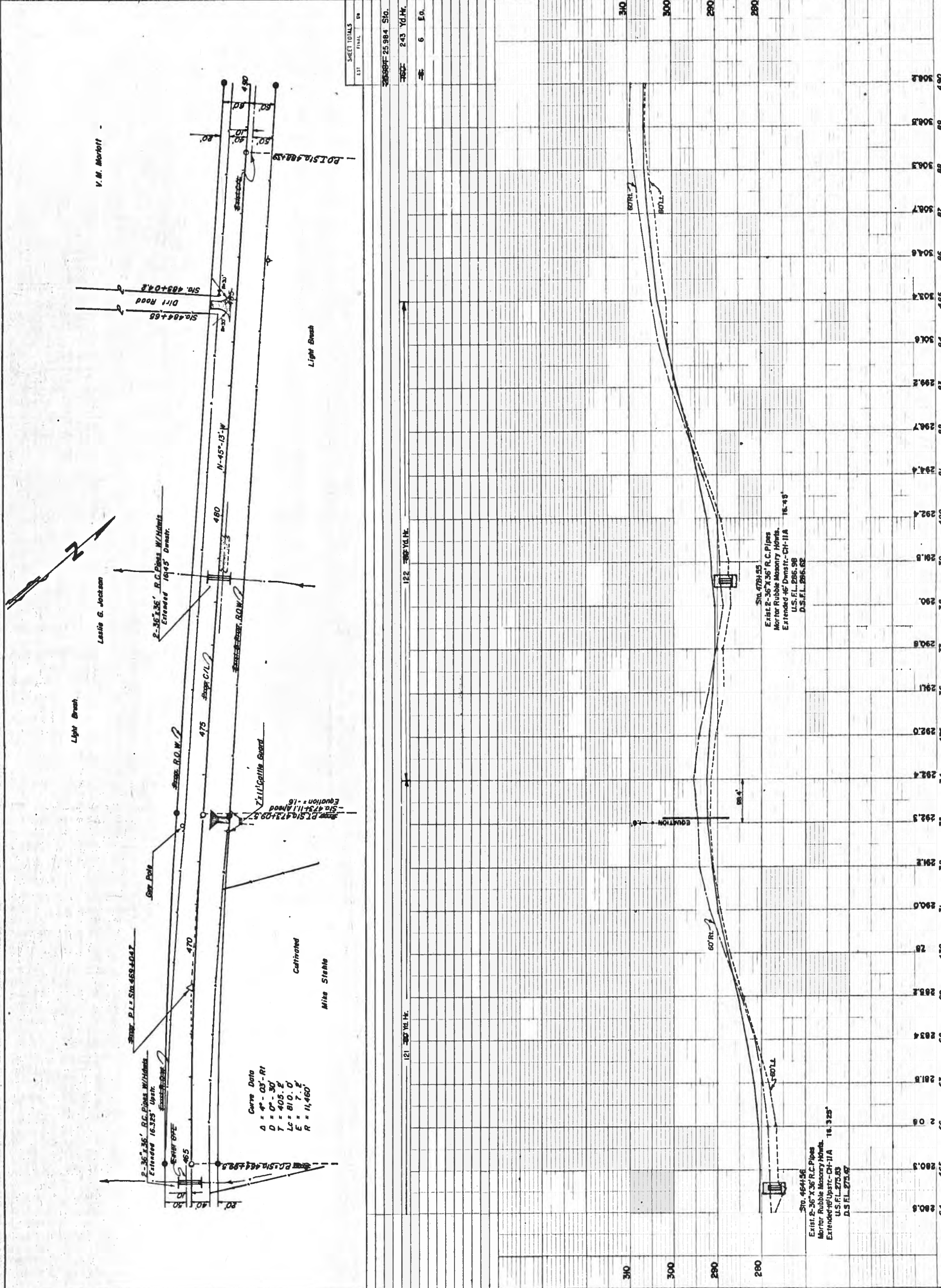
SHEET NOTES

B.M.-Nail in Mesq. Tree 75' L 46410 - El. 2783.4
B.M.- " " " " 74' L 47945 - El. 280.58

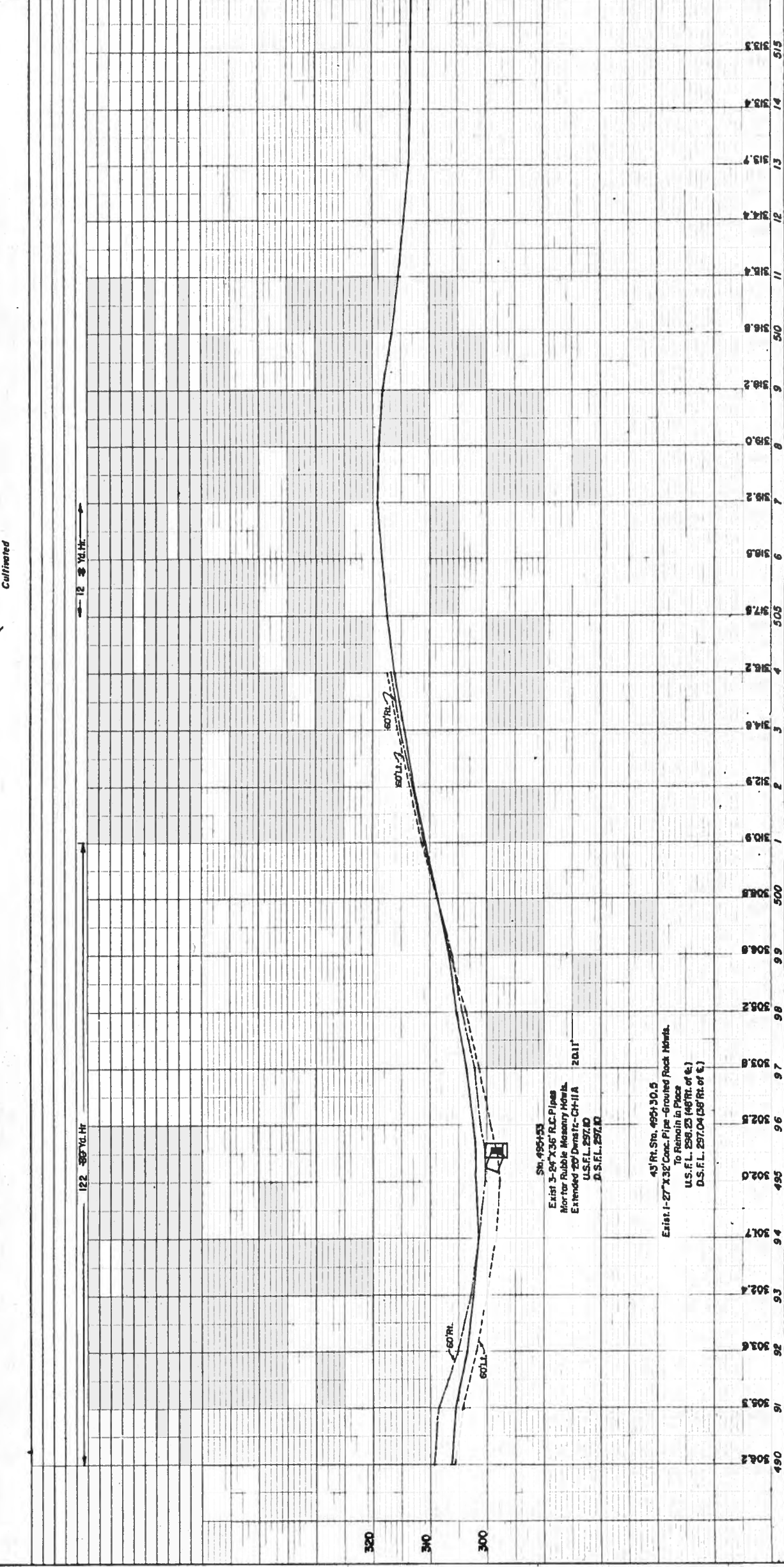
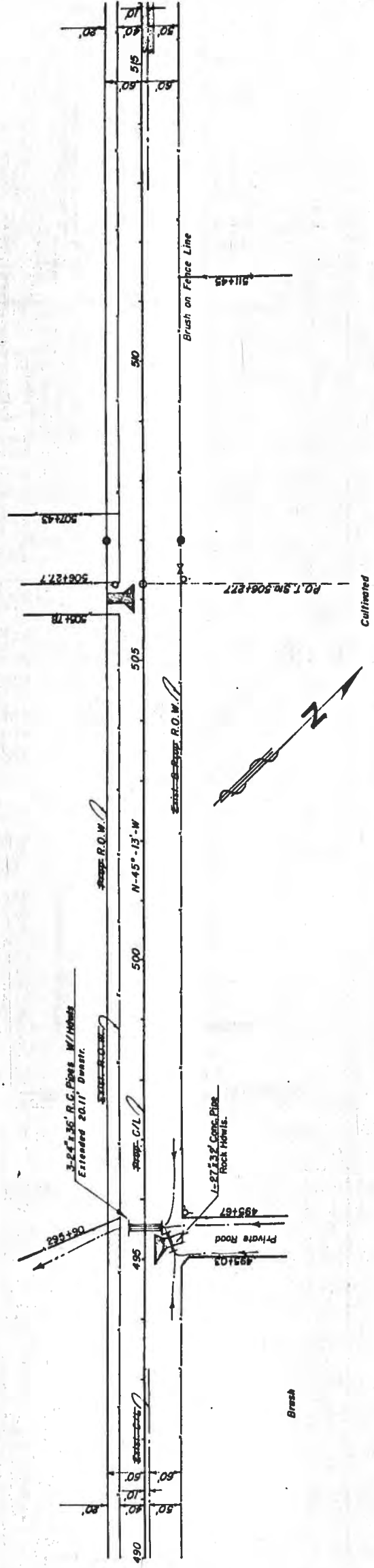
B.M.- " " " " " 74' 1.479+45-EI 290.55

PROFFCO ROAD JUNCTIONS & PVT. DRIVES		
STATION	END CRS/CR. CALL	SURF. IN/OUT

STATION	FWD CRS/CR. CAL	SURF. IS/V
RI. 472+97	12	0
LI 484+85	35	130

[illegible]

STATION NUMBER	CROSS SECTION DATA						
	SLOPE RATIO TO H	DITCH DEPTH FT	DITCH WIDTH FT	SLOPE RATIO TO H	CROWN WIDTH (FEET)	DITCH WIDTH TO H	SLOPE RATIO TO H



SHEET TOTALS		
EST	PINAL	NETT
200	26	Sta.
200	134	Yd.Hz.
20	2	Eq.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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SHEET NOTES

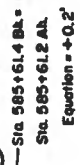
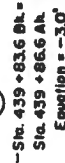
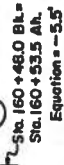
B.M. - Nail in Power Pole 64' Rt. 492+46 - El. 305.07
B.M. - Bronze Disc in Concrete Base 64' Rt.
Sta. 495+00 - El. 300.76
B.M. - Nail in Power Pole 63' Rt. 512+34 - El. 314.59

3838-CQ ROAD JUNCTIONS & P.V.T. DRIVES			
STATION	PRO CRS (R. CAL)	SURF (S.L.)	
Rt. 495 + 308.0	12	-8	139
Lt. 506 + 03	12	0	0

Stn. 495453
 Erist 3-24"x36" R.C. Pipes
 Mortar Rubble Masonry Walls
 Extended 20' Down to CH-IIA
 U.S.F.L. 257.0
 D.S.F.L. 257.0

2011

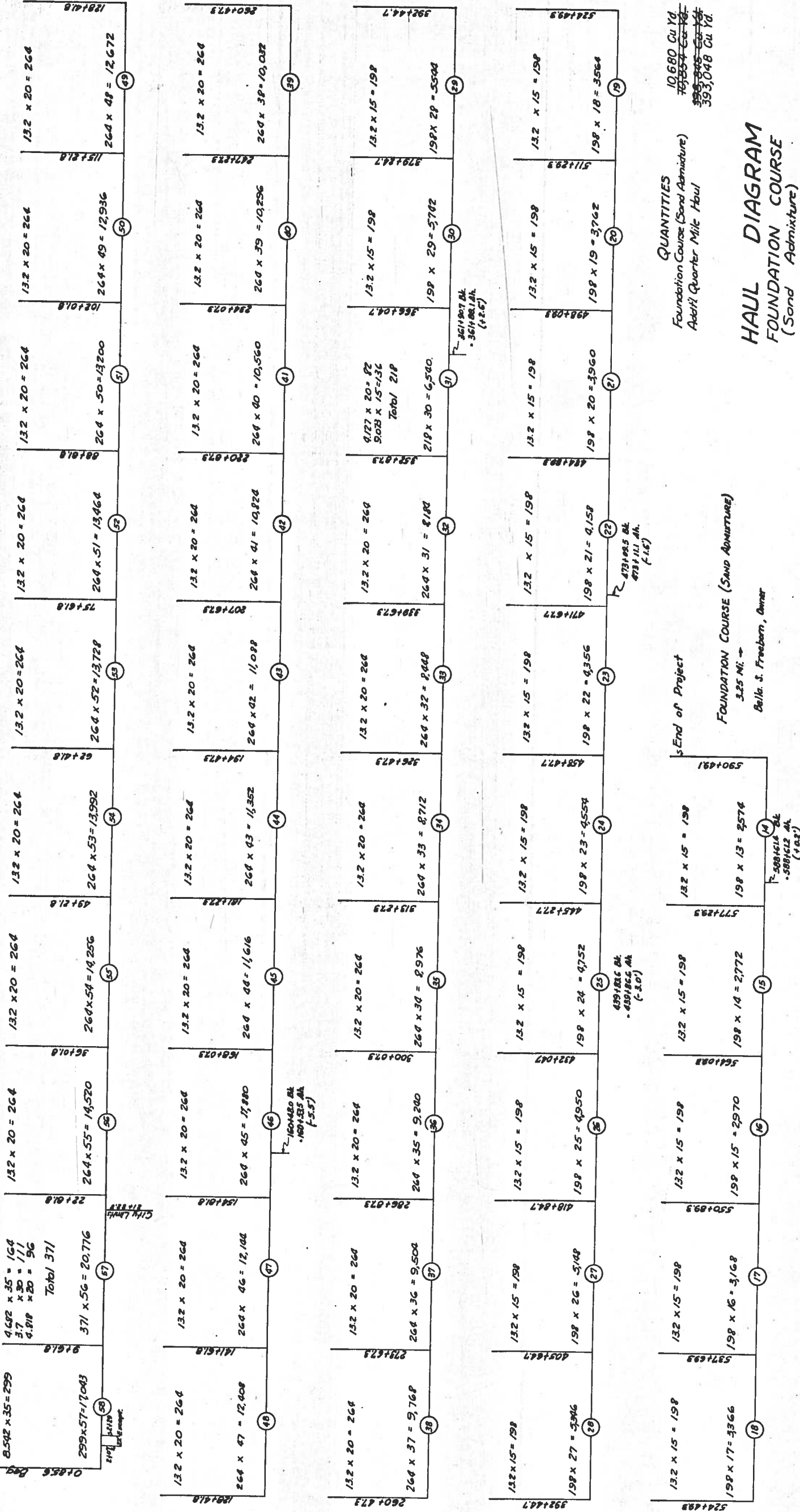
45' Rt. Stn. 495430.5
 Erist. 1-27"x36" Conc. Pipe - Grouted Rock Holes.
 To Remain in Place
 U.S.F.L. 258.2 (46' Ht. of E.)
 D.S.F.L. 257.04 (36' Ht. of E.)

EST. QUANTITIES

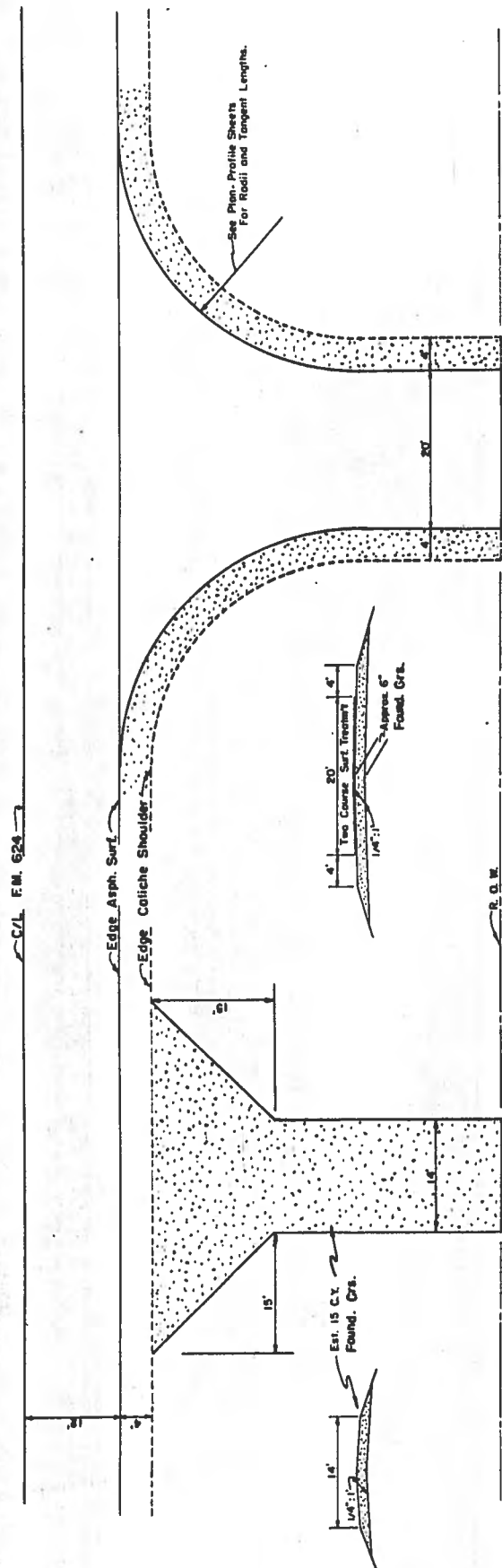
**FOUNDATION COURSE
(Crushed Caliche)**

FILE NO OF, MO.	STATE	STATE PROJECT		ENTRY NO.
0	TEXAS	R989-1-7		30
STATE ACQ. NO.	COUNTY	CONTR.	SECT.	INSTRUMENT NO.
16	JIM WELLS	989	1	FM 624

01456 Day of Project

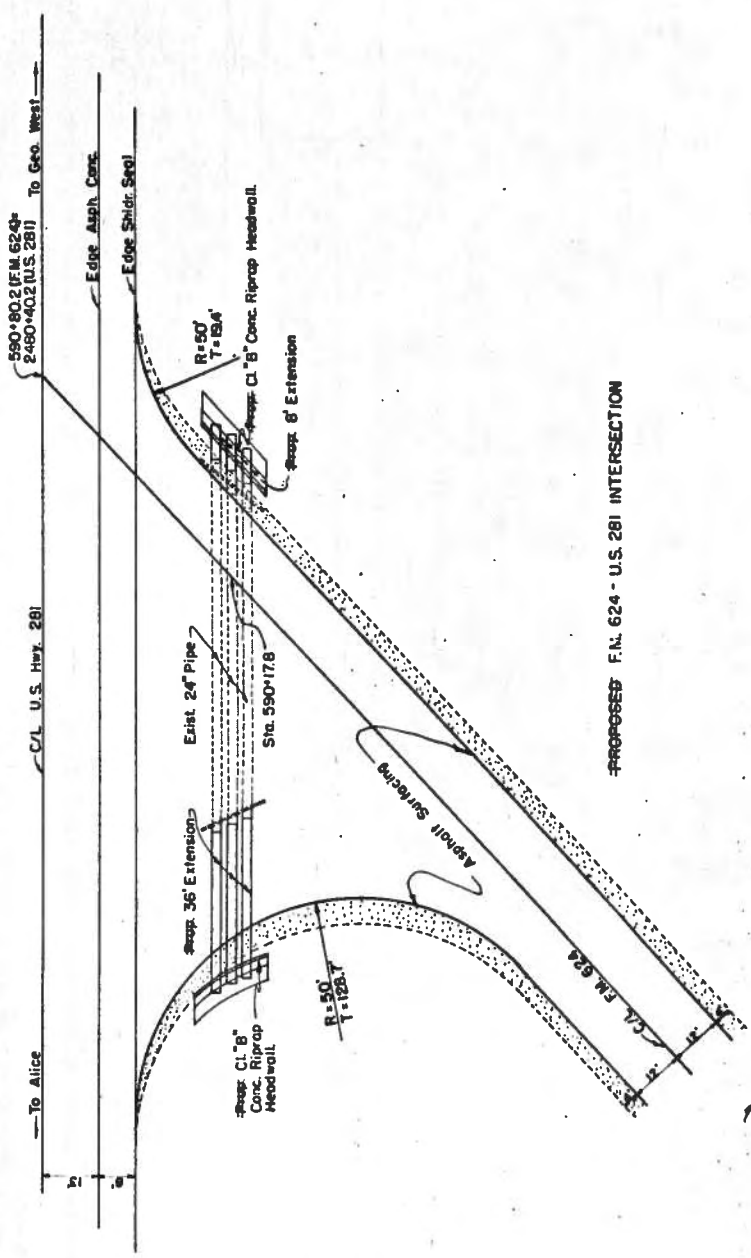


ITEM NO.	QUANTITY	UNIT
1/6	10,680	Cu Yd
1/7	75,554	Cu Yd
1/8	393,048	Cu Yd



PROPOSED PRIVATE DRIVE

PROPOSED COUNTY ROAD APPROACH

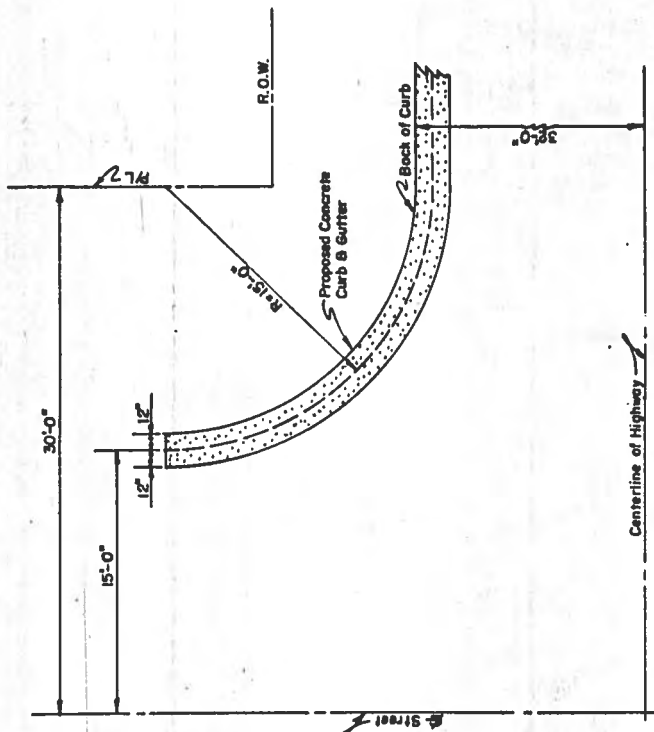
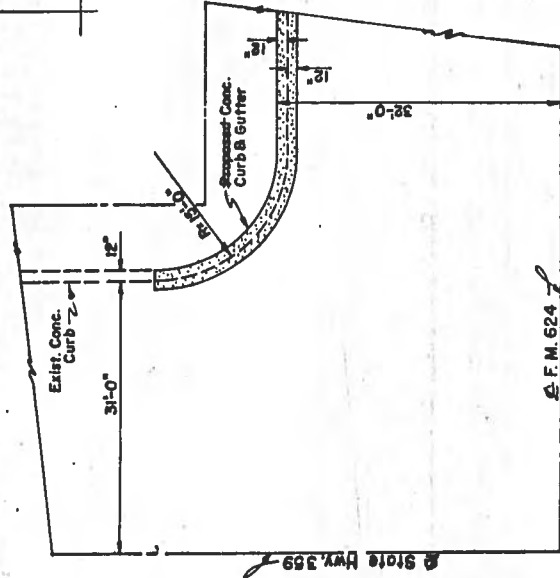
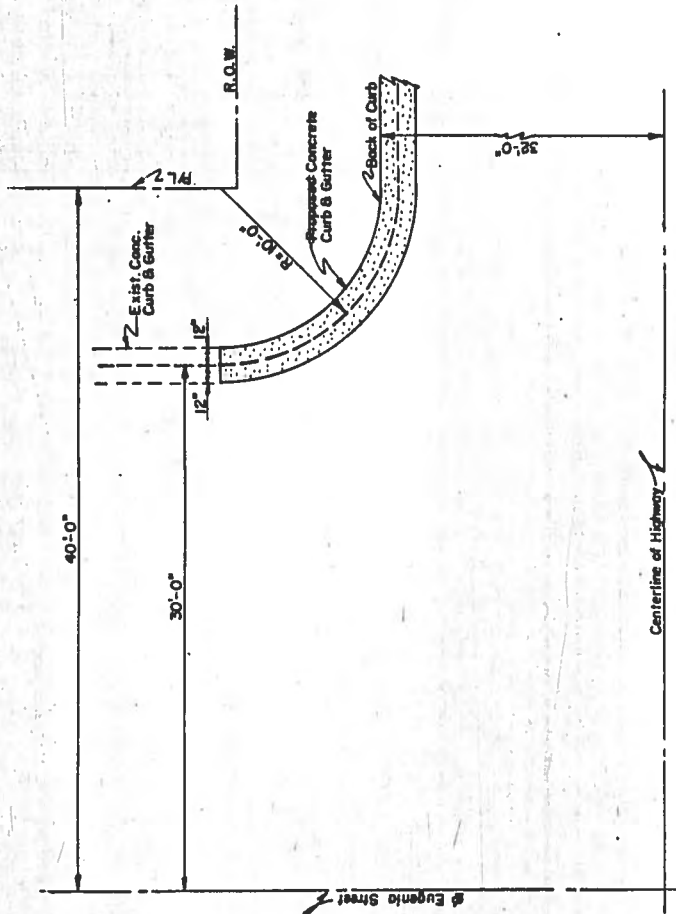


PROPOSED F.M. 624 - U.S. 281 INTERSECTION

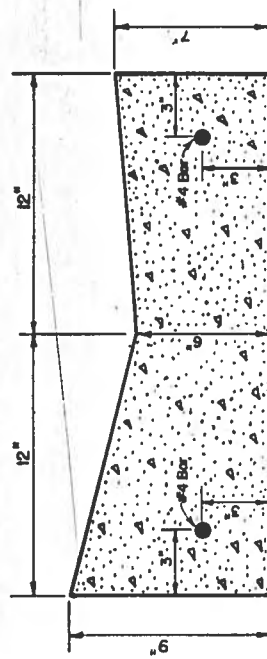
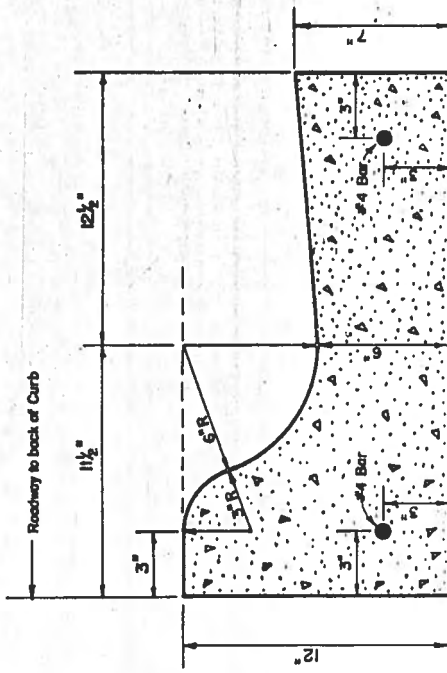
INTERSECTION SUMMARY

Station	Lt.	Rt.	County Road	Private Drive	Foundation Course (Crushed Coloid) Cu. Yd.	Asph. Surf. Sq. Yd.
0+85.6	X		Radius		2	6
0+85.6		X	Radius		2	6
3+20	X		Leon St.		8	285 114
3+20		X			8	285 114
6+80	X		Eugene St.		12	475 200
6+80		X			8	45
10+40	X		Dibrell St.		8	285 114
10+40		X			8	285 114
14+00	X		Metz St.		8	285 114
14+00		X			8	285 114
15+74	X		Wilson St.		35	142
18+21.5	X		Harrod St.		25	103
18+21.5		X			25	103
19+20	X			X	12	36
20+67	X			X	12	40
21+49.4	X		Ryan St.		25	103
21+49.4		X			25	103
27+65		X		X	12	
38+80		X		X	95	780
40+51.4	X			X	12	144
44+52	X			X	12	
48+15		X		X	12	
50+72	X			X	12	
50+80	X			X	12	
70+12	X			X	12	
89+59		X		X	65	268
89+59	X				65	268
99+52	X			X	12	
136+03	X			X	65	245
136+03		X			65	245
138+32		X			65	245
142+81	X			X	12	
156+90		X		X	12	
169+30	X			X	12	
174+90	X			X	12	
182+49	X			X	12	
190+26		X		X	12	
235+11	X			X	12	
251+63		X		X	12	
268+82	X			X	12	
287+21		X		X	12	
300+56		X		X	12	
313+30		X		X	12	
355+58	X			X	90	366
355+67.5		X			90	366
411+37		X		X	12	
458+55	X			X	35	139
472+97	X			X	12	
484+85	X			X	35	139
523+89	X			X	12	
553+72		X		X	12	
553+90		X		X	12	
577+80		X		X	12	
586+57	X			X	12	
590+49.1	Radius Lt. & Rt. of U.S. 281				130	387
495+38 30'		X		X	12	139
506+98 03	X			X	12	
155+00		X		X		245
			TOTALS		1379	5,675
1+30	X			X		30
3+80	X			X		30
4+20	X			X		30
8+85	X			X		25
12+90	X			X		5

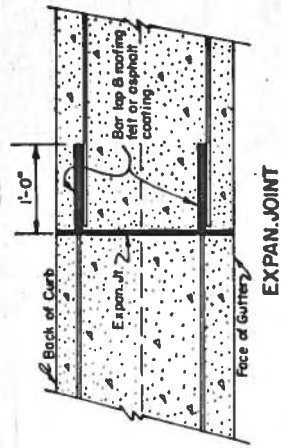
ROADWAY DETAILS



CURB & GUTTER RADII
 Leola Street - Lt. & Rt.
 Eugenia Street on Rt.
 30-38 used: Dibreil Street - Lt. & Rt.
 Metz Street - Lt. & Rt.

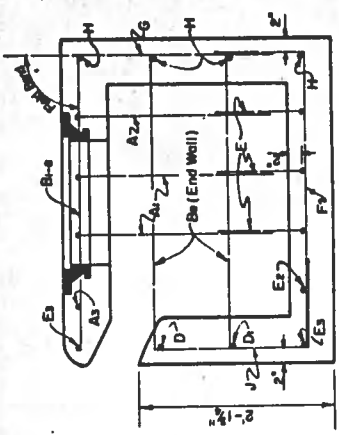


GENERAL NOTES
 All Concrete shall be Class A.
 Expansion joints at 40'-0" maximum spacing and at all points of curvature.
 Contraction joints shall be formed at 10'-0" maximum spacing.
 Reinforcing steel shall be lapped 2'-0" at each expansion joint. Exposed ends of bars shall be encased in asphalt pointed with asphalt so as to break the bond of the concrete and serve as a dowel bar at the expansion joints.

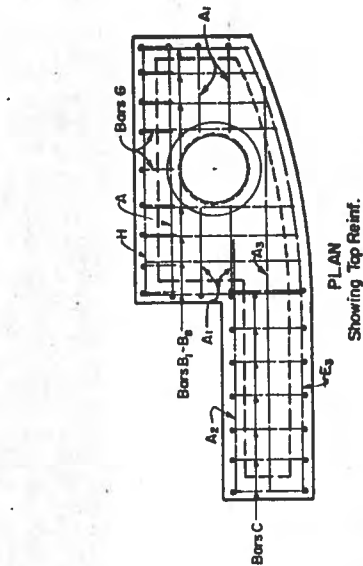


REINFORCED CONCRETE CURB & GUTTER DETAILS

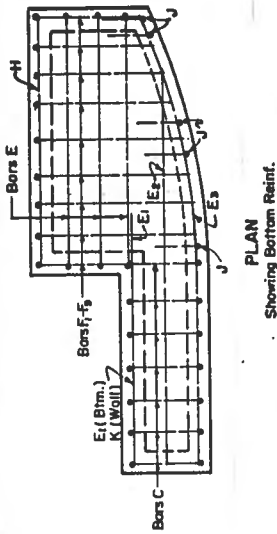
FILE NO.	STATE	PROJECT	DATE
16	TEXAS	R-985-1-7	3-2
STATE	COUNTY	CDOT	NO.
16	JIM WELLS	989	17



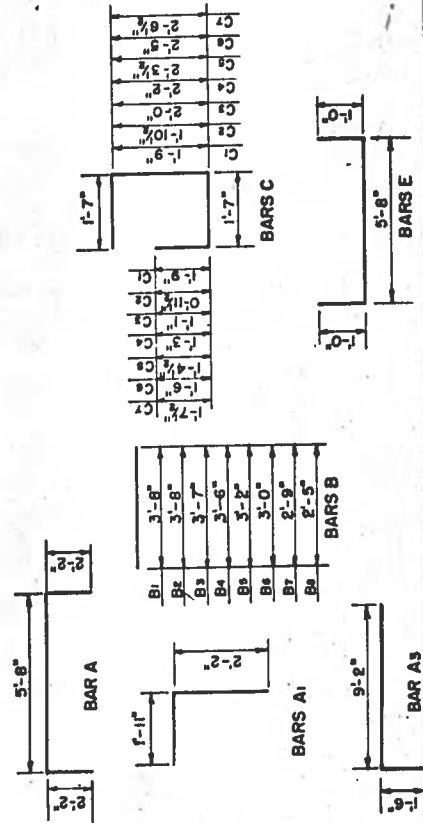
SECT A-A
Scale: 1"=1'



PLAN
Showing Top Reinf.



FLAN
Showing Bottom Reinf.



ELEVATION
Scale: 1"=2'

FRONT WALL & BOTTOM
Showing Reinf.

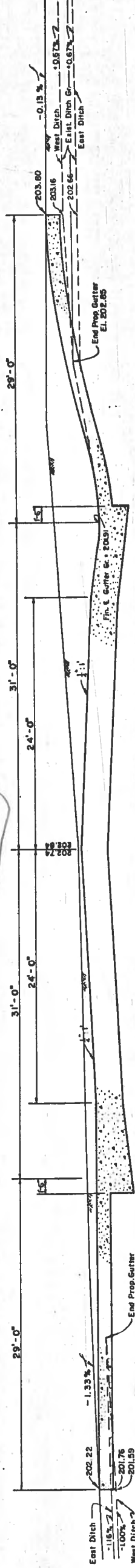
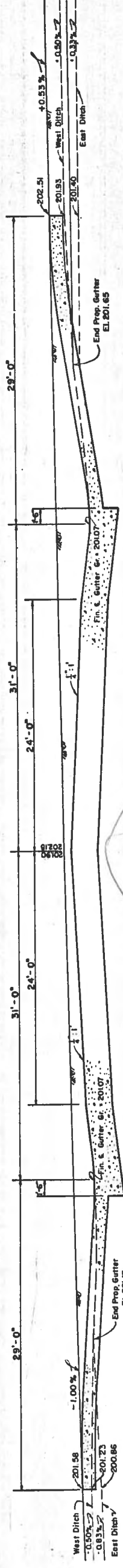
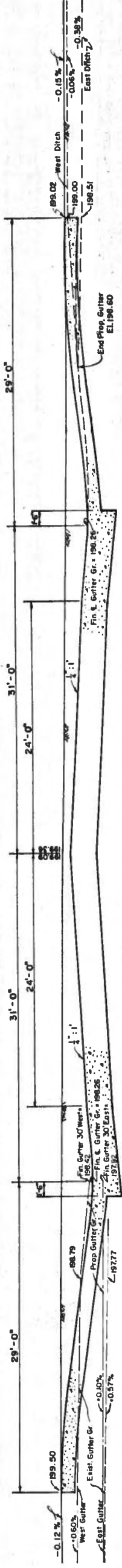
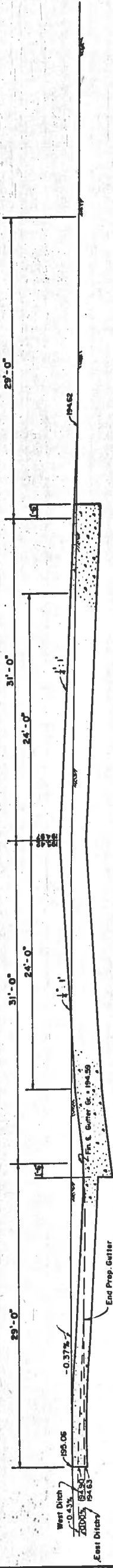
ESTIMATED QUANTITIES		
CURB INLET & EXTENSION		
Class A Conc. C.Y.	Reinf. Steel Lb.	
1.82	210	

GENERAL NOTES

All Concrete ~~was~~ Class A. Chomier all exposed corners $\frac{3}{4}$ "
Dimensions relating to reinforcing are to centers of bars.
Cast Iron Manhole Ring & Steel Plate Cover, which ~~was~~ was 1
removed from Lt. Sta 6+80, ~~was~~ installed at this structure.
Work of installing Manhole Ring & Cover ~~was~~ not ~~was~~ rapid for
directly, but ~~was~~ considered as subsidiary work to the item of
"Class A Concrete - Curb Inlets."

**DETAILS OF
CURB INLET
STA.2+93**

FILE NO. 44-38861	STATE	STATE PROJECT NO.		ENTRY NO.
6	TEXAS	R-989-1-7		99
STATE DATE 10-1-59	COUNTY	CASE	SECT	DEPOSIT NO.
16	JIM WELLS	989	1	FM624



Scale: 1" = 5' Vert
1" = 2' Hor

CITY STREET INTERSECTIONS

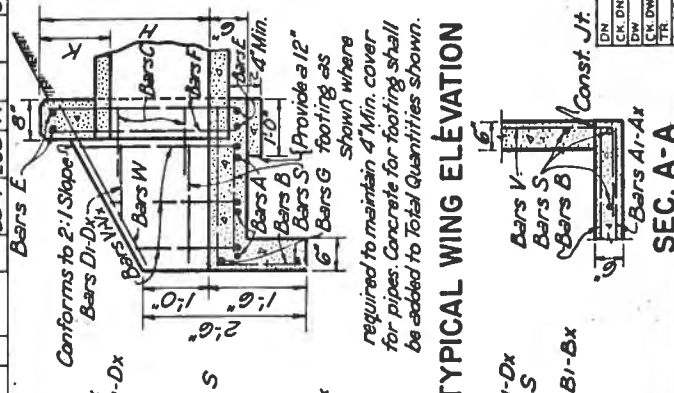
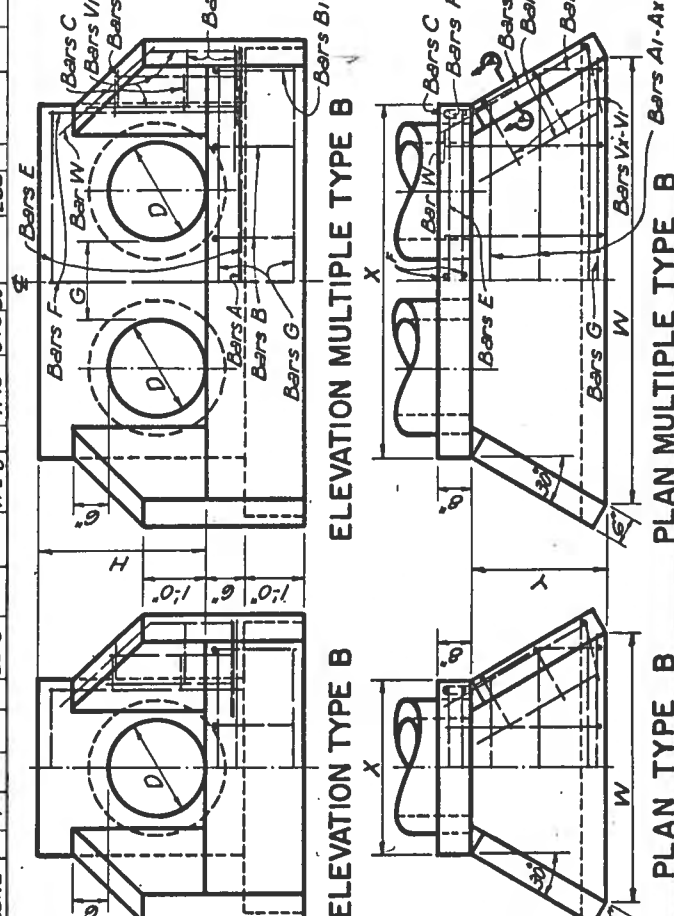
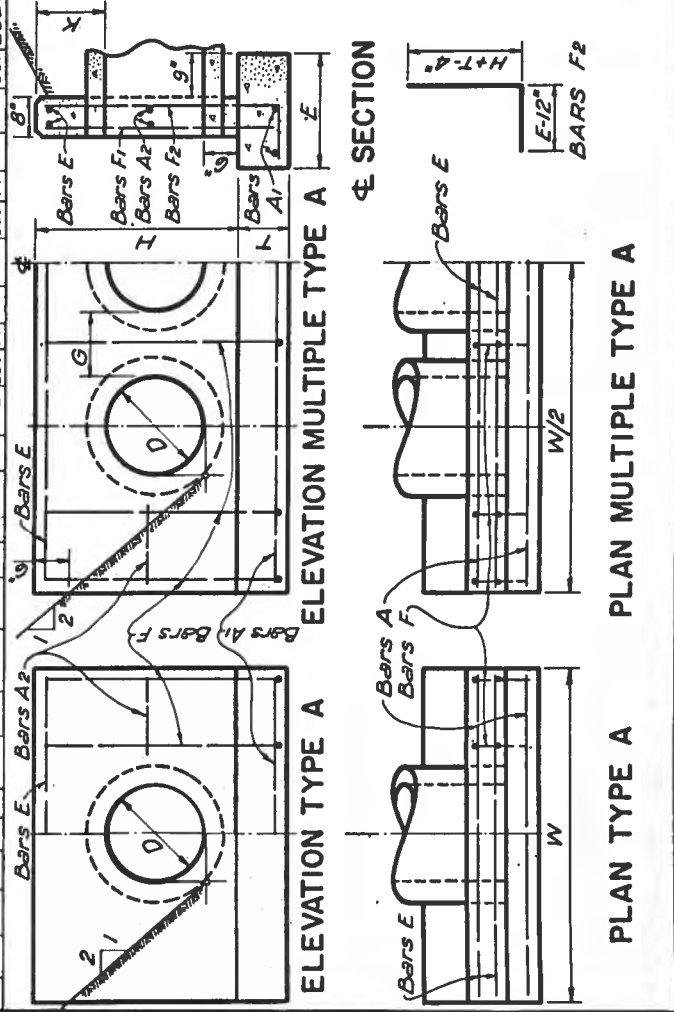
NO.	STATE	STATE PROJECT	DATE
6	TEXAS	R 989-1-7	5-6
NO.	STATE	STATE PROJECT	DATE
16	TEXAS	R 989-1-7	5-6

TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE A HEADWALLS

TABLE OF DIMENSIONS										REIN. STEEL FOR TWO HEADWALLS										TOTAL QUANTITIES			
NO OF PIPES	DIAM OF PIPES	DIMENSIONS					BARS AT 4'-0"					BARS F1 @ 12'-1"					BARS F2 @ 12'-1"					STEEL CONC. LBS.	C.Y.
		G	K	T	E	H	W	Lgth	WT	No	Lgth	WT	No	Lgth	WT	No	Lgth	WT					
1	12"	~	12'	9"	1'-9"	2'-6"	7'-0"	6'-8"	10	8	2'-6"	6'-8"	28	12	2'-11"	2'-11"	3'-8"	29	98	1,448			
2	10"	~	10'	~	~	8'-10"	8'-6"	13	~	~	8'-6"	35	14	~	~	27	14	~	34	137			
3	~	~	~	~	~	10'-8"	10'-4"	16	~	~	10'-4"	43	~	~	~	31	16	~	39	137			
4	~	~	~	~	~	12'-6"	12'-2"	18	~	~	12'-2"	51	18	~	~	35	18	~	44	156			
1	15"	~	12'	9"	1'-9"	2'-9"	8'-3"	7'-11"	12	8	3'-0"	9	7'-11"	33	12	4"	3'-2"	31	110	1,82			
2	14"	~	14'	~	~	10'-6"	10'-2"	15	~	~	10'-2"	42	14	~	~	30	14	~	37	133			
3	~	~	~	~	~	12'-9"	12'-5"	19	~	~	12'-5"	52	16	~	~	34	16	~	42	156			
4	~	~	~	~	~	15'-0"	14'-8"	22	~	~	14'-8"	61	18	~	~	38	18	~	47	177			
1	18"	~	12'	9"	1'-9"	3'-0"	9'-6"	9'-2"	14	8	3'-6"	11	9'-2"	38	20	4"	3'-5"	46	20	4"	4'-2"	56	
2	14"	~	14'	~	~	12'-2"	11'-10"	18	~	~	11'-10"	49	20	~	~	50	22	~	61	189			
3	~	~	~	~	~	14'-10"	14'-6"	22	~	~	14'-6"	60	24	~	~	55	24	~	67	215			
4	~	~	~	~	~	17'-6"	17'-2"	26	~	~	17'-2"	72	28	~	~	59	26	~	72	240			
1	24"	~	12'	9"	2'-0"	3'-6"	12'-0"	11'-8"	18	8	4'-6"	14	11'-8"	49	24	4"	3'-11"	63	24	4"	4'-11"	79	
2	15"	~	15'	~	~	15'-5"	15'-1"	23	~	~	15'-1"	63	28	~	~	68	26	~	85	253			
3	~	~	~	~	~	18'-10"	18'-6"	28	~	~	18'-6"	77	28	~	~	73	28	~	92	284			
4	~	~	~	~	~	22'-3"	22'-3"	31	~	~	22'-3"	91	30	~	~	79	30	~	99	316			
1	30"	~	12'	9"	2'-3"	4'-0"	14'-6"	14'-2"	21	16	5'-6"	33	14'-2"	59	28	4"	4'-5"	83	28	4"	5'-8"	106	
2	18"	~	18'	~	~	18'-8"	18'-4"	28	~	~	18'-4"	76	32	~	~	94	32	~	121	352			
3	~	~	~	~	~	22'-10"	22'-6"	34	~	~	22'-6"	94	36	~	~	106	36	~	136	403			
4	~	~	~	~	~	27'-0"	26'-8"	40	~	~	26'-8"	111	40	~	~	118	40	~	152	454			
1	36"	~	12'	12'	2'-6"	4'-6"	17'-0"	16'-8"	25	16	6'-6"	39	16'-8"	70	32	4"	5'-2"	111	32	4"	6'-8"	143	
2	14"	~	14'	~	~	21'-11"	21'-7"	32	~	~	21'-7"	90	36	~	~	124	36	~	160	445			
3	~	~	~	~	~	26'-10"	26'-6"	40	~	~	26'-6"	111	40	~	~	128	40	~	178	506			
4	~	~	~	~	~	31'-9"	31'-5"	47	~	~	31'-5"	131	44	~	~	152	44	~	196	565			
1	48"	~	15'	12'	3'-0"	5'-9"	19'-6"	19'-2"	29	16	7'-6"	45	19'-2"	80	36	4"	5'-8"	136	36	4"	7'-5"	178	
2	25"	~	25'	~	~	25'-2"	24'-0"	37	~	~	24'-0"	104	40	~	~	152	40	~	198	536			
3	~	~	~	~	~	35'-10"	35'-6"	53	~	~	35'-6"	148	48	~	~	167	44	~	218	603			
4	~	~	~	~	~	36'-6"	36'-2"	54	~	~	36'-2"	151	48	~	~	182	48	~	238	670			
1	48"	~	15'	12'	3'-0"	5'-9"	23'-0"	22'-8"	34	24	8'-9"	79	22'-8"	95	40	4"	6'-5"	268	40	4"	8'-5"	357	
2	25"	~	25'	~	~	29'-5"	29'-1"	44	~	~	29'-1"	121	44	~	~	285	44	~	386	925			
3	~	~	~	~	~	35'-10"	35'-6"	53	~	~	35'-6"	148	48	~	~	321	48	~	422	1023			
4	~	~	~	~	~	42'-3"	41'-11"	63	~	~	41'-11"	175	52	~	~	348	52	~	457	1122			
1	54"	~	15'	12'	3'-3"	6'-3"	25'-6"	25'-2"	38	24	9'-9"	88	25'-2"	105	44	4"	6'-11"	318	44	4"	9'-2"	421	
2	24"	~	24'	~	~	32'-6"	32'-6"	60	~	~	32'-6"	136	50	~	~	361	50	~	478	1112			
3	~	~	~	~	~	40'-2"	39'-0"	69	~	~	39'-0"	166	56	~	~	404	56	~	536	1254			
4	~	~	~	~	~	47'-6"	47'-2"	71	~	~	47'-2"	197	62	~	~	447	62	~	593	1396			
1	60"	~	15'	12'	3'-6"	6'-9"	28'-0"	27'-8"	42	24	10'-9"	97	27'-8"	115	40	4"	7'-5"	371	48	4"	9'-11"	497	
2	30"	~	30'	~	~	36'-0"	35'-8"	54	~	~	35'-8"	149	54	~	~	418	54	~	559	1277			
3	~	~	~	~	~	44'-0"	43'-8"	66	~	~	43'-8"	182	60	~	~	464	60	~	621	1420			
4	~	~	~	~	~	52'-0"	51'-8"	78	~	~	51'-8"	216	66	~	~	511	66	~	683	1585			
1	66"	~	15'	12'	3'-9"	7'-3"	30'-6"	30'-2"	45	32	11'-9"	141	30'-2"	126	52	4"	7'-11"	430	52	4"	10'-8"	579	
2	34"	~	34'	~	~	39'-1"	38'-9"	58	~	~	38'-9"	162	54	~	~	479	58	~	645	1485			
3	~	~	~	~	~	47'-4"	47'-4"	78	~	~	47'-4"	198	64	~	~	529	64	~	712	1651			
4	~	~	~	~	~	56'-3"	55'-1"	84	~	~	55'-1"	233	70	~	~	578	70	~	779	1815			
1	72"	~	15'	12'	4'-0"	7'-9"	33'-0"	32'-8"	49	32	12'-9"	153	32'-8"	136	56	4"	8'-5"	492	56	4"	11'-5"	667	
2	36"	~	36'	~	~	42'-2"	41'-0"	63	~	~	41'-0"	175	62	~	~	544	62	~	738	1675			
3	~	~	~	~	~	51'-0"	51'-0"	77	~	~	51'-0"	219	68	~	~	597	68	~	810	1850			
4	~	~	~	~	~	60'-6"	60'-2"	90	~	~	60'-2"	251	74	~	~	650	74	~	881	2035			

TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE B HEADWALLS

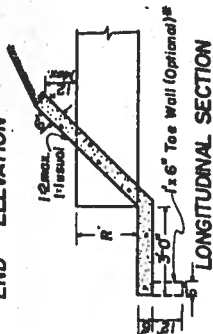
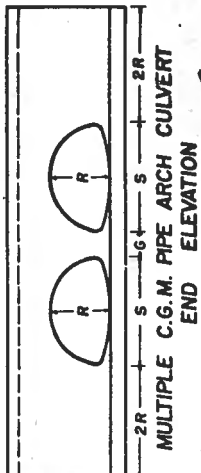
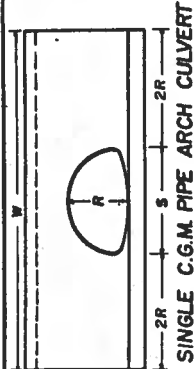
TABLE OF DIMENSIONS				REINFORCING STEEL AND QUANTITIES FOR TWO HEADWALLS												TOTAL QUANTITIES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
PIPES OF DIAM.	DIMENSIONS				BARS A1-A12												STEEL CONC.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	G	K	X	H	W	BARS A1-A12		BARS B1-B12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS AN1-AN12		BARS AO1-AO12		BARS AP1-AP12		BARS AQ1-AQ12		BARS AR1-AR12		BARS AS1-AS12		BARS AT1-AT12		BARS AU1-AU12		BARS AV1-AV12		BARS AW1-AW12		BARS AX1-AX12		BARS AY1-AY12		BARS AZ1-AZ12		BARS BA1-BA12		BARS BB1-BB12		BARS BC1-BC12		BARS BD1-BD12		BARS BE1-BE12		BARS BF1-BF12		BARS BG1-BG12		BARS BH1-BH12		BARS BI1-BI12		BARS BJ1-BJ12		BARS BK1-BK12		BARS BL1-BL12		BARS BM1-BM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS AG1-AG12		BARS AH1-AH12		BARS AI1-AI12		BARS AJ1-AJ12		BARS AK1-AK12		BARS AL1-AL12		BARS AM1-AM12		BARS BN1-BN12		BARS BO1-BO12		BARS BP1-BP12		BARS BQ1-BQ12		BARS BR1-BR12		BARS BS1-BS12		BARS BT1-BT12		BARS BU1-BU12		BARS BV1-BV12		BARS BW1-BW12		BARS BX1-BX12		BARS BY1-BY12		BARS BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L12		BARS M1-M12		BARS N1-N12		BARS O1-O12		BARS P1-P12		BARS Q1-Q12		BARS R1-R12		BARS S1-S12		BARS T1-T12		BARS U1-U12		BARS V1-V12		BARS W1-W12		BARS X1-X12		BARS Y1-Y12		BARS Z1-Z12		BARS AA1-AA12		BARS AB1-AB12		BARS AC1-AC12		BARS AD1-AD12		BARS AE1-AE12		BARS AF1-AF12		BARS 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BZ1-BZ12		BARS C1-C12		BARS D1-D12		BARS E1-E12		BARS F1-F12		BARS G1-G12		BARS H1-H12		BARS I1-I12		BARS J1-J12		BARS K1-K12		BARS L1-L



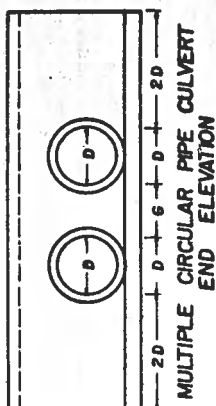
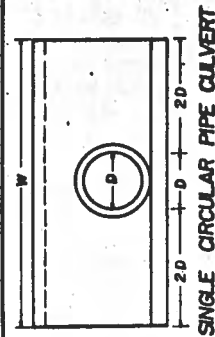
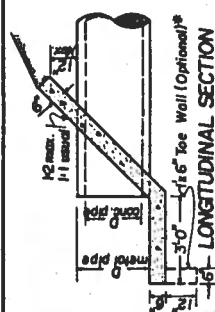
GENERAL NOTES :-
 All concrete shall be Class A. All exposed corners shall be chamfered $\frac{1}{4}"$.
 Reinforcing steel shall be placed with the center of the outside layer of bars 2" from the surface of the concrete. Total Quantities include one 20 diameter lap for all bars over 60'0" in length.

FOR
PIPE CULVERTS
12 TO 72 INCHES IN DIAMETER

	TMD	DRAWING	DATE	FED. REG.	STATE	PATENT AND PROJECT NO.	SHEET NO.
	1 TMD	C-1476A*	MAR 1950	6	TEXAS	R 989-I-7	36
	BADA						
	7 KM						
	UCK				COUNTY	NO. OF SHEETS IN SET	NO. OF SHEETS USED
	BDA			16	JIM WELLS	989 I 7	624



DIMENSIONS & QUANTITIES FOR C.G.M.P. ARCH CURVERTS									
DESIGN SIZE	APPROX ARCH DIMENSIONS		SINGLE SPAN Feet	SINGLE SPAN Meters		W" Circ Rimpop S + 4d	PER ADD'L ARCH CUB' Conc Rimpop		S + 6 Cu. Yds.
	Span Feet	Span Meters		Cu. Yds.	Cu. Yds.				
1	18"	11"	1.17	5'-2"	0.84	2'-6"			
2	22"	13"	1.44	6'-2"	0.61	2'-0"			
3	30"	17"	2.01	6'-2"	0.78	3'-6"			
4	37"	21"	2.61	12'-0"	0.95	4'-2"			
5	44"	25"	3.27	12'-0"	1.15	4'-11"			
6	52"	30"	4.15	14'-4"	1.40	5'-9"			
7	58"	36"	5.24	16'-10"	1.63	6'-5"			
8	65"	40"	6.08	18'-9"	1.92	7'-4"			
9	72"	44"	6.99	20'-6"	2.15	8'-0"			



DIAM OF PIPE	DIMENSIONS AND QUANTITIES FOR CIRCULAR PIPE CULVERTS									
	S I N G L E				P E R A D D I T I O N A L					
	CL-B' CONCRETE	CL-B' CONCRETE	CL-B' CONCRETE	RIPRAP	"W"	CL-B' CONCRETE	RIPRAP	P I P E	D	+ G
PIPE	Cu. Yds.	CONC. PIPE	Cu. Yds.	CONC. PIPE	(SD)	Cu. Yds.	CONC. PIPE	Cu. Yds.	P I P E	P I P E
18"	1.92	2.02	7-6"	0.51	0.62	2-3"	2-6"	2-3"	2-6"	2-6"
24"	2.78	2.95	10-0"	0.69	0.84	3-11"	3-5"	3-5"	3-5"	3-5"
30"	3.75	4.00	12-6"	0.89	1.07	3-7"	4-2"	4-2"	4-2"	4-2"
36"	4.83	5.17	15-0"	1.13	1.32	4-3"	4-11"	4-11"	4-11"	4-11"
42"	6.02	6.47	17-6"	1.33	1.59	4-11"	5-18"	5-18"	5-18"	5-18"
48"	7.32	7.89	20-0"	1.57	1.88	5-7"	6-5"	6-5"	6-5"	6-5"
54"	8.74	9.44	22-6"	1.80	2.26	6-5"	7-4"	7-4"	7-4"	7-4"
60"	10.26	11.11	25-0"	2.13	2.65	7-6"	8-0"	8-0"	8-0"	8-0"

GENERAL NOTES

Materials and construction of Headwalls ~~shall be~~
in accordance with Standard Item 423 "Riprap."
Headwalls ~~shall be~~ measured and paid for by the cubic
yard of material in place.

Quantities shown hereon are for two headwalls, not
yard of material in place.

including toe walls.

Quantities and dimensions shown hereon may be
varying for waste.

**CLASS "R" CONCRETE RIPRAP
HEADWALLS FOR PIPE CULVERTS**

CRH-16 DISTRICT 16



Und. Struct. Excav. = 30 CY
24" R.C. Pipe - CL III = 177.9
CL "A" Concrete = 5.26 CY
Reinf. Steel = 360 Lb.
Relaying Pipe = 56 Lb.

* Und. Struct. Excav. = 4 CY
Relaying Culvert Pipe 18" Dia. & Under = 21.60

Und. Struct. Excav. = 64 CY
24" R.C. Pipe - CL III = 156.55
CL "A" Concrete = 5.59 CY
Reinf. Steel = 316 Lb.
Relaying Pipe = 4 Lb.

Und. Struct. Excav. = 9 CY
30" R.C. Pipe - CL III = 24 Lb.
CL "A" Concrete = 6.26 CY
Reinf. Steel = 403 Lb.

CROSS SECTION AT CULVERT SITES
Sheet 1 of 7

STATE PROJECT	16
R-389-1-7	7
DATE	10/1/77
BY	JIM WELLS
CHECKED	10/1/77
APPROVED	10/1/77

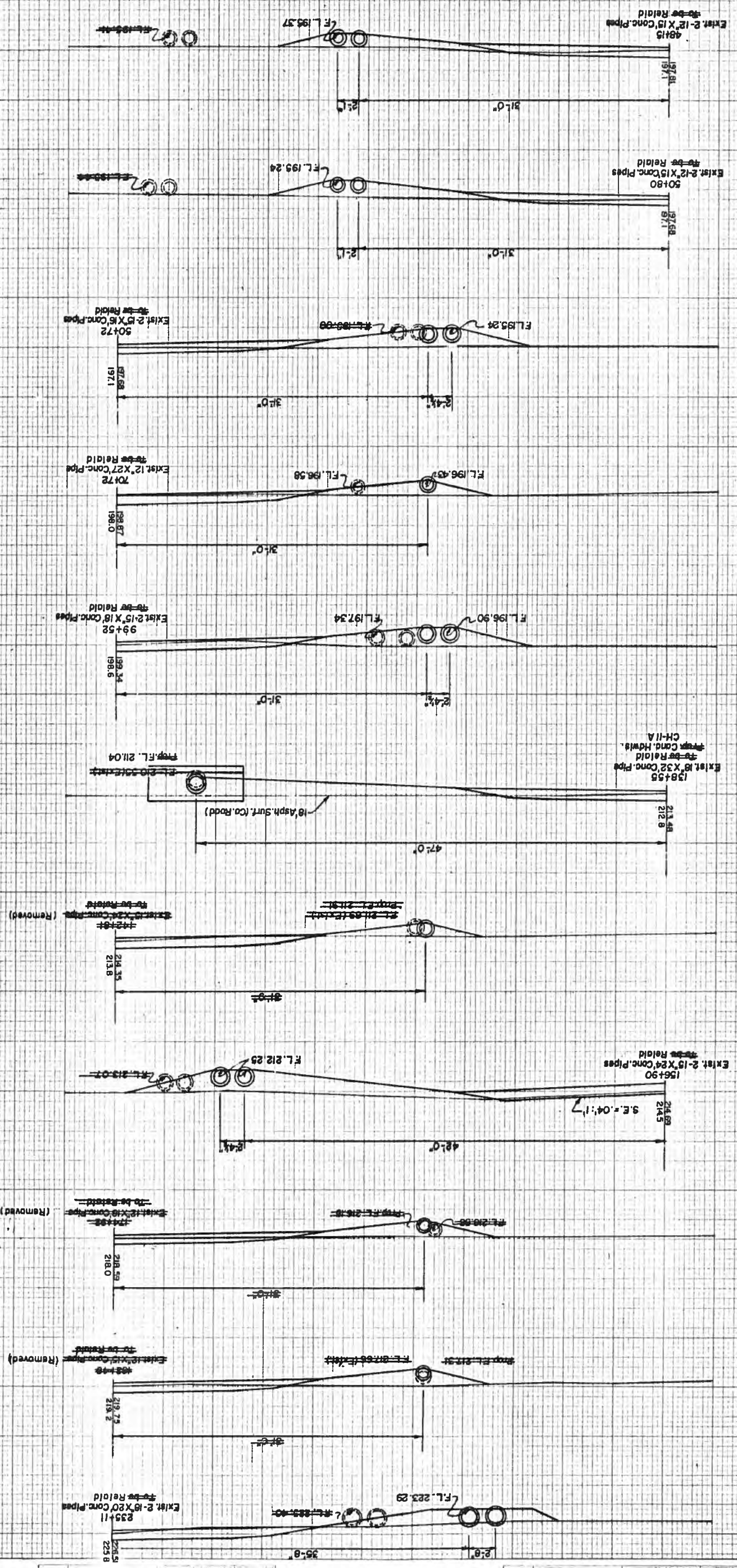
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DATE	10/1/77
BY	JIM WELLS
CHECKED	10/1/77
APPROVED	10/1/77

NO.	1
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BY	JIM WELLS
CHECKED	10/1/77
APPROVED	10/1/77

CROSS SECTION AT CULVERT SITES

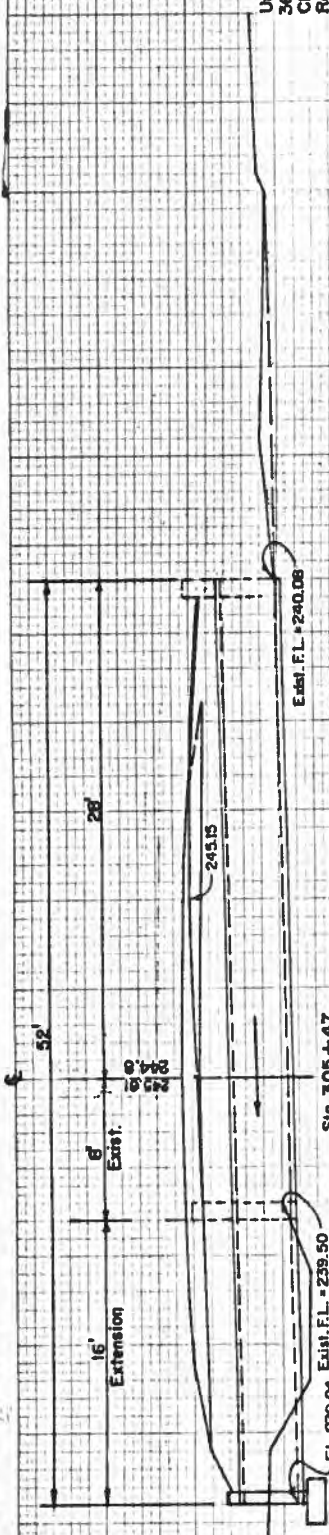
SHEET 2 of 7

STATE PROJECT	16
R-989-1-7	JIM WELLS 989
DATE	1
BY	7
FM	624



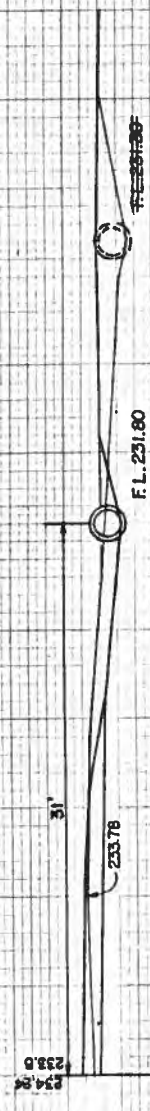
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NO.	1
DATE	1
BY	7
FM	624

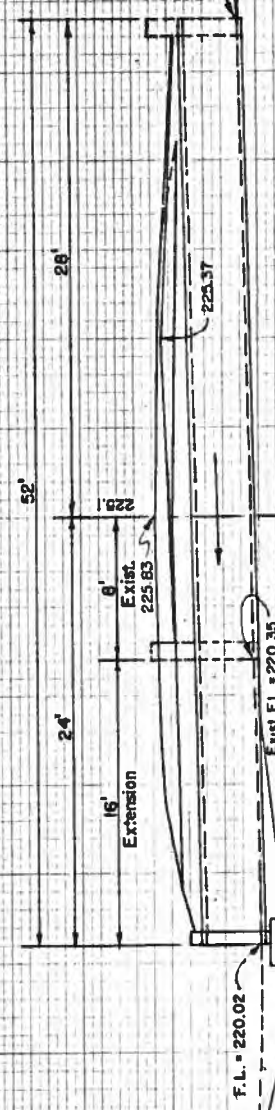


Und. Struct. Excav. = 7 C.Y.
 36" R.C. Pipe - Cl. II = 4.88 L.F. 49.55
 Cl. II Concrete = 4.88 C.Y.
 Reinf. Steel = 233 Lb.

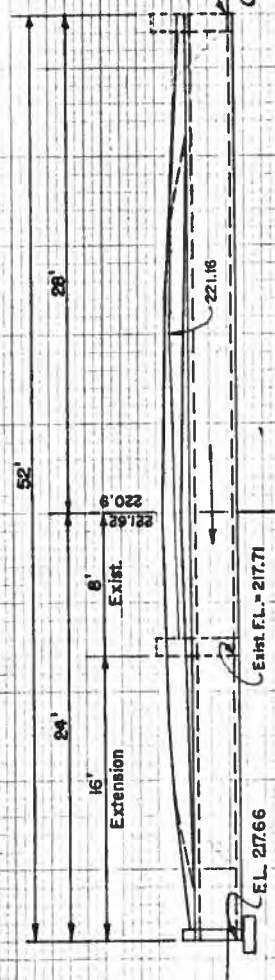
Sta. 305 + 47
 Exist. 3-36" X 36" R.C. Pipes - Mortar Rubble Masonry Hdqrs.
 Extended 16' Downstr. - CH-II A



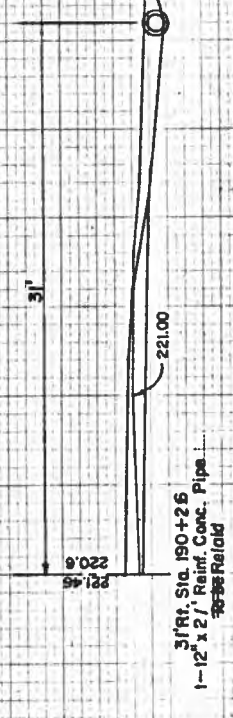
31' R.C. Sta. 281 + 63
 1-18' x 15' R.C. Pipe
 (Reinforced)



Sta. 228 + 20
 Exist. 6-36" X 36" R.C. Pipes - Mortar Rubble Masonry Hdqrs.
 Extended 16' Downstr. - CH-II A (Reinforced)



Sta. 190 + 78
 Exist. 1-24" X 36" R.C. Pipe - Mortar Rubble Masonry Hdqrs.
 Extended 16' Downstr. - CH-II A



31' R.C. Sta. 190 + 26
 1-12' x 2' R.C. Pipe
 (Reinforced)

6-36" CONC. PIPES - TABLE OF DIMENSIONS & QUANTITIES FOR ONE HDWL. - CH-II A

TABLE		REIN. STEEL FOR ONE HEADWALL										TOTAL QUANTITIES							
OF DIMENSIONS		BARS A1		BARS A2		BARS F1		BARS F2		STEEL CONC.									
G	K	T	E	H	W	No.	Lgth.	Wt.	No.	Lgth.	Wt.	LBS.	CY.						
1'-11"	12'	12'	2'-5"	4'-5"	4'-7"	63	8	6'-6"	20	42'-3"	176	26	5'-2"	150	126	6'-8"	116	465	6.91

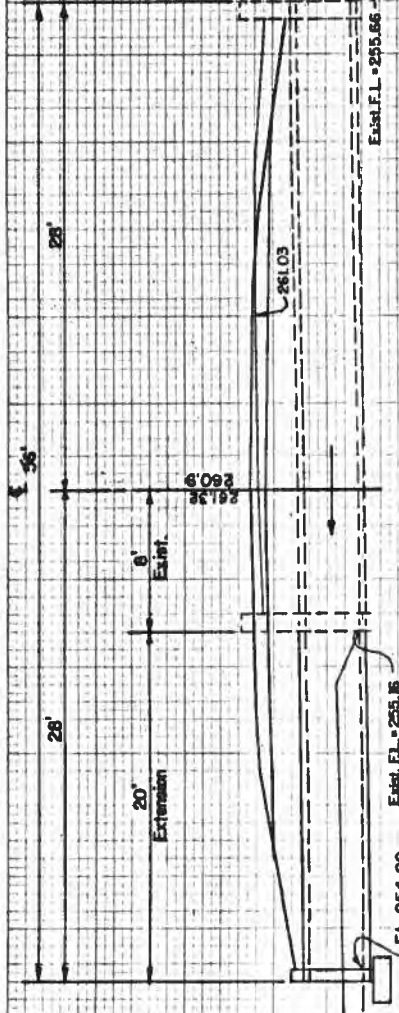
Refer to Standard Conc. Models. For Pipe Culverts - CH-II" for dimensions and details not shown hereon.

Und. Struct. Excav. = 15 C.Y.
 36" R.C. Pipe - Cl. II = 6.91 L.F. 89.65
 Cl. II Concrete = 6.91 C.Y.
 Reinf. Steel = 465 Lb.

Und. Struct. Excav. = 3 C.Y.
 24" R.C. Pipe - Cl. II = 1.58 L.F. 16.2
 Cl. II Concrete = 1.58 C.Y.
 Reinf. Steel = 112 Lb.

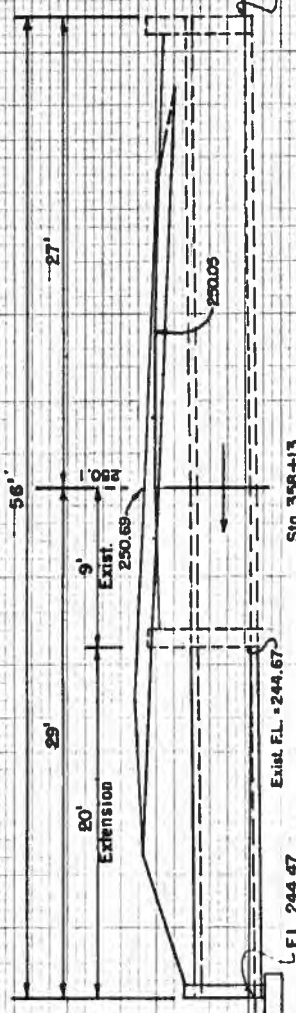
CROSS SECTION AT CULVERT SITES
 Sheet 3 of 7

STATE PROJECT		SHEET	
NO.	DATE	NO.	DATE
16	Jim Wells	989	1
17	Jim Wells	989	2
18	Jim Wells	989	3
19	Jim Wells	989	4
20	Jim Wells	989	5
21	Jim Wells	989	6
22	Jim Wells	989	7
23	Jim Wells	989	8
24	Jim Wells	989	9
25	Jim Wells	989	10
26	Jim Wells	989	11
27	Jim Wells	989	12
28	Jim Wells	989	13
29	Jim Wells	989	14
30	Jim Wells	989	15
31	Jim Wells	989	16
32	Jim Wells	989	17
33	Jim Wells	989	18
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36	Jim Wells	989	21
37	Jim Wells	989	22
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113	Jim Wells	989	98
114	Jim Wells	989	99
115	Jim Wells	989	100



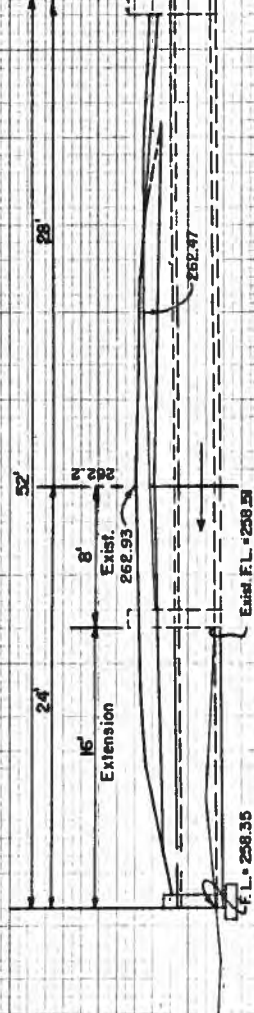
Sta. 363+53
Exist. 4-36" X 36" R.C. Pipes-Mortar Rubble Masonry Hdrts.
Extended 20' Demstr.-CH-11A

Und. Struct. Excav. = 2.0 C.Y.
36" R.C. Pipe-CL III = 30' L.F. 82.42
Cl. A Concrete = 5.42 C.Y.
Reinf. Steel = 293 Lb.



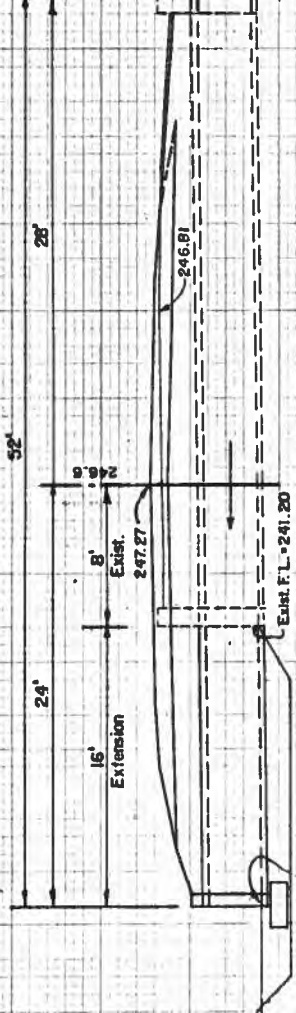
Sta. 358+13
Exist. 3-36" X 36" R.C. Pipes-Mortar Rubble Masonry Hdrts.
Extended 20' Demstr.-CH-11A

Und. Struct. Excav. = 12 C.Y.
36" R.C. Pipe-CL III = 30' L.F. 61.77
Cl. A Concrete = 4.68 C.Y.
Reinf. Steel = 253 Lb.



Sta. 337+46
Exist. 1-24" X 36" R.C. Pipe-Mortar Rubble Masonry Hdrts.
Extended 16' Demstr.-CH-11A

Und. Struct. Excav. = 2 C.Y.
24" R.C. Pipe-CL III = 16' L.F. 16.3
Class A Concrete = 1.59 C.Y.
Reinf. Steel = 112 Lb.



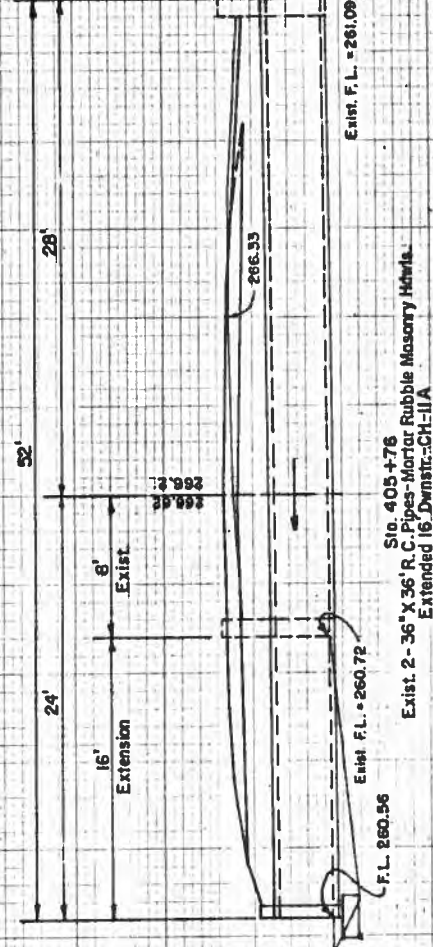
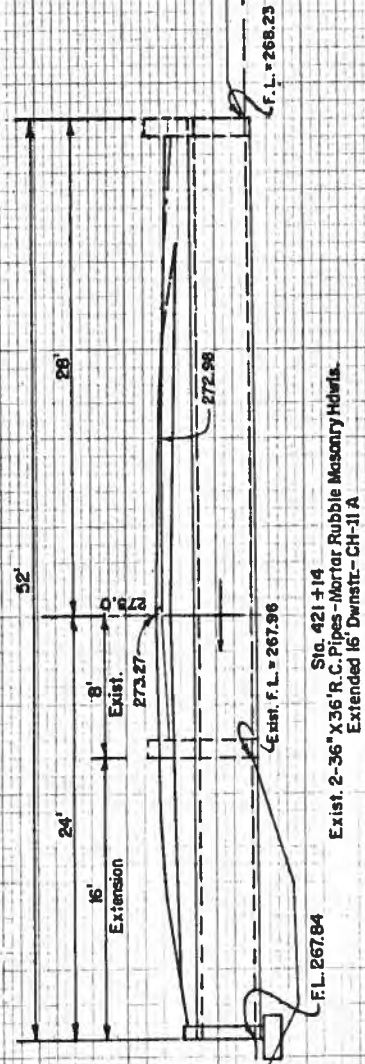
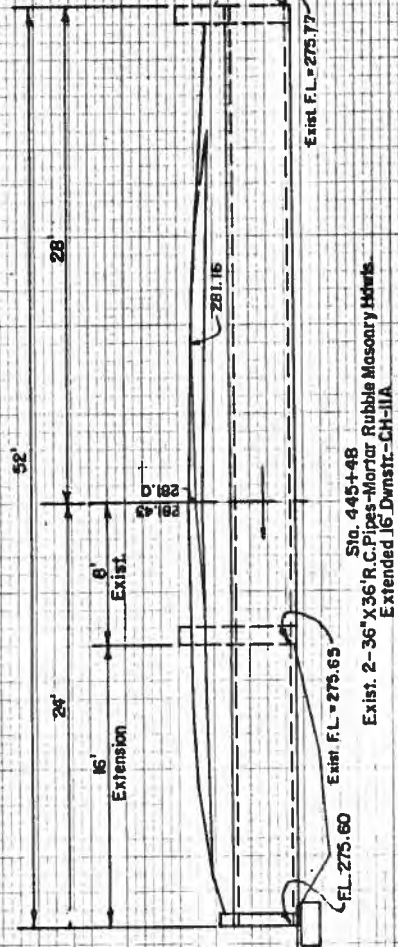
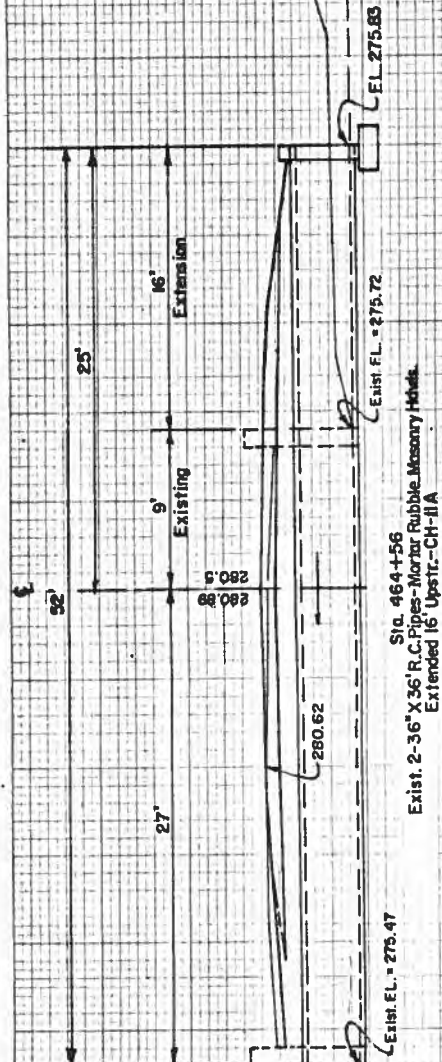
Sta. 321+92
Exist. 4-36" X 36" R.C. Pipes-Mortar Rubble Masonry Hdrts.
Extended 16' Demstr.-CH-11A

Und. Struct. Excav. = 1 C.Y.
36" R.C. Pipe-CL III = 30' L.F. 56.12
Class A Concrete = 5.42 C.Y.
Reinf. Steel = 293 Lb.

CROSS SECTION AT CULVERT SITES

Sheet 4 of 7

NO.	DATE	BY	CHKD.	APP'D.	STATE	PROJECT
16	10/1/77	Jim Wells	989	1	7	EN 624



CROSS SECTION AT CULVERT SITES

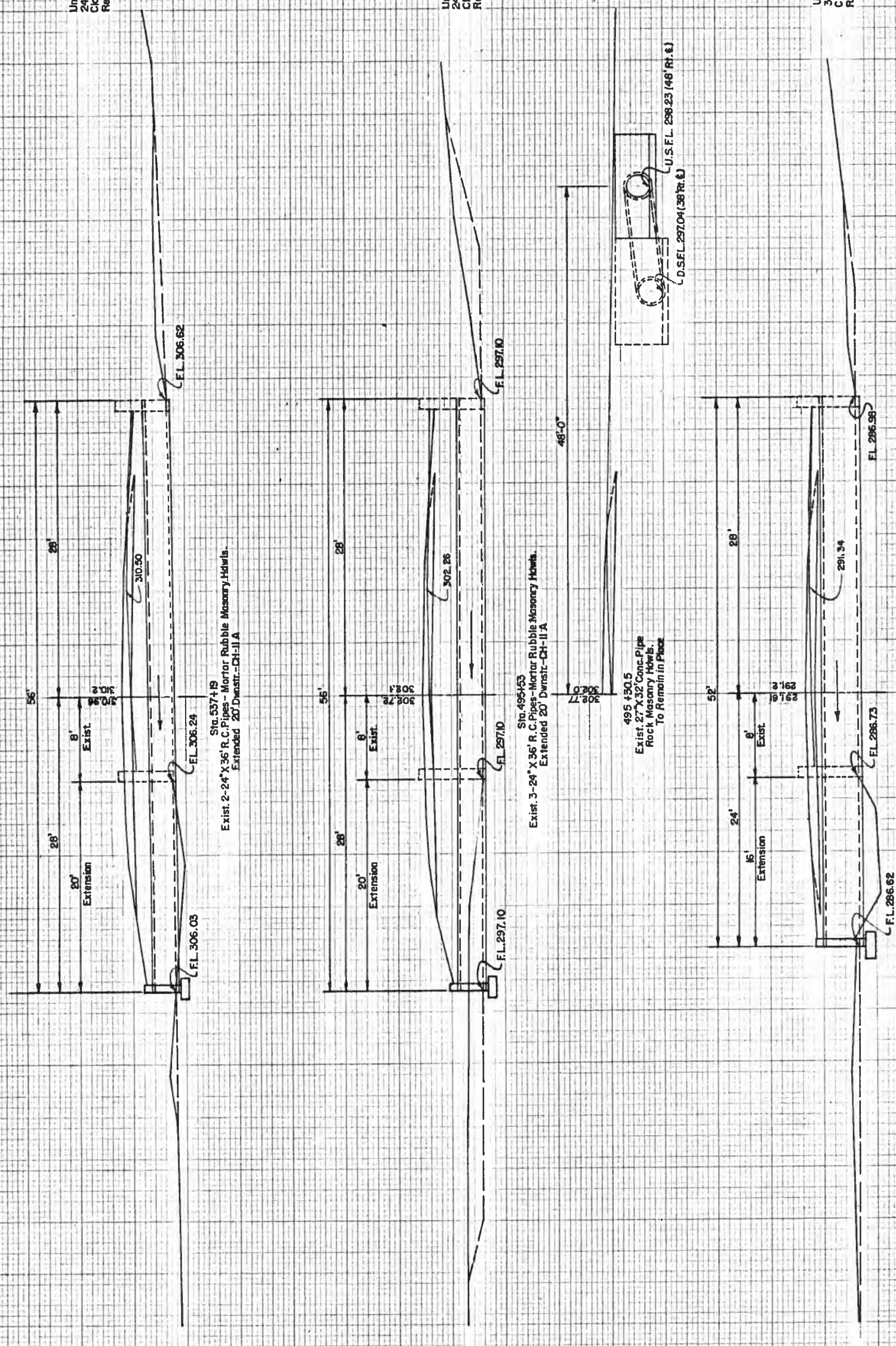
Sheet 5 of 7

16	Jim Wells	989	1	7	EM 624
4	100.5	L-999-1-7			STATS FRA/10/CT
48	STATS				

Uncl. Struct. Excor. = 2 CY
 24" R.C. Pipe - Cl. II = 40 LF 40.35
 Class A Concrete = 194 CY
 Reinf. Steel = 127 Lb

Uncl. Struct. Excor. = 10 CY
 24" R.C. Pipe - Cl. II = 40 LF 40.35
 Class A Concrete = 231 CY
 Reinf. Steel = 142 Lb

Uncl. Struct. Excor. = 4 CY
 36" R.C. Pipe - Cl. II = 35 LF 32.90
 Class A Concrete = 194 CY
 Reinf. Steel = 223 Lb

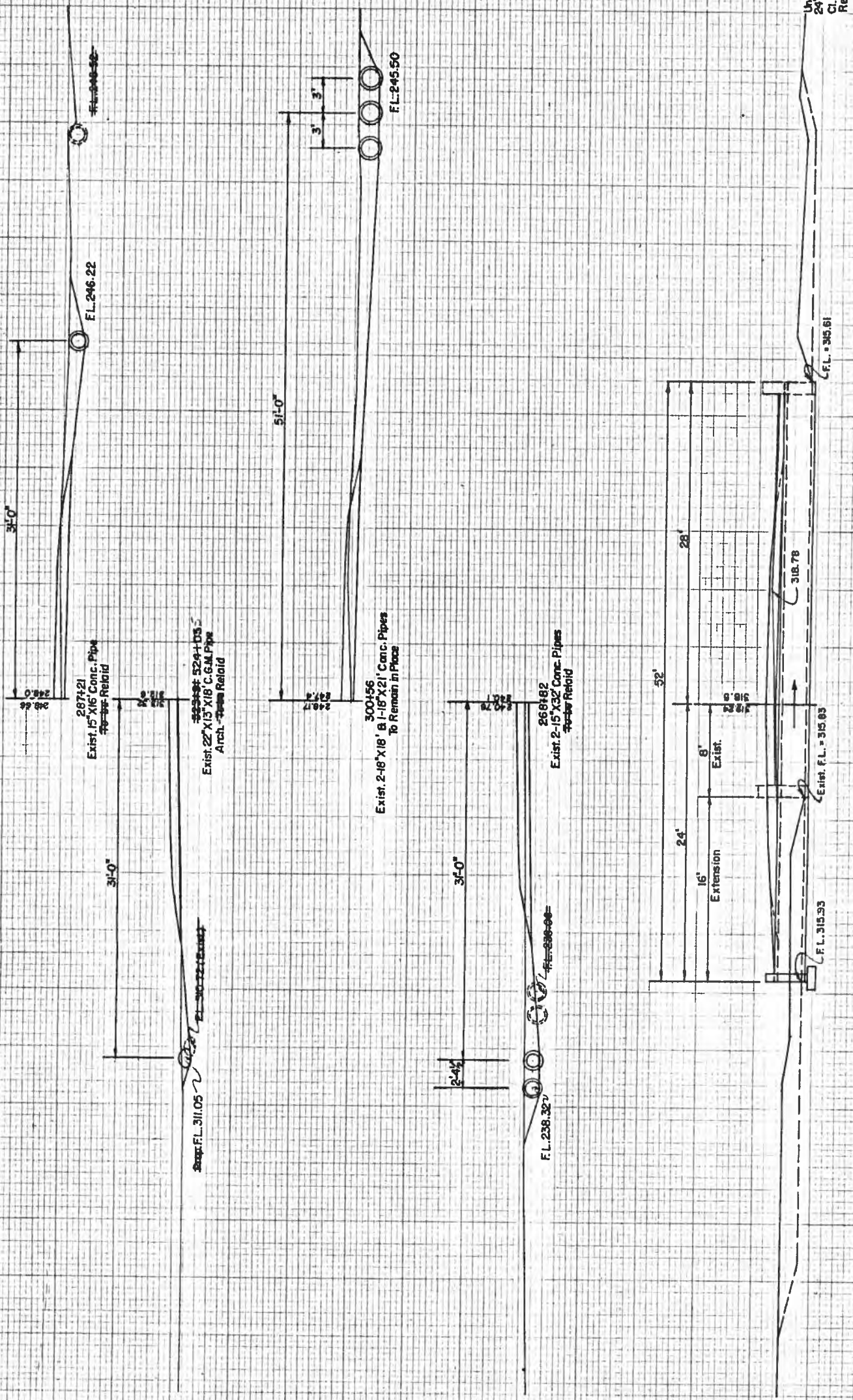


CROSS SECTION AT CULVERT SITES

Sheet 6 of 7

NO.	DATE	STATE PROJECT
1	12-9-19	1-7
2	12-9-19	1-7
3	12-9-19	1-7
4	12-9-19	1-7
5	12-9-19	1-7
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15	12-9-19	1-7
16	12-9-19	1-7
17	12-9-19	1-7
18	12-9-19	1-7
19	12-9-19	1-7
20	12-9-19	1-7

16 JIM WELLS 989 1 7 FM 624



CROSS SECTION AT CULVERT SITES
Sheet 7 of 7

16	Jim Wells	989	4	7	FM 624
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