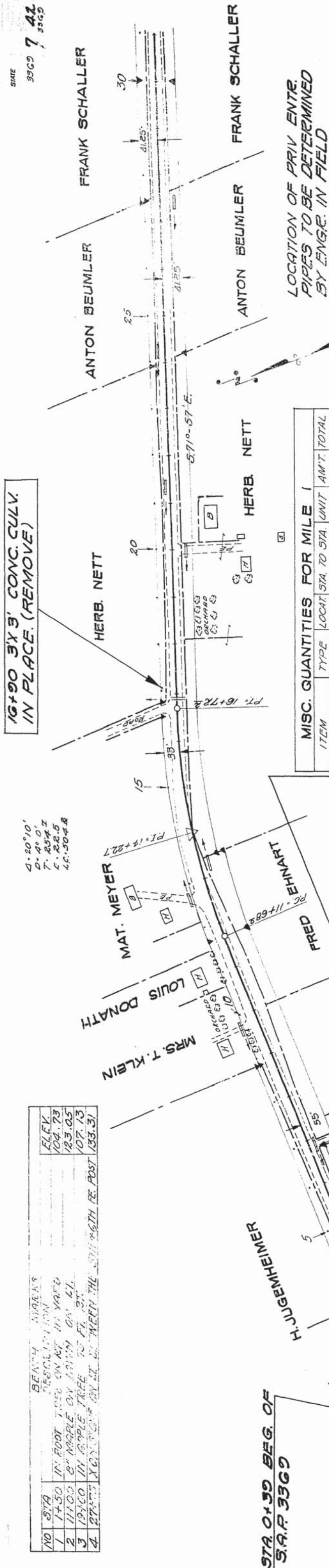
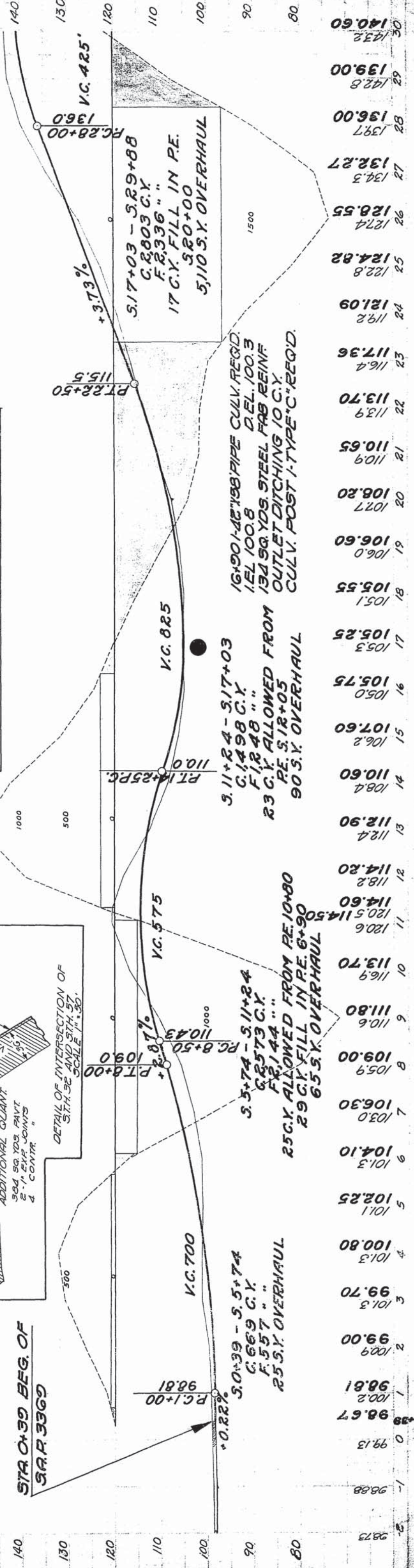


NO	STA	BEACH MARKS	ELEV.
1	1+50	IN FOOT TONG ON RT. IN YARD	104.73
2	1+100	ON MAPLE ON LWN ON AL.	123.05
3	1+400	IN APPLE TREE TO FT. ST.	107.13
4	2+400	X ON 20' ON RT. NEAR THE 6TH RE POST	133.31



MISC. QUANTITIES FOR MILE I						
ITEM	TYPE	LOCAT	STA TO STA	UNIT	AM'T	TOTAL
CLEAR & GRAVE	R	R	3+00 10+00	ACRE	0.5	0.5
LIP CURB	B	R	1+80 16+2	LIN. FT.	4.92	4.92
"	A	R	2+30 9+20	"	5.90	
"	A	R	16+22 29+00	"	11.88	
"	A	L	2+30 10+20	"	7.50	
"	A	L	19+00 29+00	"	5.80	36.18
G CURB & GUTTER	2' G	R	0+39 2+00	"	16.1	
"	2' G	L	0+00 2+00	"	2.00	3.61
"	"	R	5+50 11+50	"	2.00	
"	3' G	R	39+20 42+50	"	2.60	
"	3' G	L	10+50 11+30	"	.80	
"	3' G	L	32+80 35+55	"	2.75	8.15
LIP CURB OUTL.	8' L	R	16+22 16+22	C.Y.	3.0	
"	8' G	R-L	23+00	"	6.2	9.2
C & G INLET	3' D	R	2+00	"	G	
"	"	R	9+50	"	G	
"	"	L	0+00	"	G	
"	"	L	2+00	"	G	
"	OUTLET	"	10+50	"	G	
"	"	L	32+80	"	G	
"	OUTLET	"	35+55	"	G	
"	"	L	39+190	"	G	
"	OUTLET	"	42+50	"	G	5.4
STEEL ANCH G-DR	TOTAL	FOR	AMT	2.83	20.0	90.0
"	"	"	"	2.83	6.50	62.0
"	"	"	"	POST	37	37
P. O. W. MARSHES						

[illegible]

50+02 1-36" PIPE CULV.
IN PLACE. (REMOVE).

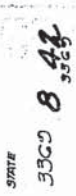
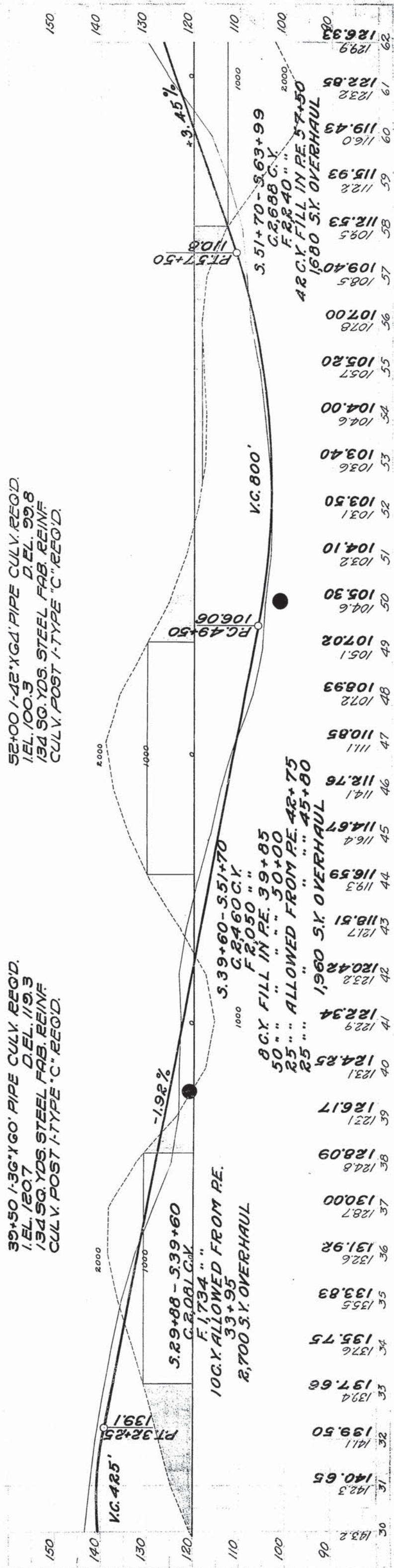
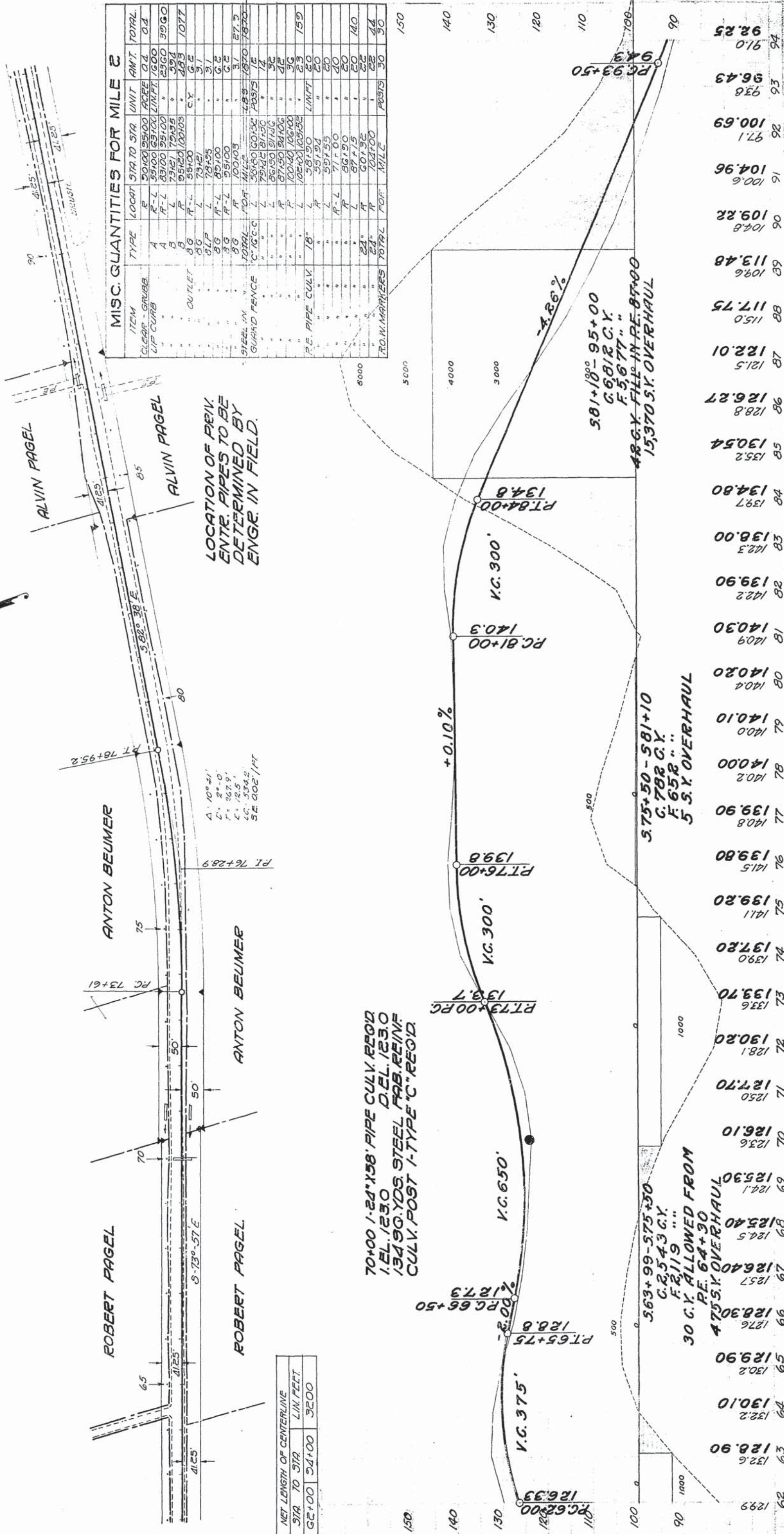


Diagram of a beam with a hinge support at the left end and a roller support at the right end. A uniformly distributed load of 20 kN/m is applied downwards over a 7m span. The beam is divided into two sections: Section 1 (left) and Section 2 (right).



MISC. QUANTITIES FOR MILE 2						
ITEM	TYPE	LOCAL	STA TO STA	UNIT	AM'T	
CLEAR - GRAVE		P	50100	25400	ACRE	0.1
LIP CURB	A	P-L	55100	23100	LINEAL	16000
	B	P-L	33100	25100	"	23600
	B	L	73421	75435	"	3948
	B	P	95400	100103	"	2853
OUTLET	B	P-L	55100		CY	6.2
	B	L	73421		"	3.1
	B	P-L	73425		"	3.1
	B	L	85100		"	6.2
	B	P-L	95100		"	6.2
	B	P	100103		"	3.1
STEEL IN	TOTAL	FOR	MILE		18.5	18700
GUARD FENCE	C 16.0 C	L	55100	60132	POSTS	12
	"	L	73421	81500	"	14
	"	L	86100	87400	"	32
	"	P	87150	87400	"	42
	"	P	100140	106100	"	36
	"	L	105100	105152	"	23
P.E. PIPE CULV	18"	L	55100		LINEAL	20
	"	P	55150		"	20
	"	L	59150		"	20
	"	P-L	71000		"	40
	"	P	86100		"	20
	"	L	87115		"	20
	24"	P	60132		"	22
	24"	P	104100		"	22
TOTAL	FOR	MILE			POSTS	30



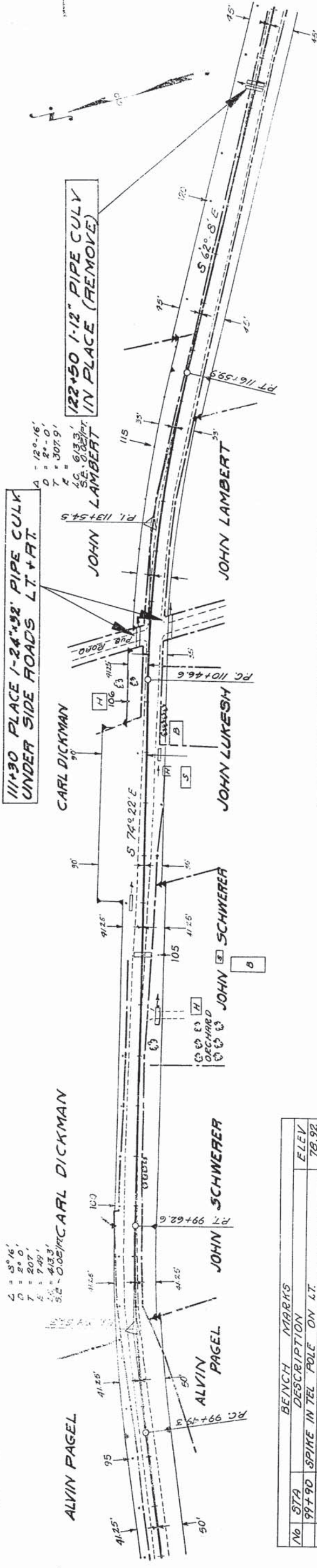
Δ = 5° 16'
D = 240.0'
T = 207.1'
E = 7.49'
S.E. = 413.3'
S.E. = 0.051/PC

ALVIN PAGEL

111+90 PLACE 1-24"x82" PIPE CULV UNDER SIDE ROADS LT. + RT.

Δ = 13° 16'
D = 240.0'
T = 307.9'
E = 613.3'
S.E. = 0.051/PC

122+50 1-12" PIPE CULV IN PLACE (REMOVE)



BENCH MARKS		
No	STA	ELEV
99+90	SPIKE IN TEL POLE ON LT.	78.92
109+25	X IN N.E. COR. BLOCK FRONT DOOR (HOUSE)	74.74
124+85	SPIKE IN APPLE TREE ON LT.	66.68

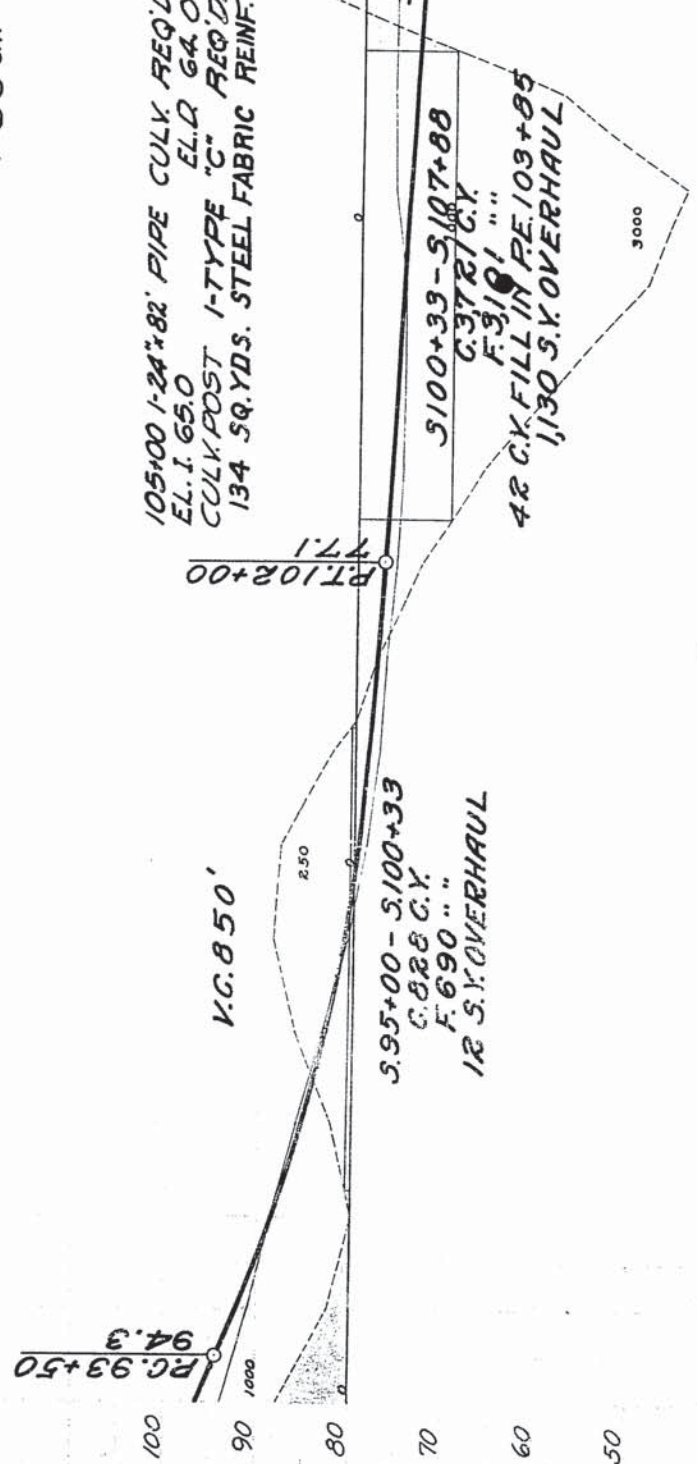
MISC. QUANTITIES FOR MILE 3.

ITEM	TYPE	LOCAT	STA TO STA	UNIT	AMT.	TOTAL
LIP CURB	B	R	110+07/117+00	LINEAL	693	
LIP CURB	B	L	115+94/122+50	"	656	1349
LIP CURB OUTLET	B	R	117+00	CY	31	
LIP CURB OUTLET	B	L	117+00	"	31	62
OFF-ROAD LIP CURB OUTLET	B	R	117+00	LINEAL	288	
OFF-ROAD LIP CURB OUTLET	B	L	117+00	"	288	576
GUARD FENCE	B	R	117+00/122+50	LINEAL	55	
GUARD FENCE	B	L	117+00/122+50	"	55	110
ANCHORAGE	STD	R	117+00	"	2	
ANCHORAGE	STD	L	117+00	"	2	4
GUARD FENCE	C 16" C.C.	R	106+00/106+48	POSTS	3	
GUARD FENCE	C 16" C.C.	L	106+00/106+48	"	3	6
GUARD FENCE	C 16" C.C.	R	126+50/129+70	POSTS	21	
GUARD FENCE	C 16" C.C.	L	126+50/129+70	"	21	42
GUARD FENCE	C 16" C.C.	R	127+10/132+70	POSTS	36	
GUARD FENCE	C 16" C.C.	L	127+10/132+70	"	36	72
GUARD FENCE	C 16" C.C.	R	122+50/122+50	POSTS	64	
GUARD FENCE	C 16" C.C.	L	122+50/122+50	"	64	128
ROW MARKERS	TOTAL	R	117+00/122+50	POSTS	54	
ROW MARKERS	TOTAL	L	117+00/122+50	"	54	108

LOCATION OF RE. PIPES TO BE DETERMINED BY ENGINEER IN FIELD.

NET LENGTH OF CENTERLINE		
STA	TO STA.	LINEAL
94+00	106+00	1200
106+00	125+00	1900
125+00	125+00	3100

C 124 CY F 3015 CY
C 959 CY F 86 CY



105+00 1-24"x82" PIPE CULV REQ'D.
EL. I. 65.0
CULV. POST 1-TYPE "C" REQ'D.
134 SQ. YDS. STEEL FABRIC REINF.

5100+33-5100+33
C. 828 C.Y.
F. 690 " "
12 S.Y. OVERHAUL

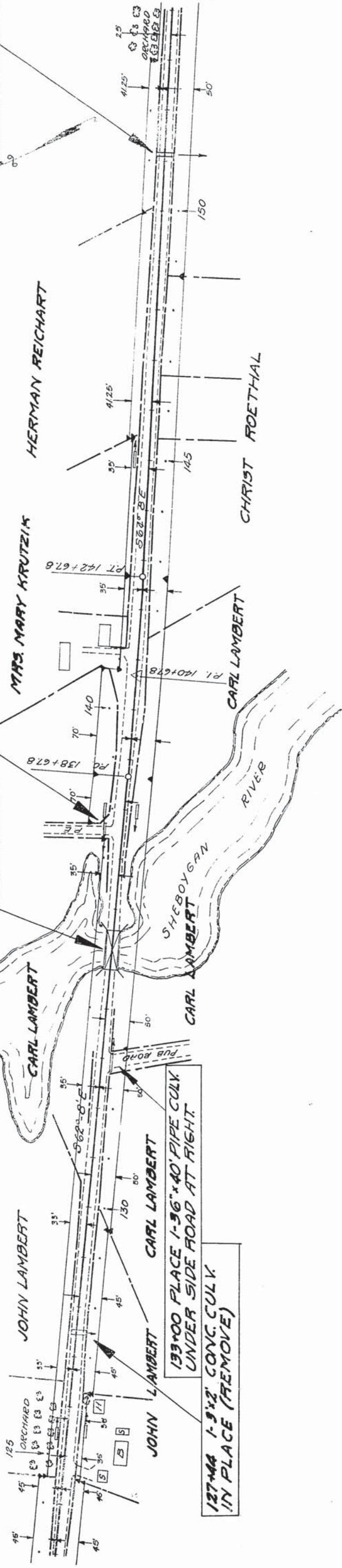
5100+33-5100+33
C. 372 C.Y.
F. 310 " "
42 C.Y. FILL IN RE 109+85
1,130 S.Y. OVERHAUL

5107+88-5124+00
C. 4775 C.Y.
F. 3979 " "
25 C.Y. ALLOWED FROM RE.
109+00
17,640 S.Y. OVERHAUL

122+50 2-24"x58" PIPE CULVS. REQ'D.
EL. I. 62.5
1345X REIN. STEEL REQ'D. IN PAV'T.
CULV. POST 1-TYPE "C" REQ'D.

94.3
96.43
98.25
99.86
100.50
101.70
102.10
103.54
105.42
107.40
109.48
111.50
113.50
115.50
117.50
119.50
121.50
123.50
125.50

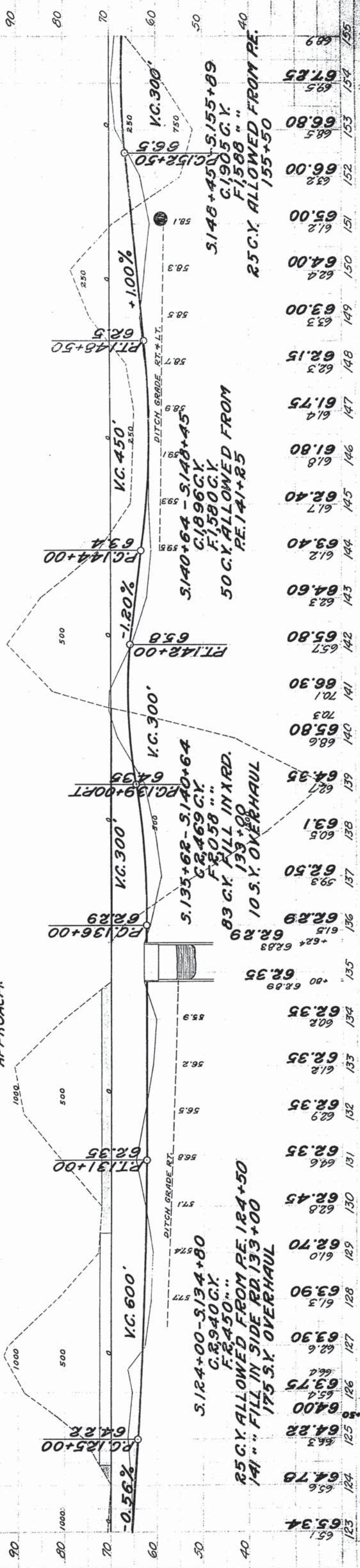
151x12 18" PIPE CULY
(REMOVE) 3672 IN PLACE (REMOVE)



NET LENGTH OF CENTERLINE		
STA.	TO STA.	LIN. FT.
125+00	155+00	3000

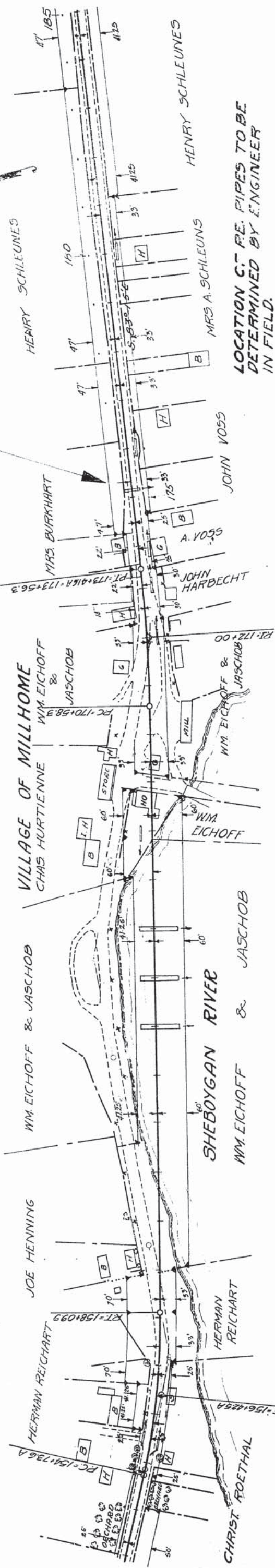
STA. 135+20 W.H.C. STAN.
80' SPAN 28' RDY LOW
TRUSS BR. IN PLACE
1345X REINF. STEEL
REQ'D IN EACH BRIDGE
APPROACH.

151/12 1-36"ØØ PIPE CULV REQD
EL.I.580 ELD.575
134 SY REINF REQD IN PAY'T.
CULV POST 1-TYPE "C" REQD



NO.	STA	BENCH MARKS	ELEV.
159+00	SPRINKLER	SPRINKLER	65.00
169+50	SPRINKLER	SPRINKLER	71.55
174+50	SPRINKLER	SPRINKLER	60.37
186+00	SPRINKLER	SPRINKLER	53.34

$\Delta = 13^{\circ} 27'$
 $D = 40' 0''$
 $T = 168.9$
 $L.C. = 336.3$
 $S.E. = 0.04' / FT.$



NET LENGTH OF CENTERLINE	STA. TO STA.	LIN. FT.
155+00	159+00	400
159+00	185+00	2,585.3
155+00	185+00	2,985.3

- ③ 4 159+50 TO 168+80
 400 C.Y. RIP RAP REQ'D 6" THICK
 ON RT. SLOPE FROM BOTTOM
 OF RIVER TO ELEV. 59.0

C. 1885 C.Y.
 F. 581 C.Y.
 F. 1005 C.Y.

165 AND 166 1 AT EACH 36" x 117"
 PIPE CULV'S REQ'D
 EL. 4.470
 CULV. POST 2 TYPE 'C' REQ'D
 134 SQ. YDS. STEEL FABRIC REIN.
 REQ. AT STA. 164, 165, 166

ITEM	TYPE	LOC.	STA. TO STA.	UNIT	AMT.	TOTAL
LIP CURB	B	L	170+18	179+82	LIN. FT.	91.9
"	B	R	174+42	199+37	"	51.5
"	A	L+R	208+00	212+00	C.Y.	800
"	"	"	173+82	"	"	51
"	B	R	173+57	"	"	51
"	B	L+R	208+00	"	"	62
STEEL IN L.C. QUILT	TOTAL	"	"	"	"	828
RE. PIPE CULV	18"	L	168+00	"	"	20
"	"	R	173+00	"	"	20
"	"	R	174+00	"	"	20
"	"	R	176+00	"	"	20
"	"	R	180+00	"	"	20
"	"	R+L	193+00	"	"	40
6" CULV. GUTTER	36" x 117"	L	173+30	174+00	"	195
"	"	R	174+00	195+55	"	100
"	"	L	174+00	"	"	6
"	"	R	174+00	"	"	6
"	"	"	"	"	"	180
"	"	"	"	"	"	300
"	"	"	"	"	"	300

ITEM	TYPE	LOC.	STA. TO STA.	UNIT	AMT.	TOTAL
RIP RAP	B	"	159+50	168+80	C.Y.	405
GUARD FENCE	B	"	170+10	168+54	LIN. FT.	944
"	B	"	160+50	167+48	"	696
ANCHORAGE	STD	"	159+10	"	"	1
"	"	"	168+14	"	"	1
"	"	"	160+10	"	"	1
GUARD FENCE	"	"	167+16	"	"	1
"	"	"	169+20	172+48	POSTS	43
"	"	"	174+40	179+82	"	8
"	"	"	174+40	191+88	"	109
"	"	"	181+30	193+20	"	76
"	"	"	199+50	201+58	"	14
"	"	"	201+50	202+46	"	7
"	"	"	201+50	212+00	"	32
ROAD MARKERS	"	"	"	"	"	37
TOTAL	"	"	"	"	"	97

5.174+00 - 5.184+48
 6.2352 C.Y.
 F. 1960 " "

20 C.Y. FILL IN RE. 177+00
 12 " " " 180+60
 1235 S.Y. OVERHAUL

V.C. 350'
 -0.10%

V.C. 310'
 -1.31%

V.C. 340'
 -0.72%

HIGH LEVEL OF STORAGE WATER = 56.05'

164+00 1-36" x 122" PIPE CULV. REQ'D
 EL. 4.480
 CULV. POST 1-TYPE "C" REQ'D
 18.19% SHRINKAGE
 BORROW 27,538 C.Y.

18.7% SHRINKAGE

V.C. 310'
 -1.31%

V.C. 340'
 -0.72%

HIGH LEVEL OF STORAGE WATER = 56.05'

164+00 1-36" x 122" PIPE CULV. REQ'D
 EL. 4.480
 CULV. POST 1-TYPE "C" REQ'D
 18.19% SHRINKAGE
 BORROW 27,538 C.Y.

18.7% SHRINKAGE

V.C. 310'
 -1.31%

V.C. 340'
 -0.72%

HIGH LEVEL OF STORAGE WATER = 56.05'

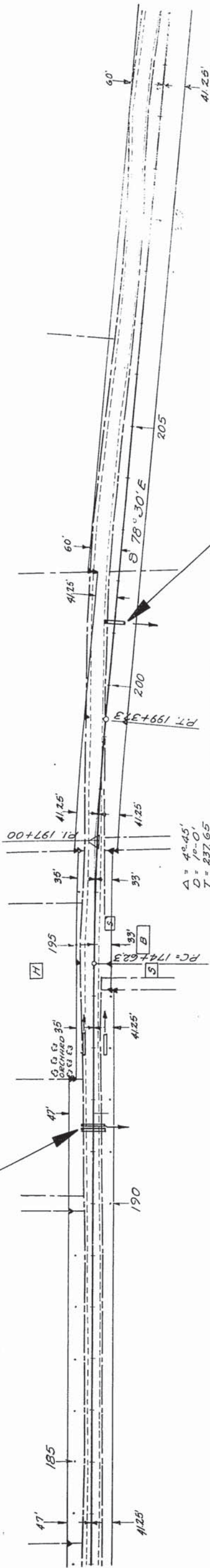
164+00 1-36" x 122" PIPE CULV. REQ'D
 EL. 4.480
 CULV. POST 1-TYPE "C" REQ'D
 18.19% SHRINKAGE
 BORROW 27,538 C.Y.

18.7% SHRINKAGE

BENCH MARKS			
No	STA	DESCRIPTION	ELEV
	186+00	3' ELM 75 FT. RT.	53.34
	194+35	IN N.E. CORNER OF BARN	53.13
	202+10	IN FOOT OF ELM 40 FT. RT.	41.50

191+54 18" PIPE CULV.
IN PLACE (REMOVE)

HENRY SCHLEUNES ROBERT KAISER



NET LENGTH OF CENTERLINE		
STA	TO STA.	LIN. FT.
185+00	212+00	2,700

HENRY SCHLEUNES
ROBERT KAISER
 $\Delta = 4^{\circ}45'$
 $D = 10'-0"$
 $T = 237.65'$
 $L.C. = 475.0'$

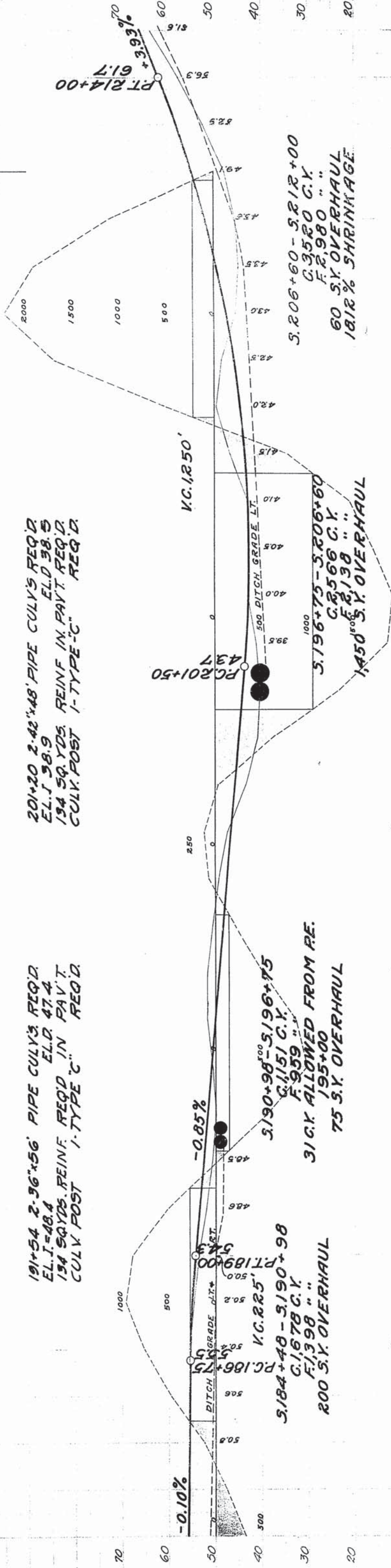
201+20 1-42" PIPE CULV.
IN PLACE (REMOVE)

191+54 2-36"x56" PIPE CULV'S REQ'D.
EL.I.=48.4
194 SQ.YDS. REINF. REQ'D. IN PAV'T.
CULV. POST 1-TYPE "C" REQ'D.

201+20 2-42"x48" PIPE CULV'S REQ'D.
EL.D 38.5
194 SQ.YDS. REINF. IN PAV'T. REQ'D.
CULV. POST 1-TYPE "C" REQ'D.

4 5

FENNER (CO. LNSR)



55.89	55.78	55.68	55.58	55.48	55.00	54.30	53.45	52.60	51.76	50.91	50.06	49.21	48.36	47.52	46.67	45.82	44.97	44.12	43.35	42.90	42.80	43.00	43.60	44.50	45.80	47.50	49.50	51.90	54.80	57.90	61.70	65.70
183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215

