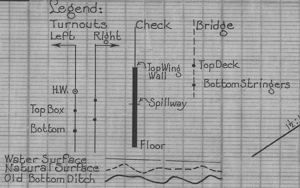
DEPARTMENT OF THE INTERIOR
UNITED STATES RECLAMATION SERVICE
RIO GRANDE PROJECT; N.M. & TEX.
FINAL PROFILE

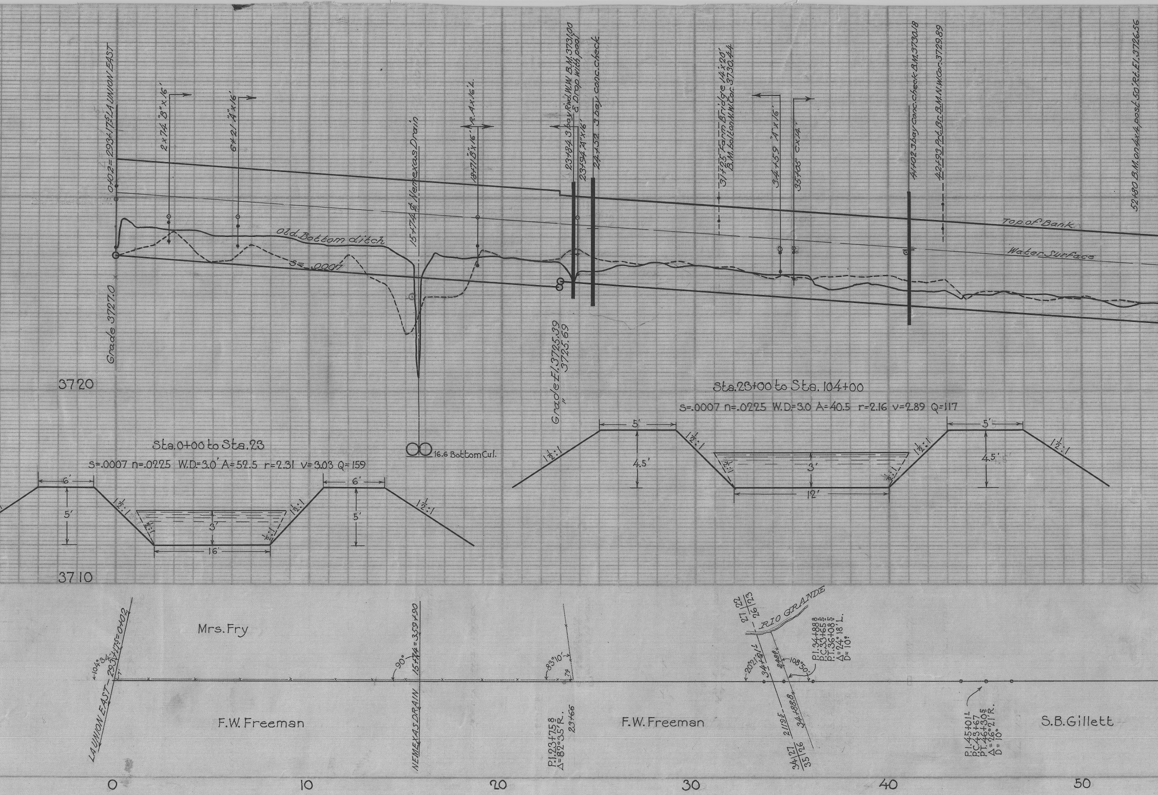
CANUTILLO CANAL

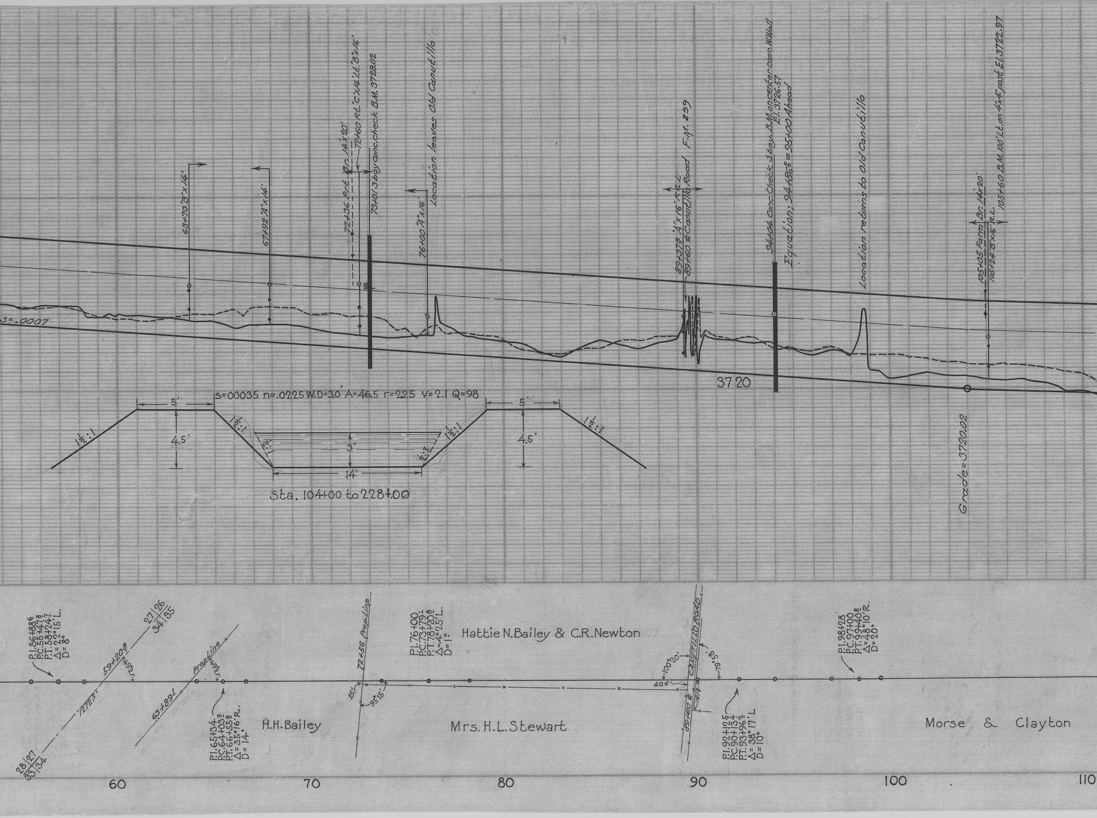
WEST SIDE EXTENSION DIVISION - C.
MESILLA VALLEY

Drawn by F.W.S. & F.R.M. Checked by	Recommended by Approved by

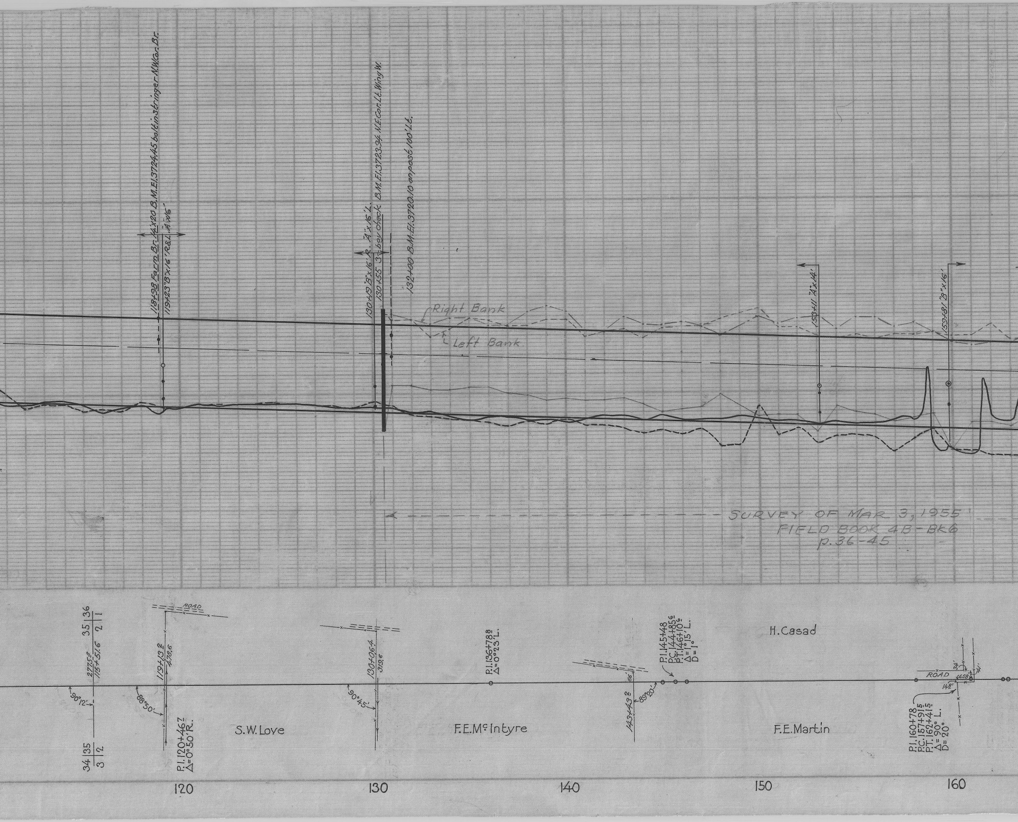
LAS CRUCES N.M.

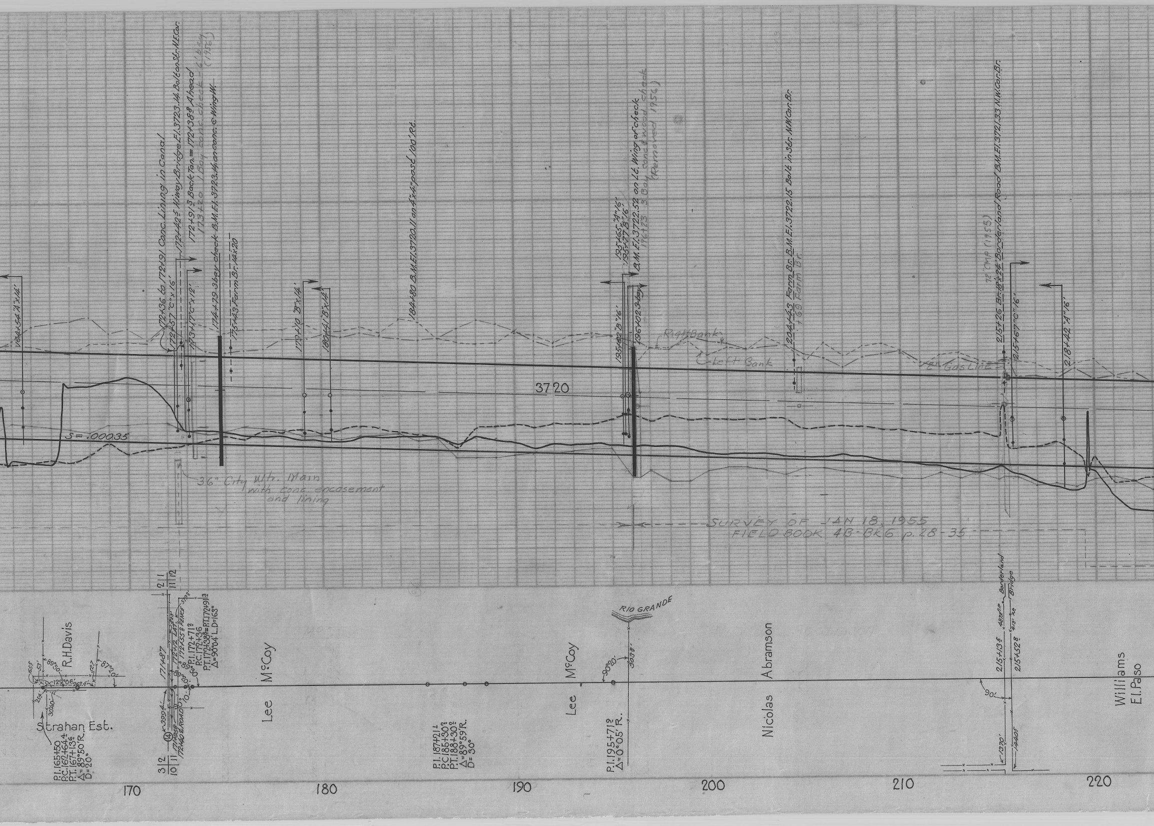

Legend:
Turnouts
Left
Right
H.W.
Top Box
Bottom
Check
Top Wing Wall
Spillway
Floor
Bridge
Top Deck
Bottom Stringers
Water Surface
Natural Surface
Old Bottom Ditch
1½:


0+02=293+17.5 LA UNION EAST
Grade 3727.0
2+74 "B"x16'
6+21 "A"x16'
Old Bottom ditch
S=.0007
15+74 ℄ Nemexas Drain
18+71 "B"x16' R. A x 16' L.
Grade El. 3725.39
" 3725.69
23+84 3 bay Rwd. W.W. B.M. 3731.00 & Drop with pool
23+94 "A"x16'
24+32 3 bay conc. check
31+25 Farm Bridge 14'x20' B.M. bolt on N.W. Cor. 3730.44
34+59 "A"x16'
35+05 C x 14'
41+02 3 bay Conc. check B.M. 3730.18
42+93 Pvt. Br. B.M. N.W. Cor. 3729.89
52+80 B.M. on 4x4 post 50' Rt. El. 3726.56
Top of Bank.
Water Surface
3720
3710
16.6 Bottom Cul.
Sta. 0+00 to Sta. 23
S=.0007 n=.0225 W.D.=3.0' A=52.5 r=2.31 v=3.03 Q=159
6'
5'
1½:1
3'
16'
6'
5'
1½:1
Sta. 23+00 to Sta. 104+00
S=.0007 n=.0225 W.D.=3.0 A=40.5 r=2.16 v=2.89 Q=117
5'
4.5'
1½:1
3'
12'
5'
4.5'
1½:1
Mrs. Fry
LA UNION EAST 293+17.5=0+02
104°34'
7'
90°
15+74=359+90
NEMEXAS DRAIN
F.W. Freeman
83°10'
74
P.I. 23+75.8
Δ=82°35' R.
23+66
27 | 22
26 | 23
RIO GRANDE
202.1'
34+40.1
248.8
108°50'
P.I. 34+88.8
P.C. 33+65.5
P.T. 36+08.5
Δ=24°18' L.
D=10°
21/19.5
34+88.8
34 | 27
35 | 26
F.W. Freeman
P.I. 45+01
P.C. 43+67
P.T. 46+30.5
Δ=26°21' R.
D=10°
S.B. Gillett
0
10
20
30
40
50

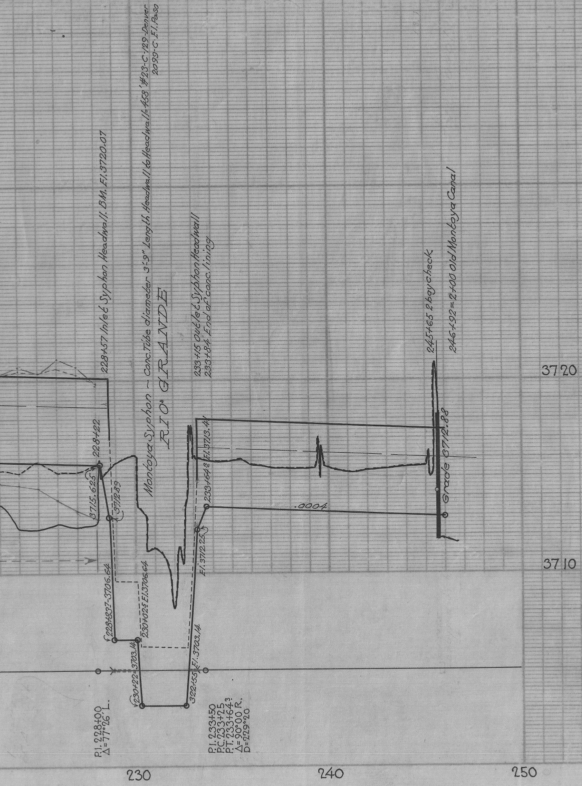


63+70 "B"x14'
67+92 "A"x14'
72+36 Prt. Br. 14'x20'
72+60 Rt. "C"x14' Lt. "B"x16'
73+01 3 bay conc. check B.M. 3728.02
76+00 "A"x16'
Location leaves Old Canutillo
89+37.8 "A"x16' R. ℄ L
89+60 ℄ Canutillo Road F.M. 259
94+04 Conc. Check 3 bay. B.M. on center conc. W. Wall El. 3726.57
Equation; 94+86.2 = 95+00 Ahead
Location returns to Old Canutillo
105+05 Farm Br. 14'x20'
105+24 "B"x16' R.L.
105+60 B.M. 100' Lt. on 4"x4" post El. 3722.97
S=.0007
3720
Grade=3720.02
S=.00035 n=.0225 W.D=3.0' A=46.5 r=2.25 V=2.1 Q=98
5'
4.5'
1½:1
3'
14'
1:1
½:1
Sta. 104+00 to 228+00
P.I. 56+88.6
P.C. 55+47.8
P.T. 58+24.7
Δ= 22°15' L.
D= 8°
27|26
34|35
59+20.8
1272.5'
28|27
33|34
12°46'
Prop. Line
63+89.1
12°46'
P.I. 65+34
P.C. 64+03.9
P.T. 66+55.8
Δ= 35°16' R.
D= 14°
H.H. Bailey
72+56 Prop. Line
25'
95°15'
P.I. 76+00
P.C. 73+79.1
P.T. 78+20.8
Δ= 4°25' L.
D= 1°
Hattie N. Bailey & C.R. Newton
Mrs. H.L. Stewart
CANUTILLO ROAD
100°20'
79°58'
49.6'
89+60 ℄
16.18
P.I. 92+12.5
P.C. 90+13.4
P.T. 93+96.2
Δ= 38° 17' L
D= 10°
P.I. 98+28
P.C. 97+00
P.T. 99+40.8
Δ= 48° 10' R.
D= 20°
Morse & Clayton
60
70
80
90
100
110

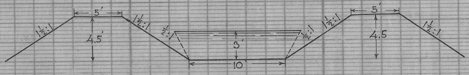

118+98 Farm Br. 14'x20 B.M.El.3724.45 bolt in stringer N.W.Cor. Br.
119+23 "B"x16' R.&L. "A"x16'
130+19 "B"x16' R. "A"x16' L.
130+55 3-bay check B.M.El.3723.94 N.E.Cor. Lt. Wing W.
132+00 B.M.El.3720.10 on post 100' Lt.
Right Bank
Left Bank
153+11 "A"x14'
159+81 "B"x16'
SURVEY OF MAR 3, 1955
FIELD BOOK 4B - BK6
p. 36-45
35 | 36
2 | 1
2775.8
115+51.6
90°12'
34 | 35
3 | 2
ROAD
119+13.2
478.6
88°50'
P.I. 120+46.7
Δ=0°50' R.
S.W. Love
130+06.4
31.9
90°45'
P.I. 136+78.8
Δ=0°23' L.
F.E. McIntyre
56'
143+43.2
89°20'
P.I. 145+48
P.C. 144+85.6
P.T. 146+10.6
Δ=1°15' L.
D=1°
H. Casad
F.E. Martin
ROAD
34'
41'
1658
148'
P.I. 160+78
P.C. 157+91.5
P.T. 162+41.5
Δ=90° L.
D=20°
120
130
140
150
160



164+54 "A"x14'
172+36 to 172+91 Conc. Lining in Canal
172+57 "C"x16'
172+42.5 Hiway Bridge El. 3723.14 Bolt on Str. N.E. Cor.
172+91.3 Back Tan. = 172+38.8 Ahead
173+17 "C"x12'
173+20 1 Bay conc. check - 6' bay (1956)
174+79 3 bay check B.M. El. 3723.14 on conc. © Wing W.
175+43 Farm Br. 14x20
179+10 "B"x14'
180+41 "B"x14'
184+80 B.M. El. 3720.11 on 4"x4" post 100' Rt.
195+02 "B" 16'
195+65 "A" 16'
195+77 "B" 16'
196+02 3-bay
B.M. El. 3722.52 on Lt. Wing of check
196+23 3 Bay conc. & wood check (Removed 1956)
204+43 Farm Br. B.M. El. 3722.15 Bolt in Str. N.W. Cor. Br.
+69 Farm Br.
Right Bank
Left Bank
3720
S = .00035
36" City Wtr. Main with conc. encasement and lining
SURVEY OF JAN 18, 1955
FIELD BOOK 4B-BK6 p. 28-35
72" CMP (1955)
215+26 Br. 18'x24' Borderland Road B.M. El. 3721.33 N.W. Cor. Br.
215+67 "C" 16'
218+42 "A" 16'
Gas Line
R.H. Davis
Strahan Est.
65.5'
53'
89°50'
129°06'
262.5'
52.7'
87°20'
25.4'
30°40'
P.I. 165+50
P.C. 162+64.4
P.T. 167+13.6
Δ = 89°50' R.
D = 20°
2 | 1
11 | 12
3 | 2
10 | 11
14
171+87
339.4'
171+95.8
172+40 ℄ ROAD
172+12 LAT.
172+55.2 FENCE
57.2'
89°20'
0°30'
10'
P.I. 172+71.2
P.C. 172+36
P.T. 172+38.8 = P.T. 172+91.3
Δ = 90°04' L. D = 163°
Lee McCoy
P.I. 187+21±
P.C. 185+30±
P.T. 188+30±
Δ = 89°59' R.
D = 30°
Lee McCoy
RIO GRANDE
90°20'
303.8'
P.I. 195+71.2
Δ = 0°05' R.
Nicolas Abramson
215+13.5
487.8' F.P.
Borderland
Bridge
215+52.8
413' F.P.
90'
1370'
1440.5'
Williams
El. Paso
170
180
190
200
210
220


228+57 Inlet Syphon Headwall. BM. El. 3720.07
Montoya Syphon ~ Conc. Tube diameter 3'-9" Length Headwall to Headwall = 458' #23-C-129-Denver
2099-C-El. Paso
RIO GRANDE
233+15 Outlet Syphon Headwall
233+84 End of conc. lining
245+65 2 bay check
246+92 = 2+00 Old Montoya Canal
3720
3710
228+22
3715.625
3712.89
228+83.7-3706.64
230+02.5 El. 3706.64
230+22 = 3703.14
322+55 El. 3703.14
El. 3712.25
233+64.3
El. 3713.4
.0004
Grade 3712.88
P.I. 228+00
Δ = 77°26' L.
P.I. 233+50
P.C. 233+25
P.T. 233+64.3
Δ = 90°00' R.
D = 229°20'
230
240
250

Sec. Sta. 233+50 to 247+00


5'
$1\frac{1}{2}:1$
4.5'
$1\frac{1}{2}:1$
$\frac{1}{2}:1$
3'
10'
$\frac{1}{2}:1$
$1\frac{1}{2}:1$
5'
4.5
$1\frac{1}{2}:1$

A = 34.5 r = 2.06 S = 0004 n = .0225 V = 2.10 Q = 72.