COLORADO
Department of Transportation

DOCUMENT SEPARATOR SHEET

REGION 5 – JUNE 2017 CONVERSION

To be placed at the beginning of each separator sheet.

r500001561

Description:
ROW Plans 11X17

Route # and Mile Points:
US 24

Originating Office:

ROW/Survey

File Name:
F.A.P. 54 AR_ROW(.PDF)

Box Location:

25 of 38

For assistance, or to request changes to this form,
please email helpdesk@msimaging.com.

MOUNTAIN STATES IMAGING

F. 4/5

DEPARTMENT OF AGRICULTURE

WASHINGTON

May 11, 1938.

The Honorable,

The Secretary of the Interior.

7

Dear Mr. Secretary:

The Colorado State Highway Department has made application for the appropriation of certain unappropriated public land for use as a right of way for Colorado Federal aid highway project No. 54-A. Enclosed is one linen tracing and four blue prints thereof, showing the right of way desired. This tracing bears the local register's serial number 050747 and certificate to the effect that vacant public land is involved in this application. Denver

Pursuant to the provisions of Section 17 of the Federal Highway Act approved November 9, 1921 (42 Stat. 212), and acting upon representations made by the Colorado State Highway Department, I find that the above mentioned land is needed by the said State Highway Department as a right of way for Colorado Federal aid highway project No. 54-A. If the proposed appropriation of such right of way is not contrary to the public interests or inconsistent with the objects of your Department, I should be obliged if you would authorize the transfer of the same to the Colorado State Highway Department for the purpose specified.

If and when the transfer is approved it will be appreciated if you will have the necessary notations showing such approval made on the blue prints enclosed herewith and return them to the Bureau of Public Roads of this Department.

Sincerely,

Harry L. Brown

Acting Secretary

Enclosures

ADDRESS ONLY THE COMMISSIONER OF THE GENERAL LAND OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GENERAL LAND OFFICE
WASHINGTON

AUG 18 1938

074167

IN REPLY PLEASE REFER TO

Denver 050747 "F" AB

: Transmitting
: map with
: instructions.

Register,

Denver, Colorado.

Sir:

On August 12, the Department approved the map filed by the Colorado State Highway Department in connection with its application of the above number for right of way for the construction of Colorado Federal Aid Highway Project No. 54-A, affecting land in your district.

There is transmitted herewith for the files of your office the duplicate map. Make appropriate notations on your record.

Very respectfully,

Commissioner.

Enclosure.

Staff Right of Way - General

COLORADO

RESS ALL COMMUNICATIONS TO
RADO DEPARTMENT OF HIGHWAYS
4201 E. ARKANSAS AVE.

CHAS. E. SHUMATE
Chief Engineer

DEPARTMENT OF HIGHWAYS
DENVER 22, COLORADO
11/13/68

Mr. Everett K. Weeden
Supervisory Adjudicator
Bureau of Land Management
1509 Federal Building
Denver, Colorado 80202

Attention: Mrs. Todd

Dear Mr. Weeden:

We are enclosing a tabulation of the starting and completion dates of the projects which you noted in your letters of October 22, 1968 and November 7, 1968.

According to the phone conversation with Mr. Turban, this list will serve as satisfactory proof of construction for these old projects.

Very truly yours,

CHAS. E. SHUMATE
Chief Engineer

By J. P. McFall
J. P. McFall
Staff Right of Way Engineer

JPM:KWA:mc
Enclosure

cc: L. C. Bower
F. K. Merten

GRANT NO.	OF GRANT	PROJECT NO.	PROJECT NAME	TION STARTED	TION COMPLETED
D 050 867	10/18/38	FAP 68-E(1)	Salida - Poncha Springs	5/4/38	11/10/38
D 050 747	8/12/38	FAP 54 AR	Buena Vista - Fairplay	3/2/38	10/22/38
D 052 636	5/26/44	AI FA 103-I(1)	Ridgeway - Placerville	5/13/44	12/30/44
D 053 696	11/14/46	F 103(13)	Ridgeway - Westerly	6/25/46	8/29/47
D 053 741	6/29/50	F 292(8) F 001-2(3)	Dowd - Wolcott Road	4/18/49	10/29/49
D 053 825	2/4/47	F 258(12)	Montrose - Gunnison Rd.	7/22/46	7/12/47
D 053 854	9/29/47	F 171(2) F 299(10)	Delta - Grand Junction Rd.	6/19/46	12/5/47
D 053 916	9/22/47	S 98(1)	Crested Butte - Gunnison Rd.	9/5/46	9/8/47
D 053 926	9/11/47	S 369(4)	Parlin - Saguache	7/14/47	8/14/48
D 053 941	1/30/47	FAP 6-A(1)	Palisade - Grand Valley Rd.	12/10/46	10/29/47
D 054 071	8/20/47	FAP 113(10)	Salida - East	10/16/46	8/21/47
D 54 143	8/26/47	FLHP 24 F	Willow Creek Pass	8/20/47	7/14/48
D 054 207	8/19/47	FAS 97(1)	Toponas Road - McCoy	5/10/48	10/19/48
D 054 286	4/26/47	S 110(1)	Muddy Pass - Walden	7/29/47	7/26/48
D 054 416	5/28/47	S 2(2)	Garo - Fairplay	9/29/47	10/2/48
D 068	1/8/48	SP 49 64-505	Stinking Creek - Rangely Rd.	7/14/47	5/19/48
D 055 218	4/5/48	S 0125(2)	Sapinero - Hotchkiss	3/29/48	8/25/48
D 055 800	4/21/50	S 423(3)	Buena Vista - Independence Pass	8/4/47	8/17/48
D 055 834	4/21/50	F 21-1(1)	Sapinero - Gunnison Rd.	4/14/48	11/16/48
D 055 879	3/23/48	AESNFAP 81-GHIJ(2)	Clear Creek Rd.	6/25/48	7/26/49
D 055 962	6/17/48	"	Clear Creek Rd.	6/25/48	7/26/49

IN REPLY REFER TO:
D-050747 R/W

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT
COLORADO STATE OFFICE
ROOM 14023 · FEDERAL BLDG.
1961 STOUT STREET
DENVER, COLORADO 80202

Proj. No. FAP 54 AR
Location: Buena Vista-Fairplay

June 17, 1969

CERTIFIED MAIL

DECISION

Department of Highways
State of Colorado

RIGHT-OF-WAY

PROOF OF CONSTRUCTION ACCEPTED

FORMAL APPROVAL OF A RIGHT-OF-WAY FOR a highway ON CERTAIN PUBLIC DOMAIN LANDS WAS PREVIOUSLY GRANTED UNDER THE ABOVE SERIAL NUMBER.

PURSUANT TO THE PROVISIONS OF 43 CFR 2234.1-4(a) (FORMERLY 244.15), CERTIFICATIONS AS TO COMPLETION OF CONSTRUCTION SIGNED BY BOTH THE APPLICANT AND THE APPLICANT'S ENGINEER HAVE BEEN FILED. THE CERTIFICATIONS SHOW THAT THE LOCATION OF THE ACTUAL CONSTRUCTION CONFORMS TO THE LOCATION SHOWN ON THE MAP PREVIOUSLY APPROVED BY THIS BUREAU.

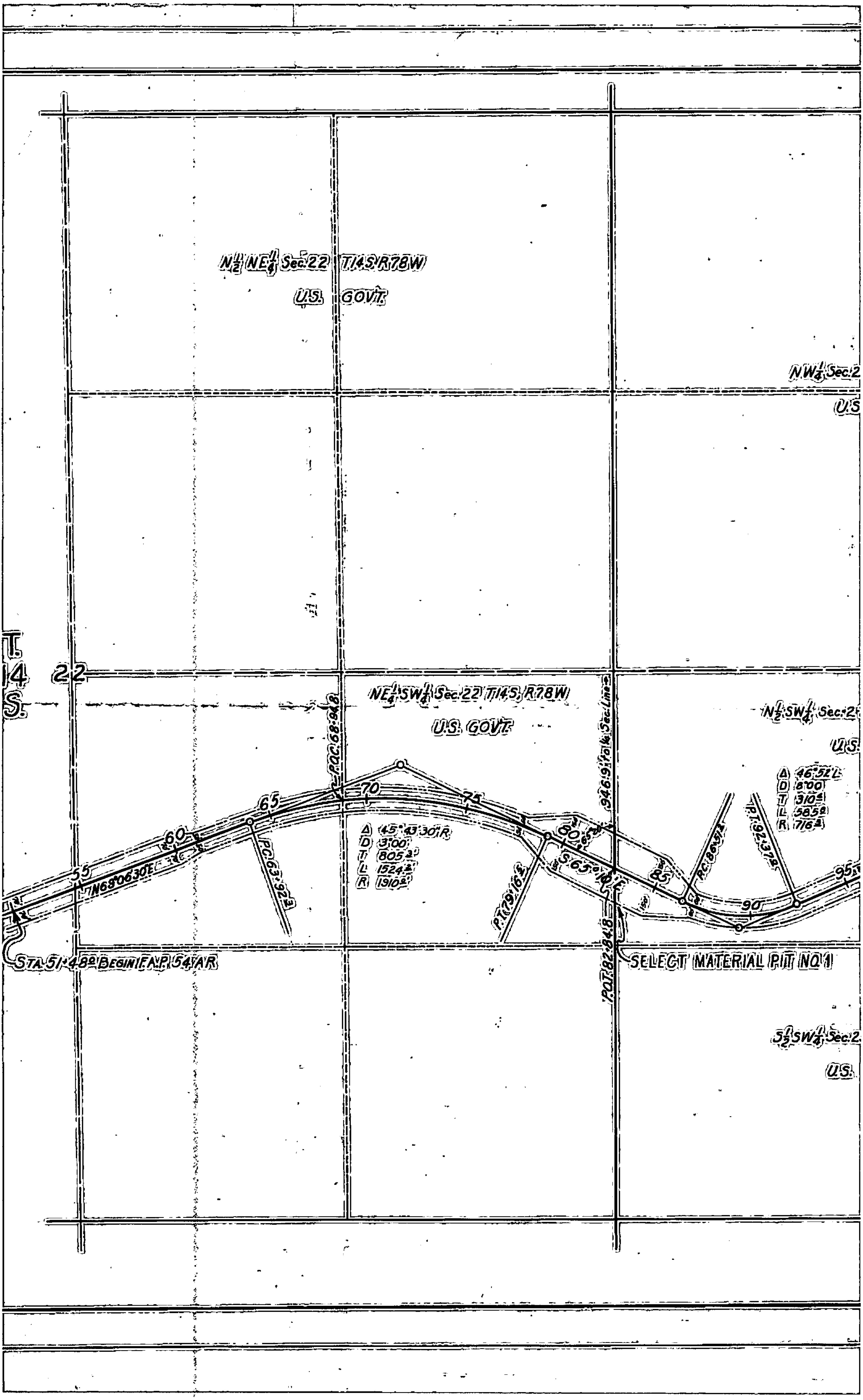
FIELD REPRESENTATIVES OF THIS BUREAU HAVE REPORTED THAT THEIR EXAMINATION SHOWS THAT ADEQUATE COMPLIANCE HAS BEEN MADE WITH THE TERMS AND CONDITIONS OF THE DECISION GRANTING THE RIGHT-OF-WAY. SINCE SATISFACTORY COMPLIANCE WITH EXISTING LAW AND REGULATIONS HAS BEEN EFFECTED, PROOF OF CONSTRUCTION IS HEREBY ACCEPTED AND THE RECORDS OF THE LAND OFFICE WILL BE NOTED ACCORDINGLY.

Robert D. Swanson
for EVERETT K. WEEDIN
SUPERVISORY ADJUDICATOR
BRANCH OF LANDS

cc: Bureau of Public Roads

copy: DM, Canon City

JUN 19 '69



N½ NE¼ Sec.22 T14S R78W
U.S. GOVT.
NW¼ Sec.2
U.S
T.
14
S.
22
NE¼ SW¼ Sec.22 T14S, R78W
U.S. GOVT.
N½ SW¼ Sec.2
U.S.
P.O.C. 68+94.8
946.9' to ¼ Sec Line
Δ 45°43'30" R
D 3°00'
T 805.3'
L 1524.2'
R 1910.0'
Δ 46°52' L
D 8°00'
T 310.6'
L 585.0'
R 716.3'
55
60
65
70
75
80
85
90
95
N68°06'30"E
S65°10'E
P.C. 63+92.3
P.T. 79+16.2
P.C. 86+51.2
P.T. 92+37.0
P.O.T. 82+84.8
STA 51+48.0 BEGIN F.A.P. 54 A R
SELECT MATERIAL PIT NO 1
S½ SW¼ Sec.2
U.S.

N½ NE¼ Sec. 22 T14S. R78W

U.S. GOV'T.

NW¼ Sec. 23 T14S

U.S. GOV'T.

T. 14 S.

22

NE¼ SW¼ Sec. 22 T14S. R78W

U.S. GOV'T.

N½ SW¼ Sec. 23 T14S.

U.S. GOV'T.

946.9' to ¼ Sec. Line

P.O.C. 68.94.8

Δ 45°43'30" R
D 3°00'
T 805.2'
L 1524.2'
R 1910.9'

Δ 46°52' L
D 8°00'
T 310.2'
L 585.9'
R 716.2'

P.C. 63+92.3

P.T. 79+16.2

P.C. 86+37.2

P.T. 92+37.2

N68°06'30"E

S 65°10' E

POT. 82+84.8

STA. 51+48.2 BEGIN F.A.P. 54 A'R

SELECT MATERIAL PIT NO. 1

S½ SW¼ Sec. 23 T14S

U.S. GOV'T.

R. 78 W.

NW¼ Sec. 23 | T14S, R78W
U.S. | GOV'T.

N½ N

S½ NE¼

? T14S, R78W
;OV'T.

946.9' to ¼ Sec. Line

N½ SW¼ Sec. 23 T14S, R78W
U.S. GOV'T.

Δ 46°52'L
D 8°00
T 310.2
L 585.2
R 716.2

P.T. 92+37.2

P.C. 86+51.1

P.T. 79+16.2

P.O.T. 82+84.8

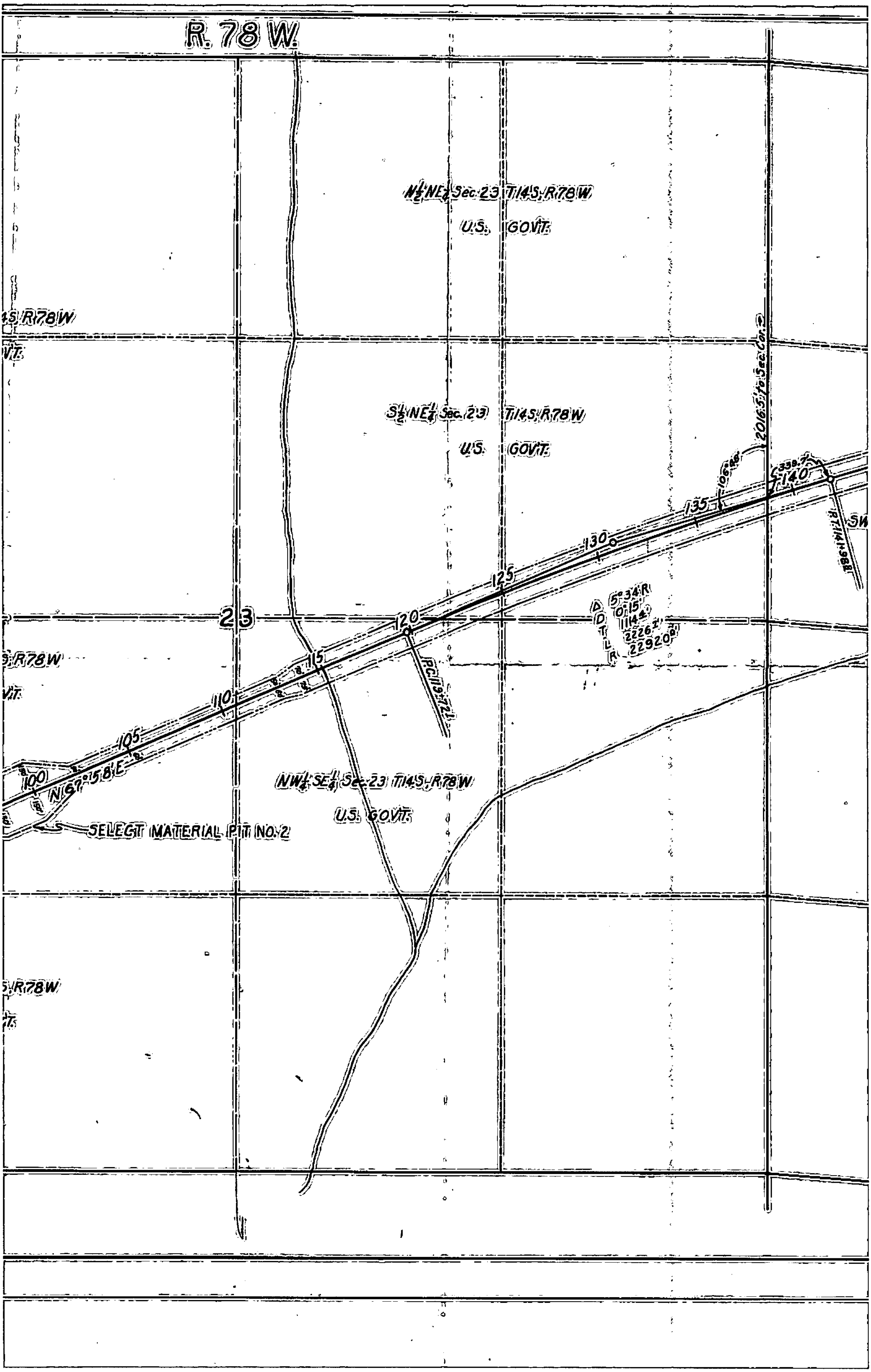
N 67° 58' E

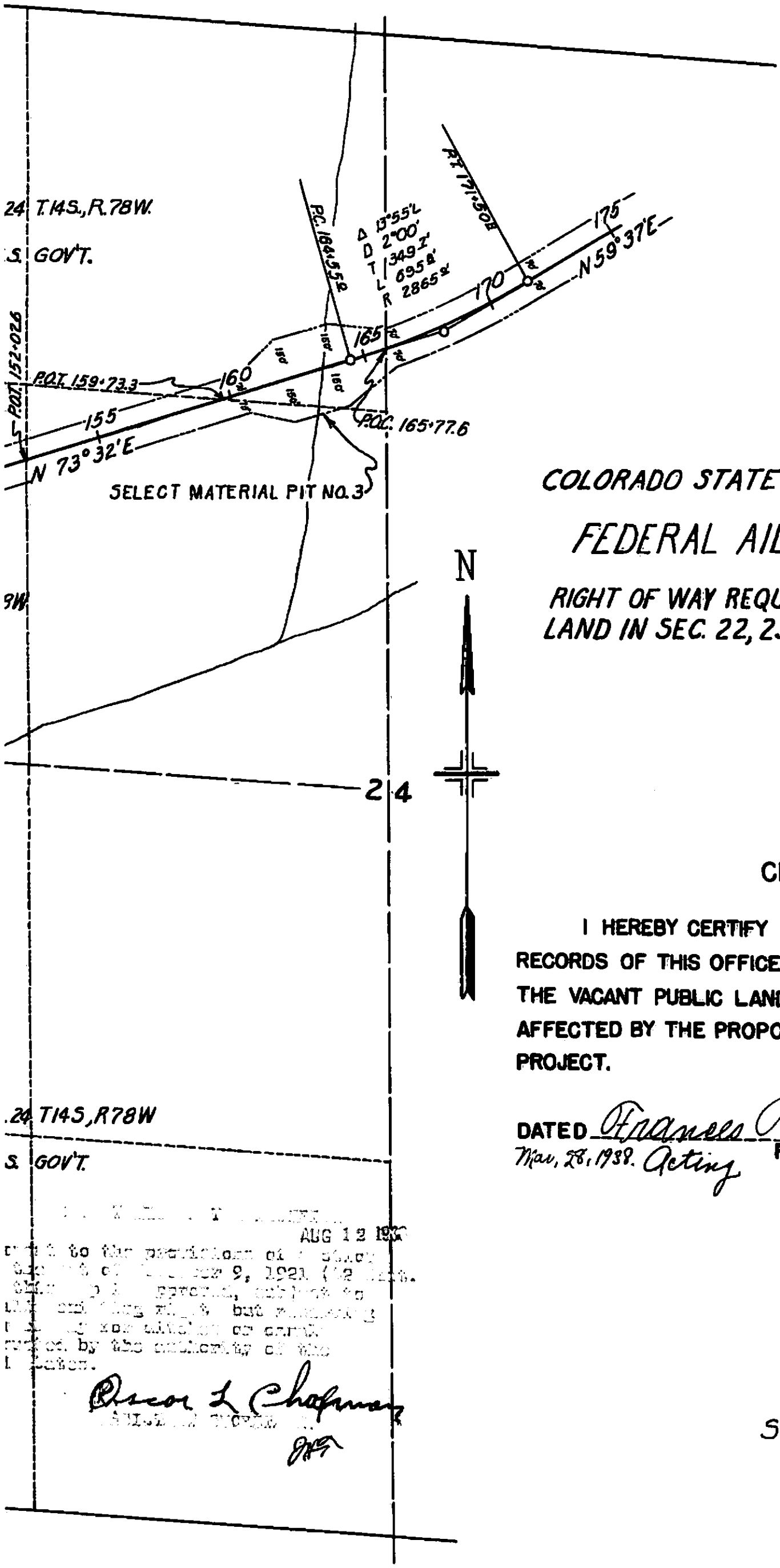
NW¼ SE¼ Sec. 23 T14S,
U.S. GOV'T.

SELECT MATERIAL PIT NO. 2

SELECT MATERIAL PIT NO. 1

S½ SW¼ Sec. 23 T14S, R78W
U.S. GOV'T.


R. 78 W.
N½ NE¼ Sec. 23 T14S, R78W
U.S. GOVT.
S½ NE¼ Sec. 23 T14S, R78W
U.S. GOVT.
23
NW¼ SE¼ Sec. 23 T14S, R78W
U.S. GOVT.
SELECT MATERIAL PIT NO. 2
N 67°58' E
100
105
110
115
120
125
130
135
140
P.C. 119+72.1
2016.5' to Sec. Cor.
106.88
339.7
R.T. 141+98.8
Δ 5°34' R
D 0°15'
T 1114.1'
L 2226.1'
R 22920.0'



COLORADO STATE HIGHWAY DEPARTMENT

FEDERAL AID PROJ. NO. 54-AR

RIGHT OF WAY REQUIRED THROUGH U.S. GOV'T. LAND IN SEC. 22, 23 & 24, T.14S, R.78W.

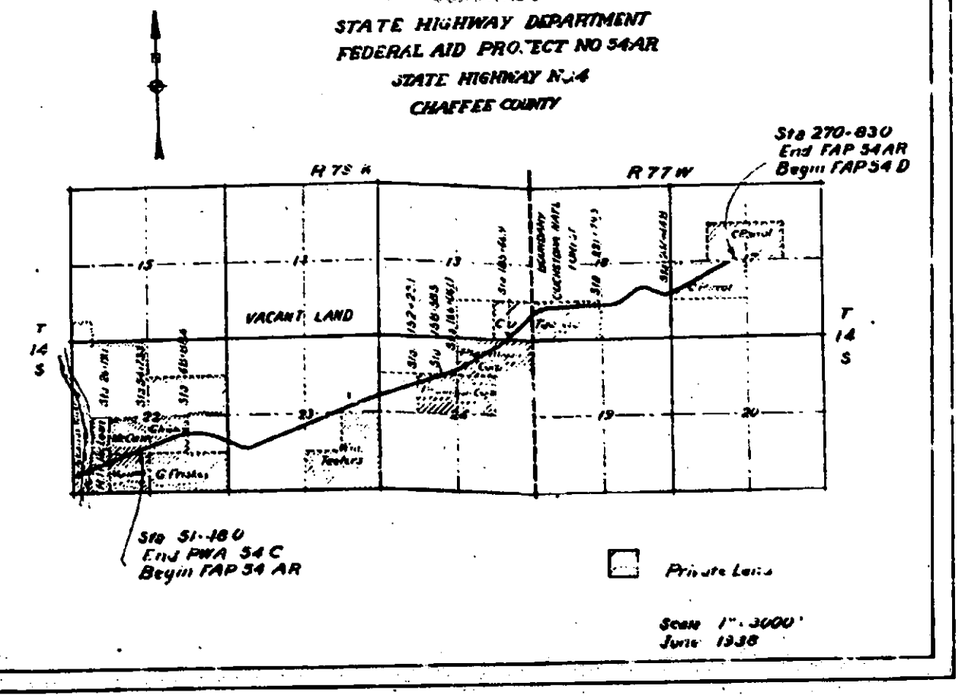
CERTIFICATE

I HEREBY CERTIFY THAT ACCORDING TO THE RECORDS OF THIS OFFICE, THIS PLAT CORRECTLY SHOWS THE VACANT PUBLIC LAND IN SEC. 22, 23 & 24, T.14S., R.78W., AFFECTED BY THE PROPOSED RIGHT OF WAY FOR THIS PROJECT.

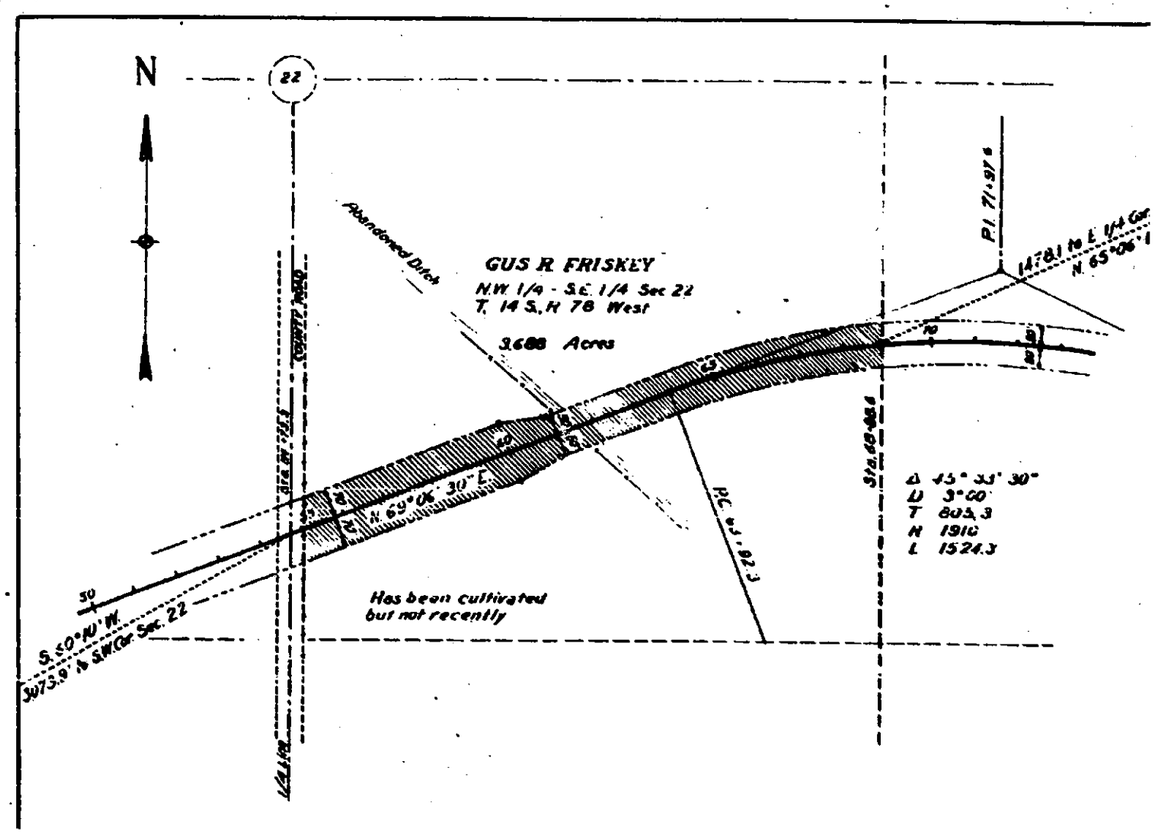
DATED Frances Reilly
Mar. 28, 1938. Acting
REGISTER U.S. LAND OFFICE
DENVER, COLORADO

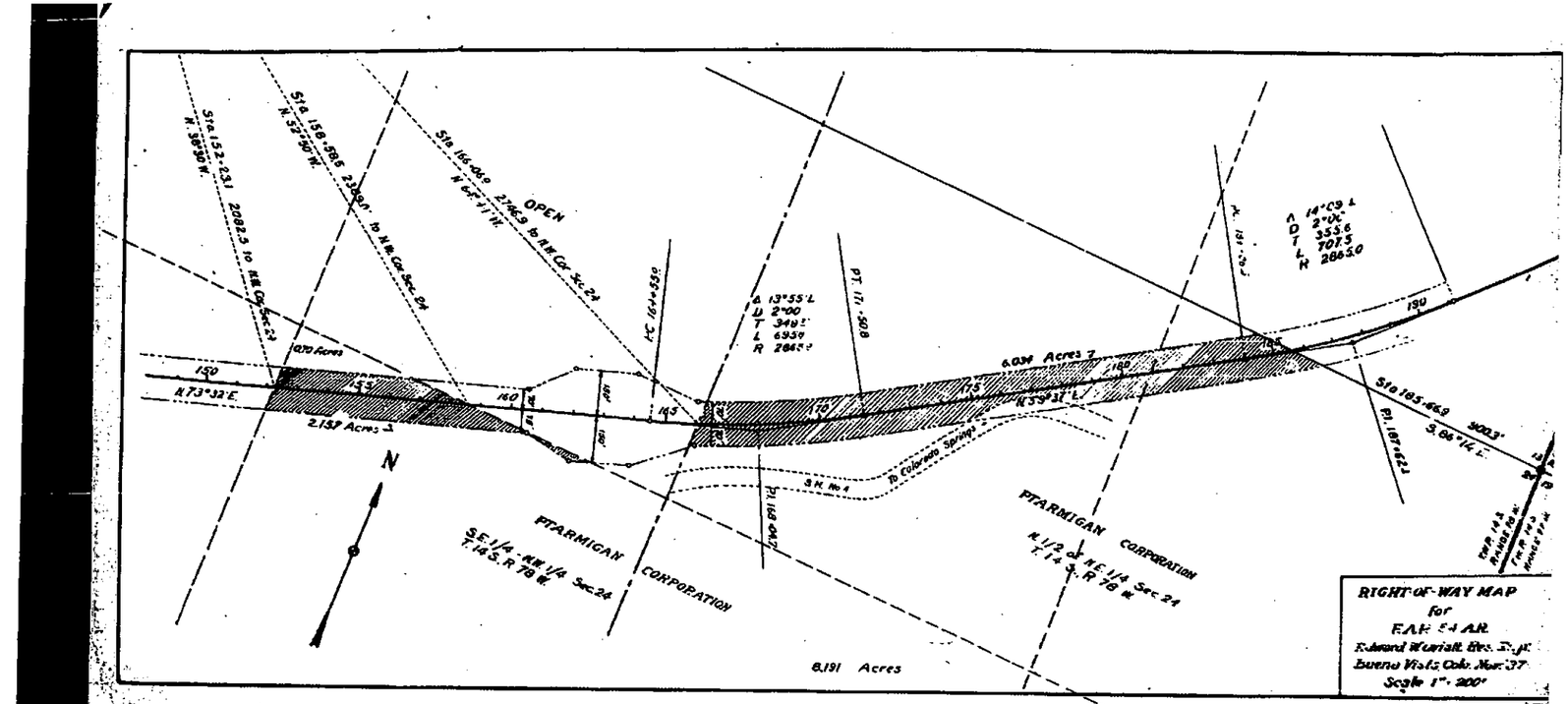
SCALE 1"=400'

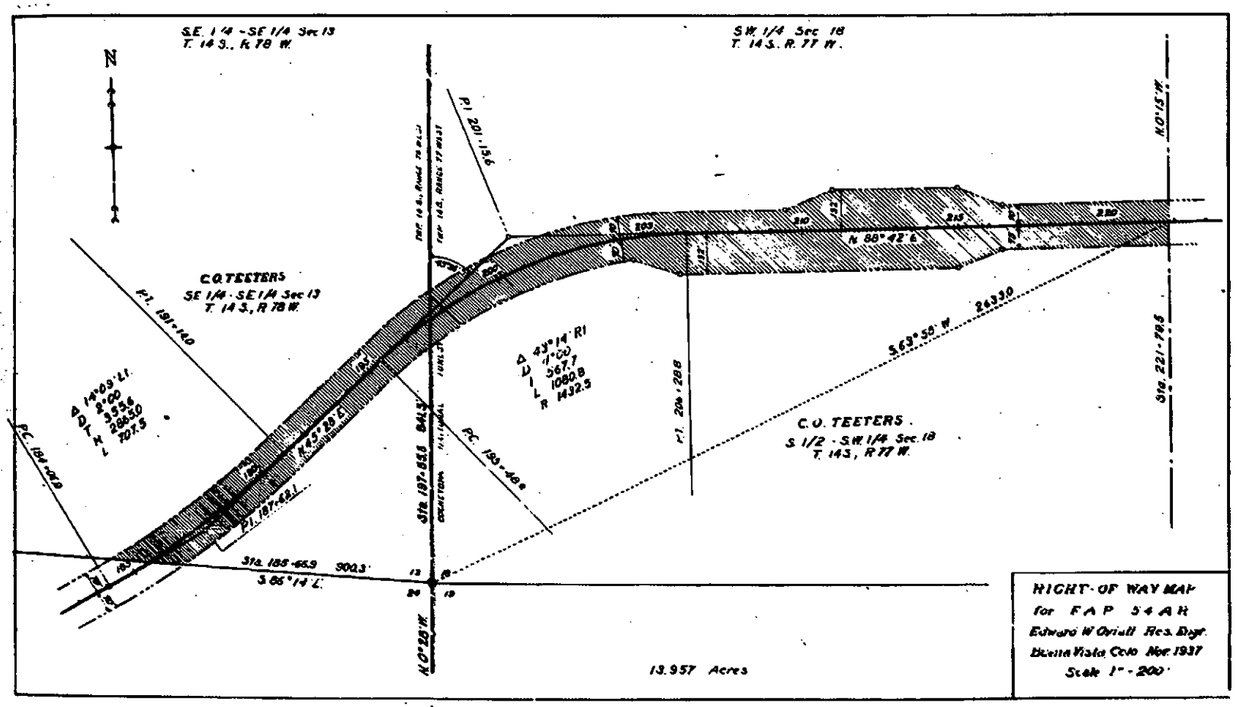
COLORADO
STATE HIGHWAY DEPARTMENT
FEDERAL AID PROJECT NO 54AR
STATE HIGHWAY NO 4
CHAFFEE COUNTY



Scale 1" = 3000'
June 1938




Sta 152+2.31
N. 38°30' W.
2082.5 to NE Cor Sec 24
Sta 158+58.5
N 13°30' W.
2398' to NE Cor Sec 24
Sta 166+00.0
N 64°11' W
2746.9 to NW Cor Sec 24
OPEN
1870 Acres
150
N 73°32' E
2.157 Acres
N
PTARMIGAN CORPORATION
S.E. 1/4 - NE 1/4 Sec 24
T. 14 S., R 78 W.
To Colorado Springs
S.H. No. 1
6.834 Acres
N 39°31' E
PTARMIGAN CORPORATION
N 1/2 of NE 1/4 Sec 24
T. 14 S., R 78 W.
Sta 185+65.9
3003'
S 86°14' E.
8.191 Acres
RIGHT-OF-WAY MAP
for
F.A.P. 54 A.R.
Edward W. Oriall Res. Engr.
Buena Vista Colo. Nov. 1937
Scale 1" = 200'


S.E. 1/4 - S.E. 1/4 Sec 13
T. 14 S., R 78 W.
S.W. 1/4 Sec 18
T. 14 S., R 77 W.
N
C.O. TEETERS
SE 1/4 - SE 1/4 Sec 13
T. 14 S., R 78 W.
N 88°42' E
S 63°50' W
2633.0
C.O. TEETERS
S 1/2 - SW 1/4 Sec 18
T. 14 S., R 77 W.
Sta 185+65.9
900.3'
S 86°14' E.
13.957 Acres
RIGHT-OF-WAY MAP
for F A P 54 A R
Edward W Oriall Res. Engr.
Buena Vista Colo Nov 1937
Scale 1" = 200'

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54AR	3	

Rev. 1-26-38 gt Surfacing Pit No. 2 eliminated
Rev. as Constructed - 5-1-38 - KLR

FENCING REQUIREMENTS

STATION TO STATION	SIDE	REMOVE FENCE LIN. FT.	BUILD BARB WIRE FENCE LIN. FT.	BARB WIRE GATES NO.
51+48 - 54+70	Lt.		322	
51+48 - 54+22	Rt.		274	
54+46	X	148		
55+29 - 70+20	Lt.		1518	
54+78 - 70+20	Rt.		1536	
55+03	X	148		
61+50	X	111		
71+15 - 78+22	Lt.		702	
71+15 - 80+77	Rt.		971	
78+31	Lt.			1
80+88	Rt.			1
78+40 - 97+48	Lt.		1915	
97+56	Lt.			1
97+64 - 98+07	Lt.		63	
80+99 - 98+00	Rt.		1903	
99+12 - 115+07	Lt.		1635	
99+19 - 115+00	Rt.		1621	
116+23 - 132+98	Lt.		1737	
116+30 - 132+85	Rt.		1712	
132+22 - 139+62	Lt.		672	
132+25 - 139+59	Rt.		667	
140+10 - 158+39	Lt.		1945	
140+13 - 157+94	Rt.		1834	
158+60 - 163+88	Lt.		517	
158+15 - 163+30	Rt.		565	
163+81 - 178+05	Lt.		1465	
163+84 - 178+05	Rt.		1469	
178+62 - 195+13	Lt.		1700	
178+62 - 195+13	Rt.		1728	
195+67 - 214+51	Lt.		2060	
195+67 - 214+51	Rt.		1946	
197+80	X	174		
214+89 - 215+78	Lt.		130	
214+89 - 215+37	Rt.		75	
216+40 - 231+87	Lt.		1604	
216+04 - 231+83	Rt.		1803	
232+13 - 240+18	Lt.		1123	
232+17 - 239+49	Rt.		630	
240+29 - 270+83	Lt.		3000	
240+02 - 270+83	Rt.		3422	
TOTALS		581	44344	3

R.O.W. MARKERS

STATION	SIDE	NO.
54+50.3	R	1
55+01	L	1
60+00	L & R	2
61+00	L & R	2
78+00	L & R	2
80+00	L & R	2
82+15.9	L	1
83+53.7	R	1
85+00	L & R	2
87+00	L & R	2
96+00	L & R	2
98+00	L & R	2
100+00	L & R	2
102+00	L & R	2
110+49	R	1
110+94.1	L	1
113+00	L & R	2
114+00	L & R	2
118+66	L	1
122+10	R	1
138+36.5	R	1
138+80	L	1
160+50	L & R	2
162+00	L & R	2
164+00	L & R	2
165+79	R	1
166+31	L	1
166+00	L & R	2
184+66	L	1
186+52	R	1
197+02	R	1
198+03	L	1
204+50	R	1
206+00	R	1
209+50	L	1
211+00	L	1
215+00	L	1
216+50	R	1
221+85	R	1
221+90	L	1
223+00	L	1
223+50	R	1
224+00	L	1
225+00	R	1
226+50	R	1
231+60 Ah	L & R	2
232+83.9	L & R	2
246+20	R	1
246+65	L	1
248+28.5 Ah	L & R	2
250+00	L & R	2
253+50	R	1
256+00	R	1
267+80	L	1
270+20	R	1
214+00	R	1
217+80	L	1
TOTAL		77

GRAVEL OR CRUSHED ROCK SURFACING PLAN

STATION TO STATION	APPROXIMATE QUANTITY REQUIRED TONS	OVERHAUL TON MILE	SOURCE
51+48 - 96+67	2758.1	Within F.H. Limit	Pit No. 1 located in the NW¼ Sec. 22, T.14S., R.78W., 1790' from Sta. 61+77
96+67 - 232+04 Bk.	ϕ 8569.35	ϕ 11003.7	
230+82.9 Ah. - 248+20.3 Bk.	1127.4	3074.4	
248+28.5 Ah. - 270+83	1397.8	4355.4	
Sub-Total Base Course	13850.65	18433.5	
Stockpile 100' Lt. Sta. 80+00	829.5	Within F.H. Limit	Subsequently placed on road as Oil Processed Mat. by State Forces
" 150' Lt. Sta. 102+50	2010.7	297.5	
" 50' Rt. Sta. 156+00	974.3	1109.0	
" 50' Rt. Sta. 202+00	1680.3	3367.9	
" 50' Rt. Sta. 237+00	937.9	2523.1	
Road Approaches	141.05	0.6	
Sub-Total Top Course	6573.75	7274.7	
TOTALS	20424.4	25708.2	

ϕ Quantities as shown below included in Bridge Quantities
Sta. 139± 19 Tons and 16.5 Ton Miles
Sta. 163± 18.8 Tons and 23.8 Ton Miles
Sta. 178± 21.1 Tons and 32.6 Ton Miles
Sta. 195± 21.1 Tons and 39.5 Ton Miles

SELECTED MATERIAL

STATION TO STATION	APPROXIMATE QUANTITY REQUIRED CU. YD.	OVERHAUL STA. YD.	OVERHAUL YD. MI.	SOURCE
51+48 - 106+00				Widened cuts between Stas. 92+00 & 97+00. Yardage & Overhaul involved included in roadway quantities
106+00 - 114+50	863	7362	12.8	Pit No. 2 located Lt. Sta. 98±
114+50 - 151+00	▲ 3665	▲ 35605	267.3	Pit No. 3 located Lt. Sta. 139±
151+00 - 171+00	▲ 2003	▲ 10184	11	Pit No. 4 located Lt. Sta. 163±
171+00 - 192+00	▲ 2085	▲ 10431	19.3	Pit No. 5 located Lt. Sta. 178±
192+00 - 201+50	▲ 1018	▲ 3157		Pit No. 6 located Lt. Sta. 195±
201+50 - 240+00	3985	30892	531.3	Pit No. 7 located Lt. Sta. 208±
240+00 - 270+83	2995	29124	522.2	Pit No. 8 located Lt. Sta. 277±
TOTALS	16614	126755	1349	

▲ Quantities as shown below included in Bridge Quantities
Sta. 139± 20 cu. yds., 120 sta. yd.
Sta. 163± 20 cu. yds. 72 sta. yd.
Sta. 178± 21 cu. yds. 18 sta. yd.
Sta. 195± 24 cu. yds. 476 sta. yd.

GUARD FENCE

STATION TO STATION	SIDE	LIN. FT.
90+25 - 92+37.5	R	212.5
98+00.8 - 98+25.8	L	25
97+75.8 - 98+25.8	R	50
98+94.2 - 101+06.7	L & R	425
104+50 - 106+87.5	R	237.5
105+37.5 - 108+50	L	312.5
114+67.5 - 115+17.5	L	50
114+30 - 115+17.5	R	87.5
116+05.5 - 117+05.5	L	100
116+05.5 - 121+55.5	R	550
117+87.5 - 121+87.5	L	400
131+75 - 134+37.5	R	262.5
132+00 - 135+12.5	L	312.5
137+62.5 - 139+70.7	R	208.2
136+62.5 - 139+70.7	L	308.2
139+70.7 - 140+01.4	R & L	ϕ 61.4
140+01.4 - 141+25	R	123.6
140+01.4 - 142+37.5	L	236.1
162+12.5 - 163+41.8	L	129.3
161+75 - 163+41.8	R	166.8
163+41.8 - 163+72.2	R & L	ϕ 60.8
163+72.2 - 164+87.5	L	115.3
163+72.2 - 164+87.5	R	115.3
166+37.5 - 167+87.5	R	150
171+75 - 175+62.5	L	387.5
171+25 - 178+15	R	690
177+75 - 178+15	L	40
178+15 - 178+49	R & L	ϕ 68
178+49 - 180+87.5	R	238.5
178+49 - 182+62.5	L	413.5
189+00 - 195+23	R	623
194+25 - 195+23	L	98
195+23 - 195+57	R & L	ϕ 68
195+57 - 197+75	R	218
195+57 - 197+37.5	L	180.5
211+87.5 - 216+75	R	487.5
212+50 - 217+12.5	L	462.5
218+87.5 - 222+50	R	362.5
221+12.5 - 222+50	L	137.5
223+50 - 226+25	R	275
230+87.5 - 231+91.3 Ah	L	225
230+37.5 - 236+41.3 Ah	R	725
238+62.5 - 241+25	R	262.5
239+00 - 241+12.5	L	212.5
242+62.5 - 245+50	R	287.5
253+00 - 256+00	L	300
253+00 - 258+12.5	R	512.5
257+12.5 - 258+50	L	137.5
263+50 - 268+62.5	R	512.5
265+12.5 - 268+62.5	L	350
TOTALS		12975

ϕ Quantities included in Bridge Quants.

GUARD POSTS

STATION TO STATION	SIDE	NO.
50+90	R	1
51+10	L	1
55+10	L	1
62+05	L	1
64+70 - 69+70	L	11
70+33 - Br. Appr.	R & L	8
71+03 - " "	R & L	8
71+65 - 78+75	L	14
79+00 - 85+00	L	13
79+50 - 89+00	R	20
91+97	L	1
96+95	R	1
101+37 - 101+97	L	3
101+60 - 104+10	R	6
117+30	L	1
123+50 - 124+50	L	3
123+90 - 129+70	R	3
128+64	L	1
149+00 - 150+80	R	7
149+10 - 150+90	L	5
152+10 - 154+80	R	10
152+60 - 154+60	L	5
157+00 - 159+10	R	8
157+50 - 160+50	L	7
165+07	R	1
168+12	R	1
175+97 - 176+32	L	2
177+35 - 177+55	L	2
183+60 - 185+70	R	8
187+97	R	1
190+60 - 190+90	L	2
192+60	L	1
198+15 - 202+05	R	14
198+55 - 201+85	L	12
203+10 - 204+30	R	5
203+75 - 204+35	L	3
207+50 - 207+80	R	3
208+05 - 208+65	L	3
216+95 - 217+15	R	2
217+32 - 217+52	R	2
219+75 - 220+35	L	3
224+10 - 226+55	L	8
230+17	R	1
233+32	L	1
236+33 - 236+63	L	2
238+60 - 238+80	L	2
241+45	R	1
242+42	R	1
243+20	L	1
245+50	L	1
245+60 - 245+80	R	2
249+60 - 251+10	R	6
252+50 - 252+75	R	2
256+52 - 256+72	L	8
262+35	L	1
264+52 - 264+72	L	2
268+82	L	1
TOTALS		238

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54 AR	1	

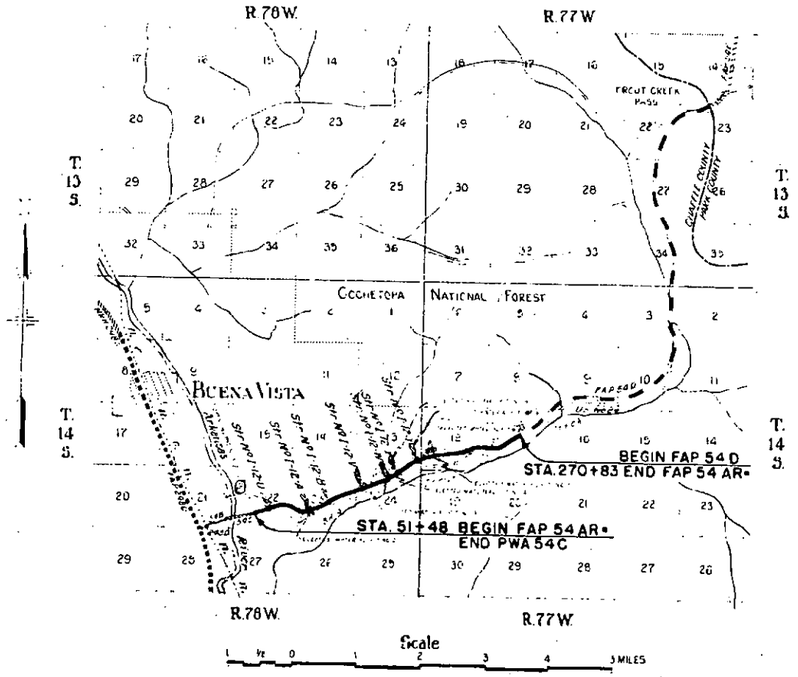
Rev 12-9-37 Sheets #1 & 2 eliminated
Rev 12-28-37 Index of Sheets

COLORADO
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF
FEDERAL AID PROJECT NO. 54 AR
STATE HIGHWAY NO. 4
CHAFFEE COUNTY

INDEX OF SHEETS

SCALES ON ORIGINAL TRACINGS
ON PLAN. 1 IN. = 100 FT.
ON PROFILE 1 IN. = 100 FT. HORIZONTAL
1 IN. = 10 FT. VERTICAL
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD
GROSS LENGTH OF PROJECT } 22,098.0 FT. = 4.185 MILES
NET LENGTH OF PROJECT }



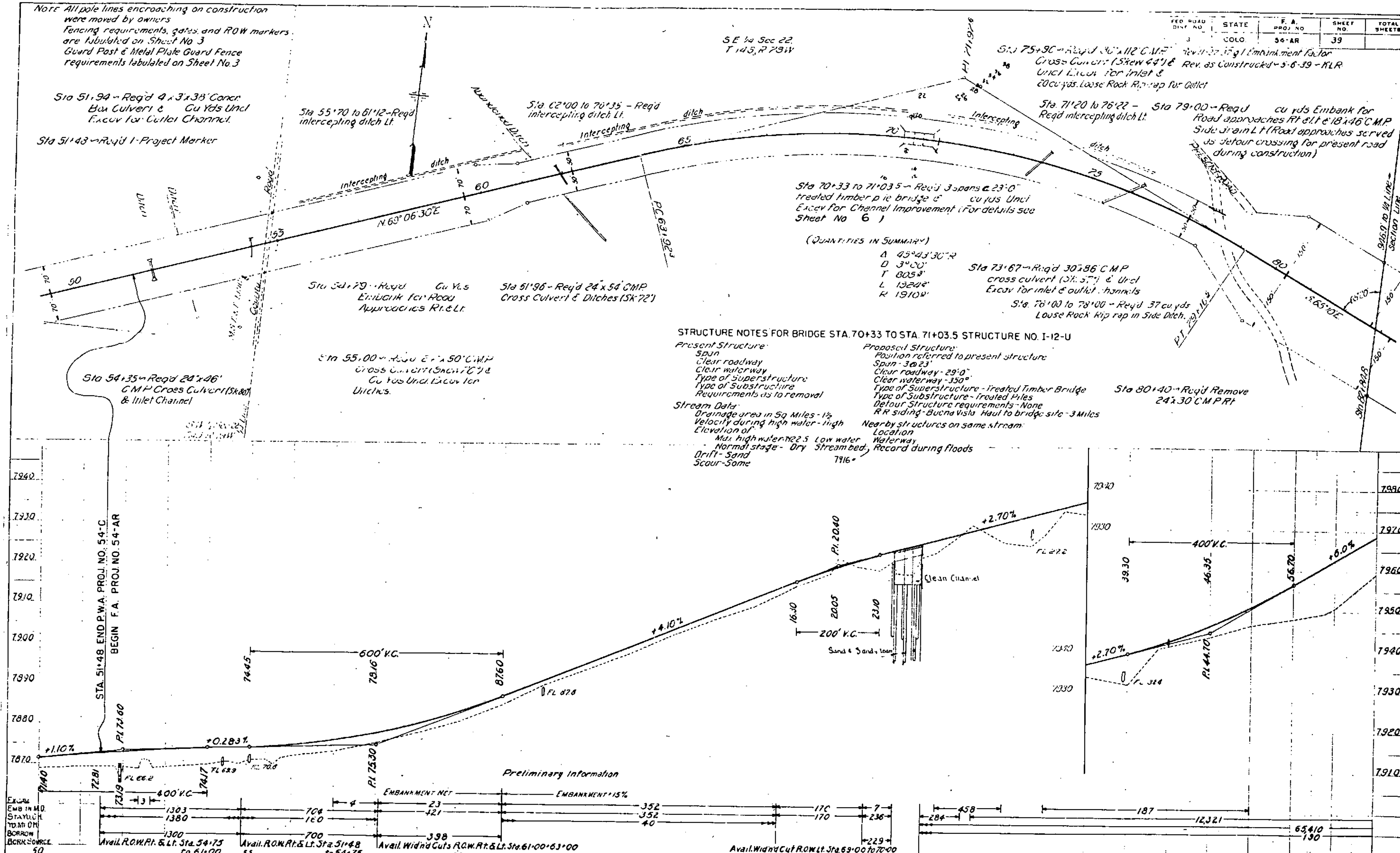
CONVENTIONAL SIGNS

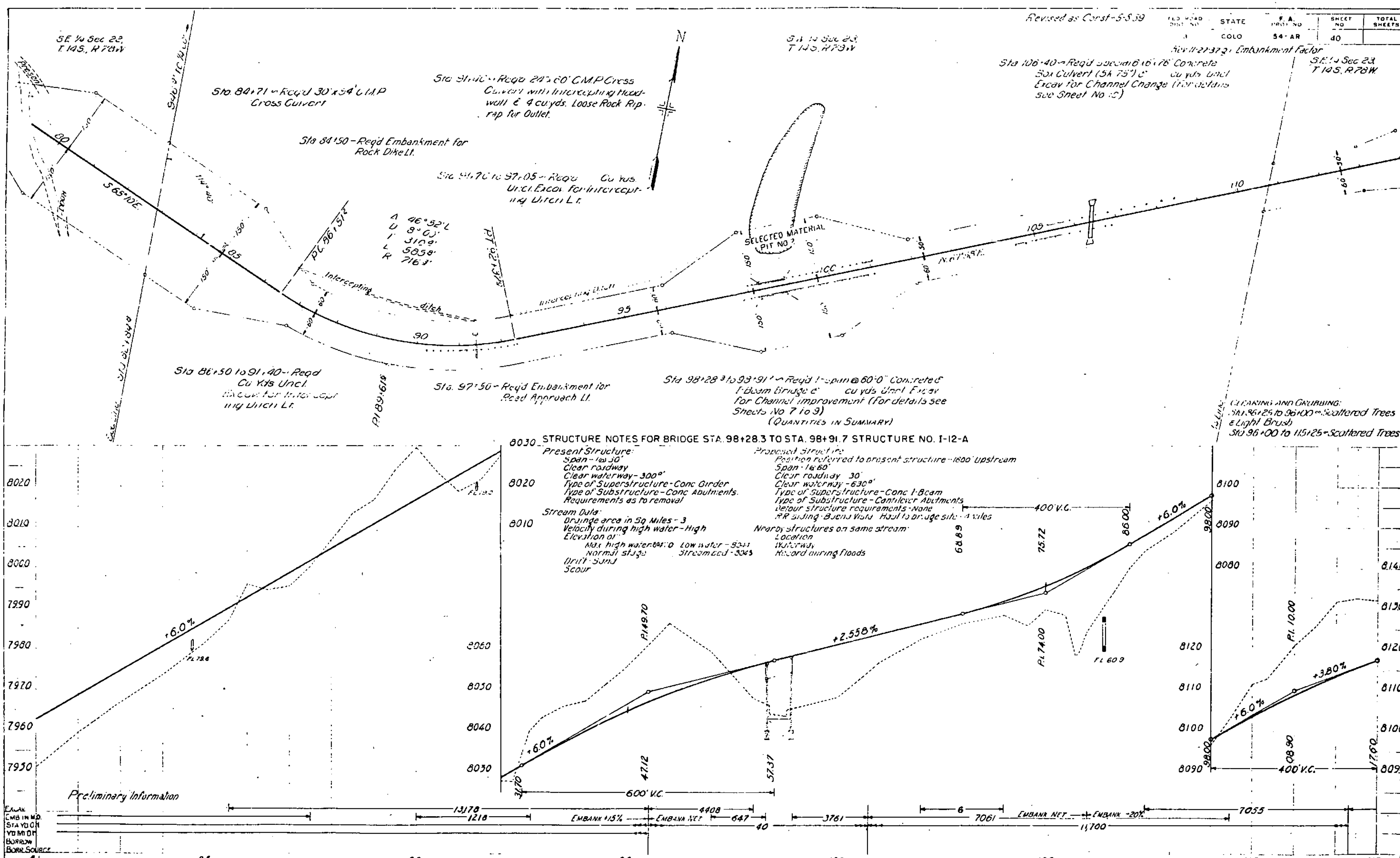
Center Line of Survey
Section Lines
One Quarter Section Lines
Right of Way Lines
Fences
Guard Fence
Telephone Poles

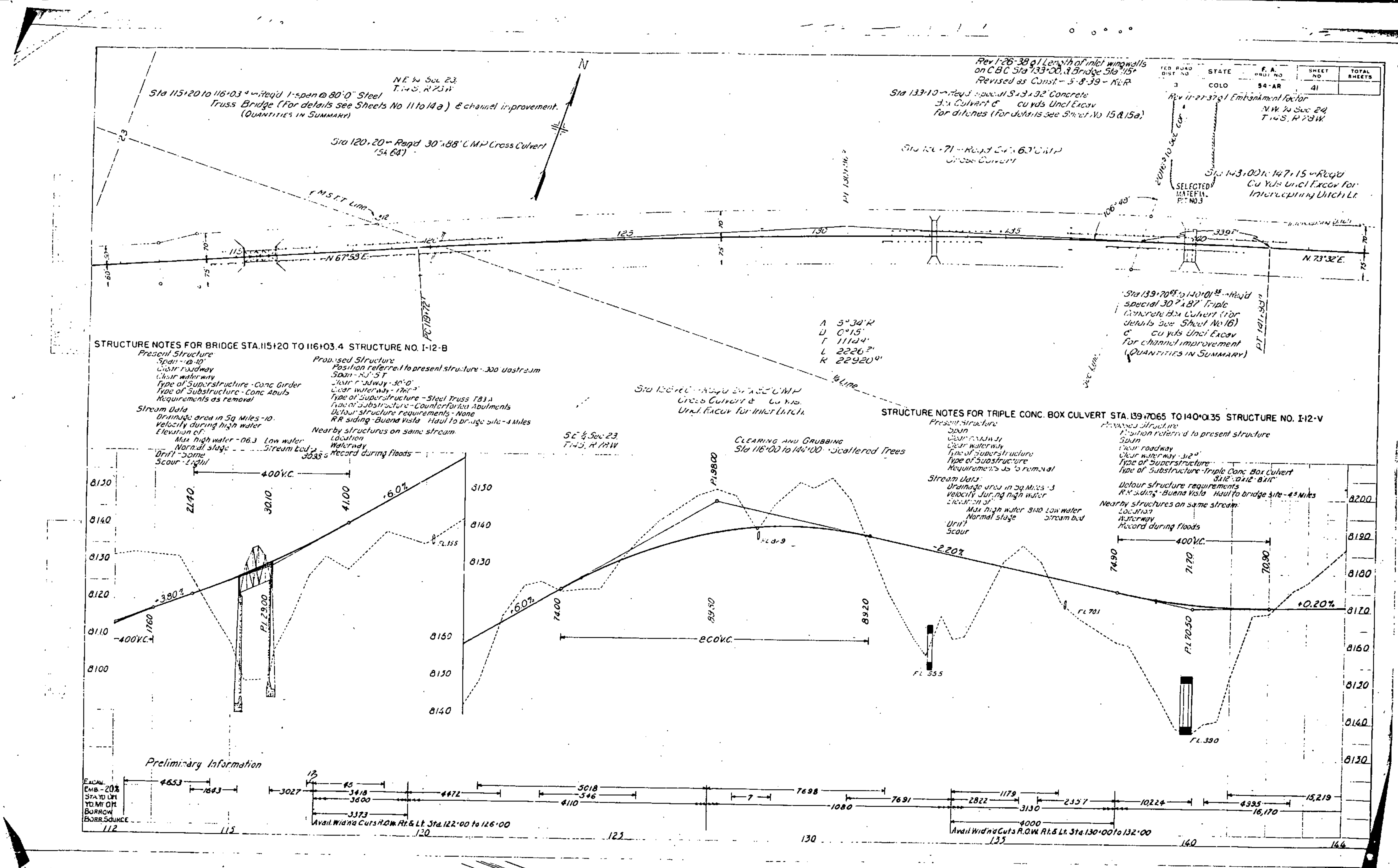
NOTE
Bidders on this project are over the plan details with one of the following field representatives of this department.
Mr W. A. Whitney, Division Engineer, Salida, Colo.
Mr Edward Ovatt, Resident Engineer, Buena Vista, Colo.

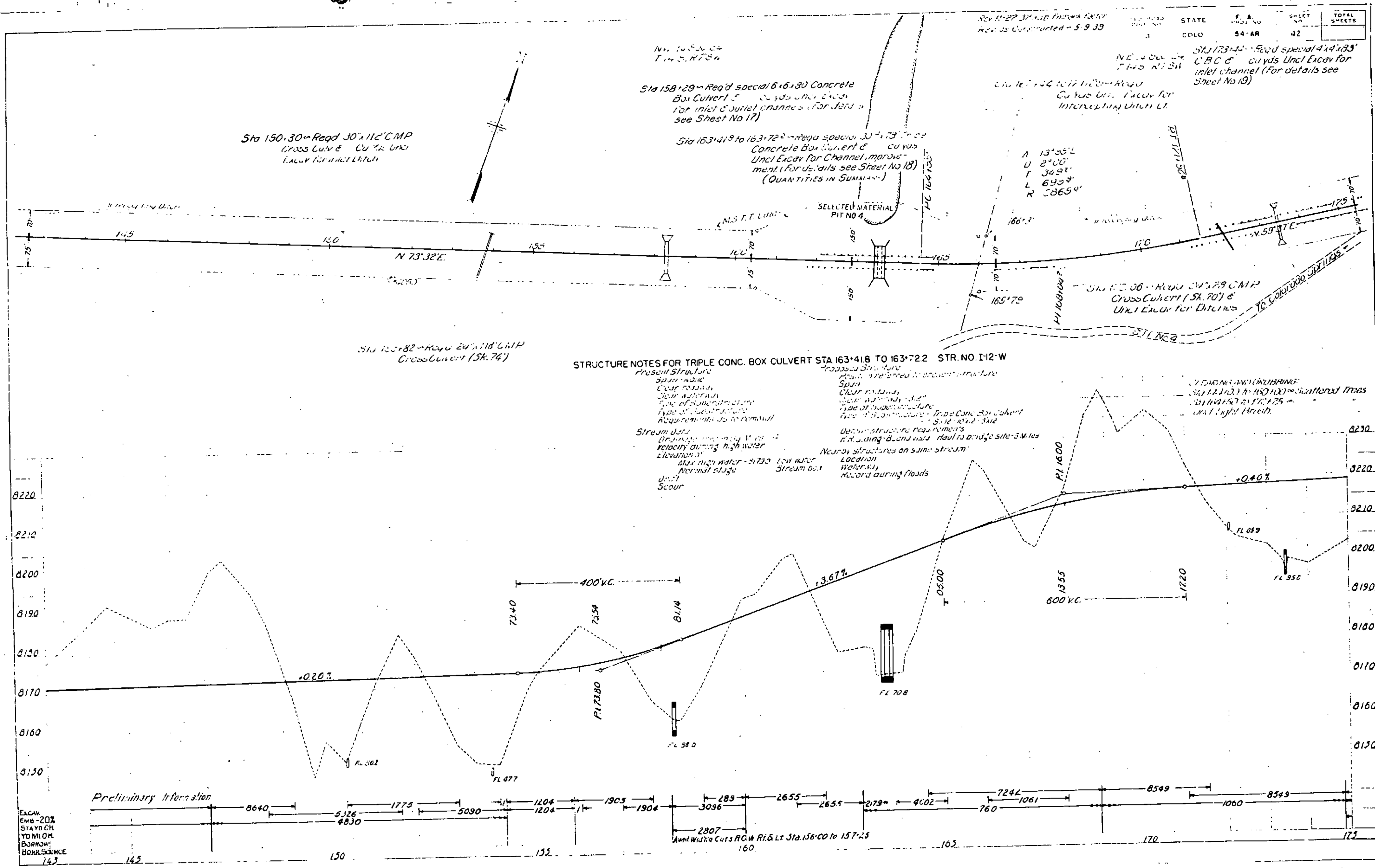
RECOMMENDED FOR APPROVAL 11-22-37
ASSISTANT ENGINEER
APPROVED
STATE HIGHWAY ENGINEER
RECOMMENDED FOR APPROVAL
DIST. ENG. BUREAU PUBLIC ROADS
RECOMMENDED FOR APPROVAL
CHIEF ENG. BUREAU PUBLIC ROADS
APPROVED
DIRECTOR BUREAU PUBLIC ROADS

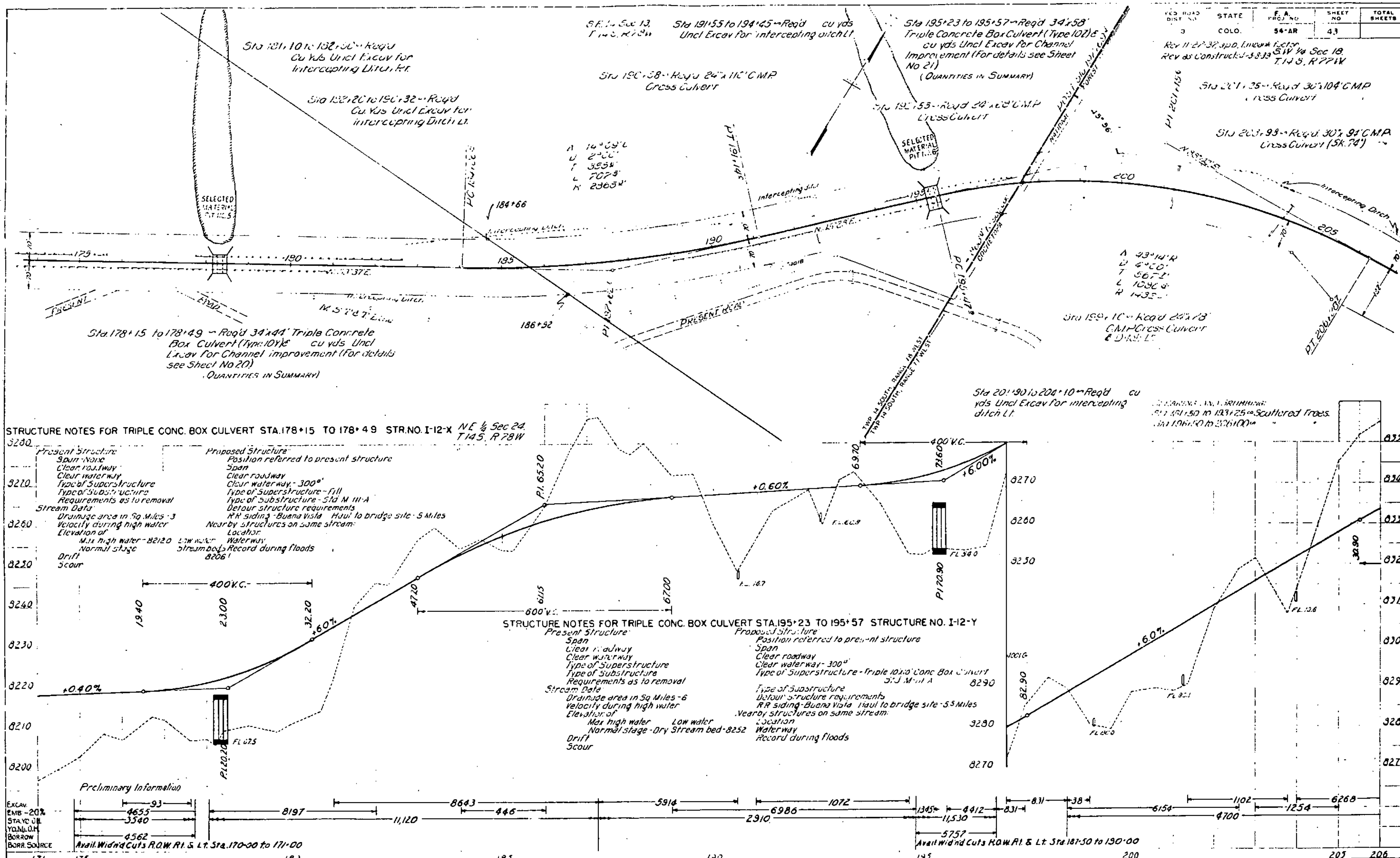
FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54-AR	39	



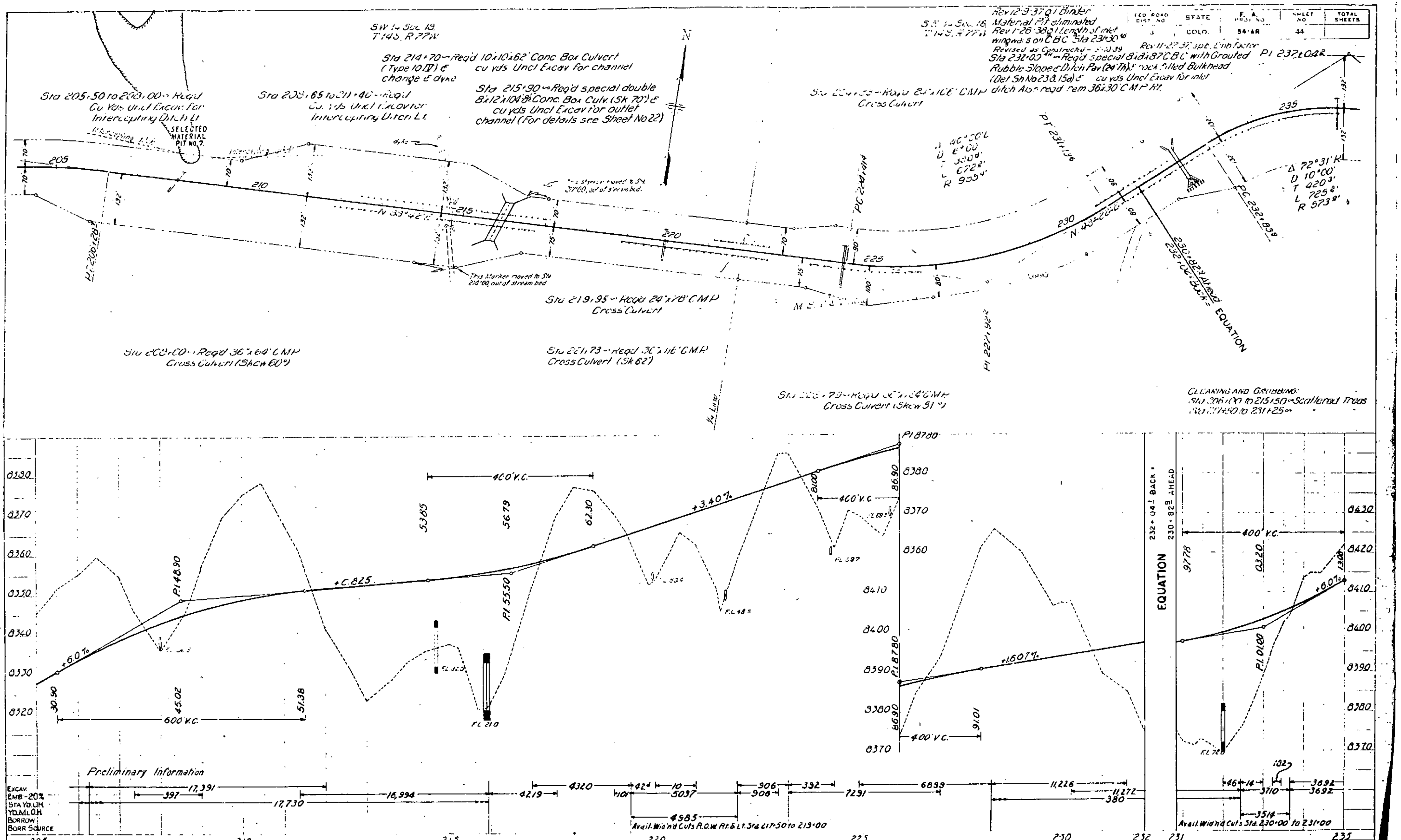

Revised as Const-5-5-39
STATE COLO
F.A. PROJ NO 54-AR
SHEET NO 40
TOTAL SHEETS
Rev 11-27-37 Embankment Factor
SE 1/4 Sec 22, T 14S., R 78W.
S.E. 1/4 Sec 23, T 14S. R 78W.
N
Sta 84+71 – Reqd 30" x 54' C.M.P. Cross Culvert
Sta 84+50 – Reqd Embankment for Rock Dike Lt.
Sta 91+40 – Reqd 24" x 60' C.M.P. Cross Culvert with Intercepting Headwall & 4 cu yds. Loose Rock Rip-rap for Outlet.
Sta 91+70 to 97+05 – Reqd Cu Yds. Uncl. Excav. for Intercepting Ditch Lt.
Sta 106+40 – Reqd special 6'x6'x76' Concrete Box Culvert (Sk 75°) & cu yds Uncl Excav for Channel Change (For details see Sheet No 10)
S 65°10' E
PC 86+51.2
Δ 46°32' L
D 8°00'
T 310.9'
L 585.8'
R 716.8'
Intercepting ditch
SELECTED MATERIAL PIT NO 2
N 67°38' E
Sta 86+50 to 91+40 – Reqd Cu Yds Uncl. Excav. for Intercepting Ditch Lt.
Sta 97+50 – Reqd Embankment for Road Approach Lt.
Sta 98+28.3 to 98+91.7 – Reqd 1-span @ 60'-0" Concrete & I-Beam Bridge & cu yds Uncl Excav for Channel improvement (For details see Sheets No 7 to 9)
(QUANTITIES IN SUMMARY)
CLEARING AND GRUBBING:
Sta 86+25 to 96+00 – Scattered Trees & Light Brush
Sta 96+00 to 115+25 – Scattered Trees
STRUCTURE NOTES FOR BRIDGE STA. 98+28.3 TO STA. 98+91.7 STRUCTURE NO. I-12-A
Present Structure:
Span – 1 @ 30'
Clear roadway
Clear waterway – 300□'
Type of Superstructure – Conc Girder
Type of Substructure – Conc Abutments.
Requirements as to removal
Stream Data:
Drainage area in Sq Miles – 3
Velocity during high water – High
Elevation of
Max high water 8047.0 Low water – 8044
Normal stage Streambed – 8043
Drift – Sand
Scour
Proposed Structure:
Position referred to present structure – 1600' Upstream
Span – 1 @ 60'
Clear roadway 30'
Clear waterway – 630□'
Type of Superstructure – Conc I-Beam
Type of Substructure – Cantilever Abutments
Detour structure requirements – None
RR Siding – Buena Vista Haul to bridge site – 4 miles
Nearby structures on same stream:
Location
Waterway
Record during floods
+6.0%
+2.558%
+6.0%
+3.80%
600' V.C.
400' V.C.
400' V.C.
Preliminary Information
EMBANK +15%
EMBANK NET
EMBANK NET
EMBANK –20%
13178
1218
4408
647
40
3761
6
7061
7055
11700
81 85 90 95 100 105 110 113

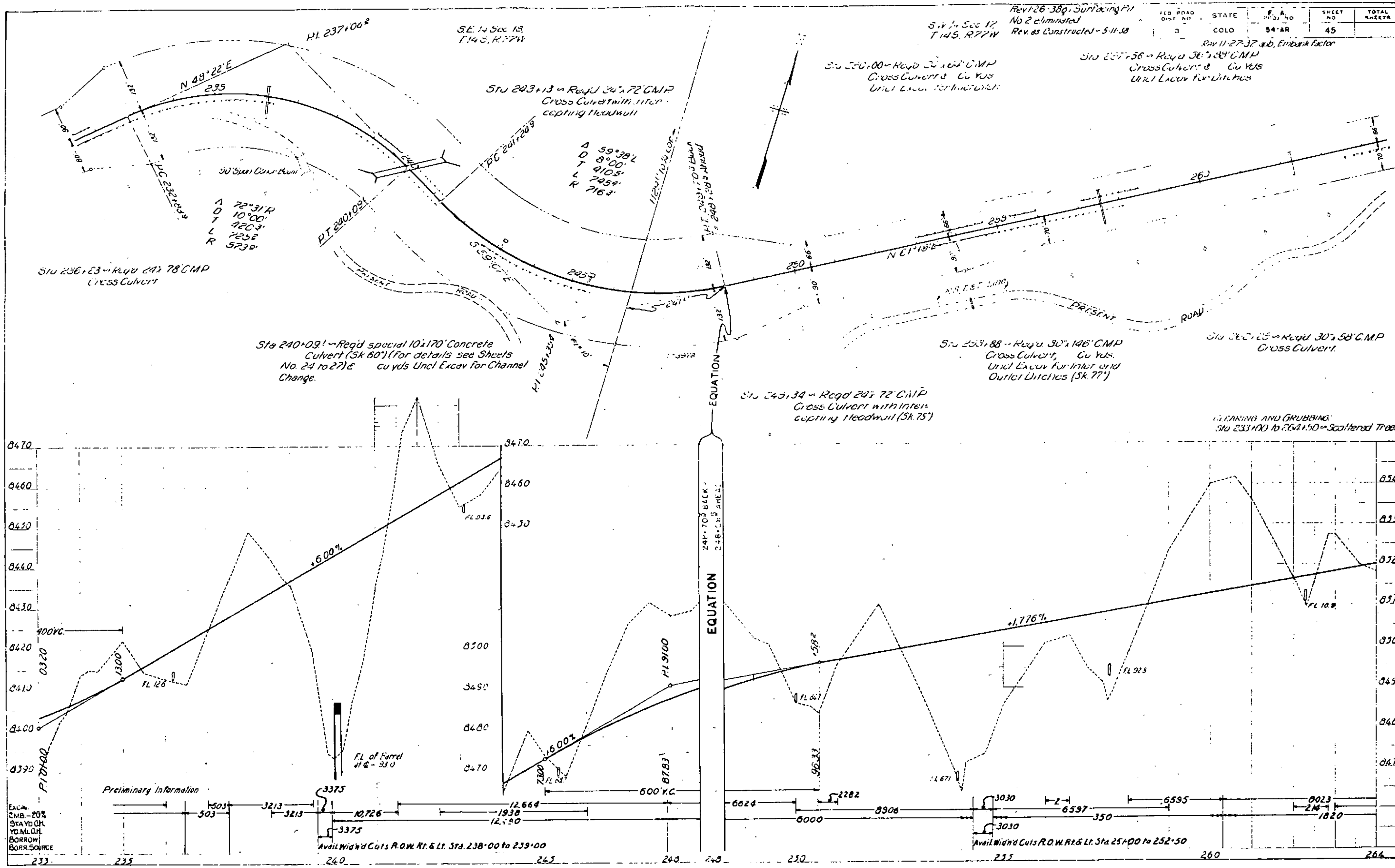

FED. ROAD DIST. NO. 3
STATE COLO
F. A. PROJ. NO. 54-AR
SHEET NO. 41
TOTAL SHEETS
Rev 1-26-38 gl Length of inlet wingwalls on CBC Sta 133+00, & Bridge Sta 115+
Revised as Const - 5-8-39 - KLR
Rev 11-27-37 gl Embankment factor
N.E. ¼ Sec 23, T.14 S, R.78 W.
N.W. ¼ Sec 24, T.14 S, R.78 W.
S.E. ¼ Sec 23, T.14 S, R.78 W.
N
Sta 115+20 to 116+03.4 - Req'd 1-span @ 80'-0" Steel Truss Bridge (For details see Sheets No 11 to 14a) & channel improvement. (QUANTITIES IN SUMMARY)
Sta 120+20 - Req'd 30" x 88' CMP Cross Culvert (Sk 64°)
Sta 133+10 - Req'd special 8 x 8 x 92' Concrete Box Culvert & cu yds Uncl Excav for ditches (For details see Sheet No 15 & 15a)
Sta 143+00 to 147+15 - Req'd Cu Yds Uncl Excav for Intercepting Ditch Lt.
SELECTED MATERIAL PIT NO 3
Sta 139+70.65 to 140+01.35 - Req'd special 30.7' x 87' Triple Concrete Box Culvert (for details see Sheet No 16) & cu yds Uncl Excav for channel improvement (QUANTITIES IN SUMMARY)
N 67°59' E
N 73°32' E
PC 119+72.7
PT 141+93.5
Δ 5°34' R
D 0°15'
T 1112.4'
L 2226.7'
R 22920.0'
¼ Line
Sec Line
STRUCTURE NOTES FOR BRIDGE STA. 115+20 TO 116+03.4 STRUCTURE NO. I-12-B
Present Structure
Span - @ 10'
Clear roadway
Clear waterway
Type of Superstructure - Conc Girder
Type of Substructure - Conc Abuts
Requirements as removal
Stream Data
Drainage area in Sq Miles - 10
Velocity during high water
Elevation of:
Max high water - 06.3 Low water
Normal stage Stream bed
Drift - Some
Scour - Light
Proposed Structure
Position referred to present structure - 300' upstream
Clear roadway - 30'-0"
Type of Superstructure - Steel Truss T83A
Type of Substructure - Counterforted Abutments
Detour structure requirements - None
RR siding - Buena Vista Haul to bridge site - 4 Miles
Nearby structures on same stream
Location
Waterway
Record during floods
CLEARING AND GRUBBING
Sta 116+00 to 144+00 - Scattered Trees
STRUCTURE NOTES FOR TRIPLE CONC. BOX CULVERT STA. 139+70.65 TO 140+01.35 STRUCTURE NO. I-12-V
Present Structure
Span
Clear roadway
Clear waterway
Type of Superstructure
Type of Substructure
Requirements as to removal
Stream Data
Drainage area in Sq Miles - 3
Velocity during high water
Elevation of:
Max high water 8140 Low water
Normal stage Stream bed
Drift
Scour
Proposed Structure
Position referred to present structure
Span
Clear roadway
Clear waterway - 31.2'
Type of Superstructure
Type of Substructure - Triple Conc Box Culvert 8'x12' - 10'x12' - 8'x10'
Detour structure requirements
RR siding - Buena Vista Haul to bridge site - 4.5 Miles
Nearby structures on same stream
Location
Waterway
Record during floods
400' V.C.
800' V.C.
+3.90%
+6.0%
-2.20%
+0.20%
PI 29.00
PI 98.00
PI 70.50
FL 390
Preliminary Information
EXCAV.
EMB. - 20%
STA YD OH
YD. MI. OH
BORROW
BORR. SOURCE
Avail. Wid'n'g Cuts R.O.W. Rt. & Lt. Sta. 122+00 to 126+00
Avail. Wid'n'g Cuts R.O.W. Rt. & Lt. Sta. 130+00 to 132+00
112
115
120
125
130
135
140
144


Rev 11-27-37
Rev as Constructed - 5-9-39
STATE
F. A. PROJ NO
SHEET NO
TOTAL SHEETS
COLO
54-AR
42
Sta 173+44 - Req'd special 4'x4'x83' C B C & cu yds Uncl Excav for inlet channel (For details see Sheet No 19)
Uncl Excav for Intercepting Ditch Lt.
Sta 158+29 - Req'd special 6'x6'x80' Concrete Box Culvert & cu yds Uncl Excav for inlet & outlet channels (For details see Sheet No 17)
Sta 150+30 - Req'd 30"x112' CMP Cross Culv & Cu Yds Uncl Excav for Inlet Ditch
Sta 163+41.8 to 163+72.2 - Req'd special Concrete Box Culvert & cu yds Uncl Excav for Channel improvement (For details see Sheet No 18)
(QUANTITIES IN SUMMARY)
SELECTED MATERIAL PIT NO 4
Δ 13°55' L
D 2°00'
T 349
L 695
R 2865
PC 164+35
PT 171+56
PI 168+04
165+79
166+3
145
150
155
160
165
170
175
N 73°32' E
N 59°37' E
S.T.L. No 4
To Colorado Springs
Sta 168+06 - Req'd 24"x78' CMP Cross Culvert (Sk. 70') & Uncl Excav for Ditches
Sta 155+82 - Req'd 24"x118' CMP Cross Culvert (Sk. 74')
STRUCTURE NOTES FOR TRIPLE CONC. BOX CULVERT STA. 163+41.8 TO 163+72.2 STR. NO. I-12-W
Present Structure
Span
Clear roadway
Clear waterway
Type of Superstructure
Type of Substructure
Requirements as to removal
Stream Data
Velocity during high water
Elevation of
Max high water - 8179.0
Normal stage
Low water
Stream bed
Drift
Scour
Proposed Structure
Span
Clear roadway
Type of Superstructure
Type of Substructure - Triple Conc Box Culvert
Detour structure requirements
Haul to bridge site - 5 Miles
Nearby structures on same stream:
Location
Waterway
Record during floods
CLEARING AND GRUBBING:
Scattered Trees
and Light Brush.
8230
8220
8210
8200
8190
8180
8170
8160
8150
+0.20%
+3.67%
+0.40%
400' V.C.
600' V.C.
73.40
73.54
81.14
P.I. 73.80
05.00
P.I. 16.00
13.55
17.20
FL 50.2
FL 47.7
FL 58.0
FL 70.8
FL 05.9
FL 95.0
Preliminary Information
EXCAV.
EMB -20%
STA YD CH.
YD MI.O.H.
BORROW
BORR. SOURCE
8640
5326
4830
1775
5090
1204
1204
1905
1904
289
3096
2807
2655
2655
2179
4002
7242
1061
760
8549
8549
1060
Avg Width Cuts R.O.W. Rt. & Lt. Sta. 156+00 to 157+25
143
145
150
155
160
165
170
175



STATE COLO.
F.A. PROJ. NO. 54-AR
SHEET NO. 43
TOTAL SHEETS
Sta. 181+10 to 182+90 - Req'd Cu Yds Uncl Excav for Intercepting Ditch Rt.
Sta. 182+20 to 190+32 - Req'd Cu Yds Uncl Excav for Intercepting Ditch Lt.
Sta. 191+55 to 194+45 - Req'd cu yds Uncl Excav for intercepting ditch Lt.
Sta. 190+58 - Req'd 24"x 110' C.M.P. Cross Culvert
Sta. 195+23 to 195+57 - Req'd 34'x58' Triple Concrete Box Culvert (Type 10Z) & cu yds Uncl Excav for Channel Improvement (For details see Sheet No 21)
(QUANTITIES IN SUMMARY)
Sta. 201+25 - Req'd 30"x104' C.M.P. Cross Culvert
Sta. 203+93 - Req'd 30"x 94' C.M.P. Cross Culvert (SK. 74°)
S.W. 1/4 Sec 18. T.14 S. R.77 W.
SELECTED MATERIAL PIT
Sta. 178+15 to 178+49 - Req'd 34'x44' Triple Concrete Box Culvert (Type 10Y) & cu yds Uncl Excav for Channel improvement (For details see Sheet No 20)
(QUANTITIES IN SUMMARY)
Sta. 199+10 - Req'd 24"x78' CMP Cross Culvert
Sta. 201+90 to 204+10 - Req'd cu yds Uncl Excav for intercepting ditch Lt.
Intercepting Ditch
PRESENT ROAD
184+66
186+52
STRUCTURE NOTES FOR TRIPLE CONC. BOX CULVERT STA. 178+15 TO 178+49 STR. NO. I-12-X
N.E. 1/4 Sec 24. T.14 S. R.78 W.
Present Structure: Span - None; Clear roadway; Clear waterway; Type of Superstructure; Type of Substructure; Requirements as to removal
Stream Data: Drainage area in Sq Miles - 3; Velocity during high water; Elevation of Max high water - 8212.0; Low water; Normal stage; Stream bed - 8206; Drift; Scour
Proposed Structure: Position referred to present structure; Span; Clear roadway; Clear waterway - 300°; Type of Superstructure - Fill; Type of Substructure - Std M III-A; Detour structure requirements; R.R. siding - Buena Vista; Haul to bridge site - 5 Miles
Nearby structures on same stream: Location; Waterway; Record during floods
STRUCTURE NOTES FOR TRIPLE CONC. BOX CULVERT STA. 195+23 TO 195+57 STRUCTURE NO. I-12-Y
Present Structure: Span; Clear roadway; Clear waterway; Type of Superstructure; Type of Substructure; Requirements as to removal
Stream Data: Drainage area in Sq Miles - 6; Velocity during high water; Elevation of Max high water; Low water; Normal stage - Dry; Stream bed - 8252; Drift; Scour
Proposed Structure: Position referred to present structure; Span; Clear roadway; Clear waterway - 300°; Type of Superstructure - Triple 10x10 Conc Box Culvert Std M-III-A; Type of Substructure; Detour structure requirements; R.R. siding - Buena Vista; Haul to bridge site - 5.5 Miles
Nearby structures on same stream: Location; Waterway; Record during floods
400' V.C.
600' V.C.
+0.40%
+6.0%
+0.60%
+6.00%
P.I. 65.20
P.I. 70.90
P.I. 20.20
Preliminary Information
EXCAV. EMB -20% STA. YD. O.H. YD. Mi. O.H. BORROW BORR. SOURCE
Avail. Wid'nd Cuts R.O.W. Rt. & Lt. Sta. 170+00 to 171+00
Avail. Wid'nd Cuts R.O.W. Rt. & Lt. Sta. 187+50 to 190+00
174 175 180 185 190 195 200 205 206


FED ROAD DIST NO | STATE | F.A. PROJ NO | SHEET NO | TOTAL SHEETS
3 | COLO. | 54-AR | 44
SW 1/4 Sec 19 T14S R77W
Sta 214+70 Req'd 10'x10'x62' Conc Box Culvert (Type 10 IV) & cu yds Uncl Excav for channel change & dyke
Sta 205+50 to 208+00 Req'd Cu Yds Uncl Excav for Intercepting Ditch Lt
Sta 208+65 to 211+40 Req'd Cu Yds Uncl Excav for Intercepting Ditch Lt
Sta 215+90 Req'd special double 8'x12'x104'8" Conc Box Culv. (Sk 70°) & cu yds Uncl Excav for outlet channel (For details see Sheet No 22)
SELECTED MATERIAL PIT NO 7
Rev 12-9-37 Q.I Binder Material Pit eliminated
Rev 1-26-38 Q.I Length of inlet wingwalls on C.B.C. Sta 231+30
Revised as Constructed
Sta 232+00 Req'd special 8'x8'x87' C.B.C with Grouted Rubble Sloped Ditch Pav (24 Th) Rock filled Bulkhead (Det Sh No 23 & 15a) & cu yds Uncl Excav for inlet ditch Also req'd rem 36"x30' C.M.P. Rt.
Cross Culvert
PI 237+04.2
Δ 72°31' Rt
D 10°00'
T 420.3'
L 725.8'
R 573.0'
PC 232+83.9
PT 231+13.6
PC 224+11.4
PI 227+92.2
PI 206+28.3
N 33°42' E
N 40°22' E
232+04.1 Back = 230+82.9 Ahead EQUATION
This Marker moved to Sta 214+00 out of stream bed
Sta 219+95 Req'd 24"x78' C.M.P Cross Culvert
Sta 208+00 Req'd 36"x64' C.M.P Cross Culvert (Skew 60°)
Sta 221+73 Req'd 30"x116' C.M.P Cross Culvert (Sk 62°)
Sta 226+79 Req'd 30"x124' C.M.P Cross Culvert (Skew 31°)
1/4 Line
CLEARING AND GRUBBING:
Sta 206+00 to 215+50 Scattered Trees
Sta 227+50 to 231+25
PI 8780
400' V.C.
+3.40%
+0.825
+6.0%
+1.607%
+6.07%
600' V.C.
PI 48.90
PI 55.50
PI 87.80
PI 01.80
FL 210
EQUATION
232+04.1 BACK = 230+82.9 AHEAD
Preliminary Information
Excav.
Emb - 20%
Sta Yd O.H.
Yd Mi O.H.
Borrow
Borr Source
17,391
397
17,730
16,994
4219
4320
5037
4985
906
332
7291
6899
11,226
11,272
380
3710
3514
3692
Avail Wid'nd Cuts R.O.W. Rt & Lt Sta 217+50 to 219+00
Avail Wid'nd Cuts Sta 230+00 to 231+00
205
210
215
220
225
230
232
231
235


Rev 1-26-38 - Surfacing Pit No 2 eliminated
Rev. as Constructed - 5-11-38
Rev 11-27-37 sub. Embank Factor
FED. ROAD DIST. NO. 3
STATE COLO
F. A. PROJ. NO. 54-AR
SHEET NO. 45
TOTAL SHEETS
P.I. 237+06²
SE 1/4 Sec 18 T14S, R77W
S.W. 1/4 Sec 17 T14S, R77W
N 48°22'E
Sta 243+13 - Req'd 24"x72' C.M.P. Cross Culvert with intercepting Headwall
Sta 236+23 - Req'd 24"x78' C.M.P. Cross Culvert
Δ 72°31'R
D 10°00'
T 420.3'
L 725.2
R 573.9'
Δ 59°38'L
D 8°00'
T 410.3'
L 745.9'
R 716.8'
PT 240+09
Sta 240+09! - Req'd special 10'x170' Concrete Culvert (Sk 60") (For details see Sheets No. 24 to 27) & cu yds Uncl Excav for Channel Change.
Sta 253+88 - Req'd 30"x146' C.M.P. Cross Culvert, cu yds Uncl Excav for Inlet and Outlet Ditches (Sk. 77")
Sta 243+34 - Req'd 24"x72' C.M.P. Cross Culvert with intercepting Headwall (Sk. 75")
Cross Culvert
Uncl Excav for Ditches
N 67°18'E
PRESENT ROAD
EQUATION
CLEARING AND GRUBBING: Sta 233+00 to 264+50 - Scattered Trees
+6.00%
+1.776%
400 V.C.
600 V.C.
P.I. 9100
FL of Barrel at ℄ - 33.0
Preliminary Information
EXCAV.
EMB. - 20%
Avail Wid'n'd Cuts R.O.W. Rt. & Lt. Sta. 238+00 to 239+00
Avail Wid'n'd Cuts R.O.W. Rt. & Lt. Sta. 251+00 to 252+50
8470
8460
8450
8440
8430
8420
8410
8400
8390
8540
8530
8520
8510
8500
8490
8480
233
235
240
245
250
255
260
264

FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54-AR	46	

Rev. at 27+30.00 Ending Point
Rev. as Constructed = 5...19

NW ¼ Sec 17
T14S, R77W

NE ¼ Sec 17
T14S, R77W

Sta 267+10 — Regd special 6'x6'x91'CBC (Details see Sheet No 28) ___ cu yds Unclassified Excav for Channel Improvement

N

SELECTED MATERIAL PIT NO. 8

PI 270+59.9

265 — N 61°15'E — 270 — 275 — 280

Present Road

Road

Δ 19°43' R
D 6°
T 166.8'
L 328.8'
P 955.6'

PC 276+93.2

PT 280+22.5

17

SW ¼ Sec 17
T14S R77W

STA. 270+83 END F.A. PROJ. NO. 54 AR
END ORIGINAL F.A. PROJ. NO. 54
BEGIN F.A. PROJ. NO. 54 D

+1.77%

-2.29

EL. 98.0

8560
8550
8540
8530
8520
8510
8500
8490

Preliminary information

EXCAV.			
EMB - 20%	780.9	679.2	679.2
STA TO O.H.			
TO BY O.H.			
BORROW			
BORR. SOURCE			

263 265 270 275 280

FED. ROAD DIST. NO.	STATE	P.W.A. PROJ.	SHEET NO	TOTAL SHEETS
3	COLO.	NO. 54 C	1	

COLORADO
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED

P.W.A. DOCKET COLO. 804-D

PROJECT NO. 54-C

STATE HIGHWAY NO. 4

CHAFFEE COUNTY

INDEX OF SHEETS

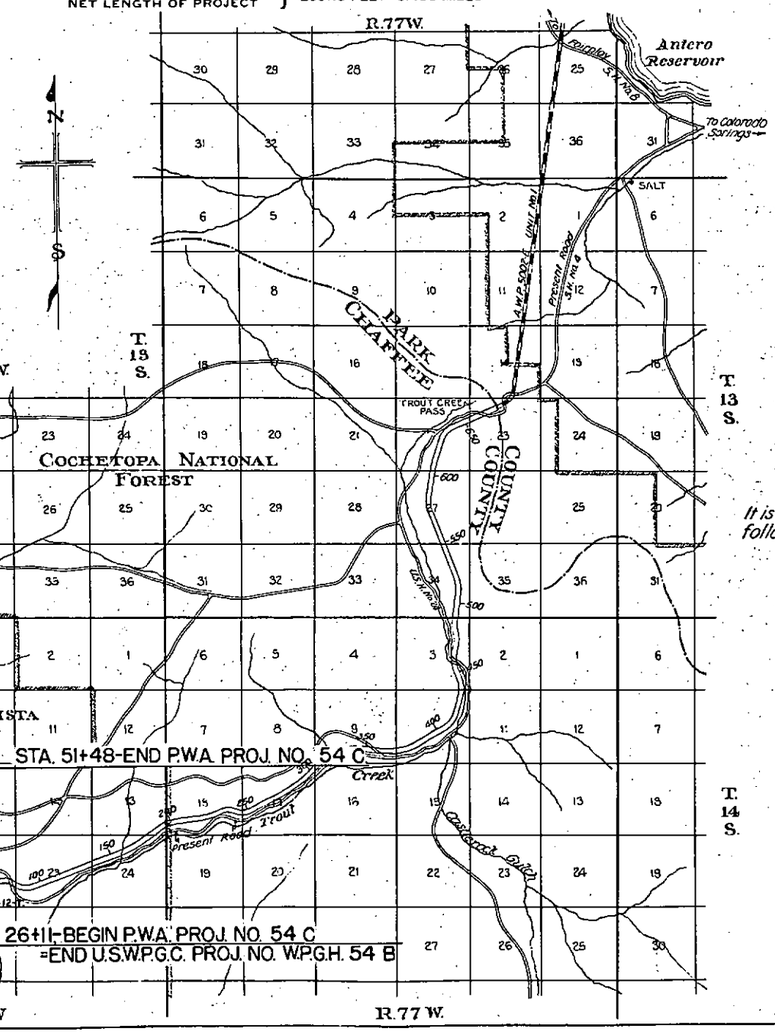
SCALES ON ORIGINAL TRACINGS

ON PLAN, 1 IN. - 100 FT.

ON PROFILE (1 IN. - 100 FT. HORIZONTAL; 1 IN. - 10 FT. VERTICAL)

GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD

GROSS LENGTH OF PROJECT } 2537.0 FEET = 0.480 MILES
NET LENGTH OF PROJECT }



CONVENTIONAL SIGNS

Center Line Of Survey
Right Of Way Line
Section Line
One Quarter Section Line
Fence
Pole Lines

Note

It is recommended that bidders on this project go over the plan details with one of the following field representatives of the department.
Mr. Ernest Montgomery, Division Engineer, Colorado Springs
Mr. Ed. W. Oviatt, Resident Engineer, Bueno Vista.

RECOMMENDED FOR APPROVAL 6/8/37
ASSISTANT ENGINEER

APPROVED
STATE HIGHWAY ENGINEER

RECOMMENDED FOR APPROVAL
DIST. ENG. BUREAU PUBLIC ROADS

RECOMMENDED FOR APPROVAL
CHIEF ENG. BUREAU PUBLIC ROADS

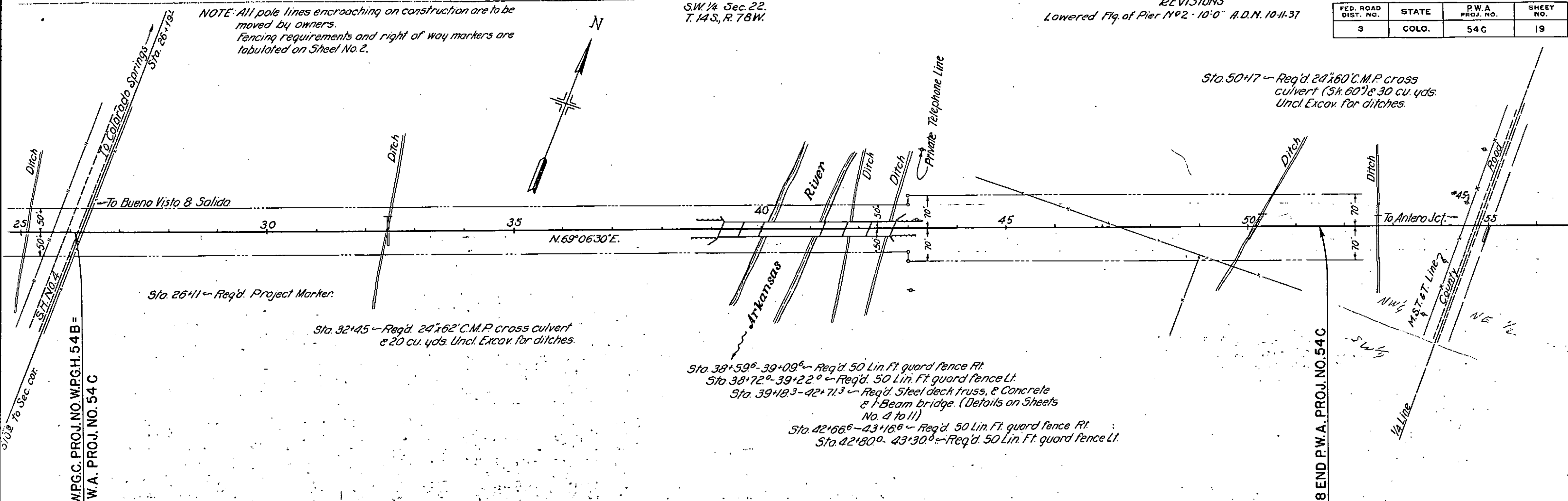
APPROVED
DIRECTOR BUREAU PUBLIC ROADS

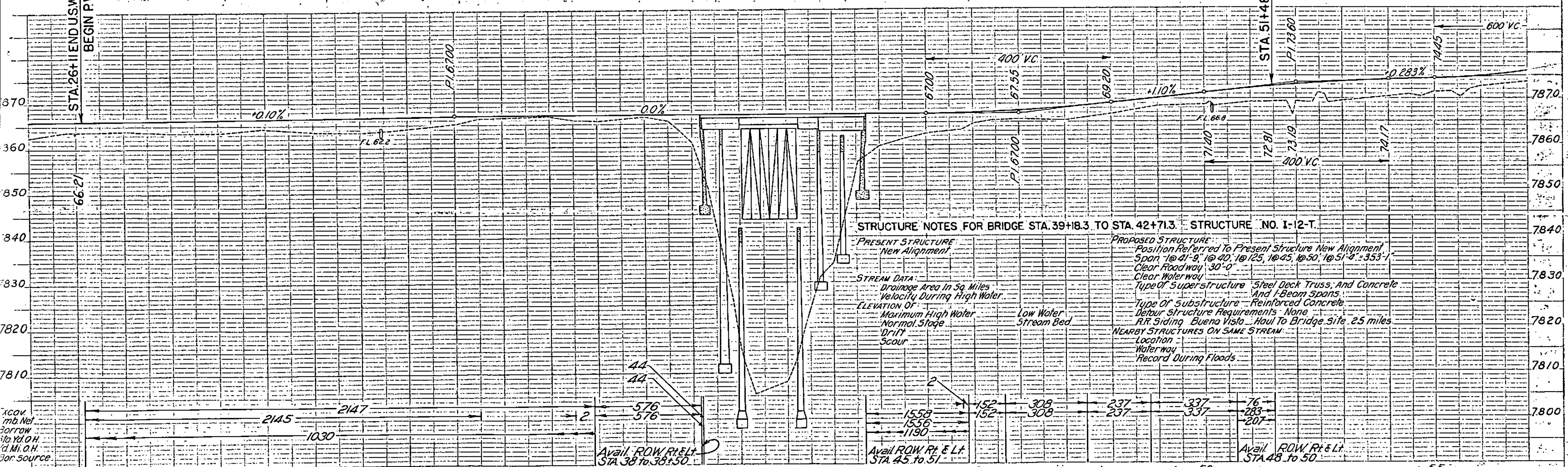
FED. ROAD DIST. NO.	STATE	P.W.A PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54C	19	

REVISIONS
Lowered Ftg. of Pier Nº2 - 10'-0" A.D.N. 10-11-37

NOTE: All pole lines encroaching on construction are to be moved by owners.
Fencing requirements and right of way markers are tabulated on Sheet No. 2.

S.W. 1/4 Sec. 22.
T. 14 S., R. 78 W.





STRUCTURE NOTES FOR BRIDGE STA. 39+18.3 TO STA. 42+71.3. STRUCTURE NO. I-12-T.

PRESENT STRUCTURE:
New Alignment

STREAM DATA:
Drainage Area In Sq. Miles
Velocity During High Water

ELEVATION OF:
Maximum High Water — Low Water
Normal Stage — Stream Bed
Drift
Scour

PROPOSED STRUCTURE:
Position Referred To Present Structure New Alignment
Span 1@41'-9", 1@40', 1@125, 1@45, 1@50', 1@51'-4" = 353'-1"
Clear Roadway 30'-0"
Clear Waterway
Type Of Superstructure Steel Deck Truss, And Concrete And I-Beam Spans.
Type Of Substructure Reinforced Concrete.
Detour Structure Requirements None
R.R. Siding Buena Vista Haul To Bridge Site 2.5 miles

NEARBY STRUCTURES ON SAME STREAM:
Location
Waterway
Record During Floods

FED. ROAD DIST. NO.	STATE	COMBINED U.S.W.P.G.C. PROJ. NO. W.P.G.H. 248 D & W.P.G.H. 54 B.	SHEET NO.	TOTAL SHEETS
8	COLO.		1	

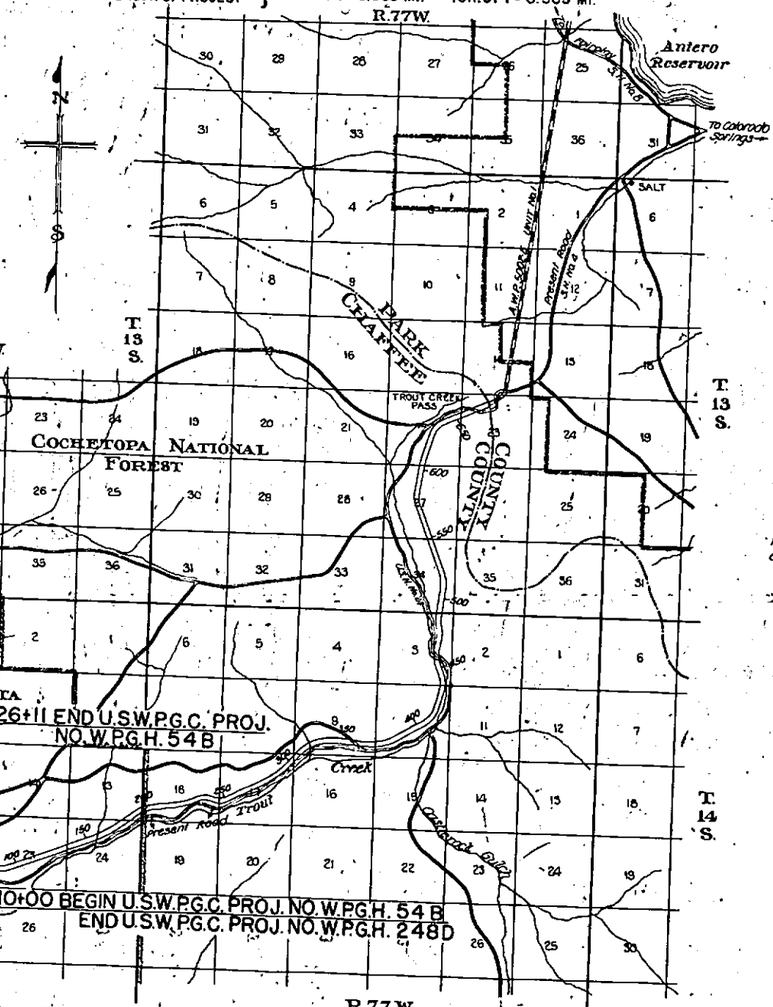
COLORADO
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED
COMBINED U.S.W.P. GRADE CROSSING PROJECT NO. W.P.G.H. 248 D
AND U.S.W.P. GRADE CROSSING PROJECT NO. W.P.G.H. 54 B
STATE HIGHWAY NO. 4
CHAFFEE COUNTY

INDEX OF SHEETS

SCALES ON ORIGINAL TRACINGS
ON PLAN, 1 IN. = 100 FT.
ON PROFILE { (1 IN. = 100 FT. HORIZONTAL
(1 IN. = 10 FT. VERTICAL
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD

	W.P.G.H. 248 D	W.P.G.H. 54 B
GROSS LENGTH OF PROJECT	1760.4 FT = 0.333 MI.	1611.0 FT = 0.305 MI.
NET LENGTH OF PROJECT		



CONVENTIONAL SIGNS

- Center Line Of Survey — 10
- Section Line
- One Quarter Section Line
- Right Of Way Line
- Fence
- Railroad
- Pole Line
- Present Road

NOTE

It is recommended that bidders on this project go over the plan details with one of the following field representatives of the department.

Mr. Ernest Montgomery, Division Engineer, Colorado Springs
Mr. Ed. W. Oviatt, Resident Engineer, Buena Vista.

RECOMMENDED FOR APPROVAL
J. E. Maloney by H. H. Young
ASSISTANT ENGINEER

APPROVED
Chas. D. Vail
STATE HIGHWAY ENGINEER

RECOMMENDED FOR APPROVAL
DIST. ENG. BUREAU PUBLIC ROADS

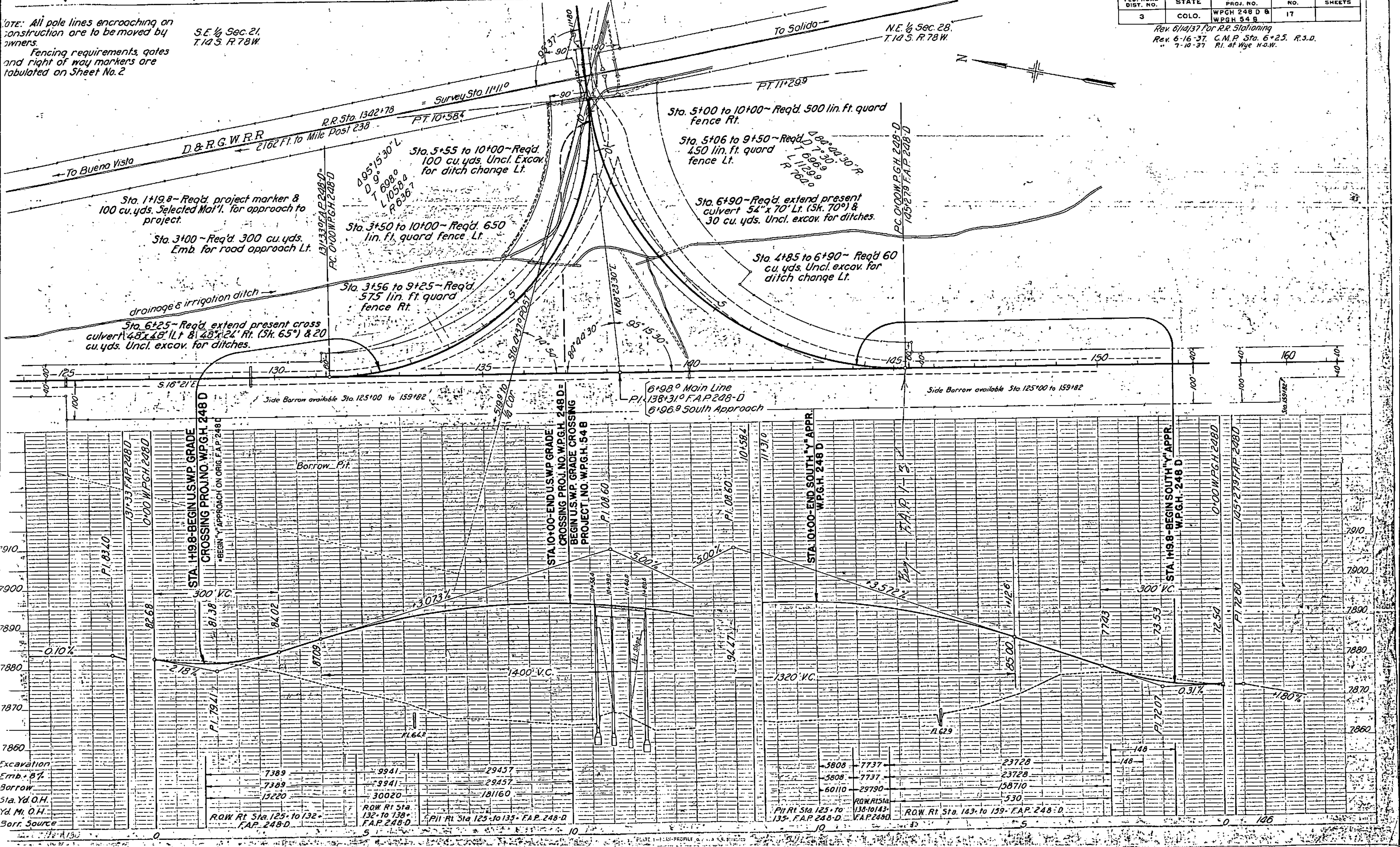
RECOMMENDED FOR APPROVAL
CHIEF ENG. BUREAU PUBLIC ROADS

APPROVED
DIRECTOR BUREAU PUBLIC ROADS

FED. ROAD DIST. NO.	STATE	COMBINED USWPGC PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	WPGH 248 D & WPGH 54 B	17	

Rev. 6/14/37 for R.R. Stationing
Rev. 6-16-37. C.M.P. Sta. 6+25. R.S.D.
" 7-10-37 P.I. at Wye H.O.W.

NOTE: All pole lines encroaching on construction are to be moved by owners.
Fencing requirements, gates and right of way markers are tabulated on Sheet No. 2



S.E. 1/4 Sec. 21. T.14 S. R.78 W.
N.E. 1/4 Sec. 28. T.14 S. R.78 W.
To Solido
To Bueno Vista
D.&R.G.W.R.R.
2162 Ft. to Mile Post 238
R.R. Sta. 1342+78 = Survey Sta. 11+11.0
P.T. 10+58.4
P.T. 11+29.9
Sta. 5+00 to 10+00 ~ Req'd. 500 lin. ft. guard fence Rt.
Sta. 5+06 to 9+50 ~ Req'd. 450 lin. ft. guard fence Lt.
Δ 84°44'30" R D 7°30' T 696.9 L 1129.9 R 764.0
Δ 95°15'30" L D 9° T 698.0 L 1058.4 R 636.7
Sta. 5+55 to 10+00 ~ Req'd. 100 cu. yds. Uncl. Excav. for ditch change Lt.
Sta. 1+19.8 ~ Req'd. project marker & 100 cu. yds. Selected Mat'l. for approach to project.
Sta. 3+00 ~ Req'd. 300 cu. yds. Emb. for road approach Lt.
Sta. 3+50 to 10+00 ~ Req'd. 650 lin. ft. guard fence Lt.
Sta. 6+90 ~ Req'd. extend present culvert 54" x 70' Lt. (Sk. 70°) & 30 cu. yds. Uncl. excav. for ditches.
Sta. 4+85 to 6+90 ~ Req'd 60 cu. yds. Uncl. excav. for ditch change Lt.
Sta. 3+56 to 9+25 ~ Req'd. 575 lin. ft. guard fence Rt.
drainage & irrigation ditch
Sta. 6+25 ~ Req'd. extend present cross culvert 48" x 48' Lt. & 48" x 24' Rt. (Sk. 65°) & 20 cu. yds. Uncl. excav. for ditches.
131+33.9 F.A.P. 248-D = P.C. 0+00 W.P.G.H. 248-D
P.C. 0+00 W.P.G.H. 248-D = 145+27.9 F.A.P. 248-D
N. 68°23'30" L.
S. 16°21' E.
Side Borrow available Sta. 125+00 to 159+82
P.I. 6+98.0 Main Line = 138+31.0 F.A.P. 248-D = 6+96.9 South Approach
STA. 1+19.8 - BEGIN U.S.W.P. GRADE CROSSING PROJ. NO. W.P.G.H. 248 D
BEGIN "Y" APPROACH ON ORIG. F.A.P. 248 D
STA. 10+00 - END U.S.W.P. GRADE CROSSING PROJ. NO. W.P.G.H. 248 D = BEGIN U.S.W.P. GRADE CROSSING PROJECT NO. W.P.G.H. 54 B
STA. 10+00 - END SOUTH "Y" APPR. W.P.G.H. 248 D
STA. 1+19.8 - BEGIN SOUTH "Y" APPR. W.P.G.H. 248 D
Borrow Pit
300' V.C.
1400' V.C.
1320' V.C.
+3.073%
-5.00%
+3.572%
0.10%
2.18%
0.31%
+1.80%
FL 64.2
FL 62.9
Excavation
Emb. + 8%
Borrow
Sta. Yd. O.H.
Yd. Mi. O.H.
Borr. Source
R.O.W. Rt. Sta. 125+ to 132+ F.A.P. 248-D
R.O.W. Rt. Sta. 132+ to 138+ F.A.P. 248-D
Pit Rt. Sta. 125+ to 135+ F.A.P. 248-D
R.O.W. Rt. Sta. 143+ to 159+ F.A.P. 248-D

FED. ROAD DIST. NO.	STATE	COMBINED USWPGC PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	WPGH 248 D & WPGH 54 B	18	

S.E. ¼ Sec. 21
T. 14 S., R. 78 W.

S.W. ¼ Sec. 22
T. 14 S., R. 78 W.

Rev. 6/10/37 for R.R. Stationing
Rev. P.I. of Wye 7/14/37.

NE ¼ Sec. 28,
T. 14 S., R. 78 W.

To Buena Vista

To Salida

To Colorado Springs

4+37.2 POST

6+98.2 Main Line
138+31.2 FAP 248-D
6+96.2 South Appr.

Sec Line

Sec Line

Sta. 10+00 to 10+55 ~ Req'd. 20 cu. yds. Uncl. excav. for ditch change Lt.

Sta. 10+55 ~ Req'd. 48"x130' C.M.P. cross culvert & 50 cu. yds. Uncl. excav. for ditches & remove 24"x30' C.M.P. & division box Rt. (Details on Sheet No. 7.)

Sta. 10+75 ~ Req'd. remove 36"x36' C.M.P.

Sta. 11+11 ~ Req'd. 3'x2'x40' C.B.C. under railroad tracks & remove and reset cattle guards. (Force Account. Work by railroad Co forces)

Sta. 10+00 to 10+55.9 ~ Req'd. 56 lin. ft. guard fence Lt.

Sta. 10+00 (South leg of Wye) to 10+55.9 (Main Line) ~ Req'd. 128 lin. ft. guard fence Rt.

Sta. 10+58.4 to 11+80.6 ~ Req'd. concrete T-beam overpass. (Details on Sheet No. 4 to 6.)

Sta. 11+36 ~ Req'd. remove 12"x18" W.B.C.

Sta. 11+83.1 to 17+45.6 ~ Req'd. 562.5 lin. ft. guard fence Lt. & 562.5 lin. ft. guard fence Rt.

Sta. 12+62 ~ Req'd. 18"x128' C.M.P. cross culvert & 20 cu. yds. Uncl. excav. for ditches & remove 12"x18" W.B.C.

Sta. 18+26 ~ Req'd. 24"x74' C.M.P. cross culvert & 10 cu. yds. Uncl. excav. for ditches.

Sta. 20+00 ~ Req'd. 18"x24' C.M.P. side drain & 50 cu. yds. Emb. for road appr. Lt.

Sta. 21+94 ~ Req'd. 18"x64' C.M.P. cross culvert & 20 cu. yds. Uncl. excav. for ditches.

Sta. 25+14 ~ Req'd. 18"x66' C.M.P. cross culvert & 20 cu. yds. Uncl. excav. for ditches.

Sta. 26+00 ~ Req'd. 200 cu. yds. Emb. for road approaches Rt. & Lt.

Sta. 28+18 ~ 510.8 ft to sec cor

D. & R.G.W.R.R.

269.2 ft to Mile Post 238

P.T. 10+58.9 Main Line

P.C. 11+31.8 End S. Appr.

R.R. Sta. 1802.8 Survey Sta. 11+11.6

S.H. No. 4

S.H. No. 4

Δ 95°15'30" L
D 9°00'
T 609.9'
L 1058.9'
R 636.6'

Δ 84°44'30" R
D 7°30'
T 696.9'
L 1129.9'
R 764.8'

N 68°23'30" E

95°15'30"

84°44'30"

74°54'

110° 45'

312.9'

N

BEGIN U.S.W.P. GRADE CROSSING PROJ. NO. W.P.G.H. 248 D = PROJ. NO. W.P.G.H. 54 B

END U.S.W.P. GRADE CROSSING P.T. 11+29.9

STA. 10+00 = END U.S.W.P. GRADE CROSSING PROJ. NO. W.P.G.H. 54 B

STA. 26+11 = END U.S.W.P. GRADE CROSSING PROJ. NO. W.P.G.H. 54 B

P.I. 0860

P.I. 6700

+3.073 %

-5.00 %

0.0 %

+0.10 %

8.02

8.09

1400' V.C.

300' V.C.

200' V.C.

7360

6797

6110

7360

P.I. 66.10

P.I. 66.10

66.90

66.97

F.L. 62.3

F.L. 63.0

F.L. 61.5

F.L. 61.1

F.L. 61.2

Sta. 10+00 South Leg of Y
11°31'8"
10°58'4"
6741
6741
62690

Sta. 10+00 North Leg of Y
4810
47239
51246
537140
2530
803

Pit Rt. Sta. 125+ to 135+ F.A.P. 248-D

Pit Rt. Sta. 125+ to 135+ F.A.P. 248-D

7910
7900
7890
7880
7870
7860
7850
7840

10 15 20 25 30

Rev. 12-11-37 Whitney, Div. Engr.
Rev. as Constructed 4-28-39

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54 AR	1	

Rev. 12-9-37 g.l. Surfacing Pit No. 2 eliminated.
Rev. 1-26-38 g.l. Index of Sheets.

COLORADO
STATE HIGHWAY DEPARTMENT

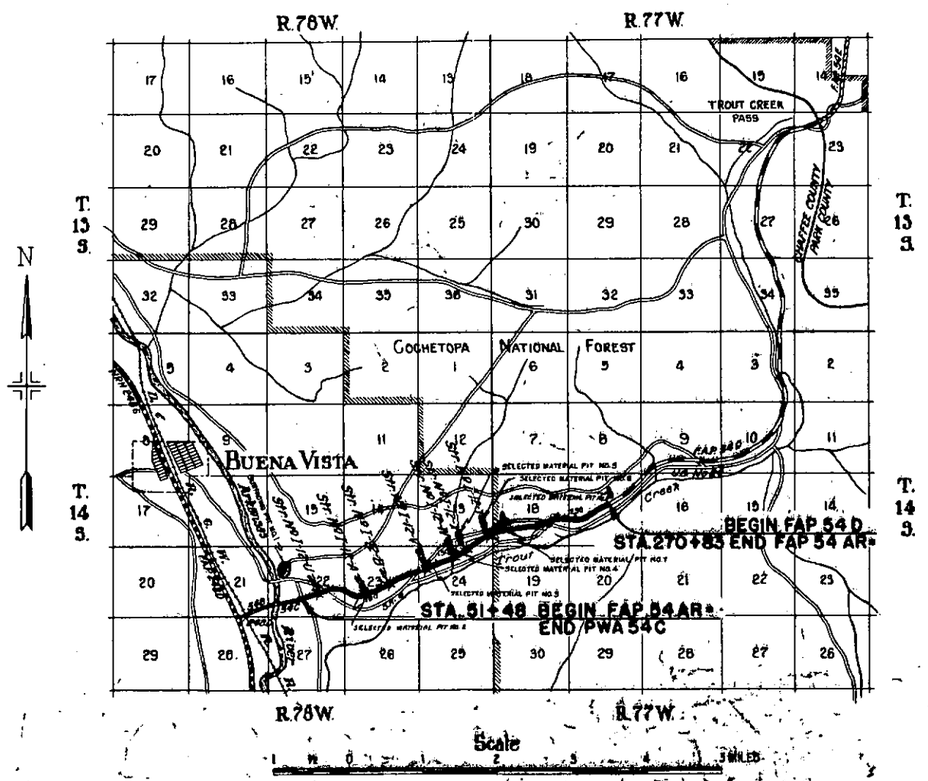
PLAN AND PROFILE OF PROPOSED
FEDERAL AID PROJECT NO. 54 AR
STATE HIGHWAY NO. 4
CHAFFEE COUNTY

INDEX OF SHEETS

CONVENTIONAL SIGNS

- Center Line of Survey
- Section Lines
- One Quarter Section Lines
- Right of Way Lines
- Fences
- Guard Fence
- Telephone Poles

SCALES ON ORIGINAL TRACINGS
ON PLAN, 1 IN. = 100 FT.
ON PROFILE } 1 IN. = 100 FT. HORIZONTAL
1 IN. = 10 FT. VERTICAL
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD
GROSS LENGTH OF PROJECT } 22,098.0 FT. = 4.185 MILES
NET LENGTH OF PROJECT



NOTE
Bidders on this project must go over the plan details with one of the following field representatives of this department.
Mr. W. A. Whitney, Division Engineer, Salida, Colo.
Mr. Edward Oviatt, Resident Engineer, Buena Vista, Colo.

RECOMMENDED FOR APPROVAL 11-22-37
Assistant Engineer
APPROVED
Chas. D. Vail
State Highway Engineer
RECOMMENDED FOR APPROVAL
Dist. Eng. Bureau Public Roads
RECOMMENDED FOR APPROVAL
Chief Eng. Bureau Public Roads
APPROVED
Director Bureau Public Roads

FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54-AR	39	

NOTE: All pole lines encroaching on construction were moved by owners.
Fencing requirements, gates, and R.O.W. markers are tabulated on Sheet No. 3
Guard Post & Metal Plate Guard Fence requirements tabulated on Sheet No. 3

Sta. 51+94 ~ Req'd. 4'x3'x38' Concr. Box Culvert & Cu. Yds. Uncl. Excav. for Outlet Channel.

Sta. 51+48 ~ Req'd. 1-Project Marker.

N.

S.E. ¼ Sec. 22, T. 14 S., R. 78 W.

Sta. 55+70 to 61+12 ~ Req'd intercepting ditch Lt.

Abandoned Ditch

Sta. 62+00 to 70+35 ~ Req'd intercepting ditch Lt.

Sta. 75+90 ~ Req'd 30"x112' C.M.P. Cross Culvert (Skew 44°) & Uncl. Excav. for Inlet & 20 cu. yds. Loose Rock Rip-rap for Outlet

Rev. 11-27-37, g.l. Embankment Factor
Rev. as Constructed ~ 5-6-39 ~ R.L.R.

Sta. 71+20 to 76+22 ~ Req'd intercepting ditch Lt.

Sta. 79+00 ~ Req'd cu. yds. Embank. for Road approaches Rt. & Lt. & 18'x46' C.M.P. Side drain L.t. (Road approaches Served as detour crossing for present road during construction.)

Sta. 70+33 to 71+03.5 ~ Req'd. 3 spans @ 23'-0" treated timber pile bridge & cu. yds. Uncl. Excav. for Channel Improvement. (For details see Sheet No. 6)

(QUANTITIES IN SUMMARY)

Δ 45°43'30"R
D 3°00'
T 805.3'
L 1524.2'
R 1910.2'

Sta. 73+67 ~ Req'd 30"x86' C.M.P. cross culvert (Sk. 57°) & Uncl. Excav. for inlet & outlet channels.

Sta. 78+00 to 78+00 ~ Req'd. 37 cu. yds. Loose Rock Rip-rap in Side Ditch.

Sta. 80+40 ~ Req'd. Remove 24"x30' C.M.P. Rt.

Sta. 54+79 ~ Req'd. Cu. Yds. Embank. for Road Approaches Rt. & Lt.

Sta. 61+96 ~ Req'd 24"x54' C.M.P. Cross Culvert & Ditches (Sk. 72°)

Sta. 55+00 ~ Req'd. 24"x50' C.M.P. Cross Culvert (Skew 70°) & Cu. Yds. Uncl. Excav. for Ditches.

Sta. 54+35 ~ Req'd. 24"x46' C.M.P. Cross Culvert (Sk. 80°) & Inlet Channel

S.W. ¼ Sec. 22, T. 14 S., R. 78 W.

Ditch
Road
Intercepting ditch
N. 69° 06' 30" E.
P.C. 63+92.3
M.S.T. & T. Line
Gould
P.I. 71+93.5
Intercepting ditch
Present Road
P.I. 73+16.5
P.T. 73+46.5
S. 65° 10' E.
65.20
946.9' to W. Line Section Line
S. W. Cor. Sec. 22

STRUCTURE NOTES FOR BRIDGE STA. 70+33 TO STA. 71+03.5 STRUCTURE NO. I-12-U

Present Structure:
Span
Clear roadway
Clear waterway
Type of Superstructure
Type of Substructure
Requirements as to removal

Stream Data:
Drainage area in Sq. Miles - 1½
Velocity during high water - High
Elevation of:
Max. high water - 7912.5 Low water
Normal stage - Dry Stream bed
Drift - Sand
Scour - Same

Proposed Structure:
Position referred to present structure
Span - 3@23'
Clear roadway - 29'-0"
Clear waterway - 350 sq. ft.
Type of Superstructure - Treated Timber Bridge
Type of Substructure - Treated Piles
Detour Structure requirements - None
R.R. siding - Buena Vista Haul to bridge site - 3 Miles

Nearby structures on same stream:
Location
Waterway
Record during floods
7916 -

STA. 51+48 END P.W.A. PROJ. NO. 54-C
BEGIN F.A.I. PROJ. NO. 54-AR

Cream Channel

Preliminary Information

Excav.
Emb. in M.O.
Sta. Yds. O.H.
Yds. Mtr. O.H.
Borrow
Borr. Source

Avail. R.O.W. Rt. & Lt. Sta. 54+75 to 61+00
Avail. R.O.W. Rt. & Lt. Sta. 51+48 to 54+75
Avail. Widths Cuts R.O.W. Rt. & Lt. Sta. 61+00 - 63+00
Avail. Widths Cut R.O.W. Lt. Sta. 63+00 to 72+00

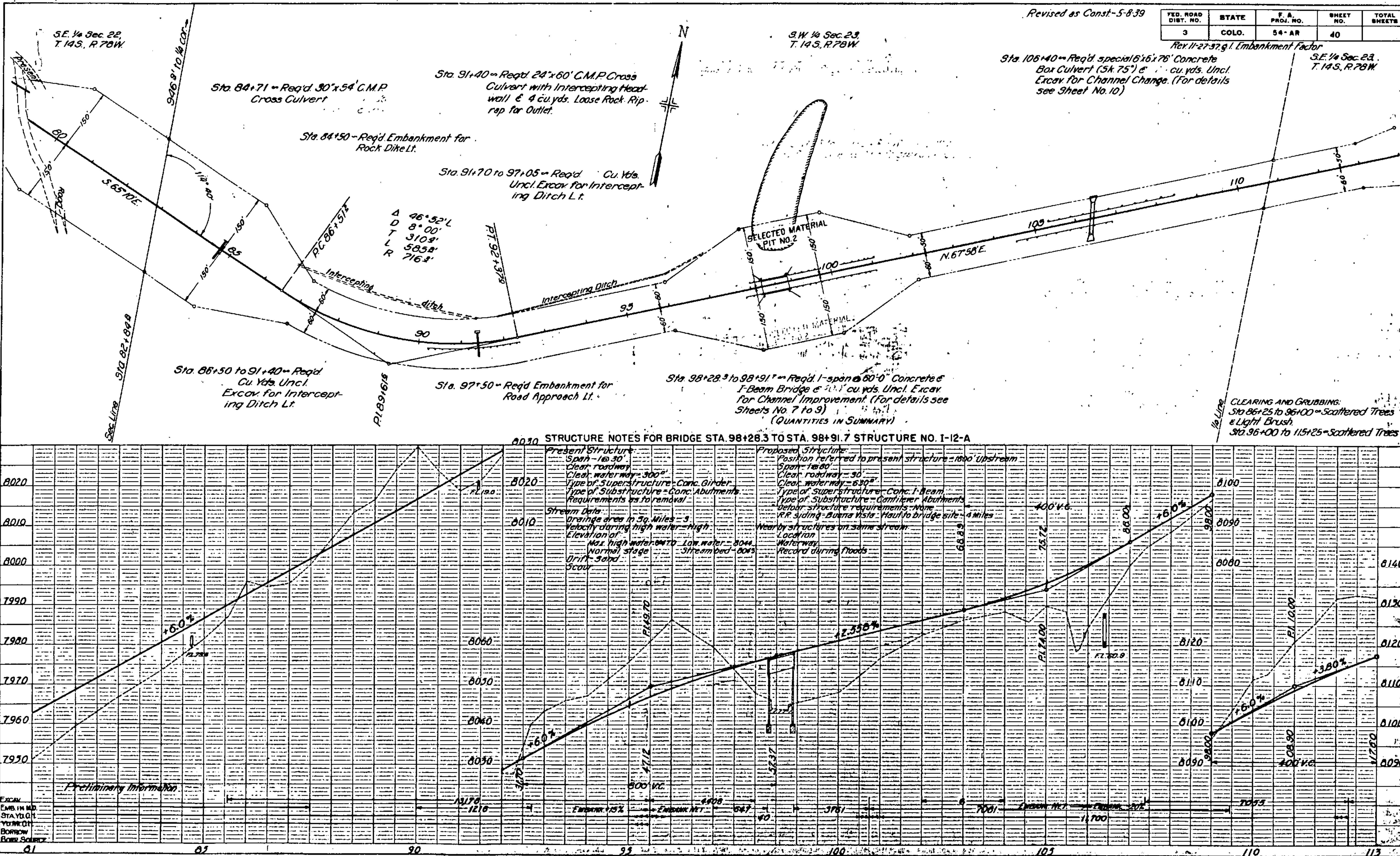
Embankment Net.
Embankment @ 15%

50 55 60 65 70 75 80 82

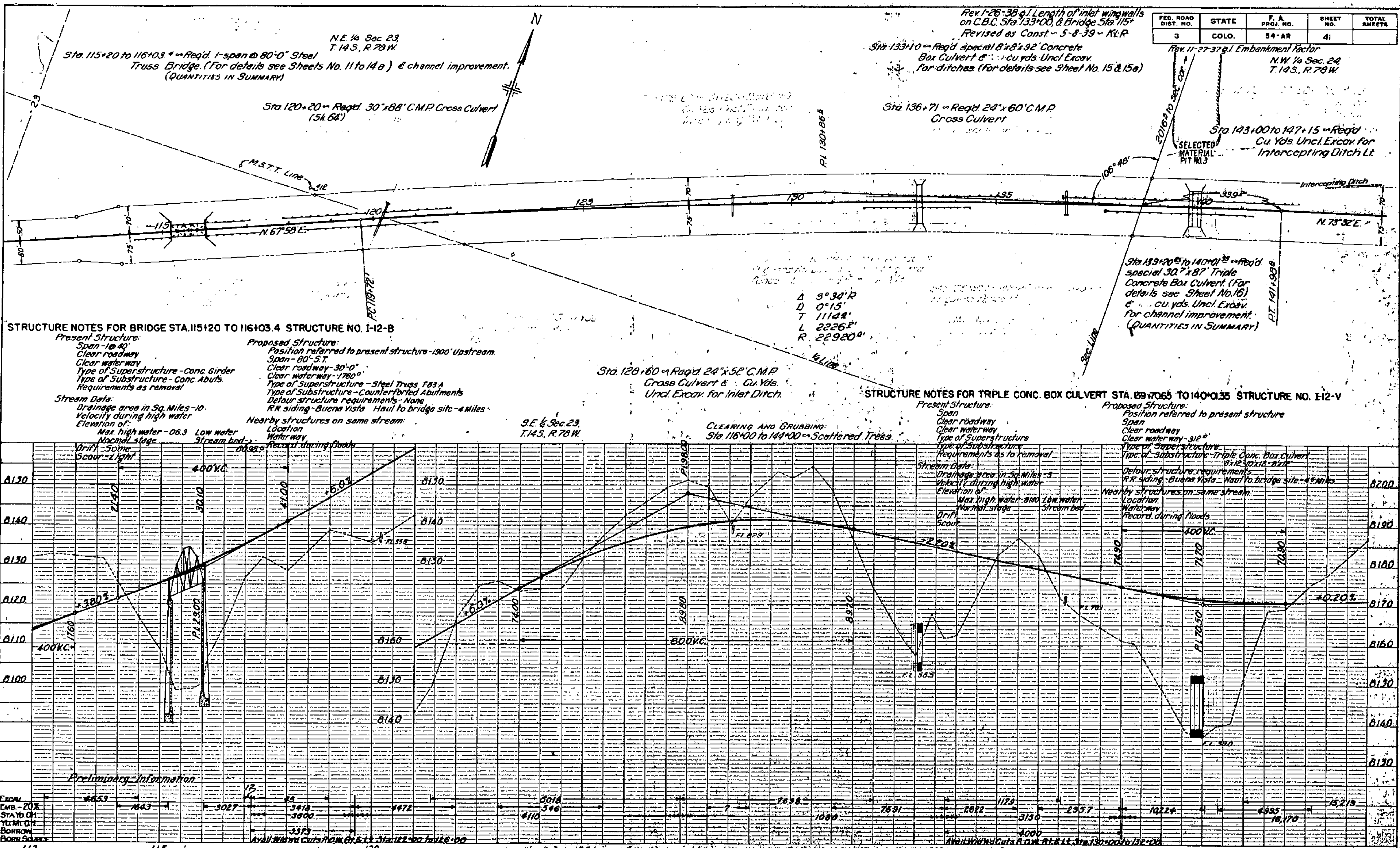
Revised as Const.-5-8-39

FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54-AR	40	

Rev. 11-27-37 g.l. Embankment Factor

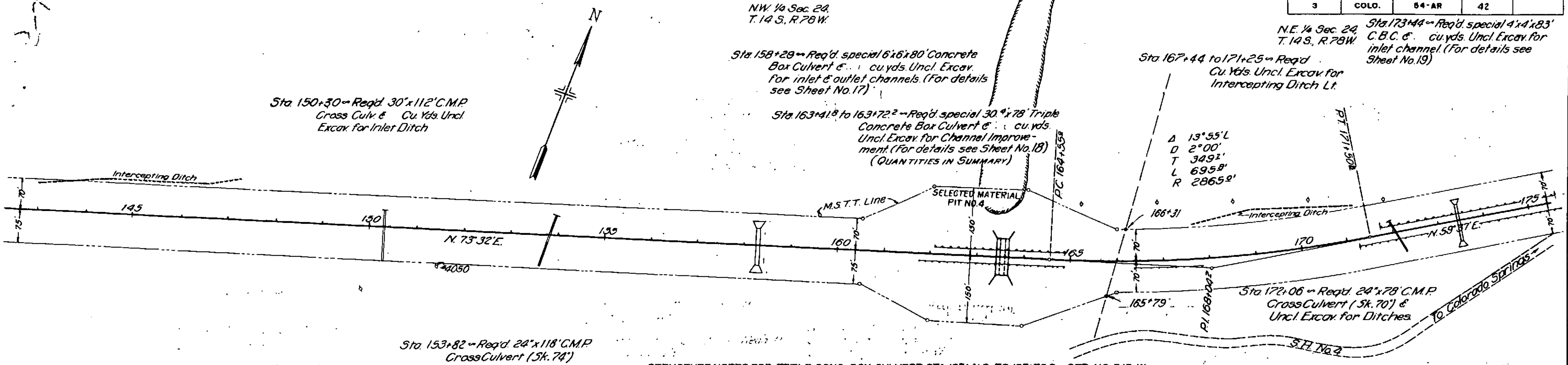


FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54-AR	41	



FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	64-AR	42	

Rev. 11-27-37, a.p.b. Embank. Factor
Rev. as Constructed – 5-9-39



STRUCTURE NOTES FOR TRIPLE CONC. BOX CULVERT STA. 163+41.8 TO 163+72.2 STR. NO. I-12-W

Present Structure:
- Span – None
- Clear roadway
- Clear waterway
- Type of Superstructure
- Type of Substructure
- Requirements as to removal

Stream Data:
- Drainage area in Sq. Miles – 4
- Velocity during high water
- Elevation of:
  - Max. high water – 8179.0 Low water
  - Normal stage Stream bed
- Drift
- Scour

Proposed Structure:
- Position referred to present structure
- Span
- Clear roadway
- Clear waterway – 312.0'
- Type of Superstructure
- Type of Substructure – Triple Conc. Box Culvert 8'x12' – 10'x12' – 8'x12'
- Detour structure requirements
- R.R. siding – Buena Vista Haul to bridge site – 5 Miles

Nearby structures on same stream:
- Location
- Waterway
- Record during floods

CLEARING AND GRUBBING:
Sta. 144+00 to 160+00 – Scattered Trees
Sta. 164+50 to 172+25 – and Light Brush.

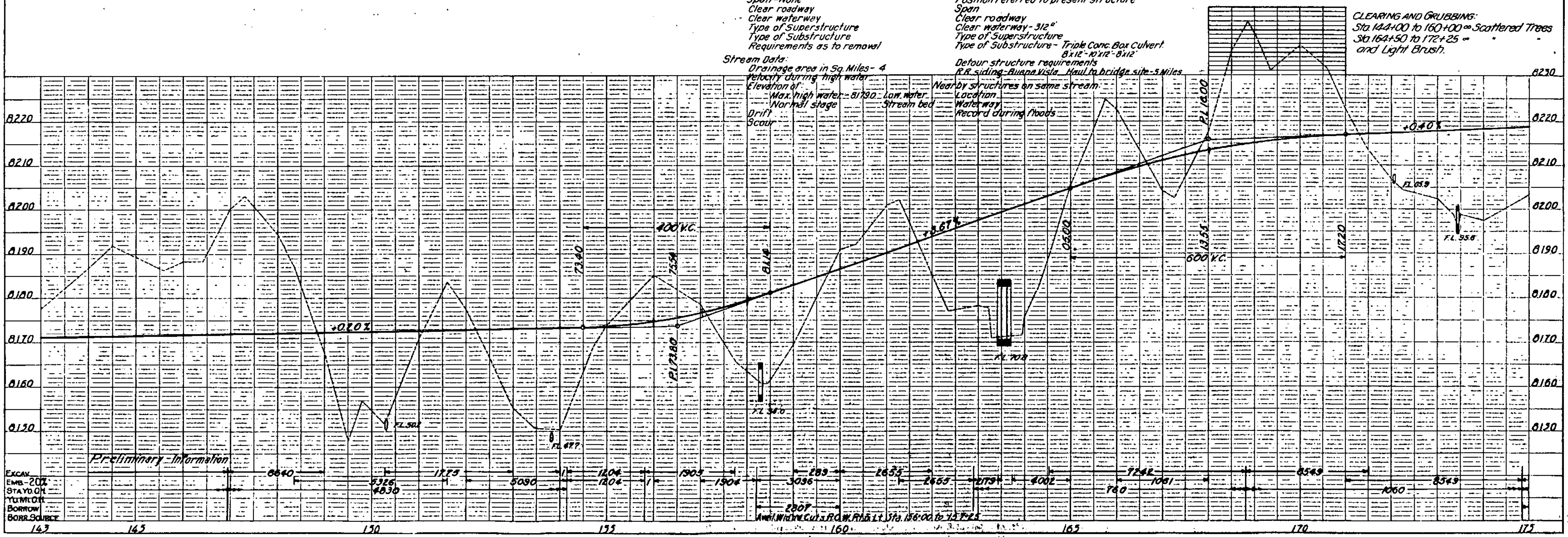
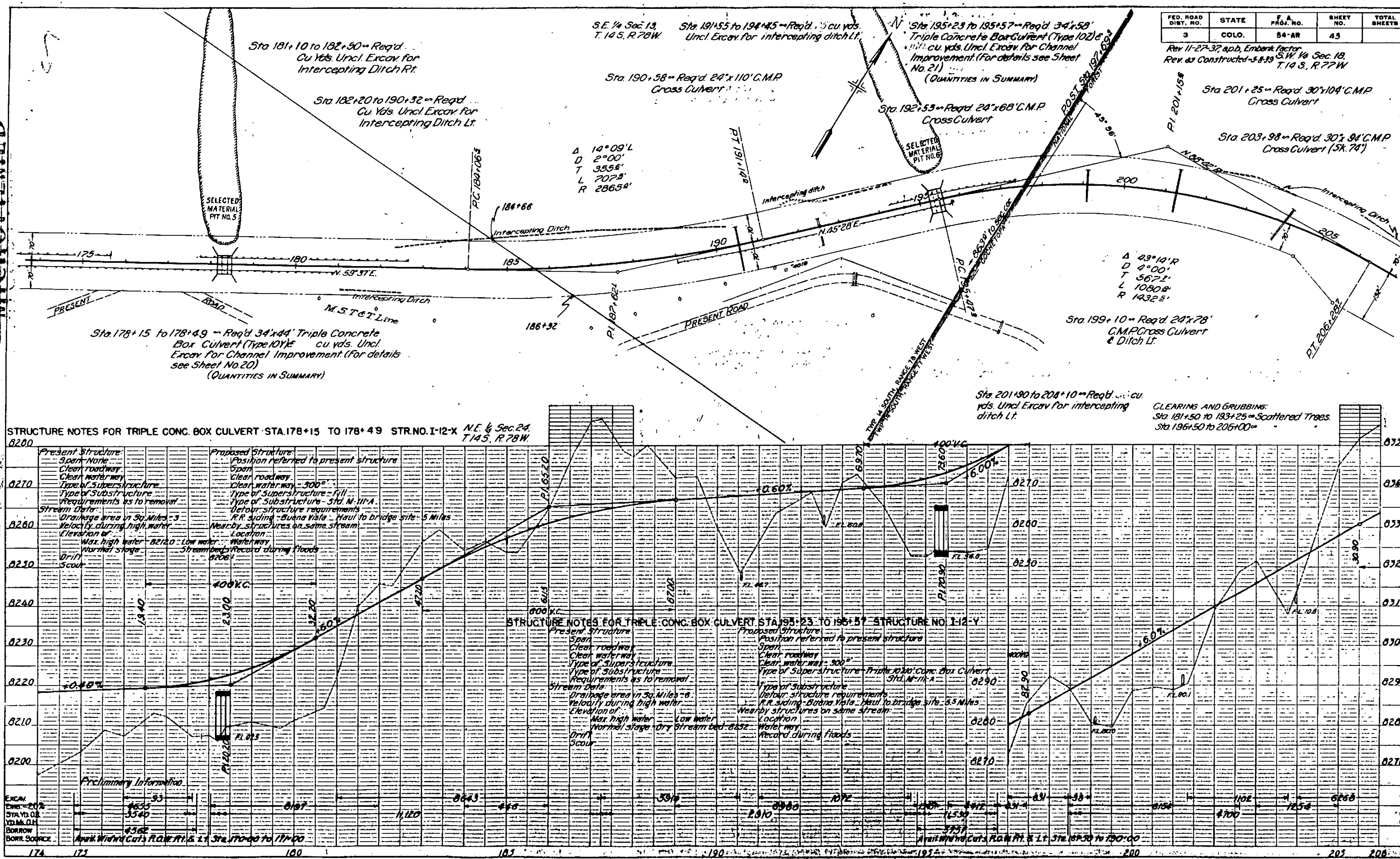


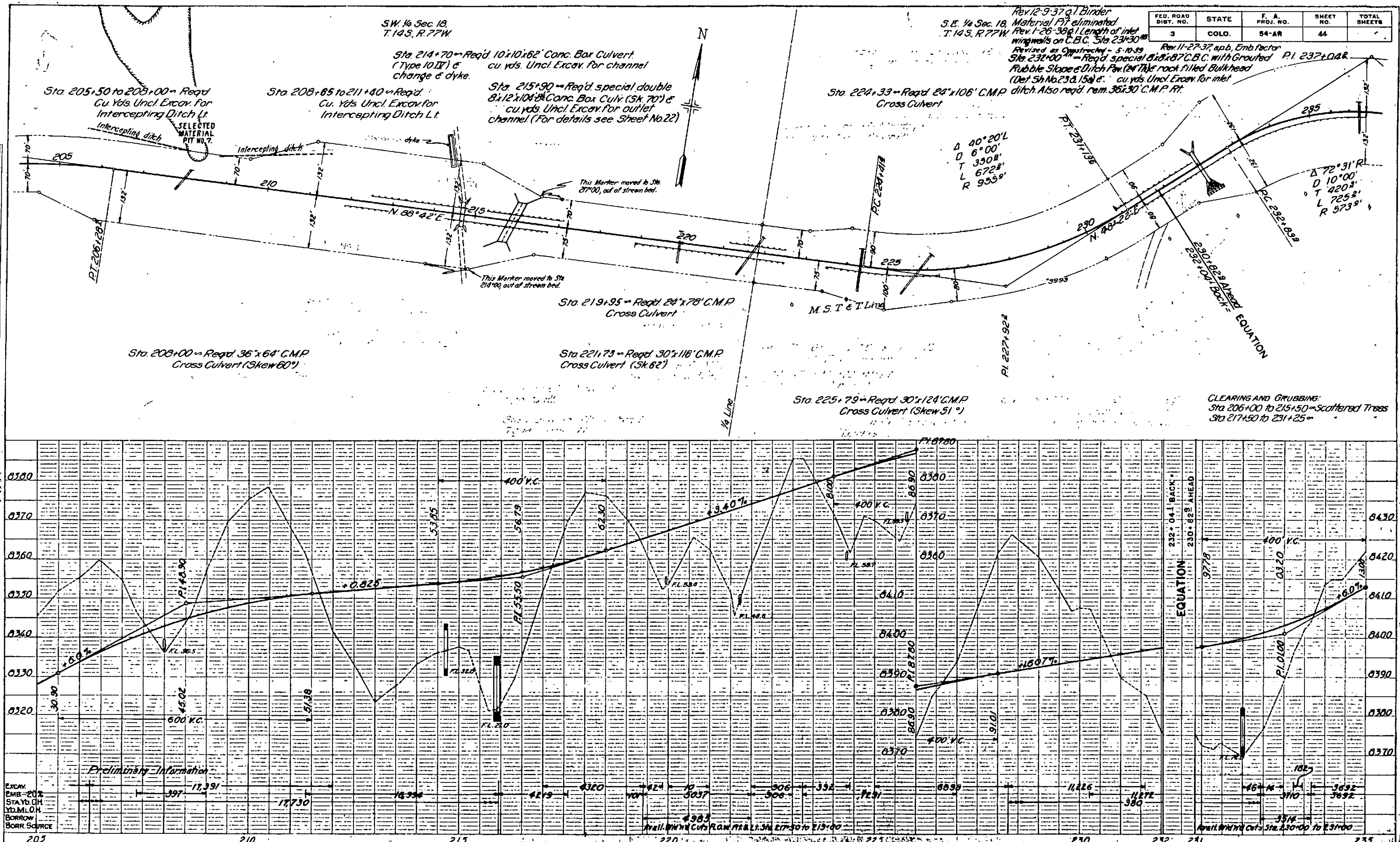
PLATE 1 – PLAN-PROFILE

FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54-AR	43	

Rev. 11-27-37, a.p.b., Embank factor
Rev. as Constructed-5-8-39



FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54-AR	44	



FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54-AR	45	

Rev. 1-26-38 g.I. Surfacing Pit No. 2 eliminated.
Rev. as Constructed - 5-11-38

Rev. 11-27-37, adb, Embank. factor

S.E. ¼ Sec. 18, T. 14 S., R. 77 W.

S.W. ¼ Sec. 17, T. 14 S., R. 77 W.

P.I. 237+00

N. 48° 22' E

295

P.C. 232+83

50' Span Conc. Beam

Δ 72° 31' R
D 10° 00'
T 420.3'
L 725.2'
R 573.9'

Sta. 236+23 — Reqd. 24" x 78' C.M.P. Cross Culvert

Sta. 243+13 — Reqd. 24" x 72' C.M.P. Cross Culvert with Intercepting Headwall

P.C. 241+24.3

Δ 59° 38' L
D 8° 00'
T 410.5'
L 745.4'
R 716.3'

P.T. 240+09.4

S. 59 10' E

245

241.1'

PRESENT ROAD

Sta. 240+09.4 — Reqd. special 10' x 170' Concrete Culvert (Sk. 60") (For details see Sheets No. 24 to 27) & cu. yds. Uncl. Excav. for Channel Change.

P.I. 245+35.8

67° 18'

0° 39' 7"

1129.1' to ¼ cor.

P.T. 248+70.3 Back = 248+28.3 Ahead

EQUATION

Sta. 245+34 — Reqd. 24" x 72' C.M.P. Cross Culvert with Intercepting Headwall (Sk. 75')

N

Sta. 250+00 — Reqd. 24" x 64' C.M.P. Cross Culvert & Cu. Yds. Uncl. Excav. for Inlet Ditch

Sta. 257+56 — Reqd. 36" x 88' C.M.P. Cross Culvert & Cu. Yds. Uncl. Excav. for Ditches

260

259

N. 61° 16' E

250

M.S.T. & T. Line

PRESENT ROAD

Sta. 253+88 — Reqd. 30" x 146' C.M.P. Cross Culvert, Cu. Yds. Uncl. Excav. for Inlet and Outlet Ditches (Sk. 77")

Sta. 262+25 — Reqd. 30" x 58' C.M.P. Cross Culvert.

CLEARING AND GRUBBING:
Sta. 233+00 to 264+50 — Scattered Trees

8470
8460
8450
8440
8430
8420
8410
8400
8390

100' V.C.
0.32%
+3.00%
FL. 12.6
P.I. 10+00
+6.00%
FL. 88.6
FL. of Barrel at C = 99.0
3375
3375
FL. 68.1
7.30
P.I. 9.00
EQUATION
248+70.3 BACK
248+28.3 AHEAD
+5.82
FL. 80.7
96.33
87.83
600' V.C.
+1.776%
FL. 92.5
FL. 10.6
FL. 87.1

8470
8460
8450
8430
8300
8490
8480
8470
8340
8330
8320
8310
8300
8290
8280
8270

Preliminary Information

Avail. Width of Cuts R. O. W. Rt. & Lt. Sta. 238+00 to 239+00

Avail. Width of Cuts R. O. W. Rt. & Lt. Sta. 251+00 to 252+50

	233	235	240	245	248	248	250	255	260	264
EXCAV.										
EMB. - 20%										
STA. YD. O.H.		505	3213	12,664			6624	2282	6595	6023
YD. MI. O.H.		505	3213	1838			6306		6597	2.14
BORROW			10,726	12,480			6000	3030	350	1820
BORR. SOURCE			3375					3030		

PLATE 1 — PLAN-PROFILE OF A RURAL HIGHWAY
SURVEYED & DRAWN BY CO., NEW YORK.

FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54-AR	46	

Rev. 11-27-37, a.p.b. Embank. factor
Rev. as Constructed - 5-12-39

N.W. ¼ Sec. 17
T.14S., R.77W.

N.E. ¼ Sec. 17
T.14S., R.77W.

Sta. 267+10 — Req'd. special 6'x6'x91' C.B.C. (Details see Sheet No. 28) & cu. yds. Uncl. Excav. for Channel Improvement.

SELECTED MATERIAL PIT NO. 8

P.I. 278+59.8

265 270 275 280

N. 61°15' E.

66'
70'
70'

Present

Road

17

P.C. 276+93.8
Δ 19°43' R
D 6°
T 166.2'
L 328.8'
R 955.2'

P.T. 280+22.5

END F.A. PROJ. NO. 54 AR-83
END ORIGINAL F.A. PROJ. NO. 54
BEGIN F.A. PROJ. NO. 54 D

S.W. ¼ Sec. 17
T.14S. R.77W.

STA. 270+83

+1.776%

-3.29

F.L. 98.0

8560
8550
8540
8530
8520
8510
8500
8490

Preliminary Information

EXCAV.
EMB. - 20%
STA. TO O.H.
YD. MI. O.H.
BORROW
BORR. SOURCE

7803 6792 6792

263 265 270 275 280

PLATE 1—P. & PROFILE O. P. R. & B. STANDARD
KEUFFEL & ESSER CO. NEW YORK

FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	54-AR	46	

Rev 11-27-37, a.p.b, Embank. factor
Rev. as Constructed - 5-12-39

Sta 267+10 — Req'd special 6'x6'x91' C.B.C. (Details see Sheet No. 28) 6 cu. yds. Uncl. Excav. for Channel Improvement

N.W. ¼ Sec. 17
T. 14S., R. 77W.

N.E. ¼ Sec. 17
T. 14S., R. 77W.

S.W. ¼ Sec. 17
T. 14S. R. 77W.

N

SELECTED MATERIAL PIT NO. 8

P.I. 278+50.9

265 — N. 61°15' E. — 270 — 275 — 280

66'

70'

Present Road

17

P.C. 276+93.9

Δ 19°43'R
D 6°
T 166.2'
L 328.6'
R 955.2'

P.T. 280+22.3

83 END F.A. PROJ. NO. 54 AR =
END ORIGINAL F.A. PROJ. NO. 54
BEGIN F.A. PROJ. NO. 54 D

STA. 270+83

32.9

+1.7 76.7

F.L. 38.0

8560
8550
8540
8530
8520
8510
8500
8490

Preliminary Information

EXCAV. EMB. - 20%			
STA. TO STA.	7809	6792	6792
YD. MI. O.H.			
BORROW			
BORR. SOURCE			

263 265 270 275 280

PLATE 1—PLAN-PROFILE O. P. R. & R. E. STANDARD