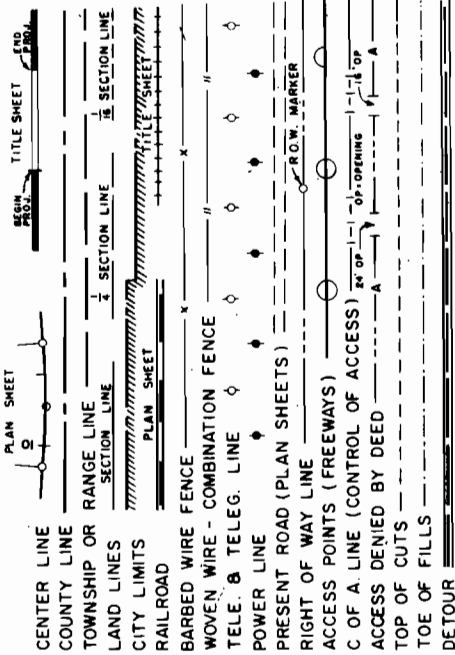


31.01

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJECT NO.	SHEET NO.
9	COLORADO	S 0031 (1)	1

DEPARTMENT OF HIGHWAYS
STATE OF COLORADO

CONVENTIONAL SIGNS



SHEET NO.
1'
2
3-
4-
5-18'

INDEX OF SHEETS

PLAN AND PROFILE OF PROPOSED
FEDERAL AID PROJECT NO. S0031(1)
STATE HIGHWAY NO. 389
LAS ANIMAS COUNTY

TITLE PAGE, SKETCH MAP AND TABULATION
OF LENGTH & DESIGN DATA
TYPICAL SECTION, GENERAL NOTES, SURFACING
PLAN AND TABULATION OF DELINEATORS
SUMMARY OF APPROXIMATE QUANTITIES
PIT LOCATION
PLAN AND PROFILE SHEETS

APPROACH ROADS, FLARING, CUT SLOPE TREATMENT
BRIDGE
(28-64) CREST WIDENING M-2-A
CONSTRUCTION TRAFFIC SIGNS (2 SHEETS) M-6-B
IDENTIFICATION SIGNS (6-26-64) M-6-CA
DELINEATORS (2 SHEETS) (1-28-64) M-192-AA

SCALES OF ORIGINAL DRAWINGS

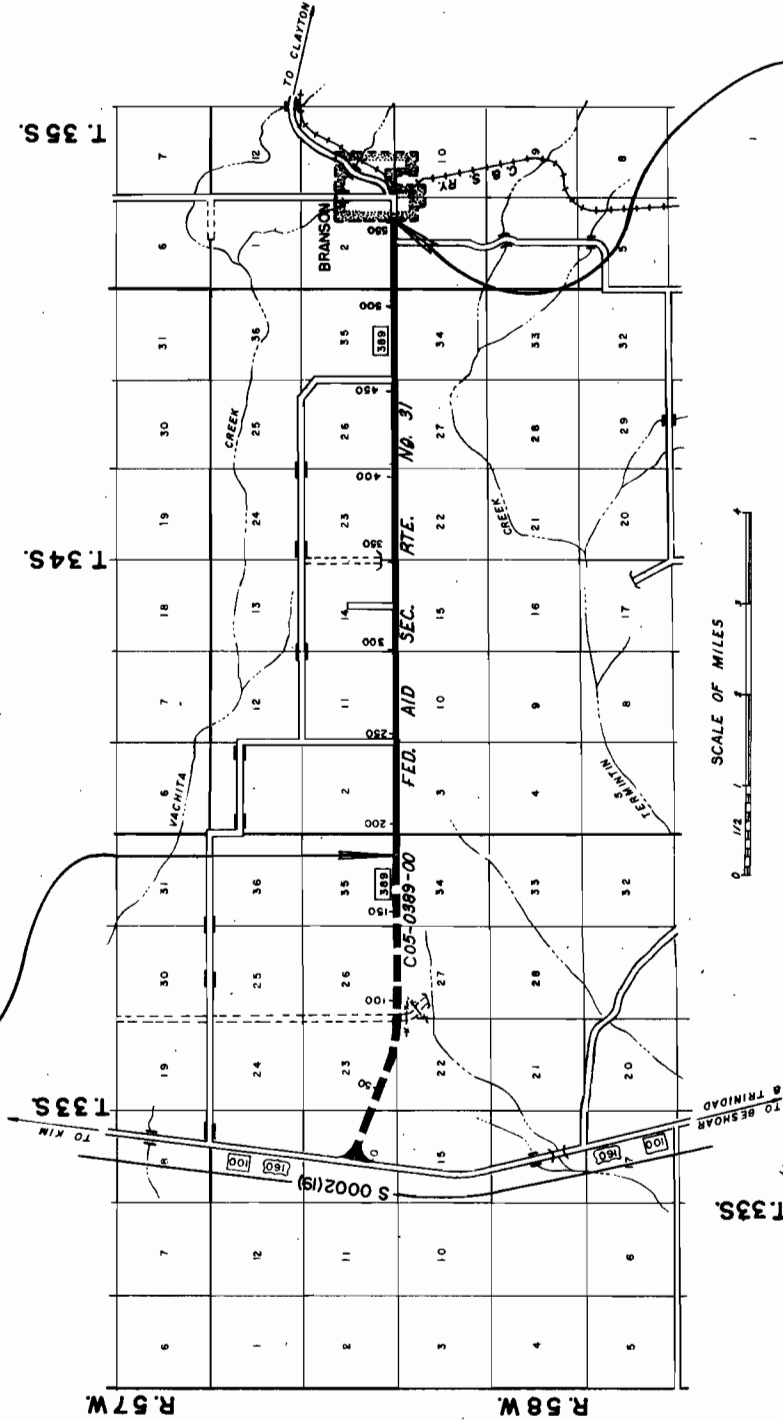
ON PLAN, 1 IN. = 100 FT.
ON PROFILE, 1 IN. = 100 FT. HORIZONTAL
1 IN. = 10 FT. VERTICAL
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD
GROSS LENGTH OF PROJECT } 37,335 LIN. FT. = 7.071 MI.
NET LENGTH OF PROJECT }

STA. 180 + 00.0 BEGIN S 0031(1) =
STA. 180 + 00.0 END C 05-0389-00

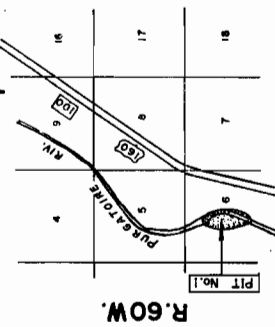


TABULATION OF LENGTH & DESIGN DATA

STATION	Roadway Lin. Ft.	Lin. Ft.	Miles
180+00 Begin S0031(1) =			
180+00 End C05-0389-00			
553+35 End S0031(1) 4288	37,335		7.071
553+35 - 574 + 0.0 W.O. 4288	206		0.402
Total	37,541	37,400	7.462
SUMMARY			
Roadway (Net & Gross Length)	37,335	7,071	
DESIGN DATA			
Maximum Degree of Curve	None		
Maximum Grade	3%		
Minimum S.S.D. Horizontal	71300 ft.		
Minimum S.S.D. Vertical	350 ft.		
Maximum Design Speed	50 M.P.H.		



STA. 553+35.0 END S0031(1)



SEE SPECIAL PROVISIONS FOR
NOTICE TO BIDDERS

DEPARTMENT OF HIGHWAYS
STATE OF COLORADO

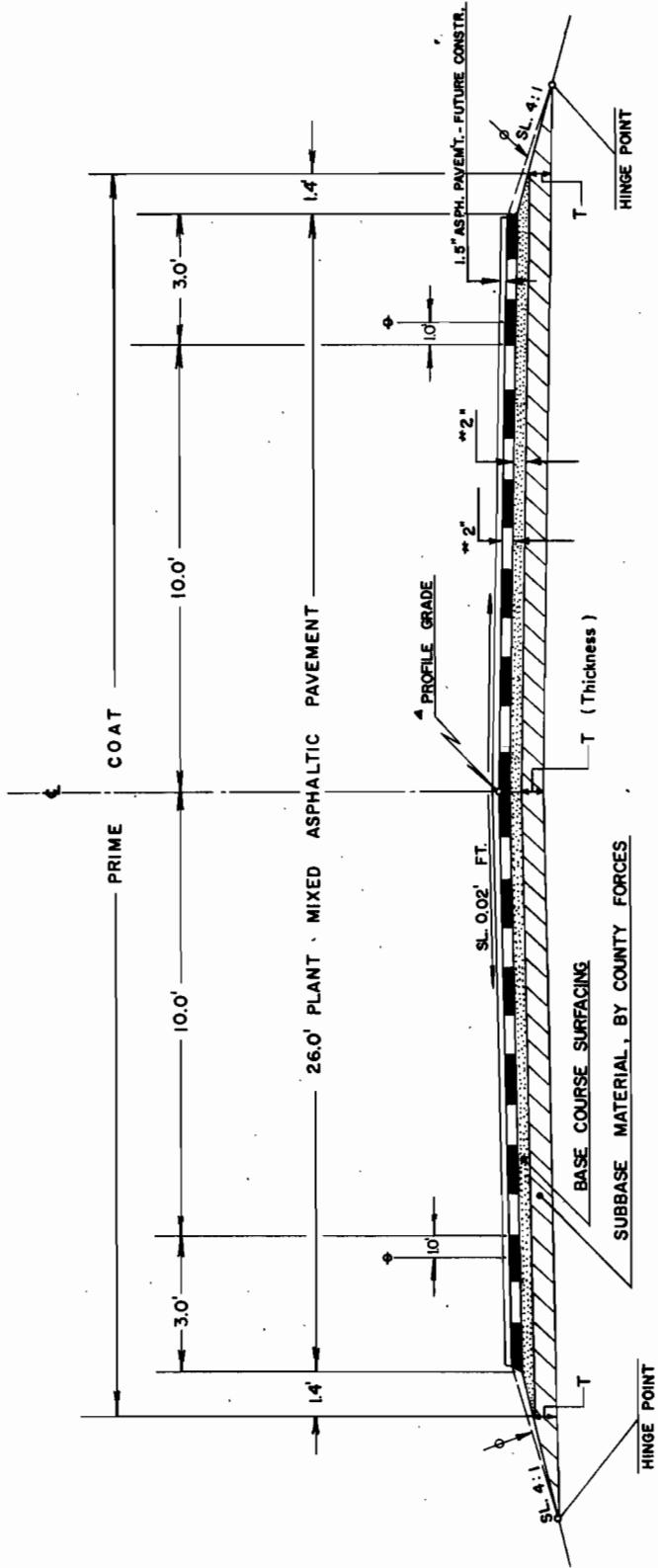
APPROVED: *John E. Edmunds* 8-28-64
CHIEF ENGINEER DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: _____ DATE _____
DIVISION ENGINEER

W.E.M.

TYPICAL SECTION



- Contractor will be required to place Base Course Surfacing Material to this line after completion of paving operation. Quantities included in Surfacing Plan.
- Profile Grade is the combined thickness of Base Course and Plant Mixed Surfacing above the Subbase Material.
- Location of solid white painted stripe (Both sides). State Forces.

* Approximate thickness.

Approximate 4" compacted thickness of gravel or crushed rock Surfacing shall be placed in separate courses of the following Rates per 100 lin. ft. of Roadway:

Asphaltic Pavement	31 Tons
Base Course	30 Tons

GENERAL NOTES

This Project is to be constructed in conformity with the Standard Specifications of the Colorado Department of Highways, adopted January 1, 1958. Alignment and Grades to be shown by the Engineer. Alignment lies along present road.

All quantities on preliminary plans are to be considered approximate only.

For preliminary plan quantities of Asphaltic Road Materials the following Rates of application were used: Prime Coat, MC @ 0.40" Gals. per sq. Yd. Paving Asphalt (200-100 pen.) @ 6.40" by weight of mix

Rate of application and grade of asphaltic material shall be as determined by the Engineer at time of application.

Thickness of surfacing and asphaltic pavement material as shown on plans is approximate only. These materials are to be placed on the basis of Tonnages shown on plans.

County Forces will remove all guard posts during stabilization, and construct project up through subbase material, lengthening and or replacing drainage structures (including side drains).

All side approach roads to the project shall be primed and asphaltic surfaced 2" thick as follows: Field approaches, 4' out from edge of processed mat. All others, 50' out from edge of processed mat or to the Right of Way line, whichever is less.

During construction of this project, traffic will use the present traveled roadway

It is estimated that Material for Surfacing for the Project is available in the vicinity of the pit indicated in the following tabulations. Estimated quantities involved in these operations are shown below. Alteration of the Surfacing Plan as here outlined will be allowed only on written permission from the Department.

SURFACING PLAN

STATION	SOURCE & AVAILABLE	T O N S		T O N M I L E S	
		PLANT MIX	BASE COURSE	PLANT MIX	BASE COURSE
180 + 00 to 553 + 35	PIT No. 1	11,574	11,201	299.021	289,379
ESTIMATED FOR: Correcting Irregularities	22.3 Mi. to		1,120		28,938
Approach to Project 353 +	56.180 + 00	31	61	911	1,793
Road Approaches	27,000 Cu. Yds.	185	446	581	12,329
Finishing Shoulders	R = 80		2,247		58,052
TOTALS		11,790	15,075	305.113	390,491

TABULATION OF DELINEATORS

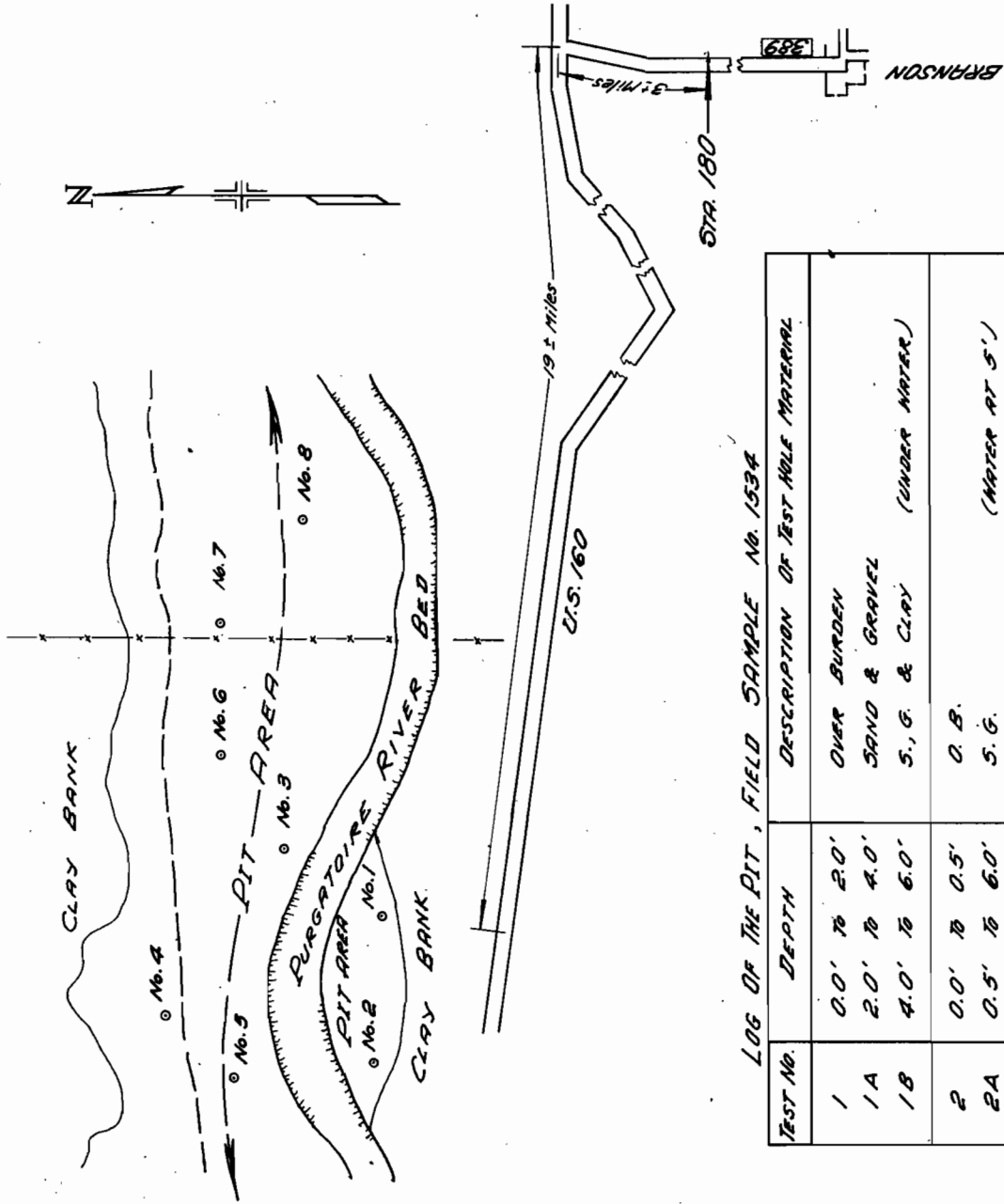
STATION	SIDE	SPACING	TYPE I EACH
180 + 00 to 553 + 35	Lt. & Rt.	Tangent	94
TOTAL			94

SUMMARY OF APPROXIMATE QUANTITIES

[illegible]

PIT LOCATION
PIT No. 1

LOCATION: N 1/2 Sec. 6, T. 33 S., R. 60 W.
OWNER: JOE VELTRI, HOEHNE, COLO.
PROPOSED USE: SURFACING
QUANTITY AVAILABLE: 27,000 Cu. Yd.
ESTIMATED FOR STRIPPING: 5000 Cu. Yd.
HAUL DISTANCE: 22.3 MILES TO STA. 180 + 00



LOG OF THE PIT, FIELD SAMPLE No. 1534

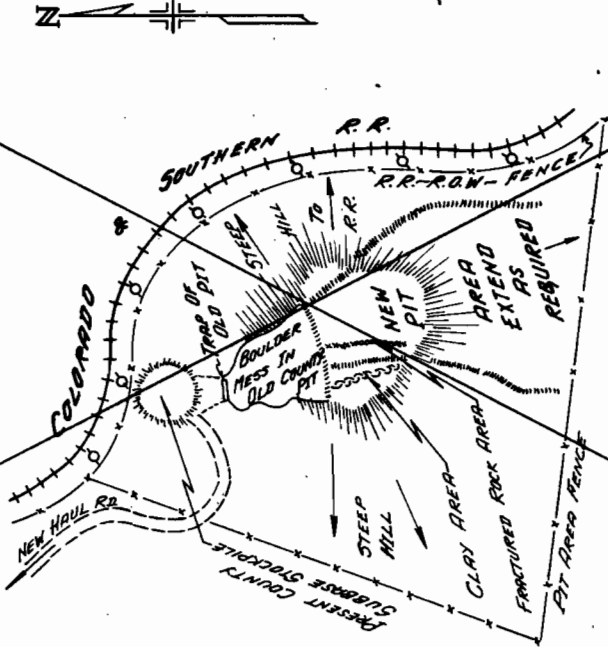
TEST No.	DEPTH	DESCRIPTION OF TEST HOLE MATERIAL
1	0.0' TO 2.0'	OVER BURDEN
1A	2.0' TO 4.0'	SAND & GRAVEL
1B	4.0' TO 6.0'	S., G. & CLAY (UNDER WATER)
2	0.0' TO 0.5'	O. B.
2A	0.5' TO 6.0'	S. G. (WATER AT 5')
3	0.0' TO 2.0'	O. B.
3A	2.0' TO 5.0'	S. & G. (WATER AT 5')
4	0.0' TO 5.0'	FINE SAND
5	0.0' TO 1.0'	O. B.
5A	1.0' TO 3.0'	S. & G. (WATER AT 3.5')
6	0.0' TO 4.0'	FINE SAND
7	0.0' TO 0.4'	O. B.
7A	0.4' TO 5.0'	S. & G. (WATER AT 4.5')
8	0.0' TO 0.6'	O. B.
8A	0.6' TO 4.0'	S. & G. (WATER AT 4.5')

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	5003(1)	4	

PIT LOCATION

PIT No. 1

LOCATION: NE 1/4 Sec. 14, T. 36 S., R. 60 W.
OWNER: JOHN J. BOWERS, HOEHNE, COLO.
PROPOSED USE: SURFACING
QUANTITY AVAILABLE: 27,000 Cu. Yd.
ESTIMATED FOR STRIPPING: 5000 Cu. Yd.
HAUL DISTANCE: 22.3 MILES TO STA. 180 + 00



LOG OF THE PIT, FIELD SAMPLE No. 2996

TEST No.	DEPTH	DESCRIPTION OF MATERIAL
1	0' TO 25'	ROCK - SAND & GRAVEL

N.W. 1/4 SEC. 35
T.33S., R. 56W.

S.W. 1/4 SEC. 35

FILE NO.	DIVISION	PROJECT NO.	SHEET NO.
8	COLO	50031(1)	5

N 89° 19' E



P.O.T. 163+00

P.O.T. 176+24.5

P.L. 181+00
Δ=0°24' RT.

R.O.W. Along present fence

R.O.W. Along present fence

San Isabel Elect.



STA. 180+00 BEGIN 50031(1) =
STA. 180+00 END C05-0389-00
(State Forces)
Sta. 180+00 Identification sign Rt.

N.E. 1/4 SEC. 34
B.M. IN RR 35 RT. 180+00
ELEV. 5915.80

B.M. IN RR 37 RT. 175+00
ELEV. 5915.80

B.M. IN RR 38 RT. 180+00
ELEV. 5915.80

S.E. 1/4 SEC. 34
B.M. IN RR 37 RT. 180+00
ELEV. 5915.80

B.M. IN RR 37 RT. 180+00
ELEV. 5915.80

IN=30.5
OUT=30.2

24201

24200

N.W. 1/4 SEC. 2

S.W. 1/4 SEC. 35
T.33S, R.58W

REG. NO.	DIVISION	PLAT. NO.	SECTION
9	010	50031(1)	6

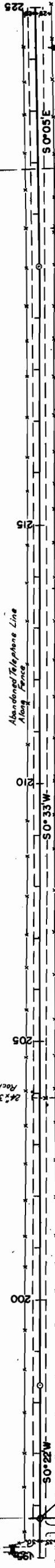
S.W. 1/4 SEC. 2



195+15 RD. APPR.
1/8' CUTTING GUARD W/
4' ROCK 35.3 Rock Hdw.

P.L. 198+53.2
A=0°11'RT

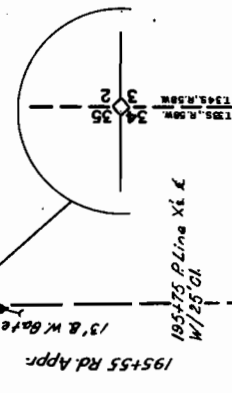
24'x30' C.N.P. W/2
Rock Hdw.



P.L. 220+00
A=0°38'LT

221+09.4

San Isabel Elect.



1335, R.58W
T.34S, R.58W

S.E. 1/4 SEC. 34
MAIL IN P.P. 35 RT. 193+75
ELEV. 5864.48

S.M.
MAIL IN P.P. 45 RT. 202+98
ELEV. 5847.30

N.E. 1/4 SEC. 3
T.34S, R.38W

S.M.
MAIL IN P.P. 35 RT. 20+18
ELEV. 5850.82

S.M.
MAIL IN P.P. 35 RT. 217+22
ELEV. 5864.38

S.E. 1/4 SEC. 3
MAIL IN P.P. 34 RT. 224+21
ELEV. 5853.53

5970

60

50

5940

5970

60

50

5940

195

200

205

210

215

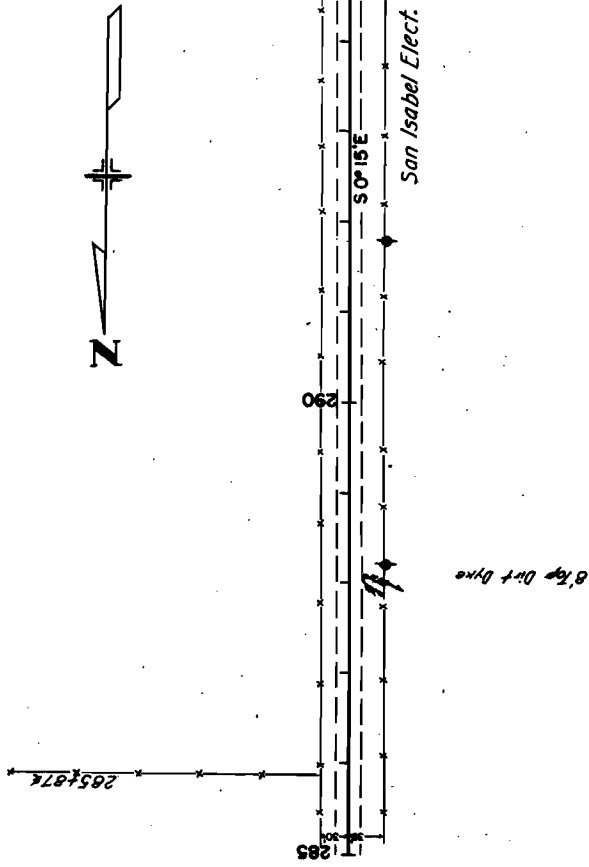
220

225

S.W. 1/4 SEC. 11
T.34 S., R.58 W.

N.W. 1/4 SEC. 14

FED. ROAD DIST. NO.	DIVISION	PROJECT NO.	SHEET NO.
9	COLO.	50031 (1)	9



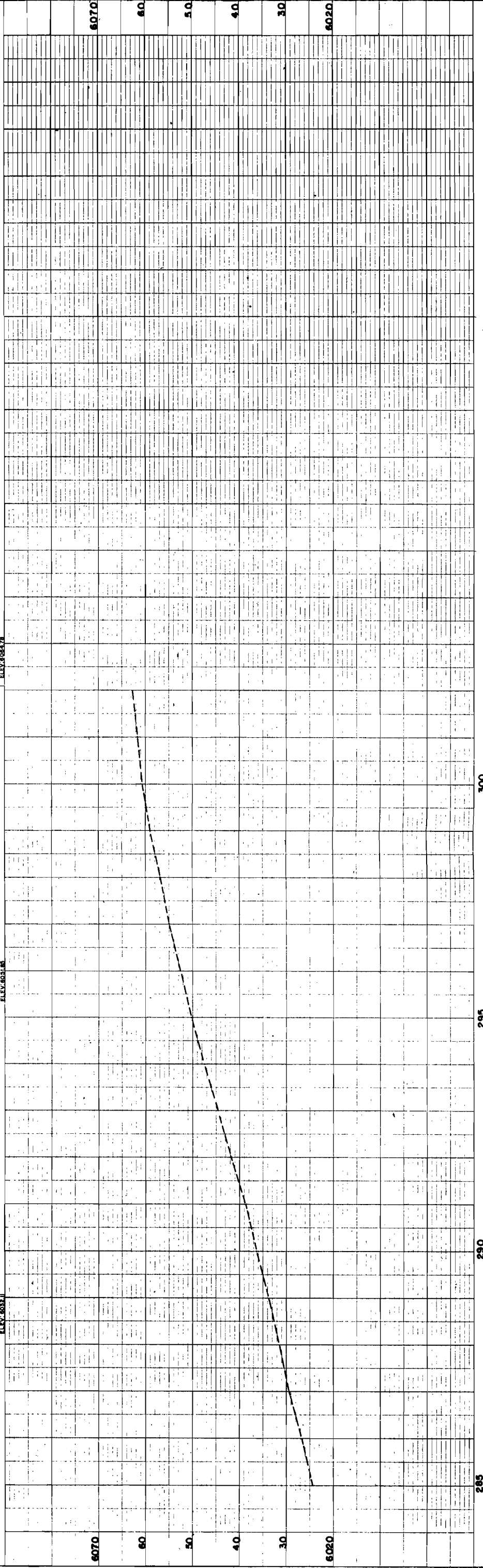
S.M. IN PP. 41 RT. 288+20
ELEV. 6032.11

S.M. IN PP. 41 RT. 293+25
ELEV. 6031.85

S.M. IN PP. 41 RT. 302+25
ELEV. 6027.78

N.E. 1/4 SEC. 15

S.E. 1/4 SEC. 10

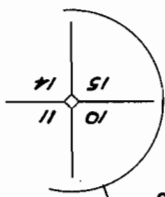


FED. ROAD REG NO	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLOR.	S 0031 (1)	10	

N.W. 1/4 SEC. 14
T. 34 S., R. 58 W.

N.W. 1/4 SEC. 14
T. 34 S., R. 58 W.

S.W. 1/4 SEC. 11



P.O.T. 300 + 00

$$\overline{\overline{302+105}}$$

R.O.W. Along present fence

18' B.W. Gates!

3,5105

平

51

3,5105

R.O.W. Along present fence

San Isabel Elect.

24 x 30' C.M.P.

S.E. 1/4 SEC. 10

N.E. 1/4 SEC. 15

3.M. MAIL IN RP
40' RT. 302+30
ELEV: 6064.78

3.M. MAIL IN RP
40' RT. 302+30
ELEV: 6064.78

3.M. MAIL IN RP
40' RT. 302+30
ELEV: 6064.78

U.S. MAIL IN 22
40' RT. 309+52
ALLEY; 607Q, 67.

U.S. MAIL IN 22
40' RT. 309+52
ALLEY; 607Q, 67.

U.S. MAIL IN 22
40' RT. 309+52
ALLEY; 607Q, 67.

IN 63.5
OUT 63.2

OUT 63.2

0609

80

02

09

50

6040

500

305

310

315

05652

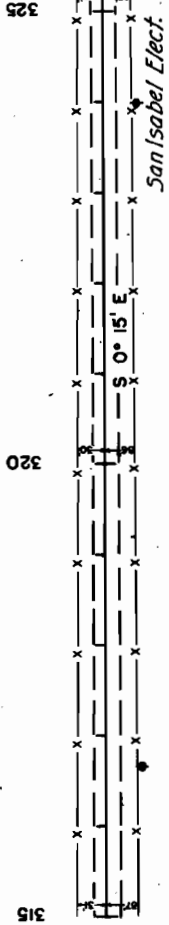
15557

FED. ROAD DIST. NO.	DIVISION	PRJ. NO.	SHEET NO.
9	COLO.	S 0031 (I)	//



+22 Rd. Appl.

P1 329+61.4
Δ 0° 12' RT



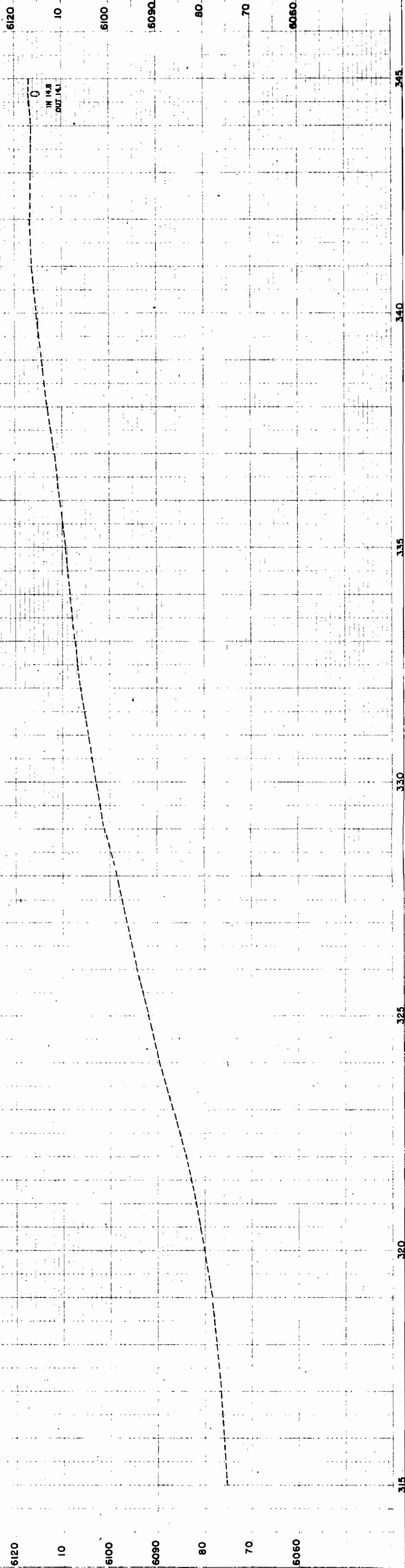
P1 344+67.0
Δ 0° 08' LT

B.M. NAIL IN RR
35' RT. 3144.65
ELEV. 6077.08

B.M. NAIL IN RR
37' RT. 3234.97
ELEV. 6090.08

B.M. NAIL IN RR
34' RT. 3314.78
ELEV. 6087.87

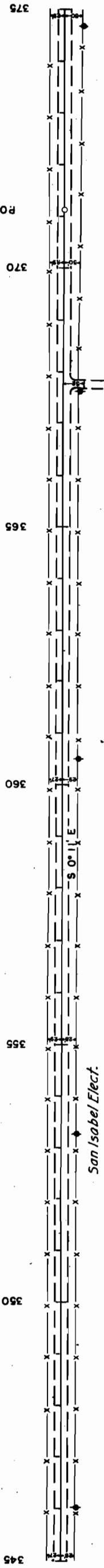
B.M. NAIL IN RR
32' RT. 3384.00
ELEV. 6115.85



FED. ROAD DIST. NO.	DIVISION	PRJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLD.	S 0031 (I)	12	



P.O.T. 371+10.3



San Isabel Elect.

367.75 Rd. Appl.

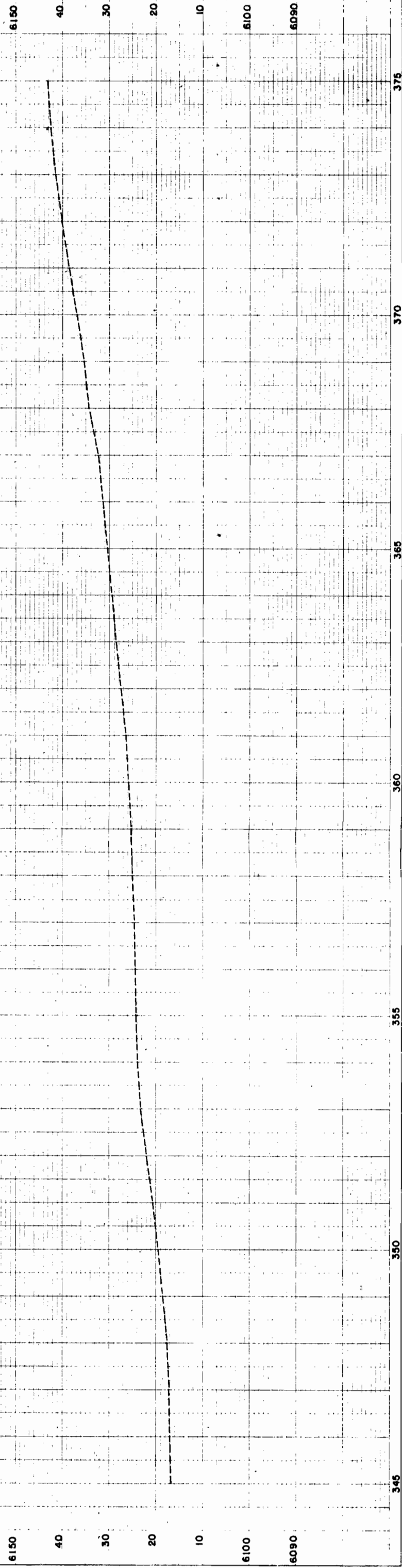
B.M. MAIL IN RP
RT STA. 344+00
ELEV. 6117.88

B.M. MAIL IN RP
RT STA. 352+30
ELEV. 6184.39

B.M. MAIL IN RP
RT STA. 360+00
ELEV. 6183.37

B.M. MAIL IN RP
RT STA. 367+00
ELEV. 6133.99

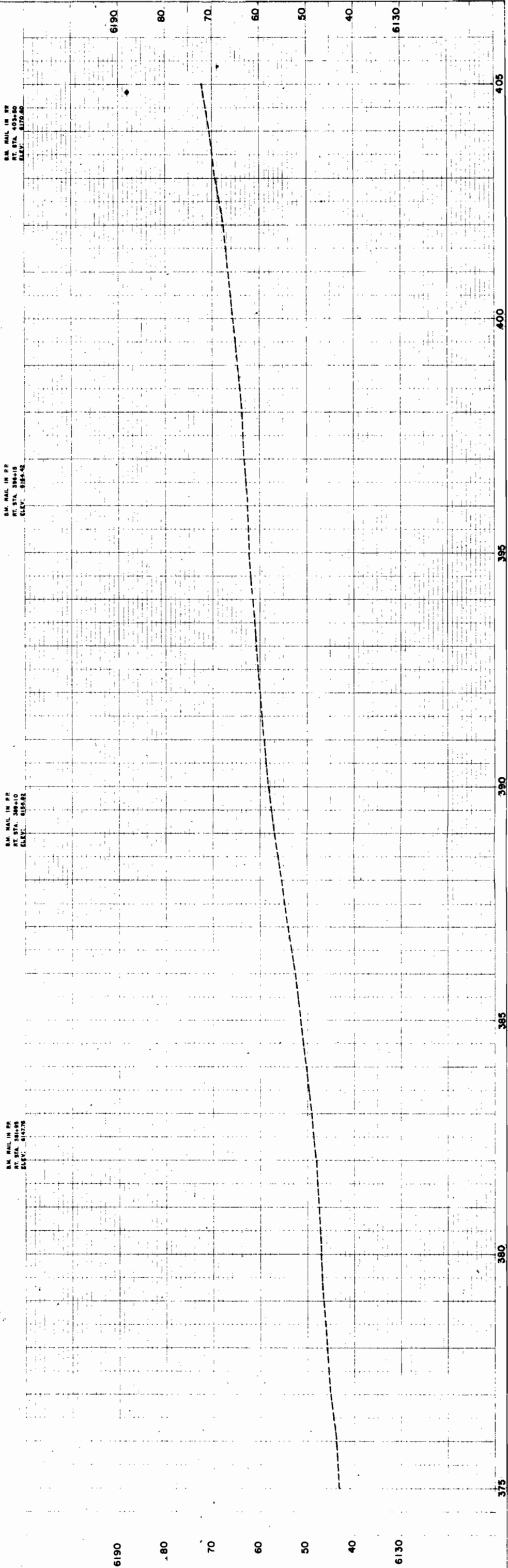
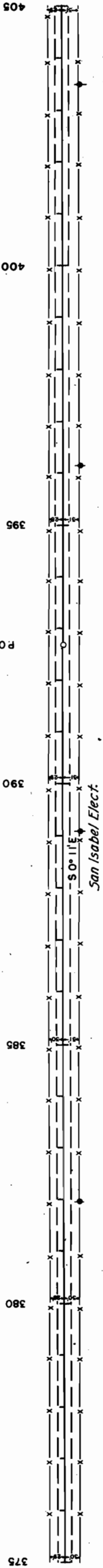
B.M. MAIL IN RP
RT STA. 374+70
ELEV. 6198.84



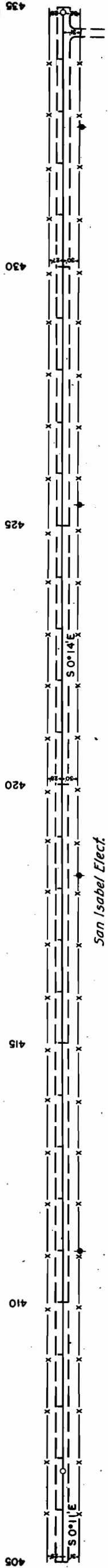
FILE NO.	DIVISION	PRO. NO.	SHEET NO.	TOTAL SHEETS
9	CDLO.	S 0031 (I)	13	



P.O.T. 392+68.3

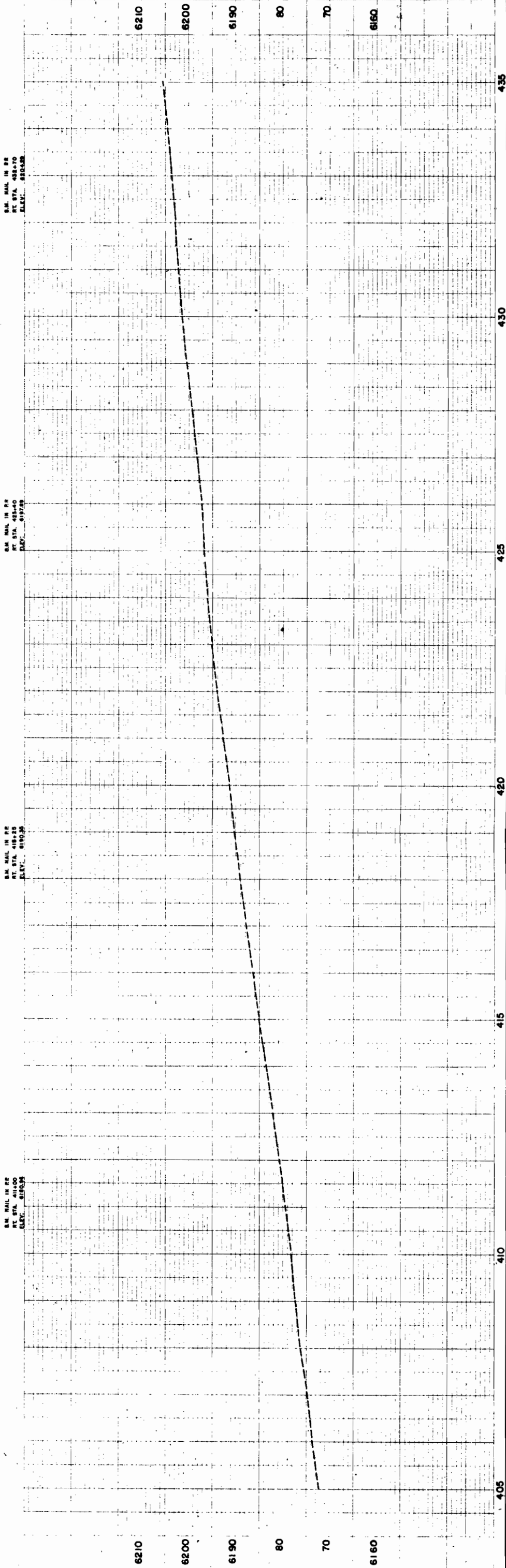


ED. NO.	PROJ. NO.	DIVISION	COLOR	SHEET NO.	TOTAL SHEETS
9	S003(1)			14	



PL 406+75.5
A.O. 03 LT

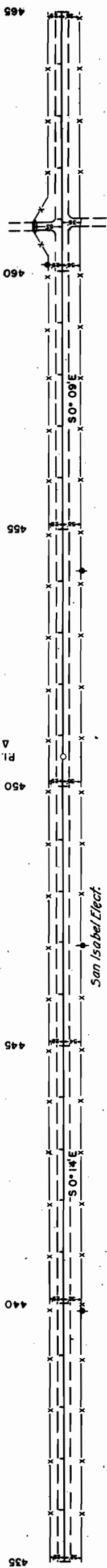
434+50 Rd. Appr.



FID. ROAD REG. NO.	DIVISION	PROJ. I.D.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0031(I)	15	



P.I. 450+59.0
Δ 0° 05' RT



460+93 Rd. Appr.

S.M. MAIL IN RE
RT. STA. 435+40
ELEV. 6200.00

S.M. MAIL IN RE
RT. STA. 440+95
ELEV. 6200.00

S.M. MAIL IN RE
RT. STA. 450+50
ELEV. 6200.00

S.M. MAIL IN RE
RT. STA. 460+90
ELEV. 6200.00

6240

30

20

10

6200

6190

6180

6240

30

20

10

6200

6190

6180

435

440

445

450

455

460

465

FED. ROAD DIST. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	COLO.	SO03(1)	5/	



POT 468+32.9

465

470

475

480

485

490

495

POT 493+18.5

San Isabel Elect.

S 0° 08' E

26'x30' C.M.P.

491+20 Rd. Appx

B.M. NAIL IN RP
LT. STA. 468+00
ELEV. 6215.85

B.M. NAIL IN RP
LT. STA. 474+00
ELEV. 6225.10

B.M. NAIL IN RP
LT. STA. 481+00
ELEV. 6235.30

B.M. NAIL IN RP
LT. STA. 488+00
ELEV. 6247.07

6200

50

40

30

20

10

6200

6200

50

40

30

20

10

6200

465

470

475

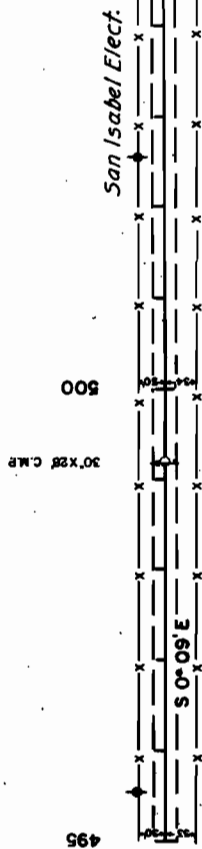
480

485

490

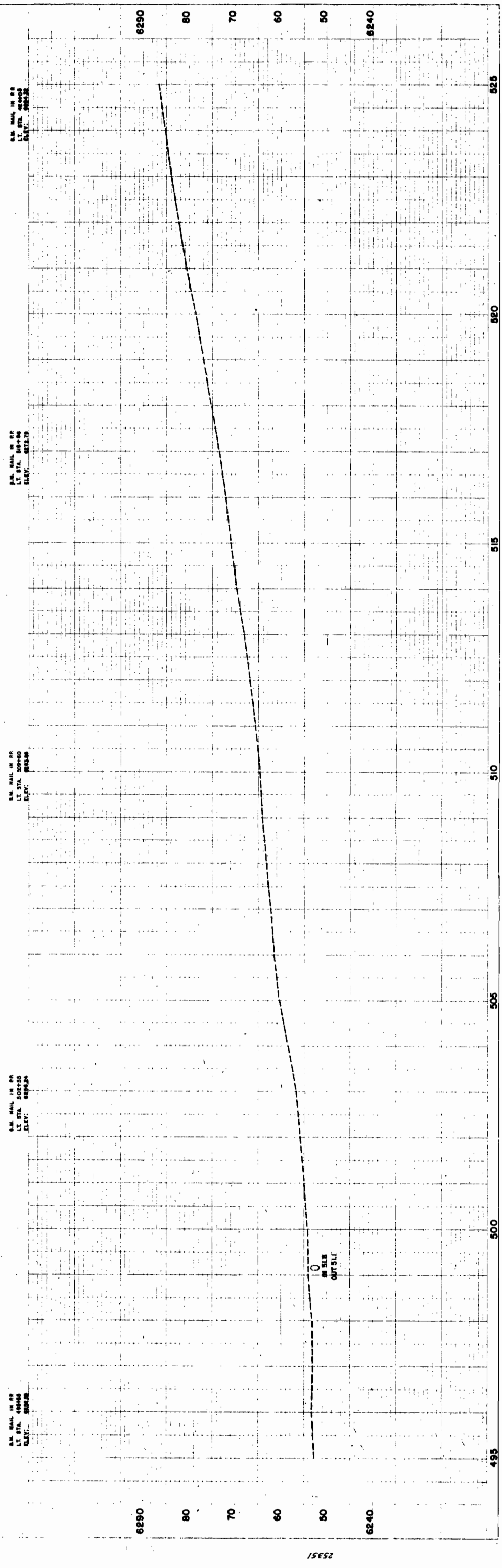
495

FIELD BOOK PAGE NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S003(1)	17	



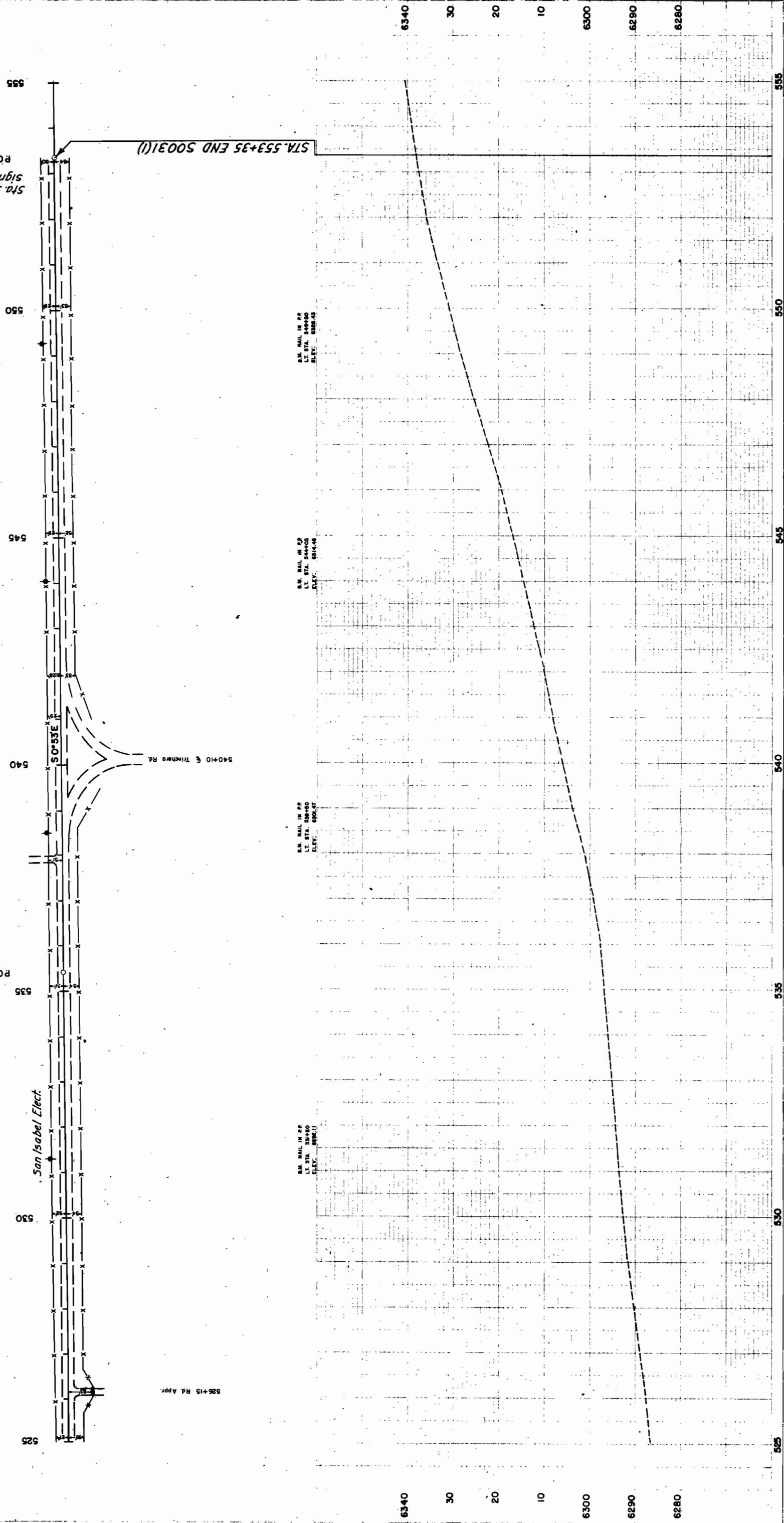
PL 499+17.4
Δ 0° 15' LT

PL 513+39.5
Δ 0° 29' LT
513+44 Rd. Appx



FED. ROAD NO. 9	DIVISION 1010	P. O. NO. S 003(1)	SHEET 18	TOTAL SHEETS
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Sta. 553+35 Identification
sign Lt. (State Forces)
P.O.T. 553+35.0



B.M. NAIL IN P.P.
LT. STA. 544+30
ELEV. 6286.45

B.M. NAIL IN P.P.
LT. STA. 544+00
ELEV. 6284.46

B.M. NAIL IN P.P.
LT. STA. 538+80
ELEV. 6300.47

B.M. NAIL IN P.P.
LT. STA. 534+80
ELEV. 6286.11

526+15 Rd. Appr.

537+90 Rd. Appr.