

COLORADO DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED FEDERAL AID PROJECT NO. S 0001(25) STATE HIGHWAY NO. 51 (385) CHEYENNE COUNTY

FEDERAL ROAD DIVISION NO	DISTRICT	PROJ NO	SHEET NO	TOTAL SHEETS
9	COLORADO	S 0001(25)	1	

INDEX OF SHEETS

SHEET NO 1	SKETCH MAP AND TITLE PAGE AND TABULATION OF LENGTH & DESIGN DATA	
2	TYPICAL SECTIONS, GENERAL NOTES AND SUMMARY OF APPROXIMATE QUANTITIES	
3	SUB-BASE MATERIAL PLAN, SURFACING PLAN, MATERIAL PIT SKETCH, TIMBER GUARD POSTS AND SHAPING ROADBED	
4	LIST OF STRUCTURES	
5	STANDARD SIDE APPROACH ROADS, FLARING, CUT SLOPE TREATMENT & WIDENING AT BRIDGES & AT CREST OF GRADES	M-2-EM M-7-C M-19-D M-25-B M-29-B M-107-C
6	STANDARD MARKER POSTS AND BENCH MARKS	
7	STANDARD TIMBER GUARD POSTS	
8	STANDARD PICKET SNOW FENCE WITH STEEL POSTS	
9-10	STANDARD ROADWAY CONSTRUCTION TRAFFIC SIGNS	
11	STANDARD TYPES OF DITCHES AND CONSTRUCTION METHODS	
12-26	ALIGNMENT PLAN AND PROFILE	
27	SUMMARY OF EARTHWORK QUANTITIES	
28-78	CROSS SECTIONS	

CONVENTIONAL SIGNS

CENTER LINE	PLAN SHEET	TITLE SHEET
RIGHT OF WAY LINE	R.O.W. MARKER	
TOWNSHIP OR RANGE LINE	SECTION LINE	1/4 SECTION LINE
LAND LINES	SECTION LINE	1/4 SECTION LINE
RAILROAD	TITLE SHEET	PLAN SHEET
BARBED WIRE FENCE		
COMBINATION WIRE FENCE		
SNOW FENCE		
TELEPHONE & TELEGRAPH LINES		
POWER LINE		
PRESENT ROAD (Plan Sheets)		

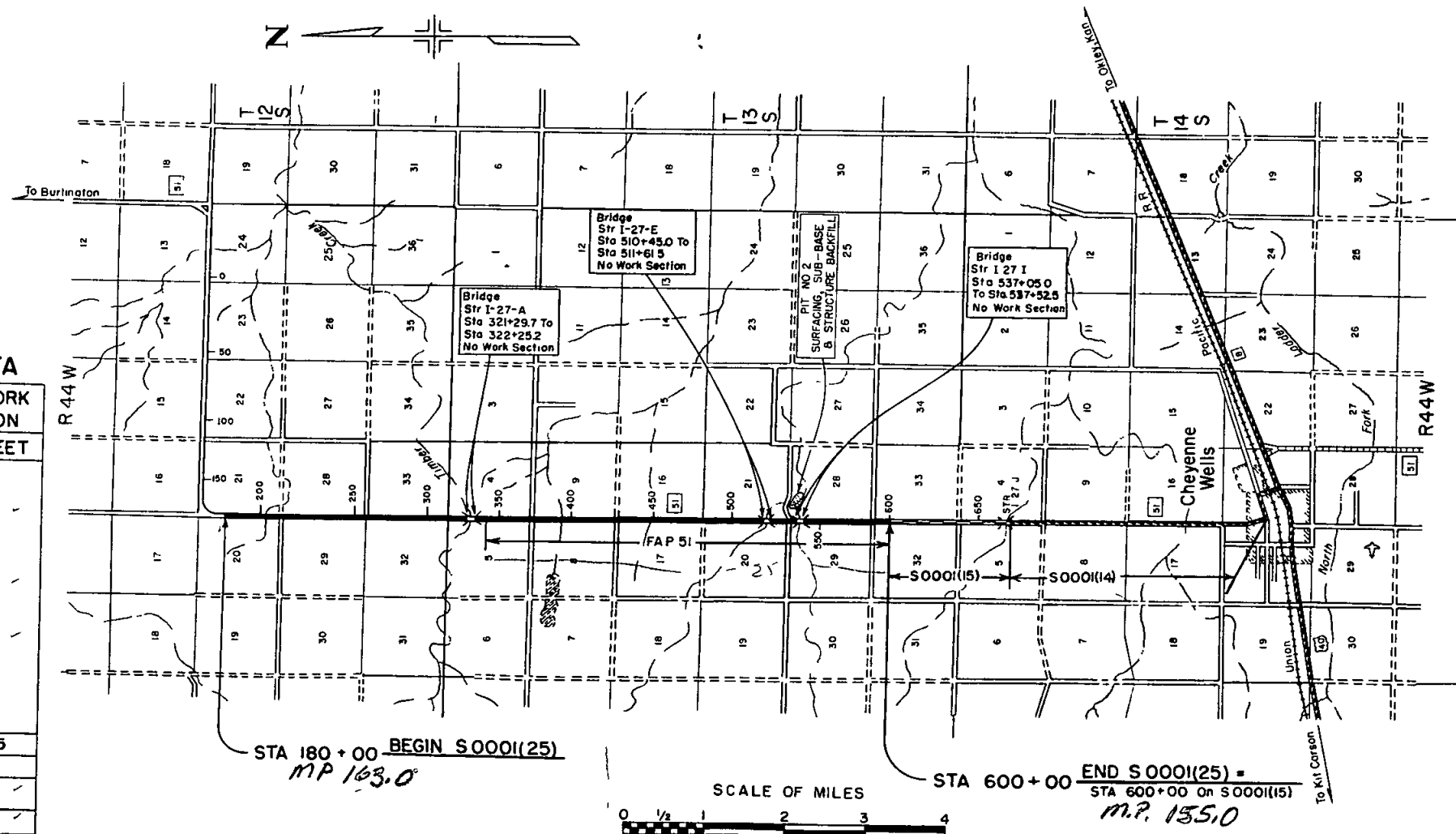
SCALES OF ORIGINAL DRAWINGS

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 42,000 FEET = 7.955 MILES
NET LENGTH OF PROJECT 41,740.5 FEET = 7.906 MILES

TABULATION OF LENGTH AND DESIGN DATA

STATION	ROADWAY	NO WORK SECTION
180+00 Begin S0001(25)		
321+297 = Begin S0001(15)	14,129.7	
322+25.2 Bridge		95.5
340+246 = Sta 464+00 End FAP 51	1,799.4	
510+45.0 Bridge	17,020.4	
511+61.5		116.5
537+05.0 Bridge	2,543.5	
537+52.5		47.5
600+00 End S0001(25) = Sta 600+00 On S0001(15)	6,247.5	
TOTALS	41,740.5	259.5
SUMMARY	LIN FEET	MILES
Roadway	41,740.5	7.906
Project Total - Net Length	41,740.5	7.906
No Work Sections	259.5	0.049
Project Total - Gross Length	42,000.0	7.955
DESIGN DATA		
Maximum Degree Of Curve	Tangent	
Maximum Grade	5.30%	
Minimum NPSD Horizontal	> 1300'	
Minimum NPSD Vertical	525'	
Maximum Design Speed	50 M.P.H.	



NOTICE TO BIDDERS

IT IS RECOMMENDED THAT BIDDERS ON THIS PROJECT GO OVER THE PLAN DETAILS WITH ONE OF THE FOLLOWING FIELD REPRESENTATIVES OF THIS DEPARTMENT
FRED O. STEARNS, CONST ENGR, DENVER, COLO.
H.W. JACKSON, PROJ ENGR, BURLINGTON, COLO.
OFFICE 1375 MARTIN AVENUE
PHONE NO 588, BURLINGTON, COLO.

COLORADO
DEPARTMENT OF HIGHWAYS

APPROVED

W. H. Jackson 8-2-56
CHIEF ENGINEER DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED

DATE

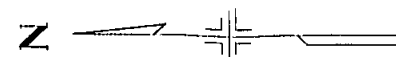
DISTRICT ENGINEER

N W 1/4, SEC 21
T 12 S, R 44 W

S W 1/4, SEC 21
T 12 S, R 44 W

FED ROAD DIST NO	DIST	PROJ NO	SHEET NO	TOTAL SHEETS
9	COLO	50001(25)	12	

Note
Alignment and Grades as shown are subject to modification during construction after approval by the Denver Office. Soil data shown on the plans is obtained from best available testing laboratory information. This information is shown for the convenience of the Contractor and the Department does not guarantee the accuracy of these tests. If materials not conforming to the plans are encountered during construction the grading plan shown on plans will be modified where necessary to secure dense, stable embankments. Timber Guard Posts are tabulated on Sheet No 3.



Cultivated

Cultivated

STA 200+00 BEGIN GRADING
END SHAPING

N E 1/4, SEC 20
T 12 S, R 44 W

S E 1/4, SEC 20
T 12 S, R 44 W

180+00 ~ Req'd Project Marker, Rt.
(State Forces)

STA 180+00 BEGIN S 0001(25)

205+10 ~ Req'd 18 x 28"
Side Drain and Road
Approach Lt

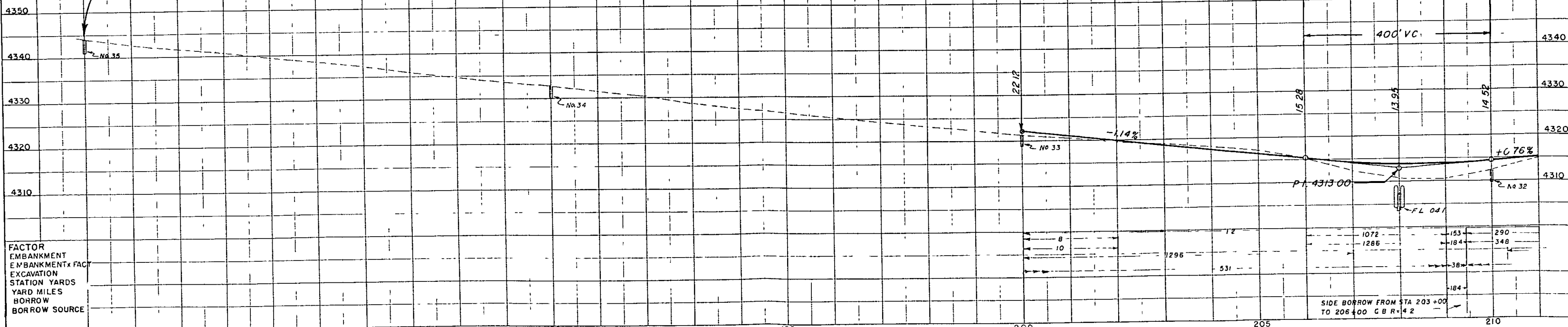
48' x 52' C.M.P.
208+00 ~ Req'd 60 x 74
Double Cross Culvert
Remove 48' x 52' C.M.P.

TEST # 35
SIMILAR
TEST # 29
A - 6 (9)
C.B.R. 4.2

TEST # 34
SIMILAR
TEST # 29
A - 6 (9)
C.B.R. 4.2

TEST # 33
SIMILAR
TEST # 21
A - 6 (9)
C.B.R. 4.2

TEST # 32
SIMILAR
TEST # 29
A - 6 (9)
C.B.R. 4.2



FACTOR
EMBANKMENT
EMBANKMENT FACT
EXCAVATION
STATION YARDS
YARD MILES
BORROW
BORROW SOURCE

SIDE BORROW FROM STA 203+00
TO 206+00 C.B.R. 4.2



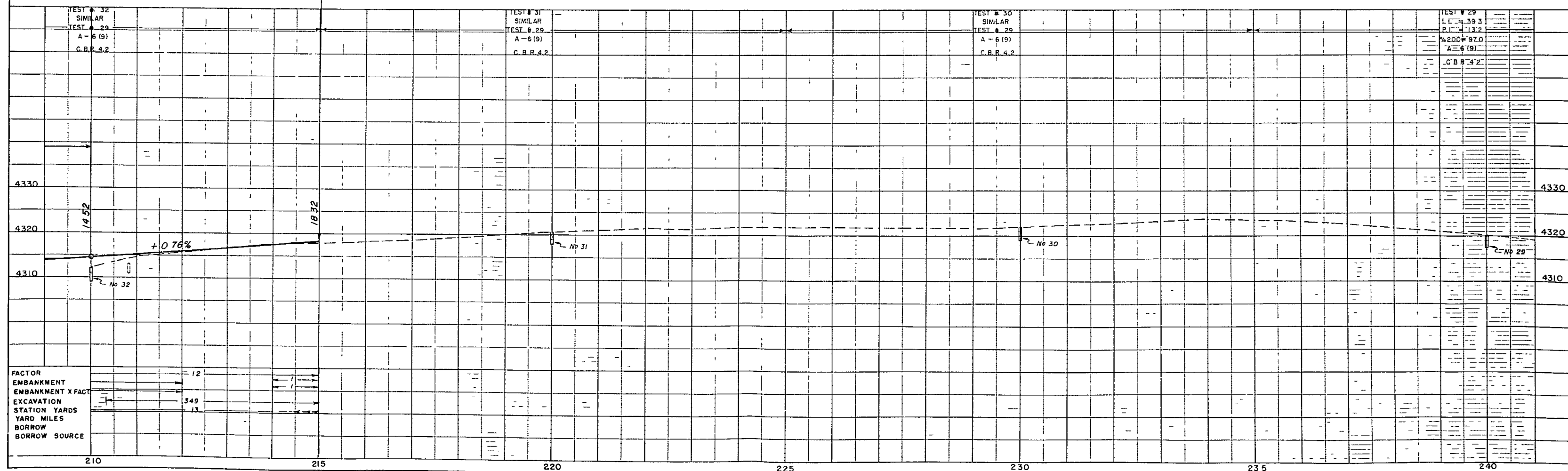
210+53 ~ Req'd Road Approach, Rt & Lt
H way S

POT 231+73 8

238+00 ~ Reg'd Road
Approach Lt

CULTIVATED

NE 1/4 SEC 29
T12S R44W



FROM COR. 1A
APRIL 1952

10
RT. OF WAY 74' 10"

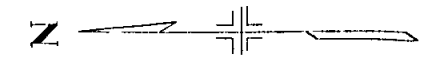
10
STRUCTURE NOTED AS CH. 10

NO
10
STRUCTURE NOTED AS CH. 10

S W 1/4, SEC 28
T 12 S R 44 W

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0001(25)	14	

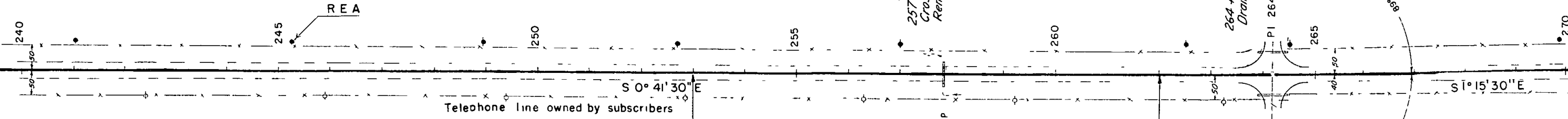
N W 1/4, SEC 33
T 12 S R 44 W



Cultivated

257+85 ~ Reg'd 36"x50"
Cross Culvert & Ditches
Remove 30"x38" C.M.P.

264+16.8 ~ Reg'd 18"x58" Side
Drain and Road Approach, Rt. & Lt.



Telephone line owned by subscribers

Cultivated

STA 253+00 BEGIN GRADING
END SHAPING

S E 1/4 SEC 29
T 12 S R 44 W

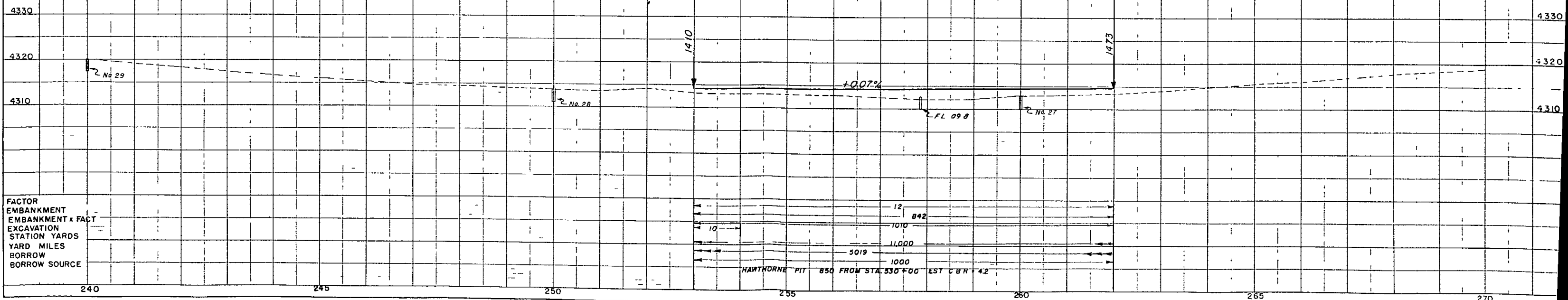
STA 262+00 END GRADING
BEGIN SHAPING

N E 1/4, SEC 32
T 12 S R 44 W

TEST # 29
LL = 39.3
P.I. = 13.2
% 200 = 97.0
A - 6 (9)
C.B.R. 4.2

TEST # 28
SIMILAR
TEST # 21
A - 6 (9)
C.B.R. 4.2

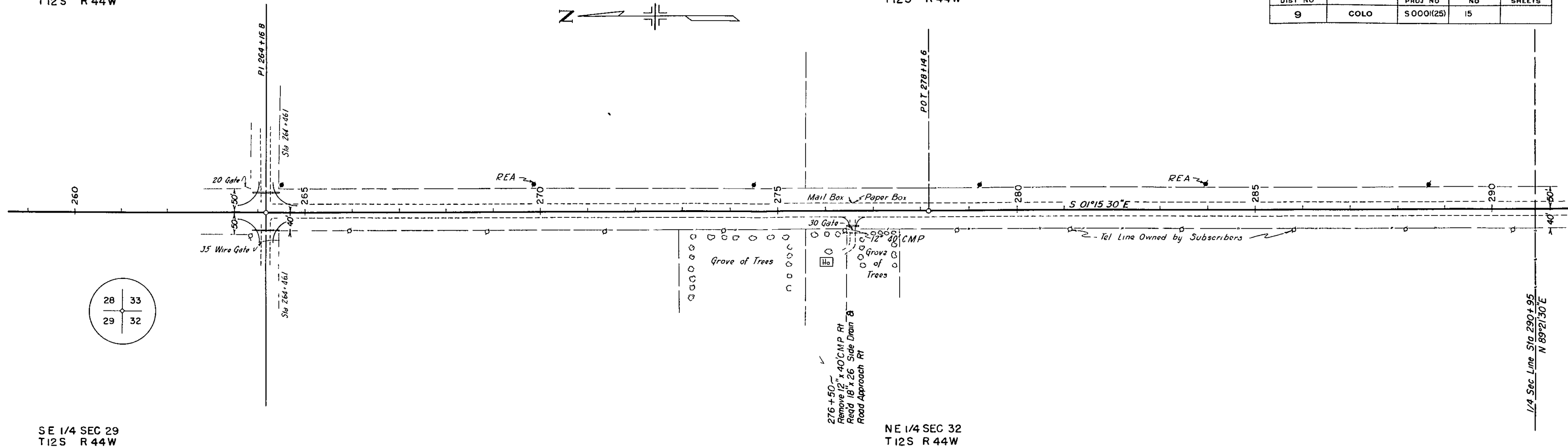
TEST # 27
SIMILAR
TEST # 21
A - 6 (9)
C.B.R. 4.2



P.A.E. PLAN PROFILE OF RAREST C.D.

NW 1/4 SEC 33
T12S R 44W

FED ROAD DIST NO	DIST	PROJ NO	SHEET NO	TOTAL SHEETS
9	COLO	S0001(25)	15	



		TEST # 25 SIMILAR TEST # 21 A=6(9) CBR 42		TEST # 25 SIMILAR TEST # 21 A=6(9) CBR 42		TEST # 24 SIMILAR TEST # 21 A=6(9) CBR 42	
4330							
4320							
4310							
4300							
FACTOR EMBANKMENT EMBANK X FACTOR EXCAVATION STATION YARDS YARD MILES BORROW BORROW SOURCE							
		265	270	275	280	285	290

NW 1/4 SEC 33
T12S R 44W

SW 1/4 SEC 33
T12S R 44W

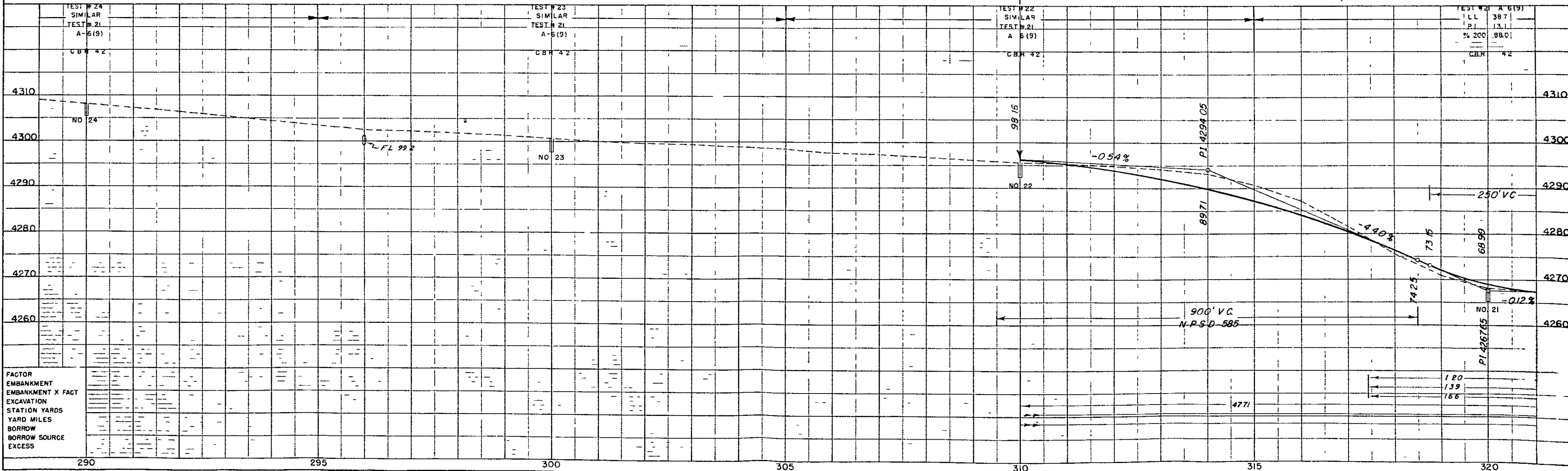
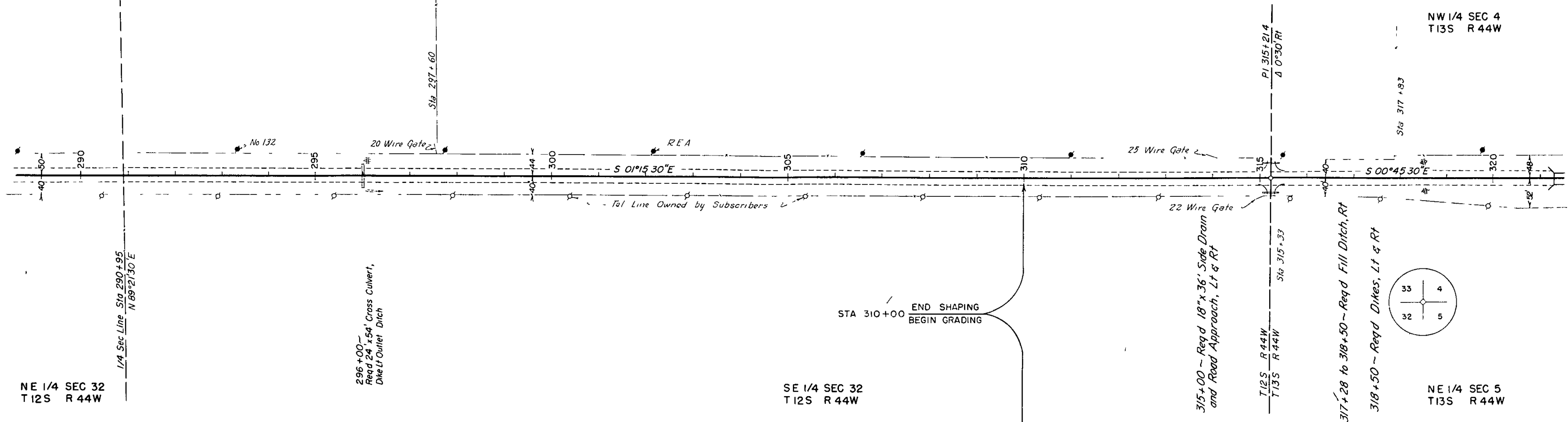
FED ROAD DIST NO	DIST	PROJ NO	SHEET NO	TOTAL SHEETS
9	COLO	S0001(25)	16	

NW 1/4 SEC 4
T13S R 44W

NE 1/4 SEC 32
T12S R 44W

SE 1/4 SEC 32
T12S R 44W

NE 1/4 SEC 5
T13S R 44W



STR NO 1-27-A

NW 1/4 SEC 4
T13S R 44W

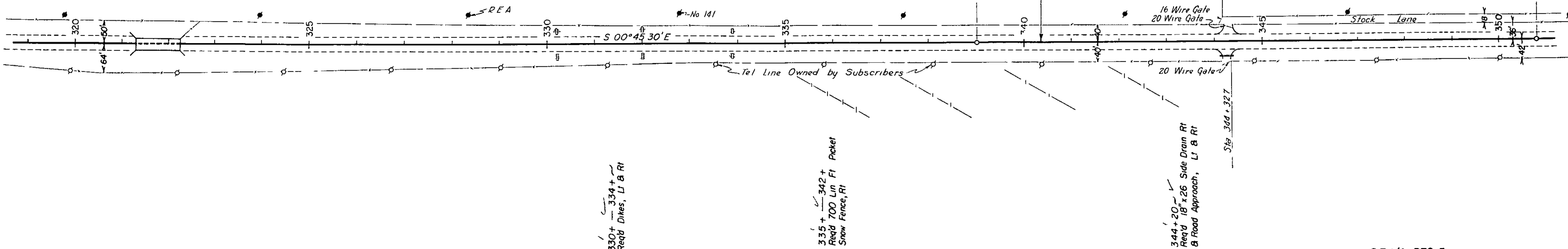
FED ROAD DIST NO	DIST	PROJ NO	SHEET NO	TOTAL SHEETS
9	COLO	S0001(25)	17	

SW 1/4 SEC 4
T13S R 44W

SE 1/4 SEC 5
T13S R 44W



STA 321+29.7 Begin Bridge =
Begin S 00°45'30"E
NO WORK SECTION
STA 322+25.2 End Bridge

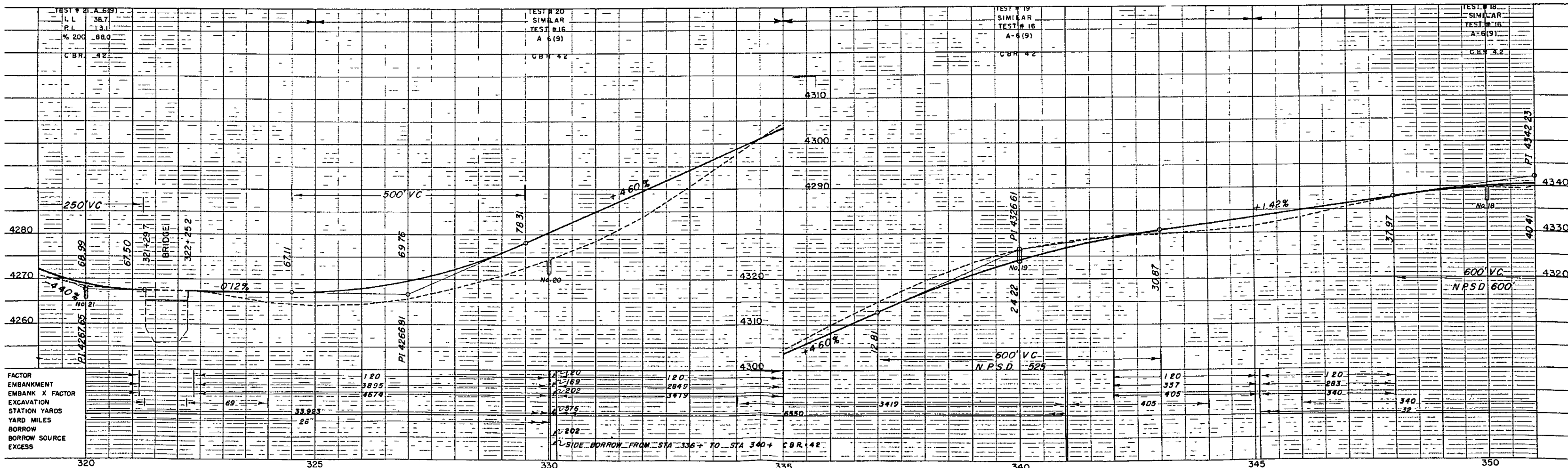


NE 1/4 SEC 5
T13S R 44W

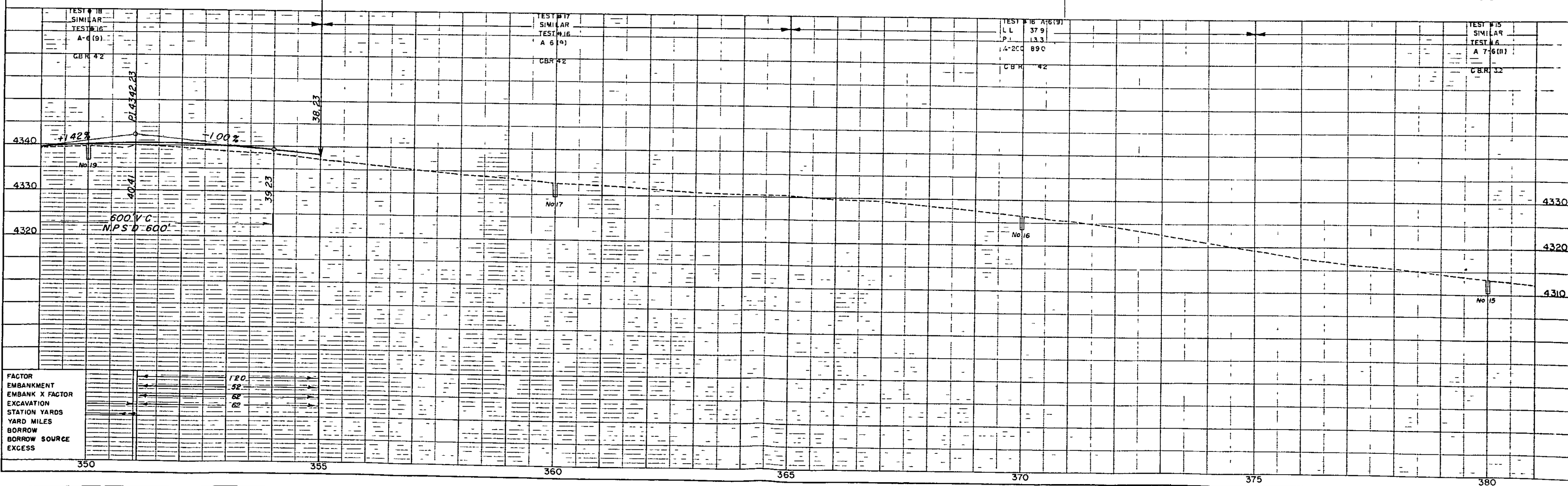
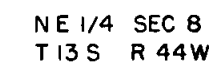
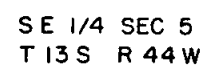
330+ - 342+
Req'd Dikes, Lt & Rt

335+ - 342+
Req'd 700 Lin Ft
Snow Fence, Rt

344+20 -
Req'd 18' x 26' Side Drain Rt
& Road Approach, Lt & Rt



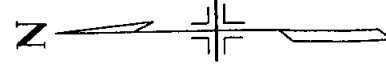
NW 1/4 SEC 9
T13S R 44W



NW 1/4 SEC 9
T13S R 44W

SW 1/4 SEC 9
T13S R 44W

FED ROAD DIST NO	DIST	PROJ NO	SHEET NO	TOTAL SHEETS
9	COLO	S 0001(25)	19	



STA 385+00 END SHAPING
BEGIN GRADING

NE 1/4 SEC 8
T13S R 44W

SE 1/4 SEC 8
T13S R 44W

386+70 ~
Req'd Road Approach Lt

404+50 ~
Req'd Road Approach Lt
POT 404+79.2

20 Gate

395 REA

30 Wire Gate

No 158

48" x 40 CMP

32' Wire Gate

Tel Line Owned by Subscribers

387+40 ~ Req'd
Extend 48" x 40 CMP Cross Culvert,
8 Lt & 8 Rt

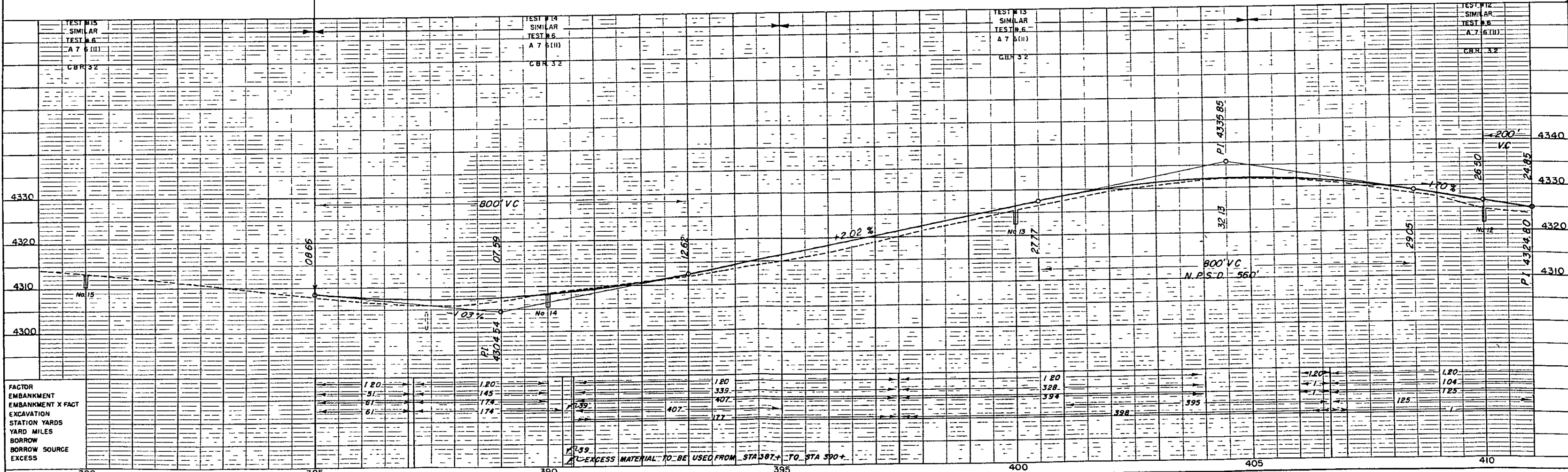
396+50 ~
Req'd 18" x 26' Side Drain &
Road Approach Rt

TEST #15
SIMILAR
TEST #6
A 7.5(II)
CBR 32

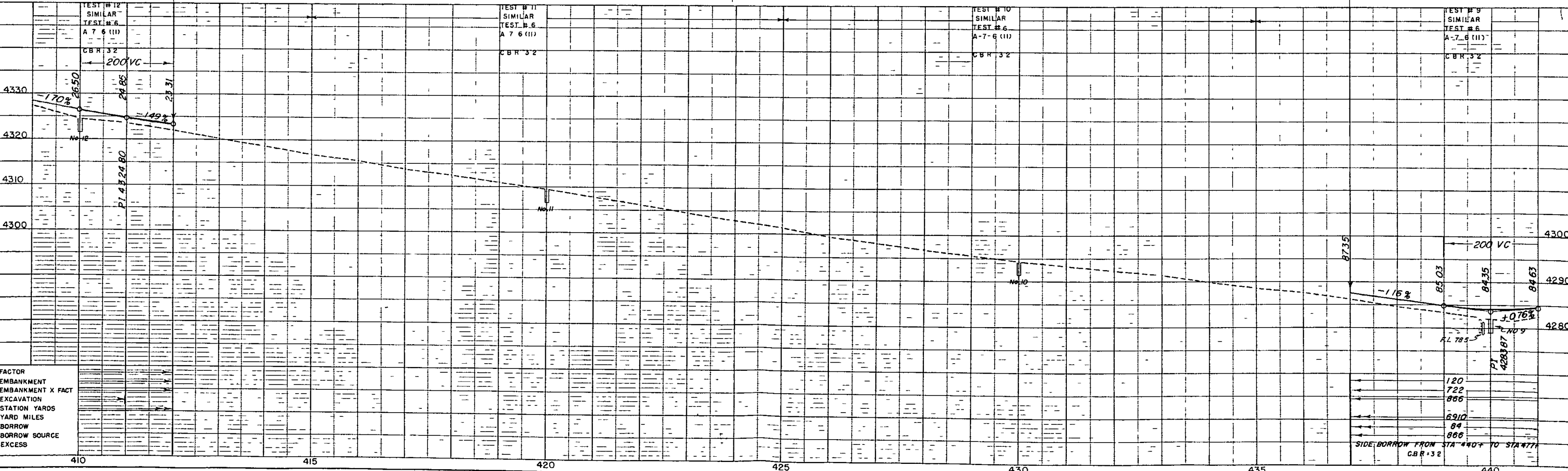
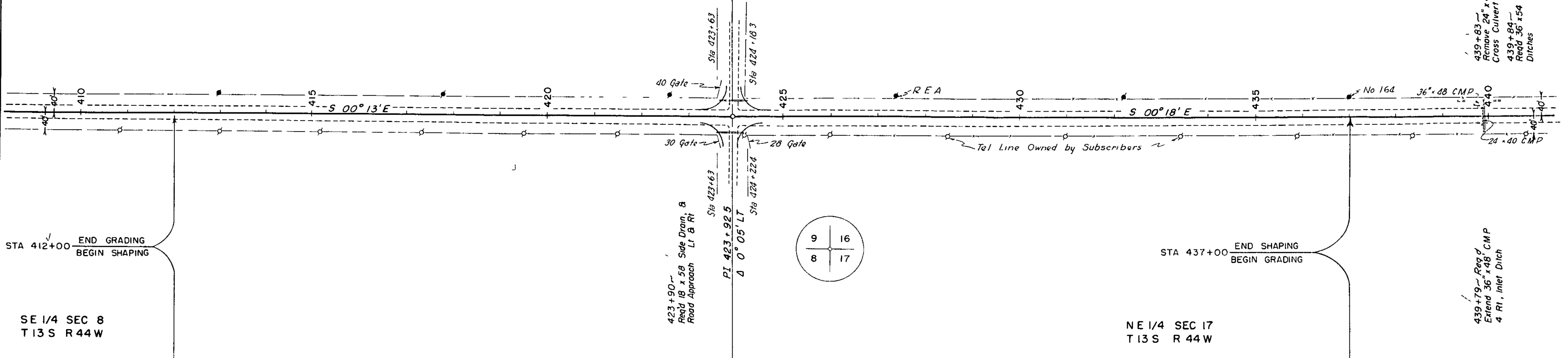
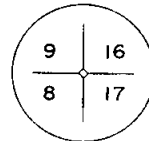
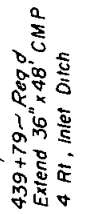
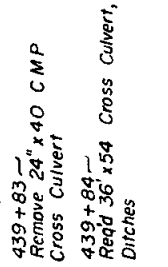
TEST #14
SIMILAR
TEST #6
A 7.5(II)
CBR 32

TEST #13
SIMILAR
TEST #6
A 7.5(II)
CBR 32

TEST #12
SIMILAR
TEST #6
A 7.5(II)
CBR 32



FED ROAD DIST NO	DIST	PROJ NO	SHEET NO	TOTAL SHEETS
9	COLO	S0001(25)	20	

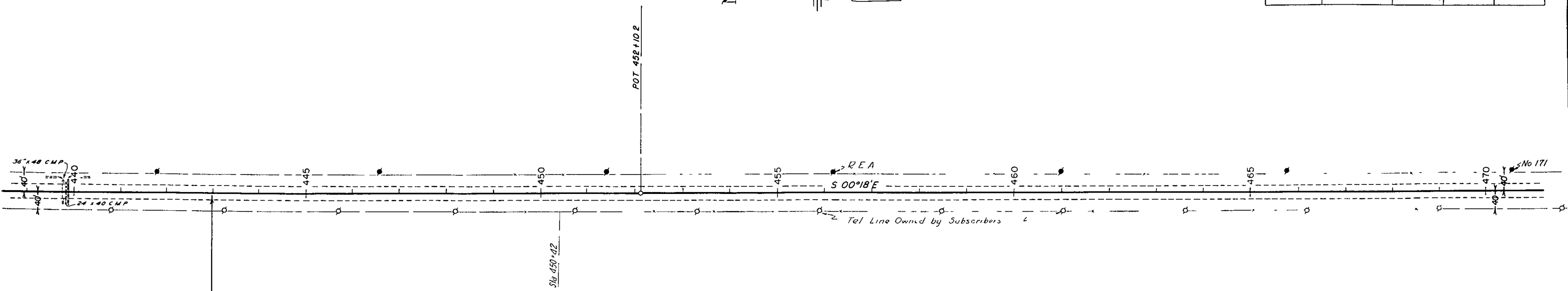
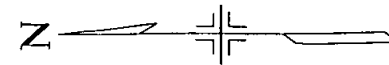


FACTOR
EMBANKMENT
EMBANKMENT X FACT
EXCAVATION
STATION YARDS
YARD MILES
BORROW
BORROW SOURCE
EXCESS

NW 1/4 SEC 16
T13S R 44W

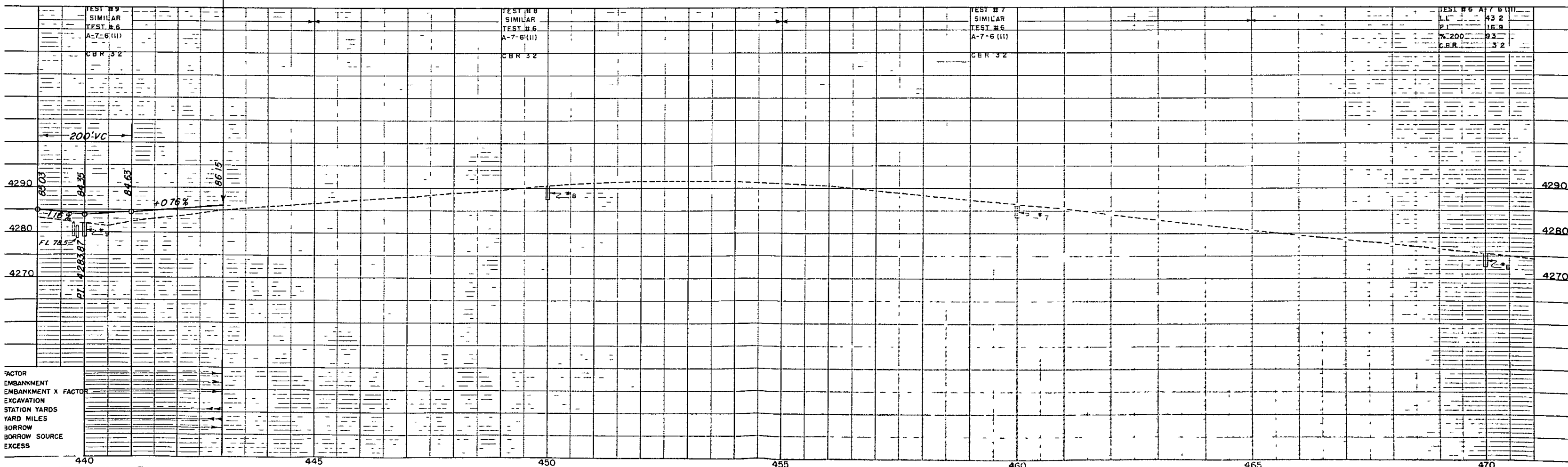
SW 1/4 SEC 16
T13S R 44W

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0001(25)	21	



NE 1/4 SEC 17
T13S R 44W

SE 1/4 SEC 17
T13S R 44W

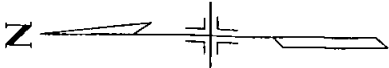


FACTOR
EMBANKMENT
EMBANKMENT X FACTOR
EXCAVATION
STATION YARDS
YARD MILES
BORROW
BORROW SOURCE
EXCESS

SW 1/4 SEC 16
T 13 S R 44 W

NW 1/4 SEC 21
T 13 S R 44 W

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0001(25)	22	

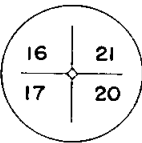


476+60 ~ Reg'd 18" x 28' Side
Drain & Road Approach Lt

480+ ~ 490+
Reg'd Dikes Lt at 200' ±
Intervals

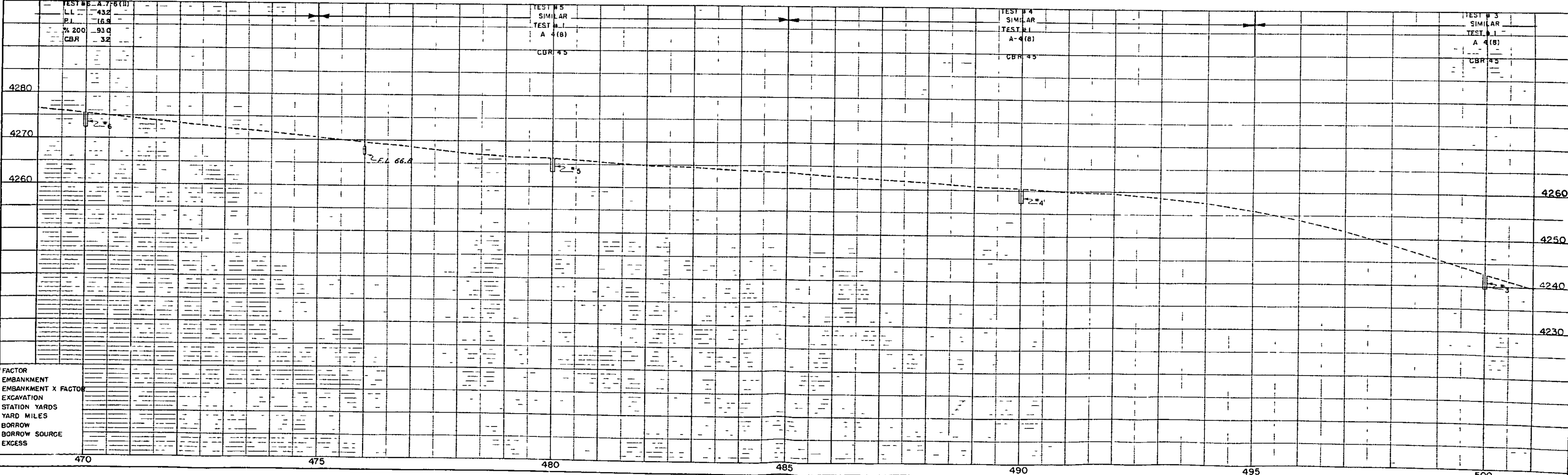
476+00 ~
Reg'd 24" x 52' Cross Culvert,
Ditches, Dike Rt

477+10 ~ Reg'd Road Approach Rt



SE 1/4 SEC 17
T 13 S R 44 W

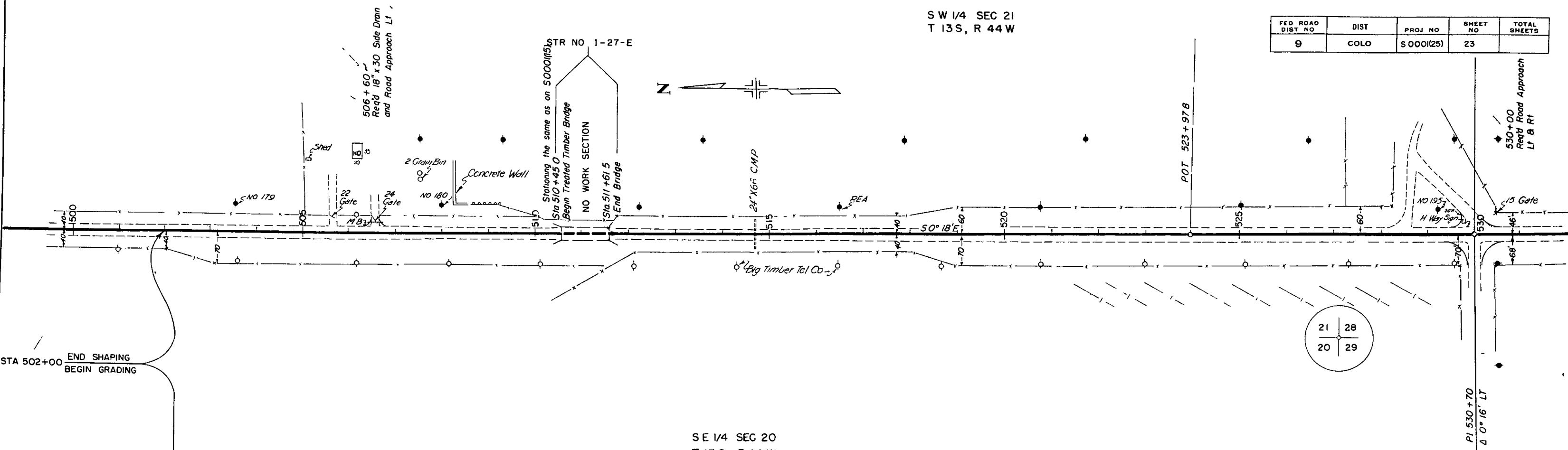
NE 1/4 SEC 20
T 13 S R 44 W



FACTOR
EMBANKMENT
EMBANKMENT X FACTOR
EXCAVATION
STATION YARDS
YARD MILES
BORROW
BORROW SOURCE
EXCESS

SW 1/4 SEC 21
T 13S, R 44W

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 000(125)	23	



SE 1/4 SEC 20
T 13S, R 44W

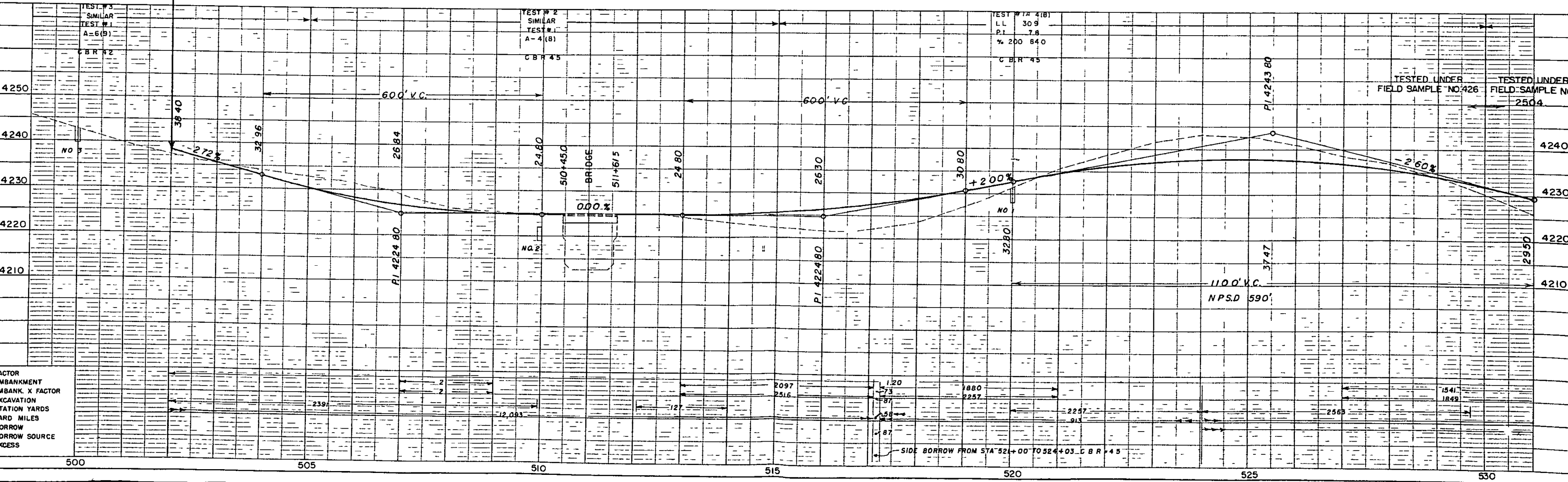
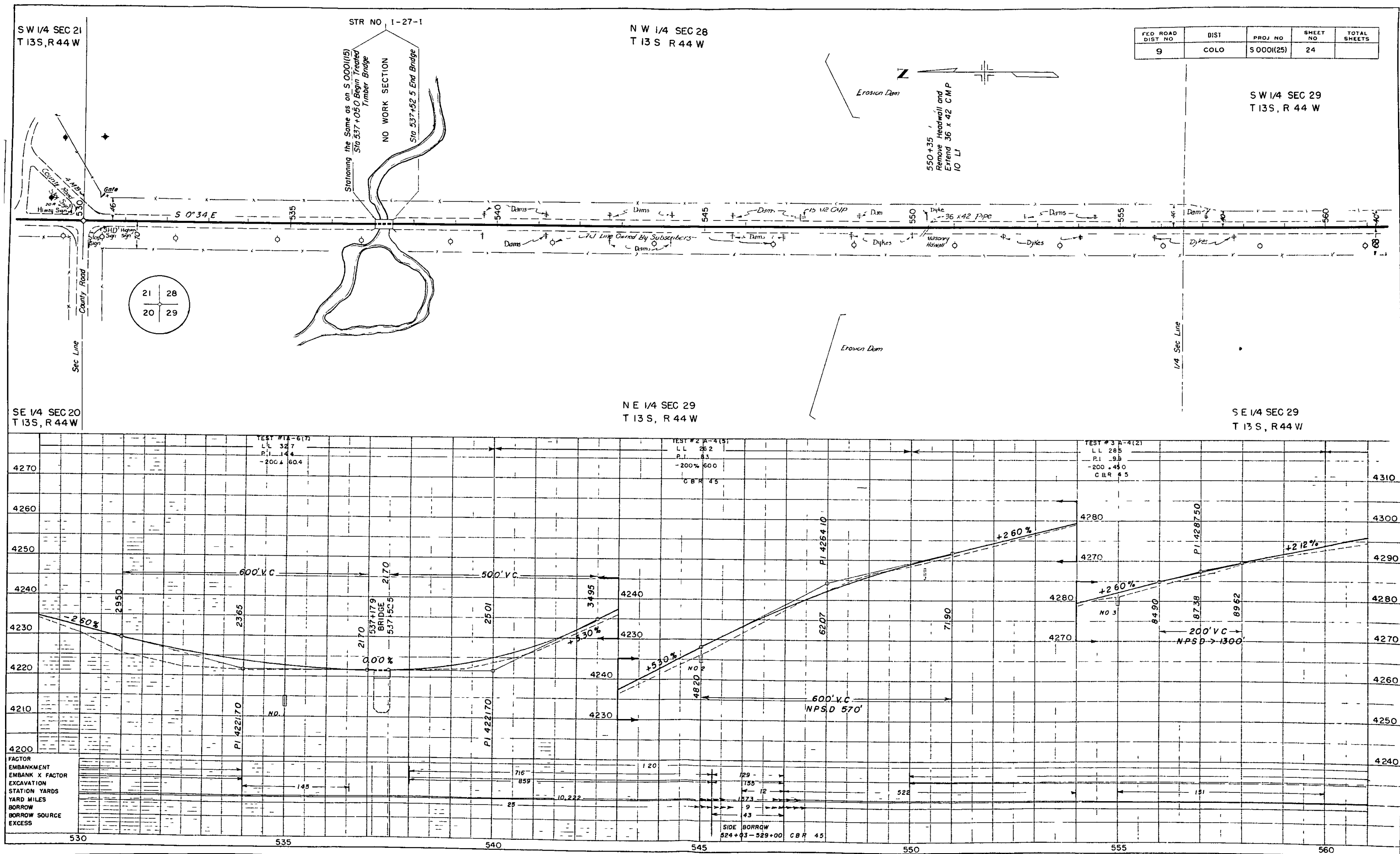


PLATE 1-PLAN PROFILE OF ROAD STANDARD

S W 1/4 SEC 29
T 13S, R 44 W



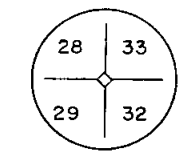
S W 1/4 Section 28
T 13 S, R 44 W

563+85 ~ Req'd Extend 24' x 36'
Cross Culvert 10' Lt & 4' Rt, Inlet
Ditch Remove Headwall Rt and
24' x 6' C.M.P. & Headwall Lt



FED ROAD DIV NO	DISTRICT	PROJ NO	SHEET NO	TOTAL SHEETS
9	COLO	5000(25)	25	

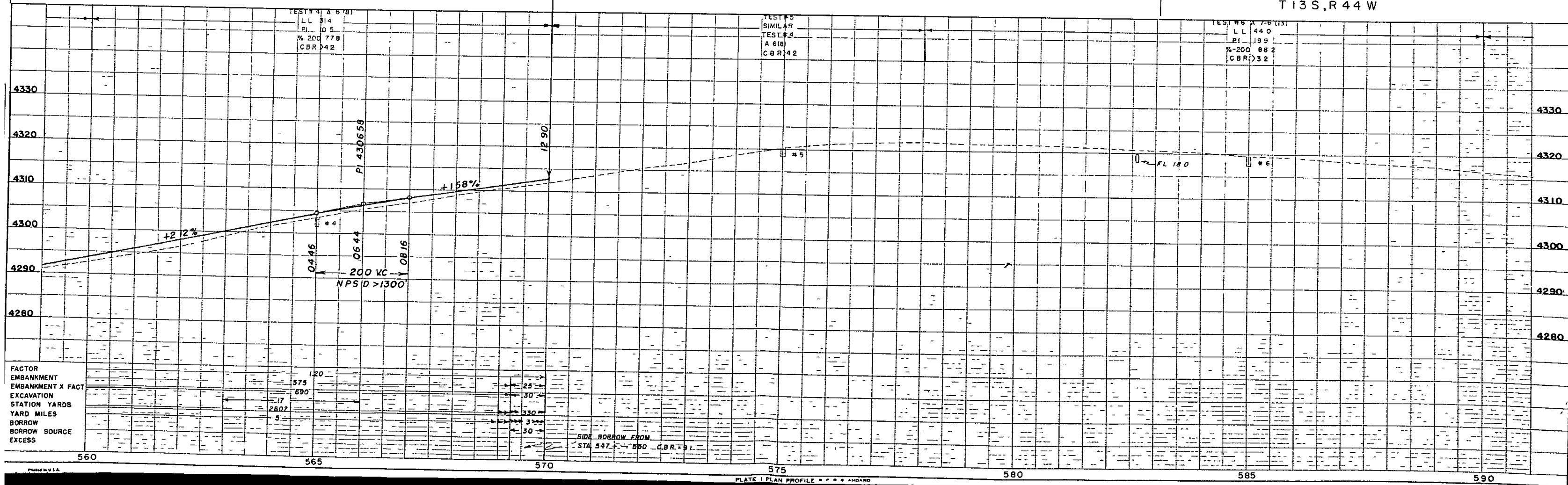
N W 1/4 Section 33
T 13 S, R 44 W



N E 1/4 Section 32
T 13 S, R 44 W

S E 1/4 Section 29
T 13 S, R 44 W

STA 570+00 END GRADING
BEGIN SHAPING



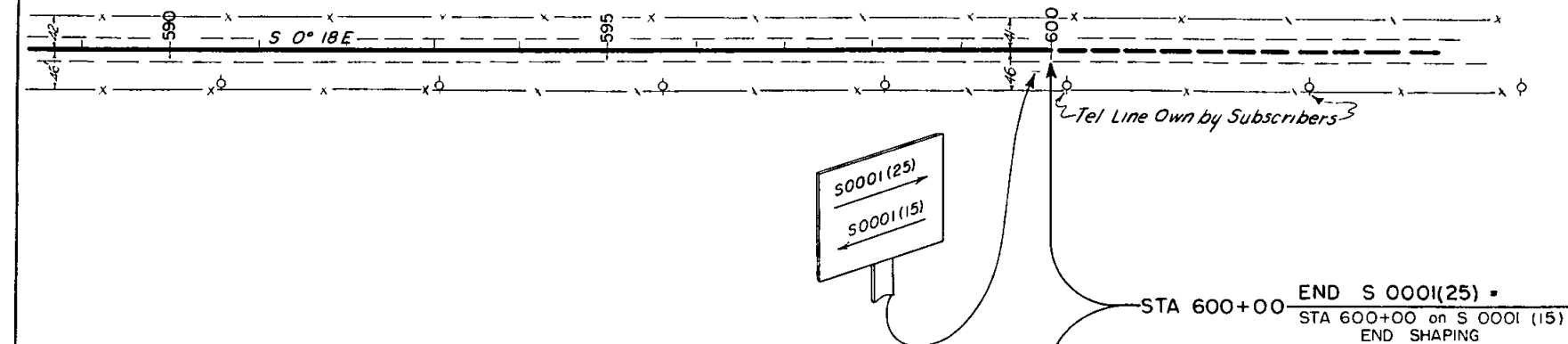
FACTOR
EMBANKMENT
EMBANKMENT X FACT
EXCAVATION
STATION YARDS
YARD MILES
BORROW
BORROW SOURCE
EXCESS

NE 1/4 SEC 33
T 13 S, R 44 W

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO	S 0001(25)	26	



600+00 ~ Req'd Project Marker Rt.
(State Forces)



NE 1/4 SEC 32
T 13 S, R 44 W

