



COLORADO
Department of
Transportation

DOCUMENT SEPARATOR SHEET

REGION 5 – JUNE 2017 CONVERSION

To be placed at the beginning of each separator sheet.



r500001322

Description:

ROW Plans 24X36

Route # and Mile Points:

US 160

Originating Office:

ROW/Survey

File Name:

F 022-2(4)_ROW(.PDF)

Box Location:

23 (TUBE-2)of 38

F022-2(4)

DATE	BY	
		SURVEYED
		PLOTTED
		ALIGNMENT CHECKED
		RT. OF WAY CHECKED
		NO.

PROFILE NOTE BOOK NO. 7	SURVEYED	BY _____ DATE _____
	PLOTTED CHECKED	
	GRADES CHECKED	
	NOTED	
	BAR NOTED	

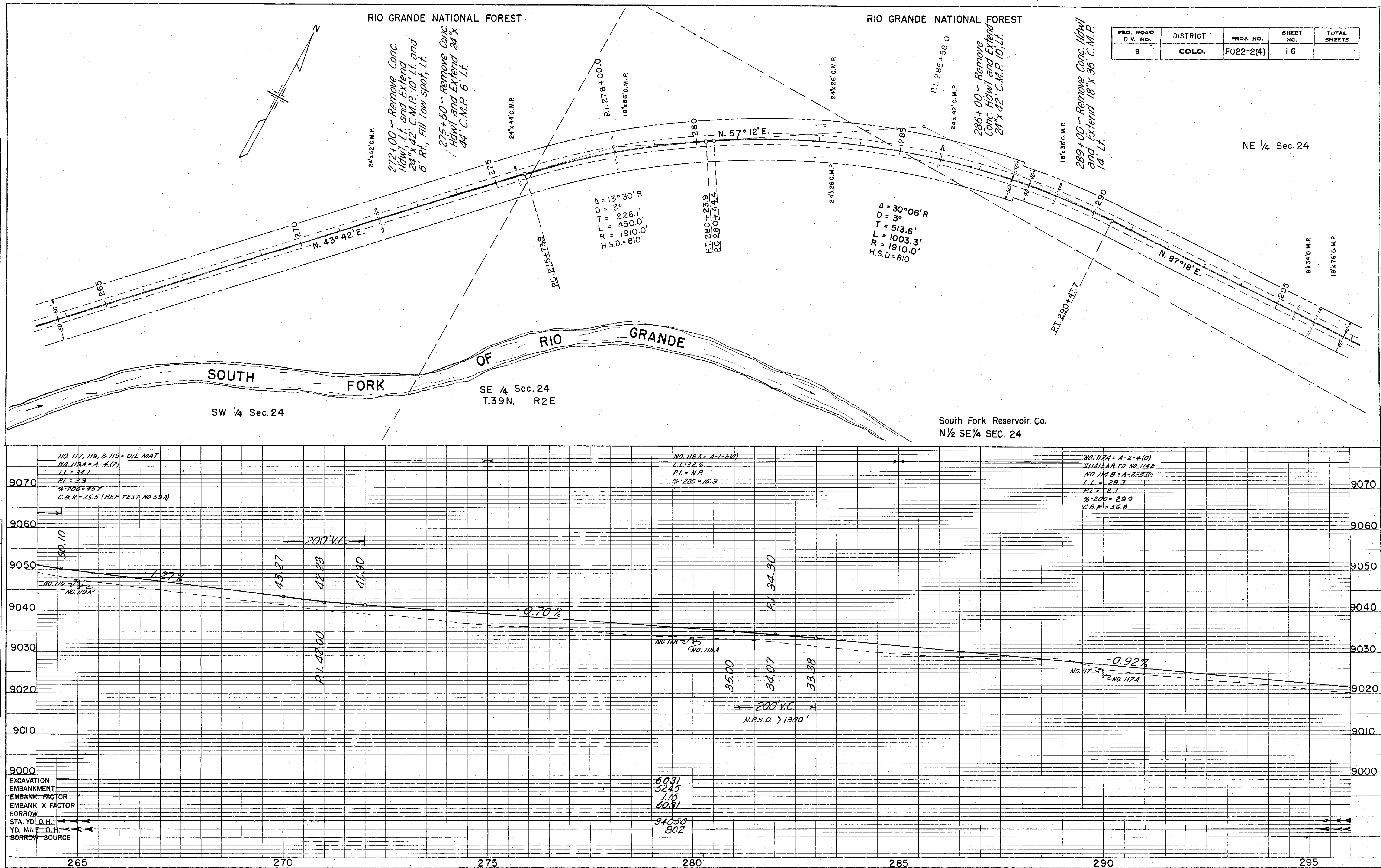
9060	
EXCAVATION	
EMBANKMENT	
EMBANK. FACTOR	
EMBANK. X FACTOR	
BORROW	
STA. YD. O. H.	
YD. MILE O. H.	
BORROW SOURCE	

		2

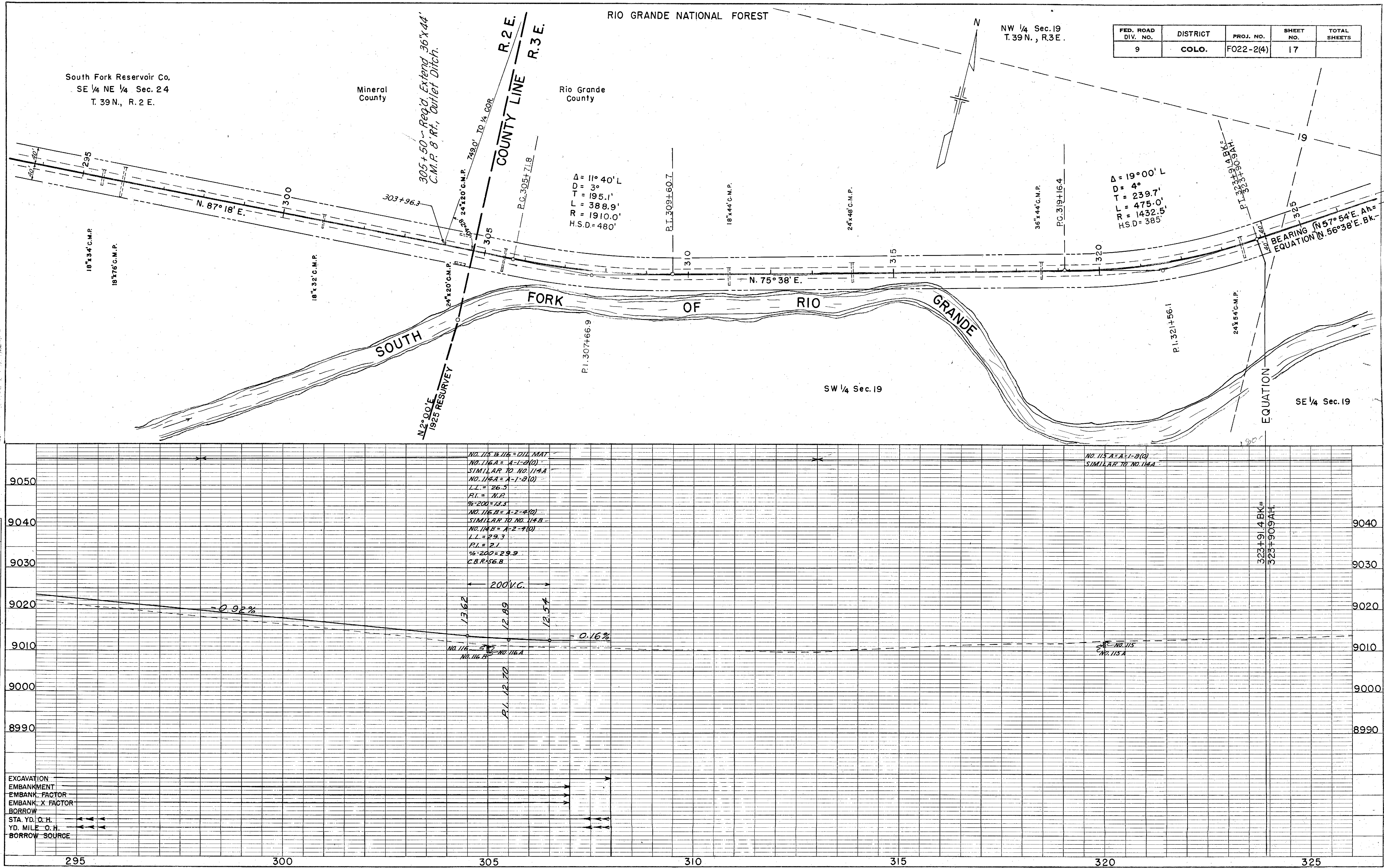


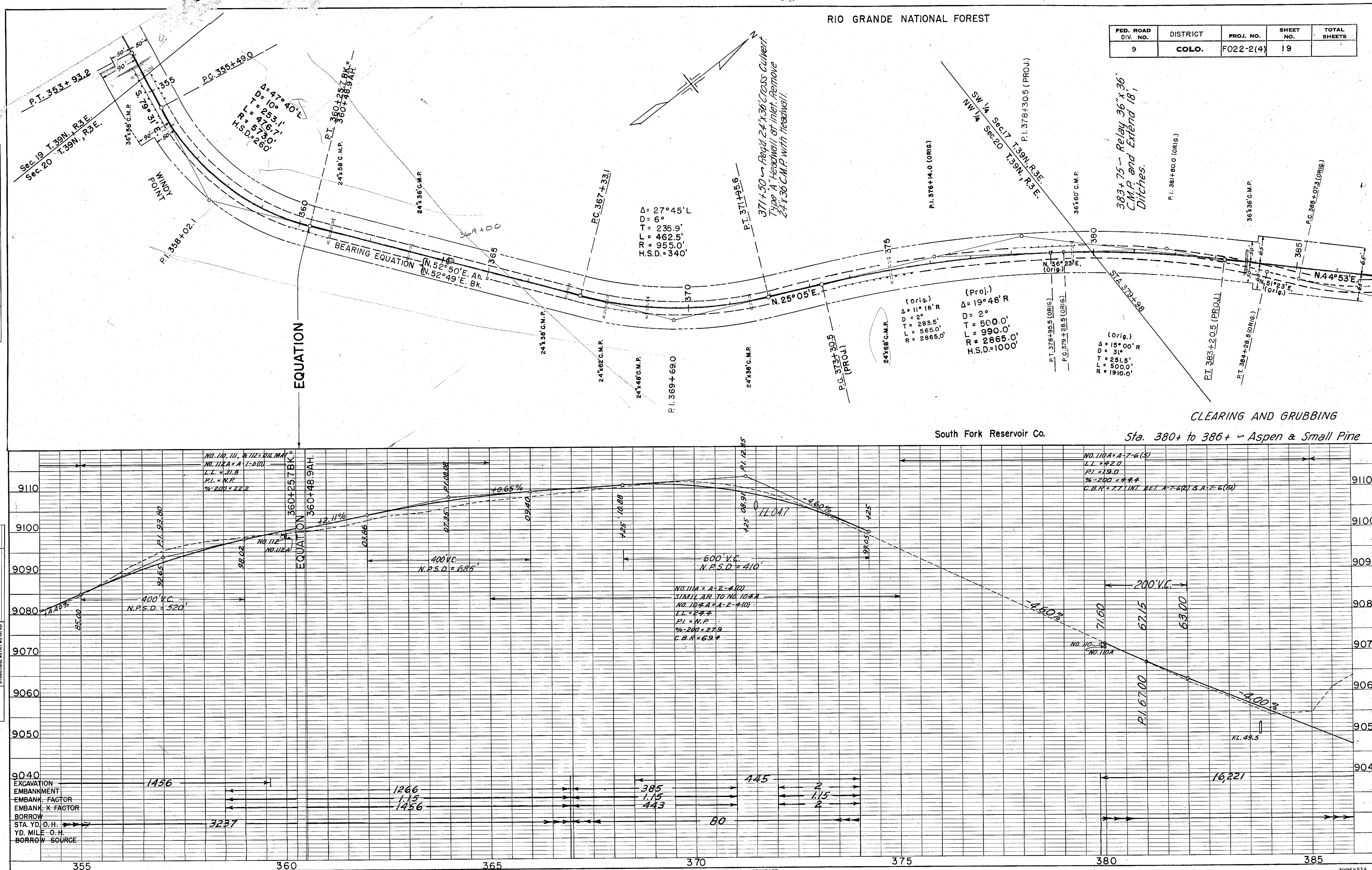
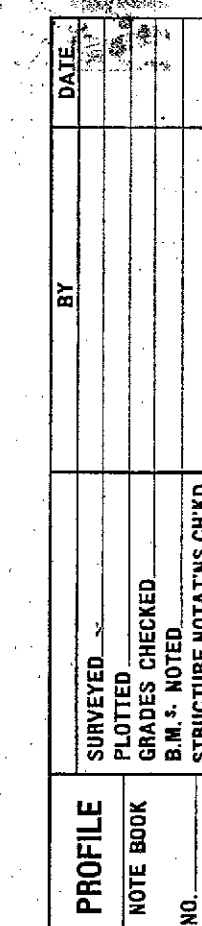
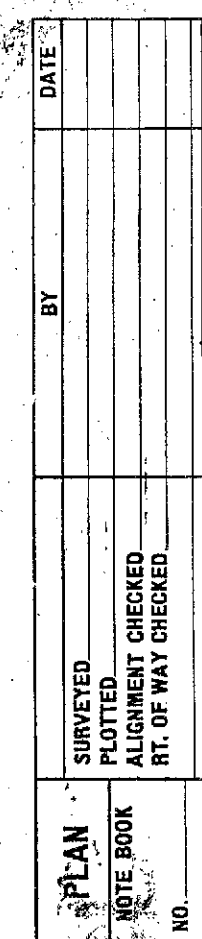
PLAN	SURVEYED		BY	DATE
NOTE BOOK	PLOTTED			
	ALIGNMENT CHECKED			
	RT. OF WAY CHECKED			
NO.				

PROFILE	BY		DATE
SURVEYED			
PLOTTED			
GRADES CHECKED			
B.M.'s NOTED			
NO.	STRUCTURE NOTAT'NS CH'KD		



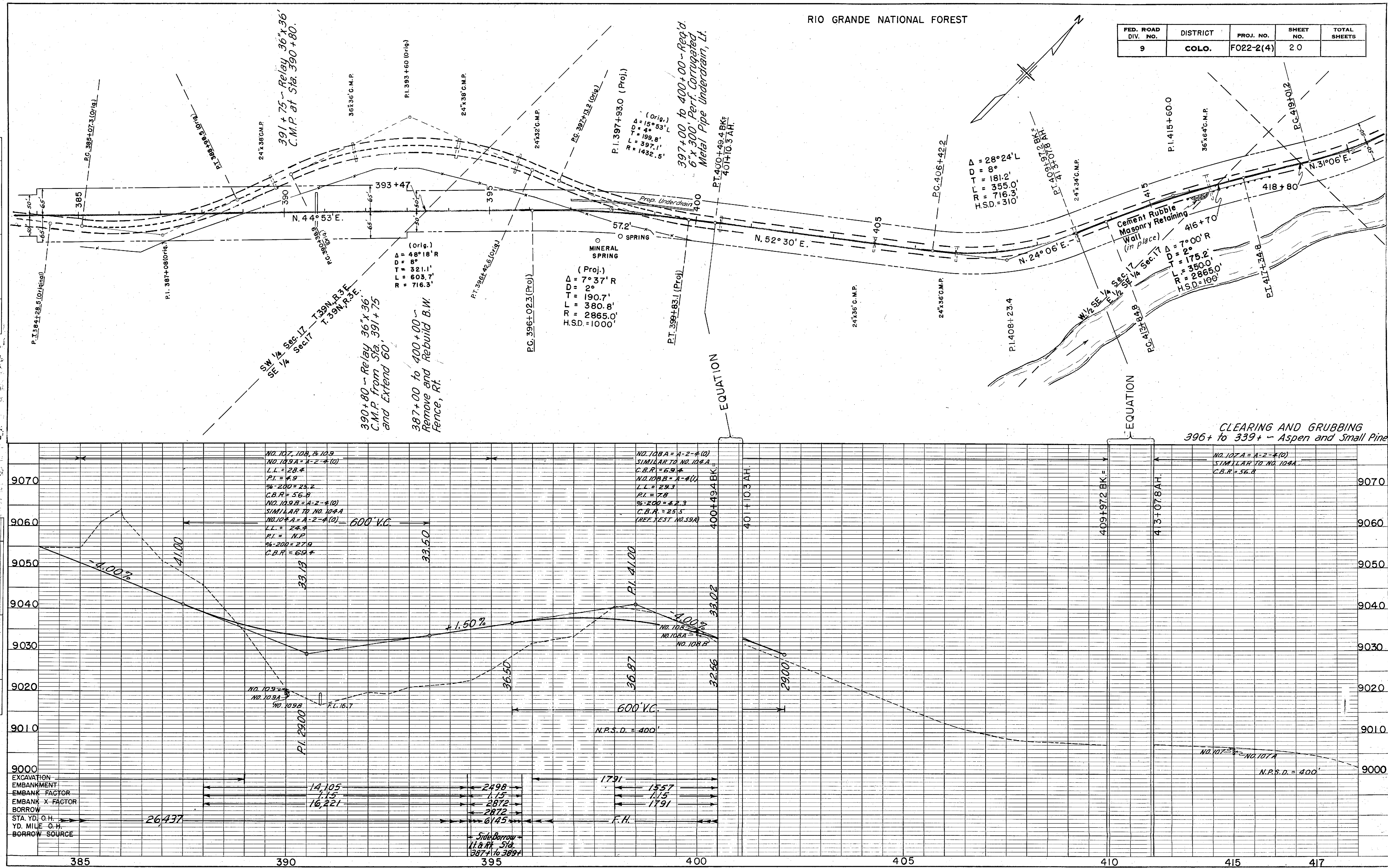
DATE	BY	DATE	BY
PLAN		PROFILE	
SURVEYED	NOTE BOOK	SURVEYED	NOTE BOOK
ALIGNED	CHECKED	GRADES	CHECKED
RT. OF WAY	CHECKED	B.M.'S	NOTED
		STRUCTURE	NOTED
		NO.	





PLAN	DATE	BY	DATE
SURVEYED			
PLOTTED			
CHECKED			
NO. 10			

PROFILE	DATE	BY	DATE
SURVEYED			
PLOTTED			
CHECKED			
NO. 10			



S.W. 1/4 SEC. 9, T. 39 N., R. 3 E., N.M.P.M.

RIO GRANDE NATIONAL FOREST

N.E. 1/4 SEC. 9, T. 39 N., R. 3 E., N.M.P.M.

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-2(4)	23	

$\Delta = 10^\circ 24' L.$
 $D = 1^\circ 00'$
 $T = 521.5'$
 $L = 1040.0'$
 $R = 5730.0'$
 $H.S.D. = 880'$

$\Delta = 39^\circ 12' L.$
 $D = 5^\circ 00'$
 $T = 408.1'$
 $L = 784.0'$
 $R = 1146.0'$
 $H.S.D. = 385'$

$\Delta = 15^\circ 18' R.$
 $D = 3^\circ 00'$
 $T = 256.5'$
 $L = 510.0'$
 $R = 1910.0'$
 $H.S.D. = 810'$

EQUATION

EQUATION

S.E. 1/4 SEC. 9, T. 39 N., R. 3 E., N.M.P.M.

TRACT NO. 42

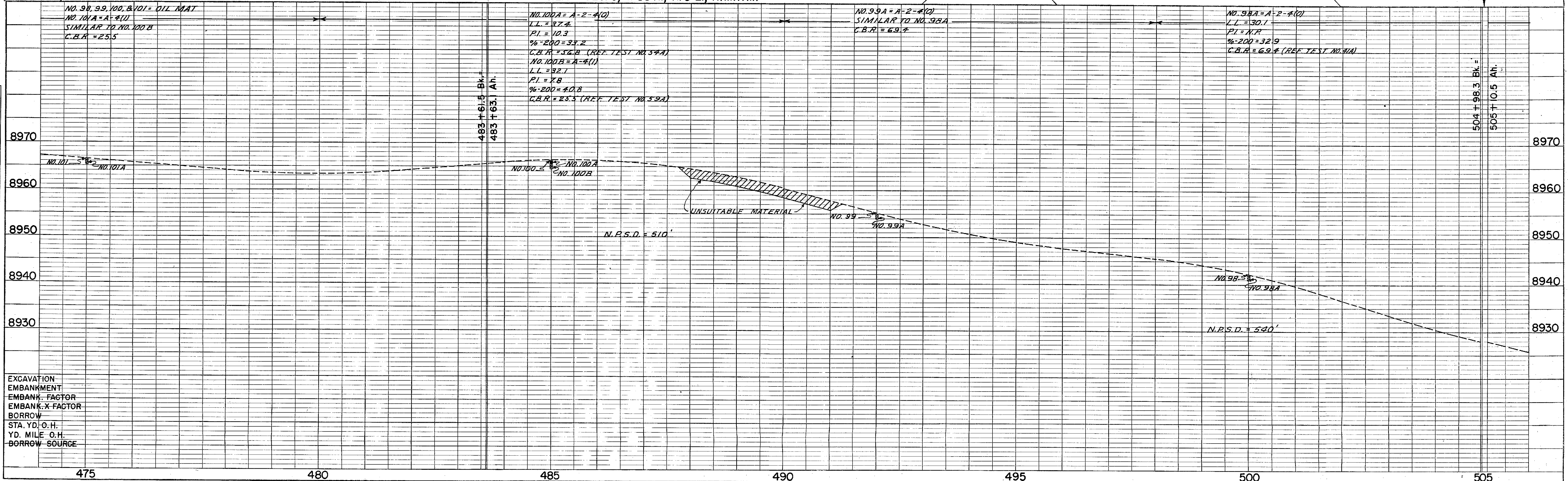
NO. 98, 99, 100, & 101 = OIL MAT
NO. 101A = A-2-4(1)
SIMILAR TO NO. 100B
C.B.R. = 23.5

NO. 100A = A-2-4(1)
L.L. = 37.4
P.I. = 10.3
% = 200 = 33.2
C.B.R. = 36.8 (REF. TEST NO. 39A)
NO. 100B = A-4(1)
L.L. = 32.1
P.I. = 7.8
% = 200 = 40.8
C.B.R. = 25.5 (REF. TEST NO. 39A)

NO. 99A = A-2-4(1)
SIMILAR TO NO. 98A
C.B.R. = 69.4

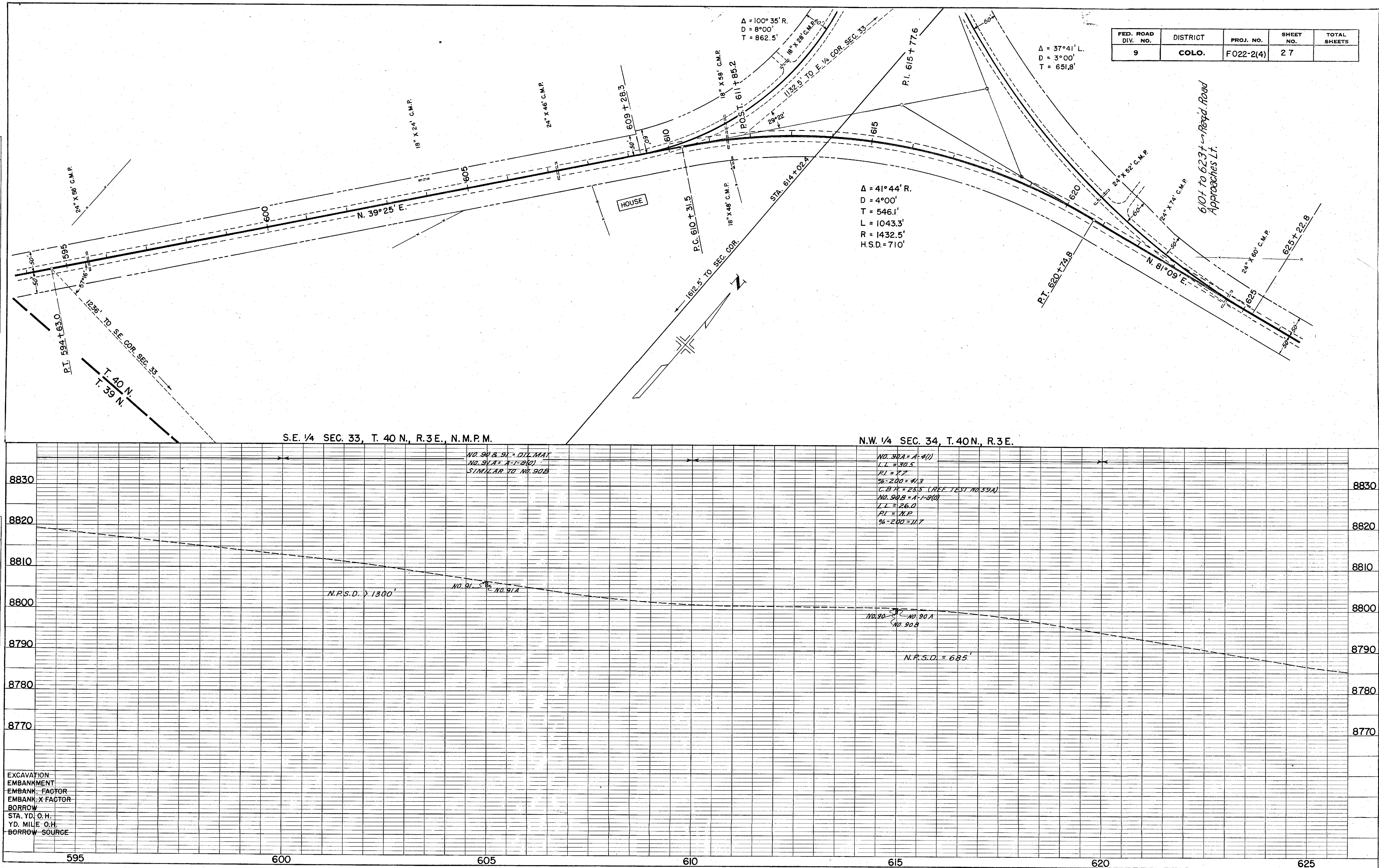
NO. 98A = A-2-4(1)
L.L. = 30.1
P.I. = 11.7
% = 200 = 32.9
C.B.R. = 69.4 (REF. TEST NO. 41A)

504 + 98.3 Bk. =
505 + 10.5 Aft.



DATE	BY	SURVEYED	PLAN
		PLOTTED	NOTE BOOK
		ALIGNED	RT. OF WAY CHECKED
		NO.	

DATE	BY	SURVEYED	PROFILE
		PLOTTED	NOTE BOOK
		GRADES CHECKED	
		NO.	



FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-2(4)	27	

EXCAVATION
EMBANKMENT
EMBANK. FACTOR
EMBANK. X FACTOR
BORROW
STA. YD. O.H.
YD. MILE O.H.
BORROW SOURCE

N.E. 1/4 SEC. 34, T. 40 N., R. 3 E., N.M.P.M.

N.W. 1/4 SEC. 35, T. 40 N., R. 3 E.

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-2(4)	29	

683+00 Project Marker
(State Forces)

$\Delta = 6^\circ 20' L.$
 $D = 1^\circ 00'$
 $T = 317.0$
 $L = 633.3'$
 $R = 5730.0'$
 $H.S.D. = 1170'$

P.T. 663+33.3

STA 670+00
END 298-1
BEGIN 243-F

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

N. 74° 49' E.

TO DEL NORTE

STA. 683+00 END F 022-2(4)
= END F022-2 (1)

F022-2(4)
F022-2 (1)

SOUTH FORK

S.E. 1/4 SEC. 34, T. 40 N., R. 3 E.

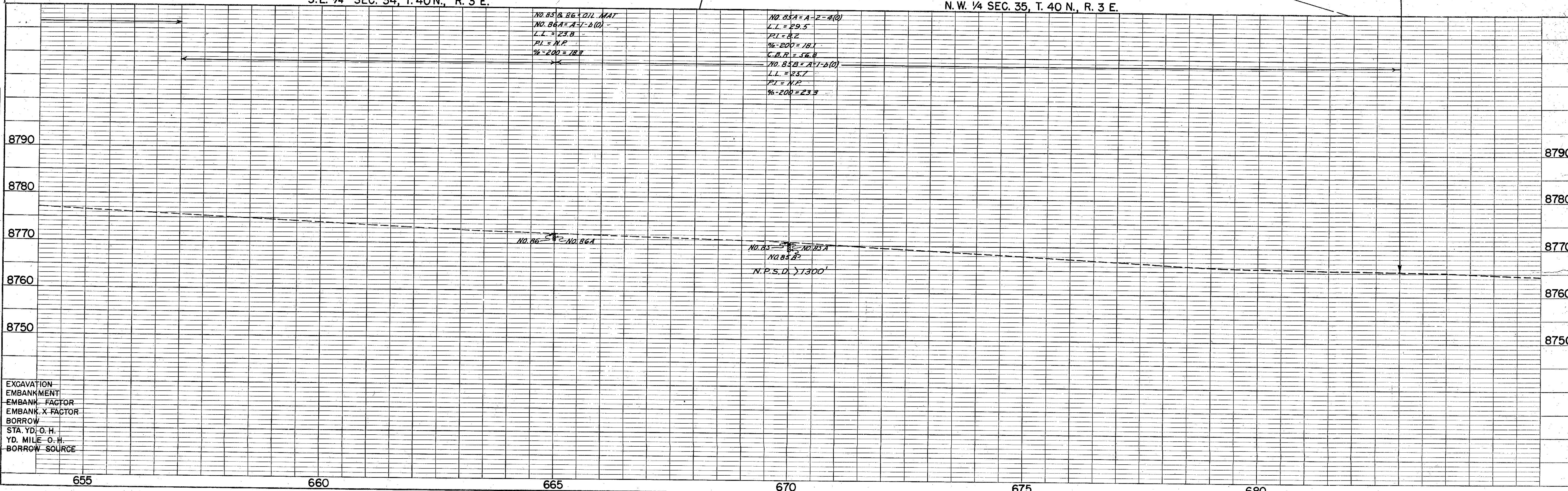
N.W. 1/4 SEC. 35, T. 40 N., R. 3 E.

NO. 83 & 86 1/2 L. MAY
NO. 86 1/2 L. - 1/2 L.
L.L. = 23.8
P.L. = N.P.
% - 200 = 18.7

NO. 83 A = A - 2 - 1/2 L.
L.L. = 29.5
P.L. = 8.2
% - 200 = 18.1
C.B.R. = 56.8
NO. 83 B = A - 1 - 1/2 L.
L.L. = 25.7
P.L. = N.P.
% - 200 = 23.3

NO. 86 1/2 L. - NO. 86 A

NO. 83 - 5 - NO. 83 A
NO. 83 B
N.P.S.D. > 1300'



EXCAVATION
EMBANKMENT
EMBANK. FACTOR
EMBANK. X FACTOR
BORROW
STA. YD. O.H.
YD. MILE O.H.
BORROW SOURCE

DATE	BY	SURVEYED	PLANNED
		NOTED	NOTED
		NOTED	NOTED
		NOTED	NOTED

DATE	BY	SURVEYED	PLANNED
		NOTED	NOTED
		NOTED	NOTED
		NOTED	NOTED

REPRODUCTION OF ORIGINAL DRAWING



COLORADO
Department of
Transportation

DOCUMENT SEPARATOR SHEET

REGION 5 – JUNE 2017 CONVERSION

To be placed at the beginning of each separator sheet.



r500001905

Description:

ROW Plans 11X17

Route # and Mile Points:

US 160

Originating Office:

ROW/Survey

File Name:

F 022-2(4)_ROW(.PDF)

Box Location:

30 of 38

INDEX OF SHEETS SHEETS

- 1 SKETCH MAP AND TITLE PAGE
- 2 TYPICAL SECTIONS AND GENERAL NOTES
- 3 SUMMARY OF APPROXIMATE QUANTITIES AND TABULATION OF LENGTH AND DESIGN DATA
- 4 SURFACING PLAN, BALLAST MATERIAL TABULATION, TIMBER GUARD POSTS AND GUARD FENCE
- 5 SKETCH MAP OF PIT LOCATIONS, BORROW TABULATION AND REMOVAL OF UNSUITABLE MATERIAL
- 6 LIST OF STRUCTURES
- 7 STANDARD MARKER POSTS M-7-B
- 8 STANDARD HEADWALLS AND APRONS FOR G.M.P. CULVERTS M-102-G
- 9 STANDARD TIMBER GUARD POSTS M-19-C
- 10 STANDARD METHODS FOR SUPERELEVATION & WIDENING OF CURVES M-1-B
- 11 STANDARD SIDE APPROACH ROADS, FLARING, CUT SLOPE TREATMENT & WIDENING AT BRIDGES & AT GREST OF GRADES M-2-DM
- 12 STANDARD ROADWAY CONSTRUCTION TRAFFIC SIGNS M-2-DS
- 13 STANDARD TYPES OF DITCHES AND CONSTRUCTION METHODS M-107-C
- 29 ALIGNMENT PLAN AND PROFILE
- 79 CROSS SECTIONS
- 80 SUMMARY OF EARTHWORK QUANTITIES
- 9A STANDARD WIRE FENCE WITH WOODEN POSTS M-24-H

COLORADO STATE HIGHWAY DEPARTMENT PLAN AND PROFILE OF PROPOSED FEDERAL AID PROJECT NO. F 022-2(4) STATE HIGHWAY NO. 10 RIO GRANDE & MINERAL COUNTIES

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F 022-2(4)	1	

CONVENTIONAL SIGNS

CENTER LINE _____ TITLE SHEET
RIGHT OF WAY LINE _____
COUNTY LINE _____
TOWNSHIP OR RANGE LINE T 6 S, R 89 W
SECTION LINE T 7 S, R 89 W
QUARTER SECTION _____
RAILROAD _____
PRESENT ROAD ON PLAN 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 45,652.3 FT. = 8.646 MILES
NET LENGTH OF PROJECT 45,415.2 FT. = 8.601 MILES



NOTE

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

R. B. Dudley Resident Engineer, Alamosa, Colo.
J. E. Casey Construction Engineer, Durango, Colo.

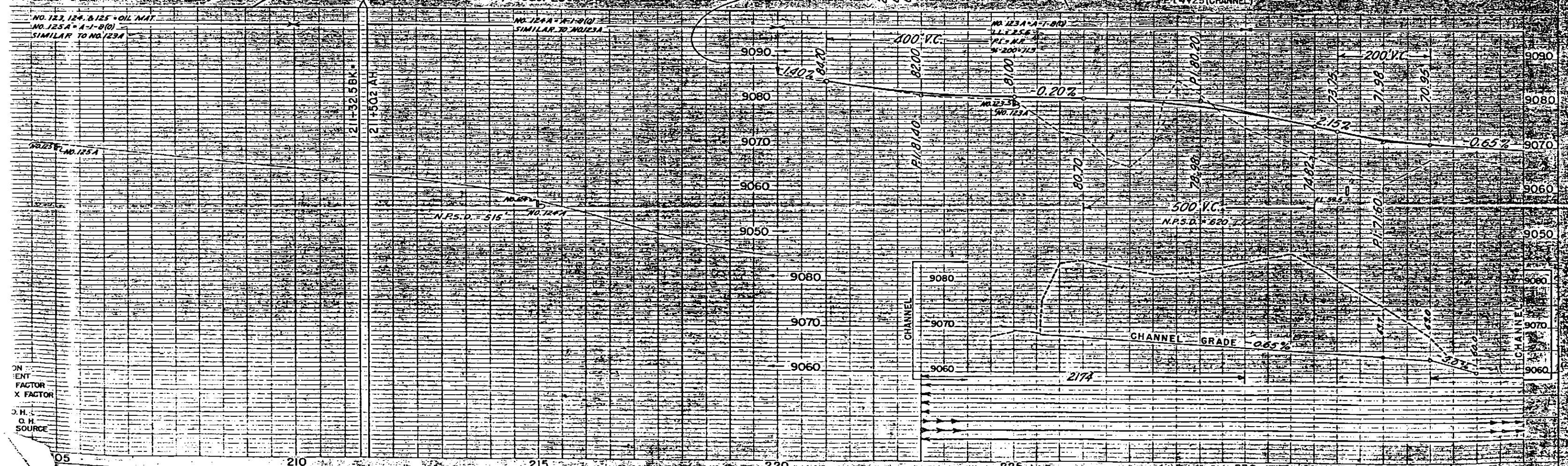
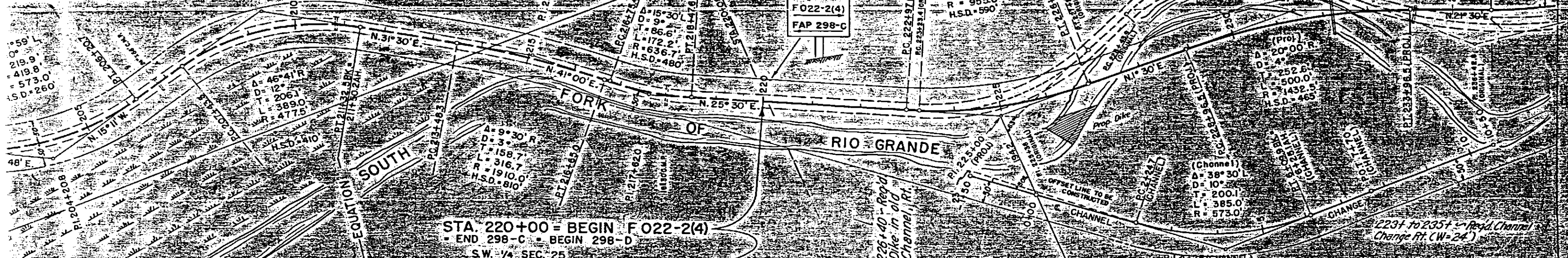
STA. 220+00 =
BEGIN F 022-2(4) =
END FAP 298-C =
BEGIN FAP 298-D

APPROVED	
STATE HIGHWAY DEPARTMENT STATE OF COLORADO	
RECOMMENDED FOR APPROVAL	
DATE	6-21-51
ASSISTANT ENGINEER	DATE
APPROVED	RECOMMENDED FOR APPROVAL
DATE	6-21-51
STATE HIGHWAY ENGINEER	DATE

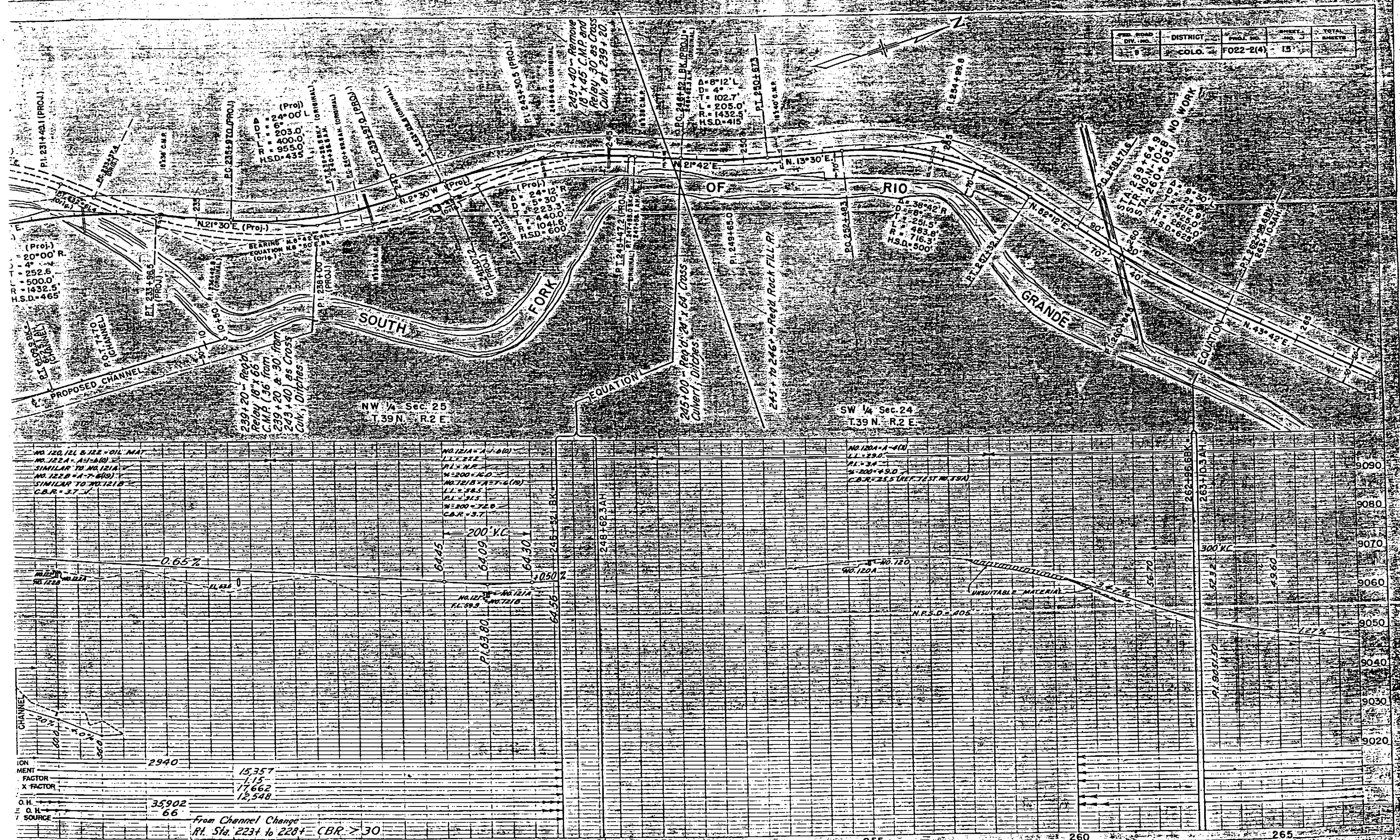
DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS	
RECOMMENDED FOR APPROVAL	
DISTRICT ENGINEER	
DATE	
APPROVED	
DATE	
DIVISION ENGINEER BUREAU OF PUBLIC ROADS	

inment and Grades as shown are subject to modification
ing construction after approval by the Denver Office.

move & rebuild guard fence & Guard posts
tabulated on Sheet No. 4.



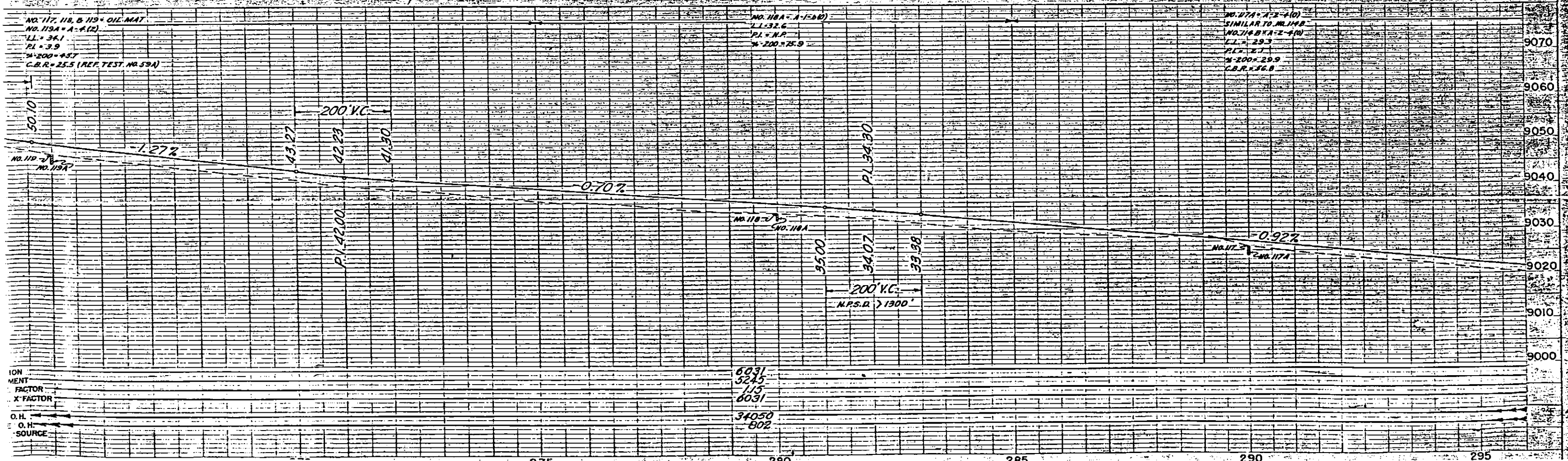
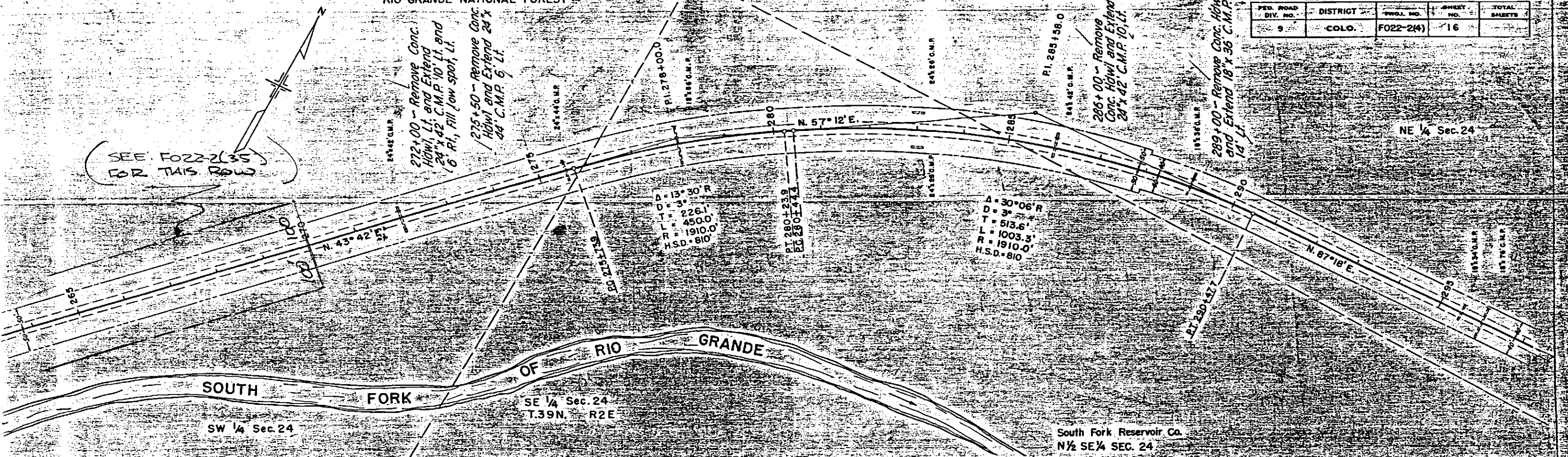
FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-2(4)	13	



RIO GRANDE NATIONAL FOREST

RIO GRANDE NATIONAL FOREST

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-2(4)	16	



ION
MENT
FACTOR
X FACTOR
O.H.
O.H.
SOURCE

South Fork Reservoir Co.
SE 1/4 NE 1/4 Sec. 24
T 39 N., R. 2 E.

RIO GRANDE NATIONAL FOREST

NW 1/4 Sec. 19
T 39 N., R. 3 E.

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-244	17	

Mineral
County

Rio Grande
County

$\Delta = 11^\circ 40' L$
 $D = 3'$
 $T = 195.1'$
 $L = 388.9'$
 $R = 1910.0'$
 $H.S.D. = 480'$

$\Delta = 19^\circ 00' L$
 $D = 4'$
 $T = 239.7'$
 $L = 475.0'$
 $R = 1432.5'$
 $H.S.D. = 385'$

SOUTH

FORK

OF

RIO

GRANDE

SW 1/4 Sec. 19

SE 1/4 Sec. 19

NO. 115 & 116 - OIL MAT.
NO. 116A - A-1-B(1)
SIMILAR TO NO. 114A
NO. 114A - A-1-B(1)
LT. = 26.3
PI = N.P.
W-200 = 13.3
NO. 116B - A-2-A(1)
SIMILAR TO NO. 114B
NO. 114B - A-2-A(1)
LT. = 29.3
PI = C-21
W-200 = 29.9
C.B.R. = 56.8

200 V.C.

-0.92%

-0.16%

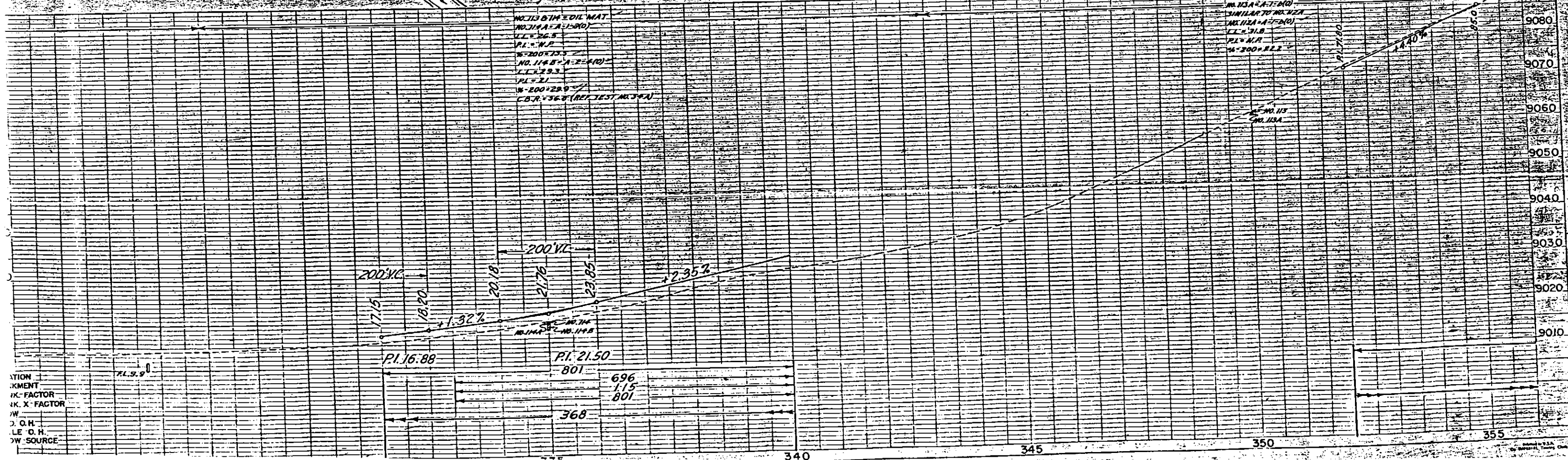
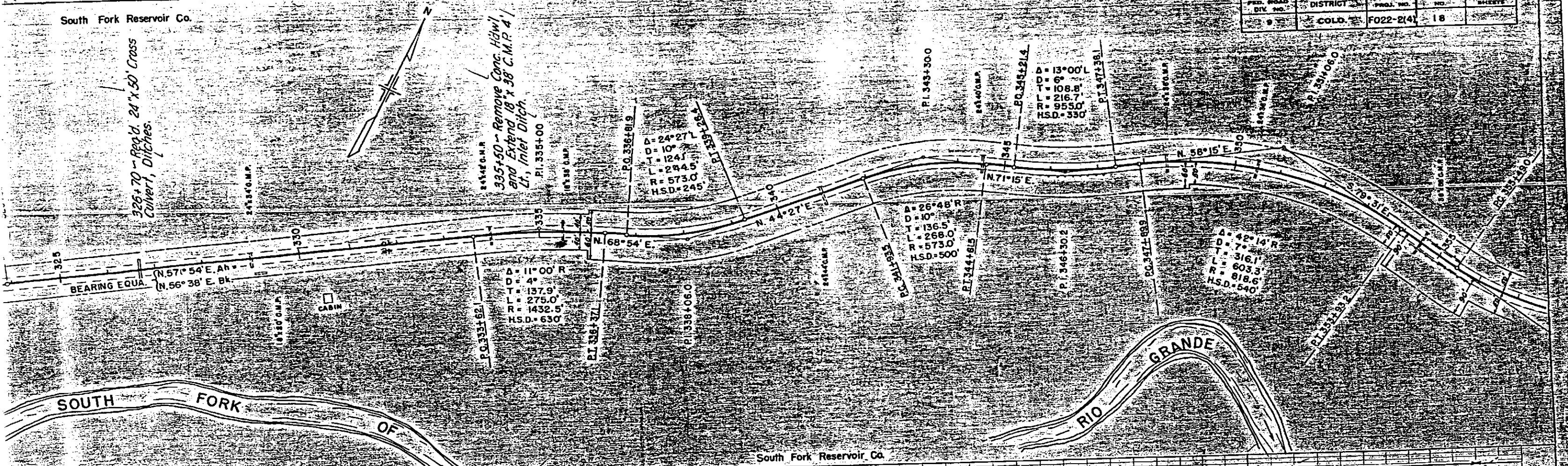
NO. 115A - A-1-B(1)
SIMILAR TO NO. 114A

NO. 115
NO. 115A

ION
MENT
FACTOR
X FACTOR
O.H.
E.O.H.
V. SOURCE

South Fork Reservoir Co.

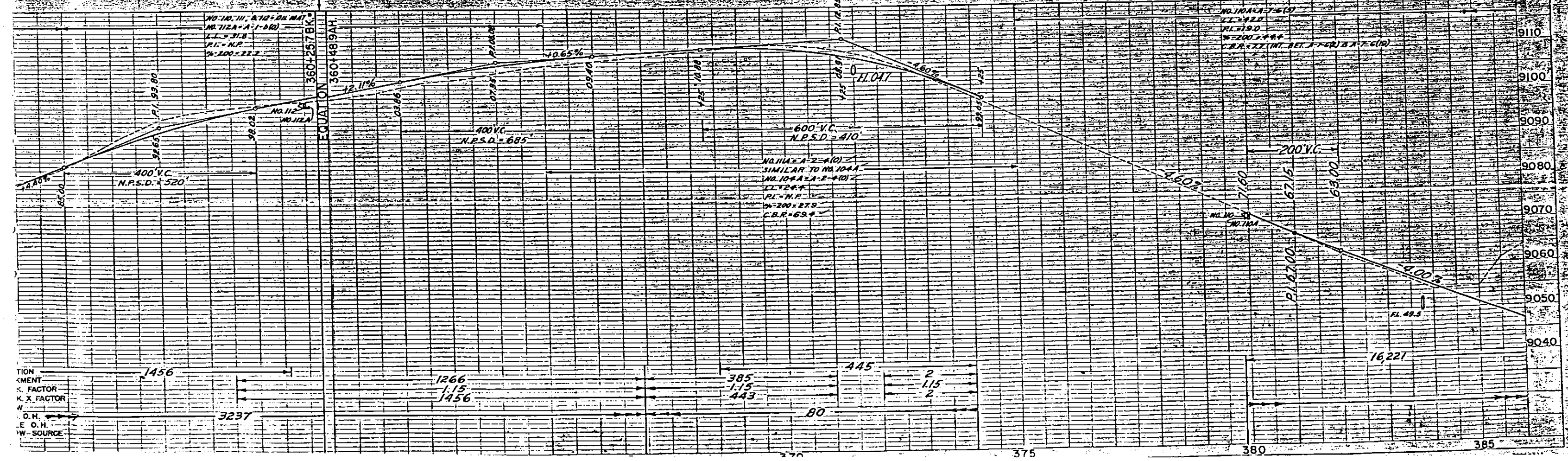
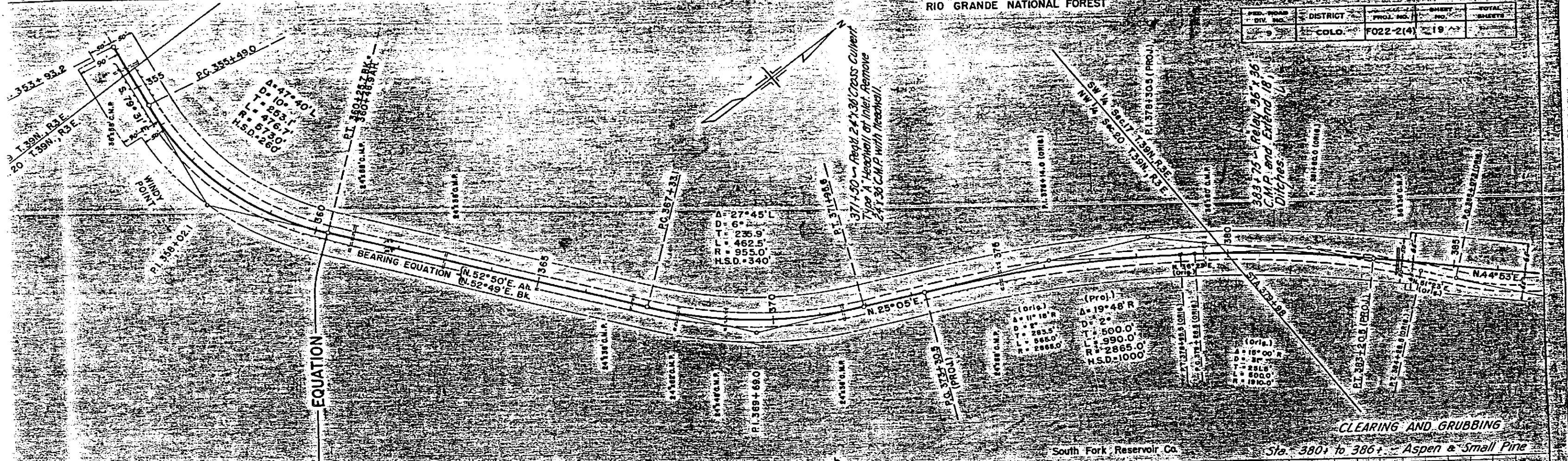
FILE NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	C.O.D.	F022-2(4)	18	

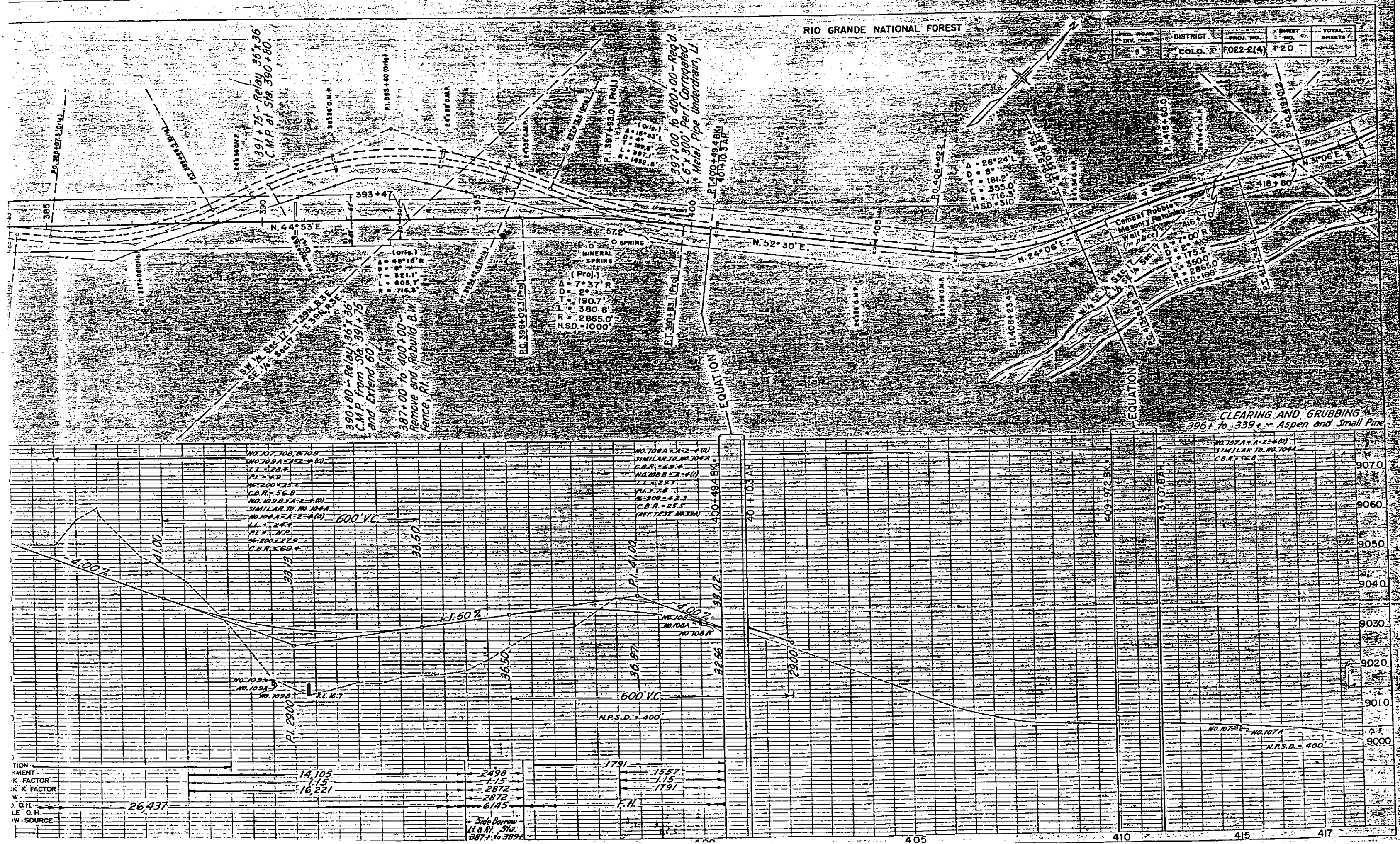


ATION
KMENT
K. X. FACTOR
K. X. FACTOR
W
O.H.
LE O.H.
W. SOURCE

RIO GRANDE NATIONAL FOREST

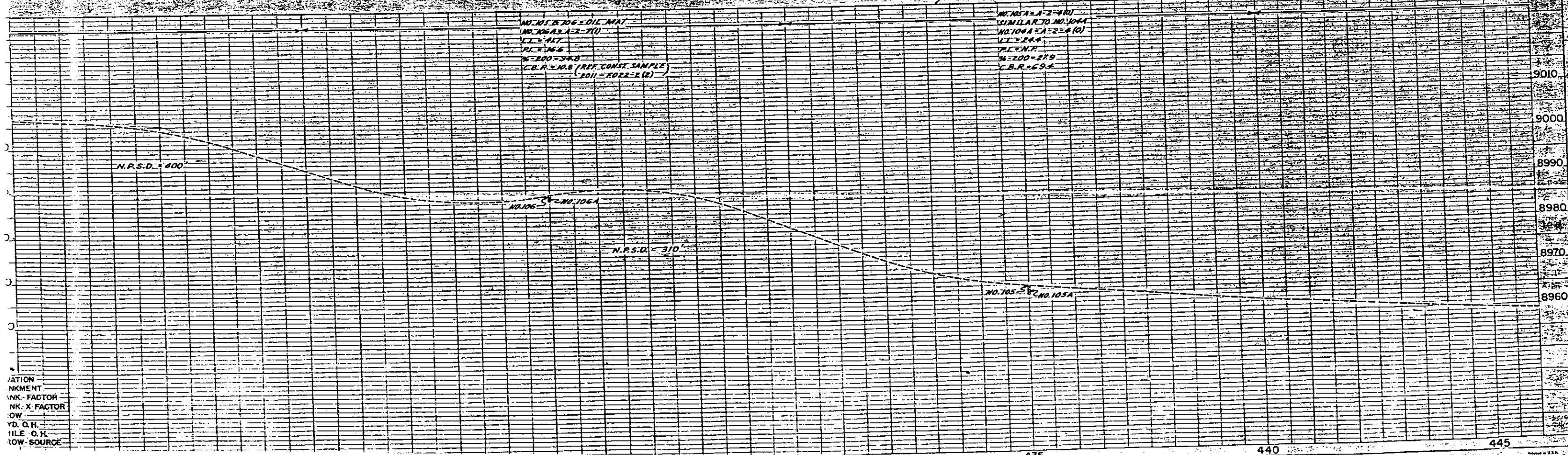
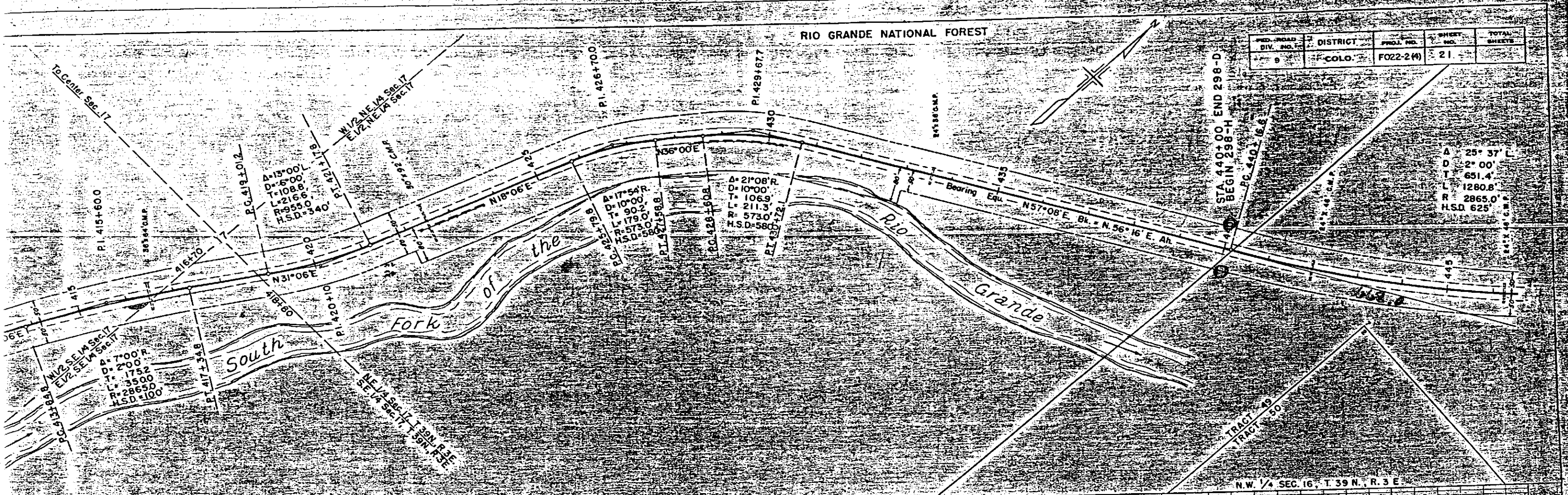
DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
COLO.	F022-2(4)	19	





RIO GRANDE NATIONAL FOREST

DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-2(4)	21	



ATION
NKMENT
NK FACTOR
NK X FACTOR
OW
YD. O.H.
FILE O.H.
ROW SOURCE

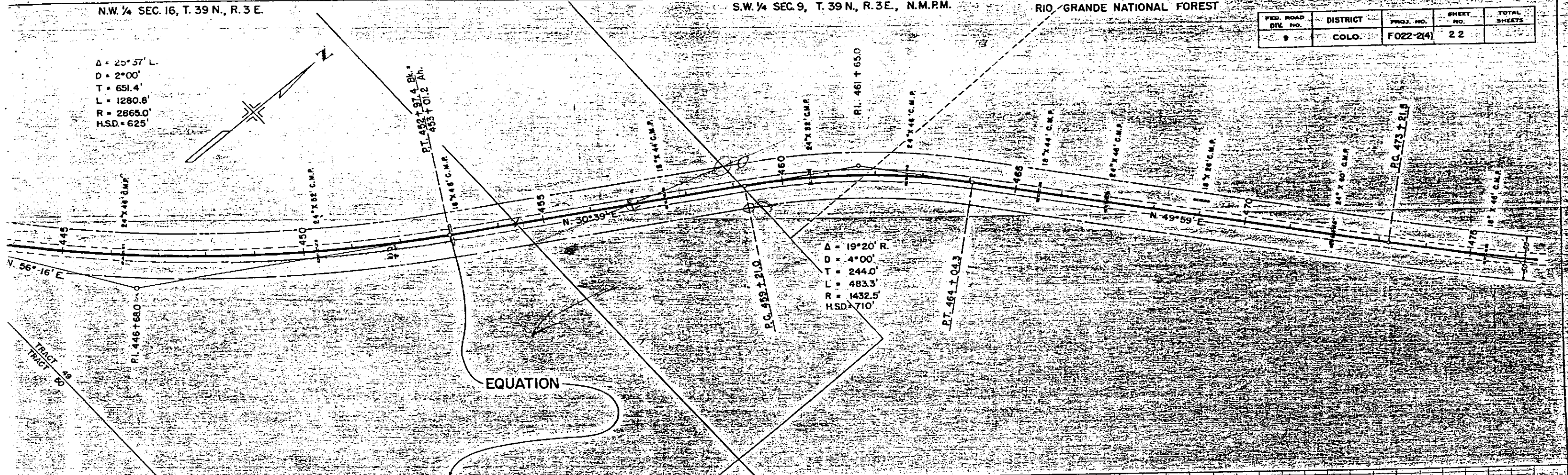
N.W. 1/4 SEC. 16, T. 39 N., R. 3 E.

S.W. 1/4 SEC. 9, T. 39 N., R. 3 E., N.M.P.M.

RIO GRANDE NATIONAL FOREST

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-2(4)	22	

$\Delta = 25^{\circ}37' L$
 $D = 2^{\circ}00'$
 $T = 651.4'$
 $L = 1280.8'$
 $R = 2865.0'$
 $HSD = 625'$



NO. 102, 103, B.M. 1 - OIL MAT
 NO. 104A - A-2-4(10)
 L.L. = 24.4
 P.I. = M.P.
 W-200 = 27.8
 C.B.R. = 69.4 (REF. TEST NO. 41A)

NO. 103A - A-6(5)
 SIMILAR TO NO. 102A
 C.B.R. = 8.6

NO. 102A - A-6(5)
 L.L. = 36.8
 P.I. = 15.2
 W-200 = 51.5
 C.B.R. = 3.6 (INT. TEST NO. 52B BCSA)
 NO. 102B - A-4(2)
 L.L. = 30.2
 P.I. = 8.2
 W-200 = 52.2
 C.B.R. = 25.5 (REF. TEST NO. 59A)

NO. 104 - 58
 NO. 104A

NO. 103
 NO. 103A



TION
 CEMENT
 K. FACTOR
 K. X FACTOR
 W
 O.H.
 E O.H.
 W SOURCE

455

460

465

470

475

S.W. 1/4 SEC. 9, T. 39 N., R. 3 E., N.M.P.M.

RIO GRANDE NATIONAL FOREST

N.E. 1/4 SEC. 9, T. 39 N., R. 3 E., N.M.P.M.

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-2(4)	23	

$\Delta = 10^{\circ}24' L$
 $D = 1^{\circ}00'$
 $T = 521.5'$
 $L = 1040.0'$
 $R = 5730.0'$
 $H.S.D. = 880'$

$\Delta = 39^{\circ}12' L$
 $D = 5^{\circ}00'$
 $T = 408.1'$
 $L = 784.0'$
 $R = 1146.0'$
 $H.S.D. = 385'$

$\Delta = 15^{\circ}18' R$
 $D = 3^{\circ}00'$
 $T = 256.5'$
 $L = 510.0'$
 $R = 1910.0'$
 $H.S.D. = 810'$

S.E. 1/4 SEC. 9, T. 39 N., R. 3 E., N.M.P.M.

NO. 98, 99, 100, & 101 - OIL MAT.
NO. 101A - A-1(1)
SIMILAR TO NO. 100B
C.B.R. = 25.5

NO. 100A - A-2-1(1)
L.L. = 37.4
P.I. = 30.3
W-200 = 33.2
C.B.R. = 56.8 (REF. TEST NO. 39A)
NO. 100B - A-1(1)
L.L. = 32.7
P.I. = 7.8
W-200 = 40.8
C.B.R. = 85.5 (REF. TEST NO. 39A)

NO. 99A - A-2-1(1)
SIMILAR TO NO. 98A
C.B.R. = 69.4

NO. 98A - A-2-1(1)
L.L. = 30.7
P.I. = 11.4
W-200 = 32.9
C.B.R. = 69.4 (REF. TEST NO. 44)

NO. 100 - NO. 100A
C.B.R. = 100B

NO. 99 - NO. 99A

NO. 98 - NO. 98A

N.P.S.D. = 810'

N.P.S.D. = 540'

UNSUITABLE MATERIAL

TION
KMENT
K. FACTOR
K.X FACTOR
W
O.H.
LE O.H.
W SOURCE

RIO GRANDE NATIONAL FOREST

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-2(4)	24	

TRACT NO. 42

$\Delta = 24^{\circ}25' L$
 $D = 5^{\circ}00'$
 $T = 247.9'$
 $L = 488.3'$
 $R = 1146.0'$
 $HSD = 345'$

$\Delta = 5^{\circ}12' R$
 $D = 1^{\circ}00'$
 $T = 260.2'$
 $L = 520.0'$
 $R = 5730.0'$
 $H.S.D. 1300'$

P.I. 536 + 10.8

$\Delta = 26^{\circ}00'$
 $D = 4^{\circ}00'$
 $T = 330.7'$
 $L = 650.0'$
 $R = 1432.5'$
 $H.S.D. = 710'$

100

TRACT NO. 45

N.W. 1/4 SEC. 10, T.39 N., R.3 E., N.M.P.M.

S.W. 1/4 SEC. 3, T. 39 N., R. 3 E.

NO. 96 & 97 - DIL. MAT.
NO. 97A - SURFACING
NO. 87B - A-2-4(0)
SIMILAR TO NO. 95B
NO. 95B - A-2-4(0)
P.T. = 31.7
P.T. = 1.9
% E.O. = 32.5
G.B.R. = 69.4

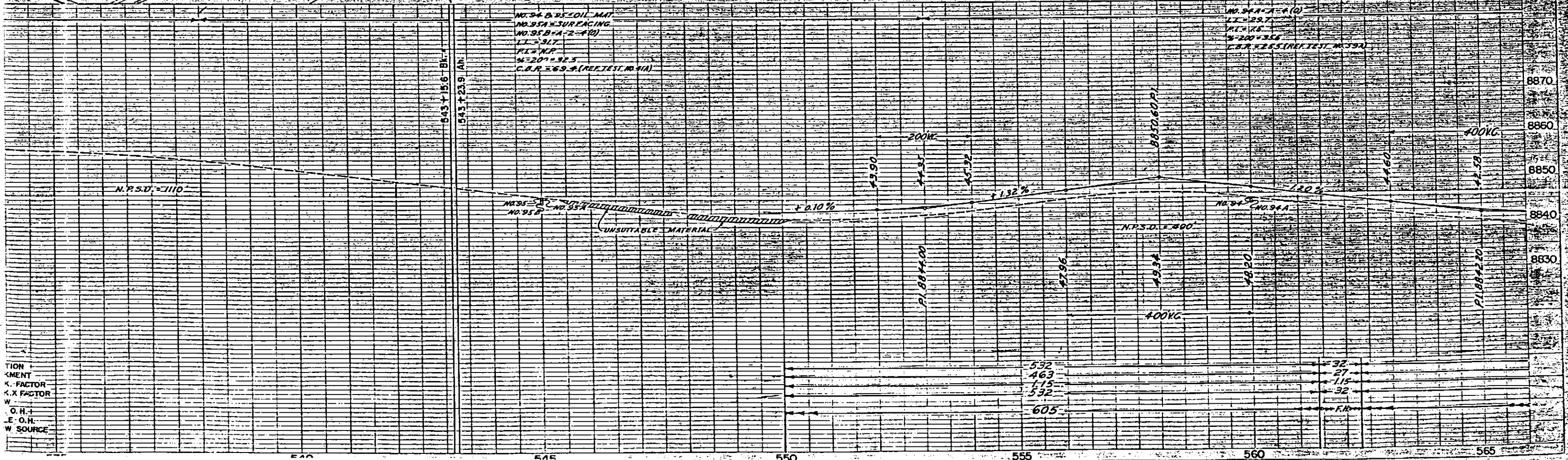
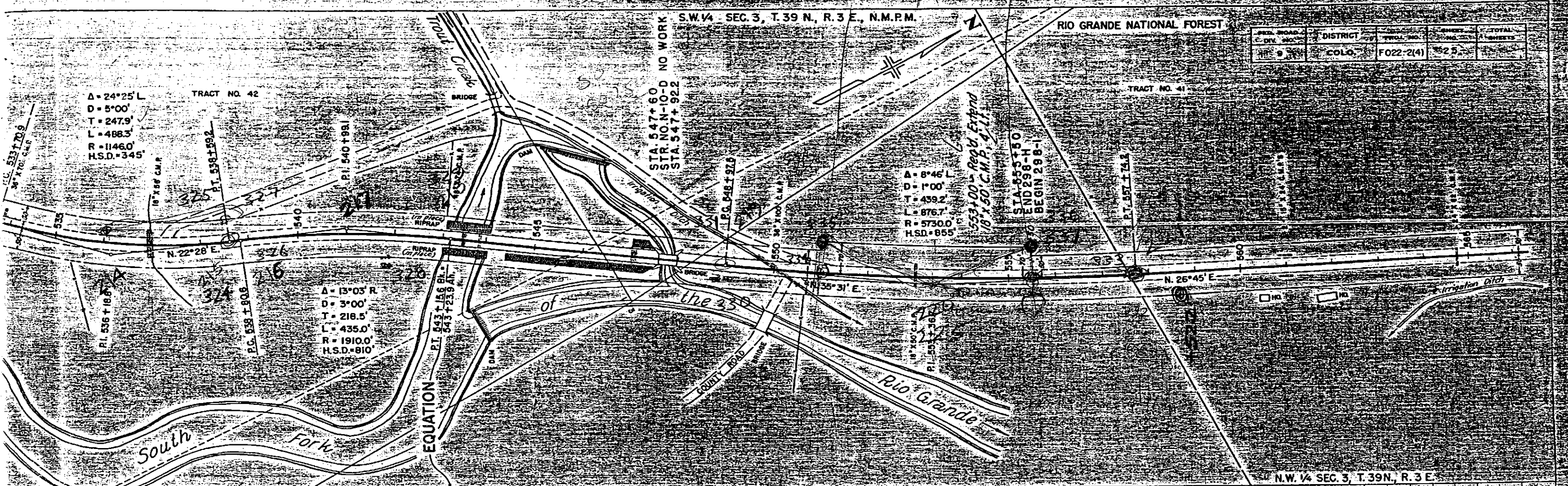
NO 97A
NO 97B
NO 97C

N.P.S.D. # 685

N.P.S.D. # 655

NO. 96 - NO. 96A

ATION
JKMENT
NK. FACTOR
NK. X FACTOR
OW
D. O. H.
ILE O. H.
OW SOURCE

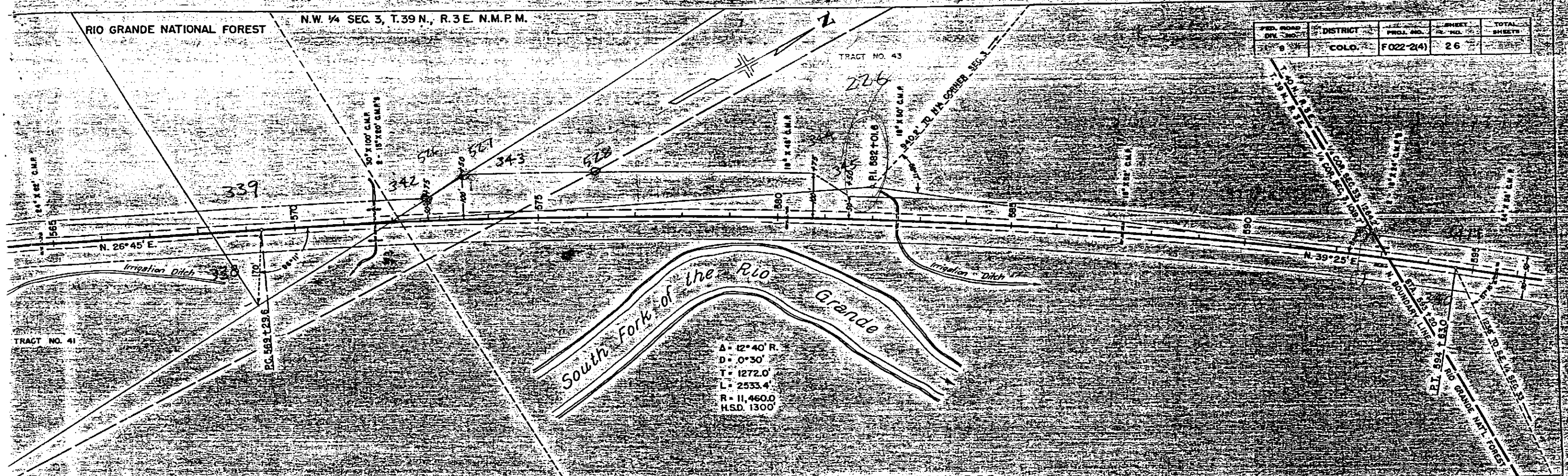


TION
MENT
K. FACTOR
K. FACTOR
W
O.H.
E.O.H.
W SOURCE

RIO GRANDE NATIONAL FOREST

N.W. 1/4 SEC 3, T.39 N., R.3 E. N.M.P.M.

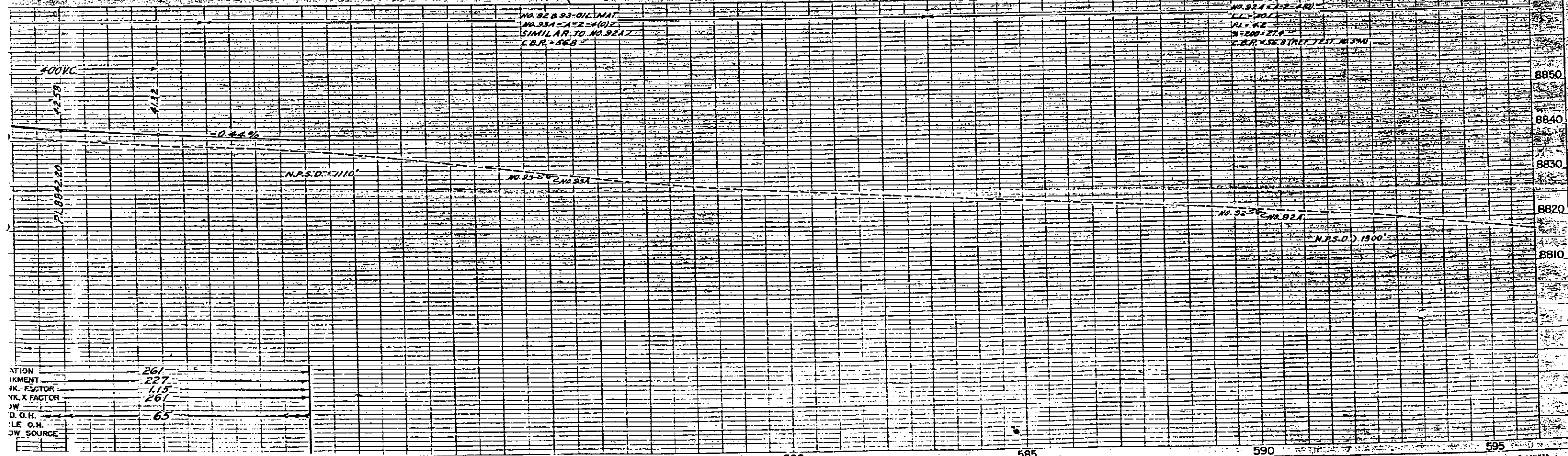
FED. ROAD DIST. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
8	COLO.	F022-2(4)	26	



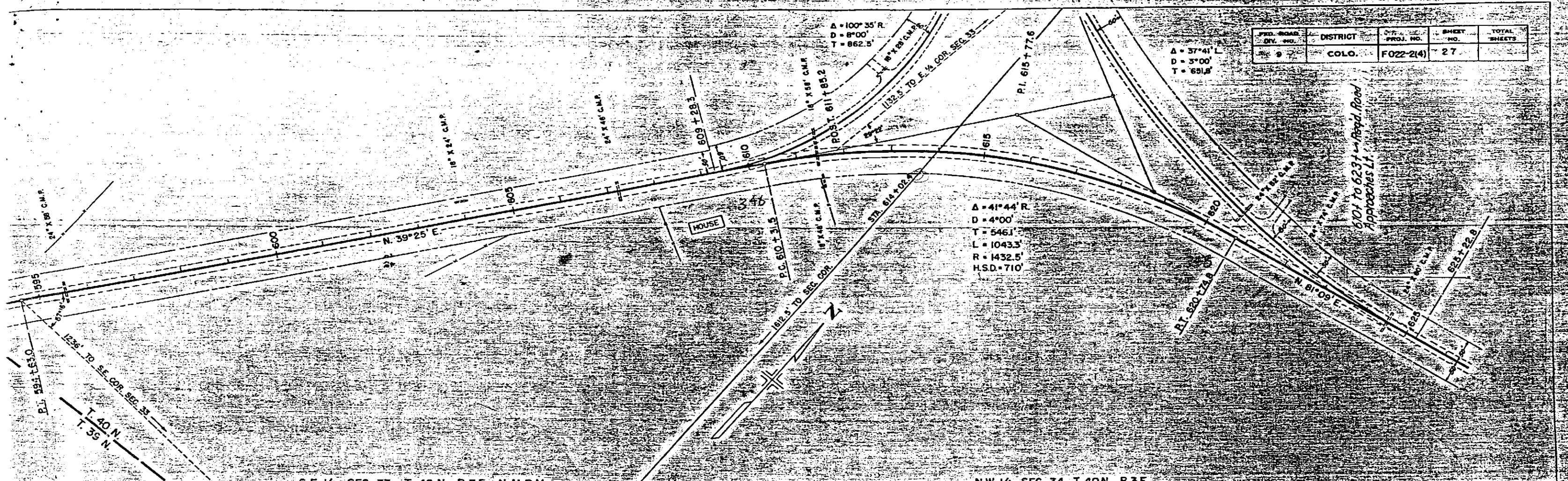
Δ = 12° 40' R.
D = 0° 30'
T = 1272.0
L = 2533.4
R = 11,460.0
HSD 1300'

NO. 92 & 93 OIL NAT
NO. 93A-A-2-4(0)Z
SIMILAR TO NO. 92A
C.B.R. = 568'

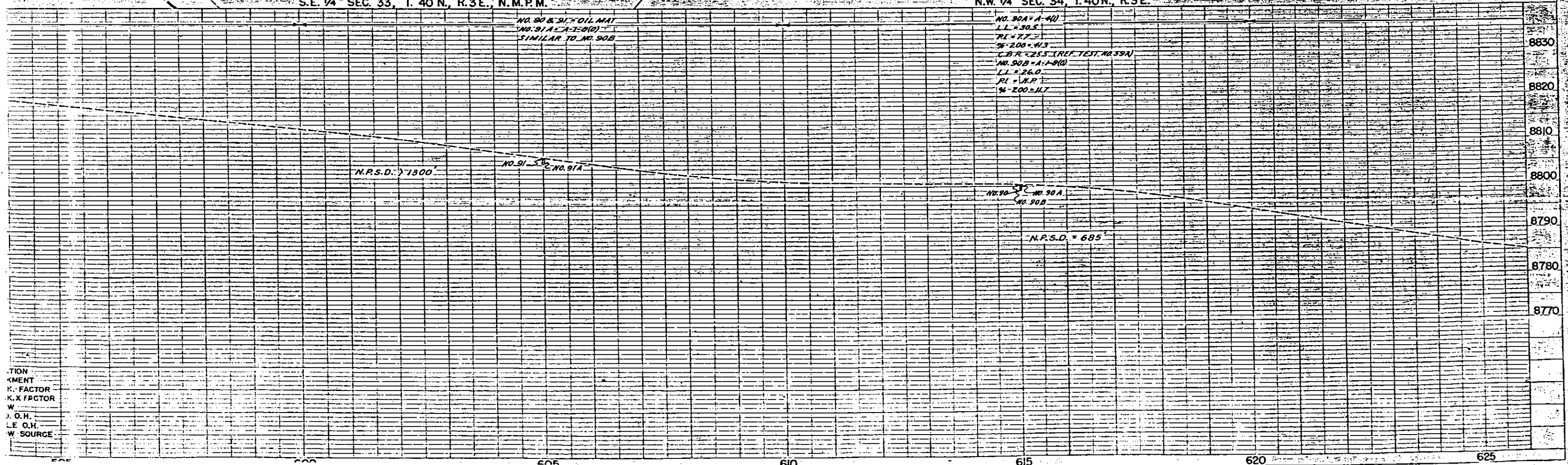
NO. 92A-A-2-4(0)Z
C.B.R. = 568' (REF. TEST. M. 340)



ATION	261
IKMENT	227
IK. FACTOR	115
IK. X FACTOR	261
JW	
D. O.H.	65
LE O.H.	
JW SOURCE	

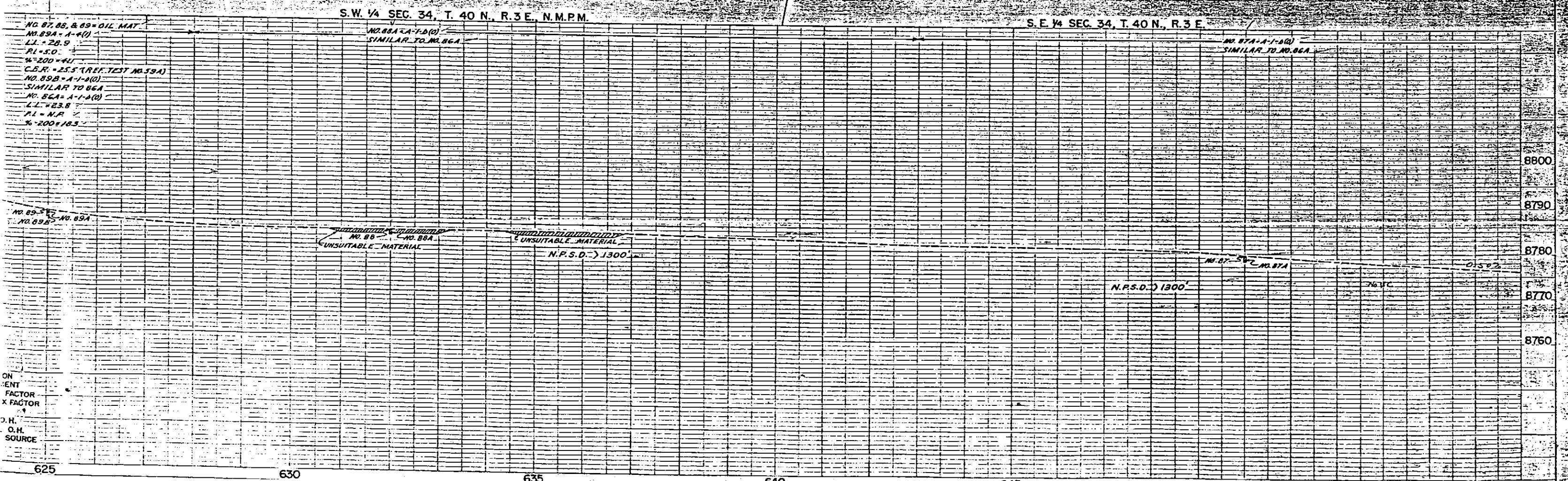
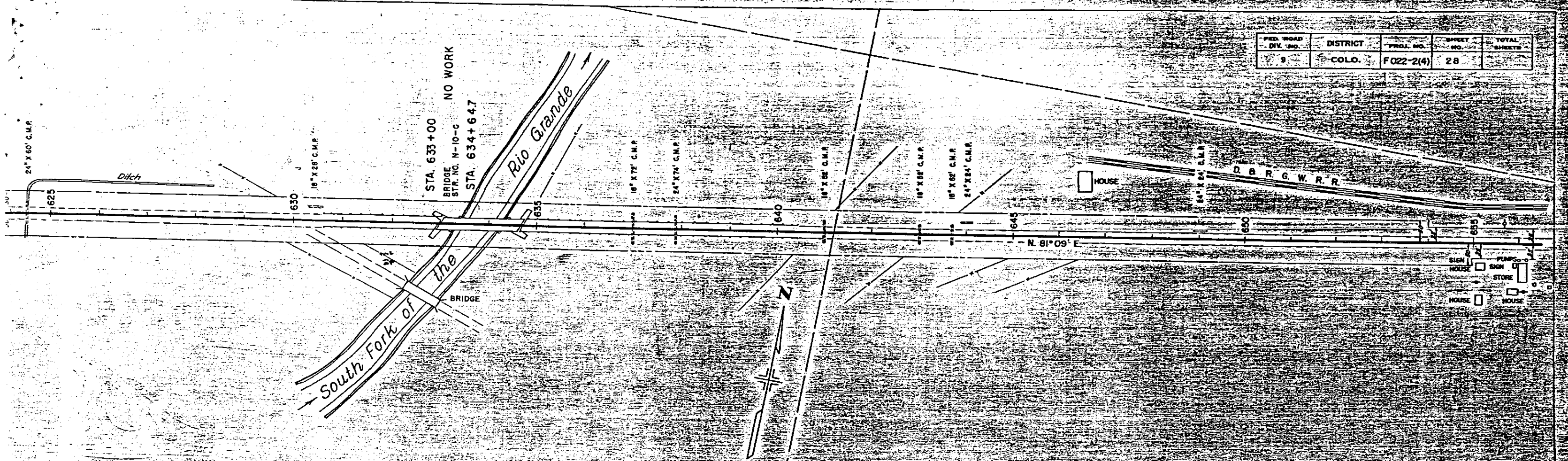


PROJ. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-2(4)	27	



TION
 KMENT
 K. FACTOR
 K. X FACTOR
 W
 J. O. H.
 L. E. O. H.
 W. SOURCE

FED. ROAD DIV. NO.	DISTRICT	TRIAL NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F022-2(4)	28	



N.W. ¼ SEC. 35, T. 40 N., R. 3 E.

683400 Project Marker
(State Forces)

