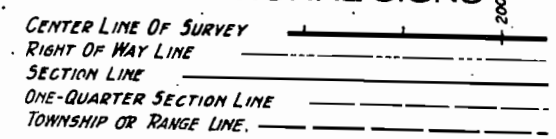


FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F 005-3(6)	1	

Added Bridge JRW 1/15/50
REV. 8-25-50 E.A.R. Index

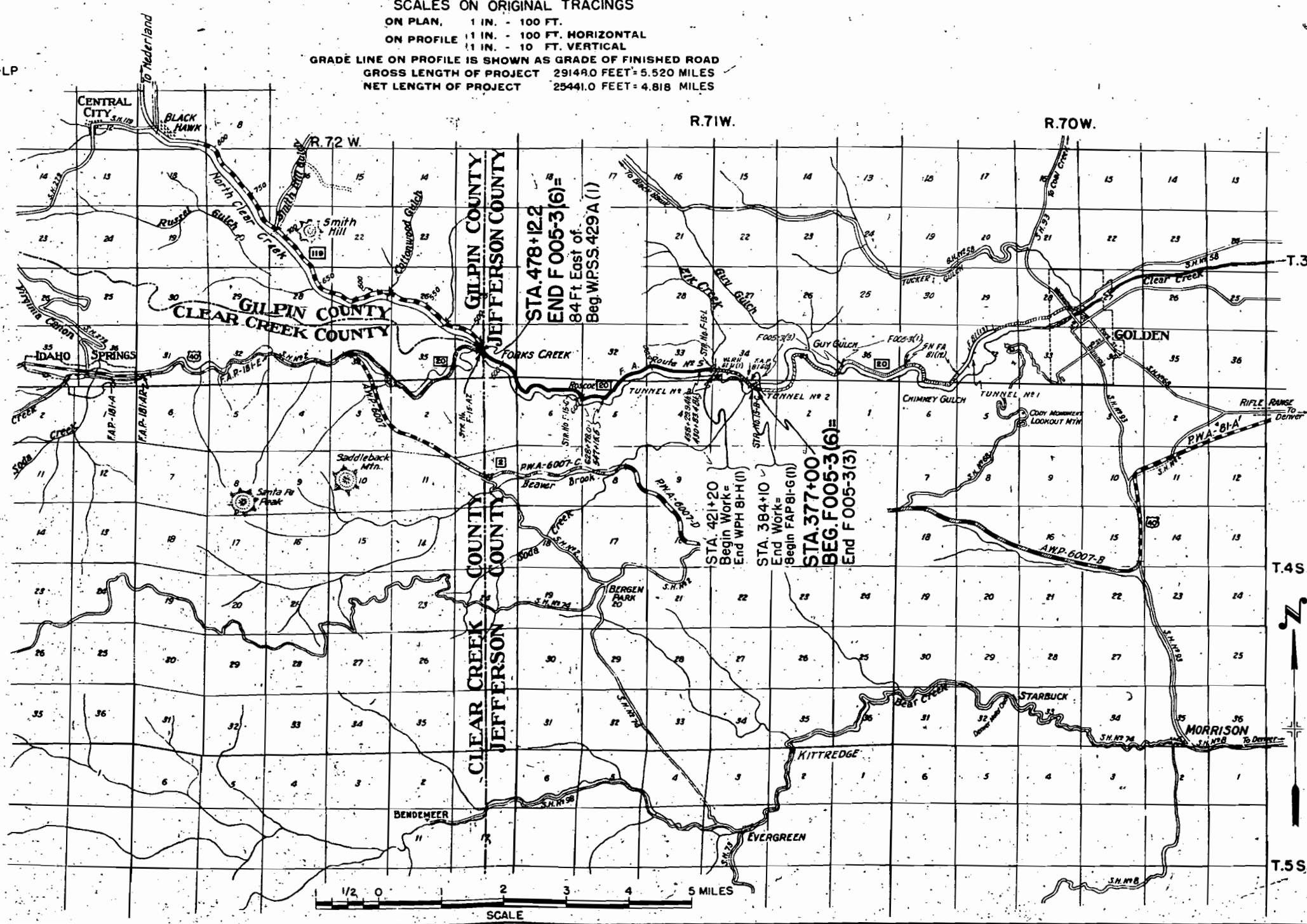
COLORADO STATE HIGHWAY DEPARTMENT PLAN AND PROFILE OF PROPOSED FEDERAL AID PROJ. NO. F 005-3(6) STATE HIGHWAY NO. 20 JEFFERSON, GILPIN AND CLEAR CREEK COUNTIES

CONVENTIONAL SIGNS



- ### INDEX OF SHEETS
- HEET NO. 1 SKETCH MAP AND TITLE PAGE.
- ✓ 2 TYPICAL SECTIONS AND GENERAL NOTES.
 - ✓ 3 SUMMARY OF APPROXIMATE QUANTITIES AND TABULATION OF LENGTH AND DESIGN DATA.
 - ✓ 4-6 LIST OF STRUCTURES.
 - ✓ 7-13 DETAILS OF BRIDGE STA. 382+.
 - ✓ 14-18 DETAILS OF BRIDGE STA. 423+.
 - ✓ 19 CONCRETE BOX CULVERT MODIFICATION OF STANDARD M-104-F
 - 19a STANDARD WIRE FENCES (TREATED WOODEN POSTS) M-24-G
 - ✓ 20 STANDARD LETTERS AND FIGURES FOR YEAR NUMBERS AND STRUCTURE NUMBERS.
 - ✓ 21 STANDARD MARKER POSTS M-10-B
 - ✓ 22 STANDARD HEADWALLS AND APRONS FOR C.M.P. CULVERTS. M-7-B
 - ✓ 23 STANDARD TYPE G HEADWALLS FOR LARGE C.M.P. CULVERTS M-102-G
 - ✓ 24 STANDARD CONCRETE BOX CULVERT M-102-G-LP
 - ✓ 25 STANDARD DOUBLE CONCRETE BOX CULVERT M-104-F
 - ✓ 26 STANDARD METHODS FOR SUPERELEVATION AND WIDENING OF CURVES. M-110-D
 - ✓ 27 STANDARD SIDE APPROACH ROADS, FLARING, CUT SLOPE TREATMENT AND WIDENING AT BRIDGES AND AT CREST OF GRADES. M-1-B
 - ✓ 28 STANDARD ROADWAY CONSTRUCTION TRAFFIC SIGNS M-2-DM
 - ✓ 29 CONTOUR INTERCEPTING AND DRAINAGE DITCHES M-2-DS
 - ✓ 30 LAYOUT AND DETAILS OF INTERSECTION AT FORKS CREEK. M-107-B
 - ✓ 31-42 PLAN AND PROFILE SHEETS.
 - ✓ 43-356 CROSS SECTIONS
 - 357. SUMMARY OF EARTHWORK QUANTITIES.
 - 18a-18g DETAILS OF BRIDGE, STA. 489+
 - 17a-17b DETAILS OF BRIDGE, STA. 423+

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 29149.0 FEET = 5.520 MILES
NET LENGTH OF PROJECT 25441.0 FEET = 4.818 MILES



RECOMMENDED FOR APPROVAL
Jas. S. Snel
ASSISTANT ENGINEER DATE 9-29-49

APPROVED
Mark H. Watson
STATE HIGHWAY ENGINEER DATE 9-29-49

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

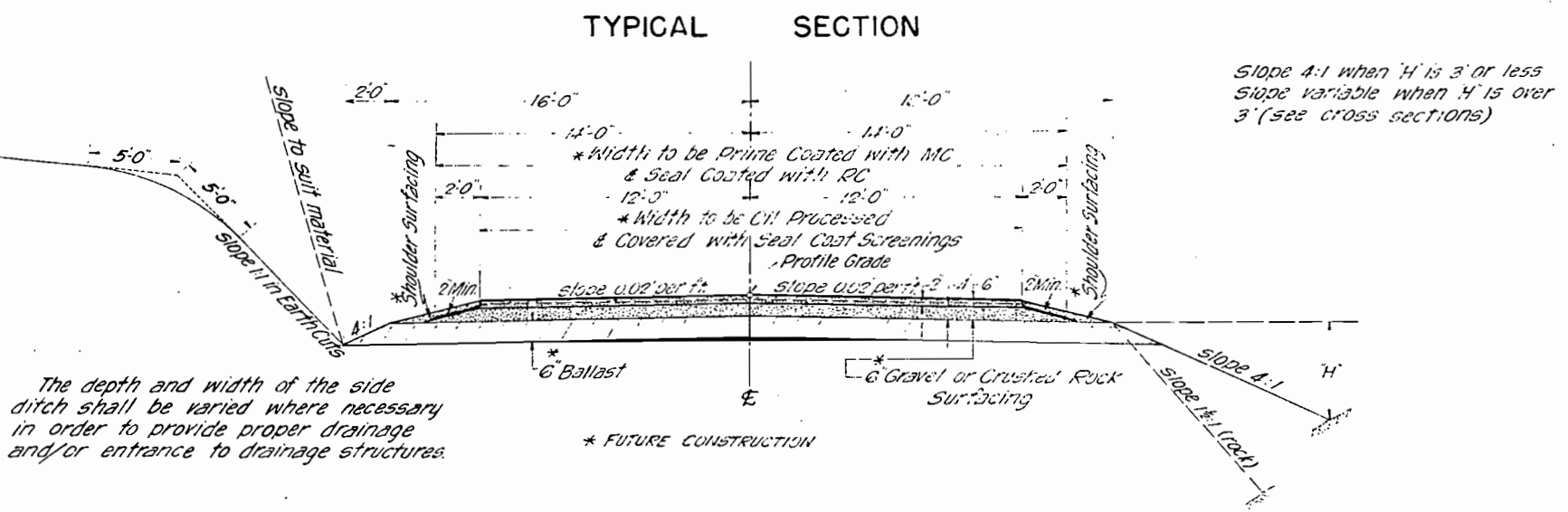
APPROVED
DIVISION ENGINEER DATE
BUREAU OF PUBLIC ROADS
DEPARTMENT OF COMMERCE

NOTE
It is recommended that bidders on this Project go over the plan details with one of the following field representatives of this Department:

F.W. Miller, Construction Engineer, Denver, Colorado
W.A. Gray, Resident Engineer, Idaho Springs, Colorado

TYPICAL CROSS SECTION OF IMPROVEMENT

NOTE:
See Standard M-2-DM for details of cut slope treatment, flaring and widening for guard fence and/or guard posts.



The depth and width of the side ditch shall be varied where necessary in order to provide proper drainage and/or entrance to drainage structures.

GENERAL NOTES

This Project is to be constructed in conformity with Standard Specifications of the Colorado State Highway Department adopted January 1, 1948.

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

All roadway excavation required to construct this project is to be obtained and used as indicated on the plans. Quantities involved beyond the limits of the ditches shown on the Typical Cross Section, either noted as "Borrow" on the Plans or "Embankment" in the List of Structures, are to be classified and paid for as "Unclassified Excavation". These quantities are to be staked part of the original excavation at locations indicated on the Plans. Any slope stakes beyond limits of the Typical Section as shown, are subject to change by the Engineer to fit conditions actually met in construction.

Except as otherwise noted on the plans, payment overhaul will be based on measurement along centerline of the project.

The entire Project shall be cleared in conformity with the requirements of the Standard Specifications except that such trees or shrubs as the Engineer may designate, shall be left in place and protected from damage during construction operations.

Approximate location and quantities involved in construction of intercepting ditches are indicated on summary of earthwork quantities sheet.

All corrugated Metal Pipe Cross Culverts shall be laid without headwalls unless otherwise noted on the plans.

Culverts projecting from embankments shall be covered with approximately 6 inches of embankment material in such a manner that a minimum of pipe shall be exposed in the completed work. This shall be accomplished by warping embankment slopes around and adjacent to the culvert.

All curves are to be superelevated and widened as provided by the Standard Superelevation sheet included with the plans, except as otherwise noted on plans.

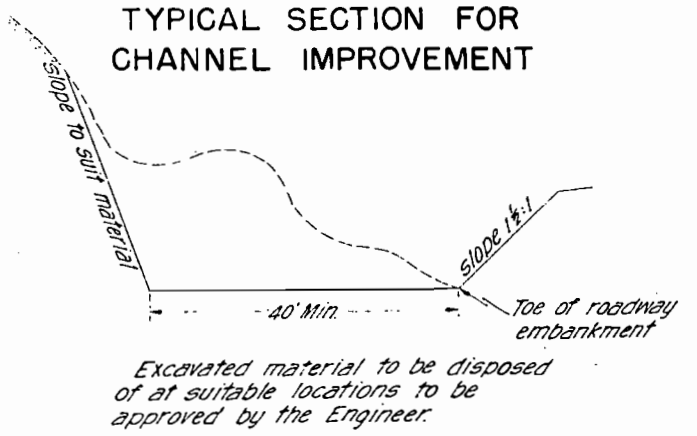
Curves on this project over 6 degrees shall be provided with the superelevation shown on the Standard Superelevation sheet for a 6 degree curve.

If excavation operations develop material which will stand on slopes steeper than slope stake lines, the Department reserves the right to change cut slopes during the progress of such excavations.

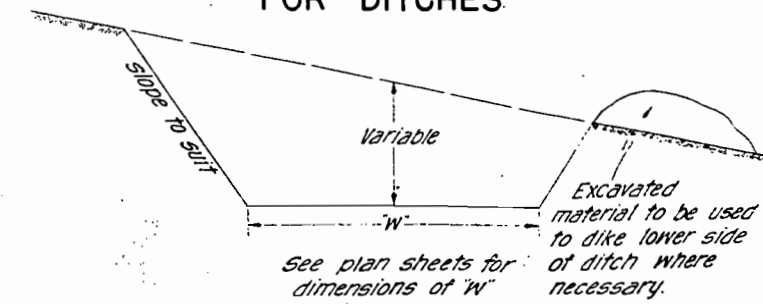
All concrete used on this Project shall be "Air Entrained Concrete".

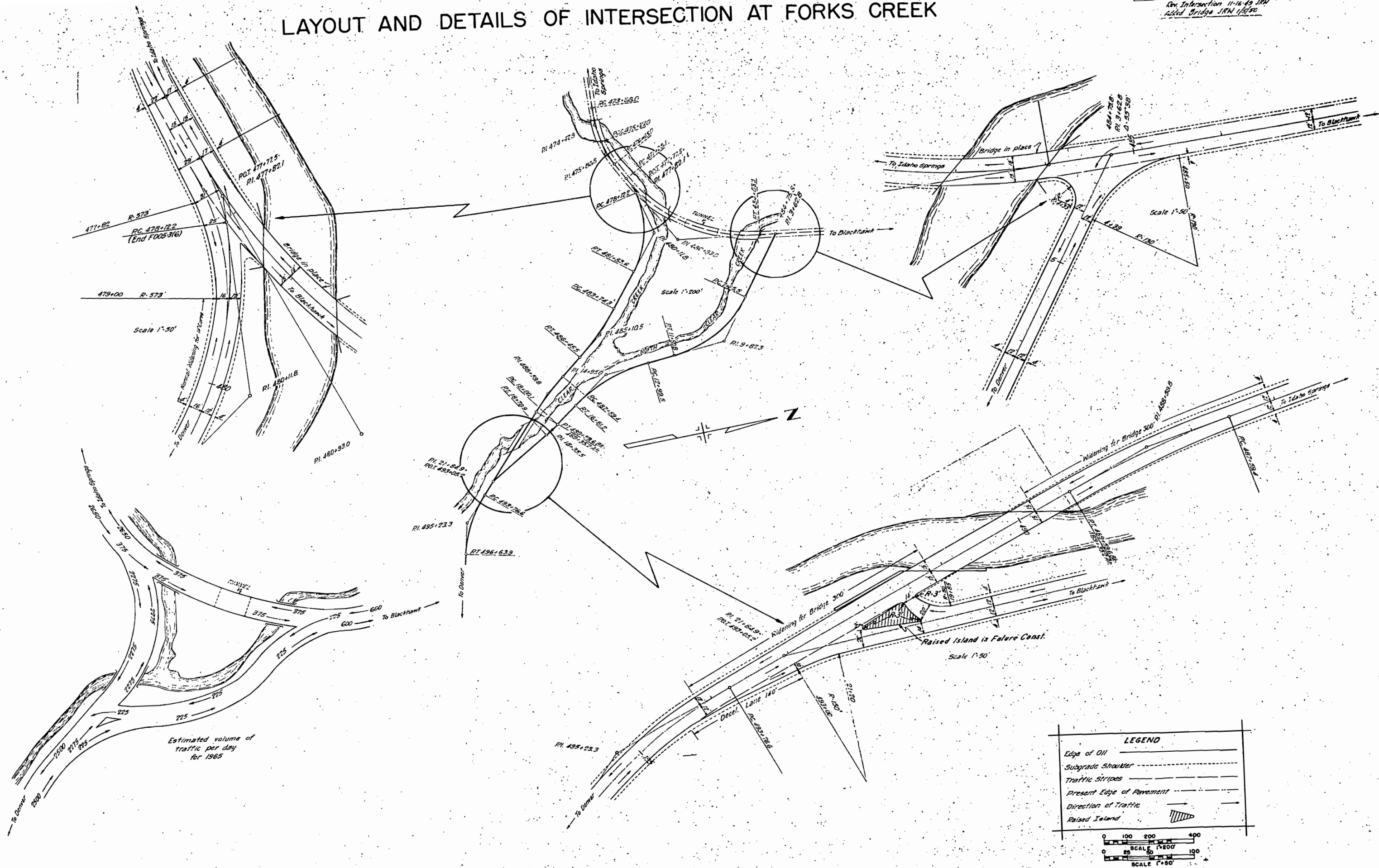
"The force-account item, 'Clearing of Building Sites, including Removal of Foundation and Appurtenances,' shall include removal of all foundations, wells, out-houses and other appurtenances not removed by the owner, and any necessary backfilling of cellars, cess pools, wells etc., to provide neat road-side conditions. It is estimated that this item applies at the following stations, 5+ to 6+, Lt. and 5+56+ to 5+56+, Lt. & Rt.

TYPICAL SECTION FOR CHANNEL IMPROVEMENT



TYPICAL SECTION FOR DITCHES





$\Delta = 55.56$
 $D = 14.00$
 $T = 217.3$
 $L = 399.5$
 $R = 409.3$

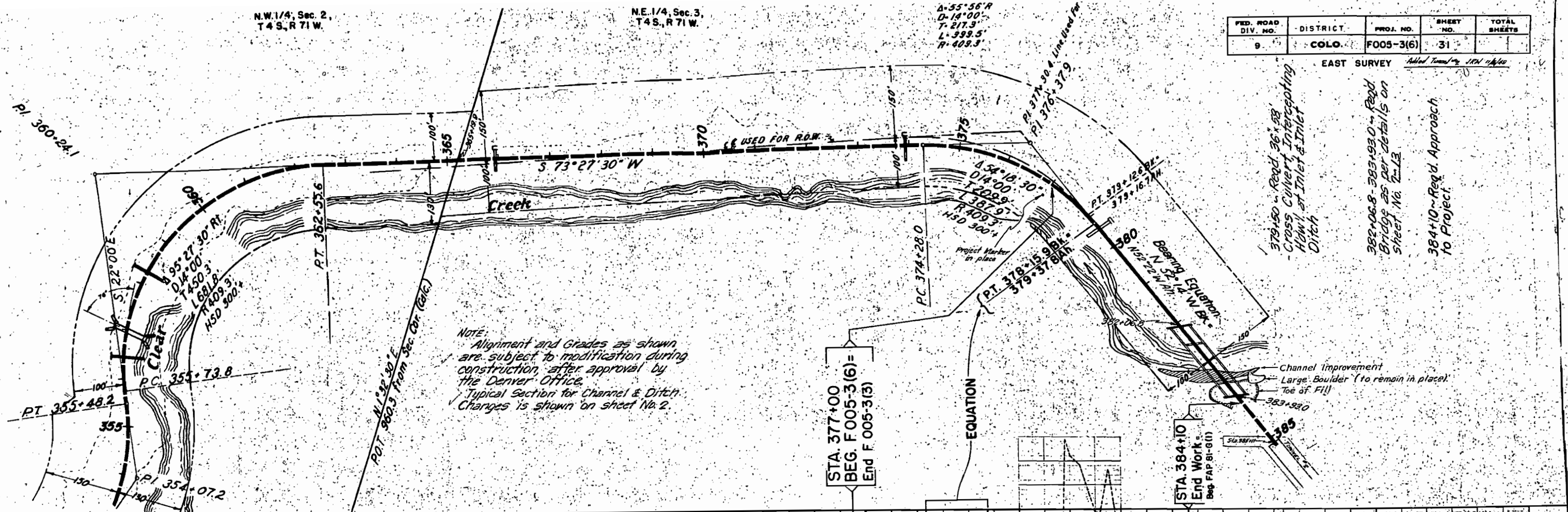
FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F005-3(6)	31	

EAST SURVEY Added Tunnel only JRN 11/24/45

379.50 - Req'd. 36" x 58"
Cross Culvert Intercepting
Haul at Inlet & Inlet
Ditch

382+06.8-383+93.0 ~ Rqd.
Bridge as per details on
sheet No. 7-13

384+10~Req'd. Approach
to Project.



STRUCTURE NOTES FOR BRIDGE, STA. 382+06.8 to 383+93.0, STR. NO. F-15-BG

PRESENT STRUCTURE - NONE

- SPAN --
- CLEAR ROADWAY --
- CLEAR WATERWAY --
- TYPE OF SUPERSTRUCTURE --
- TYPE OF SUBSTRUCTURE --
- REQUIREMENTS AS TO REMOVAL --

STREAM DATA

- DRAINAGE AREA IN SQUARE MILES --
- VELOCITY DURING HIGH WATER --
- ELEVATION OF:
 - MAXIMUM HIGH WATER --
 - NORMAL STAGE --
- LOW WATER --
- STREAM BED --

DRIFT --

SCOUR --

PROPOSED STRUCTURE

- POSITION REFERRED TO PRESENT STRUCTURE --
- SPAN -- 45'-100'-25'
- CLEAR ROADWAY -- 30'
- CLEAR WATERWAY -- 3600'
- TYPE OF SUPERSTRUCTURE -- LONG SLAB ON GIRDERS & BEAMS
- TYPE OF SUBSTRUCTURE -- *
- DETOUR STRUCTURE REQUIREMENTS -- NONE
- R.R. SIDING -- GOLDEN HAIL TO BRIDGE SITE -- 1.8 MILES
- NEARBY STRUCTURES ON SAME STREAM --
- LOCATION --
- WATERWAY --
- PERIOD DURING FLOODS --

* ABUT. #1 - LOW WALL ON ROCK
PIERS 3 LEG CONCRETE
ABUT. #4 - 2 LEG SPILL THRU

NOTES:

- 100' V.C. N.P.S.D. 610'
- 300' V.C. N.P.S.D. 75'
- Stationing: 365, 370, 375, 380
- Elevations: 6330, 6340, 6350, 6360, 6370, 6380, 6390, 6400
- Grades: +2.54%, +1.10%, +1.27%, +1.10%
- Bridge Section at Station 379+37.84 ft.

PLATE 1-PLAN-PERFECTED S. P. R. STANDARD

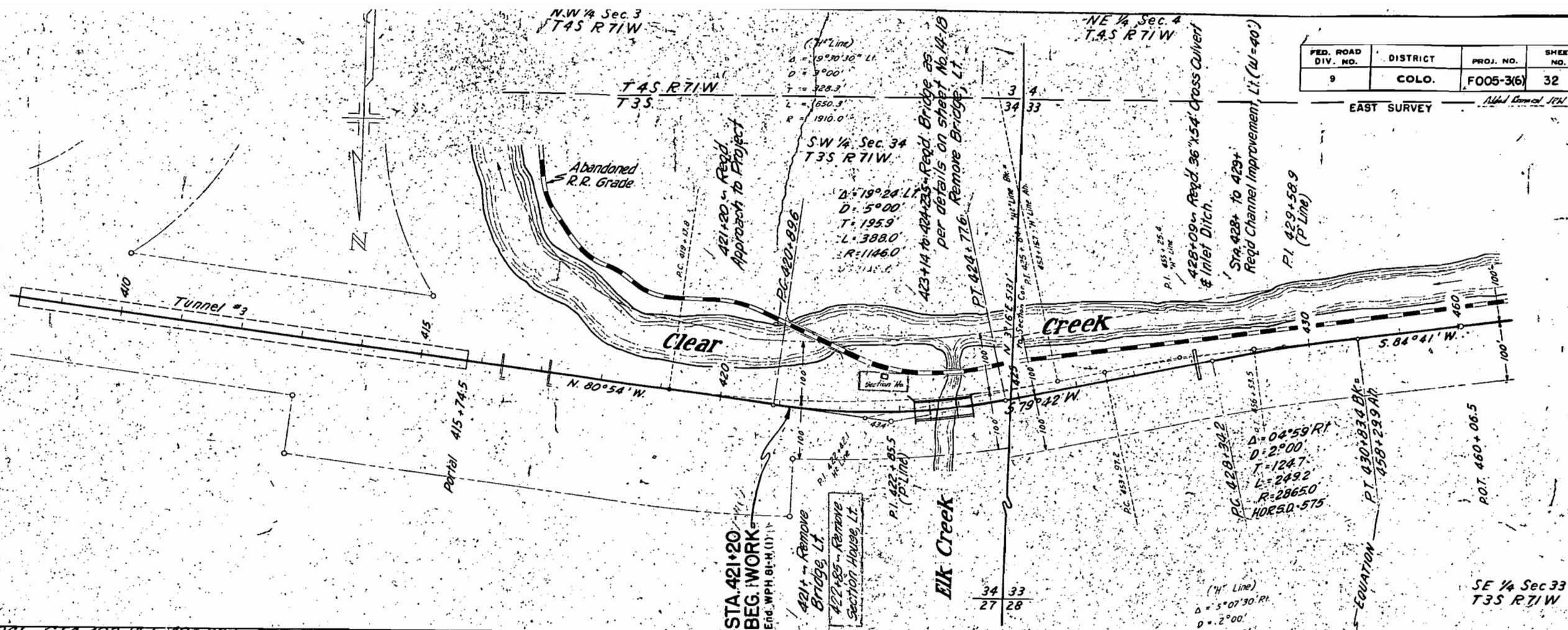
Printed in U.S.A.
on SPECIAL Tinting Co.

AVATION
AVATION 1/2 FACT
EXCAVATION
FROM YD. O.M.
1 MILE O.M.
ESS-EXCAV.

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	FO05-3(6)	32	

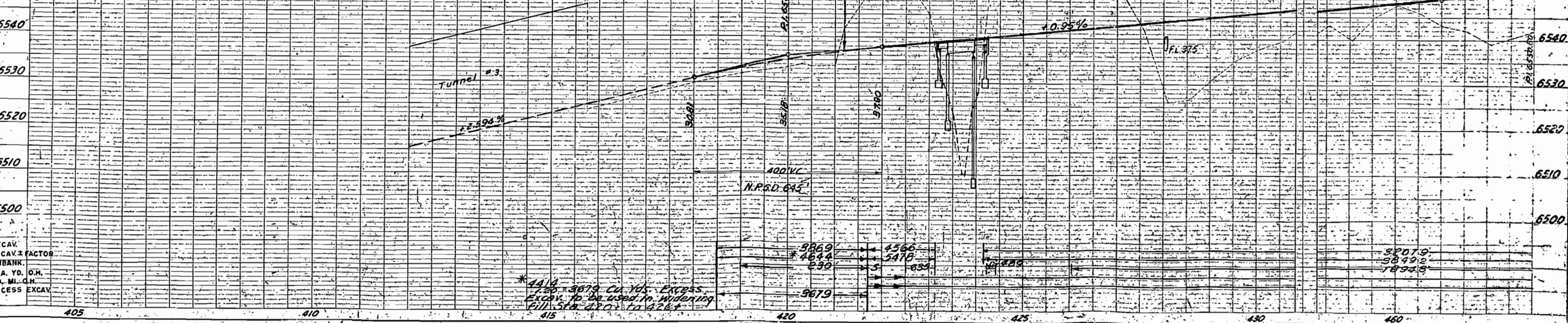
EAST SURVEY

Added Coronal 10/14/42



STRUCTURE NOTES FOR BRIDGE, STA. 423+14 TO 424+23.5 STR. NO. F 15-L

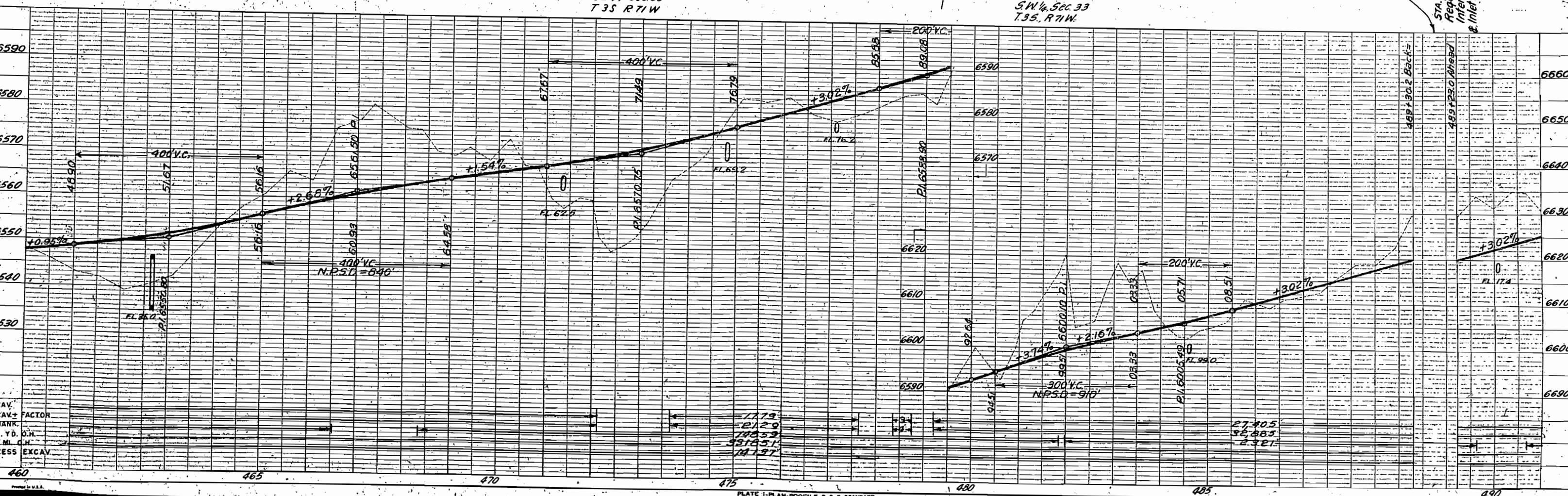
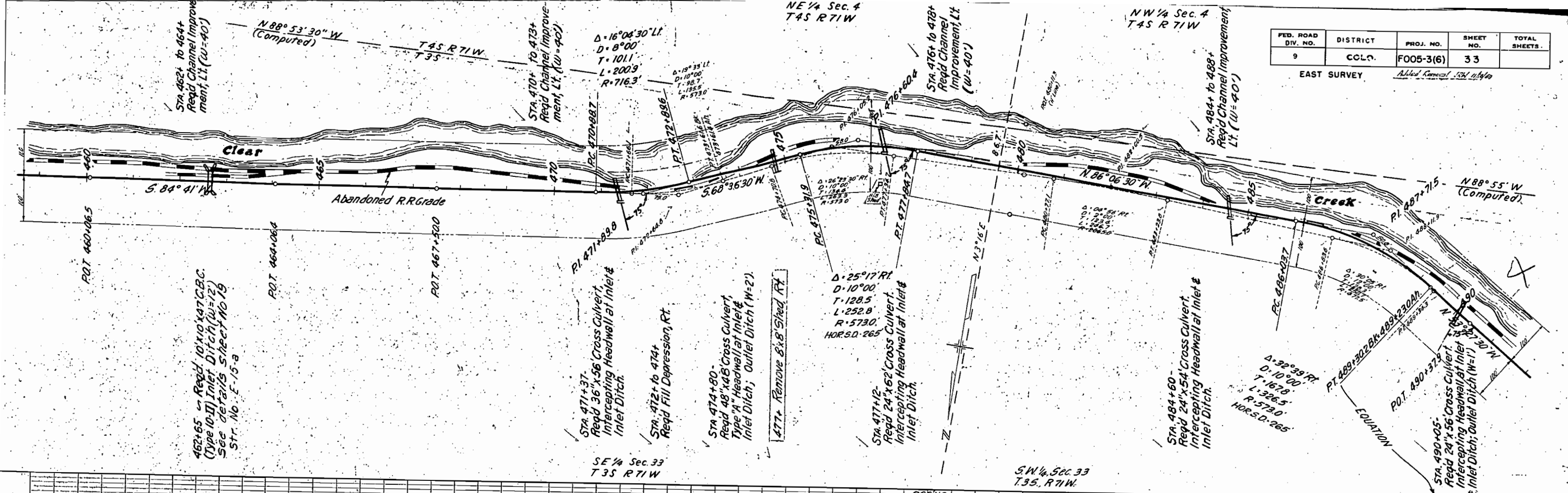
PRESENT STRUCTURE	PROPOSED STRUCTURE
ABANDONED R.R. BRIDGE	POSITION REFERRED TO PRESENT STRUCTURE - 60' UPSTREAM
SPAN - 3 @ 10' = 30'	3 SPAN - 24' 58' 24"
CLEAR ROADWAY - 200 SQ. FT.	CLEAR ROADWAY - 30 FT.
CLEAR WATERWAY - 1420 SQ. FT.	CLEAR WATERWAY - 1420 SQ. FT.
TYPE OF SUPERSTRUCTURE - TIMBER TRESTLE	TYPE OF SUPERSTRUCTURE - CONC. W. BEAM CONC. CANTILEVER ABUTS.
TYPE OF SUBSTRUCTURE -	TYPE OF SUBSTRUCTURE - 2 LEGGED PIERS
REQUIREMENTS AS TO REMOVAL - REMOVE AFTER NEW BRIDGE COMPLETED	DETOUR STRUCTURE REQUIREMENTS - NONE
STREAM DATA:	R.R. SIDING - MAIN TO BRIDGE SITE - MILES -
DRAINAGE AREA IN SQUARE MILES - 6.5	NEARBY STRUCTURES ON SAME STREAM -
VELOCITY DURING HIGH WATER - FAST	LOCATION - ABANDONED R.R. BRIDGE SAME SITE
ELEVATION OF:	WATERWAY - 200 SQ. FT.
MAXIMUM HIGH WATER - LOW WATER - 6510	RECORD DURING FLOODS - NOT SUFFICIENT
NORMAL STAGE -	
DRIFT - MEDIUM	
SCOUR - LIGHT	



FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	CCLD	F005-3(6)	33	

EAST SURVEY

Added Remarks: 1/24/1964



EAST SURVEY:

Δ 23°13'0" L
D. 5'00'
T. 236.2
L. 465.8
R. 1146.0
(Survey)

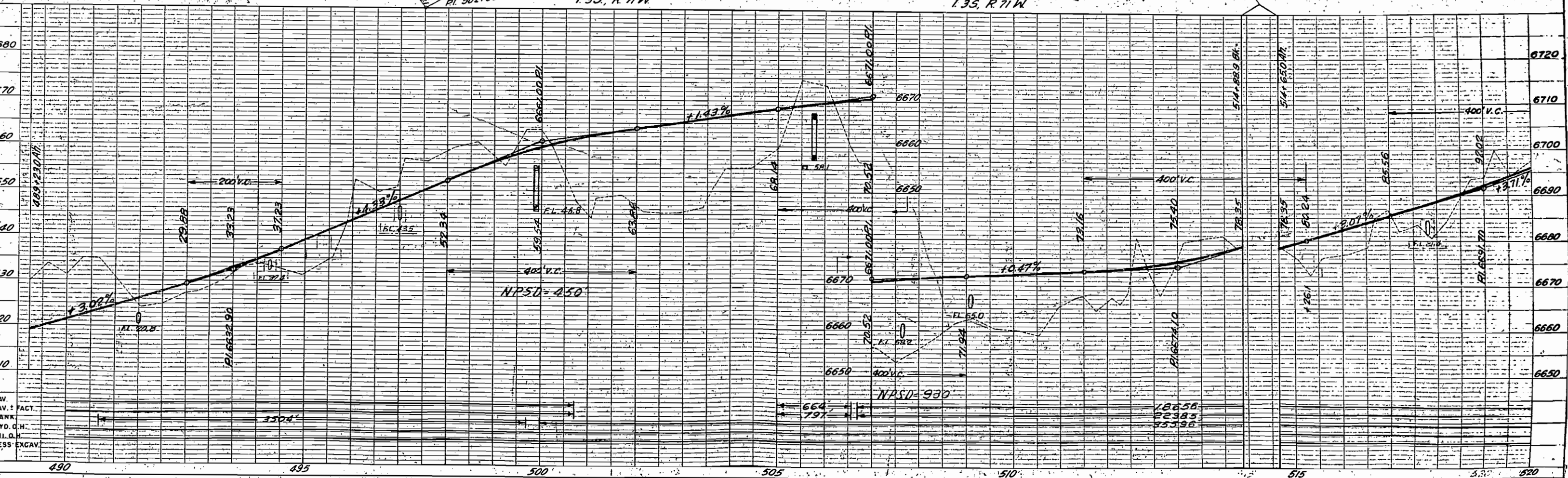
Δ 25°01'30" L
D. 5'00'
T. 254.3
L. 500.5
R. 1146.0

Sec. 34, T4N, R10E, S40

PT. 518+80.7
PT. 518+84.0 (Survey)

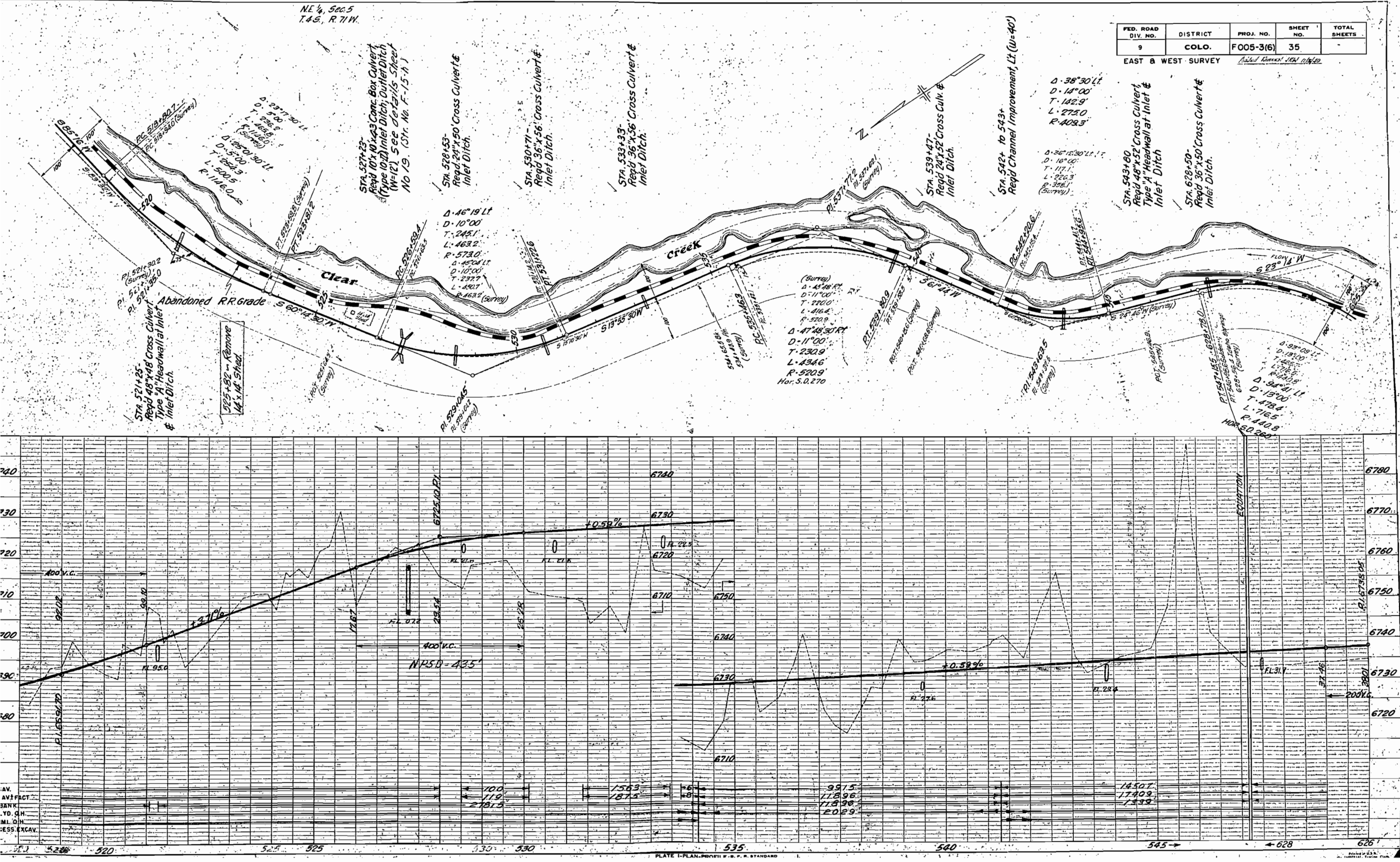
PT. 523+59.6 (Survey)
PT. 523+81.2

from



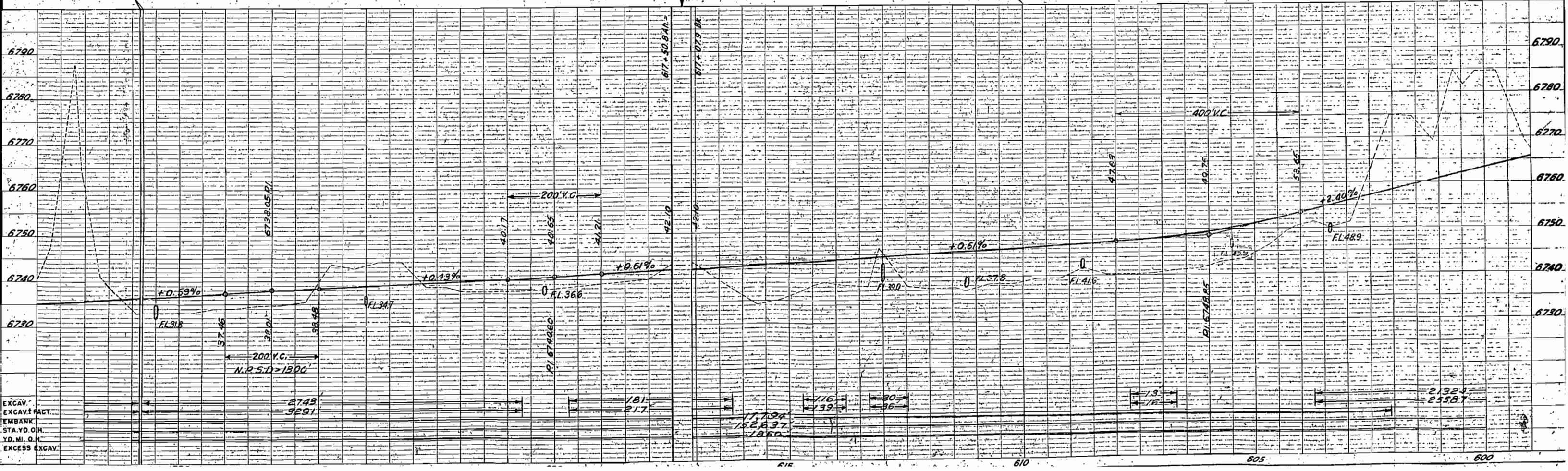
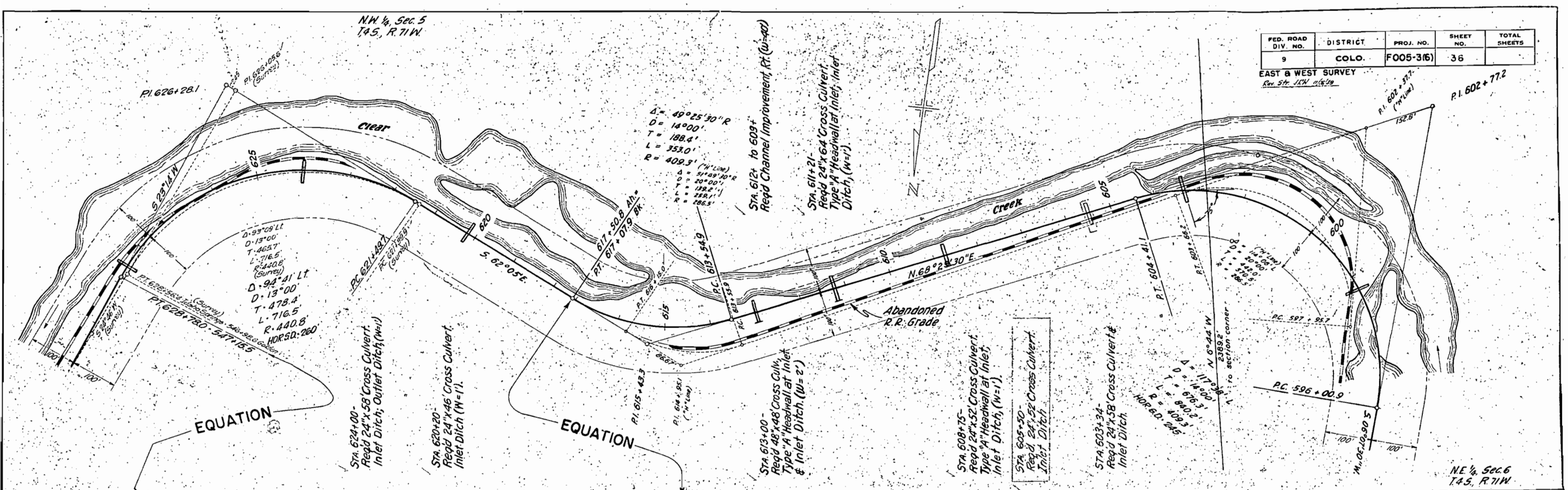
FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F005-3(6)	35	-

EAST & WEST SURVEY *Paired Remount JRW 11/15/50*



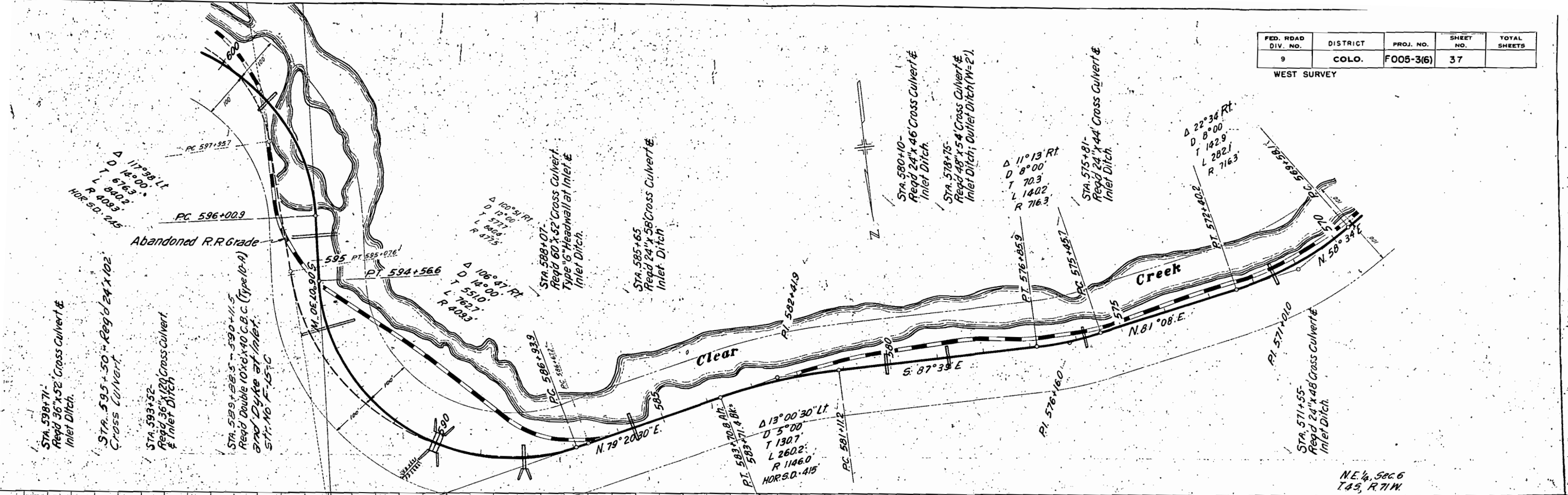
FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	FO05-3(6)	36	

EAST & WEST SURVEY
Rev. Str. JCN 11/6/29



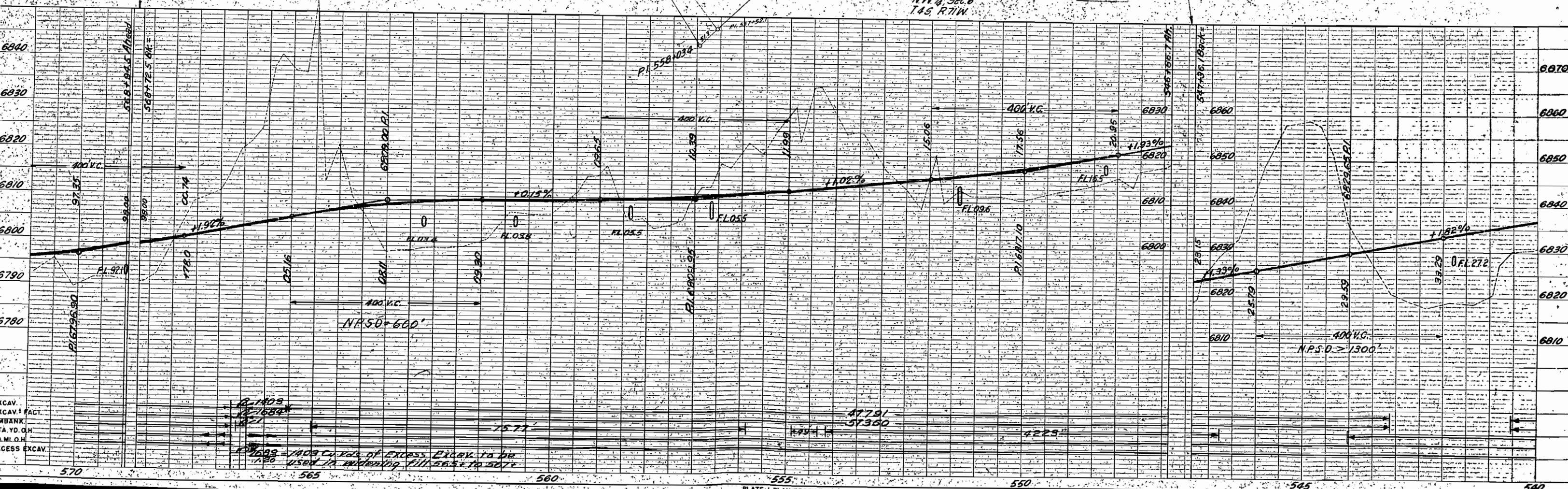
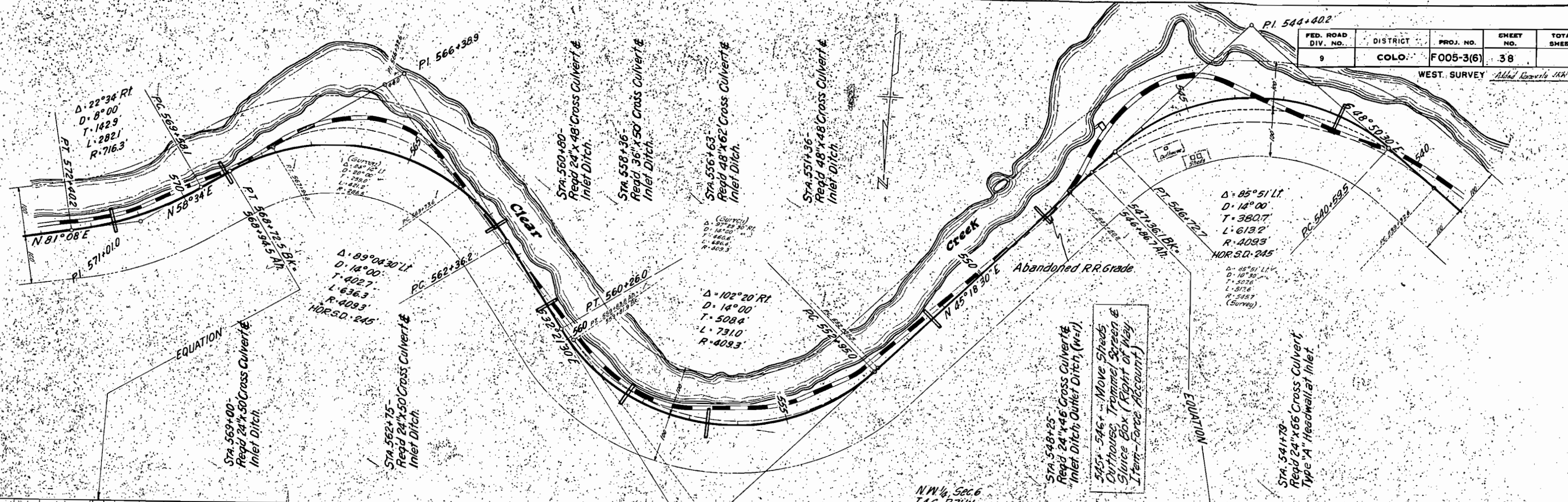
FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F005-3(6)	37	

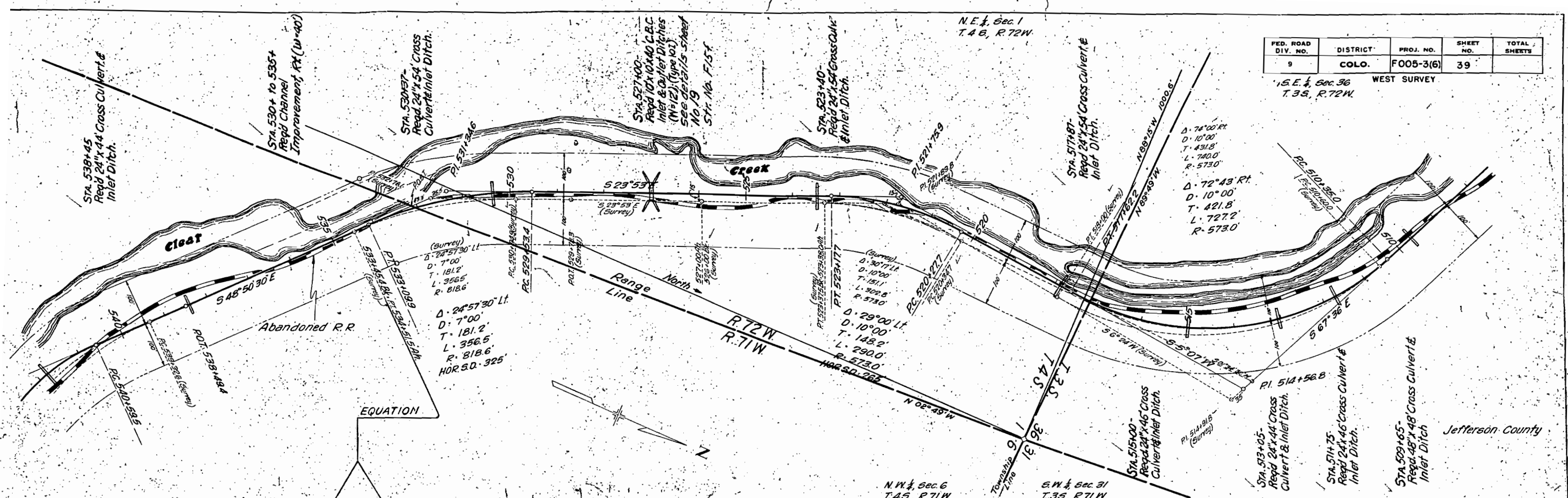
WEST SURVEY



FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F005-3(6)	38	

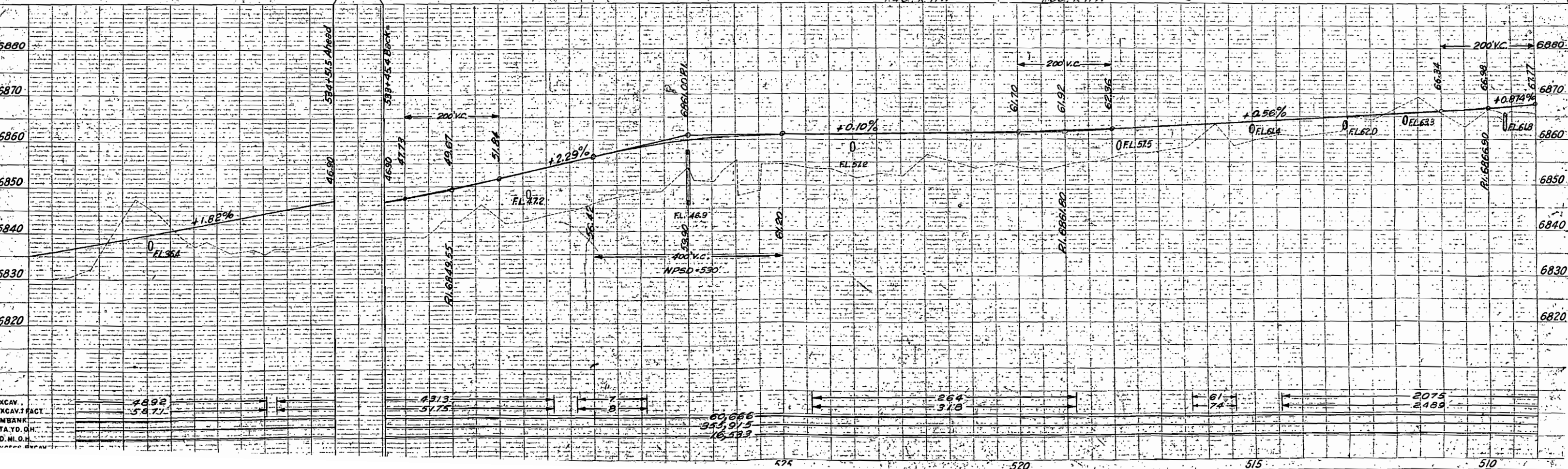
WEST SURVEY *Added Survey's 1947 1948*





FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F005-3(6)	39	

WEST SURVEY
 S.E. 1/4, Sec. 36
 T.35, R.72W.



STA 492+ to 507+
Regrad Channel Change, Rt. (W=40')

505+00 ~ Reg'd 48'x52' Cross
Culvert, Type A, Headwall at
inlet & inlet ditch.

495+00 ~ Reg'd 36'x60'
Cross Culvert, Type A,
Headwall at inlet &
inlet ditch

493+ ~ Reg'd
Approach Connection
as per details on
Sheet no 30.

489+ ~ Reg'd Removal
Box Car House

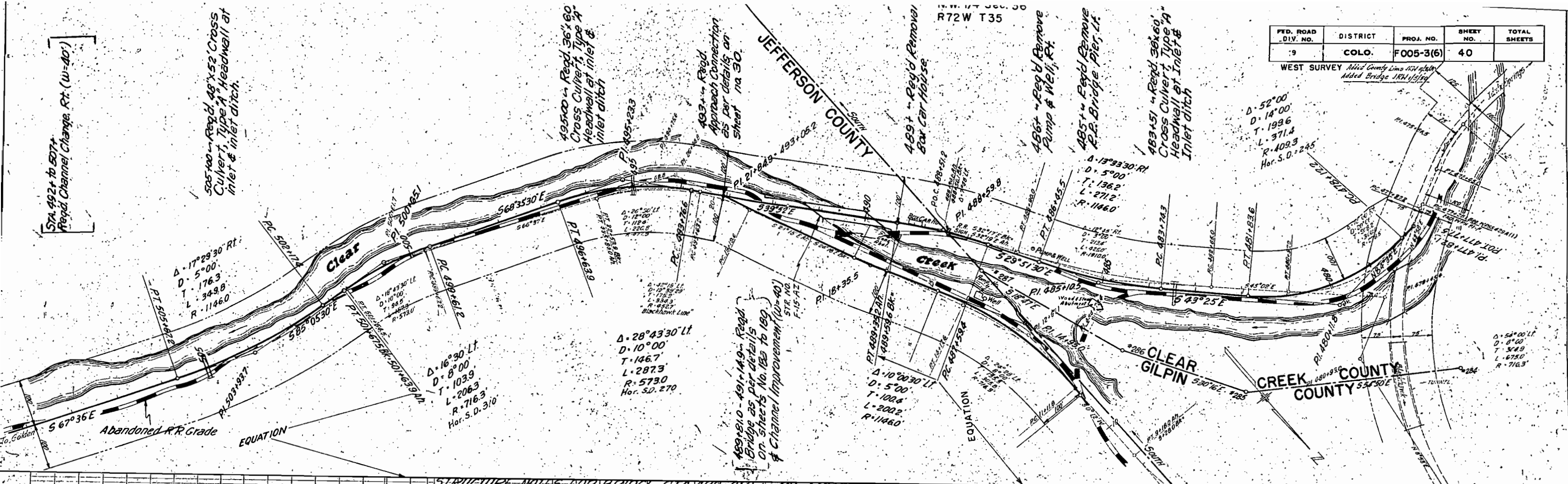
486+ ~ Reg'd Remove
Pump & Well, Rt.

485+ ~ Reg'd Remove
P.E. Bridge Pier, Lt.

483+51 ~ Reg'd 36'x60'
Cross Culvert, Type A,
Headwall at Inlet &
Inlet ditch

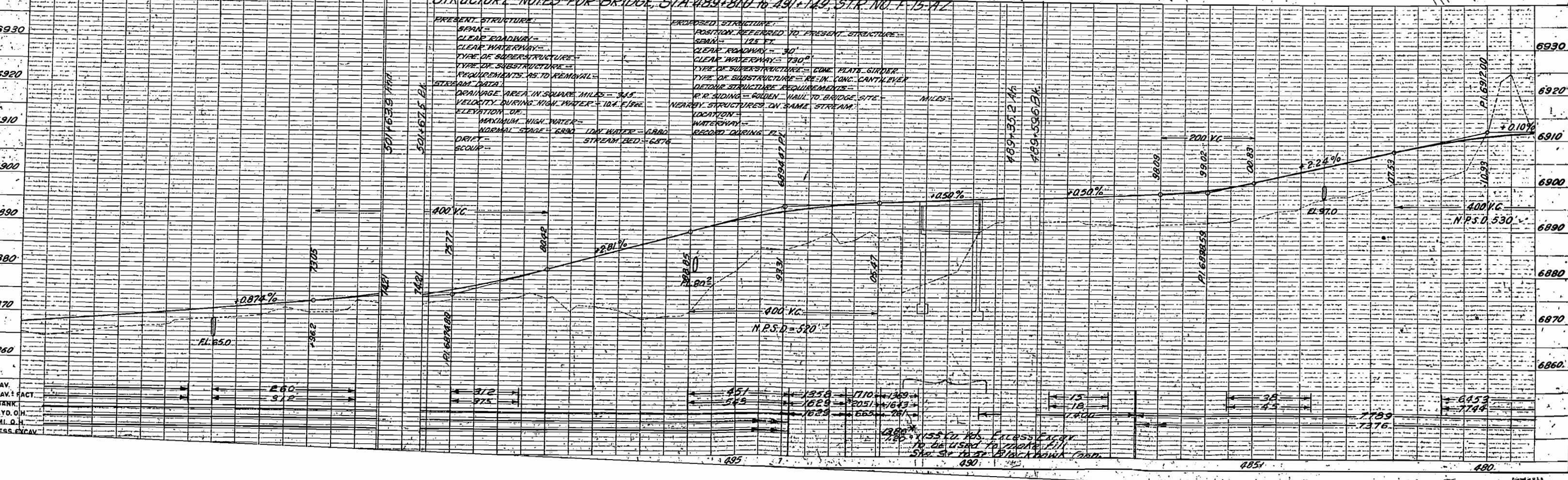
FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	FO05-3(6)	40	

WEST SURVEY Adair County Line 1874 plat
Added Bridge 1874/1875



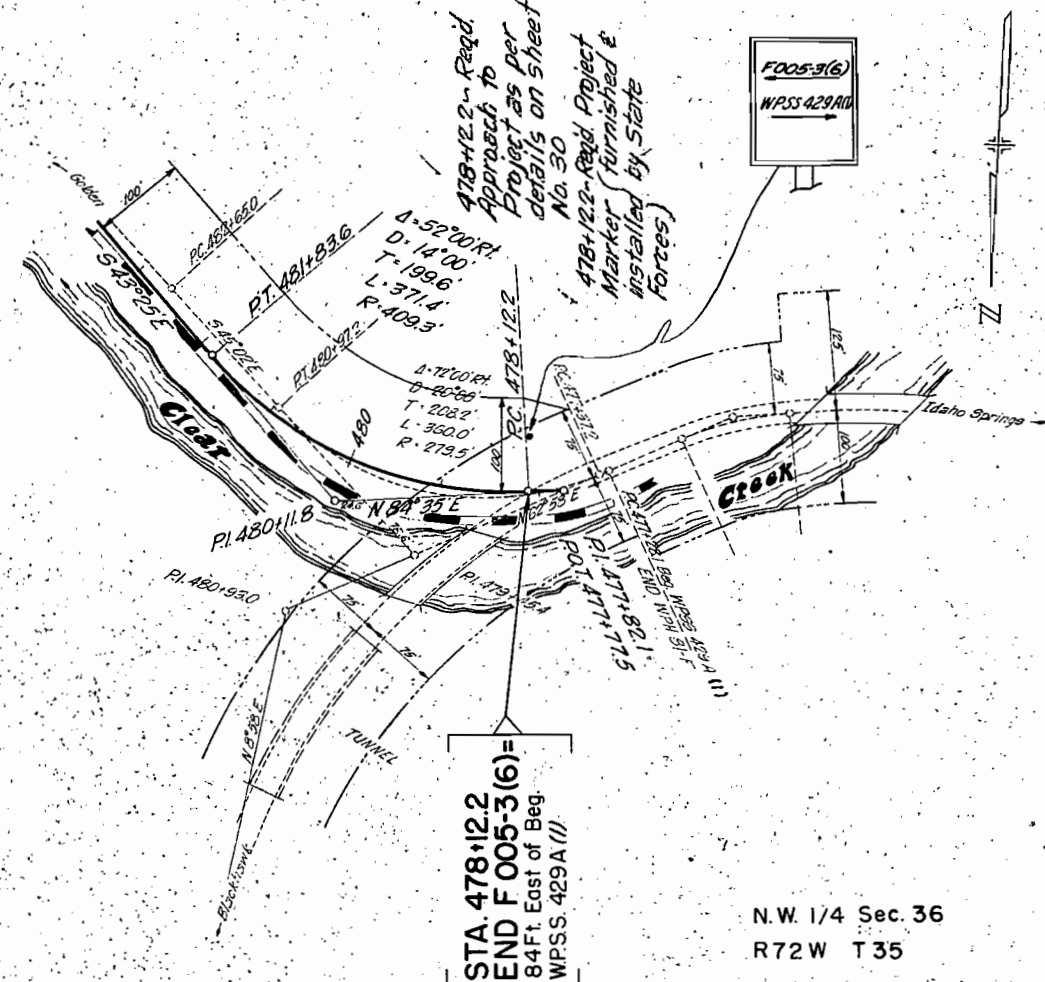
STRUCTURE NOTES FOR BRIDGE, STA 489+800 to 491+149, STR. NO. F-15-AZ

PRESENT STRUCTURE	PROPOSED STRUCTURE
SPAN =	POSITION REFERRED TO PRESENT STRUCTURE =
CLEAR ROADWAY =	SPAN =
CLEAR WATERWAY =	CLEAR ROADWAY = 30'
TYPE OF SUPERSTRUCTURE =	CLEAR WATERWAY = 730'
TYPE OF SUBSTRUCTURE =	TYPE OF SUPERSTRUCTURE = CONC. PLATE GIRDER
REQUIREMENTS AS TO REMOVAL =	TYPE OF SUBSTRUCTURE = RE-IN. CONC. CANTILEVER
DRAINAGE AREA IN SQUARE MILES = 3.15	DETOUR STRUCTURE REQUIREMENTS =
VELOCITY DURING HIGH WATER = 10.4 F/SEC	R.R. SIDING = GOLDEN HAIL TO BRIDGE SITE
ELEVATION OF:	NEARBY STRUCTURES ON SAME STREAM:
MAXIMUM HIGH WATER =	LOCATION =
NORMAL STAGE = 6890	WATERWAY =
DRIFT =	RECORD DURING F.I.
SCOUR =	

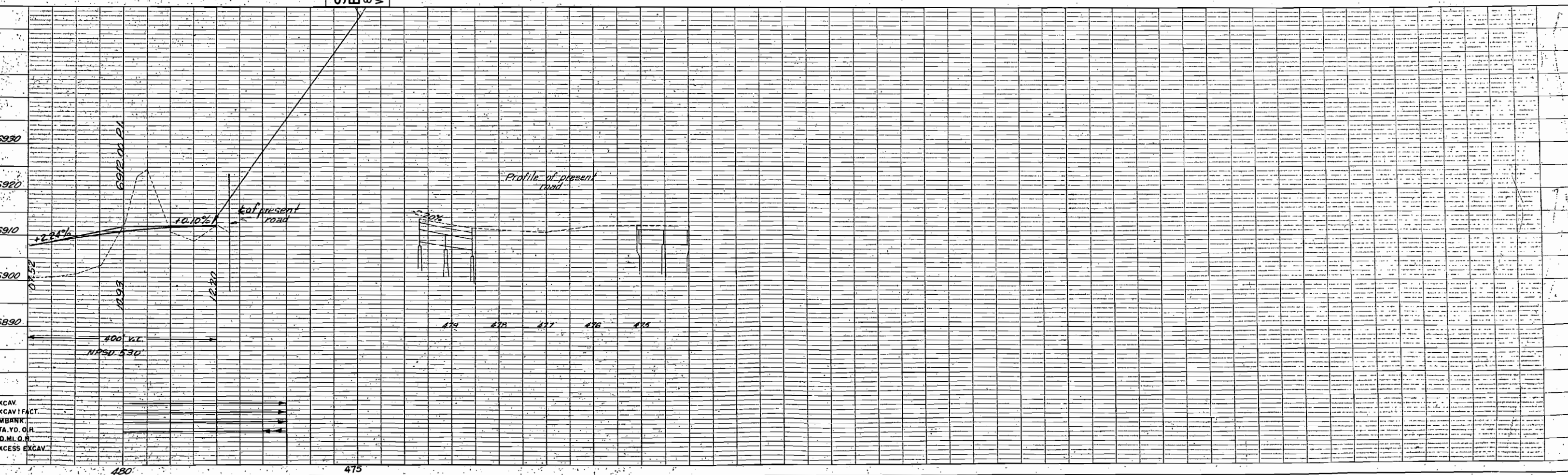


FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F005-3(6)	41	

WEST SURVEY



N.W. 1/4 Sec. 36
R72W T35



Added County Lines & Rev. Str. JPN 11/15/20 BLACKHAWK CONNECTION

