

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	79-J(2) 192-A(2)	1	

# COLORADO STATE HIGHWAY DEPARTMENT

## PLAN AND PROFILE OF PROPOSED COMBINED FEDERAL AID PROJECTS NOS. 79-J(2) & 192-A(2) STATE HIGHWAY NO. 4 *24* EL PASO COUNTY

### CONVENTIONAL SIGNS

- CENTER LINE OF SURVEY \_\_\_\_\_
- RIGHT OF WAY LINES \_\_\_\_\_
- TOWNSHIP OR RANGELINES \_\_\_\_\_
- SECTION LINES \_\_\_\_\_
- ONE QUARTER SECTION LINES \_\_\_\_\_
- RAILROAD TRACKS \_\_\_\_\_
- BARBED WIRE FENCE \_\_\_\_\_
- POLE LINES \_\_\_\_\_

- F.A.P. 79-J(2)  
INDEX OF SHEETS
- SHEET NO. 1 SKETCH MAP AND TITLE SHEET
  - 2 TYPICAL SECTION AND SUMMARY OF QUANTITIES
  - 3 SURFACING PLAN, AND TABULATION OF SUBGRADE STABILIZATION REQUIREMENTS
  - 4 TABULATION OF GUARD FENCE, DITCH DIKES AND INTERCEPTING DITCHES
  - 5 & 6 TABULATION OF STRUCTURES AND DETAILS OF TIMBER CHECK, STA. 771+00
  - 7 DETAILS OF TIMBER CHECK AND CONCRETE CULVERT EXTENSION, STA. 536+75
  - 8 (DELETED)
  - 9 STANDARD TIMBER GUARD POSTS M 19 B
  - 10 STANDARD WIRE CABLE GUARD FENCE M 20 B
  - 11 STANDARD WIRE FENCES WITH METAL POSTS M 27 B
  - 12 STANDARD METHODS FOR SUPERELEVATION AND WIDENING OF CURVES M 1 B
  - 13 TYPICAL SIDE APPROACH ROADS-ROADWAY CONSTRUCTION TRAFFIC SIGNS M 2 B
  - 14 STANDARD MARKER POST M 7 B
  - 15 STANDARD EMBANKMENT PROTECTORS M 13 B
  - 16-19 ALIGNMENT PLAN AND PROFILE
  - 32-44 & 101 ROADWAY CROSS SECTIONS

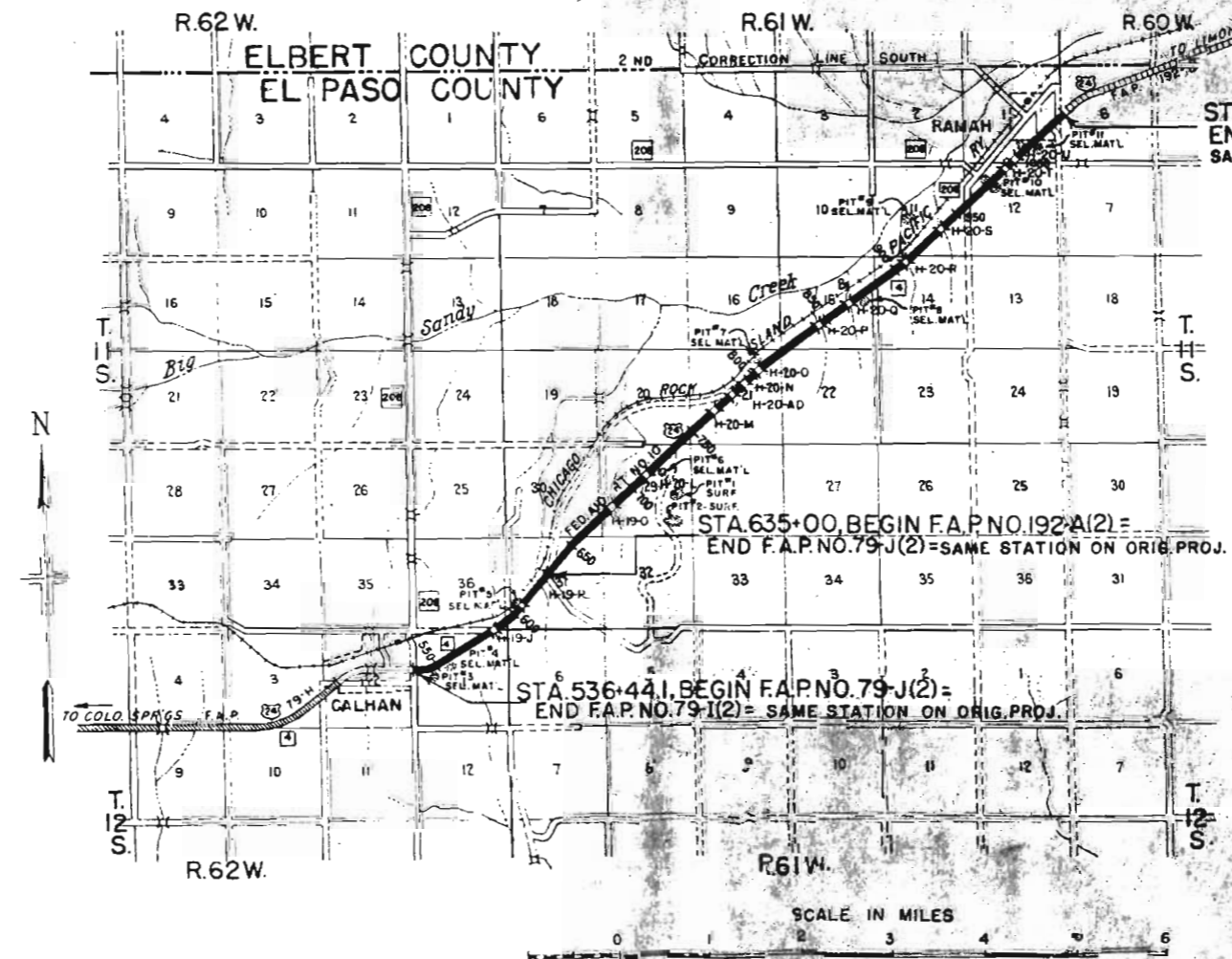
SCALES OF ORIGINAL TRACINGS  
ON PLAN, 1 IN. = 100 FT.  
ON PROFILE 1 IN. = 100 FT. HORIZONTAL  
1 IN. = 10 FT. VERTICAL

GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD

PROJECT NOS.	F.A.P. 79-J(2)	F.A.P. 192-A(2)
GROSS LENGTH OF PROJECTS	9,913.0 FT. = 1.877 MI.	39,307.6 FT. = 7.444 MI.
NET LENGTH OF PROJECTS	9,725.8 FT. = 1.842 MI.	38,538.0 FT. = 7.298 MI.

7444  
1877  
868  
10187

- F.A.P. 192-A(2)  
INDEX OF SHEETS
- SHEET NO. 1 SKETCH MAP AND TITLE SHEET
  - 2 TYPICAL SECTION AND SUMMARY OF QUANTITIES
  - 3 SURFACING PLAN, AND TABULATION OF SUBGRADE STABILIZATION REQUIREMENTS
  - 4 TABULATION OF GUARD FENCE, DITCH DIKES AND INTERCEPTING DITCHES
  - 5 & 6 TABULATION OF STRUCTURES AND DETAILS OF TIMBER CHECK, STA. 771+00
  - 8 (DELETED)
  - 9 STANDARD TIMBER GUARD POSTS M 19 B
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  - 13 TYPICAL SIDE APPROACH ROADS-ROADWAY CONSTRUCTION TRAFFIC SIGNS M 2 B
  - 14 STANDARD MARKER POST M 7 B
  - 15 STANDARD EMBANKMENT PROTECTORS M 13 B
  - 19-31 ALIGNMENT PLAN AND PROFILE
  - 45-101 ROADWAY CROSS SECTIONS



NOTE:  
IT IS RECOMMENDED THAT BIDDERS ON THIS PROJECT GO OVER THE PLAN DETAILS WITH ONE OF THE FOLLOWING FIELD REPRESENTATIVES OF THIS DEPARTMENT:  
ERNEST MONTGOMERY, DIV. ENGINEER, COLO. SPRINGS  
HARRY LITTLEFIELD, RES. ENGINEER, COLO. SPRINGS

### LIST OF STRUCTURES TO BE EXCLUDED FROM PROJECTS

LOCATION	BRIDGE NO.	LIN. FT.
F.A.P. NO. 79-J(2)		
586+88.5-587+61.5	H-19-J	73.0
606+26.0-607+40.2	H-19-P	114.2
TOTAL F.A.P. 79-J(2)		187.2
F.A.P. NO. 192-A(2)		
710+75.8-711+69.3	H-20-L	93.5
772+04.3-772+74.8	H-20-M	70.3
786+64.3-786+88.8	H-20-AD	24.5
791+47.3-792+17.8	H-20-N	70.5
800+95.3-801+42.8	H-20-O	47.5
847+99.3-848+69.8	H-20-P	70.5
868+71.3-868+83.8	H-20-Q	47.5
907+21.1-907+71.8	H-20-R	47.5
934+43.2-935+63.4	H-20S	114.2
984+39.2-985+30.9	H-20-T	91.7
997+54.2-998+45.9	H-20-U	91.7
TOTAL F.A.P. 192-A(2)		769.6

RECOMMENDED FOR APPROVAL

*[Signature]*  
ASSISTANT ENGINEER DATE 2-24-21

APPROVED

*[Signature]*  
STATE HIGHWAY ENGINEER

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER  
PUBLIC ROADS ADMINISTRATION  
FEDERAL WORKS ADMINISTRATION

RECOMMENDED FOR APPROVAL

CHIEF WESTERN REGION  
PUBLIC ROADS ADMINISTRATION  
FEDERAL WORKS ADMINISTRATION

APPROVED

COMMISSIONER  
PUBLIC ROADS ADMINISTRATION

## TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

### GENERAL NOTES

This Project is to be constructed in conformity with the Standard Specifications of the Colorado State Highway Department, adopted June 1, 1940.

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

All roadway excavation required to construct the project is to be obtained as indicated on the plans. Quantities involved beyond the limits of ditch as shown on the Typical Section, either noted on the profile as "Borrow" or on the Tabulation of Structures as "Excavation" and "Embankment" are to be classified and paid for as "Unclassified Excavation."

These quantities are to be staked as part of the original excavation at locations indicated on the plans. Slope stakes beyond the limits of the Typical Section are subject to change by the Engineer to fit embankment requirements actually encountered on construction.

If, after cut slopes are staked, it is found that the material will stand on a steeper slope, rights are reserved to change cut slopes after cuts have been opened up by the Contractor.

All curves are to be superelevated and widened as provided by the Standard Superelevation Sheet.

Except as noted on the plans, overhaul will be paid for as measured along center line of project.

All side approach roads to the project shall be gravel surfaced with a 4" thickness of "Gravel or Crushed Rock Surfacing" extending approximately 30 feet from edge of highway. Estimated tonnage of surfacing material required in this operation is shown in the "Tabulation of Structures". Surfacing material placed on approaches shall be oil processed under Const. Div. No. 2.

All embankment necessary for the construction of this project shall be classified and paid for as "Unclassified Excavation." Estimated quantities involved, and sources of embankment material, are shown in the "Tabulation of Subgrade Stabilization Requirements" and in profile data on line sheets.

The top 6" of present roadway shall be used for the bottom layer of selected material course.

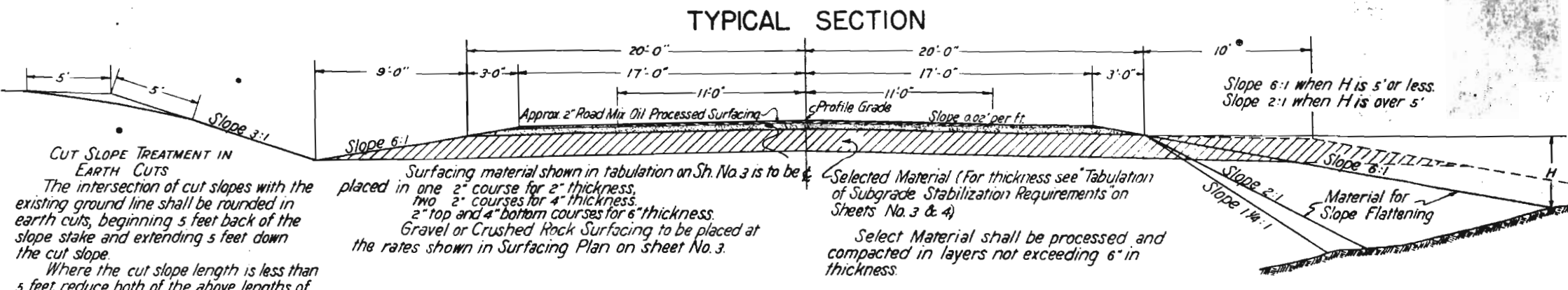
Wherever the present surfacing is not to be removed, this surfacing is to be scarified to the depth shown in tabulation on sheets No. 3 and 4.

All poles encroaching on construction shall be moved by the owners.

All wire fences including line posts, shall be placed approximately six inches inside the boundary of the highway right of way as shown on the plans.

During construction of this project, traffic will use the present traveled roadway. At all places on the project where new construction encroaches on the present traveled roadway, traffic must be adequately provided for at the contractor's expense. Also, the contractor shall at his own expense, construct and maintain in safe condition all temporary approaches to and crossings of intersecting roads.

All new and relaid corrugated metal culvert pipes on these projects shall be installed without headwalls. The ends of C.M.P. culverts on these projects shall be covered with earth so that a minimum of metal will be exposed in the completed work. Fill slopes shall be warped adjacent to and over the pipes, and the covering over pipes shall be approximately six inches thick.



**CUT SLOPE TREATMENT IN EARTH CUTS**  
The intersection of cut slopes with the existing ground line shall be rounded in earth cuts, beginning 5 feet back of the slope stake and extending 5 feet down the cut slope.  
Where the cut slope length is less than 5 feet, reduce both of the above lengths of slope treatment to the actual slope distance. Excavation quantities involved in rounded slope shall be included in Unclassified Excavation.

Surfacing material shown in tabulation on Sh. No. 3 is to be placed in one 2" course for 2" thickness, two 2" courses for 4" thickness, 2" top and 4" bottom courses for 6" thickness. Gravel or Crushed Rock Surfacing to be placed at the rates shown in Surfacing Plan on sheet No. 3.

Select Material shall be processed and compacted in layers not exceeding 6" in thickness.

### SUMMARY OF APPROXIMATE QUANTITIES

\* Between the following stations, the sub-grade shall be widened 10 ft. to provide turnouts. The bottom part of this widened embankment shall be built from excess roadway excavation, and the top part shall be built of selected material of the thickness shown in tabulation on sheet No. 3. Surfacing will not be required on this widened embankment.

F.A.P. 79-J (2)  
Sta. 549 to 569 Left side

F.A.P. 192-A (2)  
Sta. 631 to 648 Left side  
" 650 " 675 Left side  
" 680 " 700 Left & Right sides  
" 750 " 771 Left & Right sides

CONSTRUCTION DIVISION No. 1  
Improving sight distance, stabilizing subgrade, gravel surfacing and incidental work as outlined on Plans.

CONSTRUCTION DIVISION No. 2  
Road mix oil processing (use surfacing placed under Construction Division No. 1.)

MC-O Asphaltic Road Material to be placed over a 26 ft. minimum width of roadway previous to placing of oil processed material.

ITEM NO.	ITEM	UNIT	F.A.P. 79-J (2)		F.A.P. 192-A (2)			COMBINE. TOTALS	
			PROJECT TOTALS	OUTSIDE ROADWAY	RAMAH BRIDGE 678 + 60 TO 679 + 233	INSIDE RAMAH ROADWAY	PROJECT TOTALS		
10	Clearing & Grubbing Entire Project	Lump Sum	(10a)	(10b)	(10c)				
11 b	Removal of 16 Structures	Lump Sum							
12 b	Removing & Rebuilding Fence	Lin. Ft.	300	3,000			3,000	3,300	
12 c	Metal Line Posts	Each		10			10	10	
12 f	Removing & Rebuilding Guard Fence	Lin. Ft.	1,904	3,156			3,156	5,060	
12 g	Unclassified Excavation	Cu. Yd.	46,000	153,000		2,000	155,000	201,000	
13 d	Unclassified Ditch Excavation	Cu. Yd.	700	1,200		100	1,300	2,000	
13 e	Dry Common Excavation (Struct)	Cu. Yd.	200	500	20	100	620	820	
14 d	Wet Common Excavation (Struct)	Cu. Yd.	20	50	40	20	110	130	
14 e	Mechanical Tamping	Hour	55	120		25	145	200	
15 a	Rolling Fills	Hour	150	660		10	670	820	
15 b	Furnishing Rollers	Roller Unit	1	2		Prorated	2		
15 c	Wetting Fills	M Gal.	500	2,200		30	2,230	2,730	
18 a	Station Yard Overhaul	Sta. Yd.	146,000	966,000		6,000	972,000	1,118,000	
18 b	Yard Mile Overhaul	Yd. Mi.	1,300	17,600		100	17,700	19,000	
20 a	Gravel or Crushed Rock Surfacing	Ton	11,400	39,900		2,000	41,900	53,300	
26 c	Overhaul of Surfacing	Ton Mi.	25,000	68,000		10,000	78,000	103,000	
44 b	Miscellaneous Treated Timber	M ft. b. m.	0.7	0.6			0.6		
46 a	Class A Concrete	Cu. Yd.	11						
46 z	Grouting Holes	Lump Sum							
47	Reinforcing Steel	Lb.	600					600	
51	Relaying Pipe	Lin. Ft.	24	320			320	344	
53 y	10" Corr. Metal Culvert Pipe	Lin. Ft.	180	36			36	216	
53 c	24" Corr. Metal Culvert Pipe	Lin. Ft.	15	435			435	450	
53 d	30" Corr. Metal Culvert Pipe	Lin. Ft.		196			196	196	
53 e	36" Corr. Metal Culvert Pipe	Lin. Ft.		36			36	36	
53 f	42" Corr. Metal Culvert Pipe	Lin. Ft.		92			92	92	
53 g	48" Corr. Metal Culvert Pipe	Lin. Ft.				128	128	128	
59 a	Treated Sheet Piling	Lin. Ft.	210	182			182	392	
60 a	Treated Timber Piling	Lin. Ft.	75	60			60	135	
62 b	Metal Pile Shoes	Each	5	4			4	9	
64 a	Dry Rubble Slope Paving (12" thick)	Sq. Yd.	85	55			55	140	
64 b	Dry Rubble Slope Paving (18" thick)	Sq. Yd.	45	10			10	55	
67 a	Riprap	Cu. Yd.		30			30	30	
79 a	Water-Gas Tar Waterproofing	Sq. Yd.			140		140	140	
81 b	Right-of-Way Markers	Each	3	17			17	20	
92	Timber Guard Posts	Each	105	196			196	301	
93 b	18" Metal Embankment Protectors	Each	5	1			1	6	
ITEMS NOT RECEIVING FEDERAL AID FORCE ACCOUNT (WORK BY STATE FORCES) Rebuild 200 ft. fence, Sta. 536 to 547 Rebuild 2300 ft. fence Tighten drift bolts & seal asphalt plank, Sta. 606 +			Lump Sum Lump Sum Lump Sum						
31 x	CONSTRUCTION DIVISION No. 2 Road Mix Oil Processing	Mile	1.842	6.979		0.307	7.286	9.138	

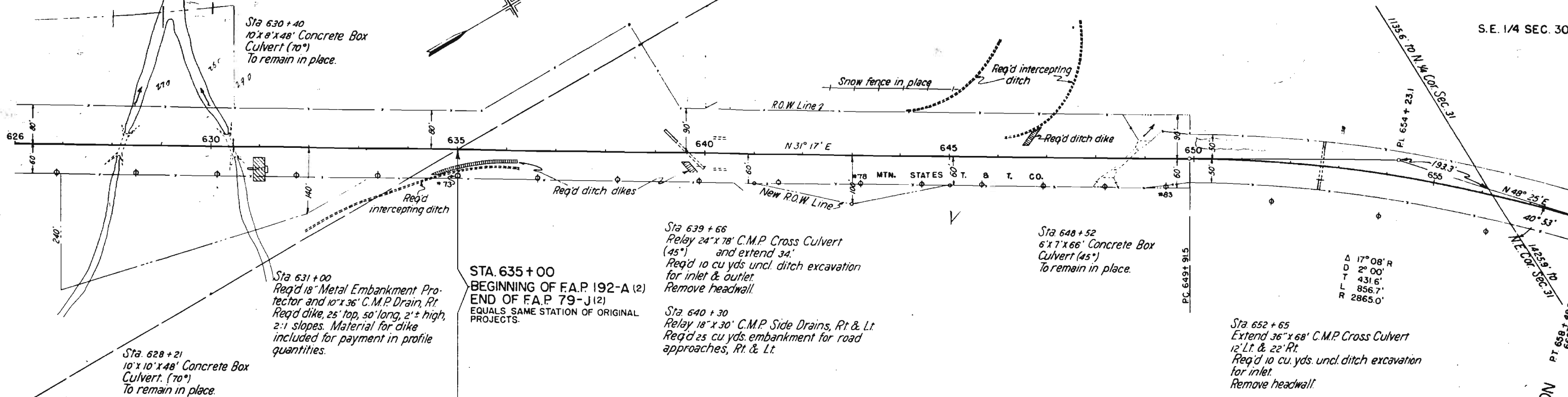
N.W. 1/4 SEC. 31

N.E. 1/4 SEC. 31  
T.11 S., R.61 W.

S.E. 1/4 SEC. 30

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO	79-J (2) 192-A (2)	19	

NOTE:  
See tabulation on Sheet No. 4  
for intercepting ditch and ditch  
dike requirement details.



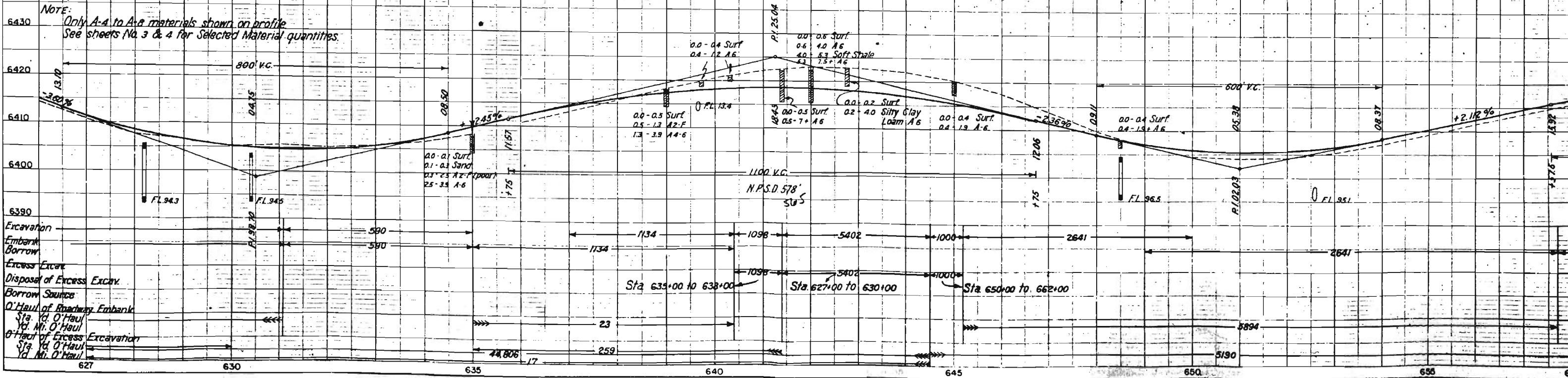
STA. 635 + 00  
BEGINNING OF F.A.P. 192-A (2)  
END OF F.A.P. 79-J (2)  
EQUALS SAME STATION OF ORIGINAL  
PROJECTS.

Δ 17° 08' R  
D 2° 00'  
T 431.6'  
R L 856.7'  
2865.0'

DATE	BY	PLAN
		SURVEYED
		PLOTTED
		NOTE BOOK
		ALWAYS CHECKED
		BY
		NO.

DATE	BY	PROFILE
		SURVEYED
		PLOTTED
		NOTE BOOK
		ALWAYS CHECKED
		BY
		NO.

NOTE:  
Only A-4 to A-6 materials shown on profile  
See sheets No. 3 & 4 for Selected Material quantities.



Excavation	Embank	Borrow	Excess Excav	Dispose of Excess Excav.	Borrow Source
590	590	1134	1134	1098	5402
23	259	1098	5402	1000	2641
44,806	17	23	259	1000	5894
627	630	635	640	645	650

EQUATION

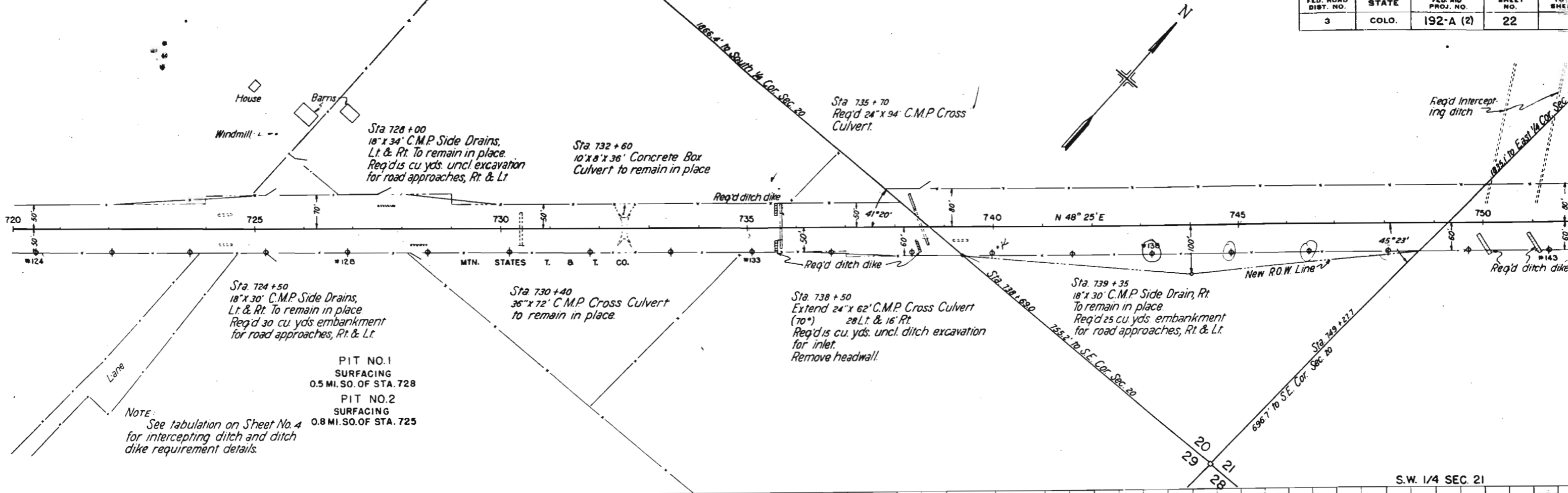




N.E. 1/4 SEC. 29

S.E. 1/4 SEC. 20  
T. 11 S., R. 61 W.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOT. SHEETS
3	COLO.	192-A (2)	22	

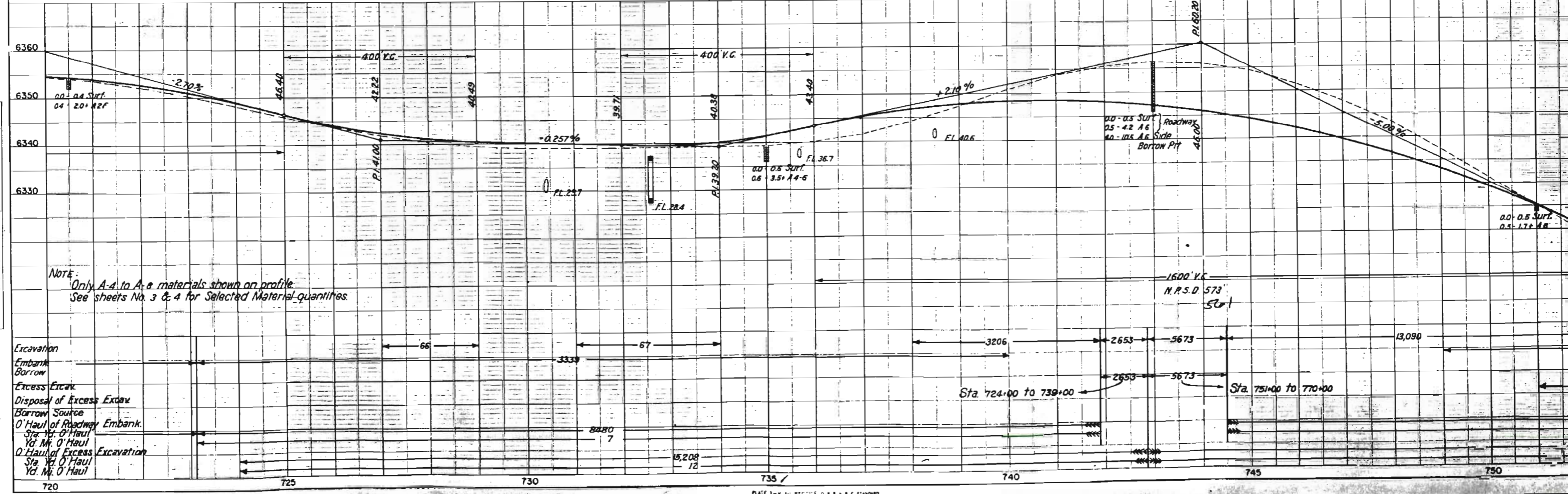


NOTE:  
See tabulation on Sheet No. 4  
for intercepting ditch and ditch  
dike requirement details.

PIT NO. 1  
SURFACING  
0.5 MI. SO. OF STA. 728  
PIT NO. 2  
SURFACING  
0.8 MI. SO. OF STA. 725

DATE	BY	REVISION

DATE	BY	REVISION



NOTE:  
Only A-4 to A-6 materials shown on profile  
See sheets No. 3 & 4 for Selected Material quantities.

Excavation	Embank	Borrow	Excess Excav	Disposal of Excess Excav	Borrow Source	O'Haul of Roadway Embank	Sta. Yd. O'Haul	Yd. Mt. O'Haul	O'Haul of Excess Excavation	Sta. Yd. O'Haul	Yd. Mt. O'Haul
66	333	67	3206	2653	5673	13,090					
			8480								
			15,208								

S.W. 1/4 SEC. 21  
T. 11 S., R. 61 W.

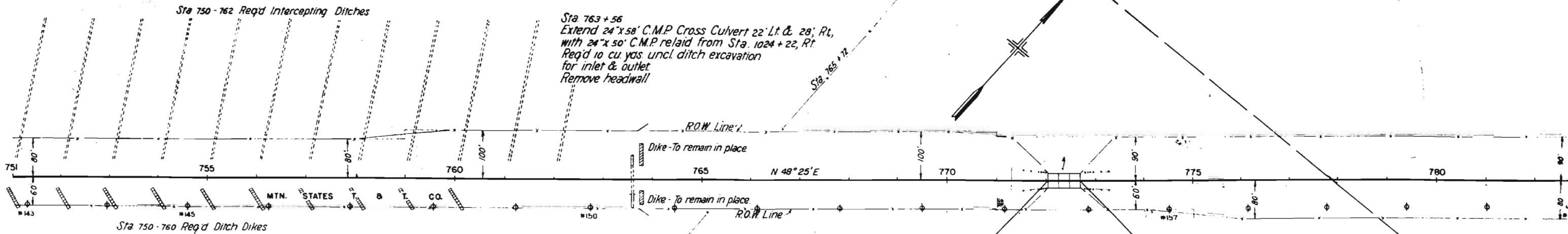
N.W. 1/4 SEC. 21

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TO SHEET
3	COLO.	192-A (2)	23	

DATE	BY	REVISION

PLAN	DATE	BY	REVISION



NOTE:  
See tabulation on Sheet No. 4  
for intercepting ditch and ditch  
dike requirement details.

Sta. 763 + 82  
Req'd 30 cu yds embankment  
for road approaches, Rt. & Lt.

STRUCTURE H-20-M  
NOT INCLUDED IN PROJECT  
STA. 772 + 04.3 TO 772 + 74.8  
3 Spans @ 23'-0"  
Treated Timber Trestle  
Constructed under F.A.P. 192-A

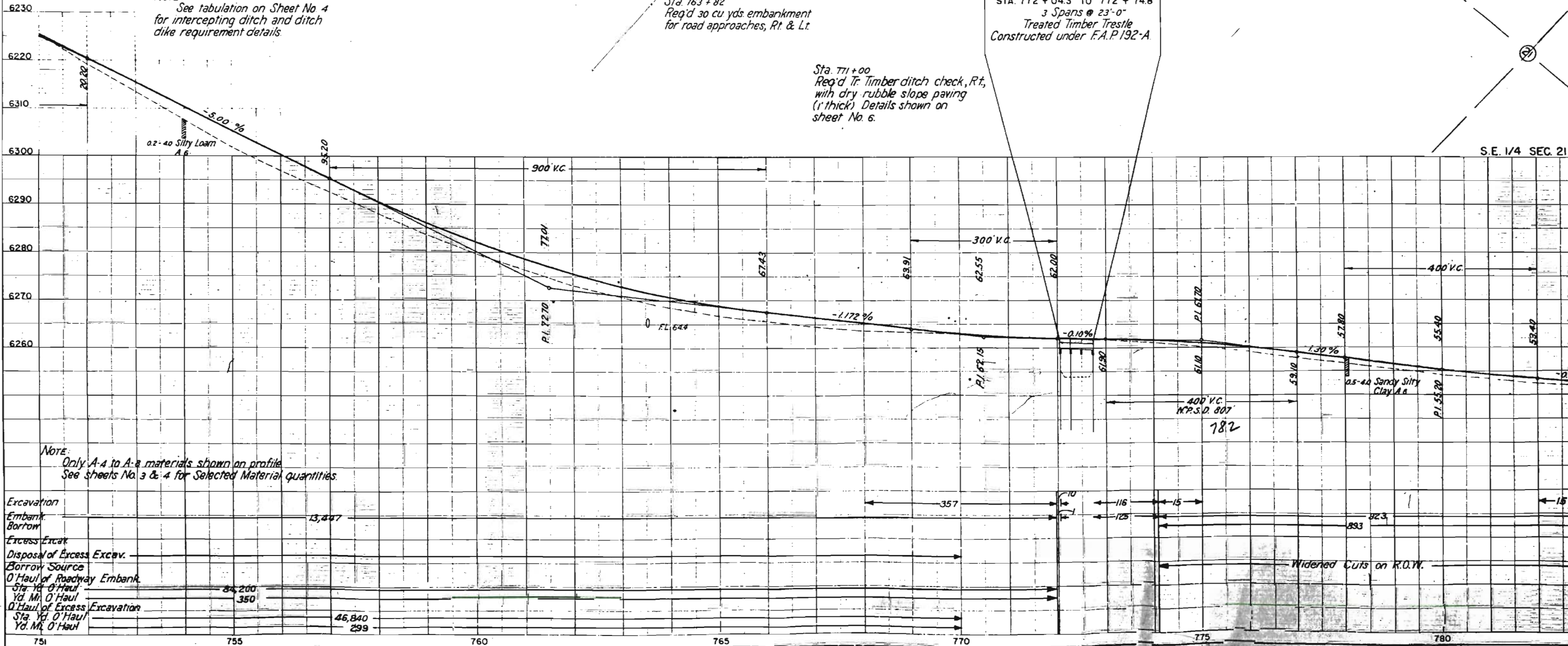
Sta. 771 + 00  
Req'd Treated Timber ditch check, Rt.,  
with dry rubble slope paving  
(1' thick) Details shown on  
sheet No. 6.

S.E. 1/4 SEC. 21

DATE	BY	REVISION

PROFILE	DATE	BY	REVISION



Note:  
Only A-4 to A-6 materials shown on profile  
See Sheets No. 3 & 4 for Selected Material Quantities.

Excavation	Embankment	Borrow	Bottom	Excavation	Disposal of Excess Excav.	Borrow Source	O'Haul of Roadway Embank.	Sta. Yd. O'Haul	Yd. M. O'Haul	O'Haul of Excess Excavation	Sta. Yd. O'Haul	Yd. M. O'Haul
	13,447						84,200		350		46,840	299

N.W. 1/4 SEC. 21

N.E. 1/4 SEC. 21  
T. 11S., R. 61W.

PIJ NO. 7  
SELECTED MATERIAL  
750' LEFT OF STA. 801 (R.R. CUT)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOT. SHEETS
3	COLO.	192-A (2)	24	

Note:  
See tabulation on Sheet No 4  
for ditch dike requirement details.

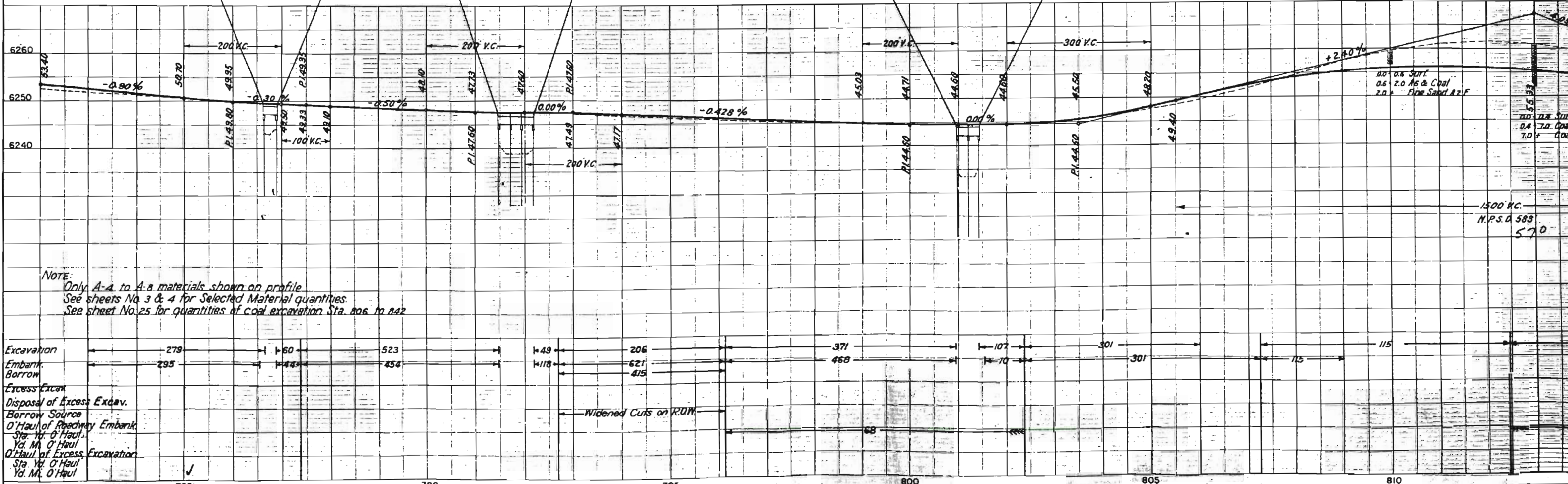
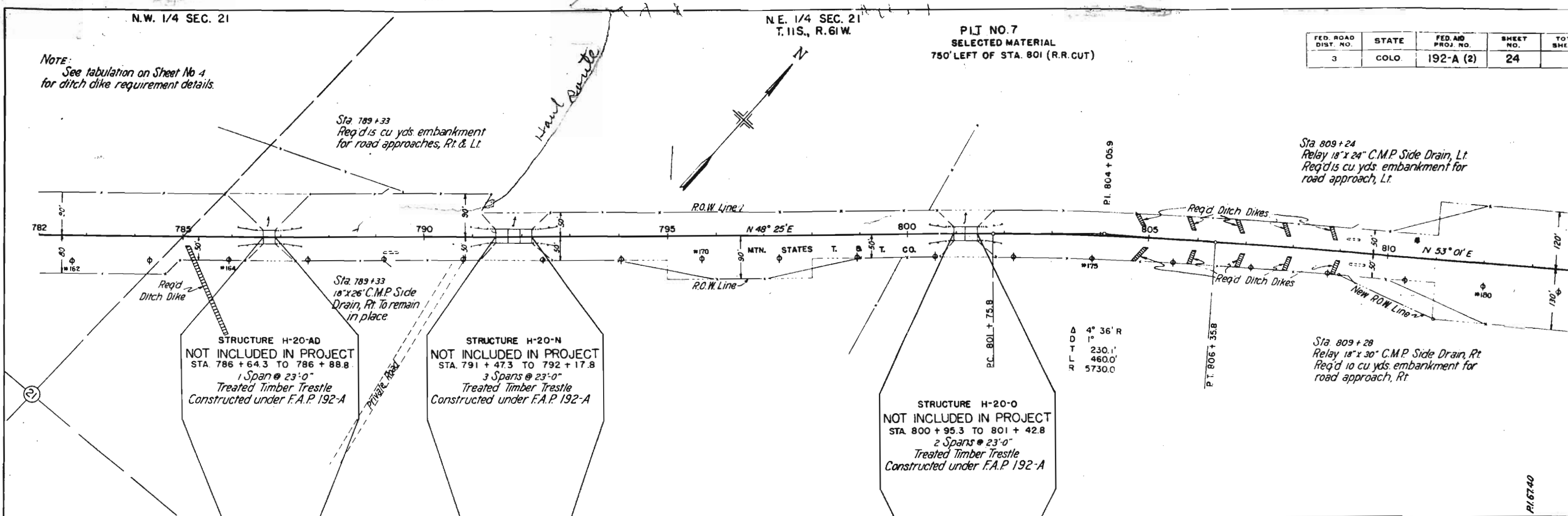
Sta 789 + 33  
Req'd is cu yds. embankment  
for road approaches, Rt. & Lt.

Sta 809 + 24  
Relay 18" x 24" C.M.P. Side Drain, Lt.  
Req'd is cu yds. embankment for  
road approach, Lt.

Sta 809 + 28  
Relay 18" x 30" C.M.P. Side Drain, Rt.  
Req'd 10 cu yds. embankment for  
road approach, Rt.

PLAN	DATE
DATE	
BY	
CHECKED	
APPROVED	
NOTE BOOK	
NO.	

PROFILE	DATE
DATE	
BY	
CHECKED	
APPROVED	
NOTE BOOK	
NO.	



Excavation	Embankment	Borrow
279	295	415
523	449	415
449	454	
206	621	
371	468	
107	70	
301	301	
115	115	

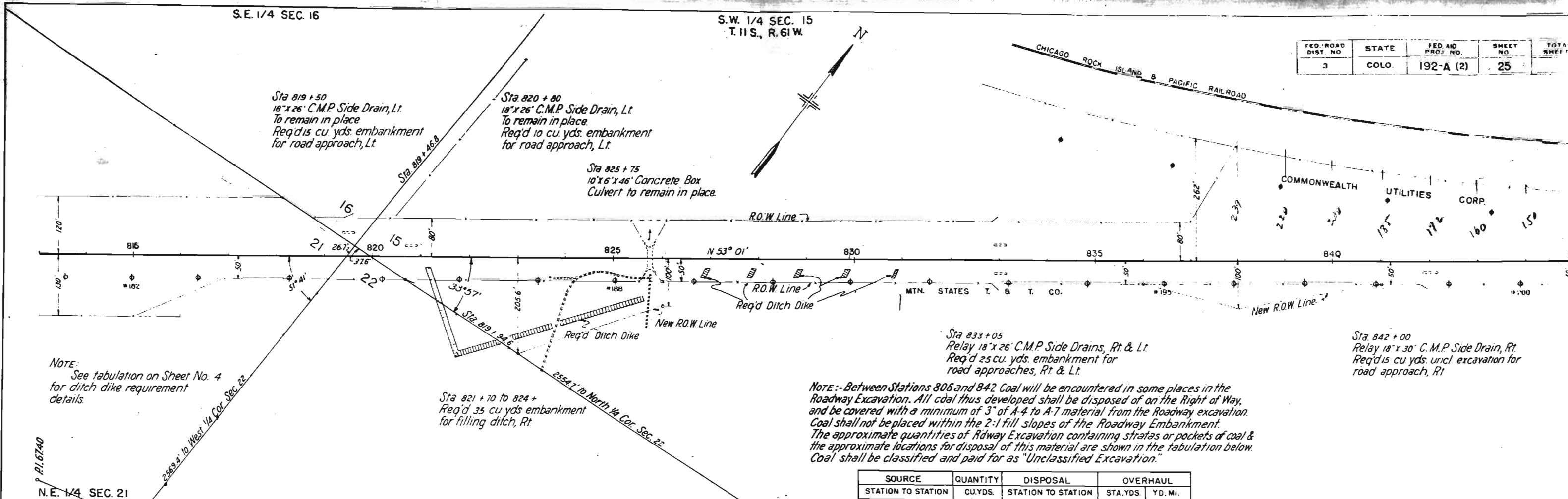
S.E. 1/4 SEC. 16

S.W. 1/4 SEC. 15  
T. 11 S., R. 61 W.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-A (2)	25	

DATE	
BY	
CHECKED	
APPROVED	
NO.	

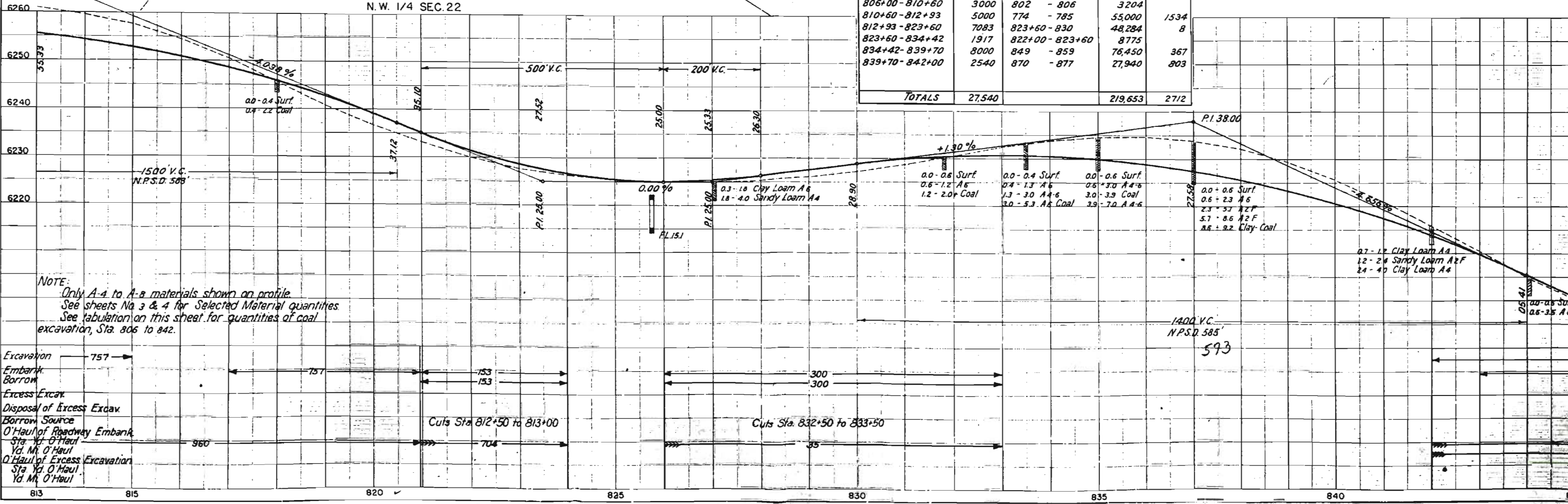
DATE	
BY	
CHECKED	
APPROVED	
NO.	



NOTE: See tabulation on Sheet No. 4 for ditch dike requirement details.

NOTE: - Between Stations 806 and 842 Coal will be encountered in some places in the Roadway Excavation. All coal thus developed shall be disposed of on the Right of Way, and be covered with a minimum of 3" of A-4 to A-7 material from the Roadway excavation. Coal shall not be placed within the 2:1 fill slopes of the Roadway Embankment. The approximate quantities of Roadway Excavation containing stratas or pockets of coal & the approximate locations for disposal of this material are shown in the tabulation below. Coal shall be classified and paid for as "Unclassified Excavation."

SOURCE STATION TO STATION	QUANTITY CU.YDS.	DISPOSAL STATION TO STATION	OVERHAUL	
			STA.YDS.	YD. MI.
806+00-810+60	3000	802 - 806	3204	
810+60-812+93	5000	774 - 785	55,000	1534
812+93-823+60	7083	823+60-830	48,284	8
823+60-834+42	1917	822+00-823+60	8775	
834+42-839+70	8000	849 - 859	76,450	367
839+70-842+00	2540	870 - 877	27,940	803
<b>TOTALS</b>	<b>27,540</b>		<b>219,653</b>	<b>2712</b>



Excavation	757
Embank.	
Borrow	757
Excess Excav.	
Disposal of Excess Excav.	
Borrow Source	
O'Haul of Roadway Embank.	
Sta. Yd. O'Haul	960
Yd. Mt. O'Haul	
O'Haul of Excess Excavation	
Sta. Yd. O'Haul	704
Yd. Mt. O'Haul	

Cuts Sta. 812+50 to 813+00

Cuts Sta. 832+50 to 833+50

S.W. 1/4 SEC. 15

S.E. 1/4 SEC. 15

N.E. 1/4 SEC. 15  
T.11S., R.61W.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-A (2)	26	

Sta 872+00  
Req'd 15 cu yds. embankment  
for road approach, Lt.

CHICAGO ROCK ISLAND & PACIFIC RAILROAD

R.O.W. 2

COMMONWEALTH UTILITIES CORP.

N 53° 01' E

Req'd Ditch Dike

870

875

MTN. STATES T. & B. T. CO.

Req'd Ditch Dike

#217

PIT NO.8  
SELECTED MATERIAL  
150' RIGHT OF STA. 872-877+

STRUCTURE H-20-Q  
NOT INCLUDED IN PROJECT  
STA. 868 + 36.3 TO 868 + 83.8  
2 Spans @ 23'-0"  
Treated Timber Trestle  
Constructed under F.A.P. 192-A

NOTE:  
See tabulation on  
Sheet No. 4 for ditch  
dike requirement details.

STRUCTURE H-20-P  
NOT INCLUDED IN PROJECT  
STA. 847 + 99.3 TO 848 + 69.8  
3 Spans @ 23'-0"  
Treated Timber Trestle  
Constructed under F.A.P. 192-A

Sta 852+00  
18" x 26" C.M.P. Side Drain, Rt.  
To remain in place.  
Req'd 10 cu yds. embankment  
for road approach, Rt.

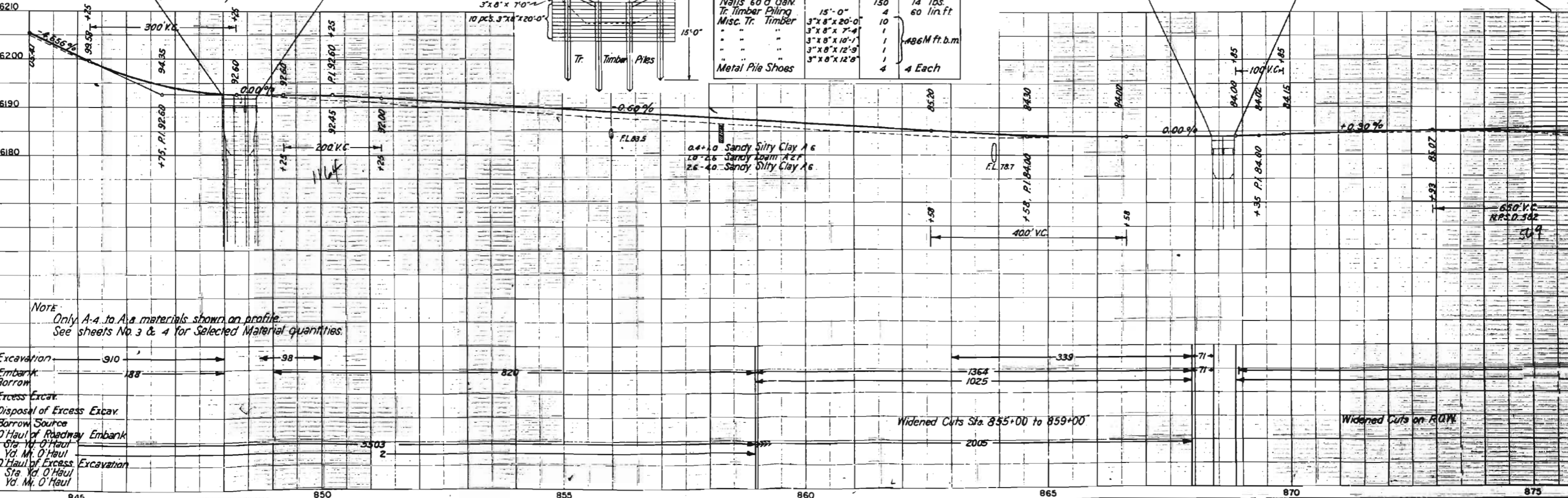
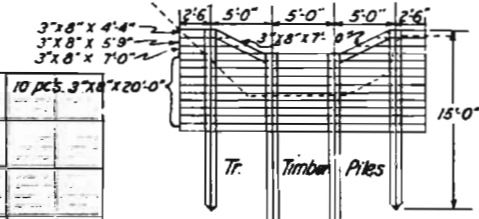
Sta 856+00  
Extend 24" x 56" C.M.P. Cross Culvert  
10 Lt. & 24' Rt.  
Remove headwall.

Sta 868+00, 41' Rt.  
Req'd 20 ft. timber ditch check with 4-15' treated  
timber piles @ 5' center to center. Modify detail of  
ditch check shown on sheet No. 7, to dimensions  
shown in sketch below.

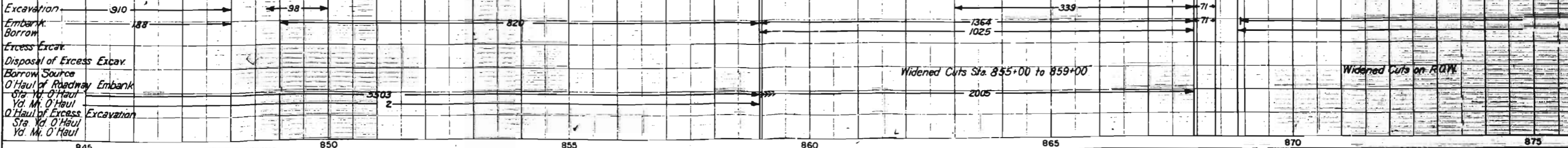
Sta 863+90  
Req'd 42" x 92" C.M.P. Cross  
Culvert and 15 cu yds. uncl.  
ditch excavation for inlet  
& outlet.

MATERIAL FOR TR. TIMBER DITCH CHECK

Description	Dimension	No. Pcs	Quantity
Nails 60 d Galv.	15'-0"	150	14 lbs.
Tr. Timber Piling	15'-0"	4	60 lin.ft
Misc. Tr. Timber	3" x 8" x 20'-0"	10	486 M ft. b.m.
"	3" x 8" x 7'-8"	1	
"	3" x 8" x 10'-1"	1	
"	3" x 8" x 12'-9"	1	
Metal Pile Shoes	3" x 8" x 12'-8"	4	4 Each



NOTE:  
Only A-4 to A-6 materials shown on profile.  
See sheets No 3 & 4 for Selected Material quantities.



Widened Cuts Sta. 855+00 to 859+00

Widened Cuts on R.O.W.

DATE	
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PLAN	
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NOTE	
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DATE	
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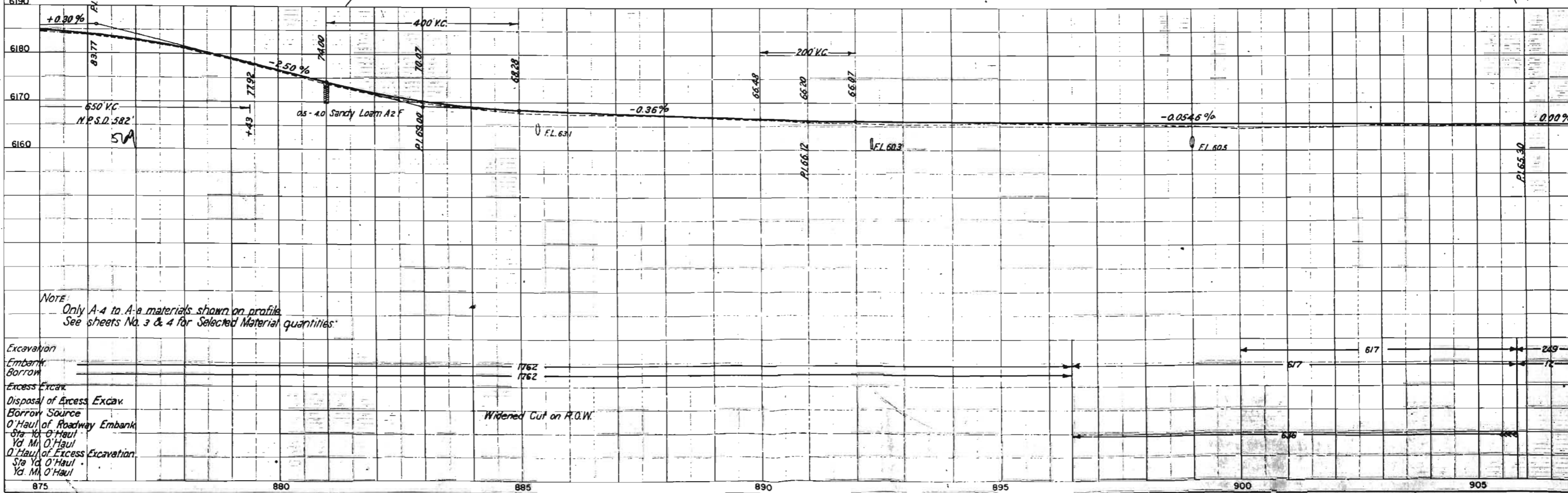
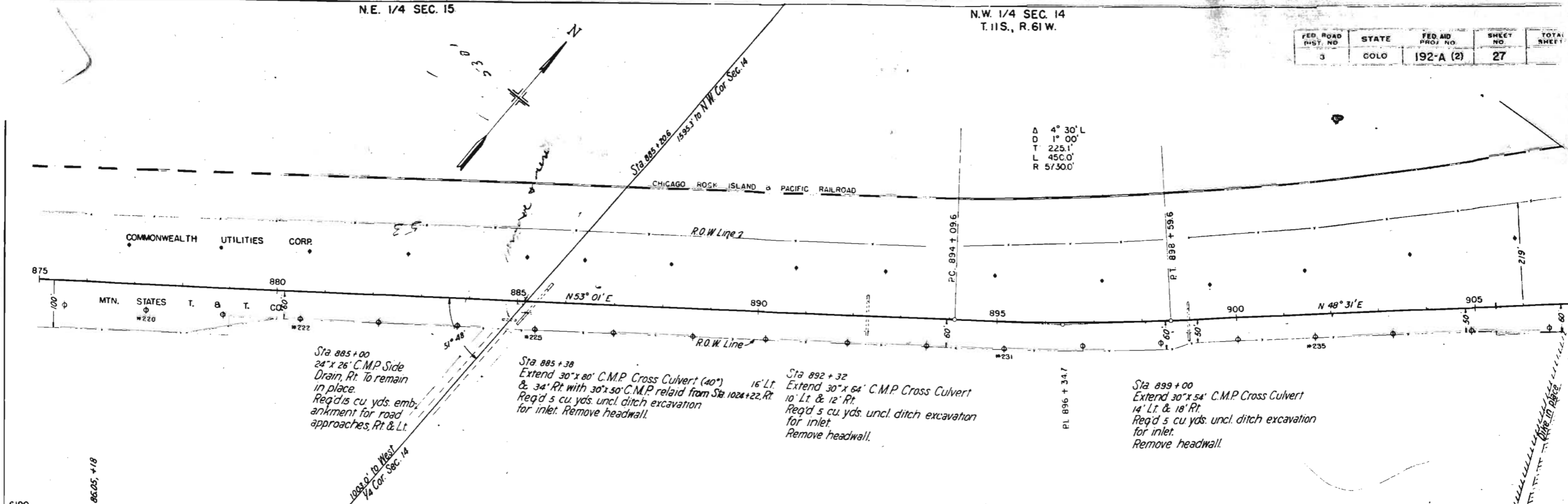
N.E. 1/4 SEC. 15

N.W. 1/4 SEC. 14  
T.11S., R.61W.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-A (2)	27	

PLAN	DATE	BY
DESIGNED		
PLOTTED		
NOTED		
NO.		

PROFILE	DATE	BY
DESIGNED		
PLOTTED		
NOTED		
NO.		



Note:  
Only A-4 to A-6 materials shown on profile.  
See sheets No. 3 & 4 for Selected Material Quantities.

S.W. 1/4 SEC. 11

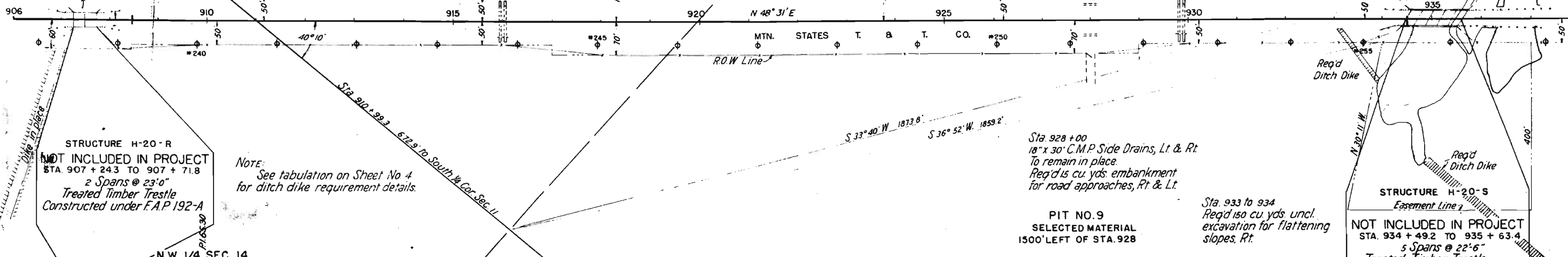
S.E. 1/4 SEC. 11  
T. 11 S., R. 61 W.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOT. SHEETS
3	COLO.	192-A (2)	28	

CHICAGO ROCK ISLAND & PACIFIC RAILROAD

Sta 916 + 00  
Extend 2-30' x 60' C.M.P. Cross Culverts  
12' Lt. & 12' Rt.  
Req'd 15 cu. yds. uncl. ditch excavation  
for inlet.  
Remove headwall

Sta 929 + 90  
Extend 2-30' x 56' C.M.P. Cross Culverts  
20' Lt. & 20' Rt.  
Req'd 15 cu. yds. uncl. ditch excavation  
for inlet.  
Remove headwall



STRUCTURE H-20-R  
NOT INCLUDED IN PROJECT  
STA. 907 + 24.3 TO 907 + 71.8  
2 Spans @ 23'-0"  
Treated Timber Trestle  
Constructed under F.A.P. 192-A

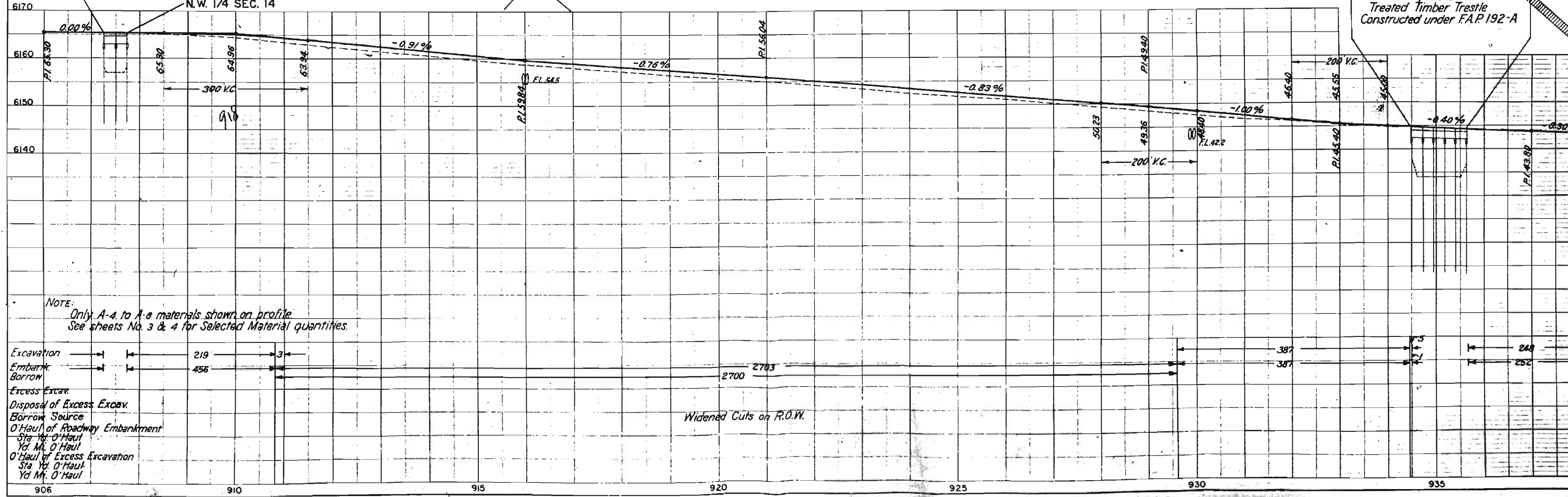
NOTE:  
See tabulation on Sheet No. 4  
for ditch dike requirement details.

Sta. 928 + 00  
18" x 30" C.M.P. Side Drains, Lt. & Rt.  
To remain in place.  
Req'd 15 cu. yds. embankment  
for road approaches, Rt. & Lt.

PIT NO. 9  
SELECTED MATERIAL  
1500' LEFT OF STA. 928

Sta. 933 to 934  
Req'd 150 cu. yds. uncl.  
excavation for flattening  
slopes, Rt.

STRUCTURE H-20-S  
Easement Line  
NOT INCLUDED IN PROJECT  
STA. 934 + 49.2 TO 935 + 63.4  
5 Spans @ 22'-6"  
Treated Timber Trestle  
Constructed under F.A.P. 192-A



NOTE:  
Only A-2 to A-8 materials shown on profile  
See sheets No. 3 & 4 for Selected Material quantities.

Excavation	219	3	387	248
Embank.	456		387	252
Borrow				
Excess Excav.				
Disposal of Excess Excav.				
Borrow Source				
O'Haul of Roadway Embankment				
Sta. Yd. O'Haul				
Yd. Mt. O'Haul				
O'Haul of Excess Excavation				
Sta. Yd. O'Haul				
Yd. Mt. O'Haul				

Widened Cuts on R.O.W.

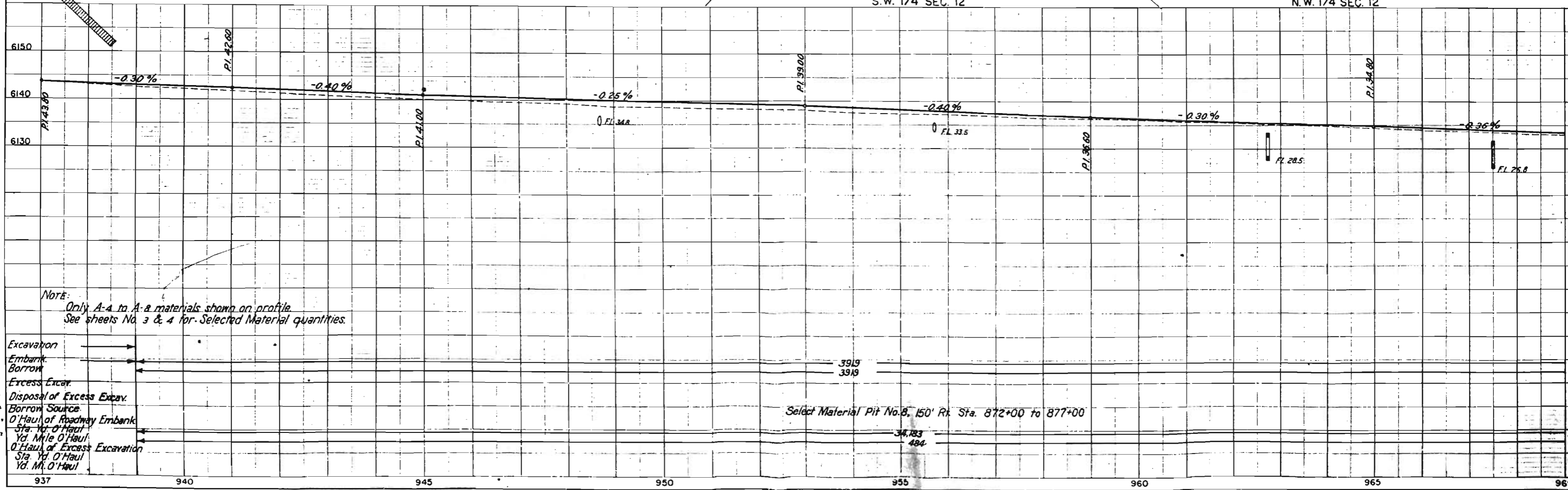
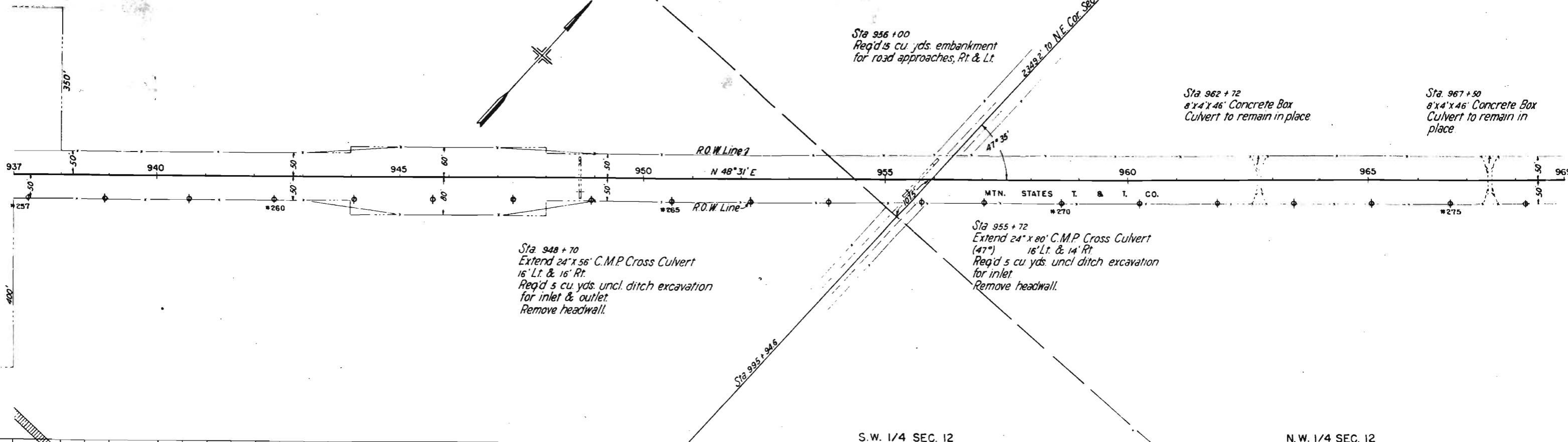
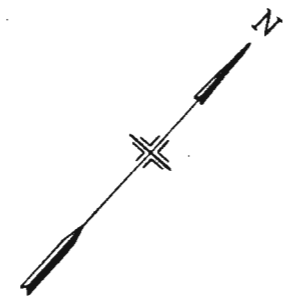
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SE. 1/4 SEC. 11

NE. 1/4 SEC. 11  
T. 11 S., R. 61 W.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-A (2)	29	



Note:  
Only A-4 to A-8 materials shown on profile.  
See sheets No. 3 & 4 for Selected Material Quantities.

- Excavation
- Embank.
- Borrow
- Excess Excav.
- Disposal of Excess Excav.
- Borrow Source
- O'Haul of Roadway Embank.
- Sta. Yd. O'Haul
- Yd. Mile O'Haul
- O'Haul of Excess Excavation
- Sta. Yd. O'Haul
- Yd. M. O'Haul

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DATE  
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NOTE BOOK PAGES CHECKED  
STRUCTURE NOTED AS CHECKED

PROFILE  
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NOTE BOOK PAGES CHECKED  
STRUCTURE NOTED AS CHECKED