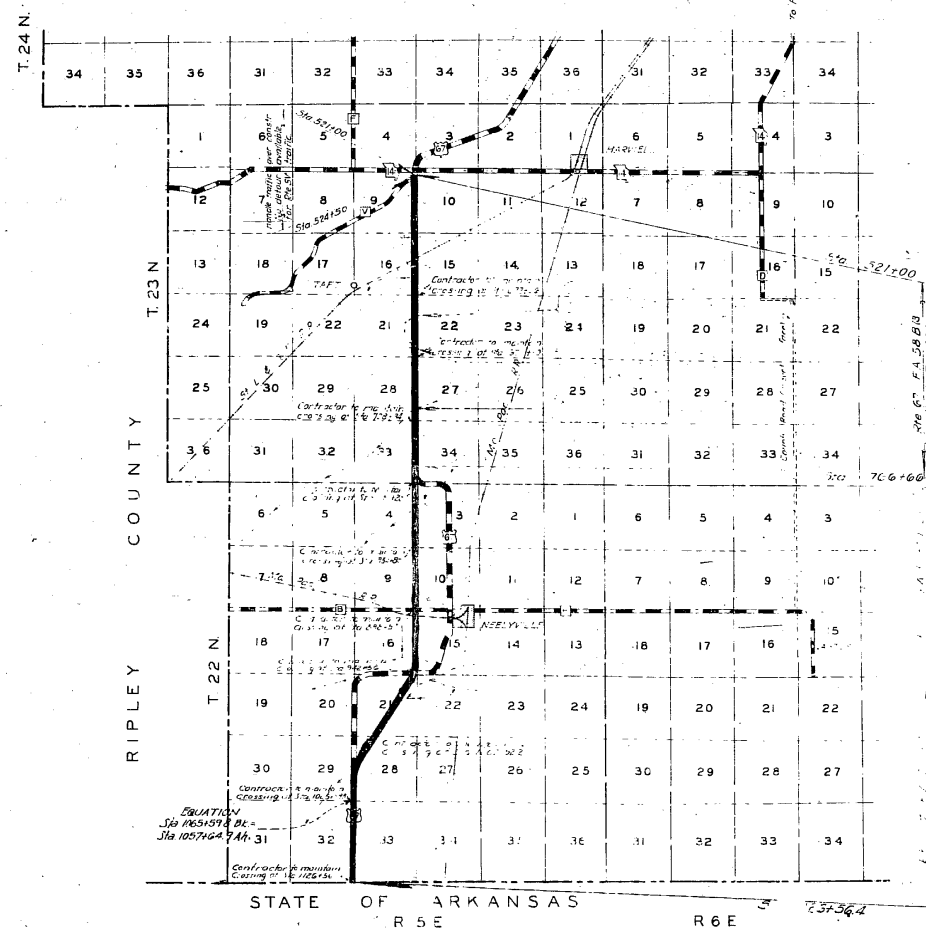


# MISSOURI STATE HIGHWAY COMMISSION PLAN AND PROFILE OF PROPOSED STATE ROAD FEDERAL AID PROJECT BUTLER COUNTY

PLAN 1 IN. = 100 FT.  
PROFILE, HOR. 1 IN. = 100 FT. VERT. 1 IN. = 10 FT.  
CROSS-SECTIONS 1 IN. = 5 FT.

| SECTION | STATE | NO.        | DATE | BY | DATE |
|---------|-------|------------|------|----|------|
| 5       | MO    | FA 58-B(3) |      |    |      |
| 10      |       | BUTLER     |      |    |      |

Proj. FA 58-B(3)



## CONVENTIONAL SIGNS

|                          |                      |            |
|--------------------------|----------------------|------------|
| STATE AND NATIONAL LINE  | LEVEE                | WATER      |
| COUNTY LINE              | CULVERT              | RAILROAD   |
| CITY, VILLAGE OR BOROUGH | DROP INLET           | TRUCK STOP |
| TOWNSHIP LINE            | TRUCK STOP           | TRUCK STOP |
| SECTION LINE             | POWER POLE           | TRUCK STOP |
| GRADE LINE               | TELEPHONE OR T. POLE | TRUCK STOP |
| FENCE LINE               | RAILROAD             | TRUCK STOP |
| UNFENCED PROPERTY        | RAILROAD             | TRUCK STOP |
| RIGHT OF WAY LINE        | RAILROAD             | TRUCK STOP |
| TRAVELING WAY            | RAILROAD             | TRUCK STOP |
| RAILROAD                 | RAILROAD             | TRUCK STOP |
| RETAINING WALL           | RAILROAD             | TRUCK STOP |
| BASE OR SURVEY LINE      | RAILROAD             | TRUCK STOP |

SUBMITTED

RECOMMENDED FOR APPROVAL

APPROVED

COMMISSIONER  
PUBLIC ROADS ADMINISTRATION  
FEDERAL WORKS AGENCY

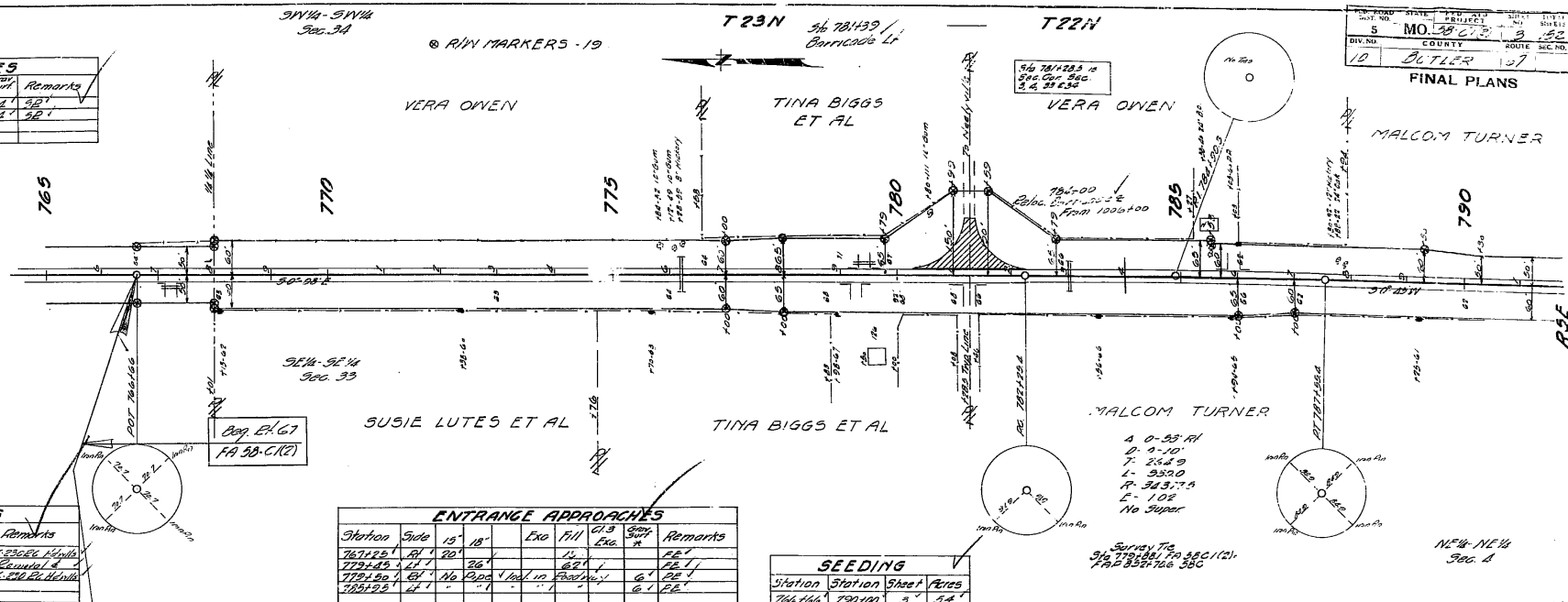
## FINAL SUMMARY OF QUANTITIES

## FINAL SUMMARY OF QUANTITIES

Prepared By D. A. T. S. S. Date 10-1-19 19 19 Checked in Div. Office By \_\_\_\_\_ Date \_\_\_\_\_ 19 \_\_\_\_\_ Checked in Central Office By \_\_\_\_\_ Date \_\_\_\_\_ 19 \_\_\_\_\_ Revised By \_\_\_\_\_ Date \_\_\_\_\_ 19 \_\_\_\_\_

## SIDE ROAD APPROACHES

| SIDE ROAD APPROACHES |      |         |              |      |         |           |         |
|----------------------|------|---------|--------------|------|---------|-----------|---------|
| Station              | Side | 18"     | Exc          | Fill | C13 Exc | Grav Surf | Remarks |
| 781428.5             | Li   | No Pipe | Inst in Bank |      |         | 4.4'      | 9.2'    |
| 781429.5             | RH   | 3.4'    |              | 5.5' |         | 1.4'      | 5.2'    |



## ENTRANCE APPROACHES

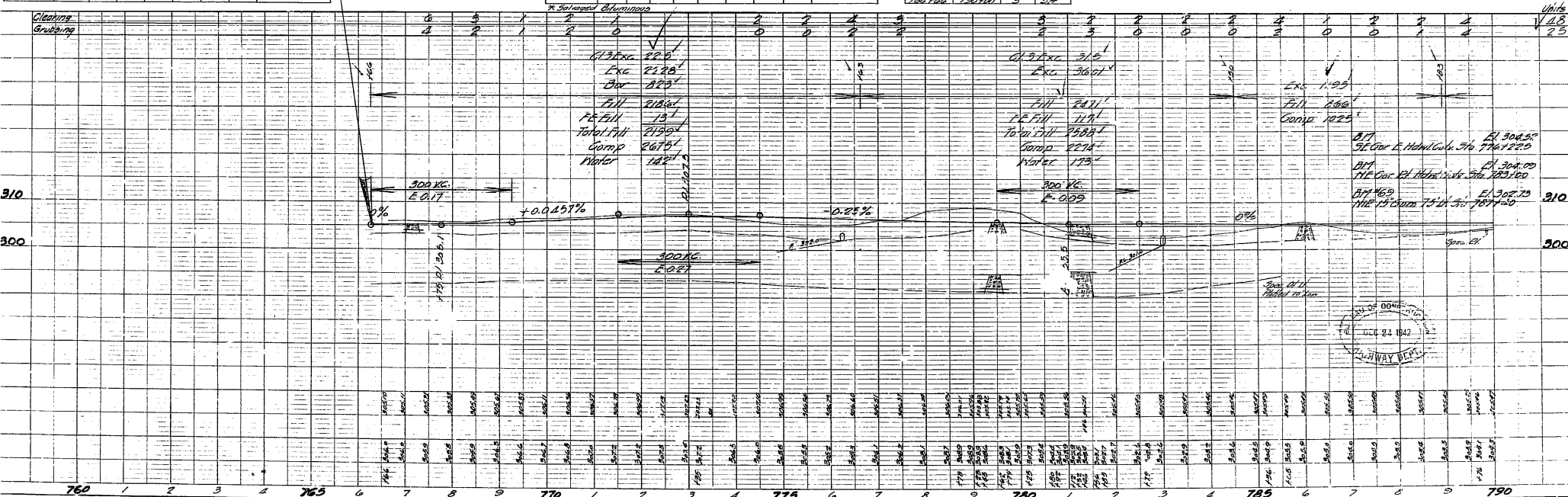
| <u>ENTRANCE APPROACHES</u> |             |            |            |            |                 |                 |               |                |
|----------------------------|-------------|------------|------------|------------|-----------------|-----------------|---------------|----------------|
| <u>Station</u>             | <u>Side</u> | <u>15'</u> | <u>18'</u> | <u>Exo</u> | <u>Fill</u>     | <u>G/S Exo.</u> | <u>Spr. x</u> | <u>Remarks</u> |
| 767422S                    | Rt          | 20'        |            |            | 15'             |                 |               | FE 1           |
| 767423S                    | Lt          | 26'        |            |            | 26'             |                 |               | FE 1           |
| 767424S                    | Rt          | No         | 230m       | ↓          | bed. in Food m. |                 | G' PE         | FE 1           |
| 767425S                    | Lt          | "          | "          |            |                 |                 | G' PE         | FE 1           |

## SEEDING

| SEEDING |         |       |       |
|---------|---------|-------|-------|
| Station | Station | Sheet | Pires |
| 711-111 | 700-100 | 2     | 5.5   |

## DRAINAGE STRUCTURES

| DRAINAGE STRUCTURES |       |       |      |       |            |          |              |
|---------------------|-------|-------|------|-------|------------|----------|--------------|
| Station             | Flowd | Size  | Shov | Depth | Drain Area | Flow Exp | Remarks      |
| C76 + 0.00          | Pipe  | 18" x | 62'  | Equal | 22.5'      | 11.25'   | C230RC 4x10s |
| C81 + 0.00          |       |       |      |       |            |          | Concrete 4   |
| C83 + 0.00          | Pipe  | 24" x | 54'  | Equal | 20.0'      | 10.00'   | C230RC 4x10s |



N1/4-N1/4  
Sec. 3

S1/4-N1/4  
Sec. 3

T22N  
JULIA : AWS, ESTATE

N1/4-S1/4  
Sec. 3

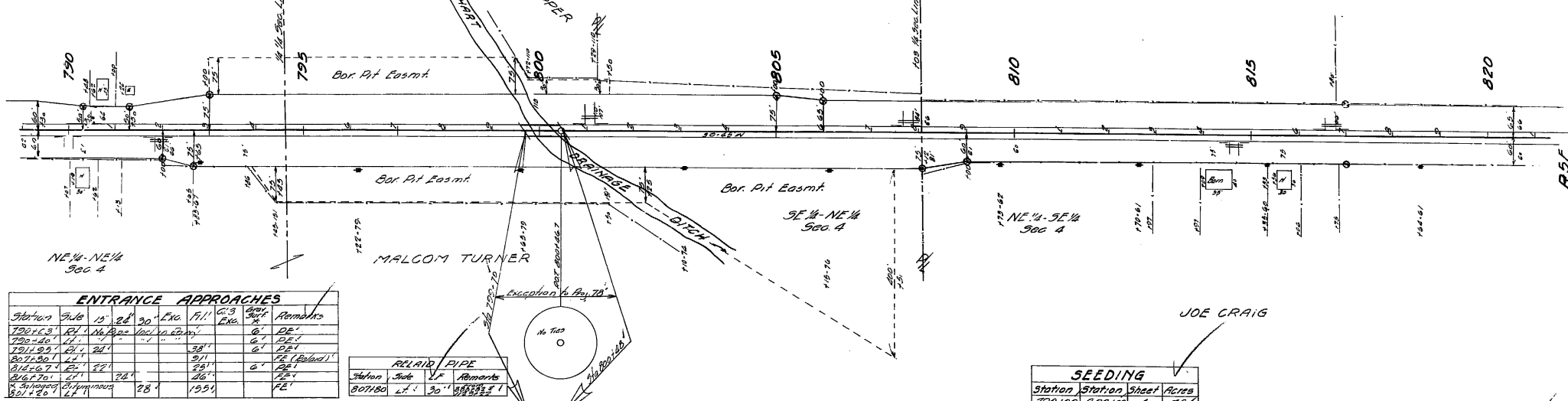
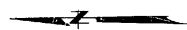
© R/W MARKERS 11  
D.M. RATCLIFF

|             |    |        |        |       |    |           |      |
|-------------|----|--------|--------|-------|----|-----------|------|
| PROJECT NO. | 5  | MO.    | MO.    | DAY   | 15 | YEAR      | 1952 |
| DIST. NO.   | 10 | COUNTY | BUTLER | ROUTE | 67 | SHEET NO. | 67   |

FINAL PLANS

MALCOM TURNER

CHESTER G. SKIPPER



**ENTRANCE APPROACHES**

| Station | Sub | 15 | 20 | 30 | Exc. | Fill | G.S. | Remarks |
|---------|-----|----|----|----|------|------|------|---------|
| 1201.03 | 14  | 14 | 14 | 14 | 14   | 14   | 14   | DE      |
| 1201.03 | 14  | 14 | 14 | 14 | 14   | 14   | 14   | DE      |
| 1201.03 | 14  | 14 | 14 | 14 | 14   | 14   | 14   | DE      |
| 1201.03 | 14  | 14 | 14 | 14 | 14   | 14   | 14   | DE      |
| 1201.03 | 14  | 14 | 14 | 14 | 14   | 14   | 14   | DE      |
| 1201.03 | 14  | 14 | 14 | 14 | 14   | 14   | 14   | DE      |
| 1201.03 | 14  | 14 | 14 | 14 | 14   | 14   | 14   | DE      |
| 1201.03 | 14  | 14 | 14 | 14 | 14   | 14   | 14   | DE      |
| 1201.03 | 14  | 14 | 14 | 14 | 14   | 14   | 14   | DE      |
| 1201.03 | 14  | 14 | 14 | 14 | 14   | 14   | 14   | DE      |

**RELAY PIPE**

| Station | Sub | 15 | 20 | 30 | Exc. | Fill | G.S. | Remarks |
|---------|-----|----|----|----|------|------|------|---------|
| 801.80  | 14  | 14 | 14 | 14 | 14   | 14   | 14   | DE      |

**SEEDING**

| Station | Station | Sheet | Acres |
|---------|---------|-------|-------|
| 790.00  | 820.00  | 4     | 1.0   |

JOE CRAIG

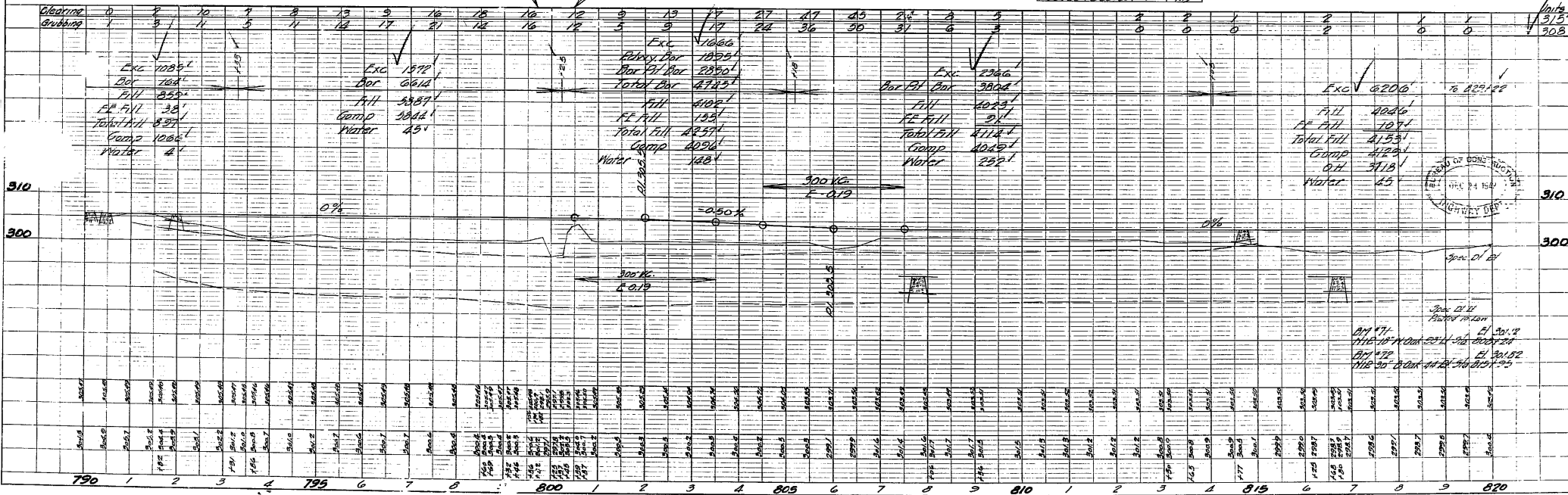
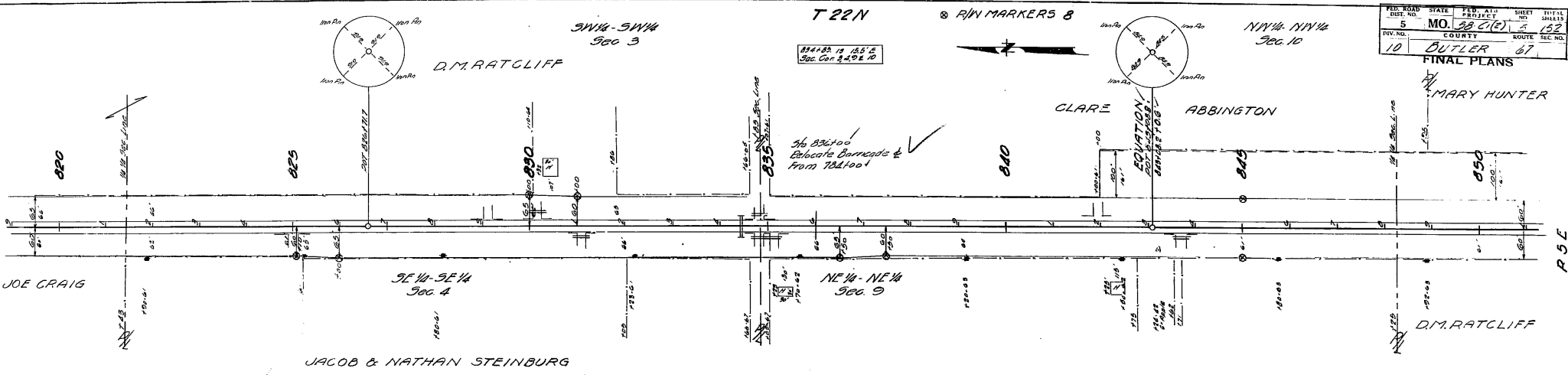


PLATE 1-PLAN-PROFILE (D.P.A.R.C. STANDARD)  
KUFFEL & ESSER CO. NEW YORK



| FED. ROAD DIST. NO. | STATE  | FED. AID PROJECT | SHEET NO. | TOTAL SHEETS |
|---------------------|--------|------------------|-----------|--------------|
| 5                   | MO.    | 83 C1E2          | 152       | 152          |
| SEC. NO.            | COUNTY | ROUTE            | SECTION   |              |
| 10                  | BUTLER | 67               |           |              |

FINAL PLANS

| Station | Side | 15' | 18' | 24' | Exc. | Fill | Gr. | Remarks |
|---------|------|-----|-----|-----|------|------|-----|---------|
| 822+105 | LT   | 12' |     |     | 28'  | 6'   | BE  |         |
| 822+116 | LT   | 12' |     |     | 31'  | 6'   | FE  |         |
| 830+122 | LT   | 24' |     |     | 37'  | 6'   | DE  |         |
| 831+110 | LT   | 24' |     |     | 37'  | 6'   | FE  |         |
| 831+110 | RT   | 24' |     |     | 37'  | 6'   | FE  |         |
| 841+126 | LT   | 22' |     |     | 37'  | 6'   | FE  |         |
| 841+126 | RT   | 22' |     |     | 37'  | 6'   | FE  |         |

| Station | Side | 18' | 24' | Exc. | Fill | Gr. | Remarks |
|---------|------|-----|-----|------|------|-----|---------|
| 834+135 | LT   | 38' |     | 95'  | 11'  |     |         |
| 834+135 | RT   | 38' |     | 95'  | 11'  |     |         |

| Station | Station Sheet | Acres  |
|---------|---------------|--------|
| 820+00  | 830+00        | 5' 32' |

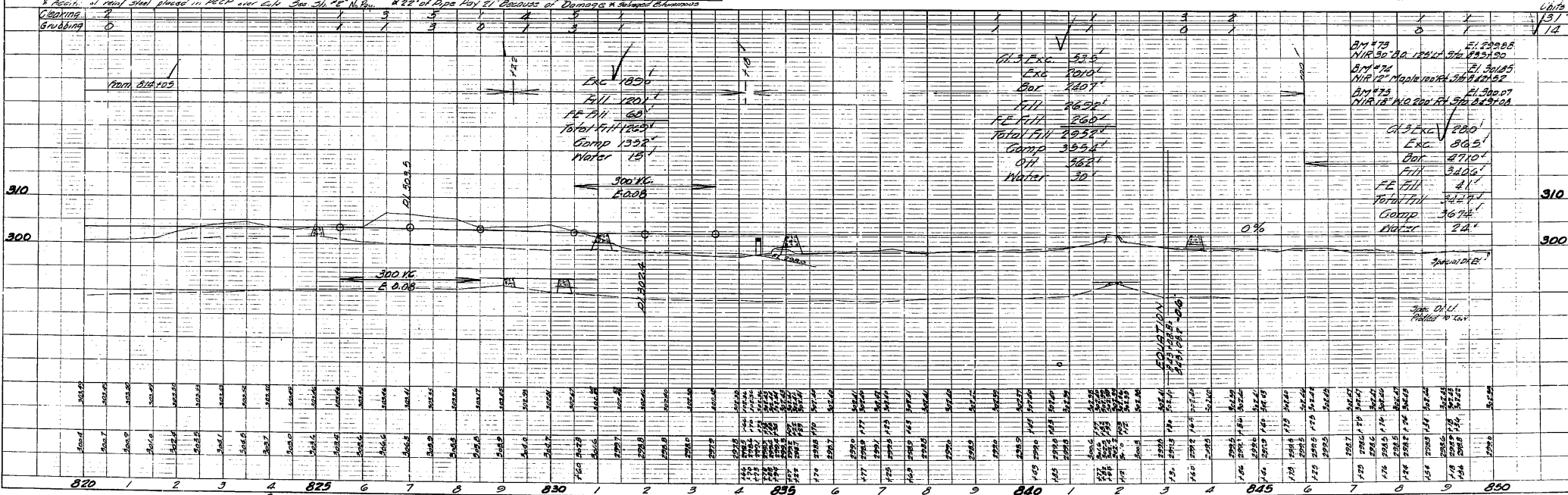


PLATE 1 - PLAN - PROFILE

MARY HUNTER

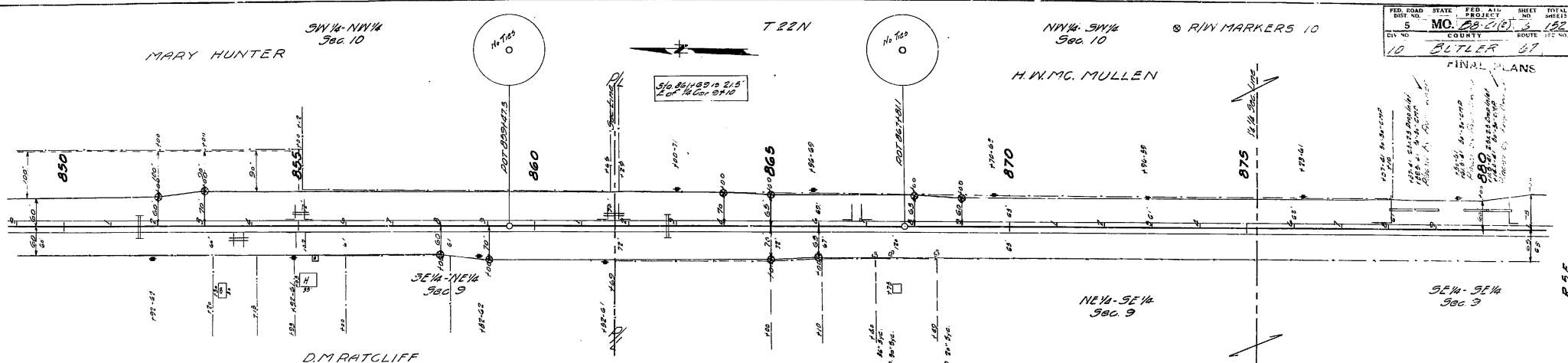
SW 1/4 - NW 1/4  
Sec. 10

T 22 N

NW 1/4 - SW 1/4  
Sec. 10

R/W MARKERS 10

FED. ROAD STATE FED. AID PROJECT SHEET TOTAL  
DIST NO. MO. DIST NO. 3 152  
COUNTY ROUTE 175  
10 BUTLER 67  
FINAL PLANS



**ENTRANCE APPROACHES**

| Station | Side | 15' | 30' | 36' | Exc. | Fill | 15' | 30' | 36' | Exc. | Remarks |
|---------|------|-----|-----|-----|------|------|-----|-----|-----|------|---------|
| 855+00  | RT   | 82' | 82' |     |      | 111' | 62' | 62' |     | BE!  |         |
| 855+00  | RT   | 16' | 16' | 16' |      | 17'  | 7'  | 7'  |     | BE!  |         |
| 855+00  | RT   | 14' | 14' | 21' |      | 64'  | 7'  | 7'  |     | BE!  |         |
| 855+00  | RT   | 14' | 21' |     |      | 61'  | 7'  | 7'  |     | BE!  |         |
| 855+00  | RT   | 14' | 21' |     |      | 16'  | 7'  | 7'  |     | BE!  |         |

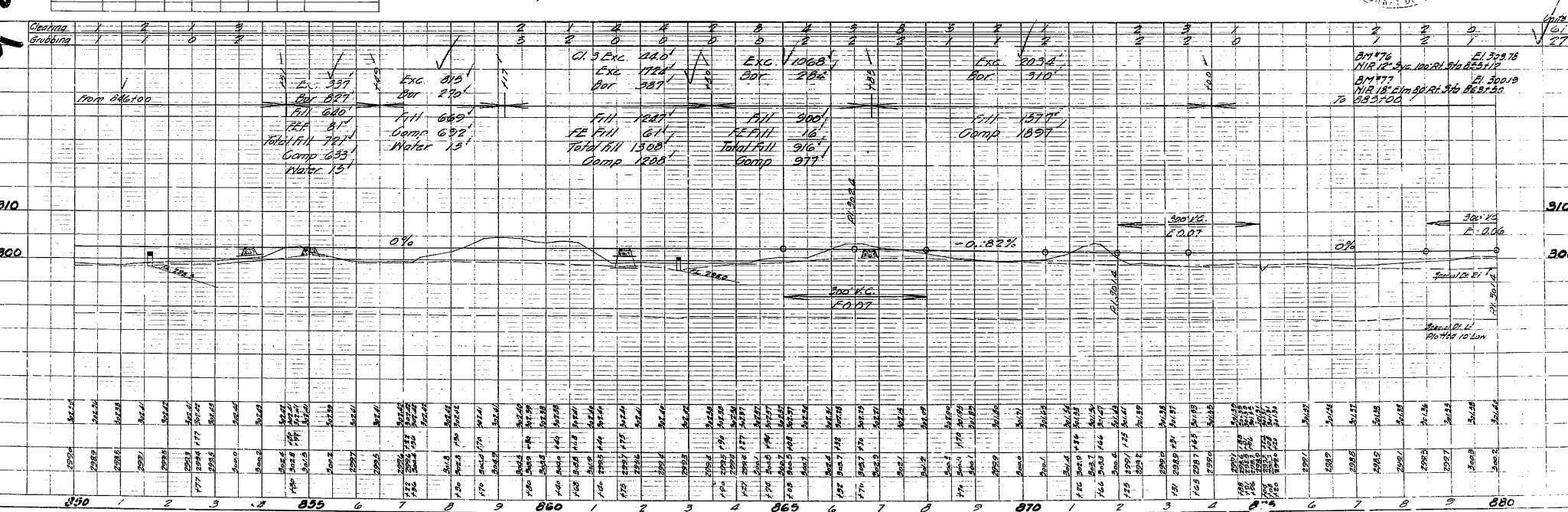
x Stripped Off-culverts

**SEEDING**

| Station | Station | Seed | Area |
|---------|---------|------|------|
| 850+00  | 850+00  | 2    | 14   |

**DRAINAGE STRUCTURES**

| Station | Span      | Size    | Span | Length | Drain Area | C/S Exc.    | Remarks |
|---------|-----------|---------|------|--------|------------|-------------|---------|
| 851+43  | 20' x 16" | 3' x 3' | 48'  | Equal  | 280        | 2.0' Minors |         |
| 852+70  | 20' x 16" | 3' x 3' | 31'  | Equal  | 810        | 2.0' Minors |         |



DATE 1-18-68 DRAWN BY J. E. B. STATION

⊗ R/W MARKERS 27

H. V. MAC. MULLEN

JOS. GOLDEN

EDW. JUDY

260

B. C. GOSS

CENTRAL STATES LIFE INS. CO

## FINAL PLANS

SW 1/4 - NW 1/4  
Sec. 15

LUCIVIE BURNETT

SE 1/4 - SE

## SEEDING

| Station | Station | Sheet | Acres |
|---------|---------|-------|-------|
| 880+00  | 910+00  | 7     | 10.8  |

542 286 + 00  
Cooking, Clean  
666 Cu. Yds

### SIDE ROAD APPROACHES

| Station  | Side | Exc.     | Fill         | Cl. 3<br>Exc. | Sett<br>6" | Remarks       |
|----------|------|----------|--------------|---------------|------------|---------------|
| BBS 197' | L'   | 1/2 Pipe | Inc. in Bl'g | 83'           | 83'        | See p. 56 = 1 |
| BBS 197' | R'   | 1/2 Pipe | Inc. in Bl'g | 85'           | 85'        |               |

## DRAINAGE STRUCTURES

| Station | Stand | SIZE | Skew | LGth  | DRAIN<br>Area | G.I.<br>Exc | Vol.<br>Dist.<br>Exc. | Remarks         |
|---------|-------|------|------|-------|---------------|-------------|-----------------------|-----------------|
| AB314   |       |      |      |       |               |             |                       | Parent 11'      |
| AB2150  | Pipe  | 26"  | 34'  | Equal | 60.5'         |             |                       | 6.250 Cu. Yards |
| AB4110  | Pipe  | 16"  | 20'  | Equal | 115'          |             |                       | 1.500 " " "     |
| AB4142  | 6546  | 22"  | 20'  | Equal | 80'           |             |                       | 6 " "           |
| AB3160  | Pipe  | 22"  | 46'  | Equal | 16'           |             |                       | to He-wi        |

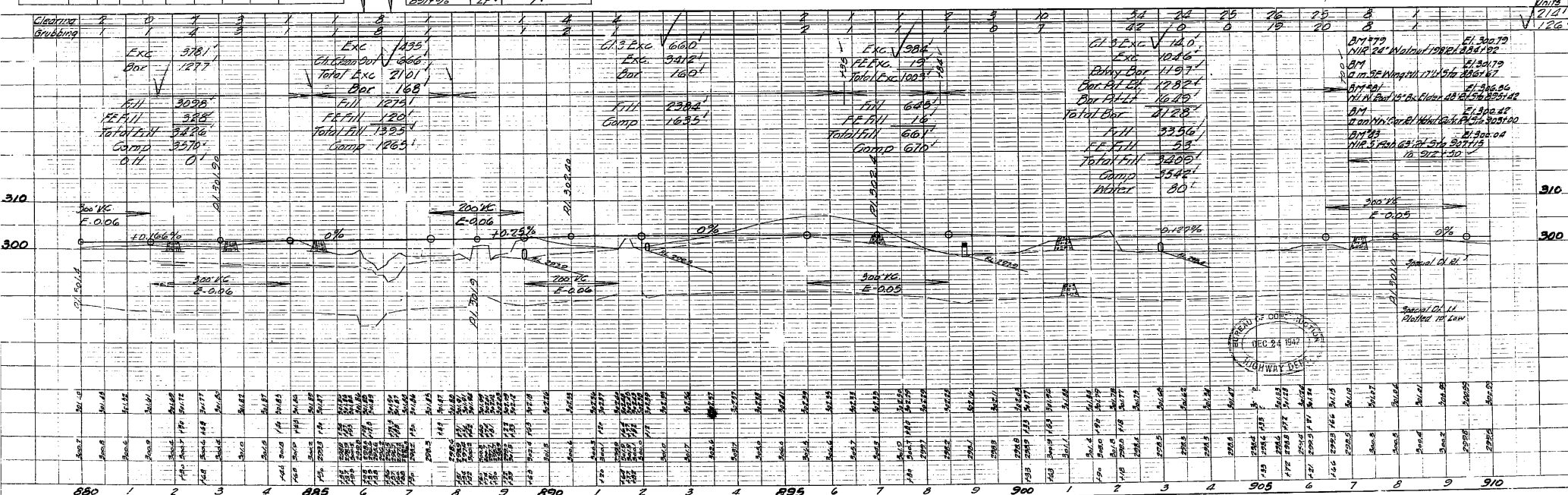
## RELAY PIPE 24" C.M.P.

| Station | Side | Lin Ft | Remarks                 |
|---------|------|--------|-------------------------|
| 888 +23 | L    | 61     | 20' from<br>888 +245.11 |

G-104 REINF SLAB X-ING

| Station | Length Shoulder<br>To Shoulder | Skew   | P.C. Par. |
|---------|--------------------------------|--------|-----------|
| 89+6.55 | 20.51'                         | 2'-08" | 41.2      |

## ENTRANCE APPROACHES

[illegible]



SW 1/4 - NW 1/4  
Sec. 15  
CENTRAL STATES INS CO

SW 1/4 - NE 1/4  
Sec. 15  
1/4 Sec. 15 to 15+10

NW 1/4 - SW 1/4  
Sec. 15

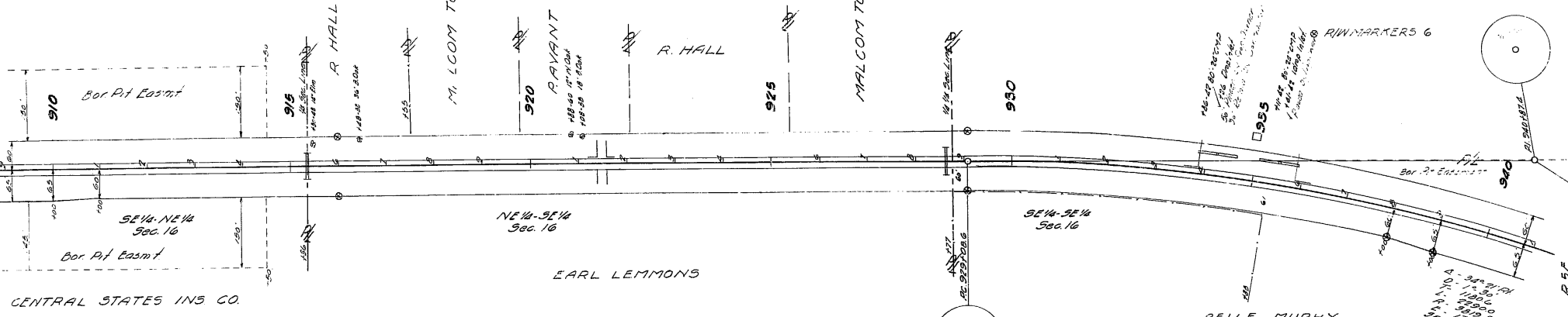
T 22 N

SW 1/4 - NW 1/4  
Sec. 15  
1/4 Sec. 15 to 15+10

SW 1/4 - SW 1/4  
Sec. 19

| FILE NO. | STATE  | FED. AID | SHEET    | TOTAL |
|----------|--------|----------|----------|-------|
| 5        | MO.    | 50.00    | 3        | 3     |
| DIV. NO. | COUNTY | ROUTE    | SEC. NO. |       |
| 10       | BUTLER | 57       |          |       |

FINAL PLANS

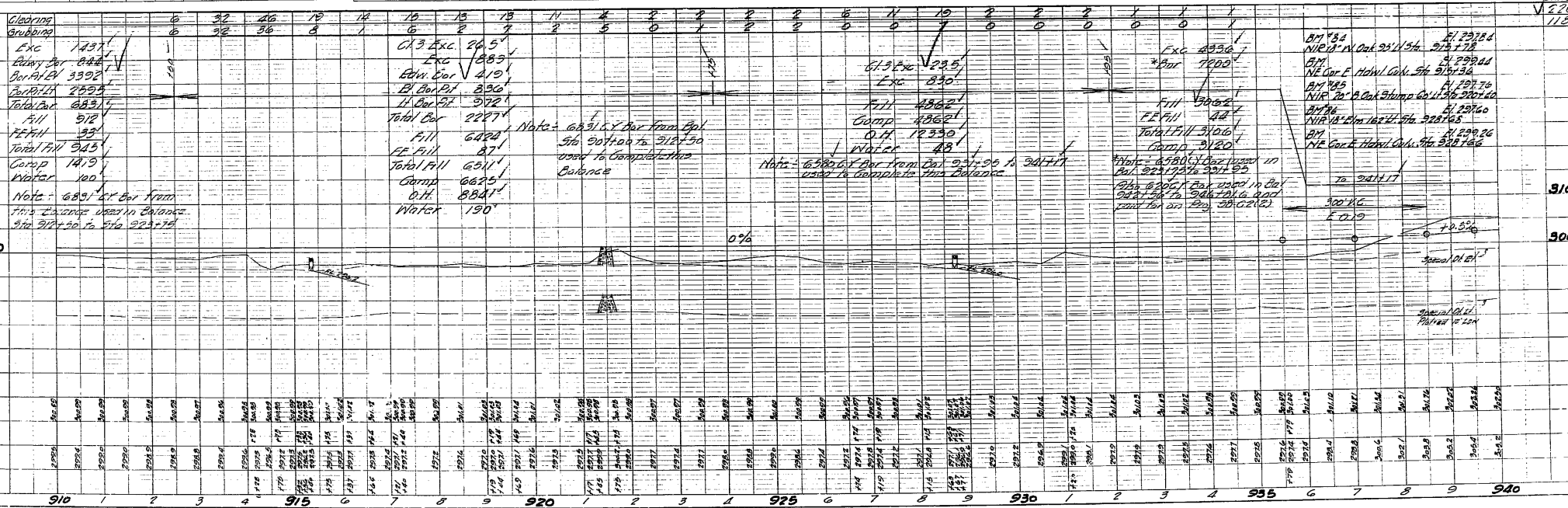
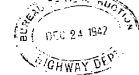


| Station | Stake   | Size | Shen | Light | Draw  | Exc. | Remarks      |
|---------|---------|------|------|-------|-------|------|--------------|
| 910.150 | 1235.00 | 36"  | 24"  | 60"   | 24.3' | 2.0' | 2.0' Details |
| 910.150 | 1235.00 | 36"  | 24"  | 60"   | 24.3' | 2.0' | 2.0' Details |
| 910.150 | 1235.00 | 36"  | 24"  | 60"   | 24.3' | 2.0' | 2.0' Details |

| Station | Side | Exc. | Fill | Remarks |
|---------|------|------|------|---------|
| 910.100 | 15'  | 24'  | 24'  | 24'     |
| 910.100 | 15'  | 24'  | 24'  | 24'     |
| 910.100 | 15'  | 24'  | 24'  | 24'     |
| 910.100 | 15'  | 24'  | 24'  | 24'     |

| Station | Station | Sheet | Area |
|---------|---------|-------|------|
| 910.100 | 940.100 | 3     | 6.9  |

| Station | Station | Sheet | Area |
|---------|---------|-------|------|
| 910.100 | 940.100 | 3     | 6.9  |





NE 1/4 - NE 1/4  
Sag 21

T22N

|        |          |         |       |       |
|--------|----------|---------|-------|-------|
| STATE  | FED. AID | PROJECT | SHEET | TOTAL |
| MO.    | 5        | 210     | 2     | 2     |
| COUNTY | BUTLER   |         |       |       |
| ROUTE  | 57       |         |       |       |

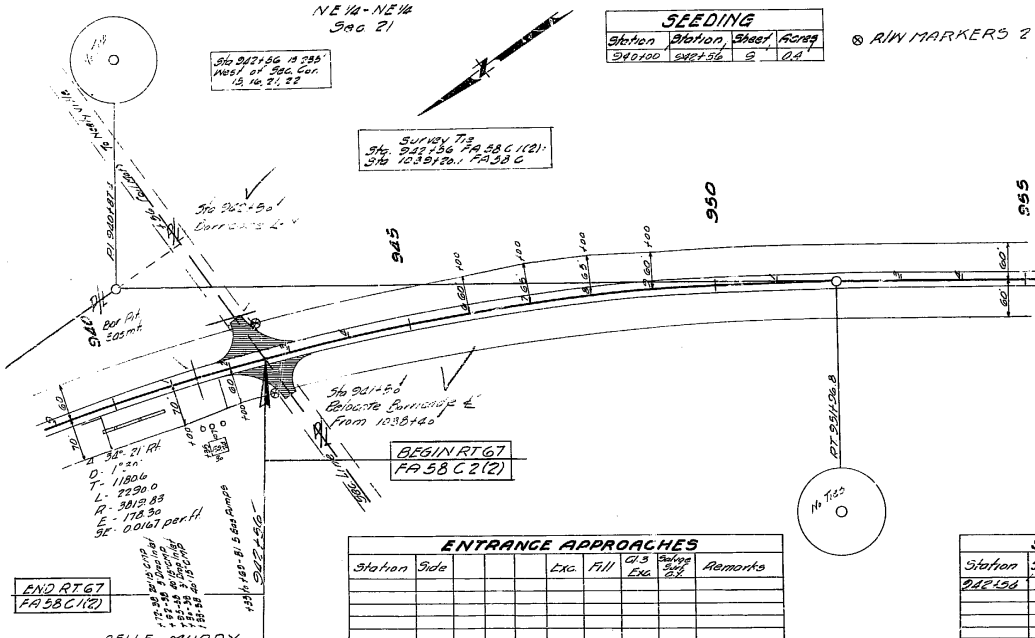
FINAL PLANS

| Station | Station | Sheet | Range |
|---------|---------|-------|-------|
| 940+00  | 942+50  | 2     | 04    |

② R/W MARKERS 2

Sta 942+50 is 250' west of 300 Cor. 12, 14, 21, 22

SURVEY T13  
Sta. 942+50 FA 58 C (12)  
Sta. 1035+20 FA 58 C



| ENTRANCE APPROACHES |      |      |      |      |         |
|---------------------|------|------|------|------|---------|
| Station             | Side | Exc. | Fill | Exc. | Remarks |
|                     |      |      |      |      |         |
|                     |      |      |      |      |         |
|                     |      |      |      |      |         |
|                     |      |      |      |      |         |

| SIDE ROAD APPROACHES |      |      |      |      |         |
|----------------------|------|------|------|------|---------|
| Station              | Side | Exc. | Fill | Exc. | Remarks |
| 942+50               | L    | No   | Exc. | Exc. | 27      |
|                      |      |      |      |      |         |
|                      |      |      |      |      |         |
|                      |      |      |      |      |         |

END RT 67  
FA 58 C (12)

BELLE MURRY

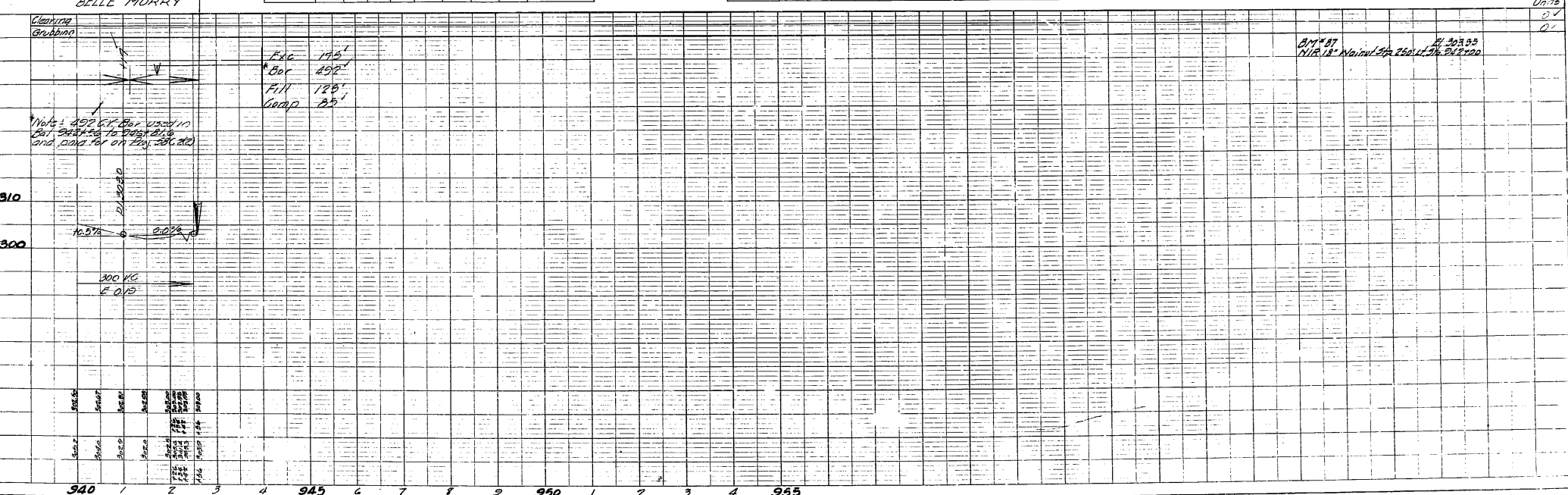
Clearing  
Grubbing

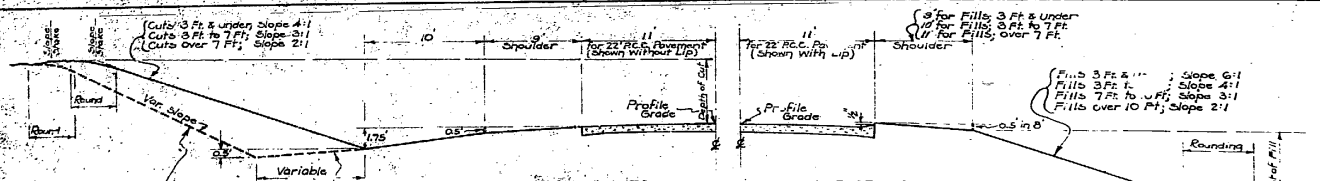
Exc 175'  
Ber 452'  
Fill 125'  
Grub 75'

Note: 492' RT Ber used in  
but 942+50 to 942+50  
and, same for on 942+50

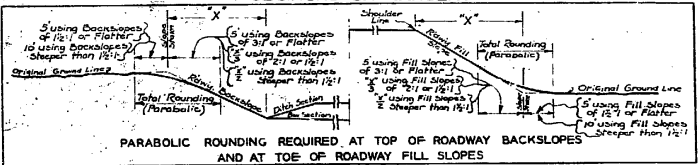
BY 4/97  
NIR 18" Normal Sta 250 to Sta 942+50

Units  
0' ✓  
0'

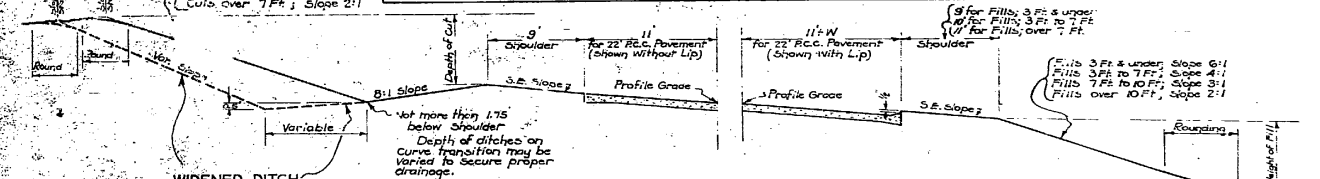




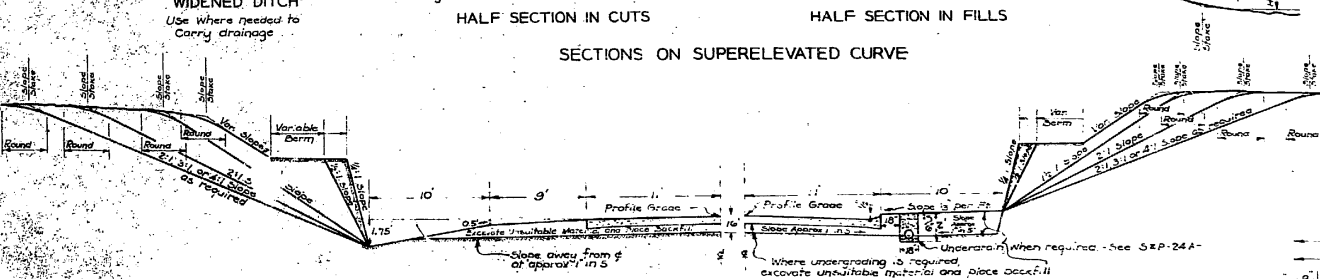
HALF SECTION IN CUTS  
SECTIONS ON TANGENT



PARABOLIC ROUNDING REQUIRED AT TOP OF ROADWAY BACKSLOPES  
AND AT TOE OF ROADWAY FILL SLOPES

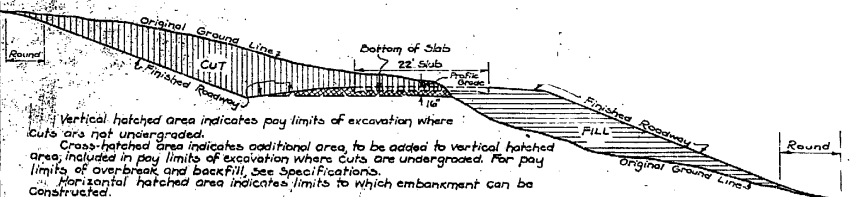


HALF SECTION IN CUTS  
HALF SECTION IN FILLS  
SECTIONS ON SUPERELEVATED CURVE



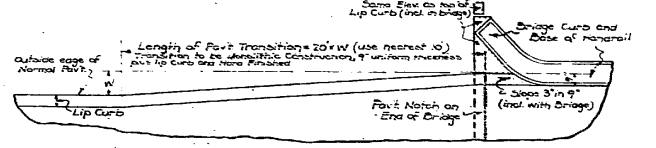
HALF BOX SECTION - ON TANGENT

SECTION IN UNDERGRADED CUTS WITH DITCH ON TANGENT  
NOTE: - On Super-elevated Curves, if a undergraded section shall parallel the Super-elevation.

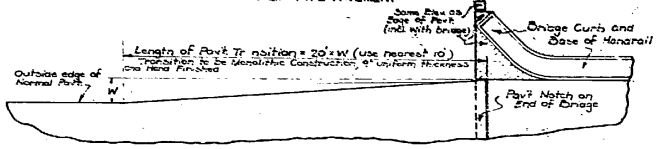


SECTION SHOWING EXCAVATION PAY LINES

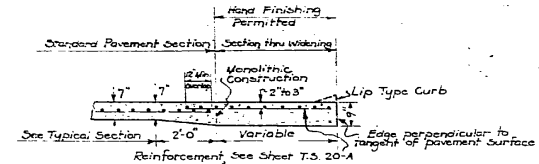
**GENERAL NOTES:-**  
Standard requirements for Super-elevation and widening of horizontal curves shall be as given on Standard Drawing S&P-17.  
No lip to be used on pavement where grade is less than 1% on tangents and 0.5% on Super-elevated Curves.  
In transitioning from one slope to another, a warped surface, presenting a smooth and uniform appearance, shall be constructed as directed by the Engineer.  
All information shown on these Typical Sections is for the purpose of indicating general design and construction details. Actual construction of roadway widths, slopes, depth and type of ditches, undergraded cuts and other features shall conform to the details shown on Cross-Section and Plan-Profile sheets or as directed by the Engineer.  
For details of Transverse Joints, Surface Drain Basins, Surface Drains, and Gate Type Drop Inlets, See Separate Sheets



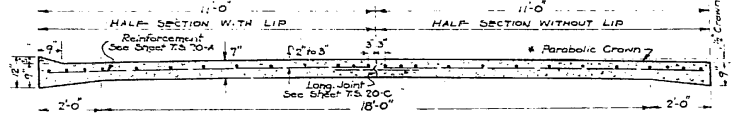
PLAN OF PAVEMENT WIDENING AT BRIDGE ENDS  
USING LIP TYPE PAVEMENT



PLAN OF PAVEMENT WIDENING AT BRIDGE ENDS  
USING PAVEMENT WITHOUT LIP



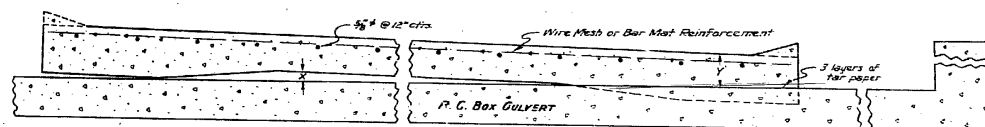
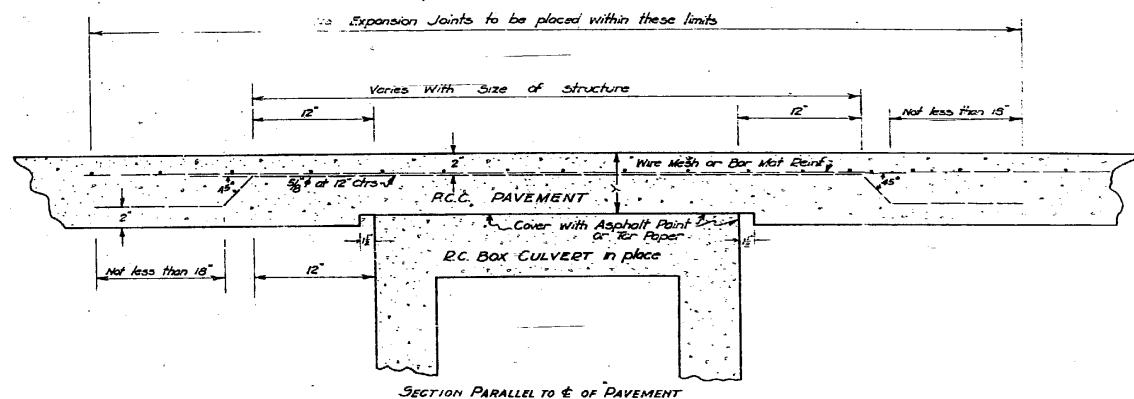
TYPICAL SECTION SHOWING  
CURVE WIDENING  
AND OTHER IRREGULAR PAVEMENT WIDENING



DETAILS OF TYPICAL SECTION OF  
22 FT. SLAB

MISSOURI STATE HIGHWAY COMMISSION  
**REINFORCED**  
**22 FT. PORTLAND CEMENT CONCRETE**  
**PAVEMENT**  
**40 FT. ROADBED**  
**ROUTE 67 BUTLER COUNTY**  
**PROJECTS FA 58-C1(2)&FA 58-C2(2)**

| REP. NO. | STATE  | FED. AID | LOCAL | TOTAL |
|----------|--------|----------|-------|-------|
| 5        | MO.    |          |       |       |
| REV. NO. | COUNTY |          |       |       |
|          |        |          |       |       |



SECTION ON E OF CULVERT

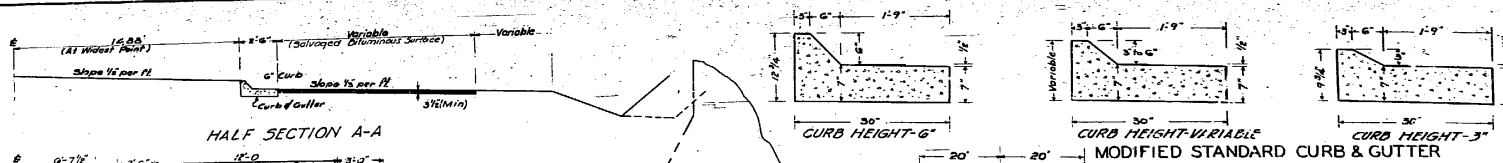
NOTES

Y = Minimum distance between top so-face of pavement and top slab of concrete box, to be not less than 4". When Y is less than 4" modify culvert as shown on "Special Sheet - Design for Culverts using Top Slab for Riding Surface".

X = Minimum clearance between bottom of pavement slab and top of concrete box. When X is 15" or less than 2" at any point over culvert use hand banded 60,000 psi cushion over box and omit reinforcing bars. When X is less than 2" increase thickness of pavement slab to meet top of culvert box and add reinforcing steel as shown.

No extra compensation for this type of construction. Entire cost to be completely covered by contract price for Portland Cement Concrete Pavement per Sq. Yd.

SPECIAL REINFORCED CONCRETE  
PAVEMENT OVER CULVERTS



# GENERAL NOTES

All concrete in curb and gutter to be class B  
 Exposed edges to be rounded to a 3/4" radius  
 1/2" premix bituminous joints shall be constructed through curb and gutter extending from subgrade to 1/2" below top of finished surface of concrete.  
 The upper 1/2" of joint shall be open with a 1/2" radius  
 Joints through curb and gutter shall be spaced not more than 30' center to center.  
 A subgrade trench for surfacing shall be prepared as indicated on the sections shown on this sheet. The trench shall be prepared so that the finished surface will be to the required lines and grades as shown on the plans or as directed by the Engineer.  
 The cost of preparing subgrade trench for surfacing shall be considered as completely covered by the unit prices bid for other items of work.

NOTE: Shaded area indicates salvaged bituminous surface

PLAN  
 SHOWING PROPOSED INTERSECTION LAYOUT AT  
 OF ROUTE 67 AND ROUTE SB - STATION 33+07 (RTS 67)  
 OR YDS SURFACING AREA  
 RIGHT 650  
 LEFT 650  
 LIN. FT. OF CURB & GUTTER  
 RIGHT 225  
 LEFT 225

ROUTE 67 PROJECT FA 56-C1(2)  
 BUTLER COUNTY  
 SPECIAL SHEET NO. 1