I-40-1(6)72

| FED. ROAD FUNC. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHT. NO. | TOTAL SHTS. |
|---|---|---|---|---|---|
| 3 | TENN. | ~~F 505(9)~~ I 40-1(6)72 | 1957 | 1 | 19 |

REVISED 12-10-57 SHT. NO 37a ADDED TO PROJ. I-40-1(6)72

FILE NO. 9

DESIGN DIV. TENNESSEE D. O. T. IN-

# STATE OF TENNESSEE
# DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS

# PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

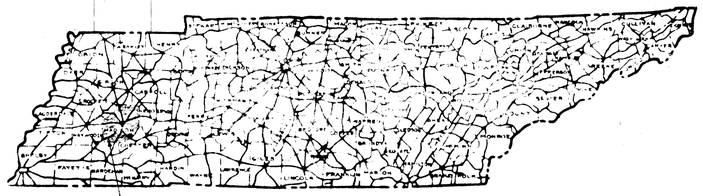
FEDERAL AID PROJECT NO. 505 (9)

## MADISON COUNTY

FROM 0.6 MILES WEST OF LOWER BROWNSVILLE ROAD TO 0.4 MILES EAST OF STATE RT. 20.

**STATE HIGHWAY NO.** **F.A.H.S. NO. I-505**

**SCALES** PLAN, 1 IN. 100 FT.
PROFILE, HOR. 1 IN. 100 FT., VERT. 1 IN. 10 FT.



I 505 (9)
NO EQUATIONS
NO EXCEPTIONS
NO EXCLUSIONS

## INDEX OF SHEETS


| | | |
|---|---|---|
| SHEET NO. | 1 | TITLE SHEET |
| " " | 2-2B | TYPICAL CROSS SECTIONS AND DETAILS |
| " " | 2C-2D | ESTIMATED QUANTITIES |
| " " | 3-13 | PLAN AND PROFILE |
| " " | 14-17 | CROSSROAD PLAN AND PROFILE AND DETOUR |
| " " | 18-23 | INTERCHANGES 1"=50' LAYOUT, GRADING, RAMP PROFILES, AND FRONTAGE ROAD PROFILES |
| " " | 24-30 | STANDARD CONCRETE BOX CULVERTS DWGS. A-14-54, A-14-84, B-G-141, C-4-141, D-4-161, E-8-11 & E-8-150 |
| " " | 31 | CORRUGATED METAL AND STRUCTURAL PLATE PIPE AND PIPE ARCHES DWG. CM-1-4 |
| " " | 32 | STANDARD PIPE AND PIPE-ARCH CULVERTS BEVELED ENDS AND RIP-RAP DWG. CM-1-5 |
| " " | 33 | STANDARD METAL END SECTIONS FOR CORRUGATED METAL PIPE AND PIPE-ARCH CULVERTS DWG. CM-1-6 |
| " " | 34-35 | STANDARD CONCRETE ENDWALLS DWG. A-4-85 & E-2-90 |
| " " | 36 | STANDARD CONCRETE ENDWALLS DROP INLETS AND SPRING DRAIN DWG. D-0-13 |
| " " | 37 | STANDARD NO. 31 CATCH BASIN AND TYPE "X" CONCRETE |
| | 37a | ENDWALL DWG. M-D-1 |
| " " | 38 | STANDARD NO. 2 MANHOLE, CASTINGS AND MASONRY JUNCTION DWG. S-M-2a |
| " " | 39 | DETAIL OF EXPANSION, CONSTRUCTION AND DUMMY JOINTS DWG. P-E-30 |
| " " | 40 | STANDARD CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS DWG. P-C-15 |
| " " | 41 | STANDARD CIRCULAR CONCRETE CURBS AND GUTTERS DWG. P-C-16 |
| " " | 42-43 | DESIGN STANDARDS FOR MEDIAN OPENINGS DWG. M-O-1 |
| " " | 44 | METAL LONGITUDINAL JOINTS DWG. P-E-10a |
| " " | 45 | STANDARD SAWED JOINTS DWG. P-E-31 |
| " " | 46 | SUPERELEVATION DETAILS DWG. S-E-1 |
| " " | 47 | ROADSIDE DEVELOPEMENT AND LANDSCAPING DWG. RD-L-1b |
| " " | 48-49 | STANDARD RAMPS TO SIDE ROADS DWG. D-R-2 |
| " " | 50 | CONSTRUCTION DETAILS - DRAINAGE DWG. C-2-95 |
| " " | 51 | STANDARD STEEL DEEP BEAM GUARDRAIL DWG. RD-R-3 |
| " " | 52 | CONCRETE RIGHT OF WAY POST DWG. RW-M-2a |
| " " | 53-91 | STRUCTURES (OVER 20' SPAN) |
| " " | 92-96 | CULVERT CROSS SECTIONS |
| " " | 97-110 | CROSSROAD CROSS SECTIONS |
| " " | 111-131 | INTERSTATE CROSS SECTIONS |
| " " | | STANDARD CONCRETE SPILLWAYS, DWG. D-S-8. |


Note: Sh. Nos. 52-91 (incl.) filed in Ky. Dept.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS DATED JULY 1, 1951, AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT

THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN TRAFFIC DURING CONSTRUCTION OF THIS PROJECT.

## STRUCTURES (OVER 20' SPAN)

| | | |
|---|---|---|
| SHEET NO. | 53 | STANDARD BRIDGE DETAILS |
| " " | 53A | STANDARD PIPE DETAILS, DWG. NO. F-2-118 |
| " " | 53B | STANDARD 3 PIPE ALUMINUM HANDRAILING, DWG. NO. F-10-47 |
| " " | 53C | STANDARD ALUMINUM RAIL, DWG. NO. F-2-115 |
| " " | 54 | LAYOUT OF BRIDGE NO. 1 (LOWER BROWNSVILLE RD. INT.) DWG. NO. 7027-LB-1 |
| " " | 61 | " " " " 2 (CUB CREEK) DWG. NO. CU-1 |
| " " | 68 | " " " " 3 (McCLEISH RD) DWG. NO. MC-1 |
| " " | 70 | " " " " 4 (FORKED DEER RIVER OVERFLOW) DWG. NO. SFD-1 |
| " " | 72 | " " " " 5 (FORKED DEER RIVER CANAL) DWG. NO. FDR-1 |
| " " | 77 | " " " " 6 (G M & O RAILROAD) DWG. NO. GW-1 |
| " " | 91 | " " " " 7 (STATE ROUTE 20 INTERCHANGE) DWG. NO. SR-1 |

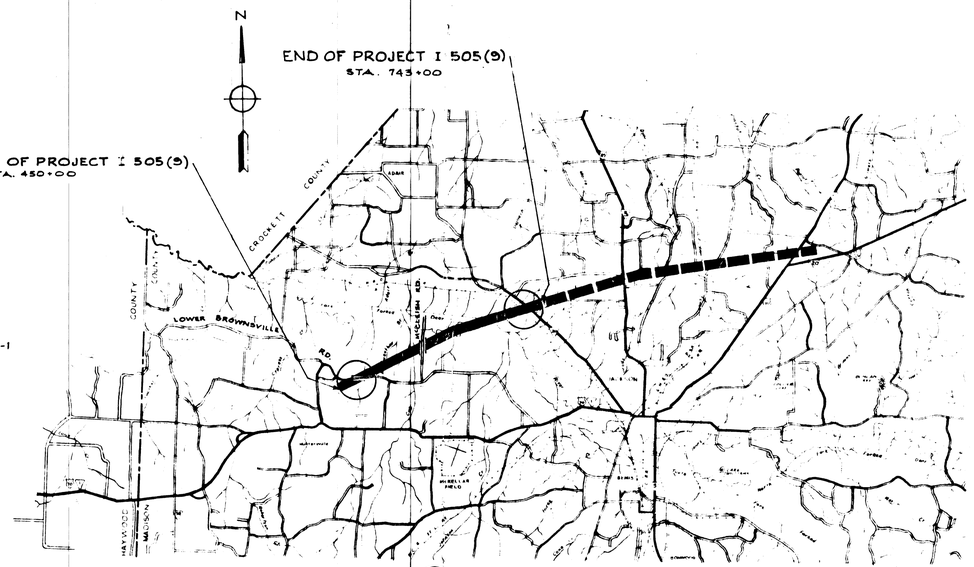
Bridge Dwgs - G-2-43 thru G-2-81

## DATUM

ELEVATIONS ON THESE PLANS ARE BASED ON U.S.G.S. B.M. NO. R.H.P.-39-1945 ELEVATION 413 LOCATED N.W. CORNER UNION GROVE METHODIST CHURCH.

## CONVENTIONAL SIGNS

| | EXISTING | PROPOSED |
|---|---|---|
| COUNTY LINE | | |
| CITY VILLAGE OR BOROUGH | | |
| CULVERTS | | PIPE CULVERT / BOX CULVERT |
| POWER POLE | | |
| TELEPHONE OR TELEGRAPH POLE | | |
| FENCE LINE | | ITEM 179-7 STOCK FENCE / ITEM 179-G CHAIN LINK |
| GUARD RAIL | | |
| UNFENCED PROPERTY | | |
| RIGHT OF WAY LINE | | ACCESS PERMITTED / NO ACCESS |
| TRAVELED WAY | | |
| RAILROAD | | |
| RETAINING WALL | | |
| BASE OR SURVEY LINE | | |
| DROP INLET | | CB# __ |
| BRIDGE OVER 20 FT. SPAN | | |




| | MADISON |
|---|---|
| ROADWAY LENGTH | 5.316 |
| BRIDGE LENGTH | .238 |
| PROJECT LENGTH | 5.549 |

APPROVED _____ ENGINEER OF SURVEYS AND DESIGN
DATE

APPROVED _____ STATE HIGHWAY ENGINEER
DATE

APPROVED _____ COMMISSIONER

PREPARED AND RECOMMENDED BY
Charles W Wood TENN. P.E. LIC. NO. 3517 DATE 12/16 1957

LOCKWOOD, KESSLER AND BARTLETT INC.
CONSULTING ENGINEERS
SYOSSET N.Y. NASHVILLE TENN.

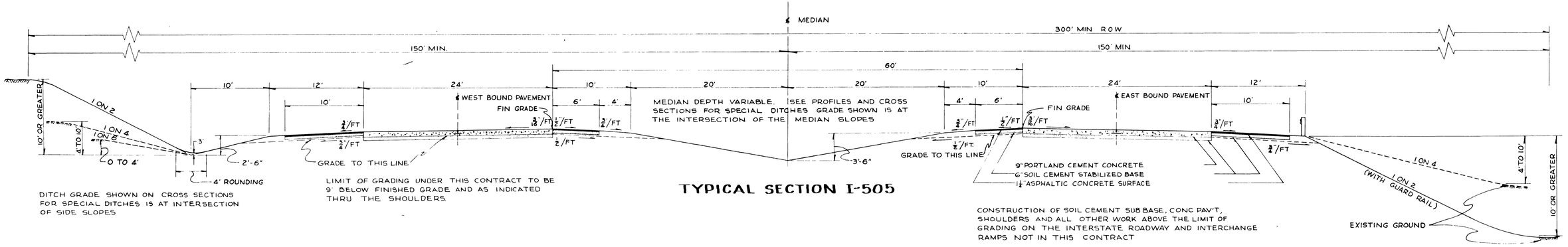
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED:
DIV. ROAD ENGINEER DATE

DESIGNED:
CHECKED:
SURVEY NO.

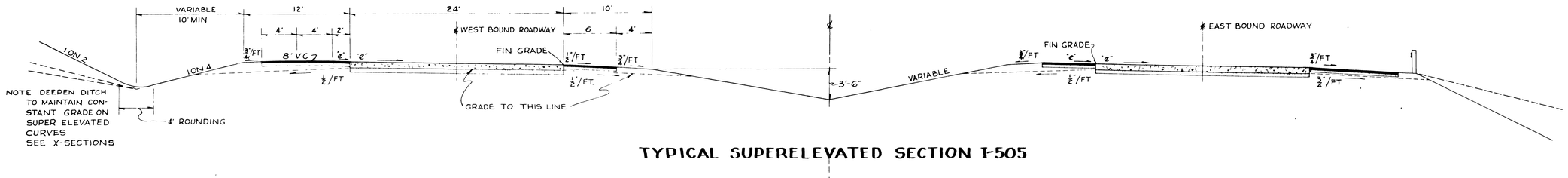
STATE HIGHWAYS
File IN-
No. 9

| FED ROAD DIST Nº | STATE | FEDERAL AND PROJECT Nº | FISCAL YEAR | SHEET Nº | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-505(9) | 1957 | 2 | 198 |

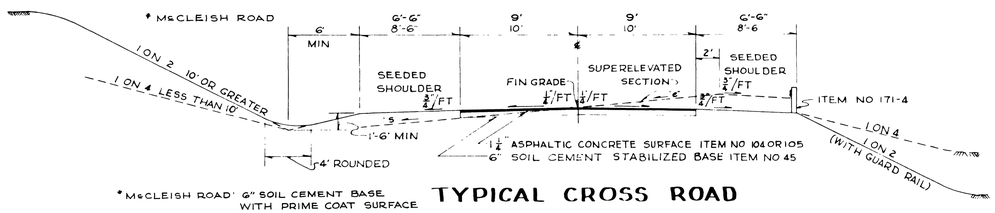
I-40-1(6)72



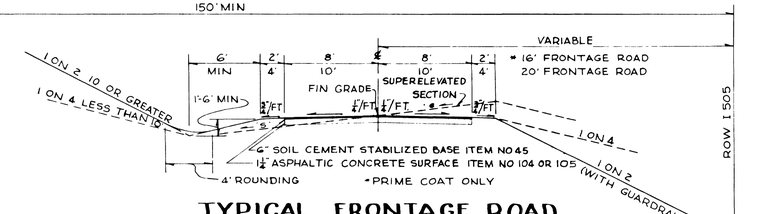

## TYPICAL SECTION I-505



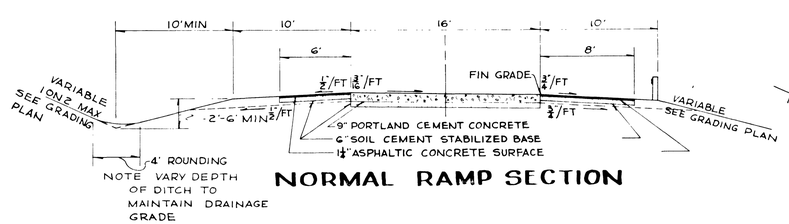

## TYPICAL SUPERELEVATED SECTION I-505



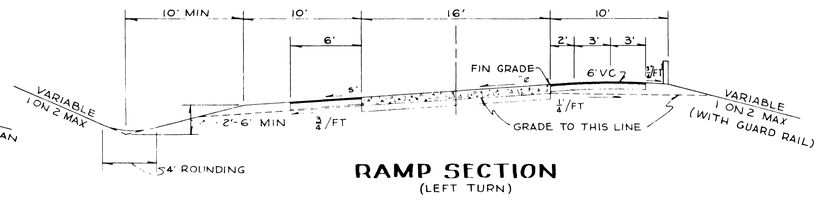

## TYPICAL CROSS ROAD



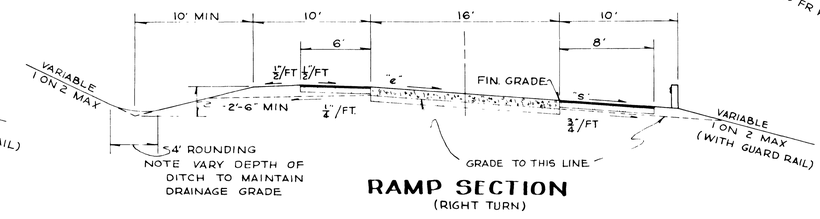

## TYPICAL FRONTAGE ROAD



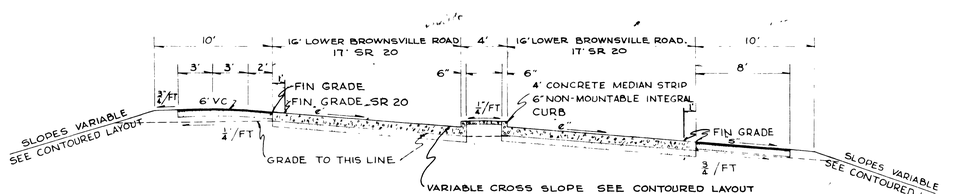

## NORMAL RAMP SECTION




## RAMP SECTION
(LEFT TURN)




## RAMP SECTION
(RIGHT TURN)




## TYPICAL SECTION OF TWO-WAY RAMP
RAISED CONCRETE MEDIAN

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

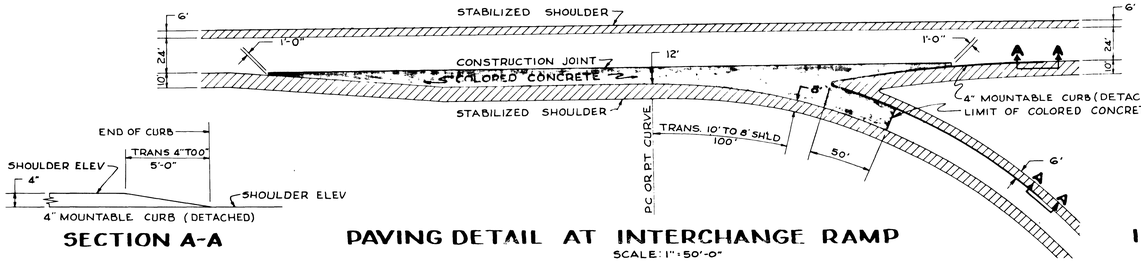
# TYPICAL ROADWAY SECTIONS

| LOCKWOOD, KESSLER & BARTLETT, INC CONSULTING ENGINEERS SYOSSET, N Y & NASHVILLE, TENN | JOB Nº | SCALE | DATE | DWG Nº |
|---|---|---|---|---|
| | 7007 | 1"=6' | NOV 1957 | |

Design C. Fee
Drawn H.H.C.
Traced by N.F.
Checked by R.J.M.

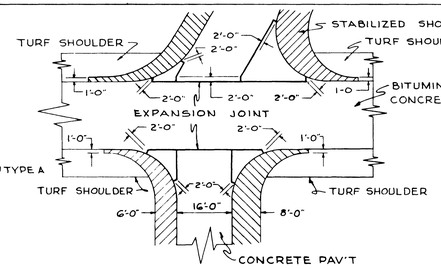
TENN. STATE HIGHWAYS
Mains File IN-9
Dwgs. No.

| FED. ROAD DIST. NO. | T E N N. | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | | ~~I 505(9)~~ I-40-1(6)72 | 1957 | 2A | 198 |

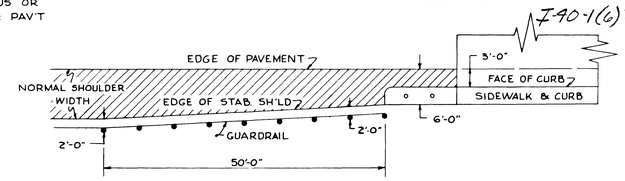



SECTION A-A

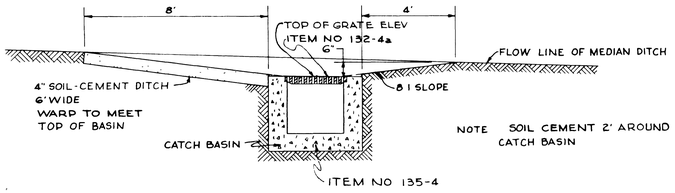
PAVING DETAIL AT INTERCHANGE RAMP
SCALE: 1" = 50'-0"



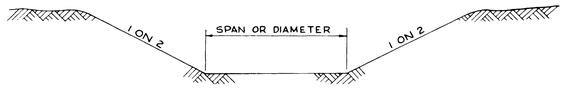

PAVING DETAIL OF INTERCHANGE RAMP AT CROSSROADS



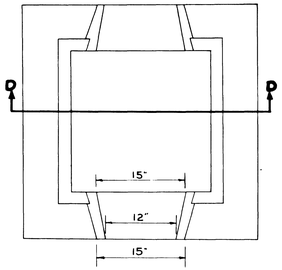

DETAIL OF STABILIZED SHOULDER TRANSITION AT BRIDGE

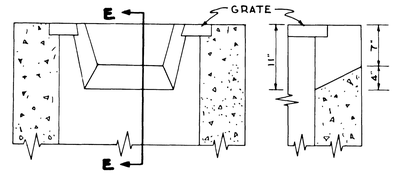



DETAIL OF MEDIAN DITCH AT CATCH BASIN




DETAIL OF CULVERT INLET & OUTLET DITCHES

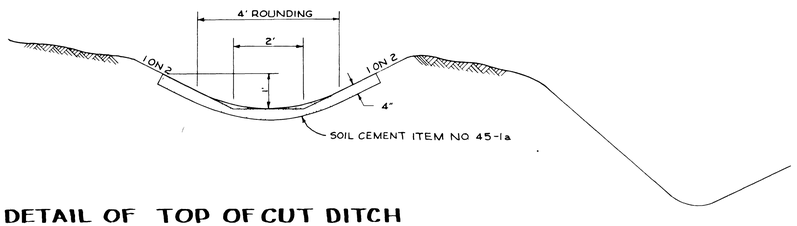


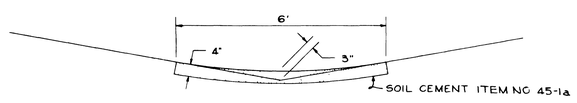

SECTION D-D SECTION E-E

NOTE- OPENING (0 TO 4) IN SIDE OF NO 31 OR G-TYPE CATCH BASIN AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR OPENINGS NO DEDUCTION IN CONCRETE WILL BE MADE FROM ESTIMATED QUANTITIES FOR OPENINGS.

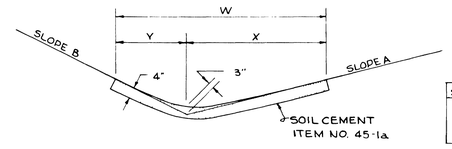
DETAIL OF SIDE OPENING IN NO. 31 OR G-TYPE CATCH BASIN




DETAIL OF TOP OF CUT DITCH

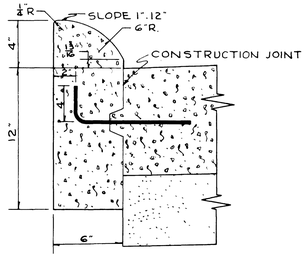



DETAIL OF PAVED MEDIAN DITCH

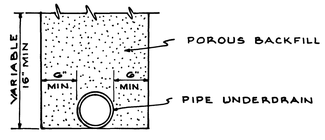



| SLOPE A | SLOPE B | X | Y | W |
|---|---|---|---|---|
| 1 ON 4 | 1 ON 4 | 4' | 4' | 8 |
| 1 ON 4 | 1 ON 2 | 4' | 2' | 6' |
| 1 ON 2 | 1 ON 2 | 2' | 2' | 4' |

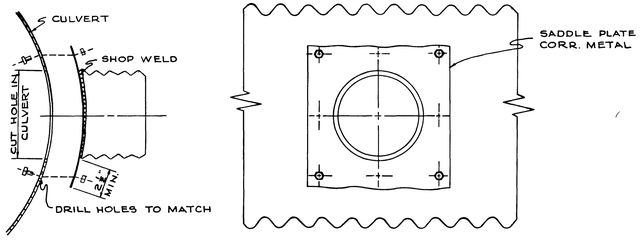
DETAIL OF PAVED STANDARD DITCH




4" MOUNTABLE DETACHED CONC. CURB
SEE DWG. NO P-E-10a TYPE "A" FOR CONSTR JOINT DETAIL AND DOWEL SIZE AND SPACING. NO METAL DIVIDER STRIP TO BE USED
SCALE 1" = 0'-6"




TYPICAL UNDERDRAIN




TYPICAL SADDLE BRANCH CONNECTION
FOR CORRUGATED METAL PIPE

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

# PAVING AND DRAINAGE DETAILS

| LOCKWOOD, KESSLER & BARTLETT, INC CONSULTING ENGINEERS SYOSSET, N.Y. & NASHVILLE, TENN. | JOB NO. 7007 | SCALE AS SHOWN | DATE NOV 11, '57 | DWG NO. |
|---|---|---|---|---|

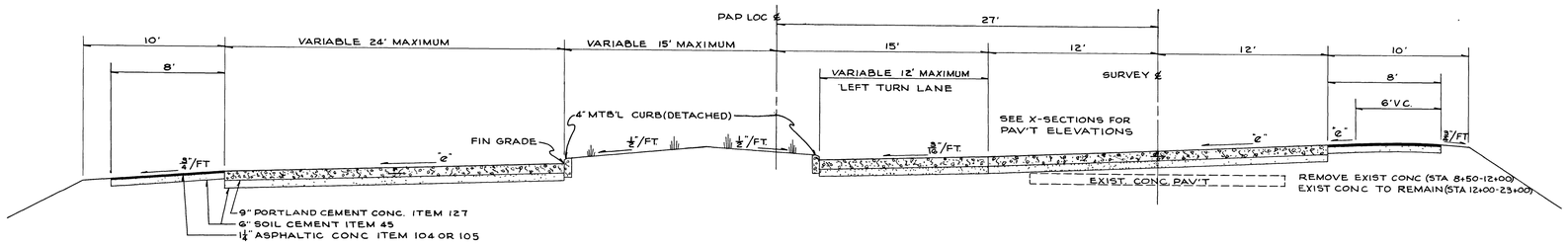
In Charge C.M.R.
Made by R.J.M.
Traced by M.E.
Checked by M.M.C.

MICROFILMED

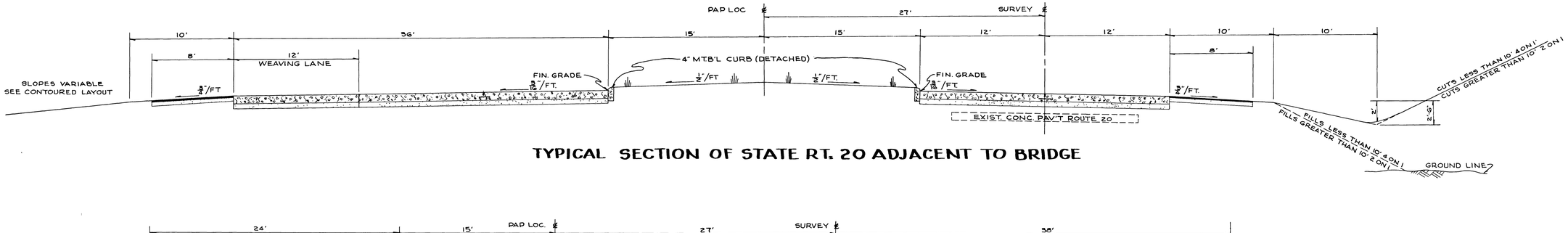
File No. IN-9

| FED. ROAD DIST. Nº | | FEDERAL AID PROJECT Nº | FISCAL YEAR | SHEET Nº | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN | I-505(9) | 1957 | 28 | 198 |

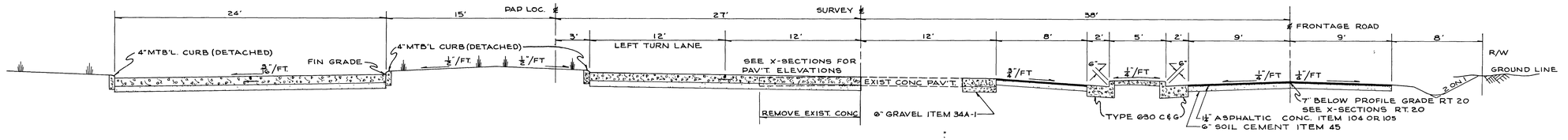
I-90-1(6)12




## TYPICAL SECTION OF STATE RT. 20
STATION 10+75± TO STATION 15+00±



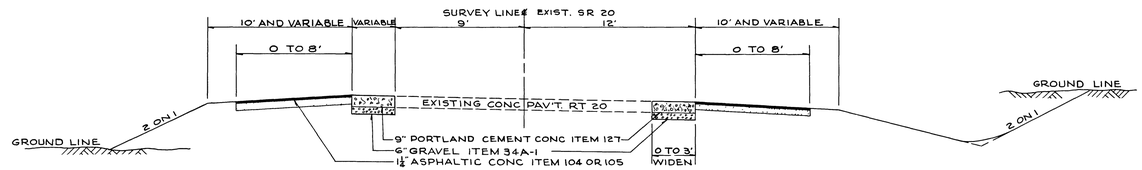

## TYPICAL SECTION OF STATE RT. 20 ADJACENT TO BRIDGE




## TYPICAL SECTION OF STATE RT. 20 SHOWING FRONTAGE ROAD

SUBBASE FOR WIDENING OF EXISTING PAV'T AT RT 20 TO BE 6" GRAVEL ITEM 34A-1 BETWEEN THE FOLLOWING LIMITS:

| STA. | TO | STA. |
|---|---|---|
| 6+55 RT. | | 7+35 RT |
| 6+55 LT. | | 8+50 LT. |
| 25+00 RT. | | 32+96 RT. |
| 29+15 LT. | | 32+96 LT. |




## TYPICAL SECTION OF TRANSITION AT ENDS OF STATE RT. 20 IMPROVEMENT
STATION G+55 TO STATION 7+35
STATION 32+06 TO STATION 32+96

In Charge S.T.R.
Made by R.L.K. 12-57
Traced by N.F.
Checked by J.H.H.

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

# TYPICAL SECTIONS STATE RT. 20

| LOCKWOOD KESSLER & BARTLETT, INC. CONSULTING ENGINEERS SYOSSET, N.Y. & NASHVILLE, TENN. | JOB Nº 7007B | SCALE 1"=5'-0" | DATE Nov. 11, '57 | DWG Nº |
|---|---|---|---|---|

TN. STATE HIGHWAYS
File IN-9

REVISED 3/25/58 CHANGED QUANTITIES AS SHOWN DUE TO CHANGES IN DRAINAGE ON SH. NOS. 5, 14 & 18

I-40-1(6)72

| FED ROAD DIST Nº | STATE | FEDERAL AID PROJECT Nº | FISCAL YEAR | SHEET Nº | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | ~~I-505(9)~~ | 1957 | 2C | 198 |

REVISED 12-19-57 QUANTITIES CHANGED & BRIDGE LENGTH CORRECTED

# ESTIMATED ROADWAY QUANTITIES

| Special provisions | Note | ITEM NO. | DESCRIPTION | QUANTITY | UNIT | REVISED QUANTITIES 3/25/58 |
|---|---|---|---|---|---|---|
| SEE SPECIAL PROVISIONS REGARDING SECTION 12 | (12) | 11-1 | CLEARING & GRUBBING | 1 | L.S. | |
| | | 12-1 | REMOVAL OF STRUCTURES, OBSTRUCTIONS, ETC. | 1 | L.S. | |
| | | 12-1a | SALVAGE VALUE | 1 | L.S. | |
| SEE SPECIAL PROVISION REGARDING SECTION 13 | (1) | 13-3 | ROAD & DRAINAGE EXCAVATION (UNCLASS) | 434,420 | CU. YD. | |
| | | 13-4 | CHANNEL EXCAVATION (UNCLASS) | 9,161 | CU. YD. | |
| | (2) | 13-5 | WATER (EMBANKMENT) | 7,040 | M. GAL. | |
| | | 15-3 | BORROW EXCAVATION (UNCLASS) | 1,120,996 | CU. YD. | |
| SEE SPECIAL PROVISION REGARDING SECTION 34 | (3) | 34A-1 | GRAVEL OR CHERT (T.B.R.) | 779 | CU. YD | |
| | (4) | 45-1 | SOIL-CEMENT PROCESSING (6" BASE) | 36,351 | SQ. YD. | |
| | (4) | 45-2 | PORTLAND CEMENT (6" BASE) | 4,907 | BBL. | |
| | (5) | 45-1a | SOIL-CEMENT PROCESSING (4" DITCHES) | ~~7,560~~ | SQ. YD. | 7,947 |
| | (5) | 45-2a | PORTLAND CEMENT (4" DITCHES) | 681 | BBL. | |
| | (6) | 49-1 | BITUMINOUS MATERIAL (PRIME COAT) | 19 | TON | |
| SURFACE ALTERNATE SEE SPECIAL PROVISIONS REGARDING SECTION 104-105 | (7) | 104-1 | MINERAL AGGREGATE (A.C.S.C.) | 664 | TON | |
| | (7) | 104-2 | ASPHALT CEMENT (A.C.S.C.) | 46 | TON | |
| | (7) | 105-1 | MINERAL AGGREGATE (S.A. OR S.A.S.C.) | 667 | TON | |
| | (7) | 105-2 | ASPHALT CEMENT (S.A. OR S.A.S.C.) | 43 | TON | |
| SEE SPECIAL PROVISIONS REGARDING SECTION 127 | (13) | 127-1 | CEMENT CONCRETE PAVEMENT (PLAIN) | 10,368 | SQ. YD. | |
| | (13) | 127-1a | COLORED CEMENT CONC. PAV'T. (PLAIN) | 2,382 | SQ. YD. | |
| | | 132-4a | GRAY IRON CASTINGS (CLASS 30) | 165 | LB. | |
| | | 132-4b | GRAY IRON CASTINGS (CLASS 20) | 7,318 | LB | |
| | (8) | 135-4 | CLASS "A" CONCRETE | ~~1,613~~ | CU. YD. | 1490 |
| | (14) | 135-12 | STEEL BAR REINFORCEMENT | ~~169,446~~ | LB. | 154,466 |
| | | 141-2 | 15" CONCRETE PIPE CULVERT | ~~918~~ | LIN. FT | 954 |
| | | 141-3 | 18" CONCRETE PIPE CULVERT | 1,598 | LIN FT | |
| | | 141-4 | 24" CONCRETE PIPE CULVERT | ~~908~~ | LIN. FT | 640 |
| | | 141-5 | 30" CONCRETE PIPE CULVERT | ~~284~~ | LIN FT. | 328 |
| | | 141-6 | 36" CONCRETE PIPE CULVERT | 1146 | LIN FT. | |
| | | 141-8 | 48" CONCRETE PIPE CULVERT | ~~54~~ | LIN FT | 316 |
| | | 144 | 18" C.M.P. CULVERT (MEDIAN DRAIN) | 38 | LIN FT. | |
| | | 144 | 24" C M P. CULVERT (SIDE DRAIN) | 172 | LIN FT | |
| | | 147 | 18"x11" C.M.P. - ARCH CULVERT (SIDE DRAINS) | 154 | LIN FT. | |
| | | 147 | 43"x27" C.M.P - ARCH CULVERT (25% PAVED INV. & COATED) | 340 | LIN FT. | |
| | | 147 | 58"x36" C M P - ARCH CULVERT (25% PAVED INV. & COATED) | ~~328~~ | LIN FT | 512 |
| | | 147 | 65"x40" C.M.P. - ARCH CULVERT (25% PAVED INV. & COATED) | 310 | LIN FT. | |
| | | 148-44 | 8" C.M PIPE DRAINS | 200 | LIN FT | |
| | | 152-2 | BRICK MASONRY | 0.944 | M | |
| | | 155 | METAL END SECTION, PIPE - ARCH 65"x40" | 4 | EA | |
| | | 162-1 | CONC. CURB 4' MOUNT. TYPE DETACHED | 707 | CU YD | |
| | | 162-1a | CONC. CURB 8' BARRIER TYPE DETACHED | 12 | CU. YD. | |
| | | 162-21 | CONC. COMBINED CURB & GUTTER TYPE G-30 | 504 | CU. YD. | |
| | | 171-4 | STEEL DEEP BEAM SINGLE GUARD RAIL WITH METAL POST | 1612 | LIN FT | |
| SEE SPECIAL PROVISION REGARDING SECTION 173 | | 173-6 | FENCE WIRE - 6' CHAIN LINK | 5680 | LIN FT. | |
| | | 173-7 | FENCE WIRE - 4' STOCK | 53,475 | LIN FT. | |
| | | 174-2 | MARKERS (R.O.W.) | 81 | EA. | |
| RIP-RAP ALTERNATES SEE SPECIAL PROVISION REGARDING SECTION 176 | (9) | 176-1 | RUBBLE STONE RIP-RAP (PLAIN) | 147 | CU. YD. | |
| | (9) | 176-4 | SACKED SAND-CEMENT RIP-RAP | 147 | CU. YD. | |
| | (11) | 176 5 | REINF. CONC. MAT RIP-RAP 4" | 152 | CU. YD. | |
| | (10) | 178-24 | 6" POROUS CONC. PIPE UNDERDRAINS | 100 | LIN FT. | |
| | (11) | 187-1 | GRASS SPRIGGING, METHOD I | 797 | SQ. YD. | |
| SEE SPECIAL PROVISION REGARDING SEEDING | | 500 | SEEDING | 4014 | UNIT | |
| | | 502 | REMOVAL & DISPOSAL OF EXIST CONC PAV'T | 1650 | SQ YD. | |

(1) - INCLUDES 2,159 CU YD FOR CULVERT INLET & OUTLET DITCHES TO BE USED TO FILL EXIST. DITCHES
(2) - CONTAINS 11 M-GAL. FOR ITEM 34A & 208 M-GAL. FOR SOIL-CEMENT.
(3) - FOR DRIVEWAYS, RAMP AT HILLARD RD. & MILLER RD. & DETOUR AT McCLEISH RD, & BASE @ RT. 20.
(4) - INCLUDES 1,182 SQ. YDS. & 159 BBL. FOR DETOUR LOWER BROWNSVILLE RD.
(5) - INCLUDES 74 SQ YDS. & 7 BBL FOR CHANNEL BETWEEN BOX CULVERTS AT STA. 482+83
(6) - EMULSIFIED ASPHALT, INCLUDES 2 TONS FOR DETOUR LOWER BROWNSVILLE RD.
(7) - INCLUDES 59 TONS FOR DETOUR LOWER BROWNSVILLE RD.
(8) - INCLUDES 3 CU YDS FOR DRIVEWAY RT STA 23+75 ROUTE 20. & 26.0 C.Y. FOR SPILLWAYS.
(9) - INCLUDES 56 CU. YDS FOR SLOPE PROTECTION STA. 708+50 - STA. 710+00
(10) - IF REQUIRED, TO BE USED WHERE AND AS DIRECTED. SIZE 19 OR 31 AGGREGATE.
(11) - SEE SHEET NO 54 FOR DETAIL.
(12) - THE ENTIRE AREA OF THE RIGHT-OF-WAY SHALL BE CLEARED AND GRUBBED, EXCEPT THAT LIVING TREES AND SHRUBS 5' FEET OUTSIDE THE CONSTRUCTION LINES OF THE ROAD MAY BE DESIGNATED BY THE ENGINEER TO BE SAVED.
(13) - 9" UNIFORM THICKNESS.
(14) INCLUDES 660 LBS FOR SPILLWAYS

# ESTIMATED BRIDGE QUANTITIES

| ITEM NO. | DESCRIPTION | BRIDGE Nº | 1 | 2 | 3 | 4 | 5 | 6 | 7 | TOTAL | UNIT |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | STRUCTURE | H.G.S. Lower Brownsville | Cub Creek | H.G.S. McCliesh Rd | Overflow @ Forked Deer River | Forked Deer River | H.G.S. G M & O R.R. | H.G.S. State Rt 20 | | |
| | | STATION | 483+37 | 526+79 | 545+09 | 640+14.69 | 672+45.26 | 713+88 | 720+26.71 | | |
| | | TYPE | Prestressed Concrete Girder | Reinforced Concrete Girder | Prestressed Concrete Girder | Reinforced Concrete Girder | Reinf. Conc & Prest Conc. Girder | Reinforced Concrete Girder | Prestressed Concrete Girder | | |
| | | NO. SPANS | 4 | 5 | 4 | 11 | 13 | 3 | 4 | | |
| | | TOT. LENGTH | 237.8 | 144.08 | 237.8 | 317.17 | 426.87 | 113.16 | 230.36 | | |
| | | ROADWAY SHEETS | 1 @ 28' Safety Walks 54-60 | 2 @ 40' & Safety Curbs 61-62 | 22 & Safety Walks 63-69 | 2 @ 30' & Safety Walks 70-71 | 2 @ 30' & Safety Walks 72-76 | 2 @ 40' & Safety Curbs 77-80 | 1 @ 30' 1 @ 42' & Safety Walks 81-91 | | |
| 17-2 | DRY EXCAVATION BRIDGES | | 216 | – | 234 | – | – | 196 | 540 | 1,186 | C.Y. |
| 17-3 | WET EXCAVATION BRIDGES | | – | – | – | – | 425 | – | – | 425 | C.Y. |
| 135-4 | CLASS "A" CONCRETE | | 567 | 700 | 505 | 1286 | 1757 | 879 | 1383 | 7,077 | C.Y. |
| 135-12 | STEEL BAR REINFORCEMENT | | 92,706 | 169,810 | 79,850 | 308,519 | 469,520 | 316,800 | 240,832 | 1,678,037 | LB. |
| 139-1 | PRECAST CONCRETE TEST PILING | | 200 | 480 | 200 | 960 | 560 | 320 | 400 | 3120 | L.F. |
| 139-3 | PRECAST CONCRETE PILING, SIZE I | | 4200 | 3840 | 4080 | 5920 | 9,640 | 3840 | 10320 | 41,840 | L.F. |
| * 176 | RIP-RAP | | – | 340 | – | 414 | 366 | – | – | 1,120 | C.Y. |
| ** 501 | ALUMINUM RAILING 2 BAR | | | 574'-0" | | 1268'-4" | 1691'-4 3/8" | 442'-0" | 976'-0" | 4951'-8 3/8" | L.F. |
| ** 501a | ALUMINUM RAILING 3 BAR | | 499'-10½" | | 499'-10½" | | | | | 999'-9" | L.F. |
| ** 154 | PRESTRESSED, PRECAST CONC. BR. MEMBERS | | 175 | – | 143 | – | 161 | – | 375 | 854 | C.Y. |

* ALT. SACKED SAND CEMENT RIP-RAP ITEM 176-4 / RUBBLE STONE RIP-RAP (PLAIN) ITEM 176-1

** SEE SPECIAL PROVISIONS

FOR GENERAL NOTES REGARDING THE STRUCTURES SEE SHEET NO. 53

GRADES SHOWN ON PROFILES AND CROSS SECTIONS OF THE INTERSTATE ROUTE, CROSSROADS, FRONTAGE ROADS, RELOCATED ROADS, AND ALL LOOPS AND TURNING ROADWAYS IN INTERCHANGES ARE THE SAME AS FINISHED GRADES ON THE TYPICAL CROSS SECTIONS. ON INTERSTATE AND CROSSROAD SUPERELEVATED CURVES SEE CROSS SECTIONS FOR EDGE OF PAVEMENT ELEVATIONS. IN INTERCHANGES SEE GRADING PLANS AND CROSS SECTIONS FOR EDGE OF PAVEMENT ELEVATIONS. FOR GRADES OF SPECIAL DITCHES INDICATED ON THE PLANS, SEE CROSS SECTIONS. THE DITCH ELEVATION SHOWN IS AT THE INTERSECTION OF THE SIDE SLOPES

EARTHWORK AREAS SHOWN ON CROSS SECTIONS ARE BASED ON FINISHED GRADE ELEVATIONS. DEDUCTIONS AND ADDITIONS HAVE BEEN MADE TO COMPENSATE FOR THIS IN THE EARTHWORK VOLUME TABULATION AS SHOWN ON THE PLANS.

COST OF REMOVING AND DISPOSING OF EXISTING BITUMINOUS PAVEMENT OR BASE, WHERE REQUIRED, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 13-3 PER CU. YD.

WHERE STRAIGHT ENDWALLS ARE USED AND RIP-RAP IS REQUIRED, SIDES AND BOTTOM OF CHANNEL SHALL BE RIP-RAPPED TO THE POINT WHERE TOE OF FILL SLOPE INTERSECTS ORIGINAL GROUND, UNLESS OTHERWISE SHOWN OR DIRECTED BY THE ENGINEER.

THE ENDS OF THE WINGWALLS AND ADJACENT EMBANKMENT OF ALL BOX CULVERTS SHALL BE PROTECTED BY RIP-RAP TO A POINT WHERE THE TOE OF FILL SLOPE INTERSECTS ORIGINAL GROUND; AND IF REQUIRED BY THE ENGINEER THE AREA BETWEEN THE WINGWALLS OF BOX CULVERTS TO BE USED AS MACHINERY UNDERPASSES SHALL BE PAVED WITH 6" SOIL CEMENT TO BE PAID FOR UNDER ITEMS 45 (1a) AND 45 (2a), SOIL CEMENT DITCHES.

ALL NECESSARY CONSTRUCTION JOINTS IN CONCRETE BOX CULVERTS SHALL BE THE BUTT TYPE. LOCATION OF JOINTS IS TO BE DETERMINED BY THE ENGINEER ON CONSTRUCTION.

THE COST OF CULVERT EXCAVATION FOR THE CONCRETE BOXES, CATCH BASINS AND MANHOLES IS TO BE INCLUDED IN THE UNIT PRICE BID PER CU.YD. OF CONC.. THE COST OF PIPE CULVERT AND ENDWALL EXCAVATION IS TO BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF PIPE. WHERE A CULVERT IS MOVED TO A NEW LOCATION OTHER THAN SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE IN PAYMENT OR DEDUCTION WILL BE MADE DUE TO CHANGES IN THE AMOUNT OF CULVERT EXCAVATION.

UNDER ITEM 15-3 THE CONTRACTOR SHALL FURNISH SUITABLE BORROW MATERIAL FROM A SITE APPROVED BY THE ENGINEER. THE BORROW AREA SHALL BE WORKED IN SUCH A MANNER THAT THE MATERIAL TAKEN MAY BE READILY MEASURED. ALL BORROW MATERIAL USED IN THE TOP 12" OF SUBGRADE SHALL BE A-4 APPROVED BY THE ENGINEER AS BEING SUITABLE FOR USE IN SOIL CEMENT SUB BASE.

PAYMENT FOR CHANNEL EXCAVATION, ITEM 13-4, SHALL BE MADE ONLY WHERE THE BOTTOM WIDTH EXCEEDS 12 FEET.

ALL CORRUGATED METAL PIPE OR PIPE ARCHES USED ON THIS CONTRACT WHICH ARE 25% PAVED AND FULLY COATED WITH BITUMINOUS MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 233.02, TYPE A, AND 233.03.

IN EXCAVATION AREAS, AT THE GRADE LINE, THE CONTRACTOR, IN LIEU OF DISPOSING OF MATERIAL CLASSIFIED AS UNSUITABLE OR UNSATISFACTORY, SHALL, IF ORDERED BY THE ENGINEER, UNDERCUT THESE AREAS TO A DEPTH APPROVED BY THE ENGINEER, AND RECOMPACT THE SAME MATERIAL, PROVIDED THAT THE DENSITY REQUIRED IN SECTION 18.06 CAN BE OBTAINED.

ALL EARTH SIDE SLOPES, UNSTABILIZED SHOULDERS, UNPAVED DITCHES, THE ENTIRE MEDIAN AREA NOT STABILIZED, ALL GRADED AREAS WITHIN THE INTERCHANGES, AND ANY OTHER NEWLY GRADED AREAS ARE TO BE SEEDED IN ACCORDANCE WITH THE SPECIAL PROVISION REGARDING SECTION 500, EXCEPT THAT NO SEEDING SHALL BE DONE UNDER THIS CONTRACT IN AREAS ABOVE THE POINT WHERE THE LIMIT OF GRADING LINE INTERSECTS THE SIDE SLOPES.

TOP OF CUT DITCHES, IN ADDITION TO THOSE SHOWN ON THE PLANS, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL SECTION, WHERE ORDERED BY THE ENGINEER.

OWNERS TO RELAY OR ADJUST ALL WATER MAINS, GAS MAINS, SANITARY SEWERS, AND SERVICE CONNECTIONS CONFLICTING WITH THE PROPOSED IMPROVEMENTS.

FENCES: CERTAIN PORTIONS OF THE RIGHT-OF-WAY AS DESIGNATED BY THE ENGINEER SHALL BE FENCED PRIOR TO THE BEGINNING OF CONSTRUCTION OPERATIONS.

CONCRETE PAVEMENT SHALL BE FINISHED BY BROOMING IN ACCORDANCE WITH SECTION 127.26.

WHERE DETACHED CONCRETE CURB IS TO BE CONSTRUCTED ADJACENT TO CONCRETE PAVEMENT, A JOINT SHALL BE FORMED IN THE CONCRETE PAVEMENT EDGE AND DOWELS PLACED AS SHOWN ON THE TYPICAL SECTION, SHEET NO. 2A

COST OF REMOVAL AND DISPOSAL OF TEMPORARY DETOUR PAVEMENT, CLEANUP AND GRADING OF THIS AREA TO BE INCLUDED UNDED OTHER ITEMS.

Plan No. IN-9

| FED. ROAD DIST. Nº | STATE | FEDERAL Nº PROJECT Nº | FISCAL YEAR | SHEET Nº | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-505(9) | 1957 | 20 | 198 |

I-69-1(12)

REV 12-19-57 DRAINAGE QUANTITIES ADDED

# ESTIMATED QUANTITIES - CONCRETE BOX CULVERTS

| STATION | DA ACRES | SIZE & LENGTH S | H | L | SKEW | DWG. NO. | CLASS "A" CONC. CU.YD. | REINF. STEEL LBS. | RIP RAP CU.YDS. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 482+83 | 460 H | 8 | 6 | 232 | 45° LT. | A-14-54 & C-4-141 | 244.7 | 32,442 | 61.0 | |
| 482+83 | 460 H | 8 | 6 | 36 | 45° LT. | A-14-54 | 55.2 | 4,300 | — | FRONTAGE RD. LT. |
| 498+46 | 75 H | 8 | 3 | 179 | 60° LT. | A-14-84 | 154.2 | 15,130 | 0.8 | |
| 557+70 | 101.3 H | 5 | 6 | 217 | 75° LT. | B-3-141 | 144.2 | 16,505 | 2.1 | |
| 589+65 | 705 H | 10 | 10 | 244 | 60° LT. | E-8-11 | 411.4 | 53,415 | 6.6 | |
| 624+50 | — | 12 | 10 | 138 | 90° | D-4-161 | 330.8 | 30,980 | — | |
| 8+79(RTE 20) | — | 6 | 5 | 22 | 90° | A-14-84 & C-2-95 | 23.6 | 1,883 | 2.0 | EXTENSION-11'LT. & 11'RT. |
| 13+52(RTE 20) | - | 2@8 | 5 | 75 | 90° | E-8-130 & C-2-95 | 128.7 | 13,024 | 2.0 | EXTENSION-57'LT. & 18'RT. |
| | | | | | | | | | | |
| | | | | | | | | | | |
| TOTAL | | | | | | | 1490.8 | 161,979 | 74.4 | |

# GRADING QUANTITIES

| STATION TO STATION | EXCAV. CU.YD. | EMB.+15% CU.YD. | BORROW UNCLASS. CU.YD. | CHANNEL EXCAV. UNCLASS CU.YD. | REMARKS |
|---|---|---|---|---|---|
| | | | | | |
| 450+00 | | | | | |
| | 15,812 | 15,812 | | | |
| 463+00 | | | | | |
| | 187,143 | 117,752 | | 2300 | 69,391 CY. EXCESS TO BE USE BETWN. |
| 527+00 | | | | | STA. 527+00 - 559+35 |
| | 66,000 | 135,391 | 69,391 | | |
| 559+35 | | | | | |
| | 1,816 | 19,026 | 17,210 | | |
| 570+00 | | | | | |
| | 8,056 | 97,837 | 89,781 | | |
| 600+00 | | | | | |
| | 46 | 141,319 | 141,273 | | |
| 630+00 | | | | | |
| | | 97,833 | 97,833 | | |
| 640+00 | | | | | |
| | | 187,651 | 187,651 | | |
| 660+00 | | | | | |
| | | 104,172 | 104,172 | | |
| 671+00 | | | | | |
| | | 157,039 | 157,039 | 6,861 | CHANNEL EXCAVATION TO BE USED |
| 690+00 | | | | | TO CONSTRUCT BERMS |
| | | 233,825 | 233,825 | | SEE X-SECTIONS |
| 713+75 | | | | | |
| | | 82,212 | 92,212 | | |
| 717+70 | | | | | |
| | 153,388 | 153,388 | | | |
| 743+00 | | | | | |
| SUB TOTAL | | | 1,190,387 - 69,391 | 9,161 | 69,391 EXCESS |
| TOTAL | 432,261 | 1,553,257 | 1,120,996 | | |

# ESTIMATED DRAINAGE QUANTITIES - PIPE CULVERTS, CATCH BASINS, HEADWALLS

| STATION | SIZE & LENGTH 15" | 18" | 24" | 30" | 36" | 48" | 18"×11" | 45"×27" | 58"×36" | 65"×40" | SKEW | CATCH BASINS | DRAWING NO. | CLASS "A" CONC. CU. YD. | REINF. STEEL LBS | GRATE CL. 20 LBS. | GRATE CL. 30 LBS. | BRICK "M" | RIP-RAP CU. YD. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 450+50 | | 160' | | | | | | | | | 90° | 31 | M-D-1 E-2-90 | 0.68 2.62 | 118 | 223 | | | | |
| 457+50 | | 154' | | | | | | | | | 90° | | E-2-90 | 2.62 | 119 | | | | | |
| 2+55 | 50' | | | | | | | | | | 90° | | E-2-90 | 2.04 | 118 | | | | | LOWER BROWNSVILLE INTERCHANGE N.W. RAMP-OUTER CONNECTION |
| 2+90 | 40' | | | | | | | | | | | | | | | | | | | LOWER BROWNSVILLE INTERCHANGE N.W. RAMP-INNER CONNECTION |
| 481+35 | | | 128' | | | | | | | | 90° | 31 | M-D-1 E-2-90 | 0.73 0.97 | 20 | 223 | | | | FROM 31 C.B. LT. TO 31 C.B. ℄ |
| 482+42 | | | 22' | | | | | | | | | 31 | M-D-1 | 0.82 | | 223 | | | | FROM 31 C.B. ℄ TO 8'×6' CONC. BOX |
| 2+85 | | 48' | | | | | | | | | | 31 | M-D-1 | 1.92 | | 223 | | | | LOWER BROWNSVILLE INTERCHANGE N.E. RAMP-INNER CONNECTION |
| 485+00 | | | 134' | | | | | | | | 90° | 31 | M-D-1 E-2-90 | 0.73 0.97 | 20 | 223 | | | | FROM 31 C.B. ℄ TO 8'×6' CONC. BOX |
| 484+08 | | | 96' | | | | | | | | | 31 | M-D-1 | 0.82 | | 223 | | | | FROM "L" EW. RT. TO ST. EW. LT. LOWER BROWNSVILLE ROAD |
| 26+20 | | | 92' | | | | | | | | | 31 | M-D-1 | 2.06 | | 223 | | | | FROM "L" E.W. RT. TO ST. E.W. LT. LOWER BROWNSVILLE ROAD |
| 26+55 | | | 60' | | | | | | | | | | D-0-13 | 1.31 | | | | | | FROM 31 C.B. TO G5"×40" PIPE-ARCH, SADDLE PLATE REQ'D |
| * 507+00 | | 38' | | | | | | | | | | | D-0-13 | 2.14 | | | | | | METAL END-SECTION REQ'D |
| * 507+40 | | | | | | | | | | 160' | 90° | 31 | M-D-1 | 0.73 | | 223 | | | | BEVELED ENDS WITH RIP-RAP REQ'D |
| * 511+50 | | | | | | | | 2@170' | | | 90° | | CM-1-G | | | | | | | MEDIAN DRAIN & ENDWALL |
| 535+50 | | | 88' | | | | | | | | 90° | | CM-1-5 | | | | | | 7.6 | SIDE DRAIN RT. - UNDER BRIDGE |
| 544+80 | | 40' | | | | | | | | | 90° | 31 | M-D-1 D-0-13 | 0.82 1.08 | 20 | 223 | | | | SIDE DRAIN LT. - UNDER BRIDGE |
| 545+50 | | 40' | | | | | | | | | | | | | | | | | | McCLIESH RD. |
| 15+42 | | | 44' | | | | | | | | 90° | | D-0-13 | 2.70 | 20 | | | | | S.D. LT. UNDER MILLER ROAD |
| * 575+75 | | | | | | | 22' | | | | | | | | | | | | | FROM G-2 C.B. ℄ TO G-4 C.B. LT. |
| 587+00 | | | 132' | | | | | | | | | G-2 | D-0-13 | 1.15 | | 282 | | | | FROM G-4 C.B. LT. TO ST. EW. LT. STA. 588+50 |
| 588+00 | | | | 74' | | | | | | | | G-4 | D-0-13 A-4-83 | 1.63 2.89 | | 377 | | | | FRONTAGE RD. RT. |
| 586+40 | | | 58' | | | | | | | | 45°LT. | | | | | | | | | FROM 31 C.B. ℄ TO 10'×10' BOX CULV. |
| 590+00 | | 28' | | | | | | | | | | 31 | M-D-1 | 0.73 | | 223 | | | | FROM 31 C.B. LT. TO ST. EW. LT. STA. 591+00 |
| 592+00 | 118' | | | | | | | | | | | 31 | M-D-1 E-2-90 | 0.97 1.85 | 112 | 223 | | | | BEVELED ENDS WITH RIP-RAP REQ'D |
| * 602+00 | | | | | | | | | 2@164' | | 90° | | CM-1-5 | | | | | | 8.4 | METAL END-SECTIONS REQ'D |
| * 609+00 | | | | | | | | | | 150' | 90° | | CM-1-G | | | | | | | |
| 618+00 | | 166' | | | | | | | | | 90° | 31 | M-D-1 E-2-90 | 1.13 2.62 | 119 | 223 | | | | MEDIAN DRAIN & ENDWALL |
| 620+00 | 92' | | | | | | | | | | 90° | 31 | M-D-1 E-E-90 | 0.77 0.97 | 20 | 223 | | | | SIDE DRAIN RT. RTE 20 - UNDER BRIDGE |
| 629+00 | | | 184' | | | | | | | | 75°LT. | G-3 | D-0-13 | 3.73 2.16 | | 330 | | | 4.7 | SIDE DRAIN RT. - RTE. 20. |
| 651+00 | | 90' | | | | | | | | | 90° | 31 | M-D-1 D-0-13 | 0.73 0.63 | 20 | 223 | | | | SIDE DRAIN RT. - RTE. 20 |
| 659+00 | | 88' | | | | | | | | | 90° | 31 | M-D-1 D-0-13 | 0.73 0.63 | 20 | 223 | | | | SIDE DRAIN RT. - RTE. 20 |
| 680+50 | 90' | | | | | | | | | | 90° | 31 | M-D-1 D-0-13 | 0.97 0.58 | 20 | 223 | | | | SIDE DRAIN RT. - RTE. 20 |
| 688+00 | 90' | | | | | | | | | | 90° | 31 | M-D-1 D-0-13 | 0.97 0.58 | 20 | 223 | | | | SIDE DRAIN RT. - RTE. 20 |
| 694+00 | 88' | | | | | | | | | | 90° | 31 | M-D-1 E-2-90 | 0.97 0.77 | 20 | 223 | | | | SIDE DRAIN RT. - RTE. 20 |
| 701+00 | 82' | | | | | | | | | | | | | | | | | | | |
| 19+65 | | 164' | | | | | | | | | | | E-2-90 | 0.77 | 20 | | | | | FROM "U" EW. LT. TO NO 2 M.H. LT STA 25+75 - RTE 20 |
| * 23+00 | | | | | | | 40' | | | | | | D-0-13 | 2.90 | | | | | | FROM "L" EW. LT. TO NO. 2 M.H. LT STA 25+75 - RTE 20 |
| * 23+65 | | | | | | | 22' | | | | | | SM-2a | 1.20 | | | 165 | .944 | | FROM NO 2 M.H. LT. TO G-4 C.B. LT. STA. 22+00 - RTE. 20 |
| * 25+10 | | | | | | | 26' | | | | | G-4 | D-0-13 | 1.63 | | 377 | | | | FROM G-4 C.B. LT. TO G-4 C.B. LT. STA. 18+40 - RTE. 20 |
| * 25+60 | | | | | | | 22' | | | | | G-4 | D-0-13 A-4-83 | 1.63 1.76 | 20 | 377 | | | | FROM G-4 C.B. LT. TO "U" EW. LT. STA. 14+36 - RTE. 20 |
| * 26+90 | | | | | | | 22' | | | | | | A-4-83 | 6.21 | 40 | | | | | S.D. WITH 2"U" EWS. LT. - RTE. 20 |
| 27+35 | 164' | | | | | | | | | | | | D-0-13 | 2.70 | 20 | | | | | FRONTAGE RD. |
| 26+65 | | | | 100' | | | | | | | 90° | | E-2-90 | 2.62 | 119 | | | | | N.W. RAMP INNER CONNECTION - RTE. 20 INTERCHANGE |
| 25+75 | | | | | 372' | | | | | | 90° | 31 | M-D-1 E-2-90 | 0.97 0.77 | 20 | 223 | | | | N.E. RAMP INNER CONNECTION - RTE. 20 INTERCHANGE |
| 22+00 | | | | | 358' | | | | | | | 31 | M-D-1 E-2-90 | 0.73 0.97 | 20 | 223 | | | | MEDIAN DRAIN & ENDWALL |
| 18+40 | | | | | 344' | | | | | | 90° | | D-0-13 | 1.55 | 20 | | | | | McCLEISH RD. |
| 14+15 | | | | | | 54' | | | | | | 31 | M-D-1 D-0-13 | 0.73 0.63 | 20 | 223 | | | | MEDIAN DRAIN & ENDWALL |
| 10+25 | | | 50' | | | | | | | | | 31 | M-D-1 | 3.0 | — | 669 | | | | SIDE DRAIN ALONG R.R. UNDER BRIDGE |
| 8+50 | | 60' | | | | | | | | | 90° | | | | | | | | | MEDIAN DRAIN @ SPILLWAY |
| 4+35 | 50' | | | | | | | | | | 90° | 31 | M-D-1 E-2-90 | 0.97 0.77 | 20 | 223 | | | | |
| 725+56.86 | | 136' | | | | | | | | | | 31 | M-D-1 E-2-90 | 0.73 0.97 | 20 | 223 | | | | |
| 24+00 | 48' | | | | | | | | | | 90° | | D-0-13 | 1.55 | 20 | | | | | |
| 529+04 | | 84' | | | | | | | | | | 31 | M-D-1 D-0-13 | 0.73 0.63 | 20 | 223 | | | | |
| * 713+68 | | | 172' | | | | | | | | | | | | | | | | | |
| 721+80 | | 340' | | | | | | | | | | 31 | M-D-1 | 3.0 | — | 669 | | | | |
| TOTAL | 918 | 1798 | 908 | 284 | 1148 | 54 | | | | | | | | 32.77 | 1107 | 7318 | 165 | .944 | 20.7 | |
| * TOTAL | — | 38 | 172' | — | — | | 154 | 340 | 328 | 310 | | | | | | | | | | |

* CMP. CMP. - ARCHES

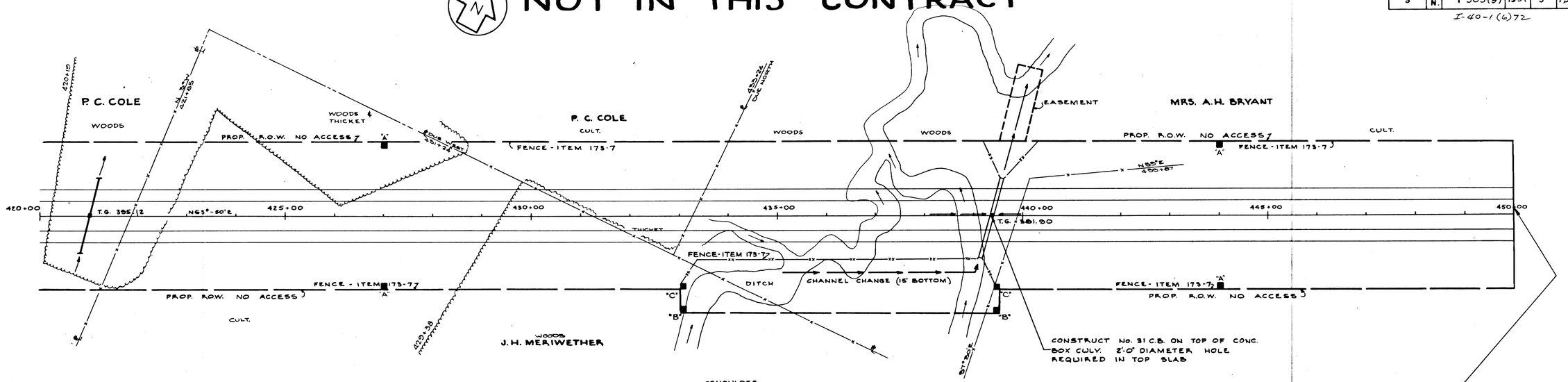
In Charge C.W.W.
Work by K.W.A.
Traced by W.S.J.R.
Checked by R.J.M.

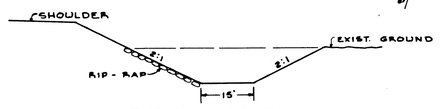
TENN. STATE HIGHWAYS
Plans
Divn.
File No. IN-9

| FED. ROAD DIST. Nº | T E N N. | FEDERAL AID PROJECT Nº | FISCAL YEAR | SHEET Nº | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | | I-505(9) | 1957 | 3 | 198 |

I-40-1(6)72

# NOT IN THIS CONTRACT



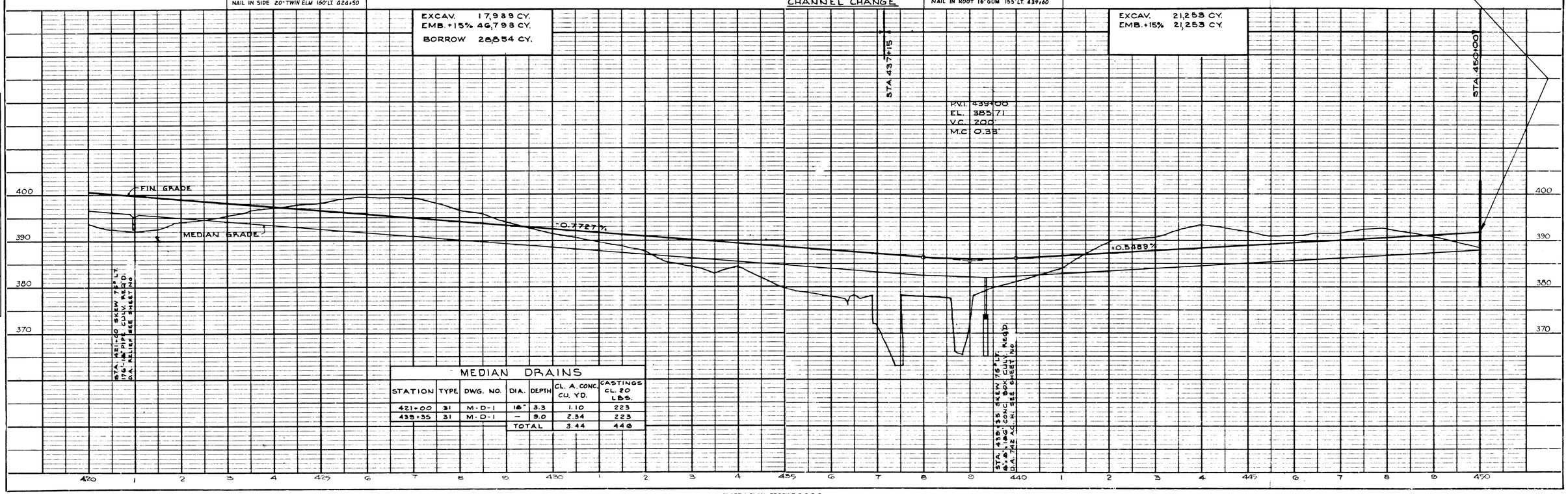

TYPICAL SECTION OF CHANNEL CHANGE

B.M. #39 Elev. 389.90
NAIL IN SIDE 20" TWIN ELM 160' LT. 424+50

EXCAV. 17,939 CY.
EMB. +15% 46,798 CY.
BORROW 28,854 CY.

B.M. #40 Elev. 377.00
NAIL IN ROOT 18" GUM 155' LT. 439+60

EXCAV. 21,253 CY.
EMB. +15% 21,253 CY.




## MEDIAN DRAINS

| STATION | TYPE | DWG. NO. | DIA. | DEPTH | CL. A. CONC. CU. YD. | CASTINGS CL. 20 LBS. |
|---|---|---|---|---|---|---|
| 421+00 | 31 | M-D-1 | 18" | 3.3 | 1.10 | 223 |
| 435+35 | 31 | M-D-1 | — | 9.0 | 2.34 | 223 |
| | | | TOTAL | | 3.44 | 446 |

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, R.C. & STRUCTURE NOTATNS CH'KD — DATE, BY

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, RC. OF WAY CHECKED — NOTE BOOK, NO.

Printed in U.S.A.
On IMPERIAL Tracing Cloth



7007B-35
Printed in U.S.A.
On IMPERIAL Tracing Cloth

STATE HIGHWAYS
Plans File 17-T
Dwgs. No. 9

| TYPE | YEAR | PROJECT NO. | SHEET # |
|---|---|---|---|
| CONST. | 1992 | IM-40-1(238)174 | 4 |

REV. 1-28-92: THIS SHEET ADDED TO PLANS.

| FED. AID PROJ. NO. | STATE | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| I-40-1(26) 72 PAVING | 60 | 3 | 33 | |

REVISED 9-1-65: GRID BEARING & COORDINATES ADDED.

| FED. ROAD DIST. # | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | N | I-505 (9) | 57 | 4 | 198 |

I-40-1(26)72

NOTE SEE SHEET NO. 16 FOR INTERCHANGE.

I-40-1(4)64 6 44

A.H. BRYANT

J.H. MERIWETHER

WOODS

FIELD

CULT.

HAY FIELD

COTTON

GARDEN

POND

BARN LOT

BARN

SHED

TEL. SERVICE LINE

TEL. LINE

TRAIL DITCH

"A" CULT.

"A" FIELD

"A"

PROP. R.O.W. NO ACCESS

FENCE ITEM 173-7

FENCE ITEM 173-6 "C"

108 R-1 8

104 R-3 9

105 IM-3 9

107 W-1 10

106

Lower Brownsville Rd. RIGHT LANE

P.I. 452+16.55
N 464,053.36
E 1,120,710.21

T.S. 447+66.55

E.S. 453+16.55

T.S. 447+66.55 N 24°30' W

STA. 450+00
N 463,980.05
E 1,120,506.45

T.G. 447.7

450+00 455+00 460+00 465+00 470+00 475+00 480+00

N 71°58'20" E (GRID)

N 68°55' E

EC 450+41.84

ET 452+91.84

462+88 EDGE R.O.W. DUE EAST

STA. 475+70

℄ CURVE DATA
D = 0°30'
Δ = 1°45'
T = 175.01'
L = 350.00'
SE-RC

BEGINNING OF ~~I-505 (9)~~ I-40-1 (26) 72
STA. 450+00

B.M. #41 Elev. 393.85
NAIL IN ROOT 26" POPLAR 180' RT. 451+25

B.M. #42 Elev. 387.93
NAIL IN ROOT TRIPLE ELM 160' LT. 459+70

B.M. #43 Elev. 383.80
NAIL IN ROOT 24" TWIN OAK 175' RT. 470+05

EXCAV. 15,812 C.Y.
EMB+15% 15,812 C.Y.

STA. 450+00

STA. 463+00

P.V.I. 457+00
EL. 395.59
V.C. 400'
M.C. 0.77'

FIN. GRADE +0.5489%

MEDIAN GRADE

-0.992%

390 380 370 360

STA. 450+50 SKEW 90°
160'-18" PIPE CULV. REQ'D.
D.A. RELIEF SEE SHEET No. 92

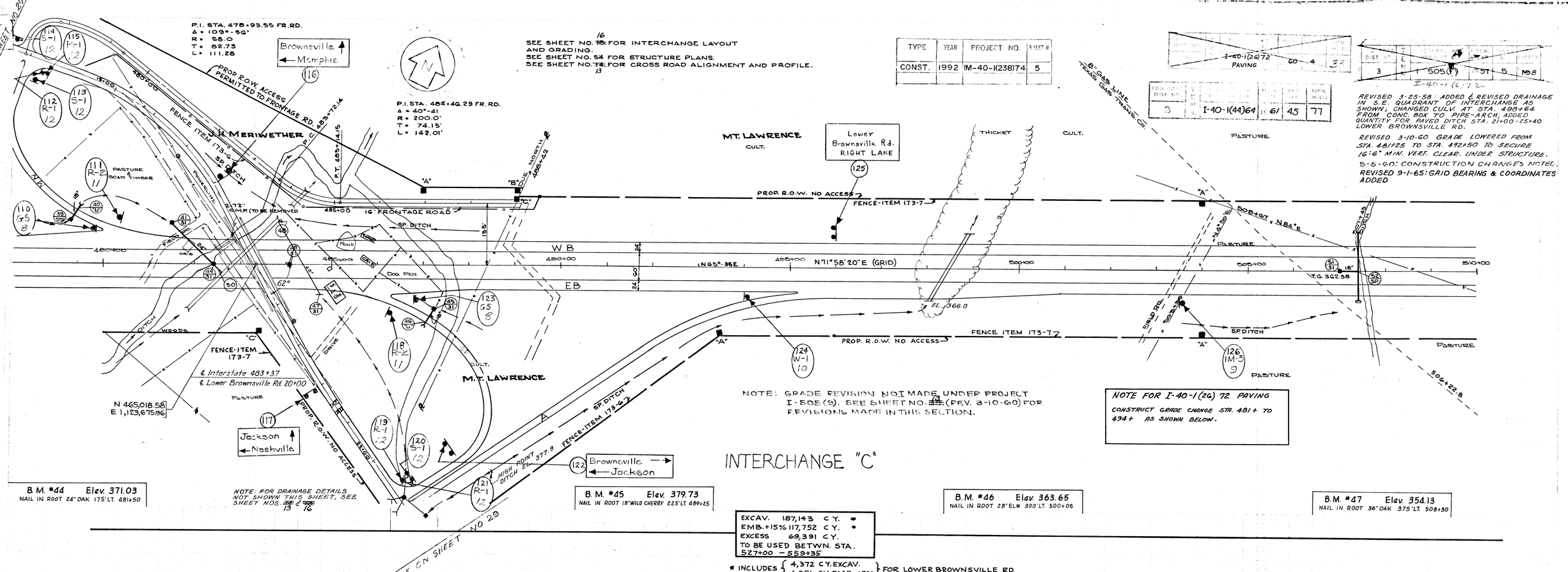
STA. 467+60 SKEW 90°
154'-18" PIPE CULV. REQ'D.
D.A. RELIEF SEE SHEET No. 92

MEDIAN DRAINS

| STATION | TYPE | DWG. NO. | DIA. | DEPTH | CL. A. CONC CU. YDS. | CASTINGS CL. 20 LBS. |
|---|---|---|---|---|---|---|
| 450+50 | 31 | M-D-1 | 18" | 2.0' | 0.69 | 223 |
| | | | TOTAL | | 0.69 | 223 |

470 1 2 3 4 475 6 7 8 9 480 1 2 3 4 485 6 7 8 9 490

70078-36




NOTE: GRADE REVISION NOT MADE UNDER PROJECT I-505(9). SEE SHEET NO. 54 (REV. 3-10-60) FOR REVISIONS MADE IN THIS SECTION.

NOTE FOR I-40-1(26) 72 PAVING

CONSTRUCT GRADE CHANGE STA. 481+ TO 494+ AS SHOWN BELOW.

# INTERCHANGE "C"

B. M. #44 Elev. 371.03
NAIL IN ROOT 24" OAK 175' LT. 481+50

NOTE: FOR DRAINAGE DETAILS NOT SHOWN THIS SHEET, SEE SHEET NOS. 13 & 16

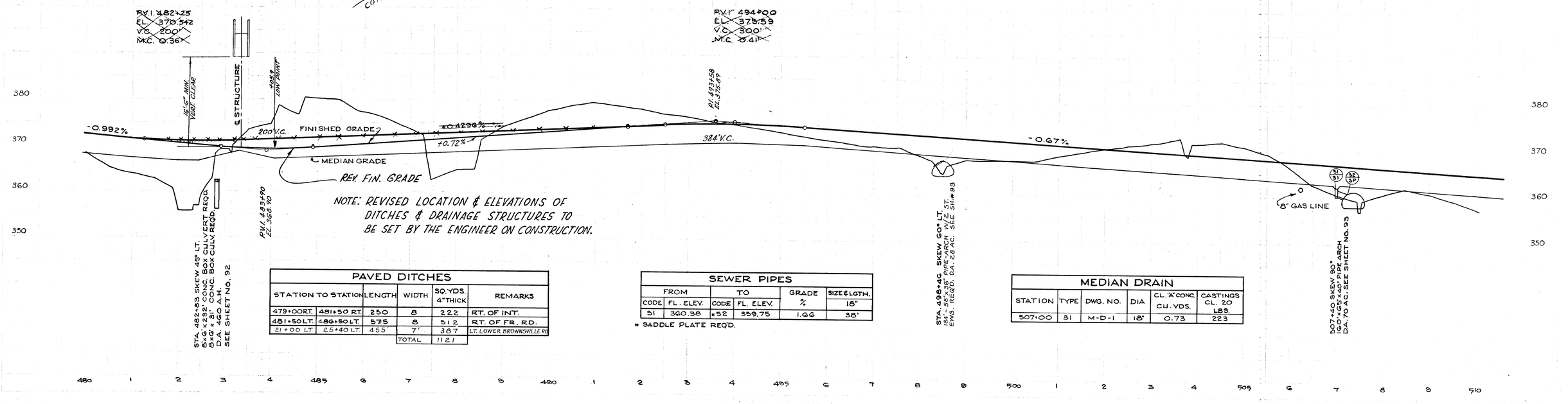
B. M. #45 Elev. 379.73
NAIL IN ROOT 18" WILD CHERRY 225' LT. 489+25

B. M. #46 Elev. 363.65
NAIL IN ROOT 28" ELM 300' LT. 500+05

B. M. #47 Elev. 354.13
NAIL IN ROOT 36" OAK 375' LT. 508+30

EXCAV. 187,143 C.Y. *
EMB. +15% 117,752 C.Y. *
EXCESS 69,391 C.Y.
TO BE USED BETWN. STA. 527+00 - 559+35

* INCLUDES { 4,372 C.Y. EXCAV. / 6,251 C.Y. EMB. +15% } FOR LOWER BROWNSVILLE RD.




NOTE: REVISED LOCATION & ELEVATIONS OF DITCHES & DRAINAGE STRUCTURES TO BE SET BY THE ENGINEER ON CONSTRUCTION.

STA. 482+93 SKEW 45° LT.
8'-0 x 2'-8" CONC. BOX CULVERT REQ'D.
D.A. 1.40 AC.
SEE SHEET NO. 92

STA. 498+46 SKEW 60° LT.
18d" - 58"x36" PIPE-ARCH W/2 ST. EWS. REQ'D. D.A. 2.8 AC. SEE SH. # 93

507+40 SKEW 90°
190"x65"x40" PIPE ARCH
D.A. 7.0 AC. SEE SHEET NO. 93

## PAVED DITCHES

| STATION TO STATION | | LENGTH | WIDTH | SQ. YDS. 4" THICK | REMARKS |
|---|---|---|---|---|---|
| 479+00 RT. | 481+50 RT. | 250 | 8 | 222 | RT. OF INT. |
| 481+50 LT. | 486+50 LT. | 575 | 8 | 512 | RT. OF FR. RD. |
| 21+00 LT. | 25+40 LT. | 455' | 7' | 367 | LT. LOWER BROWNSVILLE RD. |
| | | | TOTAL | 1121 | |

## SEWER PIPES

| FROM | | TO | | GRADE | SIZE & LGTH. |
|---|---|---|---|---|---|
| CODE | FL. ELEV. | CODE | FL. ELEV. | % | 18" |
| 51 | 360.38 | *52 | 359.75 | 1.66 | 38' |

* SADDLE PLATE REQ'D.

## MEDIAN DRAIN

| STATION | TYPE | DWG. NO. | DIA | CL. "A" CONC. CU. YDS. | CASTINGS CL. 20 LBS. |
|---|---|---|---|---|---|
| 507+00 | 51 | M-D-1 | 18" | 0.73 | 223 |

7007B-37

TENN. DEPT. OF HIGHWAYS
Plans File IM-9
Prop. No.

| TYPE | YEAR | PROJECT NO. | SHEET |
|---|---|---|---|
| CONST. | 1992 | IM-40-1(238)74 | 6 |
| | | | |

| DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-40-1(20)72 PAVING | 60 | 5 | 33 |

| FED. TO ST. DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-40-1(44)64 | 1961 | 47 | 77 |

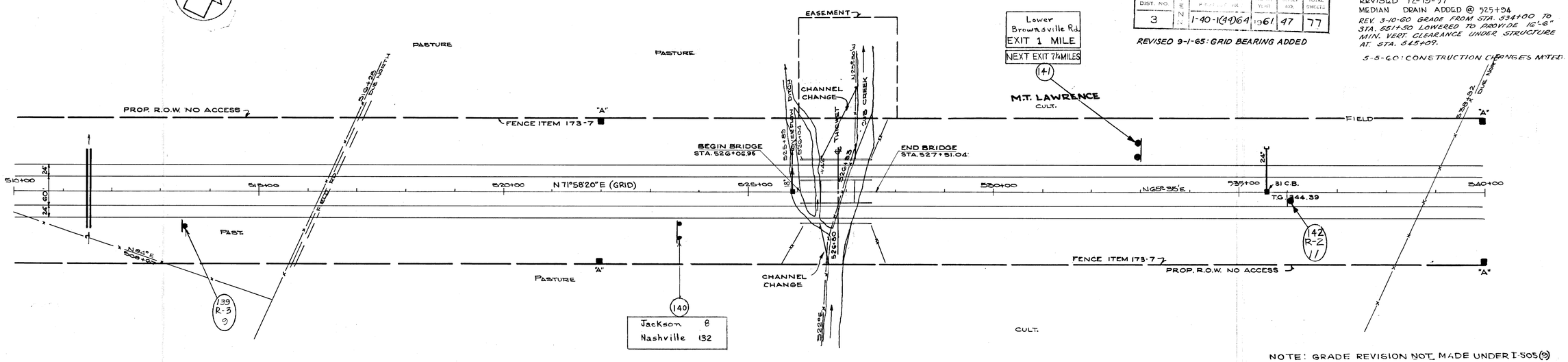
REVISED 9-1-65: GRID BEARING ADDED

| DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-505(9) | 57 | G | 198 |

I-40-1(6)72

REVISED 12-19-57
MEDIAN DRAIN ADDED @ 525+94
REV. 5-10-60 GRADE FROM STA. 534+00 TO STA. 551+50 LOWERED TO PROVIDE 16'-6" MIN. VERT. CLEARANCE UNDER STRUCTURE AT STA. 545+09.
5-5-60: CONSTRUCTION CHANGES NOTED.

SEE SHEET NO G1 FOR STRUCTURE PLAN.

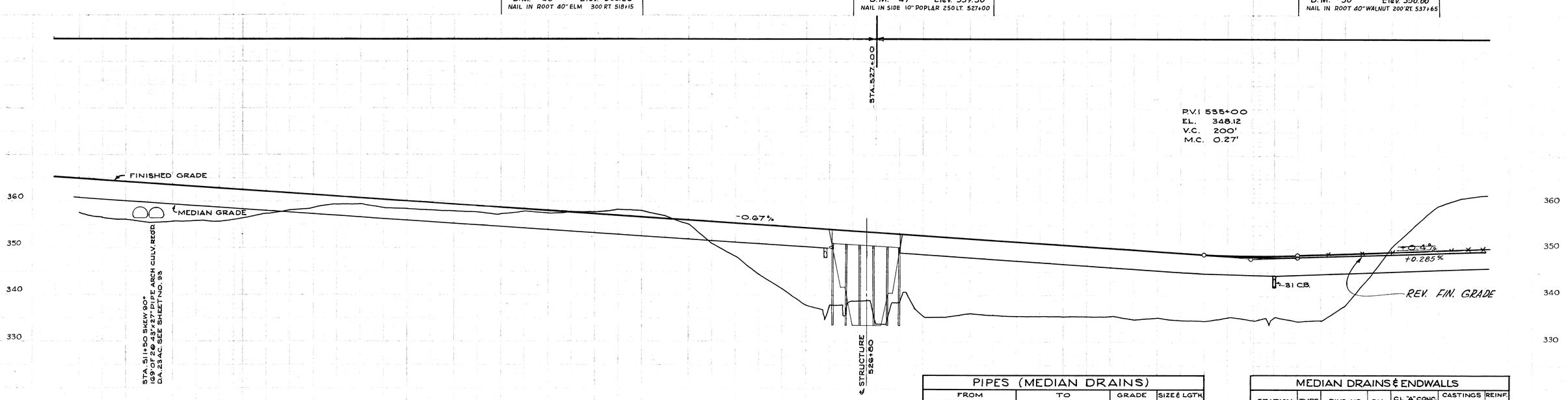



NOTE: 10' SOIL CEMENT BERM TO BE PROVIDED EACH SIDE STREAM UNDER STRUCTURE. SEE SHEET NO. G1

B.M. #48 Elev. 363.23
NAIL IN ROOT 40" ELM 300 RT. 518+15

B.M. #49 Elev. 339.30
NAIL IN SIDE 10" POPLAR 250 LT. 527+00

B.M. #50 Elev. 356.66
NAIL IN ROOT 40" WALNUT 200' RT. 537+65




## PIPES (MEDIAN DRAINS)

| FROM LOCATION | FROM FL. ELEV. | TO LOCATION | TO FL. ELEV. | GRADE % | SIZE & LGTH 18" | SIZE & LGTH 24" |
|---|---|---|---|---|---|---|
| 535+50 | 341.89 | LT. | 334.60 | 8.28% | | 88' |
| 525+94 | 348.0 | LT. | (UNKN) | — | 84' | |
| TOTALS | | | | — | 84' | 88' |

## MEDIAN DRAINS & ENDWALLS

| STATION | TYPE | DWG. NO. | DIA. | CL. "A" CONC. CU. YD. | CASTINGS CL. 20 LBS. | REINF. STEEL LBS. |
|---|---|---|---|---|---|---|
| 535+50 | 31 | M-D-1 | 24" | 0.82 | 223 | |
| 535+50 | U-EW | D-0-13 | 24" | 1.08 | — | 20 |
| 525+94 | 31 | M-D-1 | 24" | 0.73 | 223 | |
| 525+94 | U-EW | D-0-13 | 24" | 0.69 | — | 20 |
| TOTALS | | | | 3.32 | 446 | 40 |

7007B-38

TENN. STATE HIGHWAYS
Plans File IN-9
Pgm. No.

| TYPE | YEAR | PROJECT NO. | SHEET # |
|---|---|---|---|
| CONST. | 1992 | IM-40-1(238)74 | 7 |

REV. 1-28-92: THIS SHEET ADDED TO PLANS.

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-40-1(44)64 | 61 | 48 | 77 |

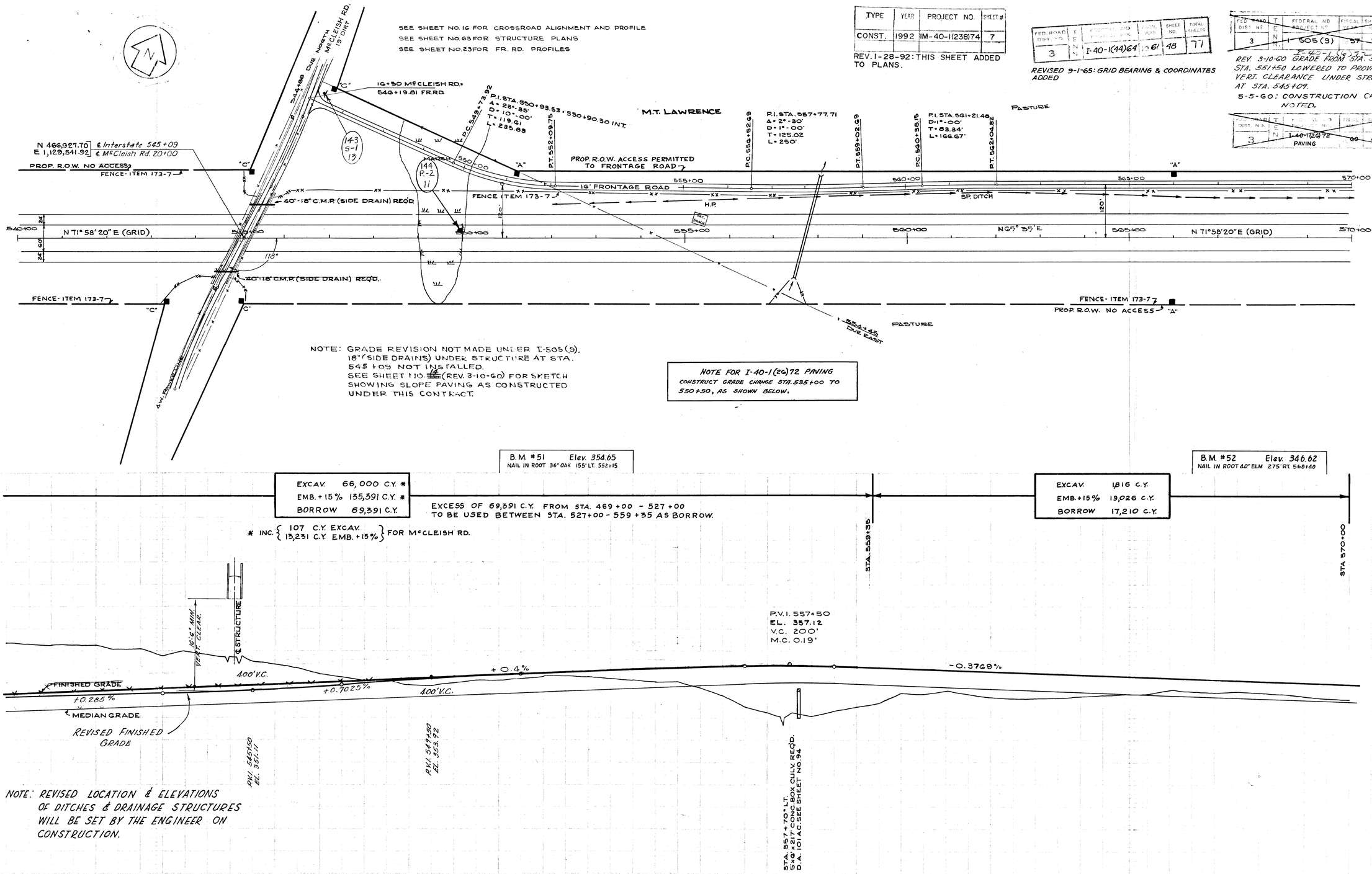
REVISED 9-1-65: GRID BEARING & COORDINATES ADDED

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-505(9) | 57 | 7 | 198 |

REV. 3-10-60 GRADE FROM STA. 534+00 TO STA. 551+50 LOWERED TO PROVIDE 16'-6" MIN. VERT. CLEARANCE UNDER STRUCTURE AT STA. 545+09.
5-5-60: CONSTRUCTION CHANGES NOTED.

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-40-1(26)72 PAVING | 68 | 6 | 33 |

SEE SHEET NO. 16 FOR CROSSROAD ALIGNMENT AND PROFILE
SEE SHEET NO. 63 FOR STRUCTURE PLANS
SEE SHEET NO. 23 FOR FR. RD. PROFILES




NOTE: GRADE REVISION NOT MADE UNDER I-505(9). 18" (SIDE DRAINS) UNDER STRUCTURE AT STA. 545+09 NOT INSTALLED. SEE SHEET NO. ~~44~~ (REV. 3-10-60) FOR SKETCH SHOWING SLOPE PAVING AS CONSTRUCTED UNDER THIS CONTRACT.

NOTE FOR I-40-1(26)72 PAVING
CONSTRUCT GRADE CHANGE STA. 535+00 TO 550+50, AS SHOWN BELOW.

B.M. #51 Elev. 354.65
NAIL IN ROOT 36" OAK 155' LT. 552+15

B.M. #52 Elev. 346.62
NAIL IN ROOT 40" ELM 275' RT. 560+40

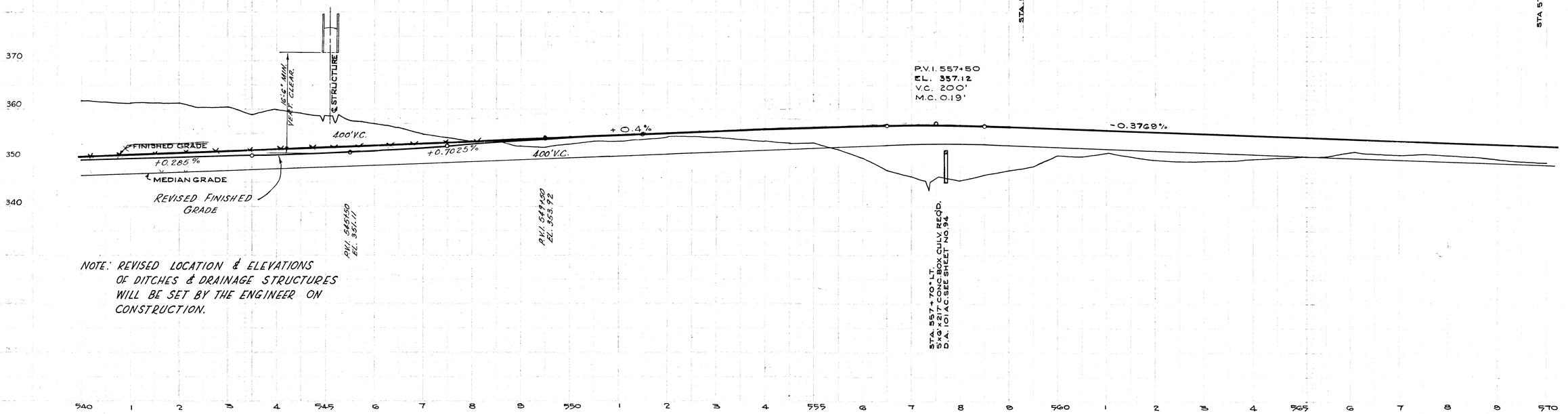
| | |
|---|---|
| EXCAV. | 66,000 C.Y. * |
| EMB. + 15% | 135,391 C.Y. * |
| BORROW | 69,391 C.Y. |

EXCESS OF 69,391 C.Y. FROM STA. 469+00 - 527+00 TO BE USED BETWEEN STA. 527+00 - 559+35 AS BORROW.

* INC. { 107 C.Y. EXCAV. 13,231 C.Y. EMB. + 15% } FOR McCLEISH RD.

| | |
|---|---|
| EXCAV. | 1,816 C.Y. |
| EMB. + 15% | 19,026 C.Y. |
| BORROW | 17,210 C.Y. |

STA. 559+35
STA. 570+00




NOTE: REVISED LOCATION & ELEVATIONS OF DITCHES & DRAINAGE STRUCTURES WILL BE SET BY THE ENGINEER ON CONSTRUCTION.

7007B-39

STATE HIGHWAYS
Plans File IN-9
Dwn. No.

REVISED 9-1-65: GRID BEARING ADDED

| TYPE | YEAR | PROJECT NO. | SHEET # |
|---|---|---|---|
| CONST. | 1992 | IM-40-1(23)174 | 8 |

REV. 1-28-92: THIS SHEET ADDED TO PLANS.

| FED. ROAD DIST. NO. | T E N N. | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | N | 505 (9) | 1957 | 8 | 198 |
| | | I-40-1(26)72 | | | |
| 3 | N | I-40-1(26)72 PAVING | 80 | 7 | 32 |
| 3 | N | I-40-1(44)64 | 1961 | 49 | 77 |

MRS C.A. BATCHELOR

M.T. LAWRENCE
PASTURE

FENNER PARHAM & WIFE
CULT.

H.L. HAYES
CULT.

FENNER PARHAM & WIFE
SEDGE FIELD

MRS C.A. BATCHELOR
PASTURE

N1°00' W
4° DIST
575+10 MILLER ROAD

PROP. R.O.W. ACCESS PERMITTED TO FRONTAGE RD.
22'-18"x11'C.M.P. ARCH
16' FRONTAGE RD. 2
570+00 575+00 580+00 585+00 590+00 595+00
120'
N 71°58'20"E (GRID)
N 4° 30' W
585+08
DUE WEST
595+08 N 4° 30' W
END CONSTR. FR. RD. 595+60±
PROP. R.O.W. NO ACCESS
FENCE ITEM 173-7

G-2 T.G. 342.17
G-4 T.G. 338.1
31 C.B. T.G. 339.1
DITCH
24"
18"
H.P. 590+00 T.G. 342.67
31 C.B.
N 65°-85°E
H.P. +347.68
600+00
599+35 N 86°-30'E

TO BE REMOVED
TMBR. BR.
CHANNEL CHANGE
CHANNEL CHANGE
DITCH
585+00
"C" "B" "A"
16' FRONTAGE RD.
58"-24"ϕ PIPE CULV.
DITCH
CULT.
CULT.
CULT.
THICKET

145 R-2 11

FENCE ITEM 173-7
PROP. R.O.W. NO ACCESS
PASTURE

THIS ROAD TO BE CLOSED

BEG. CONSTR. FR. RD. STA. 583+00±

B.M. #53 Elev. 343.49
NAIL IN ROOT 30" OAK 185' RT. 588+75

B.M. #54 Elev. 339.91
NAIL IN ROOT 36" SWEET GUM 200' LT. 597+65

EXCAV. 8,056 C.Y.
EMB+% 97,837 C.Y.
BORROW 89,781 C.Y.

STA. 570+00 STA. 600+00

P.V.I. 587+00
EL. 346.00
V.C. 200'
M.C. 0.17'

P.V.I. 600+00
EL. 349.75
V.C. 200'
M.C. 0.16'

FINISHED GRADE
MEDIAN GRADE
-0.3769%
+0.2885%

360 350 340 330

31 C.B.
24"
36"
18"
31 C.B.
15"
31 C.B.

STATION 589+65
10'x10' 24¢ CONC. BOX SKEW 60° LT.
D.A. 705 AC. SEE SHEET NO. 94

## SEWER PIPES

| FROM CODE | FROM FL. ELEV. | TO CODE | TO FL. ELEV. | GRADE % | SIZE & LEGTH 15" | 18" | 24" | 36" |
|---|---|---|---|---|---|---|---|---|
| 53 | 339.20 | 54 | 335.14 | 2.98 | | | | 136' |
| 54 | 334.14 | 55 | 333.40 | 1.00 | | | | 74' |
| 56 | 340.87 | 57 | 340.00 | 3.11 | | 28' | | |
| 58 | 337.35 | 59 | 355.00 | 1.99 | 118' | | | |
| | | | | TOTAL | 118' | 28' | 136' | 74' |

## ENDWALLS

| CODE | TYPE | PIPE DIA. | DWG. NO. | CL. "A" CONC. CU. YD. | REINF. STEEL LBS. |
|---|---|---|---|---|---|
| 55 | STR. | 36 | A-4-83 | 5.96 | -- |
| 59 | STR. | 15 | E-2-90 | 1.85 | 112 |
| | | | TOTAL | 7.81 | 112 |

## CATCH BASINS

| CODE | TYPE | DWG. NO. | APPROX. DEPTH | CL. "A" CONC CU.YDS. | |
|---|---|---|---|---|---|
| *53 | G-2 | D-0-13 | 3.0 | 1.15 | 282 |
| 54 | G-4 | D-0-13 | 4.0 | 1.63 | 377 |
| 56 | 31 | M-D-1 | 2.0 | 0.73 | 233 |
| 58 | 31 | M-D-1 | 2.0 | 0.67 | 233 |
| | | | TOTAL | 4.18 | 1105 |

*FORM WEIR IN BOTH SIDES SEE DETAIL SHEET NO. 2A

570 1 2 3 4 575 6 7 8 9 580 1 2 3 4 585 6 7 8 9 590 1 2 3 4 595 6 7 8 9 600

7007B-40

IN STATE HIGHWAYS
ons File IN-
n. No. 9
MICROFILMED

| FED. ROAD DIST. NO. | TYPE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | N.N. | I 40-1(4)64 | 19 61 | 50 | 77 |

~~FED. ROAD DIST. Nº 3 | TYPE N.N. | FEDERAL AID PROJECT Nº I 505(9) | FISCAL YEAR 1957 | SHEET Nº 9 | TOTAL SHEETS 198~~

~~I-40-1(46)72~~

~~PAVING 80 8 3.3~~

REVISED 9-1-65: GRID BEARING ADDED

| TYPE | YEAR | PROJECT NO. | SHEET # |
|---|---|---|---|
| CONST. | 1990 | IR-40-1227177 | 9 |

PASTURE
MRS. C.A. BATCHELOR

HAY FIELD

PASTURE

PASTURE

PROP. R.O.W. NO ACCESS

PROP. R.O.W. NO ACCESS

FENCE ITEM 173-7

FENCE ITEM 173-7

"A"

"A"

HAY STORAGE

PASTURE

PASTURE

N 45°30' W 615.73

N 45°30' W 615.73

N 71°58'20" E (GRID)

N 26°30' E 608.55

S 63°30' E

S 84°30' E

HEDGE ROW

RAILROAD

TRACKS

600+00 605+00 610+00 615+00 620+00 625+00 630+00

No.31 C.B. T.G. 342.00

No.31 C.B. T.G. 342.00

No.G-3 C.B. T.C. 342.00

H.P. 343.83

H.P. 344.00

B.M. # 55 Elev. 342.66
NAIL IN ROOT 24" SWEET GUM 155'RT. 608+18

B.M. # 56 Elev. 342.39
NAIL IN ROOT 30" WILLOW OAK 250'RT. 617+00

B.M. # 57 Elev. 336.66
NAIL IN ROOT 50" OAK 275' RT. 625+50

EXCAV. 46 C.Y.
EMB. +15% 141,319 C.Y.
BORROW 141,273 C.Y.

STA. 600+00

STA. 630+00

P.V.I. 600+00
EL. 349.75
V.C. 200'
M.C. 0.18'

P.V.I. 611+00
EL. 346.00
V.C. 200'
M.C. 0.09'

FIN. GRADE

MEDIAN GRADE

-0.3409%

LEVEL

No.31 C.B.

No.31 C.B.

No.G-3 C.B.

350
340
330
320

STA. 602+00 SKEW 90°
2 @ 58"X36"X164' PIPE ARCH CULV.
D.A. 47 AC. SEE SHEET NO. 94

STA. 609+00 SKEW 30°
65"X40"X150' PIPE ARCH CULV.
D.A. 18 AC. SEE SHEET NO. 94

STA. 613+00 SKEW 90°
166'-18" PIPE CULV.
D.A. SEE SHEET NO. 95

STA. 624+50 SKEW 90°
12'X10'X138' CONC. BOX
W/ WINGWALLS
SEE SHEET NO. 95

STA. 629+00 SKEW 75° LT.
184'-30" ϕ PIPE CULV. REQ'D.
D.A.
SEE SHEET NO. 95

600 1 2 3 4 605 6 7 8 9 610 1 2 3 4 615 6 7 8 9 620 1 2 3 4 625 6 7 8 9 630

PIPES (MEDIAN DRAINS)

| FROM | | TO | | GRADE | SIZE & LENGTH |
|---|---|---|---|---|---|
| LOC. | FL. ELEV. | LOC. | F.L. ELEV. | % | 15" |
| 620+00 | 340.25 | LT. | 337.00 | 3.54% | 92' |

MEDIAN DRAINS & ENDWALLS

| STATION | TYPE | DWG. NO. | DIA | CL. "A" CONC. CU. YD. | REINF. STEEL LBS. | CASTINGS CLASS 20 LBS. |
|---|---|---|---|---|---|---|
| 613+00 | 31 | M-D-1 | 18" | 1.13 | — | 223 |
| 620+00 | 31 | M-D-1 | 15" | 0.67 | — | 223 |
| 620+00 | "U" | E-2-90 | 15" | 0.77 | 20 | — |
| 629+00 | G-3 | D-0-13 | 30" | 3.79 | — | 330 |
| | | | TOTAL | 6.36 | 20 | 776 |

7007 B-41

STATE HIGHWAYS
File No. IN-9

REVISED: MESSAGE ON SIGN NO. 148 CHANGED FROM "SECOND EXIT" TO "EXIT 4 MILES".

REVISED 9-1-65: GRID BEARING & COORDINATES ADDED

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | IND. | I 505(9) | 1957 | 10 | 198 |

I-40-1(6)72

| TYPE | YEAR | PROJECT NO. | SHEET # |
|---|---|---|---|
| CONST. | 1990 | IR-40-1(227)177 | 10 |

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | IND. | I 40-1(26)72 PAVING | 1960 | 9 | 33 |

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | IND. | I-40-1(44)69 | 1961 | 51 | 77 |

SEE SHEET NO. 70 FOR STRUCTURE PLANS.

MRS. C.A. BATCHELOR

MRS C.A. BATCHELOR & HUGH PEARSON
WOODS & BOTTOM

WILL S. HALL
WOODS & BOTTOM

PROP. R.O.W. NO ACCESS
FENCE ITEM 173-7

BEGIN BRIDGE STA. 638+36.10

END BRIDGE STA. 641+73.27

PC 647+53.66

PT 659+69.52

"A"

630+00 635+00 640+00 645+00 650+00 655+00 660+00

H.P. 345.58

N 71°58'20"E (GRID)

N 65°35'E

H.P. 345.58

H.P. 343.88

NO. 31 C.B.

T.G. 342.0

OLD RIVER RUN

P.I. 653+50.87
N 470,281.31
E 1,139,846.20

632+00 N 82°E

WOODS & BOTTOM LAND

MRS C.A. BATCHELOR

(147) 20 Jackson EXIT 1½ MILES

(148) Jackson Via U.S.-45 EXIT 4 MILES

℄ CURVE DATA
D = 0°30'
Δ = 9°58'
T = 587.21
L = 1155.33
SE - RC

B.M.* 38 ELEV. 331.12
NAIL IN SIDE 15" SW. GUM 155' RT. G38+15

B.M.* 39 ELEV. 331.34
NAIL IN SIDE 18" B. GUM 160' RT. G56+85

EMB. +15% 97,833 C.Y.
BORROW 97,833 C.Y.

EMB. +15% 187,651 C.Y.
BORROW 187,651 C.Y.

STA. 630+00 STA. 640+00 STA. 660+00

P.V.I. 632+50
EL. 346.00
V.C. 200'
M.C. 0.08'

P.V.I. 637+50
EL. 347.55
V.C. 200'
M.C. 0.08'

P.V.I. 643+00
EL. 347.55
V.C. 200'
M.C. 0.08'

P.V.I. 648+00
EL. 346.00
V.C. 200'
M.C. 0.08

LEVEL +0.31% LEVEL -0.31% LEVEL

FIN. GRADE

MEDIAN GRADE

NO. 31 C.B.

NO. 31 C.B.

350 340 330 320

630 1 2 3 4 635 6 7 8 9 640 1 2 3 4 645 6 7 8 9 650 1 2 3 4 655 6 7 8 9 660

PIPES (MEDIAN DRAINS)

| FROM | | TO | | GRADE | SIZE & LENG. |
|---|---|---|---|---|---|
| LOCATION | F.L. ELEV. | LOCATION | F.L. ELEV. | % | 18" |
| 651+00 | 340.00 | L.T. | 330.80 | 10.2 % | 90' |
| 659+00 | 340.00 | L.T. | 331.60 | 9.55 % | 88 |

MEDIAN DRAINS & ENDWALLS

| STATION | TYPE | DWG. NO. | DIA. | CL A CONC CU YD | REINF STEEL LBS. | CASTINGS CLASS 20 LBS. |
|---|---|---|---|---|---|---|
| 651+00 | 31' | M-D-1 | 18" | 0.73 | — | 223 |
| 651+00 | "U" | D-0-13 | 18" | 0.69 | 20 | — |
| 659+00 | 31 | M-D-1 | 18" | 0.73 | — | 223 |
| 659+00 | "U" | D-0-13 | 18" | 0.69 | 20 | |
| | | TOTAL | | 2.84 | 40 | 446 |

File No. 9

| DIST. | FED. AID PROJECT NO. | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| 3 | I-40-1(26)72 PAVING | 60 13 | 93 |

| FED. DIST. NO. | T E N N | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | | IN505(9) | 1957 | 14 | 198 |

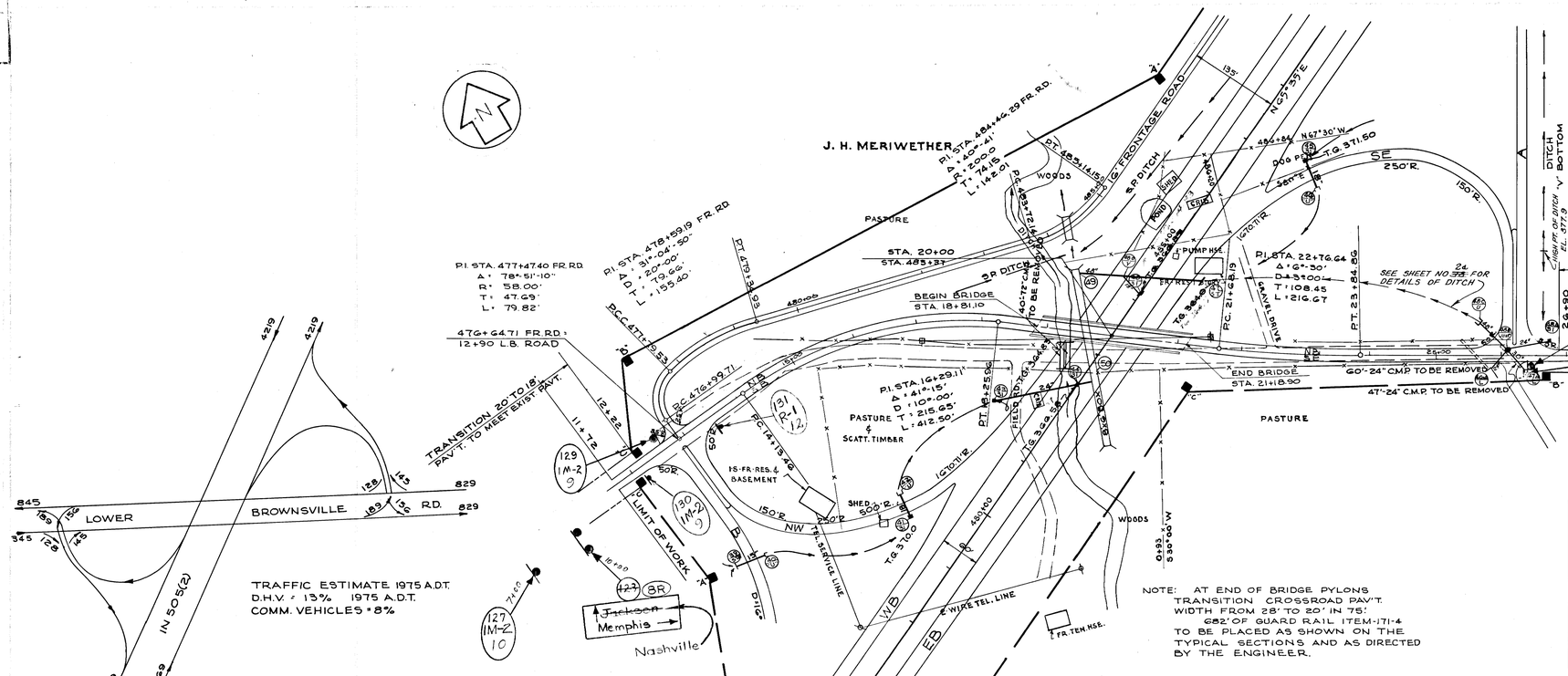
I-40-1(6)77

SEE SHEET NO. 16 FOR INTERCHANGE LAYOUT AND GRADING
SEE SHEET NO. 54 FOR STRUCTURE PLANS
SEE SHEET NO. 23 FOR PROFILES

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| REF. | 1975 | 57001-4127-04 | 22 |
| | | 39001-4127-04 | |
| | | | |
| | | | |

REVISED 3-25-58: ADDED & REVISED CERTAIN DRAINAGE IN S.E. QUADRANT OF INTERCHANGE; CHANGED DRAINAGE TABULATIONS ACCORDINGLY
REV. 3-10-60 MIN. VERT. CLEARANCE CHANGED TO 16'-6".
5-5-60: CONSTRUCTION CHANGES NOTED

| FED. DIST. NO. | T E N N | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | | I-40-1(44)64 | 61 | 46 | 77 |



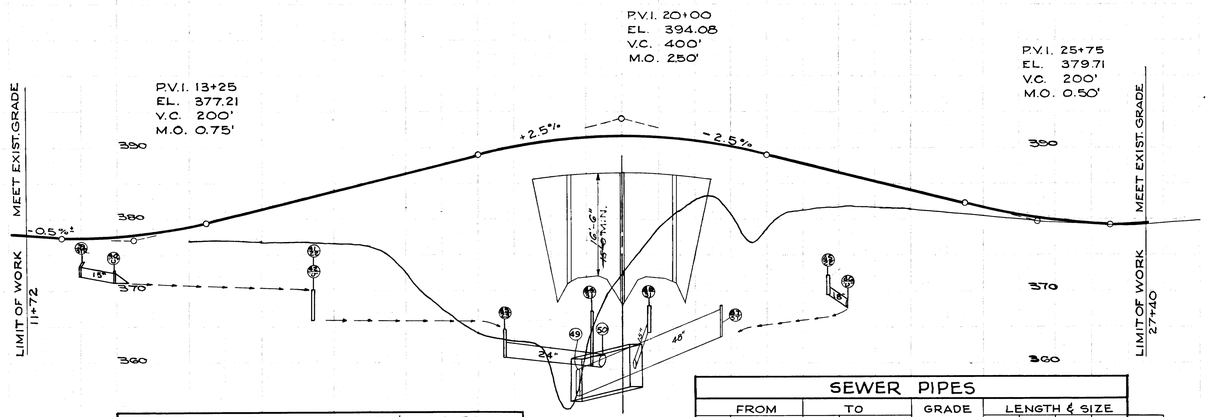

NOTE: AT END OF BRIDGE PYLONS TRANSITION CROSSROAD PAV'T. WIDTH FROM 28' TO 20' IN 75'. 682' OF GUARD RAIL ITEM-171-4 TO BE PLACED AS SHOWN ON THE TYPICAL SECTIONS AND AS DIRECTED BY THE ENGINEER.

NOTE: DATA IN RED DENOTES CHANGES MADE UNDER REV. 1 OF 5-5-60 AT THIS INTERCHANGE. CATCH BASINS (CODE 45) AND INLETS (CODE 46 AND 47) NOT CONSTRUCTED THIS PROJ.. CATCH BASINS (CODE 44 & 48) ADJUSTED AS SHOWN TO MATCH REVISED GRADE SEE SHEET NO. 16 REV. 3-10-60 FOR DITCH SHOWING SLOPE PAVING AS CONSTRUCTED UNDER THIS CONTRACT.
DITCH PAVING (CODE 48-C TO CODE 47) NOT CONSTRUCTED THIS PROJ..

**NOTE FOR I-40-1(26)72 PAVING**

CONSTRUCT STR. ENDWALL ON RT. END 48" PIPE UNDER INTERSTATE STA. 484+. CODE #47.
CONSTRUCT #33 C.B. AND "U" TYPE ENT. ON 18" PIPE UNDER RAMP ON RT. STA. 486+. CODE #45 & 46.
ITEM 135-4 = 10.6 C.Y.
ITEM 135-12 = 20 LB.
ITEM 132-46 = 145 LB.
DWG. A-4-83; E-2-90 & M-D-2.
PAVED DITCH, IF REQ'D. BY THE ENGINEER. CONDITIONAL QUANTITIES ALLOWED.

LOWER BROWNSVILLE ROAD
STA. 485+37




## MEDIAN DRAINS

| CODE | STATION | TYPE | DWG. NO. | CL."A" CONC CU. YDS. | CASTINGS CLASS 20 LBS. |
|---|---|---|---|---|---|
| 44 | 482+24.83 | 31 | M-D-1 | 1.92 | 223 |
| 48 | 484+08 | 31 | M-D-1 | .82 | 223 |
| | | | TOTALS | 2.74 | 446 |

LEGEND (31) CODE NO. / TYPE OF STRUCTURE

## CATCH BASINS & JUNC. BOX

| | CODE | TYPE | DWG. NO. | APPROX. DEPTH | CL."A" CONC CU. YDS. | CASTINGS CLASS 20 LBS. | REINF. STL. LBS. |
|---|---|---|---|---|---|---|---|
| ② | 34 | 31 | M-D-1 | 2.5 | .82 | 223 | |
| ① | 41 | 31 | M-D-1 | 2.0 | .73 | 223 | |
| ② | 43 | 31 | M-D-1 | 2.5 | .82 | 223 | |
| ① | 45 | 31 | M-D-1 | 2.0 | .73 | 223 | |
| | 60 | MAS JUNC. | S-M-2a | 5.5 | 4.43 | | 130 |
| | | | | TOTAL | 7.53 | 892 | 130 |

① OPENING TO BE FORMED IN UPSTREAM SIDE.
② OPENING TO BE FORMED IN BOTH SIDES
SEE DETAIL OF OPENING SHEET NO. 2A

## SEWER PIPES

| FROM CODE | FROM F.L. ELEV. | TO CODE | TO F.L. ELEV. | GRADE % | LENGTH & SIZE 15" | 18" | 24" | 30" | 48" |
|---|---|---|---|---|---|---|---|---|---|
| 39 | 372.00 | 40 | 371.00 | 2.08% | 48' | | | | |
| 41 | 368.00 | 42 | 365.70 | 5.00% | | 46' | | | |
| 42 | 359.35 | 39 | 359.00 | 1.59% | | | 22' | | |
| 47 | 364.00 | 48 | 355.00 | 4.46% | | | | | 202' |
| 48 | 364.33 | 49 | 359.00 | 14.80% | 36' | | | | |
| | | | | | | | | | |
| 45 | 369.50 | 46 | 367.20 | 4.79% | | 48' | | | |
| 43 | 362.33 | 44 | 359.37 | 2.31% | | | 128' | | |
| 44 | 375.00 | 38 | 374.60 | 0.91% | | | 44 | | |
| 61 | 375.00 | 38 | 374.60 | 0.91% | | | | 44 | |
| 49 | 375.00 | 45 | 374.60 | 0.57% | | | 70 | | |
| 50 | 374.50 | 49 | 374.10 | 0.67% | | | | | 60 |
| | | | | TOTAL | 84 | 94 | 264 | 44 | 262 |

## ENDWALLS

| CODE | TYPE | PIPE DIA. | DWG. NO. | CL."A" CONC CU. YDS. | REINF. STEEL LBS. |
|---|---|---|---|---|---|
| 46 | "U" | 15" | E-2-90 | .77 | 20 |
| 42 | "U" | 18" | E-2-90 | .97 | 20 |
| 46 | "U" | 18" | E-2-90 | .97 | 20 |
| 39 | STR. | 15" | E-2-90 | 1.27 | 79 |
| 40 | "L" | 24" | D-0-13 | 1.91 | — |
| 38 | "L" | 30" | D-0-13 | 2.90 | — |
| 47 | STR. | 48" | A-4-83 | 8.22 | — |
| 45 | "U" | 48" | A-4-83 | 3.10 | 20 |
| | | | TOTAL | 20.11 | 159 |

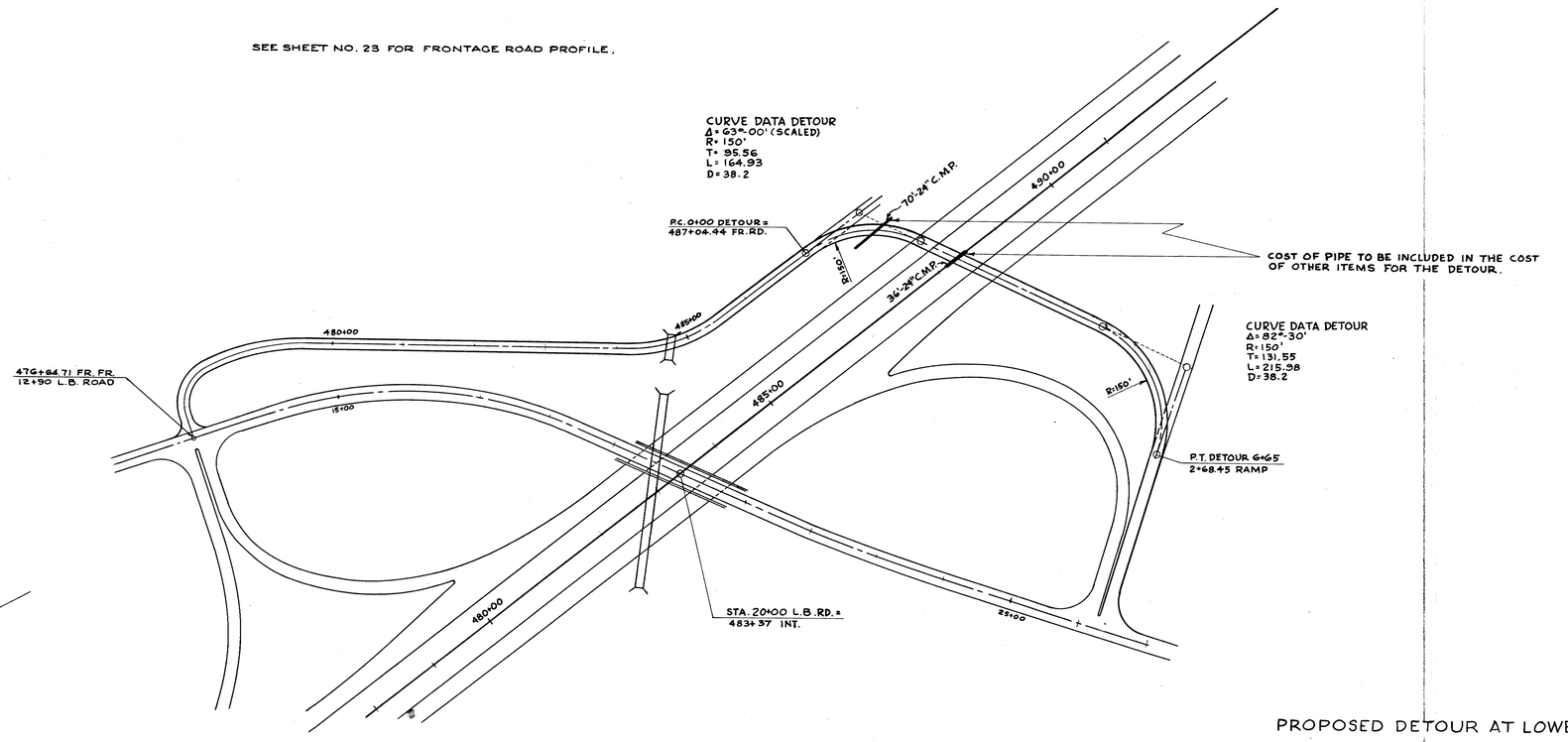
TENN. STATE HIGHWAYS

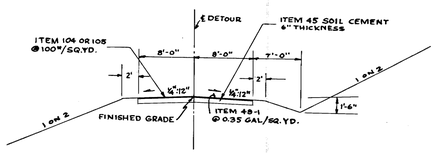
| Plans | File | IN |
|---|---|---|
| Dwg. | No. | 9 |

| PROJ. ROAD DIST. NO. | T E N | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | | IN 505 (9) I-40-1(6)72 | 19 57 | 15 | 198 |

| PROJ. ROAD DIST. NO. | T E N | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | | | 19 .... | | |

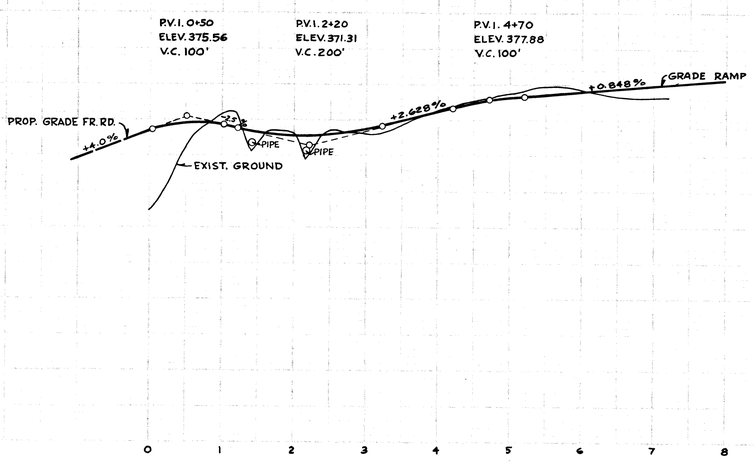
SEE SHEET NO. 23 FOR FRONTAGE ROAD PROFILE.




TYPICAL SECTION DETOUR
SCALE: 1" = 10'

PROPOSED DETOUR AT LOWER BROWNSVILLE ROAD




SEE SPECIAL PROVISION REGARDING ITEM 45

SURFACE ALTERNATES SEE SPECIAL PROVISION REGARDING 104 OR 105

ESTIMATED QUANTITIES

| ITEM NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| 45-1 | SOIL CEMENT PROCESSING | 1182 | SQ.YD. |
| 45-2 | PORTLAND CEMENT | 159 | BBL. |
| * 45-3 | WATER | 6 | M.GAL |
| | | | |
| ** 49-1 | PRIME COAT | 2 | TON |
| | | | |
| 104-1 | MINERAL AGGREGATE (A.C.S.C.) | 55 | TON |
| 104-2 | ASPHALT CEMENT (A.C.S.C.) | 4 | TON |
| | | | |
| 105-1 | MINERAL AGGREGATE (S.A. or S.A.S.C.) | 55 | TON |
| 105-2 | ASPHALT CEMENT (S.A. or S.A.S.C.) | 4 | TON |
| | | | |
| | | | |
| | | | |
| | | | |

* CONTAINS 1M. GAL. FOR ITEM 49-1
** EMULSIFIED ASPHALT

...N STATE HIGHWAYS
...ons | File 11-...
...wn. | No. 9

TRAFFIC ESTIMATE 1975 A.D.T.=25
D.H.V.=13% 1975 A.D.T.
COMM. VEHICLE = 8 %

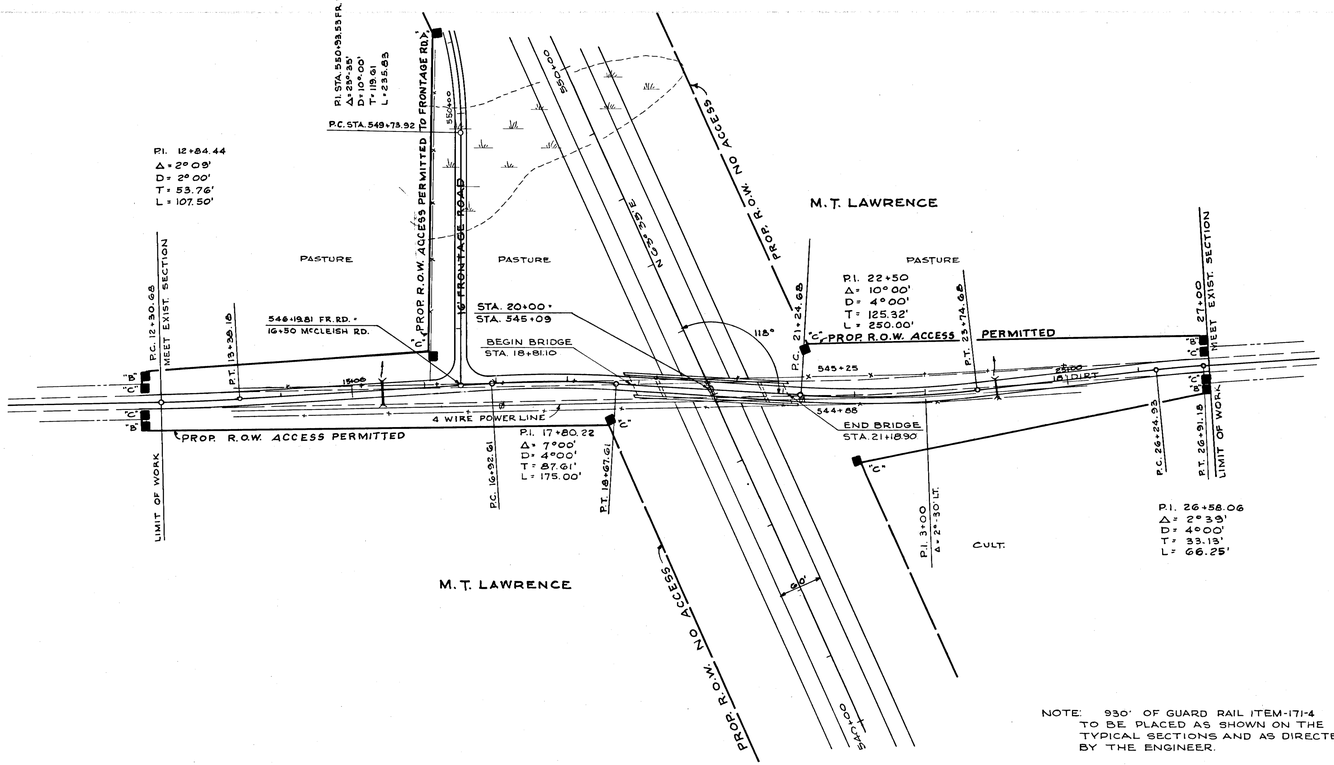
| FED. ROAD DIST. NO. | STATE | FED. AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | I N | I-40-1(26)72 PAVING | 60 | 14 | 33 |

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | I N | I 505 (9) | 1957 | 16 | 198 |

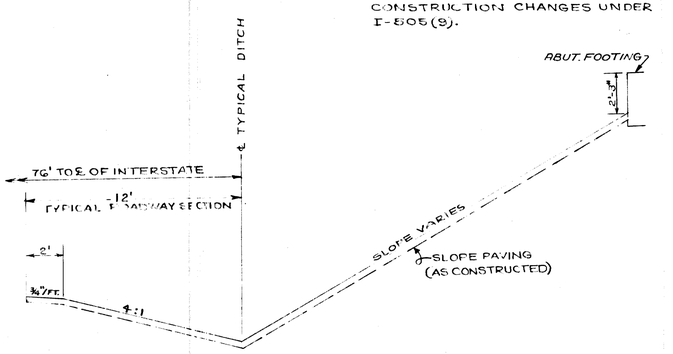
I-40-1(6)72

SEE SHEET NO. 6 FOR INTERSTATE ALIGNMENT AND PROFILE
SEE SHEET NO. 63 FOR STRUCTURE PLANS
SEE SHEET NO. 23 FOR FR. RD. PROFILES

REVISED 3-10-60 MIN. VERTICAL CLEARANCES UNDER STRUCTURES CHANGED TO 16'-6":
5-5-60 SKETCH ADDED TO SHOW CONSTRUCTION CHANGES UNDER I-505(9).




NOTE: 930' OF GUARD RAIL ITEM-171-4 TO BE PLACED AS SHOWN ON THE TYPICAL SECTIONS AND AS DIRECTED BY THE ENGINEER.




SKETCH SHOWING SLOPE PAVING AS CONSTRUCTED @ H.G.S. LOWER BROWNSVILLE RD. & H.G.S. McCLEISH RD. UNDER PROJ. I-505-(9)

NOTE: REVISION MADE IN SLOPE PAVING IN ORDER TO LINE PAVED SLOPE WITH ADJACENT RDWY. SLOPES.

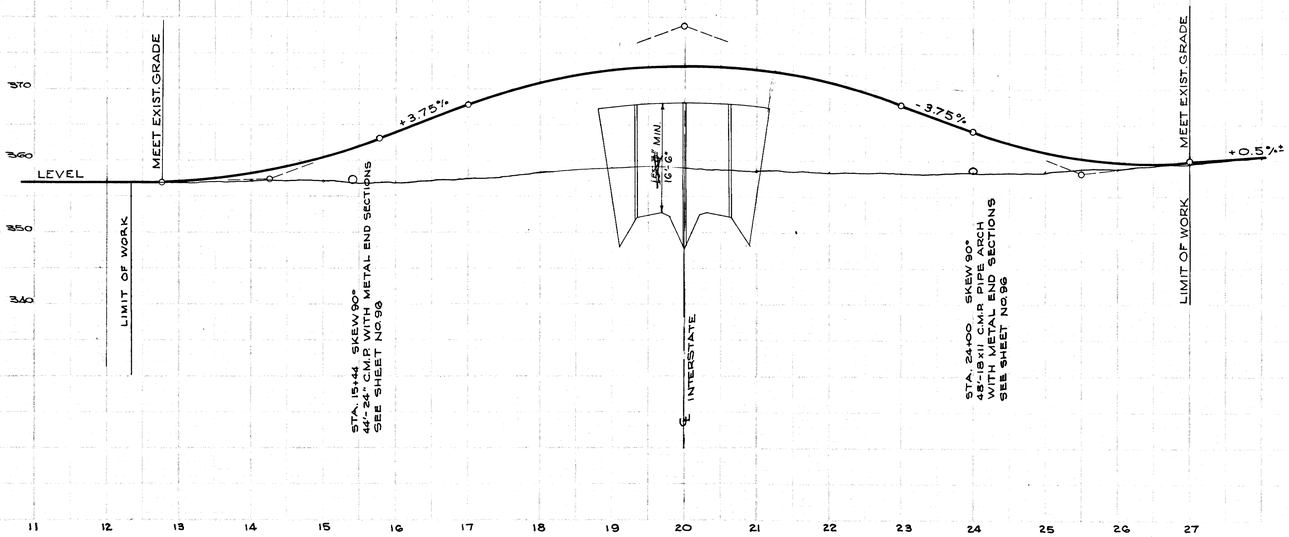
SLOPE PAVING IS CONSTRUCTED USING ORIGINAL ROADWAY GRADES NOT REVISED GRADES.

## McCLEISH ROAD
STA. 545+09

P.V.I. 14+30
EL. 357.36
V.C. 300'
M.C. 1.41'

P.V.I. 20+00
EL. 378.735
V.C. 600'
M.C. 5.625'

P.V.I. 25+50
EL. 358.11
V.C. 300'
M.C 1.59'



| PROJECT NO. | | PHASE | SHEET | TOTAL SHEETS |
|---|---|---|---|---|
| 3 | I-40-1(26)72 PAVING | 60 16 | 32 | |

I-40-1(26)72

| STATE | FEDERAL AID PROJECT NO. | SHEET | TOTAL SHEETS |
|---|---|---|---|
| 3 | I-I 505(9) | 5 | 18 |

REVISED 12-19-57: CORRECTED DESIGN OF DECELERATION LANES ON I-505

REVISED 3-25-58: ADDED DRAINAGE AND PAVED DITCH AS SHOWN ON ℄ LT. OF NEW BROWNSVILLE RD. IN S.E. QUADRANT. ALSO SEE REVISION THIS DATE ON SHEET NOS. 5 & 14.

REV. 3-10-60 NOTE ADDED "SEE REVISED GRADES ON SHEET Nº 3 & 17

5-5-60: CONSTRUCTION CHANGES (REVISED FLOW LINE OF INLET ℄F 48" PIPE)

CURVE DATA FR. RD.
Δ = 78°-51'-10"
R = 58.00'
T = 47.69'
L = 79.82'
P.I. 477+47.40

CURVE DATA FRONT RD.
Δ = 31°-04'-50"
D = 20°-00'
T = 79.66'
L = 155.40'
P.I. 478+59.19

CURVE DATA FRONT RD.
Δ = 40°-41'
R = 200'
D = 28.65°
T = 74.15'
L = 142.01'
P.I. 484+46.29
SE = 0.1'/FT.

NOTE: SEE REVISED GRADES ON SHEETS Nº 3 & 4 / 17

NOTE FOR PROJECT I-40-1(26) 72 PAVING

— 3/4" EXPANSION JOINT WITH DOWELS

NOTE: ALL PAV'T. ON LOWER BROWNSVILLE ROAD HAS BEEN CONSTRUCTED UNDER ANOTHER PROJECT.

CURVE DATA L.B. RD. INTERCHANGE

| CURVE A | CURVE B | CURVE C | CURVE D | CURVE E |
|---|---|---|---|---|
| Δ = 6°-30' | Δ = 24°-00' | Δ = 20°-00' | Δ = 95°-00' | Δ = 60°-15' |
| R = 1670.71 | R = 500' | R = 250' | R = 150' | R = 150' |
| D = 3.429° | D = 11.46° | D = 22.92° | D = 38.20° | D = 38.20° |
| T = 94.87' | T = 106.28' | T = 44.08 | T = 163.69 | T = 87.04 |
| L = 189.56 | L = 209.42' | L = 87.26 | L = 248.69 | L = 157.72 |
| S.E. = 0.1'/FT. | S.E. = 0.1'/FT. | S.E. = 0.1'/FT. | S.E. = 0.1'/FT. | S.E. = 0.1'/FT. |
| CURVE F | CURVE G | CURVE H | CURVE J | CURVE K |
| Δ = 54°-00' | Δ = 15°-15' | Δ = 34°-30' | Δ = 90°-00' | P.I. 16+29.11 |
| D = 16°-00' | D = 8°-00' | D = 8°-00' | D = 114.60° | Δ = 41°-15' |
| R = 358.12 | R = 716.25' | R = 716.25' | R = 50' | D = 10°-00' |
| T = 182.47 | T = 95.84 | T = 222.40 | T = 50' | T = 215.65 |
| L = 337.50 | L = 190.62 | L = 431.25 | L = 78.53' | L = 412.50 |
| S.E. = 0.1'/FT. | S.E. = 0.1'/FT. | S.E. = 0.1'/FT. | | |
| CURVE L | | | | |
| P.I. 22+76.64 | | | | |
| Δ = 6°-30' | | | | |
| D = 3°-00' | | | | |
| T = 108.45 | | | | |
| L = 216.67 | | | | |
| S.E. = .04'/FT. | | | | |

In Charge R.J.M.
Made by
Traced by W.S. JR.
Checked by K.W.A.

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

# INTERCHANGE
## LOWER BROWNSVILLE ROAD

| DESIGNED | DRAWN | TRACED | CHECKED | SUBMITTED | DATE | SCALE | PROJECT |
|---|---|---|---|---|---|---|---|
| | | | | | 7007 | 1"=50' | 12/16/57 7007B-82A |

TENN. STATE HIGHWAYS

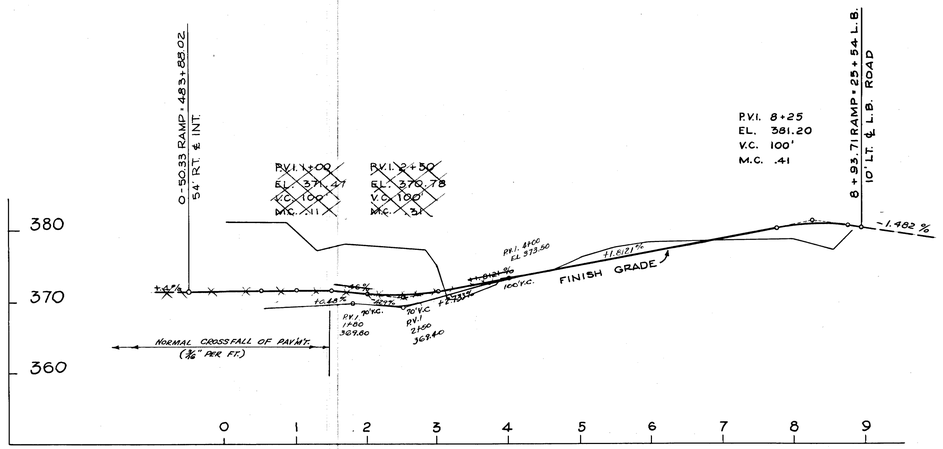
| Plans | File IN-9 |
|---|---|
| Divn. | No. |

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-40-1(26)72 PAVING | 60 | 17 | 33 |

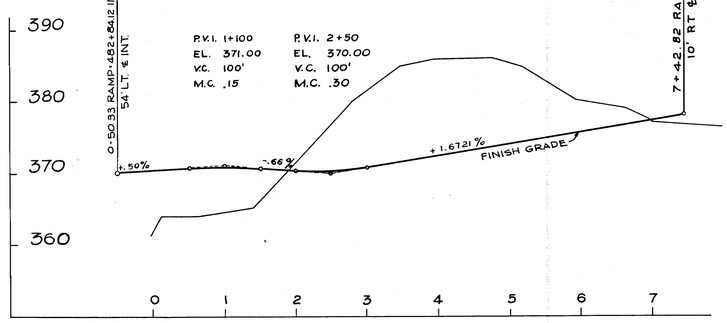
| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I 505(9) I-40-1(26)72 | 1957 | 18 | 198 |

REV. 3-10-60 GRADE ON N.E. INNER RAMP CHANGED TO CONFORM TO REVISED INTERSTATE GRADE.

5-5-60: CONSTRUCTION CHANGES NOTED.

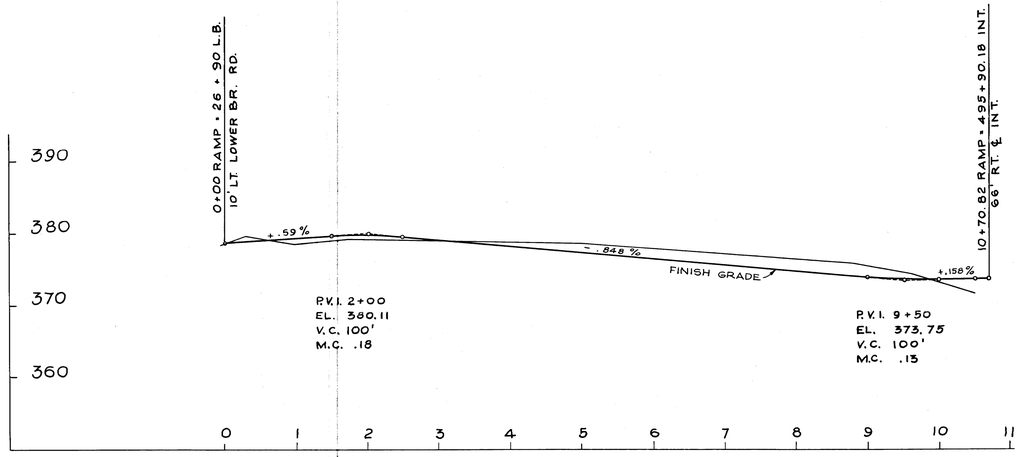



NE RAMP - INNER CONNECTION

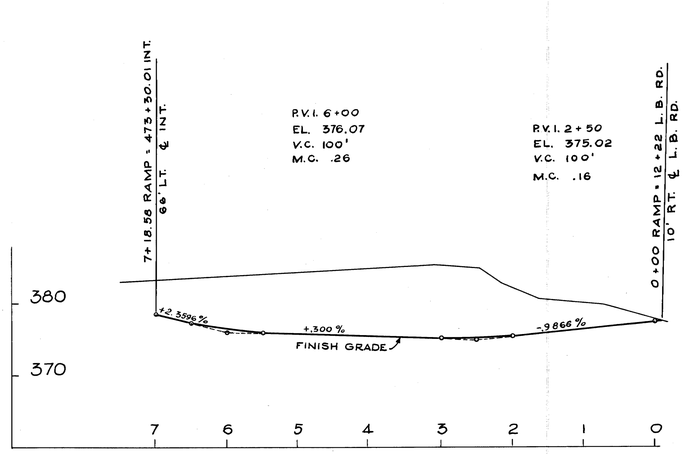



NW RAMP - INNER CONNECTION

NOTE: GRADE REVISIONS NOT MADE UNDER I-505(9). (SEE SHEET NOS. 4 AND 16)




NE RAMP - OUTER CONNECTION




NW RAMP - OUTER CONNECTION

In Charge K.W.H.
Made by K.J.M.
Traced by M.F.
Checked by K.W.H.

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

# RAMP PROFILES LOWER BROWNSVILLE INTERCHANGE

| LOCKWOOD, KESSLER & BARTLETT, INC. CONSULTING ENGINEERS SYOSSET, N.Y. & NASHVILLE, TENN. | JOB NO. 7007 | SCALE 1"=100' 1"=10' | DATE 12/14/57 | DWG NO. 70078-62 |
|---|---|---|---|---|

| FEDERAL DIST. Nº | STATE | FEDERAL AID PROJECT Nº | FISCAL YEAR | SHEET Nº | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | N M | I-505(9) I-40-1(26)72 | 1957-20 | 198 | |

Revised 12-19-57: MEDIAN DRAIN & SPILLWAYS ADDED AT STA 72+80

| TYPE | YEAR | PROJECT NO. | SHEET # |
|---|---|---|---|
| CONST. | 1990 | IR-40-1(227)177 | 29 |

| FEDERAL DIST. Nº | STATE | FEDERAL AID PROJECT Nº | FISCAL YEAR | SHEET Nº | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | N M | I-40-1(26)72 PAVING | 60 | 18 | 32 |

## NOTES

SEE SHEET NO. 21. FOR CURVE DATA ON RAMPS. FOR CURVE DATA ON PAPER LOCATION & AND SURVEY & ON STATE RT. NO. 20 SEE SHEET NO. 21.
TRANSITION 4" MTBL. CURBS TO 8" BARRIER CURBS UNDER BRIDGE
TRANSITION 30' MEDIAN TO 22' MEDIAN UNDER BRIDGE
SEE SHEET NO. 17 FOR DRAINAGE.
THE ONLY CURB TO BE CONSTRUCTED UNDER THIS CONTRACT IS MEDIAN CURB ON STATE RT. 20 AND 6-30 CURB AND GUTTER BETWEEN STATE RT. 20 AND 18' FRONTAGE ROAD.

RAMP PAVEMENT WIDTHS TO BE 17' ADJACENT TO BARRIER CURB WHERE THERE IS A 4' CONCRETE MEDIAN. PROFILE GRADE AND ALIGNMENT CARRIED 16' FROM FACE OF CURB. EDGE OF PAV'T. TO BE TRANSITIONED BETWEEN THE FOLLOWING STATIONS:

| | |
|---|---|
| N.E. RAMPS | |
| OUTER LOOP | 6+00 TO 0+50 |
| INNER LOOP | 4+00 TO 8+50 |
| N.W. RAMPS | |
| OUTER LOOP | 14+00 TO 10+50 |
| INNER LOOP | 3+00 TO 9+00 |

CURVE DATA FRONTAGE ROAD
P.I. 5+39.41
Δ = 51°-57'
R = 336'
D = 17°-58'
L = 295.51
T = 158.82
S.E. .04'/FT.

## NOTE FOR PROJECT I-40-1(26)72 PAVING

▬ ¾" EXPANSION JOINT WITH DOWELS.

NOTE: ALL PAV'T., CURB & CURB AND GUTTER ON RTE. 20 HAVE BEEN CONSTRUCTED UNDER ANOTHER PROJECT.

CONSTRUCT 7 C.B., PIPE AND END SECTION @ LOCATIONS SHOWN ON THIS SHEET. STRUCTURES (1) (2) (3) (4) (5) DWGS. CM-1-4.5 AND 3-CB-8a AND SKETCH ON SHEET #24.

ITEM 132-4b = 290 LB.
ITEM 135-4 = 1.7 C.Y.
ITEM 14A- = 80'-15" C.M. PIPE
ITEM 132-2 = 0.9 M
ITEM 159- = 2-15" END SECTIONS.

STATE HIGHWAY DEPARTMENT
BUREAU OF PUBLIC WORKS

# INTERCHANGE
## ROUTE 20 INTERSTATE

7007 1"=50' 12/16/57 7007B0

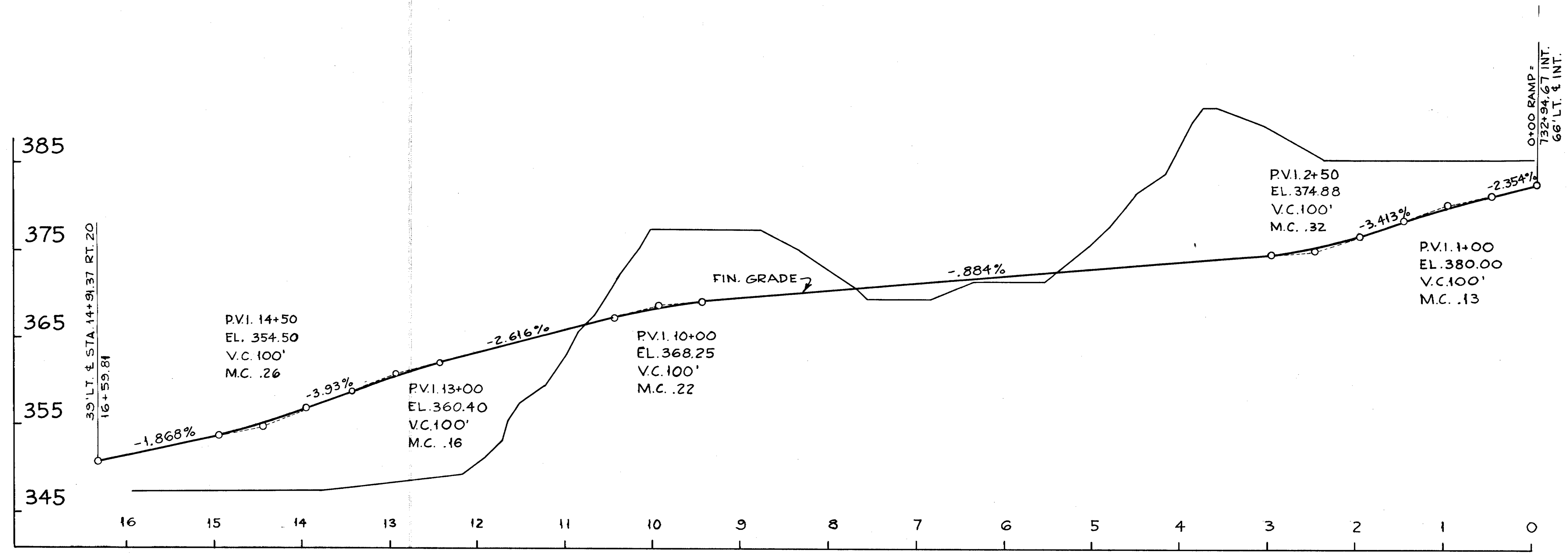
TENN. STATE HIGHWAYS

| Plans | File IN- |
| --- | --- |
| Dwn. | No. 9 |

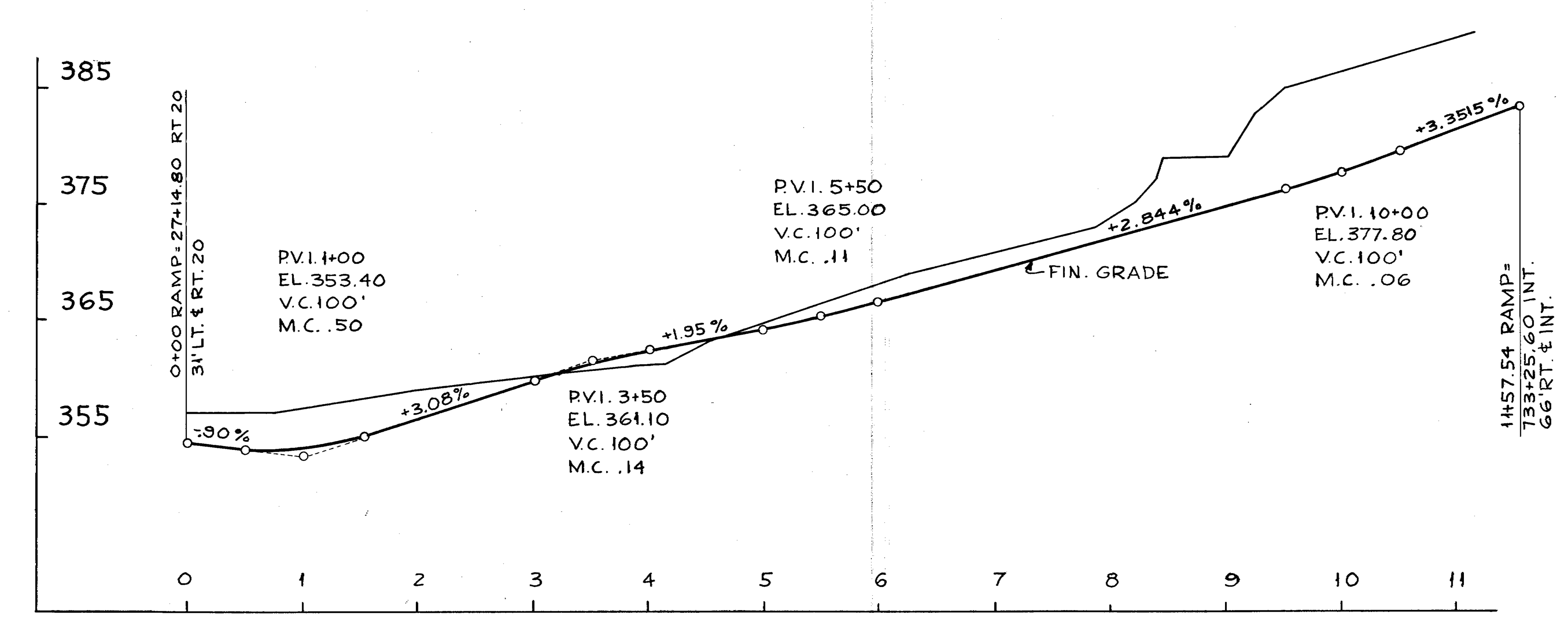
| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| --- | --- | --- | --- | --- | --- |
| 3 | TENN | I 505(9) | 1957 | 22 | 198 |

I-40-1(6)72

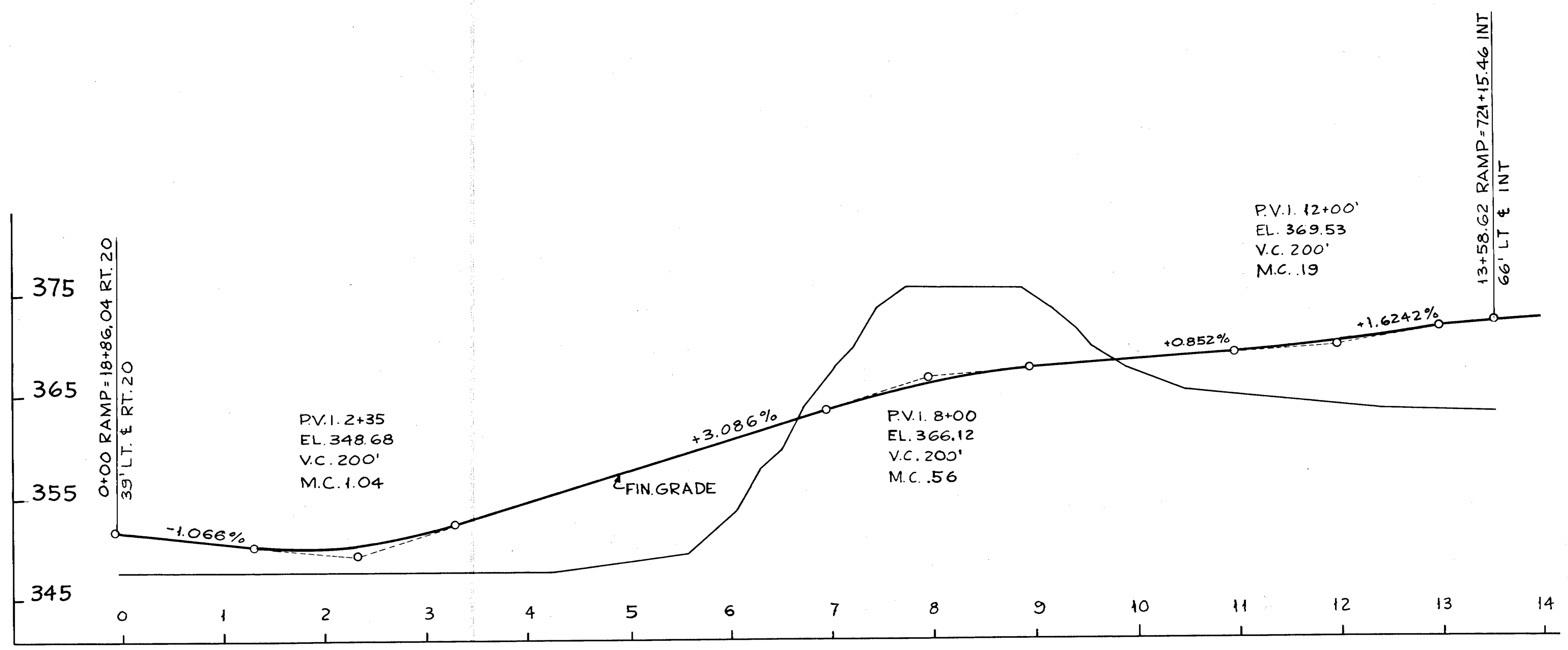
| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| --- | --- | --- | --- | --- | --- |
| 3 | TENN | I-40-1(26)72 PAVING | 60 | 20 | 33 |



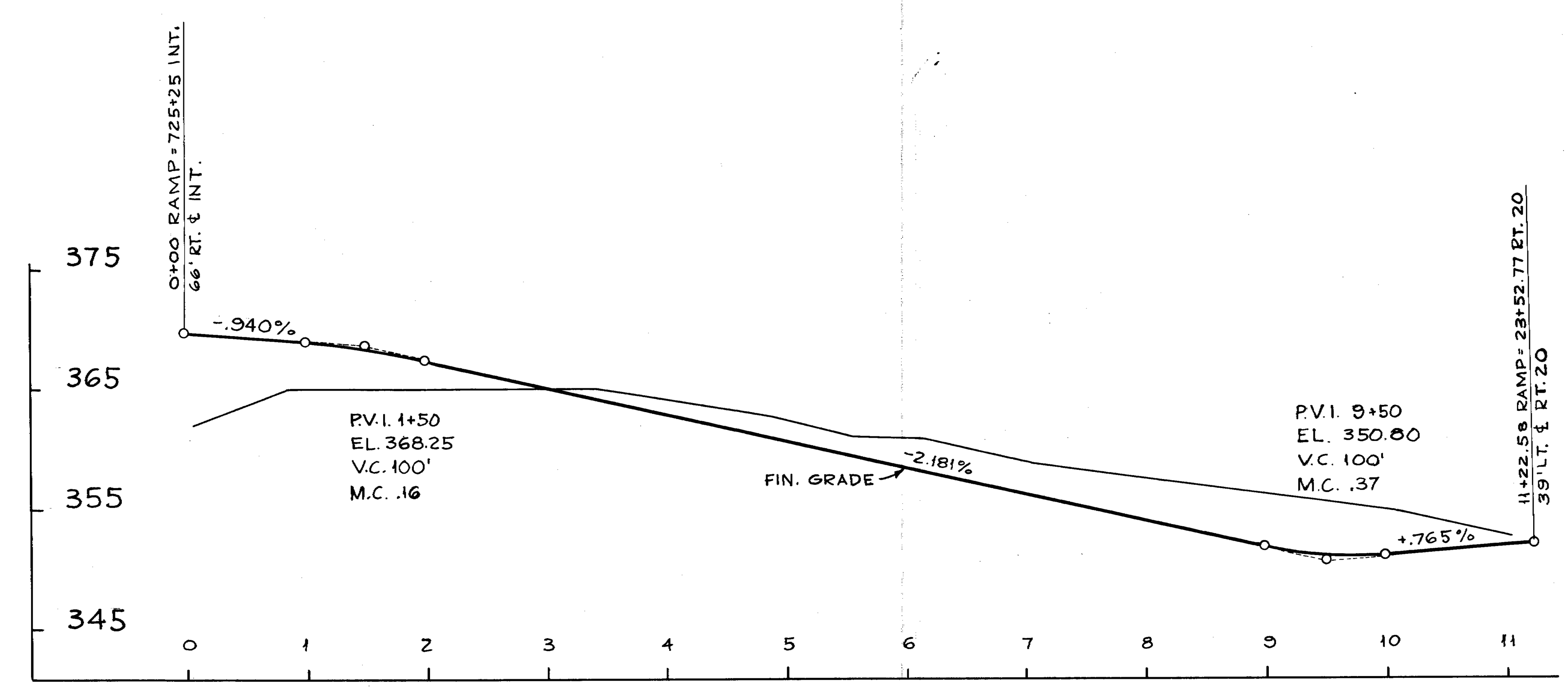

NW RAMP - OUTER CONNECTION




NE RAMP - OUTER CONNECTION




N W RAMP - INNER CONNECTION




NE RAMP - INNER - CONNECTION

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

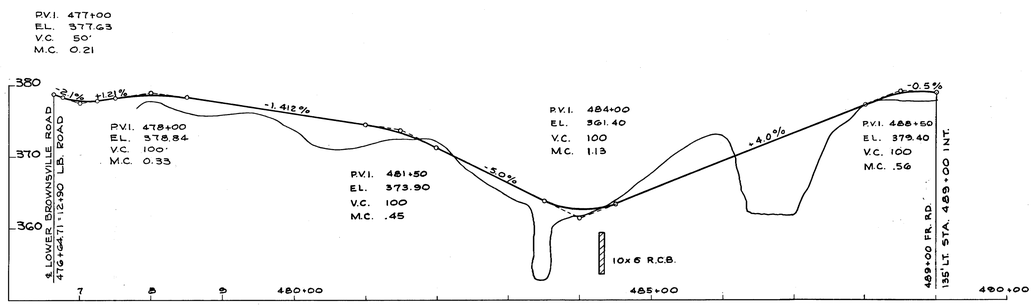
RAMP PROFILES
RT. 20 INTERCHANGE

| LOCKWOOD, KESSLER & BARTLETT, INC. CONSULTING ENGINEERS SYOSSET, N.Y. & NASHVILLE, TENN. | JOB NO. 7007 | SCALE 1" = 100' H, 1" = 10' V | DATE 12/16/57 | DWG. NO. 70078- |
| --- | --- | --- | --- | --- |

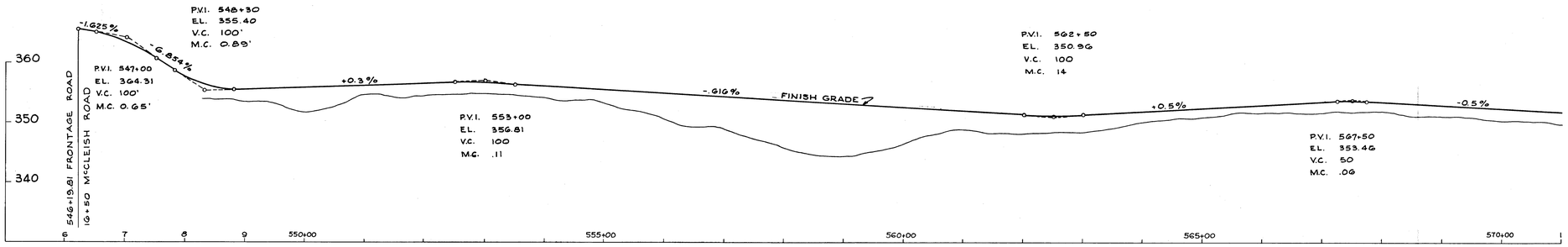
In Charge C.S.W.
Made by R.J.M.
Traced by N.F.
Checked by K.W.A.

| FED. ROAD DIST. Nº | STATE | FEDERAL AID PROJECT Nº | FISCAL YEAR | SHEET Nº | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I 505 (9) | 1957 | 23 | 198 |

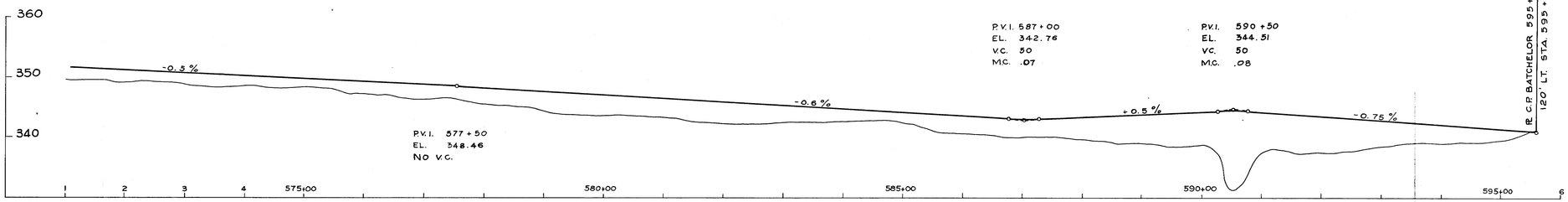
I-40-1(6)72



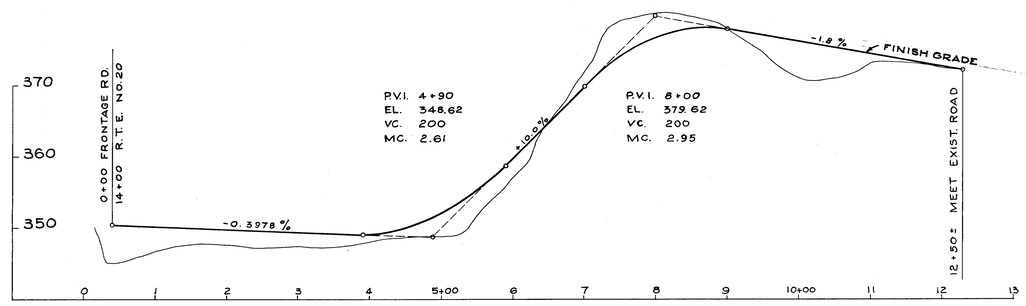

FRONTAGE ROAD- LOWER BROWNSVILLE TO LAWRENCE



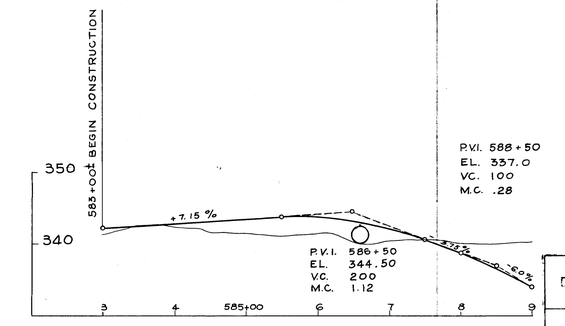

FRONTAGE ROAD- McCLEISH ROAD TO C. P. BATCHELOR




FRONTAGE ROAD - McCLEISH ROAD TO C.P. BATCHELOR




FRONTAGE ROAD - ROUTE 20 TO WILEY PARKER ROAD




FRONTAGE ROAD - FENNER PARHAM PL TO MACH. PASS

56' CAVE CREEK
STA. 586+40
45°+ L.T.

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

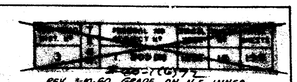
# FRONTAGE ROAD PROFILES

| LOCATION, GEOLOGY & DESIGN BY | JOB Nº | SCALE | DATE | DWG Nº |
|---|---|---|---|---|
| CONSULTING ENGINEERS SYOSSET, N.Y. & NASHVILLE, TENN. | 7007 | 1"=100' H. 1"=10' V. | 12/16/57 | |

In Charge C.E. Mc
Made by H.V.G.
Traced by N.E.
Checked by R.L.D.M.

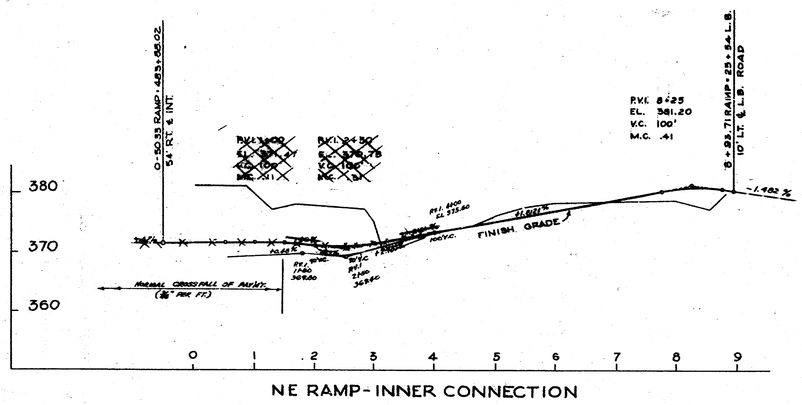
TENN. STATE HIGHWAYS
Plans File No. IN-9
Dwn.

| F.A.P. ROAD DIST. NO. | | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-40-1(26)72 PAVING | 1960 | 17 | 33 |

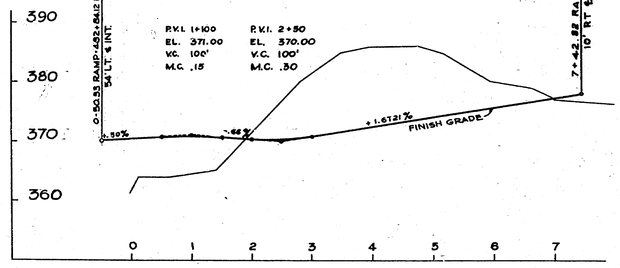


REV. 3-10-60 GRADE ON N.E. INNER RAMP CHANGED TO CONFORM TO REVISED INTERSTATE GRADE.

5-5-60: CONSTRUCTION CHANGES NOTED.

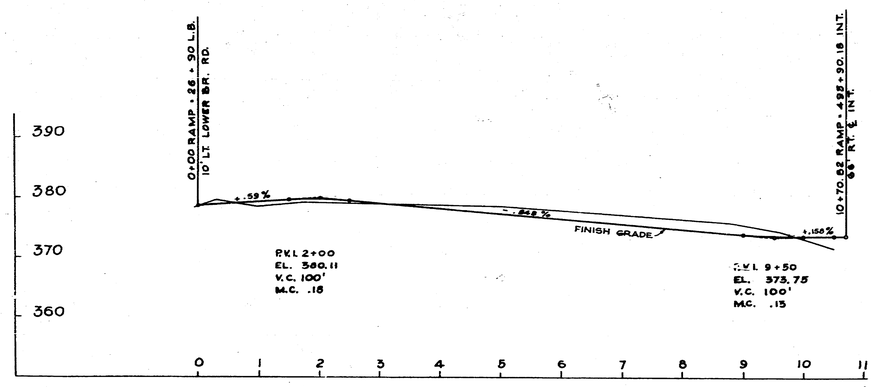



NE RAMP-INNER CONNECTION

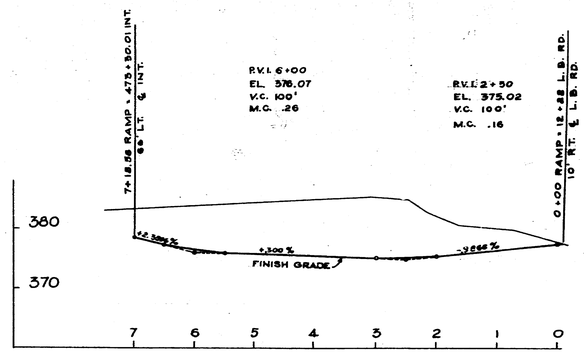



NW RAMP-INNER CONNECTION

NOTE: GRADE REVISIONS NOT MADE UNDER I-505(9).
(SEE SHEET NOS. [redacted] AND [redacted])
4 16




NE RAMP-OUTER CONNECTION




NW RAMP-OUTER CONNECTION

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

# RAMP PROFILES
# LOWER BROWNSVILLE INTERCHANGE

| CLOUGH, HARBOUR & BOUTELL ET, INC. CONSULTING ENGINEERS DIGEST, R.Y.B. NASHVILLE, TENN. | JOB NO. 7007 | SCALE | DATE | DESIGNED |
|---|---|---|---|---|

TENN. STATE HIGHWAYS
Plans File IN-9
Dgn. No.

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-40-1(20)72 PAVING | 1960 | 20 | 133 |

Revised 12-19-57: MEDIAN DRAIN & SPILLWAYS ADDED AT STA 72+80

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I-40-1(20)72 PAVING | 1960 | 18 | 133 |

NOTES

SEE SHEET NO. 21 FOR CURVE DATA ON RAMPS. FOR CURVE DATA ON PAPER LOCATION & AND SURVEY & ON STATE RT. NO. 20 SEE SHEET NO. 21.
TRANSITION 4" WITH CURBS TO 8" BARRIER CURBS UNDER BRIDGE TRANSITION 30' MEDIAN TO 20' MEDIAN UNDER BRIDGE
SEE SHEET NO. 17 FOR DRAINAGE.
THE ONLY CURB TO BE CONSTRUCTED UNDER THIS CONTRACT IS MEDIAN CURB ON STATE RT. 20 AND 6-30 CURB AND GUTTER BETWEEN STATE RT. 20 AND 15' FRONTAGE ROAD.

RAMP PAVEMENT WIDTHS TO BE 17' ADJACENT TO BARRIER CURB WHERE THERE IS A 4' CONCRETE MEDIAN. PROFILE GRADE AND ALIGNMENT CARRIED 16' FROM FACE OF CURB. EDGE OF PAVT. TO BE TRANSITIONED BETWEEN THE FOLLOWING STATIONS:

| | |
|---|---|
| N.E. RAMPS | |
| OUTER LOOP | 6+00 TO 0+50 |
| INNER LOOP | 4+00 TO 8+50 |
| N.W. RAMPS | |
| OUTER LOOP | 14+00 TO 10+50 |
| INNER LOOP | 5+00 TO 9+00 |

NOTE FOR PROJECT I-40-1(20)72 PAVING

— ¾" EXPANSION JOINT WITH DOWELS.

NOTE: ALL PAVT., CURB & GUTTER ON RTE. 20 HAVE BEEN CONSTRUCTED UNDER ANOTHER PROJECT.

CONSISTENCY "I" C.B., PIPE AND END SECTION @ LOCATIONS SHOWN ON THIS SHEET. STRUCTURES (1) (2) (3) (4) (5) DWGS. CB-1-4.6 AND 5-CB-64 AND SECTION ON SHEET "Ea".

ITEM 150-4a = 290 LB.
ITEM 155-4 = 17 C.Y.
ITEM 164- = 80'-15" C.M. PIPE
ITEM 122-2 = 0.314 AC
ITEM 165- = 2-15" END SECTIONS.

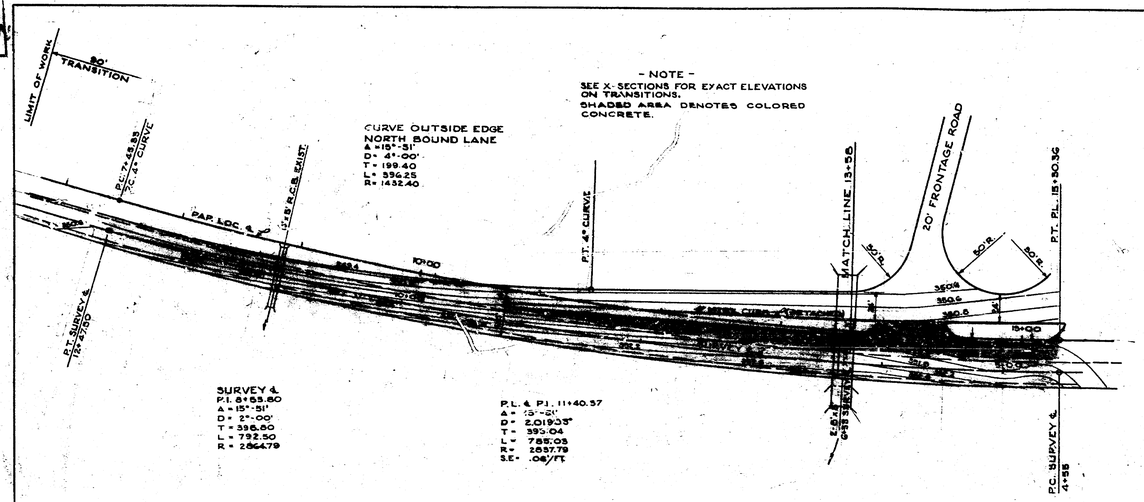
CURVE DATA FRONTAGE ROAD
RL 5+39.41
Δ - 51°-51'
D - 33.6'
D - 17°-58'
L - 295.51
T - 156.82
S.E. 04/FT.

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

INTERCHANGE
ROUTE 20 INTERSTATE

LOCKWOOD, KESSLER & BARTLETT, CONSULTING ENGINEERS, SYOSSET, N.Y. & NASHVILLE, TENN. | I-40-1 | 7007 | SCALE 1"=50' | DATE 12/6/57

TENNESSEE STATE HIGHWAYS
DIVISION | File No. | DIST.




- NOTE -
SEE X-SECTIONS FOR EXACT ELEVATIONS ON TRANSITIONS.
SHADED AREA DENOTES COLORED CONCRETE.

CURVE OUTSIDE EDGE
NORTH BOUND LANE
Δ = 115°-31'
D = 4°-00'
T = 199.40
L = 394.25
R = 1432.40

SURVEY ℄
P.I. 8+53.80
Δ = 15°-51'
D = 2°-00'
T = 395.80
L = 792.50
R = 2864.79

P.I. ℄ P.I. 11+40.57
Δ = 13°-21'
D = 2.019.03°
T = 393.04
L = 785.03
R = 2837.79
S.E. = .08/FT.

CURVE DATA RT. 20 INTERCHANGE

| CURVE A | CURVE B | CURVE C | CURVE D |
|---|---|---|---|
| Δ = 20°-00' | Δ = 138°-28' | Δ = 36°-00' | Δ = 118°-32' |
| R = 480.0' | R = 250.0' | R = 350.00' | R = 175' |
| D = 11°-56.46" | D = 36.91° | D = 16.37° | D = 32.74° |
| L = 160.51' | L = 1037.60' | T = 118.72' | T = 277.53' |
| T = 81.11' | T = 281.07' | L = 219.91' | L = 352.88' |

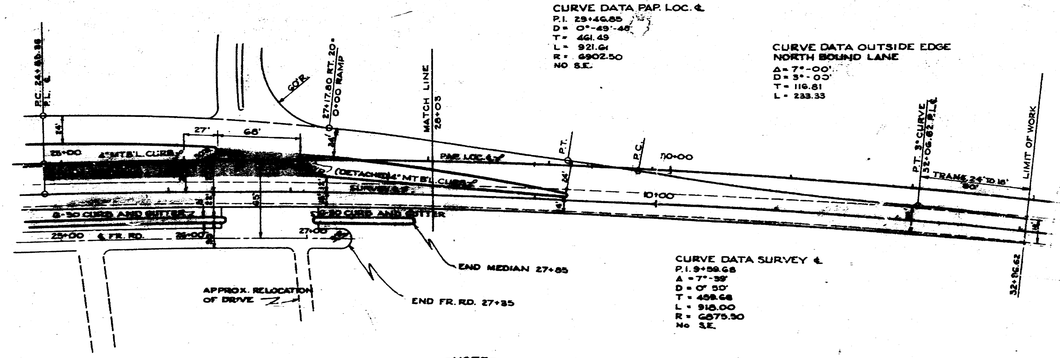
| CURVE E | CURVE F | CURVE G | CURVE H | CURVE J | CURVE K |
|---|---|---|---|---|---|
| Δ 90°00' | Δ 88°-16' | Δ 27°-21' | Δ 58°-00' | Δ 55°-55" | Δ 90°00' |
| R 350' | R 60' | R 300' | R 586' | R 520.67' | R 50' |
| D 16.37° | D 95.5° | D 19.10° | D 9.84° | D 11°-00' | D 114.59° |
| T 350.0' | T 53.53' | T 72.99' | T 200.94' | T 276.76' | T 50' |
| L 549.78' | L 87.18' | L 143.19' | L 370.62' | L 506.79' | L 78.54' |

| CURVE L | CURVE M |
|---|---|
| Δ 98°-48' | Δ 37°-17' |
| R 286' | R 998' |
| D 21.54° | D 6°-00' |
| T 171.92' | T 322.16' |
| L 508.25' | L 621.39' |

- NOTE -
SUPERELEVATION ON INTERCHANGE RAMPS 0.1'/FT.

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | F-40-1(6)72 PAVING | 1960 | 19 | 33 |

CURVE DATA OUTSIDE EDGE
NORTH BOUND LANE
Δ = 13°-00'
D = 3°-00'
T = 217.60
L = 433.33




CURVE DATA PAP. LOC. ℄
P.I. 29+46.88
D = 0°-49'-46"
T = 461.49
L = 921.61
R = 6902.50
NO S.E.

CURVE DATA OUTSIDE EDGE
NORTH BOUND LANE
Δ = 7°-00'
D = 3°-00'
T = 116.61
L = 233.33

CURVE DATA SURVEY ℄
P.I. 9+58.68
Δ = 7°-38'
D = 0° 50'
T = 458.68
L = 918.00
R = 6875.50
NO S.E.

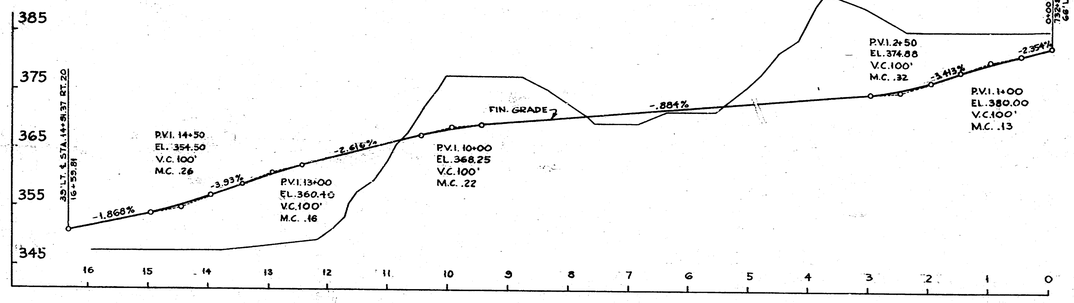
-NOTE-
SEE X SECTIONS FOR EXACT ELEVATIONS ON TRANSITIONS.

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

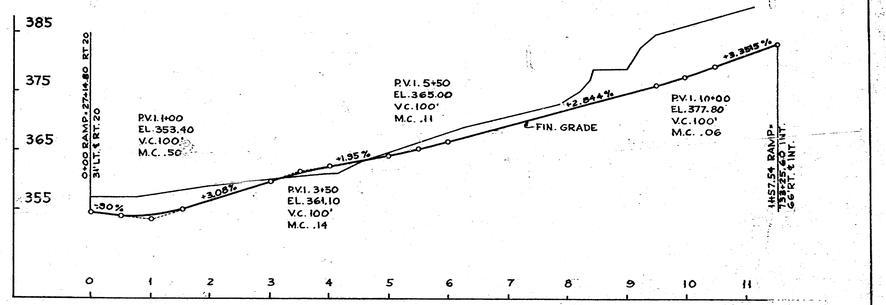
# ST. RT. 20 INTERCHANGE AREA TRANSITIONS

| LOCKWOOD, KESSLER & BARTLETT, INC. CONSULTING ENGINEERS | JOB NO. | SCALE | DATE | DWG NO. |
|---|---|---|---|---|
| SYOSSET, N.Y. & NASHVILLE, TENN. | 7007 | 1"=50' | | 36A |

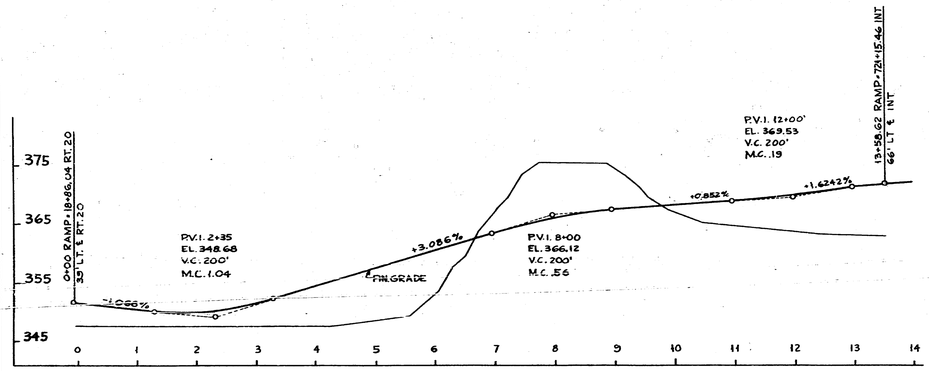
TENN. STATE HIGHWAYS
Plans File No. IN-9



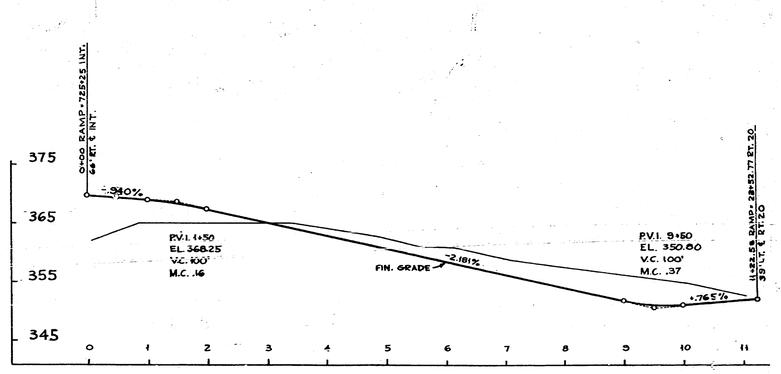

NW RAMP - OUTER CONNECTION




NE RAMP - OUTER CONNECTION




NW RAMP - INNER CONNECTION




NE RAMP - INNER-CONNECTION

| ROAD SYST. | SEC. | COUNTY | ROUTE |
|---|---|---|---|
| 3 | 2 | [illegible] | 20 |

I-40-1(26)72

| ROAD SYST. NO. | I E N | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | N | I-40-1(26)72 PAVING | 1968 | 20 | 33 |

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

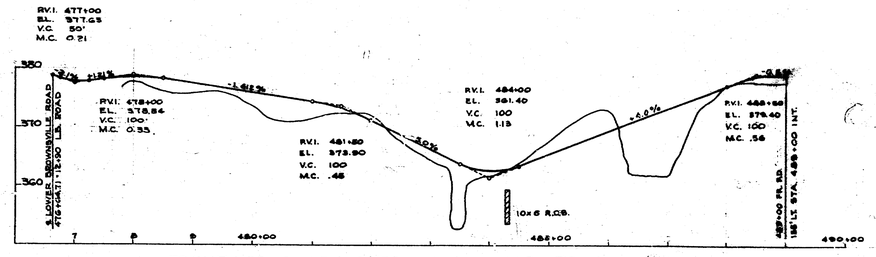
# RAMP PROFILES
# RT. 20 INTERCHANGE

| | JOB NO. | SCALE | DATE | DWG. NO. |
|---|---|---|---|---|
| [illegible] | 7007 | [illegible] | [illegible] | [illegible] |

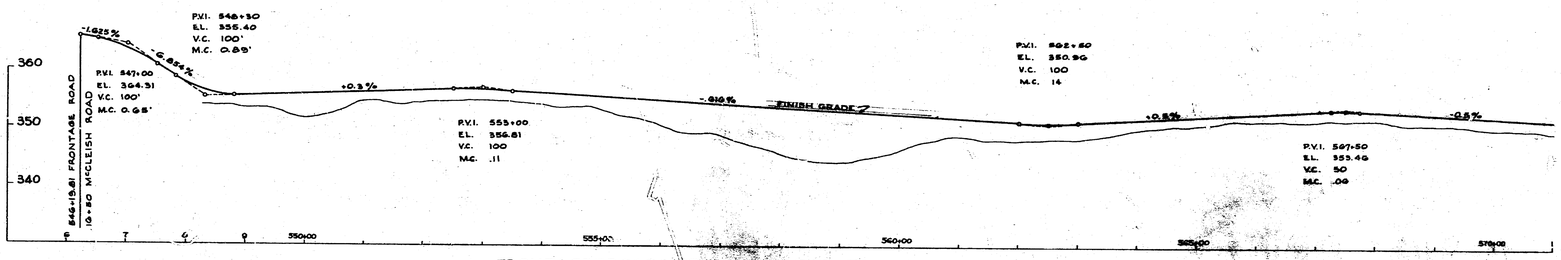
TENN. STATE HIGHWAYS
Plans File IN-9
Dwg. No.

| SHEET NO. | TOTAL SHEETS | FEDERAL AID PROJECT NO. | FISCAL YEAR | STATE | FEDERAL PROJECT NO. |
|---|---|---|---|---|---|
| 13 | 1 | 806 (8) | 1967 | 25 | I-40-1(6)72 |

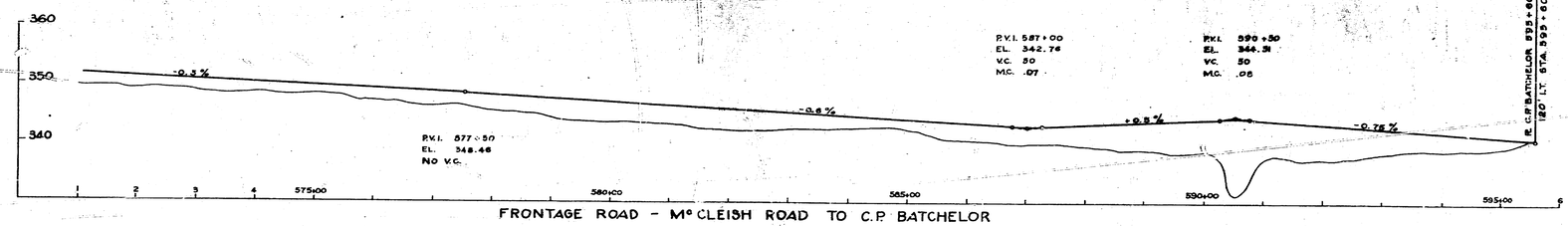
I-40-1(6)72



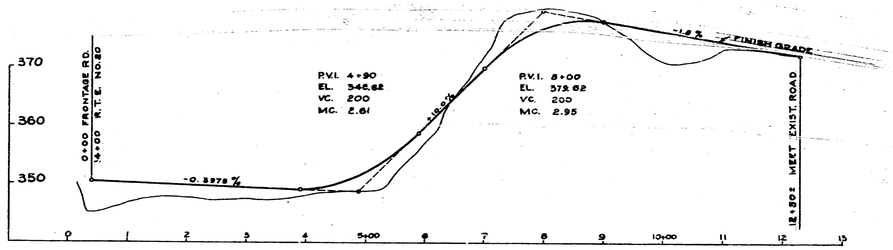

FRONTAGE ROAD- LOWER BROWNSVILLE TO LAWRENCE



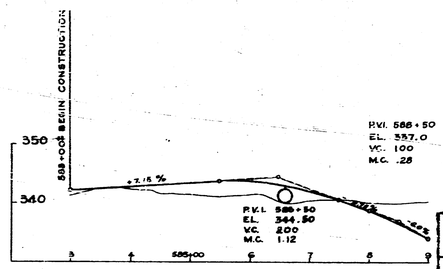

FRONTAGE ROAD- McCLEISH ROAD TO C.P. BATCHELOR




FRONTAGE ROAD - McCLEISH ROAD TO C.P. BATCHELOR




FRONTAGE ROAD - ROUTE 20 TO WILEY PARKER ROAD




FRONTAGE ROAD - FENNER PARHAM R. TO MACH. PASS

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
NASHVILLE 3, TENN.

# FRONTAGE ROAD PROFILES

| | | | | |
|---|---|---|---|---|
| HICKERSON, KESSLER & BARTLETT, INC. CONSULTING ENGINEERS SHERRET, B.T.B. NASHVILLE, TENN. | 7007 | H 1"=100' V 1"=10' | DATE 12/1967 | DRG. NO. |

TENN. STATE HIGHWAYS

| Plans | Filed |
|---|---|
| Dwn. | Nov. |

FINAL

| | |
|---|---|
| | AREAS CHECKED |
| NO. | |

NOTE WIDTH

| | |
|---|---|
| | AREAS CHECKED |
| NO. | |

| FED. ROAD DIST. No. | | FEDERAL AID PROJECT No. | FISCAL YEAR | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I. 505 (9) | 1957 | 92 | 198 |

150 100 50 ℄ 50 100 150

℄ FRONT. RD.

Cut 140 CU YDS. Outlet

Cut Outlet

℄ 353.2

℄ 353.7

4" SOIL CEMENT (SEE TYPICAL SECTION BELOW)

STA. 462+85 — SKEW 45° LT.
8'x6' Conc. Box Culv. Reqd.
Class "A" Conc. 542 CU YDS.
REINF. STEEL 43,900 LBS.
D.A. 460 AC. ±
DWG. NO. A-14-[illegible] 94

250' LT.

180' LT.

℄ LOWER MATCH LINE

℄ UPPER MATCH LINE

Cut Inlet

CUT 114 CU YDS. Inlet

GROUND LINE

4" SOIL CEMENT

RIP-RAP

RIP-RAP

TYPICAL SECTION
CHANNEL OF PROTECTION

150' RT. 200' RT. 250' RT. 300' RT. 350' RT.

Cut Outlet

4" SOIL CEMENT ℄ 384.2 (SEE TYPICAL SECTION ABOVE)

Cut 490 CU YDS. Outlet

6.75 %

Cut Inlet

℄ 384.1

STA. 482+83 — SKEW 45° LT.
8'X6'X252' Conc. Box Culv. Reqd.
Class "A" Conc. 242.7 CU YDS.
Reinf. Steel 32,442 LBS.
D.A. 460 AC. ±
CUT: REAR 61 CU YDS.
DWG. NO. A-14-[illegible] & C-4-141
94

360 482+83

℄ 388.7

℄ 388.5

STA. 457+50 — SKEW 90°
154' of 18"ø Pipe Culv.
with 1 St. & 1 "U" Type EW. Reqd.
Class "A" Conc. 242 CU YDS.
Reinf. Steel 11,9 LBS.
D.A. = ±460 AC.
DWG. NO. E-2-90

390 457+50

SEE SHEET No. FOR QUANTITIES OF NO. 51 C.B.

Cut Outlet

℄ 383.9

Cut 2 CU YDS. Outlet

℄ T.W.

℄ 381.7

STA. 450+50 — SKEW 18°
160' of 18"ø Pipe Culv.
with 1 St. & 1 "U" Type EW. Reqd.
Class "A" Conc. 2.62.0 YDS.
Reinf. Steel 1119 LBS.
D.A. = ±460 AC.
DWG. NO. E-2-90

Cut Inlet

CUT 22 CU YDS. Inlet

390 450+50

150 100 50 50 100 150

PLATE 3 SHEET 3 SECTIONS

PLOTTED BY K.M.A.
CHECKED BY [illegible]

TENN. STATE HIGHWAYS
Plans File IN-
Divn. No. 9

| FED. ROAD DIST. No. | STATE | FEDERAL AID PROJECT No. | FISCAL YEAR | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I. 505 (9) | 1957 | 93 | 198 |

REVISED 325+58 CHANGED CULV. AT STA. 498+46 FROM 8'x4' CONC. BOX TO 58"x36" PIPE-ARCH. ALSO SEE REVISIONS THIS DATE ON SHEET NOS. 5, 14 & 16

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — ESTIMATE AREAS — DATE — BY — CHECKED

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — ESTIMATE AREAS — DATE — BY — CHECKED

150 100 50 0 50 100 150

E 352.1 — 2.7% — E 356.3 — 360 511+50

STA 511+50 — SKEW 90°
110' of 20 43"x27" Pipe-Arch Culv.
RIP-RAP 7.6 CU YDS.
D.A. 23 AC.
DWG. NO. CM-1-5

E 356.2 — 2.9% — E 360.8 — 360 507+40

STA 507+40 — SKEW 90°
160' of 65"x40" Pipe-Arch Culv. with Metal End Sections Req'd.
D.A. 75 AC.
DWG. NO. CM-1-6

Top Cut Through Existing Curbing

E 368.8 — 1.8% — E 366.0 — 370 498+46

CUT INLET TO DITCH

STA 498+46 — SKEW 60° RT.
RIP-RAP O.B. CU. YDS.
Class "A" Conc. 15.4 CU YDS.
Reinf. Steel 1390 LBS.
D.A. 75 AC.
DWG. NO. A-14-84

STA 498+46 SKEW 60° LT.
CURVE OF 58"x36" PIPE-ARCH CULV. REQ'D.
2 ST. EWS. REQ'D.
CLASS "A" CONC. 16.44 CU. YDS.
D.A. 28 AC.
DWG. NO. A-4-83 MODIFIED FOR 58"x36" PIPE-ARCH

94

PLOTTED BY K.W.K.
CHECKED BY P.T.M.

PLATE 3 CROSS SECTION P.R.R.E. STANDARD

TENN. STATE HIGHWAYS
Plans File IN-
Divn. No. 9

| FED. ROAD DIST. No. | STATE | FEDERAL AID PROJECT No. | FISCAL YEAR | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I. 505 (9) | 1957 | 94 | 198 |

FINAL SURVEY — SURVEYED, PLOTTED, TRACED, AREAS CHECKED, NOTE BOOK, NO. — BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TRACED, AREAS CHECKED, NOTE BOOK, NO. — BY, DATE

340 609+00

E 339.0

-12%

E 340.8

STA. 609+00 — SKEW 90°
150'of 65"X40" Pipe-Arch Culv.
With Metal End Sections Reqd.
8.4 C.Y. R.C.
DWG. NO. CM-1-6

341 602+00

E 340.4

-0.7%

E 341.6

STA. 602+00 — SKEW 90°
164' of 280 GA"X36" PIPE (A-C) CULV.
RIP-RAP 8.4 CU.YDS.
P.A. 4.7 AC.
DWG. NO. CM-1-5

E 330.8

MATCH LINE

150'LT.

200'LT.

E EXISTING DITCH

MATCH LINE

-0.9%

E 335.0

Cut Inlet

Cut 265 CU. YDS. Inlet

330 583+65

STA. 583+65 — SKEW 60°LT.
10'X10'X244' Conc. Box Culv. Reqd.
Class "A" Conc. 411.4 Cu. Yds.
Reinf. Steel 53 K.Lbs.
Dia. 10% AC.
RIP-RAP (6.5.) 21 YDS.
DWG. NO. E-8-1

Cut Ditch

Cut 10 CU.YDS. Ditch

150'LT.

MATCH LINE

E EXISTING ROAD

-0.7%

E 342.2

STA. 557+70 — SKEW 75°LT.
6'X2'X211' Conc. Box Culv. Req'd.
Class "A" Conc. 144.2 Cu. YDS.
Reinf. Steel 16,500 Lbs.
DWG. NO. E-8-141

RIP-RAP 2.1 CU.YDS.

350 557+70

E 344.9

PLOTTED BY K.H.A.
CHECKED BY E.T.M.

PLATE 3 CROSS SECTION OF [illegible]

TENN. STATE HIGHWAYS
Plans Filé IN-
Divn. No. 9

| FED. ROAD DIST. No. | STATE | FEDERAL AID PROJECT No. | FISCAL YEAR | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | TENN. | I. 505 (9) | 1957 | 95 | 198 |

FINAL SURVEY — SURVEYED BY; PLOTTED BY; TRACED BY; NOTE BOOK; AREAS COMPUTED BY; NO.; DATE; BY; CHECKED

ORIGINAL SURVEY — SURVEYED BY; PLOTTED BY; TRACED BY; NOTE BOOK; AREAS COMPUTED BY; NO.; DATE; BY; CHECKED

150' 100' 50' ℄ 50' 100' 150'

6" SOIL CEMENT

Outlet Elev. 332.0

STA. 624+50 — SKEW 50°
(2'x10'x138' Conc. Box Machinery Pass
Class 'A' Conc. 330.50 CU.YDS.
Reinf. Steel 30,380 LBS.
DWG. NO. D-2-161

Inlet Elev. 332.0

340 624+50

340 624+00

Cut Outlet

Cl. 330.2

0.44%

STA. 623+00 — SKEW 78°-11'
Wall at 22° to First Culvert
With 2'-6"R. End Rail
Class 'A' Conc. 5.16 CU. YDS.
Reinf. Steel LBS.
Rip-Rap 4.7 CU. YDS.
DWG. NO. D-0-13

S. Cut Inlet

E. 331.0

340 623+00

340 624+00

Cut Inlet

0.5%

E 337.8

STA. 623+00 — SKEW 90°
Wall at 18° to Pipe Culvert
With STR. Inlet & 8"Q. WATER'S Edge
Class 'A' Conc. 2.62 CU. YDS.
Reinf. Steel 113. LBS.
DWG. NO. E-2-90

E 338.8

340 623+00

PLOTTED BY K.W.A.
CHECKED BY R.J.M.

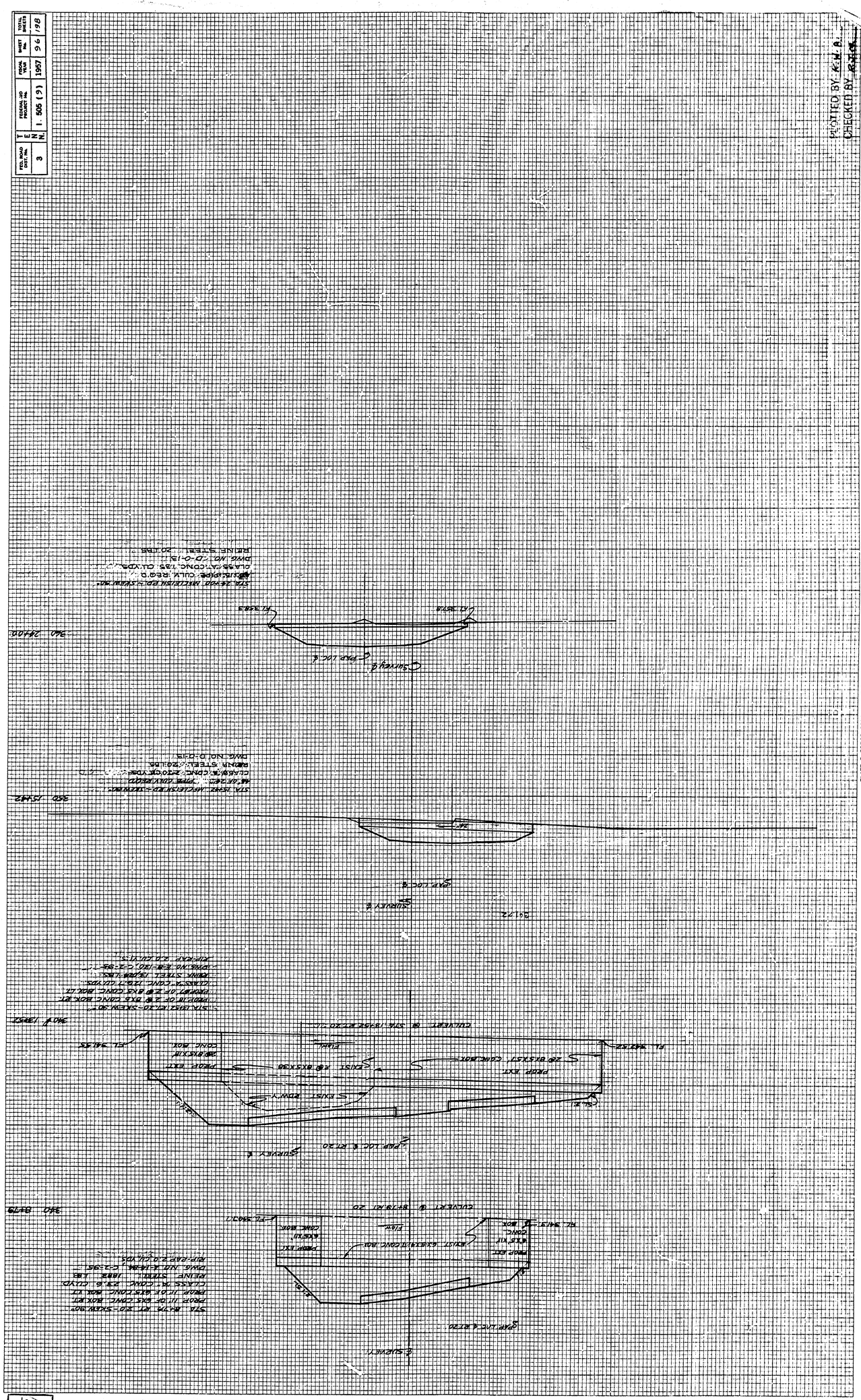
150' 100' 50' ℄ 50' 100' 150'

| FED. ROAD DIST. NO. | STATE NO. | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | | I- 505 (9) | 1957 | 96 | 198 |

PLOTTED BY: K.N.A.

CHECKED BY: R.H.S.

PLATE 3 CROSS SECTION OF PIPE & STANDARD




| ORIGINAL SURVEY | | | | FINAL SURVEY | | | |
|---|---|---|---|---|---|---|---|
| NOTE BOOK | | | | NOTE BOOK | | | |
| PLOTTED | | | | PLOTTED | | | |
| TRANSIT AREAS | | | | TRANSIT AREAS | | | |
| NO. | AREAS CHECKED | BY | DATE | NO. | AREAS CHECKED | BY | DATE |

TENN. STATE HIGHWAYS

Plans File No. 9

Divn.