

FILED
244
INDEX
244

SCANNED

DESIGNED: RAMSEY
CHECKED: SURVEY NO.
225

REV. 4-15-63: CORRECTED ERROR
IN EQUATION BLOCK.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.	F-001-9 (30)	1961	1	87

REVISED 1-12-60 - SHEET NO. 3-A ADDED TO INDEX - SEE ALSO REVISION NOTE THIS DATE, SHEET NO. 3-A, CHANGED BEGINNING STA. OF R.O.W. PROJECT.

INDEX OF SHEETS (HAWKINS CO. R.O.W.)

- SHEET NO. 1 TITLE SHEET
- SHEET NO. 2 TYPICAL CROSS-SECTION
- SHEET NO. 3 PRESENT & PROPOSED PLAN AND PROFILE (INCLUDES SHEETS NOS. 3-A, 3-B, 5-A, 5-B, 5-C)

INDEX OF SHEETS F-001-9 (30)

- SHEET NO. 1 TITLE SHEET
- " 2 TYPICAL CROSS-SECTIONS.
- " 2A-2B ESTIMATED QUANTITIES.
- " *3-8 PRESENT AND PROPOSED LAYOUT AND PROFILES.
- " 9 CONCRETE ENDWALLS (36"-60") AND DROP INLETS, DWG. A-4-83.
- " 10 CONSTRUCTION DETAILS, DWG. C-2-95.
- " 11 BEDDING STANDARD, DWG. C-B-2.
- " 12 CORRUGATED METAL STRUCTURAL PLATE PIPE AND PIPE ARCHES, DWG. CM-1-4.
- " 13 PIPE AND PIPE ARCH CULVERTS, BEVELED ENDS AND RIP-RAP, DWG. CM-1-5.
- " 14 STANDARD METAL END SECTIONS FOR PIPE AND PIPE ARCH CULVERTS, DWG. CM-1-6.
- " 15 CONCRETE ENDWALLS (12"-30") DROP INLETS AND SPRING DRAIN, DWG. D-O-13.
- " 16-16A STANDARD RAMP TO SIDE ROADS, DWG. D-R-2 (2 SHEETS).
- " 17 CONCRETE ENDWALLS (3:1 SLOPES) 12"-30", DWG. E-2-30.
- " 18 CONCRETE ENDWALL (TYPE "A") 36"-66", DWG. G-10-41.
- " 19 EXAMPLES OF MEDIAN DRAINAGE FOR 4-LANE HWYS; STANDARD NO. 31 CATCH BASIN AND TYPE "X" ENDWALL, DWG. M-D-1.
- " 20 STANDARD NO. 33 CATCH BASIN, DWG. M-D-2.
- " 21-21A DESIGN STANDARDS FOR MEDIAN OPENINGS ON 4-LANE DIVIDED HIGHWAYS, M-O-1 (2 SHEETS).
- " 22 STANDARD CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS, DWG. P-C-15.
- " 23 STANDARD RIGHT-OF-WAY STOCK FENCE AND CHAIN LINK FENCE, DWG. RD-F-10.
- " 24 ROADSIDE DEVELOPMENT AND LANDSCAPING, DWG. RD-L-16.
- " 25 STANDARD METAL DEEP-BEAM GUARD RAIL, DWG. RD-R-3.
- " 26-26A CONSTRUCTION IDENTIFICATION SIGNS, DWG. RD-S-1 (2 SHEETS).
- " 27 STANDARD CONCRETE RIGHT-OF-WAY POSTS, DWG. RW-M-2A.
- " 28 STANDARD CASTINGS FOR NOS. 12, 14, AND 15 CATCH BASIN, DWG. S-C-12C.
- " 29 STANDARD NO. 12 CATCH BASIN, DWG. S-CB-12C.
- " 30 STANDARD NO. 18 AND NO. 19 CATCH BASIN AND CASTINGS, DWG. S-CB-13.
- " 31 STANDARD NO. 22 AND NO. 23 CATCH BASIN AND CASTINGS, DWG. S-CB-23.
- " 32 STANDARD SUPERELEVATION DETAILS, DWG. S-E-11.
- " 33 STANDARD NO. 2 MANHOLE, CASTINGS AND MASONRY JUNCTION, DWG. S-M-2a.
- " 33A MINIMUM DESIGN STANDARDS FOR PRIMARY (4-LANE RURAL AND URBAN) ROADS, DWG. ST-R-7.
- " 34-36 CULVERT CROSS-SECTIONS.
- " 37-37 CROSS-SECTIONS.

* INCLUDES SHEET NOS. 3-A, 3-B AND 5-A THRU 5-D.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF HIGHWAYS DATED JULY 1, 1951, (SUPPLEMENT DATED AUGUST 1, 1960), AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN TRAFFIC ALONG AND ACROSS THE PROJECT WHERE CONSTRUCTION INTERFERES WITH THE PRESENT ROAD OR ROADS. TWO (2) LANES, FROM THE BEGINNING OF THE PROJECT TO STA 2490, SHALL BE KEPT OPEN TO TRAFFIC AT ALL TIMES DURING CONSTRUCTION.

TWO CONSTRUCTION IDENTIFICATION SIGNS TO BE ERECTED ON THIS PROJECT, WHERE INDICATED BY THIS SYMBOL (C.I.S.) SEE DWG. RD-S-1 FOR DETAILS OF SIGNS.

NOTE: SEE TABULATION OF PROPERTIES TO BE ACQUIRED UNDER THIS PROJECT ON SHEET NO. 3.

CONVENTIONAL SIGNS	
COUNTY LINE	---
CITY VILLAGE OR BOROUGH	---
CULVERTS	---
POWER POLE	---
TELEPHONE OR TELEGRAPH POLE	---
FENCE LINE	---
GUARD RAIL	---
UNFENCED PROPERTY	---
RIGHT OF WAY LINE	---
TRAVELED WAY	---
RAILROAD	---
RETAINING WALL	---
BASE OR SURVEY LINE	---
DROP INLET	---
BRIDGE OVER 20 FT. SPAN	---

AVERAGE OVER TOTAL PROJECT	
DESIGN DATA	
1960 ADT = 7,023	
1980 ADT = 11,447	
1980 DHV = 1,145	
D = 57 %	
T = 16 %	
V = 60 M.P.H.	

SPECIAL NOTE:
A SECTION WITHIN THIS PROJECT BETWEEN STATION 36+50 AND 60+43.4, INCLUDING GRADING, CONSTRUCTION OF THE BRIDGE OVER THE HOLSTON RIVER AND THE UNDER-PASS UNDER THE CLINCHFIELD R.R. IS NOW UNDER CONSTRUCTION.
NO COMPENSATION WILL BE ALLOWED FOR DELAYS, DAMAGES OR INCONVENIENCES CAUSED BY THE CONSTRUCTION NOW UNDER WAY.

STATE OF TENNESSEE

DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

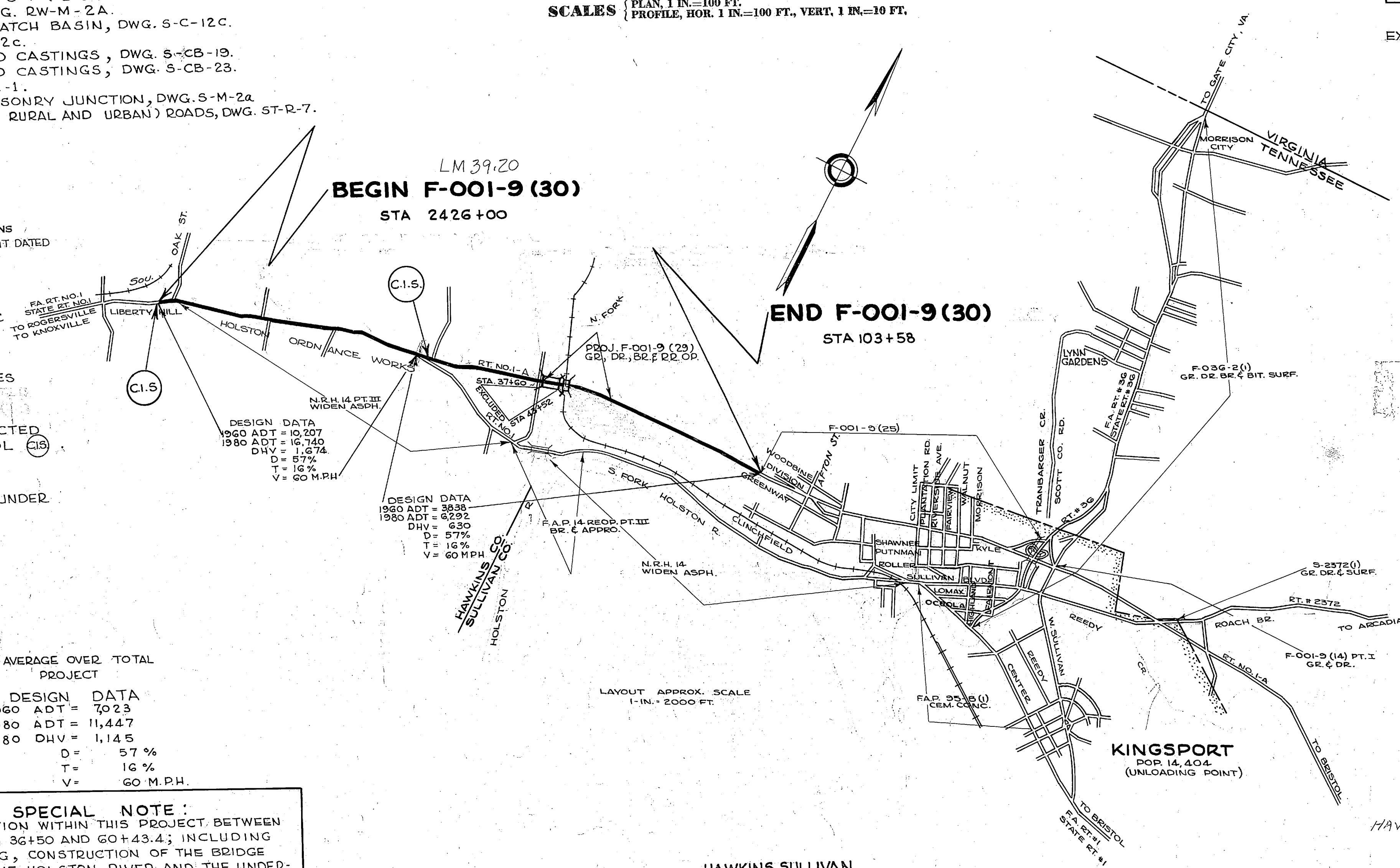
FEDERAL AID PROJECT NO. F-001-9 (30)

HAWKINS-SULLIVAN COUNTIES

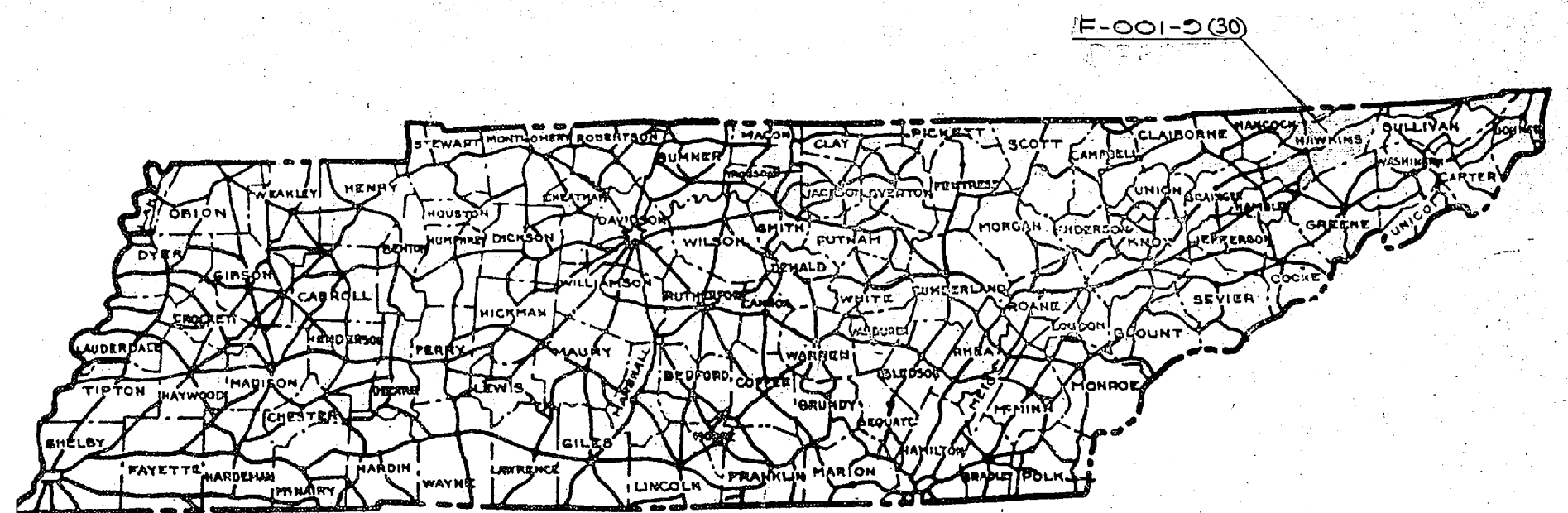
366' WEST OF OAK STREET INTERSECTION TO 600'± WEST OF AFTON STREET.

STATE HIGHWAY NO. 1 F.A.H.S. NO. 1

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



HAWKINS SULLIVAN CO. CO. TOTAL			
ROADWAY LENGTH	1.506	1.137	2.643 MILES
BRIDGE LENGTH	0.000	0.000	0.000 MILES
PROJECT LENGTH	1.506	1.137	2.643 MILES
EXCLUDED LENGTH	0.056	0.055	0.111 MILES
GROSS LENGTH	1.562	1.192	2.754 MILES



EQUATIONS

STATION TO STATION	+	-
2437+53 = 2437+00	+53	
2471+26.4 = 3+81.05	Redesignation of Stations	
18+32.35 = 18+30.1	+2.25	
20+45.85 (P.L. 1953) = 20+40.00 (S.U.R. 1958)	NO EFFECT	
20+40 = 20+45.85	-5.85	
TOTAL EFFECT ON ENUMERATION		+42.40

EXCLUSION: STA. 37+60 TO STA 43+52 -592'

APPROVED: [Signature] ENGINEER OF SURVEYS AND DESIGN

DATE: _____

APPROVED: [Signature] STATE HIGHWAY ENGINEER

DATE: _____

APPROVED: [Signature] COMMISSIONER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: _____ DATE: _____

HAWKINS CO. R.O.W. LENGTH
1.440 MILES.

PRINTED FOR SOIL SURVEY 5-11-59
PRINTED FOR R.O.W. 6-18-59
RE-PRINTED FOR R.O.W. 1-10-61

NOTE: ROW NUMBER ASSIGNED TO THIS PROJECT FOR ACCOUNTING PURPOSES IS 37001-2218-04.

REV. 1-12-60: ADDED TYPE 4-30C & G.
SECTION ON LT. TYPICAL X-SECT. STA.
242G+00 TO STA. 244.5+50±. SEE ALSO
REVISION NOTE THIS DATE, SHEET NO.



2445+50 ± TO STA. 2470+38.05 SEE PROP LAYOUT FOR TRANSITION
FROM EXIST. PAVEMENT TO TYPICAL SECTION ABOVE.
180' MIN. D.O.W.



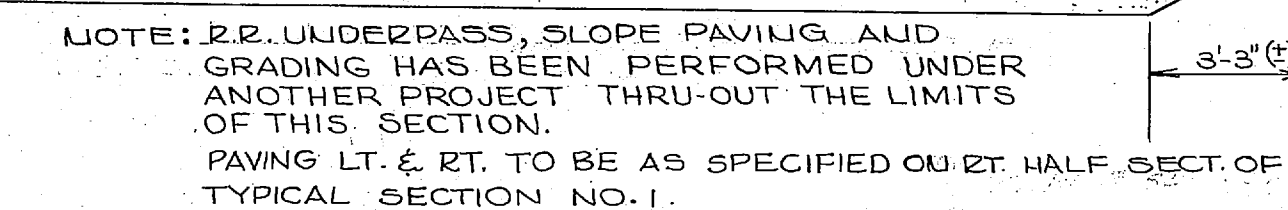
STA. 2420+00 TO STA. 2445+50 ± AND
STA. 2470+38.05 TO STA. 103+58 SEE PROP. LAYOUT FOR VARIATIONS
THROUGH INTERSECTION STA. 2470+38.05 TO 17+00, AND THRU. TRANSITION
30' TO 11' MEDIAN STA. 27+33 TO 57+65.42
250' MIN. P.O.W.



STA. 34+20 TO BEGINNING OF BRIDGE, AND FROM END OF BRIDGE TO STA. 50+50
SEE PROPOSED LAYOUT FOR MEDIAN TRANSITION.



OF PROPOSED BRIDGE OVER NORTH FORK HOLSTON RIVER
(BRIDGE UNDER CONSTRUCTION UNDER ANOTHER CONTRACT.



TYPICAL HALF-SECTION

OF ROUTE 1-A AT RAILROAD UNDERPASS STA. 45(4)
(P.R. OVERPASS UNDER CONSTRUCTION UNDER ANOTHER CONTRACT.)

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY HAWKINS	QUANTITY SULLIVAN	TOTAL	UNIT
11-1	CLEARING AND GRUBBING	65 %	35 %	1	LUMP SUM
13-3	ROAD AND DRAINAGE EXCAVATION (UNCL.)	99,446	73,742	173,188	CU. YD.
13-5	WATER (EMBANKMENT)	1,095	827	1,922	M. GAL.
13-31	PLACING OF STOCKPILED TOPSOIL	6,028	4,148	10,176	CU. YD.
13-32	UNDERCUTTING	1,000	500	1,500	CU. YD.
15-1	BORROW EXC. (COMMON)	6,691	4,633	11,324	CU. YD.
21-1	SODDING	1,867	756	2,623	SQ. YD.
36-1	CRUSHED STONE (WATER BOUND BASE)	58,232	42,267	100,499	TON
36-1b	FLAKE CALCIUM CHLORIDE, TYPE 1 (WATER BOUND BASE)	115	83	198	TON
36-1c	CONCENTRATED CALCIUM CHLORIDE, TYPE 2 (WATER BOUND BASE)	94	68	162	TON
43-1	MINERAL AGGREGATE (C.S., B.C.B.)	10,848	6,422	17,270	TON
43-2	ASPHALT CEMENT (C.S., B.C.B.)	570	338	908	TON
43-3	TACK COAT (C.S., B.C.B.)	27	15	42	TON
44-1	MINERAL AGGREGATE (C.G., B.C.B.)	10,848	6,422	17,270	TON
44-2	ASPHALT CEMENT (C.G., B.C.B.)	570	338	908	TON
44-3	TACK COAT (C.G., B.C.B.)	27	15	42	TON
49-1	BITUMINOUS MAT'L. (PRIME COAT)	87	57	144	TON
104-1	MINERAL AGGREGATE (A.C.S.C.)	3,590	2,012	5,602	TON
104-2	ASPHALT CEMENT (A.C.S.C.)	250	140	390	TON
104-3	TACK COAT (A.C.S.C.)	7	4	11	TON
105-1	MINERAL AGGREGATE (S.A., OR S.A.S.C.)	3,590	2,012	5,602	TON
105-2	ASPHALT CEMENT (S.A., OR S.A.S.C.)	250	140	390	TON
105-3	TACK COAT (S.A., OR S.A.S.C.)	7	4	11	TON
132-4a	GREY IRON CASTINGS (CLASS 30)	1,160		1,160	LB.
132-4b	GREY IRON CASTINGS (CLASS 20)	4,431	870	5,301	LB.
135-4	CLASS "A" CONCRETE	67	17	84	CU. YD.
135-4a	CLASS "A" CONCRETE	64	314	378	CU. YD.
135-12	STEEL BAR REINFORCEMENT	465	20	485	LB.
141-2	15" CONCRETE PIPE	984	220	1,204	LIN. FT.
141-3	18" CONCRETE PIPE	878		878	LIN. FT.
141-4	24" CONCRETE PIPE	350	286	636	LIN. FT.
141-5	30" CONCRETE PIPE	44		44	LIN. FT.
141-6	36" CONCRETE PIPE	340		340	LIN. FT.
141-7	42" CONCRETE PIPE	150		150	LIN. FT.
141-16	GRANULAR BACKFILL FOR CULVERTS	561	334	895	CU. YD.
144-	15" CORRUGATED METAL PIPE CULVERT	66	78	144	LIN. FT.
144-	18" CORRUGATED METAL PIPE CULVERT	120		120	LIN. FT.
144-	26" CORRUGATED METAL PIPE CULVERT		224	224	LIN. FT.
144-	24" CORRUGATED METAL PIPE CULVERT	70		70	LIN. FT.
147-	22" X 13" C.M. PIPE-ARCH CULVERT	98	112	210	LIN. FT.
149-	78" CORRUGATED METAL STRUCTURAL PLATE PIPE		182	182	LIN. FT.
152-2	BRICK MASONRY	1,982		1,982	M
159-	METAL END SECTION 15" PIPE	1		1	EACH
159-	METAL END SECTION 22" X 13" PIPE-ARCH	2	2	4	EACH
161-1	CONCRETE SIDEWALK	14,514	7,995	22,509	SQ. FT.
162-1	CONCRETE CURB	74	47	121	CU. YD.
162-21	CONCRETE COMBINED CURB & GUTTER	165		165	CU. YD.
171-4	METAL DEEP BEAM SINGLE GUARDRAIL WITH STEEL POSTS	1,405	2,105	3,510	LIN. FT.
173-6	6' CHAIN LINK FENCE	1,445		1,445	LIN. FT.
173-7	STOCK FENCE	5,020		5,020	LIN. FT.
174-2	MARKERS (R.O.W. POSTS)	68	38	106	EACH
176	RIP- RAP		17	17	CU. YD.
178-31	6" PERFORATED CORRUGATED METAL PIPE UNDERDRAINS	1,500	1,000	2,500	LIN. FT.
500	SEEDING	651	448	1,099	UNIT

GENERAL NOTES

GRADING:

FINISHED GRADE ON TYPICAL CROSS-SECTIONS IS THE SAME AS GRADE ON PROFILE AND CROSS-SECTIONS.

SOIL DATA IS SHOWN ON PROFILE.

IN EXCAVATED AREAS, THE CONTRACTOR SHALL EXERCISE CARE NOT TO DISTURB ANY VEGETATION BACK OF THE TOP SLOPE.

BORROW:

THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUITABLE BORROW MATERIAL FROM A SITE APPROVED BY THE ENGINEER. THE BORROW MATERIAL SHALL BE TAKEN IN SUCH A MANNER AS TO BE READILY MEASURED. ALL COSTS OF FURNISHING BORROW TO BE INCLUDED IN UNIT PRICE BID FOR ITEM 15-1.

DRAINAGE:

THE COST OF CULVERT EXCAVATION FOR PIPE CULVERTS AND ENDWALLS, CATCH BASINS, MANHOLES, ETC. SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF PIPE.

WHEN A CULVERT IS MOVED TO A NEW LOCATION OTHER THAN SHOWN ON PLANS, THEREBY INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT WILL BE MADE DUE TO SUCH CHANGE.

OUTLET AND INLET DITCHES TO BE CLEANED WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE INCLUDED IN UNIT PRICE PER LINEAR FOOT OF PIPE.

REMOVAL OF EXISTING PAVEMENT:

THE EXISTING PAV'T. IS TO BE SCARIFIED, REMOVED AND OBLITERATED FROM STA. 2430+78.05 TO 2489+50.03. THE COST OF REMOVAL OF EXISTING PAVEMENT OR BASE AND EVERYTHING ENCOUNTERED IN THE PROGRESS OF THE WORK NOT INCLUDED IN OTHER ITEMS. SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 13-3.

WHERE PROPOSED PAVEMENT IS TO BE JOINED TO EXISTING, THE EXISTING PAVEMENT SHALL BE CUT AND BROUGHT TO A NEAT LINE WITH AN AIR HAMMER OR OTHER SUITABLE EQUIPMENT.

REPLACING EXISTING BASE AND SURFACE:

WHEREVER IT IS NECESSARY TO CUT THE EXISTING BASE AND SURFACE, IT SHALL BE REPLACED, AS DIRECTED BY THE ENGINEER, WITH BASE AND SURFACE ITEMS SIMILAR TO THE TYPICAL CROSS-SECTIONS OF NEW CONSTRUCTION.

PRIVATE ROADS AND PUBLIC DRIVES:

ALL PUBLIC SIDE ROADS AND ALL FREQUENTLY USED PRIVATE DRIVES EXCEPT AS NOTED ON PLANS ARE TO BE SURFACED TO THE RIGHT-OF-WAY LINE OR AS DIRECTED WITH BASE MATERIAL, PRIME COAT AND SURFACE. THE THICKNESS AND WIDTHS OF THE BASE AND SURFACE WILL BE AS DIRECTED BY THE ENGINEER.

UTILITIES:

OWNERS TO RESET, RELAY OR ADJUST POWER AND TELEPHONE LINES AND POLES, WATER LINES AND ALL OTHER PUBLIC UTILITIES CONFLICTING WITH THE PROPOSED IMPROVEMENT.

SEEDING:

ALL NEWLY GRADED EARTHEN AREAS ON THE PROJECT THAT ARE NOT TO BE PAVED OR SODDED SHALL BE SEEDDED IN ACCORDANCE WITH THE SPECIAL PROVISION REGARDING SECTION 500. SEE SKETCH AT RT.

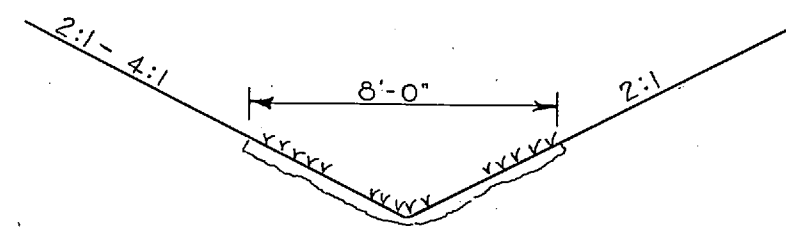
CLEARING AND GRUBBING:

IN ADDITION TO THE PROVISIONS CONTAINED IN SECTION 11 OF THE STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL INCLUDE IN HIS LUMP SUM BID FOR ITEM 11-1, THE FOLLOWING:

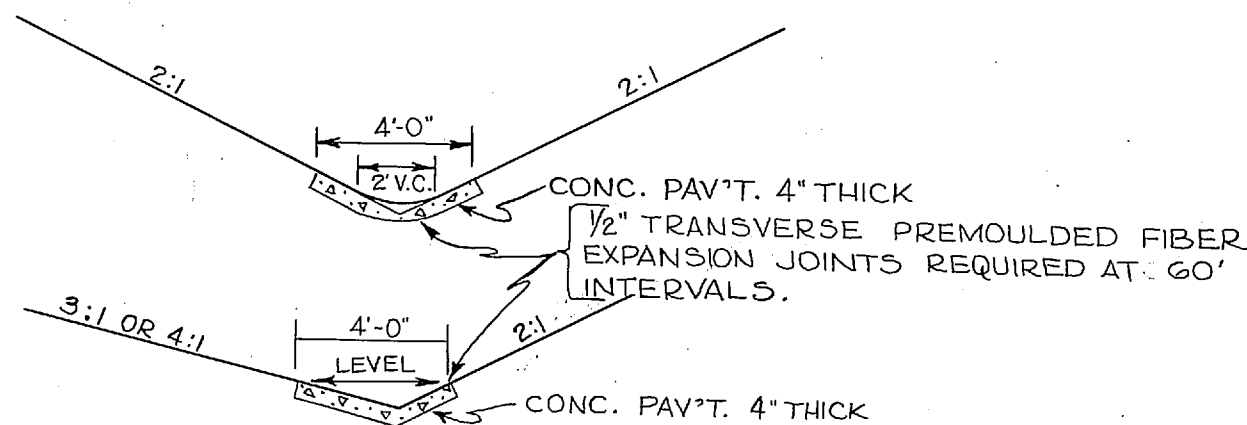
- REMOVAL AND DISPOSAL OF CERTAIN TREES OUTSIDE OF THE R.O.W. AT RT. OF STA. 2446+50, AS DESIGNATED BY THE ENGINEER.
- REMOVAL AND SATISFACTORY DISPOSAL OF THE STOCKADE TYPE FENCE ADJACENT THE HOLSTON ORDINANCE PROPERTY, AS DIRECTED BY THE ENGINEER.
- REMOVAL AND SATISFACTORY DISPOSAL OF A 15' x 36" CONCRETE SILO RT. OF STA. 83+73.

DISPOSAL OF SURPLUS MATERIAL:

THE CONTRACTOR IS TO DISPOSE OF ALL SURPLUS EXCAVATION BY FLATTENING FILL SLOPES WHERE AND AS DIRECTED BY THE ENGINEER. COST OF DISPOSAL TO BE INCLUDED UNDER ITEM 13-3, ROAD AND DRAINAGE EXCAVATION (UNCL.)



SKETCH SHOWING SODDING*
(REQ'D. ON MEDIAN DITCHES, SIDE DITCHES AND OTHER SPECIAL DITCHES WITH GRADIENTS BETWEEN 2.0% AND 3.0%)



SKETCH SHOWING DITCH PAVING
(REQ'D. ON MEDIAN DITCHES, SIDE DITCHES AND OTHER SPECIAL DITCHES, HAVING A GRADIENT OF 3.0% AND OVER)

NOTES: DITCHES ON INTERSECTING ROADS (EXCEPT EXISTING RTE. #1) TO BE SEEDED ONLY.
* FERTILIZER (4-8-4) AT 12 LBS. PER 1000 SQ. FT. AND AGRICULTURAL LIMESTONE AT 75 LBS. PER 1000 SQ. FT. TO BE SPREAD UNIFORMLY ON ALL AREAS TO BE SODDED. COST TO BE INCLUDED IN UNIT PRICE BID FOR ITEM 21-1.

ITEM NOTES:

- SEE GENERAL NOTES.
- INCLUDES WATER FOR ITEM 21-1, SODDING AND ITEM 500, SEEDING.
- TOPSOIL WILL NOT BE REQUIRED ON CUT SLOPES STEEPER THAN 2:1.
- SEE TYPICAL CROSS-SECTIONS.
- SEE SKETCH, THIS SHEET FOR AREAS TO BE SODDED.
- INCLUDES QUANTITIES FOR PRIVATE DRIVES AND PUBLIC ROADS. (SEE GEN. NOTES AND NOTES ON PLAN SHEETS 3A & 4.)
- FOR PAVING DITCHES, SEE SKETCH ON THIS SHEET AND ON PLANS SHEET NO. 7.
- A.A.S.H.O. DESIGNATION M-170-57 CLASS III.
- INCLUDES QUANTITIES FOR CM. PIPE AND PIPE-ARCH CULVERTS.
- INLET END ONLY TO BE BEVELED AND CUT TO SKEW. SEE NOTES SHEET NO. 8. (132' TO BE U.S. 12 GA.; 50' TO BE U.S. 10 GA.)
- GRADE M.A., ARTICLE 226.02.
- FOR PAVING MEDIAN, AND ISLANDS AND LANE DIVISION NOSES WHERE SHOWN ON PLANS.
- 4" MOUNTABLE CURB TYPE "B" AND 3" CURB. SEE TYPICAL CROSS-SECTIONS.
- TYPE 4-30 AND TYPE 6-30. SEE PLANS FOR LOCATIONS.
- RUBBLE STONE (PLAIN), OR SACKED SAND-CEMENT.
- TO BE USED WHERE DIRECTED BY THE ENGINEER. PIPE TO BE 6" PERFORATED CORRUGATED METAL.
- INCLUDES 30' OF SIDE DRAIN, SULLIVAN CO.
- SIDE DRAINS, HAWKINS CO.
- INCLUDES 98' OF SIDE DRAIN, HAWKINS CO.
- END SECTIONS FOR SIDE DRAINS, HAWKINS CO.
- TAR OR CUT- BACK OR EMULSIFIED ASPHALT.
- SKEWED ENDS

SEE SPEC. PROVISIONS REGARDING SOLID ROCK, TRENCHING, BACK-FILLING & CAPPING.

SEE SPECIAL PROVISIONS REGARDING SEC. 13

CALCIUM CHLORIDE ALTERNATES

BINDER ALTERNATES

SURFACE ALTERNATES

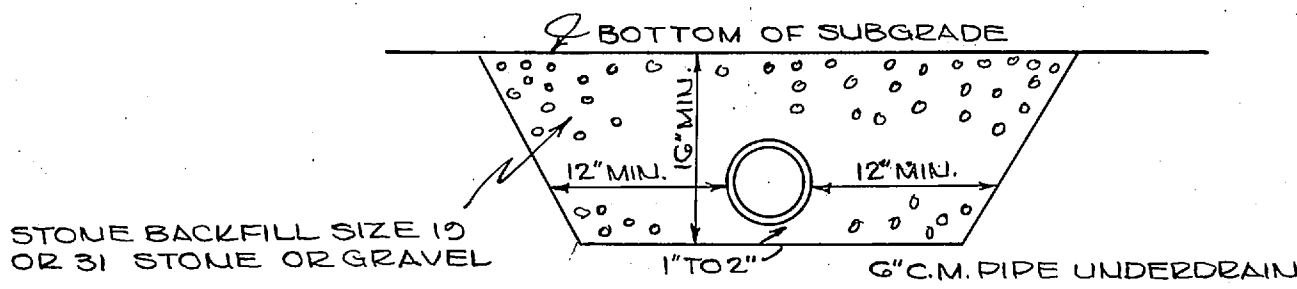
SEE SPECIAL PROVISIONS REGARDING ITEM 500.

SEE ITEM NOTES AT RT. THIS SHEET.

GRADING QUANTITIES			
STATION TO	STATION	COMMON	SOLID ROCK*
242G+00	2443+79	14,717	
2443+79	3G+50	82,528	2131
SUB TOTAL HAWKINS CO.		97,315	2131
3G+50	60+43.4	58,688	15,054
60+43.4	103+58	58,688	15,054
SUB TOTAL SULLIVAN CO.		58,688	15,054
TOTAL QUANTITIES		156,003	17,185

* SEE SPECIAL PROVISIONS REGARDING SOLID ROCK TRENCHING, BACKFILLING AND CAPPING.

R.O.W. MARKERS				
SHEET NO.	TYPE "A"	TYPE "B"	TYPE "C"	TOTAL
3	1	2	6	9
3-A	2	3	5	10
4	0	5	6	11
5	1	6	7	14
6	2	9	13	24
7	7	4	4	15
8	7	8	8	23
HAWKINS CO. TOTAL	6	25	37	68
SULLIVAN CO. TOTAL	14	12	12	38
GRAND TOTAL	20	37	49	106



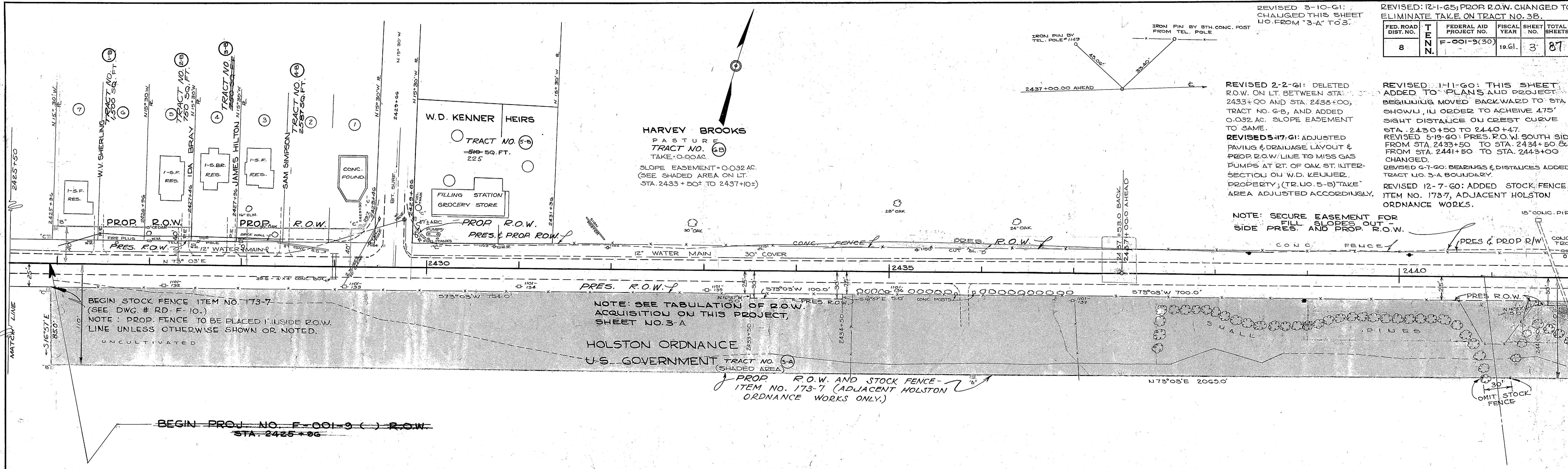
SKETCH SHOWING UNDERDRAINS
(SEE STANDARD SPECIFICATIONS SEC. 178)

RAMPS AND SIDE DRAINS									
STATION	LOC.	DESCRIPTION	RAMP WIDTH	SIZE AND LENGTH				C.M. END SECT.	REMARKS
				CODE	15"	30"	45"		
2429+66	LT.	PVT. DRIVE	24'						NO S.D. REQ'D.
2440+20	RT.	PVT. DRIVE	16'						NO S.D. REQ'D.
2456+27	LT.	EXIST. PVT. DR.	18'						NO S.D. REQ'D.
2460+23.6	LT.	EXIST. PVT. DR.	20'						NO S.D. REQ'D.
	RT.	EAST SIDE OF EUTAUCE	20'						
2467+61	LT.	EXIST. PVT. DR.	20'						NO S.D. REQ'D.
8+66.5	LT.	PVT. DRIVE	20'					38'	
15+75	LT.	PVT. DRIVE	16'					60'	2
33+60	LT.	CO. ROAD	20'						
33+60	RT.	CO. ROAD	20'	S.D. IN RDWY					
96+60	LT.	CO. ROAD	24'						NO S.D. REQ'D.
103+06	LT.	HOLLIS ST.	24'	30'					
2447+70	RT.	HOLLIS ST. VALL BLVD	36'						NO S.D. REQ'D.
	RT.	EAST SIDE VALL BLVD	28'				70'		
2462+50	RT.	EUTAUCE TO ADM. AREA	24'			44'			
HAWKINS CO. TOTALS				0	44'	120'	70'	98'	2
SULLIVAN CO. TOTALS				30'	0	0	0	0	0
GRAND TOTAL				30'	44'	120'	70'	98'	2

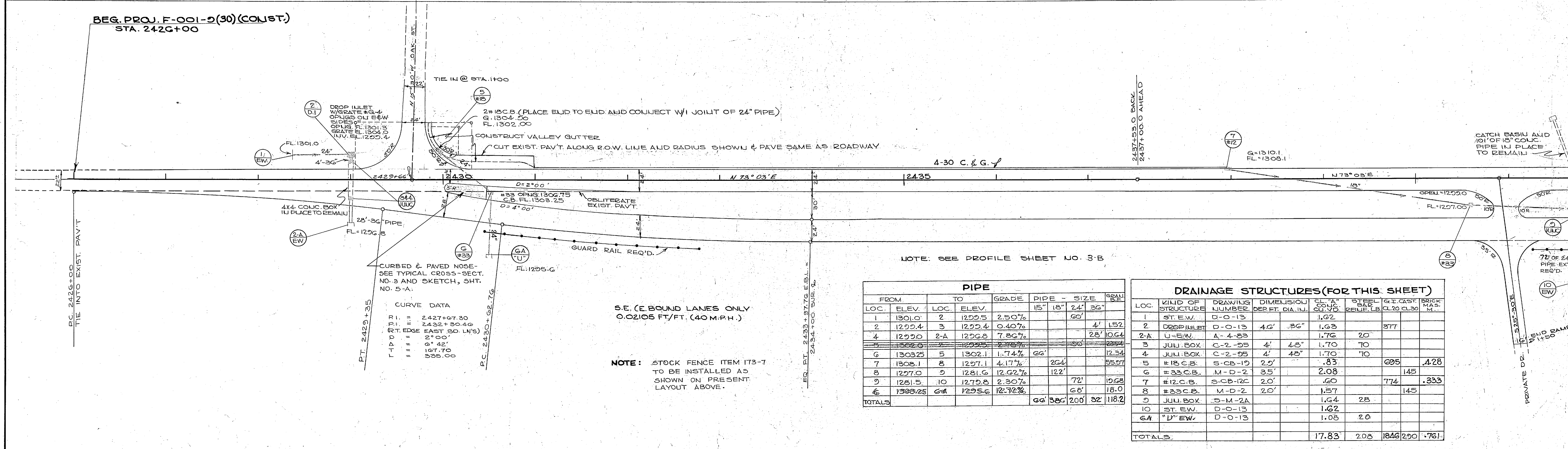
SUMMARY OF ROADWAY, MEDIAN & INTERSECTION DRAINS													
SHEET NO.	CONCRETE PIPE				C.M. PIPE				CL. "A" CONC. CULV. V.D.	STEEL BAR REIN. L.S.	G.I. CASTINGS		BRICK MASONRY
	15"	18"	24"	36"	15"	GG"	78"	22" X 13"			CL. 20	CL. 30	
3	66'	386'	200'	32'					17.83	208	1846	250	.761
3-A & 4	340'	372'		90'	66'				15.30	237	1771	580	1.221
5D	306'		150'	218'					15.37	20	665		
6	272'	120'			150'				13.34		145	250	
TOTAL	984'	878'	350'	340'	150'	66'			67.04	465	4431	1,160	1.982
7	62'						224'	112'	205				
8	128'		286'		78'		82'		14.55	20	725		
TOTAL	190'		286'		78'				16.60	20	870		
GRAND TOTAL	1,174'	878'	636'	340'	150'	144'	224'	182'	83.64	485	5,301	1,160	1.982

- ① METAL END SECTION REQ'D. FOR 15" PIPE CULV.
② 2-METAL END SECTION FOR 22" X 13" PIPE-ARCH CULV.
* SEE DWG. NO. C-8-2.
③ SKEWED ENDS
④ 132' OF U.S. 12 GA.; 50' OF U.S. 10 GAGE; BEVEL, SKEW AND RIP-RAP INLET END; SEE NOTE SHEET NO. 8 RE. OUTLET END.

SCANNED



PRESENT LAYOUT
SCALE: 1"=50'



PROPOSED LAYOUT
SCALE: 1"=50'

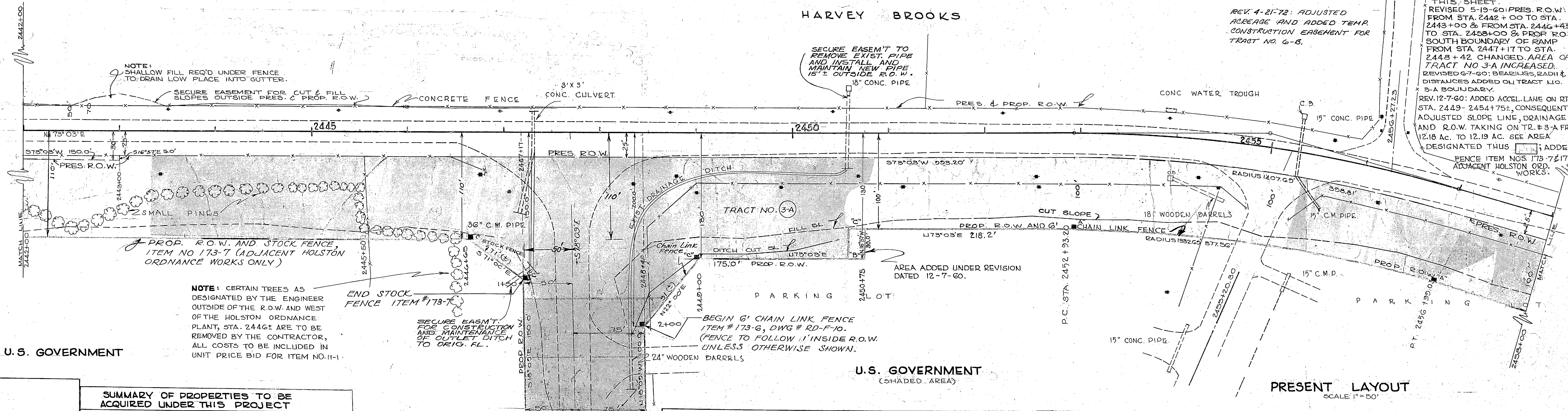
SUMMARY OF PROPERTIES TO BE ACQUIRED UNDER THIS PROJECT

NAME OF OWNER	TRACT NO.	AREA	SHEET NO.	TEMP. CONSTRUCTION
HARVEY BROOKS	1A	0.28 AC.	5	
G.P. NETHERLAND	2A	0.705 AC.	5	
U.S. GOVERNMENT	3A	12.19 AC.	3, 3A, 4, 5	
RALPH NETHERLAND	4A	0.12 AC.	6	
ZOLA RAY NETHERLAND	5A	0.21 AC.	6	
FRED NETHERLAND	6A	0.33 AC.	6	
W.V. SHERLING	1B	15.00 SF.	3	
IDA BRAY	2B	750 SF.	3	
JAMES HILTON	3B	450 SF.	3	
SAM SIMPSON	4B	2,581 SF.	3	
W.D. KENNER HEIRS	5B	225 SF.	3	
HARVEY BROOKS	6B	0.06 AC.	3	0.032

DRAINAGE STRUCTURES FOR SHEETS 3A & 4

LOC.	KIND OF STRUCTURE	DWG. NO.	DIMENSIONS	CR. A. C.V.	STEEL BAR REINFORC.	G.I. CAST BRICKS
11	#33 C.B.	M-D-2	2.1' 15"	1.63		145
12	#31 C.B.	M-D-1	3.0' 15"	1.10		223
13	#12 C.B.	S-C-12	4.5' 36"	.74		774
14	JUN. BOX	C-2-25	4.0'	.87	47	
33	ST. EW.	A-4-83	36"	4.04		
34	JUNCT.					
35	"U" EW.	D-O-13	18"	.62	20	
36	#12 C.B.	S-C-12	3.1' 18"	.70		774
37	#33 C.B.	M-D-2	2.4' 18"	.87		145
38	"U" EW.	E-2-20	18"	.97	20	
39	JUNCT.					
40	MET. END SEC.	CM-1-G	15"			
41	#33 C.B.	M-D-2	2.0' 15"	1.64		145
42	"U" EW.	D-O-13	15"	.58	20	
43	JUN. BOX	S-M-2A	15"	.56	15	
44	#33 C.B.	M-D-2	15"	1.60		145
45	ST. EW.	E-2-20	15" x 18"	2.32	11.5	
TOTALS				19.20	237	1771

HARVEY BROOKS



PRESENT LAYOUT

SCALE 1" = 50'

U.S. GOVERNMENT

(SHADED AREA)

PIPE FOR SHEETS (3A & 4)

FROM		TO		GRADE	PIPE				SIZE
LOC.	ELEV.	LOC.	ELEV.	%	15	18	24	36	GRAD. S.F.
11	1230.30	12	1279.6	0.88%	148'				
12	1279.6	14	1274.9	0.85%	52'				
14	1274.8	33	1273.4	1.15%				90'	34.20
34	1271.3	35	1270.7	0.43%		138'			29.26
36	1264.0	37	1261.5	4.31%		58			12.30
37	1261.4	38	1261.1	.56%		54			11.45
39	1255.5	40	1254.2	1.07%	66'				12.34
41	1253.0	42	1252.7	0.48%	62'				11.59
43	1245.0	45	1244.0	0.82%		122'			25.86
44	1247.71	45	1244.0	4.74%	78'				14.59
TOTALS					340'	372		90'	151.59

* DENOTES C.M. PIPE

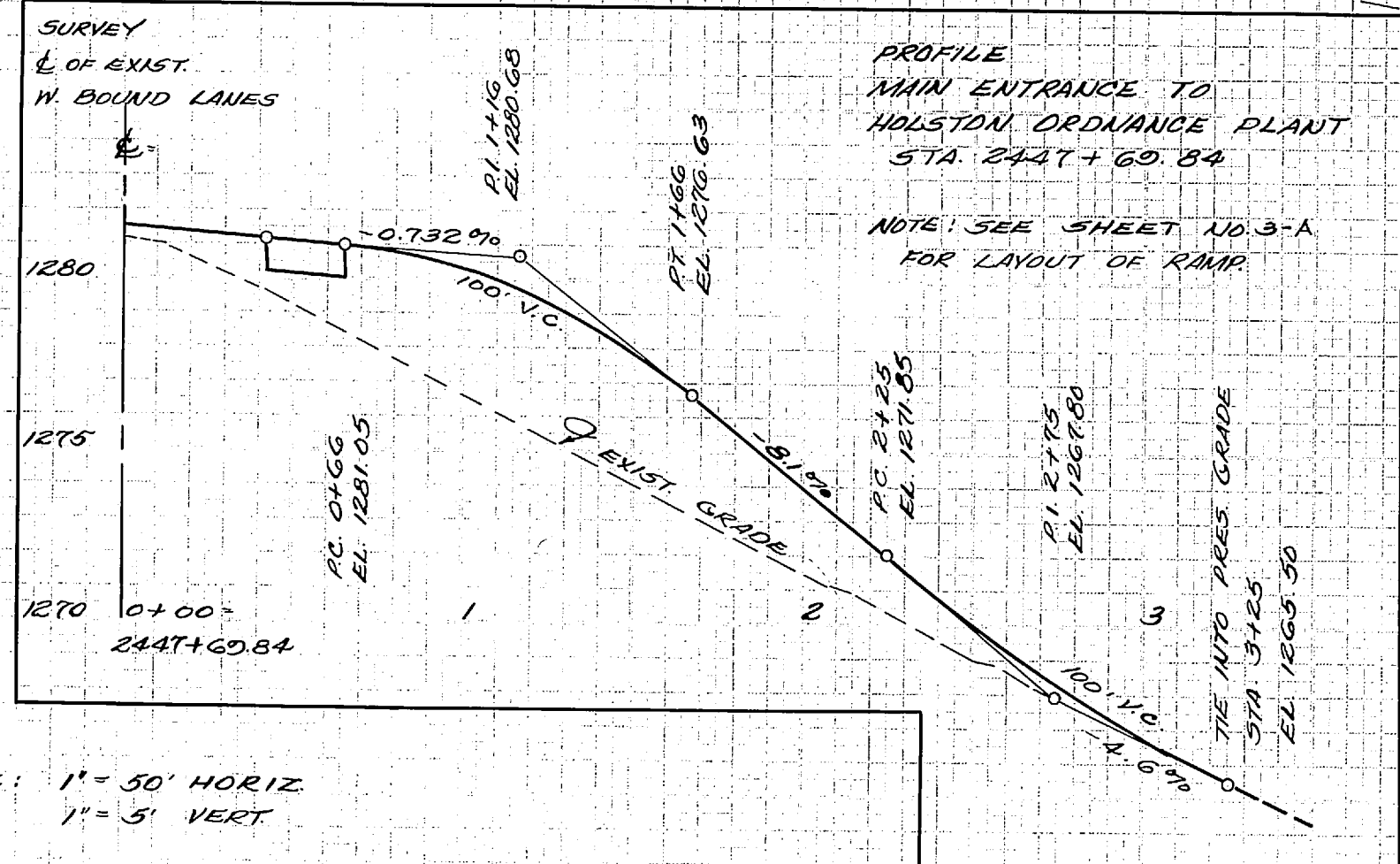
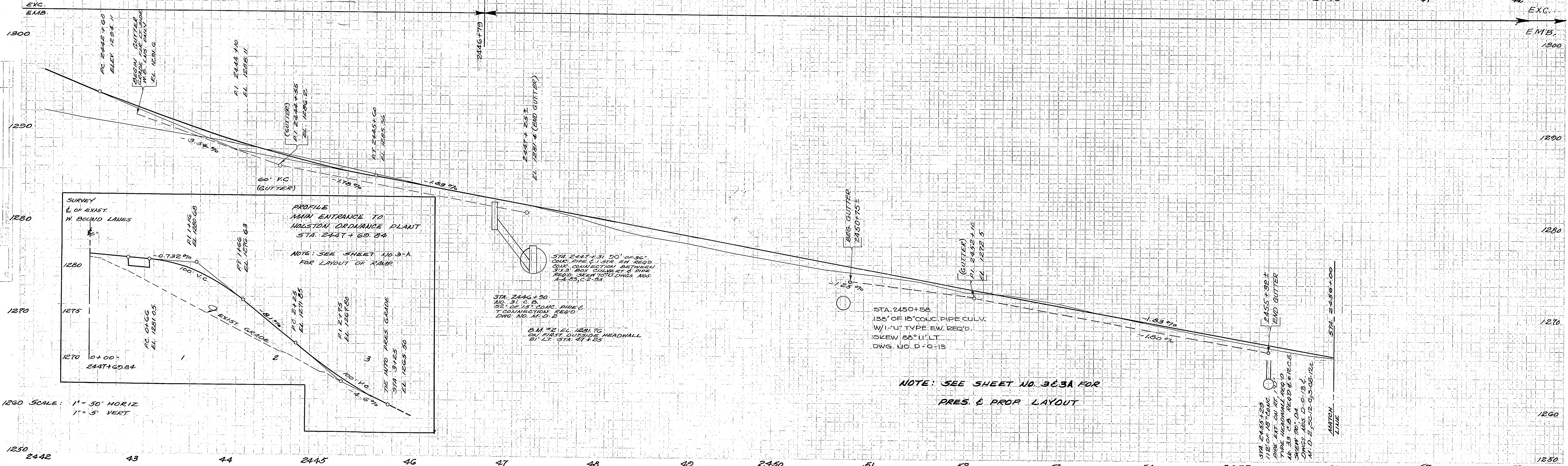
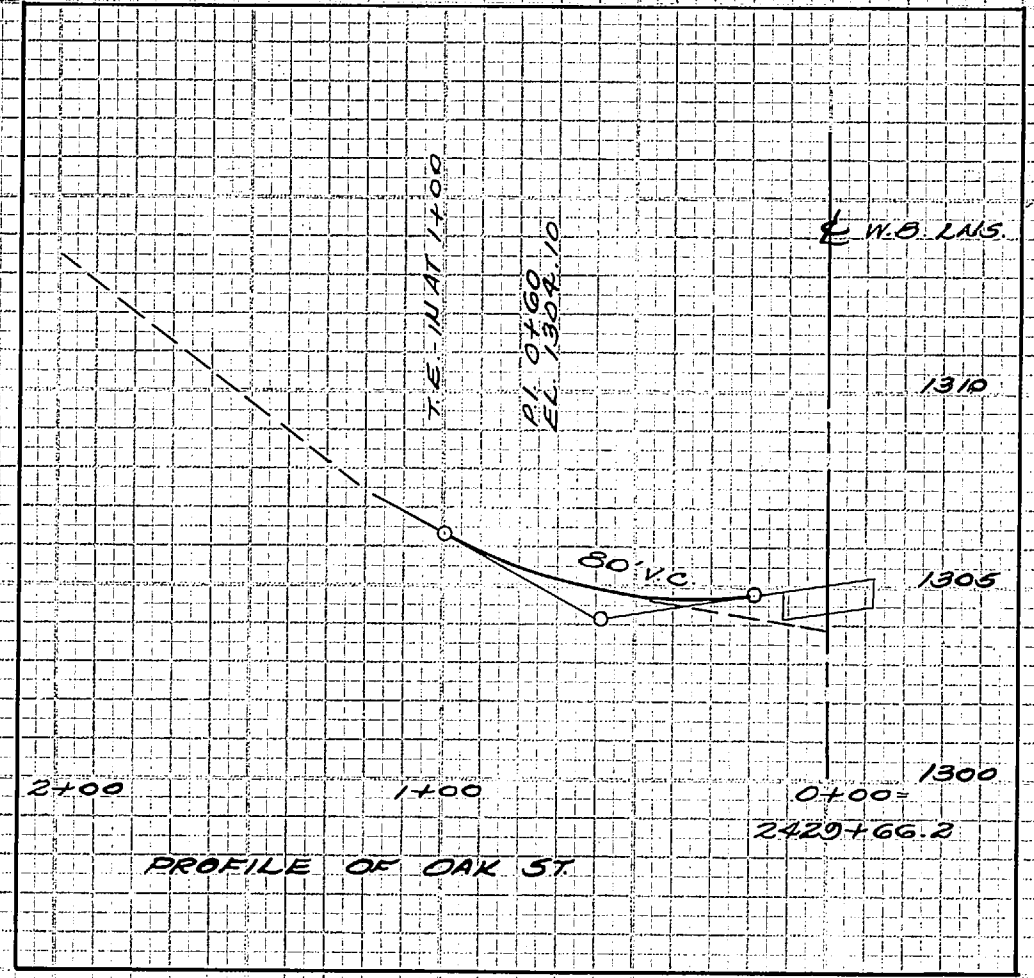
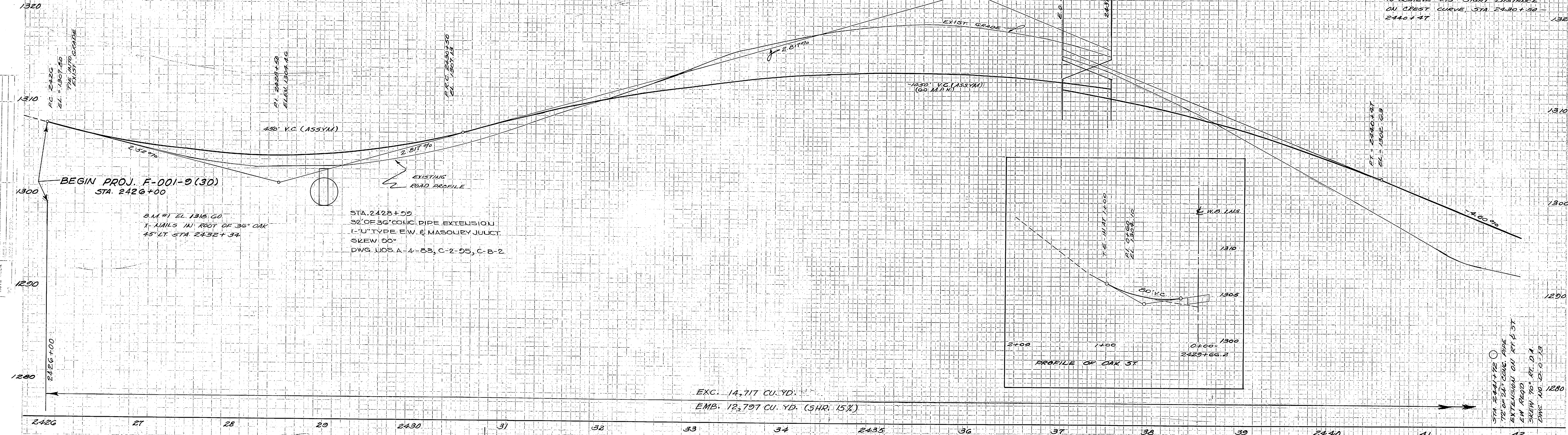
NOTES:

SEE SHEET NO. 3-B FOR PRES. & PROP. PROFILE.
SEE PRESENT LAYOUT ABOVE FOR LOCATION OF PROP. STOCK FENCE, ITEM #173-7 AND CHAIN-LINK FENCE, ITEM #173-6.
COST OF REMOVING EXISTING FENCE ON LEFT ADJACENT U.S. GOVERNMENT PROPERTY, TO BE INCLUDED UNDER ITEM #11-1 CLEARING AND GRUBBING, PER LUMP SUM.
SEE NOTE ON PRESENT LAYOUT REGARDING REMOVAL OF CERTAIN TREES OUTSIDE OF R.O.W.
MAIN ENTRANCE TO HOLSTON ORDNANCE PLANT TO BE PAVED WITH SAME MATERIALS & IN SAME QUANTITIES AS SPECIFIED ON TYPICAL X-SECTS. FOR MAIN ROADWAY.

PROPOSED LAYOUT

SCALE 1" = 50'

REVISED 1-12-66. PROFILE EXTENDED FROM STA. 2439+00 TO STA. 2456+00 TO ACHIEVE 475' SIGHT DISTANCE ON CREST CURVE. STA. 2430+50 - 2440+47



1260 SCALE: 1" = 50' HORIZ
1" = 5' VERT

DATE HIGHWAY
Plan File V
Drawn No. 24

REVISED 3-10-61: CORRECTED LOCATION OF
NORTH R.O.W. LINES STA. 2467+24 TO STA.
2467+40 AND OF SOUTH R.O.W. LINE
2467+40 TO STA. 2467+40 TO SHOW DIMENSIONS
BASED ON 1953 PAPER LOCATED LINE INSTEAD
OF ON 1955 SURVEY LINE LAYOUT OF INTER-
SECTION WITH OLD R.T. NOT ALTERED TO
CONFORM WITH AREA. TRACT NO. 173-7
CORRECTED ACCORDINGLY. (SEE SHEET NO. 5-B)

FED. ROAD DIST. NO.	T E N.	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	N.	F-001-5 (30)	1951	4	87

REVISED 5-19-60: PRES. R.O.W. ON SOUTH SIDE,
EXCEPT FROM STA 2466+50 TO PC 2471+20,
CHANGED; ALSO, PROP R.O.W. BOUNDARY CUT-OFF
OF RAMP, CHANGED.
REVISED 6-7-60: BEARINGS, RADII & DISTANCES ADDED
ON TRACT NO. 3-A BOUNDARY.
REVISED 12-7-60: ADDED FENCE ADJACENT
HOLSTON ORDANCE WORKS.

CURVE #1
P.I. (INSIDE EDGE W.B.L. = 3+31.05)
RT = 1' 46' RT
LT = 1' 00'
TT = 88.35
TT = 146.00
RT = 0.68

GRADE & ALIGNMENT
CONTROL LINE ON RT.
EDGE W.B. LANES.

U.S. C. & G.
SURVEY B.M.
#1555

CURVE #4
P.I. 2472+53.0
RT = 10' 06' RT
LT = 4' 00' LT
TT = 126.60
TT = 252.50
RT = 5.58

RADIUS 1407.65
RADIUS 1322.65

STOCK FENCE - ITEM NO. 173-7
ITEM NO. 173-7

STOCK FENCE - ITEM NO. 173-7
ITEM NO. 173-7

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ITEM NO. 173-7

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ITEM NO. 173-7

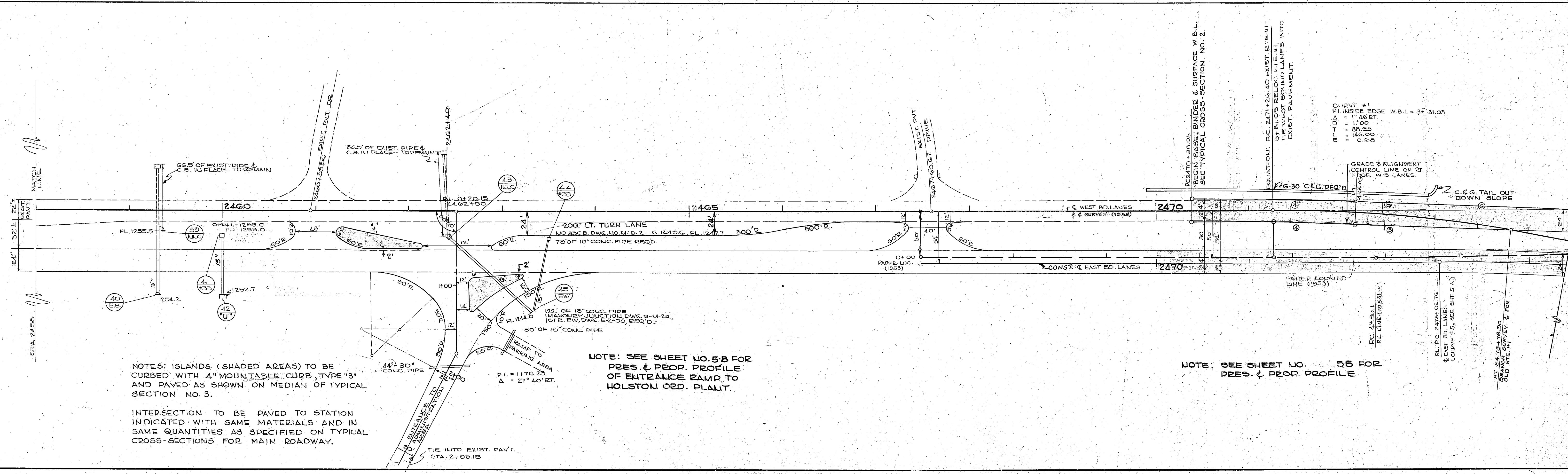
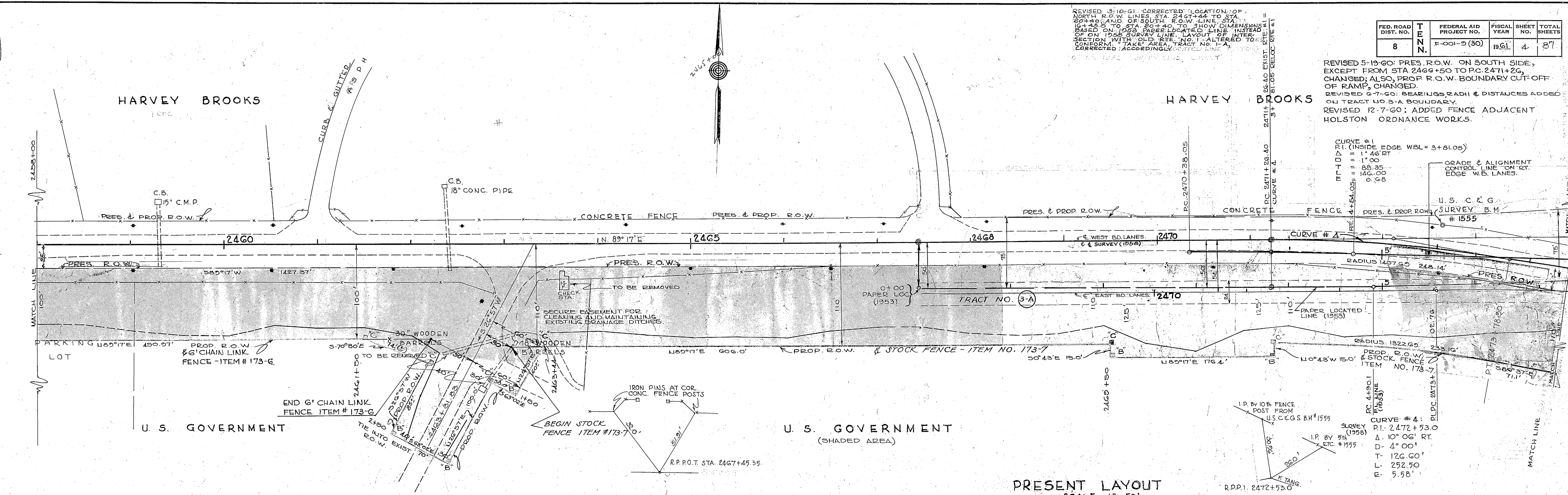
STOCK FENCE - ITEM NO. 173-7
ITEM NO. 173-7

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ITEM NO. 173-7

STOCK FENCE - ITEM NO. 173-7
ITEM NO. 173-7

STOCK FENCE - ITEM NO. 173-7
ITEM NO. 173-7

PRESENT LAYOUT
SCALE 1"=50'



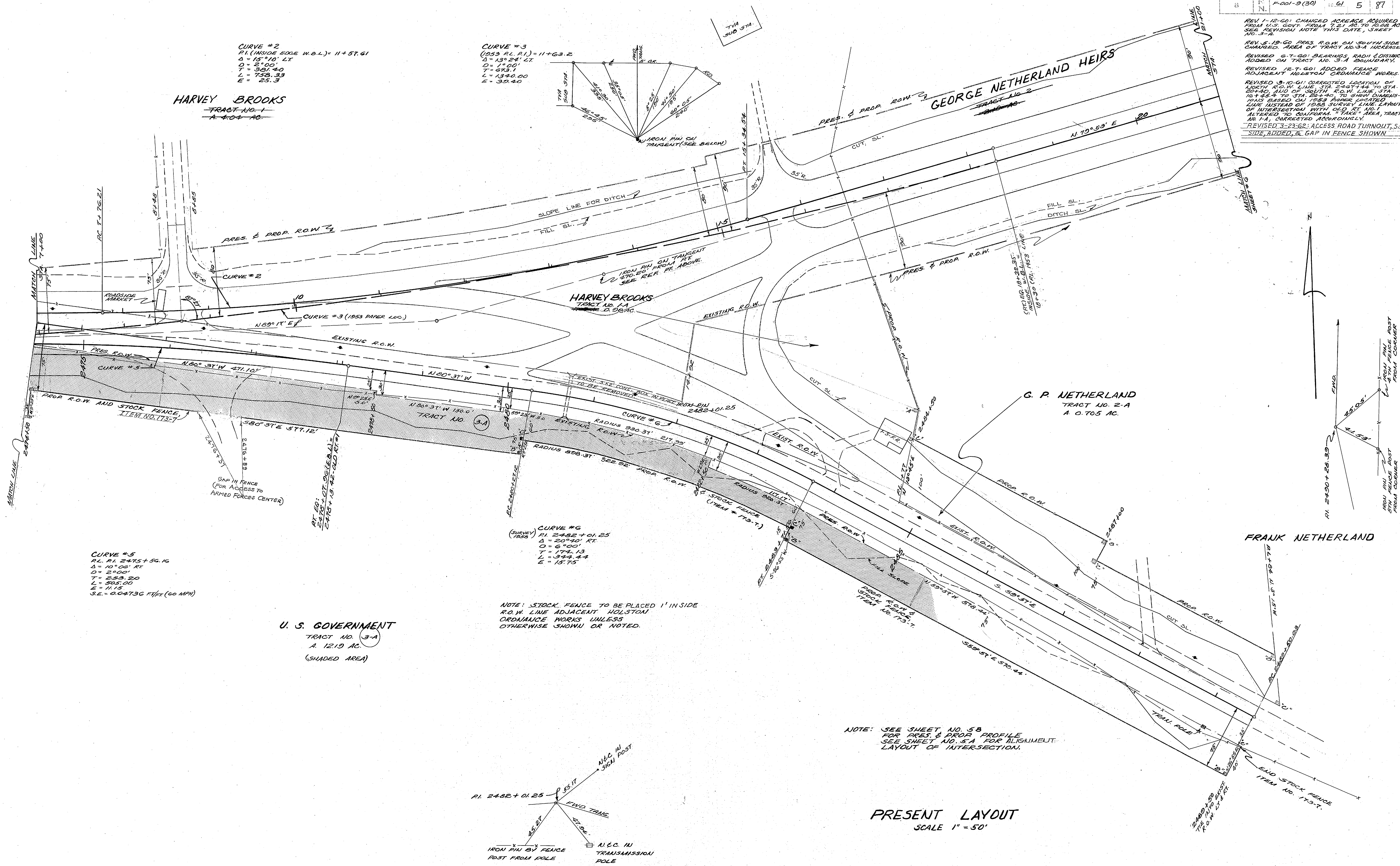
NOTES: ISLANDS (SHADED AREAS) TO BE
CURBED WITH 4" MOUNTABLE CURB, TYPE "B"
AND PAVED AS SHOWN ON MEDIAN OF TYPICAL
SECTION NO. 3.

INTERSECTION TO BE PAVED TO STATION
INDICATED WITH SAME MATERIALS AND IN
SAME QUANTITIES AS SPECIFIED ON TYPICAL
CROSS-SECTIONS FOR MAIN ROADWAY.

NOTE: SEE SHEET NO. 5-B FOR
PRES. & PROP. PROFILE
OF ENTRANCE RAMP TO
HOLSTON ORD. PLANT.

NOTE: SEE SHEET NO. 5-B FOR
PRES. & PROP. PROFILE

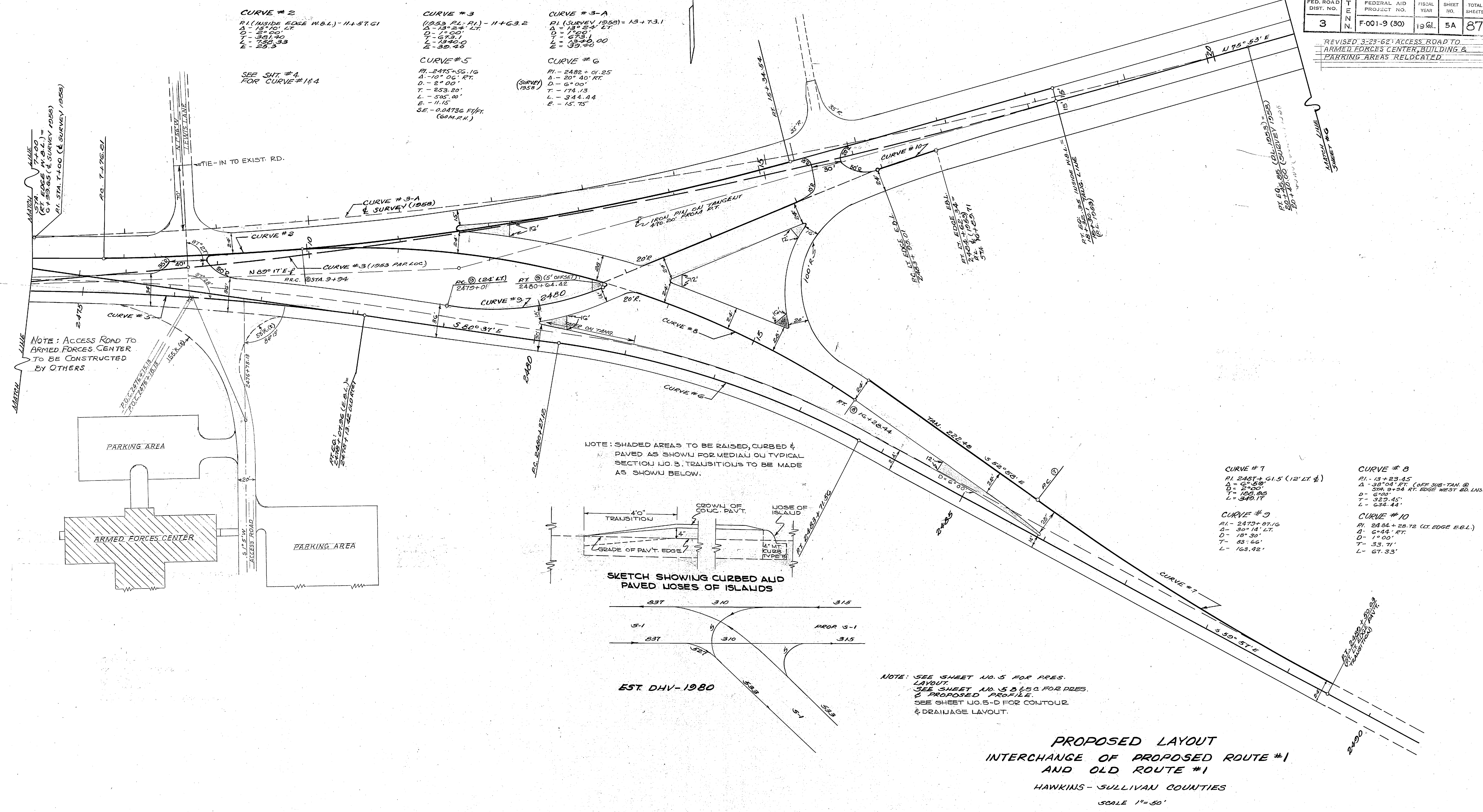
NOTE: THIS SHEET RE-TRACED 3-10-61
REV. 1-12-60: CHANGED ACRES ACQUIRED FROM U.S. GOVT. FROM 7.21 AC. TO 10.68 AC. SEE REVISION NOTE THIS DATE, SHEET NO. 3-A.
REV. 5-19-60: PRES. & PROP. R.O.W. ON SOUTH SIDE CHANGED. AREA OF TRACT NO. 3-A INCREASED.
REVISED 6-1-60: BEARINGS, RADII & DISTANCES ADDED ON TRACT NO. 3-A BOUNDARY.
REVISED 12-1-60: ADDED FENCE, ADJACENT HOUSTON ORDINANCE WORKS.
REVISED 3-10-61: CORRECTED LOCATION OF LEBETH R.O.W. LINE STA. 2457+44 TO STA. 2444+00. AND OF SOUTH R.O.W. LINE STA. 16+48.4 TO STA. 20+40. TO SHOW DIMENSIONS BASED ON 1953 PAPER LOCATED. LINE ADJUSTED TO 1953 SURVEY LINE LAYOUT OF INTERSECTION WITH OLD RT. NO. 1 ALTERED TO CONFORM. "TAKE" AREA, TRACT NO. 1-A, CORRECTED ACCORDINGLY.
REVISED 3-23-62: ACCESS ROAD TURNOUT, S. SIDE, ADDED, & GAP IN FENCE SHOWN

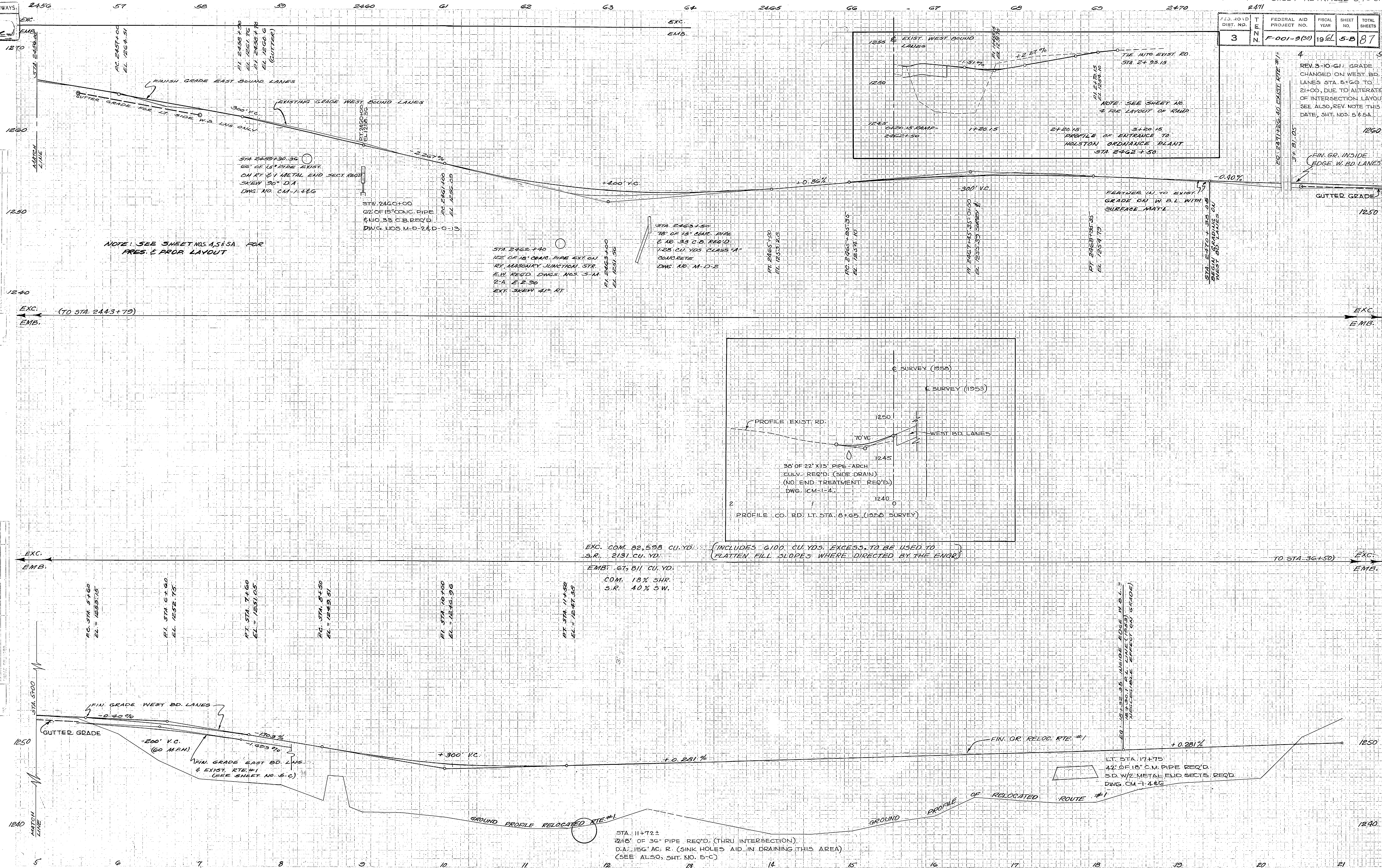


NOTE: THIS SHEET RETRACED 3-10-61
REVISED 3-10-61: CORRECTED LOCATION OF NORTH R.O.W. LINE, STA. 2464+44 TO STA. 20+40, AND OF SOUTH DIMENSIONAL LINES, BASED ON 1958 PHASE LOCATED VALUE INSTEAD OF ON 1958 SURVEY LINE. LAYOUT OF INTERSECTION WITH OLD RT. NO. 1 ALTERED TO CONFORM. "TAKE" AREA, TRACT NO. 1A, CORRECTED ACCORDINGLY.

FED. ROAD DIST. NO.	T E	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	N	F-001-9 (30)	1961	5A	87

REVISED 3-23-62: ACCESS ROAD TO ARMED FORCES CENTER, BUILDING & PARKING AREAS RELOCATED.





SCANNED

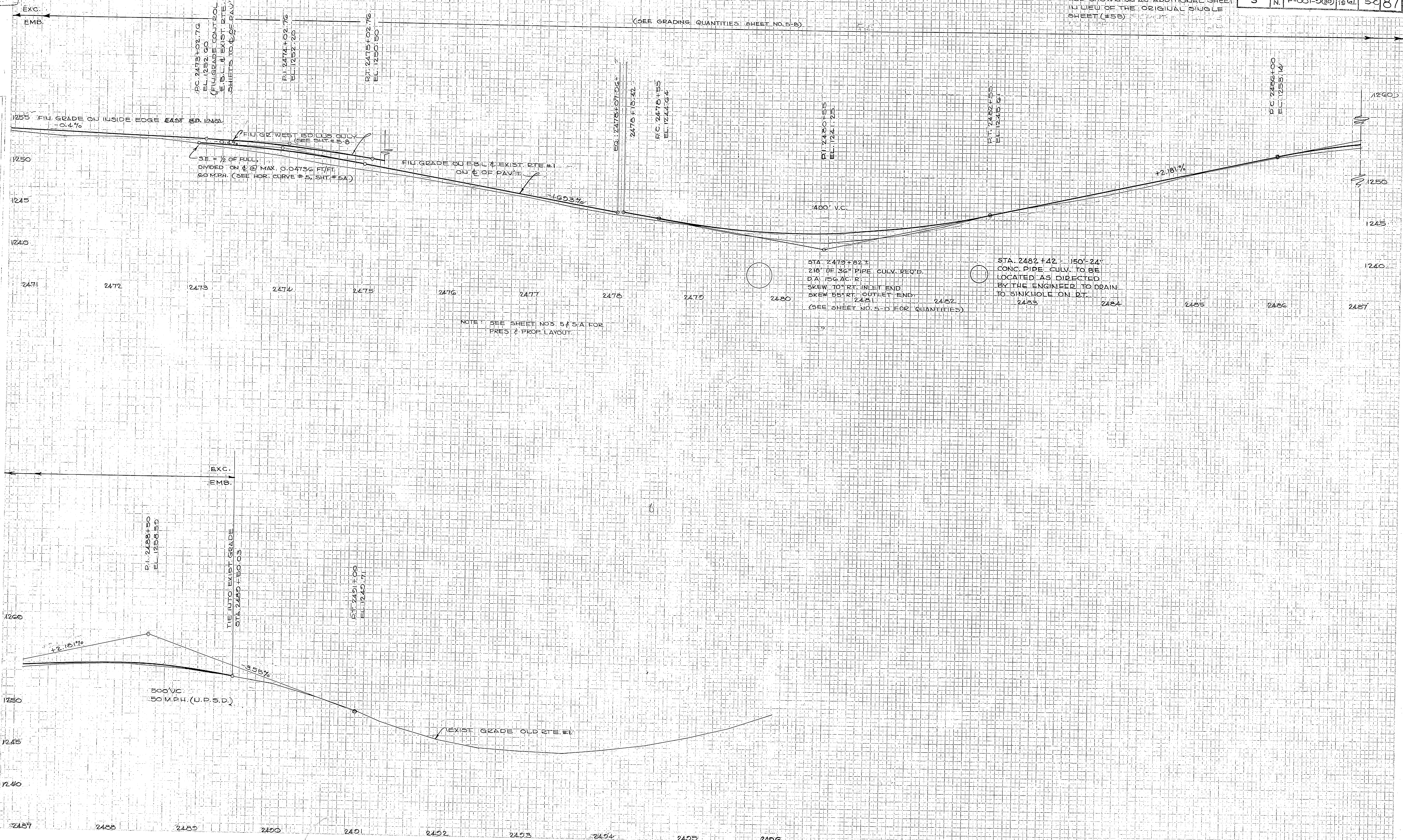
DATE
BY
CHECKED
APPROVED

DATE
BY
CHECKED
APPROVED

REV. 3-10-61: GRADE CHANGED
SLIGHTLY TO COINCIDE BETTER
WITH THE GRADE ON EXISTING RTE #1
AND SHOWN ON AN ADDITIONAL SHEET
IN LIEU OF THE ORIGINAL SINGLE
SHEET (#58)

NOTE: THIS SHEET RETRACED 3-10-61

FED. ROAD DIST. NO.	TENN.	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3		F-001-0(80)	1961	5c	87

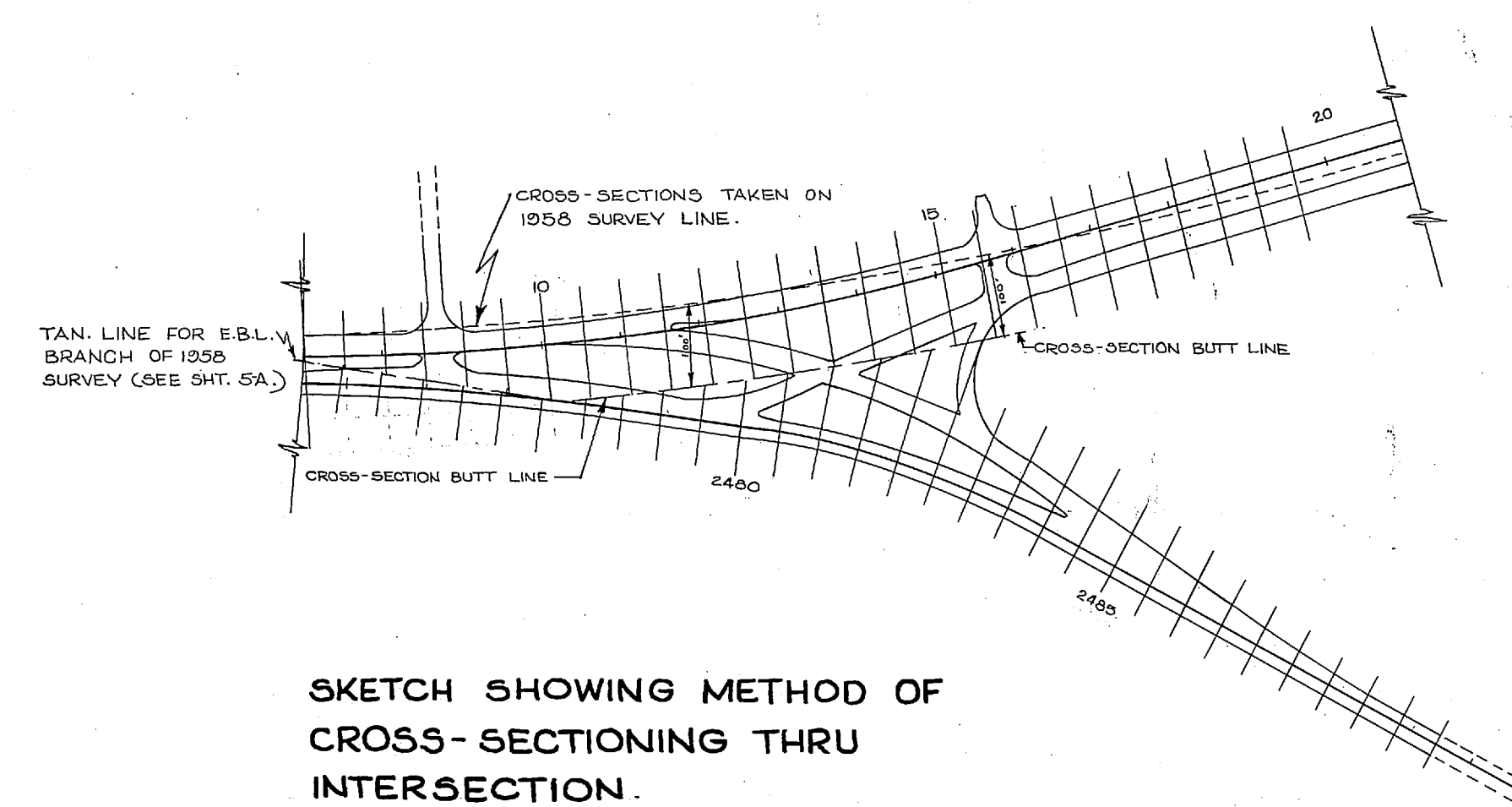
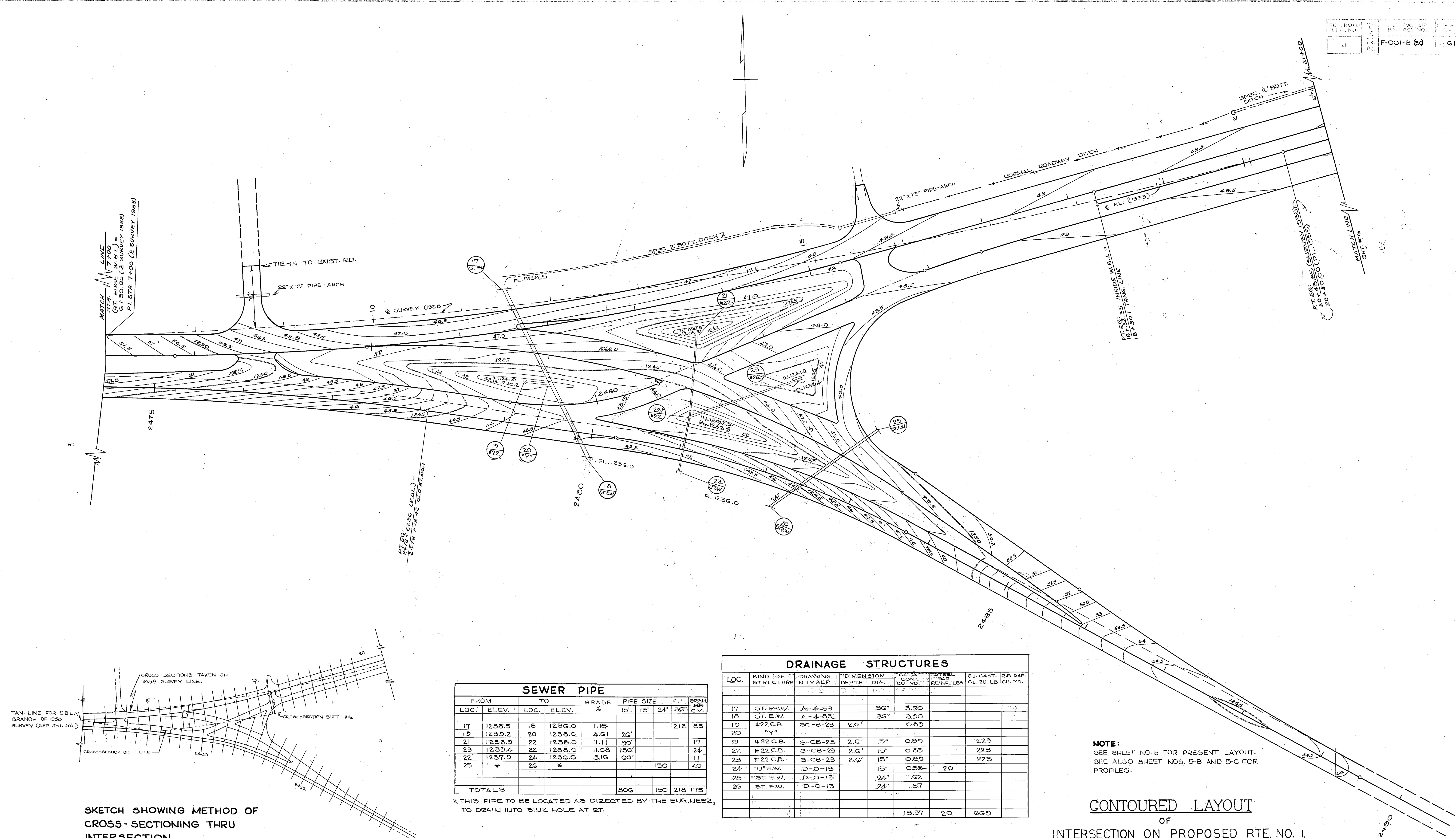


NOTE: SEE SHEET NOS. 5 & 5-A FOR
PRES. & PROP. LAYOUT.

STA. 2479+82 ±
216' OF 36" PIPE CULV. REQ'D.
DATA: 156 AC. R.
SKEW 70' RT. INLET END
SKEW 85' RT. OUTLET END
2481
(SEE SHEET NO. 5-D FOR QUANTITIES)

STA. 2482+42 ± 150' ± 24'
CONC. PIPE CULV. TO BE
LOCATED AS DIRECTED
BY THE ENGINEER TO DRAIN
TO SINKHOLE ON RT.
2483 2484 2485 2486 2487

SCANNED



SKETCH SHOWING METHOD OF
CROSS-SECTIONING THRU
INTERSECTION.

SEWER PIPE						
FROM		TO		GRADE %	PIPE SIZE	
LOC.	ELEV.	LOC.	ELEV.		15"	16"
17	1238.5	18	1236.0	1.15	26'	
19	1235.2	20	1238.0	4.61	26'	
21	1233.9	22	1238.0	1.11	90'	
23	1239.4	22	1238.0	1.08	130'	
22	1237.5	24	1236.0	3.16	60'	
25	*	26	*			150'
TOTALS					306'	150'

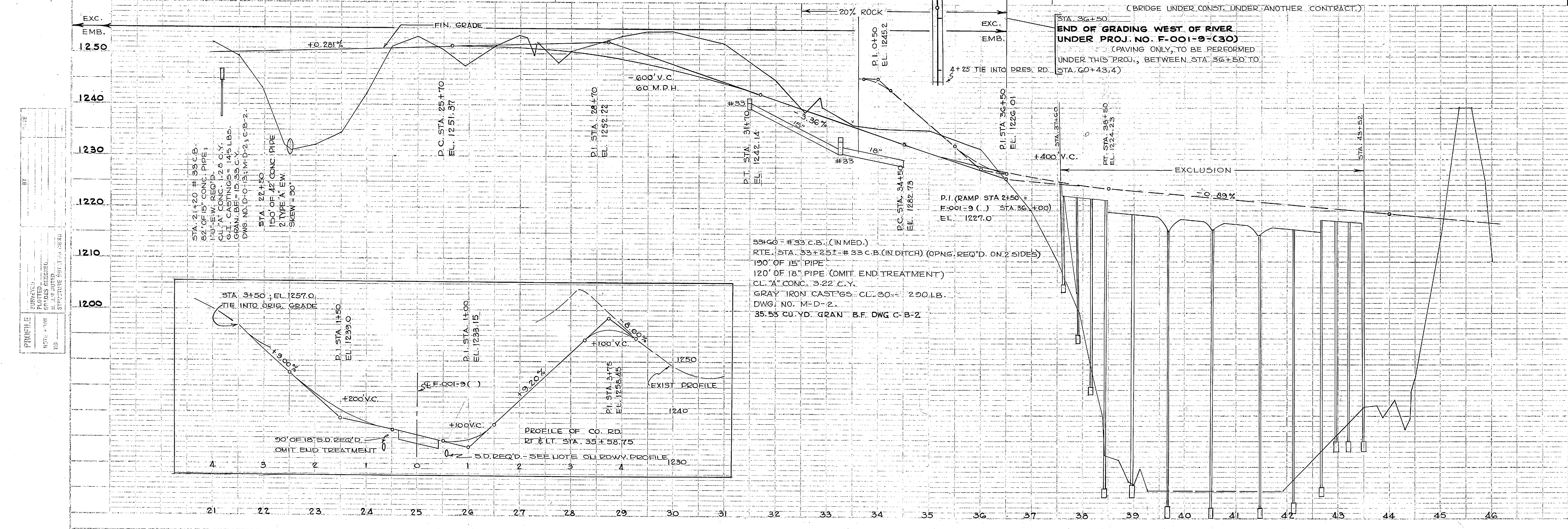
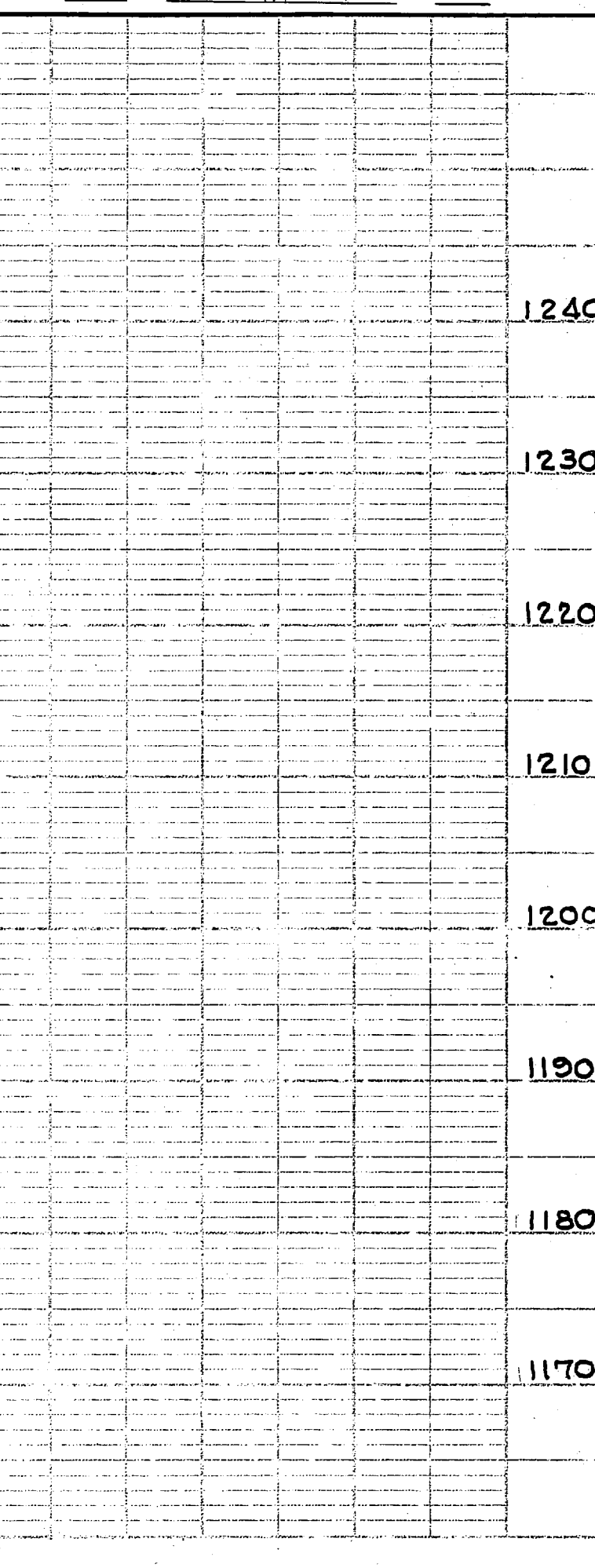
* THIS PIPE TO BE LOCATED AS DIRECTED BY THE ENGINEER,
TO DRAIN INTO SINK HOLE AT RT.

DRAINAGE STRUCTURES						
LOC.	KIND OF STRUCTURE	DRAWING NUMBER	DIMENSION DEPTH	DIA.	CL. 1" CONC. CU. YD.	STEEL BAR REIN. LBS.
17	ST. E.W.	A-4-83		36"	3.90	
18	ST. E.W.	A-4-83		36"	3.90	
19	#22 C.B.	SC-B-23	2.6'		0.89	
20	"V"					
21	#22 C.B.	S-CB-23	2.6'	15"	0.89	223
22	#22 C.B.	S-CB-23	2.6'	15"	0.89	223
23	#22 C.B.	S-CB-23	2.6'	15"	0.89	223
24	"U" E.W.	D-O-13		15"	0.58	20
25	ST. E.W.	D-O-13		24"	1.62	
26	ST. E.W.	D-O-13		24"	1.87	
TOTALS					15.37	20

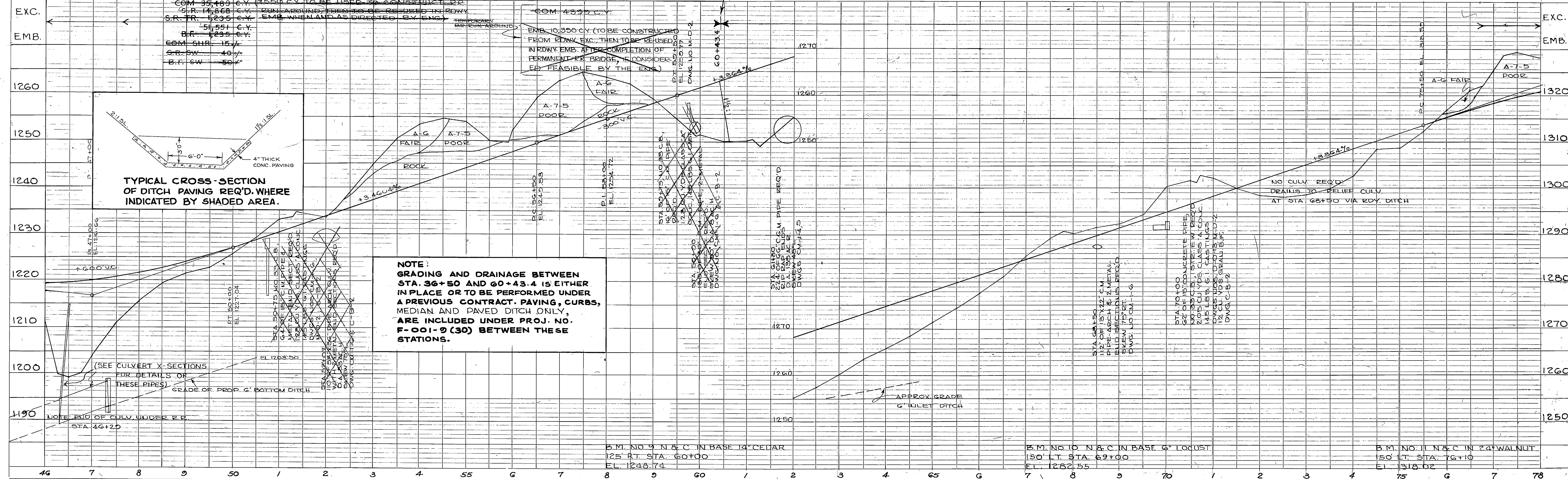
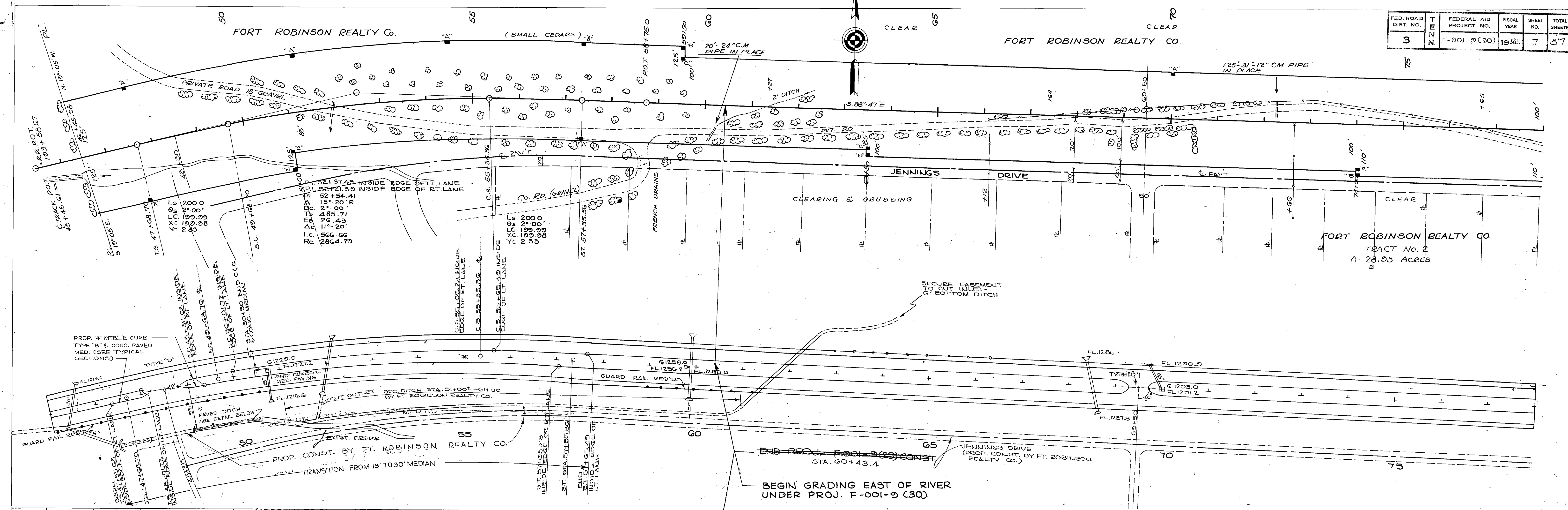
NOTE:
SEE SHEET NO. 5 FOR PRESENT LAYOUT.
SEE ALSO SHEET NOS. 5-B AND 5-C FOR
PROFILES.

CONTOURED LAYOUT
OF
INTERSECTION ON PROPOSED RTE. NO. 1.
AND OLD ROUTE NO. 1.

HAWKINS- SULLIVAN COUNTIES
SCALE 1"=50'



FED. ROAD DIST. NO.	T	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	N	F-001-9(30)	1951	7	87



FED. ROAD DIST. NO.	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	F-001-9 (30)	1961	8	87

REV. 4-10-62: TRACT NO. 2-A ADDED TO SHOW PROP. R.O.W. FOR CONST. OF RAMP AT STA. 86+72.47. ACRES FOR TRACT 2-A SHOWN.

WESTWOOD DEVELOPMENT CO. INC.
TRACT No 3
A: 5.08 ACRES

