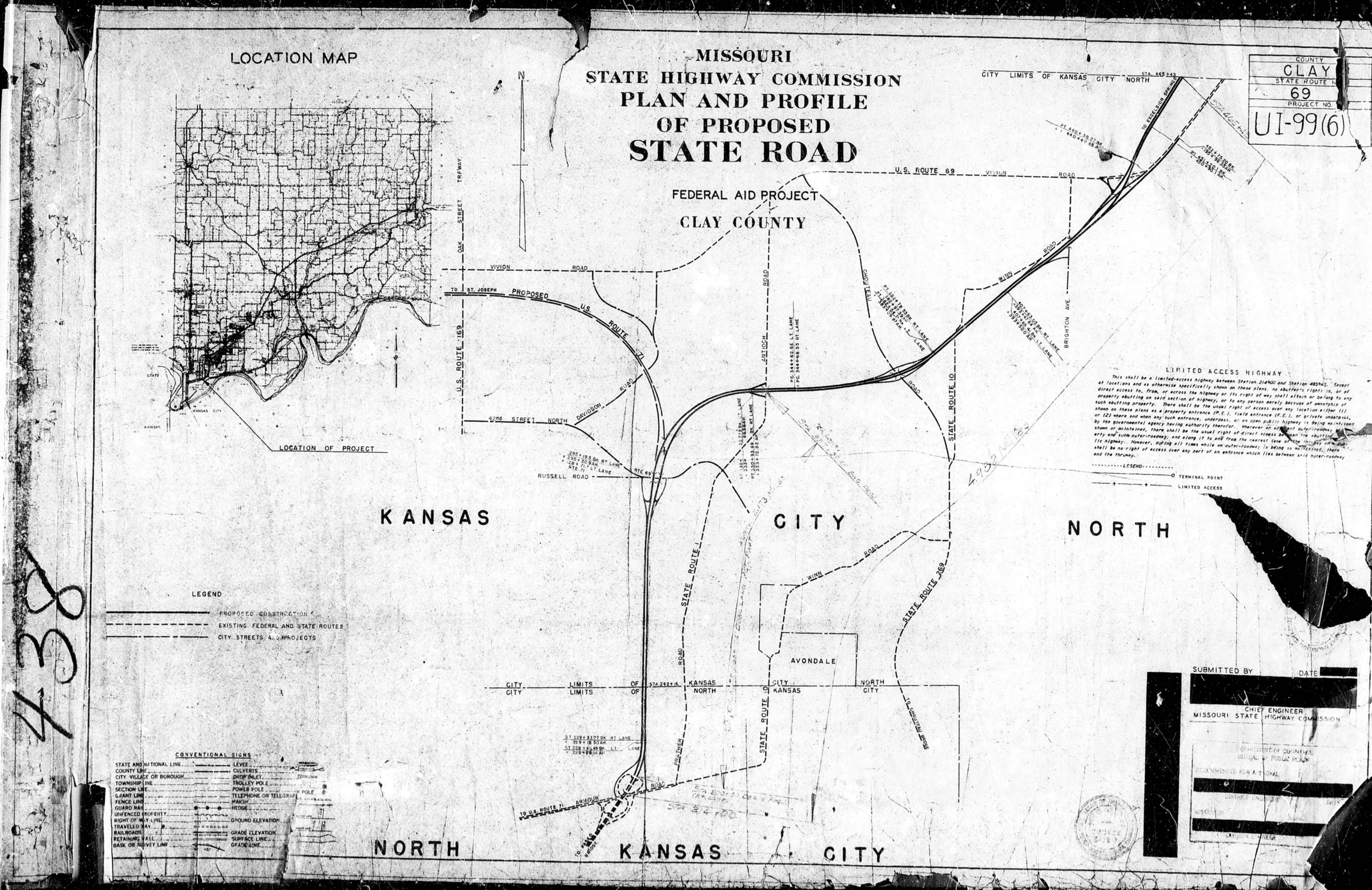
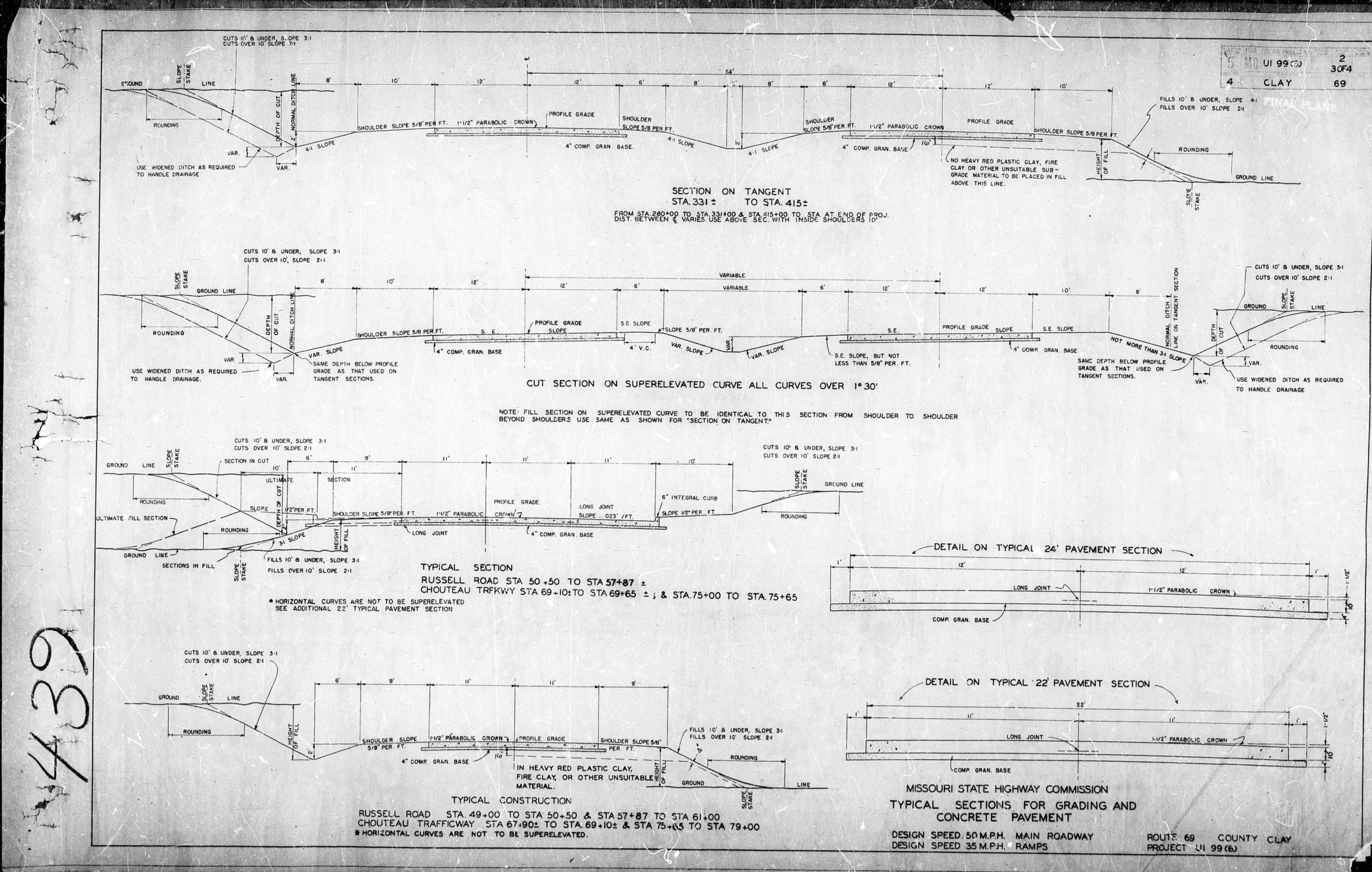
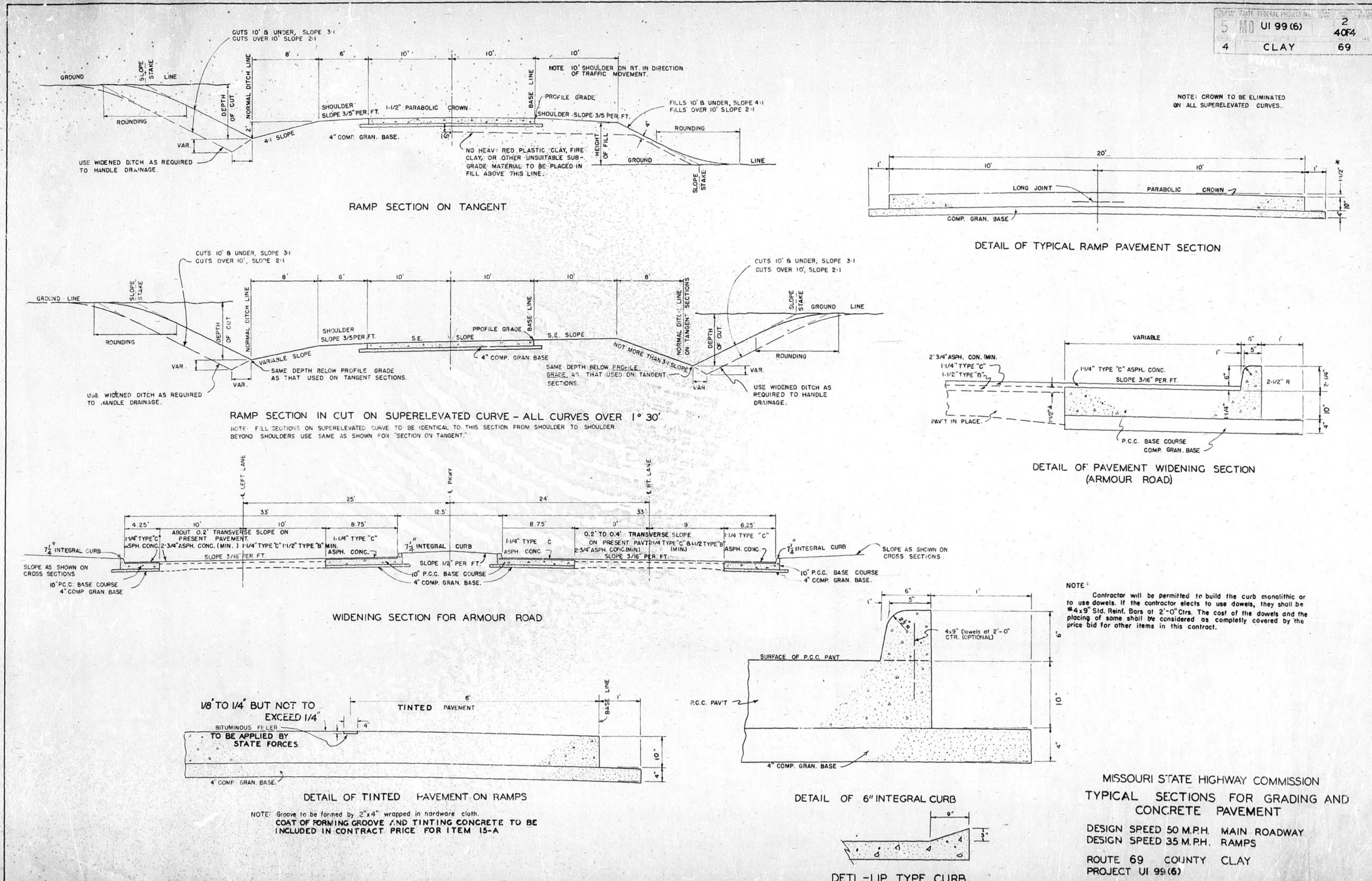

MISSOURI
STATE HIGHWAY COMMISSION
PLAN AND PROFILE
OF PROPOSED
STATE ROAD
FEDERAL AID PROJECT
CLAY COUNTY
LOCATION MAP
LOCATION OF PROJECT
COUNTY
CLAY
STATE ROUTE
69
PROJECT NO.
UI-99(6)
CITY LIMITS OF KANSAS CITY NORTH
U.S. ROUTE 69
VIVION ROAD
TO ST. JOSEPH
PROPOSED U.S. ROUTE 71
U.S. ROUTE 169
OAK STREET TRFWAY
42nd STREET NORTH
DAVIDSON ROAD
RUSSELL ROAD
ANTIOCH ROAD
BRIGHTON AVE.
WINN ROAD
STATE ROUTE 10
STATE ROUTE 1
STATE ROUTE 269
AVONDALE
KANSAS
CITY
NORTH
NORTH KANSAS CITY
CITY LIMITS OF KANSAS NORTH CITY
CITY LIMITS OF KANSAS CITY
LEGEND
PROPOSED CONSTRUCTION
EXISTING FEDERAL AND STATE ROUTES
CITY STREETS AND PROJECTS
CONVENTIONAL SIGNS
LIMITED ACCESS HIGHWAY
TERMINAL POINT
LIMITED ACCESS
SUBMITTED BY
DATE
CHIEF ENGINEER
MISSOURI STATE HIGHWAY COMMISSION
438


SECTION ON TANGENT
STA. 331± TO STA. 415±
FROM STA. 280+00 TO STA. 331+00 & STA. 415+00 TO STA. AT END OF PROJ. DIST. BETWEEN ℄ VARIES USE ABOVE SEC. WITH INSIDE SHOULDERS 10'
CUT SECTION ON SUPERELEVATED CURVE ALL CURVES OVER 1°30'
NOTE: FILL SECTION ON SUPERELEVATED CURVE TO BE IDENTICAL TO THIS SECTION FROM SHOULDER TO SHOULDER BEYOND SHOULDERS USE SAME AS SHOWN FOR "SECTION ON TANGENT."
TYPICAL SECTION
RUSSELL ROAD STA 50+50 TO STA 57+87 ±
CHOUTEAU TRFKWY STA 69+10± TO STA 69+65 ±; & STA. 75+00 TO STA. 75+65
* HORIZONTAL CURVES ARE NOT TO BE SUPERELEVATED SEE ADDITIONAL 22' TYPICAL PAVEMENT SECTION
DETAIL ON TYPICAL 24' PAVEMENT SECTION
DETAIL ON TYPICAL 22' PAVEMENT SECTION
TYPICAL CONSTRUCTION
RUSSELL ROAD STA. 49+00 TO STA 50+50 & STA 57+87 TO STA 61+00
CHOUTEAU TRAFFICWAY STA 67+90± TO STA. 69+10± & STA 75+65 TO STA 79+00
* HORIZONTAL CURVES ARE NOT TO BE SUPERELEVATED.
MISSOURI STATE HIGHWAY COMMISSION
TYPICAL SECTIONS FOR GRADING AND CONCRETE PAVEMENT
DESIGN SPEED 50 M.P.H. MAIN ROADWAY
DESIGN SPEED 35 M.P.H. RAMPS
ROUTE 69 COUNTY CLAY
PROJECT UI 99 (6)
UI 99 (6)
3 OF 4
CLAY
69
439
488



MISSOURI STATE HIGHWAY COMMISSION

TYPICAL SECTIONS FOR GRADING AND CONCRETE PAVEMENT

DESIGN SPEED 50 M.P.H. MAIN ROADWAY
DESIGN SPEED 35 M.P.H. RAMPS

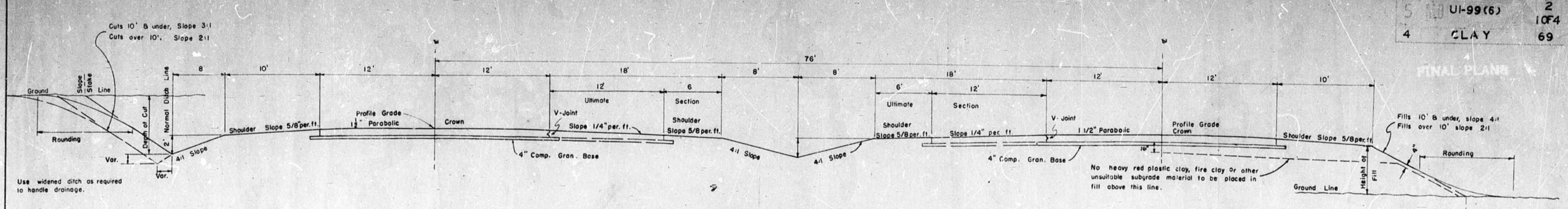
ROUTE 69 COUNTY CLAY
PROJECT UI 99(6)

440

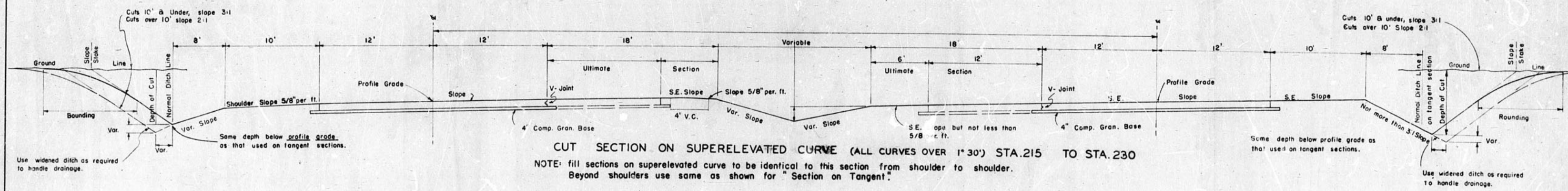
488

5	MO	U1-99(6)	2 / 1 OF 4
4		CLAY	69

FINAL PLANS



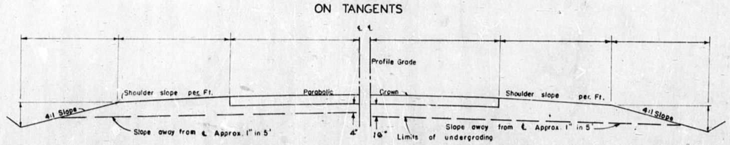
SECTION ON TANGENT
STA. 230+ TO STA. 276+



CUT SECTION ON SUPERELEVATED CURVE (ALL CURVES OVER 1° 30') STA. 215 TO STA. 230

NOTE: fill sections on superelevated curve to be identical to this section from shoulder to shoulder. Beyond shoulders use same as shown for "Section on Tangent".

HALF SECTIONS IN CUTS
ON TANGENTS



IN "CLASS C" OR
LEDGE SANDSTONE

IN HEAVY RED PLASTIC CLAY, FIRE CLAY,
OR OTHER UNSUITABLE MATERIAL

NOTE: On superelevated curves, undergrading to parallel the superelevation, and other details from ditch line to ditch line shall be identical to those shown for "Cut Sections on Superelevated Curves."

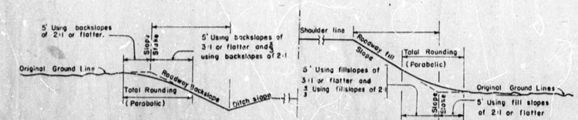
For paylimits of overbreak and backfill, see specifications.

GENERAL NOTES:

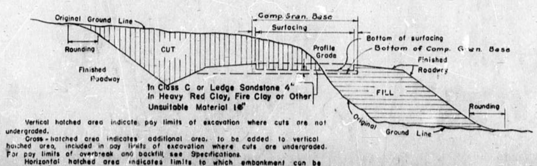
For details of superelevation and widening of horizontal curves, all pavement appurtenances, drainage items, etc., see other drawings.

In transitioning from one cut or fill slope to another, use a 25' transition beginning at a point 25' back along that which would normally be the flatter slope and ending the transition at the actual point where the steeper slope is required. If the actual limits requiring a steeper slope is less than 25' in length, do not change to the steeper slope.

All information shown on these Typical Sections is for the purpose of indicating general design and construction details. Actual construction of roadway widths, slopes, depths, and type of ditches, undergraded cuts, and other features, shall conform to the details shown on Cross Sections and Plan Profile sheets or as directed by the Engineer.



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



Vertical hatched area indicate pay limits of excavation where cuts are not undergraded.
Cross-hatched area indicates additional area to be added to vertical hatched area, included in pay limits of excavation where cuts are undergraded.
For pay limits of overbreak and backfill see Specifications.
Horizontal hatched area indicates limits to which embankment can be constructed.

SKETCH SECTION SHOWING EXCAVATION PAY LIMITS

MISSOURI STATE HIGHWAY COMMISSION

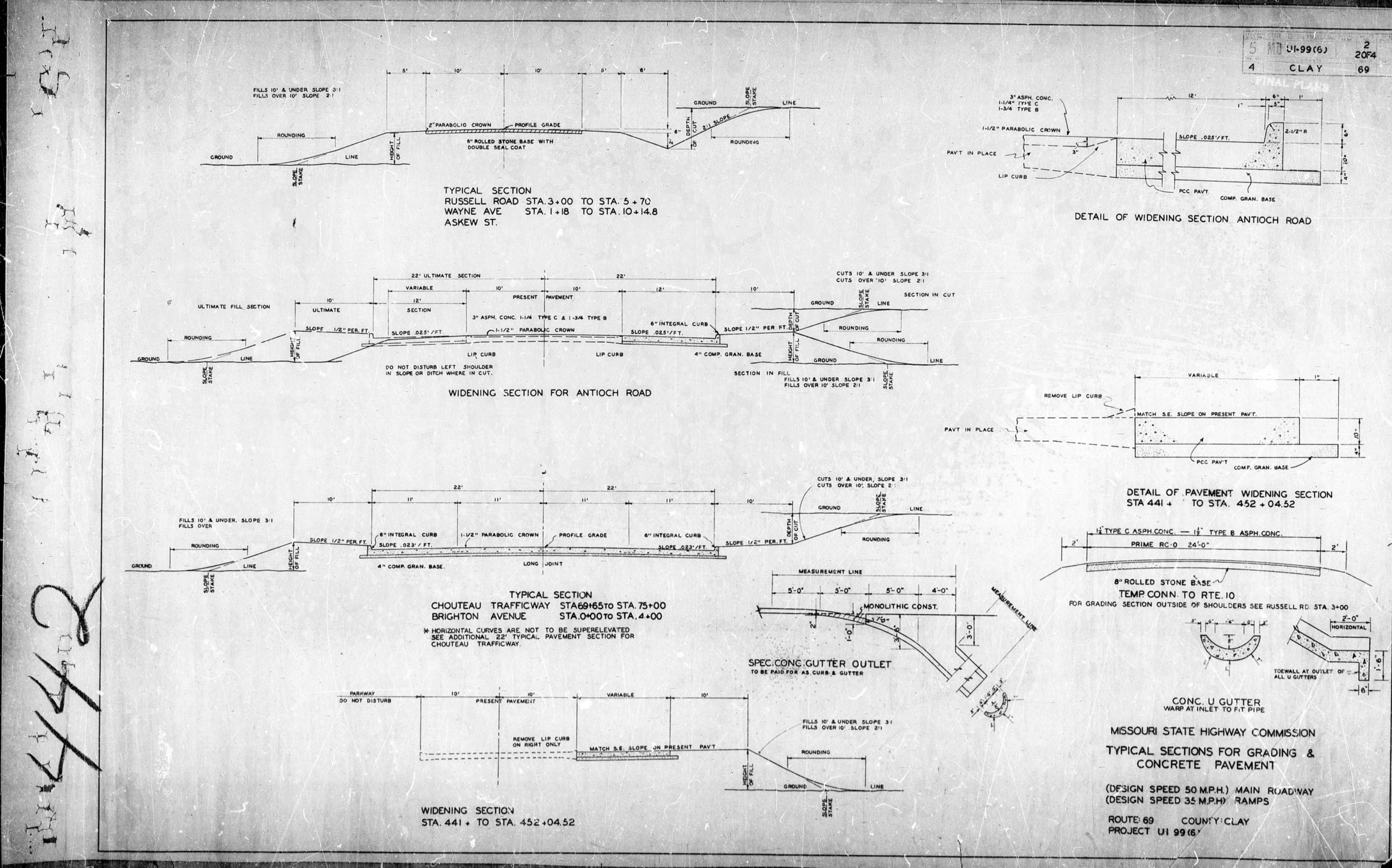
TYPICAL SECTIONS FOR GRADING AND CONCRETE PAVEMENT

(DESIGN SPEED 50 M.P.H.) MAIN ROADWAY
(DESIGN SPEED 35 M.P.H.) RAMPS

ROUTE: 69 COUNTY: CLAY
PROJECT U.I-99(6)

441

488



U1-99(6) 2 2OF4
4 CLAY 69
FINAL PLANS
FILLS 10' & UNDER SLOPE 3:1
FILLS OVER 10' SLOPE 2:1
2" PARABOLIC CROWN
PROFILE GRADE
8" ROLLED STONE BASE WITH DOUBLE SEAL COAT
ROUNDING
GROUND
LINE
SLOPE STAKE
HEIGHT OF FILL
DEPTH OF CUT
2:1 SLOPE
TYPICAL SECTION
RUSSELL ROAD STA. 3+00 TO STA. 5+70
WAYNE AVE STA. 1+18 TO STA. 10+14.8
ASKEW ST.
3" ASPH. CONC.
1-1/4" TYPE C
1-3/4 TYPE B
1-1/2" PARABOLIC CROWN
PAV'T IN PLACE
LIP CURB
SLOPE .025'/FT.
PCC PAVT.
COMP. GRAN. BASE
DETAIL OF WIDENING SECTION ANTIOCH ROAD
22' ULTIMATE SECTION
VARIABLE
PRESENT PAVEMENT
ULTIMATE FILL SECTION
ULTIMATE
12' SECTION
3" ASPH. CONC. 1-1/4 TYPE C & 1-3/4 TYPE B
SLOPE 1/2" PER FT.
SLOPE .025'/FT
1-1/2" PARABOLIC CROWN
8" INTEGRAL CURB
4" COMP. GRAN. BASE
DO NOT DISTURB LEFT SHOULDER IN SLOPE OR DITCH WHERE IN CUT.
CUTS 10' & UNDER SLOPE 3:1
CUTS OVER 10' SLOPE 2:1
SECTION IN CUT
SECTION IN FILL
FILLS 10' & UNDER SLOPE 3:1
FILLS OVER 10' SLOPE 2:1
WIDENING SECTION FOR ANTIOCH ROAD
REMOVE LIP CURB
MATCH S.E. SLOPE ON PRESENT PAVT.
PAVT IN PLACE
PCC PAV'T
COMP. GRAN. BASE
DETAIL OF PAVEMENT WIDENING SECTION
STA 441+ TO STA. 452+04.52
FILLS 10' & UNDER, SLOPE 3:1
FILLS OVER
6" INTEGRAL CURB
SLOPE .023'/FT.
LONG JOINT
TYPICAL SECTION
CHOUTEAU TRAFFICWAY STA.69+65 TO STA. 75+00
BRIGHTON AVENUE STA. 0+00 TO STA. 4+00
* HORIZONTAL CURVES ARE NOT TO BE SUPERELEVATED SEE ADDITIONAL 22' TYPICAL PAVEMENT SECTION FOR CHOUTEAU TRAFFICWAY.
MEASUREMENT LINE
MONOLITHIC CONST.
SPEC. CONC. GUTTER OUTLET
TO BE PAID FOR AS CURB & GUTTER
1-1/2" TYPE C ASPH. CONC. — 1-1/2" TYPE B ASPH. CONC.
PRIME RC-0 24'-0"
8" ROLLED STONE BASE
TEMP. CONN. TO RTE. 10
FOR GRADING SECTION OUTSIDE OF SHOULDERS SEE RUSSELL RD. STA. 3+00
HORIZONTAL
TOEWALL AT OUTLET OF ALL U GUTTERS
CONC. U GUTTER
WARP AT INLET TO FIT PIPE
PARKWAY DO NOT DISTURB
PRESENT PAVEMENT
REMOVE LIP CURB ON RIGHT ONLY
MATCH S.E. SLOPE ON PRESENT PAV'T
WIDENING SECTION
STA. 441+ TO STA. 452+04.52
MISSOURI STATE HIGHWAY COMMISSION
TYPICAL SECTIONS FOR GRADING & CONCRETE PAVEMENT
(DESIGN SPEED 50 M.P.H.) MAIN ROADWAY
(DESIGN SPEED 35 M.P.H.) RAMPS
ROUTE: 69 COUNTY: CLAY
PROJECT U1 99(6)
442

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MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

LOCATION ____________

TYPE ____________

FED. ROAD DIST. No.	STATE	PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	MO.	UI-99(6)		2A3	
DIST. No.	**COUNTY**			**ROUTE**	**SEC. No.**
4	CLAY			69	

LENGTH OF PROJECT

End of Project	Station	
Beginning of Project	Station	
Apparent Length		Feet
Equations and Exceptions:		
Total Corrections		Feet
Net Length of Project		Feet
State Length =		Miles
Federal Length =		Miles

GENERAL SUMMARY

DESCRIPTION

Item No.	Description	Unit	Total Units
	BRIDGE AT STA. 228+68.98 (Lt. La.) (Dwg. No. L-605)		
1-I	Class 3 Excavation for Structures	Cu. Yd.	916.5
16-B	Class B Concrete	Cu. Yd.	823.9
19-A	Reinforcing Steel	LB.	114,875
	BRIDGE AT STA. 311+47.38 (Rt. La.) (Dwg. No. L-606)		
1-I	Class 3 Excavation for Structures	Cu. Yd.	3727.0
16-B	Class B Concrete	Cu. Yd.	1103.3
19-A	Reinforcing Steel	LB	131,720
	CONTINGENT ITEMS		
	4" Wall Drains	Each	16
	Crushed Stone in Footing	Ton	54.3
	BRIDGE AT STA. 294+13.25 (Lt. La.) (Dwg. No. L-659)		
1-G	Class 1 Excavation for Structures	Cu. Yd.	164.5
16-B	Class B Concrete (Superstr. incl. Rail Posts	Cu. Yd.	365.4
16-B	Class B Concrete (Substructure)	Cu. Yd.	132.9
17-E	Gray Iron Alloy Castings	LB.	3610
17-J	Aluminum Alloy Handrails	Lin. Ft.	215
19-A	Reinforcing Steel	LB.	104990
22-DD	Steel Piles in Place (State Furnished)	Lin. Ft.	1201
	BRIDGE AT STA. 294+24.15 (Rt. La.) (Dwg. No. L-660)		
1-G	Class 1 Excavation for Structures	Cu. Yd.	360
16-B	Class B Concrete (Superstr. incl. Rail Posts)	Cu. Yd.	398.1
16-B	Class B Concrete (Substructure)	Cu. Yd	174.2
17-E	Gray Iron Alloy Castings	LB	3610
17-J	Aluminum Alloy Handrails	Lin. Ft	245
19-A	Reinforcing Steel	LB.	119860
22-DD	Steel Piles in Place (State furnished)	Lin. Ft.	678
	CONTINGENT ITEMS		
	Cl. 1 Excavation for Structs. below plan grade	Cu. Yd.	3
	Drilling Test Holes	Lin. Ft.	54
	BRIDGE AT STA. 336+72.35 (Rt. La.) (Dwg. No. L-653)		
1-G	Class 1 Excavation for Structures	Cu. Yd	172
16-B	Class B Concrete (Superstr. incl. Rail posts)	Cu. Yd.	285.0
16-B	Class B Concrete (Substructure)	Cu. Yd.	96.8
17-E	Gray Iron Alloy Casting	LB.	2630
17-J	Aluminum Alloy Handrail	Lin. Ft.	225
19-A	Reinforcing Steel	LB.	78160
22-DD	Steel Piles in place (State furnished)	Lin. Ft.	907
	BRIDGE AT STA. 336+72.95 (Lt. La.) (Dwg. No. L-654)		
1-G	Class 1 Excavation for Structures	Cu. Yd.	161.5
16-B	Class B Concrete (Superstr. - incl. Rail Post)	Cu. Yd.	285.0
16-B	Class B Concrete (Substructure)	Cu. Yd.	97.1
17-E	Gray Iron Alloy Castings	LB.	2630
17-J	Aluminum Alloy Handrail	Lin. Ft.	225
19-A	Reinforcing Steel	LB.	78250
22-DD	Steel Pile in Place (State furnished)	Lin. Ft.	897
	CONTINGENT ITEMS		
	Class 1 Excavation for Structs. below plan grade	Cu. Yd.	3

Contingent Items: (Cont)

Left Over 15" CMP	Lin. Ft.	86

GENERAL SUMMARY — FINAL PLANS

ITEM NO.	DESCRIPTION	UNIT	TOTAL UNITS	NO. UNITS FED. AID ONLY
1-A	Clearing	Acre	53.9	
1-B	Grubbing	Acre	18.9	
1-D	Class A Excavation	Cu. Yd.	715352	
1-E	Class C Excavation	Cu. Yd.	4463	
1-I	Class 3 Excavation For Structures	Cu. Yd.	5001.5	
1-K	Compacting Embankments (Rolling)	Cu. Yd.	600780	
1-L	Compacting in Cuts (Rolling)	Cu. Yd.	403	
1-M	Overhaul	Sta. Yd.	5,237,183	
1-BA	Water (Compacting-Rolling)	100 Gal.	0	
3-A	Portland Cement Concrete Base Course (10")	Sq. Yd.	5726.1	
13-D	Crushed Stone Surface	Cu. Yd.	107	
15-A	Portland Cement Concrete Pavement (10")	Sq. Yd.	87392.2	
15-B	Approach Slab For Bridges	Sq. Yd.	547.7	
16-B	Class B Concrete (Box Culverts)	Cu. Yd.	361.5	
16-B	Class B Concrete (Other than Box Culverts)	Cu. Yd.	92.1	
18-B	15" Corrugated Metal Culvert Pipe (Ent. & S.R.)	Lin. Ft.	102	
18-B	18" Corrugated Metal Culvert Pipe (Ent. & S.R.)	Lin. Ft.	86	
18-B	30" Corrugated Metal Culvert Pipe (Ent. & S.R.)	Lin. Ft.	50	
18-C	12" Reinf. Concrete Culvert Pipe (X-Rd.)	Lin. Ft.	1381	
18-C	15" Reinf. Concrete Culvert Pipe (X-Rd.)	Lin. Ft.	634	
18-C	18" Reinf. Concrete Culvert Pipe (X-Rd.)	Lin. Ft.	711	
18-C	24" Reinf. Concrete Culvert Pipe (X-Rd.)	Lin. Ft.	1969	
18-C	36" Reinf. Concrete Culvert Pipe (X-Rd.)	Lin. Ft.	242	
18-C	12" Reinf. Concrete Culvert Pipe	Lin. Ft.	338	
18-C	15" Reinf. Concrete Culvert Pipe	Lin. Ft.	685	
18-C	30" Extra Strength Conc. Culvert Pipe	Lin. Ft.	198	
18-CC	24" Reinf. Conc. Culv. Pipe (Imperfect trench)	Lin. Ft.	122	
18-CC	30" Reinf. Conc. Culv. Pipe (Imperfect trench)	Lin. Ft.	176	
19-A	Reinforcing Steel	LB.	64,430	
23-D	Grouted Heavy Stone Revetment	Sq. Yd.	274.3	
24-A	Class A (Type 1) Underdrains	Lin. Ft.	4702	
24-C	6" Class B (Plain) C.M. Pipe Underdrain	Lin. Ft.	180	
25-A	Concrete Protection Curb	Lin. Ft.	342.2	
25-B	Concrete Curb & Gutter	Lin. Ft.	1129.4	
25-D	Concrete Gutter	Lin. Ft.	785.5	
25-BB	Paved Approach (7")	Sq. Yd.	35.8	
25-BB	Paved Approach (8")	Sq. Yd.	180.6	
25-H	Surface Drain Basins, 8 Ft. (L.P.)	Each	2	
25-I	Surface Drains	Lin. Ft.	7.0	
27-A	Guard Rail (Type 1)	Lin. Ft.	263	
28-A	Barricades	Each	2	
28-B	Relocating Barricades	Each	0	
28-C	Standard Signs, Flags, & Flagging	Lump Sum	1	
27-B	Metal Gates	Each	2	
29-C	Right of Way Markers	Each	95	
29-D	Drain Markers	Each	69	
36-A	Grates and Bearing Plates	LB.	1800	
36-C	Manhole Frame & Cover	Each	6	
37-A	Fertilizing & Mulching	Acre	46.6	
	6" ROLLED STONE BASE			
1-BA	Water	100 Gal.	195	
2-A	Aggregate (Gradation A)	Ton	1031	
2-B	Spreading, Shaping & Compacting	Sq. Yd.	3305	
	4" COMPACTED GRANULAR BASE FOR A.C.C. PAV'T & P.C.C. BASE COURSE			
1-BA	Water	100 Gal.	4238	
3C-A	Granular Base Material	Ton	23,318	
3C-B	Spreading, Shaping & Compacting	Mile	6.84	
	ASPHALTIC CONCRETE PAVEMENT			
4C-A	Primer (MC-0)	Gal.	1170	
4C-B	Sanding Primer	Ton	19	
7-B	Type B Asphaltic Concrete	Ton	900	
7-C	Type C Asphaltic Concrete	Ton	1092	
7-D	Asphaltic Concrete Wedge Course	Ton	113	
	DOUBLE SEAL COAT CLASS A (on 6" Rolled Stone Base)			
4C-A	Primer (MC-0)	Gal.	680	
10B-A	Bituminous Material (MC-4)	Gal.	1970	
10B-B	Cover Material	Ton	74	
	THIN PAVEMENT DEDUCTIONS			
	Station 241+40 to 241+60 (Rt. Lane)			
	$\frac{20 \times 12}{9} \times (16\% \, \$4.42) = \$17.68$			
	CONTINGENT ITEMS			
	Compacted Asphaltic Samples	Each	5	
	D-4 Force Account	Each	1	
18B-A	120" Corr. Metal Sectional Plate Pipe	Lin. Ft.	220	
18-DB	18" Corr. Metal (Bituminous Coated) Pipe	Lin. Ft.	58	

Prepared By ________ Date ________ 19__ Checked in Dist. Office By ________ Date ________ 19__ Checked in Central Office By ________ Date ________ 19__ Revised By ________ Date ________ 19__

4443

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MISSOURI STATE HIGHWAY COMMISSION
SUMMARY OF QUANTITIES

LOCATION ARMOUR ROAD IN NORTH KANSAS CITY, NORTHEASTERLY TO ANTIOCH ROAD (Rte. 1)

TYPE GE, CULVERTS, BRIDGES, & TWO P.C.C. PAVT'S EACH 24 FT. WIDE

FED. ROAD DIST. No.	STATE	PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	MO.	UI-99(6)		2A	
DIV. No.	COUNTY			ROUTE	SEC. No.
4	CLAY			69	

EXCAVATION

Station	to Station	Lane	Class A	Undergrade Class A	Class C	O'Haul	Comp. in Cuts	Unauth. Class A	Embank.	Backfill	Comp. Embank.	Unauth. Embank.	Waste	Remarks
0-100	19+66	Armour Rd.	1971						1684	74	1654			
220+00	289+70	Lt.												includes Ramp A 211+63-225+16, Ramp D 216+31.1-224+97.5, Ramp E 284+00-290+18, Ramp F 286+00-289+88
220+00	289+60	Rt.	352503	4364	2447	4623083		337	302338	4935	300259	143	3637	
289+70	314+50	Lt.												includes Ramp E 290+18-294+65, Ramp F 289+38-295+00
289+60	313+60	Rt.	193984	232	2016	614100	403		169289	591	169474		1867	
0+50	9+93	Wayne Ave.	9035						7653		6646		170	
48+20	51+18	Russell Rd.	29194						25	14	39			includes conn. old Russell Rd. to Wayne Ave. 2+20-5+49
51+18	61+50	Russell Rd.	15321						15037	36	14881		46	
112+50	118+44	Lt. Lo. Rte. 71	7486						26586		26586			
121+60	125+00	Lt. Lo. Rte. 71	16253						136	8	144			
114+00	126+00	Rt. Lo. Rte. 71	13068						18942	6	18947			
314+50	325+00	Lt.												
313+60	325+40	Rt.	20197	753					18887	835	19565		150	
325+00	336+06	Lt.												
323+40	336+06	Rt.	39602	1583					36467	1688	38155			
336+06	339+92.4	Rt. & Lt.	5373						3585	24	3341		180	
295+26.5	306+50	Antioch Rd.	1663						612	25	640			
SUBTOTALS			705650	6932	4463	5237183	403	337	601241	8236	600531	143	6050	
Chan.Chan.			2260											
Inlets			431											
P.E.'s, S.Rds.			79						1439		249			
TOTALS			708420	6932	4463	5237183	403	337	602680	8236	600780	143	6050	See Sp. Provisions for add. Waste

LENGTH OF PROJECT

End of Project	Rt. Lane	Station	337+39.85	
Beginning of Project	Rt. Lane	Station	220+00	
Apparent Length			11,739.85	Feet
Equations and Exceptions:				
229+33.77 Bk. = 229+18.5 Ah.		+ 15.27		
291+00.7 Bk. = 291+00.2 Ah.		+ 0.50		
295+60.15 Bk. = 295+63.9 Ah.		- 3.75		
299+79.3 Bk. = 299+73.3 Ah.		+ 6.00		
325+48.7 Bk. = 325+48.3 Ah.		+ 0.40		
330+93.7 Bk. = 333+72.8 Ah.		- 279.10		
Total Corrections			-260.68	Feet
Net Length of Project			11,479.17	Feet
State Length =			2.174	Miles
Federal Length =			2.174	Miles

~~GENERAL SUMMARY~~ FINAL PLANS

ITEM NO.	DESCRIPTION	UNIT	TOTAL UNITS	NO. UNITS FED. AID ONLY

CLEARING & GRUBBING

Sheet No.	Clearing Units	Grubbing Units
3	393	149
4	1997	801
5	971	264
6	1262	421
7	71	14
TOTALS	4694	1649
Acres	539	18.9

FERT. & MULCH.

Sheet No.	Sq. Ft.	Acres
3	347959.15	
4	435712.60	
5	778578.01	
6	373247.63	
7	95269.30	
TOTAL	2030786.69	46.6

GROUTED HEAVY STONE REVETMENT

Station	Location	Sq. Yds.	Remarks
311+60	ch. ch. Rt. Ld.	274.25	In inlet & Outlet
TOTAL		274.25	

MANHOLES (Std. 16-A)

Station	Location	Size	"D"	C.B. Conc.	Reinf. Steel	Frame & Cover	Remarks
51+50	Russell Rd.	3x3	6'5"	2.10	209		2-24" Pipes Cl.3 incl. with RCP
56+86	Russell Rd.	3x3	5'0"	1.60	195	1	2-15" Pipes Cl.3 incl. with RCP
299+61	Antioch Rd.	3x3	4'0"	1.53	176	1	3-15" Pipes Cl.3 incl. with RCP
301+54	Antioch Rd.	3x3	4'0"	1.48	182	1	2-15" Pipes Cl.3 incl. with RCP
302+46	Antioch Rd.	3x3	4'0"	1.51	176	1	1-12" 2-15" Pipes Cl.3 incl. with RCP
303+89	Antioch Rd.	3x3	4'0"	1.48	182	1	Cl.3 incl. with RCP
TOTALS				9.70	1120	6	

RIGHT OF WAY MARKERS

Sheet No.	No.
3	11
4	25
5	29
6	21
7	9
TOTAL	95

CONCRETE BOX CULVERTS

Station	C-Std.	Size	Length	C.B. Conc.	Reinf. St'l.	Class 3	Remarks
236+70	C-529	9x8	194	275.3	27660	1132.5	25° Sk. L.A.
257+90	C-530	3x3	269	84.6	12000	337.5	30° Sk. R.A.
295+99.7	C-530	2x1½	8'-6"	1.6	213	11.0	Extension to U.A. Conc. Box incl. Cl.3 for 36D D.I.
TOTALS				361.5	39873	1481.0	

DROP INLETS

Station	Lane	Location	Type	Size	"D"	C.B. Conc.	Reinf. St'l.	Grates & Frames Type	Width	Weight	Remarks
11+37	Armour Rd.	Lt.	36G	1½x2	2'3"	.56	106	1	2'0"	156	Grate only
215+41	Ramp A	Rt.	36E	3x3	3'0"	1.17	105				Type A Cover 2 Spillways 1-18" 1-24" Pipe
220+00	Ramp D	Lt.	36E	3x2	10'0"	2.61	232				Type A Cover 1 Spillway 1-18" Pipe
222+56	Lt.	Parkway	36E	3x2	1'9"	.77	67				Type A Cover 2 Spillways 1-12" Pipe
227+70	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
232+32	Rt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
237+00	Parkway	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
241+35	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
246+34	Parkway	Rt. Rt. Lo.	36D	—	3'9"	1.69	158				2-24" Pipes
246+57	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
251+97	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
257+18	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
262+70	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
265+67		Rt. Rt. Lo.	36D	—	3'0"	1.54	138				2-18" Pipes
268+00	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
273+40	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
278+68	Rt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
282+36.4	Lt.	Lt. Lt. Lo.	36G	1½x2	1'9"	.47	100	1	2'0"	156	1-12" Pipe
284+00	Rt.	Lt. Rt. Lo.	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
294+20	Ramp E	Rt.	36E	3x3	3'6"	1.31	119				Type A Cover 2 Spillways 1-12" 1-24" Pipe
295+40.5	Lt.	Lt.	36G	1½x2	1'9"	.47	100	1	2'0"	156	1-12" Pipe See Sp. SH. #16
295+40.5	Lt.	Rt.	36G	1½x2	2'6"	.57	111	1	2'0"	156	2-18" Pipes See Sp. SH. #16
295+61	Rt.	Lt.	36G	1½x2	2'0"	.48	102	1	2'0"	156	2-18" Pipes See Sp. SH. #16
295+65	Rt.	Rt.	36G	1½x2	1'9"	.47	100	1	2'0"	156	1-12" Pipe See Sp. SH. #16
304+86.8	Rt.	Lt.	36D	—	2'6"	1.44	133				1-15" Pipe
327+08	Ramp G	Rt.	36B	4'x4'	1'9"	.65	138				2-12" Pipes
328+12	Ramp G	Rt.	36B	4'x4'	1'9"	.67	155	1	4'0"	307	1-12" Pipe
330+50	Rt.	Lt.	36E	3x2	2'0"	.84	72				Type A Cover 1 Spillway 1-15" Pipe 1-8"x18" Culv. opening
295+99.7	Antioch Rd.	Rt.	36D	—	3'9"	1.75	158				
299+06	Antioch Rd.	Rt.	36E	3x2	1'9"	.77	67				Type A Cover 2 Spillways 1-12" Pipe
299+61	Antioch Rd.	Rt.	36E	3x2	2'0"	.82	69				Type A Cover 2 Spillways 1-15" Pipe
301+54	Antioch Rd.	Rt.	36F	—	1'9"	.70	50	2	3'0"	280	10' Transition
301+65	Antioch Rd.	Rt.	36E	3x2	1'9"	.79	70				Type A Cover 1 Spillway 1-15" Pipes
302+46	Antioch Rd.	Rt.	36E	3x2	1'9"	.80	70				Type A Cover 1 Spillway 1-12" Pipe
303+89	Antioch Rd.	Rt.	36F	—	1'9"	.70	50	2	3'0"	280	25' Transition
303+89	Antioch Rd.	Rt.	36E	3x3	1'9"	.99	88				Type A Cover 1 Spillway 1-12" Pipe
TOTALS						32.63	3418			1803	

CONCRETE GUTTER

Station	Location	Lin. Ft.
225+72 216+32	Ramp B Lt. Lo.	137.5
220+00 222+70	Ramp C	100.5
216+32 222+70	Rt. Lo. Ramp C	214.5
222+56	Lt. Lt. Lo.	46.0
227+70	Lt. Lt. Lo.	60.0
246+57	Lt. Lt. Lo.	39.5
257+18	Lt. Lt. Lo.	62.0
262+70	Lt. Lt. Lo.	20.5
273+40	Rt. Lt. Lo.	34.0
312+38	Lt. Lt. Lo.	47.0
330+50	Rt. Rt. Lo.	26.0
TOTAL		785.5

CONCRETE PROTECTION CURB

Station	to Station	Location	Lin. Ft.
11+73.5	21+56.16	Armour Rd.	176.0
17+23.15	18+05.85	Armour Rd.	168.2
TOTAL			342.2

CONCRETE CURB & GUTTER

Station	to Station	Location	Lin. Ft.
11+07.45		Armour	43.5
11+88.3		Armour	42.0
211+75	217+00	Lt. Ramp A	285.0
216+00	220+50	Rt. Ramp A	488.2
282+30	285+00	Lt. Lt. Lo.	270.7
TOTAL			1129.4

GUARD RAIL (Type 1)

Station	Lane	Location	Lin. Ft.
17+20	Armour Rd.	Lt.	12.5
235+00	Rt.	Rt.	12.5
281+50	Rt.	Rt.-38th St.	37.5
281+50	Lt.	Lt.-38th St.	37.5
2871	Rt.	Rt.-38th St.	37.5
2901	Rt.	Rt.-38th St.	25.0
3221	Rt.	Rt.-Vivion	25.0
3241	Lt.	Lt.-Vivion	25.0
3271	Rt.	Rt.-Vivion	25.0
3291	Lt.	Lt.-Vivion	25.0
TOTAL			262.5

BARRICADES

Location	No.
N. Garfield & Russell Rd.	1
Old Russell Rd. & Wayne Ave.	1
TOTALS	2

RELOCATING BARRICADES

	No.	Remarks
TOTAL	0	none required

ENTRANCE & SIDE ROAD APPROACHES

Station	Location	Type	Cl. A	Embank	Comp. Embank	C.S. Surf. Base	C.Y.	Remarks
11+48.5	Lt. Armour	S.E.	57					See Paved Appr.
13+15	Rt. Armour	P.E.				1	4⅓	
15+00	Rt. Armour	P.E.				1	4	
15+57	Rt. Armour	P.E.						See Paved Appr.
16+67	Lt. Armour	P.E.						See Paved Appr.
17+00	Lt. Armour	P.E.				1	4½	
18+30.8	Rt. Armour	S.E.	6					See Paved Appr.
19+50	Lt. Armour	P.E.				1	6½	
214+14	Lt. Ramp A	S.E.				1	6½	Quantities included with Ramp A (Quebec St.)
227+71	Rt. Rt. Lo.	P.E.		650		1	17½	Levee Appr.
227+76	Lt. Lt. Lo.	P.E.		8		1	6¼	Levee Appr.
228+10	Lt. Lt. Lo.	P.E.		532		1	20¼	Levee Appr. St. Rd.
1+16	Lt. Wayne Ave.	P.E.				1	3	
1+50	Lt. Wayne Ave.	P.E.				1	4	
60+50	Rt. Russell	P.E.		249	249	1		Double Seal Coat
312+00	Rt. Rt. Lo.	S.R.				1	19⅓	Quantities with Excav.
295+32	Rt. Antioch	P.E.				1	4½	
295+60	Lt. Antioch	P.E.				1	4½	
296+72	Rt. Antioch	P.E.				1	4	
298+60	Lt. Antioch	P.E.						See Paved Appr.
304+81	Rt. Antioch	S.E.	16					See Paved Appr.
TOTALS			79	1839	249		107	

8' SURFACE BASINS & DRAINS

Station	Lane	Location	Type	Surf. Basins	Drain Lin. Ft.
8+50	Armour	Lt.	L.P.	1	
15+50	Armour	Lt.	L.P.	1	7.0
TOTAL				2	7.0

SPEC. METAL GATES (Chain Link Type)

Station	Lane	Location	No.	Remarks
227+71	Rt.	on R/W line	1	12' Width
228+10	Lt.	on R/W line	1	12' Width
TOTAL			2	

STANDARD SIGNS, FLAGS, FLAGGING, ETC.

	No.	Remarks
TOTAL	1	Lump Sum

Prepared By ______ Date ______ 19__ Checked in Div. Office By ______ Date ______ 19__ Checked in Central Office By ______ Date ______ 19__ Revised By ______ Date ______

LOCATION

TYPE

MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

FED. ROAD DIST. No.	STATE	PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	MO.	UI-99(6)		2A1	
DIV. No.		COUNTY		ROUTE	SEC. No.
4		CLAY		69	

REINFORCED CONCRETE CULVERT PIPE (Cross Road)

Station	Lane	C-230 Hdwls.	12"	15"	18"	24"	36"	Cl.B Conc.	Reinf. St'l	Cl.3 Exc.	Remarks
21+93	Quebec St.		31							12.0	
215+41	Ramp A	RC-Lt.			49			0.83	63	8.5	incl. Cl.3 for D.I.
218+34	Ramp D	RB-Rt. RC-Lt.			91			2.59	220	60.5	45° Sk. R/A
220+00	Ramp D	RB-Rt.			86			0.65	53	5.0	
222+56	Lt.		52							28.0	incl. Cl.3 for D.I.-U-gutter Lt.
223+88	Ramp A	RB-Rt.&Lt.				145		3.43	358	14.0	45° Sk. L/A
227+70	Lt.		77							38.5	10° Sk. R/A incl. Cl.3 for D.I.
232+32	Rt.	RC-Rt.	89					0.50	42	67.5	incls. Cl.3 for D.I.
237+00	Parkway		32							30.0	Outlet in Y-Rd. Conc. Box
241+35	Lt.	RB-Lt.	75					0.41	34	17.5	incls. Cl.3 for D.I.
246+34	Parkway	RB-Lt.				207		0.99	98	303.5	incls. Cl.3 for D.I.
246+57	Lt.		68							39.0	incls. Cl.3 for D.I.
251+97	Lt.	RC-Lt.	72					0.50	42	41.5	incls. Cl.3 for D.I.
257+18	Lt.		69							42.5	incls. Cl.3 for D.I.
262+70	Lt.		76							24.5	incls. Cl.3 for D.I.
265+67	Lt.&Rt.	RB-Lt.			230			0.83	79	130.0	Sk.25° R/A-incls. Cl.3 for D.I.
268+00	Lt.	RC-Lt.	85					0.50	42	26.0	incls. Cl.3 for D.I.
272+46	Lt.&Rt.	RB-Rt. RC-Rt.				173		2.25	222	128.0	
273+40	Lt.		70							38.5	incls. Cl.3 for D.I.
275+12	Lt.&Rt.	RB Rt.&Lt.					242	6.10	504	76.5	45° Sk. R/A
278+68	Rt.	RC-Rt.	88					0.50	42	74.5	incls. Cl.3 for D.I.
282+36.4	Lt.	RC-Rt.	71					0.87	81	29.5	45° Sk. L/A-incls. Cl.3 for D.I.
284+00	Rt.	RC-Rt.	93					0.50	42	49.0	incls. Cl.3 for D.I.
284+65	Ramp E	RC-Rt.&Lt.		64				2.22	188	31.0	45° Sk. R/A
285+36	Ramp F	RC-Rt.&Lt.		82				3.07	244	45.5	57° Sk. L/A
289+72	Rt.	RC-Rt.&Lt.		113				1.44	138	123.0	15° Sk. R/A
294+20	Ramp E	RC-Lt.		112				0.64	52	78.5	incl. Cl.3 for D.I.-24" Pipe. Pay as 15" (Contractor actually laid)
51+50	Russell Rd.					56				68.5	Between D.I. & M.H. incls. Cl.3 for M.H.
51+50 56+86	Russell Rd.					537				559.0	Between Manholes
56+86	Russell Rd.	RC-Rt.&Lt.				84		2.52	248	46.0	incls. Cl.3 for M.H.
295+40.5	Lt.		37							15.0	Between D.I.'s-incls Cl.3 for D.I.'s
295+82.6 296+00	Lt.		59							23.0	Rt. of Lt. La.
295+61	Rt.	RC-Lt.	29					0.50	42	18.0	From D.I. to Outlet. incls Cl.3 for D.I.
295+65	Rt.		37							11.5	Between D.I.'s-incls. Cl.3 for D.I.'s
117+19	Rt.La. #71	RB-Rt.&Lt.				109		1.98	196	17.0	
304+86.8	Rt.	RC-Rt.		69				0.86	77	33.5	Sk. 30° R/A-incls. Cl.3 for D.I.
312+33	Lt.	RC-Rt.				58		1.26	124	49.0	
317+00	Rt.	RC-Rt.&Lt.		77				1.72	154	10.5	30° Sk. L/A
323+41	Rt.	RC-Rt.&Lt.		64				1.72	154	34.0	30° Sk. L/A
326+30 327+08	Ramp G		68							24.0	Between D.I. & Outlet Lt. ditch
327+08 328+12	Ramp G		103							35.0	Between D.I.s.-incls. D.I. Cl.3
329+00	Rt.&Lt.	RC-Lt. RB-Rt.			255			1.48	116	2.5	
330+50	Rt.			53						32.0	incls. Cl.3 for D.I.
TOTALS			1381	634	711	1369	242	40.86	3655	2541.0	

EXTRA STRENGTH REINFORCED CONCRETE CULVERT PIPE

Station	Lane	C-230 Hdwls.	30"	Cl.B Conc.	Reinf. St'l	Cl.3 Exc.
253+46	Lt.&Rt.	RB-Lt. RC-Rt.	198	3.10	275	88.0
TOTALS			198	3.10	275	88.0

REINFORCED CONCRETE CULVERT PIPE (Imperfect trench method)

Station	Lane	C-230 Hdwls.	RCP 24"	30"	Cl.B Conc.	Reinf. St'l	Cl.3 Exc.	Remarks
221+40	Lt.	RB-Lt.	122		2.55	251	35.5	Sk. 60° L/A-Ext. to U.I.P. Pipe
117+00	Lt.La. #71	2RB		176	3.22	322	83.5	Sk. 20° R/A
TOTALS			122	176	5.77	573	119.0	

REINFORCED CONCRETE CULVERT PIPE

Station	Lane	Location	RCP 12"	15"	Cl.3 Exc.	Remarks
11+73.7	Armour Rd.	Lt.	52		35.0	Connects to 12" Sewer, Under Ozark St.
281+65		Lt.&Rt.La.		166	18.5	Gas line conduit
320+40		Lt.&Rt.La.		130	99.0	Gas line conduit
299+06 299+61	Antioch	Rt.	61		33.0	Between D.I. & M.H. incls. Cl.3 for D.I.
299+61	Antioch	Rt.	19		19.0	Between D.I. & M.H. incls. Cl.3 for D.I. & M.H.
299+61 301+54	Antioch	Rt.	190		197.0	Between Manholes incls. Cl.3 for M.H. 301+54
301+54	Antioch	Rt.	2		2.0	Between D.I. & M.H. incls. Cl.3 for 36F D.I.
301+54 301+65	Antioch	Rt.		22	15.0	Between D.I. & M.H. incls. Cl.3 for 36E D.I.
301+54 302+46	Antioch	Rt.		89	64.5	Between Manholes incls. Cl.3 for M.H. 302+46
302+46	Antioch	Rt.	7		4.0	Between D.I. & M.H. incls. Cl.3 for 36E D.I.
302+46 303+89	Antioch	Rt.		141	105.0	Between Manholes incls. Cl.3 for M.H. 303+89
303+89	Antioch	Rt.	4		2.0	Between D.I. & M.H. incls. Cl.3 for 36F D.I.
303+89	Antioch	Rt.	3		3.5	Between D.I. & M.H. incls. Cl.3 for 36E D.I.
303+89 305+87	Antioch	Rt.		137	79.5	Between Manhole & Outlet
TOTALS			338	685	677.0	

CLEAN-OUT EXISTING PIPE

Station	Lane	Cl.3	Remarks
280+80	Rt.	49.8	Under Lanes & Ramps
TOTAL		50.0	

CORRUGATED METAL CULVERT PIPE (Ent. 1 S.E.)

Station	Lane	Location	12"	18"	30"	Cl.3	Remarks
41+00	Wayne Ave.	Y-Road	50				
71+27	Wayne Ave.	Y-Road	52				
60+50	Russell Rd.	S.E. Rt.			50		Conn. to old Russell
295+60	Antioch	Rt.		86		41.5	Remove 86 C.M.P.
TOTALS			102	86	50	41.5	

6" CLASS 3 (Plain) CORRUGATED METAL PIPE UNDERDRAIN

Station	Lane	Location	Size	Length	Drain Mark.	Cl.3	Remarks
246+38	Lt.&Rt.	250' Cut	6"	120	1		Cl.3 Drain seep at Cut slope
249+75	Lt.	124' Lt.	6"	60	1	4.0	Outlet for Spring
TOTALS				180	2	4.0	

LENGTH OF PROJECT

End of Project ______ Station

Beginning of Project ______ Station

Apparent Length ______ Feet

Equations and Exceptions:

Total Corrections ______ Feet

Net Length of Project ______ Feet

State Length ______ Miles

Federal Length ______ Miles

CLASS A (Type 1) UNDERDRAINS

Station	Lane	Lin. Ft.	Drain Mark.	Type	Outlet
214+76	Ramp A	103	1	Lat.	Rt. Fill slope
217+35	Ramp D	62	1	Lat.	Lt. Fill slope
218+18	Ramp A	56	1	Lat.	Lt. Fill slope
221+00	Ramp D	45	1	Lat.	Rt. Fill slope
221+60	Ramp D	43	1	Lat.	Rt. Fill slope
224+50	Ramp D	61	1	Lat.	Rt. Fill slope
225+10	Ramp A	45	1	Lat.	Lt. Fill slope
228+00	Rt.	58	1	Lat.	Lt. ditch
229+80	Lt.	60	1	Lat.	Rt. ditch
233+65	Lt.	50	1	Lat.	Rt. ditch
234+20	Lt.	50	1	Lat.	Rt. ditch
237+25	Rt.	50	1	Lat.	Rt. ditch
238+00	Lt.	48	1	Lat.	Lt. Fill slope
240+25	Rt.	46	1	Lat.	Rt. ditch
241+60	Lt.	46	1	Lat.	Lt. ditch
243+25	Lt.	54	1	Lat.	Parkway
244+00	Rt.	46	1	Lat.	Lt. ditch
246+36	Lt.&Rt.	43	1	Lat.	[illegible]
246+80	Lt.	53	1	Lat.	Parkway
246+85	Rt.	48	1	Lat.	Lt. Fill slope
250+15	Rt.	54	1	Lat.	Lt. ditch
251+18	Lt.	43	1	Lat.	Lt. ditch
253+85	Lt.	54	1	Lat.	Parkway
256+50	Rt.	50	1	Lat.	Lt. ditch
257+25	Rt.	56	1	Lat.	Parkway
257+69	Lt.	44	1	Lat.	Lt. Fill slope
260+50	Rt.	58	1	Lat.	Parkway
260+85	Lt.	52	1	Lat.	Lt. Fill slope
263+38	Lt.	54	1	Lat.	Parkway
264+07	Lt.	51	1	Lat.	Lt. Fill slope
266+25	Rt.	56	1	Lat.	Parkway
267+26	Rt.	58	1	Lat.	Lt. Fill slope
269+29	Rt.	56	1	Lat.	Parkway
270+45	Lt.	51	1	Lat.	Lt. Fill slope
272+38	Rt.	56	1	Lat.	Parkway
273+64	Lt.	47	1	Lat.	Lt. Fill slope
275+37	Rt.	48	1	Lat.	Rt. Fill slope
276+83	Lt.	54	1	Lat.	Lt. ditch
278+61	Rt.	50	1	Lat.	Rt. Fill slope
280+00	Rt.	52	1	Lat.	Rt. Fill slope
281+45	Lt.	60	1	Lat.	Rt. Fill slope
283+20	Lt.	70	1	Lat.	Rt. Fill slope
284+50	Lt.	90	1	Lat.	Lt. Fill slope
287+00	Lt.	56	1	Lat.	Rt. ditch
287+00	Ramp E	54	1	Lat.	Lt. ditch
290+50	Ramp E	50	1	Lat.	Rt. slope
294+25	Ramp E	54	1	Lat.	Rt. slope
294+60	Ramp F	50	1	Lat.	Lt. ditch
50+50	Russell Rd.	50	1	Lat.	Lt. ditch
51+50 56+82	Russell Rd.	526		Long.	M.H. @ 56+86
59+50	Russell Rd.	59	1	Lat.	Lt. ditch
299+00	Lt.	86	1	Lat.	Rt. ditch
302+50	Lt.	54	1	Lat.	Rt. ditch
306+00	Lt.	121	1	Lat.	Rt. ditch
307+00	Lt.	46	1	Lat.	Rt. ditch
309+00	Lt.	51	1	Lat.	Rt. Fill slope
310+50	Rt.	46	1	Lat.	Rt. Fill slope
312+42	Lt.	53	1	Lat.	Rt. Fill slope
313+37	Lt.	44	1	Lat.	Rt. Fill slope
316+20	Lt.	56	1	Lat.	Rt. Fill slope
318+00	Lt.	52	1	Lat.	Rt. ditch
320+00	Lt.	56	1	Lat.	Rt. Fill slope
321+50	Rt.	48	1	Lat.	Rt. ditch
323+00	Lt.	58	1	Lat.	Parkway
325+00	Lt.	50	1	Lat.	Rt. ditch
326+00	Lt.	70	1	Lat.	Rt. ditch
328+50	Lt.	86	1	Lat.	Rt. Fill slope
329+00	Lt.	96	1	Lat.	Parkway
333+40	Ramp H	49	1	Lat.	Lt. ditch
333+80	Ramp G	48	1	Lat.	Lt. ditch
301+34 302+46	Antioch	175		Long.	M.H. 301+54
302+46 303+84	Antioch	131		Long.	M.H. 303+89
TOTALS		4702	67		

Corr. Metal Sectional Plate Pipe

Station to Station	Location	120"
232+93 235+15	Dr. Rt.	220
Total		220 Lin. Ft.

Corr. Metal (Bituminous Coated) Pipe

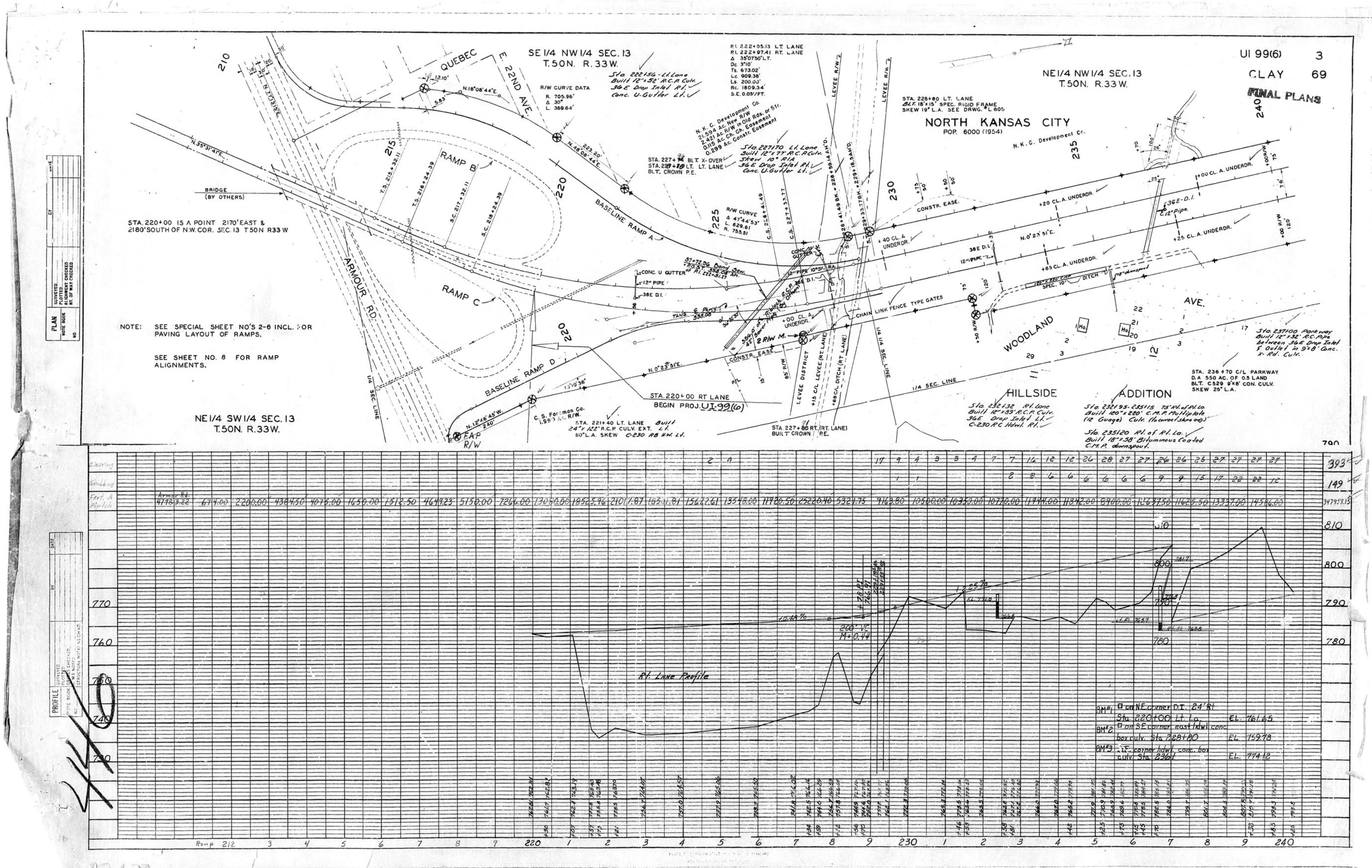
Station	Location	18"
235+20	B.S. Rt.	58
Total		58 Lin. Ft.

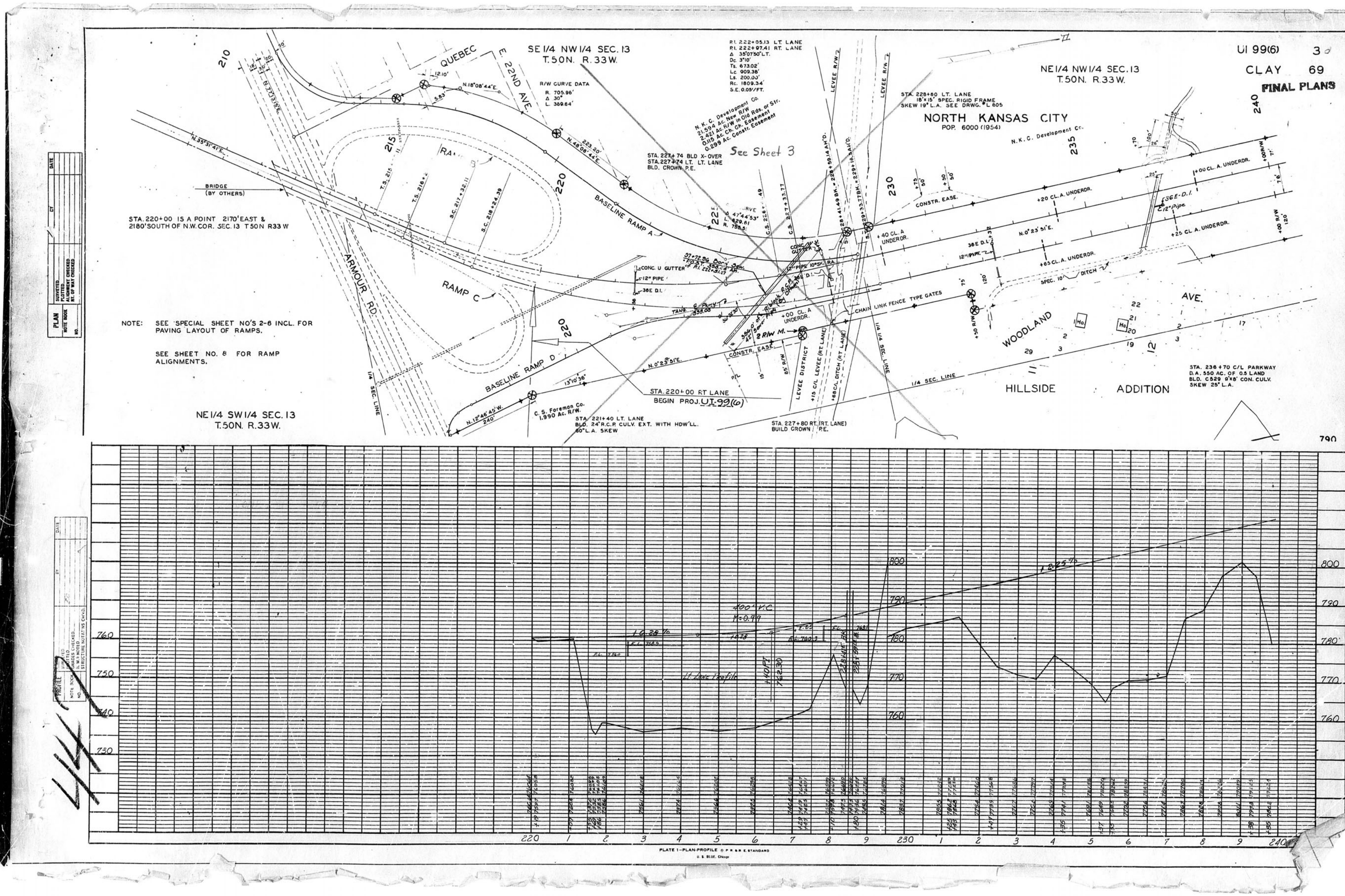
GENERAL SUMMARY — FINAL PLANS

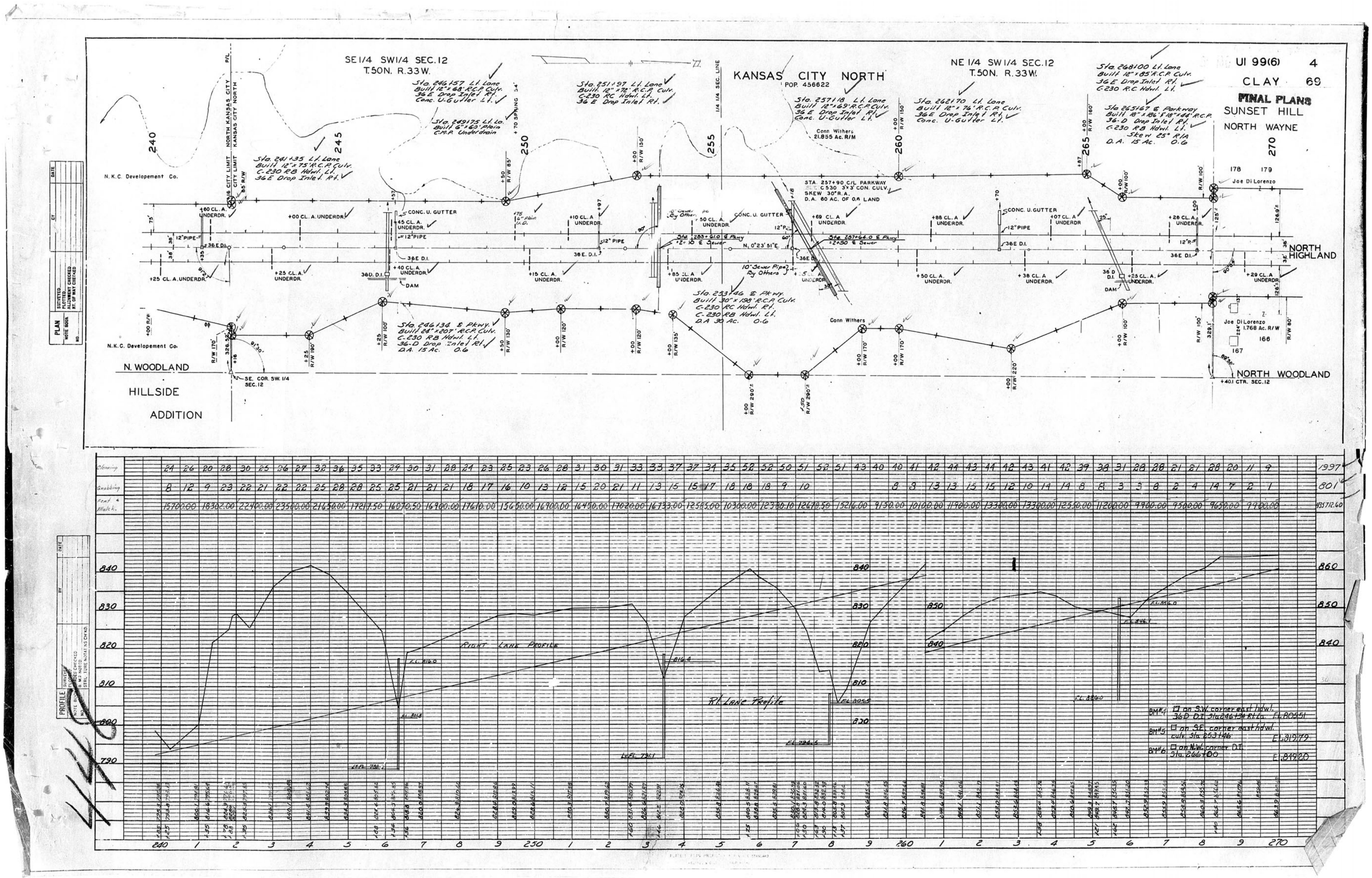
ITEM NO.	DESCRIPTION	UNIT	TOTAL UNITS	NO. UNITS FED. AID ONLY

Prepared By ______ Date ______ 19__ Checked in Div. Office By ______ Date ______ 19__ Checked in Central Office By ______ Date ______ 19__ Revised By ______ Date ______ 19__

445

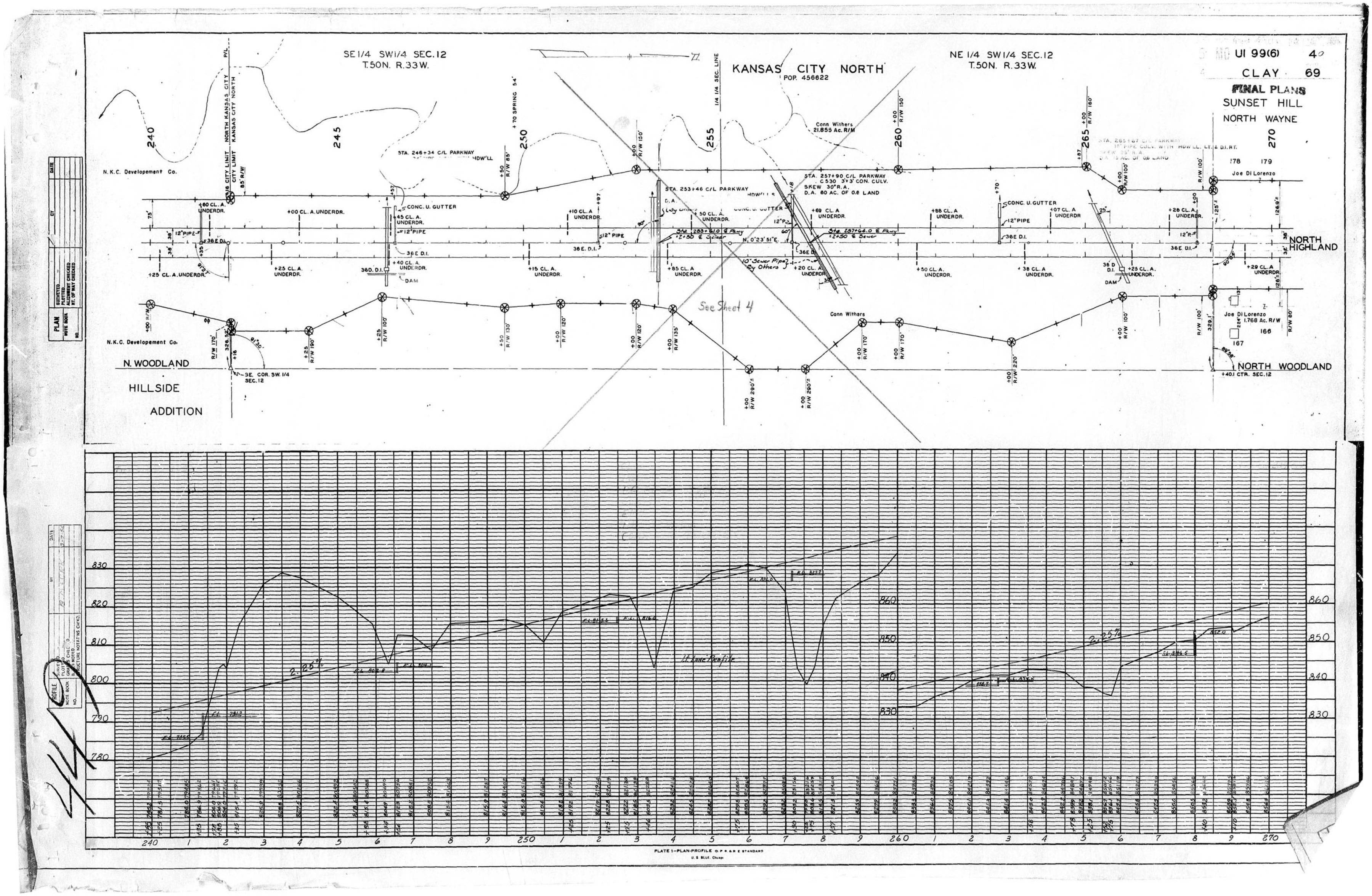

UI 99(6) 3
CLAY 69
FINAL PLANS
SE 1/4 NW 1/4 SEC. 13
T.50N. R.33W.
NE 1/4 NW 1/4 SEC. 13
T.50N. R.33W.
NE 1/4 SW 1/4 SEC. 13
T.50N. R.33W.
NORTH KANSAS CITY
POP. 6000 (1954)
N.K.C. Development Co.
QUEBEC
E. 22ND AVE.
ARMOUR RD.
RAMP B
RAMP C
BASELINE RAMP A
BASELINE RAMP D
WOODLAND AVE.
HILLSIDE ADDITION
BRIDGE (BY OTHERS)
STA. 220+00 IS A POINT 2170' EAST & 2180' SOUTH OF N.W. COR. SEC. 13 T50N R33W
NOTE: SEE SPECIAL SHEET NO'S 2-6 INCL. FOR PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 8 FOR RAMP ALIGNMENTS.
STA. 220+00 RT LANE
BEGIN PROJ. UI-99(6)
LEVEE DISTRICT
1/4 SEC. LINE
CHAIN LINK FENCE TYPE GATES
CONSTR. EASE.
STA. 236+70 C/L PARKWAY D.A. 550 AC. OF 0.5 LAND BLT. C529 9'x8' CON. CULV. SKEW 25° L.A.
Rt. Lane Profile
Ramp 212 3 4 5 6 7 8 9 220 1 2 3 4 5 6 7 8 9 230 1 2 3 4 5 6 7 8 9 240
BM#1 □ on NE corner D.I. 24' Rt. Sta. 220+00 Lt. La. EL. 761.65
BM#2 □ on SE corner east hdwl. conc. box culv. Sta. 228+80 EL. 759.78
BM#3 □ corner hdwl. conc. box culv. Sta. 236+ EL. 774.18
440

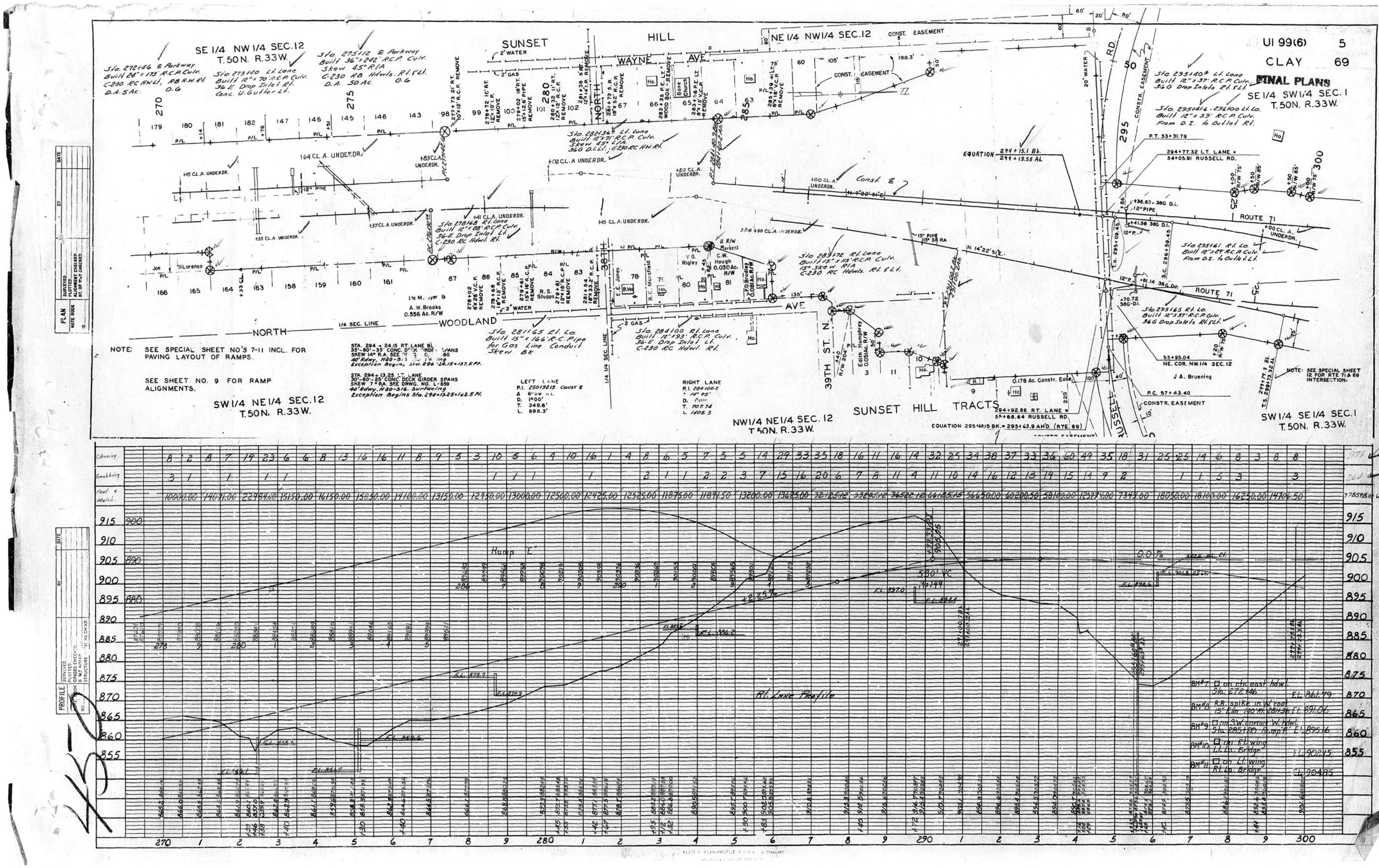

UI 99(6)
3
CLAY
69
FINAL PLANS
SE 1/4 NW 1/4 SEC. 13
T.50N. R.33W.
NE 1/4 NW 1/4 SEC. 13
T.50N. R.33W.
NE 1/4 SW 1/4 SEC. 13
T.50N. R.33W.
NORTH KANSAS CITY
POP. 6000 (1954)
QUEBEC
E. 22ND AVE.
ARMOUR RD.
RAMP B
RAMP C
BASELINE RAMP A
BASELINE RAMP D
WOODLAND AVE.
HILLSIDE ADDITION
See Sheet 3
R/W CURVE DATA
R. 705.96'
Δ 30°
L. 369.64'
STA. 220+00 IS A POINT 2170' EAST & 2180' SOUTH OF N.W. COR. SEC. 13 T50N R33W
NOTE: SEE SPECIAL SHEET NO'S 2-6 INCL. FOR PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 8 FOR RAMP ALIGNMENTS.
BRIDGE (BY OTHERS)
STA. 227+74 BLD X-OVER
STA. 227+74 LT. LANE
BLD. CROWN P.E.
STA. 228+60 LT. LANE
18'x15' SPEC. RIGID FRAME
SKEW 19° L.A. SEE DRWG. L 605
STA. 220+00 RT LANE
BEGIN PROJ. UI-99(6)
STA. 221+40 LT. LANE
BLD. 24" R.C.P. CULV. EXT. WITH HDW'LL.
60° L.A. SKEW
STA. 227+80 RT. (RT. LANE)
BUILD CROWN P.E.
STA. 236+70 C/L PARKWAY
D.A. 550 AC. OF 0.5 LAND
BLD. C529 9'x8' CON. CULV.
SKEW 25° L.A.
CHAIN LINK FENCE TYPE GATES
LEVEE DISTRICT
C.S. Foreman Co.
N.K.C. Development Co.
PLATE 1-PLAN-PROFILE



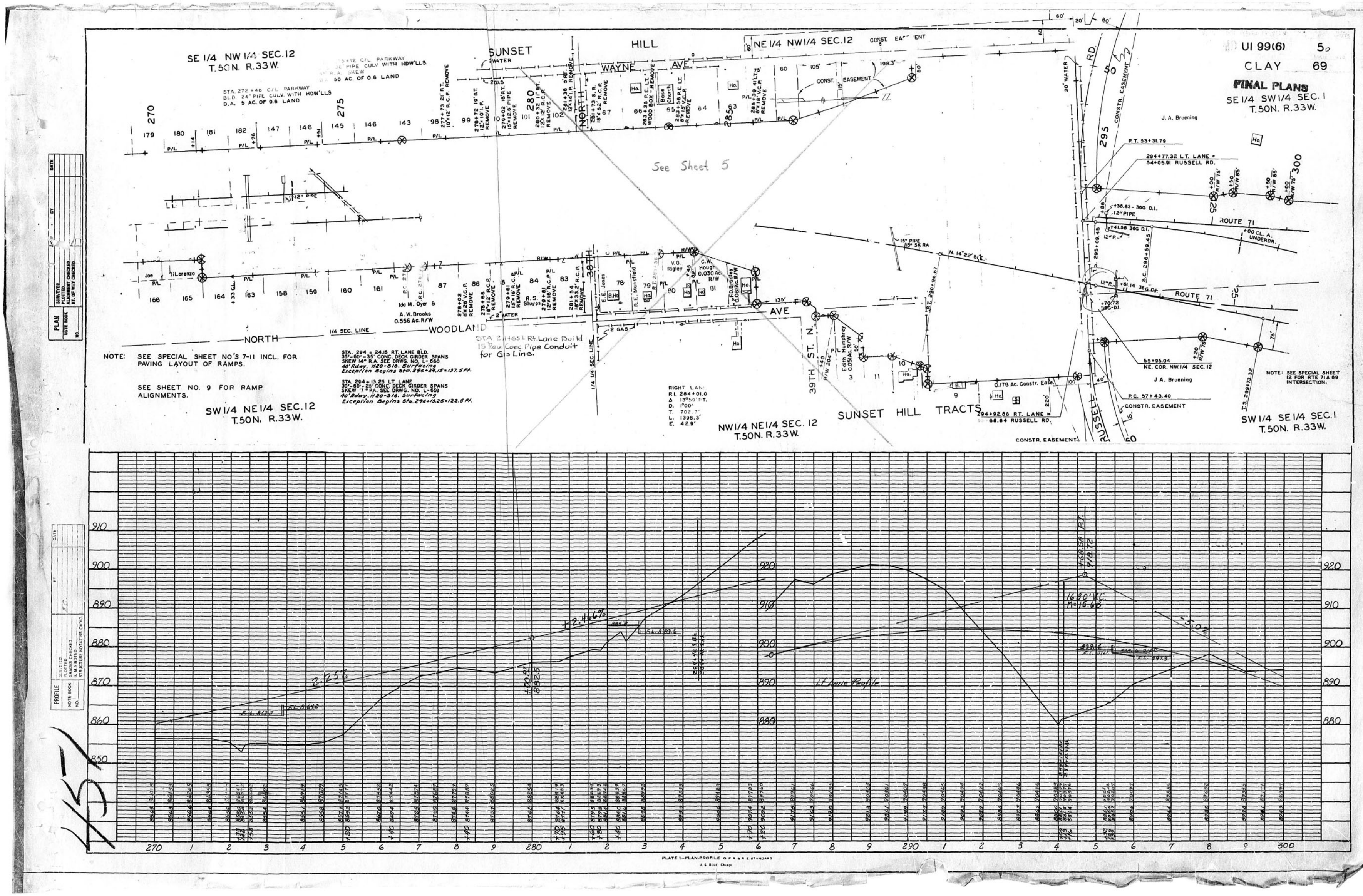
UI 99(6) 4
CLAY 69
FINAL PLANS
SUNSET HILL
NORTH WAYNE
KANSAS CITY NORTH
POP. 456622
SE 1/4 SW 1/4 SEC. 12
T.50N. R.33W.
NE 1/4 SW 1/4 SEC. 12
T.50N. R.33W.
N.K.C. Developement Co.
N. WOODLAND
HILLSIDE
ADDITION
NORTH HIGHLAND
NORTH WOODLAND
Conn Withers
21.855 Ac. R/M
Joe Di Lorenzo
1.768 Ac. R/W
CITY LIMIT NORTH KANSAS CITY
CITY LIMIT KANSAS CITY NORTH
1/4 1/4 SEC. LINE
STA. 257+90 C/L PARKWAY
C530 3'x3' CON. CULV.
SKEW 30° R.A.
D.A. 80 AC. OF 0.6 LAND
Sta. 246+57 Lt. Lane
Build 12"x 68' R.C.P. Culv.
36E Drop Inlet Rt.
Conc. U-Gutter Lt.
Sta. 251+97 Lt. Lane
Build 12"x 72' R.C.P. Culv.
C-230 RC Hdwl. Lt.
36E Drop Inlet Rt.
Sta. 257+18 Lt. Lane
Build 12"x 69' R.C.P. Culv.
36E Drop Inlet Rt.
Conc. U-Gutter Lt.
Sta. 262+70 Lt. Lane
Build 12"x 76' R.C.P. Culv.
36E Drop Inlet Rt.
Conc. U-Gutter Lt.
Sta. 268+00 Lt. Lane
Build 12"x 85' R.C.P. Culv.
36E Drop Inlet Rt.
C-230 R.C. Hdwl. Lt.
Sta. 265+67 E. Parkway
Build 18"x 86' & 18"x 44' R.C.P.
36-D Drop Inlet Rt.
C-230 RB Hdwl. Lt.
Skew 25° R/A
D.A. 15 Ac. 0.6
Sta. 241+35 Lt. Lane
Build 12"x 75' R.C.P. Culv.
C-230 RB Hdwl. Lt.
36E Drop Inlet Rt.
Sta. 249+75 Lt. Lane
Build 6"x 60' Plain
C.M.P. Underdrain
Sta. 246+36 E. Pkwy.
Build 24"x 220' R.C.P. Culv.
C-230 RB Hdwl. Lt.
36-D Drop Inlet Rt.
D.A. 15 Ac. 0.6
Sta. 253+46 E. Pkwy.
Build 30"x 139' R.C.P. Culv.
C-230 RC Hdwl. Rt.
C-230 RB Hdwl. Lt.
D.A. 30 Ac. 0.6
10" Sewer Pipe
By Others
CONC. U GUTTER
12" PIPE
36E D.I.
CL. A UNDERDR.
DAM
5E. COR. SW. 1/4 SEC. 12
+40.1 CTR. SEC. 12
240
245
250
255
260
265
270
PLAN
PROFILE
Right Lane Profile
Rt. Lane Profile
840
830
820
810
800
790
860
850
BM#4 on S.W. corner east hdwl. 36D D.I. Sta. 246+34 Rt. EL. 805.51
BM#5 on SE corner east hdwl. culv. Sta. 253+46 EL. 819.79
BM#6 on N.W. corner D.I. Sta. 266+00 EL. 849.20
Clearing
Grubbing
1997
801
240 1 2 3 4 5 6 7 8 9 250 1 2 3 4 5 6 7 8 9 260 1 2 3 4 5 6 7 8 9 270

488

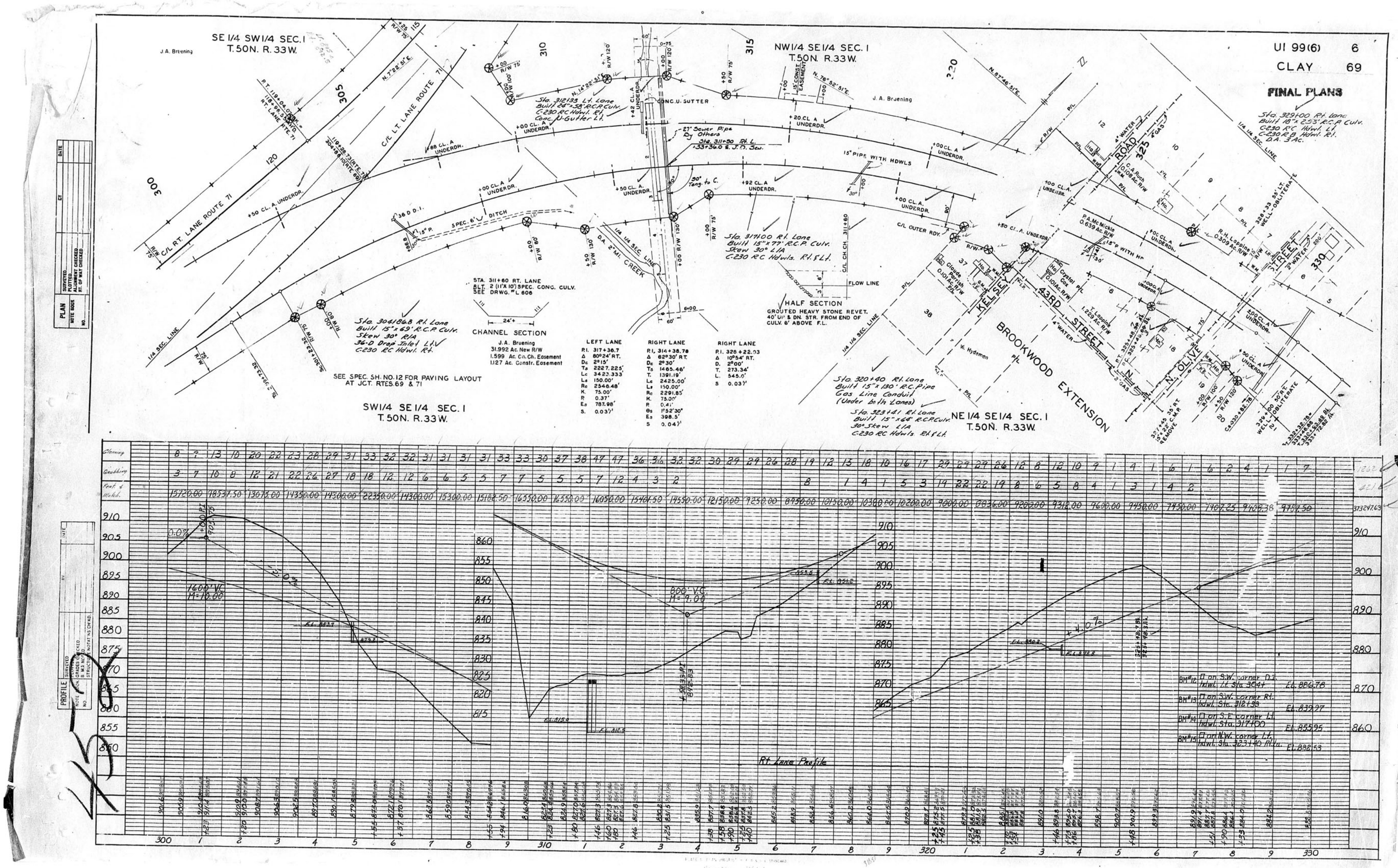

UI 99(6) 4
CLAY 69
FINAL PLANS
SUNSET HILL
NORTH WAYNE
SE 1/4 SW 1/4 SEC. 12
T. 50N. R. 33W.
KANSAS CITY NORTH
POP. 456622
NE 1/4 SW 1/4 SEC. 12
T. 50N. R. 33W.
N.K.C. Developement Co.
CITY LIMIT NORTH KANSAS CITY
CITY LIMIT KANSAS CITY NORTH
Conn Withers
21.855 Ac. R/W
Joe Di Lorenzo
1.768 Ac. R/W
STA. 246+34 C/L PARKWAY
STA. 253+46 C/L PARKWAY
STA. 257+90 C/L PARKWAY
C 530 3'x3' CON. CULV.
SKEW 30° R.A.
D.A. 80 AC. OF 0.8 LAND
CONC. U. GUTTER
CL. A. UNDERDR.
12" PIPE
36E D.I.
DAM
10" Sewer Pipe by Others
See Sheet 4
NORTH HIGHLAND
N. WOODLAND
NORTH WOODLAND
HILLSIDE ADDITION
SE. COR. SW. 1/4 SEC. 12
+40.1 CTR. SEC. 12
PLAN
PROFILE
2.26%
2.25%
Lt Lane Profile
240 245 250 255 260 265 270
PLATE 1 - PLAN-PROFILE


UI 99(6) 5
CLAY 69
FINAL PLANS
SE 1/4 NW 1/4 SEC.12
T.50N. R.33W.
SUNSET HILL
NE 1/4 NW1/4 SEC.12
SE 1/4 SW1/4 SEC.1
T.50N. R.33W.
WAYNE AVE
NORTH WOODLAND AVE
ROUTE 71
RUSSELL RD.
39TH ST. N.
SUNSET HILL TRACTS
SW1/4 NE1/4 SEC.12
T.50N. R.33W.
NW1/4 NE1/4 SEC.12
T.50N. R.33W.
SW1/4 SE1/4 SEC.1
T.50N. R.33W.
NOTE: SEE SPECIAL SHEET NO'S 7-11 INCL. FOR PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 9 FOR RAMP ALIGNMENTS.
NOTE: SEE SPECIAL SHEET 12 FOR RTE 71 & 69 INTERSECTION.
EQUATION 294+15.1 BL = 294+13.55 AL
CONST. EASEMENT
1/4 SEC. LINE
Ramp "E"
Rt. Lane Profile
PLAN
PROFILE
270
280
290
300

488

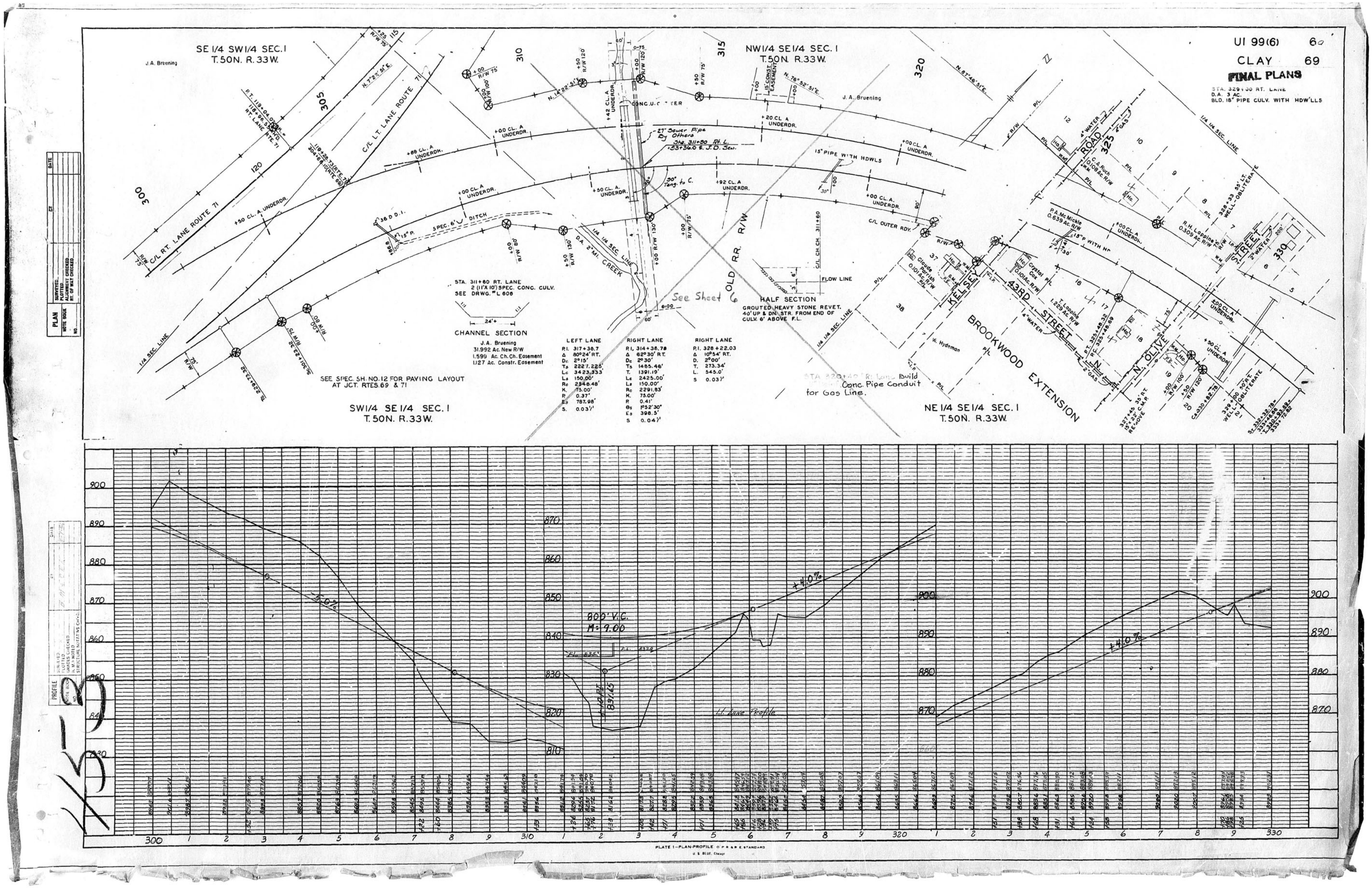

UI 99(6) 5
CLAY 69
FINAL PLANS
SE 1/4 SW1/4 SEC. 1
T.50N. R.33W.
SE 1/4 NW 1/4 SEC.12
T.50N. R.33W.
NE 1/4 NW1/4 SEC.12
SUNSET HILL
WAYNE AVE
NORTH 38TH
See Sheet 5
ROUTE 71
RUSSELL RD.
J. A. Bruening
NOTE: SEE SPECIAL SHEET NO'S 7-11 INCL. FOR PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 9 FOR RAMP ALIGNMENTS.
SW1/4 NE1/4 SEC.12
T.50N. R.33W.
NORTH WOODLAND AVE
1/4 SEC. LINE
STA. 294 + 24.15 RT. LANE BLD.
STA. 294 + 13.25 LT. LANE
39TH ST. N.
SUNSET HILL TRACTS
NW1/4 NE1/4 SEC. 12
T.50N. R.33W.
SW1/4 SE1/4 SEC.1
T.50N. R.33W.
NOTE: SEE SPECIAL SHEET 12 FOR RTE 71 & 69 INTERSECTION.
CONSTR. EASEMENT
+2.446%
-2.25%
-5.0%
Lt Lane Profile
270
275
280
285
290
295
300
PLATE 1—PLAN-PROFILE

157

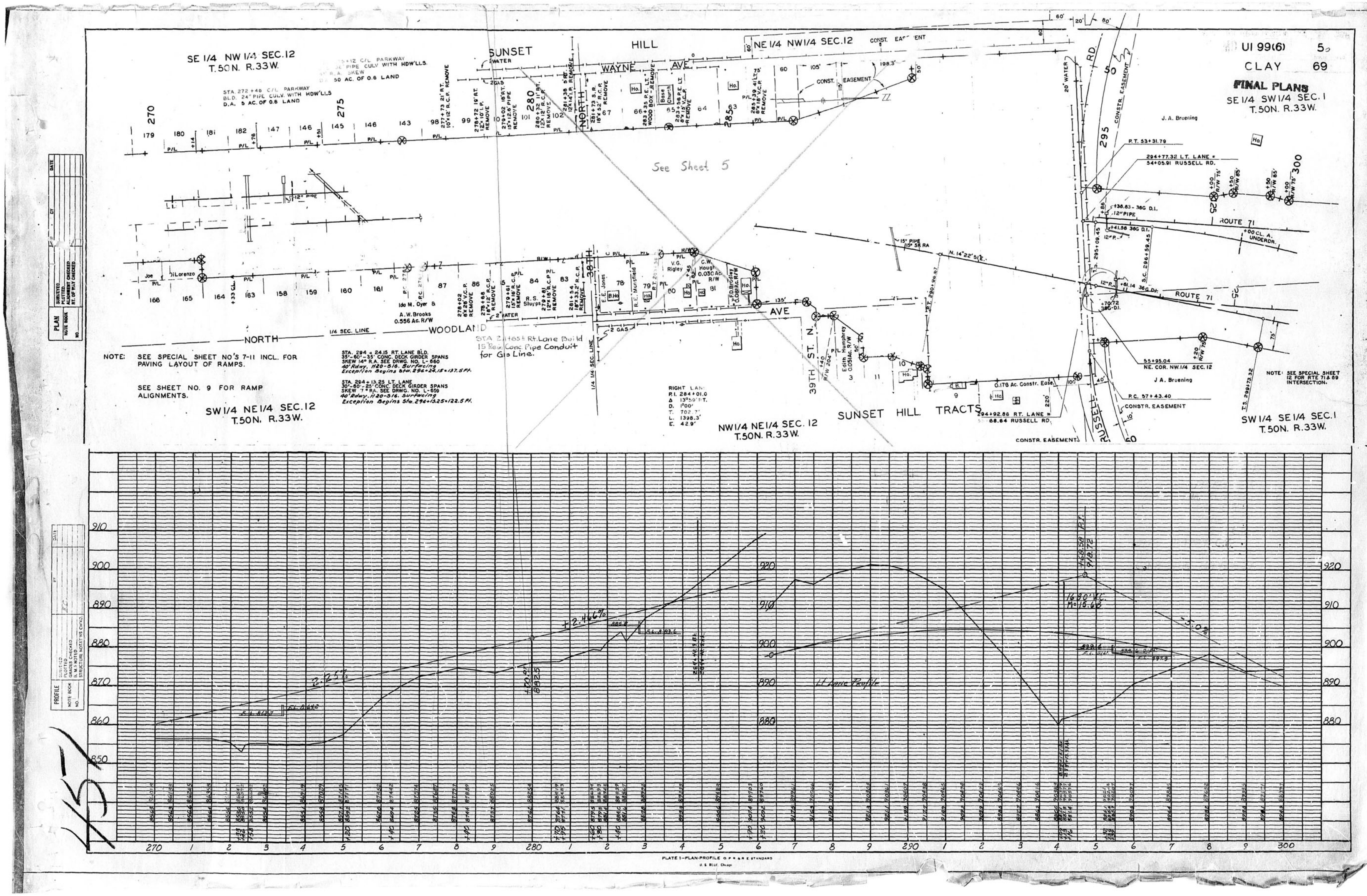


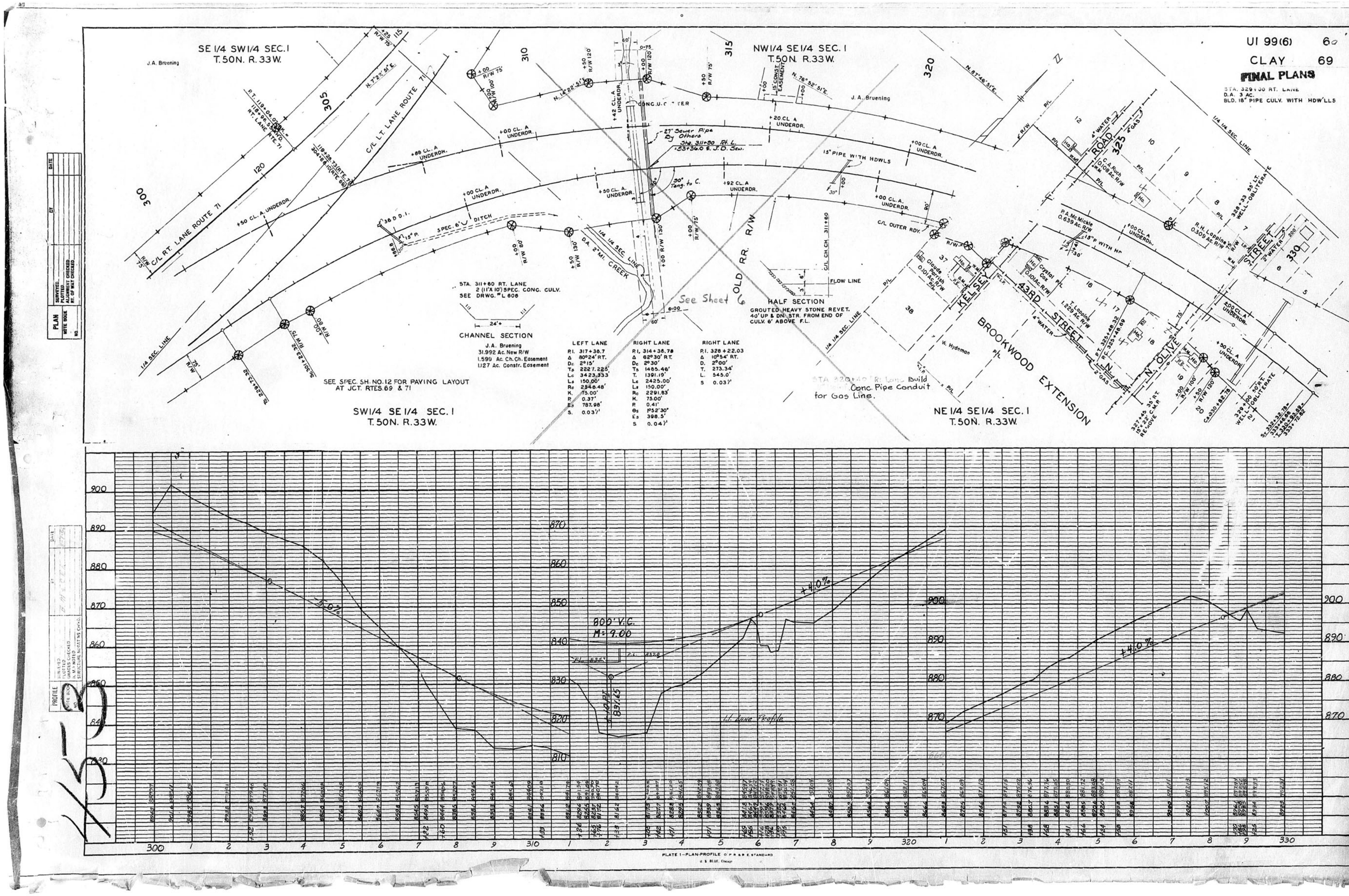
UI 99(6) 6
CLAY 69
FINAL PLANS
SE 1/4 SW1/4 SEC. 1
T. 50N. R. 33W.
NW1/4 SE1/4 SEC. 1
T. 50N. R. 33W.
SW1/4 SE 1/4 SEC. 1
T. 50N. R. 33W.
NE 1/4 SE 1/4 SEC. 1
T. 50N. R. 33W.
J. A. Bruening
C/L RT. LANE ROUTE 71
C/L LT. LANE ROUTE 71
C/L OUTER RDY.
1/4 SEC. LINE
1/4 1/4 SEC. LINE
CONC. U. GUTTER
27" Sewer Pipe By Others
15" PIPE WITH HDWLS
D.A. 2 MI. CREEK
SPEC. 6' U DITCH
BROOKWOOD EXTENSION
KELSEY
43RD STREET
ROAD
N. OLIVE
STREET
Sta. 306+68 Rt. Lane Built 15"x69' R.C.P. Culv. Skew 30° R/A 36-D Drop Inlet Lt. C230 RC Hdwl. Rt.
Sta. 312+33 Lt. Lane Built 24"x55' R.C.P. Culv. C230 RC Hdwl. Rt. Conc. U Gutter Lt.
Sta. 317+00 Rt. Lane Built 15"x77' R.C.P. Culv. Skew 30° L/A C230 RC Hdwls. Rt. & Lt.
Sta. 320+40 Rt. Lane Built 15"x130' R.C. Pipe Gas Line Conduit (Under both Lanes)
Sta. 323+41 Rt. Lane Built 15"x65' R.C.P. Culv. 30° Skew L/A C230 RC Hdwls. Rt. & Lt.
Sta. 329+00 Rt. Lane Built 18"x 255' R.C.P. Culv. C230 RC Hdwl. Lt. C230 R.B. Hdwl. Rt. D.A. 3 AC.
STA. 311+60 RT. LANE BLT. 2 (11'X10') SPEC. CONC. CULV. SEE DRWG. #L 606
CHANNEL SECTION
HALF SECTION
GROUTED HEAVY STONE REVET. 40' U/I & DN. STR. FROM END OF CULV. 6' ABOVE F.L.
FLOW LINE
J. A. Bruening
31.992 Ac. New R/W
1.599 Ac. Ch. Ch. Easement
1.127 Ac. Constr. Easement
SEE SPEC. SH. NO. 12 FOR PAVING LAYOUT AT JCT. RTES. 69 & 71
LEFT LANE
P.I. 317+36.7
Δ 60°24' RT.
Dc 2°15'
Ts 2227.225'
Lc 3423.333'
Ls 150.00'
Rc 2546.48'
K 75.00'
P 0.37'
Es 787.98'
S. 0.037'
RIGHT LANE
P.I. 314+38.78
Δ 62°30' RT.
Dc 2°30'
Ts 1465.46'
T. 1391.19'
Lc 2425.00'
Ls 150.00'
Rc 2291.83'
K 75.00'
P 0.41'
θs 1°52'30"
Es 398.5'
S 0.043'
RIGHT LANE
P.I. 326+22.93
Δ 10°54' RT.
D. 2°00'
T. 273.34'
L. 545.0'
S 0.037'
PLAN
PROFILE
Clearing
Grubbing
1400' V.C.
800' V.C.
Rt. Lane Profile
BM #18 □ on S.W. corner D.I. hdwl. Lt. Sta. 304+ El. 884.78
BM #19 □ on S.W. corner Rt. hdwl. Sta. 312+33 El. 839.27
BM #20 □ on S.E. corner Lt. hdwl. Sta. 317+00 El. 855.95
BM #21 □ on N.W. corner Lt. hdwl. Sta. 323+40 Rt. La. El. 892.53
300
305
310
315
320
325
330

488



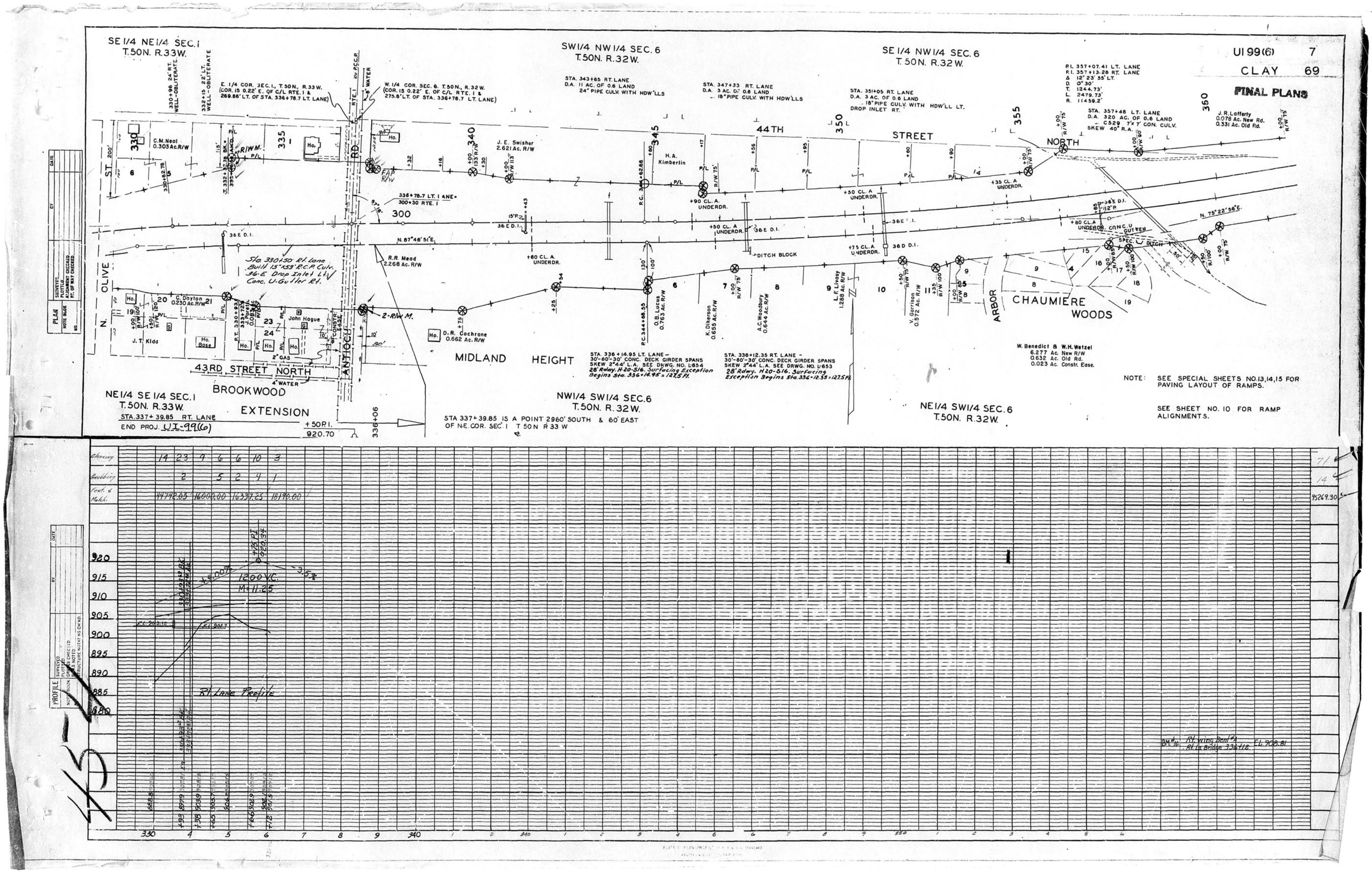
UI 99(6) 6
CLAY 69
FINAL PLANS
STA. 329+30 RT. LANE
D.A. 3 AC.
BLD. 18" PIPE CULV. WITH HDW'LLS
SE 1/4 SW1/4 SEC. 1
T.50N. R.33W.
NW1/4 SE1/4 SEC. 1
T.50N. R.33W.
SW1/4 SE 1/4 SEC. 1
T.50N. R.33W.
NE 1/4 SE 1/4 SEC. 1
T.50N. R.33W.
J. A. Bruening
C/L RT. LANE ROUTE 71
C/L LT. LANE ROUTE 71
C/L OUTER RDY.
OLD RR. R/W
1/4 1/4 SEC. LINE
BROOKWOOD EXTENSION
43RD STREET
KELSEY
N. OLIVE
ROAD
STREET
See Sheet 6
STA. 311+60 RT. LANE
2 (11'X 10') SPEC. CONC. CULV.
SEE DRWG. L 606
CHANNEL SECTION
J. A. Bruening
31.992 Ac. New R/W
1.599 Ac. Ch. Ch. Easement
1.127 Ac. Constr. Easement
SEE SPEC. SH. NO. 12 FOR PAVING LAYOUT
AT JCT. RTES. 69 & 71
HALF SECTION
GROUTED HEAVY STONE REVET.
40' UP & DN. STR. FROM END OF
CULV. 6' ABOVE F.L.
Conc. Pipe Conduit
for Gas Line.
LEFT LANE
RIGHT LANE
RIGHT LANE
800' V.C.
M = 9.00
-5.0%
+4.0%
+4.0%
Lt. Lane Profile
PLAN
PROFILE
PLATE 1 - PLAN-PROFILE


UI 99(6) 5
CLAY 69
FINAL PLANS
SE 1/4 SW 1/4 SEC. 1
T.50N. R.33W.
SE 1/4 NW 1/4 SEC.12
T.50N. R.33W.
SUNSET HILL
WAYNE AVE
NE 1/4 NW 1/4 SEC.12
CONST. EASEMENT
STA. 272+46 C/L PARKWAY
BLD. 24" PIPE CULV. WITH HDW'LLS
See Sheet 5
J. A. Bruening
P.T. 53+31.79
294+77.32 LT. LANE = 54+05.91 RUSSELL RD.
ROUTE 71
RUSSELL RD
CONSTR. EASEMENT
NORTH 38TH ST
NORTH WOODLAND AVE
1/4 SEC. LINE
Ida M. Dyer
A. W. Brooks
0.556 Ac. R/W
STA 294+65± Rt Lane Build 15" Rein Conc Pipe Conduit for Gas Line.
NOTE: SEE SPECIAL SHEET NO'S 7-11 INCL. FOR PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 9 FOR RAMP ALIGNMENTS.
SW 1/4 NE 1/4 SEC.12
T.50N. R.33W.
STA. 294+24.15 RT. LANE BLD.
35'-60'-35' CONC. DECK GIRDER SPANS
SKEW 14° R.A. SEE DRWG. NO. L-660
40' Rdwy. H20-S16. Surfacing
Exception Begins Sta. 294+24.15+137.5 Ft.
STA. 294+13.25 LT. LANE
30'-60'-25' CONC. DECK GIRDER SPANS
SKEW 7° R.A. SEE DRWG. NO. L-659
40' Rdwy. H20-S16. Surfacing
Exception Begins Sta. 294+13.25+122.5 Ft.
39TH ST. N.
SUNSET HILL TRACTS
NW 1/4 NE 1/4 SEC. 12
T.50N. R.33W.
55+95.04
NE. COR. NW 1/4 SEC. 12
P.C. 57+43.40
CONSTR. EASEMENT
NOTE: SEE SPECIAL SHEET 12 FOR RTE 71 & 69 INTERSECTION.
SW 1/4 SE 1/4 SEC. 1
T.50N. R.33W.
294+92.86 RT. LANE = 55+68.64 RUSSELL RD.
0.178 Ac. Constr. Ease.
+2.446%
+2.25%
-5.0%
Lt Lane Profile
270
275
280
285
290
295
300
PLATE 1 - PLAN-PROFILE
457



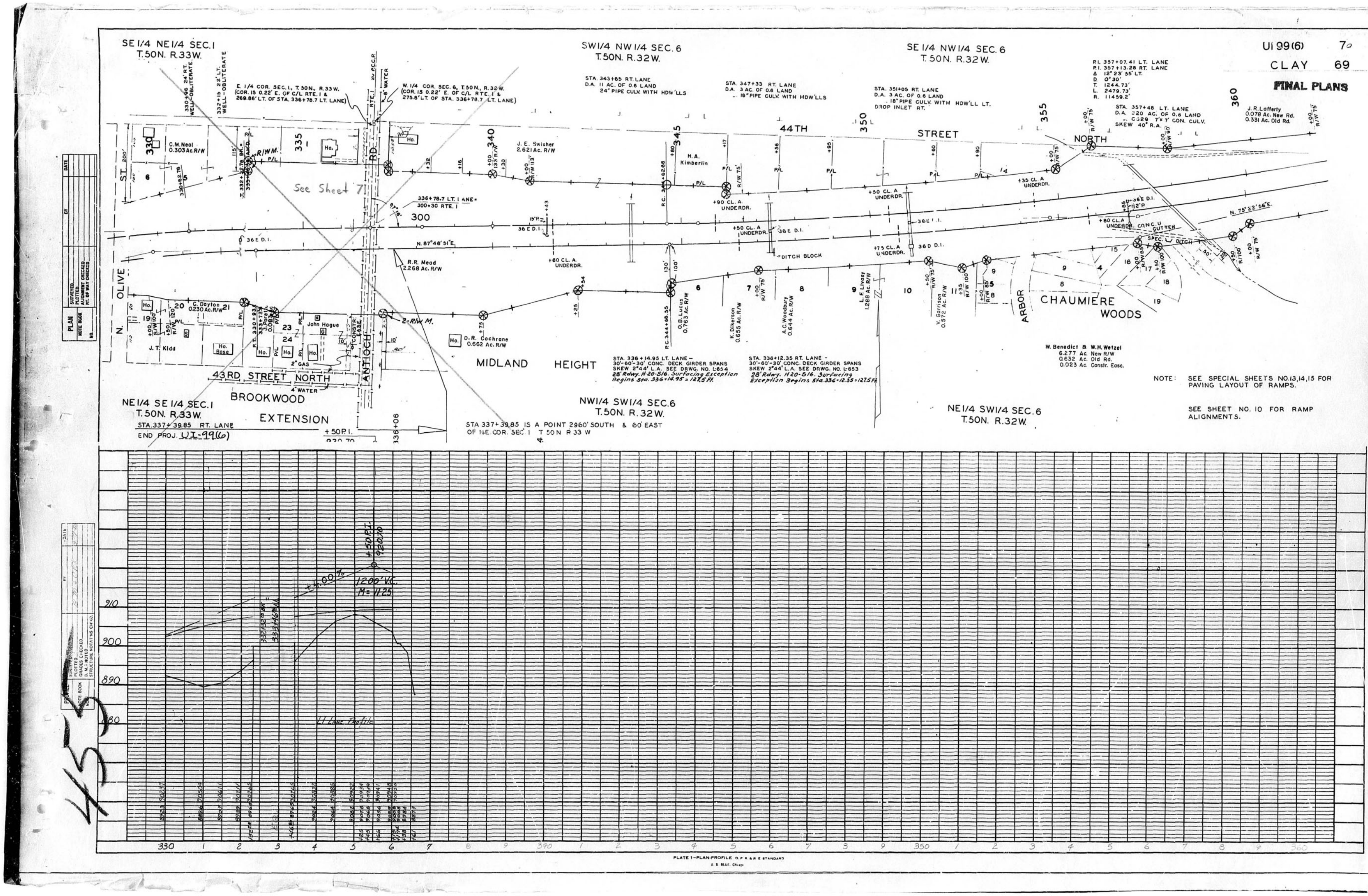
UI 99(6) 6a
CLAY 69
FINAL PLANS
STA. 329+00 RT. LANE
D.A. 3 AC.
BLD. 18" PIPE CULV. WITH HDW'LLS
SE 1/4 SW 1/4 SEC. 1
T.50N. R.33W.
NW 1/4 SE 1/4 SEC. 1
T.50N. R.33W.
SW 1/4 SE 1/4 SEC. 1
T.50N. R.33W.
NE 1/4 SE 1/4 SEC. 1
T.50N. R.33W.
J. A. Bruening
C/L RT. LANE ROUTE 71
C/L LT. LANE ROUTE 71
C/L OUTER RDY.
OLD RR. R/W
D.A. 2 MI. CREEK
1/4 1/4 SEC. LINE
27" Sewer Pipe By Others
15" PIPE WITH HDWLS
SPEC. 6' V DITCH
STA. 311+60 RT. LANE
2 (11'X 10') SPEC. CONC. CULV.
SEE DRWG. L 606
CHANNEL SECTION
J. A. Bruening
31.992 Ac. New R/W
1.599 Ac. Ch. Ch. Easement
1.127 Ac. Constr. Easement
SEE SPEC. SH. NO. 12 FOR PAVING LAYOUT AT JCT. RTES. 69 & 71
LEFT LANE
RIGHT LANE
RIGHT LANE
HALF SECTION
GROUTED HEAVY STONE REVET. 40' UP & DN. STR. FROM END OF CULV. 6' ABOVE F.L.
FLOW LINE
See Sheet 6
STA. 320+40 Rt. Lane Build Conc. Pipe Conduit for Gas Line.
KELSEY
43RD. STREET
BROOKWOOD EXTENSION
N. OLIVE
ROAD
STREET
WELL-OBLITERATE
800' V.C.
M=9.00
-5.0%
+4.0%
+4.0%
Lt. Lane Profile
300
310
320
330
PLATE 1 - PLAN-PROFILE
PLAN
PROFILE

153



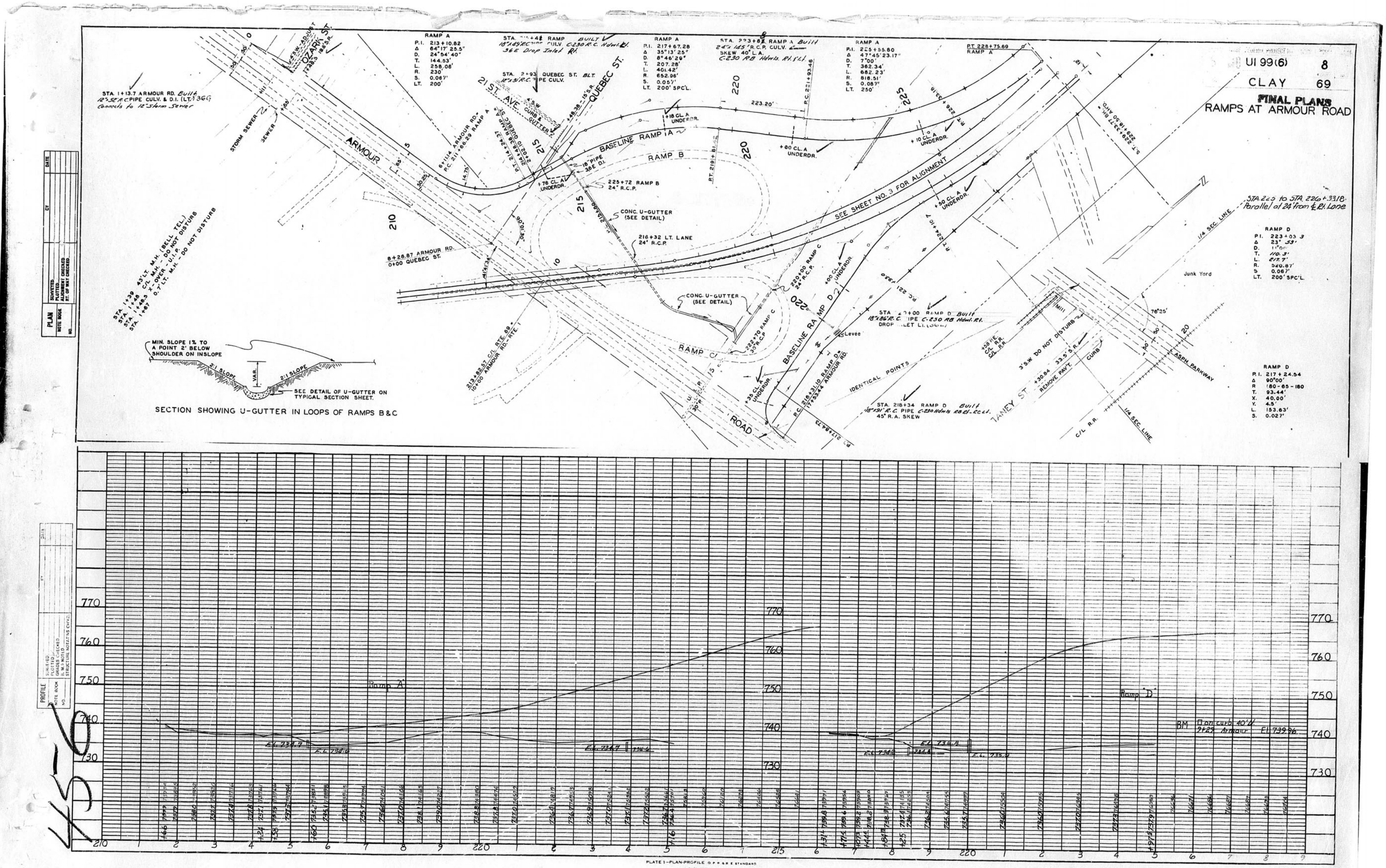
UI 99(6) 7
CLAY 69
FINAL PLANS
SE 1/4 NE 1/4 SEC. 1
T.50N. R.33W.
SW 1/4 NW 1/4 SEC. 6
T.50N. R.32W.
SE 1/4 NW 1/4 SEC. 6
T.50N. R.32W.
NE 1/4 SE 1/4 SEC. 1
T.50N. R.33W.
NW 1/4 SW 1/4 SEC. 6
T.50N. R.32W.
NE 1/4 SW 1/4 SEC. 6
T.50N. R.32W.
44TH
STREET
NORTH
N. OLIVE ST.
ANTIOCH RD
43RD STREET NORTH
BROOKWOOD
EXTENSION
MIDLAND
HEIGHT
ARBOR
CHAUMIERE
WOODS
C.M. Neal
0.303 Ac. R/W
J.E. Swisher
2.621 Ac. R/W
H.A. Kimberlin
R.R. Mead
2.268 Ac. R/W
D.R. Cochrane
0.662 Ac. R/W
John Hogue
J.T. Kidd
O.B. Lucus
0.763 Ac. R/W
K. Dikerson
0.659 Ac. R/W
A.C. Woodbury
0.644 Ac. R/W
V. Garrison
0.572 Ac. R/W
J.R. Lafferty
0.078 Ac. New Rd.
0.331 Ac. Old Rd.
W. Benedict & W.H. Wetzel
6.277 Ac. New R/W
0.632 Ac. Old Rd.
0.023 Ac. Constr. Ease.
E. 1/4 COR. SEC. 1, T.50N, R.33W.
W. 1/4 COR. SEC. 6, T.50N., R.32W.
STA. 343+65 RT. LANE
D.A. 11 AC. OF 0.6 LAND
24" PIPE CULV. WITH HDW'LLS
STA. 347+33 RT. LANE
D.A. 3 AC. OF 0.6 LAND
18" PIPE CULV. WITH HDW'LLS
STA. 351+05 RT. LANE
D.A. 3 AC. OF 0.6 LAND
18" PIPE CULV. WITH HDW'LL LT.
DROP INLET RT.
STA. 357+48 LT. LANE
D.A. 320 AC. OF 0.6 LAND
C529 7'x 7' CON. CULV.
SKEW 40° R.A.
STA. 336+14.95 LT. LANE -
30'-60'-30' CONC. DECK GIRDER SPANS
SKEW 3°44' L.A. SEE DRWG. NO. L654
STA. 336+12.35 RT. LANE -
30'-60'-30' CONC. DECK GIRDER SPANS
SKEW 3°44' L.A. SEE DRWG. NO. L653
Sta 330+50 Rt. Lane
Build 15"x53' R.C.P. Culv.
N. 87°46'51"E.
N. 75°22'56"E.
STA. 337+39.85 IS A POINT 2960' SOUTH & 60' EAST
OF NE. COR. SEC. 1 T.50N R.33W
STA. 337+39.85 RT. LANE
END PROJ. UI-99(6)
NOTE: SEE SPECIAL SHEETS NO. 13, 14, 15 FOR
PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 10 FOR RAMP
ALIGNMENTS.
Rt. Lane Profile
1200 V.C.
PLAN
PROFILE

488

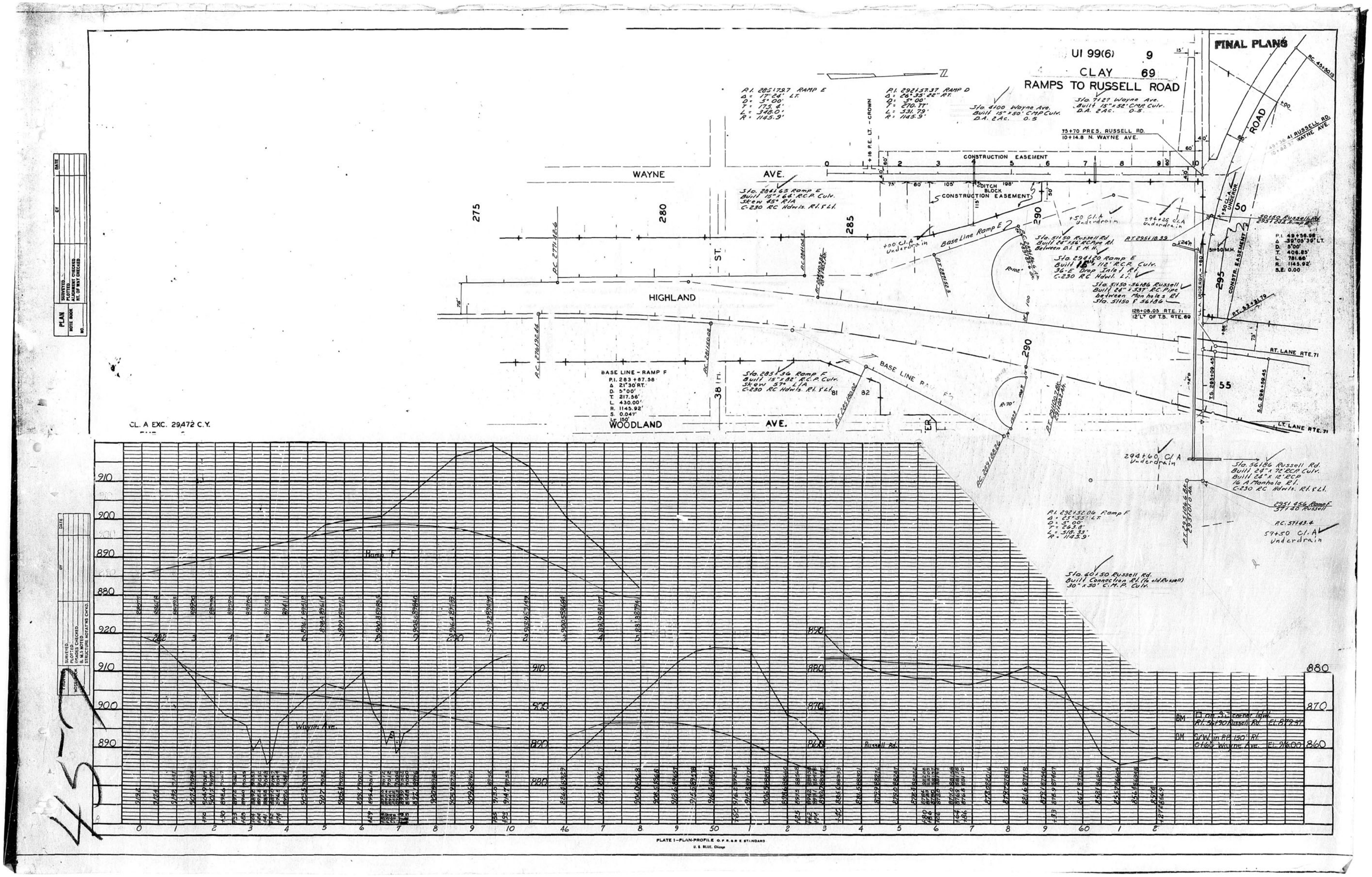


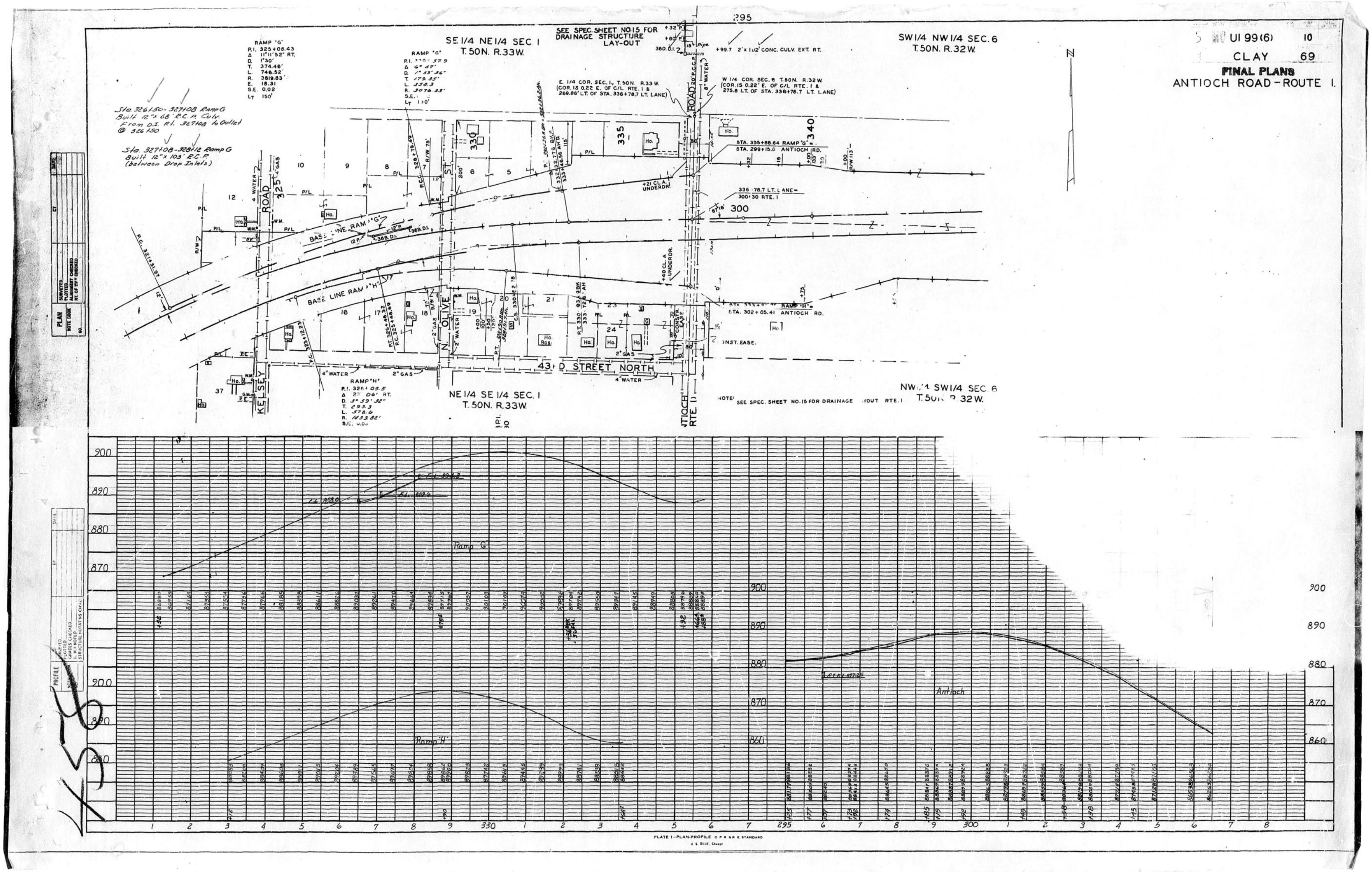
U1 99(6) 70
CLAY 69
FINAL PLANS
SE1/4 NE1/4 SEC.1
T.50N. R.33W.
SW1/4 NW1/4 SEC.6
T.50N. R.32W.
SE1/4 NW1/4 SEC.6
T.50N. R.32W.
E. 1/4 COR. SEC. 1, T.50N., R.33W.
(COR. IS 0.22' E. OF C/L RTE. I &
269.86' LT. OF STA. 336+78.7 LT. LANE)
W. 1/4 COR. SEC. 6, T.50N., R.32W.
(COR. IS 0.22' E. OF C/L RTE. I &
275.6' LT. OF STA. 336+78.7 LT. LANE)
STA. 343+65 RT. LANE
D.A. 11 AC. OF 0.6 LAND
24" PIPE CULV. WITH HDW'LLS
STA. 347+33 RT. LANE
D.A. 3 AC. OF 0.6 LAND
18" PIPE CULV. WITH HDW'LLS
STA. 351+05 RT. LANE
D.A. 3 AC. OF 0.6 LAND
18" PIPE CULV. WITH HDW'LL LT.
DROP INLET RT.
P.I. 357+07.41 LT. LANE
P.I. 357+13.28 RT. LANE
Δ 12°23'55" LT.
D 0°30'
T. 1244.73'
L 2479.73'
R. 11459.2'
STA. 357+48 LT. LANE
D.A. 220 AC. OF 0.6 LAND
C329 7'x7' CON. CULV.
SKEW 40° R.A.
J. R. Lafferty
0.078 Ac. New Rd.
0.331 Ac. Old Rd.
44TH STREET NORTH
C.M. Neal
0.303 Ac. R/W
J. E. Swisher
2.621 Ac. R/W
H. A. Kimberlin
See Sheet 7
336+78.7 LT. LANE=
300+30 RTE. I
300
N. 87°46'51"E.
N. 75°22'56"E.
R.R. Mead
2.268 Ac. R/W
ANTIOCH RD.
N. OLIVE ST.
C. Dayton
0.230 Ac. R/W
John Hogue
D. R. Cochrane
0.662 Ac. R/W
J. T. Kidd
O. B. Lucus
0.763 Ac. R/W
K. Dikerson
0.655 Ac. R/W
A. C. Woodbury
0.644 Ac. R/W
L. F. Livesy
1.288 Ac. R/W
V. Garrison
0.572 Ac. R/W
DITCH BLOCK
ARBOR
CHAUMIERE WOODS
W. Benedict & W. H. Wetzel
6.277 Ac. New R/W
0.632 Ac. Old Rd.
0.023 Ac. Constr. Eas.
MIDLAND HEIGHT
STA. 336+14.95 LT. LANE –
30'-60'-30' CONC. DECK GIRDER SPANS
SKEW 2°44' L.A. SEE DRWG. NO. L654
28' Rdwy. H20-S16. Surfacing Exception
Begins Sta. 336+14.95 = 127.5 ft.
STA. 336+12.35 RT. LANE –
30'-60'-30' CONC. DECK GIRDER SPANS
SKEW 2°44' L.A. SEE DRWG. NO. L653
28' Rdwy. H20-S16. Surfacing
Exception Begins Sta. 336+12.35 = 127.5 ft.
NOTE: SEE SPECIAL SHEETS NO. 13, 14, 15 FOR PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 10 FOR RAMP ALIGNMENTS.
43RD STREET NORTH
BROOKWOOD EXTENSION
NE1/4 SE1/4 SEC.1
T.50N. R.33W.
NW1/4 SW1/4 SEC.6
T.50N. R.32W.
NE1/4 SW1/4 SEC.6
T.50N. R.32W.
STA. 337+39.85 RT. LANE
END PROJ. U1-99(6)
STA 337+39.85 IS A POINT 2960' SOUTH & 60' EAST OF NE. COR. SEC. 1 T.50N R.33W
+50 P.I.
+4.00%
1200' V.C.
+50 P.I.
910
900
890
880
Lt. Lane Profile
330
340
350
360
PLATE 1—PLAN-PROFILE
455

488



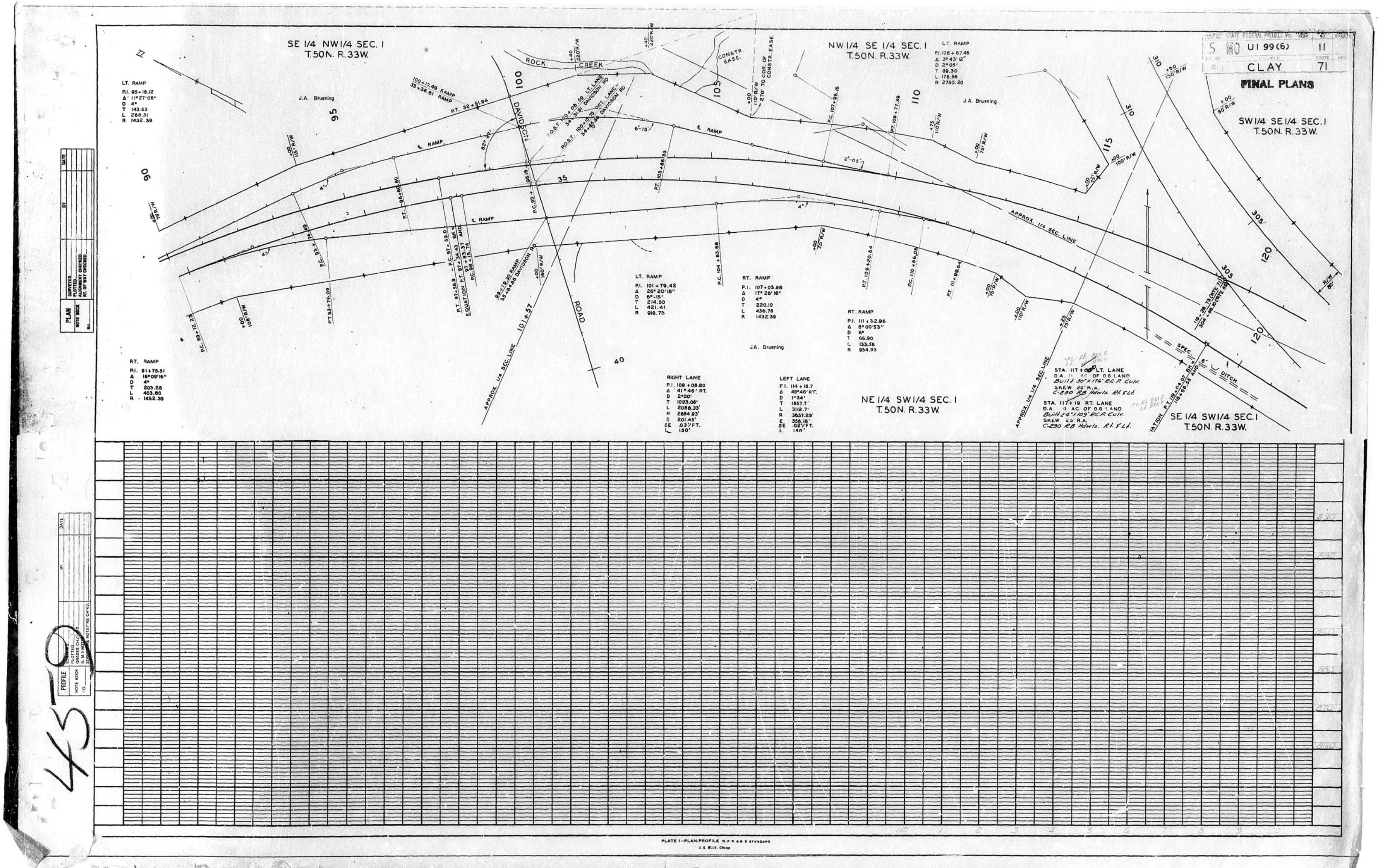
UI 99(6) 8
CLAY 69
FINAL PLANS
RAMPS AT ARMOUR ROAD
RAMP A
P.I. 213+10.82
Δ 64°17' 23.5"
D. 24°54'40"
T. 144.53'
L. 258.08'
R. 230'
S. 0.067'
LT. 200'
RAMP A
P.I. 217+67.28
Δ 35°13'25"
D. 8°46'29"
T. 207.28'
L. 401.42'
R. 652.96'
S. 0.057'
LT. 200' SPC'L.
RAMP A
P.I. 225+35.80
Δ 47°45'23.17"
D. 7°00'
T. 362.34'
L. 682.23'
R. 818.51'
S. 0.087'
LT. 250'
RAMP D
P.I. 223+03.3
Δ 23° 53'
R. 520.87'
S. 0.067'
LT. 200' SPC'L
RAMP D
P.I. 217+24.54
Δ 90°00'
R 180-65-180
T. 93.44'
X. 40.00'
Y. 4.5'
L. 153.63'
S. 0.027'
ARMOUR
ROAD
QUEBEC ST.
21 ST. AVE.
OZARK ST.
BASELINE RAMP A
RAMP B
RAMP C
BASELINE RAMP D
TANEY ST.
ASPH. PARKWAY
SEE SHEET NO. 3 FOR ALIGNMENT
CONC. U-GUTTER (SEE DETAIL)
225+72 RAMP B 24" R.C.P.
216+32 LT. LANE 24" R.C.P.
8+28.87 ARMOUR RD. 0+00 QUEBEC ST.
STORM SEWER
SEWER
Junk Yard
1/4 SEC. LINE
C/L R.R.
IDENTICAL POINTS
REMOVE PAV'T.
CURB
MIN. SLOPE 1% TO A POINT 2' BELOW SHOULDER ON INSLOPE
2:1 SLOPE
VAR.
SEE DETAIL OF U-GUTTER ON TYPICAL SECTION SHEET.
SECTION SHOWING U-GUTTER IN LOOPS OF RAMPS B&C
STA. 225 to STA. 226+33.18 Parallel at 24' from ℄ Rt. Lane
PLAN
PROFILE
Ramp 'A'
Ramp 'D'
770
760
750
740
730
210
215
220
PLATE 1 - PLAN-PROFILE
456


FINAL PLANS
UI 99(6) 9
CLAY 69
RAMPS TO RUSSELL ROAD
CONSTRUCTION EASEMENT
WAYNE AVE.
HIGHLAND
ST.
WOODLAND AVE.
BASE LINE RAMP E
BASE LINE - RAMP F
P.I. 283+87.58
Δ 21°30' RT.
D 5°00'
T. 217.56'
L 430.00'
R. 1145.92'
S. 0.047'
CL. A EXC. 29,472 C.Y.
ROAD
CONSTR. EASEMENT
RT. LANE RTE. 71
LT. LANE RTE. 71
73+70 PRES. RUSSELL RD.
10+14.8 N. WAYNE AVE.
Ramp F
Wayne Ave.
Russell Rd.
PLATE 1—PLAN-PROFILE
457



UI 99(6) 10
CLAY 69
FINAL PLANS
ANTIOCH ROAD - ROUTE I.
SE 1/4 NE 1/4 SEC 1
T. 50N. R.33W.
SEE SPEC. SHEET NO.15 FOR DRAINAGE STRUCTURE LAY-OUT
SW 1/4 NW 1/4 SEC. 6
T. 50N. R.32W.
RAMP "G"
BASE LINE RAMP "G"
BASE LINE RAMP "H"
Sta. 326+50 - 327+08 Ramp G
Built 12" x 68' R.C.P. Culv.
From D.I. Rt. 327+08 to Outlet @ 326+50
Sta. 327+08 - 328+12 Ramp G
Built 12" x 103' R.C.P.
(between Drop Inlets)
KELSEY ROAD
N. OLIVE ST.
43RD STREET NORTH
ANTIOCH ROAD
NE 1/4 SE 1/4 SEC. 1
T. 50N. R.33W.
NW 1/4 SW 1/4 SEC 6
T. 50N. R.32W.
SEE SPEC. SHEET NO.15 FOR DRAINAGE LAYOUT RTE. I
Ramp "G"
Ramp "H"
Antioch
PLAN
PROFILE
PLATE 1 - PLAN-PROFILE

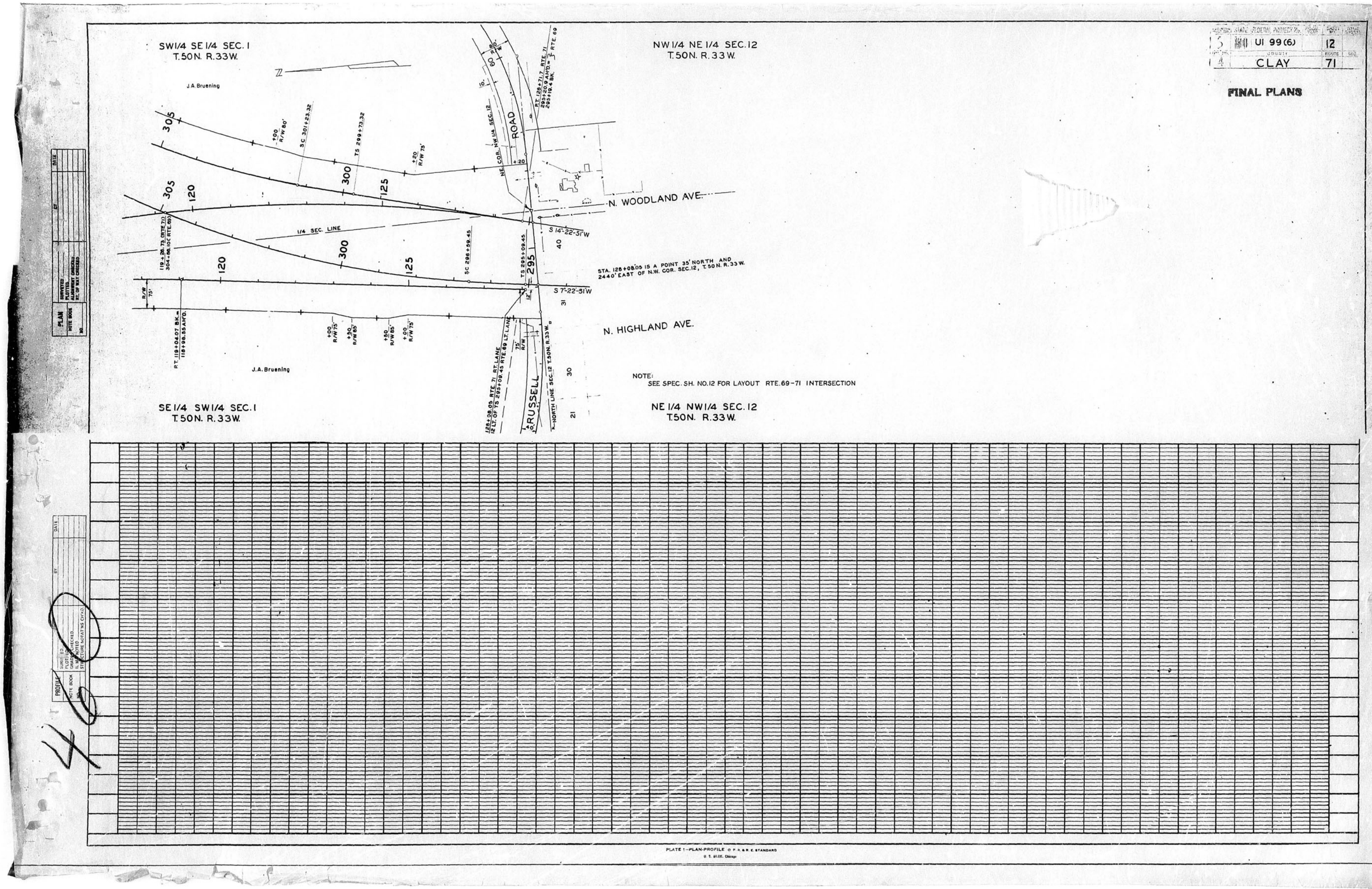
488



5
MO.
UI 99 (6)
11
4
CLAY
71
FINAL PLANS
SE 1/4 NW1/4 SEC. 1
T.50N. R.33W.
NW1/4 SE 1/4 SEC. 1
T.50N. R.33W.
SW1/4 SE1/4 SEC. 1
T.50N. R.33W.
NE 1/4 SW1/4 SEC. 1
T.50N. R.33W.
SE 1/4 SW1/4 SEC. 1
T.50N. R.33W.
LT. RAMP
P.I. 95+18.12
Δ' 11°27'08"
D 4°
T 143.63
L 286.31
R 1432.39
LT. RAMP
P.I. 108+87.46
Δ 3°43'12"
D 2°05'
T 89.30
L 178.56
R 2750.20
LT. RAMP
P.I. 101+79.42
Δ 26°20'18"
D 6°-15'
T 214.50
L 421.41
R 916.73
RT. RAMP
P.I. 107+03.98
Δ 17°26'16"
D 4°
T 220.10
L 436.76
R 1432.39
RT. RAMP
P.I. 111+32.96
Δ 8°00'53"
D 6°
T 66.90
L 133.58
R 954.93
RT. RAMP
P.I. 91+75.51
Δ 16°09'16"
D 4°
T 203.28
L 403.86
R 1432.39
RIGHT LANE
P.I. 109+08.80
Δ 41°46' RT.
D 2°00'
T 1093.06'
L 2088.33'
R 2864.93'
E 201.45'
SE .03'/FT.
L 150'
LEFT LANE
P.I. 114+18.7
Δ 43°46' RT.
D 1°34'
T 1657.7'
L 3112.7'
R 3657.29'
E 358.16'
SE .02'/FT.
L 150'
STA. 117+00 LT. LANE
D.A. 11 AC. OF 0.6 LAND
Built 30"x176' R.C.P. Culv.
SKEW 20° R.A.
C-230 RB Hdwls. Rt. & Lt.
STA. 117+19 RT. LANE
D.A. 9 AC. OF 0.6 LAND
Built 24"x109' R.C.P. Culv.
SKEW 25° R.A.
C-230 RB Hdwls. Rt. & Lt.
J.A. Bruening
ROCK CREEK
DAVIDSON ROAD
CONSTR. EASE.
APPROX. 1/4 SEC. LINE
℄ RAMP
PLAN
PROFILE
PLATE 1—PLAN-PROFILE

459

-400


UI 99(6)
12
CLAY
71
FINAL PLANS
SW1/4 SE1/4 SEC. 1
T.50N. R.33W.
NW1/4 NE1/4 SEC. 12
T.50N. R.33W.
J.A.Bruening
N. WOODLAND AVE.
1/4 SEC. LINE
S 14°-22'-51"W
S 7°-22'-51"W
N. HIGHLAND AVE.
RUSSELL
ROAD
STA. 128+08.05 IS A POINT 35' NORTH AND 2440' EAST OF N.W. COR. SEC.12, T.50N. R.33W.
NOTE:
SEE SPEC. SH. NO.12 FOR LAYOUT RTE.69-71 INTERSECTION
SE1/4 SW1/4 SEC. 1
T.50N. R.33W.
NE 1/4 NW1/4 SEC. 12
T.50N. R.33W.
128+08.05 RTE. 71 RT. LANE
12 LT. OF TS 295+09.45 RTE.69 LT. LANE
NORTH LINE SEC.12 T.50N. R.33W.
TS 295+09.45
SC 296+59.45
PLAN
PROFILE
460
PLATE 1—PLAN-PROFILE

MODIFICATIONS OF STANDARD CULVERT DETAILS

STATION	STANDARD NUMBER	SIZE AND TOTAL LENGTH OF FINAL STRUCTURES	HEIGHT OF FILL FOR DESIGN DATA	SECTION OR IDENTICAL SECTIONS	SECTION LOCATED UNDER	LENGTH OF SECTION	MODIFICATIONS BOTTOM SLAB THICKNESS OF SLAB	SIZE OF A-BARS	SPACING OF A-BARS	LENGTH OF B-BARS IN SIDEWALLS	REMARKS

MODIFICATIONS OF STANDARD CULVERT DETAILS

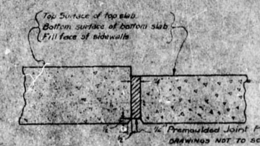
STATION	STANDARD NUMBER	SIZE AND TOTAL LENGTH OF FINAL STRUCTURES	HEIGHT OF FILL FOR DESIGN DATA	SECTION OR IDENTICAL SECTIONS	SECTION LOCATED UNDER	LENGTH OF SECTION	MODIFICATIONS BOTTOM SLAB THICKNESS OF SLAB	SIZE OF A-BARS	SPACING OF A-BARS	LENGTH OF B-BARS IN SIDEWALLS	REMARKS
236+70	C-529	9'x8' x 194' Skew 25° L.A.	8	A	Left Slope	26'-0"	13½	7/8⌀	6"	9'-9"	
			11	B	Left Lane	49'-0"	14"	7/8⌀	5½	9'-9"	
			11	C	Parkway	25'-0"	14"	7/8⌀	5½"	9'-9"	
			11	D	Right Lane	49'-0"	14"	7/8⌀	5½"	9'-9"	
			10	E	Right Slope	45'-0	13½"	7/8⌀	5½"	9'-9"	
257+90	C-530	3'x3' x 269' Skew 30° RA.	10	A	Right Slope	28'-9"					W.W. 2-1
			24	B	Right Slope	32'-6"					
			28	C	Right Lane	50'-0"					
			28	D	Parkway	29'-0"					
			29	E	Left Lane	50'-0"					
			27	F	Left Slope	50'-0"					
			9	G	Left Slope	28'-9"					W.W. 2-1

C-530

NOTE– Section "A" is always that section nearest the upstream flow line of the final structure.

DETAILS OF TRANSVERSE EXPANSION JOINT

FINAL PLANS 13



Joint material to be used at transverse joints in top and bottom slabs and sidewalls.
Tranverse joint to be constructed perpendicular to flow line and at right angles to ℄ of box

GENERAL NOTES

All longitudinal reinforcement shall be placed with ends approximately 1½" from center of expansion joints.

Cost of tranverse expansion joints complete in place, to be included in unit price bid for Class "B" concrete.

The Premoulded Joint Filler shall meet the requirements of Standard Specification 38-19A(1)h.

MISSOURI STATE HIGHWAY COMMISSION

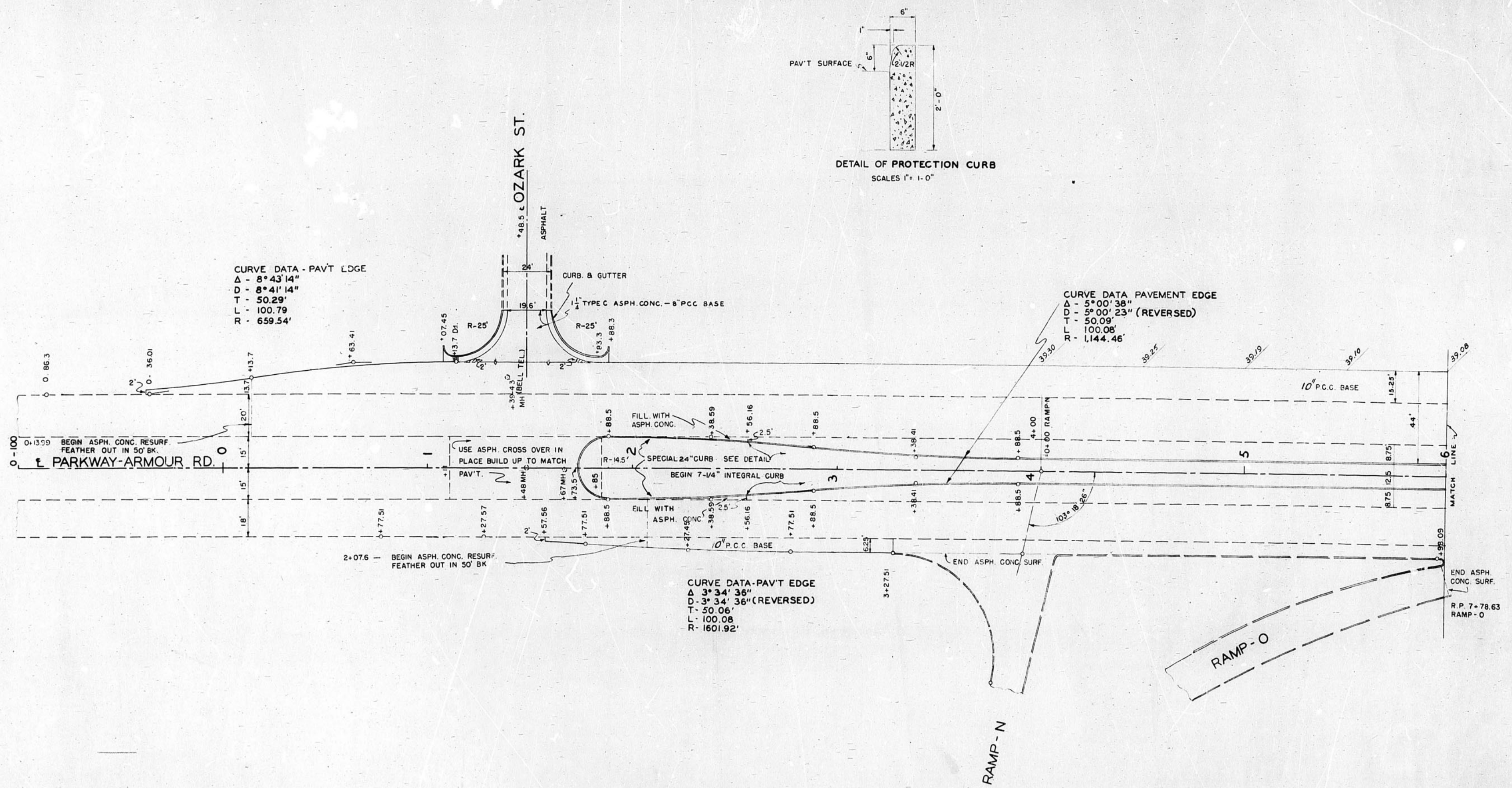
MODIFICATIONS AND TRANSVERSE EXPANSION JOINTS FOR BOX CULVERTS WHICH ARE TO BE BUILT IN SECTIONS

ROUTE 69 PROJ. UI 99(6)
COUNTY CLAY

REVISIONS

SPECIAL SHEET NO. 1

4(c)



LEGEND

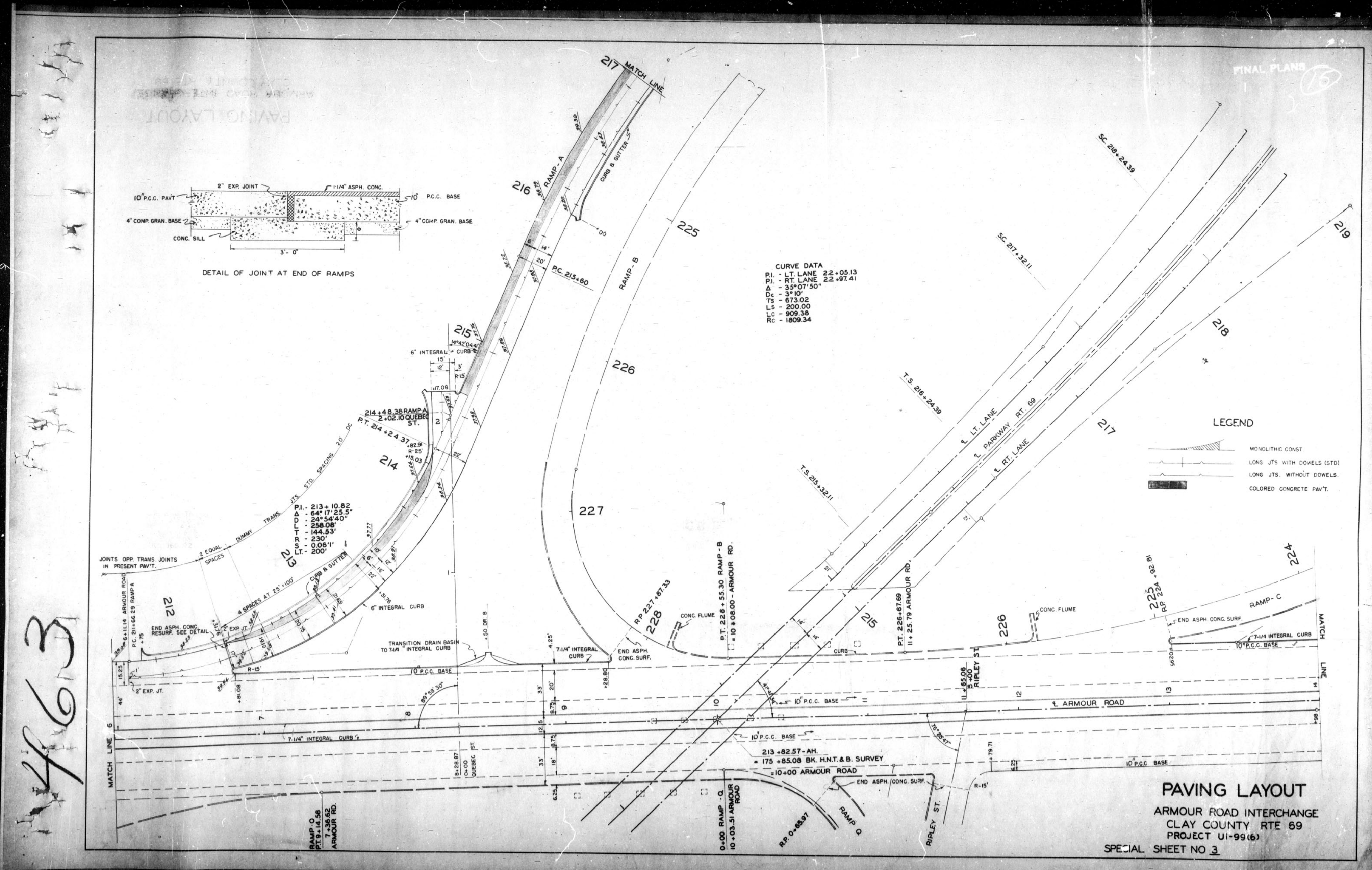
- MONOLITHIC CONST.
- LONG. JTS. WITH DOWELS (STD.)
- LONG. JTS. WITHOUT DOWELS.

PAVING LAYOUT

ARMOUR ROAD INTERCHANGE
CLAY COUNTY RTE 69
PROJECT UI-99(6)

SPECIAL SHEET NO 2

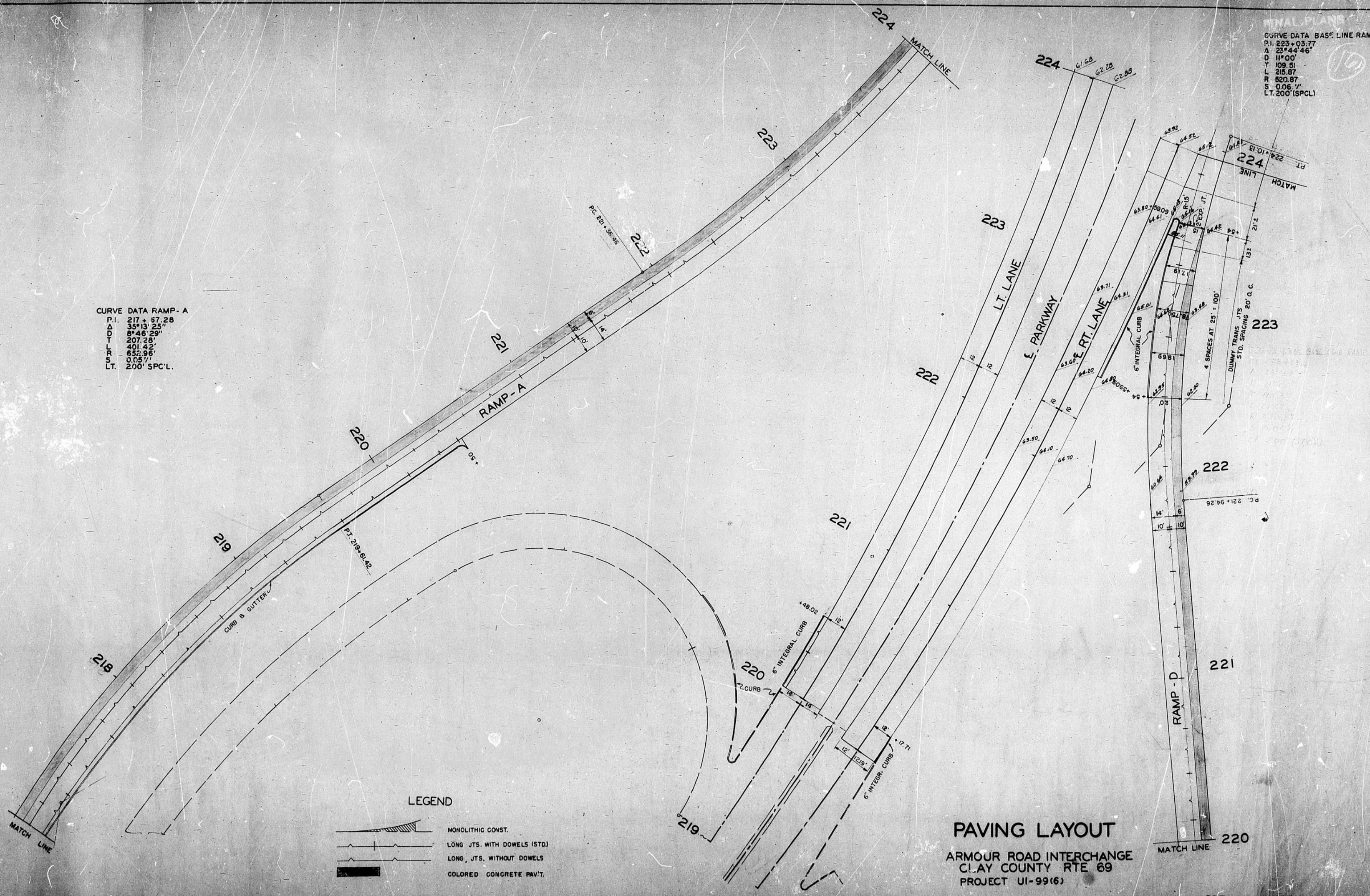
462



FINAL PLANS
15
463
DETAIL OF JOINT AT END OF RAMPS
2" EXP. JOINT
1-1/4" ASPH. CONC.
10" P.C.C. PAV'T
10" P.C.C. BASE
4" COMP. GRAN. BASE
4" COMP. GRAN. BASE
CONC. SILL
3'- 0"
CURVE DATA
P.I. - LT. LANE 22+05.13
P.I. - RT. LANE 22+97.41
Δ - 35°07'50"
Dc - 3°10'
Ts - 673.02
Ls - 200.00
Lc - 909.38
Rc - 1809.34
LEGEND
MONOLITHIC CONST.
LONG. JTS. WITH DOWELS (STD)
LONG. JTS. WITHOUT DOWELS.
COLORED CONCRETE PAV'T.
RAMP - A
RAMP - B
RAMP - C
RAMP Q
MATCH LINE
CURB & GUTTER
P.C. 215+60
6" INTEGRAL CURB
214+48.38 RAMP-A
2+02.10 QUEBEC ST.
P.T. 214+24.37
P.I. - 213+10.82
Δ - 64° 17'25.5"
D - 24°54'40"
L - 258.08'
T - 144.53'
R - 230'
S - 0.061'
LT. - 200'
JOINTS OPP. TRANS. JOINTS IN PRESENT PAV'T.
2 EQUAL SPACES
DUMMY TRANS. JTS. STD. SPACING 20' OC.
4 SPACES AT 25'±100'
END ASPH. CONC. RESURF. SEE DETAIL
2" EXP. JT.
P.C. 211+66.29 RAMP A
TRANSITION DRAIN BASIN TO 7-1/4" INTEGRAL CURB
7-1/4" INTEGRAL CURB
END ASPH. CONC. SURF.
R.P. 227+87.33
CONC. FLUME
P.T. 228+55.30 RAMP-B
= 10+08.00 - ARMOUR RD.
P.T. 226+67.69
11+25.79 ARMOUR RD.
S.C. 218+24.39
S.C. 217+32.11
T.S. 216+24.39
T.S. 215+32.11
℄ LT. LANE
℄ PARKWAY RT. 69
℄ RT. LANE
℄ ARMOUR ROAD
10" P.C.C. BASE
7-1/4" INTEGRAL CURB
213+82.57 - AH.
= 175+85.08 BK. H.N.T. & B. SURVEY
= 10+00 ARMOUR ROAD
RIPLEY ST.
QUEBEC ST.
RAMP-Q P.T. 9+14.56
7+36.62 ARMOUR RD.
0+00 RAMP - Q
10+03.51 ARMOUR ROAD
R.P. 0+65.97
R.P. 224+92.81
PAVING LAYOUT
ARMOUR ROAD INTERCHANGE
CLAY COUNTY RTE 69
PROJECT UI-99(6)
SPECIAL SHEET NO 3

FINAL PLANS

CURVE DATA BASE LINE RAMP D
P.I. 223 + 03.77
A 23°44'46"
D 11°00'
T 109.51
L 215.87
R 520.87
S 0.06.'/'
LT. 200' (SPCL)



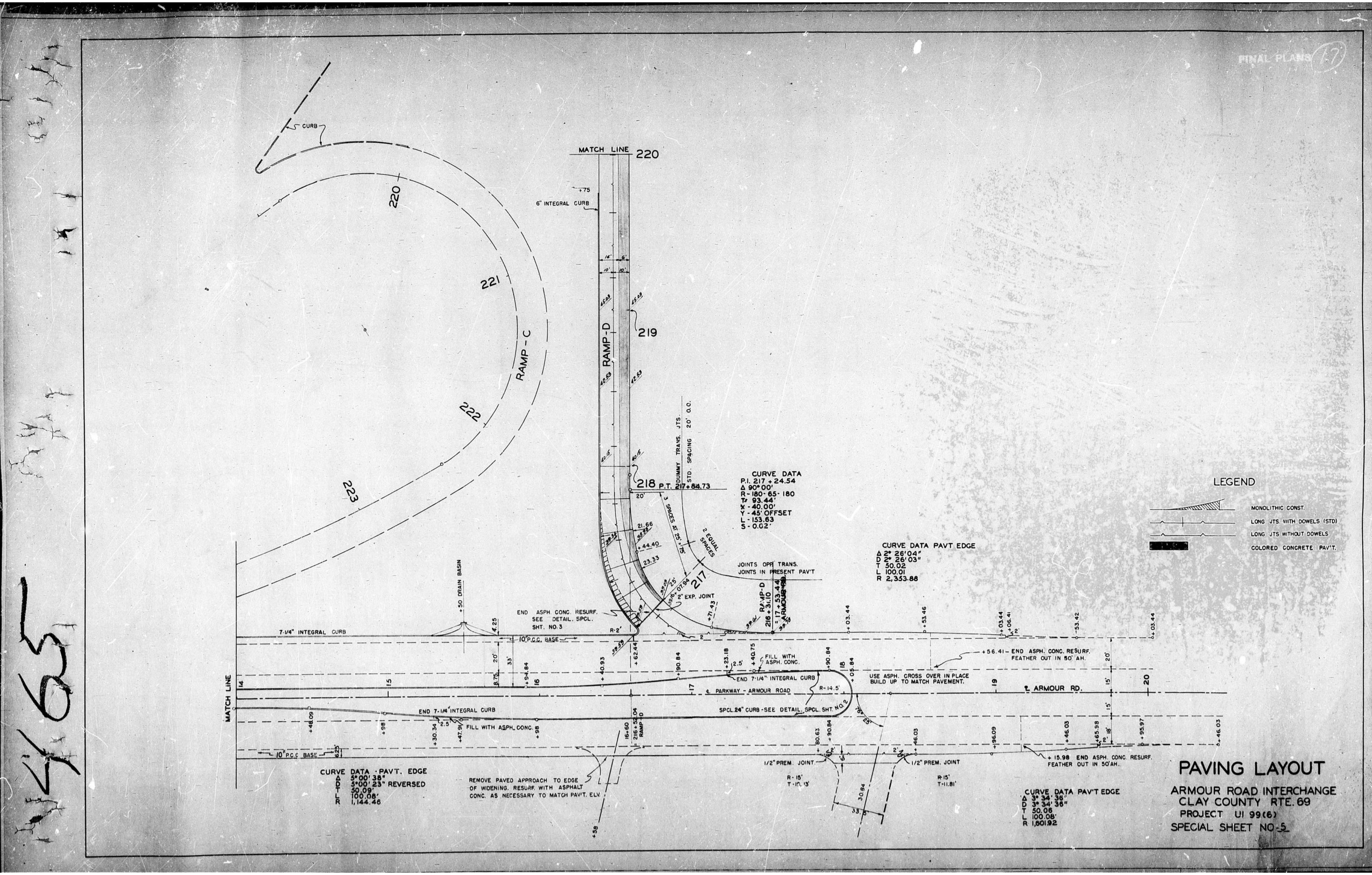
LEGEND

MONOLITHIC CONST.
LONG. JTS. WITH DOWELS (STD.)
LONG. JTS. WITHOUT DOWELS
COLORED CONCRETE PAV'T.

PAVING LAYOUT

ARMOUR ROAD INTERCHANGE
CLAY COUNTY RTE 69
PROJECT UI-99(6)

SPECIAL SHEET NO 4

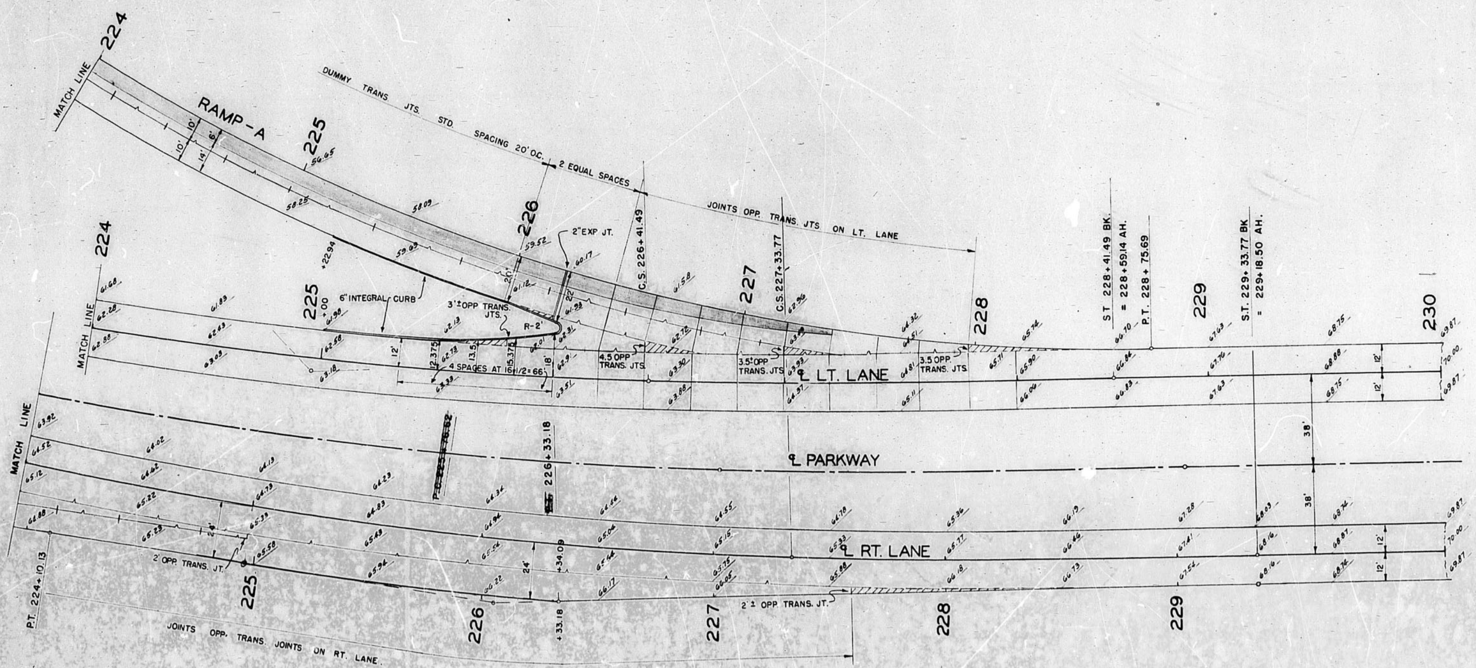


PAVING LAYOUT

ARMOUR ROAD INTERCHANGE
CLAY COUNTY RTE. 69
PROJECT UI 99(6)
SPECIAL SHEET NO-5

FINAL PLANS 18

CURVE DATA RAMP-A
P.I. 225+55.80
Δ 47°45'23".17
D 7°00'
T 362.34'
L 682.23'
R 818.51'
E 76.62'
S 0.05 '/'
LT. 250'



CURVE DATA BASE LINE RAMP-D
P.I. 226+04.98
Δ 10°34'10"
~~D 18°41'15"~~
~~T 28.36'~~
~~L 56.56'~~
~~R 306.60'~~

STA. 225 to STA. 226+33.18
Parallel at 24' from ℄ Rt. Lane

LEGEND

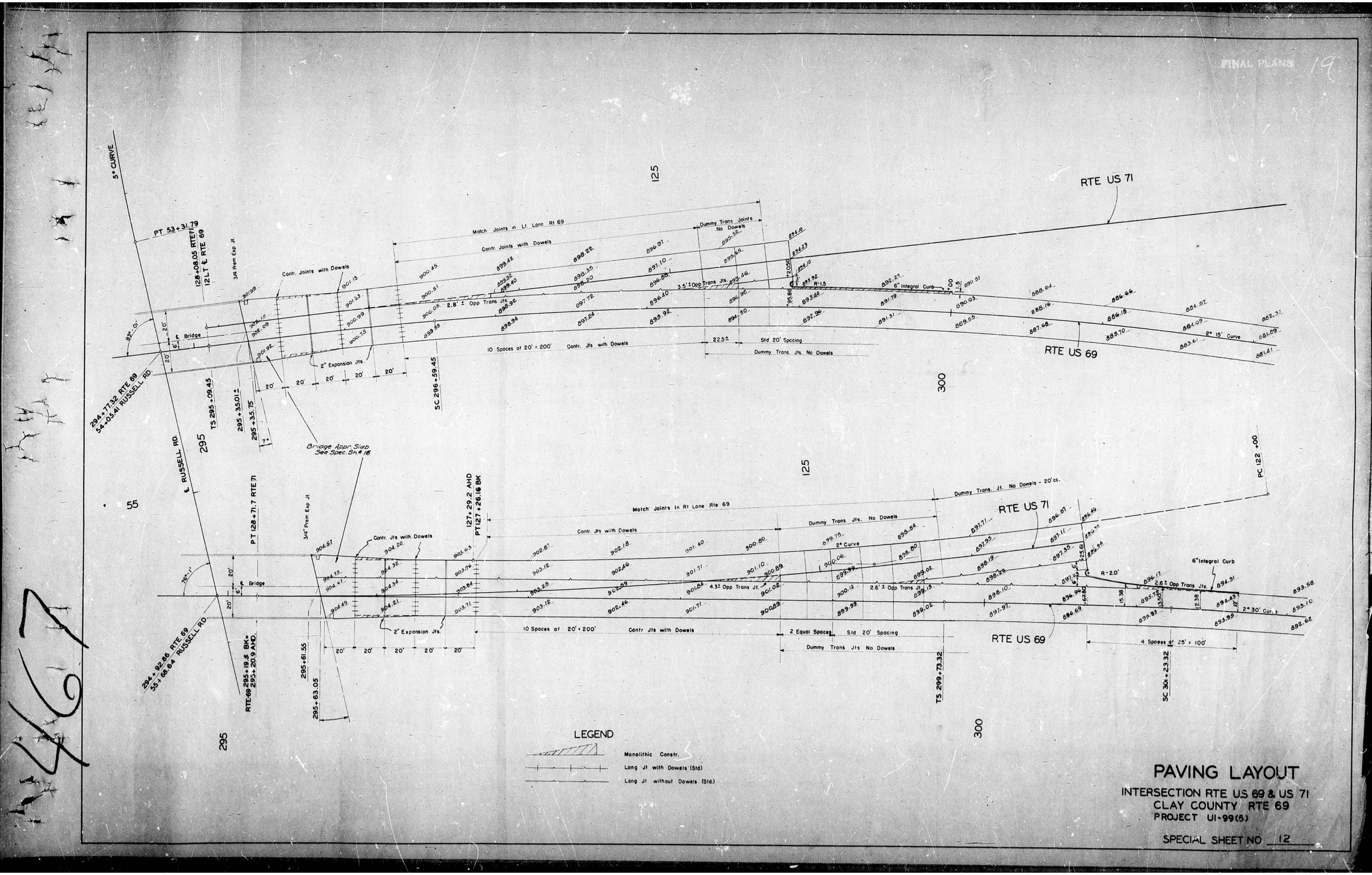
MONOLITHIC CONST.
LONG JTS. WITH DOWELS (STD.)
LONG JTS. WITHOUT DOWELS
COLORED CONCRETE PAV'T.

PAVING LAYOUT

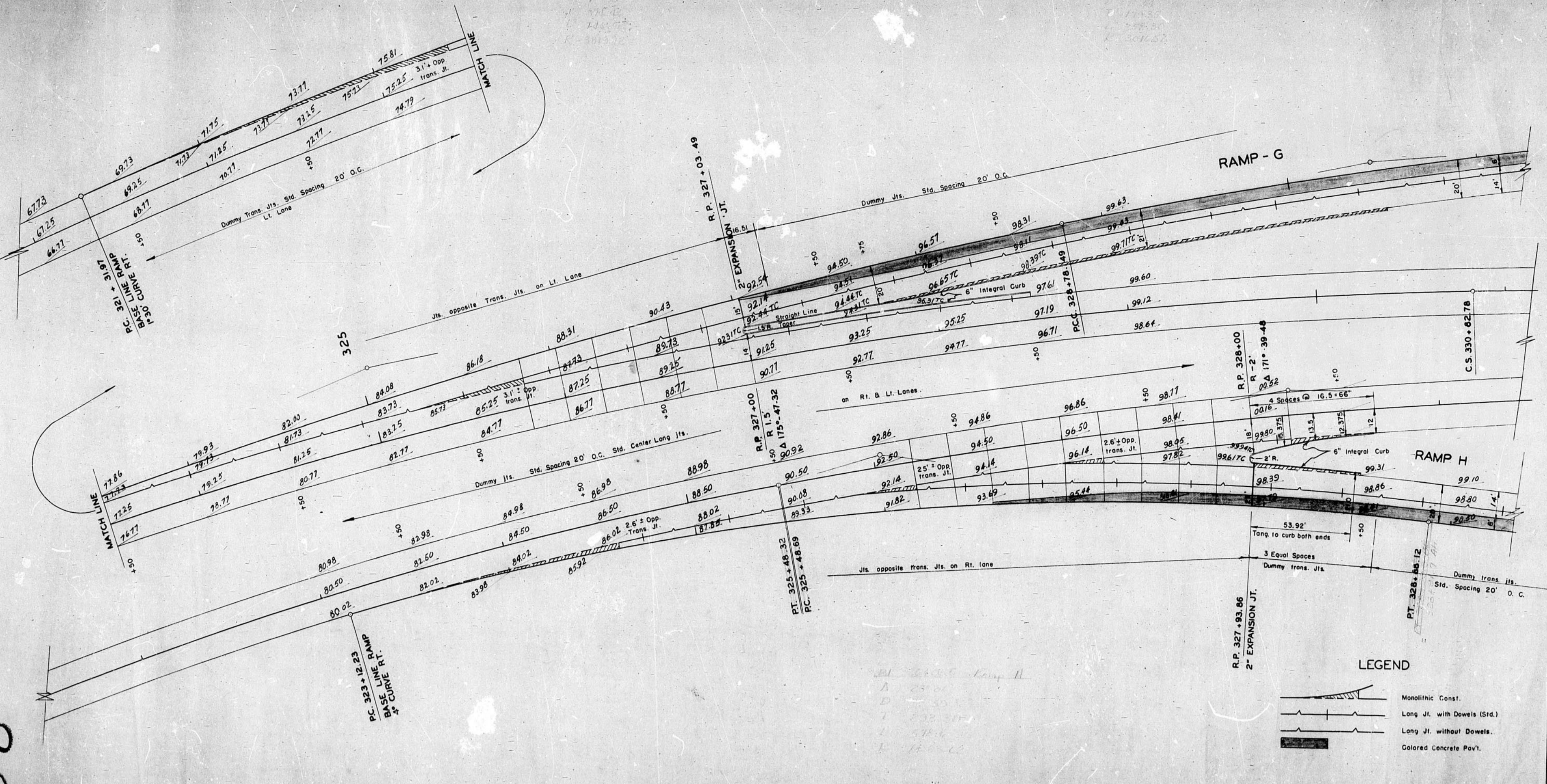
ARMOUR ROAD INTERCHANGE
CLAY COUNTY RTE. 69
PROJECT UI-99(6)

SPECIAL SHEET NO. 6

#66


FINAL PLANS 19
467
5° CURVE
PT 53+31.79
128+08.05 RTE 71
12 LT ℄ RTE 69
Contr. Joints with Dowels
Match Joints in Lt Lane Rt 69
Dummy Trans Joints No Dowels
3.5' ± Opp Trans Jts.
2.8' ± Opp Trans Jts.
6" Integral Curb
R-1.5
10 Spaces at 20' = 200' Contr. Jts with Dowels
Std 20' Spacing
Dummy Trans. Jts. No Dowels
2" Expansion Jts.
2° 15' Curve
RTE US 71
RTE US 69
294+77.32 RTE 69
54+05.41 RUSSELL RD.
TS 295+09.45
295+35.01±
295+35.75
SC 296+59.45
Bridge Appr. Slab See Spec. Sh # 16
℄ RUSSELL RD.
PT 128+71.7 RTE 71
127+29.2 AHD
PT 127+26.16 BK
PC 122+00
Dummy Trans. Jt. No Dowels - 20' cc.
Match Joints in Rt Lane Rte 69
Contr. Jts with Dowels
Dummy Trans Jts. No Dowels
2° Curve
4.3' ± Opp Trans Jt.
2.6' ± Opp Trans Jt.
R-2.0'
2° 30' Cur.
10 Spaces at 20' = 200' Contr Jts with Dowels
2 Equal Spaces
Std 20' Spacing
Dummy Trans Jts No Dowels
4 Spaces at 25' = 100'
294+92.86 RTE 69
55+68.64 RUSSELL RD.
RTE 69 295+19.6 BK=
295+20.9 AHD
295+61.55
295+63.05
TS 299+73.32
SC 301+23.32
LEGEND
Monolithic Constr.
Long Jt with Dowels (Std)
Long Jt without Dowels (Std)
PAVING LAYOUT
INTERSECTION RTE US 69 & US 71
CLAY COUNTY RTE 69
PROJECT UI-99(5)
SPECIAL SHEET NO 12

FINAL PLANS

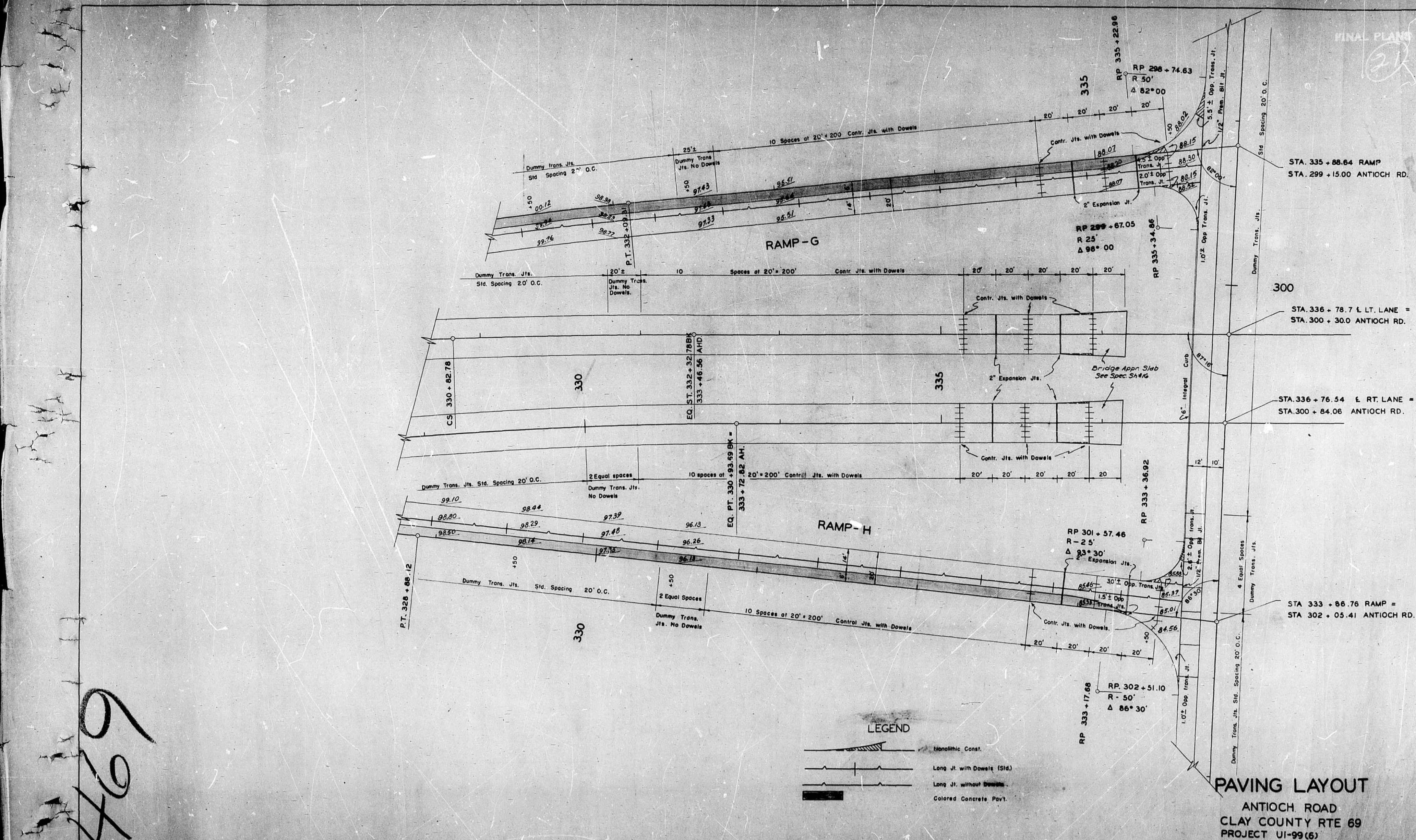


468

PAVING LAYOUT

ANTIOCH ROAD INTERCHANGE
CLAY COUNTY RTE 69
PROJECT UI-99(6)

SPECIAL SHEET NO 13



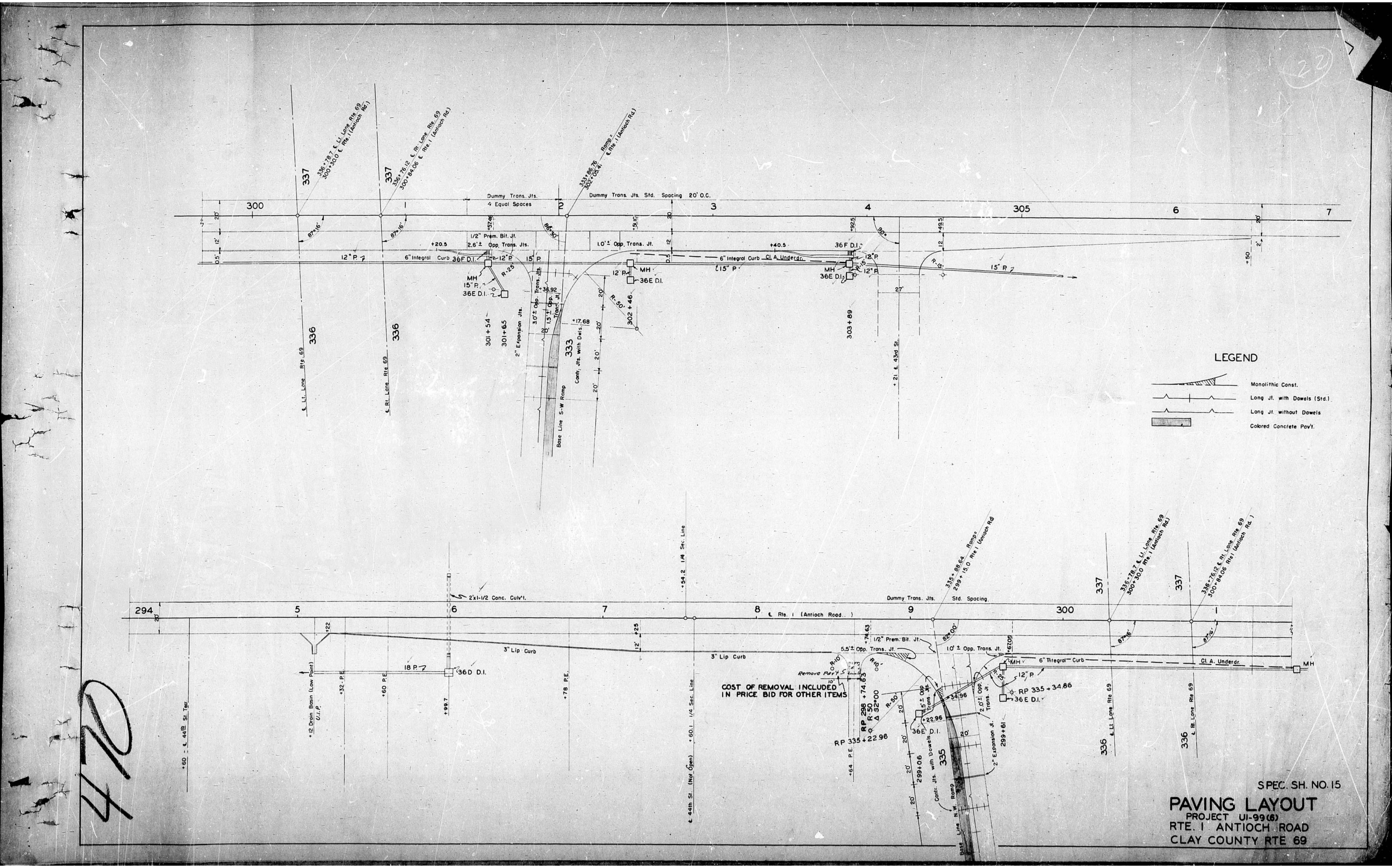
PAVING LAYOUT

ANTIOCH ROAD

CLAY COUNTY RTE 69

PROJECT UI-99(6)

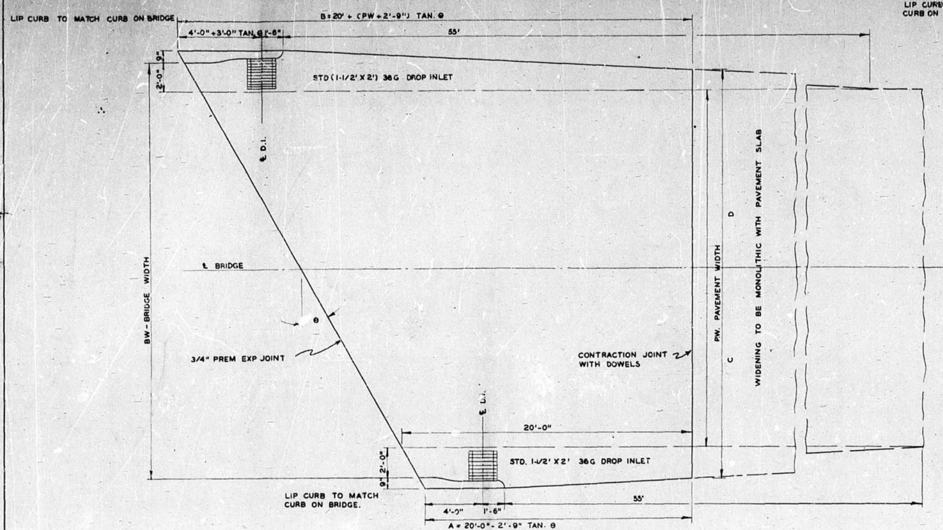
SPECIAL SHEET NO. 14


LEGEND
Monolithic Const.
Long Jt. with Dowels (Std.)
Long Jt. without Dowels
Colored Concrete Pav't.
Dummy Trans. Jts. 4 Equal Spaces
Dummy Trans. Jts. Std. Spacing 20' O.C.
1/2" Prem. Bit. Jt.
2.6' ± Opp. Trans. Jts.
1.0' ± Opp. Trans. Jt.
6" Integral Curb
6" Integral Curb Cl. A Underdr.
2" Expansion Jts.
Contr. Jts. with Dwls.
Base Line S-W Ramp
℄ Lt. Lane Rte 69
℄ Rt. Lane Rte 69
2'x1-1/2 Conc. Culv't.
℄ Rte. 1 (Antioch Road)
Dummy Trans. Jts. Std. Spacing
3" Lip Curb
5.5' ± Opp. Trans. Jt.
COST OF REMOVAL INCLUDED
IN PRICE BID FOR OTHER ITEMS
+12 Drain Basin (Low Point) U.I.P.
℄ 44th St. (Not Open)
1/4 Sec. Line
Base Line N-W Ramp
SPEC. SH. NO. 15
PAVING LAYOUT
PROJECT UI-99(6)
RTE. 1 ANTIOCH ROAD
CLAY COUNTY RTE 69
470

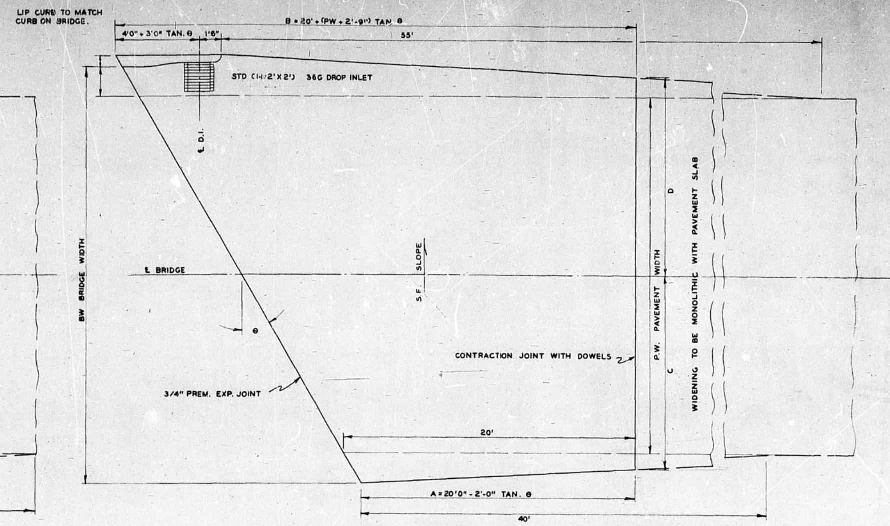
FINAL PLANS

23

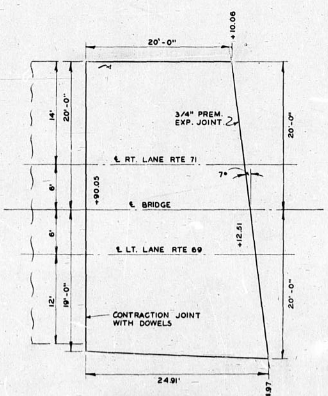
471



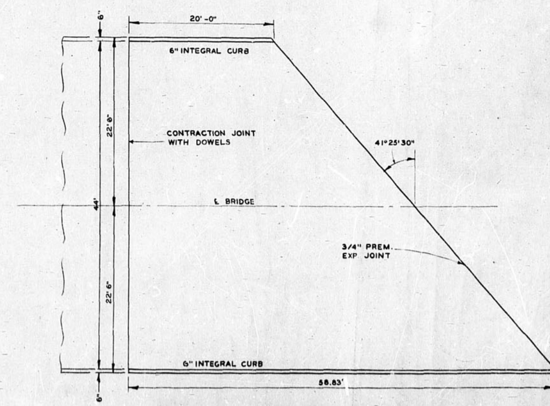
APPROACH SLAB WITH DROP INLETS



APPROACH SLAB WITH DROP INLET ON SUPERELEVATED CURVE



APPROACH SLAB
STA. 2.93 + 90.05 LT. LANE
SCALE 1/8" = 1'-0"



APPROACH SLAB FOR BRIGHTON AVENUE BRIDGE
STA. 3+64.89 TO STA. 4+04.3 & STA 6+66.3 TO STA. 7+05.71
SCALE 1/8" = 1'0"

STATION	STATION	LANE	DATA	B.W.	P.W.	A	B	C	D	CONC. SQ.YDS.	*STL. LBS.	REMARKS
293+99.66	294+24.15	RT.	14°R.A.	40'	36'	STD.15AB APPR.SLAB				106.10	3.720	
295+63.05	295+87.53	RT.	14°R.A.	40'	36'	1931	29.66	20.06	19.58	110.19	3.860	APPROACH SLAB WITH D.I.
293+90.79	294+13.25	LT.	7°R.A.	40'	38'	SEE DETAIL				98.42	3.450	NO TAPER ON LT. HALF OF SLAB
295+35.75	295+57.96	LT.	7°R.A.	40'	36'	1966	24.76	20.04	19.81	100.20	3.510	APPROACH SLAB WITH D.I.
335+91.78	336+12.35	RT.	2°44'L.A.	28'	24'	STD. 15 AB APPR. SLAB				61.71	2160	
337+39.85	337+60.42	RT.	2°44'L.A.	28'	24'	1987	21.28	14.03	13.97	65.52	2300	APPROACH SLAB WITH D.I.
335+94.38	336+14.95	LT.	2°44' L.A.	28'	24'	STD. 15 AB APPR SLAB				61.71	2160	
337+42.45	337+63.02	LT.	2°44' L.A.	28'	24'	1987	21.28	14.03	13.97	65.52	2300	APPROACH SLAB WITH D.I.
370+87.52	371+13.10	RT.	24°55'58"+R.A.	28'	24'	STD 15 AB APPR. SLAB				76.74	2700	
372+62.15	372+87.73	RT.	24°55'58"+R.A.	28'	24'	1907	32.44	13.05	13.47	79.11	2770	APPROACH SLAB WITH D.I. ON S.E.
370+58.33	370+83.91	LT.	24°55'58"+R.A.	28'	24'	STD 15 AB APPR. SLAB				76.74	2700	
372+33.1	372+58.68	LT.	24°55'58"+R.A.	28'	24'	1907	32.44	13.05	13.47	79.11	2770	APPROACH SLAB WITH D.I. ON S.E.
3+64.89	4+04.3 BRIGHTON		41°25'30" R.A.	44'	44'	SEE DETAIL				197.07	6.910	
6+66.3	7+05.71 AVENUE		41°25'30" R.A.	44'	44'	SEE DETAIL				197.07	6.910	
429+71.61	430+24.50	LT.	69°57'32" L.A.	28'	24'	12.46	93.33	14.40	12.00	156.65	5.490	APPROACH SLAB WITH D.I.
434+30.7	434+83.59	LT.	69°57'32" L.A.	28'	24'	12.46	93.33	14.40	12.00	156.65	5490	APPROACH SLAB WITH D.I.

— GENERAL NOTES —

SEE STD 15AB FOR DETAILS OF REINF. STL. SLAB THICKNESS, MUD JACKING HOLES ETC. NOT SHOWN ON THIS DRAWING. WHERE DROP INLETS ARE USED IN APPROACH SLAB, BEND AND/OR CUT REINFORCED STEEL TO FIT DROP INLET OPENING.

* NOT A PAY ITEM. INCL. COST IN UNIT PRICE BID FOR APPROACH SLAB.

APPROACH SLABS FOR BRIDGES

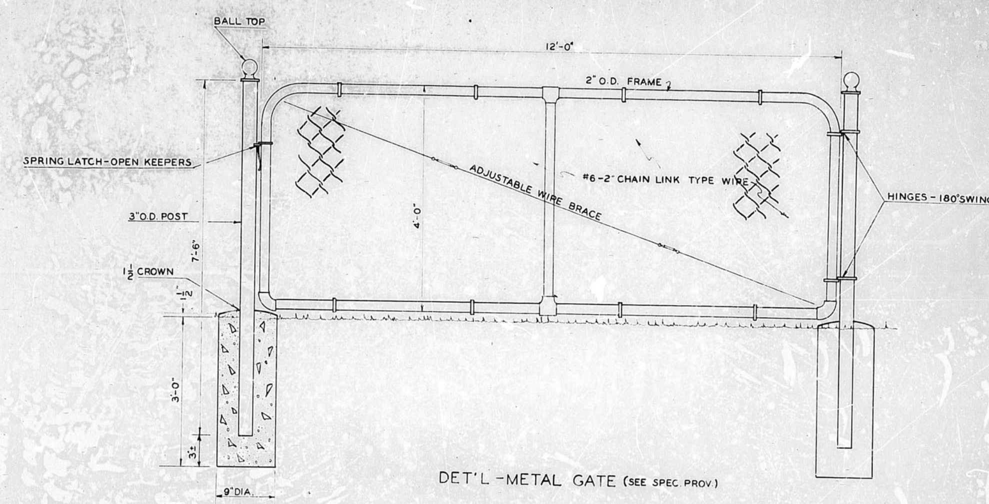
CLAY COUNTY RTE 69

PROJECT U1-99(6)

SPECIAL SHEET NO 16

FED. ROAD DIST. NO.	STATE	FEDERAL PROJECT No.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO				
DIV. NO.	COUNTY			ROUTE	SEC.

4

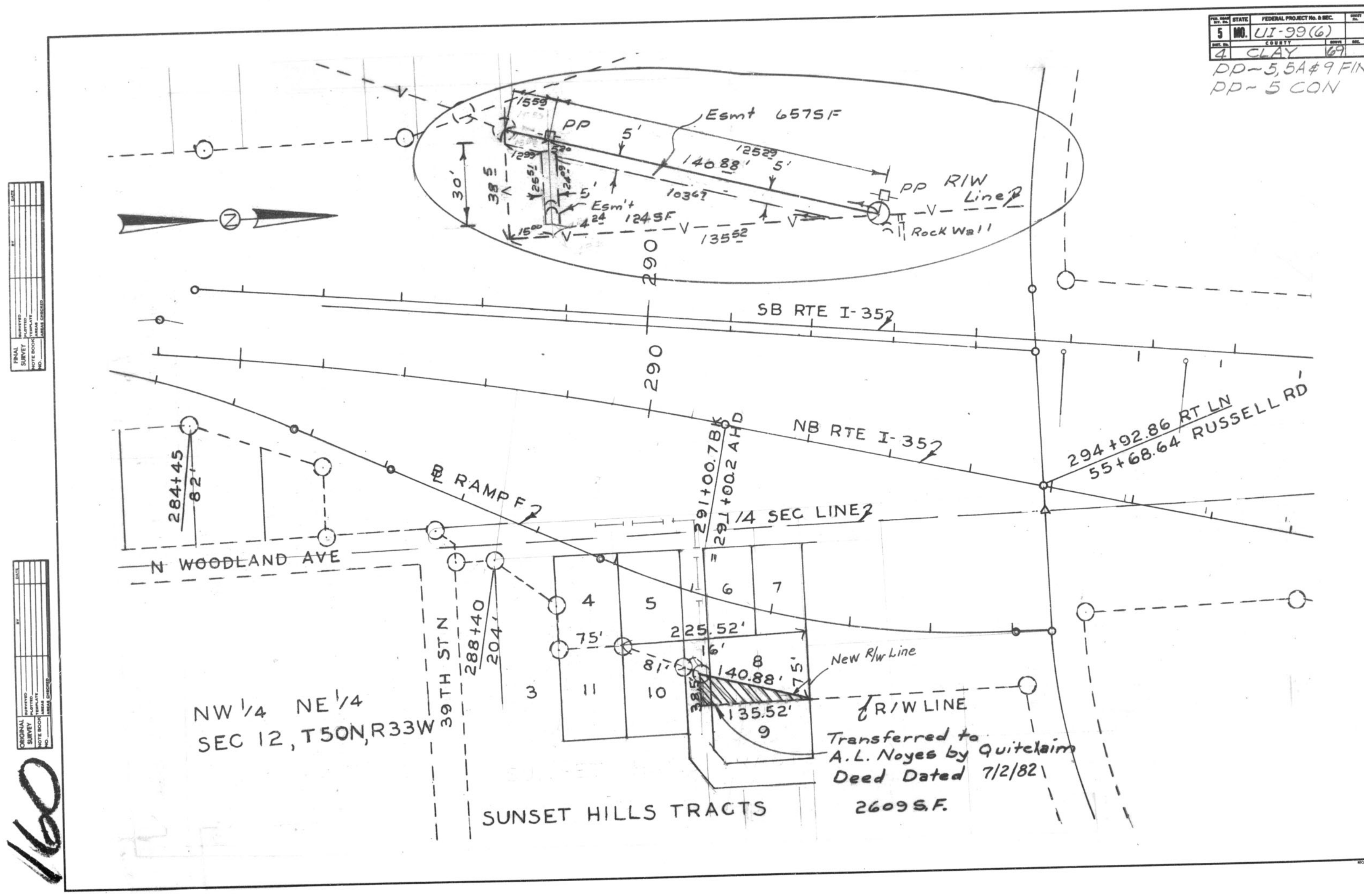


DET'L -METAL GATE (SEE SPEC. PROV.)

SPEC. METAL GATES

LT. STA. 227+74 LT. LANE
RT. STA. 227+80 RT. LANE
CLAY COUNTY RTE. 69
PROJECT UI-99(6)
SPECIAL SHEET NO. 17

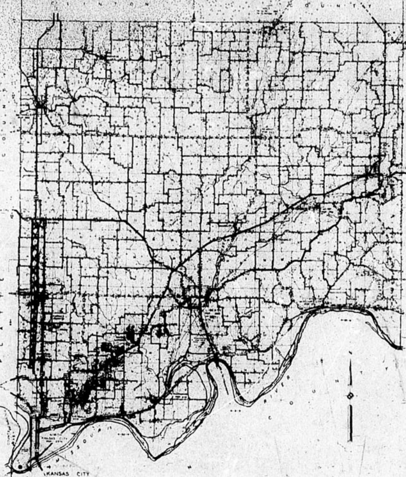
472



STATE
FEDERAL PROJECT No. & SEC.
5
MO.
UI-99(6)
COUNTY
4
CLAY
69
PP~5,5A$9 FIN
PP~5 CON
Esmt 657SF
PP
5'
125.29
140.88'
5'
PP R/W Line
103.67
30'
38.5'
Esm't
124SF
135.52
Rock Wall
290
SB RTE I-35
NB RTE I-35
294+92.86 RT LN
55+68.64 RUSSELL RD
291+00.7 BK
291+00.2 AHD
1/4 SEC LINE
RAMP F
284+45
82'
N WOODLAND AVE
288+40
204'
39TH ST N
4
5
6
7
75'
225.52'
16'
8
81'
140.88'
75'
New R/W Line
R/W LINE
135.52'
9
3
11
10
NW 1/4 NE 1/4
SEC 12, T50N, R33W
Transferred to
A.L. Noyes by Quitclaim
Deed Dated 7/2/82
2609 S.F.
SUNSET HILLS TRACTS

160

LOCATION MAP



MISSOURI
STATE HIGHWAY COMMISSION
PLAN AND PROFILE
OF PROPOSED
STATE ROAD

FEDERAL AID PROJECT

CLAY COUNTY

CLAY
STATE ROUTE NO.
169
PROJECT NO.
F-6(6)

A4B

LIMITED ACCESS HIGHWAY

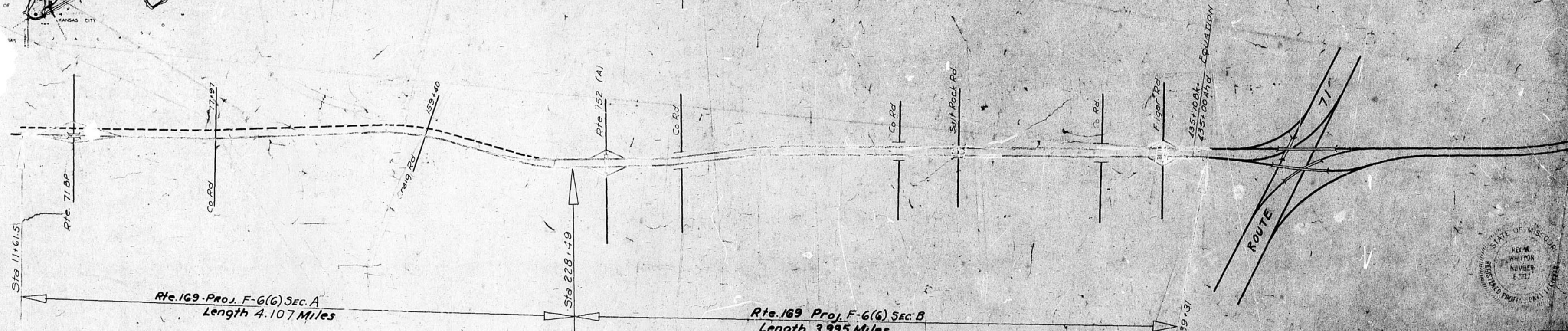
This shall be a limited-access highway between Station 2+95 and Station 448+70.2. Except at locations and as otherwise specifically shown on these plans, no abutter's rights in, or of direct access to, from, or across the highway or its right of way shall attach or belong to any property abutting on said section of highway, or to any person merely because of ownership of such abutting property. There shall be the usual right of access over any location either (1) shown on these plans as a property entrance (P.E.), field entrance (F.E.), or private underpass, or (2) where and when any such entrance, underpass, or an open public highway is being maintained by the governmental agency having authority therefor. Wherever an adjacent outer-roadway is so shown or maintained, there shall be the usual right of direct access between the abutting property and such outer-roadway, and along it to and from the nearest lane of the thruway or a public highway. However, during all times while an outer-roadway is being so maintained, there shall be no right of access over any part of an entrance which lies between said outer-roadway and the thruway.

----------LEGEND----------

BEGINNING AND ENDING OF LIMITED ACCESS

LIMITED ACCESS

Shipping Point
North Kansas City; Kansas City North; Kansas City.
Siding Cap. ~ Unlimited



Sta 550+59.6 Rte. 169
PWA 74 Docket # 2981 =
Sta 8+00 this Proj.

ROUTE 169 PROJECT F-6(6)
LENGTH 8.102 MILES G.E., CULV'S, & BRIDGES

AWARDED
12 - 11 - 56

SUBMITTED BY DATE [redacted]

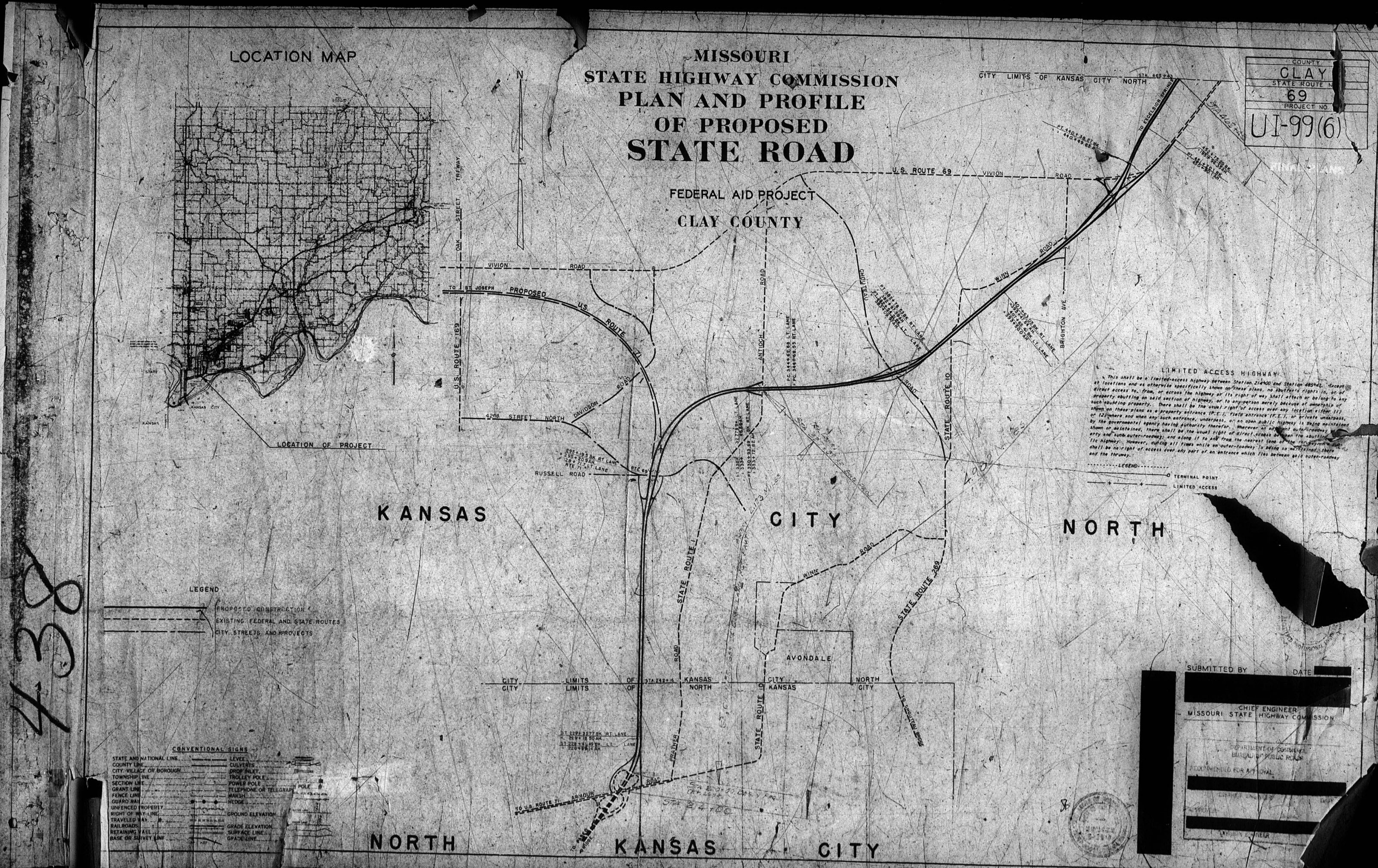
[redacted]

CHIEF ENGINEER
MISSOURI STATE HIGHWAY COMMISSION

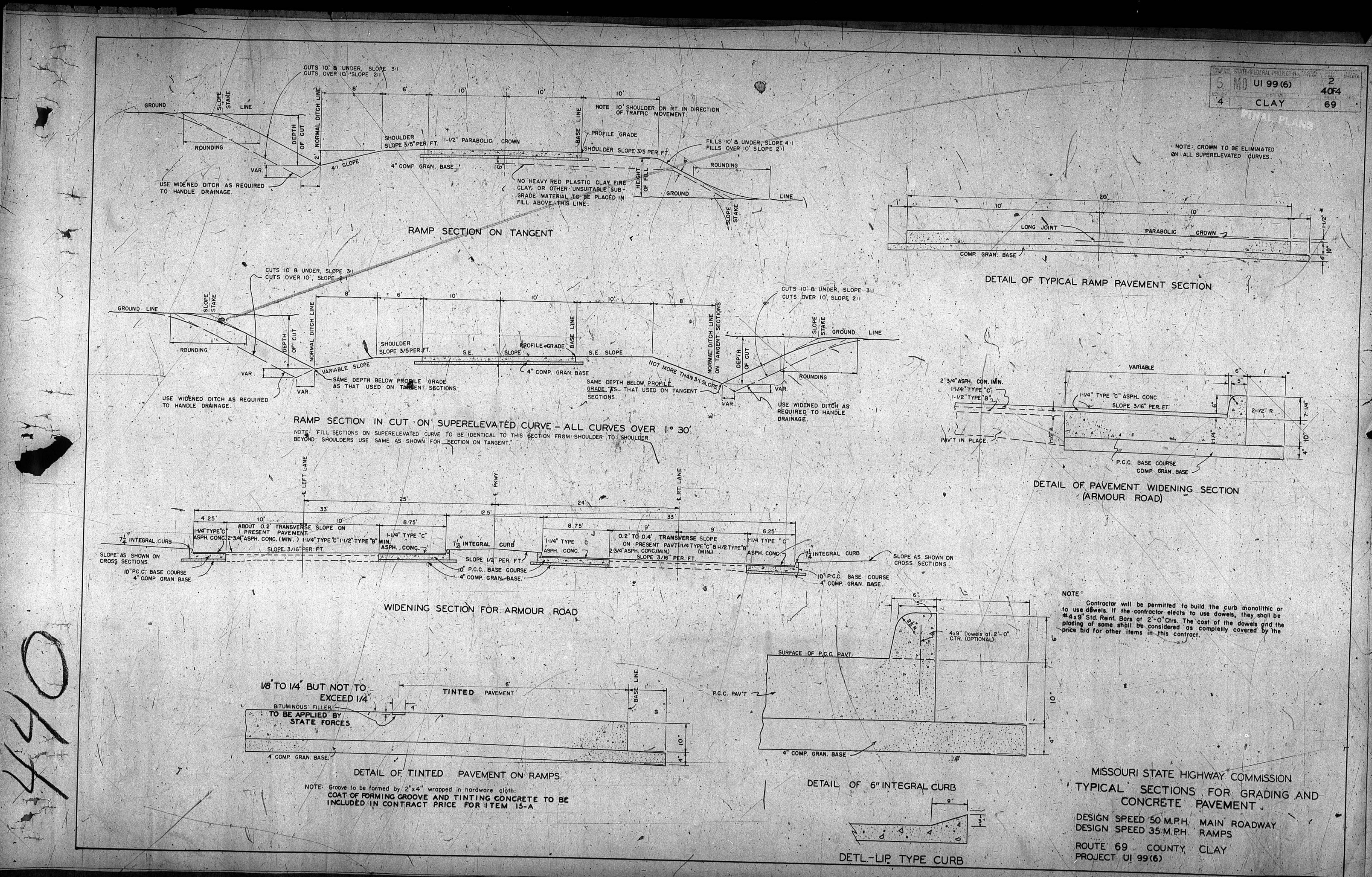
CONVENTIONAL SIGNS

STATE AND NATIONAL LINE	LEVEE
COUNTY LINE	CULVERTS
CITY, VILLAGE OR BOROUGH	DROP INLET
TOWNSHIP LINE	TROLLEY POLE
SECTION LINE	POWER POLE
GRANT LINE	TELEPHONE OR TELEGRAPH POLE
FENCE LINE	MARSH
GUARD RAIL	HEDGE
UNFENCED PROPERTY	
RIGHT OF WAY LINE	GROUND ELEVATION
TRAVELED WAY	
RAILROADS	GRADE ELEVATION
RETAINING WALL	SURFACE LINE
BASE OR SURVEY LINE	GRADE LINE

35

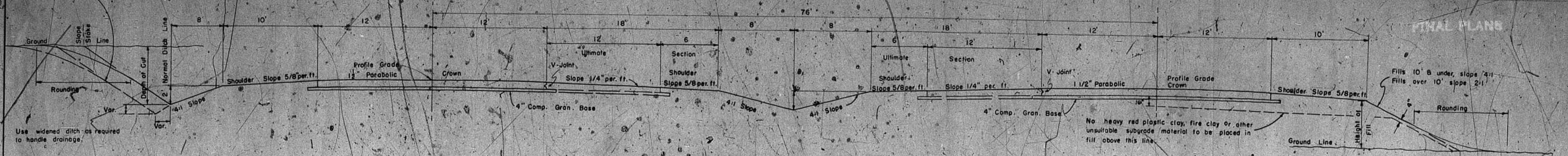


MISSOURI
STATE HIGHWAY COMMISSION
PLAN AND PROFILE
OF PROPOSED
STATE ROAD
FEDERAL AID PROJECT
CLAY COUNTY
COUNTY
CLAY
STATE ROUTE NO.
69
PROJECT NO.
UI-99(6)
LOCATION MAP
LOCATION OF PROJECT
CITY LIMITS OF KANSAS CITY NORTH
U.S. ROUTE 69 VIVION ROAD
VIVION ROAD
TO ST. JOSEPH PROPOSED U.S. ROUTE
U.S. ROUTE 169
42nd STREET NORTH
DAVIDSON
RUSSELL ROAD
ANTIOCH ROAD
WINN ROAD
BRIGHTON AVE.
STATE ROUTE 10
STATE ROUTE 1
STATE ROUTE 269
LIMITED ACCESS HIGHWAY
LEGEND
TERMINAL POINT
LIMITED ACCESS
KANSAS
CITY
NORTH
AVONDALE
CITY LIMITS OF KANSAS CITY NORTH
CITY LIMITS OF NORTH KANSAS CITY
LEGEND
PROPOSED CONSTRUCTION
EXISTING FEDERAL AND STATE ROUTES
CITY STREETS AND PROJECTS
CONVENTIONAL SIGNS
TO U.S. ROUTE 71 ARMOUR ROAD
NORTH KANSAS CITY
SUBMITTED BY
DATE
[redacted]
CHIEF ENGINEER
MISSOURI STATE HIGHWAY COMMISSION
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
RECOMMENDED FOR APPROVAL
[redacted]
438

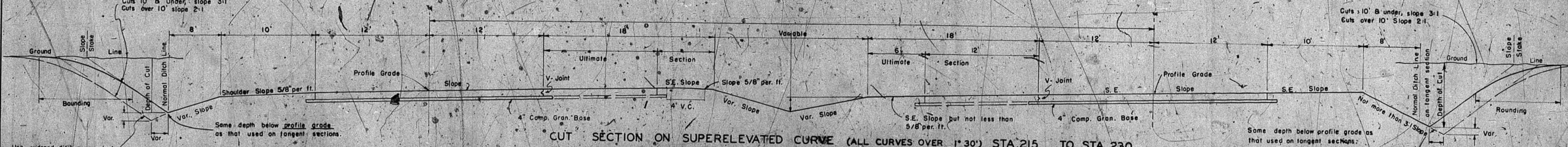

5 MO UI 99(6) 2 4 OF 4
4 CLAY 69
FINAL PLANS
RAMP SECTION ON TANGENT
CUTS 10' & UNDER, SLOPE 3:1
CUTS OVER 10' SLOPE 2:1
GROUND
SLOPE STAKE
LINE
ROUNDING
DEPTH OF CUT
NORMAL DITCH LINE
VAR.
4:1 SLOPE
USE WIDENED DITCH AS REQUIRED TO HANDLE DRAINAGE.
SHOULDER SLOPE 3/5" PER FT.
1-1/2" PARABOLIC CROWN
4" COMP. GRAN. BASE
BASE LINE
PROFILE GRADE
SHOULDER SLOPE 3/5 PER FT.
NOTE: 10' SHOULDER ON RT. IN DIRECTION OF TRAFFIC MOVEMENT.
NO HEAVY RED PLASTIC CLAY, FIRE CLAY, OR OTHER UNSUITABLE SUB-GRADE MATERIAL TO BE PLACED IN FILL ABOVE THIS LINE.
HEIGHT OF FILL
FILLS 10' & UNDER, SLOPE 4:1
FILLS OVER 10' SLOPE 2:1
NOTE: CROWN TO BE ELIMINATED ON ALL SUPERELEVATED CURVES.
DETAIL OF TYPICAL RAMP PAVEMENT SECTION
LONG JOINT
PARABOLIC CROWN
COMP. GRAN. BASE
RAMP SECTION IN CUT ON SUPERELEVATED CURVE - ALL CURVES OVER 1° 30'
NOTE: FILL SECTIONS ON SUPERELEVATED CURVE TO BE IDENTICAL TO THIS SECTION FROM SHOULDER TO SHOULDER. BEYOND SHOULDERS USE SAME AS SHOWN FOR "SECTION ON TANGENT."
GROUND LINE
VARIABLE SLOPE
SAME DEPTH BELOW PROFILE GRADE AS THAT USED ON TANGENT SECTIONS.
S.E. SLOPE
4" COMP. GRAN BASE
NOT MORE THAN 3:1 SLOPE
SAME DEPTH BELOW PROFILE GRADE AS THAT USED ON TANGENT SECTIONS.
NORMAL DITCH LINE ON TANGENT SECTIONS
USE WIDENED DITCH AS REQUIRED TO HANDLE DRAINAGE.
DETAIL OF PAVEMENT WIDENING SECTION (ARMOUR ROAD)
VARIABLE
2 3/4" ASPH. CON. (MIN.
1 1/4" TYPE "C"
1-1/2" TYPE "B"
1-1/4" TYPE "C" ASPH. CONC.
SLOPE 3/16" PER FT.
2-1/2" R.
PAV'T IN PLACE
P.C.C. BASE COURSE
COMP. GRAN. BASE
WIDENING SECTION FOR ARMOUR ROAD
℄ LEFT LANE
℄ PKWY
℄ RT. LANE
7 1/2" INTEGRAL CURB
1-1/4" TYPE "C" ASPH. CONC.
ABOUT 0.2' TRANSVERSE SLOPE ON PRESENT PAVEMENT
2-3/4" ASPH. CONC. (MIN.) 1-1/4" TYPE "C" 1-1/2" TYPE "B" MIN.
SLOPE 3/16" PER FT.
SLOPE AS SHOWN ON CROSS SECTIONS
10" P.C.C. BASE COURSE
4" COMP. GRAN. BASE
SLOPE 1/2" PER FT.
0.2' TO 0.4' TRANSVERSE SLOPE ON PRESENT PAV'T
NOTE:
Contractor will be permitted to build the curb monolithic or to use dowels. If the contractor elects to use dowels, they shall be #4 x 9" Std. Reinf. Bars at 2'-0" Ctrs. The cost of the dowels and the placing of same shall be considered as completely covered by the price bid for other items in this contract.
4x9" Dowels at 2'-0" CTR. (OPTIONAL)
SURFACE OF P.C.C. PAVT.
P.C.C. PAV'T
4" COMP. GRAN. BASE
DETAIL OF 6" INTEGRAL CURB
DETL.-LIP TYPE CURB
1/8" TO 1/4" BUT NOT TO EXCEED 1/4"
BITUMINOUS FILLER TO BE APPLIED BY STATE FORCES
TINTED PAVEMENT
BASE LINE
4" COMP. GRAN. BASE
DETAIL OF TINTED PAVEMENT ON RAMPS
NOTE: Groove to be formed by 2"x4" wrapped in hardware cloth.
COAT OF FORMING GROOVE AND TINTING CONCRETE TO BE INCLUDED IN CONTRACT PRICE FOR ITEM 15-A
MISSOURI STATE HIGHWAY COMMISSION
TYPICAL SECTIONS FOR GRADING AND CONCRETE PAVEMENT
DESIGN SPEED 50 M.P.H. MAIN ROADWAY
DESIGN SPEED 35 M.P.H. RAMPS
ROUTE 69 COUNTY CLAY
PROJECT UI 99(6)
440

U1-99(6) 2 1 OF 4
4 CLAY 69

FINAL PLANS



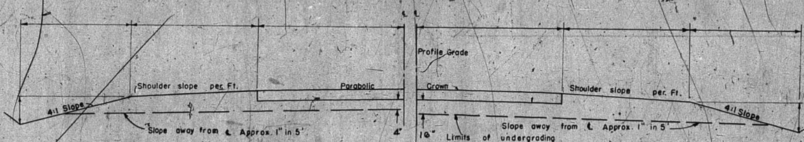
SECTION ON TANGENT
STA. 230+ TO STA. 276+



CUT SECTION ON SUPERELEVATED CURVE (ALL CURVES OVER 1° 30') STA. 215 TO STA. 230

NOTE: fill sections on superelevated curve to be identical to this section from shoulder to shoulder. Beyond shoulders use same as shown for "Section on Tangent".

HALF SECTIONS IN CUTS ON TANGENTS



IN "CLASS C" OR LEDGE SANDSTONE

IN HEAVY RED PLASTIC CLAY, FIRE CLAY, OR OTHER UNSUITABLE MATERIAL

NOTE: On superelevated curves, undergrading to parallel the superelevation, and other details from ditch line to ditch line shall be identical to those shown for "Cut Sections on Superelevated Curves".

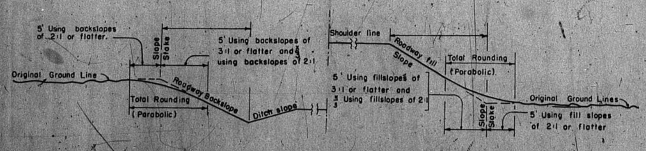
For paylimits of overbreak and backfill, see specifications.

GENERAL NOTES:

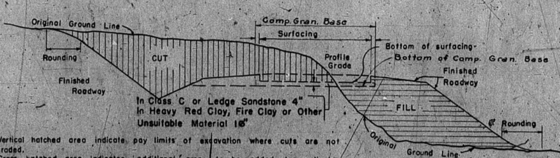
For details of superelevation and widening of horizontal curves, all pavement appurtenances, drainage items, etc., see other drawings.

In transitioning from one cut or fill slope to another, use a 25' transition beginning at a point 25' back along that which would normally be the flatter slope and ending the transition at the actual point where the steeper slope is required. If the actual limits requiring a steeper slope is less than 25' in length, do not change to the steeper slope.

All information shown on these Typical Sections is for the purpose of indicating general design and construction details. Actual construction of roadway widths, slopes, depths, and type of ditches, undergraded cuts, and other features, shall conform to the details shown on Cross Sections and Plan Profile sheets or as directed by the Engineer.



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



Vertical hatched area indicate pay limits of excavation where cuts are not undergraded.

Cross-hatched area indicates additional area, to be added to vertical hatched area, included in pay limits of excavation where cuts are undergraded. For pay limits of overbreak and backfill see Specifications.

Horizontal hatched area indicates limits to which embankment can be constructed.

SKETCH SECTION SHOWING EXCAVATION PAY LIMITS

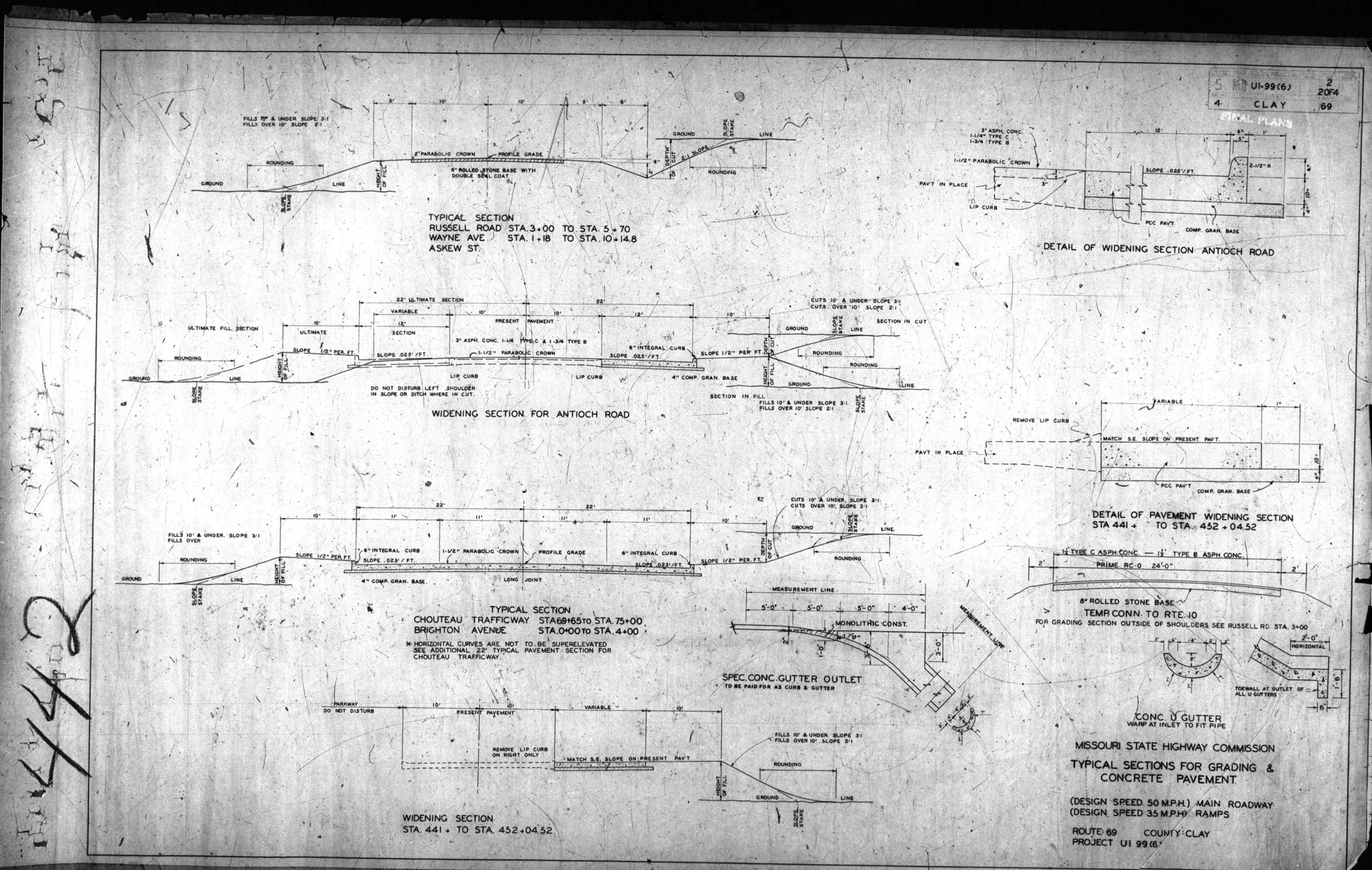
MISSOURI STATE HIGHWAY COMMISSION

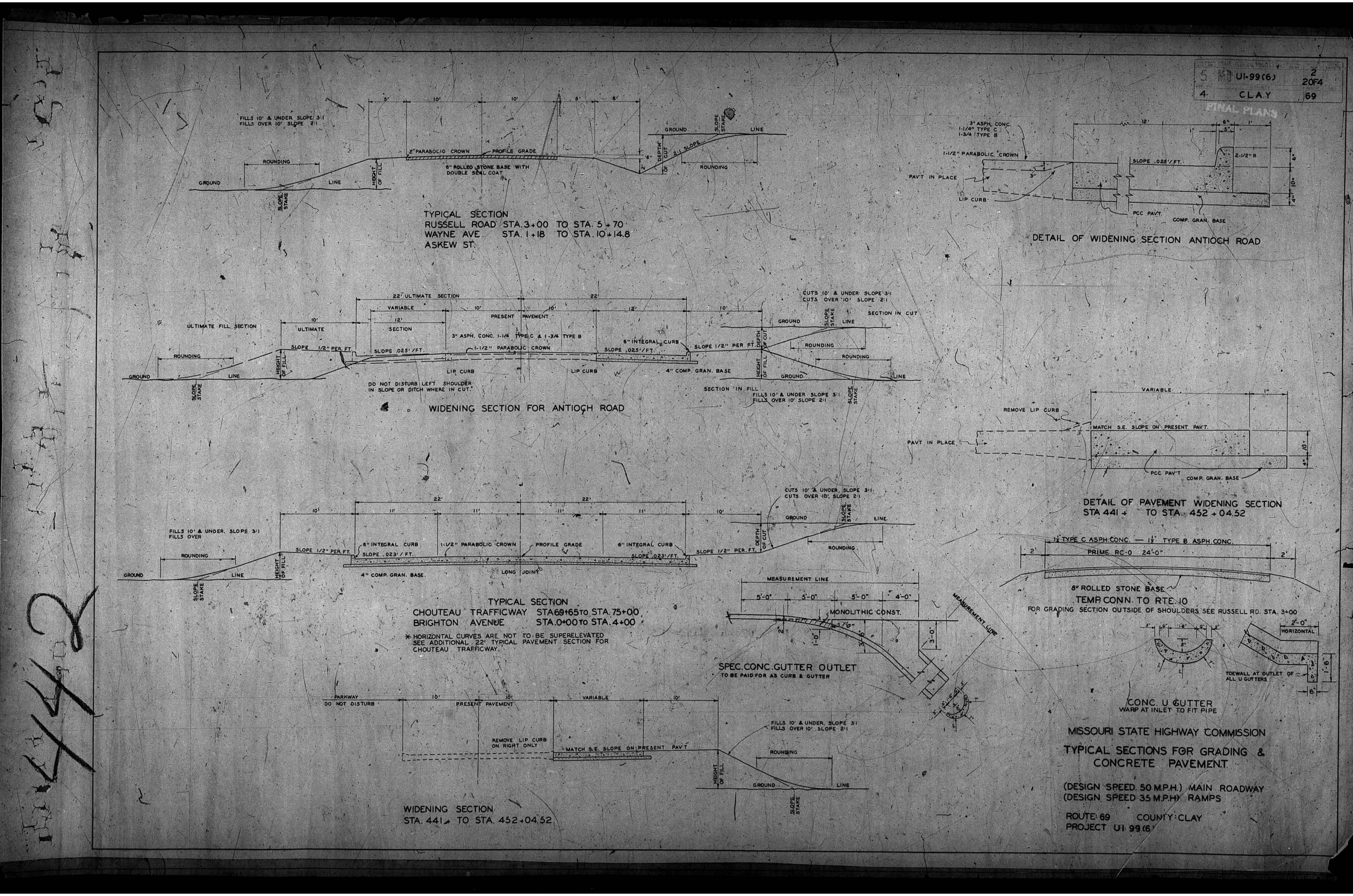
TYPICAL SECTIONS FOR GRADING AND CONCRETE PAVEMENT

(DESIGN SPEED 50 M.P.H.) MAIN ROADWAY
(DESIGN SPEED 35 M.P.H.) RAMPS

ROUTE: 69 COUNTY: CLAY
PROJECT U.1-99(6)

441


5 MO UI-99(6) 2 2OF4
4 CLAY 69
FINAL PLANS
FILLS 10' & UNDER SLOPE 3:1
FILLS OVER 10' SLOPE 2:1
2" PARABOLIC CROWN
PROFILE GRADE
6" ROLLED STONE BASE WITH DOUBLE SEAL COAT
GROUND
LINE
ROUNDING
HEIGHT OF FILL
SLOPE STAKE
DEPTH OF CUT
2:1 SLOPE
TYPICAL SECTION
RUSSELL ROAD STA. 3+00 TO STA. 5+70
WAYNE AVE. STA. 1+18 TO STA. 10+14.8
ASKEW ST.
3" ASPH. CONC.
1-1/4" TYPE C
1-3/4 TYPE B
1-1/2" PARABOLIC CROWN
PAV'T IN PLACE
LIP CURB
SLOPE .025'/FT.
2-1/2" R
PCC PAV'T
COMP. GRAN. BASE
DETAIL OF WIDENING SECTION ANTIOCH ROAD
22' ULTIMATE SECTION
VARIABLE
12' SECTION
10' ULTIMATE
PRESENT PAVEMENT
ULTIMATE FILL SECTION
3" ASPH. CONC. 1-1/4 TYPE C & 1-3/4 TYPE B
SLOPE 1/2" PER FT.
SLOPES .025'/FT.
1-1/2" PARABOLIC CROWN
6" INTEGRAL CURB
4" COMP. GRAN. BASE
DO NOT DISTURB LEFT SHOULDER IN SLOPE OR DITCH WHERE IN CUT.
CUTS 10' & UNDER SLOPE 3:1
CUTS OVER 10' SLOPE 2:1
SECTION IN CUT
SECTION IN FILL
FILLS 10' & UNDER SLOPE 3:1
FILLS OVER 10' SLOPE 2:1
WIDENING SECTION FOR ANTIOCH ROAD
VARIABLE
REMOVE LIP CURB
MATCH S.E. SLOPE ON PRESENT PAV'T.
PAV'T IN PLACE
PCC PAV'T
COMP. GRAN. BASE
DETAIL OF PAVEMENT WIDENING SECTION
STA 441+ TO STA. 452+04.52
FILLS 10' & UNDER SLOPE 3:1
FILLS OVER
SLOPE 1/2" PER FT.
6" INTEGRAL CURB
SLOPE .023'/FT.
1-1/2" PARABOLIC CROWN
PROFILE GRADE
4" COMP. GRAN. BASE
LONG JOINT
TYPICAL SECTION
CHOUTEAU TRAFFICWAY STA.69+65 TO STA. 75+00
BRIGHTON AVENUE STA. 0+00 TO STA. 4+00
* HORIZONTAL CURVES ARE NOT TO BE SUPERELEVATED
SEE ADDITIONAL 22' TYPICAL PAVEMENT SECTION FOR CHOUTEAU TRAFFICWAY.
1-1/2" TYPE C ASPH. CONC. — 1-1/2" TYPE B ASPH. CONC.
PRIME RC-0 24'-0"
8" ROLLED STONE BASE
TEMP. CONN. TO RTE. 10
FOR GRADING SECTION OUTSIDE OF SHOULDERS SEE RUSSELL RD. STA. 3+00
MEASUREMENT LINE
MONOLITHIC CONST.
SPEC. CONC. GUTTER OUTLET
TO BE PAID FOR AS CURB & GUTTER
HORIZONTAL
TOEWALL AT OUTLET OF ALL U GUTTERS
CONC. U GUTTER
WARP AT INLET TO FIT PIPE
PARKWAY DO NOT DISTURB
PRESENT PAVEMENT
REMOVE LIP CURB ON RIGHT ONLY
MATCH S.E. SLOPE ON PRESENT PAV'T
WIDENING SECTION
STA. 441+ TO STA. 452+04.52
MISSOURI STATE HIGHWAY COMMISSION
TYPICAL SECTIONS FOR GRADING & CONCRETE PAVEMENT
(DESIGN SPEED 50 M.P.H.) MAIN ROADWAY
(DESIGN SPEED 35 M.P.H.) RAMPS
ROUTE 69 COUNTY CLAY
PROJECT UI 99(6)
442


5 MO U1-99(6) 2 2 OF 4
4 CLAY 69
FINAL PLANS
FILLS 10' & UNDER SLOPE 3:1
FILLS OVER 10' SLOPE 2:1
2" PARABOLIC CROWN
PROFILE GRADE
6" ROLLED STONE BASE WITH DOUBLE SEAL COAT
ROUNDING
GROUND LINE
SLOPE STAKE
HEIGHT OF FILL
DEPTH OF CUT
2:1 SLOPE
TYPICAL SECTION
RUSSELL ROAD STA. 3+00 TO STA. 5+70
WAYNE AVE. STA. 1+18 TO STA. 10+14.8
ASKEW ST.
3" ASPH. CONC.
1-1/4" TYPE C
1-3/4 TYPE B
1-1/2" PARABOLIC CROWN
PAV'T IN PLACE
LIP CURB
SLOPE .025'/FT.
2-1/2" R
PCC PAV'T.
COMP. GRAN. BASE
DETAIL OF WIDENING SECTION ANTIOCH ROAD
22' ULTIMATE SECTION
VARIABLE
PRESENT PAVEMENT
ULTIMATE FILL SECTION
ULTIMATE
12' SECTION
3" ASPH. CONC. 1-1/4 TYPE C & 1-3/4 TYPE B
6" INTEGRAL CURB
SLOPE 1/2" PER FT.
SLOPE .025'/FT.
1-1/2" PARABOLIC CROWN
LIP CURB
4" COMP. GRAN. BASE
DO NOT DISTURB LEFT SHOULDER IN SLOPE OR DITCH WHERE IN CUT.
CUTS 10' & UNDER SLOPE 3:1
CUTS OVER 10' SLOPE 2:1
SECTION IN CUT
SECTION IN FILL
FILLS 10' & UNDER SLOPE 3:1
FILLS OVER 10' SLOPE 2:1
WIDENING SECTION FOR ANTIOCH ROAD
REMOVE LIP CURB
MATCH S.E. SLOPE ON PRESENT PAV'T.
PAV'T IN PLACE
PCC PAV'T
COMP. GRAN. BASE
DETAIL OF PAVEMENT WIDENING SECTION
STA 441 + TO STA. 452 + 04.52
FILLS 10' & UNDER, SLOPE 3:1
FILLS OVER
6" INTEGRAL CURB
SLOPE .023'/FT.
PROFILE GRADE
LONG. JOINT
4" COMP. GRAN. BASE
TYPICAL SECTION
CHOUTEAU TRAFFICWAY STA.69+65 TO STA. 75+00
BRIGHTON AVENUE STA. 0+00 TO STA. 4+00
* HORIZONTAL CURVES ARE NOT TO BE SUPERELEVATED
SEE ADDITIONAL 22' TYPICAL PAVEMENT SECTION FOR CHOUTEAU TRAFFICWAY.
1 1/2" TYPE C ASPH. CONC. — 1 1/2" TYPE B ASPH. CONC.
PRIME RC-0 24'-0"
8" ROLLED STONE BASE
TEMP. CONN. TO RTE. 10
FOR GRADING SECTION OUTSIDE OF SHOULDERS SEE RUSSELL RD. STA. 3+00
MEASUREMENT LINE
5'-0" 5'-0" 5'-0" 4'-0"
MONOLITHIC CONST.
SPEC. CONC. GUTTER OUTLET
TO BE PAID FOR AS CURB & GUTTER
HORIZONTAL
TOEWALL AT OUTLET OF ALL U GUTTERS
CONC. U GUTTER
WARP AT INLET TO FIT PIPE
PARKWAY
DO NOT DISTURB
REMOVE LIP CURB ON RIGHT ONLY
MATCH S.E. SLOPE ON PRESENT PAV'T
WIDENING SECTION
STA. 441 + TO STA. 452+04.52
MISSOURI STATE HIGHWAY COMMISSION
TYPICAL SECTIONS FOR GRADING & CONCRETE PAVEMENT
(DESIGN SPEED 50 M.P.H.) MAIN ROADWAY
(DESIGN SPEED 35 M.P.H.) RAMPS
ROUTE 69 COUNTY CLAY
PROJECT U1-99(6)
442

LOCATION

TYPE

MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

FED. ROAD DIST. No.	STATE	PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	MO.	UI-99(6)		2A3	
DIST. No. 4	COUNTY: CLAY			ROUTE 69	SEC. No.

LENGTH OF PROJECT

End of Project — Station
Beginning of Project — Station
Apparent Length — Feet
Equations and Exceptions:
Total Corrections — Feet
Net Length of Project — Feet
State Length — Miles
Federal Length — Miles

GENERAL SUMMARY
DESCRIPTION

Item No.	Description	Unit	Quantity
	BRIDGE AT STA. 228+68.98 (Lt. La.) (Dwg. No. L-605)		
1-I	Class 3 Excavation for Structures	Cu. Yd.	916.5
16-B	Class B Concrete	Cu. Yd.	823.9
19-A	Reinforcing Steel	LB.	114,875
	BRIDGE AT STA. 311+47.38 (Rt. La.) (Dwg. No. L-606)		
1-I	Class 3 Excavation for Structures	Cu. Yd.	3727.0
16-B	Class B Concrete	Cu. Yd.	1103.3
19-A	Reinforcing Steel	LB	131,720
	CONTINGENT ITEMS		
	4" Wall Drains	Each	16
	Crushed Stone in Footing	Ton	54.3
	BRIDGE AT STA. 294+13.25 (Lt. La.) (Dwg. No. L-659)		
1-G	Class 1 Excavation for Structures	Cu. Yd.	164.5
16-B	Class B Concrete (Super str. incl. Rail Posts	Cu. Yd.	365.4
16-B	Class B Concrete (Substructure)	Cu. Yd.	132.9
17-E	Gray Iron Alloy Castings	LB.	3610
17-J	Aluminum Alloy Handrails	Lin. Ft.	215
19-A	Reinforcing Steel	LB.	104990
22-DD	Steel Piles in Place (State Furnished)	Lin. Ft.	1201
	BRIDGE AT STA. 294+24.15 (Rt. La.) (Dwg. No. L-660)		
1-G	Class 1 Excavation for Structures	Cu. Yd.	360
16-B	Class B Concrete (Superstr. incl. Rail Posts)	Cu. Yd.	398.1
16-B	Class B Concrete (Substructure)	Cu. Yd	174.2
17-E	Gray Iron Alloy Castings	LB	3610
17-J	Aluminum Alloy Handrails	Lin. Ft	245
19-A	Reinforcing Steel	LB.	119860
22-DD	Steel Piles in Place (State furnished)	Lin. Ft.	678
	CONTINGENT ITEMS		
	Cl. 1 Excavation for Structs. below plan grade	Cu. Yd.	3
	Drilling Test Holes	Lin. Ft.	54
	BRIDGE AT STA. 336+12.35 (Rt. La.) (Dwg. No. L-653)		
1-G	Class 1 Excavation for Structures	Cu. Yd	172
16-B	Class B Concrete (Superstr. incl. Rail posts)	Cu. Yd.	285.0
16-B	Class B Concrete (Substructure)	Cu. Yd.	96.8
17-E	Gray Iron Alloy Casting	LB.	2630
17-J	Aluminum Alloy Handrail	Lin. Ft.	225
19-A	Reinforcing Steel	LB.	78160
22-DD	Steel Piles in place (State furnished)	Lin. Ft.	907
	BRIDGE AT STA. 336+14.95 (Lt. La.) (Dwg. No. L-654)		
1-G	Class 1 Excavation for Structures	Cu. Yd.	161.5
16-B	Class B Concrete (Superstr. - incl. Rail Post)	Cu. Yd.	285.0
16-B	Class B Concrete (Substructure)	Cu. Yd.	97.1
17-E	Gray Iron Alloy Castings	LB.	2630
17-J	Aluminum Alloy Handrail	Lin. Ft.	225
19-A	Reinforcing Steel	LB.	78250
22-DD	Steel Pile in Place (State furnished)	Lin. Ft.	897
	CONTINGENT ITEMS		
	Class 1 Excavation for Structs. below plan grade	Cu. Yd.	3

CONTINGENT ITEMS (CONT)

Left Over 18" CMP		Lin. Ft.	86

GENERAL SUMMARY — FINAL PLANS

ITEM NO.	DESCRIPTION	UNIT	TOTAL UNITS	NO. UNITS FED. AID ONLY
1-A	Clearing	Acre	53.9	
1-B	Grubbing	Acre	18.9	
1-D	Class A Excavation	Cu. Yd.	715352	
1-E	Class C Excavation	Cu. Yd.	4463	
1-I	Class 3 Excavation For Structures	Cu. Yd.	5001.5	
1-K	Compacting Embankments (Rolling)	Cu. Yd.	600780	
1-L	Compacting in Cuts (Rolling)	Cu. Yd.	403	
1-M	Overhaul	Sta. Yd.	5237,183	
1-BA	Water (Compacting-Rolling)	100 Gal.	0	
3-A	Portland Cement Concrete Base Course (10")	Sq. Yd.	5226.1	
13-D	Crushed Stone Surface	Cu. Yd.	107	
15-A	Portland Cement Concrete Pavement (10")	Sq. Yd.	87392.2	
15-B	Approach Slab For Bridges	Sq. Yd.	547.7	
16-B	Class B Concrete (Box Culverts)	Cu. Yd.	361.5	
16-B	Class B Concrete (Other than Box Culverts)	Cu. Yd.	92.1	
18-B	15" Corrugated Metal Culvert Pipe (Ent. & S.R.)	Lin. Ft.	102	
18-B	18" Corrugated Metal Culvert Pipe (Ent. & S.R.)	Lin. Ft.	86	
18-B	30" Corrugated Metal Culvert Pipe (Ent. & S.R.)	Lin. Ft.	50	
18-C	12" Reinf. Concrete Culvert Pipe (X-Rd.)	Lin. Ft.	1381	
18-C	15" Reinf. Concrete Culvert Pipe (X-Rd.)	Lin. Ft.	634	
18-C	18" Reinf. Concrete Culvert Pipe (X-Rd.)	Lin. Ft.	711	
18-C	24" Reinf. Concrete Culvert Pipe (X-Rd.)	Lin. Ft.	1369	
18-C	36" Reinf. Concrete Culvert Pipe, (X-Rd.)	Lin. Ft.	242	
18-C	12" Reinf. Concrete Culvert Pipe	Lin. Ft.	338	
18-C	15" Reinf. Concrete Culvert Pipe	Lin. Ft.	685	
18-C	30" Extra Strength Conc. Culvert Pipe	Lin. Ft.	198	
18-CC	24" Reinf. Conc. Culv. Pipe (Imperfect trench)	Lin. Ft.	122	
18-CC	30" Reinf. Conc. Culv. Pipe (Imperfect trench)	Lin. Ft.	176	
19-A	Reinforcing Steel	LB.	64,430	
23-D	Grouted Heavy Stone Revetment	Sq. Yd.	274.3	
24-A	Class A (Type 1) Underdrains	Lin. Ft.	4702	
24-C	6" Class B (Plain) C.M. Pipe Underdrain	Lin. Ft.	180	
25-A	Concrete Protection Curb	Lin. Ft.	3422	
25-B	Concrete Curb & Gutter	Lin. Ft.	1129.4	
25-D	Concrete Gutter	Lin. Ft.	785.5	
25-BB	Paved Approach (7")	Sq. Yd.	35.8	
25-BB	Paved Approach (8")	Sq. Yd.	180.6	
25-H	Surface Drain Basins, 8 Ft. (L.P.)	Each	2	
25-I	Surface Drains	Lin. Ft.	7.0	
27-A	Guard Rail (Type 1)	Lin. Ft.	263	
28-A	Barricades	Each	2	
28-B	Relocating Barricades	Each	0	
28-C	Standard Signs, Flags, & Flagging	Lump Sum	1	
27-B	Metal Gates	Each	2	
29-C	Right of Way Markers	Each	95	
29-D	Drain Markers	Each	69	
36-A	Grates and Bearing Plates	LB.	1800	
36-C	Manhole Frame & Cover	Each	6	
37-A	Fertilizing & Mulching	Acre	46.6	
	6" ROLLED STONE BASE			
1-BA	Water	100 Gal.	195	
2-A	Aggregate (Gradation A)	Ton	1031	
2-B	Spreading, Shaping & Compacting	Sq. Yd.	3305	
	4" COMPACTED GRANULAR BASE FOR P.C.C. PAV'T & P.C.C. BASE COURSE			
1-BA	Water	100 Gal.	4238	
3C-A	Granular Base Material	Ton	23,318	
3C-B	Spreading, Shaping & Compacting	Mile	6.84	
	ASPHALTIC CONCRETE PAVEMENT			
4C-A	Primer (MC-0)	Gal.	1170	
4C-B	Sanding Primer	Ton	19	
7-B	Type B Asphaltic Concrete	Ton	900	
7-C	Type C Asphaltic Concrete	Ton	1092	
7-D	Asphaltic Concrete Wedge Course	Ton	113	
	DOUBLE SEAL COAT CLASS A (on 6" Rolled Stone Base)			
4C-A	Primer (MC-0)	Gal.	680	
10B-A	Bituminous Material (MC-4)	Gal.	1970	
10B-B	Cover Material	Ton	74	
	THIN PAVEMENT DEDUCTIONS			
	Station 241+40 to 241+60 (Rt. Lane)			
	$\frac{20 \times 12}{9} \times (15\% \ \$4.42) = \$17.68$			
	CONTINGENT ITEMS			
	Compacted Asphaltic Samples	Each	5	
	D-4 Force Account	Each	1	
18B-A	120" Corr. Metal Sectional Plate Pipe	Lin. Ft.	220	
18-DB	18" Corr. Metal (Bituminous Coated) Pipe	Lin. Ft.	58	

Prepared By ________ Date ________ 19__ Checked in Dist. Office By ________ Date ________ 19__ Checked in Central Office By ________ Date ________ 19__ Revised By ________ Date ________ 19__

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FED. ROAD DIST. No.	STATE	PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	MO.	UI-99(6)		2A	
DIV. No.	COUNTY			ROUTE	SEC. No.
4	CLAY			69	

LOCATION ARMOUR ROAD IN NORTH KANSAS CITY, NORTHEASTERLY TO ANTIOCH ROAD (Rte. 1)

TYPE GE, CULVERTS, BRIDGES, & TWO P.C.C. PAVT'S EACH 24 FT. WIDE

MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

EXCAVATION

Station	to Station	Lane	Class A	Undergrade Class A	Class C	O'Haul	Comp. in Cuts	Unauth. Class A	Embank.	Backfill	Comp. Embank.	Unauth. Embank.	Waste	Remarks
0-100	19+66	Armour Rd.	1971						1684	74	1654			
220+00	289+70	Lt.	352503	4364	2447	4623083		337	302338	4935	300259	143	3637	includes Ramp A 211+63-225+16, Ramp D 216+31-224+97.5, Ramp E 284+00-290+18, Ramp F 286+00-289+88
220+00	289+60	Rt.												
289+70	314+50	Lt.	193984	232	2016	614100	403		169289	591	169474		1867	includes Ramp E 290+18-294+65, Ramp F 289+88-295+00
289+60	313+60	Rt.							7653		6646		170	
0+50	9+93	Wayne Ave.	9035						25	14	39			includes conn. old Russell Rd. to Wayne Ave. 2+20-3+49
48+20	51+18	Russell Rd.	29194						15037	36	14881		46	
51+18	61+50	Russell Rd.	15321						26586		26586			
112+50	118+44	Lt. Lo. Rte. 71	7486						136	8	144			
121+60	125+00	Lt. Lo. Rte. 71	16253						18942	6	18947			
114+00	126+00	Rt. Lo. Rte. 71	13068											
314+50	325+00	Lt.												
313+60	325+40	Rt.	20197	753					18887	835	19565		150	
325+00	336+06	Lt.												
323+40	336+06	Rt.	39602	1583					36467	1688	38155			
336+06	339+92.4	Rt. & Lt.	5373						3585	24	3541		189	
295+26.5	306+50	Antioch Rd.	1663						1612	25	640			
SUBTOTALS			705650	6932	4463	5237183	403	337	601241	8236	600531	143	6050	
Chan. Chan.			2260											
Inlets			431						1439		249			
P.E.'s, S. Rds.			79											
TOTALS			708420	6932	4463	5237183	403	337	602680	8236	600780	143	6050	See Sp. Provision for add. Waste

CLEARING & GRUBBING

Sheet No.	Clearing Units	Grubbing Units
3	393	149
4	1997	801
5	971	264
6	1262	421
7	71	14
TOTALS	4694	1649
Acres	53.9	18.9

FERT. & MULCH.

Sheet No.	Sq. Ft.	Acres
3	347959.15	
4	435712.60	
5	778598.01	
6	373247.63	
7	95269.30	
TOTAL	2030786.69	46.6

GROUTED HEAVY STONE REVETMENT

Station	Location	Sq. Yds.	Remarks
311+60	ch. ch. Rt. & Lt.	274.25	Br. inlet & Outlet
TOTAL		274.25	

CONCRETE BOX CULVERTS

Station	C-Std.	Size	Length	C.I.B Conc.	Reinf. St'l.	Class 3	Remarks
236+70	C-529	9x8	194	275.3	27660	1132.5	25° Sk. L/A
257+90	C-530	3x3	269	84.6	12000	337.5	30° Sk. R/A
295+99.7	C-530	2x1½	8'-6"	1.6	213	11.0	Extension to U.R. Conc. Box incl. Cl.3 for 360 D.I.
TOTALS				361.5	39873	1481.0	

DROP INLETS

Station	Lane	Location	Type	Size	"D"	C.I.B Conc.	Reinf. St'l	Grates Type	Grates Width	Grates Weight	Remarks
1+13.7	Armour Rd.	Lt.	36G	1½x2	2'3"	.56	106	1	2'0"	156	Grate only
215+41	Ramp A	Rt.	36E	3x3	3'0"	1.17	105				Type A Cover 2 Spillways 1-18" 1-24" Pipe
220+00	Ramp D	Lt.	36E	3x2	10'0"	2.61	232				Type A Cover 1 spillway 1-18" Pipe
222+56	Lt.	Parkway	36E	3x2	1'9"	.77	67				Type A Cover 2 spillways 2-12" Pipe
227+70	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
232+32	Rt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
237+00	Parkway	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
241+35	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
246+34	Parkway	Rt. Rt. Lo.	36D	—	3'9"	1.69	158				2-24" Pipes
246+57	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
251+97	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
257+18	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
262+70	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
265+67		Rt. Rt. Lo.	36D	—	3'0"	1.54	138				2-18" Pipes
268+00	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
273+40	Lt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
278+68	Rt.	Parkway	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
282+36.4	Lt.	Lt. Lt. Lo.	36G	1½x2	1'9"	.47	100	1	2'0"	156	1-12" Pipe
284+00	Rt.	Lt. Rt. Lo.	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
294+20	Ramp E	Rt.	36E	3x3	3'6"	1.31	119				Type A Cover 2 spillways 1-18" 1-24" Pipe
295+40.5	Lt.	Lt.	36G	1½x2	1'9"	.47	100	1	2'0"	156	See Sp. SH. #16
295+40.5	Lt.	Rt.	36G	1½x2	2'6"	.57	111	1	2'0"	156	2-12" Pipes See Sp. SH. #16
295+61	Rt.	Lt.	36G	1½x2	2'0"	.48	102	1	2'0"	156	2-18" Pipes See Sp. SH. #16
295+65	Rt.	Rt.	36G	1½x2	1'9"	.47	100	1	2'0"	156	1-18" Pipe See Sp. SH. #16
301+86.8	Rt.	Lt.	36D	—	2'6"	1.44	133				1-15" Pipe
327+08	Ramp G	Rt.	36B	18"x48"	1'9"	.65	158				2-18" Pipes
328+12	Ramp G	Rt.	36B	18"x48"	1'9"	.67	155	1	4'0"	307	1-12" Pipe
330+50	Rt.	Lt.	36E	3x2	2'0"	.84	72				Type A Cover 1 spillway 1-15" Pipe
295+99.7	Antioch Rd.	Rt.	36D	—	3'9"	1.75	138				1-18" Pipe 1-2'x1½' Culv. opening
299+06	Antioch Rd.	Rt.	36E	3x2	1'9"	.77	67				Type A Cover 2 spillways 1-12" Pipe
299+61	Antioch Rd.	Rt.	36E	3x2	2'0"	.82	69				Type A Cover 2 spillways 1-12" Pipe
301+54	Antioch Rd.	Rt.	36F	—	1'9"	.70	50	2	3'0"	280	10" Transition
301+65	Antioch Rd.	Rt.	36E	3x2	1'9"	.79	70				Type A Cover 1 spillway 1-15" Pipe
302+46	Antioch Rd.	Rt.	36E	3x2	1'9"	.80	70				Type A Cover 1 spillway 1-12" Pipe
303+89	Antioch Rd.	Rt.	36F	—	1'9"	.70	50	2	3'0"	280	1-18" Pipe 25" Transition
303+89	Antioch Rd.	Rt.	36E	3x3	1'9"	.99	88				Type A Cover 1 spillway 1-12" Pipe
TOTALS						32.63	3418			1803	

MANHOLES (Std. 16-A)

Station	Location	Size	"D"	C.I.B Conc.	Reinf. Steel	Frame & Cover	Remarks
51+50	Russell Rd.	3x3	6'5"	2.10	209		2-24" Pipes Cl.3 incl. with ECP
56+86	Russell Rd.	3x3	5'0"	1.60	195	1	3-24" Pipes Cl.3 incl. with ECP
299+61	Antioch Rd.	3x3	4'0"	1.53	176	1	3-12" Pipes Cl.3 incl. with ECP
301+54	Antioch Rd.	3x3	4'0"	1.48	182	1	2-18" 2-15" Pipes Cl.3 incl. with ECP
302+46	Antioch Rd.	3x3	4'0"	1.51	176	1	1-18" 2-15" Pipes Cl.3 incl. with ECP
303+89	Antioch Rd.	3x3	4'0"	1.48	182	1	2-18" 2-15" Pipes Cl.3 incl. with ECP
TOTALS				9.70	1120	6	

RIGHT OF WAY MARKERS

Sheet No.	No.
3	11
4	25
5	29
6	21
7	9
TOTAL	95

LENGTH OF PROJECT

End of Project	Rt. Lane	Station	337+39.85
Beginning of Project	Rt. Lane	Station	220+00
Apparent Length		11,739.85	Feet
Equations and Exceptions:	[illegible]		
Total Corrections		-260.68	Feet
Net Length of Project		11,479.17	Feet
State Length =		2.174	Miles
Federal Length =		2.174	Miles

CONCRETE GUTTER

Station	Location	Lin. Ft.
[illegible]	Rt. Lo.	137.5
220+00	Ramp C	100.5
[illegible]	Ramp C	214.5
222+56	Lt. Lt. Lo.	46.0
227+70	Lt. Lt. Lo.	60.0
246+57	Lt. Lt. Lo.	39.5
257+18	Lt. Lt. Lo.	62.0
262+70	Lt. Lt. Lo.	20.5
273+40	Lt. Lt. Lo.	34.0
312+33	Lt. Lt. Lo.	47.0
330+50	Rt. Lt. Lo.	24.0
TOTAL		785.5

CONCRETE PROTECTION CURB

Station	to Station	Location	Lin. Ft.
11+35	21+56.16	Armour Rd.	174.0
17+12.3	18+05.85	Armour Rd.	168.2
TOTAL			342.2

CONCRETE CURB & GUTTER

Station	to Station	Location	Lin. Ft.
11+07.65		Armour	43.5
11+88.3		Armour	42.0
211+75	[illegible]	Lt. Ramp A	285.0
216+00	220+50	Lt. Ramp A	488.2
292+30	295+00	Lt. Lt. Lo.	270.7
TOTAL			1129.4

GUARD RAIL (Type 1)

Station	Lane	Location	Lin. Ft.
[illegible]	Armour Rd.	Lt.	12.5
235+00	Rt.	Rt.	12.5
281+50	Rt.	Rt. 38th St.	37.5
281+50	Lt.	Lt. 38th St.	37.5
2871	Rt.	Rt. 39th St.	37.5
2901	Rt.	Rt. 39th St.	25.0
3221	Rt.	Rt. Roland Rd.	25.0
3241	Lt.	Lt. Roland	25.0
3271	Rt.	Rt. N. Olive	25.0
3291	Lt.	Lt. N. Olive	25.0
TOTAL			262.5

BARRICADES

Location	No.
N. Garfield & Russell Rd.	1
Old Russell Rd. & Wayne Ave.	1
TOTALS	2

RELOCATING BARRICADES

	No.	Remarks
TOTAL	0	none required

~~GENERAL SUMMARY~~ FINAL PLANS

ITEM NO.	DESCRIPTION	UNIT	TOTAL UNITS	NO. UNITS FED. AID ONLY

ENTRANCE & SIDE ROAD APPROACHES

Station	Location	Type	Cl. A	Embank	Comp. Embank	Surf. Std.	Cr.	Remarks
11+83.5	Lt. Armour	S.E.	57					See Paved Appr.
13+50	Rt. Armour	P.E.				1	4½	
15+00	Rt. Armour	P.E.				1	4	
15+57	Rt. Armour	P.E.						See Paved Appr.
16+16.7	Rt. Armour	P.E.						See Paved Appr.
17+00	Rt. Armour	P.E.				1	4½	
18+30.8	Rt. Armour	S.E.	6					
19+50	Rt. Armour	P.E.				1	4½	
214+40.0	Lt. Ramp A	P.E.				1	6½	Quantities included with Ramp A Grading
227+71	Rt. Rt. Lo.	P.E.		650			17½	Levee Appr.
227+76	Lt. Rt. Lo.	P.E.		8			6¼	Levee Appr.
230+10	Lt. Lt. Lo.	P.E.		552			20½	Levee Appr.
1+16	Lt. Wayne Ave.	P.E.				1	3	
1+50	Rt. Wayne Ave.	P.E.				1	4	
60+50	Rt. Russell	S.E.		249	249			Double Seal Coat
320+00	Rt. Rt. Lo.	S.E.				1	19½	Quantities with Ramp
295+32	Rt. Antioch	S.E.				1	2½	
295+60	Rt. Antioch	P.E.				1	6½	
296+70	Rt. Antioch	P.E.				1	4	
298+66	Rt. Antioch	P.E.						See Paved Appr.
304+21	Rt. Antioch	S.E.	16					See Paved Appr.
TOTALS			79	1839	249		107	

8" SURFACE BASINS & DRAINS

Station	Lane	Location	Type	Surf. Basins	Drain Lin. Ft.
14+50	Armour	Lt.	L.P.	1	
15+15.0	Armour	Lt.	L.P.	1	7.0
TOTAL				2	7.0

SPEC. METAL GATES (Chain Link Type)

Station	Lane	Location	No.	Remarks
227+71	Rt.	on Rt. R/W line	1	12' Width
228+10	Lt.	on Lt. R/W line	1	12' Width
TOTAL			2	

STANDARD SIGNS, FLAGS, FLAGGING, ETC.

	No.	Remarks
TOTAL	1	Lump Sum

Prepared By ______ Date ______ 19__ Checked in Div. Office By ______ Date ______ 19__ Checked in Central Office By ______ Date ______ 19__ Revised By ______ Date ______

MISSOURI STATE HIGHWAY COMMISSION
SUMMARY OF QUANTITIES

LOCATION ____________

TYPE ____________

FED. ROAD DIST. No.	STATE	PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	MO.	UI-39(6)		24	
DIV. No.		COUNTY		ROUTE	SEC. No.
4		CLAY		69	

FINAL PLANS

REINFORCED CONCRETE CULVERT PIPE (Cross Road)

Station	Lane	C-230 Hdwls.	12"	15"	18"	24"	36"	Cl.B Conc.	Reinf. St'l.	Cl.3 Exc.	Remarks
21+93	Quebec St.		31							12.0	
215+41	Ramp A	RC-Lt.			49			0.83	63	8.5	incl. Cl.3 for D.I.
218+34	Ramp D	RB-Rt. RC-Lt.			91			2.59	220	60.5	45° Sk. R/A
220+00	Ramp D	RB-Rt.			86			0.65	53	5.0	
222+56	Lt.		52							28.0	incl. Cl.3 for D.I.-U-gutter Lt.
223+88	Ramp A	RB-Rt.&Lt.				145		3.48	358	14.0	45° Sk. L/A
227+70	Lt.		77							38.5	10° Sk. R/A incl. Cl.3 for D.I.
232+32	Rt.	RC-Rt.	89					0.50	42	67.5	incls. Cl.3 for D.I.
237+00	Parkway		32							30.0	Outlet in Y-Ld. Conc. Box
241+35	Lt.	RB-Lt.	75					0.41	34	17.5	incls. Cl.3 for D.I.
246+34	Parkway	RB-Lt.				207		0.99	98	303.5	incls. Cl.3 for D.I.
246+57	Lt.		68							39.0	incls. Cl.3 for D.I.
251+97	Lt.	RC-Lt.	72					0.50	42	41.5	incls. Cl.3 for D.I.
257+18	Lt.		69							42.5	incls. Cl.3 for D.I.
262+70	Lt.		76							24.5	incls. Cl.3 for D.I.
265+67	Lt.&Rt.	RB-Lt.			230			0.83	79	130.0	Sk 25° R/A incls. Cl.3 for D.I.
268+00	Lt.	RC-Lt.	85					0.50	42	26.0	incls. Cl.3 for D.I.
272+46	Lt.&Rt.	RB-Rt. RC-Rt.				173		2.25	222	128.0	
273+40	Lt.		70							38.5	incls. Cl.3 for D.I.
275+12	Lt.&Rt.	RB Rt.&Lt.					242	6.10	504	76.5	45° Sk. R/A
278+68	Rt.	RC-Rt.	88					0.50	42	74.5	incls. Cl.3 for D.I.
282+36.4	Lt.	RC-Rt.	71					0.87	81	29.5	45° Sk L/A-incls. Cl.3 for D.I.
284+00	Rt.	RC-Rt.	93					0.50	42	49.0	incls. Cl.3 for D.I.
284+65	Ramp E	RC-Rt.&Lt.		64				2.22	188	31.0	45° Sk. R/A
285+36	Ramp E	RC-Rt.&Lt.		82				3.02	244	45.5	57° Sk. L/A
289+72	Rt.	RC-Rt.&Lt.		113				1.44	138	123.0	15° Sk. R/A
294+20	Ramp E	RC-Lt.		112				0.64	52	78.5	incl. Cl.3 for D.I.-28" Pipe. Pay as 15" Contractor actually laid
51+50	Russell Rd.					56				68.5	Between D.I. & M.H. incls. Cl.3 for M.H.
51+50 56+86	Russell Rd.					537				559.0	Between Manholes
56+86	Russell Rd.	RC-Rt.&Lt.				84		2.52	248	46.0	incls. Cl.3 for M.H.
295+40.5	Lt.		37							15.0	Between D.I.'s-incls Cl.3 for D.I.'s
295+81.6 296+00	Lt.		59							23.0	Rt. of Lt. Lo.
295+61	Rt.	RC-Lt.	29					0.50	42	18.0	From D.I. to Outlet. incls Cl.3 for D.I.
295+65	Rt.		37							11.5	Between D.I.'s-incls. Cl.3 for D.I.'s
117+19	Rt. Lo. #71	RB-Rt.&Lt.				109		1.98	196	17.0	
304+86.8	Rt.	RC-Rt.		69				0.86	77	33.5	Sk 30° R/A incls. Cl.3 for D.I.
312+33	Lt.	RC-Rt.				58		1.26	124	49.0	
317+00	Rt.	RC-Rt.&Lt.		77				1.72	154	10.5	30° Sk. L/A
323+41	Rt.	RC-Rt.&Lt.		64				1.72	154	34.0	30° Sk. L/A
326+50 327+08	Ramp G		68							24.0	Between D.I. & Outlet Lt. ditch
327+08 328+12	Ramp G		103							35.0	Between D.I.'s incls. D.I. Cl.3
329+00	Rt.&Lt.	RC-Lt. RB-Rt.			255			1.48	116	2.5	
330+50	Rt.			53						32.0	incls. Cl.3 for D.I.
TOTALS			1381	634	711	1369	242	40.86	3655	2541.0	

EXTRA STRENGTH REINFORCED CONCRETE CULVERT PIPE

Station	Lane	C-230 Hdwls.	30"	Cl.B Conc.	Reinf. St'l.	Cl.3 Exc.
253+46	Lt.&Rt.	RB-Lt. RC-Rt.	198	3.10	275	88.0
TOTALS			198	3.10	275	88.0

REINFORCED CONCRETE CULVERT PIPE (Imperfect trench method)

Station	Lane	C-230 Hdwls.	RCP 24"	RCP 30"	Cl.B Conc.	Reinf. St'l.	Cl.3 Exc.	Remarks
221+40	Lt.	RB-Lt.	122		2.55	251	35.5	Sk. 60° L/A - Ext. to U.I.P. Pipe
117+00	Lt. Lo. #71	2 RB		176	3.22	322	83.5	Sk 20° R/A
TOTALS			122	176	5.77	573	119.0	

REINFORCED CONCRETE CULVERT PIPE

Station	Lane	Location	RCP 12"	RCP 15"	Cl.3 Exc.	Remarks
11+73.7	Armour Rd.	Lt.	52		35.0	connects to 12" Sewer, Under Ozark St.
281+65		Lt.&Rt. Lo.		166	18.5	Gas line conduit
320+40		Lt.&Rt. Lo.		130	99.0	Gas line conduit
298+00 299+61	Antioch	Rt.	61		33.0	Between D.I. & M.H. incls. Cl.3 for D.I.
299+61	Antioch	Rt.	19		19.0	Between D.I. & M.H. incls. Cl.3 for D.I. & M.H.
299+61 301+54	Antioch	Rt.	190		197.0	Between Manholes incls. Cl.3 for M.H. 301+54
301+54	Antioch	Rt.	2		2.0	Between D.I. & M.H. incls. Cl.3 for 36F D.I.
301+54 301+65	Antioch	Rt.		22	15.0	Between D.I. & M.H. incls. Cl.3 for 36E D.I.
301+54 302+46	Antioch	Rt.		89	64.5	Between Manholes incls. Cl.3 for M.H. 302+46
302+46	Antioch	Rt.	7		4.0	Between D.I. & M.H. incls. Cl.3 for 36E D.I.
302+46 303+89	Antioch	Rt.		141	105.0	Between Manholes incls. Cl.3 for M.H. 303+89
303+89	Antioch	Rt.	4		2.0	Between D.I. & M.H. incls. Cl.3 for 36F D.I.
303+89	Antioch	Rt.	3		3.5	Between D.I. & M.H. incls. Cl.3 for 36E D.I.
303+89 305+27	Antioch	Rt.		137	79.5	Between Manhole & Outlet
TOTALS			338	685	677.0	

CLEAN-OUT EXISTING PIPE

Station	Lane	Cl.3	Remarks
220+80	Rt.	49.8	Under Lanes & Ramps
TOTAL		50.0	

CORRUGATED METAL CULVERT PIPE (Ent. & S.R.)

Station	Lane	Location	15"	18"	30"	Cl.3	Remarks
4+00	Wayne Ave.	S. Road	50				
7+27	Wayne Ave.	N. Road	52				
60+50	Russell Rd.	S.R. Rt.			50		Con. to old Russell Rd. C.M.P.
295+40	Antioch Rd.	R.E. Rt.		86		41.5	Paid for as C.M.P.
TOTALS			102	86	50	41.5	

6" CLASS B (Plain) CORRUGATED METAL PIPE UNDERDRAIN

Station	Lane	Location	Size	Length	Drain Mark	Cl.3	Remarks
246+34	Lt.&Rt.	60' Lt.	6"	120	1		Drain seep at culv. site
259+35	Lt.	28' Lt.	6"	60	1	40	Outlet for Spring
TOTALS				180	2	40	

LENGTH OF PROJECT

	Station	
End of Project		
Beginning of Project		
Apparent Length		Feet
Equations and Exceptions:		
Total Corrections		Feet
Net Length of Project		Feet
State Length =		Miles
Federal Length =		Miles

CLASS A (Type 1) UNDERDRAINS

Station	Lane	Lin. Ft.	Drain Mark	Type	Outlet
214+76	Ramp A	103	1	Lat.	[illegible]
217+35	Ramp D	62	1	Lat.	Lt. Fill slope
218+18	Ramp A	56	1	Lat.	Lt. Fill slope
221+00	Ramp D	45	1	Lat.	Rt. Fill slope
221+60	Ramp A	43	1	Lat.	Lt. Fill slope
222+50	Ramp D	61	1	Lat.	Rt. Fill slope
225+10	Ramp A	45	1	Lat.	Lt. Fill slope
228+00	Rt.	58	1	Lat.	Lt. ditch
229+40	Lt.	60	1	Lat.	Rt. ditch
233+65	Rt.	50	1	Lat.	Rt. Fill slope
234+20	Lt.	50	1	Lat.	Lt. ditch
237+25	Rt.	50	1	Lat.	Rt. ditch
238+00	Lt.	48	1	Lat.	Lt. Fill slope
240+25	Rt.	46	1	Lat.	Rt. ditch
241+60	Lt.	46	1	Lat.	Lt. ditch
243+25	Rt.	56	1	Lat.	Parkway
244+00	Lt.	46	1	Lat.	Lt. ditch
246+34	Lt.&Rt.	43	1	Lat.	[illegible]
246+10	Rt.	53	1	Lat.	Parkway
246+85	Lt.	48	1	Lat.	Lt. Fill slope
250+15	Rt.	54	1	Lat.	Parkway
251+10	Lt.	45	1	Lat.	Lt. ditch
253+85	Rt.	54	1	Lat.	Parkway
254+50	Lt.	50	1	Lat.	Lt. ditch
257+25	Rt.	56	1	Lat.	Parkway
257+69	Lt.	44	1	Lat.	Lt. Fill slope
260+50	Rt.	58	1	Lat.	Parkway
260+88	Lt.	52	1	Lat.	Lt. Fill slope
263+34	Rt.	54	1	Lat.	Parkway
264+07	Lt.	51	1	Lat.	Lt. Fill slope
266+25	Rt.	56	1	Lat.	Parkway
267+26	Lt.	52	1	Lat.	Lt. Fill slope
269+29	Rt.	56	1	Lat.	Parkway
270+85	Lt.	51	1	Lat.	Lt. Fill slope
272+33	Rt.	56	1	Lat.	Parkway
273+68	Lt.	47	1	Lat.	Lt. Fill slope
275+37	Rt.	48	1	Lat.	Rt. Fill slope
276+93	Lt.	54	1	Lat.	Lt. ditch
278+81	Rt.	50	1	Lat.	Rt. ditch
280+02	Lt.	52	1	Lat.	Lt. Fill slope
281+45	Rt.	60	1	Lat.	Rt. Fill slope
283+20	Lt.	70	1	Lat.	Rt. Fill slope
284+50	Rt.	90	1	Lat.	Rt. ditch
287+00	Lt.	56	1	Lat.	Rt. ditch
287+00	Ramp E	54	1	Lat.	Rt. ditch
290+50	Ramp E	50	1	Lat.	Rt. Slope
294+25	Ramp E	54	1	Lat.	Rt. ditch
294+60	Ramp F	50	1	Lat.	Lt. ditch
50+50	Russell Rd.	50	1	Lat.	Rt. ditch
56+86	Russell Rd.	326		Long.	M.H. @ 56+86
59+50	Russell Rd.	59	1	Lat.	Lt. ditch
299+00	Lt.	86	1	Lat.	Lt. ditch
302+50	Lt.	54	1	Lat.	Rt. ditch
306+00	Lt.	121	1	Lat.	[illegible]
307+00	Rt.	46	1	Lat.	Rt. Fill slope
309+00	Lt.	51	1	Lat.	Rt. Fill slope
310+50	Rt.	46	1	Lat.	Rt. Fill slope
312+42	Lt.	53	1	Lat.	Lt. ditch
313+93	Rt.	44	1	Lat.	Rt. Fill slope
316+20	Lt.	56	1	Lat.	Rt. Fill slope
318+00	Rt.	52	1	Lat.	Rt. ditch
320+00	Lt.	56	1	Lat.	Rt. Fill slope
321+50	Rt.	48	1	Lat.	Rt. ditch
323+00	Lt.	58	1	Lat.	Lt. ditch
325+00	Rt.	50	1	Lat.	Rt. ditch
326+00	Lt.	70	1	Lat.	Parkway
328+50	Rt.	86	1	Lat.	Rt. Fill slope
329+00	Lt.	96	1	Lat.	Parkway
333+40	Ramp H	49	1	Lat.	Lt. ditch
335+12	Ramp G	48	1	Lat.	Lt. ditch
299+00 301+54	Antioch	175		Long.	M.H. 301+54
302+46 303+89	Antioch	131		Long.	M.H. 303+89
TOTALS		4702	67		

Corr. Metal Sectional Plate Pipe

Station to Station	Location	120"
232+45 235+15	Dr. Rt.	220
Total		220 Lin. Ft.

Corr. Metal (Bituminous Coated) Pipe

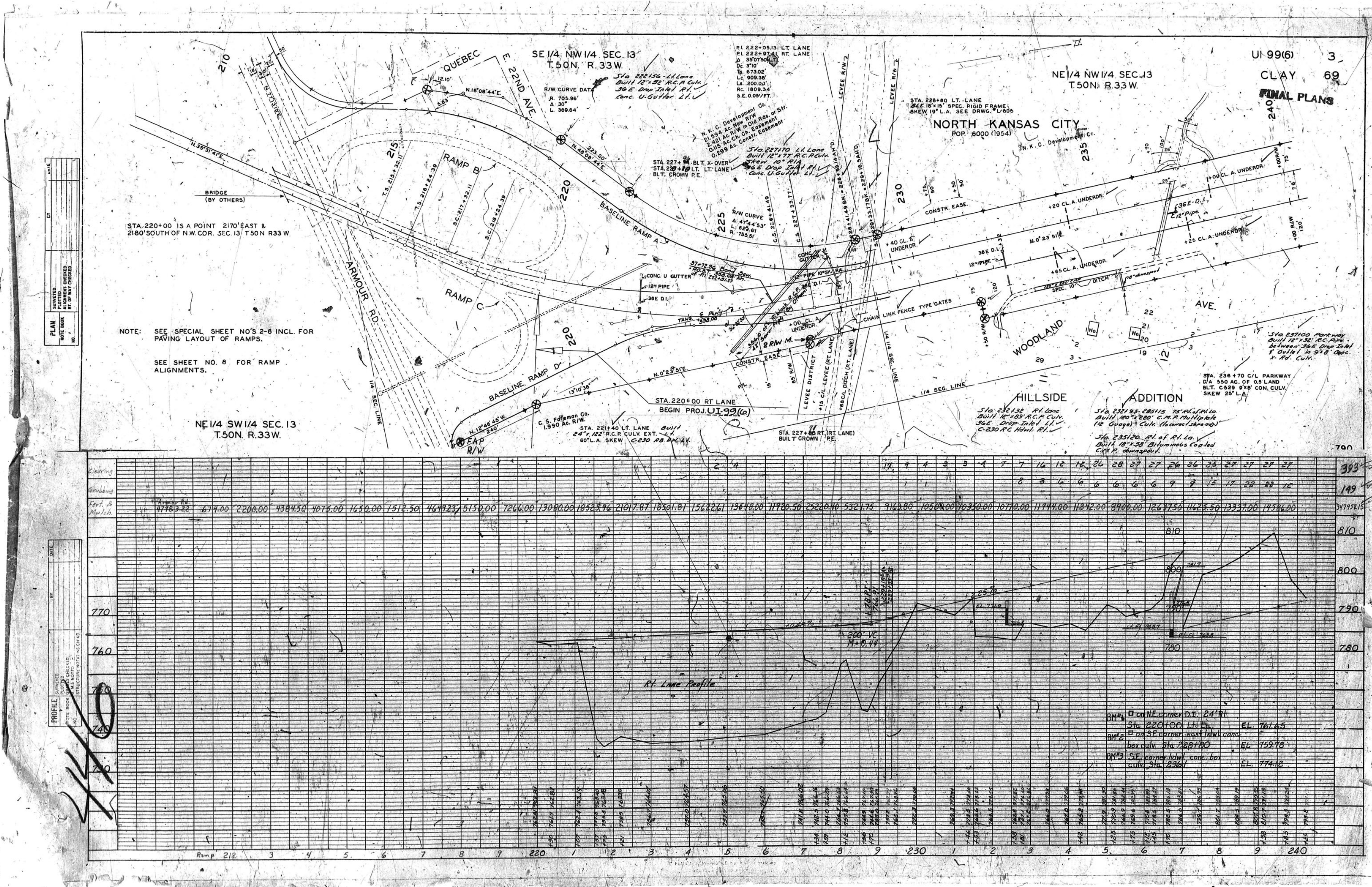
Station	Location	18"
235+20	B.S. Rt.	58
Total		58 Lin. Ft.

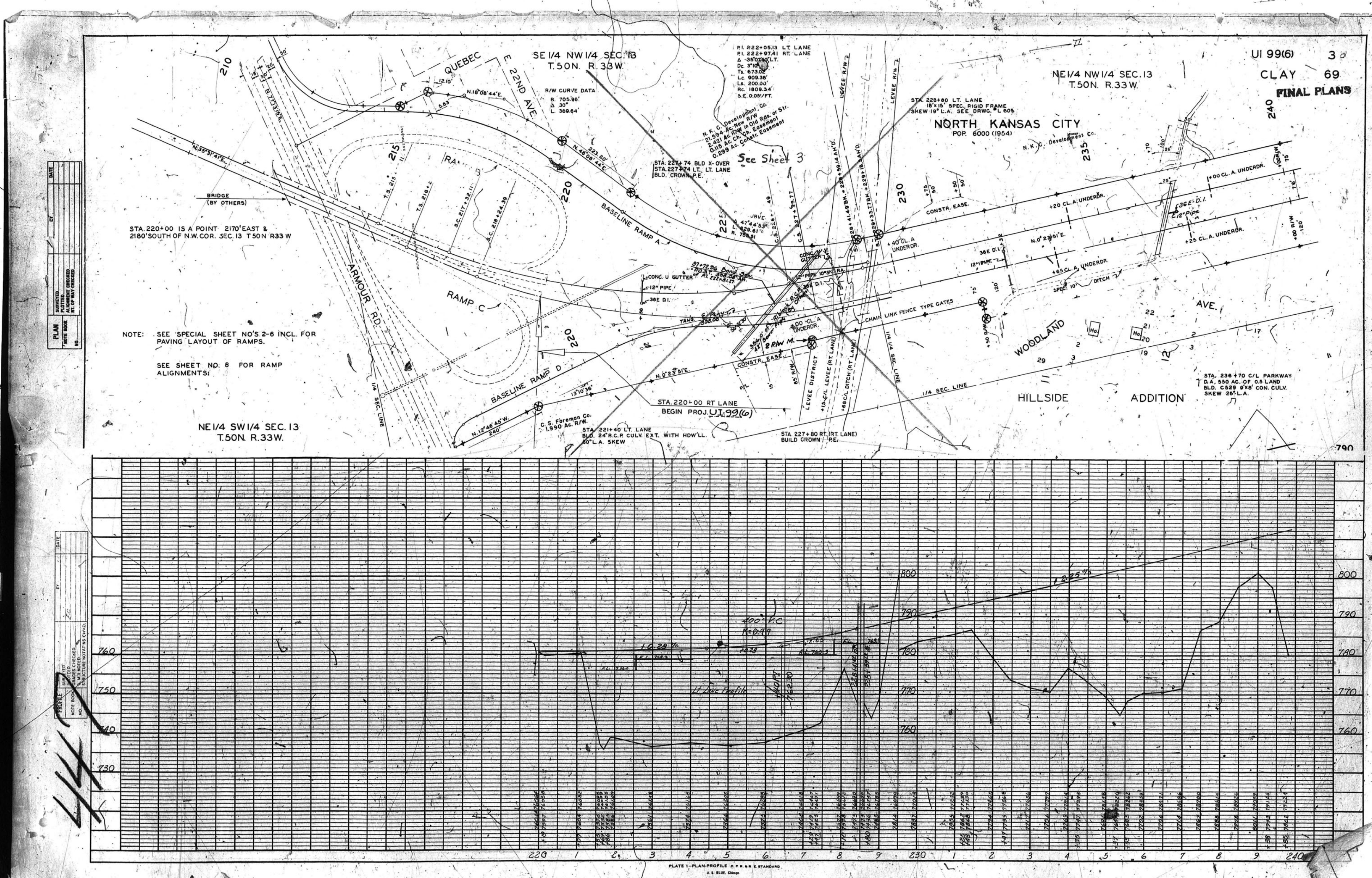
GENERAL SUMMARY

ITEM NO.	DESCRIPTION	UNIT	TOTAL UNITS	NO. UNITS FED. AID ONLY

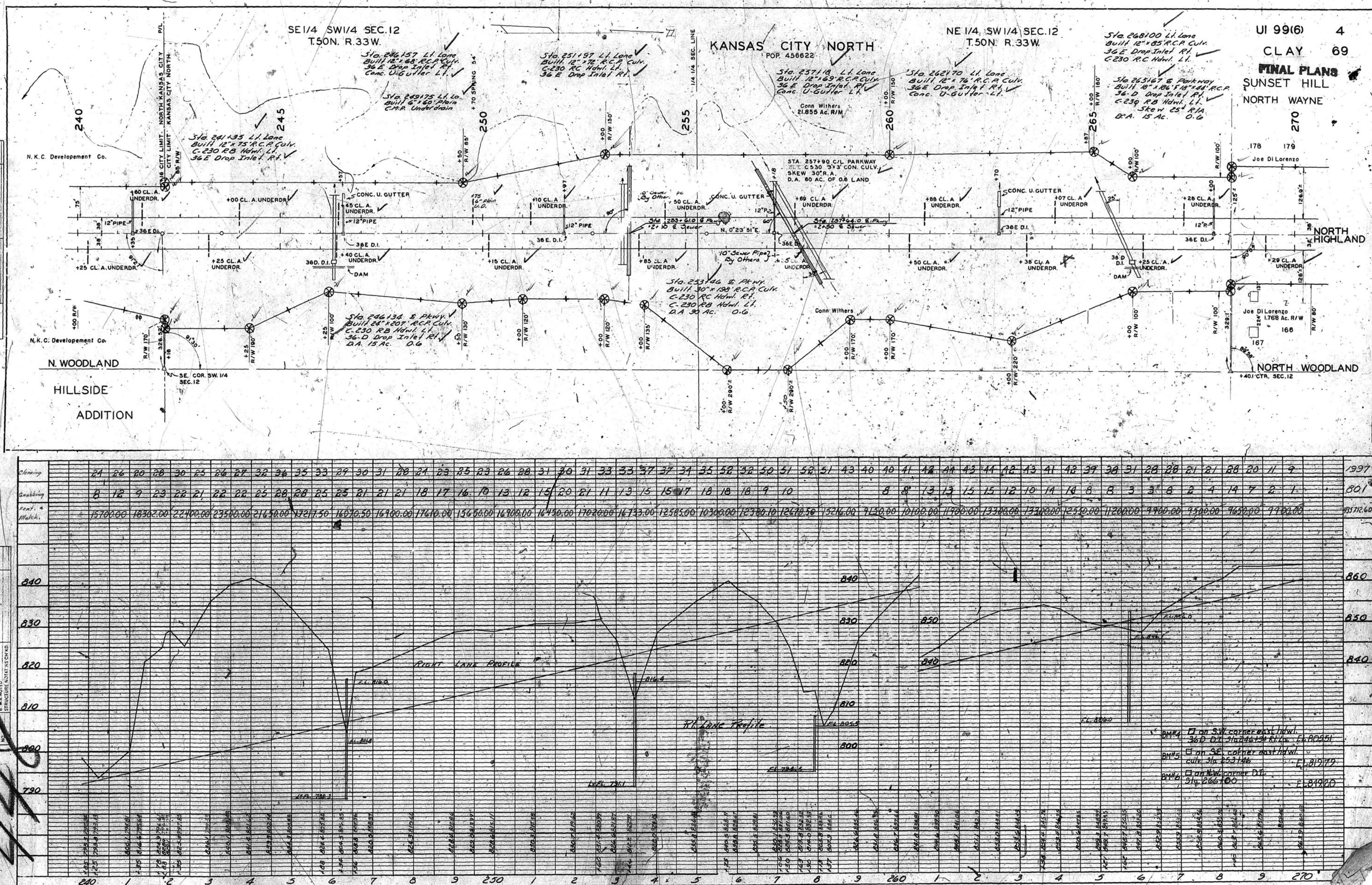
Prepared By________ Date________ 19__ Checked in Div. Office By________ Date________ 19__ Checked in Central Office By________ Date________ 19__ Revised By________ Date________ 19__

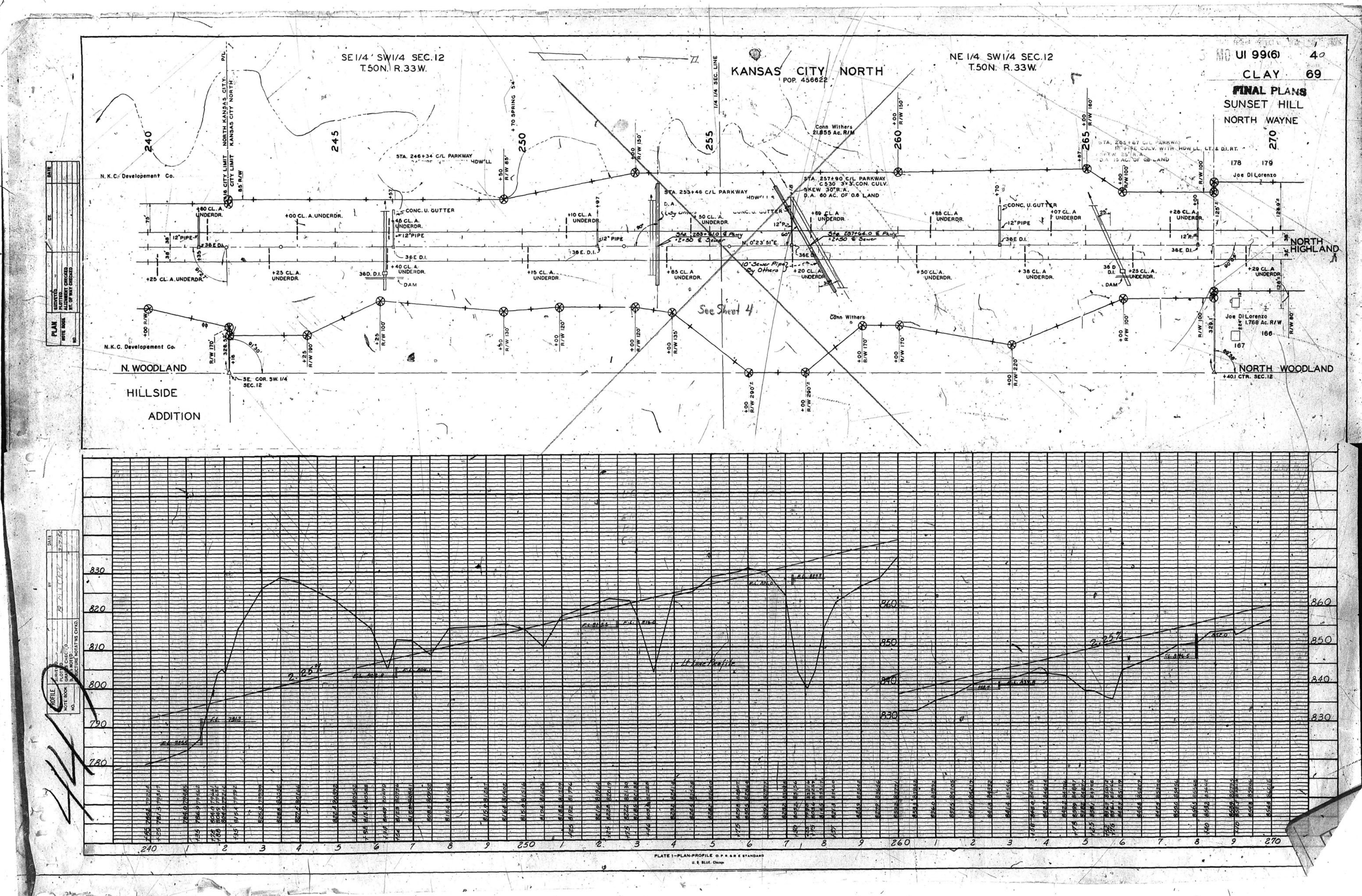
445


UI 99(6) 3
CLAY 69
FINAL PLANS
SE 1/4 NW 1/4 SEC. 13
T.50N. R.33W.
NE 1/4 NW 1/4 SEC. 13
T.50N. R.33W.
NORTH KANSAS CITY
POP. 6000 (1954)
N.K.C. Development Co.
QUEBEC
E 22ND AVE.
ARMOUR RD.
RAMP B
RAMP C
BASELINE RAMP A
BASELINE RAMP D
BRIDGE
(BY OTHERS)
STA. 220+00 IS A POINT 2170' EAST &
2180' SOUTH OF N.W. COR. SEC. 13 T.50N R33W.
NOTE: SEE SPECIAL SHEET NO'S 2-6 INCL. FOR
PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 8 FOR RAMP
ALIGNMENTS.
NE 1/4 SW 1/4 SEC. 13
T.50N. R.33W.
STA. 220+00 RT LANE
BEGIN PROJ. UI-99(6)
CHAIN LINK FENCE TYPE GATES
CONSTR. EASE.
LEVEE DISTRICT
1/4 SEC. LINE
WOODLAND
AVE.
HILLSIDE
ADDITION
PLAN
PROFILE
Clearing
Grubbing
Fert. & Mulch
Rt. Lane Profile
BM#1 on N.E. corner D.I. 24' Rt. Sta. 220+00 Lt. La. EL. 761.65
BM#2 on SE corner east hdwl. conc. box culv. Sta. 228+80 EL. 759.78
BM#3 S.E. corner hdwl. conc. box culv. Sta. 236+1 EL. 774.12
Ramp 212
220
230
240
440

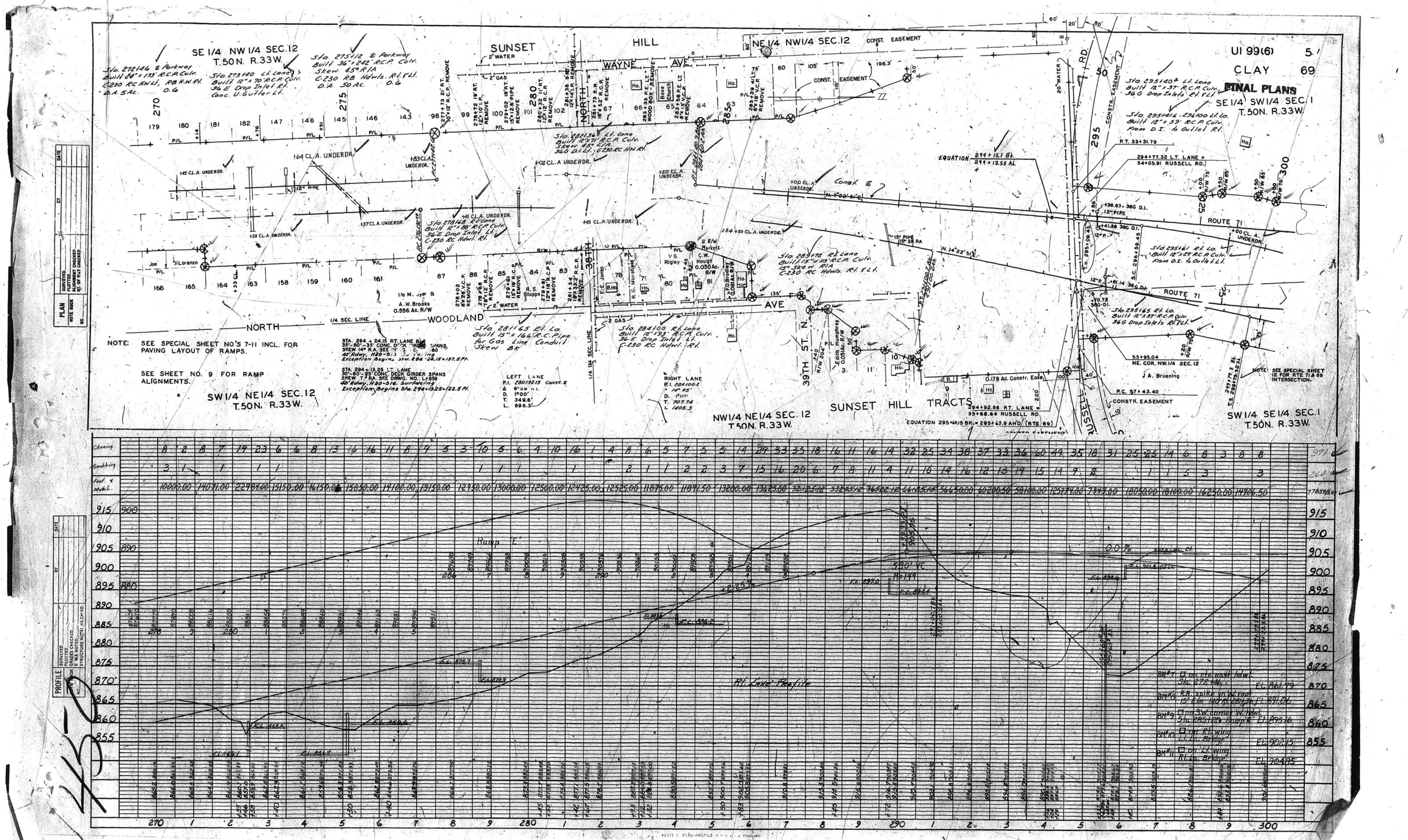


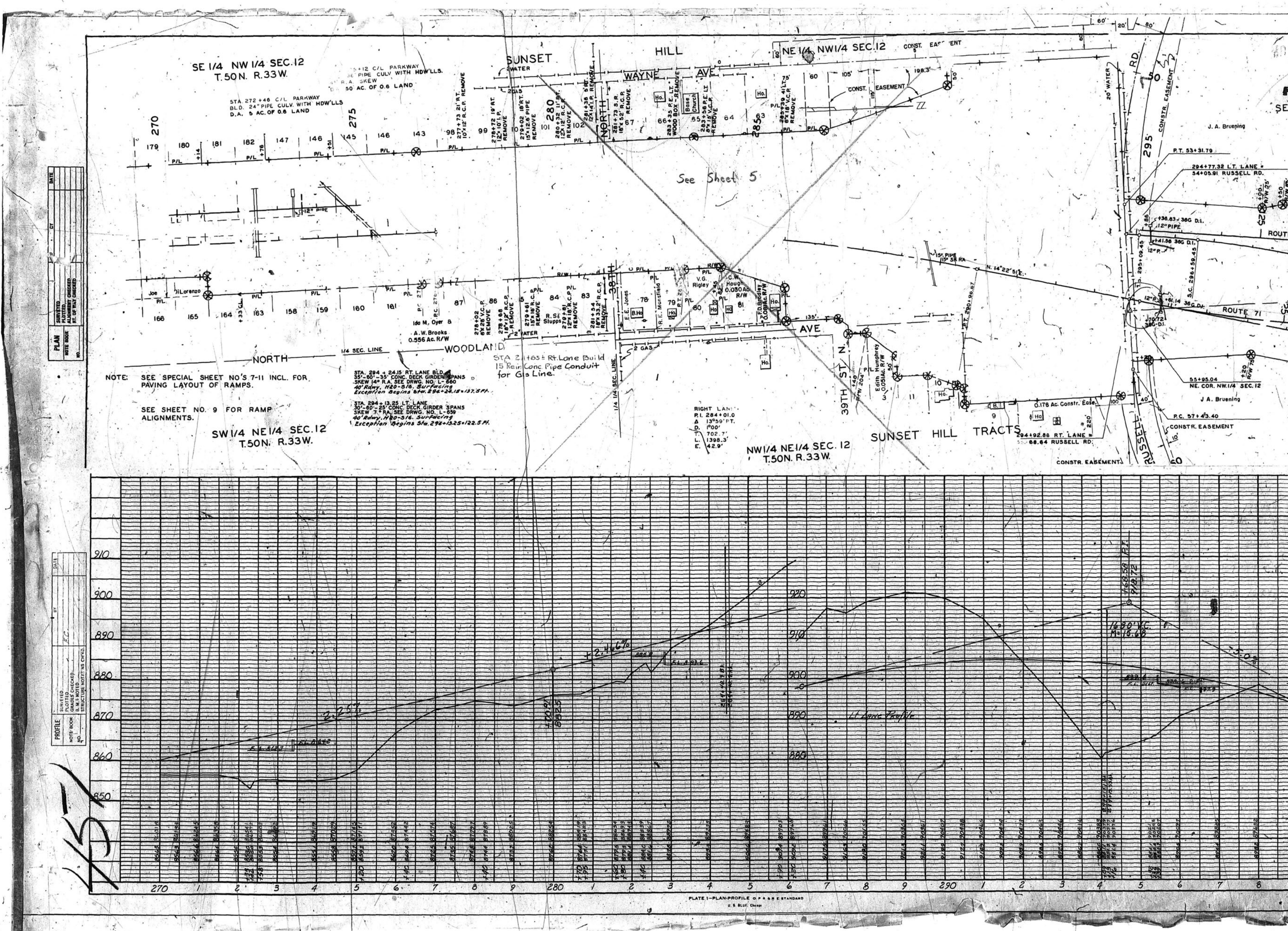
UI 99(6) 38
CLAY 69
FINAL PLANS
SE 1/4 NW 1/4 SEC. 13
T. 50N. R. 33W.
NE 1/4 NW 1/4 SEC. 13
T. 50N. R. 33W.
NE 1/4 SW 1/4 SEC. 13
T. 50N. R. 33W.
NORTH KANSAS CITY
POP. 6000 (1954)
QUEBEC
E 22ND AVE.
ARMOUR RD.
RAMP C
BASELINE RAMP A
BASELINE RAMP D
WOODLAND
AVE.
HILLSIDE
ADDITION
R/W CURVE DATA
R. 705.96'
Δ 30°
L. 369.64'
BRIDGE
(BY OTHERS)
STA. 220+00 IS A POINT 2170' EAST &
2180' SOUTH OF N.W. COR. SEC. 13 T50N R33 W
NOTE: SEE SPECIAL SHEET NO'S. 2-6 INCL. FOR
PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 8 FOR RAMP
ALIGNMENTS.
STA. 220+00 RT LANE
BEGIN PROJ. UI-99(6)
STA. 221+40 LT. LANE
BLD. 24" R.C.P. CULV. EXT. WITH HDW'LL.
60° L.A. SKEW
STA. 227+80 RT (RT. LANE)
BUILD CROWN P.E.
STA. 227+74 BLD X-OVER
STA. 227+74 LT. LT. LANE
BLD. CROWN P.E.
STA. 228+80 LT. LANE
18'x15' SPEC. RIGID FRAME
SKEW 19° L.A. SEE DRWG. L 605
STA. 236+70 C/L PARKWAY
D.A. 550 AC. OF 0.5 LAND
BLD. C529 9'x8' CON. CULV.
SKEW 25° L.A.
C. S. Foreman Co.
1.990 Ac. R/W.
N. K. C. Development Co.
N. K. C. Development Co.
CONSTR. EASE.
CHAIN LINK FENCE TYPE GATES
LEVEE DISTRICT
1/4 SEC. LINE
See Sheet 3
PLAN
PROFILE
PLATE 1—PLAN-PROFILE


UI 99(6) 4
CLAY 69
FINAL PLANS
SUNSET HILL
NORTH WAYNE
SE1/4 SW1/4 SEC.12
T.50N. R.33W.
KANSAS CITY NORTH
POP. 456622
NE 1/4 SW1/4 SEC.12
T.50N. R.33W.
Sta. 246+57 Lt. Lane
Built 12" x 68' R.C.P. Culv.
36E Drop Inlet Rt.
Conc. U-Gutter Lt.
Sta. 251+97 Lt. Lane
Built 12" x 72' R.C.P. Culv.
C-230 RC Hdwl. Lt.
36E Drop Inlet Rt.
Sta. 257+18 Lt. Lane
Built 12" x 69' R.C.P. Culv.
36E Drop Inlet Rt.
Conc. U-Gutter Lt.
Sta. 262+70 Lt. Lane
Built 12" x 76' R.C.P. Culv.
36E Drop Inlet Rt.
Conc. U-Gutter Lt.
Sta. 268+00 Lt. Lane
Built 12" x 85' R.C.P. Culv.
36E Drop Inlet Rt.
C-230 R.C. Hdwl. Lt.
Sta. 265+67 ℄ Parkway
Built 18" x 186.5' 18" x 44' R.C.P.
36-D Drop Inlet Rt.
C-230 RB Hdwl. Lt.
Skew 25° R/A
D.A. 15 Ac. 0.6
Sta. 241+35 Lt. Lane
Built 12" x 75' R.C.P. Culv.
C-230 RB Hdwl. Lt.
36E Drop Inlet Rt.
Sta. 249+75 Lt. Lane
Built 6" x 60' Plain C.M.P. Underdrain
STA. 257+90 C/L PARKWAY
C530 3'x3' CON. CULV.
SKEW 30° R.A.
D.A. 80 AC. OF 0.8 LAND
Conn Withers
21.855 Ac. R/M
Sta. 246+34 ℄ Pkwy.
Built 24" x 207' R.C.P. Culv.
C-230 RB Hdwl. Lt.
36-D Drop Inlet Rt.
D.A. 15 Ac. 0.6
Sta. 253+46 ℄ Pkwy.
Built 30" x 198' R.C.P. Culv.
C-230 RC Hdwl. Rt.
C-230 RB Hdwl. Lt.
D.A. 30 Ac. 0.6
N.K.C. Developement Co.
CITY LIMIT NORTH KANSAS CITY
CITY LIMIT KANSAS CITY NORTH
1/4 SEC. LINE
240
245
250
255
260
265
270
CONC. U. GUTTER
CL. A. UNDERDR.
12" PIPE
36E D.I.
36D D.I.
DAM
10" Sewer Pipe By Others
N. 0°23'51" E.
NORTH HIGHLAND
Joe Di Lorenzo
1.769 Ac. R/W
N. WOODLAND
NORTH WOODLAND
SE. COR. SW. 1/4 SEC. 12
+40.1 CTR. SEC. 12
HILLSIDE
ADDITION
Conn Withers
PLAN
PROFILE
Clearing
Grubbing
Fert. & Mulch
Right Lane Profile
Rt. Lane Profile
BM #4 □ on S.W. corner east hdwl. 36D D.I. Sta 246+34 Rt. ℄ El. 805.51
BM #5 □ on SE corner east hdwl. culv. Sta 253+46 El. 819.79
BM #6 □ on N.W. corner D.I. Sta 266+00 El. 819.20
840
830
820
810
800
790
860
850
240
250
260
270

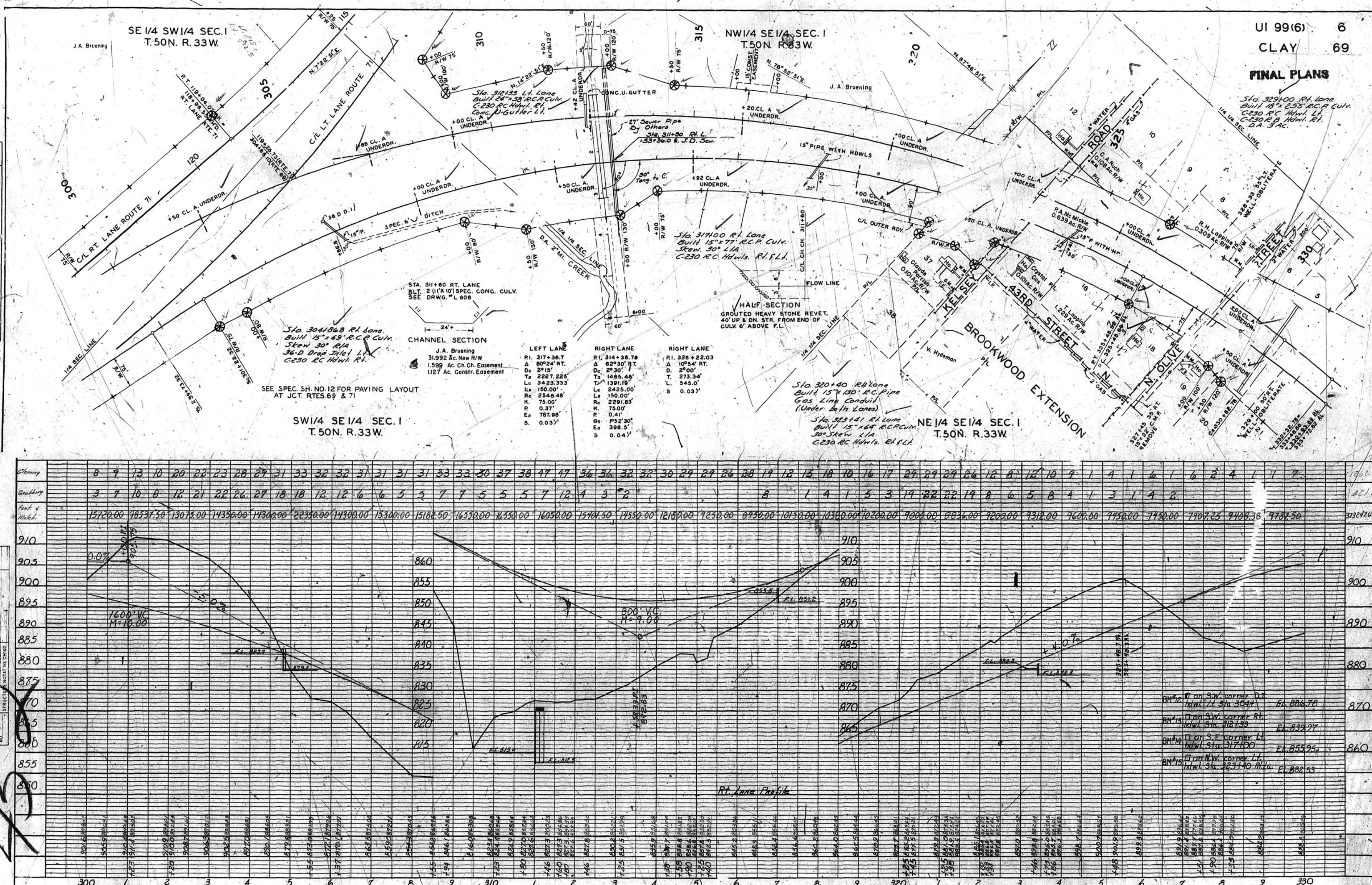


MO UI 99(6) 40
CLAY 69
FINAL PLANS
SUNSET HILL
NORTH WAYNE
SE 1/4 SW 1/4 SEC. 12
T.50N. R.33W.
KANSAS CITY NORTH
POP. 456622
NE 1/4 SW 1/4 SEC. 12
T.50N. R.33W.
1/4 SEC. LINE
CITY LIMIT NORTH KANSAS CITY
CITY LIMIT KANSAS CITY NORTH
N.K.C. Developement Co.
STA. 246+34 C/L PARKWAY
STA. 253+46 C/L PARKWAY
STA. 257+90 C/L PARKWAY
SKEW 30° R.A.
D.A. 60 AC. OF 0.8 LAND
Conn Withers
21.855 Ac. R/W
Joe Di Lorenzo
1.768 Ac. R/W
CONC. U. GUTTER
12" PIPE
CL. A. UNDERDR.
36 E D.I.
DAM
See Sheet 4
10" Sewer Pipe by Others
NORTH HIGHLAND
N. WOODLAND
NORTH WOODLAND
SE. COR. SW 1/4 SEC. 12
+40.1 CTR. SEC. 12
HILLSIDE
ADDITION
PLAN
PROFILE
2.25%
Lt Lane Profile
240
245
250
255
260
265
270
PLATE 1—PLAN-PROFILE
U. S. BLUE, Chicago

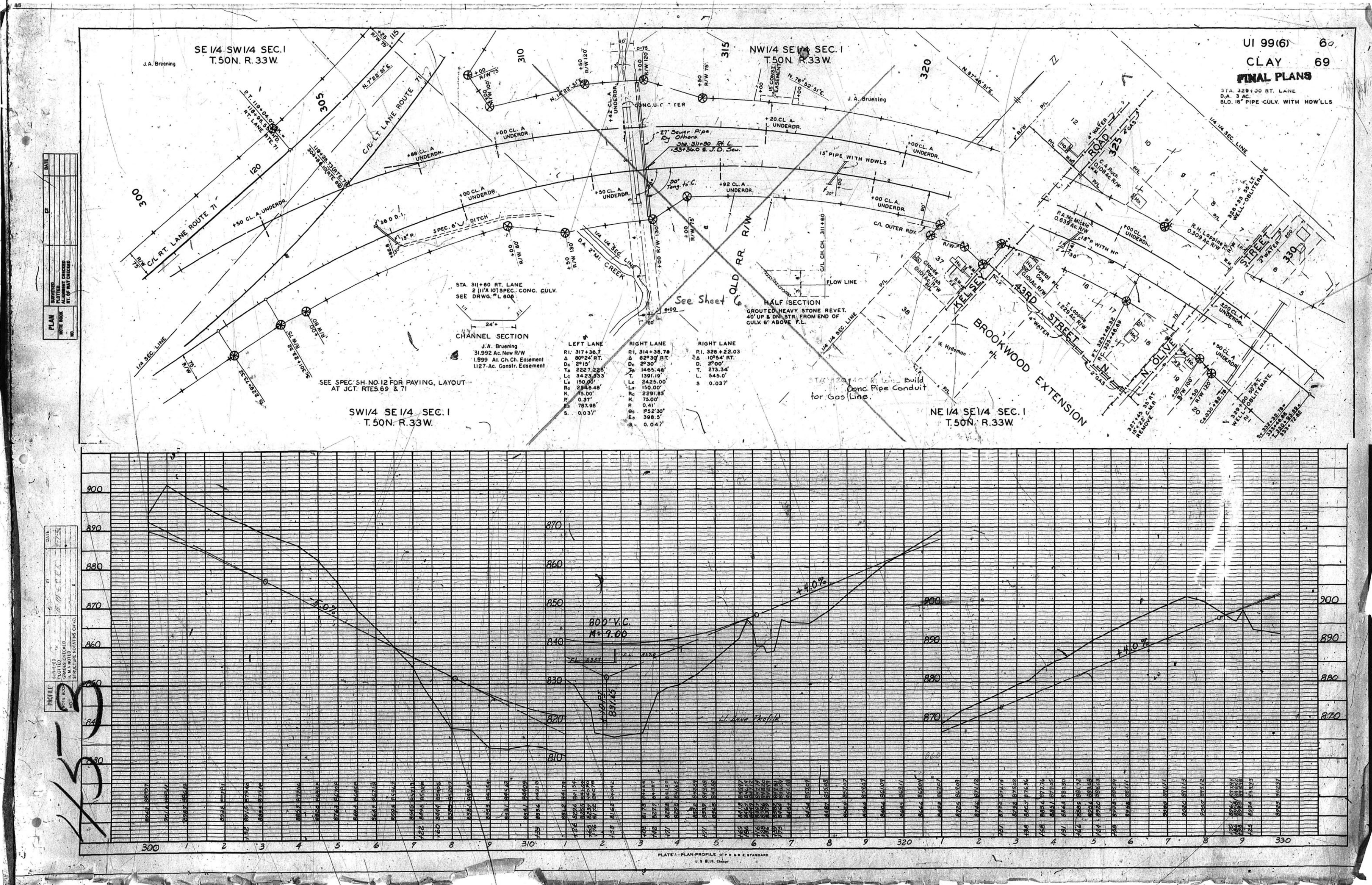

UI 99(6) 5
CLAY 69
FINAL PLANS
SE 1/4 NW 1/4 SEC.12
T.50N. R.33W.
SUNSET HILL
NE 1/4 NW1/4 SEC.12
WAYNE AVE
CONST. EASEMENT
SE 1/4 SW1/4 SEC.1
T.50N. R.33W.
ROUTE 71
RUSSELL RD.
NORTH WOODLAND AVE
39TH ST. N
38TH
NOTE: SEE SPECIAL SHEET NO'S 7-11 INCL. FOR PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 9 FOR RAMP ALIGNMENTS.
SW1/4 NE1/4 SEC.12
T.50N. R.33W.
SUNSET HILL TRACTS
NW1/4 NE1/4 SEC. 12
T.50N. R.33W.
SW1/4 SE1/4 SEC.1
T.50N. R.33W.
EQUATION 294+15.1 Bk. = 294+12.55 Ah.
EQUATION 295+40.15 BK. = 295+43.9 AHD. (RTE. 69)
NOTE: SEE SPECIAL SHEET 12 FOR RTE 71 & 69 INTERSECTION.
NE. COR. NW.1/4 SEC. 12
CONSTR. EASEMENT
PLAN
PROFILE
Ramp "E"
Rt. Lane Profile
0.0%
Clearing
Grubbing
BM#7 on ctr. east hdwl. Sta. 272+46 El. 861.79
BM#8 R.R. spike in W. root El. 891.86
BM#9 on S.W. corner W. Hdwl. Sta. 285+00 El. 895.16
BM#10 on Rt. wing Lt. La. Bridge El. 902.15
BM#11 on Lt. wing Rt. La. Bridge El. 904.95
270 275 280 285 290 295 300
450

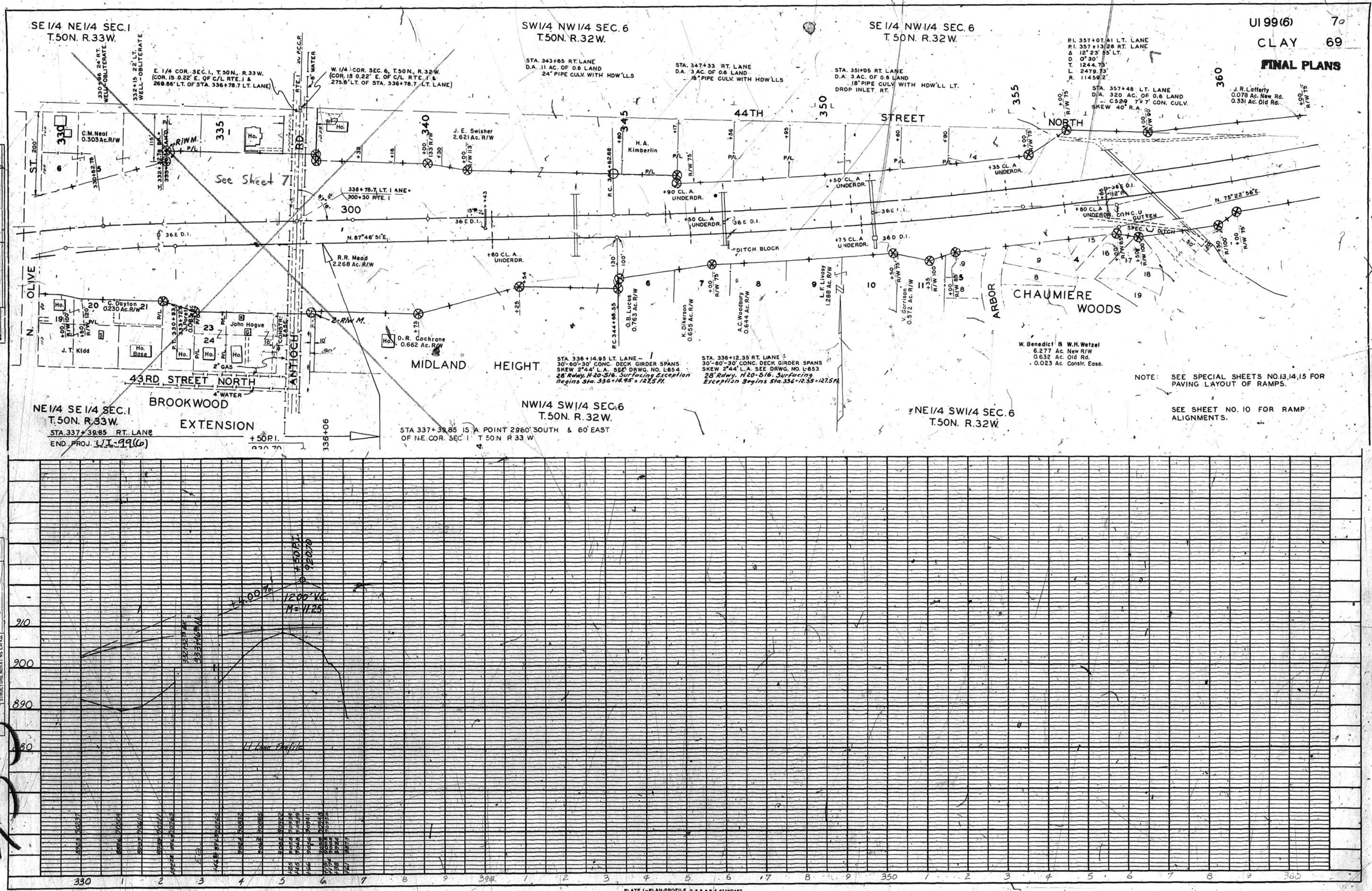


UI 99(6) 53
CLAY 69
FINAL PLANS
SE 1/4 NW 1/4 SEC.12
T.50N. R.33W.
NE 1/4 NW1/4 SEC.12
SE 1/4 SW1/4 SEC.1
T.50N. R.33W.
SW1/4 NE1/4 SEC.12
T.50N. R.33W.
NW1/4 NE1/4 SEC. 12
T.50N. R.33W.
SW1/4 SE 1/4 SEC.1
T.50N. R.33W.
SUNSET HILL
WAYNE AVE
NORTH 38TH
39TH ST. N.
NORTH WOODLAND AVE
SUNSET HILL TRACTS
RUSSELL RD.
ROUTE 71
See Sheet 5
CONST. EASEMENT
CONSTR. EASEMENT
J. A. Bruening
STA. 272+46 C/L PARKWAY
BLD. 24" PIPE CULV. WITH HDW'LLS
D.A. 5 AC. OF 0.6 LAND
Ido M. Oyer
A. W. Brooks
0.556 Ac. R/W
STA. 294 + 24.15 RT. LANE BLD.
35'-60'-35' CONC. DECK GIRDER SPANS
SKEW 14° R.A. SEE DRWG. NO. L-660
STA. 294 + 13.25 LT. LANE
30'-60'-25' CONC. DECK GIRDER SPANS
SKEW 7° R.A. SEE DRWG. NO. L-659
STA 284+65± Rt. Lane Build
15 Rein. Conc. Pipe Conduit
for Gas Line
NOTE: SEE SPECIAL SHEET NO'S 7-11 INCL. FOR PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 9 FOR RAMP ALIGNMENTS.
NOTE: SEE SPECIAL SHEET 12 FOR RTE 71 & 69 INTERSECTION.
RIGHT LANE
P.I. 284+01.0
P.C. 57+43.40
55+95.04 NE. COR. NW.1/4 SEC. 12
294+77.32 LT. LANE = 34+05.91 RUSSELL RD.
294+92.86 RT. LANE = 68.64 RUSSELL RD.
0.176 Ac. Constr. Ease.
+2.467%
2.25%
1480' V.C.
Lt. Lane Profile
PLAN
PROFILE
270
280
290
300
PLATE 1-PLAN-PROFILE
157

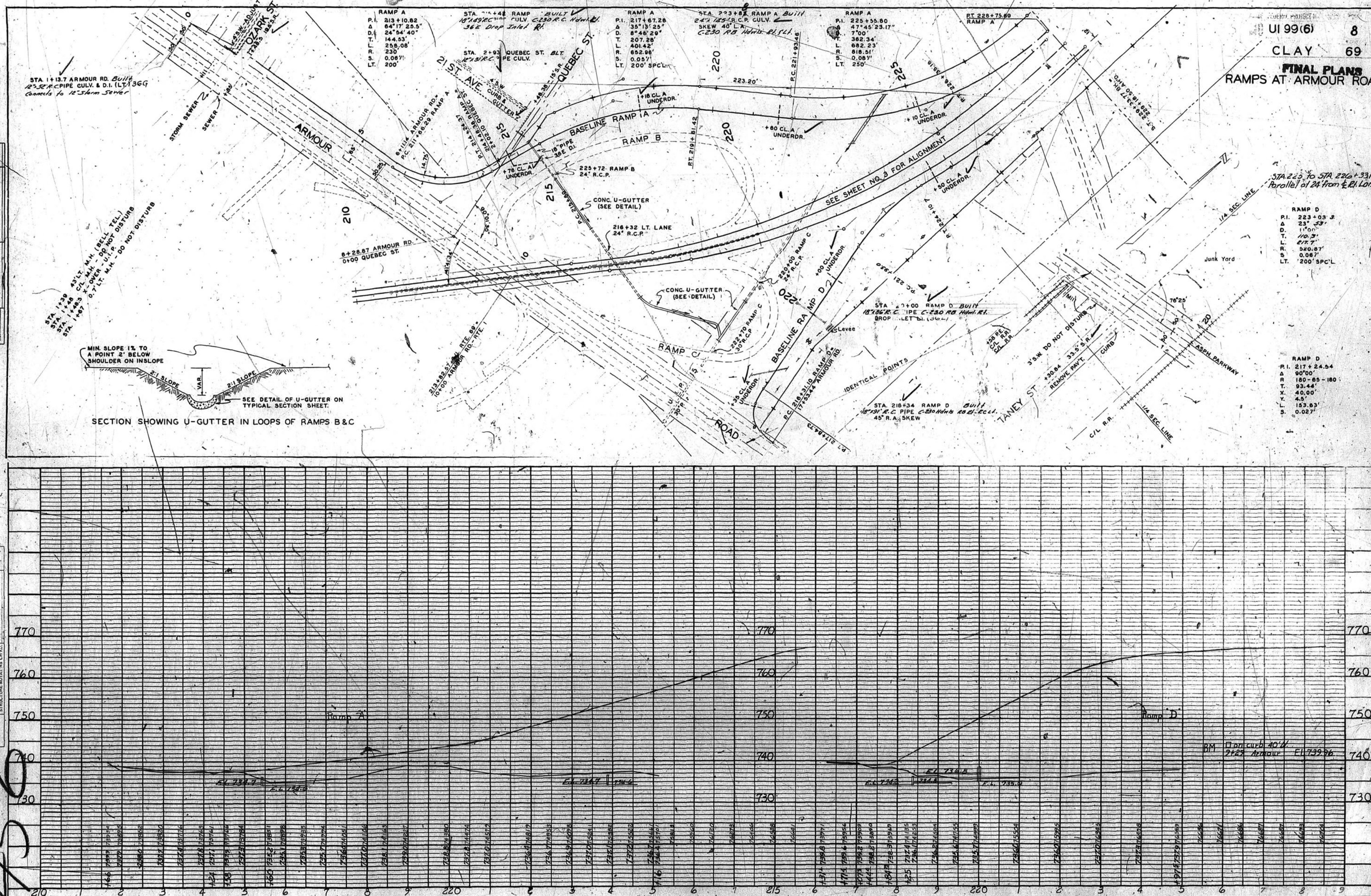


UI 99(6) 6
CLAY 69
FINAL PLANS
SE 1/4 SW 1/4 SEC. 1
T.50N. R.33W.
NW 1/4 SE 1/4 SEC. 1
T.50N. R.33W.
SW 1/4 SE 1/4 SEC. 1
T.50N. R.33W.
NE 1/4 SE 1/4 SEC. 1
T.50N. R.33W.
J.A. Bruening
C/L RT. LANE ROUTE 71
C/L LT. LANE ROUTE 71
C/L OUTER RDY.
Sta. 329+00 Rt. Lane Built 18"x 255' R.C.P. Culv. C-230 RC Hdwl. Lt. C-230 R.C. Hdwl. Rt. D.A. 3 Ac.
Sta. 312+35 Lt. Lane Built 24"x 58' R.C.P. Culv. C-230 RC Hdwl. Rt. Conc. U-Gutter Lt.
CONC. U-GUTTER
27" Sewer Pipe By Others Sta. 311+80 Rt. L. +33+34.0 S. J.D. Sew.
15" PIPE WITH HDWLS
Sta. 317+00 Rt. Lane Built 15"x 77' R.C.P. Culv. Skew 30° L/A C-230 RC Hdwls. Rt. & Lt.
Sta. 304+68.8 Rt. Lane Built 15"x 69' R.C.P. Culv. Skew 30° R/A 36-D Drop Inlet Lt. C-230 RC Hdwl. Rt.
STA. 311+60 RT. LANE BLT. 2 (11'x 10') SPEC. CONC. CULV. SEE DRWG. No. L 606
CHANNEL SECTION
J.A. Bruening 31.992 Ac. New R/W 1.599 Ac. Ch. Ch. Easement 1.127 Ac. Constr. Easement
SEE SPEC. SH. NO. 12 FOR PAVING LAYOUT AT JCT. RTES. 69 & 71
HALF SECTION GROUTED HEAVY STONE REVET. 40' UP & DN. STR. FROM END OF CULV. 6' ABOVE F.L.
FLOW LINE
D.A. 2 Mi. CREEK
1/4 SEC. LINE
LEFT LANE: P.I. 317+36.7, Δ 80°24' RT., Dc 2°15', Ts 2227.225', Lc 3423.333', Ls 150.00', Rc 2546.48', K. 75.00', P. 0.37', Es 787.98', S. 0.03'/'
RIGHT LANE: P.I. 314+38.78, Δ 62°30' RT., Dc 2°30', Ts 1465.46', T 1391.19', Lc 2425.00', Ls 150.00', Rc 2291.83', K. 75.00', P. 0.41', θs 1°52'30", Es 398.5', S 0.04'/'
RIGHT LANE: P.I. 328+22.03, Δ 10°54' RT., D. 2°00', T. 273.34', L. 545.0', S 0.03'/'
Sta. 320+40 Rt. Lane Built 15"x 130' R.C. Pipe Gas Line Conduit (Under both Lanes)
Sta. 323+41 Rt. Lane Built 15"x 64' R.C.P. Culv. 30° Skew L/A C-230 RC Hdwls. Rt. & Lt.
KEY ST.
43RD STREET
BROOKWOOD EXTENSION
N. OLIVE
ROAD
STREET
Clouds Porter
V. Hyde
P.A. McMickle 0.639 Ac. R/W
R.H. Lapping 0.309 Ac. R/W
T. Lapping 1.227 Ac. R/W
C.A. Ruch 0.108 Ac. R/W
Crystal Cox 0.016 Ac. R/W
WELL-OBLITERATE
REMOVE
4" WATER
2" GAS
Clearing
Grubbing
Fenc. & Mobil.
1600' V.C. M=10.00
800' V.C. M=9.00
-5.0%
0.0%
+4.07%
Rt. Lane Profile
BM#12 □ on S.W. corner Lt. Hdwl. Lt. Sta. 304+ EL. 886.78
BM#13 □ on S.W. corner Rt. Hdwl. Sta. 312+35 EL. 839.97
BM#14 □ on S.E. corner Lt. Hdwl. Sta. 317+00 EL. 855.95
BM#15 □ on N.W. corner Lt. Hdwl. Sta. 323+40 Rt. La. EL. 888.53
300 1 2 3 4 5 6 7 8 9 310 1 2 3 4 5 6 7 8 9 320 1 2 3 4 5 6 7 8 9 330
PLAN
PROFILE


UI 99(6) 6a
CLAY 69
FINAL PLANS
STA. 329+30 RT. LANE
D.A. 3 AC.
BLD. 18" PIPE CULV. WITH HDW'LLS
SE 1/4 SW1/4 SEC. 1
T.50N. R.33W.
J.A. Bruening
NW1/4 SE1/4 SEC. 1
T.50N. R.33W.
SW1/4 SE1/4 SEC. 1
T.50N. R.33W.
NE 1/4 SE1/4 SEC. 1
T.50N. R.33W.
C/L RT. LANE ROUTE 71
C/L LT. LANE ROUTE 71
+50 CL. A. UNDERDR.
+00 CL. A UNDERDR.
+88 CL. A UNDERDR.
+92 CL. A UNDERDR.
+20 CL. A UNDERDR.
27" Sewer Pipe By Others
15" PIPE WITH HDWLS
30° Tang. to C.
OLD R.R. R/W
C/L OUTER RDY.
C/L CH. CH. 311+60
FLOW LINE
HALF SECTION
GROUTED HEAVY STONE REVET.
40' UP & DN. STR. FROM END OF CULV. 6' ABOVE F.L.
See Sheet 6
D.A. 2 MI. CREEK
1/4 1/4 SEC. LINE
STA. 311+60 RT. LANE
2 (11'X 10') SPEC. CONC. CULV.
SEE DRWG. # L 600
24'
CHANNEL SECTION
J.A. Bruening
31.992 Ac. New R/W
1.999 Ac. Ch. Ch. Easement
1.127 Ac. Constr. Easement
SEE SPEC. SH. NO. 12 FOR PAVING, LAYOUT AT JCT. RTES. 69 & 71
LEFT LANE
P.I. 317+36.7
Δ 80°24' RT.
Dc 2°15'
Ts 2227.22'
Lc 3423.33'
Ls 150.00'
Rc 2546.48'
K 75.00'
R 0.37'
Es 787.98'
S 0.037'
RIGHT LANE
P.I. 314+38.78
Δ 62°30' RT.
Dc 2°30'
Ts 1465.46'
T 1391.19'
Lc 2425.00'
Ls 150.00'
Rc 2291.83'
K 75.00'
R 0.41'
θs 1°52'30"
Es 398.5'
S 0.047'
RIGHT LANE
P.I. 328+22.03
Δ 10°54' RT.
D 2°00'
T 273.34'
L 545.0'
S 0.037'
STA. 320+40 Rt. Lane Build Conc. Pipe Conduit for Gas Line
KELSEY
43RD STREET
BROOKWOOD EXTENSION
N. OLIVE
ROAD
STREET
WELL-OBLITERATE
REMOVE CAR
P.A. McMickle
R.H. Loppine
C.A. Rich
800' V.C.
M = 7.00
-5.0%
+4.0%
+4.0%
Lt. Lane Profile
900
890
880
870
860
850
840
830
820
810
300
305
310
315
320
325
330
PROFILE
PLAN
PLATE 1—PLAN-PROFILE
U.S. BLUE, Chicago
153

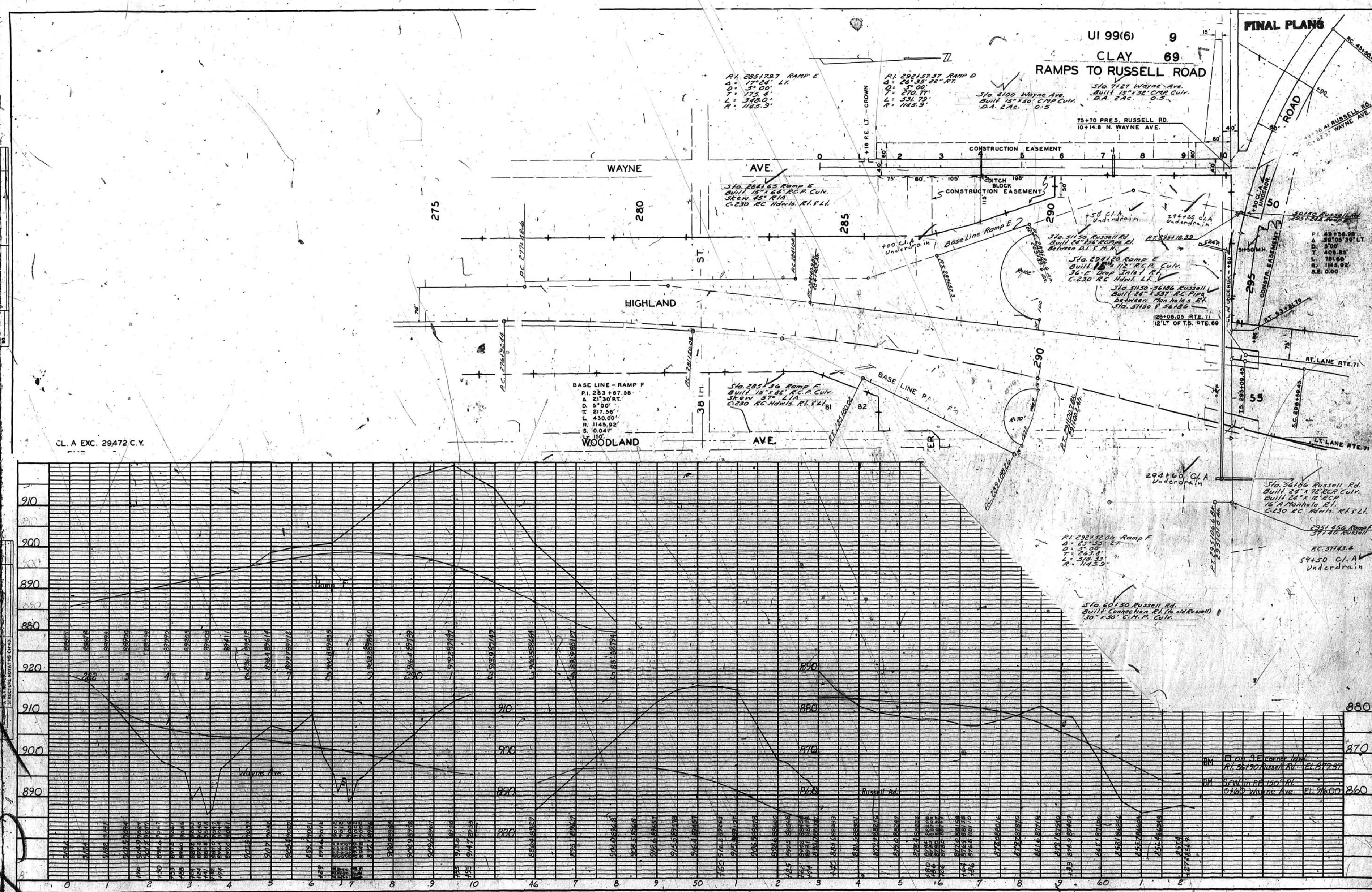


UI 99(6) 70
CLAY 69
FINAL PLANS
SE 1/4 NE 1/4 SEC. 1 T.50N. R.33W.
SW 1/4 NW 1/4 SEC. 6 T.50N. R.32W.
SE 1/4 NW 1/4 SEC. 6 T.50N. R.32W.
NE 1/4 SE 1/4 SEC. 1 T.50N. R.33W.
NW 1/4 SW 1/4 SEC. 6 T.50N. R.32W.
NE 1/4 SW 1/4 SEC. 6 T.50N. R.32W.
E. 1/4 COR. SEC. 1, T.50N., R.33W. (COR. IS 0.22' E. OF C/L RTE. I & 269.86' LT. OF STA. 336+78.7 LT. LANE)
W. 1/4 COR. SEC. 6, T.50N., R.32W. (COR. IS 0.22' E. OF C/L RTE. I & 275.8' LT. OF STA. 336+78.7 LT. LANE)
STA. 343+85 RT. LANE D.A. .11 AC. OF 0.6 LAND 24" PIPE CULV. WITH HDW'LLS
STA. 347+33 RT. LANE D.A. .3 AC. OF 0.6 LAND 18" PIPE CULV. WITH HDW'LLS
STA. 351+05 RT. LANE D.A. .3 AC. OF 0.6 LAND 18" PIPE CULV. WITH HDW'LL LT. DROP INLET RT.
P.I. 357+07.41 LT. LANE
P.I. 357+13.28 RT. LANE
Δ 12° 23' 55" LT.
D. 0° 30'
T. 1244.75'
L. 2479.73'
R. 11459.2'
STA. 357+48 LT. LANE D.A. 320 AC. OF 0.6 LAND C529 7'x7' CON. CULV. SKEW 40° R.A.
J.R. Lafferty 0.078 Ac. New Rd. 0.331 Ac. Old Rd.
44TH STREET NORTH
C.M. Neal 0.303 Ac. R/W
J.E. Swisher 2.621 Ac. R/W
H.A. Kimberlin
See Sheet 7
336+78.7 LT. LANE = 300+30 RTE. I
N. 87° 48' 51" E.
R.R. Mead 2.268 Ac. R/W
N. OLIVE ST.
C. Dayton 0.230 Ac. R/W
J.T. Kidd
John Hogue
D.R. Cochrane 0.662 Ac. R/W
O.B. Lucas 0.763 Ac. R/W
K. Dikerson 0.655 Ac. R/W
A.C. Woodbury 0.644 Ac. R/W
L.E. Livosy 1.288 Ac. R/W
V. Garrison 0.572 Ac. R/W
ARBOR
CHAUMIERE WOODS
W. Benedict & W.H. Wetzel 6.277 Ac. New R/W 0.632 Ac. Old Rd. 0.023 Ac. Constr. Ease.
N. 75° 22' 56" E.
DITCH BLOCK
MIDLAND HEIGHT
43RD STREET NORTH
BROOKWOOD EXTENSION
ANTIOCH RD.
STA. 336+14.95 LT. LANE — 30'-60'-30' CONC. DECK GIRDER SPANS SKEW 2°44' L.A. SEE DRWG. NO. L654 28' Rdwy. H20-S16. Surfacing Exception Begins Sta. 336+14.95 = 127.5 Ft.
STA. 336+12.35 RT. LANE 30'-60'-30' CONC. DECK GIRDER SPANS SKEW 2°44' L.A. SEE DRWG. NO. L653 28' Rdwy. H20-S16. Surfacing Exception Begins Sta. 336+12.35 = 127.5 Ft.
STA. 337+39.65 RT. LANE END PROJ. UI-99(6)
STA 337+39.65 IS A POINT 2960' SOUTH & 60' EAST OF N.E. COR. SEC. 1 T 50N R 33W
NOTE: SEE SPECIAL SHEETS NO. 13, 14, 15 FOR PAVING LAYOUT OF RAMPS.
SEE SHEET NO. 10 FOR RAMP ALIGNMENTS.
+50 P.I. 920.70
1200' V.C.
M= 11.25
+4.00%
Lt Lane Profile
910
900
890
880
330 1 2 3 4 5 6 7 8 9 340 1 2 3 4 5 6 7 8 9 350 1 2 3 4 5 6 7 8 9 360
PLATE 1—PLAN-PROFILE
45

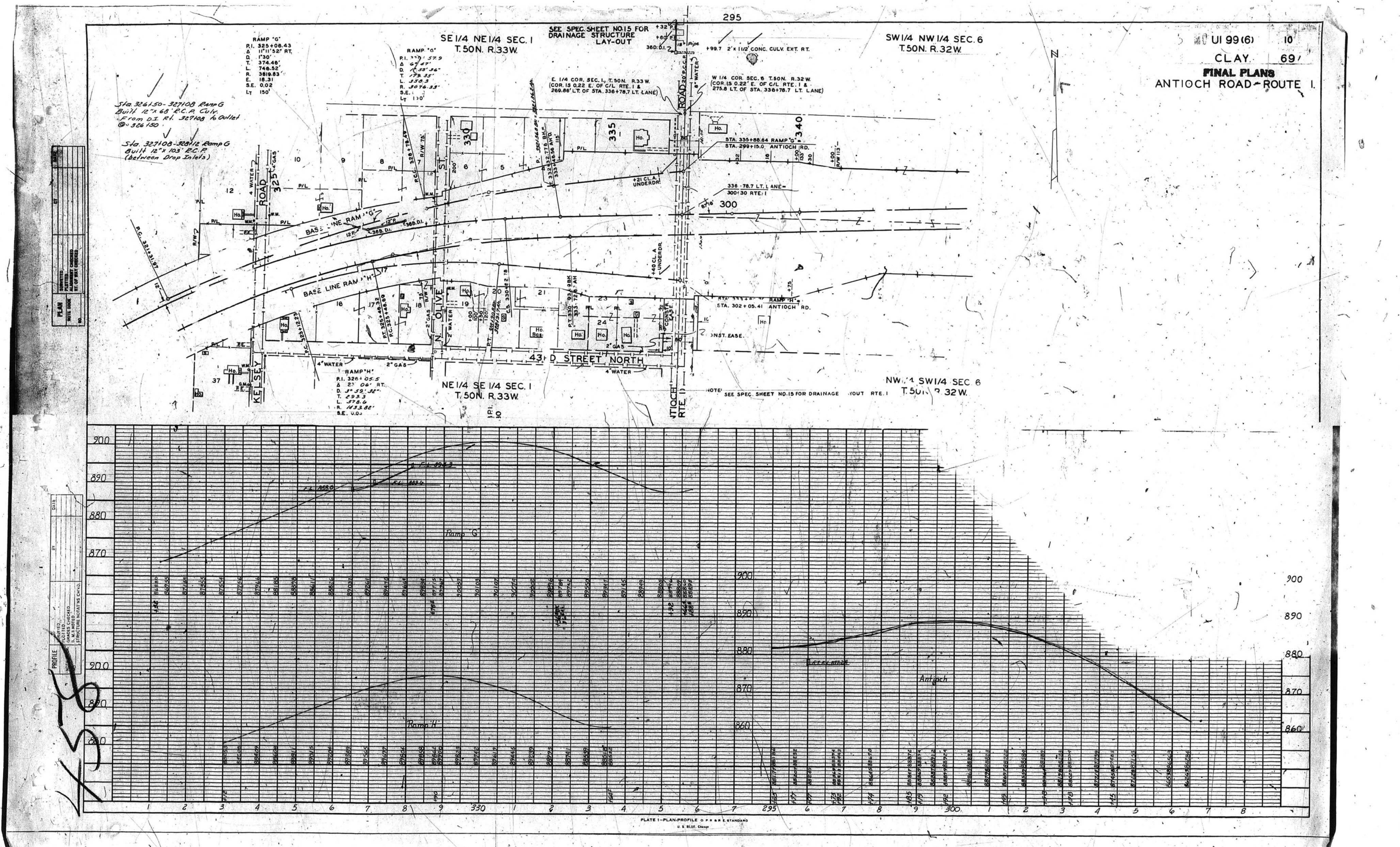


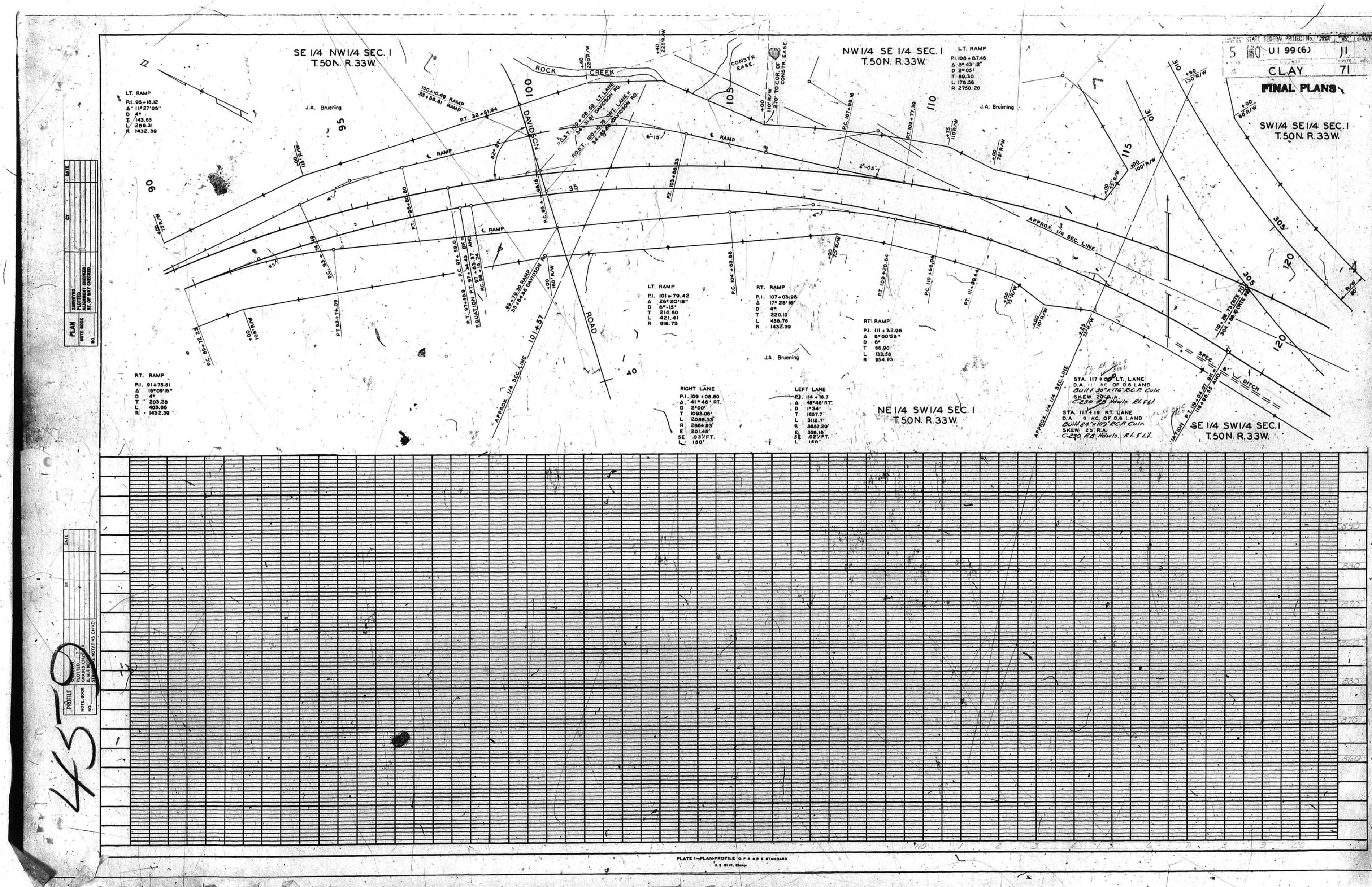
UI 99(6) 8
CLAY 69
FINAL PLANS
RAMPS AT ARMOUR ROAD
RAMP A
P.I. 213 + 10.82
D. 24° 54' 40"
T. 144.53'
L. 258.08'
R. 230
S. 0.067'
LT. 200'
RAMP A
P.I. 217 + 67.28
Δ 35° 13' 25"
D. 8° 46' 29"
T. 207.28
L. 401.42'
R. 652.96'
S. 0.067'
LT. 200' SPC'L
RAMP A
P.I. 225 + 55.80
Δ 47° 45' 23.17"
D. 7° 00'
T. 382.34'
L. 682.23'
R. 818.51'
S. 0.067'
LT. 250'
STA. 2+93 QUEBEC ST. BLT.
STA. 1+13.7 ARMOUR RD. Built
OZARK ST.
QUEBEC ST.
21 ST. AVE.
ARMOUR
ROAD
BASELINE RAMP A
RAMP B
RAMP C
BASELINE RAMP D
SEE SHEET NO. 8 FOR ALIGNMENT
STORM SEWER
SEWER
225+72 RAMP B
24" R.C.P.
CONC. U-GUTTER
(SEE DETAIL)
216+32 LT. LANE
24" R.C.P.
8+28.87 ARMOUR RD.
0+00 QUEBEC ST.
STA. 1+39 45' LT. M.H. (BELL TEL.)
C/L M.H. - DO NOT DISTURB
0.7 LT. M.H. - DO NOT DISTURB
MIN. SLOPE 1% TO A POINT 2' BELOW SHOULDER ON INSLOPE
2:1 SLOPE
VAR.
SEE DETAIL OF U-GUTTER ON TYPICAL SECTION SHEET.
SECTION SHOWING U-GUTTER IN LOOPS OF RAMPS B&C
IDENTICAL POINTS
STA. 216+34 RAMP D Built
TANEY ST.
REMOVE PAVT.
CURB
ASPH. PARKWAY
1/4 SEC. LINE
C/L R.R.
Junk Yard
RAMP D
P.I. 223 + 03.3
D. 11° 00'
L. 217.7'
S. 0.067'
LT. 200' SPC'L
RAMP D
P.I. 217 + 24.54
Δ 90° 00'
T. 93.44'
Y. 40.00'
S. 0.027'
Ramp "A"
Ramp "D"
BM
770
760
750
740
730
210
220
215
PLATE 1—PLAN-PROFILE

456



FINAL PLANS
UI 99(6) 9
CLAY 69
RAMPS TO RUSSELL ROAD
P.I. 2851797 RAMP E
P.I. 2921537 RAMP D
Sta. 7127 Wayne Ave. Built 15" x 52' CMP Culv. D.A. 2Ac. 0.5
Sta. 4100 Wayne Ave. Built 15" x 50' CMP Culv. D.A. 2Ac. 0.5
75+70 PRES. RUSSELL RD.
10+14.8 N. WAYNE AVE.
CONSTRUCTION EASEMENT
WAYNE
AVE.
DITCH BLOCK
HIGHLAND
ST.
WOODLAND
AVE.
Base Line Ramp E
BASE LINE RAMP F
BASE LINE - RAMP F
P.I. 283+67.58
Δ 21°30' RT.
D. 5°00'
T. 217.56'
L. 430.00'
R. 1145.92'
S. 0.041'
L. 150'
CL. A EXC. 29,472 C.Y.
ROAD
CONSTR. EASEMENT
RT. LANE RTE. 71
LT. LANE RTE. 71
294+60 Cl. A Underdrain
54+50 Cl. A Underdrain
Sta. 60+50 Russell Rd. Built Connection Rt. (to old Russell) 30" x 30' C.M.P. Culv.
Ramp F
Wayne Ave.
Russell Rd.
PLATE 1—PLAN-PROFILE


UI 99(6) 10
CLAY 69
FINAL PLANS
ANTIOCH ROAD - ROUTE 1.
SE 1/4 NE 1/4 SEC. 1
T.50N. R.33W.
SW1/4 NW1/4 SEC. 6
T.50N. R.32W.
NE1/4 SE 1/4 SEC. 1
T.50N. R.33W.
SEE SPEC. SHEET NO.15 FOR DRAINAGE STRUCTURE LAY-OUT
+99.7 2'x 1 1/2' CONC. CULV. EXT. RT.
RAMP "G"
P.I. 325+08.43
Δ 11°11'52" RT.
D. 1°30'
T. 374.46'
L. 746.52'
R. 3819.83'
E. 18.31
S.E. 0.02
LT 150'
Sta. 326+50 - 327+08 Ramp G
Built 12"x 68' R.C.P. Culv.
From D.I. Rt. 327+08 to Outlet @ 326+50
Sta. 327+08 - 328+12 Ramp G
Built 12"x 103' R.C.P.
(between Drop Inlets)
E. 1/4 COR. SEC. 1, T.50N. R.33 W.
(COR. IS 0.22 E. OF C/L RTE. 1 & 269.86' LT. OF STA. 336+78.7 LT. LANE)
W 1/4 COR. SEC. 6 T.50N. R.32 W.
(COR. IS 0.22' E. OF C/L RTE. 1 & 275.8 LT. OF STA. 336+78.7 LT. LANE)
STA. 335+88.64 RAMP "G" = STA. 299+15.0 ANTIOCH RD.
336+78.7 LT. LANE = 300+30 RTE. 1
+21 CL.A. UNDERDR.
+40 CL.A. UNDERDR.
BASE LINE RAMP "G"
BASE LINE RAMP "H"
STA. 302+05.41 ANTIOCH RD.
KELSEY ROAD
N. OLIVE ST.
43RD STREET NORTH
ANTIOCH RTE. 1
ANTIOCH ROAD
4" WATER
2" GAS
RAMP "H"
P.I. 326+05.5
Δ 23°06' RT.
D. 3°59'32"
T. 293.3
L. 578.6
R. 1433.82
S.E. 0.05
NW 1/4 SW1/4 SEC 6
T.50N. R.32W.
NOTE: SEE SPEC. SHEET NO.15 FOR DRAINAGE LAYOUT RTE. 1
CONST. EASE.
Ramp G
Ramp H
Antioch
PROFILE
PLAN
PLATE 1 - PLAN-PROFILE
U. S. BLUE, Chicago
458



STATE FEDERAL PROJECT No.
5 MO U1 99(6) J1
COUNTY ROUTE
4 CLAY 71
FINAL PLANS
SE 1/4 NW1/4 SEC. 1
T.50N. R.33W.
NW1/4 SE 1/4 SEC. 1
T.50N. R.33W.
SW1/4 SE1/4 SEC. 1
T.50N. R.33W.
NE 1/4 SW1/4 SEC. 1
T.50N. R.33W.
SE 1/4 SW1/4 SEC. 1
T.50N. R.33W.
ROCK CREEK
DAVIDSON RD.
ROAD
J.A. Bruening
LT. RAMP
P.I. 95+18.12
Δ 11°27'08"
D 4°
T 143.63
L 286.31
R 1432.39
LT. RAMP
P.I. 108+87.46
Δ 3°43'12"
D 2°05'
T 89.30
L 178.56
R 2750.20
RT. RAMP
P.I. 91+75.51
Δ 16°09'16"
D 4°
T 203.28
L 403.86
R 1432.39
LT. RAMP
P.I. 101+79.42
Δ 26°20'18"
D 6°-15'
T 214.50
L 421.41
R 916.73
RT. RAMP
P.I. 107+03.98
Δ 17°28'16"
D 4°
T 220.10
L 436.76
R 1432.39
RT. RAMP
P.I. 111+32.96
Δ 8°00'53"
D 6°
T 66.90
L 133.58
R 954.93
RIGHT LANE
P.I. 109+08.80
Δ 41°46' RT.
D 2°00'
T 1093.06'
L 2088.33'
LEFT LANE
P.I. 114+16.7
Δ 48°46' RT.
D 1°34'
T 1657.7'
L 3112.7'
APPROX. 1/4 SEC. LINE
EQUATION P.T. 97+63.37 AHD.
PLAN
PROFILE
PLATE 1—PLAN-PROFILE

45-9

MO	UI 99(6)	12
	CLAY	71

FINAL PLANS

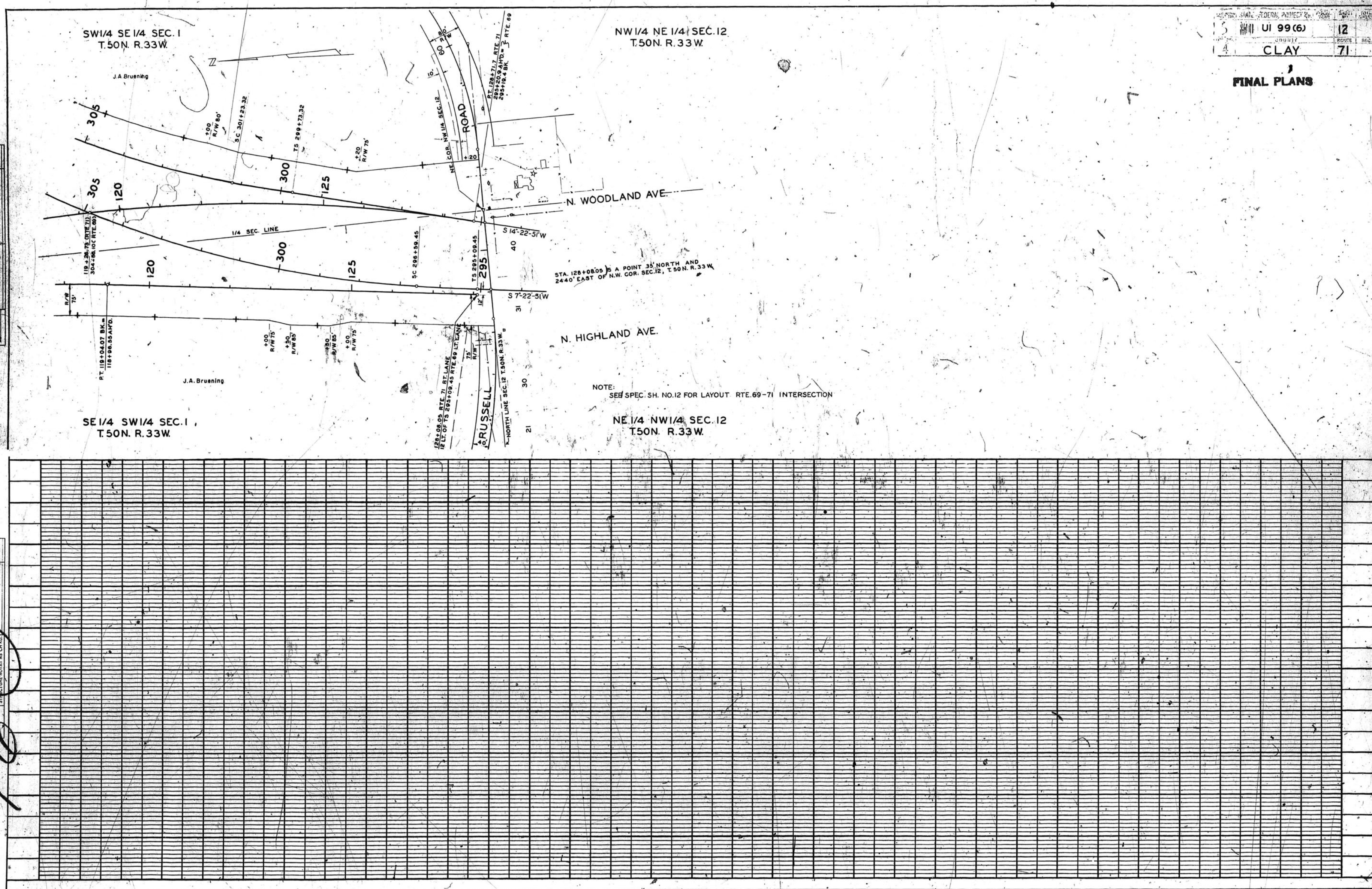


PLATE 1-PLAN-PROFILE

U. S. BLUE, Chicago

MODIFICATIONS OF STANDARD CULVERT DETAILS

STATION	STANDARD NUMBER	SIZE AND TOTAL LENGTH OF FINAL STRUCTURES	HEIGHT OF FILL FOR DESIGN DATA	SECTION OR IDENTICAL SECTIONS	SECTION LOCATED UNDER	LENGTH OF SECTION	MODIFICATIONS – BOTTOM SLAB – THICKNESS OF SLAB	SIZE OF A-BARS	SPACING OF A-BARS	LENGTH OF B-BARS IN SIDEWALLS	REMARKS

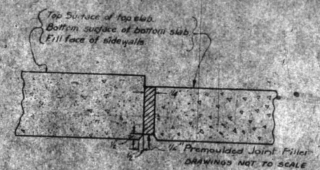
MODIFICATIONS OF STANDARD CULVERT DETAILS

STATION	STANDARD NUMBER	SIZE AND TOTAL LENGTH OF FINAL STRUCTURES	HEIGHT OF FILL FOR DESIGN DATA	SECTION OR IDENTICAL SECTIONS	SECTION LOCATED UNDER	LENGTH OF SECTION	MODIFICATIONS – BOTTOM SLAB – THICKNESS OF SLAB	SIZE OF A-BARS	SPACING OF A-BARS	LENGTH OF B-BARS IN SIDEWALLS	REMARKS
			8	A	Left Slope	26'-0"	13½	7/8"ϕ	6"	9'-9"	
			11	B	Left Lane	49'-0"	14"	7/8"ϕ	5½"	9'-9"	
236+70	C-529	9'x8'x x194'	11	C	Parkway	25'-0"	14"	7/8"ϕ	5½"	9'-9"	
		Skew	11	D	Right Lane	49'-0"	14"	7/8"ϕ	5½"	9'-9"	
		25°L.A.	10	E	Right Slope	45'-0	13½"	7/8"ϕ	5½"	9'-9"	
			10	A	Right Slope	28'-9"					W.W. 2:1
		3'x3'x	24	B	Right Slope	32'-6"					
257+90	C-530	x269'	28	C	Right Lane	50'-0"					
		Skew	28	D	Parkway	29'-0"					
		30°RA.	29	E	Left Lane	50'-0"					
			27	F	Left Slope	50'-0"					
			9	G	Left Slope	28'-9"					W.W. 2:1

NOTE- Section "A" is always that section nearest the upstream flow line of the final structure.

DETAILS OF TRANSVERSE EXPANSION JOINT

FINAL PLANS



Joint material to be used at transverse joints in top and bottom slabs and sidewalls. Tranverse joint to be constructed perpendicular to flow line and at right angles to ℄ of box.

GENERAL NOTES

All longitudinal reinforcement shall be placed with ends approximately 1½" from center of expansion joints.

Cost of tranverse expansion joints, complete in place, to be included in unit price bid for Class "B" concrete.

The Premoulded Joint Filler shall meet the requirements of Standard Specification 38-19A(1)h.

MISSOURI STATE HIGHWAY COMMISSION

MODIFICATIONS AND TRANSVERSE EXPANSION JOINTS FOR BOX CULVERTS WHICH ARE TO BE BUILT IN SECTIONS

ROUTE 69 PROJ. UI. 99(6)

COUNTY CLAY

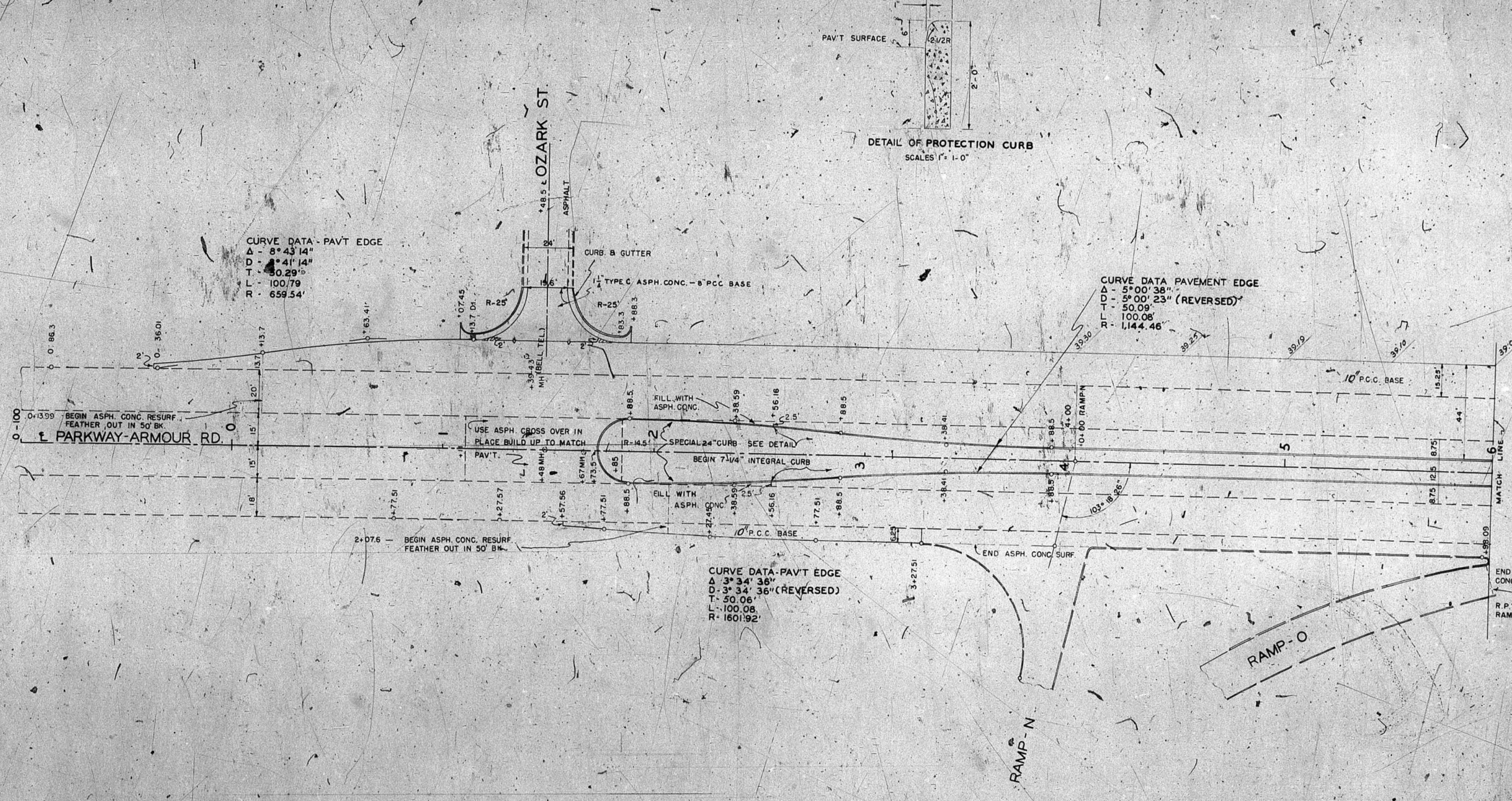
REVISIONS					
1	2	3	4	5	6
6-39					

SPECIAL SHEET NO. 1

461

FINAL PLANS

14



LEGEND

- MONOLITHIC CONST.
- LONG JTS. WITH DOWELS (STD)
- LONG JTS. WITHOUT DOWELS

PAVING LAYOUT

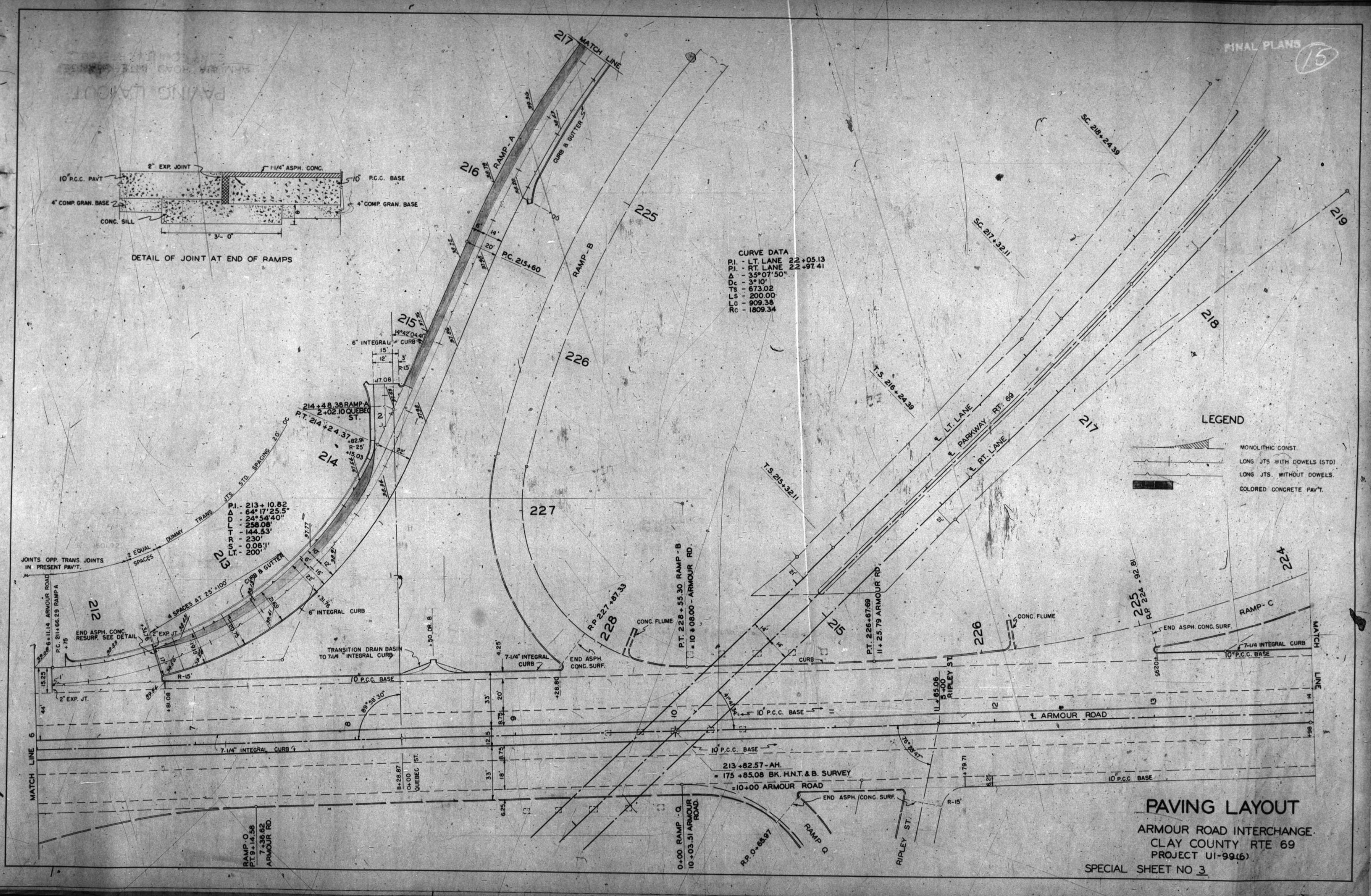
ARMOUR ROAD INTERCHANGE
CLAY COUNTY RTE 69

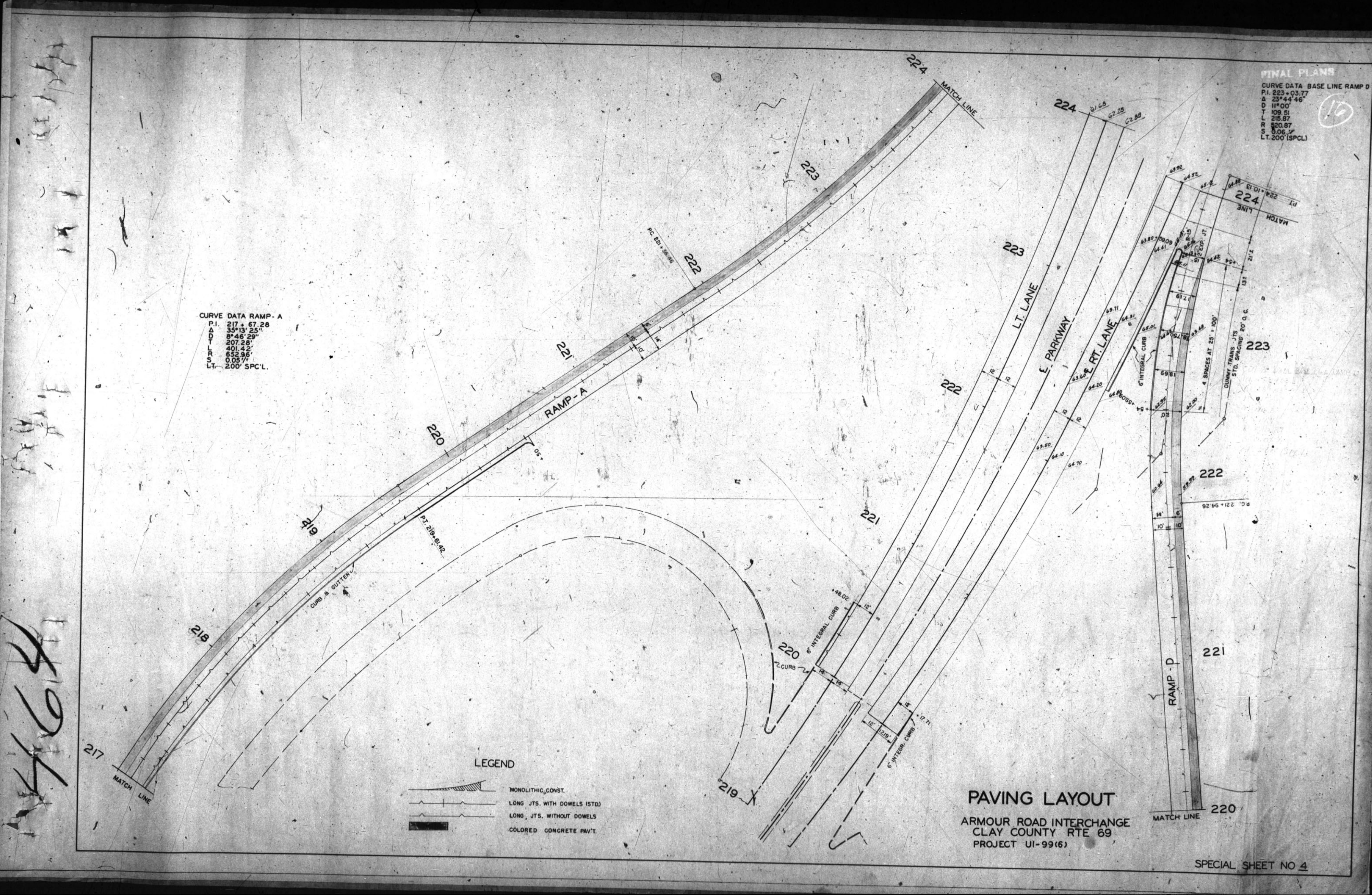
PROJECT UI-99(6)

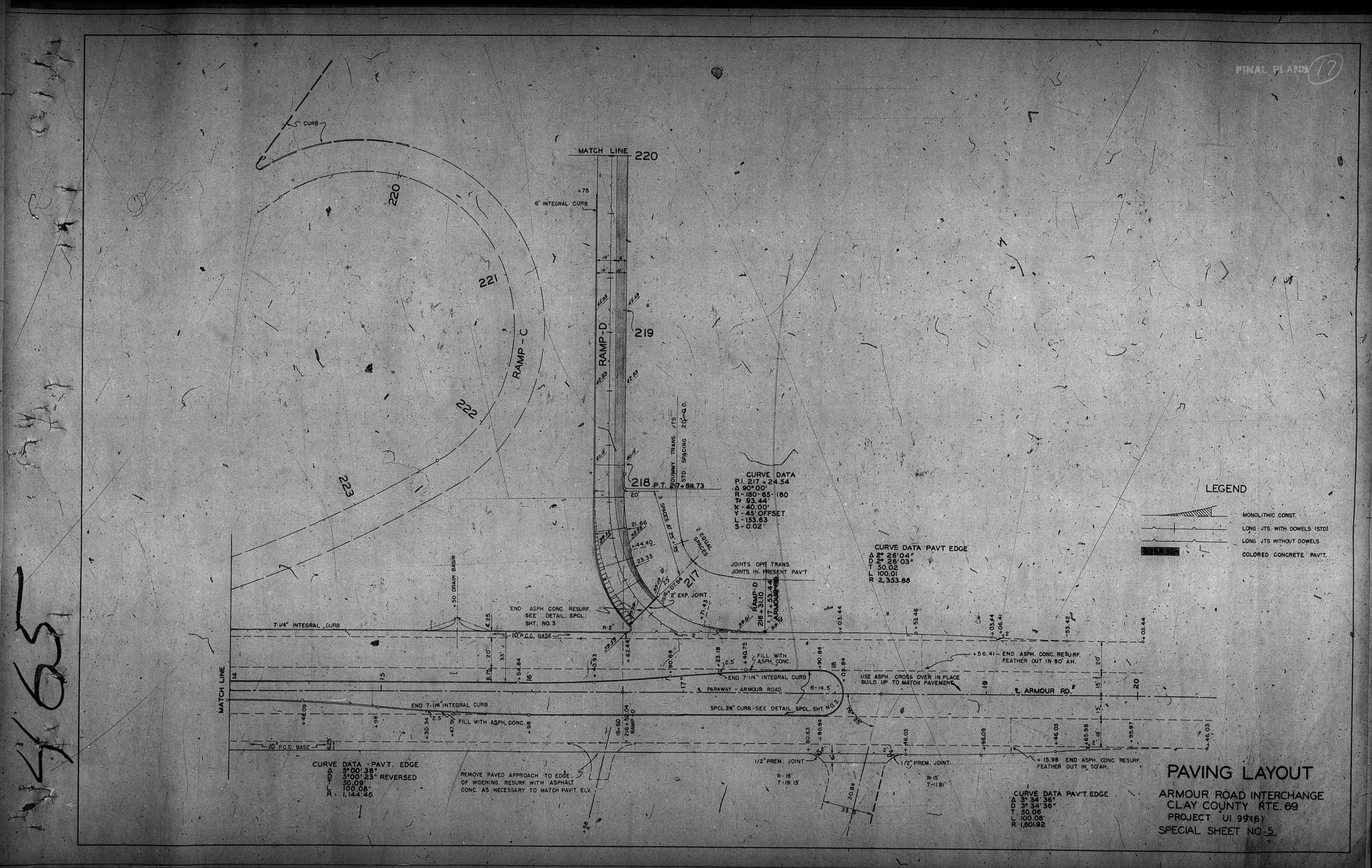
SPECIAL SHEET NO 2

462

463


FINAL PLANS
15
DETAIL OF JOINT AT END OF RAMPS
2" EXP. JOINT
1-1/4" ASPH. CONC.
10" P.C.C. PAVT
10" P.C.C. BASE
4" COMP. GRAN. BASE
4" COMP. GRAN. BASE
CONC. SILL
3'-0"
CURVE DATA
P.I. - LT. LANE 22+05.13
P.I. - RT. LANE 22+97.41
Δ - 35°07'50"
Dc - 3°10'
Ts - 673.02
Ls - 200.00
Lc - 909.38
Rc - 1809.34
LEGEND
MONOLITHIC CONST.
LONG JTS WITH DOWELS (STD)
LONG JTS. WITHOUT DOWELS
COLORED CONCRETE PAV'T.
RAMP - A
RAMP - B
RAMP - C
RAMP Q
MATCH LINE
CURB & GUTTER
P.C. 215+60
6" INTEGRAL CURB
214+48.38 RAMP A
2+02.10 QUEBEC ST.
P.T. 214+24.37
P.I. - 213+10.82
Δ - 64°17'25.5"
Δ - 24°54'40"
L - 258.08'
TR - 144.53'
TS - 230'
S - 0.08'/'
LT. - 200'
2 EQUAL DUMMY TRANS. JTS. STD. SPACING 20' OC
JOINTS OPP. TRANS. JOINTS IN PRESENT PAV'T.
4 SPACES AT 25'=100'
END ASPH. CONC. RESURF. SEE DETAIL
TRANSITION DRAIN BASIN TO 7-1/4 INTEGRAL CURB
7-1/4" INTEGRAL CURB
END ASPH. CONC. SURF.
CONC. FLUME
P.T. 228+55.30 RAMP - B
= 10+08.00 - ARMOUR RD.
P.T. 226+67.69
11+25.79 ARMOUR RD.
R.P. 227+87.33
R.P. 224+92.81
S.C. 218+24.39
S.C. 217+32.11
T.S. 216+24.39
T.S. 215+32.11
℄ LT. LANE
℄ PARKWAY RT. 69
℄ RT. LANE
10" P.C.C. BASE
℄ ARMOUR ROAD
213+82.57-AH.
= 175+85.08 BK. H.N.T. & B. SURVEY
= 10+00 ARMOUR ROAD
END ASPH./CONC. SURF.
RIPLEY ST.
QUEBEC ST.
0+00 RAMP Q
10+03.51 ARMOUR ROAD
R.P. 0+68.97
RAMP-Q P.T. 9+14.58
7+36.62 ARMOUR RD.
PAVING LAYOUT
ARMOUR ROAD INTERCHANGE
CLAY COUNTY RTE 69
PROJECT UI-99(6)
SPECIAL SHEET NO 3

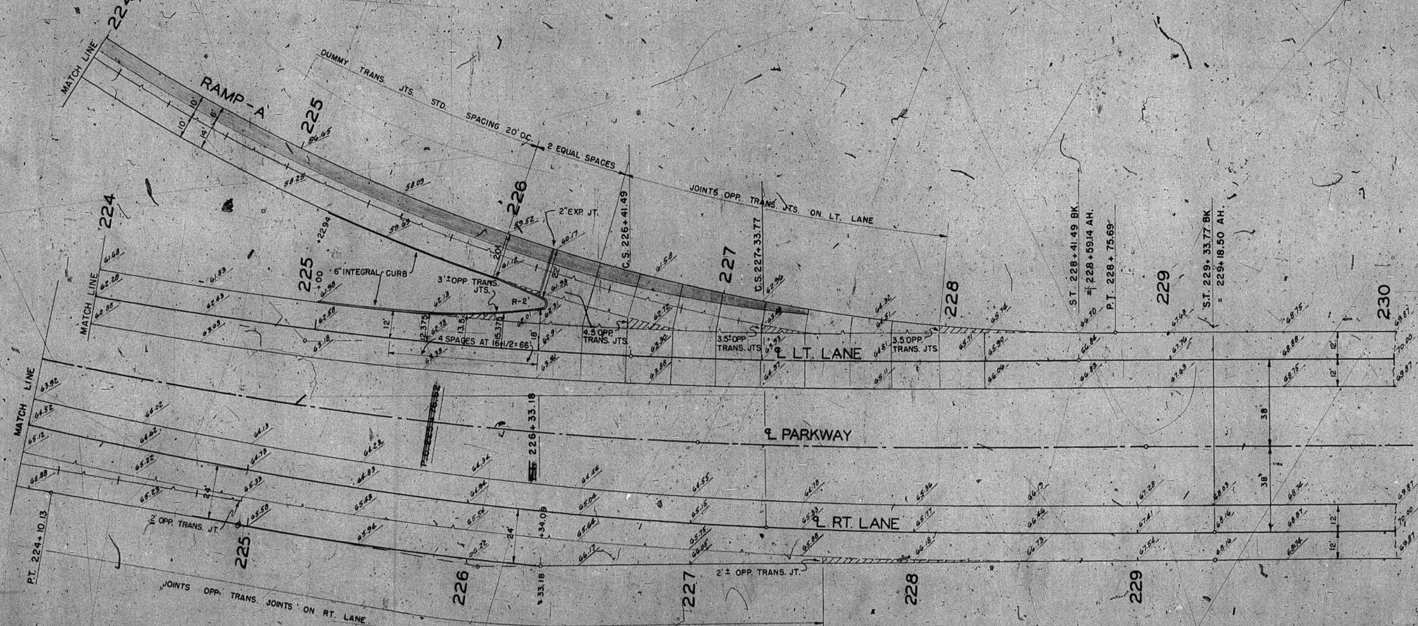

FINAL PLANS
CURVE DATA BASE LINE RAMP D
P.I. 223+03.77
Δ 23°44'46"
D 11°00'
T 109.51
L 215.87
R 520.87
S 0.06'/'
LT. 200' (SPCL)
16
CURVE DATA RAMP - A
P.I. 217 + 67.28
Δ 35°13' 25"
D 8°46'29"
T 207.28'
L 401.42'
R 652.96'
S 0.05'/'
LT. 200' SPC'L.
RAMP - A
LT. LANE
℄ PARKWAY
℄ RT. LANE
RAMP - D
MATCH LINE
CURB & GUTTER
6" INTEGRAL CURB
6" INTEGR. CURB
CURB
DUMMY TRANS. JTS. STD. SPACING 20' O.C.
4 SPACES AT 25' = 100'
P.C. 221+38.86
P.T. 219+61.42
P.C. 221+94.26
P.T. 224+10.13
LEGEND
MONOLITHIC CONST.
LONG. JTS. WITH DOWELS (STD.)
LONG. JTS. WITHOUT DOWELS
COLORED CONCRETE PAV'T.
PAVING LAYOUT
ARMOUR ROAD INTERCHANGE
CLAY COUNTY RTE 69
PROJECT UI-99(6)
SPECIAL SHEET NO 4
464



FINAL PLANS 17
465
MATCH LINE 220
CURB
RAMP-C
220
221
222
223
RAMP-D
219
218 P.T. 217+84.73
217
6" INTEGRAL CURB
DUMMY TRANS. JTS. STD. SPACING 20'-0" C.C.
3 SPACES AT 15'
2 EQUAL SPACES
CURVE DATA
P.I. 217+24.54
Δ 90°00'
R - 180-65-180
T 93.44'
X - 40.00'
Y - 45' OFFSET
L - 153.63
S - 0.02'
JOINTS OPP. TRANS. JOINTS IN PRESENT PAV'T
2" EXP. JOINT
RAMP-D 216+31.10
17+53.44 ARMOUR RD.
CURVE DATA PAVT EDGE
Δ 2° 26'04"
D 2° 26'03"
T 50.02
L 100.01
R 2,353.88
LEGEND
MONOLITHIC CONST.
LONG JTS. WITH DOWELS (STD)
LONG JTS WITHOUT DOWELS
COLORED CONCRETE PAV'T.
+50 DRAIN BASIN
END ASPH. CONC. RESURF. SEE DETAIL SPCL. SHT. NO. 3
7-1/4" INTEGRAL CURB
10" P.C.C. BASE
R-2'
FILL WITH ASPH. CONC.
END 7-1/4" INTEGRAL CURB
R-14.5'
¢ PARKWAY - ARMOUR ROAD
SPCL. 24" CURB - SEE DETAIL SPCL. SHT. NO. 2
+56.41 - END ASPH. CONC. RESURF. FEATHER OUT IN 50' AH.
USE ASPH. CROSS OVER IN PLACE BUILD UP TO MATCH PAVEMENT
¢ ARMOUR RD.
MATCH LINE
14
15
16
17
18
19
20
END 7-1/4" INTEGRAL CURB
FILL WITH ASPH. CONC.
16+50 216+54.04 RAMP-D
10" P.C.C. BASE
1/2" PREM. JOINT
R-15'
T-19.13'
R-15'
T-11.81'
+15.98 END ASPH. CONC. RESURF. FEATHER OUT IN 50' AH.
CURVE DATA - PAVT. EDGE
Δ 5°00'38"
D 5°00'23" REVERSED
T 50.09'
L 100.08'
R 1,144.46
REMOVE PAVED APPROACH TO EDGE OF WIDENING. RESURF. WITH ASPHALT CONC. AS NECESSARY TO MATCH PAVT. ELV.
CURVE DATA PAV'T EDGE
Δ 3° 34'36"
D 3° 34'36"
T 50.06
L 100.08
R 1,601.92
PAVING LAYOUT
ARMOUR ROAD INTERCHANGE
CLAY COUNTY RTE. 69
PROJECT UI 99(6)
SPECIAL SHEET NO-5

FINAL PLANS 18

CURVE DATA RAMP-A
P.I. 225+55.80
Δ 47°45'23".17
D 7° 00'
T 362.34'
L 682.23'
R 818.51'
E 76.62'
S 0.05 '/'
LT. 250'



CURVE DATA-BASE LINE RAMP-D
P.I. 226+04.98
Δ 10°34'10"
D 18°41'15"
T 28.36'
L 56.86'
R 306.60'

STA. 225 to STA. 226+33.18
Parallel at 24' from ℄ Rt. Lane

LEGEND

MONOLITHIC CONST.
LONG JTS. WITH DOWELS (STD.)
LONG JTS. WITHOUT DOWELS
COLORED CONCRETE PAV'T.

PAVING LAYOUT

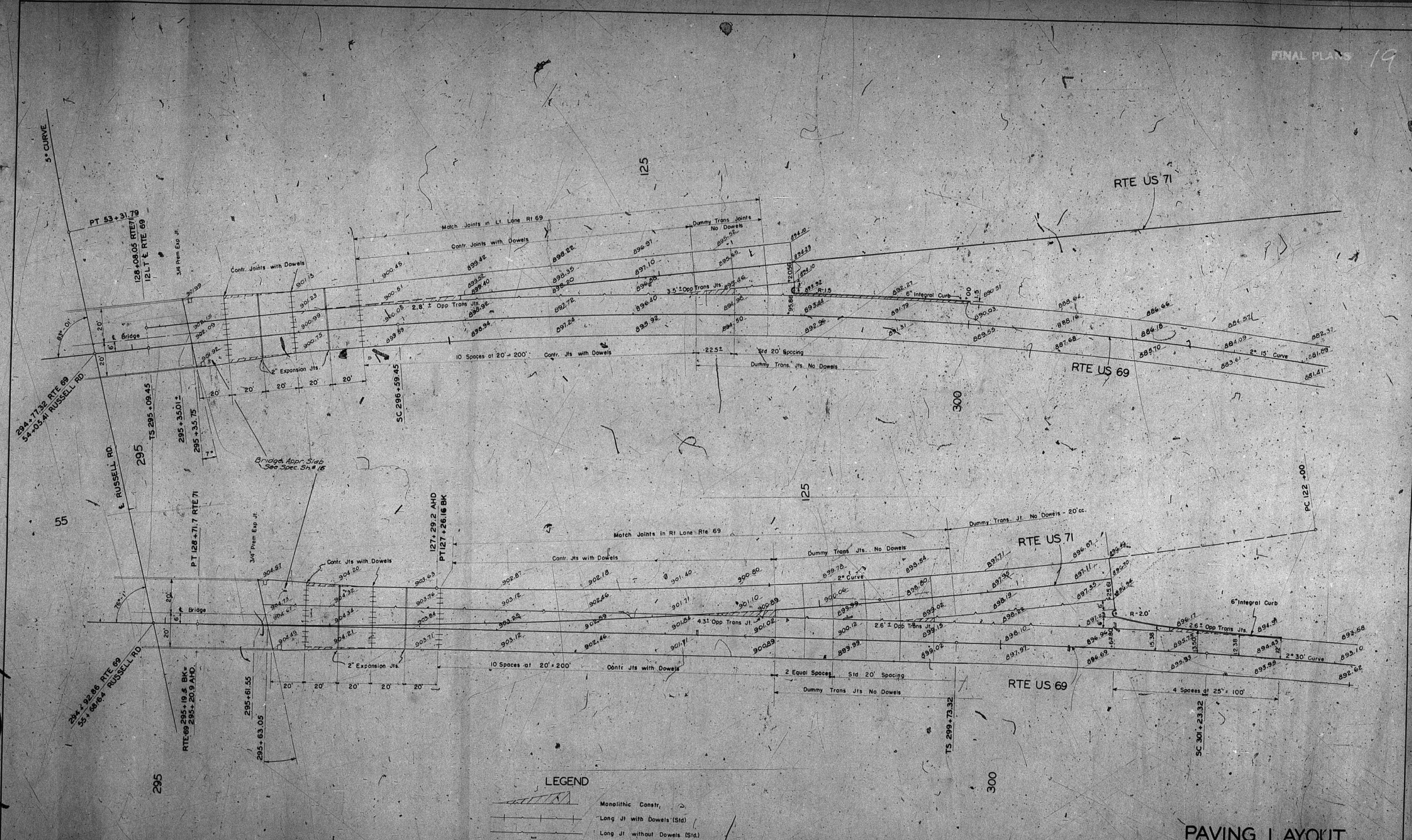
ARMOUR ROAD INTERCHANGE
CLAY COUNTY, RTE. 69
PROJECT UI-99(6)

SPECIAL SHEET NO. 6

466

FINAL PLANS 19

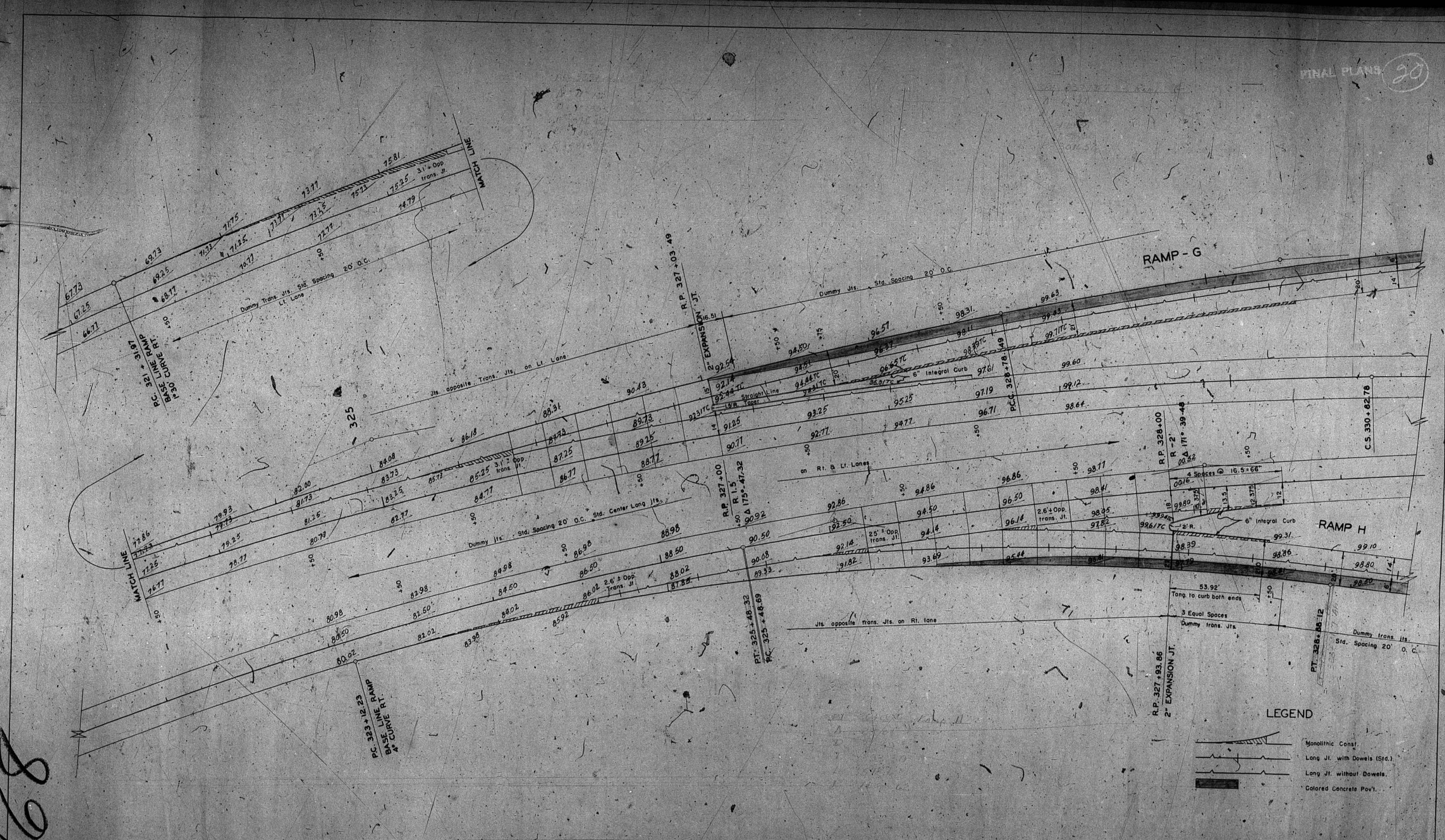
467



PAVING LAYOUT

INTERSECTION RTE US 69 & US 71
CLAY COUNTY RTE 69
PROJECT UI-99(6)

SPECIAL SHEET NO 12



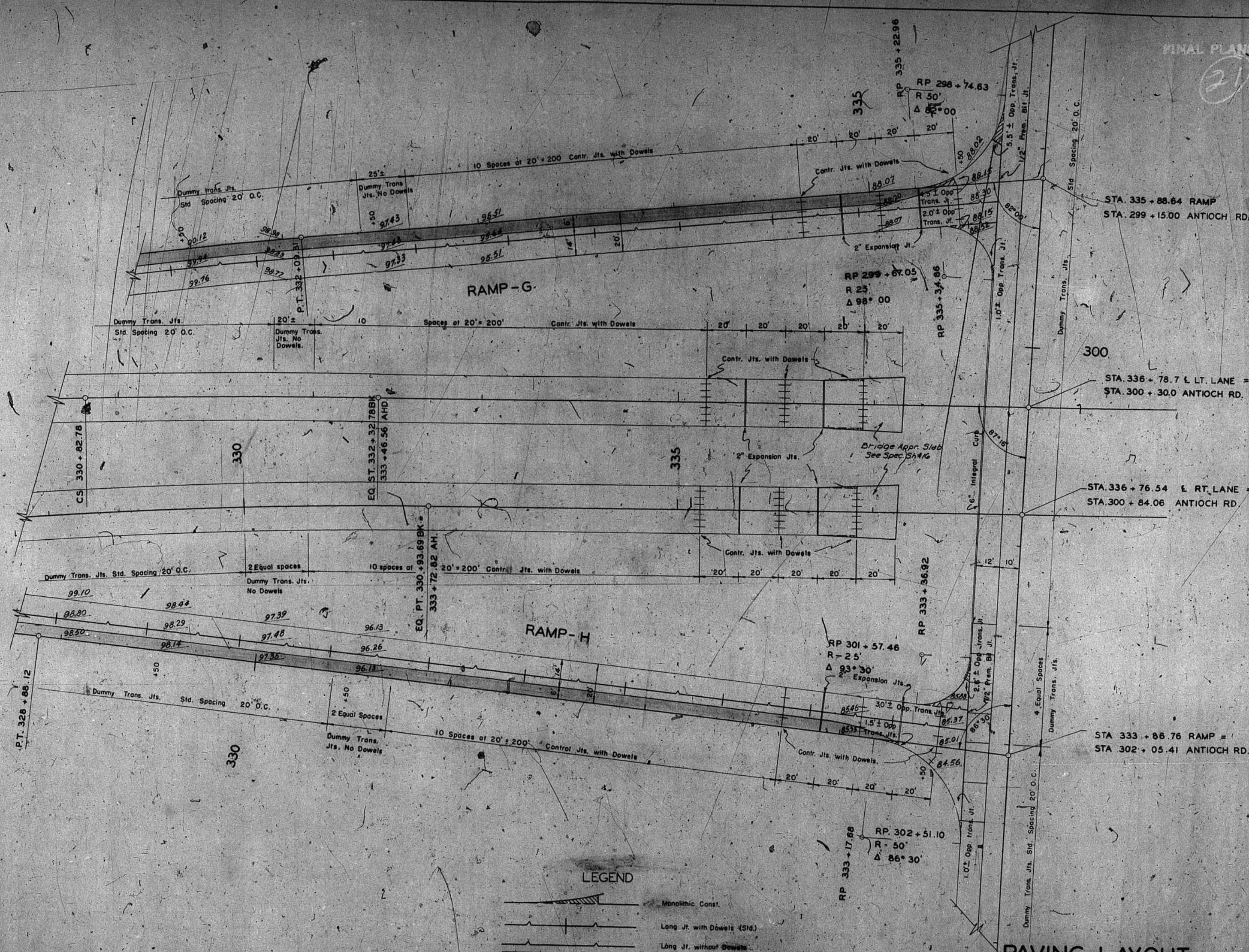
PAVING LAYOUT

ANTIOCH ROAD INTERCHANGE
CLAY COUNTY RTE 69
PROJECT UI-99(6)

SPECIAL SHEET NO 13

FINAL PLANS

21

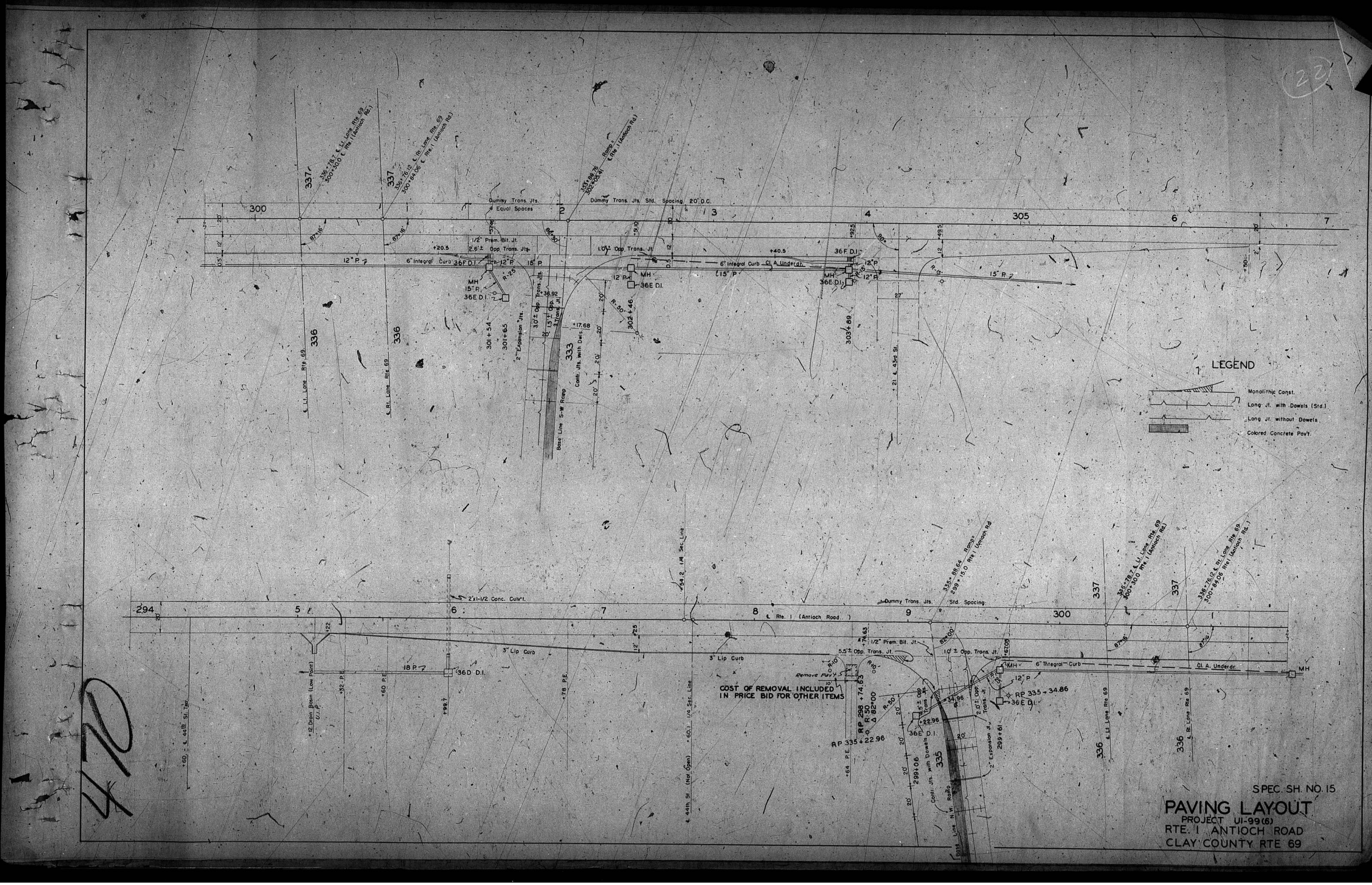


469

PAVING LAYOUT

ANTIOCH ROAD
CLAY COUNTY RTE 69
PROJECT UI-99(6)

SPECIAL SHEET NO. 14



SPEC. SH. NO. 15

PAVING LAYOUT

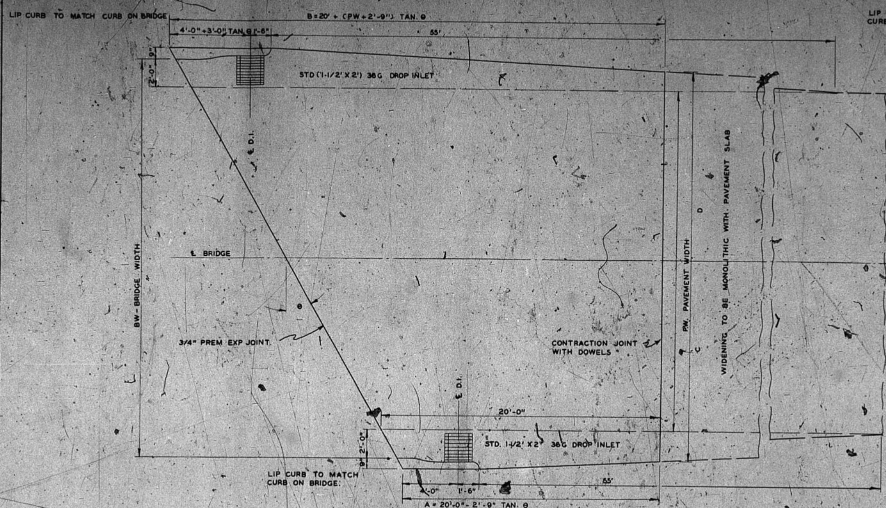
PROJECT UI-99(6)

RTE. 1 ANTIOCH ROAD

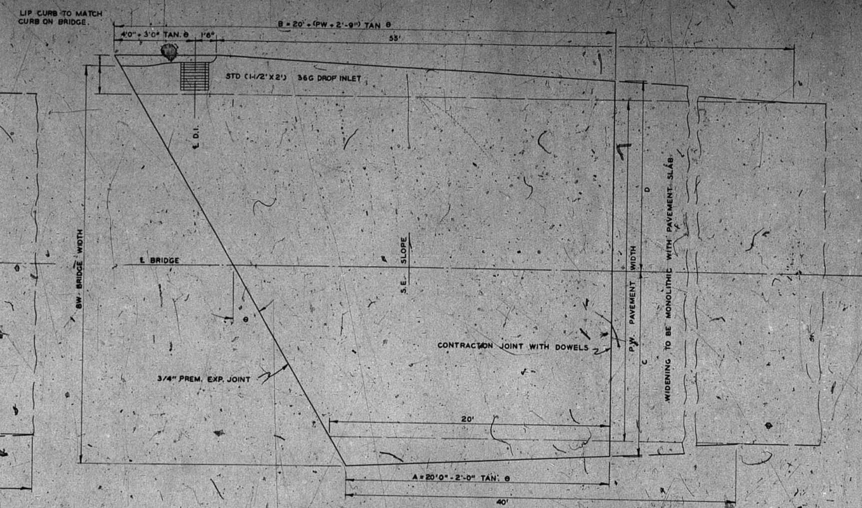
CLAY COUNTY RTE 69

FINAL PLANS

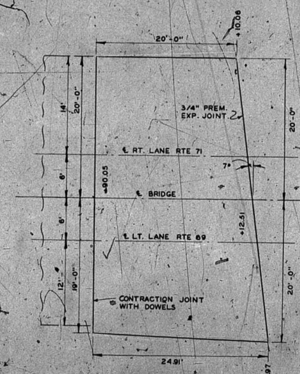
23



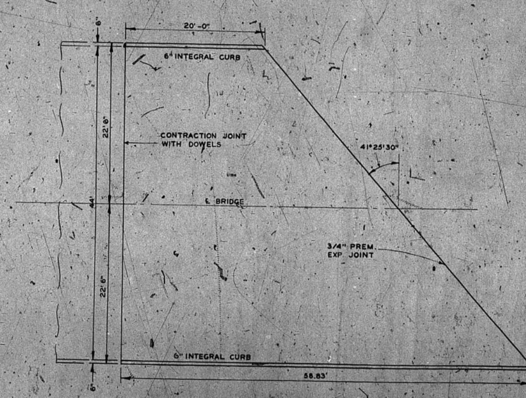
APPROACH SLAB WITH DROP INLETS



APPROACH SLAB WITH DROP INLET ON SUPERELEVATED CURVE



APPROACH SLAB
STA. 2.93 + 90.05 LT. LANE
SCALE 1/8" = 1'-0"



APPROACH SLAB FOR BRIGHTON AVENUE BRIDGE
STA. 3+64.89 TO STA. 4+04.3 & STA. 6+66.3 TO STA. 7+05.71
SCALE 1/8" = 1'0"

STATION	STATION	LANE	DATA	B.W.	P.W.	A	B	C	D	CONC. SQ.YDS.	*STL. LBS.	REMARKS
293+99.66	294+24.15	RT.	14°R.A.	40'	36'	STD. 15AB APPR. SLAB				106.10	3,720	
295+63.05	295+87.53	RT.	14°R.A.	40'	36'	1931	29.66	20.06	19.58	110.19	3,860	APPROACH SLAB WITH D.I.
293+90.79	294+13.25	LT.	7°R.A.	40'	38'	SEE DETAIL				98.42	3,450	NO TAPER ON LT. HALF OF SLAB
295+35.75	295+57.96	LT.	7°R.A.	40'	36'	1966	24.76	20.04	19.81	100.20	3,510	APPROACH SLAB WITH D.I.
335+91.78	336+12.35	RT.	2°44' L.A.	28'	24'	STD. 15 AB APPR. SLAB				61.71	2160	
337+39.85	337+60.42	RT.	2°44' L.A.	28'	24'	19.87	21.28	14.03	13.97	65.52	2300	APPROACH SLAB WITH D.I.
335+94.38	336+14.95	LT.	2°44' L.A.	28'	24'	STD. 15 AB APPR SLAB				61.71	2160	
337+42.45	337+63.02	LT.	2°44' L.A.	28'	24'	1987	21.28	14.03	13.97	65.52	2300	APPROACH SLAB WITH D.I.
370+87.52	371+13.10	RT.	24°55'58" R.A.	28'	24'	STD 15 AB APPR. SLAB				76.74	2700	
372+62.15	372+87.73	RT.	24°55'58" R.A.	28'	24'	1907	32.44	13.05	13.47	79.11	2770	APPROACH SLAB WITH D.I. ON S.E.
370+58.33	370+83.91	LT.	24°55'58" R.A.	28'	24'	STD 15 AB APPR. SLAB				76.74	2700	
372+33.1	372+58.68	LT.	24°55'58" R.A.	28'	24'	1907	32.44	13.05	13.47	79.11	2770	APPROACH SLAB WITH D.I. ON S.E.
3+64.89	4+04.3 BRIGHTON		41°25'30" R.A.	44'	44'	SEE DETAIL				197.07	6,910	
6+66.3	7+05.71 AVENUE		41°25'30" R.A.	44'	44'	SEE DETAIL				197.07	6,910	
429+71.61	430+24.50	LT.	69°57'32" L.A.	28'	24'	12.46	93.33	14.40	12.00	156.65	5,490	APPROACH SLAB WITH D.I.
434+30.7	434+83.59	LT.	69°57'32" L.A.	28'	24'	12.46	93.33	14.40	12.00	156.65	5490	APPROACH SLAB WITH D.I.

GENERAL NOTES

SEE STD 15AB FOR DETAILS OF REINF. STL. SLAB THICKNESS, MUD JACKING HOLES ETC. NOT SHOWN ON THIS DRAWING. WHERE DROP INLETS ARE USED IN APPROACH SLAB, BEND AND/OR CUT REINFORCED STEEL TO FIT DROP INLET OPENING.

* NOT A PAY ITEM. INCL. COST IN UNIT PRICE BID FOR APPROACH SLAB.

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APPROACH SLABS FOR BRIDGES

CLAY COUNTY RTE 69
PROJECT UI-99(6)

SPECIAL SHEET NO. 16

FINAL PLANS

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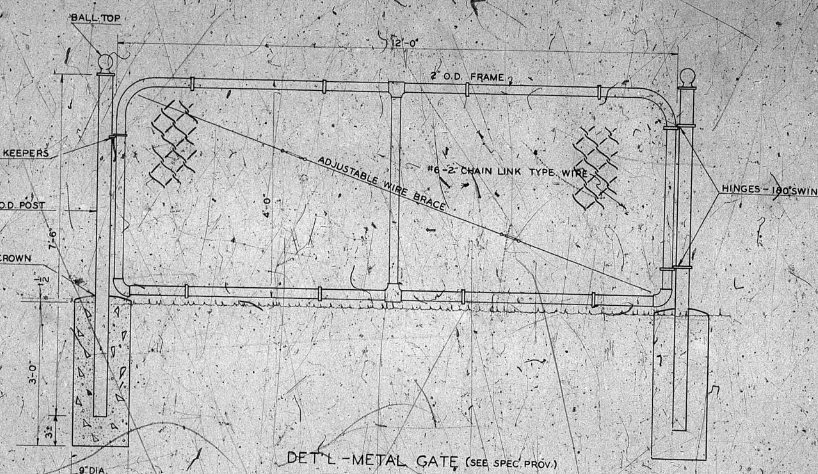

DET'L - METAL GATE (SEE SPEC. PROV.)

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SPEC. METAL GATES

LT. STA. 227+74 LT. LANE
RT. STA. 227+80 RT. LANE
CLAY COUNTY RTE. 69
PROJECT UI-99(6)
SPECIAL SHEET NO. 17

LIST OF STANDARD PLANS

PROJ.	SHEET
UI-99 (6)	25
CO.	**RTE.**
CLAY	69

1 BA-4		(6-9-54)
1TR-2		(5-20-52)
15AB-2		(4-54)
15C-1		(10-53)
15DE-6U		
16A-1		(NEW 10-1-50)
24A-5		(1-15-51)
25D-13		(NEW 1-7-53)
25BB-7		(1-53)
25K-10		(1-26-50)
27A-15		11-53
28A-2		
28B-2		(1-54)
36A-18		(5-54)
36B-1		(3-29-54)
36D-4		(10-52)
36E-8		(12-53)
36F-2		(7-1-50)
36G-3		(3-29-54)
C-230R2		
C-245		
C-529	1of2	(1-30-59)
C-529	2of2	(8-18-52)
C-530		(1-30-53)
C-27		
C110R3		

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