STATE OF KANSAS

STATE HIGHWAY COMMISSION

INDEX OF SHEETS

PLAN AND PROFILE OF PROPOSED

STATE HIGHWAY

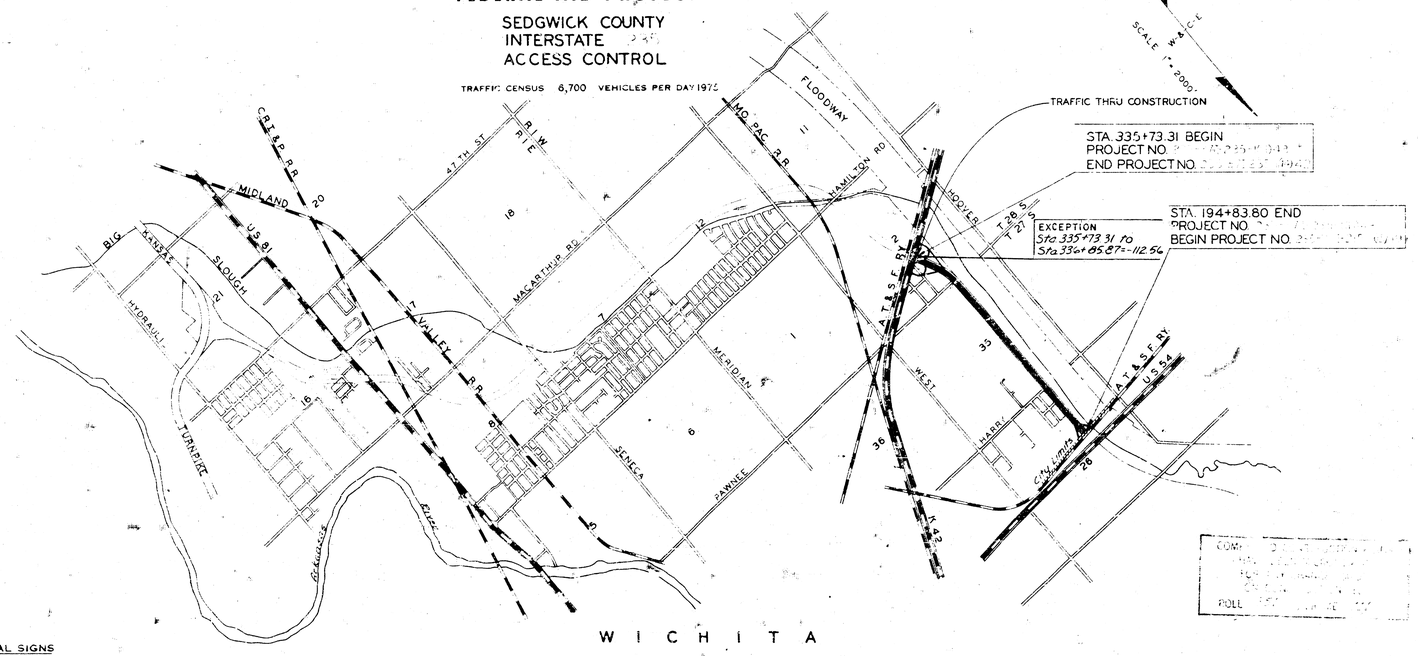
FEDERAL AID PROJECT

SEDGWICK COUNTY
INTERSTATE
ACCESS CONTROL

TRAFFIC CENSUS 6,700 VEHICLES PER DAY 1975

PROJ NO.

GRADING



WICHITA

CONVENTIONAL SIGNS

COUNTY LINE		RETAINING WALL	
CITY, VILLAGE OR BOROUGH		BASE OR SURVEY LINE	
STATE OR NATIONAL LINE		LEVEE	
TOWNSHIP LINE		CULVERTS	
SECTION LINE		DROP INLETS	
SURVEY LINE		TROLLEY POLE	
FENCE LINE		POWER LINE	
WIRE FENCE		TELEPHONE OR TELEGRAPH LINE	
FENCED PROPERTY		MARSH	
RIGHT OF WAY LINE		HEDGE	
TRAVELLED WAY		TREES	
RAILROADS		GRADE ELEVATION	1234.5
ACCESS CONTROL		CITY LIMITS	

GROSS LENGTH OF PROJECT 9,295.18 FT.

EXCEPTIONS 112.56

ADDITIONS 0

EQUATIONS
STA. 375+95.48 BACK = STA. 142+11.24 AHEAD
STA. 192+46.88 BACK = STA. 192+46.43 AHEAD

NET LENGTH OF PROJECT	9,182.62	FT.	1.739	MILES
NET LENGTH OF BRIDGES	0.00	FT.	0.000	MILES
NET LENGTH OF ROAD	9,182.62	FT.	1.739	MILES

PLANS PREPARED BY: DATE Oct 28, 1958

WILSON & COMPANY ENGINEERS

ENGINEER OF DESIGN
STATE HIGHWAY COMMISSION OF KANSAS

STATE HIGHWAY ENGINEER
STATE HIGHWAY COMMISSION OF KANSAS

ENGINEER
BUREAU OF PUBLIC ROADS
DEPARTMENT OF COMMERCE

DISTRICT ENGINEER
BUREAU OF PUBLIC ROADS
DEPARTMENT OF COMMERCE

POT Ref Sta 325+23.72
1. 28.10 W. to Spike in Post
2. 32.20 E. to Spike in Post
3. 5.00 N. to E-W Fence Line

POT Ref Sta 328+50.19
1. 76.85 S. to Spike in Post
2. 35.25 N. to Spike in Post
3. 107.15 W. to Spike in Tel. Pole

POC Ref Sta 335+71.50 ℄ to K-42
1. 84.50' S.E. to Spk. in Tele. Pole
2. 77.00' N.W. to Spk. & Washer in P. Pole
3. 81.30' N.E. to Spk. in Top of Fc. Post
4. ⅝" Iron Bar @ P.O.C. ℄ K-42

Sta 337+35 Install 42"×30A C.R.P. Extra Strength Conc. 2 End Sect 160 Lt. 140 Rt. D.A.=6.3 Ac. Q=59 cfs I.F.=0.9 H.W.=3.5

Cultivated

Sta 335+73.31 BEGIN Proj
End Proj

Sta 335+73.330 Const Br. No. Not Part of This Contract

Existing R/W

Remove Small Trees

RAMP D

RAMP C

71.58 ℄ to K-42

160 ℄

NW¼ Sec. 2 T28S R1W

Sta 342+00 Const Type I Inlet on ℄ Install 18"×124' C.R.P.(CMP) Broken Back See Sheet No. 18 & 20

For Interchange Details See Sheets No. 8 thru 11

F.L. Outlet 1304.00

RAMP F

RAMP E

Proposed Improvement

RAMP B

Invert El 1315.91

RAMP A

F.L. Outlet 1295.00

Idle Field

Kansas State Highway Property

Large Trees to be Shredded

Sta 339+00 to 350+00 All Trees to be Shredded Working 58 Spots All Trees Not Named 3 40' 1-50'

Salvage Yard

Sta 350+00 Const Type I Inlet on ℄ Install 18"×88' C.R.P. See Sheet No. 18 & 20

Sta 353+00 Const Type III Inlet 113 Rt. ℄ Install 15"×62' C.R.P.(MAC) See Sheet No. 19 & 20

For R/W See Sheet No. 8

EXCEPTION Sta 333+54.31 to Sta 336+85.87=11256

NE¼ Sec. 2 T28S R1W

SW¼ Sec. 35 T27S R1W

Sec. Line

¼ Sec. Line

Grading Contractor shall complete all roadway Excavation and embankment in the vicinity of the Bridge prior to the construction of piers and abutments

Except As Noted On Piers

EQUATION Sta 326+26.30 Back = Sta 324+50.93 Ahead

POT Sta 325+23.72

POC Sta 327+60.81

POC Sta 332+50.10

SCALE

PLAN: Lat. & Long. 100' 50' 0 100' 200'

PROFILE: Horiz. Same as above Vert. 5' 0

SEA LEVEL DATUM

BM #113 RR Spike in Tele. Pole 223' Lt. Sta. 326+26 Elev. 1298.06

BM #114 1" Iron Bar in Fence Cor. 146 Lt. Sta. 336+09 Elev 1292.35

For Earthwork Quantities See Sheet No. 5

To Sta. 173+46

By Owners Proj

P.I. = 60 El. 1323.30

Bridge

3.00%

1500' V.C.

H.P.S.D.=660'

-3.00%

800' V.C.

-1.00%

-0.30%

Ground Line

Fl. Elev. 97.73

El. Elev. 99.73

Sp. Med. Dt

Cr. Gr. El. 1330.65
F.L. El. Lt 1291.00
F.L. El. Rt. 1291.00

See Sheet No. 10 For Drainage

See Sheet No. 10 For Drainage

Toe Dt. Lt

Toe Dt.

Scale: Hor. 1" = 100'
Ver. 1" = 10'

Sta 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355

1314.24 1313.32 1314.50 1317.50 1320.50 1323.34 1325.78 1327.82 1329.46 1330.70 1331.54 1331.92 1332.02 1331.66 1330.90 1329.74 1328.18 1326.22 1324.06 1321.70 1319.10 1316.10 1312.70 1309.33 1306.93 1303.91 1303.26 1301.99 1301.09 1300.57 1300.02 1300.42 1300.42

Prop 138 KV Trans. Line

Access Control 130 ℄

Conc. Mon.

P.I. Sta 342+28.02 Back = P.I. Sta 337+72.03 Ahead

P.I. Sta 352+89.46 Back = P.I. Sta 348+28.09 Ahead

P.I. Sta 348+28.09 Back = P.I. Sta 343+72.10 Ahead

CURVE DATA (Both Curves)
Δ = 24°02'
D = 0°30'
R = 11,459.19
T = 2,439.21
L = 4,806.67
E = 256.73
SE= R.C.

For R/W See Sheet 6

R/W = Chan. R/W

℄ Proj Sta 352+53.52 ⅝" Iron Bar @ P.O.C. 12" Deep
2. 24.35' E.N.E. Spk. in Fc. Post
3. 13.20' N.W. Spk. in Fc. Post
4. 13.40' W.N.W. Spk. in Fc. Post

P.I. Ref Sta 352+89.40 ℄ Back = Sta 348+28.09 Ahead
1. ⅝" Iron Bar @ P.I. 12" Deep
2. 64.75' N.N.W. Spk. in Fc. Post
3. 63.70' N.N.E. Spk. in Fc. Post
4. 75.00' E.N.E. Spk. in Fc. Post

F.L. El. 1296.94

Invert El. 1296.83

F.L. Outlet 1296.90

Exist R/W 150 ℄

Cultivated

Sec. Line

For R/W See Sheet No. 8

Except As Noted On Piers

EQUATION Sta 342+28.02 Back = Sta 343+72.10 Ahead

EQUATION Sta 348+28.09 Back = Sta 348+50.93 Ahead

EQUATION Sta 352+89.46 Back = Sta 352+53.52 Ahead

Except As Noted On Piers

EQUATION Sta 352+89.46 Back = Sta 352+53.52 Ahead

Except As Noted On Piers

EQUATION Sta 348+28.09 Back = Sta 348+50.93 Ahead

EQUATION Sta 342+28.02 Back = Sta 343+72.10 Ahead

EQUATION Sta 337+72.03 Back = Sta 337+35.00 Ahead

EQUATION Sta 332+50.10 Back = Sta 332+85.87 Ahead

EQUATION Sta 327+60.81 Back = Sta 328+50.19 Ahead

EQUATION Sta 326+26.30 Back = Sta 324+50.93 Ahead

Except As Noted On Piers

EQUATION Sta 326+26.30 Back = Sta 324+50.93 Ahead

POT Sta 325+23.72

POC Sta 327+60.81

POC Sta 332+50.10

PLAN

BY	DATE
SURVEYED	
DRAWN	
TRACED	
NOTE BOOK	
ACCURACY CHECKED	
NO. OF MAPS CHECKED	
No.	

PROFILE

BY	DATE
COMPUTED	
CHECKED	
NOTE BOOK	
NO.	

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	KANSAS		1958	5	69

P.T. Rel. Sta. 375+56.86 Back's
Sta. 142+67.30 Ahead
1.5ϕ Iron Bar @ P.I. (2" dead)
2.33.75° S.W. 50± ℄ Intersection 12 Post.
3.31.30° W. 50± ℄ in Fc. Post
4.56.10° N.W. 50± ℄ in Fc. Post

Sta. 364+50 Const.
6'x4'x162' RCB
D.A. 250 Ac. Q=138cfs
L.F. 0.4 H.W. = 4.4
See Sheet 25

Sta. 357+50 Const. Type III
Inlet 17.3' Rt. ℄ Install
1.5ϕx62' CRP (MAC)
See Sheet No. 19&20

Sta. 367+50 Const.
Type II Inlet on ℄
Install 18'x78' CRP
See Sheet No. 18&20

Sta. 143+50 Const. Type III
Inlet 19.5' Rt. ℄ Install
1.5ϕx60' CRP (MAC)
See Sheet No 19&20

Sta. 148+50 Const. Type III
Inlet 19.5' Rt. ℄ Install
1.5ϕx58' CRP (MAC)
See Sheet No 19&20

Invert Elev. 1295.23

F.L. Elev. 1296.94

Levee Toe Drain

Conc. Mon.

Exist. R/W

Exist. R/W-115' ℄

Cham. R/W

℄ Prop. Imp.

Exist. R/W-150' ℄

Prop. 138 K.V. Trans. Line

Proposed 36" R.C.P. Culvert

F.L. Outlet 1294.90

F.L. Outlet 1296.30

F.L. Outlet 1293.61

F.L. Outlet 1294.11

F.L. Outlet 1294.70

F.L. Outlet 1295.20

Sta. 362+50 Const. Type III
Inlet 17.3' Rt. ℄ Install
1.5ϕx56' CRP (MAC)
See Sheet No. 19&20

Sta. 372+50 Const.
Type II Inlet on ℄
Install 18'x76' CRP
See Sheet No. 18&20

Cultivated

SW¼ Sec. 35-T27S-R1W

NW¼ Sec. 35-T27S-R1W

Tom C. Cain Et Ux Tract

C. of E. Ponding Area "Q"
Max. Elev. = 1295.5
11 Ac. Ft
9 Acres

C.D. Mc Keown
S½ SW¼ Ex. RR Canal

EQUATION
Sta. 372+88.5 Back
Sta. 142+17.50 Ahead

Large Trees to be Grubbed
Sta. 353+00 to Sta. 360+00
All trees to be grubbed are marked ⊗. Spare all trees not marked.
1-40", 4-50", 2-60", 1-70"
1-80", 5-100", 1-120"
Total - 15

BM #115 "a" Cut in Root of Cottonwood 45 Lt. Sta. 337+81 Elev. 1295.80

BM #116 "a" Cut in N.E. Cor. E. Hdwl. 236.5' Lt. Sta. 362+90 Elev. 1297.38

*Exc: 557,700 Cu. Yds
*Emb. 464,750 Cu. Yds.
*Incl. 542,977 Cu. Yds Exc. from borrow area to be provided by Contractor and approved by the Engineer. See Note below.
†Incl. 9,862 Cu. Yds Emb. for North Berm at A.T.&S.F. Ry. Bridge
†Incl. 100,061 Cu. Yds. Emb. for Ramps B, D, C & D of K-10 Interchange

From Sta. 335+15

To Sta. 378+96

Toe Ditch Rt.

Std. Ditch Rt.

Toe Ditch Lt.

8' Sp. Ditch Rt.

Sp. Med. Ditch

NOTE:
All borrow to be obtained from areas provided by the contractor shall be approved by the engineer both as to suitability of material and site location.
Location that in the opinion of the Engineer will leave an unsightly appearance on this project will not be approved.

+0.50% -0.40% +0.40% -0.40% +0.40% +0.00% -0.40% +0.40% -0.40% +0.40% -0.42.2% -0.42.7% +0.40% -0.40% +0.40%

F.L. El. 97.73 F.L. El. 98.73 F.L. El. 97.73 Ground Line F.L. El. 98.73 F.L. El. 97.73 F.L. El. 98.73 F.L. El. 97.73 F.L. El. 98.73 F.L. El. 98.32 F.L. El. 97.73 F.L. El. 98.73 F.L. El. 97.73 F.L. El. 98.73

Cr. Gr. El. = 1300.42
F.L. El. Lt. = 1293.00
F.L. El. Rt. = 1293.21

+0.10% Rt. +0.10% Rt.

F.L. Rt. 94.36 El. Rt. 95.85

1300 1290 1280

EQUATION
Sta. 372+88.5 Back
Sta. 142+17.50 Ahead

Scale: Horiz. 1"=100'
Vert. 1"=10'

PLATE 1—PLAN—PROFILE O. P. & R. E.
CHARLES BERGER COMPANY, INC.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	KANSAS	A39-077-A36 (1)058	[illegible]	6	69

Sta. 332+00 Construct Type III Inlet 19.5 Rt. ℄ Install 1.5'×5.68' CRP(MAC) See Sheet No. 19E20

Sta. 158+50 Construct Type III Inlet 19.5 Rt. ℄ Install 1.5'×56 CRP(MAC) See Sheet No. 19E20

Sta. 163+00 Construct Type III Inlet 19.5 Rt. ℄ Install 1.5'×56 CRP(MAP) See Sheet No. 19E20

Sta. 166+00 Construct Type III Inlet 19.5 Rt. ℄ Install 1.5'×56 CRP(MAC) See Sheet No. 19E20

P.O.T. Sta 171+23.67 By Iron Bar @ P.O.T. 3.80 S. 52° 56' E. Witness in Top of 12" Post 3.62 N. 52° 56' E. Witness in Top of 12" Post 4.16.26 S.W. 77 Spk. in P. Pole

Sta. 172+35 Construct Type III Inlet 19.5 Rt. ℄ Install 1.5'×58' CRP(MAC) See Sheet No. 19E20

Sta 179+00 Construct Type III Inlet 19.5 Lt. ℄ Install 1.5'×5.41' CRP(MAC) See Sheet No. 19E20

FL. E. 296.94
FL. Outlet 1295.60

FL. E. 296.98
FL. Outlet 1296.10

FL. E. 1297.24
FL. Outlet 1296.99

FL. E. 1298.00
FL. Outlet 1296.85

FL. E. 1299.27
FL. Outlet 1297.49

FL. Outlet 1300.13
FL. E. 1300.38

Survey Base Line

R/W+115'

℄ Proposed Improvement

Flood Control Maintenance Road

Proposed 138 KV Trans. Line

℄ Frontage Road

R/W 80'

R/W+Sec. Line
Sta 171+88 110' Rt Install 50' Steel Plate Guard Fence Terminal End Sections See Sheet No. 22

Sta 178+46 140' Rt Install 25' Steel Plate Guard Fence Terminal End Sections See Sheet No. 22

Sta 157+00 Frontage Road Install 18"×28' SRP 2 End Sections 14' Lt 14' Rt

Note: The 138 KV Trans. Line Rt Sta 350+00 to Sta 197+83.80 Will be in Place During Construction and the Grazing Contractor Will Work Around It.

Large Trees to be Grubbed Sta 153+00 to Sta 179+00 15-30", 10-50", 4-60", 1-70", 2-80" Total 32. All Trees to be Grubbed are marked Truss & Spare all Trees not marked. Hedge to be Grubbed Sta 155+36-41 Lin. Ft.

Sec. 11 Comm. NE¼ NW¼, SE¼ of Sec.

MONROE ST.

BM #117 Top 55 Conc. R/W Marker 49' Lt Sta 145+54 Elev. 1296.39

BM #118 Top 5/5" Conc. R/W Marker 49' Lt Sta 158+71 Elev. 1299.19

BM #119 RR Spike in Power Pole 12' Lt. Sta 171+60 Elev. 1300.27

From Sta. 332+12

For Earthwork Quantities See Sheet No. 6

For Earthwork Quantities See Sheet No. 6

Toe Ditch Left

8' Special Ditch Right

FRONTAGE ROAD PROFILE

300' V.C.
+0.25%
-0.5%
+2.0° F-RC Rt
800 V.C.
FL Elev. = 1295.85
FL Elev. @ = 1296.00
E. El. = 1297.50
Ground Line
Special Median Ditch
+0.00%
+2.40%
-0.40%
+0.40%
-0.40
+0.43%
-0.53%
+0.77%
-0.40%
+0.41%
+2.10% Rt
+0.20%
-0.40%
+0.40%
-0.37%
FL El 97.73
El. Rt 94.95
FL El 98.73
FL El 97.73
FL El 98.73
FL El 97.73
FL El 99.02
FL El 98.23
FL El 98.78
FL El 99.39
FL El 100.72
FL El 100.06
El. Rt 98.00
FL El 98.66
Scales
Horizontal 1"=100
Vertical 1"=10

PLATE 1 - PLAN-PROFILE O.P.R.&B.E. STANDARD
KUTTER, ELLIS & ESSER CO. NEW YORK

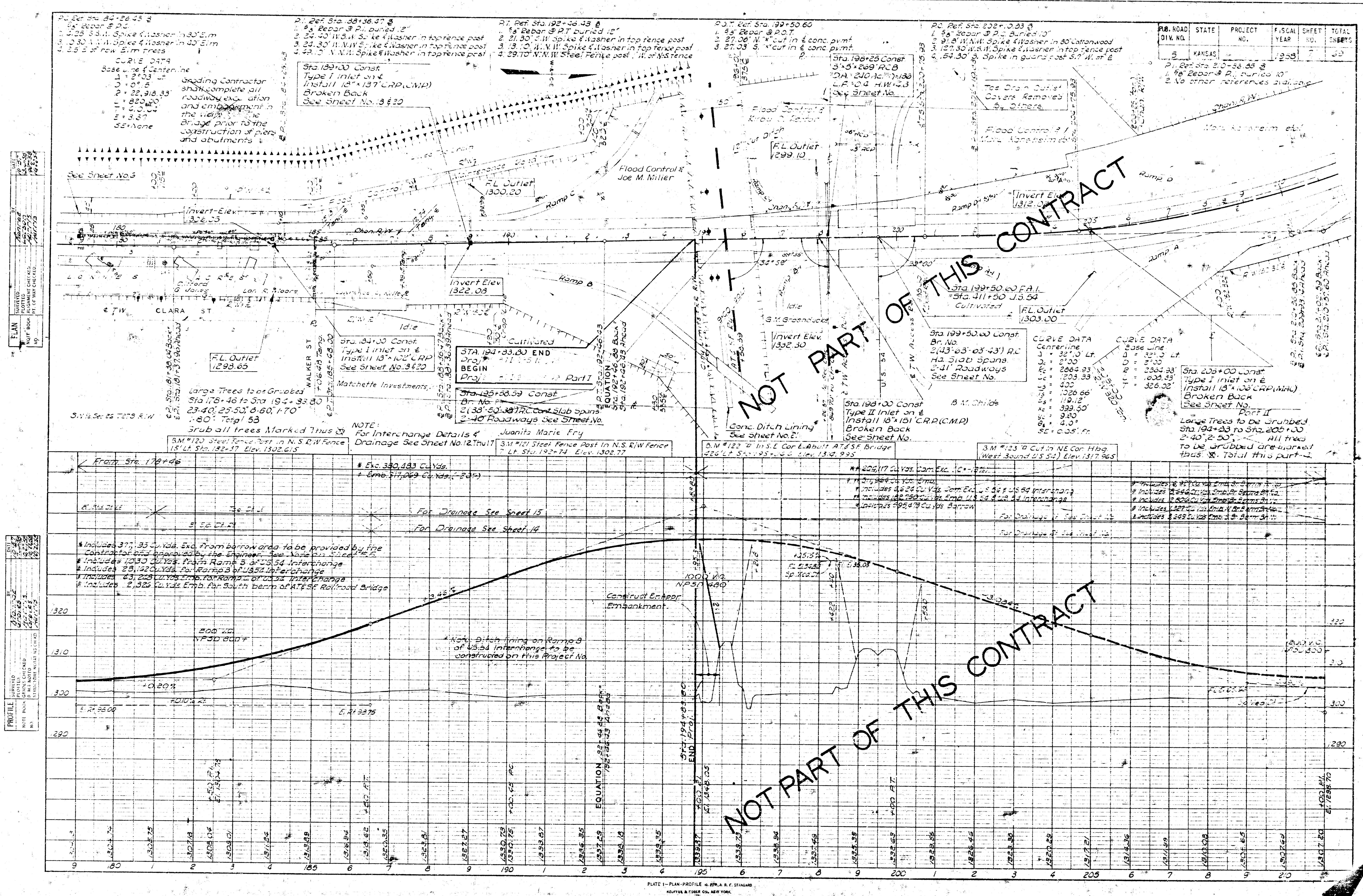


PLATE 1—PLAN-PROFILE ... R. R. STANDARD
KEUFFEL & ESSER CO., NEW YORK

PUB. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	KANSAS		1958	3	69

Sta. 1450 Ramp C & D Install
42"x 112' CRP & End Sections
56' Lt. 56' Rt.
D.A.= 6.8 Ac. Q= 58 c.f.s.
L.F.=0.4 H.W.=3.6

Sta. 9100 Ramp D Construct
Type II Inlet 90' Rt. ℄
Install 18"x 146' CRP
See Sheet No. 18 & 20

CURVE DATA (Both Curves)
Δ = 24°02'
D = 0°30'
R = 11,459.16'
T = 2,339.23'
L = 4,806.97'
E = 250.73'

1270.5 Section Line
R/W = Chan. R/W

Chan R/W = R/W

Scale 1" = 100'

Channel R/W

1270.5 Section Line
15' Chan. R/W

Team Track to be removed

Walter M. Keeler Co. Inc. Tract

Install 24" E.P. Lt.

FL Outlet
1292.50

Inv. = Elev.
1300.30

Proposed

Small

Sta. 357 + 59.22 Back =
Sta. 111 + 22.03 Ahead

℄ P.I. Sta. 356 + 59.40 Back =
Sta. 110 + 28.19 Ahead

Skew Line 48°17' R

Δ = 84°45'
R = 30'

Access Control 130' ℄

℄ Prop. Imp.

Invert Elev.
1295.50

FL Outlet
1292.05

Sta. 9100 Ramp A Const.
Type II Inlet 92' Lt. ℄
Install 18" x 136' C.P.P.
See Sheet No. 18 & 20

ANNA STREET

1/4 Sec. Line

PAVING

Sta. 1150 Ramp A & B Install
42"x 76' CRP & End Sections
38' Lt. 38' Rt.
DA 52 Ac. Q= 49 c.f.s.
L.F.=0.6 H.W.=3.2

R/W = Exist R/W?

R/W 150' ℄

R/W

℄ P.C. Sta. 3271.88.81

℄ P.C. Sta. 3141.50.19

(Revised Access Control)

80'43

Sump Pit

Salvage Yard

Kansas State Highway Property

Nora L. Alcorn
S½ NE¼ So. of Ks. Hwy. No. 42

R/W 400' ℄
(Access Control)

Exist. R/W

℄ S.P.R.R.

X-ing

323 330 335 340 345 350 355

90 60 150

R/W 150' ℄

TRAFFIC FLOW DIAGRAM
DHV= 1975

496 100 ℄ 660 100 ℄

NO	DATE	REVISIONS	BY	APP'D
3				
2				
1				

STATE HIGHWAY COMMISSION OF KANSAS

K-42 INTERCHANGE

GENERAL LAYOUT

WILSON & COMPANY
ENGINEERS & ARCHITECTS
SALINA KANSAS

DESIGNED DeJulio TRACED Carpenter CHECKED Joyner