FORM 129 A

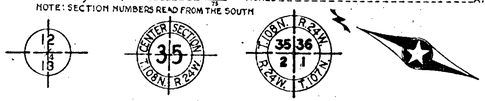
CONVENTIONAL SIGNS

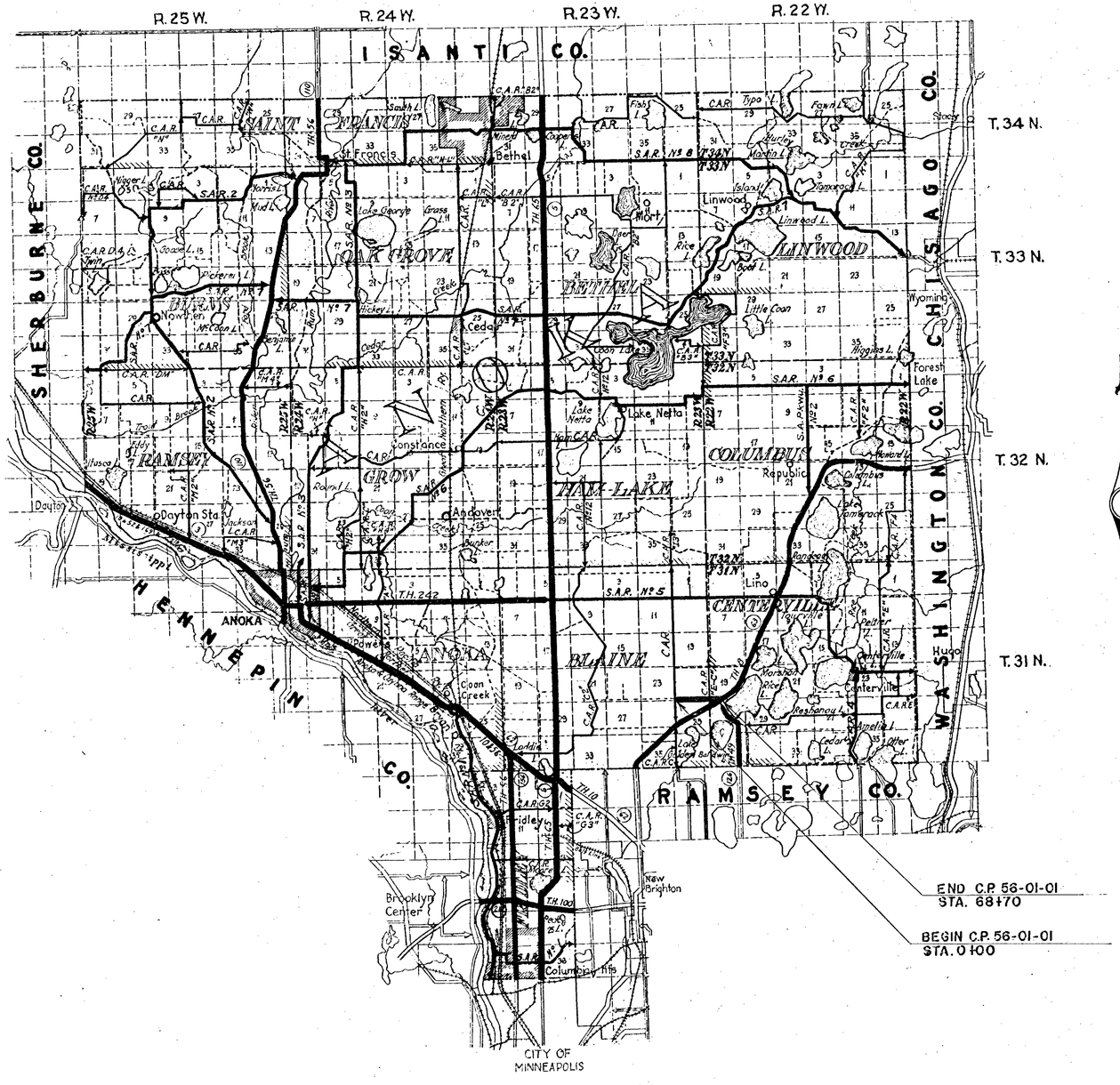
STATE LINE
COUNTY LINE
TWP OR RANGE LINE
SECTION LINE
RIGHT OF WAY LINE
CORPORATE OR CITY LIMITS
ROAD CENTER LINE
RETAINING WALL
RAILROADS
CREEK
DRY RUN
DRAINAGE DITCH
POWER POLE LINE
TELEPHONE OR TELEGRAPH LINE
CULVERTS - PLAIN
WITH ENDWALLS
WITH WINGWALLS
DROP INLET
FENCE LINE
GRAVEL PIT
SAND PIT
CLAY PIT
ROCK QUARRY
SPRINGS
MARSH
BRUSH OR TIMBER
HEDGE
ROCK LEDGE
SAND
EDGE OF CUT
TOE OF EMBANKMENT
RAILROAD R/W LINE
BUILDING (One Story Frame) 1 STY R

NOTE: SECTION NUMBERS READ FROM THE SOUTH

ABBREVIATIONS

EXCAVATION	EXC.
EARTH	E.
LOOSE ROCK	L.R.
SOLID ROCK	S.R.
EMBANKMENT	F.
OVERHAUL	H.
SURFACING	S.
HAND DITCHING	H.D.
SPECIAL EXCAVATION	S.E.
SPECIAL PLOWING	S.P.
GUARD RAIL	G.R.
CORRUGATED METAL CULVERT	C.M.CULV.
SECTIONAL CONCRETE CULVERT	R.CULV.
SECTIONAL CONCRETE CULVERT (Heavy Type)	R.CULV.
TON MILES	T.M.
TELEPHONE POLE	TEL.P.
POWER POLE	P.P.
PLACE	P.
INPLACE	INP.
REPLACE	REP.
RIGHT	RT.
LEFT	LT.
INTERSECTION ANGLE	Δ
RADIUS	R.
TANGENT	T.
LENGTH OF CURVE	L.
POINT OF CURVE	P.C.
POINT OF TANGENT	P.T.
POINT OF INTERSECTION	P.I.
VERTICAL CURVE	V.C.
BENCH MARK	B.M.
ELEVATION	EL.
ACRES	A.





STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
Plan and Profile of State Road No. 24

ANOKA COUNTY

From N.W. COR. SEC. 25 - T.31 N. - R. 23 W. To N.E. COR. SEC. 25 - T.31 N. - R. 23 W.
Give proper reference to Sections, Township and Range

A POINT 1596.8' EAST OF THE

GROSS LENGTH 6,870 FEET 1.301 MILES
LENGTH OF EXCEPTIONS 0 FEET 0 MILES
NET LENGTH 6,870 FEET 1.301 MILES

SCALES
- PLAN, 1 Inch = 200 Feet.
- PROFILE, Horz. 1 Inch = 200 Feet, Vert. 1 Inch = 20 Feet
- WORKING PLANS: Horz. 1 Inch = 100 Feet; Vert. 1 Inch = 10 Feet; Cross-Section, 1 Inch = 10 Feet

LAYOUT
Scale, 1 Inch = 10560 Feet

INDEX OF SHEETS

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL:

DISTRICT ENGINEER — DATE

APPROVED:

DIVISION ENGINEER — DATE

PLANNED BY E.S. VEVEA 1956
COUNTY ENGINEER FOR ANOKA COUNTY

RECOMMENDED FOR APPROVAL _____ 19__
DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL _____ 19__
ENGINEER OF COUNTY DIVISION

APPROVED _____ 19__
ENGINEER OF PLANS AND SURVEYS

Anoka County, Minnesota. County Proj. No. 56-01-01 Plan No. _____ Sheet 1 of 10 Sheets

FORM 129 c - # 1 Rev. '46

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SEC.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MINN.					

ESTIMATED QUANTITIES

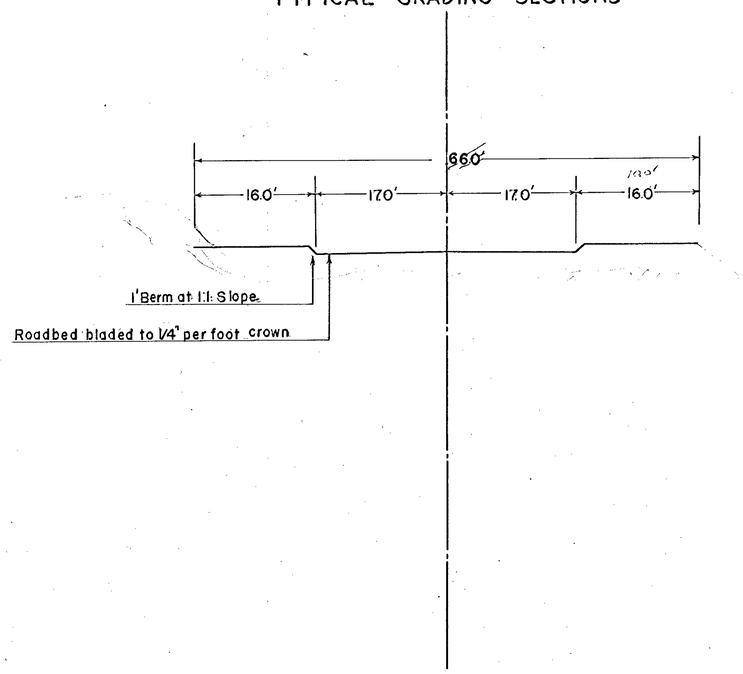
SPECIFICATION NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2101.501	CLEARING	ACRE	0.68
2101.502	CLEARING	TREE	2
2101.506	GRUBBING	ACRE	0.68
2101.507	GRUBBING	TREE	12
2104.510	REMOVE FENCE	LIN. FT.	334
2105.503	CLASS "C" EXCAVATION	CU. YDS.	7,568
2501.511-12	FURNISH & INSTALL 12" C.M.P. CULV.	LIN. FT.	20
2202.527	GRAVEL BASE IMPLACE	CU. YD.	2,163
2130.501	WATER	M-GAL.	43.3
2321.501	BITUMINOUS MAT'L. FOR PRIME	GAL.	7,786
2321.502	" " " " TACK	GAL.	1,298
2321.503	" " " " MIXTURE	GAL.	30,228
2321.507	AGGREGATE	CU. YD.	1,145

STANDARD DETAIL PLATES

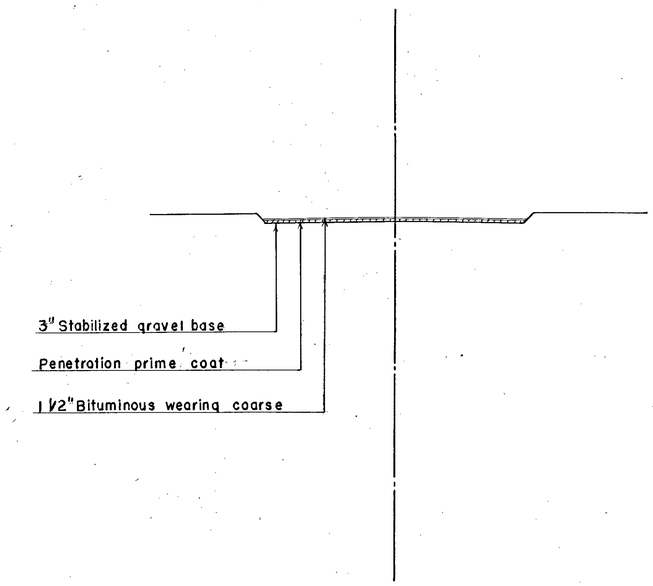
Standard Detail Plates issued October 1, 1947 and approved by the Public Roads Administration April 1, 1948, with revisions Approved Feb. 24, 1949, shall govern.

PLATE NO.	STANDARD DETAIL PLATES
9000	APPROACHES & ENTRANCES
9001	STABILIZED BASE & BITUMINOUS SURFACING ON APPROACHES & ENTRANCES

TYPICAL GRADING SECTIONS



TYPICAL BASE & SURFACE SECTIONS



SPECIAL DETAILS

BASIS FOR COMPUTATION OF QUANTITIES

ESTIMATE QUANTITIES INCLUDE MAT'L. FOR ENTRANCES & APPROACHES TO BE USED AS DIRECTED BY THE ENGINEER.
3" DEPTH BASE CONSTRUCTION - 28.7 CU. YDS. PER STATION - SPEC. 3138 (CLASS 5)
WATER FOR COMPACTION - 20 GALLONS PER CU. YD. OF BASE CONSTRUCTION.
BITUMINOUS MAT'L. FOR PRIME COAT - 0.30 GAL. PER. SQ. YD. (M.C.-0 OR M.C.-1)
" " " TACK COAT - 0.05 GAL. PER. SQ. YD. (M.C.-2 OR M.C.-3)
" " " MIXTURE - 1.10 " " " " (M.C.-2 OR M.C.-3)
AGGREGATE - 150 LBS. PER. SQ. YD. - SPEC. 3139 (BA-2)
GRAVEL MATERIAL ASSUMED TO WEIGH 2800 LBS. PER CU. YD.

DAHMS PHOTO PRINT CO. MPLS. 1, MINN.

STA.16+00 - LT & RT. thru berm
F&I.-2-12"x10' C.M.P. CULV.

BEGIN PROJECT
STA. 0+00

LEXINGTON AVE. C.A.R. NO. 40

Center Road

Park Drive West

PI = STA. 26+33.5
Δ = 0°-03' LT.

+0.883%
+0.667%
-0.675%
+0.795%
-0.690%
-0.256%
-1.203%

200' V.C. M=0.261'
400' V.C. M=0.779'
200' V.C. M=0.107'
200' V.C. M=0.371'
200' V.C. M=0.109'
200' V.C. M=0.237'

EXC.-376 EMB.-278
EXC.-262 EMB.-278
EXC.-716 EMB.-529
EXC.-517 EMB.-385
EXC.-716 EMB.-551

PARK DRIVE E.
PINE DRIVE
DUEN WAY
EDGE DRIVE
POINT CROSS ROAD
STORE

PI = STA. 52+73.2
Δ = 2°-00' LT.

-0.567%
+0.133%
-0.300%
+1.335%
+0.726%
-1.300%
-0.567%
+1.833%
-0.625%
-1.175%

200' V.C. M=0.159'
200' V.C. M=0.175'
200' V.C. M=0.108'
200' V.C. M=0.234'
200' V.C. M=0.277'
200' V.C. M=0.294'
200' V.C. M=0.333'
200' V.C. M=0.600'
200' V.C. M=0.615'
200' V.C. M=0.138'

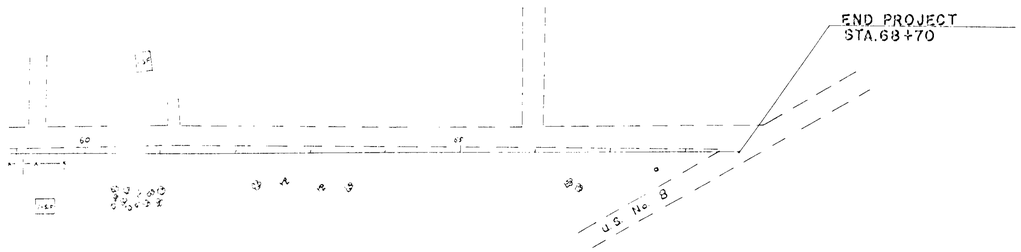
EXC.-1056 EMB.-781
EXC.-407 EMB.-302
EXC.-88 EMB.-40
EXC.-1159 EMB.-857
EXC.-522 EMB.-387
EXC.-370 EMB.-275

PLATE 2 - PLAN - PROFILE O.P.R.R.E.
CHARLES SHOWING COMPANY, INC.

C.P. 56-01-01
C.A.R. 24

NO. ROAD
CIRCLE PINES

SHEET 3 OF 10 SHEETS



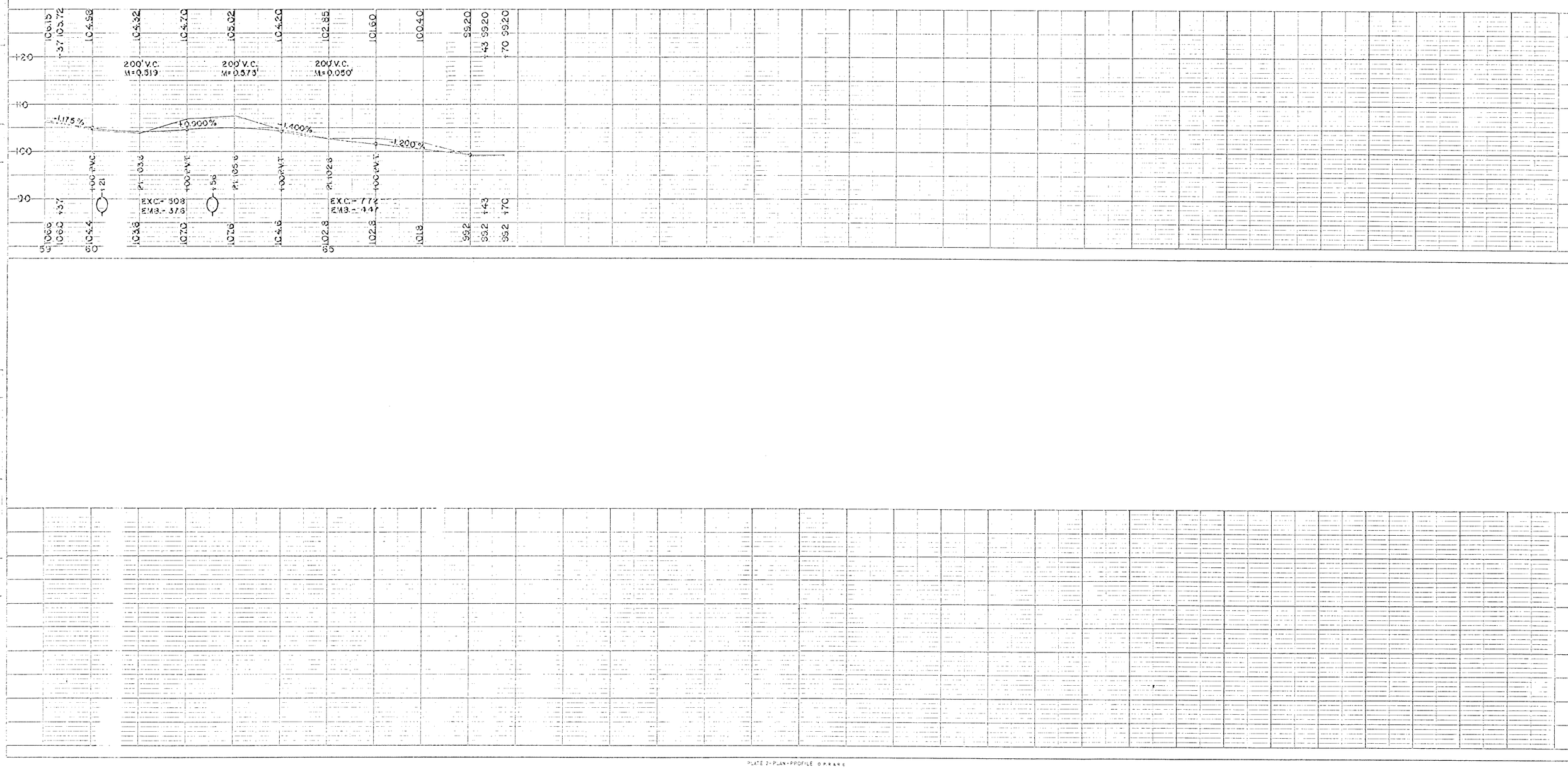


PLATE 2-PLAN-PROFILE OF RANE
CHARLES BRUNING COMPANY, INC

C.P. 56-01-01
C.A.R. NO. 24

NO. ROAD
CIRCLE PINES

SHEET 4 OF 10

EXCAVATION		EMBANKMENT	
SUB-TOTALS	CU. YDS.	CU. YDS.	SUB-TOTALS

5+00 105.2

4+00 104.1

3+00 103.2

2+00 101.8

1+00 100.5

0+00 100.4

12+00 111.3

11+00 110.5

10+00 109.1

9+00 107.3

8+00 106.1

7+00 106.1

6+00 105.7

PLATE 3 - CROSS SECTION OF PARKE PHASE
CHARLES BRUNING COMPANY, INC.

C.P. 56-01-01
C.A.R. NO. 24

NO. ROAD
CIRCLE PINES

SHEET 5 OF 10 SHEETS

EXCAVATION EMBANKMENT

SUB-TOTALS | CU. YDS. | CU. YDS. | SUB-TOTALS

17+00 109.4

18+00 108.5

17+00 108.5

16+00 108.3

15+00 107.2

14+00 110.0

13+00 110.7

EXCAVATION EMBANKMENT

SUB-TOTALS | CU. YDS. | CU. YDS. | SUB-TOTALS

25+00 108.0

24+00 109.8

23+00 109.9

22+00 110.6

21+39 111.3

21+00 110.9

20+00 108.3

PLATE 3 – CROSS SECTION O F R O A D E PROFILE
CHARLES BRUNING COMPANY, INC.

C.P.56-01-01
C.A.R. NO. 24

NO. ROAD
CIRCLE PINES

EXCAVATION EMBANKMENT

SUB-TOTALS | CU. YDS. | CU. YDS. | SUB-TOTALS

31+00 103.7

30+00 109.6

29+00 105.7

28+53.5 107.3

27+00 108.1

28+34 108.9

26+00 108.1

38+00 102.8

37+00 105.4

36+00 109.9

35+00 109.9

34+00 109.2

33+00 103.9

32+00 103.7

PLATE 3 – CROSS SECTION OF ROAD

CHARLES SHOWING COMPANY, INC.

C.P. 56-01-01 NO. ROAD
C.A.R. NO. 24 CIRCLE PINES

SHEET 7 OF 10 SHEETS

EXCAVATION EMBANKMENT

SUB-TOTALS | CU. YDS. CU. YDS. | SUB-TOTALS

49+00 111.5

45+00 109.6

42+00 108.2

41+50 108.1

40+18 108.5

40+00 108.2

37+00 109.1

51+00 105.9

50+00 105.5

48+00 105.1

46+00 105.9

44+00 106.2

43+00 110.5

41+00 111.7

58+00 107.7

57+00 109.5

56+00 110.5

55+00 110.6

54+00 110.5

53+00 110.3

52+00 107.8

EXCAVATION EMBANKMENT

SUB-TOTALS	CU. CU. YDS. YDS.	SUB-TOTALS

64+00 109.6

63+00 107.6

62+00 107.0

61+00 105.8

60+00 102.4

59+37 106.0

59+00 108.6

EXCAVATION EMBANKMENT

SUB-TOTALS	CU. CU. YDS. YDS.	SUB-TOTALS

PLATE 3 - CROSS SECTION OF R.R.E. PRECISE
CHARLES BRUNING COMPANY, INC.

C.P. 5G-01-01
C.A.R. NO. 24

NO. ROAD
CIRCLE PINES

EXCAVATION		EMBANKMENT	
SUB-TOTALS	CU. YDS.	CU. YDS.	SUB-TOTALS

68+70 99.2

68+33 99.2

68+50 99.2

67+00 101.8

66+00 102.3

65+20 102.3

PLATE 3 - CROSS SECTION O F R A R E PRECISE
CHARLES BRUNING COMPANY, INC

C.P. 56-01-01
C.A.R. NO. 24

NO. ROAD
CIRCLE PINES

SHEET 10 OF 10