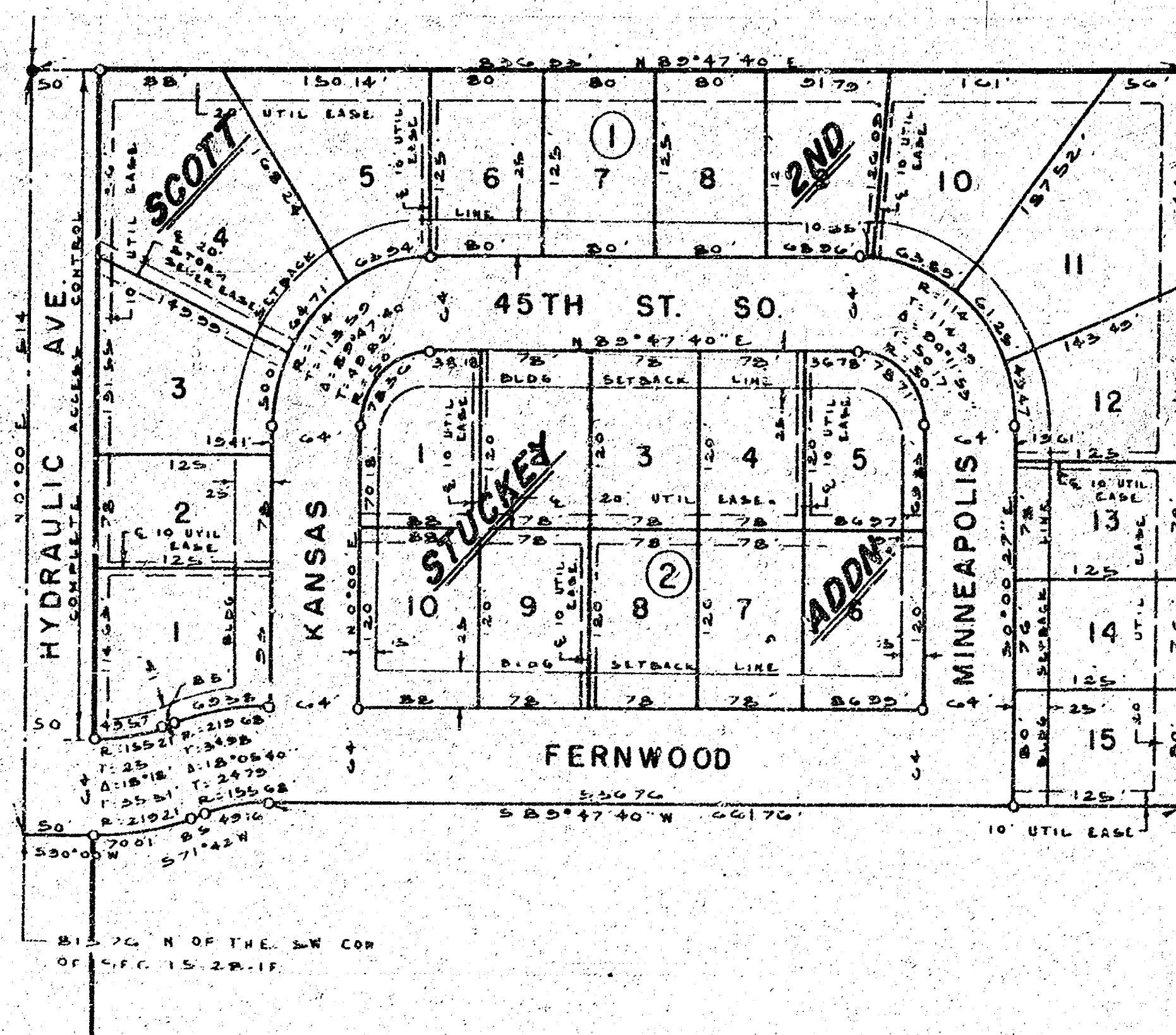


FERNWOOD
E.L. HYDRAULIC TO E.L. MINNEAPOLIS
KANSAS, 45TH ST. SO., & MINNEAPOLIS
N.L. FERNWOOD TO N.L. FERNWOOD
472-76-245-80914-000-000-001
CITY OF WICHITA, KS.
R.W. BRUGGEMAN ————— DIRECTOR OF ENGINEERING

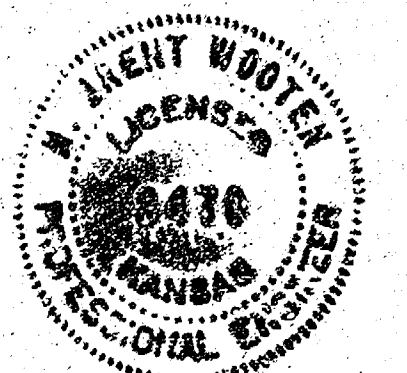


Note-

Contractor to regrade ditch each direction from the drainage pipe on the east side of Hydraulic. Cost of the regrading of the ditch and the end sections are to be considered as incidental to C.F. Pipe.
 Contractor to contact Gas Service Co. for the location of new service lines for this addition.
 Contractor to note the caution warning on sheet-5.
 Transition sections of cb. & gutter are to be bid & paid as Roll combined CB and Curb.

THE ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE DATA AND INFORMATION FURNISHED HEREON. THE ENGINEER SHALL BE RESPONSIBLE TO THE CLIENT FOR THE RESULTS OF HIS PROFESSIONAL SERVICES. THE ENGINEER SHALL BE RESPONSIBLE FOR THE RESULTS OF HIS PROFESSIONAL SERVICES. THE ENGINEER SHALL BE RESPONSIBLE FOR THE RESULTS OF HIS PROFESSIONAL SERVICES.

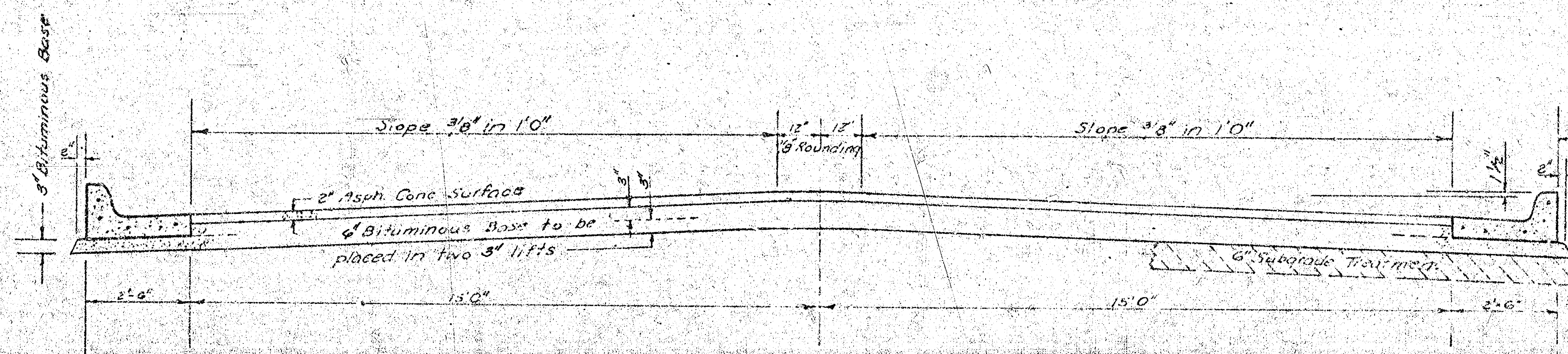
NOTE: FIELD ENGINEER TO SPOT CHECK EARTH WORK ELEVATIONS PRIOR TO CONST. RE- CROSS SECTION WHERE NECESSARY.



Date _____

BAUGHMAN COMPANY, P.A.
 SURVEYING & ENGINEERING
 316/262-7271 • 330 LAURA • WICHITA, KANSAS 67211

1/12



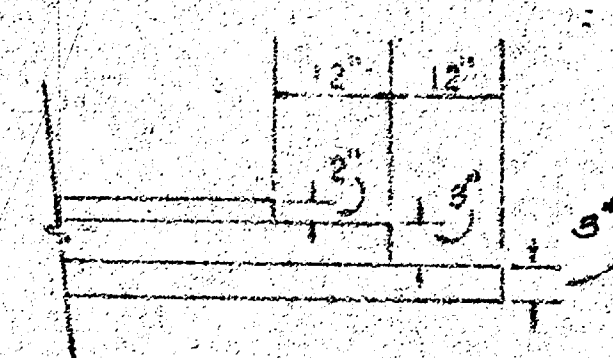
TYPICAL SECTION

35' ASPHALTIC CONCRETE PAVEMENT WITH BITUMINOUS BASE

A TACK COAT OF EMULSIFIED ASPHALT (SS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE 0.05 GALLONS PER SQ YD BETWEEN LIFTS OF ASPHALTIC MATERIALS WHEN ORDERED BY THE ENGINEER. TACK COAT WILL NOT BE PAID FOR DIRECTLY AND SHALL BE CONSIDERED AS SUBSIDIARY TO PRICE BID FOR ASPHALTIC PAVEMENT.

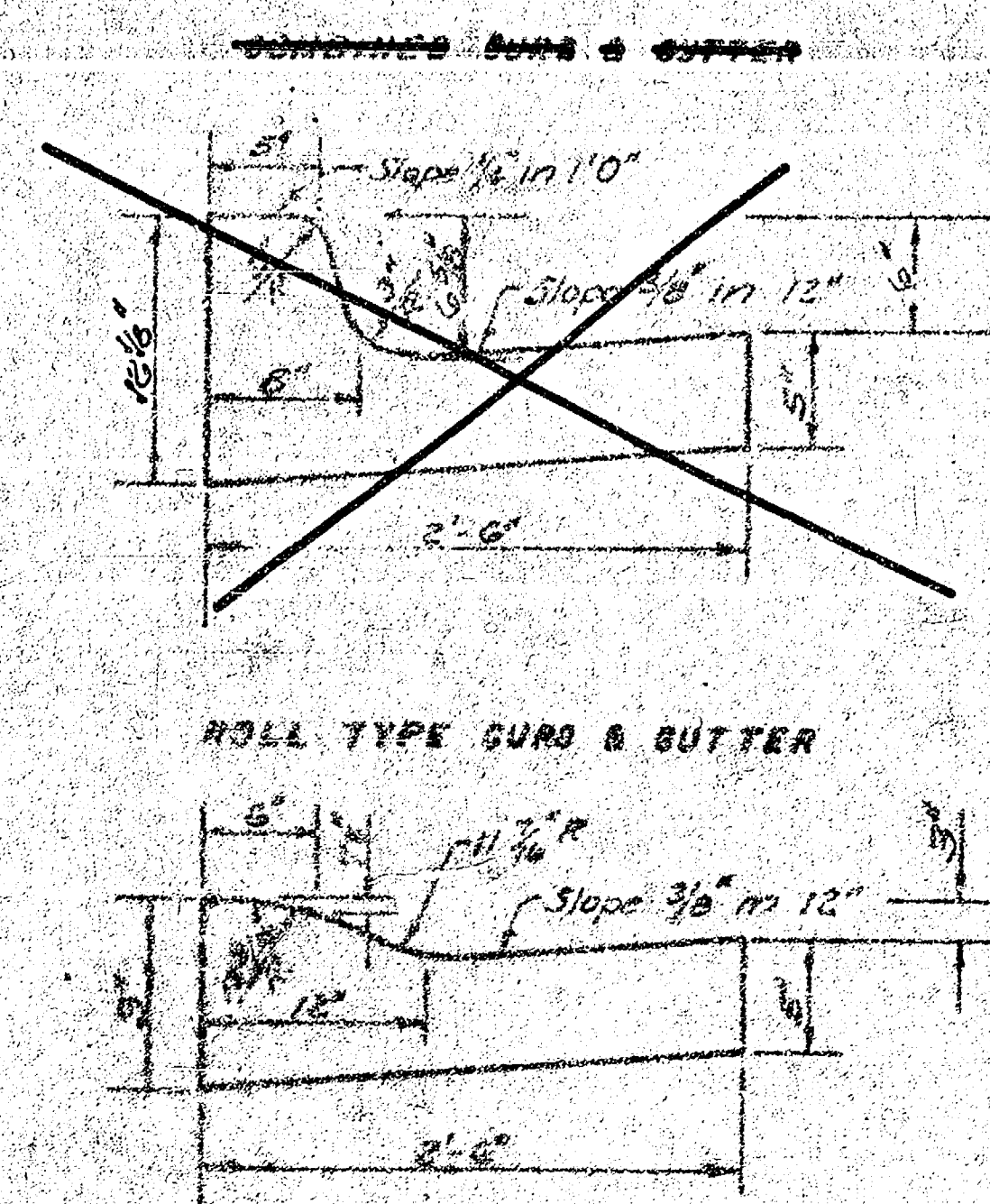
BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR CROWN AND GRADE. CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF 1' WITH JOINTS IN PRECEDING LIFTS AND PLACED SUCH THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE IN THE TOP LIFT.

DETAIL OF TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT TEMPORARILY ENDS TO FACILITATE FUTURE PAVEMENT CONSTRUCTION AS SHOWN BY DETAIL. THE COST OF CONSTRUCTING THE TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE MEASURED OR PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS OF ASPHALTIC CONCRETE PAVEMENT.

The A.C. Pavement between the curb and gutter shall be paid as 39 sq yds. 6" A.C. Pavement (6" Bituminous Base).
The Bituminous Base under the curb and gutter shall be paid as 39 sq yds. 3" Bituminous Base.



CITY OF WICHITA KANSAS

DEPARTMENT OF ENGINEERING

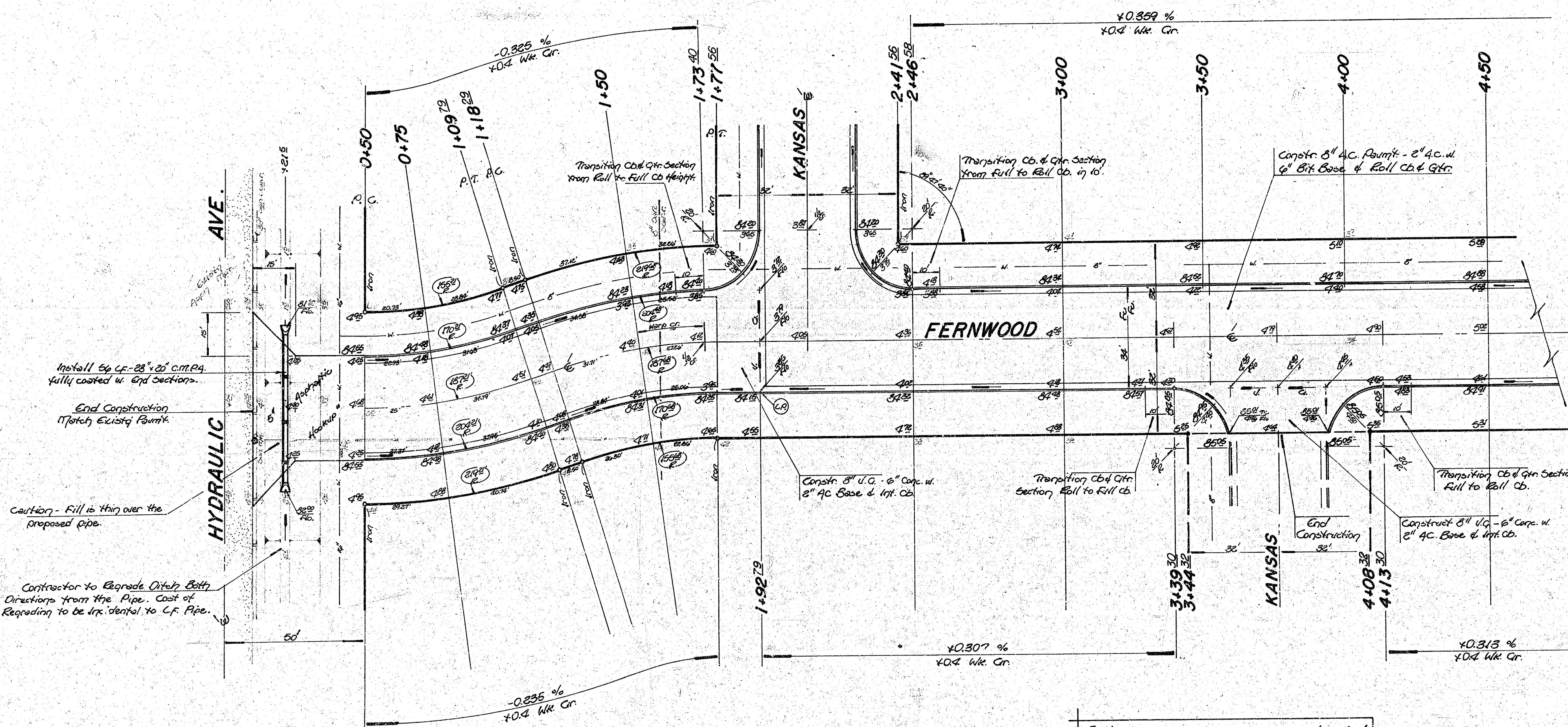
R.W. BRUGGEMAN - DIRECTOR OF ENGR/CITY ENGR

DATE: PROJ No. 412-76-243-80914-000-000-001 2/7

Survey - 4/19/9
Plan - 4/19/9

8.17 82.54 R.R. Spk. E. Fe. PP. N.W. Cor. Hydraulic & Fernwood W.
8.17 84.20 City Std. Hydraulic & 47th St. So., 44' E. & 52' N. of & Both.

15-20' DRIVES



$\Delta = 18^{\circ}18'00''$ $R = 187.81'$ $T = 30.15'$ $L = 59.79'$ $LC = 59.55'$
 $\Delta/2 = 9^{\circ}09'00''$

Curve Data Based on $\Delta/2$					
Sta.	Arc	Chord	Offset	Dist.	Dist.
0+50	25'	21.65'	20.32'	5'44'35"	5'44'35"
0+75	25'	21.65'	20.32'	5'44'35"	5'44'35"
1+04.79	34.79'	30.10'	39.35'	5'19'35"	9'05'55"

Defl./Ft. = 9.18155 mm.

$\Delta = 18^{\circ}18'00''$ $R = 187.81'$ $T = 30.15'$ $L = 59.79'$ $LC = 59.55'$
 $\Delta/2 = 9^{\circ}09'00''$

Curve Data Based on $\Delta/2$					
Sta.	Arc	Chord	Offset	Dist.	Dist.
1+10.89	31.71'	30.29'	27.45'	4'50'25"	4'50'25"
1+40	25'	21.65'	20.32'	5'44'35"	5'44'35"
1+75.66	4.16'	4.16'	23.81'	0'35'00"	9'05'55"

Defl./Ft. = 9.18155 mm.

Earthwork		
Excavation	Comp. Fill	Borrow
109.7 cy	179.2 cy	1789.1 cy
+10% = 119.9 cy	+10% = 179.9 cy	+10% = 1789.9 cy
Total = 289.7 cy	Total = 197.1 cy	Total = 1968.0 cy
Manipulation = 630.2 cy		

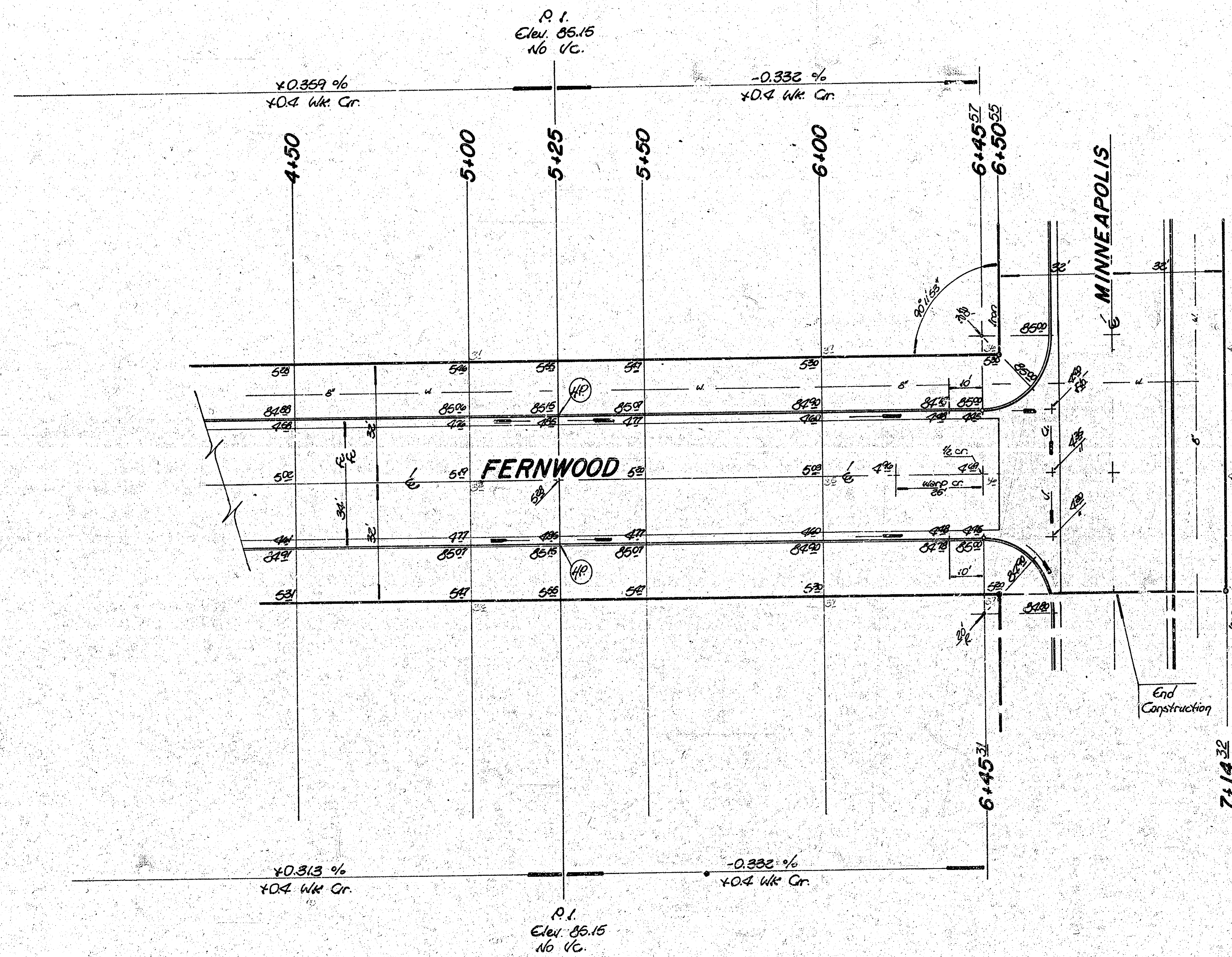
Quantities		
Excavation	Comp. Fill	Borrow
684 cy	174 cy	1785 cy
+10% = 684 cy	+10% = 174 cy	+10% = 1785 cy
Total = 758 cy	Total = 191 cy	Total = 1895 cy
Manipulation = 607.2 cy		

INTERSECTION QUANTITIES	
S.Y.	Concrete Pavement
1742 S.Y.	Asphaltic Conc. Pavement (6" Bituminous Base)
68 S.Y.	Bituminous Base
214 L.F.	Combined Curb & Gutter
214 L.F.	Integral Curb
S.F.	4" Wheelchair Ramp
S.F.	4" Walk
220 C.Y.	Excavation
58 C.Y.	Compacted Fill
4875 Lbs.	Reinforcing Steel
222 S.Y.	Manipulation
2.6 Tons	Lime or Cement
91.8 S.Y.	V.S. 6" Concrete & 2" Asphaltic Concrete Base
515 cy	Borrow

INTERSECTION QUANTITIES	
S.Y.	Concrete Pavement
1064 S.Y.	Asphaltic Conc. Pavement (6" Bituminous Base)
S.Y.	Bituminous Base
L.F.	Combined Curb & Gutter
428 L.F.	Integral Curb
S.F.	4" Wheelchair Ramp
S.F.	4" Walk
228 C.Y.	Excavation
58 C.Y.	Compacted Fill
4875 Lbs.	Reinforcing Steel
222 S.Y.	Manipulation
2.6 Tons	Lime or Cement
91.8 S.Y.	V.S. 6" Concrete & 2" Asphaltic Concrete Base
515 cy	Borrow

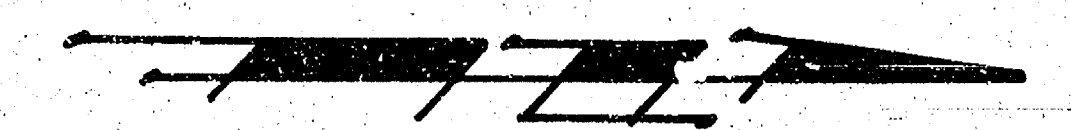
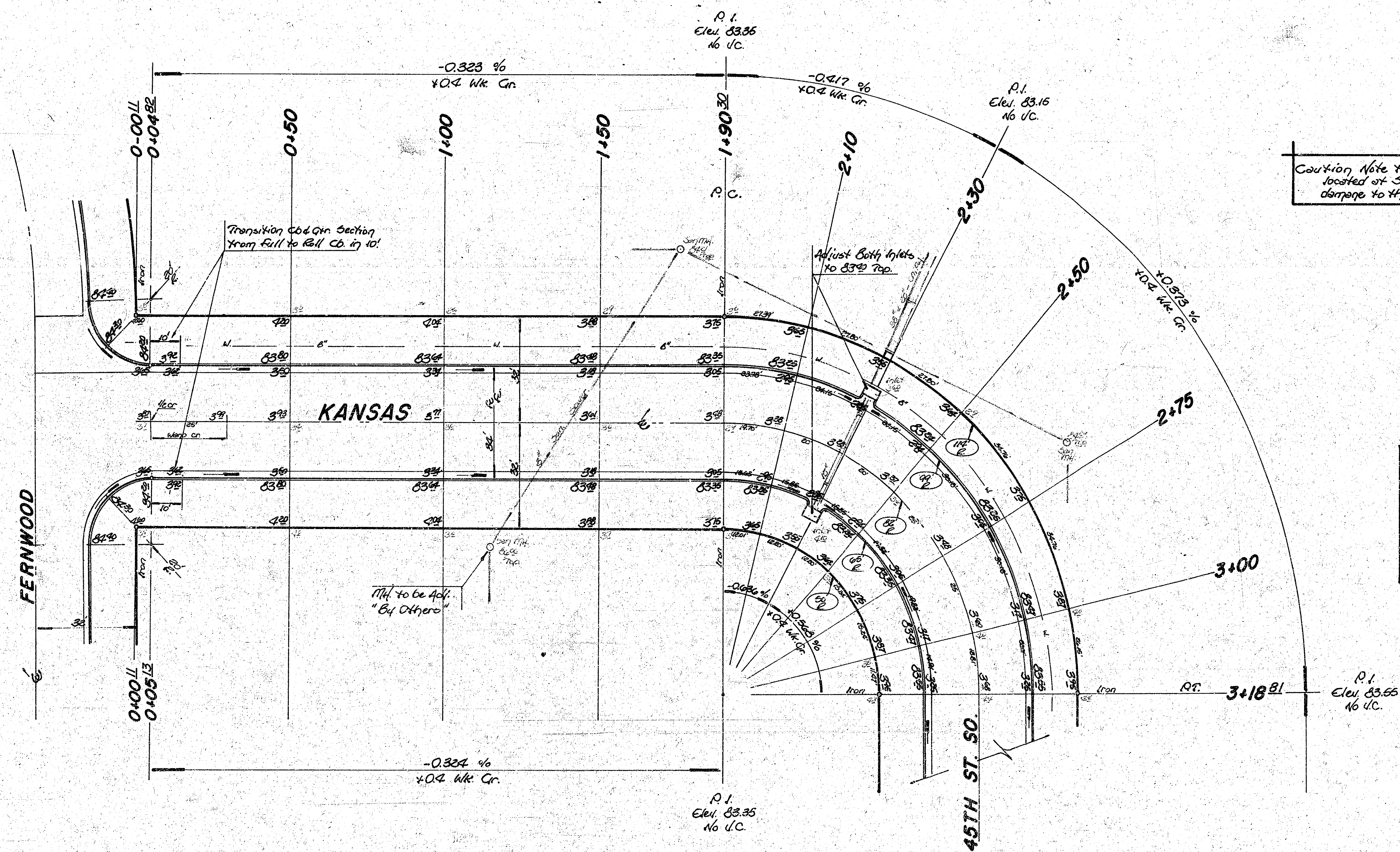
FERNWOOD

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Scale:
1" = 30'

FERNWOOD



Scale:
1" = 20'

Caution Note to Contractor: - Fill is thin over the 15" s.w.s. Pipe located at Sta. 2+30. Take the necessary steps to prevent any damage to the pipe during construction.

$A = 84^{\circ}41'40''$ $R = 82'$ $T = 61.76'$ $L = 128.61'$ $L.C. = 115.76'$

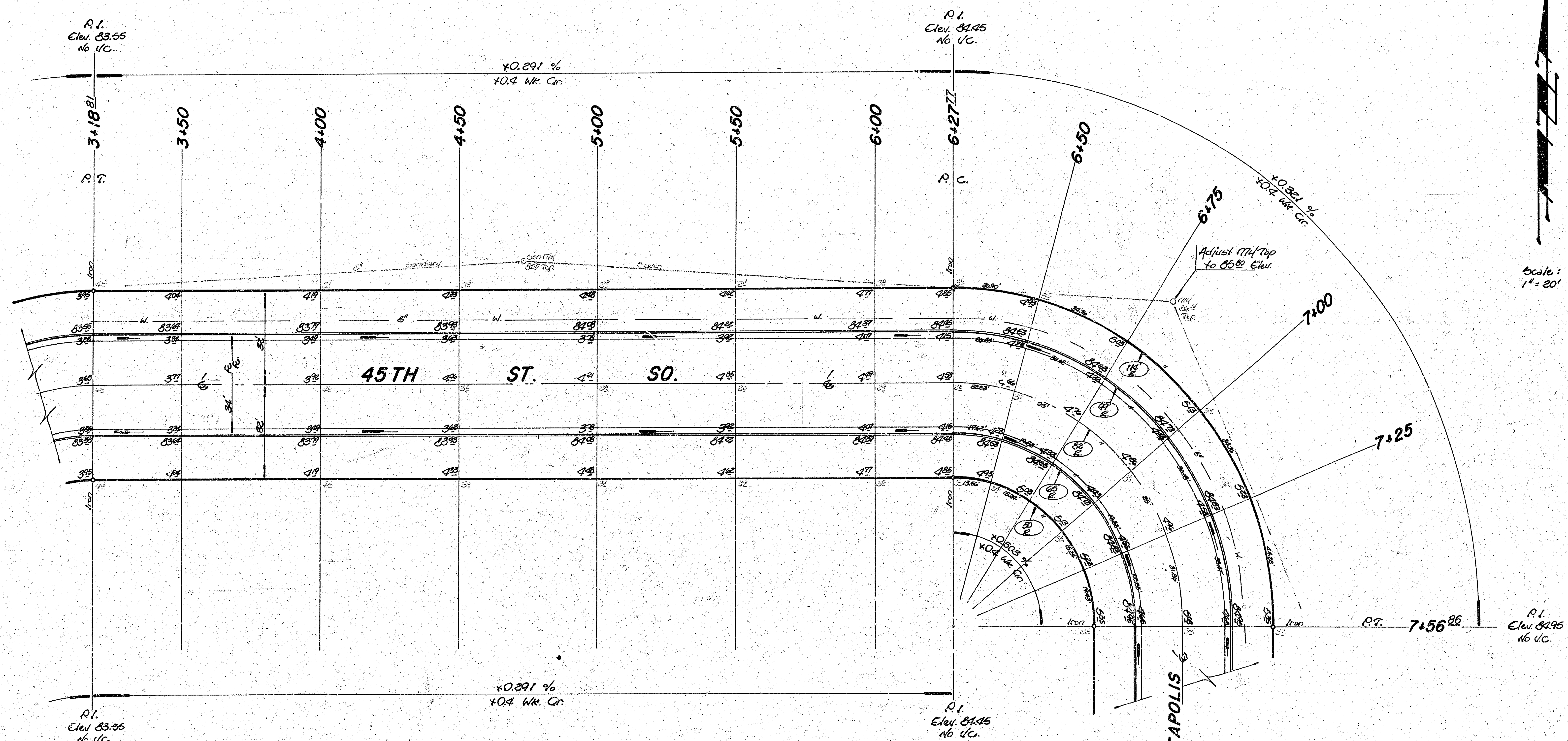
Curve Data Based on $\Delta = 84^{\circ}41'40''$

Sta.	Arc	From P.C. to Sta.	Length	Off. to Ch.	Off. to Ck.	Off. to Ck.
1+90.30			0'00.00'	0'00.00'	0'00.00'	0'00.00'
2+10	19.70'	26.64'	13.64'	6'52.57"	6'52.57"	6'52.57"
2+30	20'	26.03'	13.67'	6'52.14"	6'52.14"	6'52.14"
2+50	20'	26.03'	13.67'	6'52.14"	6'52.14"	6'52.14"
2+75	25'	32.50'	17.51'	8'44.03"	8'44.03"	8'44.03"
3+00	25'	32.50'	17.51'	8'44.03"	8'44.03"	8'44.03"
3+18.81	18.51'	34.01'	13.05'	6'54.18"	6'54.18"	6'54.18"

Deflection = 20.96187 mrad

KANSAS

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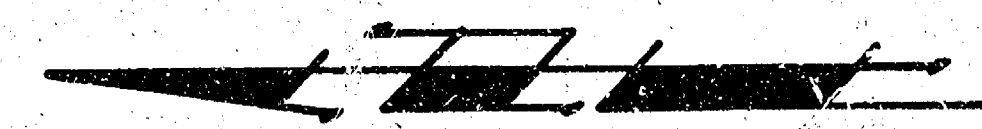
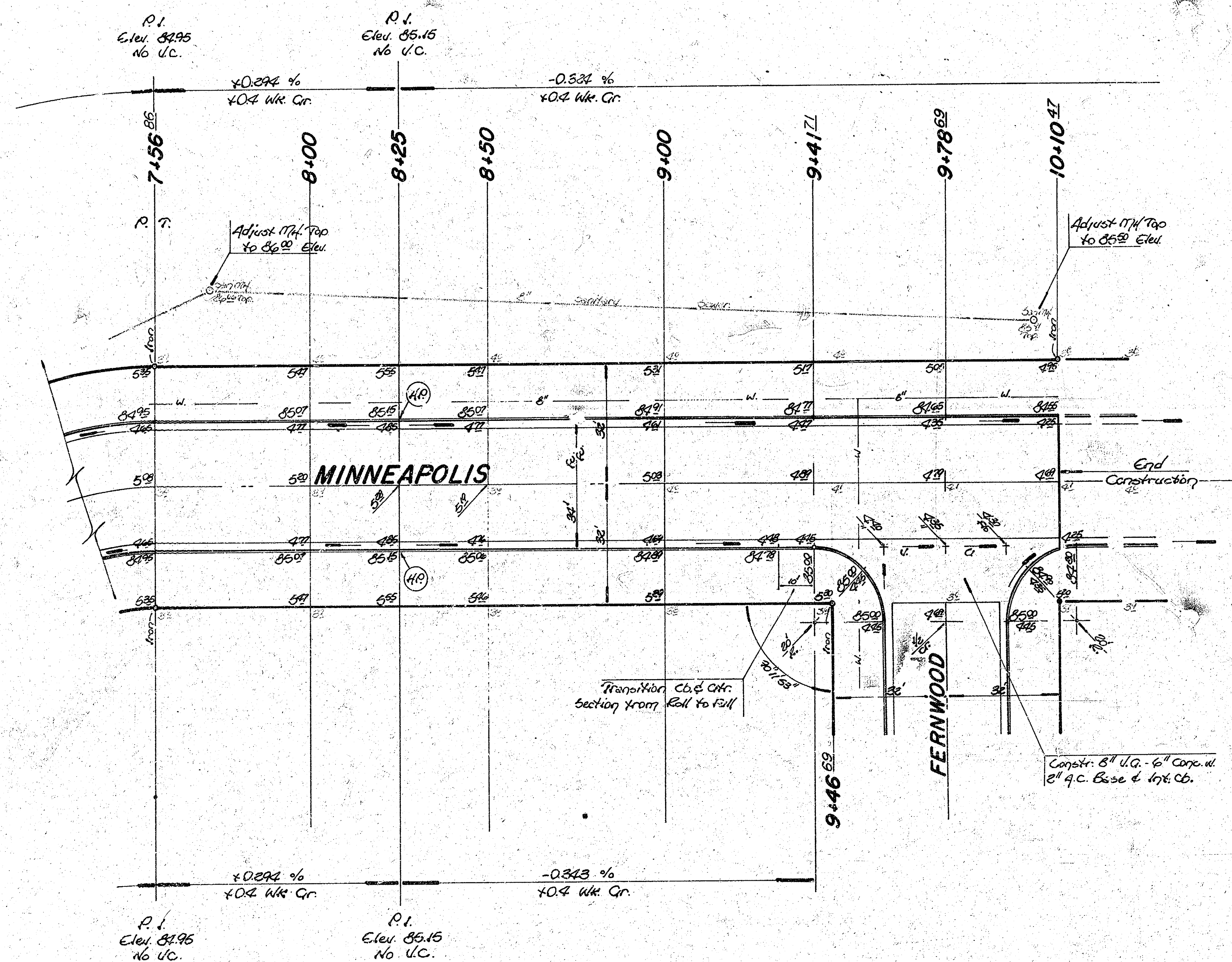
$\Delta = 90^{\circ}11'53''$ $R = 82.26'$ $T = 52.26'$ $L = 129.09'$ $LC = 116.17'$

Curve Data Based on Δ						$\Delta/C = 45^{\circ}05'56''$
Sta	Arc	Chord		Tangent	Offset	Tgt. Offset
		Station	Length			
6+18.277	22.25	22.25	15.41	0'00.00"	0'00.00"	
6+50	25	32.50	17.31	7'45.54"	7'45.54"	
6+75	25	32.50	17.31	8'44.03"	16'30.06"	
7+00	25	32.50	17.31	8'44.03"	25'14.05"	
7+25	25	32.50	17.31	8'44.03"	33'58.07"	
7+56.26	31.04	41.51	22.01	11'07.61"	45'05.65"	

Offset/ft. = 20.94187 min.

45TH ST. SO.

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Scale:
1" = 80'

INTERSECTION QUANTITIES	
1000	S.Y. 8" Concrete Pavement
1000	S.Y. 8" Asphaltic Conc. Pavement (6" Bituminous Base)
1000	S.Y. 4" Bituminous Base
1000	L.F. Combined Curb & Gutter
424	L.F. Integral Curb
100	S.F. 4" Wheelchair Ramp
100	S.F. 4" Walk
224	C.Y. Excavation
60	C.Y. Compacted Fill
4476	Lbs. Reinforcing Steel
2082	S.Y. Manipulation
25	Tons Lime or Cement
914	S.Y. V.G. 6" Concrete & 2" Asphaltic Concrete Base
516	C.Y. Borrow

MINNEAPOLIS

(7/1)