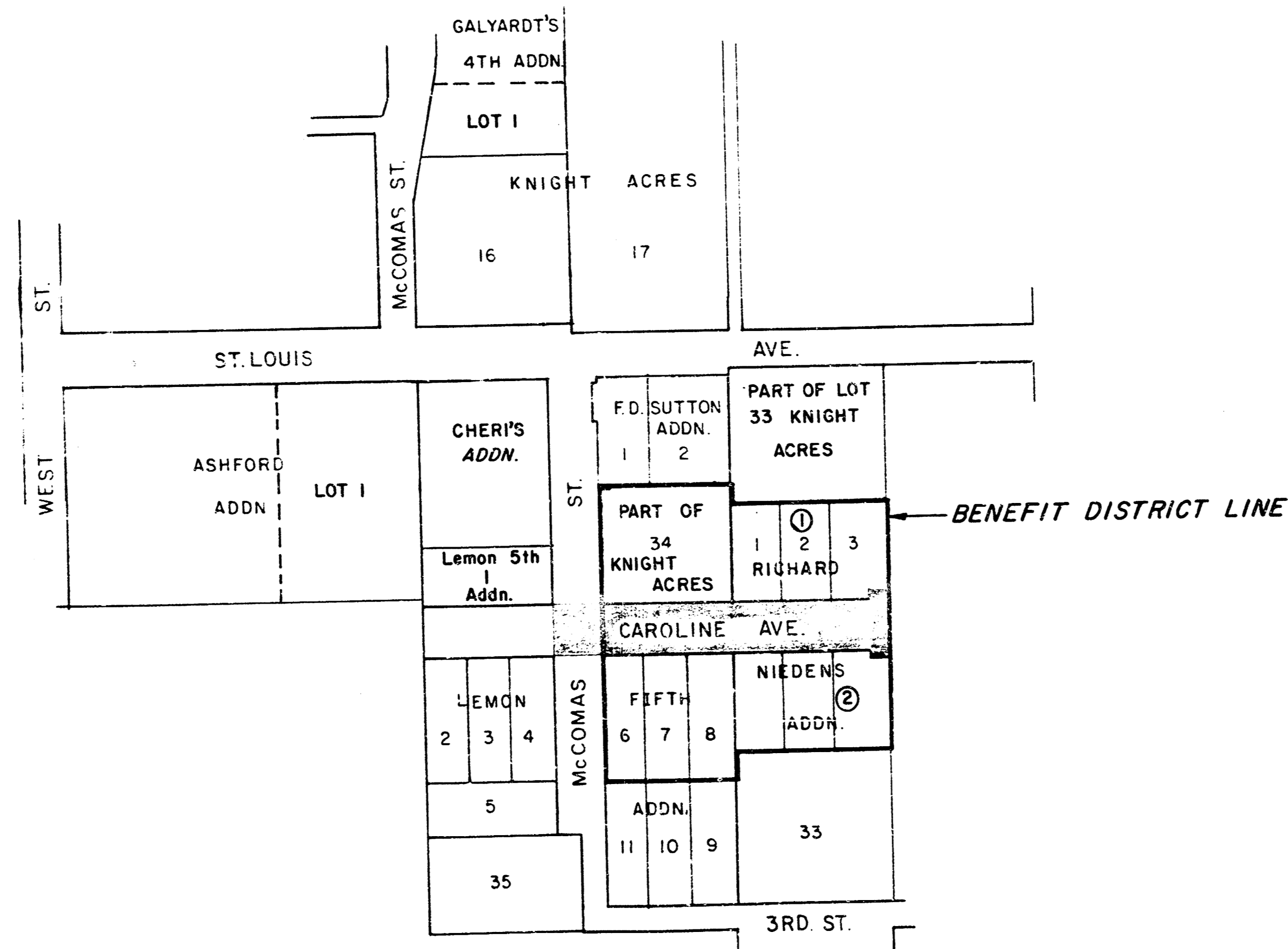


CAROLINE AVE.

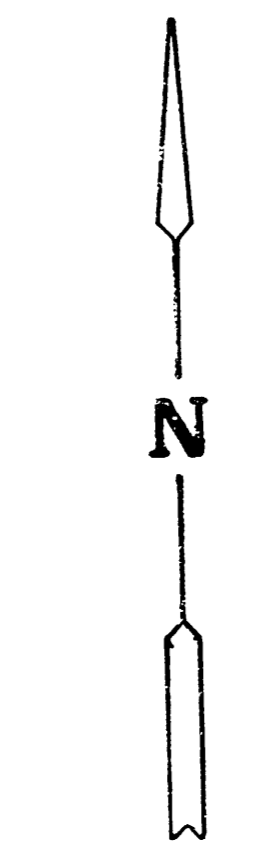
W.L. McCOMAS ST. TO E.L. LOT 3, BLK. I, RICHARD NIEDENS ADDN.
PROJECT NO. 472 76 245 81367 000 000 001

CITY OF WICHITA, KANSAS

M.E. LINDEBAK - CITY ENGINEER



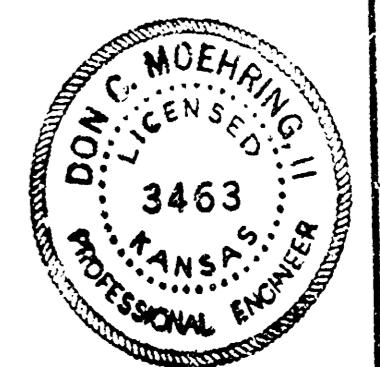
LOCATION MAP



Scale: 1"=150'

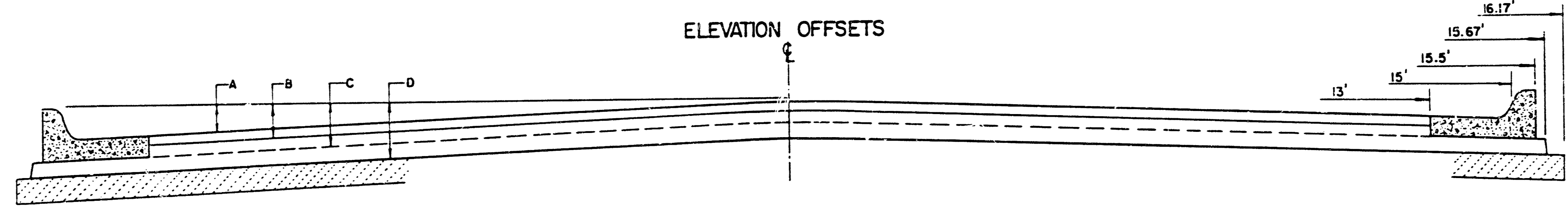
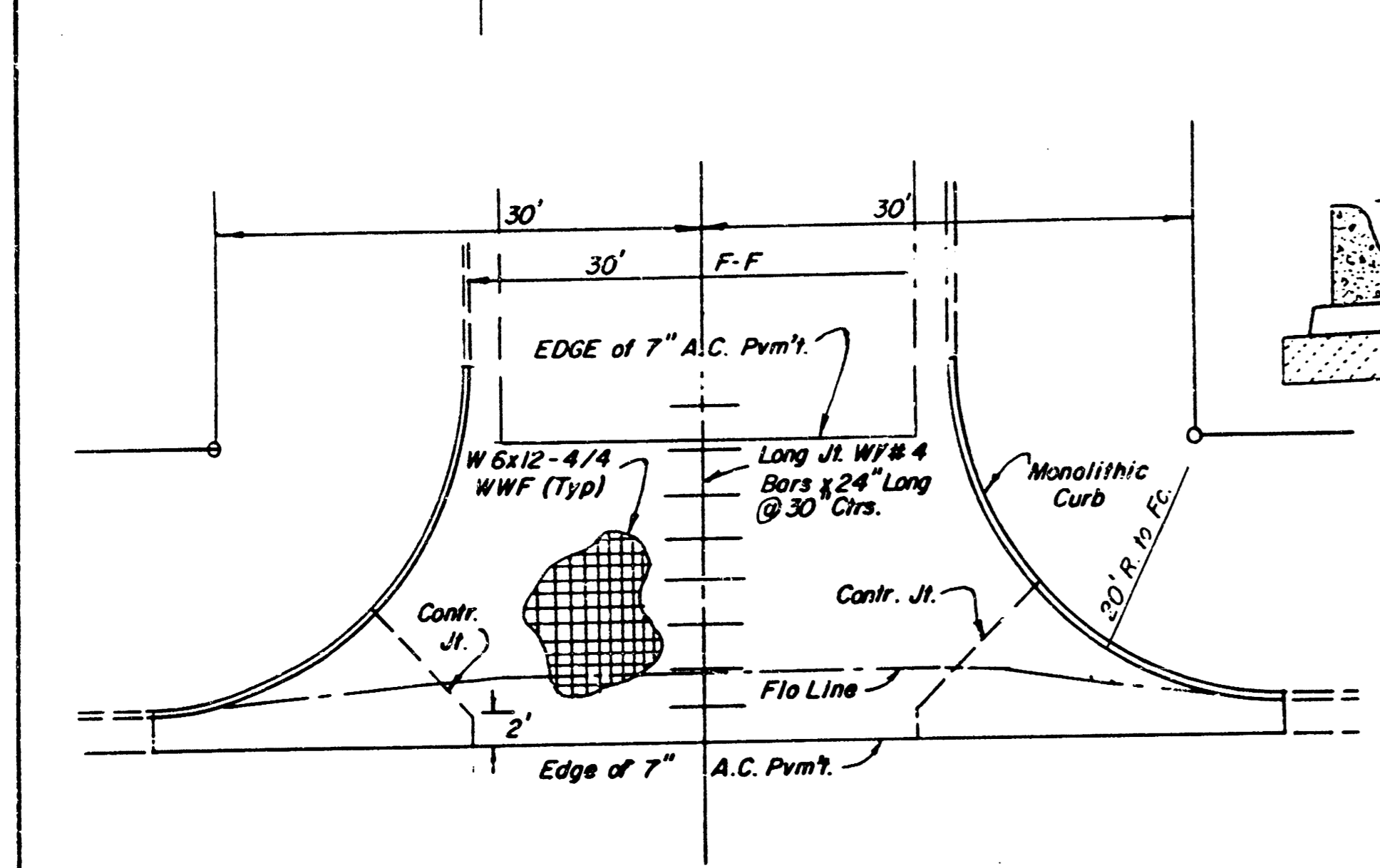
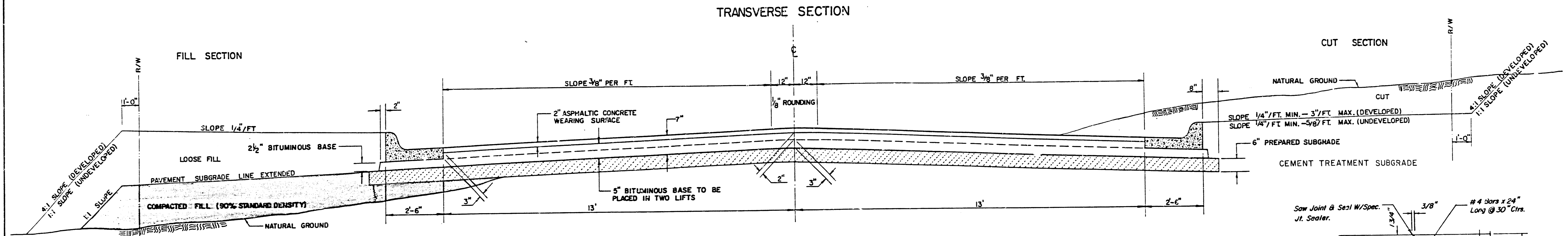
INDEX

SHEET NO.	TITLE
1	Cover Sheet
2-3	Typicals
4-5	Plan Sheets
6	Cross Sections

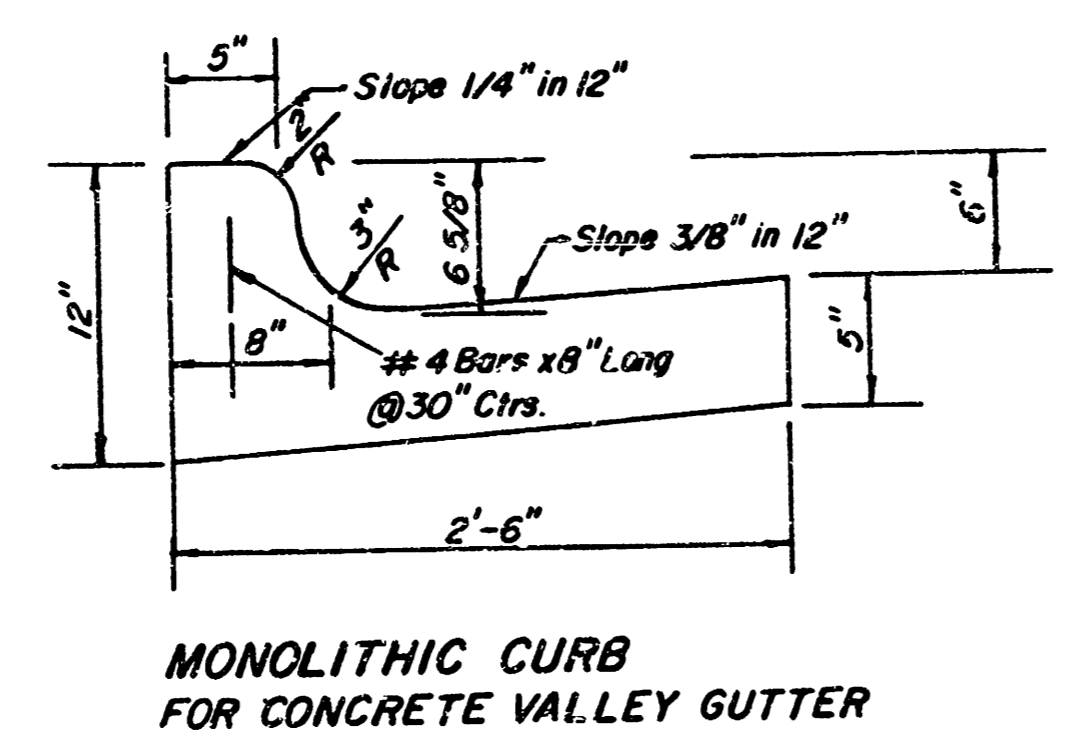
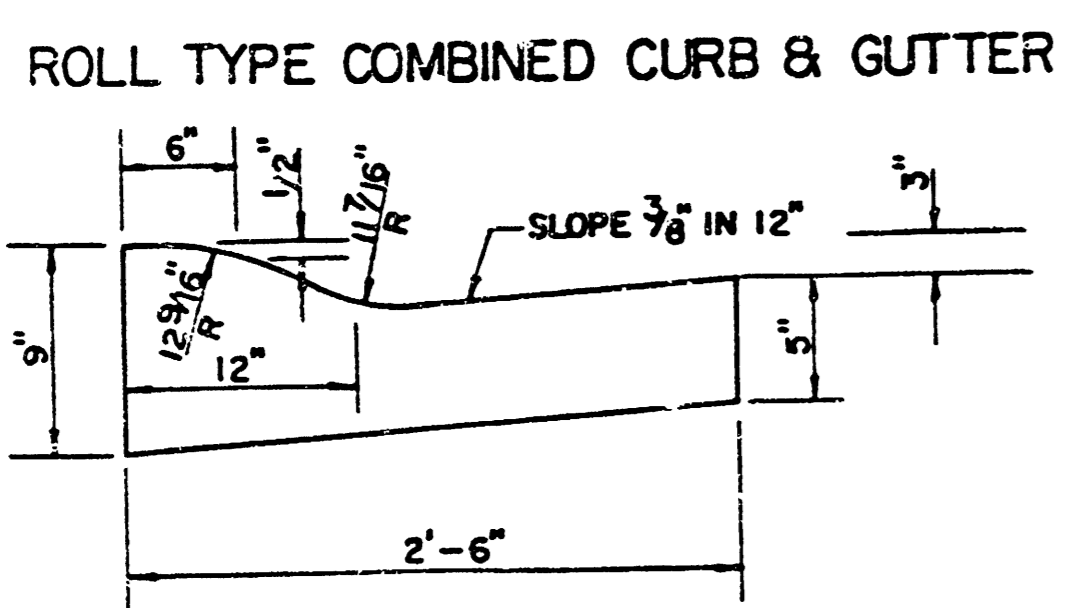
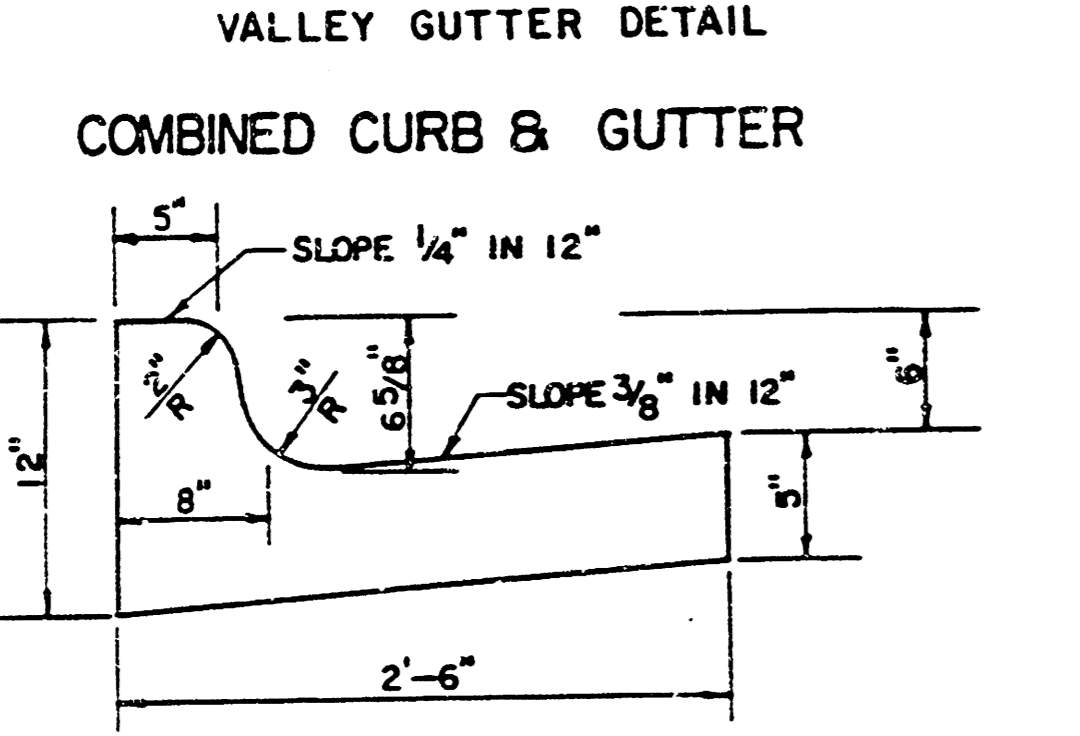
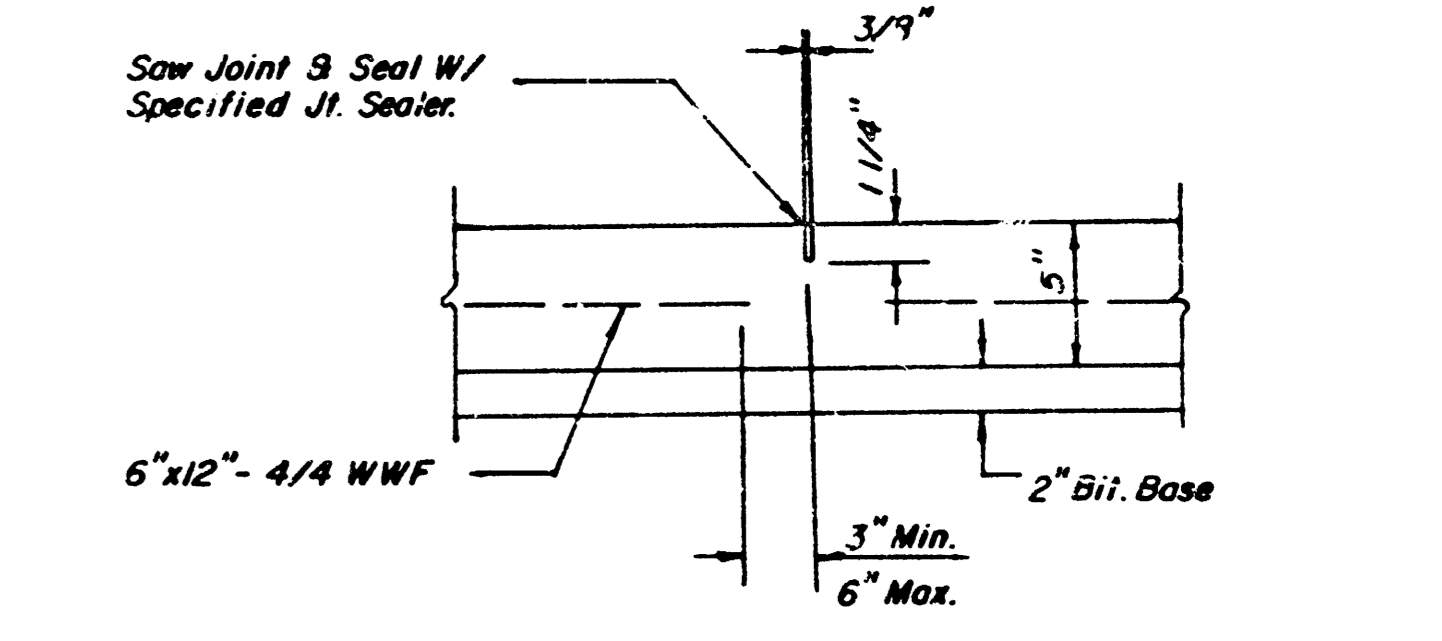
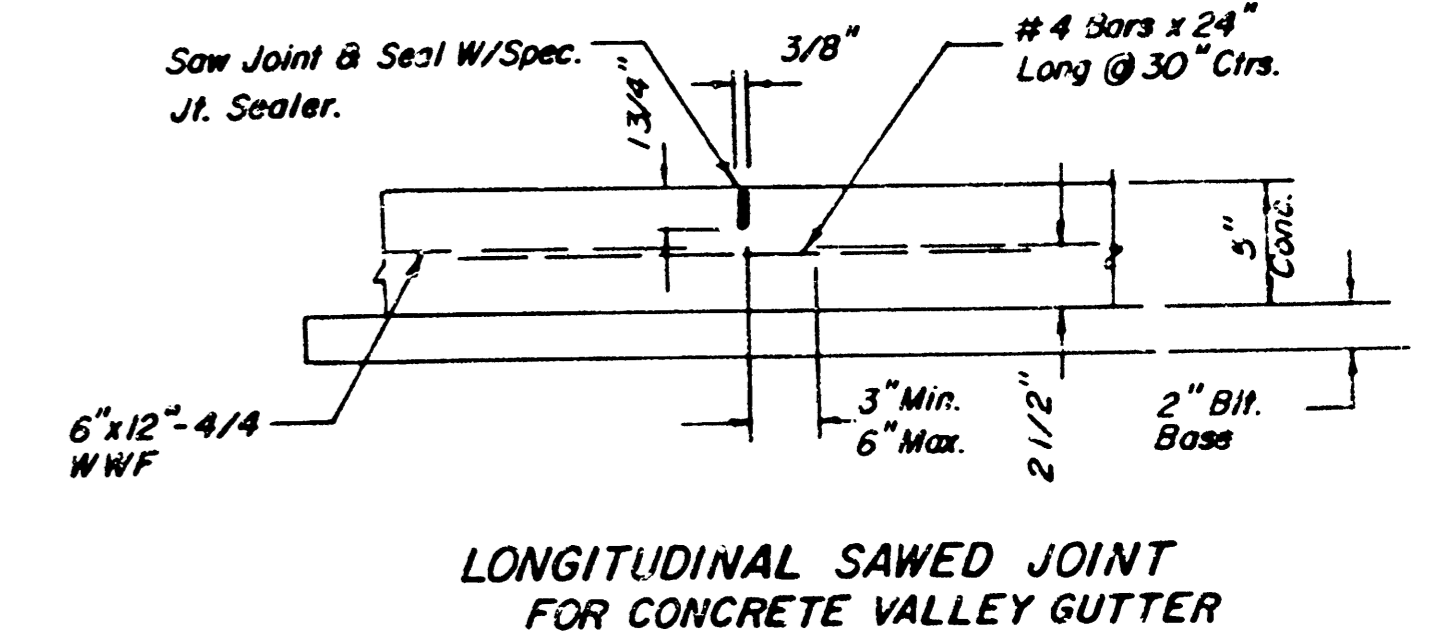


PROJECT DESCRIPTION		
CAROLINE AVENUE, W.L. McComas St. to E.L. Lot 3, Block 1, Richard Niedens Addn.		
PROJECT NUMBER		
472 76 245 81367 000 000 001		
BOOK NO.	LOOSE	APPROVED BY
DRAWN BY: CBS		DATE:
CITY OF WICHITA		REVISID:
DEPARTMENT OF ENGINEERING		
CITY ENGINEER	SCALE	
M.E. LINDEBAK	NOTED	

TYPICAL 3' PAVEMENT DETAILS



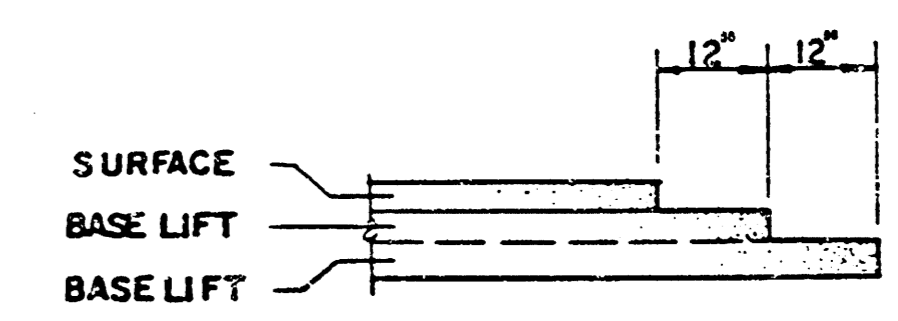
	DISTANCE FROM CENTERLINE (LT. & RT.)												
	0'	2'	4'	6'	7.5'	10'	12'	13'	15'	15.5'	15.6'	15.67'	16.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.10	0.14	0.21	0.27	0.32	0.39	0.46	0.49	—	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.27	0.31	0.38	0.44	0.49	0.56	0.63	0.66	—	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.44	0.49	0.57	0.64	0.70	0.79	0.87	0.90	0.98	1.00	1.00	—	—
D: TOP OF CURBS TO TOP OF SUBGRADE	0.69	0.73	0.80	0.87	0.93	1.01	1.08	1.12	1.19	1.21	1.21	1.23	—



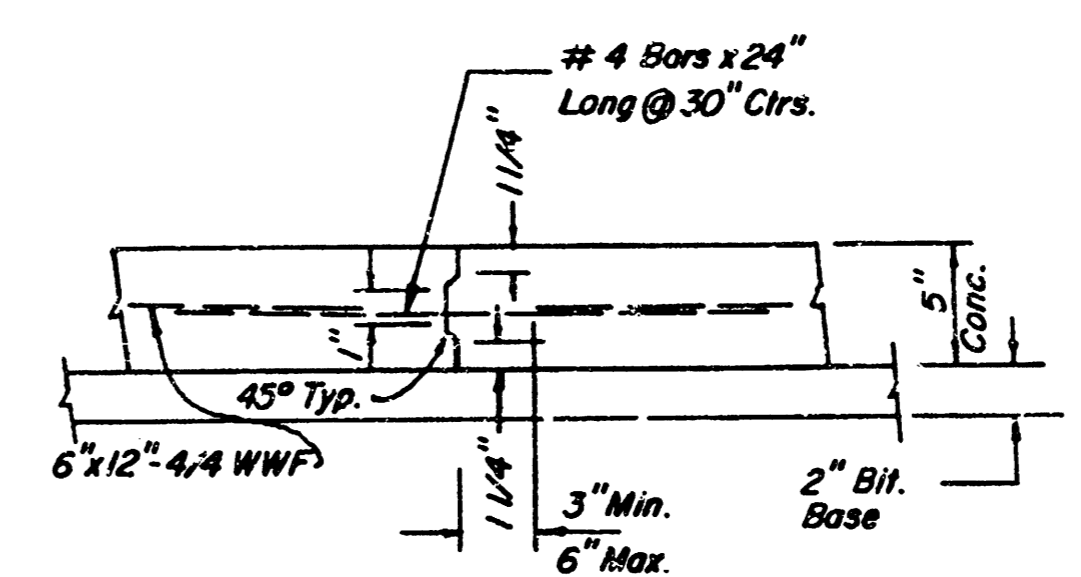
GENERAL NOTES

- 1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).
- 2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" BITUMINOUS BASE.
- 3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.
- 4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.
- 5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.
- 6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.

TRANSVERSE CONSTRUCTION JOINTS

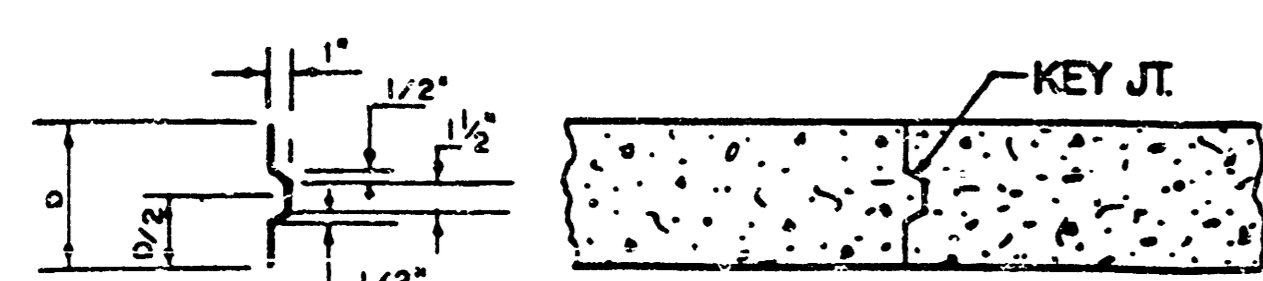


TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINTS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

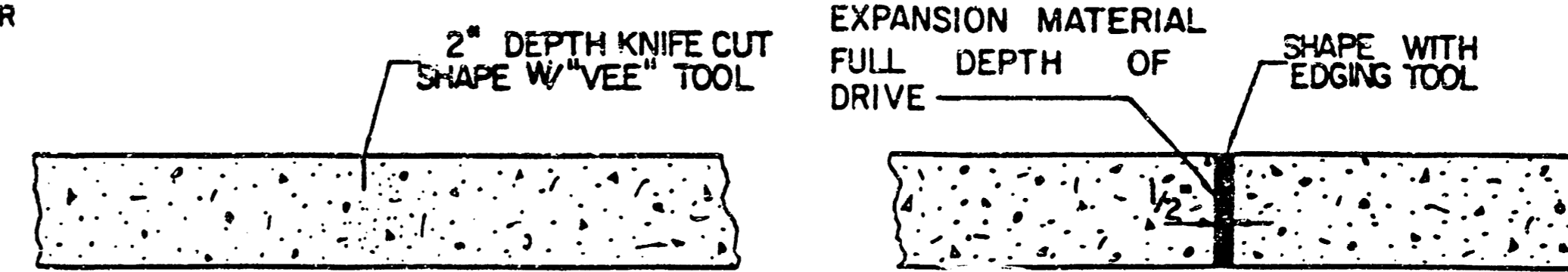


7 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 5 INCH BITUMINOUS BASE
 CITY OF WICHITA, KANSAS
 PROJECT NUMBER
 472 76 245 81367 000 000 001

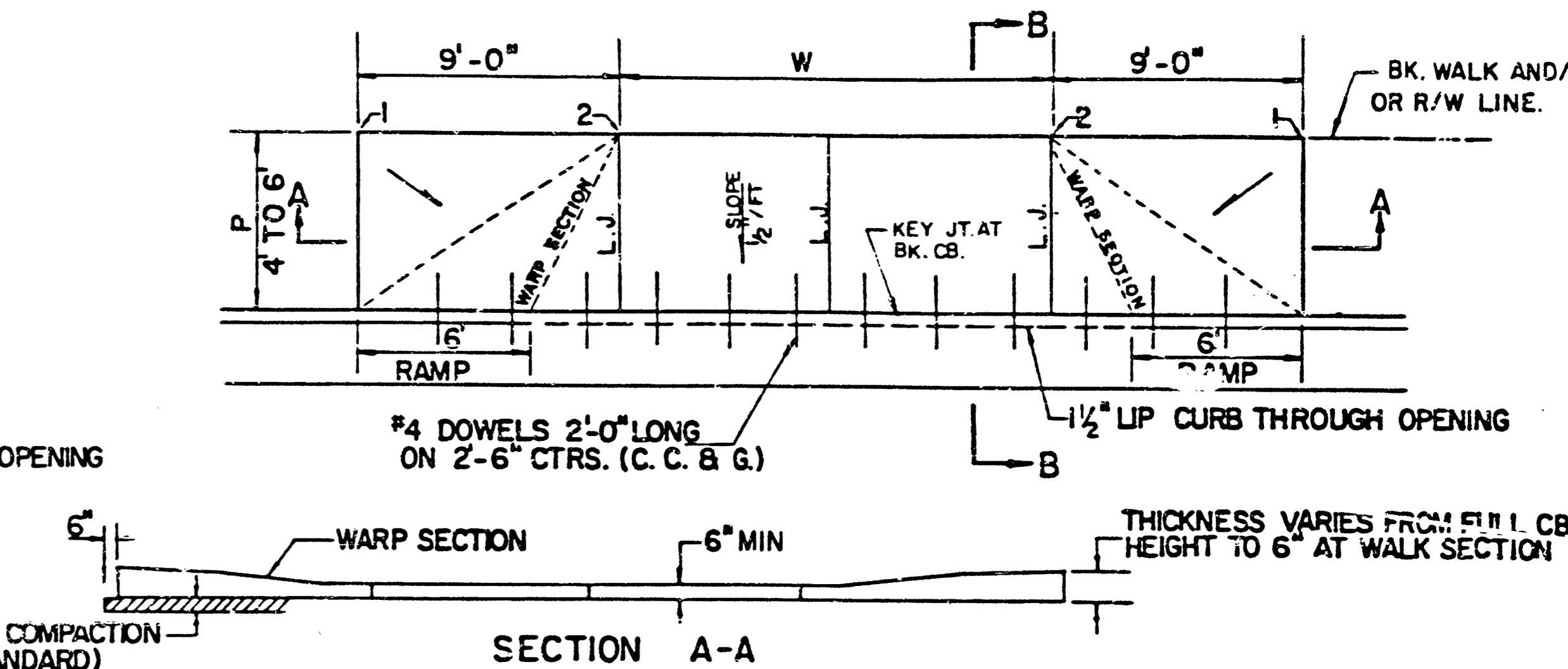
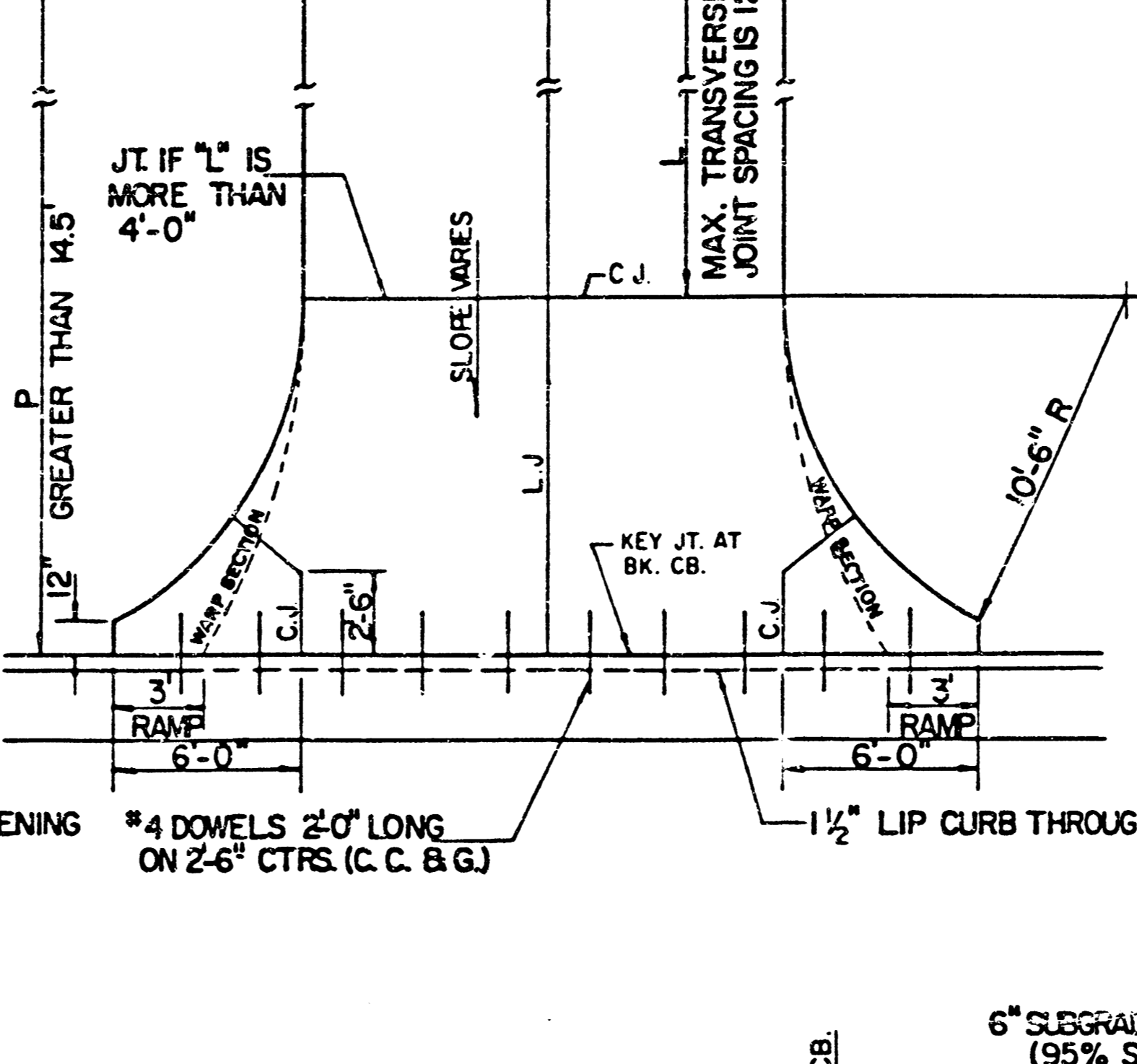
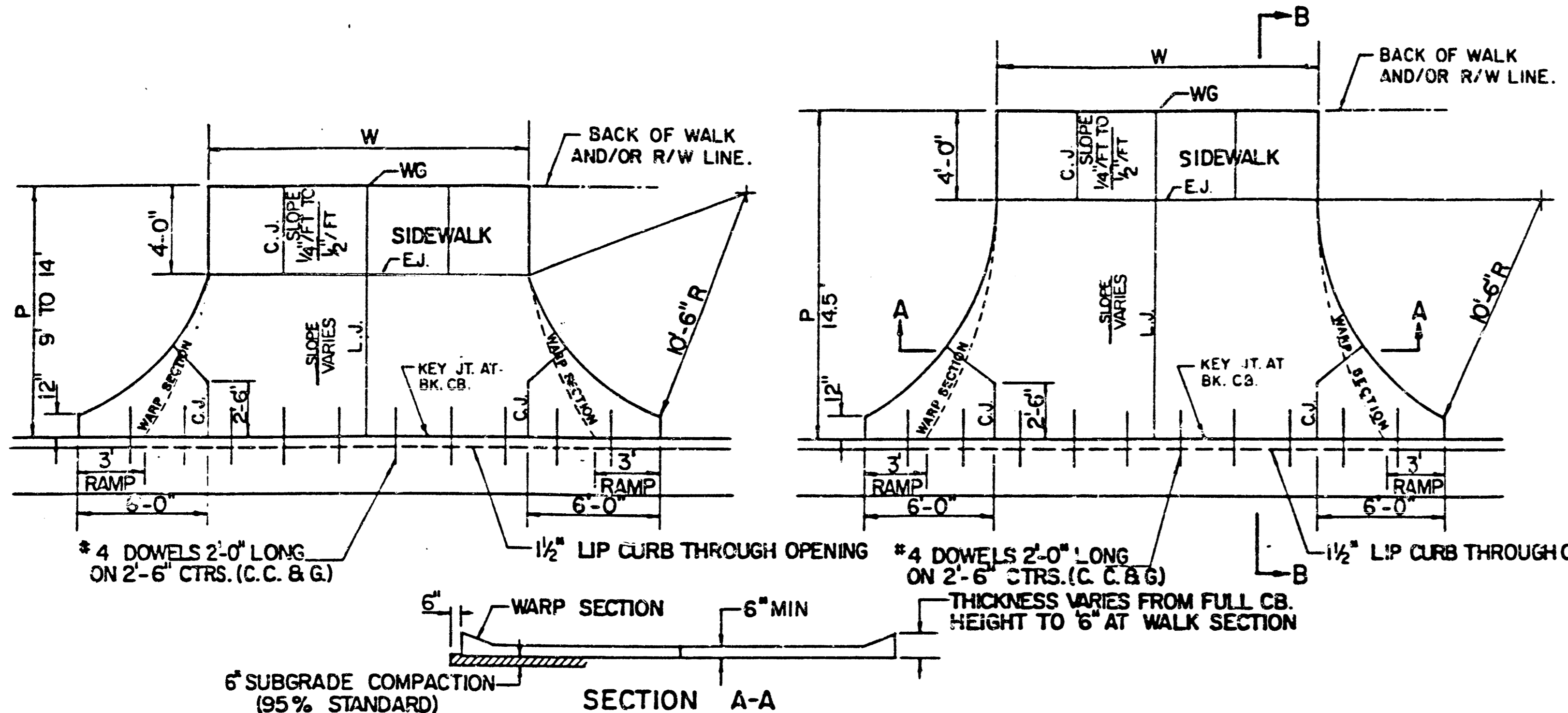
FILMED FROM THE BEST AVAILABLE COPY



ALT. LONGITUDINAL CONSTRUCTION JOINT



CONTRACTION JOINT (C.J.) OR LONGITUDINAL JOINT (L.J.) NO SAWN JOINTS WILL BE ALLOWED.
EXPANSION JOINT (E.J.)

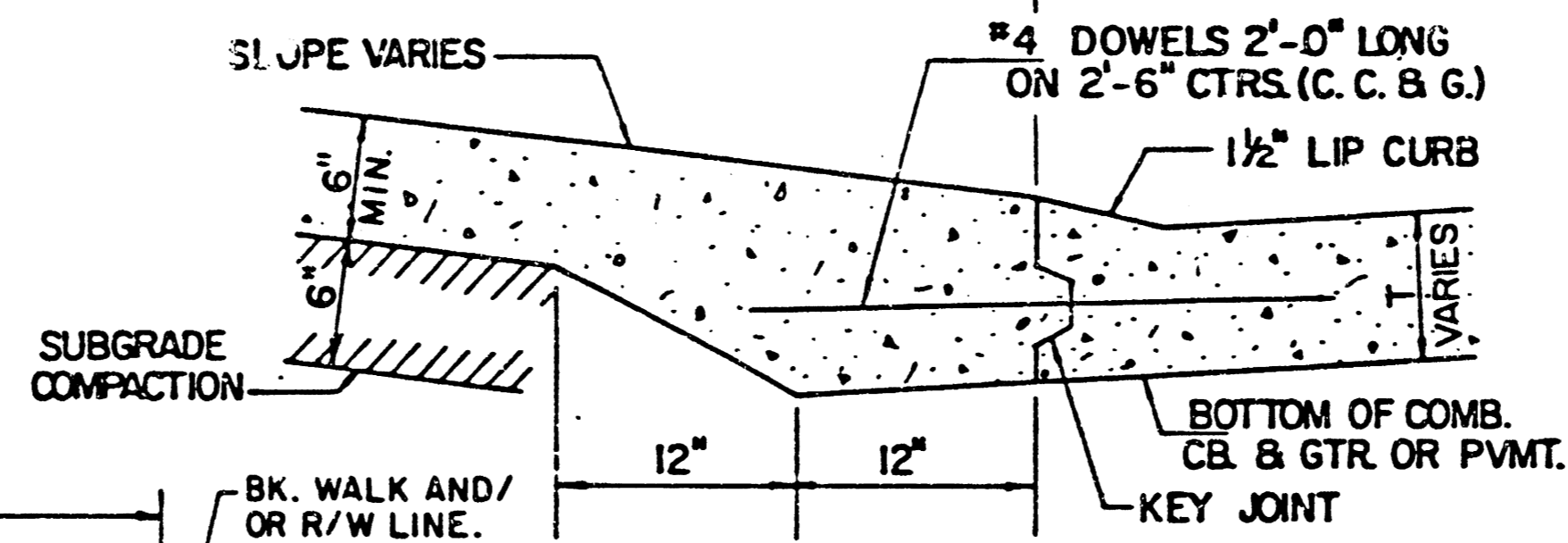


PARKING WIDTH "P"	9'	10'	11'	12'	13'	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.35	0.35	0.40	0.45	0.60	0.80	1.35	1.85	2.35	2.85	3.35	3.85	4.35
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.35	0.35	0.40	0.45	0.60	0.70	1.04	1.30	1.56	1.82	2.08	2.34	2.60
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.19	0.21	0.23	0.25	0.27	0.30	0.42	0.52	0.62	0.72	0.82	0.92	1.02
ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	-1.9	-1.6	-1.3	-1.0	-0.6	0.0	0.0	0.15	0.25	0.35	0.45	0.55	0.65

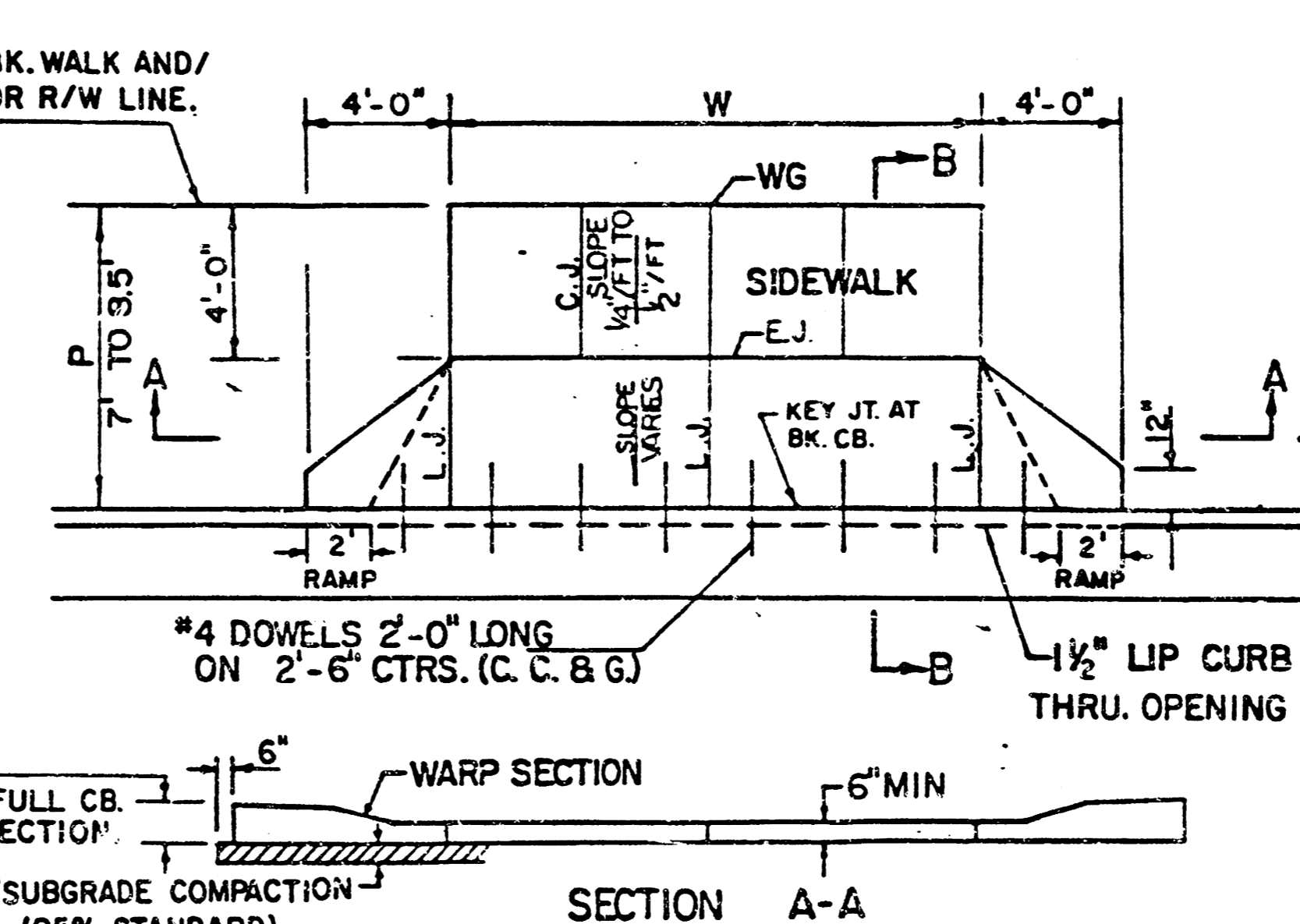
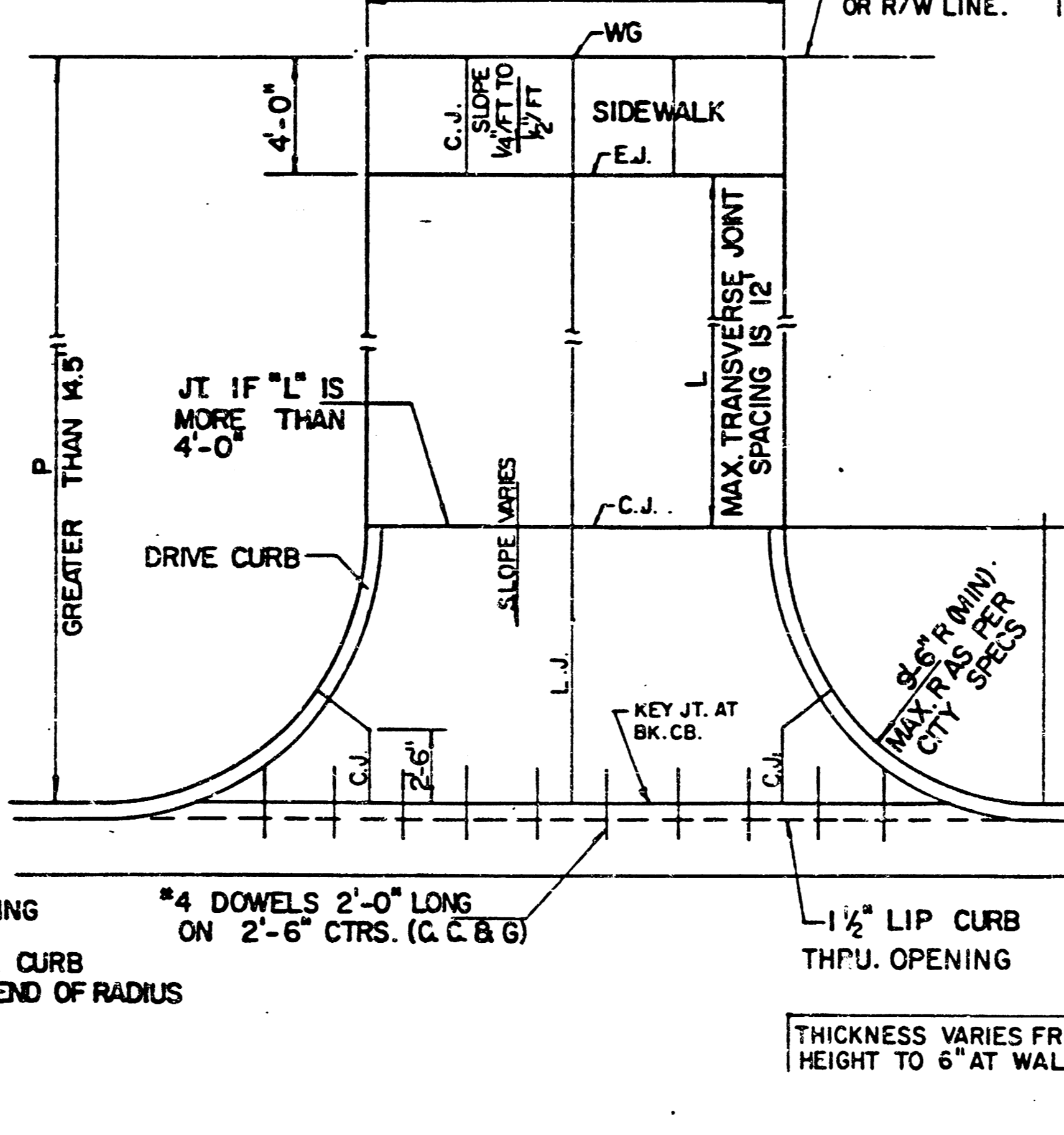
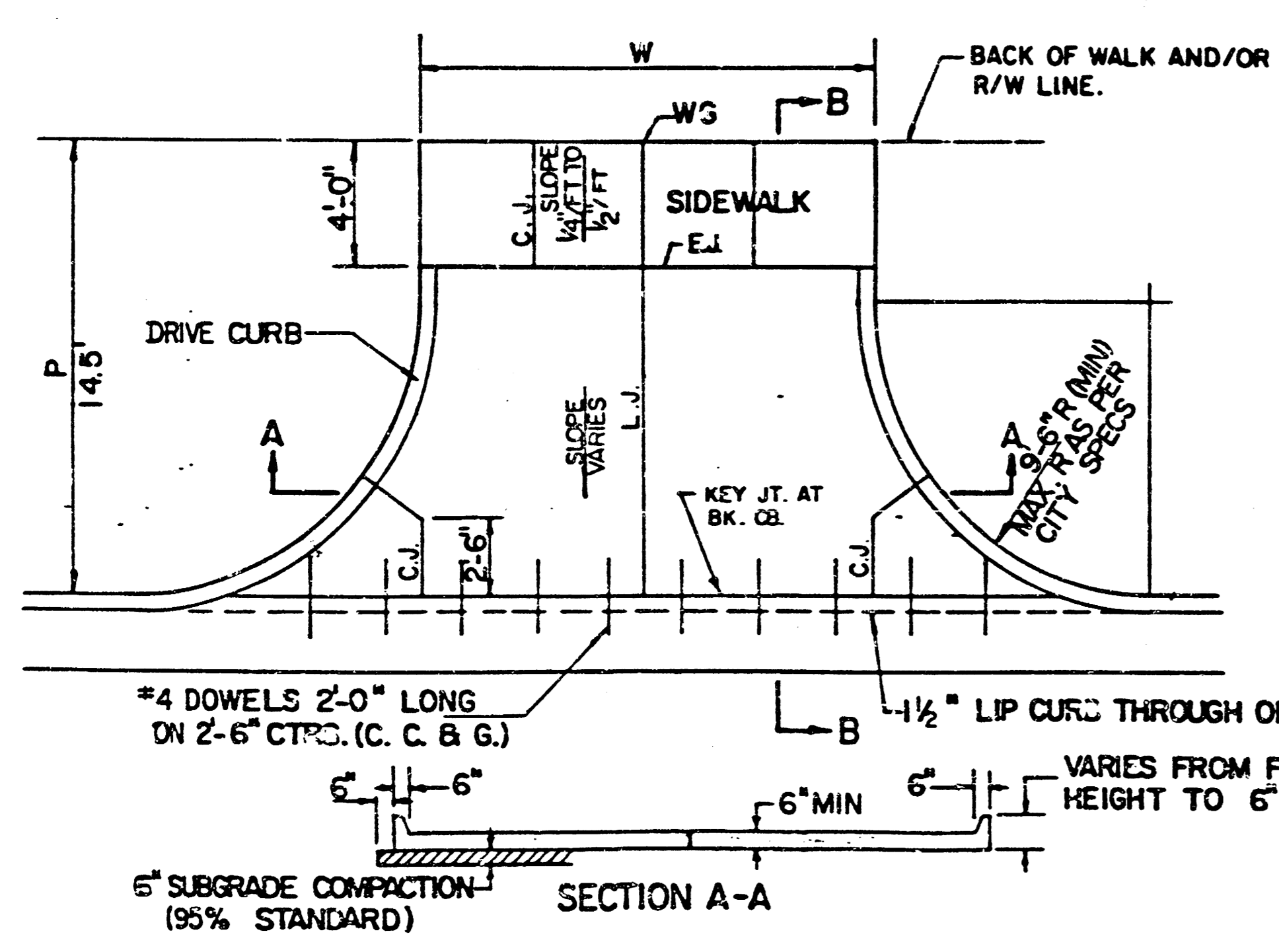
RADIUS RAMP DRIVES (P = 9.0' & GREATER)

PARKING WIDTH "P"	4'	4.5'	5'	5.5'	6'	6.5'
DIST. OF PT. "T" ABOVE TOP OF FULL CB	0.08	0.09	0.10	0.12	0.13	0.14
DIST. OF PT. "T" BELOW TOP OF FULL CB	-0.26	-0.24	-0.22	-0.20	-0.16	-0.16

FULL RAMP DRIVE (P=4.0' TO 6.5')



BACK OF CURB DETAIL SECTION B-B (no scale)



PARKING WIDTH "P"	7'	7.5'	8'	8.5'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB	0.00	0.10	0.20	0.30
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB	0.00	0.10	0.20	0.30
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB	0.15	0.16	0.17	0.17
ABSOLUTE MAX. DIST. OF PT. "WG" BELOW TOP OF FULL CB	-25	-20	-20	-20

FULL RAMP DRIVE (P=7.0' TO 8.5')

PARKING WIDTH "P"	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB	0.80	1.35	1.85	2.35	2.85	3.35	3.85	4.35
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB	0.70	1.04	1.30	1.56	1.82	2.08	2.34	2.60
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB	0.30	0.42	0.52	0.62	0.72	0.82	0.92	1.02
ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB	0.00	0.00	0.15	0.25	0.35	0.45	0.55	0.65

FULL RADIUS DRIVES (P=14.5' & GREATER)

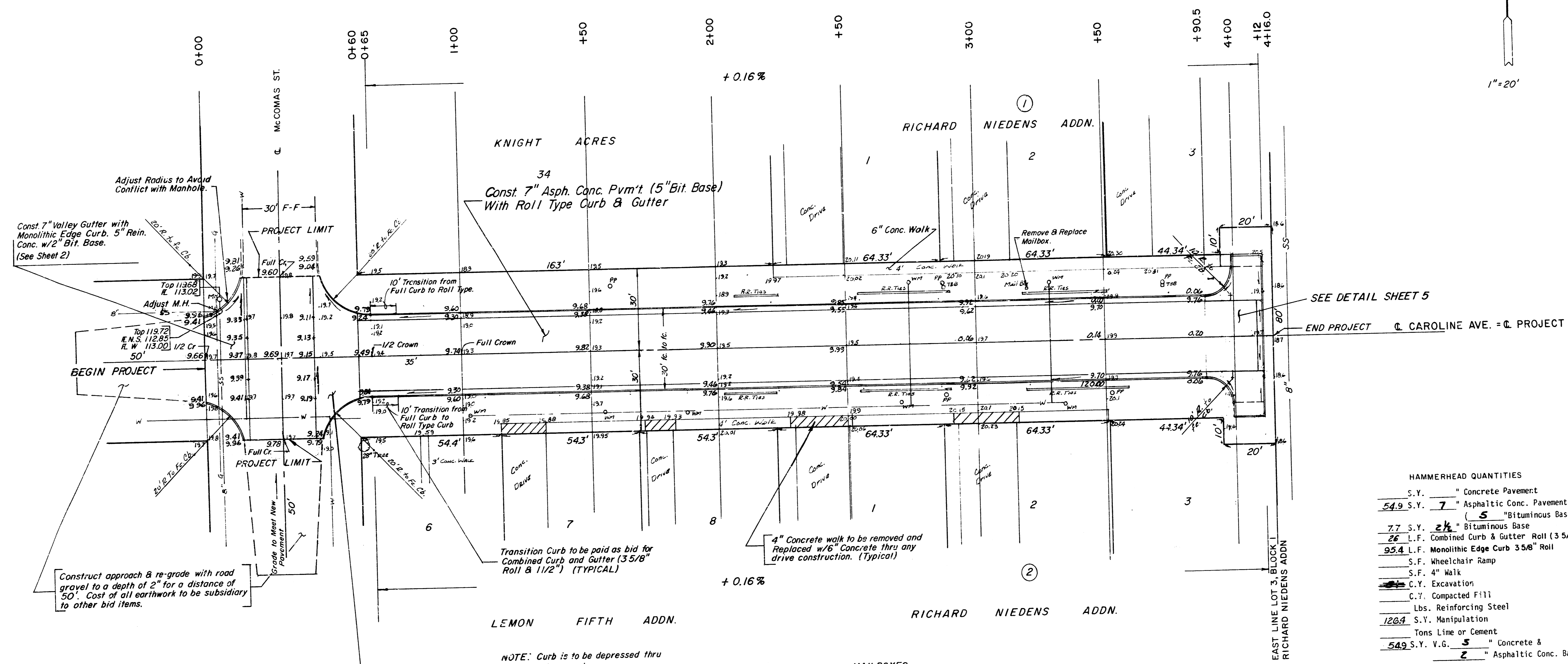
- GENERAL NOTES
- DRIVEWAY CONSTRUCTION DETAILED ON THIS SHEET IS FOR USE WITH FULL HEIGHT STREET CURBS AND IN AREAS WITHOUT FULL WALK CONSTRUCTION IN THE PARKING. SEE OTHER DETAIL SHEETS FOR DRIVEWAY CONSTRUCTION WITH ROLL CURB AND/OR FULL WALK.
 - ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTERLINE OF DRIVES HAVING A "P" DIMENSION OF 24' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 10' FOR DRIVES WITH A "P" DIMENSION GREATER THAN 24'.
 - DRIVEWAY WIDTH DENOTED AS "P" IN THE DETAIL DRAWINGS SHALL BE A MINIMUM OF 10' AND A MAXIMUM OF 30'. THE MAXIMUM SPACING FOR RADIUS TYPE DRIVES WITH CURBS THROUGH THE RADIUS SHALL NOT EXCEED 52' AT THE STREET CURB LINE.
 - CONSTRUCTION JOINT SPACING IN THE DRIVEWAY WALK SECTION SHALL BE A MINIMUM OF 3' AND A MAXIMUM OF 6' AND ARE TO BE EQUALLY SPACED WITHIN THIS RANGE. WALK SECTION SHALL BE CONSTRUCTED TO THE SAME THICKNESS AS THE DRIVEWAY.
 - DOWEL BARS SHALL BE OMITTED FROM THE KEYED CONSTRUCTION JOINT ALONG THE BACK OF THE STREET CURB LINE WHEN DRIVEWAYS ARE CONSTRUCTED IN CONJUNCTION WITH NEW CONCRETE PAVEMENT CONSTRUCTION.
 - ADDITIONAL THICKNESS OF DRIVE AS INDICATED IN THE DRAWINGS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE DRIVEWAY CONSTRUCTION.
 - ONE HALF INCH EXPANSION JOINTS SHALL BE INSTALLED WHEREVER DRIVE CONSTRUCTION ABUTS SIDEWALK. ONE HALF INCH EXPANSION JOINTS SHALL ALSO BE INSTALLED ALONG THE PROPERTY LINE AND/OR BACK OF WALK LINE WHEN DRIVE CONSTRUCTION ALONG THIS LINE ABUTS CONCRETE PARKING LOTS OR CONCRETE DRIVE EXTENSION.
 - ALL DRIVEWAYS SHALL BE A MINIMUM OF 6" IN THICKNESS AND SHALL BE WITHOUT REINFORCEMENT. DRIVEWAYS MAY BE CONSTRUCTED THICKER THAN 6" AND THEY MAY BE REINFORCED WITH 6"x12" W-8 WELDED WIRE FABRIC WHEN PROPERLY AUTHORIZED BY THE PROPERTY OWNER WITH THE ENGINEER'S CONCURRENCE.
 - OPTIMUM DRIVEWAY ELEVATIONS SHOWN IN THE TABLES ARE TO BE USED WHEREVER POSSIBLE. ABSOLUTE MAXIMUM AND MINIMUM ELEVATIONS ARE TO BE USED ONLY WHEN THESE VALUES WILL PERMIT NEW CONSTRUCTION TO MATCH EXISTING DRIVES OR PARKING LOTS. VALUES SHOWN IN THE TABLES ARE BASED ON A FULL CURB HEIGHT ELEVATION OF 0.55' ABOVE THE GUTTER FLOW LINE AND MUST BE ADJUSTED ACCORDINGLY FOR OTHER CURB HEIGHTS. VALUES SHOWN IN THE TABLES WITH MINUS SIGNS INDICATE ELEVATIONS BELOW TOP OF FULL HEIGHT CURB.

SCALE: 1" = 5'

STANDARD DRIVE ENTRANCES
FULL HEIGHT CURB
 CITY OF WICHITA, KANSAS
 PROJECT NUMBER
 472 76 245 81367 000 000 001

FILMED FROM THE BEST AVAILABLE COPY.....

B.M. 120.20 Step bench in Power Pole N.W. corner Kessler and St. Louis.
 B.M. 121.37 R.R. spike in Power Pole S.W. corner McComas and St. Louis.



Adjust Radius to Avoid Conflict with Manhole.
 Const. 7" Valley Gutter with Monolithic Edge Curb, 5" Rein. Conc. w/2" Bit. Base. (See Sheet 2)

Construct approach & re-grade with road gravel to a depth of 2" for a distance of 50'. Cost of all earthwork to be subsidiary to other bid items.

Transition Curb to be paid for by Combined Curb and Gutter (3 5/8" Roll & 1 1/2") (TYPICAL)

4" Concrete walk to be removed and Replaced w/6" Concrete thru any drive construction. (Typical)

SEE DETAIL SHEET 5

END PROJECT @ CAROLINE AVE. = PROJECT

INTERSECTION QUANTITIES

S.Y.	Concrete Pavement	
173.3	S.Y. 7" Asphaltic Conc. Pavement (5" Bituminous Base)	
	S.Y. Bituminous Base	
85.2	L.F. MONOLITHIC EDGE CURB (5 5/8")	
	S.F. Wheelchair Ramp	
	S.F. 4" Walk	
100.4	C.Y. Excavation	
	C.Y. Compacted Fill	
	Lbs. Reinforcing Steel	
347.8	S.Y. Manipulation	
	Tons Lime or Cement	
168.5	S.Y. V.G. 5" Concrete & 2" Asphaltic Conc. Base	

Const. 7" Valley Gutter w/Monolithic Edge Curb, 5" Rein. Conc. w/2" Bit. Base. (See Sheet 2)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.

MAILBOXES
 Mailboxes within the limits of this project shall be removed & replaced by the Contractor as approved by the Engineer. Contractor will be required to make Satisfactory provisions for mail delivery to properties affected by this Project during its Construction.

RAILROAD TIE REMOVAL
 RAILROAD TIES SHALL BE REMOVED AND SALVAGED BY THE CONTRACTOR AND GIVEN TO THE ADJACENT PROPERTY OWNER. IN THE EVENT THAT THE PROPERTY OWNER DOES NOT WANT THE R.R. TIES, THE CONTRACTOR SHALL DISPOSE OF SAME IN A MANNER ACCEPTABLE TO THE FIELD ENGR. THIS WORK TO BE DONE AT NO ADDITIONAL COST TO THE PROJECT.

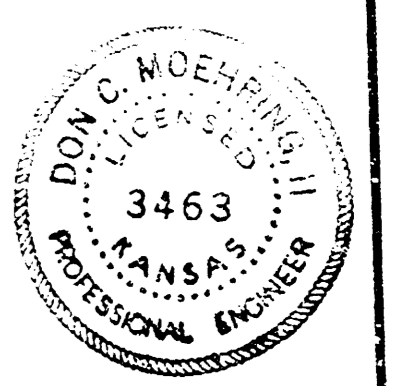
EXCAVATION

230.1	Cu. Yds.
+10%	23.0
253.1	Cu. Yds.

1662 Sq. Yds. Manipulation

HAMMERHEAD QUANTITIES

S.Y.	Concrete Pavement	
54.9	S.Y. 7" Asphaltic Conc. Pavement (5" Bituminous Base)	
7.7	S.Y. 2 1/2" Bituminous Base	
26	L.F. Combined Curb & Gutter Roll (3 5/8")	
95.4	L.F. Monolithic Edge Curb 3 5/8" Roll	
	S.F. Wheelchair Ramp	
	S.F. 4" Walk	
	C.Y. Excavation	
	C.Y. Compacted Fill	
	Lbs. Reinforcing Steel	
126.4	S.Y. Manipulation	
	Tons Lime or Cement	
54.9	S.Y. V.G. 5" Concrete & 2" Asphaltic Conc. Base	

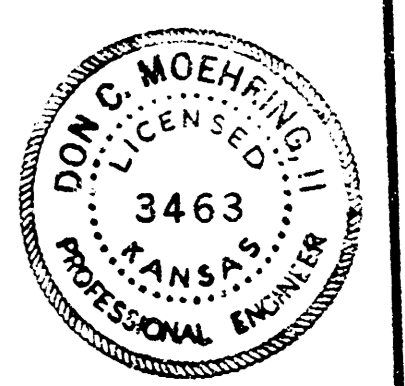
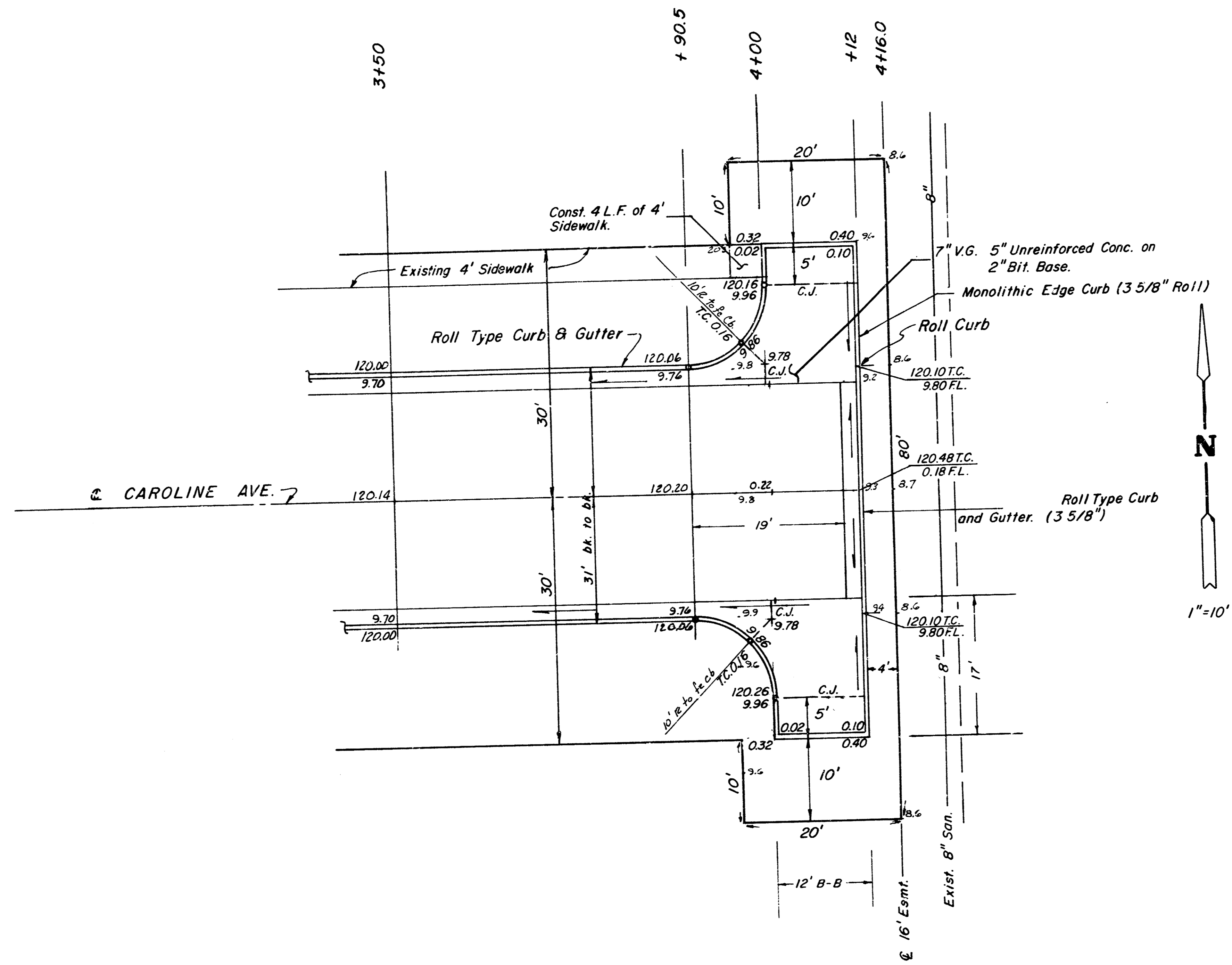


CAROLINE AVENUE
 FROM W.L. McCOMAS TO E.L. LOT 3, BLOCK 1,
 RICHARD NIEDENS ADDITION

PROJECT NUMBER
 472 76 245 81367 000 000 001

M.E. LINDEBAK CITY ENGINEER
 MOEHRING & ASSOCIATES
 CONSULTING ENGINEERS

FILMED FROM THE BEST AVAILABLE COPY



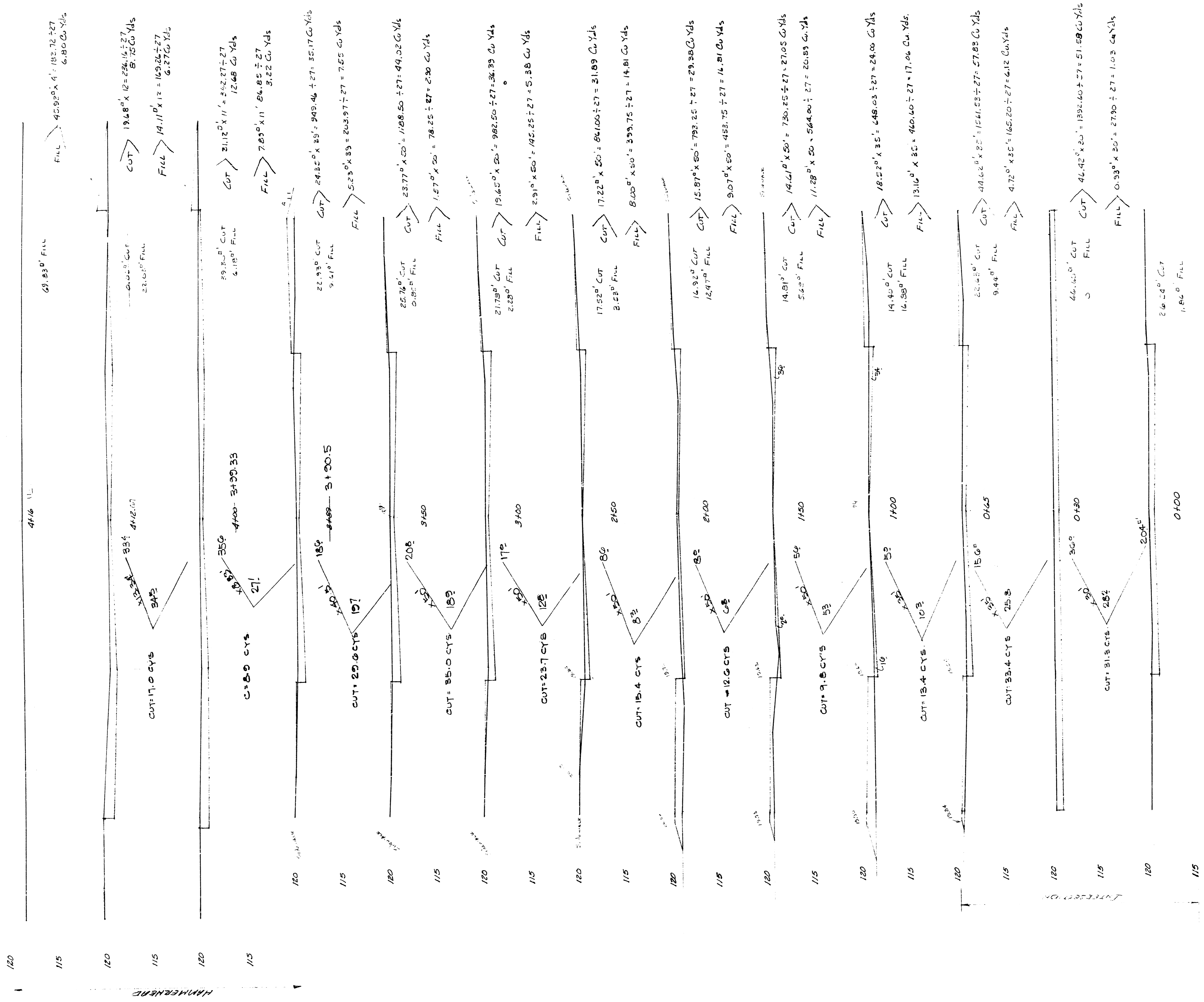
HAMMERHEAD DETAIL
CAROLINE AVE

PROJECT NUMBER
 472 75 245 81367 000 000 001

5/6

FILMED FROM THE BEST AVAILABLE COPY

0 10 20 30 40 50 60 70 80



CAROLINE AVENUE - FROM THE W. LINE Mc COMAS ST.
 TO THE E. LINE OF LOT 3, BLOCK 1, RICHARD
 NIEDENS ADDITION.
 472 76 245 81367 000 000 001



EARTHWORK THIS SHEET

EXCAV. 3159
 230.1
 FILL 109 Cu Yds
 LOOSE

30 20 10 0 5 10 20 30

FILED FROM THE BEST AVAILABLE COPY