1/0

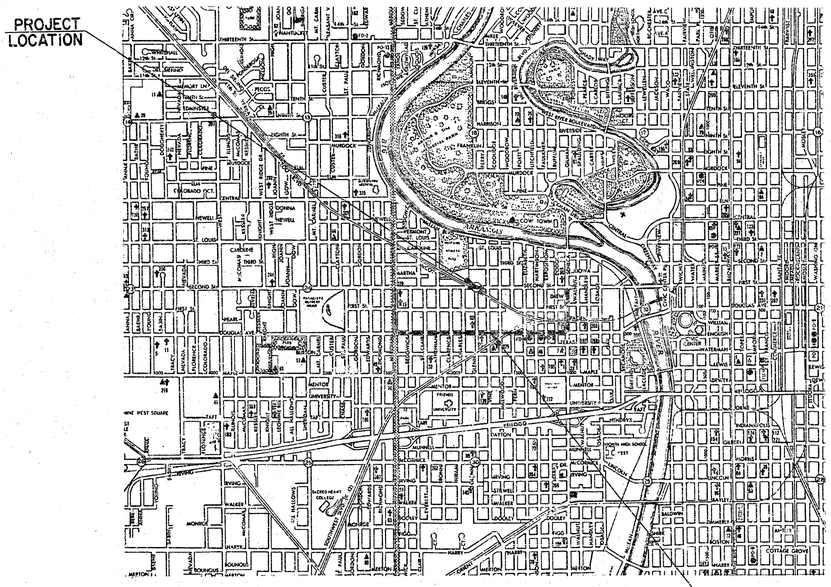
CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, P.E., CITY ENGINEER

PAVING MODIFICATIONS IN CONNECTION WITH RUBBERIZATION OF MISSOURI PACIFIC RAILROAD CROSSING AT SECOND AND GLENN

PROJECT NO. 472-76-286-38200-000-006-001

INDEX OF SHEETS

1. TITLE SHEET
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6. COMB. C. & G. (4'') & CONC. FLUME DETAILS
7. STANDARD DRIVE ENTRANCE DETAILS
8. SECOND STREET CROSS SECTIONS
9. GLENN CROSS SECTIONS



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SCALE: 1"=2,000'

GENERAL NOTES

1. SECOND STREET AND GLENN SOUTH OF SECOND STREET SHALL BE CLOSED TO THROUGH TRAFFIC DURING CONSTRUCTION OF THIS PROJECT. PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING BARRICADES AND DETOUR SIGNING AS FURTHER PROMULGATED BY PROJECT SPECIAL PROVISIONS.

2. UTILITY SERVICE LINES, POWER POLES, VALVE BOXES, METERS, ETCETERA, ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

3. EXCEPT AT LOCATIONS WHERE THE PLANS SPECIFICALLY REQUIRE FULL DEPTH SAW CUTS, A SAW CUT OF AT LEAST ONE-HALF THE DEPTH OF EXISTING SURFACE COURSES OR ONE-FOURTH THE DEPTH OF THE EXISTING TOTAL PAVEMENT THICKNESS SHALL BE PROVIDED AT LOCATIONS WHERE PROPOSED CONSTRUCTION ABUTS AN EXISTING SURFACE COURSE OR PAVEMENT FOR WHICH PARTIAL REMOVAL OF THAT SURFACE OR PAVEMENT IS REQUIRED. SAWED JOINT TO FACILITATE REMOVAL WITHIN THREE (3) FEET OF EXISTING JOINTS WILL NOT BE PERMITTED AND FOR SUCH INSTANCES THE LIMITS OF REMOVAL SHALL EXTEND TO THE EXISTING JOINT. SUCH SAW CUTS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE CONSIDERED AS SUBSIDIARY TO THE REMOVAL OF THE SURFACE OR PAVEMENT.

4. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE, AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.

5 REMOVAL OF EXISTING CONCRETE PARKING LOT PAVEMENTS, ASPHALT PARKING LOT PAVEMENTS, ASPHALT DRIVEWAY PAVEMENTS AND/OR ASPHALT SIDEWALK PAVEMENTS WILL BE PAID FOR AS SQUARE FEET OF ASPHALT PARKING LOT, WALK AND DRIVE REMOVED.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL 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.

7. LIMITS OF EARTHWORK SHALL MATCH EXISTING GROUND ELEVATIONS AT THE RIGHT-OF-WAY LINE UNLESS OTHERWISE NOTED ON THE PLANS.

8. THE CONTRACTOR SHALL ADJUST WATER VALVE BOXES AS DIRECTED BY THE ENGINEER AT THE PRICE BID FOR SAID ADJUSTMENTS. THE WATER DEPARTMENT SHALL FIELD LOCATE WATER VALVES ONE TIME DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. WATER VALVES OR WATER VALVE BOXES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.

9. CONCRETE JOINTING PATTERNS AND DIMENSIONS ARE APPROXIMATE. ENGINEER SHALL FIELD ADJUST AS REQUIRED TO MATCH EXISTING AND ADJACENT CONDITIONS.

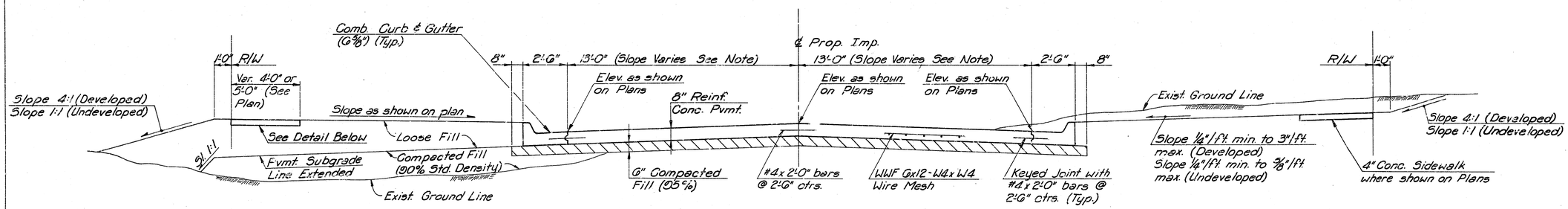


DECEMBER, 1986

PLANS PREPARED BY
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

10 sheets

PROJECT NO.	SHEET NO.	TOTAL SHEETS
870-70-289-5022G-430-000-000	2	0

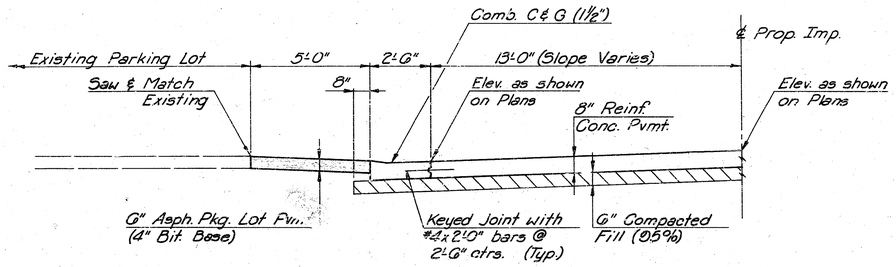


IN FILL

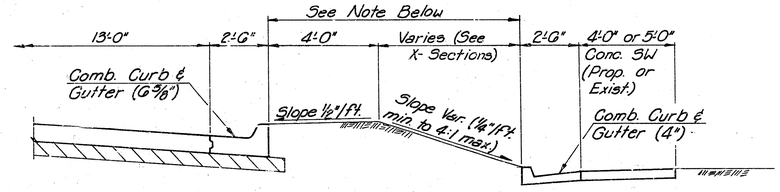
IN CUT

TYPICAL SECTION

Note: Slope varies from ¼"/ft. min. to ⅜"/ft. max.

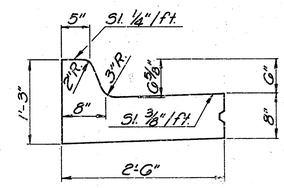


HALF SECTION AT PARKING LOT

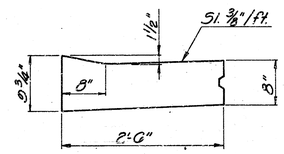


PARTIAL SECTION S.W. RETURN
Second and Glenn

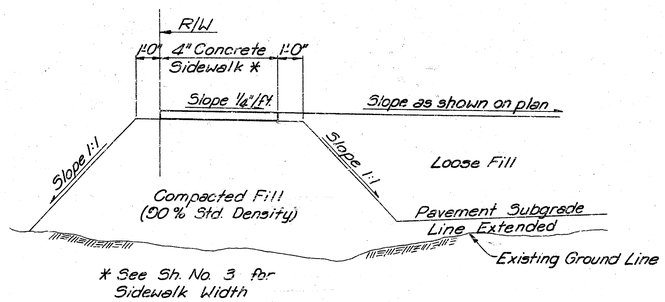
Note: Slope arrangement shown shall be used in areas with no sidewalk Lt. Second St. Sta. 7+00 to Sta. 7+25 and Lt. Glenn Sta. 50+55.50 to Sta. 50+91.50



COMBINED CURB & GUTTER ($6\frac{5}{8}$")



COMBINED CURB & GUTTER (1½")



COMPACTED FILL DETAIL
WHEN SIDEWALK IS CONSTRUCTED

SECOND AND GLENN

TYPICAL SECTIONS

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed by	G.D.S.	Checked by	G.D.S.
Drawn by	V.J.K.	Date	Dec., 1980

Job No. 86478

PROJECT NO.	SHEET NO.	TOTAL SHEETS
870-70-286-5022G-430-000-000	3	0

① Trans. from full height to no curb
② Trans. from 1½" lip curb to no curb
③ Trans. from Comb. C&G (G⅝") to match exist. Comb. C&G Section over length of 5'0"

Scale: 1" = 20'

Comb. Curb & Gutter Const. by Paving Contractor
Sta. 6+83.95 to Sta. 7+32.27 Lt. Const. Comb. C&G (G⅝")
Sta. 7+30.43 to Sta. 8+30.75 Lt. Const. Comb. C&G (1½")
Sta. 8+30.75 to Sta. 8+50 Lt. Const. Spec. Gutter Trans.
Sta. 8+50 to Sta. 8+99.50 Lt. Const. Comb. C&G (1½")
Sta. 6+83.95 to Sta. 7+52.75 Rt. Const. Comb. C&G (G⅝")
Sta. 7+52.75 (S.W. Cb. Return) Const. Comb. C&G (G⅝")
Sta. 50+65.50 to Sta. 51+02.5 (Glenn) Rt. Const. Comb. C&G (G⅝")
Sta. 50+55.50 to Sta. 50+91.5 (Glenn) Lt. Const. Comb. C&G (G⅝")
Sta. 8+72.75 (S.E. Cb. Return) Const. Comb. C&G (G⅝")
Sta. 8+72.75 to Sta. 8+99.50 Rt. Const. Comb. C&G (G⅝")

Note: All new street pavement for Second Street and Glenn shall be 8" Reinforced Concrete Pavement.

Water Valve Adjustment by Paving Contractor
1. Water Valve Box - 22.5' Rt. 2ND St. Sta. 7+35
2. Water Valve Box - 22.0' Rt. 2ND St. Sta. 7+30
3. Water Valve Box - 15.5' Rt. Glen Sta. 50+36

PROPOSED PAVEMENT ELEVATIONS

(R) - Edge of Rubber (CL) - Centerline
(M) - Match Existing (FL) - Flowline
(H.E.) - High Edge

SECOND STREET

STATION	NORTH EDGE PAVEMENT (H.E.)	(CL)	SOUTH EDGE PAVEMENT (H.E.)
6+83.95	114.71(M)	114.79(M)	113.79(M)
6+85	114.75	114.80	113.81
6+90	114.88	114.86	113.87
6+95	115.04	114.93	113.94
7+00	115.23	115.00	114.01
7+05	115.42	115.08	114.10
7+10	115.64	115.16	114.18
7+15	115.84	115.25	114.28
7+20	116.01	115.36	114.39
7+25	116.14	115.48	114.51
7+30	116.24	115.61	114.63
7+35.95	116.27(R)	115.78	114.79
7+40	116.27	115.83	114.93
7+45	116.27	116.06	115.10
7+50	116.27	116.16	115.30
7+52.75	116.27	116.21	115.42
7+54.11	116.27(R)	116.23	115.47
7+55	116.27	116.24	115.50
7+59.89	116.27	116.26(R)	115.70
7+65	116.27	116.26	115.90
7+70	116.24	116.26	116.05
7+75	116.20	116.26	116.16
7+78.05	116.19	116.26(R)	116.20
7+80	116.17	116.26	116.23
7+83.83	116.15	116.26	116.25(R)
7+85	116.14	116.26	116.25
7+90	116.11	116.25	116.25
7+95	116.08	116.24	116.25
8+00	116.05	116.20	116.25
8+01.99	116.04	116.19	116.25(R)
8+05	116.02	116.18	116.25
8+10	115.99	116.16	116.25
8+15	115.96	116.13	116.24
8+20	115.94	116.10	116.21
8+25	115.90	116.07	116.16
8+30	115.88	116.04	116.08
8+35	115.84	116.00	115.99
8+40	115.80	115.97	115.90
8+45	115.78	115.94	115.80
8+50	115.75	115.90	115.70
8+55	115.73	115.89	115.58
8+60	115.72	115.87	115.47
8+65	115.70	115.85	115.37
8+70	115.69	115.84	115.29
8+72.75	115.68	115.83	115.21
8+75	115.67	115.82	115.20
8+80	115.65	115.80	115.13
8+85	115.64	115.79	115.06
8+90	115.62	115.77	115.00
8+95	115.61	115.75	114.96
8+99.50	115.60(M)	115.74(M)	114.93(M)

Top of Rail Elevations:
N. E.P. = 116.27
℄ = 116.26
E.P. @ S.E. Cb. Ref. = 116.23

Legend:
- Remove Exist. Pvmt, Curb & Gutter, Curb Driveway or Sidewalk
- L.J. Longitudinal Jt.
- C.J. Contraction Jt.
- E.J. Expansion Jt.
- * Omit Tie Bars

SPECIAL GUTTER TRANSITION DETAIL
(Lt. Second Street Sta. 8+30.75 to Sta. 8+50)

B.M. = C.O.W. B.M.
Brass Rod in Concrete Post 22.5'S & 22.5'W of ℄ Intersection Vine & 2nd Elev. 114.76

SE Cor. NW¼ Sec. 19, T27S, R1E
1" Iron in thimble @ Cor. = Sta. 10+00

NOTE: Tracks at ℄ Sta. 7+94.07 and Sta. 8+44.47 and communications pole 23' Rt. ℄ Sta. 7+26 to be removed by Railroad

SECOND AND GLENN

PLAN

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed by	G.D.S.	Checked by	G.D.S.
Drawn by	V.J.K.	Date	Dec., 1986
		Job No.	86-478

SPECIAL NOTES

RUBBERIZED CROSSING MATERIAL SUPPLIER SHALL FURNISH ALL MATERIALS AND FASTENERS NECESSARY TO PROPERLY INSTALL THE RUBBERIZED CROSSING, INCLUDING RUBBER OR WOOD TIE SHIM CAP BOARD, AND ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION. ALL SUCH MATERIALS SUPPLIED BY THE RUBBERIZED CROSSING MANUFACTURER SHALL BE INSTALLED BY THE INVOLVED RAILROAD COMPANY IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MATERIAL SUPPLIER.

INDIVIDUAL PIECES OF RUBBER OR WOOD CAP BOARDS SHALL NOT BE LESS THAN SIX (6) FEET LONG EXCEPT WHERE NECESSARY TO FURNISH SHORTER PIECES TO MATCH THE RUBBERIZED CROSSING LENGTH. SHORTER LENGTHS OF INDIVIDUAL RUBBER OR WOOD CAP BOARD PIECES SHALL NOT BE LESS THAN THREE (3) FEET. RUBBER OR WOOD CAPBOARDS SHALL BE INSTALLED SUCH THAT WHEN THE ABUTTING PAVEMENT IS CONSTRUCTED, THERE WILL BE SMOOTH VERTICAL SURFACES FORMED AT THE JUNCTURE BETWEEN THE PAVEMENT AND THE CAP BOARD FOR THE FULL DEPTH OF THE PAVEMENT WITHOUT ANY PAVEMENT COMING INTO DIRECT CONTACT WITH THE RAILROAD CROSS TIES. ONE THICKNESS OF TARPAPER SHALL BE INSTALLED BY THE PAVING CONTRACTOR ON ALL MATING SURFACES BETWEEN THE PAVEMENT AND THE RAILROAD CROSSING MATERIAL TO BREAK ANY BOND BETWEEN THE PAVEMENT AND THE RAILROAD CROSSING MATERIAL.

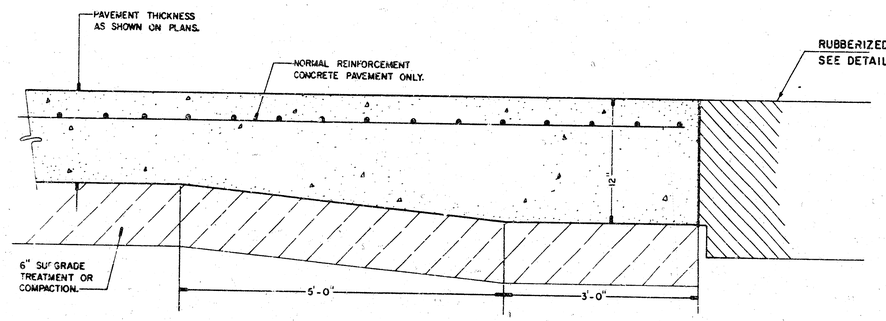
LOCATION OF RUBBER OR WOOD TIE SHIM CAP BOARD AS SHOWN ON DETAIL DRAWING WILL REQUIRE INSTALLATION OF REDWOOD SHIMS ON THE ENDS OF RAILROAD CROSS TIES WHICH ARE LESS THAN 4' -3" FOR 8' - 6" TIES AND 4' - 6" FOR 9' - 0" TIES FROM CENTERLINE OF THE TRACK. LOCATION OF RUBBER OR WOOD TIE SHIM CAP BOARD AS SHOWN ON DETAIL DRAWINGS WILL ALSO REQUIRE ENDS OF RAILROAD CROSS TIES BE CUT OFF WHERE ENDS OF SUCH TIES ARE MORE THAN 4' - 3" FOR 8' - 6" TIES AND 4' - 6" FOR 9' - 0" TIES FROM THE CENTERLINE OF THE TRACK.

EXISTING PAVEMENT SHALL BE REMOVED BY THE PAVING CONTRACTOR. PAVEMENT IMMEDIATELY ADJACENT TO AND WITHIN THREE (3) FEET OF THE CROSSING SHALL BE REMOVED PRIOR TO THE INSTALLATION OF NEW RAILROAD CROSSING MATERIALS. PAVING CONTRACTOR SHALL COORDINATE THE PAVEMENT REMOVAL AT EACH CROSSING LOCATION WITH THE INVOLVED RAILROAD COMPANY. ALL EXPOSED JOINTS BETWEEN NEW CONSTRUCTION AND EXISTING PAVEMENT, WALK OR DRIVES SHALL BE TO NEAT LINES FORMED EITHER BY SAW CUT OR EXISTING JOINT.

LENGTHS OF RUBBERIZED CROSSING MATERIAL SHOWN ON THE PLANS IN MOST CASES ARE TO EXTEND THREE (3) FEET BEYOND BOTH SIDES OF THE PAVED MAIN TRAFFICWAY FOR EACH LOCATION. WOOD PLANKING SHALL BE INSTALLED BY THE INVOLVED RAILROAD COMPANY OUTSIDE THE LIMITS OF THE RUBBERIZED INSTALLATION FOR SIDEWALK, DRIVEWAY AND SHOULDER CROSSINGS WHERE NECESSARY. THE INVOLVED RAILROAD COMPANIES SHALL ADJUST THEIR RAILS TO ELEVATIONS AS SHOWN ON THE PLANS FOR EACH CROSSING LOCATION. VARIATIONS FROM THE TOP OF RAIL ELEVATIONS SHOWN WILL BE PERMITTED ONLY WHEN APPROVED BY THE FIELD ENGINEER FOR ANTICIPATED TRACK SETTLEMENT.

SURFACE OF NEW PAVEMENT AND RUBBERIZED CROSSING MATERIAL SHALL BE SET TO IDENTICAL ELEVATIONS AT THEIR POINT OF JUNCTURE ONLY WHEN THE RAILROAD COMPANY USES APPROVED MECHANICAL EQUIPMENT TO COMPACT RAILROAD FILL AND BALLAST SUCH TO PRECLUDE TRACK SETTLEMENT. RAILROAD TRACK AND RUBBERIZED CROSSING MATERIAL ELEVATIONS OR PAVEMENT ELEVATIONS SHALL BE ADJUSTED IN A RANGE OF ONE-FOURTH (1/4) INCH TO ONE (1) INCH TO ALLOW FOR TRACK SETTLEMENT WHEN THE RAILROAD COMPANY USES HAND METHODS FOR COMPACTION OF RAILROAD FILL AND BALLAST OR USE OF OTHER COMPACTION METHODS WHICH MAY NOT PRECLUDE TRACK SETTLEMENT. THE EXACT ELEVATION DIFFERENTIAL BETWEEN CROSSING MATERIAL AND PAVEMENT SHALL BE DETERMINED BY THE RAILROAD BASED ON THEIR EXPERIENCE FOR TRACK SETTLEMENT WITH CONCURRENCE BY THE ENGINEER.

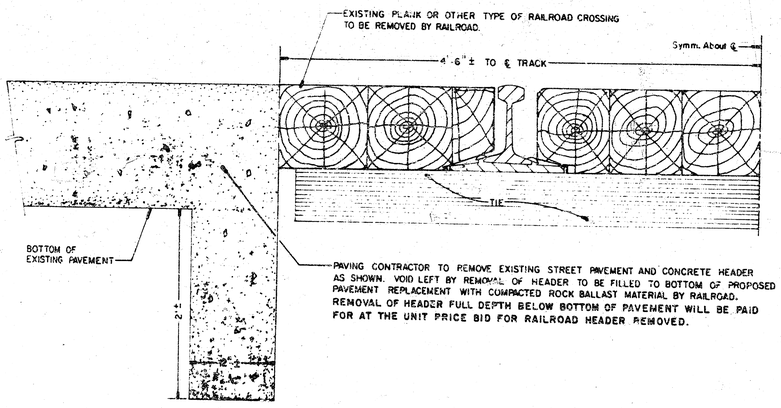
INDIVIDUAL SECTIONS OF THE RUBBERIZED CROSSING MATERIAL SHALL BE OFFSET AT LEAST ONE TIE SPACE FROM EACH OTHER SUCH THAT THE ENDS OF THE RUBBERIZED CROSSING WILL MORE CLOSELY CONFORM TO SIDEWALK OR PAVEMENT CURB ALIGNMENTS WHERE RAILROAD CROSSINGS ARE SKEWED THIRTY (30) DEGREES OR MORE TO THE STREET.



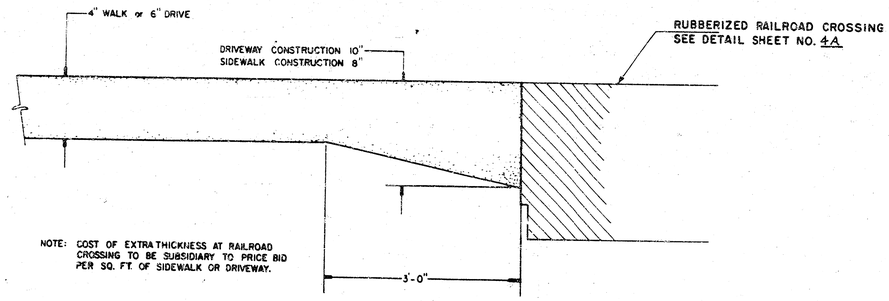
NOTE: COST OF EXTRA THICKNESS AT RAILROAD CROSSING TO BE SUBSIDIARY TO PRICE BID PER SQ. YD. OF PAVEMENT.

NOTE: ONE THICKNESS OF TAR PAPER SHALL BE INSTALLED BY PAVING CONTRACTOR ON ALL MATING SURFACES BETWEEN PAVEMENT AND RAILROAD CROSSING MATERIAL TO BREAK ANY BOND BETWEEN PAVEMENT AND RAILROAD CROSSING MATERIAL.

CROSS-SECTION DETAIL
NEW PAVEMENT CONSTRUCTION
ABUTTING RUBBERIZED RAILROAD CROSSING
NO SCALE



CROSS-SECTION DETAIL
PAVEMENT REMOVAL ABUTTING TRACKS
TO FACILITATE INSTALLATION OF
RUBBERIZED CROSSING
NO SCALE



NOTE: COST OF EXTRA THICKNESS AT RAILROAD CROSSING TO BE SUBSIDIARY TO PRICE BID PER SQ. FT. OF SIDEWALK OR DRIVEWAY.

NOTE: ONE THICKNESS OF TAR PAPER SHALL BE INSTALLED BY PAVING CONTRACTOR ON ALL MATING SURFACES BETWEEN SIDEWALK OR DRIVEWAY CONSTRUCTION AND RAILROAD CROSSING MATERIAL TO BREAK ANY BOND BETWEEN THE SIDEWALK OR DRIVEWAY PAVEMENT AND RAILROAD CROSSING MATERIAL.

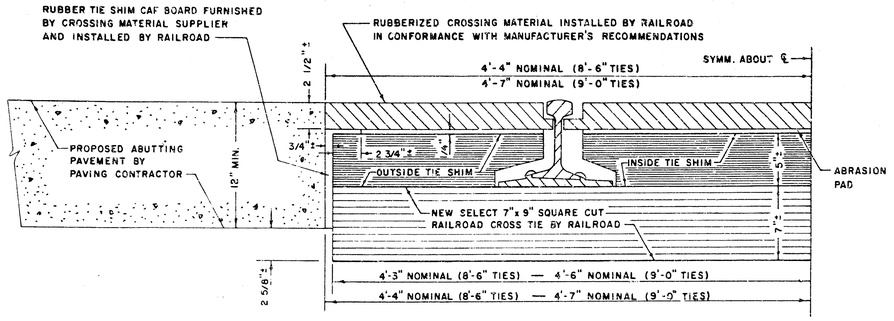
CROSS-SECTION DETAIL
NEW SIDEWALK AND DRIVEWAY CONSTRUCTION
ABUTTING RUBBERIZED RAILROAD CROSSING
NO SCALE

CITY OF WICHITA, KANSAS

STANDARDS FOR PAVING MODIFICATION IN CONNECTION WITH RUBBERIZED RAILROAD CROSSING INSTALLATION AT LOCATIONS WHERE ALL EXISTING ABUTTING PAVEMENT IS REMOVED AND RECONSTRUCTED

8" REINFORCED CONCRETE PAVEMENT

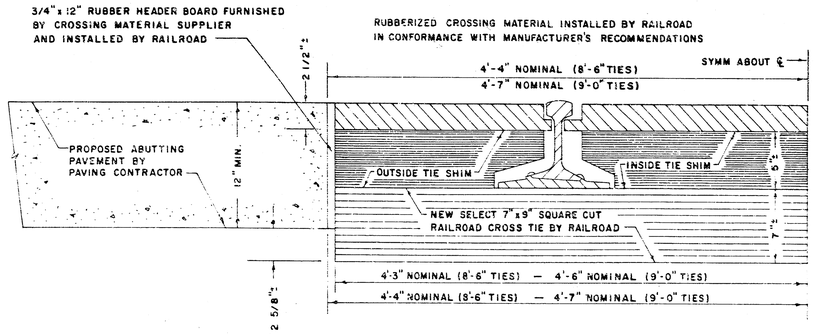
ORG



CROSS-SECTION DETAIL

RUBBER PADS WITH WOOD TIE SHIMS

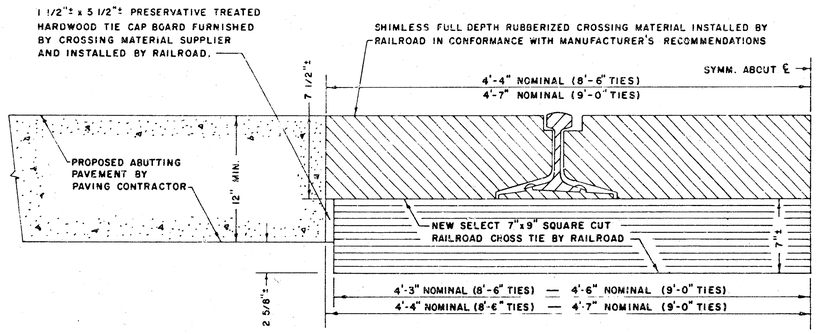
NO SCALE



CROSS-SECTION DETAIL

RUBBER PADS WITH WOOD TIE SHIMS (ALTERNATE)

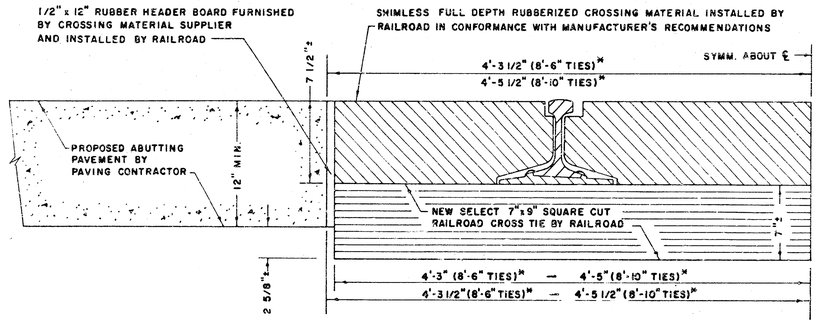
NO SCALE



CROSS-SECTION DETAIL

FULL DEPTH RUBBER PADS (ALTERNATE)

NO SCALE



* — TIES TO BE CUT AND FRAMED IN FACTORY OR IN FIELD.

CROSS-SECTION DETAIL

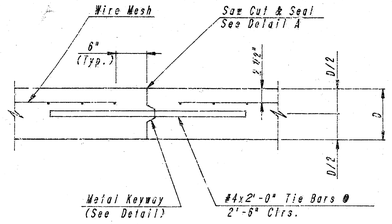
FULL DEPTH RUBBER PADS

NO SCALE

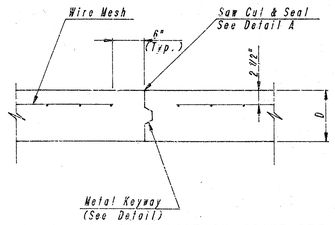
NOTE: SEE SPECIAL NOTES ON PAVING MODIFICATION OR PAVING APPROACH DETAIL SHEET FOR ADDITIONAL APPLICABLE REQUIREMENTS PERTAINING TO WORK SHOWN ON THIS SHEET.

CITY OF WITCHITA, KANSAS
STANDARDS FOR:
RUBBERIZED RAILROAD CROSSING INSTALLATION DETAILS

PROJECT NO.	SHEET NO.	TOTAL SHEETS
870-70-286-50226-430-000-000	5	5

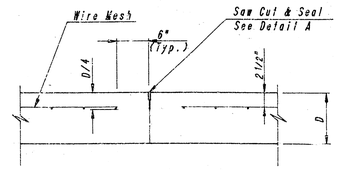


LONGITUDINAL CONSTRUCTION JOINT DETAIL
REINFORCED PAVEMENT
(TRANSVERSE SECTION)
(L.J.)

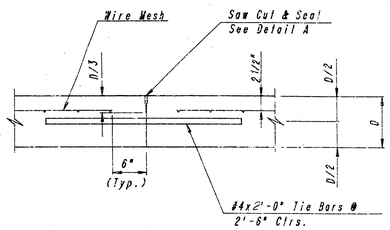


TRANSVERSE CONSTRUCTION JOINT DETAIL
REINFORCED PAVEMENT
(C.J.)

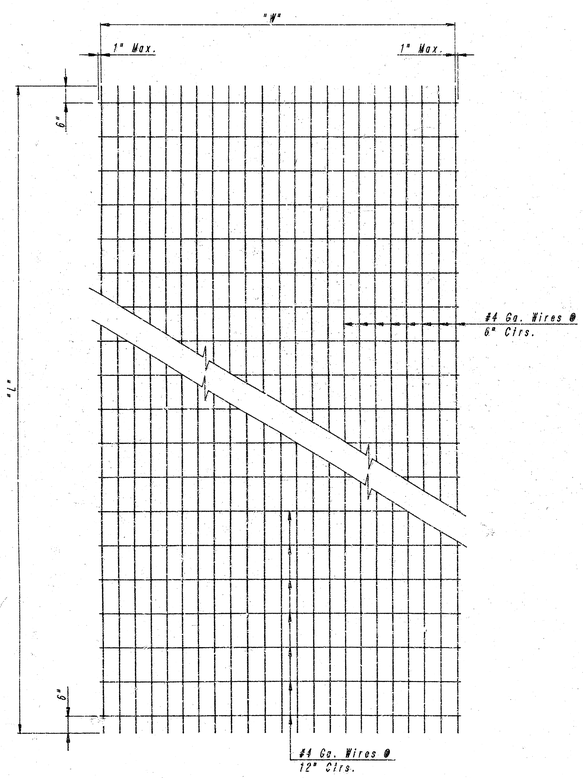
Transverse Construction Joints will be allowed only at plan contraction joint locations



TRANSVERSE CONTRACTION JOINT DETAIL
REINFORCED PAVEMENT
(C.J.)

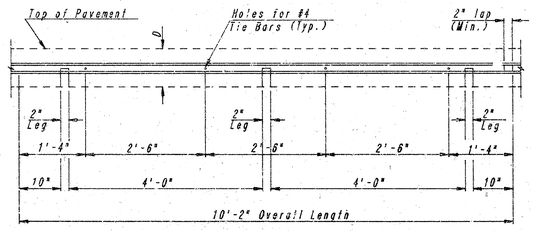


LONGITUDINAL JOINT DETAIL
REINFORCED PAVEMENT
(TRANSVERSE SECTION)
(L.J.)



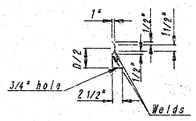
TYPICAL SHEET OF WELDED WIRE MESH

"L" = Panel length - 12"
"W" = Panel width - 12"



TO BE USED ONLY AGAINST FORMS
SHALL NOT EXTEND THRU CONTRACTION JOINTS

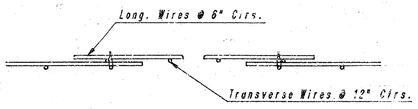
METAL STRIP FOR
LONGITUDINAL CONSTRUCTION JOINT



NOTE: SNAP-IN LEG OR OTHER APPROVED DESIGNS MAY BE USED IN LIEU OF WELDED LEG.

SECTION OF RECESSED
FORM LEG

METAL KEYWAY DETAILS

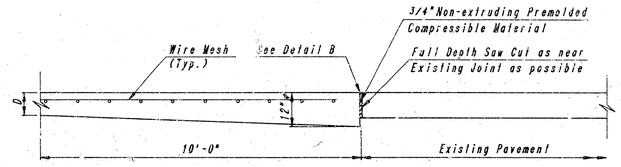


DETAIL OF LAP FOR WIRE MESH

NOTE: THE LAP SHALL EXTEND BEYOUND THE FIRST TRANSVERSE WIRE OF EACH SHEET.

THE SHEETS SHALL BE WIRED SECURELY AT THE EDGES AND AT INTERVALS NOT TO EXCEED 2'-6" FOR THE FULL WIDTH OF THE SHEET. APPROX. WEIGHT OF WIRE MESH = MESH = 44 LBS. PER 100 SQ.FT.

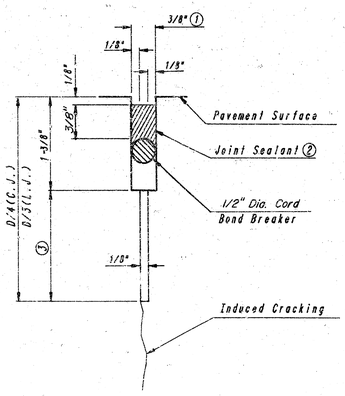
OTHER METHODS FOR FASTENING THE SHEETS OF WIRE MESH AT THE LAPS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.



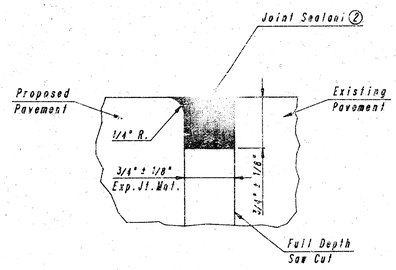
ADDITIONAL THICKNESS SHALL BE SUBSIDIARY

EXPANSION JOINT MATERIAL SHALL EXTEND THROUGH COMBINED CURB & GUTTER SECTIONS.

EXPANSION JOINT DETAIL
REINFORCED PAVEMENT
(E.J.)



DETAIL A



DETAIL B

① To be accomplished in 2 cuts for Longitudinal Joints & Contraction Joints. Initial cut to be 1/8" wide.

② Joint Sealant shall comply with ASTM D1190.

③ Eliminate bottom of cut when metal keyway is used as part of Longitudinal or Transverse Construction Joint.

SECOND AND GLENN

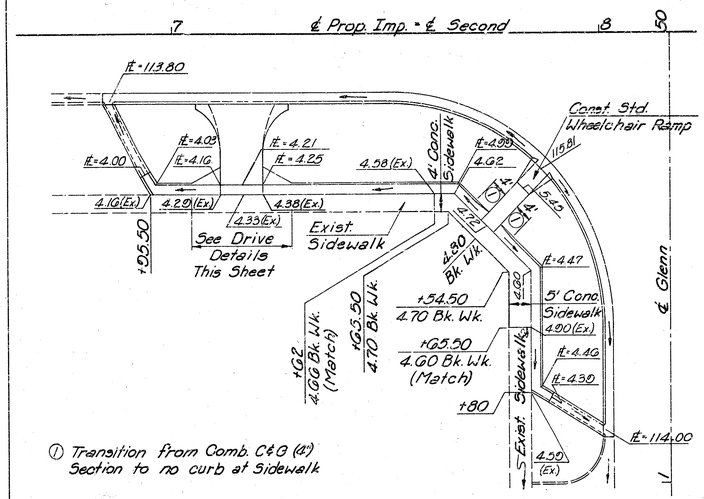
CONCRETE PAVING DETAILS

8" REINF. CONCRETE PAVEMENT

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

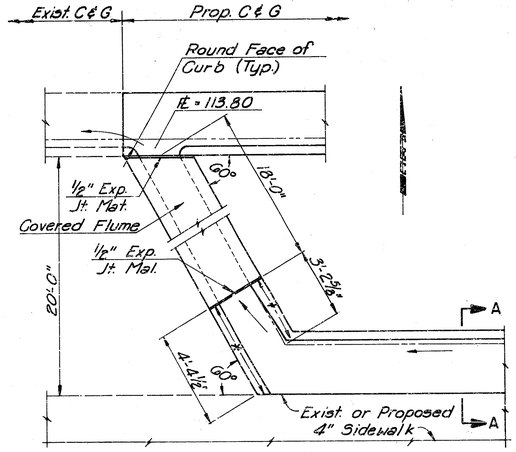
Designed by	GDS	Checked by	GDS	
Drawn by	JGP	Date Nov., 1986	Job No. 86478	

PROJECT NO.	SHEET NO.	TOTAL SHEETS
870-70-23G-5022G-490-000-000	G	O

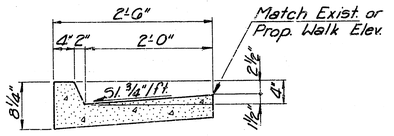


① Transition from Comb. C&G (4") Section to no curb at Sidewalk

PLAN



FLUME LAYOUT-SECOND ST.



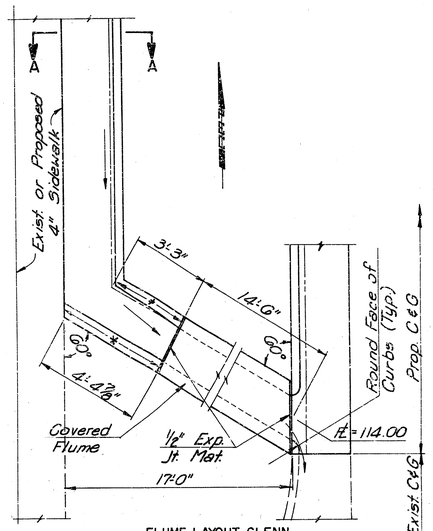
SECTION A-A

Combined Curb & Gutter (4")

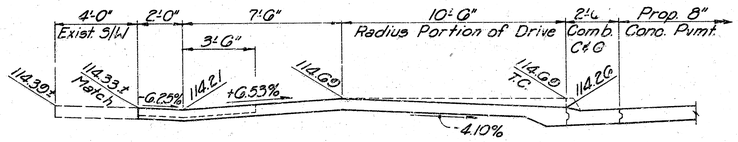
* Transition from Comb. C&G (4") Section to 6"x4" high curb at Std. Covered Concrete Flume

* Transition from 6"x0" high curb at Sidewalk to 6"x4" high curb at Std. Covered Concrete Flume

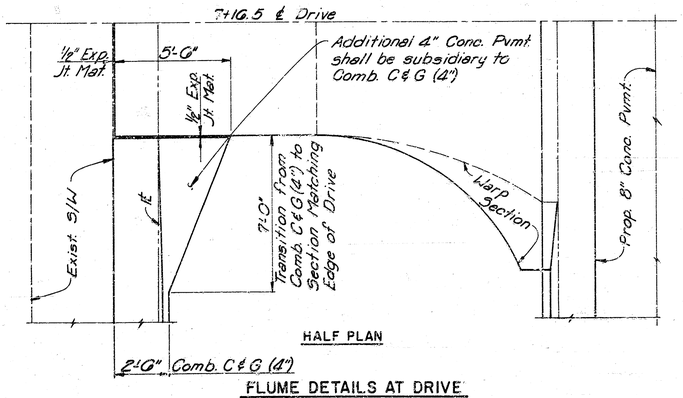
FLUME LAYOUT DETAILS



FLUME LAYOUT-GLENN

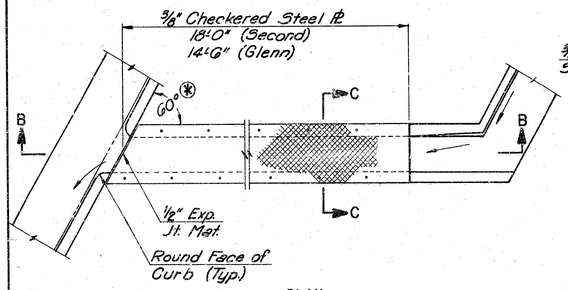


SECTION AT CENTERLINE

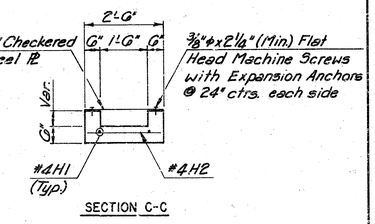


HALF PLAN

FLUME DETAILS AT DRIVE

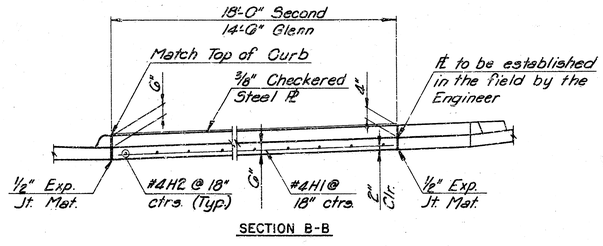


PLAN



SECTION C-C

* Shown for Second Street. Plate cut similar, but opposite hand for Glenn.



SECTION B-B

STANDARD COVERED CONCRETE FLUME DETAILS

NOTES

STANDARD COVERED CONCRETE FLUME

THE MIX USED FOR CONCRETE PAVEMENT SHALL BE USED THROUGHOUT. ALL EXPOSED EDGES SHALL BE FINISHED WITH AN EDGING TOOL. THE CHECKERED STEEL PLATE SHALL HAVE A RAISED LUG PATTERN AND SHALL BE EITHER SHOP OR FIELD PAINTED WITH ONE COAT OF ZINC DUST PAINT FOLLOWED BY TWO FIELD COATS OF ALUMINUM PAINT (TOP AND BOTTOM).
FLUMES SHALL BE MEASURED AND PAID FOR AT THE CONTRACT UNIT PRICE BID PER LIN. FT. COMPLETE AND IN PLACE. THIS SHALL BE CONSIDERED FULL COMPENSATION FOR ALL MATERIALS, LABOR, TOOLS, EXCAVATION, BACKFILLING, CONNECTION TO EXISTING STRUCTURES (IF REQUIRED), OR INCIDENTALS NECESSARY TO COMPLETE THE WORK.

COMBINED CURB AND GUTTER (4")

ALL CONSTRUCTION REQUIREMENTS, MATERIALS, PROPORTIONS, MIXING AND PLACING, AND MEASUREMENT AND PAYMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR COMBINED CURB AND GUTTER, EXCEPT AS FOLLOWS:

1. CONTRACTION JOINTS SHALL BE CUT TO MATCH THE JOINTS IN THE ADJACENT SIDEWALK SECTION.
2. ONE-HALF (1/2) INCH EXPANSION JOINTS SHALL BE PLACED IN LINE WITH ALL ADJACENT SIDEWALK EXPANSION JOINTS.

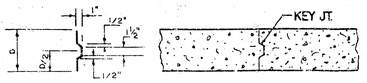
SECOND AND GLENN

COMBINED CURB & GUTTER (4") AND CONCRETE FLUME DETAILS

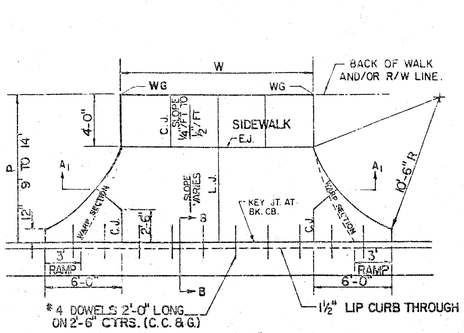
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

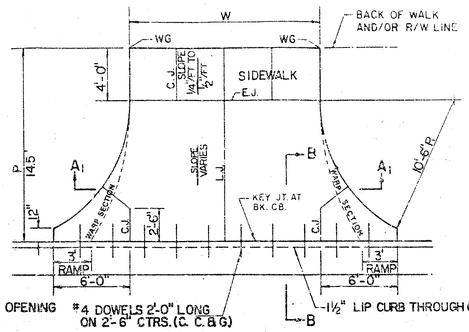
Designed by	G.D.S.	Checked by	G.D.S.	
Drawn by	V.J.K.	Date	Nov., 1986	Job No. BG478

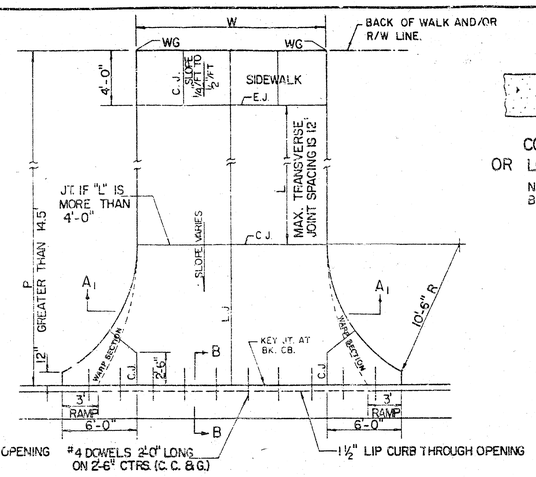
G

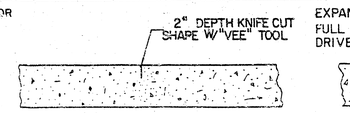


ALT. LONGITUDINAL CONSTRUCTION JOINT



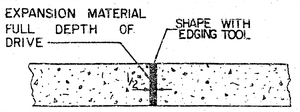




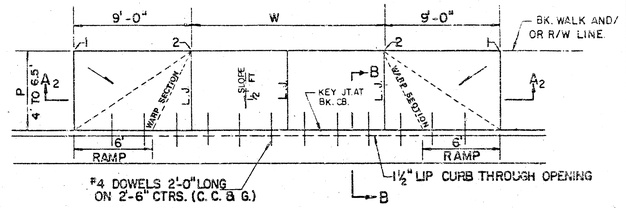


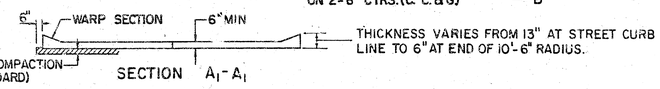
CONTRACTION JOINT (C.J.)
OR LONGITUDINAL JOINT (L.J.)

NO SAWN JOINTS WILL BE ALLOWED.

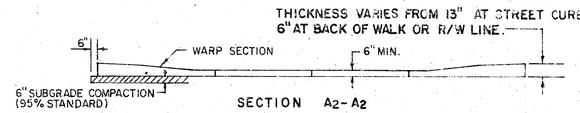


EXPANSION JOINT (E.J.)





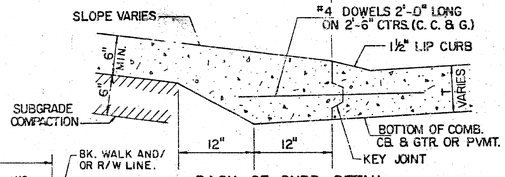
SECTION A_1-A_1



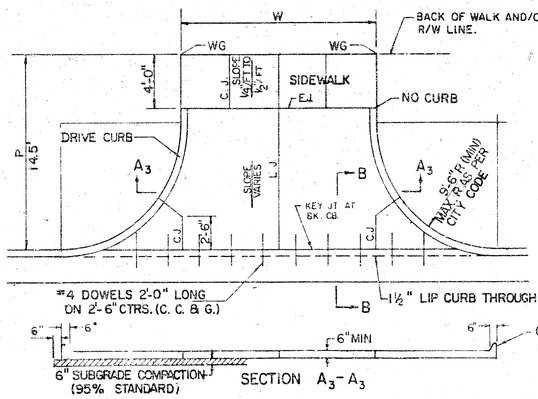
SECTION A_2-A_2

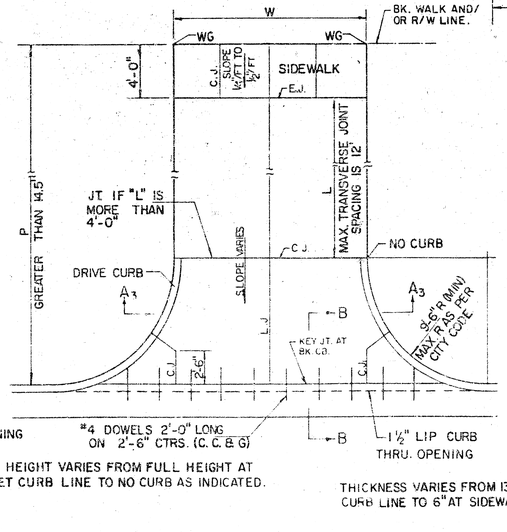
PARKING WIDTH "P"	9'	10'	11'	12'	13'	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.35'	0.35'	0.40'	0.45'	0.60'	0.80'	1.35'	1.85'	2.35'	2.85'	3.35'	3.85'	4.35'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.35'	0.35'	0.40'	0.45'	0.60'	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	-.19'	-.16'	-.13'	-.10'	-.06'	0.00	0.00	0.15	0.25	0.35	0.45	0.55	0.65

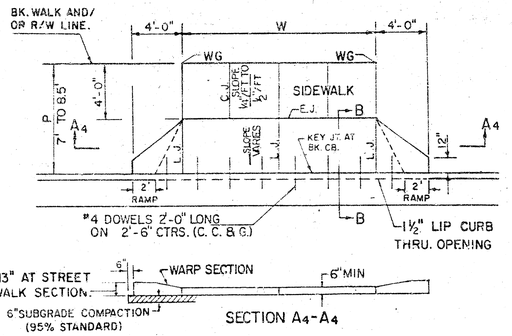
RADIUS RAMP DRIVES (P= 9.0' & GREATER)



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







SECTION A_3-A_3

SECTION A_4-A_4

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)

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" BELOW TOP OF FULL CB.	-.15'	-.16'	-.17'	-.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"	4'	4.5'	5'	5.5'	6'	6.5'
DIST OF PT. "1" ABOVE TOP OF FULL CB.	0.08'	0.09'	0.10'	0.12'	0.13'	0.14'
DIST. OF PT. "2" BELOW TOP OF FULL CB.	-.26'	-.24'	-.22'	-.20'	-.18'	-.16'

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

GENERAL NOTES

1. 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.
2. ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTERLINE OF DRIVES HAVING A "W" DIMENSION OF 24' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 10' FOR DRIVES WITH A "W" DIMENSION GREATER THAN 24'.
3. DRIVEWAY WIDTH DENOTED AS "W" ON THE DETAIL DRAWINGS SHALL BE A MINIMUM OF 10' AND A MAXIMUM OF 30'. THE MAXIMUM OPENING FOR RADIUS TYPE DRIVES WITH CURBS THROUGH THE RADIUS SHALL NOT EXCEED 52' AT THE STREET CURB LINE.
4. CONTRACTION 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.
5. 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.
6. 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.
7. 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.
8. 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" WA-WA WELDED WIRE FABRIC WHEN PROPERLY AUTHORIZED BY THE PROPERTY OWNER WITH THE ENGINEER'S CONCURRENCE.
9. 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.

REVISED OCTOBER 1985

SCALE: 1"= 5'

STANDARD DRIVE ENTRANCES FULL HEIGHT CURB

CITY OF WICHITA, KANSAS

PROJECT NUMBER
870-70-286-5022G-430-000-000

40 30 20 10 ℄ 10 20 30 40 50

115.74 (Match Exist.)

115 | 8+96.80 | 110

C = 5 C.F.(95%) = 16 — L.F. = 5 C.F.(95%) = 0 C.F.(90%) = 3

26.75' → C = 5.0 C.E.(95%) = 15.9 C.F.(95%) = 0 C.F.(90%) = 1.5 L.F. = 3.0

115.84

120 | 8+72.75 | 115

C = 5 C.E.(95%) = 16 — L.F. = 1 C.F.(95%) = 0

S.E. Return C = 2.1 C.Y. C.E.(95%) = 4.1 C.Y. C.F.(95%) = 2.1 C.Y. C.F.(90%) = 0 C.Y. L.F. = 12.8 C.Y.

Area = 334.8 sq ft; 39.5; 18; 39.5; 18; Area = 862.4 sq ft

39.50' → C = 8.0 C.E.(95%) = 23.4 C.F.(95%) = 0 L.F. = 0.7

116.00 — Match w/ Storm

120 | 8+33.05 | 115

C = 6 C.E.(95%) = 16 — L.F. = 0 C.F.(95%) = 0

15.50' → C = 3.4 C.E.(95%) = 9.2 C.F.(95%) = 0 L.F. = 0

116.09 — Match w/ Storm

120 | 8+17.75 | 115

C = 6 C.F.(95%) = 16 — L.F. = 0 C.F.(90%) = 0

15.50' → C = 3.4 C.E.(95%) = 9.2 C.F.(95%) = 0 L.F. = 0

116.19 — Match w/ Storm

120 | 8+02.25 | 115

C = 6 C.E.(95%) = 16 — L.F. = 0 C.F.(90%) = 0

Area = 526.8 sq ft; 49.5; 49.5; 17'; 20'; Area = 1167.3 sq ft

S.W. Return C = 0 C.Y. C.E.(95%) = 2.9 C.Y. C.F.(95%) = 6.9 C.Y. C.F.(90%) = 2.0 C.Y. L.F. = 47.6 C.Y.

19.50' → C = 6.4 C.E.(95%) = 25.7 C.F.(95%) = 3.7 L.F. = 17.4

116.21

120 | 7+52.75 | 115

C = 1 C.E.(95%) = 12 — L.F. = 19 C.F.(95%) = 4

21.75' → C = 0.4 C.E.(95%) = 9.7 C.F.(95%) = 3.2 L.F. = 11.7

115.64

120 | 7+31 | 115

C = 0 C.E.(95%) = 12 — L.F. = 10 C.F.(95%) = 4

16.82' → C = 0 C.E.(95%) = 6.9 C.F.(95%) = 3.1 L.F. = 6.2

115.24

120 | 7+14.18 | 115

Drive

C = 0 C.E.(95%) = 10 — L.F. = 10 C.F.(95%) = 6

30.23' → C = 2.8 C.E.(95%) = 16.6 C.F.(95%) = 3.4 L.F. = 5.6

114.79 (Match Exist.)

115 | G+83.05 | 110

C = 5 C.F.(95%) = 16 — L.F. = 0 C.F.(95%) = 0

Second St. Sta G+83.05 to Sta 8+96.80

Borrow = 1.1{[1/2(35.5+5.5)+144.0] - 0.8[43.2]} = 172.0 C.Y.

Project Earthwork Totals

C = 43.0	C.E.(95%) = 154.7	C.F.(95%) = 35.5	C.F.(90%) = 3.5	L.F. = 144.0
+10% = 4.3	+10% = 15.5	+10% = 3.6	+10% = 0.4	+10% = 14.4
47.3 C.Y.	170.2 C.Y.	39.1 C.Y.	3.9 C.Y.	158.4 C.Y.

Sheet Totals

C = 31.5		+0.5
C.E.(95%) = 121.6		+1.0
C.F.(95%) = 25.7		
C.F.(90%) = 3.5		+0.2
L.F. = 105.0		+0.3

PROJECT NO.	SHEET NO.	TOTAL SHEETS
STP-7228(3)2230-000-00	8	9

ORIGINAL SURVEY	SURVEYED	BY	DATE
	DRAWN		
NOTE BOOK NO.	CHECKED		
	PLANS		
	AREAS (HECTARES)		

FINAL SURVEY	SURVEYED	BY	DATE
	DRAWN		
NOTE BOOK NO.	CHECKED		
	PLANS		
	AREAS (HECTARES)		

PLATE 9-FULL CROSS SECTIONS (ROLLING TERRAIN)

40 30 20 10 ℄ 10 20 30 40 50

114.97

115
50+01.50
110

C = 5 L.F. = 1
$CF_{E(95\%)}$ = 11 $CF_{F(95\%)}$ = 5

26.00'
C = 4.3
$CF_{E(95\%)}$ = 11.4
$CF_{F(95\%)}$ = 3.9
L.F. = 9.1

115.47

120
50+05.50
115
110

C = 4 L.F. = 18
$CF_{E(95\%)}$ = 13 $CF_{F(95\%)}$ = 3

10.00'
C = 1.3
$CF_{E(95\%)}$ = 3.9
$CF_{F(95\%)}$ = 2.0
L.F. = 3.7

115.71

120
50+55.50
115
110

C = 3 L.F. = 29
$CF_{E(95\%)}$ = 8 $CF_{F(95\%)}$ = 8

39.50'
C = 5.9
$CF_{E(95\%)}$ = 17.6
$CF_{F(95\%)}$ = 5.9
L.F. = 21.2

Glenn
Sta. 50+55.50 to Sta. 50+01.50

Sheet Totals
C = 11.5
$CF_{E(95\%)}$ = 33.1
$CF_{F(95\%)}$ = 11.8
L.F. = 39.0

@ Sta. 50+10
C = 5 L.F. = 0
$CF_{E(95\%)}$ = 16 $CF_{F(95\%)}$ = 0

PROJECT NO.	SHEET NO.	TOTAL SHEETS
870-10-50223-4430-000-000	9	9