

**PAVING MODIFICATIONS IN CONNECTION WITH
RUBBERIZATION OF RAILROAD CROSSING
ON MAPLE WEST OF BONN**

**PROJ. NO. 870-70-286-50226-430-000-000
CONSTRUCTION CONTRACT COSTS**

**PROJ. NO. 870-70-286-50226-110-000-000
CONSTRUCTION INSPECTION COSTS**

CITY OF WICHITA, KANSAS

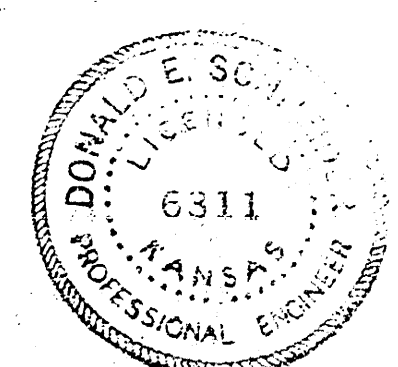
M. E. LINDEBAK - CITY ENGINEER

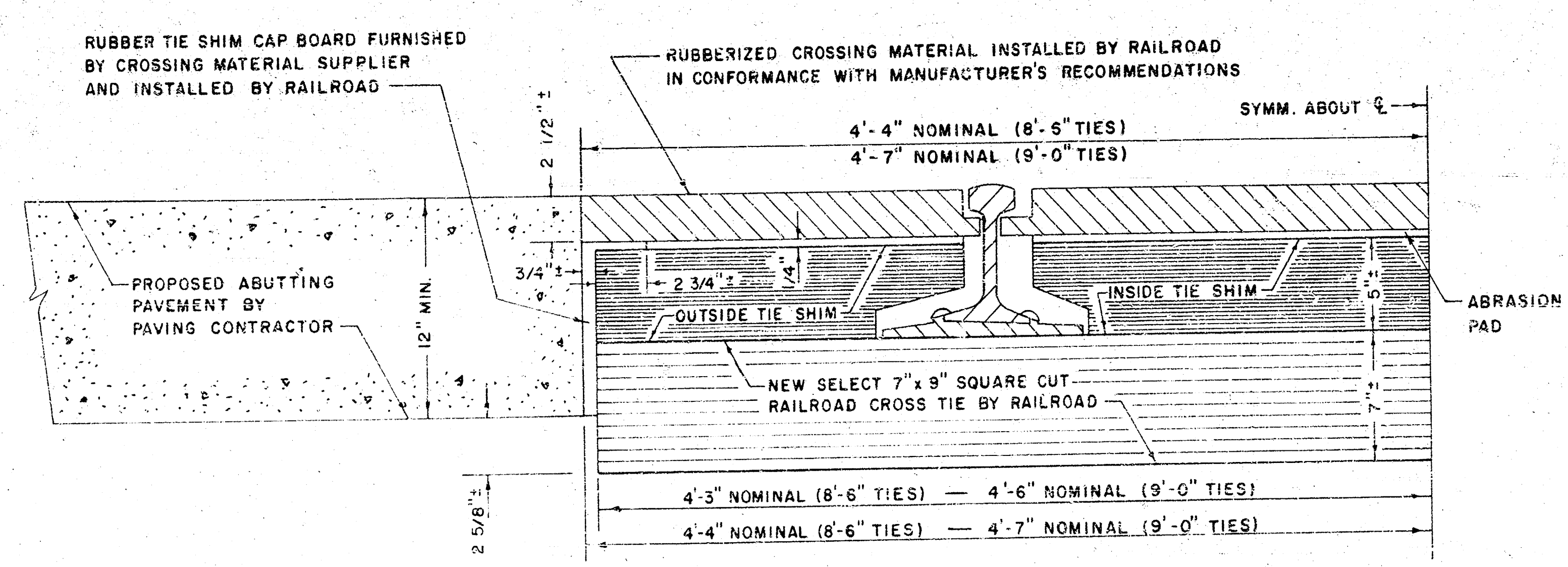
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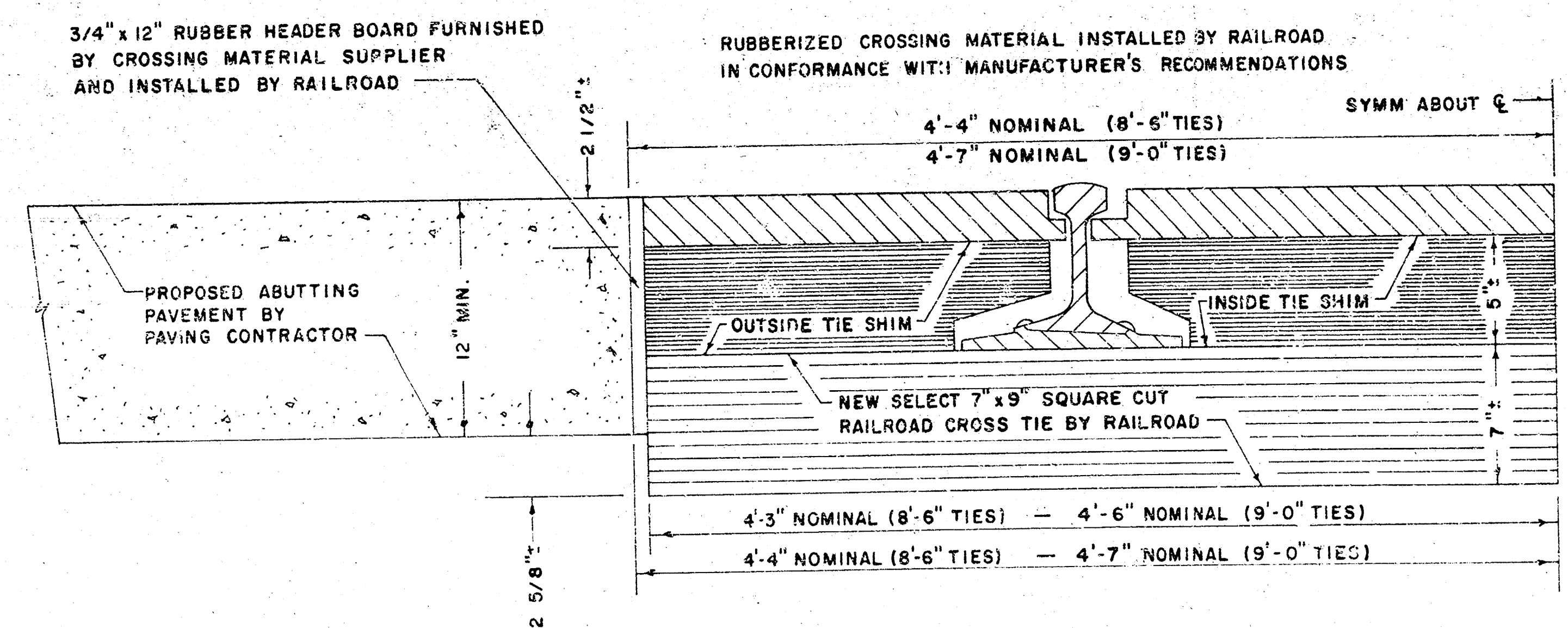
GENERAL NOTES

1. PROJECT WILL BE CLOSED TO THROUGH TRAFFIC DURING THE TIMEFRAME THE RAILROAD COMPANY IS INSTALLING RUBBERIZED CROSSING MATERIAL. PROJECT MUST BE RE-OPENED TO THROUGH TRAFFIC IMMEDIATELY AFTER THE RAILROAD COMPANY HAS COMPLETED THEIR WORK INVOLVED WITH INSTALLATION OF THE RUBBER CROSSING MATERIAL UNLESS THE CITY ELECTS TO NOT REQUIRE SUCH THROUGH TRAFFIC TO BE MAINTAINED DURING THE NEXT PHASE OF CONSTRUCTION. DETOUR SIGNING AND CONSTRUCTION TRAFFIC CONTROL SIGNING DURING THE TIME THE RAILROAD COMPANY IS WORKING ON THE CROSSING WILL BE THE RESPONSIBILITY OF THE PAVING CONTRACTOR AS FURTHER PROMULGATED BY PROJECT SPECIAL PROVISIONS. CONSTRUCTION OF TEMPORARY PAVEMENT REQUIRED TO FACILITATE MAINTENANCE OF SUCH THROUGH TRAFFIC WILL ALSO BE THE RESPONSIBILITY OF THE PAVING CONTRACTOR 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. 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. CONCRETE JOINTING PATTERNS AND DIMENSIONS ARE APPROXIMATE. ENGINEER SHALL FIELD ADJUST AS REQUIRED TO MATCH EXISTING AND ADJACENT CONDITIONS.
6. ASPHALT LEVELING COURSE WILL VARY FROM A MAXIMUM OF FOUR (4) INCHES ADJACENT TO EXISTING PAVEMENT TO NO THICKNESS AT THE HEADER AT THE TRACKS. LEVELING COURSE MAY BE CONSTRUCTED WITH BC-1 BASE COURSE MIX.

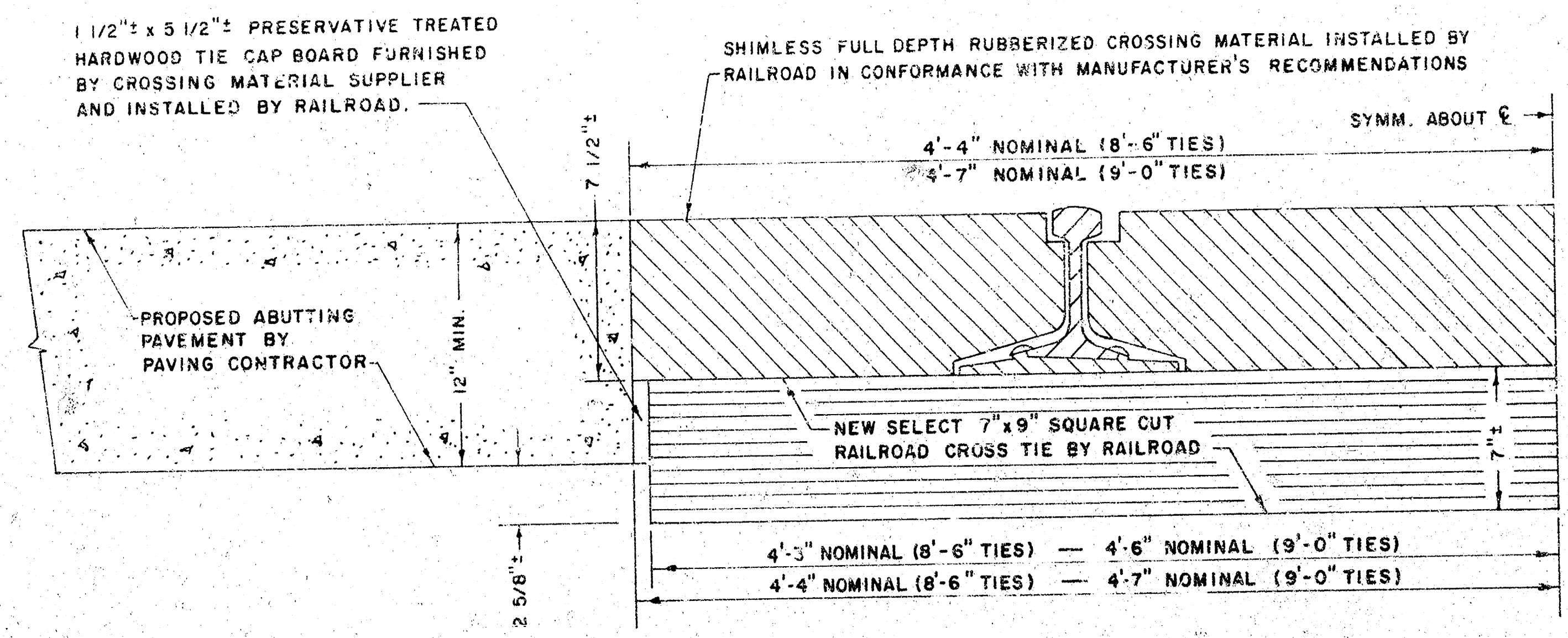




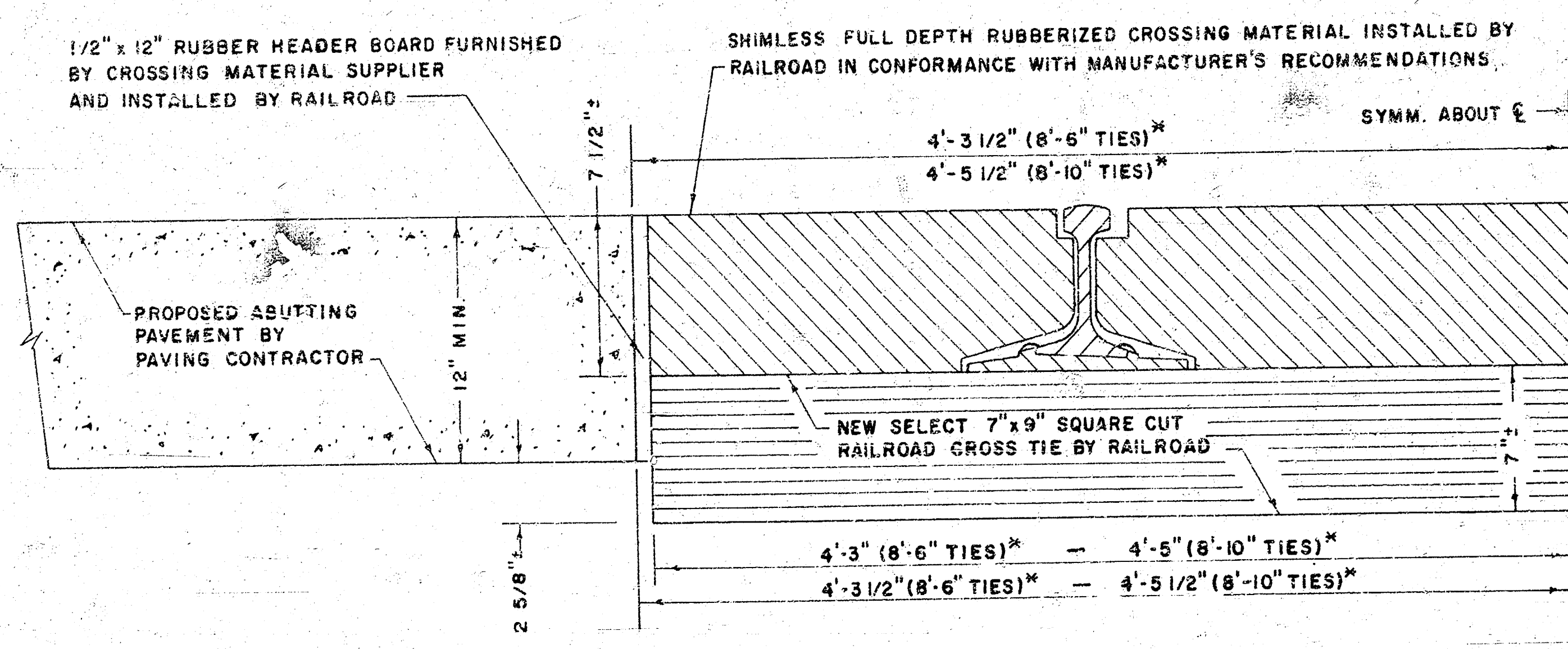
CROSS-SECTION DETAIL
RUBBER PADS WITH WOOD TIE SHIMS
NO SCALE



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 WICHITA, KANSAS
STANDARDS FOR:
RUBBERIZED RAILROAD CROSSING
INSTALLATION DETAILS

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 TAMPERS 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.

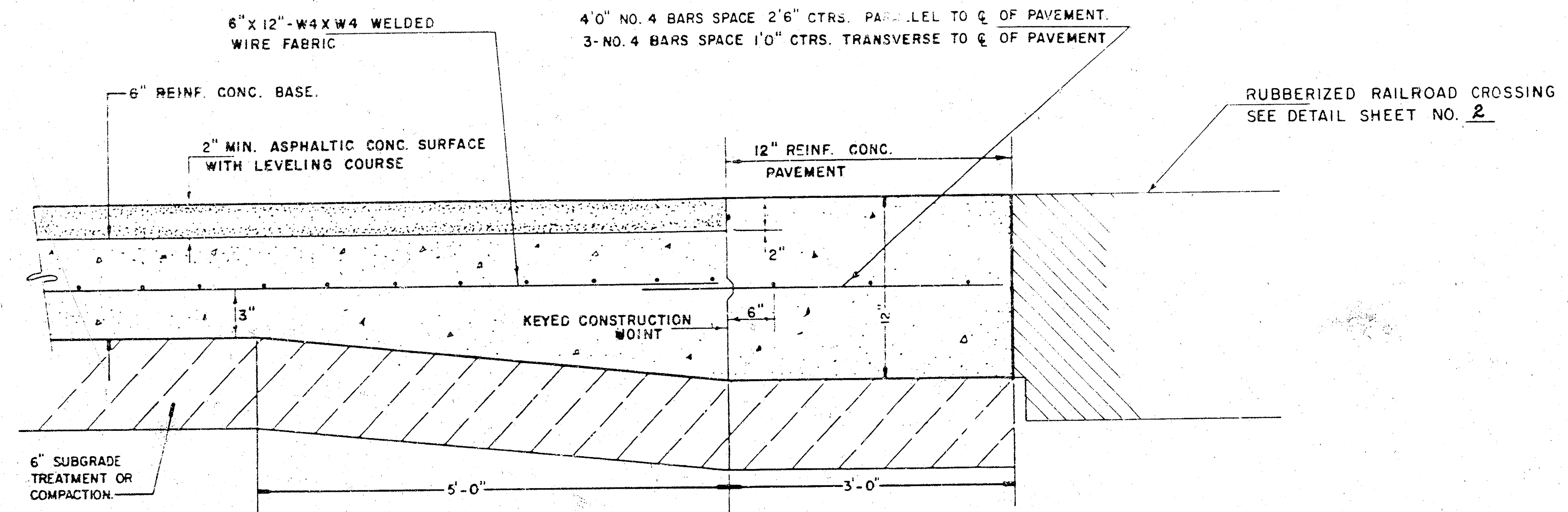
LOCATION OF RUBBER OR WOOD TIE SHIM CAP BOARD AS SHOWN ON DETAIL DRAWING WILL REQUIRE INSTALLATION OF REDWOOD SHIMS ON THE ENDS OF RAILROAD CROSS TIES WHICH ARE LESS THAN 4' - 3" FOR 8' - 6" TIES AND 4' - 6" FOR 9' - 0" TIES FROM CENTERLINE OF THE TRACK. LOCATION OF RUBBER OR WOOD TIE SHIM CAP BOARD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

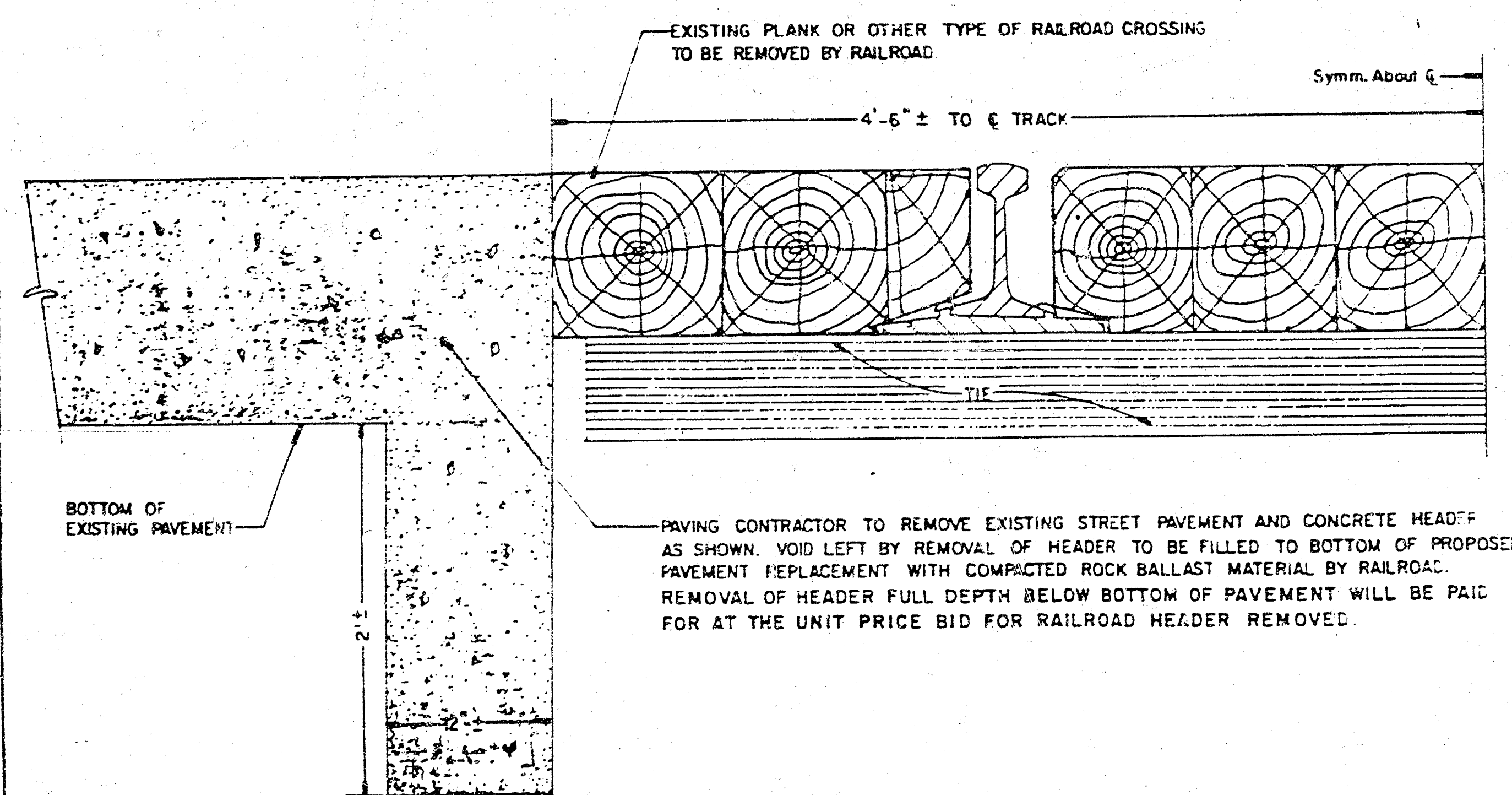
INDIVIDUAL SECTIONS OF THE RUBBERIZED CROSSING MATERIAL SHALL BE OFFSET AT LEAST ONE TIE SPACE FROM EACH OTHER SUCH THAT THE ENDS OF THE RUBBERIZED CROSSING WILL MORE CLOSELY CONFORM TO SIDEWALK OR PAVEMENT CURB ALIGNMENTS WHERE RAILROAD CROSSINGS ARE SKEWED THIRTY (30) DEGREES OR MORE TO THE STREET.



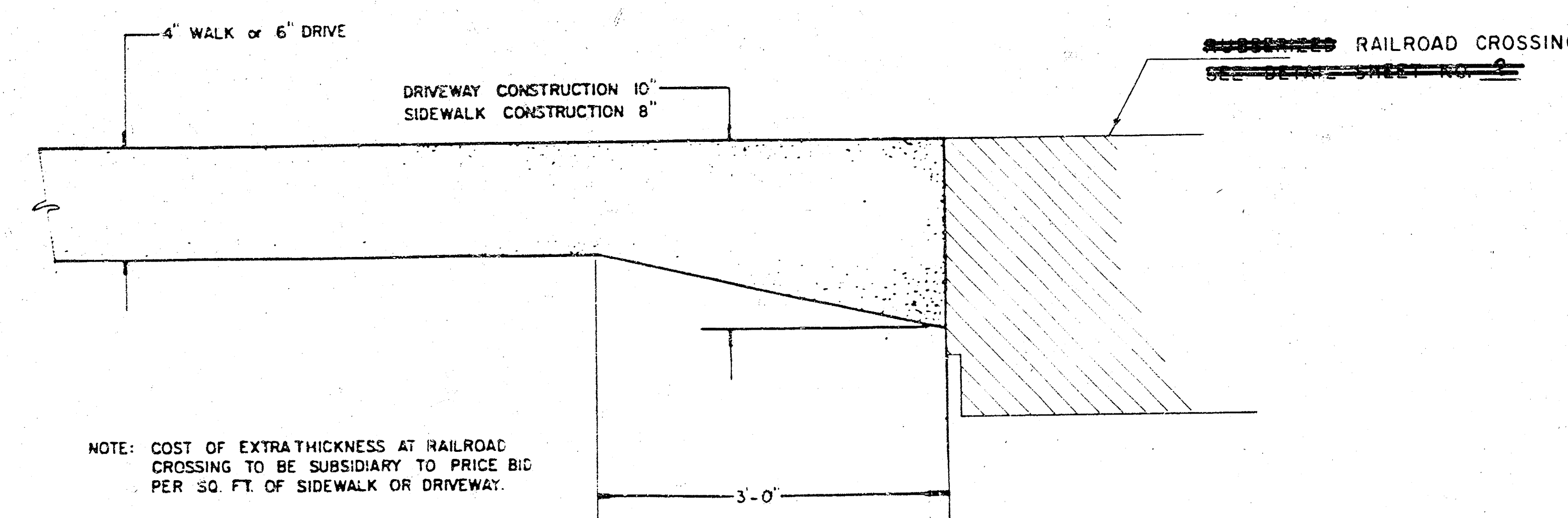
NOTE: COST OF EXTRA CONC. BASE THICKNESS AT RAILROAD CROSSING TO BE SUBSIDIARY TO PRICE BID PER SQ. YD. OF PAVEMENT.

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 EXTRATHICKNESS 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" PAVEMENT
(2" ASPH. CONC. SURFACE WITH 6" REINF. CONC. BASE)

PROPOSED ELEVATIONS								
N. HIGH EDGE LINE			PAVEMENT &			S. HIGH EDGE LINE		
STA	ELEV.	REMARK	STA	ELEV.	REMARK	STA	ELEV.	REMARK
49+78.3	1.80	Match	49+78.3	2.58	Match	49+78	1.52	Match
49+80	1.88		49+80	2.58		49+80	1.60	
49+85	1.96		49+85	2.57		49+85	1.72	
49+90	2.05		49+92	2.57	Bay Rubber	49+90	1.88	
49+95	2.16		50+08.5	2.57	End Rubber	49+95	2.10	
50+00	2.27		50+15	2.56		49+95	2.33	
50+05	2.38		50+20	2.52		49+100	2.50	
50+10	2.45		50+25	2.49		49+105	2.63	Bay Rubber
50+15	2.50		50+31.2	2.40	Match	49+110	2.63	End Rubber
50+20	2.51	Bay Rubber				49+115	2.61	
50+25	2.51	End Rubber				49+120	2.54	
50+30	2.51					49+125	2.42	
50+35	2.47					50+00	2.26	
50+40	2.34					50+05	2.07	
50+45	2.13					50+10	1.88	
50+50	1.82					50+15	1.70	
50+55	1.51					50+20	1.57	
50+60	1.26					50+25	1.45	
50+65	1.07					50+31.2	1.36	Match
50+70	0.96							
50+75	0.90	Match						
50+80	0.90							
50+85	0.90							

NOTE: LEVELING COURSE WILL TAPER FROM BETWEEN 2" TO 4" THICKNESS ADJACENT TO EXISTING PAVEMENT SURFACES AND FEATHER OUT TO NO THICKNESS ALONG CONCRETE HEADER ADJACENT TO RAILROAD TRACKS. LEVELING COURSE MAY BE CONSTRUCTED USING BC-1 BASE COURSE MIX.

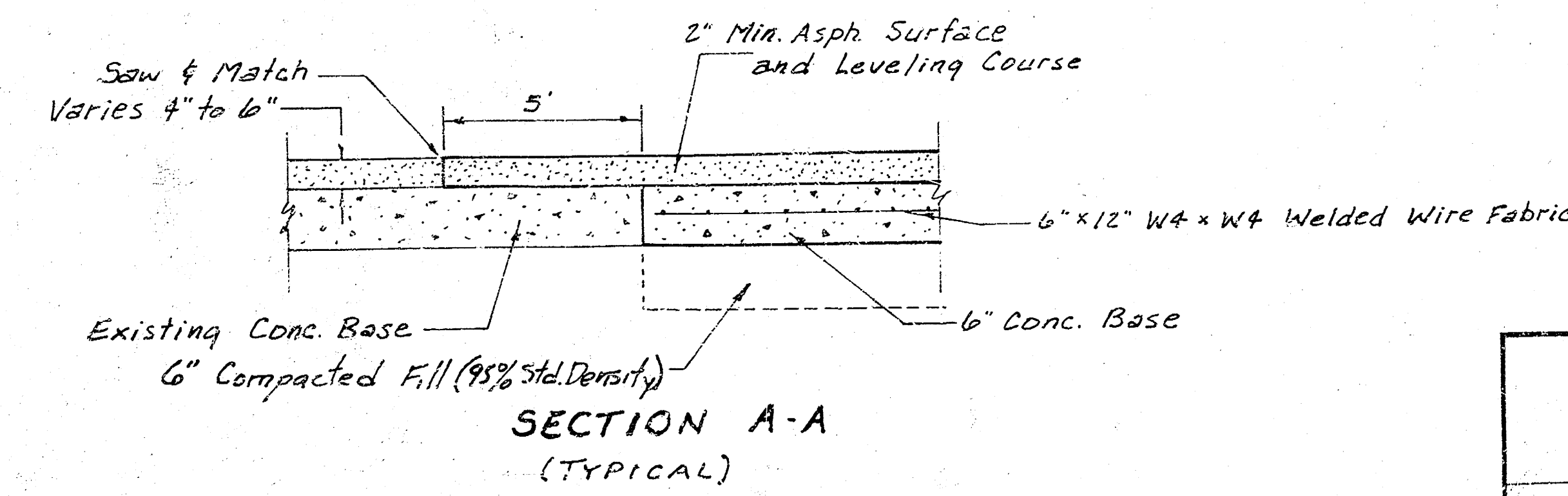
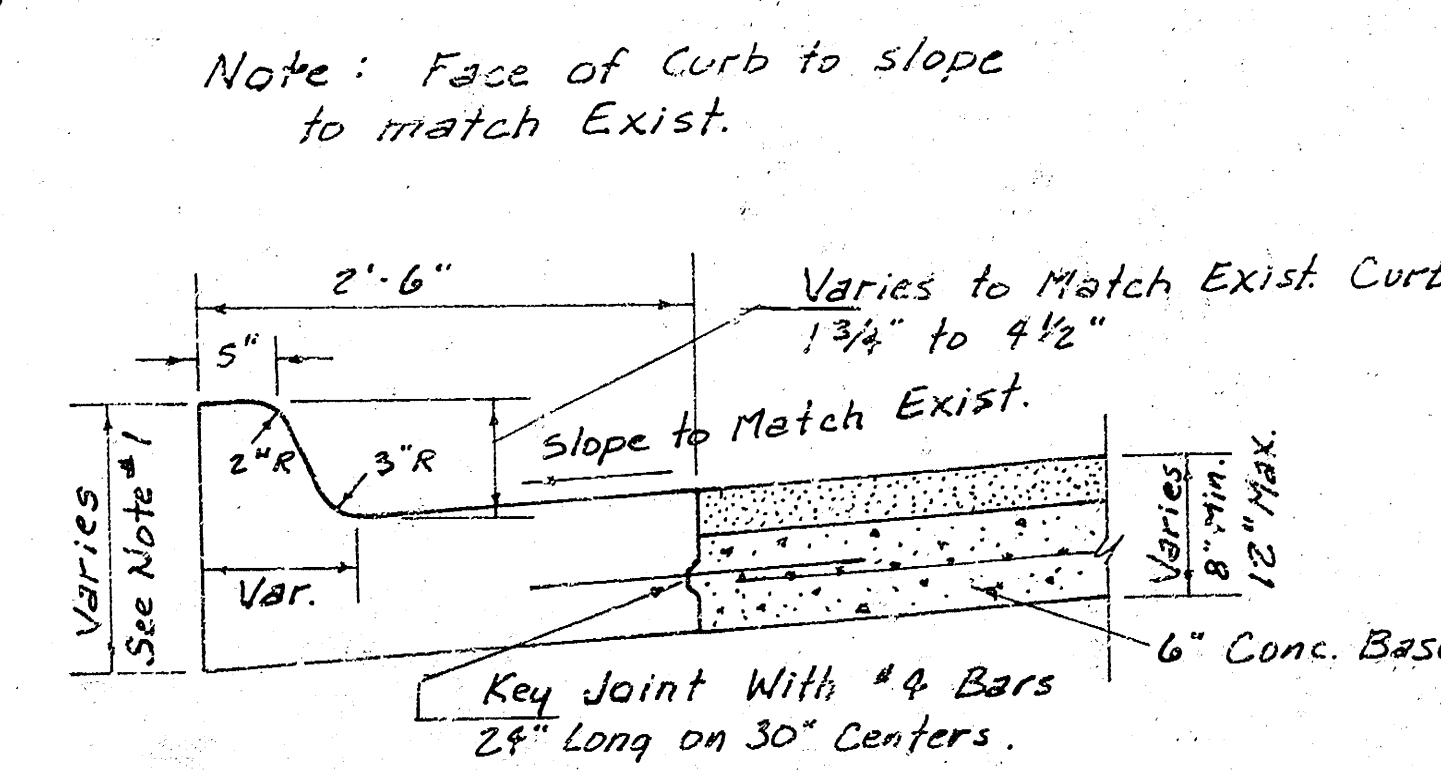
NOTE NO. 1: TOTAL DIMENSION VARIES FROM 9 3/4" TO 16 1/2". GUTTER PAN THICKNESS WILL VARY FROM 12" MAX. ADJUTING EXISTING PAVEMENT TO 8" MIN. ADJACENT TO CONCRETE HEADER AT RAILROAD TRACKS.

MAPLE ST.

MO. PAC. R.R.

BONN

TRACK ELEVATIONS		
N. Curb Line	2.51	
Q Street	2.57	
S. Curb Line	2.63	



- Denotes Complete Removal
- Denotes Removal & Replacement of Asph. Surface
- * Transition From Full Height Curb to No Curb in 10'
- Note: Remove & Replace Sidewalk to nearest Joint.



MO. PAC. R.R. CROSSING ON MAPLE WEST OF BONN
PROJECT NUMBER 870-70-286-50226-378-000-000