IMPROVING HARRY STREET DE-CEL AND LEFT TURN LANES at HARRY COURT & GOVERNEOUR

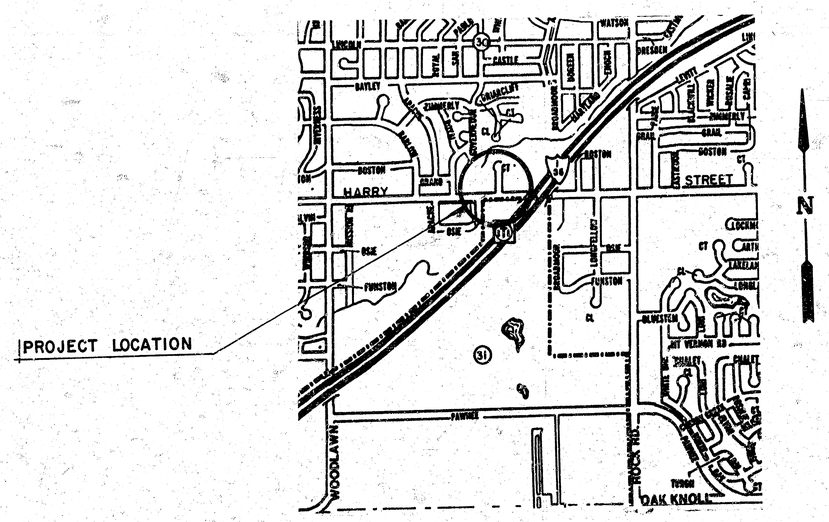
CITY OF WICHITA, KANSAS

M.E. LINDEBAK - CITY ENGINEER

INDEX CODE 705087

472-76-245-81971-000-000-001

NOTE: TRAFFIC TO BE CARRIED THRU CONSTRUCTION



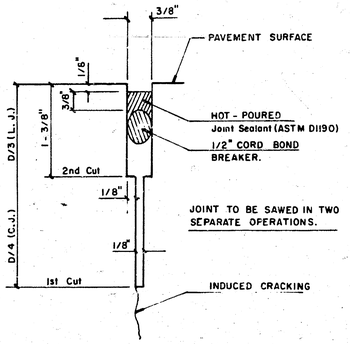
INDEX TO THE PLANS

1. _____ TITLE SHEET
2. _____ VALLEY GTR. & JOINT DETAILS
3. _____ MISC. DETAILS
4-5. _____ PAVING PLANS
6. _____ TYPE "B" SHALLOW MANHOLE DETAIL
7. _____ TYPE I-A CURB INLET DETAIL
8. _____ TYPICAL DRIVE DETAIL
9-10 _____ PAVEMENT MARKING & SIGNING PLANS
11-12 _____ PAVEMENT MARKING & SIGNING DETAILS

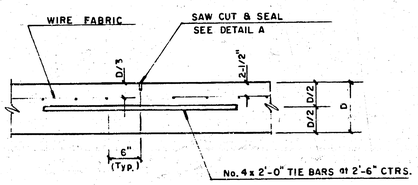
SHEET 1 OF 12

REVISED SEPT. 12, 1989

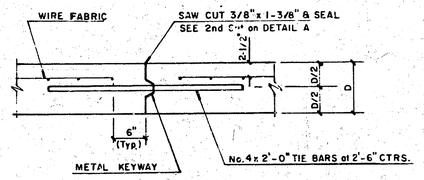
DONALD E. SCHEIDEGGER LICENSED 6311 KANSAS PROFESSIONAL ENGINEER



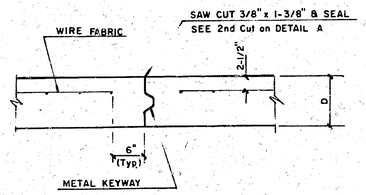
DETAIL A



LONGITUDINAL JOINT DETAIL (L.J.)

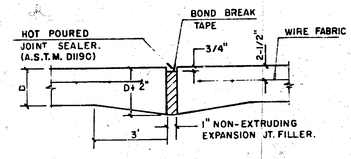


OPTIONAL LONGITUDINAL CONSTRUCTION JOINT (L.J.)
(Alternate L.J.)



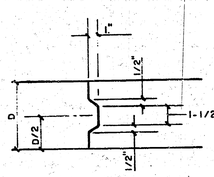
OPTIONAL CONTRACTION CONSTRUCTION JOINT (C.J.)
(Alternate C.J.)

NOTE: ALL CONCRETE VALLEY GUTTER REINFORCEMENT SHALL BE ADEQUATELY SUPPORTED BY BAR CHAIRS IN THE REQUIRED POSITION UNLESS APPROVED OTHERWISE BY THE ENGINEER.

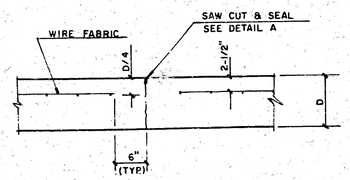


EXPANSION JOINT

NOTE: EXTRA THICKNESS TO BE SUBSIDIARY TO PRICE OF SQ YDS PAVEMENT.



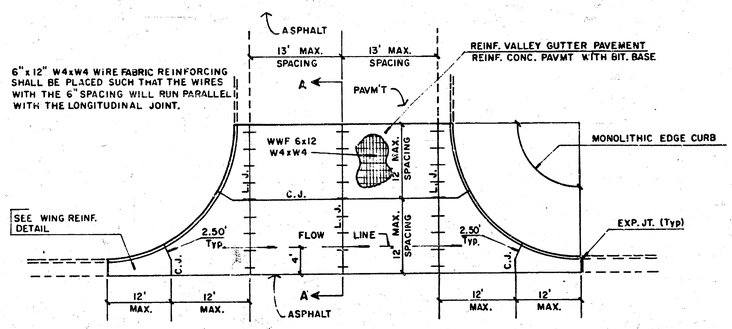
KEYWAY DETAIL



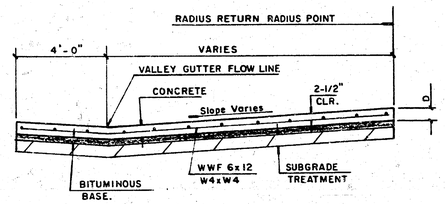
CONTRACTION JOINT DETAIL (C.J.)

L E G E N D

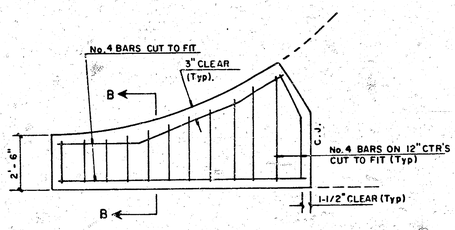
C.J. IDENTIFIES CONTRACTION JOINT
L.J. IDENTIFIES LONGITUDINAL JOINT



PLAN
REINFORCED VALLEY GUTTER

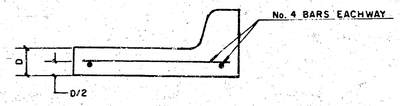


SECTION A-A



WING REINFORCING DETAIL

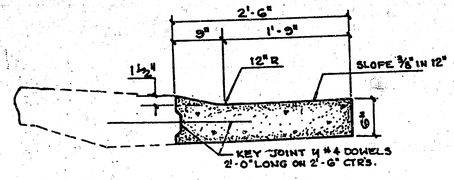
NOTE: OMIT WIRE FABRIC REINFORCING IN THIS SECTION.



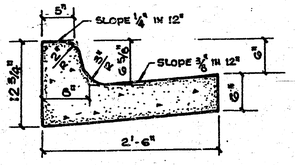
SECTION B-B

SHEET 2 OF 12

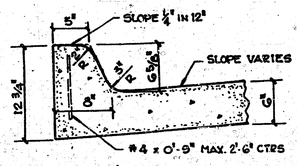
PROJECT DESCRIPTION
VALLEY GUTTER DETAILS
INDEX
PROJECT NUMBER CODE 705087



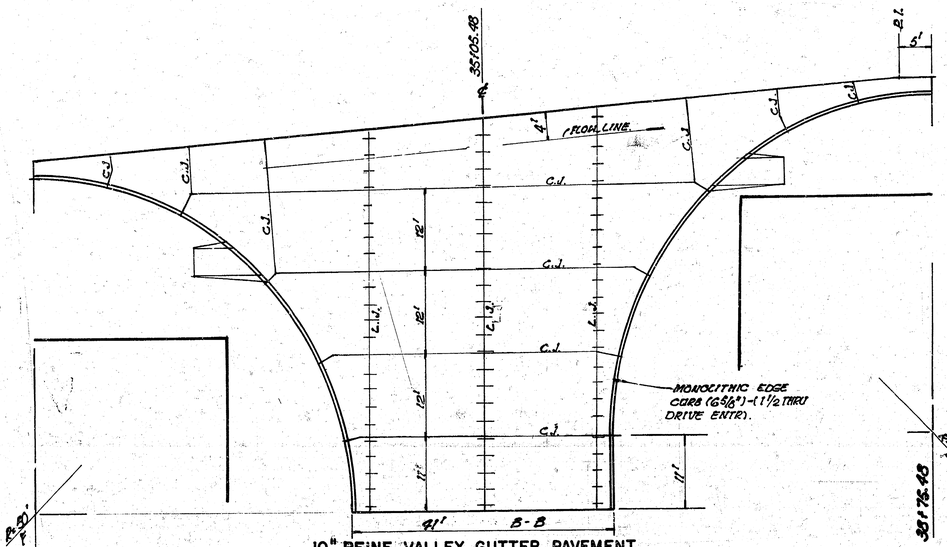
COMBINED CURB & GUTTER SECTION WITH 1-1/2" LIP CURB THRU DRIVE



COMBINED CURB & GUTTER



MONOLITHIC EDGE CURB



10" REINF. VALLEY GUTTER PAVEMENT (6" REINF. CONC. PAVM'T W 4" BIT. BASE

JOINT DETAILS

GENERAL NOTES

1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 10" ASPHALTIC CONCRETE (8" BITUMINOUS BASE).

2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 4" 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 SURFACES 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. Unless otherwise indicated on plans.

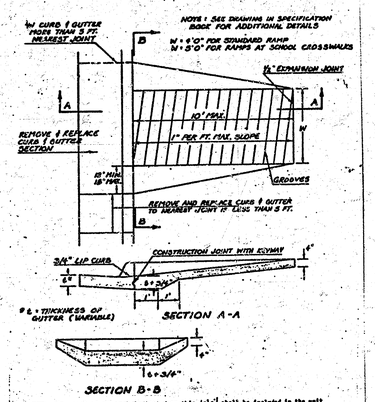
ALL GRASSED AREAS DISTURBED BY THE CONSTRUCTION IMPROVEMENTS UNDER THIS CONTRACT SHALL BE REPLANTED WITH REBEL II FESCUE GRASS SEED AT AN APPLICATION RATE OF 10 LBS./1000 S.F. FERTILIZER SHALL BE 16-20-6 APPLIED AT A RATE OF 10 LBS/1000 SQ.FT.

Utility service lines, poles, valve boxes, meters, etc. 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. Location information has been obtained from the various utility companies and is either from company record drawings or company provided field locations. The plan locations shown are not guaranteed. Additional existing utilities may also be encountered. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

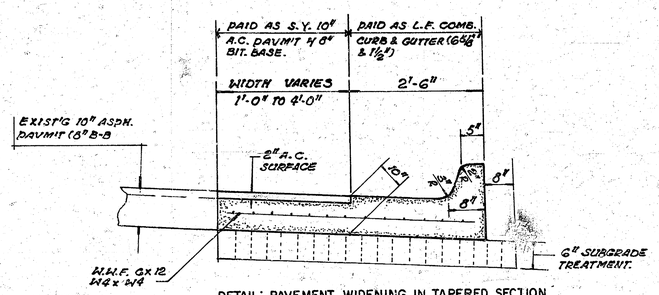
A saw cut of at least one-half the depth of existing surface courses or one-fourth the depth of the existing total pavement thickness shall be provided at locations where proposed construction abuts an existing surface course or pavement for which partial removal of that surface or pavement is required. 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.

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.

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER



NOTE: The cost of all work indicated on this detail shall be included in the unit price bid for wheel chair ramp which price shall include all costs of removing and reconstructing existing combined curb and gutter, compaction of subgrade and necessary area grading.



DETAIL: PAVEMENT WIDENING IN TAPERED SECTION

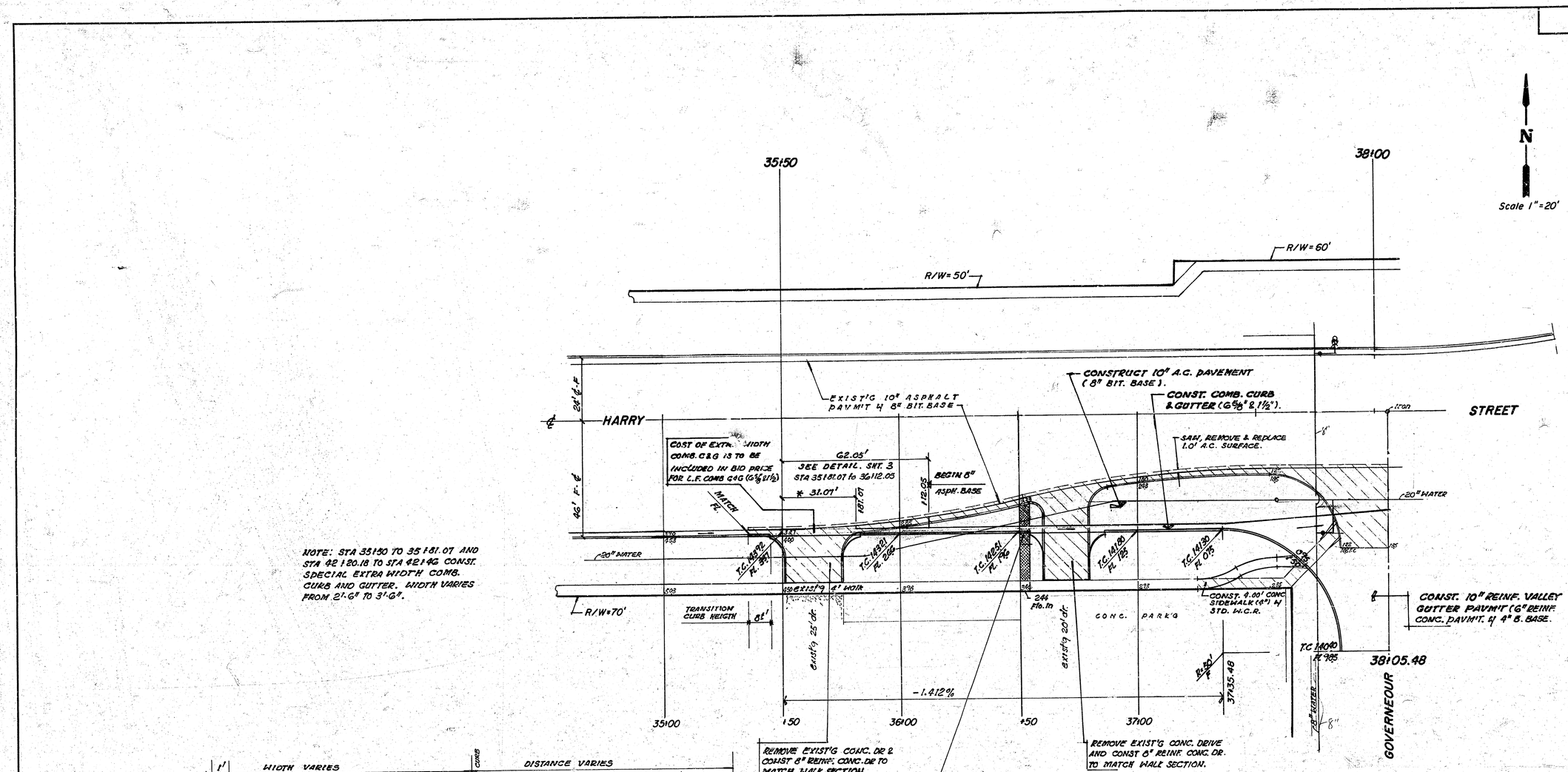
STA. 35+81.07 TO STA 36+12.05
STA 41+42.73 TO STA 42+20.18

TO BE PAID AS BID FOR L.F. COMB. CURB & GUTTER (G5 1/8 & 1 1/2") AND S.Y. 10" ASPH. CONC. PAVM'T (8" BIT. BASE.

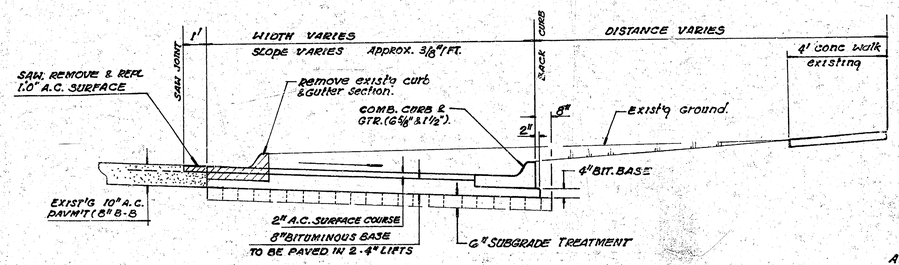
NOTE: THESE PLANS WERE PREPARED USING INFORMATION FROM HARRY STREET CONSTRUCTION PLANS AND WITHOUT BENEFIT OF TOPOGRAPHICAL SURVEY. FIELD ENGINEER SHALL VERIFY EXISTING ELEVATIONS AND HORIZONTAL DIMENSIONS ON THESE PLANS AND MAKE ADJUSTMENTS AS NECESSARY BECAUSE OF DEVIATIONS BETWEEN ACTUAL CONSTRUCTION AND CONSTRUCTION PLANS.

PROJECT DESCRIPTION
MISCELLANEOUS DETAILS

PROJECT NUMBER
INDEX CODE 705087



NOTE: STA 35+50 TO 35+81.07 AND STA 42+20.18 TO STA 42+46 CONST. SPECIAL EXTRA WIDTH COMB. CURB AND GUTTER. WIDTH VARIES FROM 2'-6" TO 3'-6".



TYPICAL SECTION

E A R T H W O R K

APPROX. 500 CU. YARDS OF EXCAVATION IS TO BE CONSIDERED AS SUBSIDIARY TO THE OTHER PAY ITEMS OF WORK IN THE CONTRACT, AND IS FOR INFORMATION ONLY.

REMOVAL

SHEET 4 OF 12

PROJECT DESCRIPTION
IMPROVING HARRY STREET DE-CEL AND LEFT TURN LANES AT HARRY COURT AND GOVERNEOUR.

PROJECT NUMBER
INDEX CODE 705087

B.M. 14730 "D" Top W. curb Governeour 77' N. of ℄ Harry.
B.M. 13723 Brass plug on East end abutment N. side conc. bridge on Harry just E. Governeour S.

40+85.48

CT.

35' 35'

40' P.F.

HARRY

38+00

39+50

41+50

42+81.48

N

Scale 1"=20'

R/W=50'

R/W=60'

12' W

CONSTRUCT 10" A.C. PAVM'T (8" BITUMINOUS BASE).

HARRY

IRON

EXIST'G 10" ASPH. PAV'T & 8" BIT. BASE

STR.

S.A.W. REMOVE & REPLACE 1.0' A.C. SURFACE.

T.C. 14022 FL. 902

T.C. 13938 FL. 883

T.C. 13948 FL. 897

T.C. 13880 FL. 915

T.C. 13891 FL. 958

25.82' ℄

MATCH FL.

TAPER-3.81' PER 100'

℄ 24" S.W.S.

EXIST'G 4' WALK

20" adj. W.V.

adj. W.V.

adj. W.V.

20" WATER

MATCH

MATCH WALK SECTION

CONST. 4.00' CONC. SIDEWALK. (4").

R/W=50'

30°

S.W.S.

T.C. 14180 FL. 125

T.C. 14130 FL. 015

EXIST'G 4' WALK

R/W=70'

35' R

CONST. 4.00' CONC. SIDEWALK. (4").

CONG. PARK'G

R=50' F

37+35.48

37+00

T.C. 14040 FL. 988

38+05.48

40' 40'

40' F-F

T.C. 14000 FL. 945

GOVERNEOUR

8'

CONST. STD. WHEEL-CHAIR RAMP.

CONST. 10" REINF. VALLEY GTR. PAVM'T (6" REINF. CONC. PAVM'T & 4" BIT. BASE). 6½" MONOLITHIC EDGE CURB.

CONST. 1½" LIP CURB THRU DRIVE OPEN'G & CONST. 6" TEMP ASPH. PAVM'T TO MATCH AT R/W LINE.

CONST. STD. WHEELCHAIR RAMP.

38+75.48

BEGIN TAPER

EXIST'G 25' OF.

40+18

STA

ASPHALT

-0.939%

PARKING

10.43%

10.5%

R=50' F

39+00

39+62

40+00 P.V.I. EL. 13905 10.36' U.C.

40+50

41+00

41+50

42+00 P.V.I. NO V.C.

42+46 ℄ PROF. 42.38

END TAPER.

END 8" ASPH. BASE.

41+62.13

STA 40+18 REMOVE INLET AND CONST. TYPE "B" SHALLOW MANHOLE. ℄ 24" E. 13478 ℄ 18" N & S. 13528 RIM. 13876 (5' DIA)

STA 40+18 CONST. STD. TYPE 1-A CURB INLET. L=6'-4" W=4'-4" INSTALL 8 LF 18" DIA. R.C.P. FL. OUT 13548 T.C. 13945

NOTE: CONTRACTOR TO UN-COVER EXIST'G 20" WATER LINE AT STA 40+18 PRIOR TO CONSTRUCTION OF INLET. FIELD ENGR. TO COORDINATE CONSTRUCTION ACCORDINGLY.

* COST OF EXTRA WIDTH COMB. CURB & GTR. IS TO BE INCLUDED IN THE BID PRICE FOR L.F. COMB. CURB & GUTTER (6½" & (4½").

37'25'

MATCH WALK AT NEAREST EXIST'G ℄ (TYP.)

9'

34.34'

9'-O.S. 35' R (REVERSE CURVE WALK DETAIL)

BR. CURB

4'

6½"

37'25'

R/W=50'

CONST. 4.00' CONC. SIDEWALK (4").

29.42'

35' R (REVERSE CURVE WALK DETAIL) 6.8' OFF-SET.

WATER VALVE ADJUSTMENT TABLE

STA	RT. OF ℄	EXIST'G. EL.	NEW EL.
37+62.5	35'	1429.9	1407.8
37+78.1	42'	142.1'	1409.9
41+12.5	32'	1409.1	1396.9

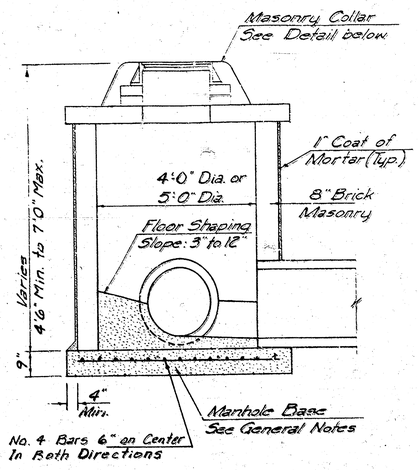
SHEET 5 OF 12

REVISED SEPT. 12, 1989

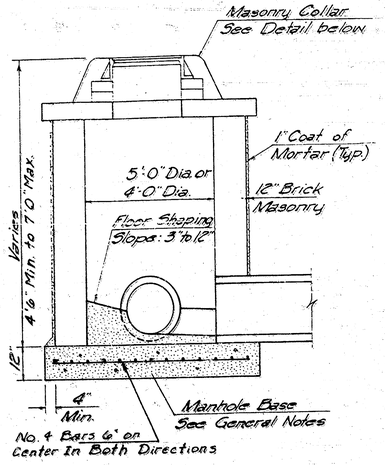
PROJECT DESCRIPTION

PROJECT NUMBER

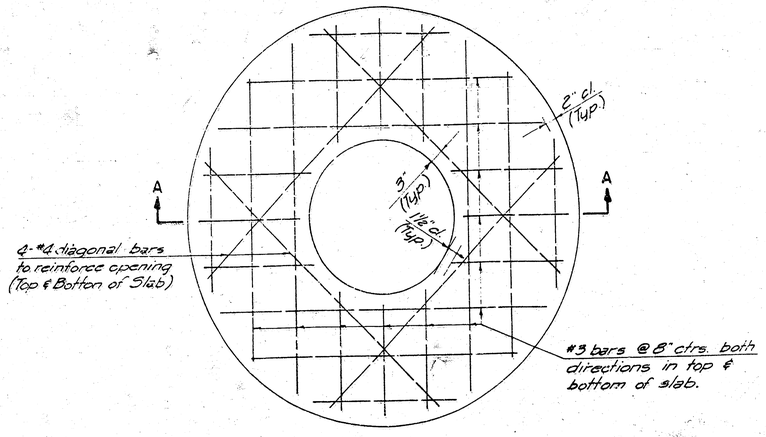
INDEX CODE 705087



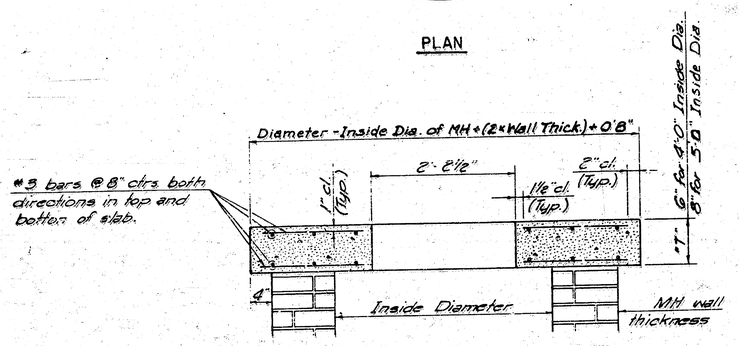
SHALLOW TYPE "A" MANHOLE



SHALLOW TYPE "B" MANHOLE

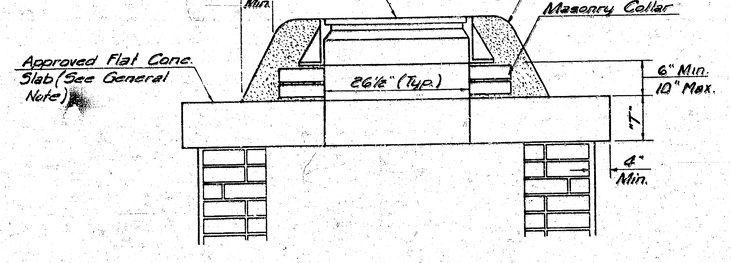


PLAN

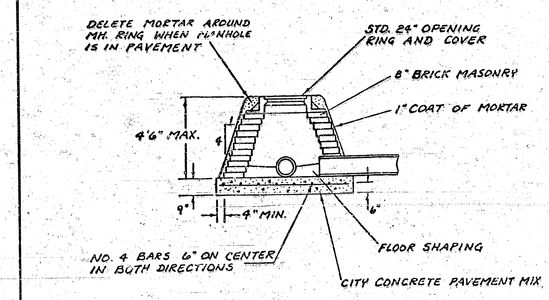


SECTION A-A

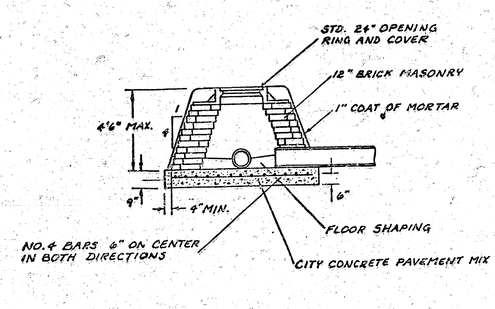
FLAT CONCRETE SLAB DETAILS



MASONRY COLLAR DETAIL



SPECIAL SHALLOW TYPE 'A' MANHOLE



SPECIAL SHALLOW TYPE 'B' MANHOLE

GENERAL NOTES

1. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE CEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. TYPE "A" SHALLOW MANHOLES CAN BE USED ON SEWERS WHEN THE MANHOLE IS NOT LOCATED WITHIN PUBLIC STREET PAVEMENT. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5'. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.

2. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED 6" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.

3. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.

4. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.

5. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWINGS.

6. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.

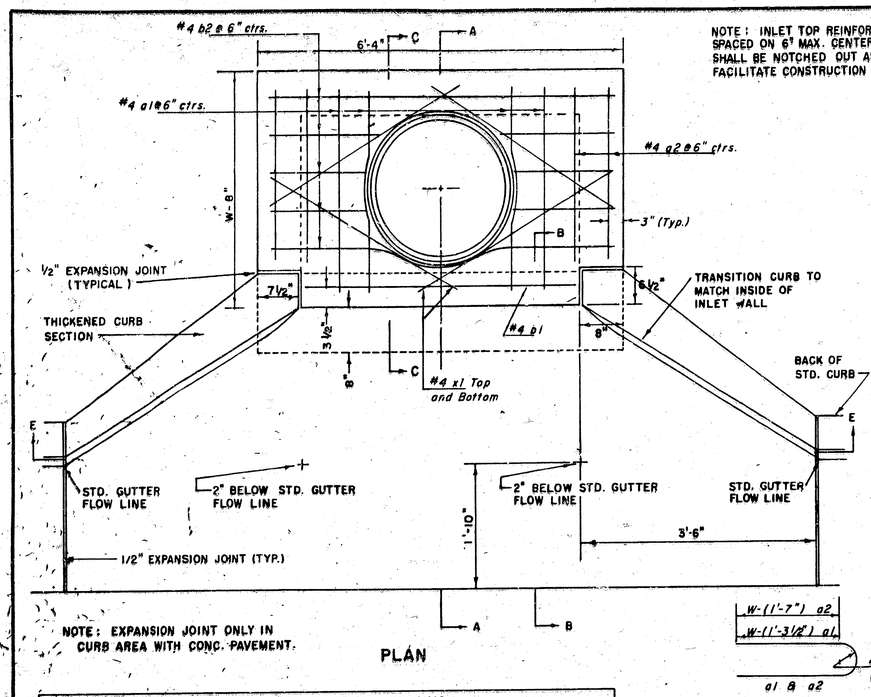
7. STANDARD SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE AND DIAMETER INDICATED. STANDARD SPECIAL SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE INDICATED. ALL STANDARD SHALLOW MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

SHEET 6 OF 12

CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES TYPE 'A' AND TYPE 'B'

INDEX CODE 705087

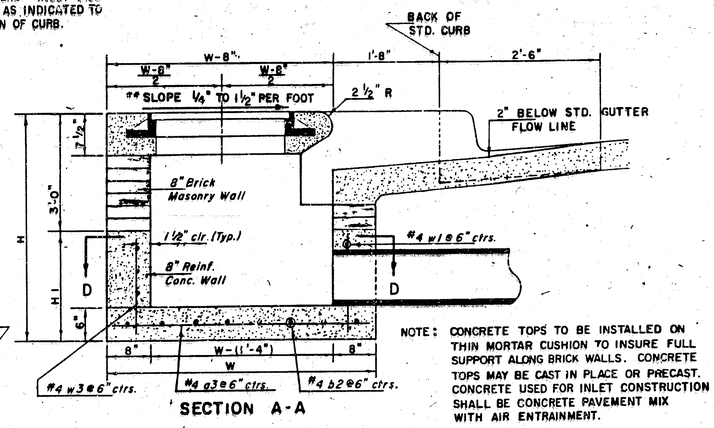
Designed by		Checked by	
Drawn by		Date	Job No.



NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

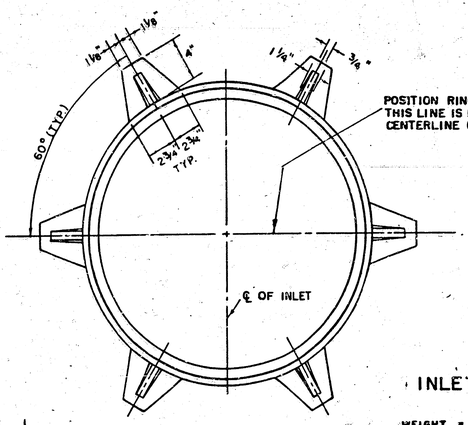
PLAN

NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.



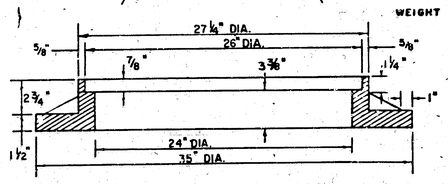
SECTION A-A

NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX WITH AIR ENTRAINMENT.



INLET FRAME

WEIGHT = 180 LBS.



SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.



BENDING DIAGRAM

PRECAST SLAB AND FLOOR REINFORCING												
		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"		
Mark	Size	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	
a1	#4	6	6'-7"	6	8'-7"	6	10'-7"	6	12'-7"	6	14'-7"	
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"	
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1"	13	8'-1"	
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	
b2	#4	23	5'-1"	29	6'-1"	35	6'-1"	41	6'-1"	47	6'-1"	
x1	#4	8	3'-10"	8	4'-2"	8	4'-6"	8	4'-10"	8	5'-2"	
WALL REINFORCING												
		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"		
Mark	Size	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	
w1	#4	①	6'-1"	①	6'-1"	①	6'-1"	①	6'-1"	①	6'-1"	
w2	#4	①	4'-1"	①	5'-1"	①	6'-1"	①	7'-1"	①	8'-1"	
w3	#4	32	②	36	②	40	②	44	②	48	②	

* Field bend or cut Reinforcing as required for clearance.

① 4(H1-12"); (H1-12") Round down to nearest 0.5'

② H1-3"

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC
4' 4"	3'8"x 6'4" x7 1/2"	21" & SMALLER	0.38 ±
5' 4"	4'8"x 6'4" x7 1/2"	24" & 30"	0.51 ±
6' 4"	5'8"x 6'4" x7 1/2"	36" & 42"	0.64 ±
7' 4"	6'8"x 6'4" x7 1/2"	48" & 54"	0.77 ±
8' 4"	7'8"x 6'4" x7 1/2"	60" & 66"	0.90 ±

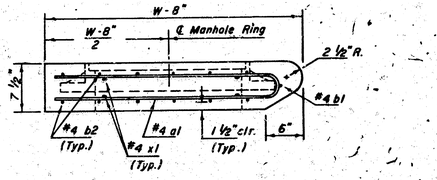
NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 6'4" AND H = 7'0" OR LESS.

ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR EACH INLET HOOKUP.

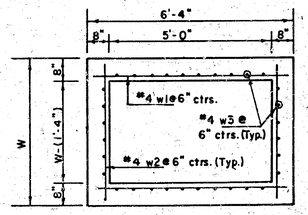
INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

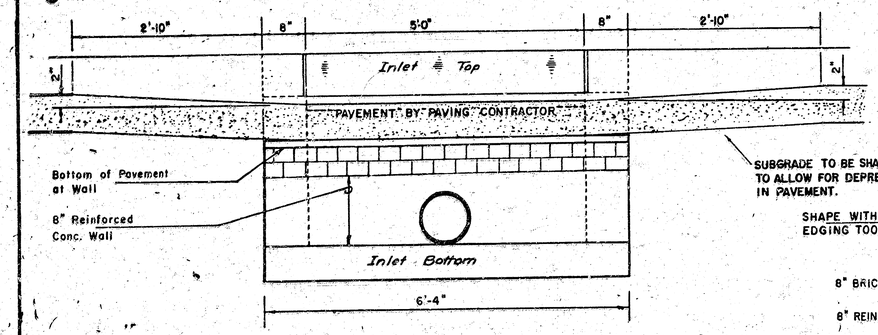
** NOTE: Slope of Inlet Tops to match Sidewalk or Parking Slopes within Limits indicated.



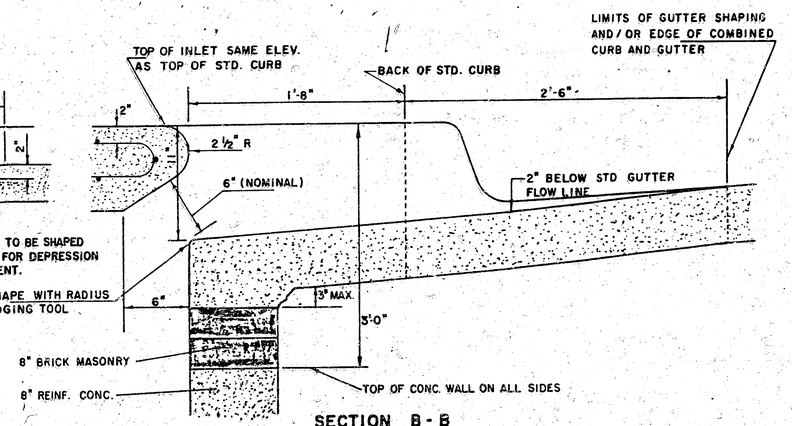
SECTION C-C



SECTION D-D



SECTION E - E



SECTION B - B

INDEX CODE 705087

SHEET 7 OF 12

~~REVISED 11-30-1988~~

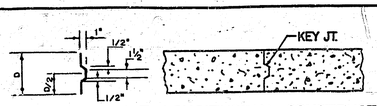
~~REVISED 12-21-1984~~ Revised 2-16-1989

DETAIL STANDARD TYPE IA CURB INLET

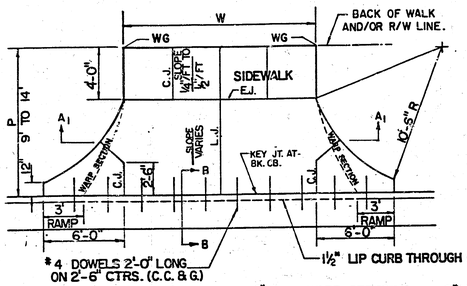
CITY OF WICHITA, KANSAS

INLET OPENING = 6" x 5'0"

JUNE 1984

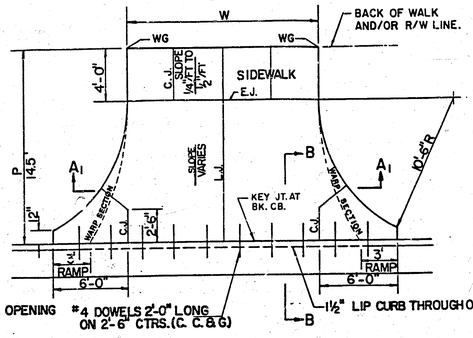


ALT. LONGITUDINAL CONSTRUCTION JOINT



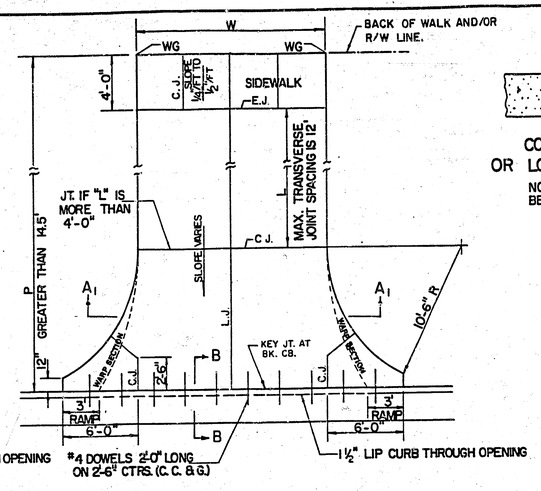
#4 DOWELS 2'-0" LONG ON 2'-6" CTRS. (C.C. & G.)

1½" LIP CURB THROUGH OPENING



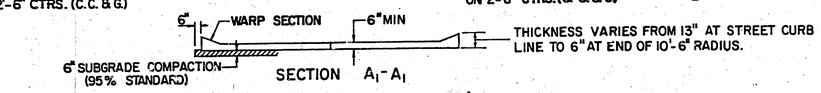
#4 DOWELS 2'-0" LONG ON 2'-6" CTRS. (C.C. & G.)

1½" LIP CURB THROUGH OPENING



#4 DOWELS 2'-0" LONG ON 2'-6" CTRS. (C.C. & G.)

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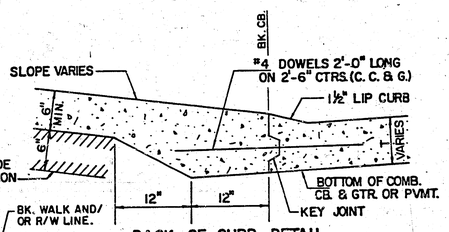


THICKNESS VARIES FROM 13" AT STREET CURB LINE TO 6" AT END OF 10'-6" RADIUS.

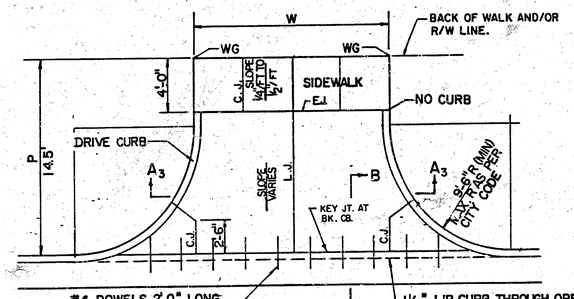
SECTION A_1-A_1

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)

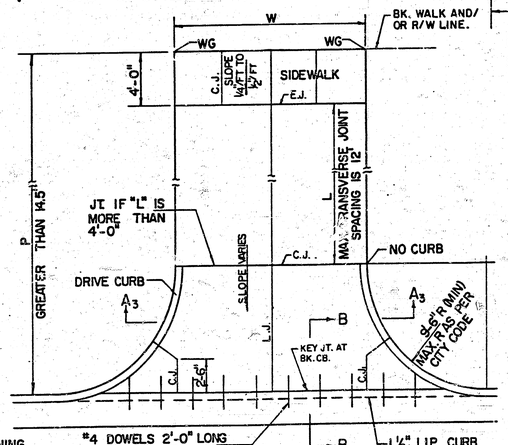


BACK OF CURB DETAIL
SECTION B - B (no scale)



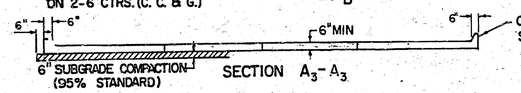
#4 DOWELS 2'-0" LONG ON 2'-6" CTRS. (C. C. & G.)

1½" LIP CURB THROUGH OPENING



#4 DOWELS 2'-0" LONG ON 2'-6" CTRS. (C. C. & G.)

1½" LIP CURB THRU. OPENING

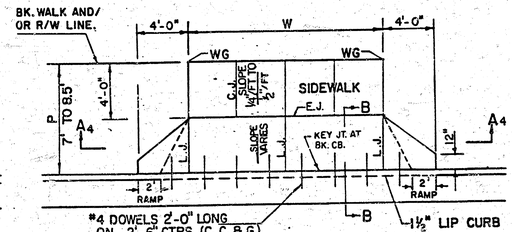


CURB HEIGHT VARIES FROM FULL HEIGHT AT STREET CURB LINE TO NO CURB AS INDICATED.

SECTION A_3-A_3

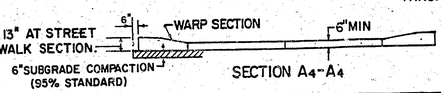
PARKING WIDTH "P"	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.80'	1.35'	1.85'	2.35'	2.85'	3.35'	3.85'	4.35'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.70'	1.04'	1.30'	1.56'	1.82'	2.08'	2.34'	2.60'
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL 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)



#4 DOWELS 2'-0" LONG ON 2'-6" CTRS. (C. C. & G.)

1½" LIP CURB THRU. OPENING

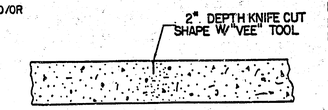


THICKNESS VARIES FROM 13" AT STREET CURB LINE TO 6" AT SIDEWALK SECTION.

SECTION A_4-A_4

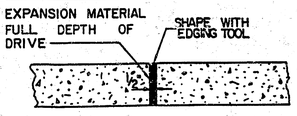
PARKING WIDTH "P"	7'	7.5'	8'	8.5'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00'	0.10'	0.20'	0.30'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00'	0.10'	0.20'	0.30'
OPTIMUM MIN. DIST. OF PT. "WG" BELOW TOP OF FULL CB.	-.15'	-.16'	-.17'	-.17'
ABSOLUTE MAX. DIST. OF PT. "WG" BELOW TOP OF FULL CB.	-.25'	-.20'	-.20'	-.20'

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

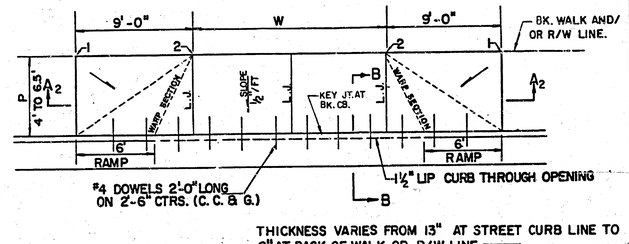


CONTRACTION JOINT (C.J.) OR LONGITUDINAL JOINT (L.J.)

NO SAWN JOINTS WILL BE ALLOWED.

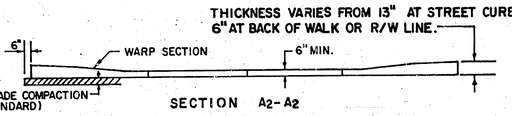


EXPANSION JOINT (E.J.)



#4 DOWELS 2'-0" LONG ON 2'-6" CTRS. (C. C. & G.)

1½" LIP CURB THROUGH OPENING



THICKNESS VARIES FROM 13" AT STREET CURB LINE TO 6" AT BACK OF WALK OR R/W LINE.

SECTION A_2-A_2

PARKING WIDTH "P"	4'	4.5'	5'	5.5'	6'	6.5'
DIST. OF PT. "I" 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" W4-W4 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.

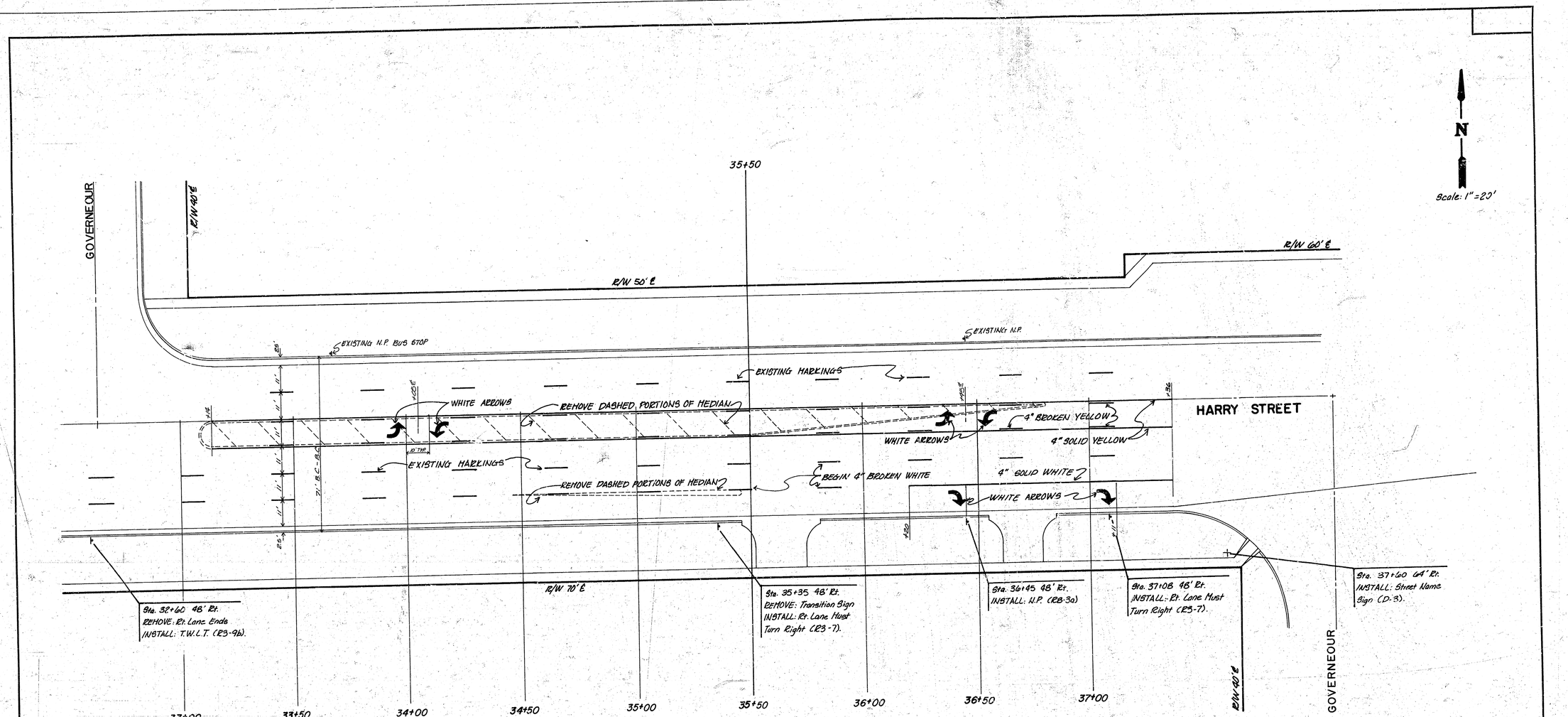
REVISED OCTOBER 1985

SHEET 8 OF 12

SCALE: 1"= 5'

STANDARD DRIVE ENTRANCES
FULL HEIGHT CURB
CITY OF WICHITA, KANSAS

INDEX CODE 705087 PROJECT NUMBER



NOTES:

1. All pavement markings shall conform to the current standards set forth in the 'Manual on Uniform Traffic Control Devices.'
2. All pavement markings shall be the Cold-laid Plastic Tape(s) and Pre-cut Standard Symbol(s) type meeting the required space. Install and Cold roll as per standard installation procedure for cold laid Pavement Markings.
3. Where new pavement (Asph. Conc.) is being constructed, the pavement markings must be installed while the new wearing surface is still warm (at least 150°F) and rolled so as to inlay the pavement markings into the new pavement.
4. Pavement marking removal (existing) shall be accomplished in accordance with City Standards for pavement marking removal.

NOTE: FURNISHING AND INSTALLING TRAFFIC SIGNS AS INDICATED ON PLAN SHEET NO.'S 9, 10 AND 12 WILL NOT BE PAID FOR DIRECTLY. THE COST FOR THIS WORK WILL BE CONSIDERED AS SUBSIDIARY TO THE OTHER PAY ITEMS OF WORK IDENTIFIED IN THE PROPOSAL.

PROJECT DESCRIPTION

HARRY - GOVERNEOUR to TURNPIKE

PAVEMENT MARKING & SIGNING PLAN

SCALE: 1"=20'	PROJECT NUMBER	DATE: SEP 89
DRAWN BY: JD	705087	SHEET 9 of 12

HARRY STREET

HARRY CT.

R/W 60'E

R/W 60'E

R/W 35'E

R/W 35'E

R/W 50'E

R/W 70'E

R/W 40'E

R/W 40'E

GOVERNEOUR

Sta. 40+03 37' Lt.
INSTALL: T.W.L.T. (R3-9b).

Sta. 38+40 53' Rt.
INSTALL: Stop Sign (R1-1).

Sta. 39+40 37' Rt.
INSTALL: N.P. (R8-3a).

EXISTING N.P.

EXISTING N.P. & S.E.R.

EXISTING MARKINGS

REMOVE DASHED PORTIONS OF EXIST'G. DOUBLE YELLOW MARKINGS

4" SOLID YELLOW

4" BROKEN YELLOW

WHITE ARROWS

4" BROKEN WHITE

12" SOLID YELLOW HASH · 20' C SPACING @ 45°

4" SOLID DOUBLE YELLOW

EXISTING N.P. & S.E.R.

BEGIN TAPER

END TAPER & MATCH EXISTING

10' TYP.

30' TYP.

10' TYP.

±35

±39

±36

±62

±46

40' B.C. B.C.

37+00

37+50

38+50

39+00

39+50

40+00

40+50

41+00

41+50

42+00

PROJECT DESCRIPTION

HARRY - GOVERNEOUR to TURNPIKE

PAVEMENT MARKING & SIGNING PLAN

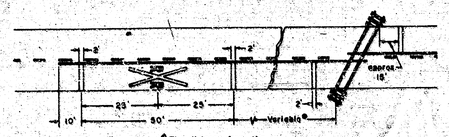
SCALE: 1"=20'	PROJECT NUMBER 705087	DATE: SEP. '89
DRAWN BY: JD		SHEET 10 of 12

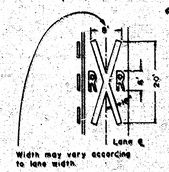
FEDERAL AID PROJECT NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS		19		

WORD & SYMBOL DETAILS (WHITE)



RAILROAD CROSSING DETAIL





Width may vary according to lane width.

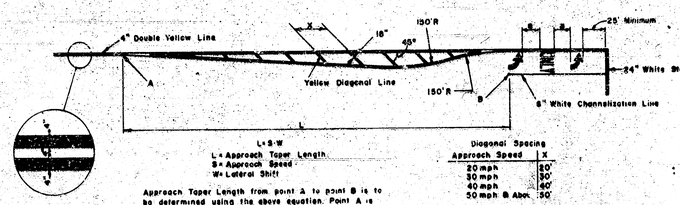
The distance from the railroad crossing marking to the nearest track will vary according to the approach speed and sight distance of the vehicular traffic approaching, but preferably should be not less than 30 feet.

A three-lane roadway should be marked with a centerline for two-lane approach operation on the approach to a crossing.

On multi-lane roads the transverse bands should extend across all approach lanes, and individual R X R symbols should be used in each approach lane.

Refer to Standard Alphabet for Highway Signs and Markings for R X R symbols details.

TYPICAL APPROACH TAPER DETAIL



L = S·W

L = Approach Taper Length
S = Approach Speed
W = Lateral Shift

Diagonal Spacing

Approach Speed	X
20 mph	20'
30 mph	30'
40 mph	40'
50 mph & Abov.	50'

Approach Taper Length from point A to point B is to be determined using the above equation. Point A is the location at which taper starts. Point B is the end of full width left turn channelization.
Unless otherwise specified the space between lines should be at least four times the height of the characters for low speed roads but not more than ten times the height of the characters, under any conditions.

For specific pavement marking details and dimensions see plan sheets.

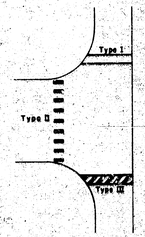
PAVEMENT MARKINGS

LOCATION	Solid WHITE Edge Line	Broken WHITE Lane Line	Dotted WHITE Extension	Solid WHITE Channelization	Solid WHITE Diagonal	Solid WHITE Crosswalk	Solid WHITE Stop Line		Solid YELLOW Median	Solid YELLOW Edge Line	Solid YELLOW Double	Solid YELLOW Diagonal	Broken YELLOW	Solid YELLOW No Passing

WORD & SYMBOL MARKINGS

LOCATION	↱	↰↑	↑	↱	↰		RXR	STOP	ONLY	X-ING	SCHOOL		

TYPICAL CROSSWALKS



Type I: Crosswalk lines shall be solid white lines. They shall not be less than 6" wide and should not be spaced less than 6' apart.
Type II: These lines should be solid white 24" wide placed parallel to the direction of traffic flow. The line placement is determined by lane line, center line, and wheel path in such a manner as to minimize traffic wear. The crosswalk width should be not less than 6'. The transverse crosswalk lines may be omitted.
Type III: These lines should be solid white 12" to 24" wide, spaced 12" to 24" apart placed at a 45° angle to the line of the crosswalk. The crosswalk width should be not less than 6'. The transverse crosswalk lines may be omitted.

BILL OF MATERIALS

ITEMS	TOTAL	UNITS
COLD PLASTIC MARKING (CL. A)(4")	265	LIN. FT.
COLD PLASTIC MARKING (CL. A)(6")		LIN. FT.
COLD PLASTIC MARKING (CL. A)(12")		LIN. FT.
COLD PLASTIC MARKING (CL. A)(18")		LIN. FT.
COLD PLASTIC MARKING (CL. A)(24")		LIN. FT.
		LIN. FT.
COLD PLASTIC MARKING (CL. B)(4")	1,000	LIN. FT.
COLD PLASTIC MARKING (CL. B)(6"-12")	20	LIN. FT.
		LIN. FT.
COLD PLASTIC MARKING (CL. A) - ARROWS	10	EACH
COLD PLASTIC MARKING (CL. A)		EACH
		EACH
COLD PLASTIC MARKING (CL. A)		EACH
		EACH
COLD PLASTIC MARKING (CL. A)		EACH
		EACH
COLD PLASTIC MARKING (CL. A)		EACH
		EACH

NO.	DATE	REVISIONS	BY	APP'D
3				
2	7/17/80	R R X-ing Detail	JFF	
1	7/17/80	Word & Symbol Details	JFF	

KANSAS DEPARTMENT OF TRANSPORTATION

COLD PLASTIC PAVEMENT MARKING

HARRY ST.

URBAN HIGHWAYS DEPARTMENT STD. NO. 2.1 7/80

SHEET NO. OF	SCALE	APP'D Robert C. Young	
DESIGNED	DETAILED J.F.F.	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK. F.E.Y.	QUAN. CK.	TRACE CK.

SHEET 11 OF 12

TRAFFIC CONTROL SIGNS & SIGN POSTS

Station	Location from ℄	Classification – Each					Sign Post Length	
		R1-1	R3-7	R3-3a	R2-1	D-5	Breakaway Length	"U"-Channel
35+40	53' Rt.	/					9.5'	
35+35	98' Rt.		/				9.5'	
37+08	98' Rt.		/				9.5'	
32+60	98' Rt.			/			11'	
40+08	97' Lt.			/			11'	
34+85	95' Rt.				/		8'	
39+40	57' Rt.				/		8'	
37+60	64' Rt.					/	N.A	