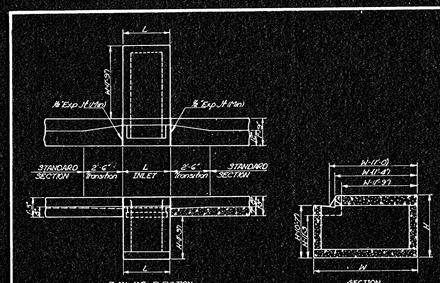
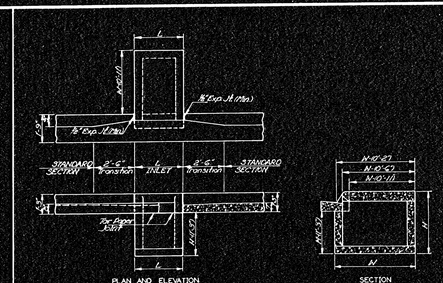
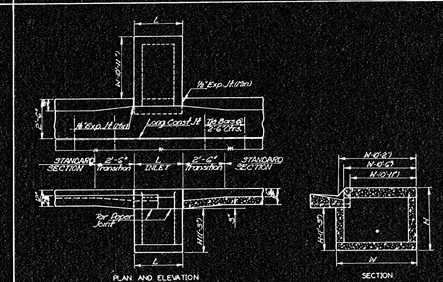
FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	BT-ER-184(1)	1974	7	28

OAKB 574005





CURB & GUTTER SHAPING FOR CURB INLETS, TYPE 10 THUR 12



CURB & GUTTER SHAPING FOR CURB INLETS, TYPE 20-22 &30-32

GENERAL NOTES

FREEBOARD

Curb and Gutter Shaping shall be placed where required by the installation of Curb Inlets.

No deductions in Curb and Gutter quantities shall be made for gutter depressions for sanitary sewer manholes and gutter which are omitted due to field inconsistencies.

CONCRETE

Class A Concrete (AE) shall be used exclusively in gutter shaping.

TRANSVERSE CONTRACTION JOINTS

Transverse contraction joints shall be constructed to coincide with those of the adjacent concrete pavement or concrete base course, except:

Transverse contraction joints shall be constructed at intervals not to exceed 10'-0", except:

EXCEPTION: Transverse contraction joints shall not be constructed within the full perimeter of the gutter shaping.

TRANSVERSE EXPANSION JOINTS

Transverse expansion joints shall be constructed to coincide with those of the adjacent concrete pavement or concrete base course.

Transverse expansion joints shall be constructed at intervals not to exceed 250 feet except:

Transverse expansion joints shall be constructed at the ends of all curb returns and at the returns, except:

EXCEPTION: Transverse expansion joints shall not be constructed within the full perimeter of the gutter shaping.

Transverse expansion joints shall be filled with premolded expansion joint filler, conforming to the following cross sectional dimension at the curb and gutter section and at the exposed concrete pavement or concrete base course.

CONSTRUCTION JOINTS

Longitudinal construction joint shall be constructed between the curb and gutter section and the adjacent concrete pavement or concrete base course.

Transverse tie bars shall be installed at 6'-0" centers along the length of the longitudinal construction joint except at construction joint locations.

TRANSVERSE TIE BARS

Transverse tie bars shall be #4 deformed steel bars, 3'-0" in length, spaced 2'-0" apart.

#4 Bars in lieu of natural shall be hot or cold rolled, cut sharp corners and free of projections.

Preformed Expansion Joint Filler, (Bituminous Fiber), Type B1.

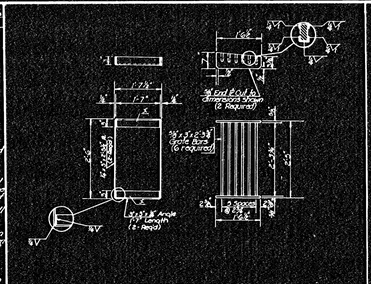
NO.	REVISION	BY	DATE

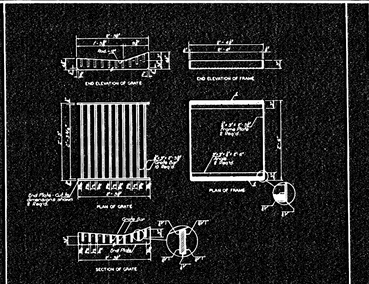
STATE HIGHWAY COMMISSION OF KANSAS

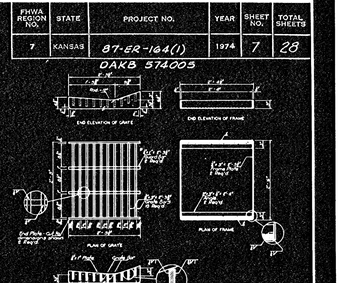
TYPICAL GUTTER SHAPING FOR CURB INLETS

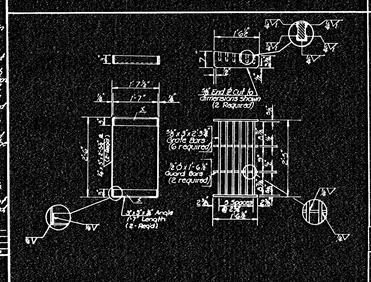
DESIGNED BY	DRAWN BY	CHECKED BY	QUANTITIES BY	CHECKED BY
R.D.K.	R.D.K.			

STATE	PROJECT NO.	SHEET NO.
KANSAS	BT-ER-184(1)	7









GENERAL NOTE

MATERIAL SPECIFICATIONS

ALL STRUCTURAL STEEL, USED IN THE FABRICATION OF GRATE AND FRAME ASSEMBLIES, SHALL COMPLY WITH SPECIFICATIONS FOR ASTM A-7, A-36, A-242 or A-441 STEEL.

MACHINE FINISHING

ALL SURFACES INDICATED BY ▽▽ SHALL BE MACHINE FINISHED.

PAINTING REQUIREMENT

STRUCTURAL STEEL GRATE AND FRAME ASSEMBLIES SHALL BE PAINTED EITHER IN THE SHOP OR IN THE FIELD WITH ONE COAT OF A RUST INHIBITIVE PRIMER, FOLLOWED BY TWO FIELD COATS OF ALUMINUM PAINT.

CALCULATED WEIGHTS

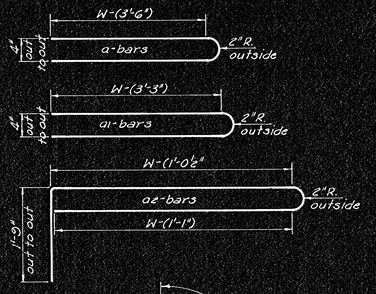
WEIGHT SHOWN PER GRATE AND FRAME ASSEMBLY IS COMPUTED WITH NO ALLOWANCE FOR FILLETS, WELDS OR OVERRUNS.

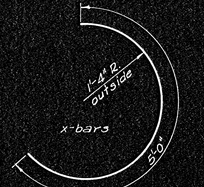
NO.	REVISION	BY	DATE

STATE HIGHWAY COMMISSION OF KANSAS

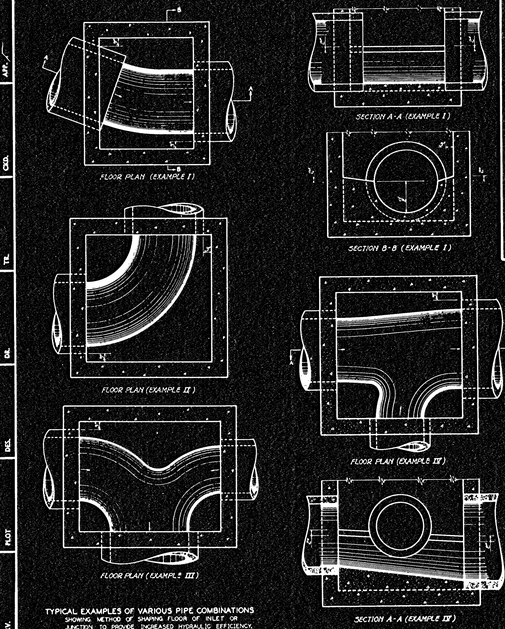
STRUCTURAL STEEL GRATE & FRAME ASSEMBLIES

DESIGNED BY	DRAWN BY	CHECKED BY	QUANTITIES BY	CHECKED BY
R.D.K.	R.D.K.			

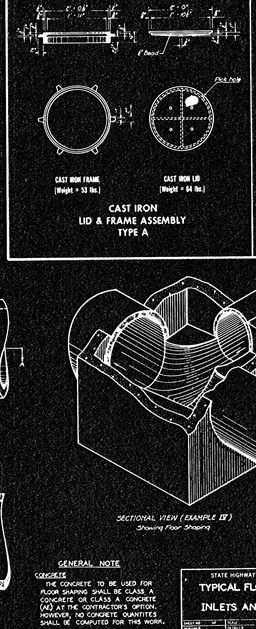




BENDING DIAGRAMS
Curb Inlet - Type 22



TYPICAL EXAMPLES OF VARIOUS PIPE COMBINATIONS
SHOWING METHOD OF SHAPING FLOOR OF INLET OR JUNCTION TO PROVIDE INCREASED HYDRAULIC EFFICIENCY.



GENERAL NOTE

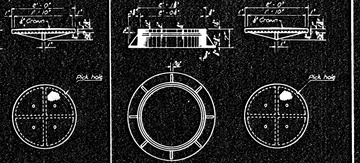
CONCRETE

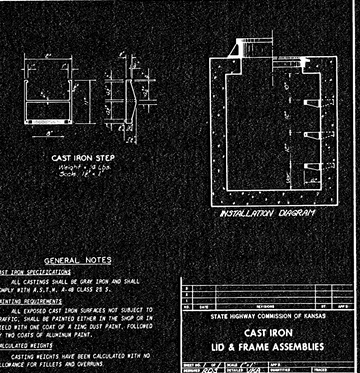
THE CONCRETE TO BE USED FOR FLOOR SHAPING SHALL BE CLASS A CONCRETE OR CLASS A CONCRETE (AE) AT THE CONTRACTOR'S OPTION, HOWEVER, NO CONCRETE QUANTITIES SHALL BE COMPUTED FOR THIS WORK.

STATE HIGHWAY COMMISSION OF KANSAS

TYPICAL FLOOR SHAPING FOR INLETS AND JUNCTIONS

DESIGNED BY	DRAWN BY	CHECKED BY	QUANTITIES BY	CHECKED BY





GENERAL NOTES

CAST IRON SPECIFICATIONS

ALL CASTINGS SHALL BE GRAY IRON AND SHALL COMPLY WITH A.S.T.M. A-48 CLASS 25 B.

PAINTING REQUIREMENTS

ALL EXPOSED CAST IRON SURFACES NOT SUBJECT TO TRAFFIC, SHALL BE PAINTED EITHER IN THE SHOP OR IN FIELD WITH ONE COAT OF A RUST INHIBITIVE PRIMER, FOLLOWED BY TWO COATS OF ALUMINUM PAINT.

CALCULATED WEIGHTS

CASTING WEIGHTS HAVE BEEN CALCULATED WITH NO ALLOWANCE FOR FILLETS AND OVERRUNS.

STATE HIGHWAY COMMISSION OF KANSAS

CAST IRON LID & FRAME ASSEMBLIES

DESIGNED BY	DRAWN BY	CHECKED BY	QUANTITIES BY	CHECKED BY
R.D.K.	R.D.K.			

	CURB INLET TYPE 22 CURB RADIUS 100 FEET		
LEGEND	DIMENSIONS	LEGEND	DIMENSIONS
L	5'-0"	LI	
W	2'-6"	WI	
H	3'-6"	HI	

BILL OF MATERIALS

BAR SYMBOLS	BAR SIZES	BAR TOTALS	BAR LENGTHS
A	4	2	2'-5½"
A1	4	2	2'-11½"
A2	4	4	5'-0 3/4"
A3	4	—	—
A4	4	—	—
B	4	14	4'-3"
B1	4	2	3'-0"
C	4	22	4'-9"
C1	4	4	2'-6"
C2	4	4	2'-3"
V	4	8	2'-0"
V1	4	22	3'-3"
V2	4	—	—
V3	4	—	—
U	4	—	—
X	4	2	5'-0"

INLET LOCATIONS

Sta. 7+85 Rt.

*Cast Iron	117 Lbs.
Reinforcing Steel	223 Lbs.
Class A Concrete (Misc.)	1.48 Cu.Yds.
Class III Excavation	5.90 Cu.Yds.

*Type A Lid & Frame Assembly

CITY OF WICHITA, KANSAS
R.W. LINN, P.E., CITY ENGINEER

FIRST STREET BRIDGE OVER THE ARKANSAS RIVER

AUXILIARY INLET DETAILS

DELAMATER, FREUND & SCHERER, P.A.
CONSULTING ENGINEERS
WICHITA KANSAS

SCALE	DATE	DWG. NO.
	June, 1974	89-G-7