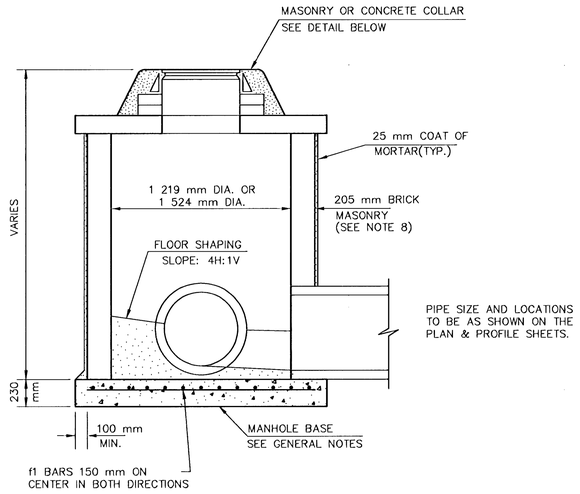
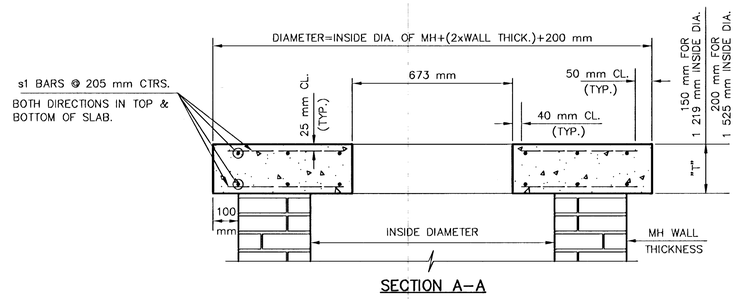
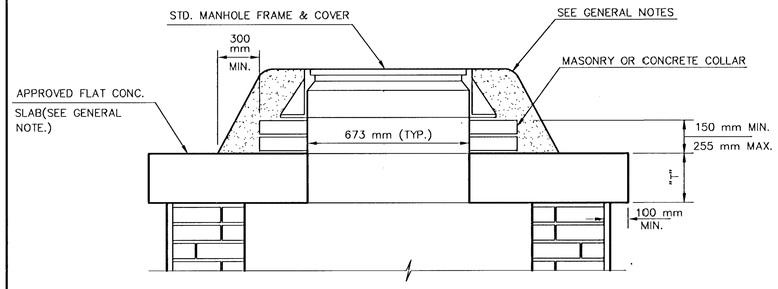
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7	KANSAS	STP-N012(901)	1999	53	131



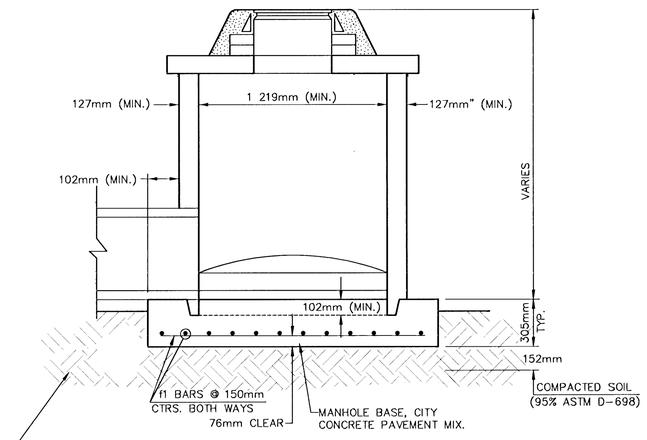
SPECIAL TYPE "A" MANHOLE



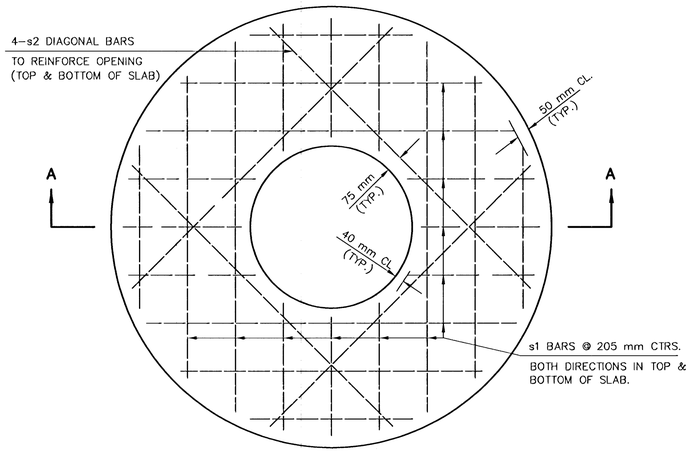
SECTION A-A



COLLAR DETAIL



SPECIAL TYPE "P" MANHOLE



PLAN

FLAT CONCRETE SLAB DETAILS

GENERAL NOTES

1. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 10.5 SACKS OF CEMENT PER CUBIC METER. 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. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 610 mm SHALL HAVE AN INSIDE DIAMETER OF 1 219 mm. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 610 mm OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 1 524 mm. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.

2. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF #13M BARS PLACED ON 150 mm CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED 150 mm 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 4H:1V IN THE AREAS OUT-SIDE 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.

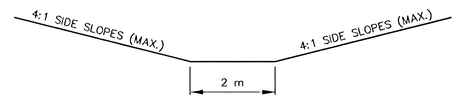
4. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. COST OF CRADLE WITHIN MANHOLE EXCAVATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.

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. SPECIAL MANHOLES TYPE "A" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE AND DIAMETER INDICATED.

8. ALTERNATIVE: PRECAST CONCRETE MANHOLE SECTION WITH 127 mm MIN. WALL THICKNESS SHALL MEET THE REQUIREMENTS OF ASTM C 478 AND CITY OF WICHITA STANDARD SPECIFICATIONS FOR PRECAST CONCRETE MANHOLE TYPE P.



TYPICAL DITCH SECTION

CITY OF WICHITA, KANSAS

STANDARD SHALLOW MANHOLE AND MISCELLANEOUS DRAINAGE DETAILS

PROJECT NO. STP-N012(901)

MID-KANSAS ENGINEERING CONSULTANTS, INC.

WICHITA, KANSAS

DESIGNED BY:	COW	CHECKED BY:	MKEC
DRAWN BY:	MKEC	DATE: MAY 1999	SHEET 53 OF 131

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