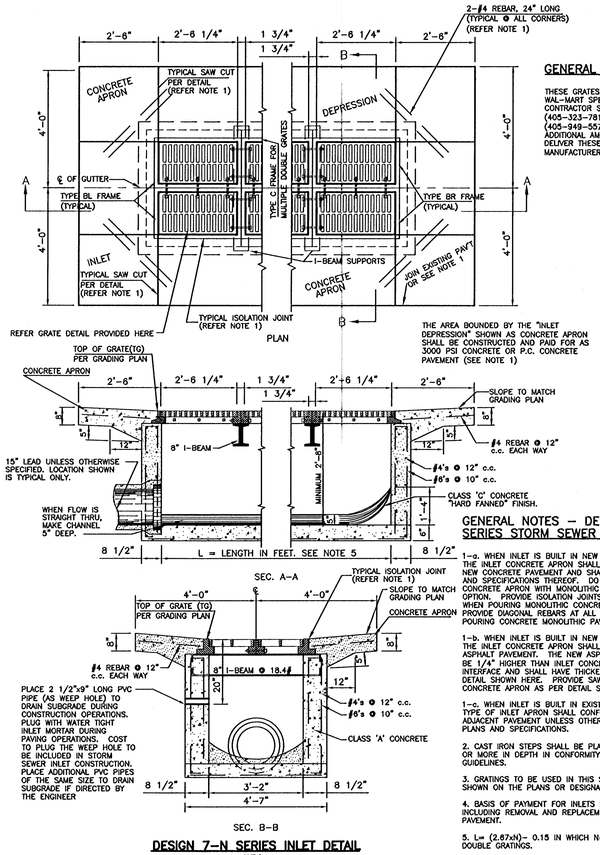
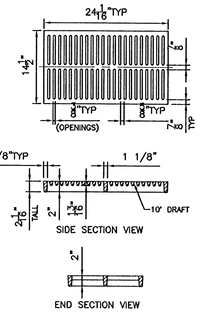


DESIGN 7-N SERIES INLET DETAIL

N.T.S.

GENERAL NOTE FOR INLET GRATE:

THESE GRATES ARE CUSTOM DESIGN TO MEET LATEST WAL-MART SPECIFICATION SECTION 02830, PART 2.2. CONTRACTOR SHALL CALL NEENAH FOUNDRY (405-323-7811) OR EAST JORDAN FOUNDRY (405-949-5579) TO ORDER THESE GRATES. ADDITIONAL AMOUNT OF TIME MAY BE REQUIRED TO DELIVER THESE GRATES AS SUGGESTED BY THE MANUFACTURER'S REPRESENTATIVE.



EAST JORDAN IRON WORK FOUNDRY

N.T.S.

GENERAL NOTES - DES. 7-N SERIES STORM SEWER INLET

1-a. WHEN INLET IS BUILT IN NEW CONCRETE PAVEMENT, THE INLET CONCRETE APRON SHALL BE MONOLITHIC WITH NEW CONCRETE PAVEMENT AND SHALL CONFORM TO PLANS AND SPECIFICATIONS THEREOF. DO NOT SAW CUT INLET CONCRETE APRON WITH MONOLITHIC CONCRETE PAVING OPTION. PROVIDE ISOLATION JOINTS AROUND INLET FRAME WHEN POURING MONOLITHIC CONCRETE PAVEMENT. PROVIDE DIAGONAL REBARS AT ALL INLET CORNERS WHEN POURING CONCRETE MONOLITHIC PAVEMENT.

1-b. WHEN INLET IS BUILT IN NEW ASPHALT PAVEMENT, THE INLET CONCRETE APRON SHALL FLUSH WITH NEW ASPHALT PAVEMENT. THE NEW ASPHALT PAVEMENT SHALL BE 1/4" HIGHER THAN INLET CONCRETE APRON AT INTERFACE AND SHALL HAVE THICKENED EDGE AS PER DETAIL SHOWN HERE. PROVIDE SAW CUT IN INLET CONCRETE APRON AS PER DETAIL SHOWN HERE.

1-c. WHEN INLET IS BUILT IN EXISTING PAVEMENT THE TYPE OF INLET APRON SHALL CONFORM TO THAT OF THE ADJACENT PAVEMENT UNLESS OTHERWISE PROVIDED IN PLANS AND SPECIFICATIONS.

2. CAST IRON STEPS SHALL BE PLACED IN ALL INLETS 3' OR MORE IN DEPTH IN CONFORMITY WITH STANDARD OSHA GUIDELINES.

3. GRATINGS TO BE USED IN THIS STRUCTURE WILL BE SHOWN ON THE PLANS OR DESIGNATED IN DETAILS.

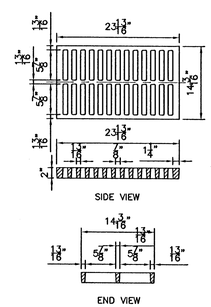
4. BASIS OF PAYMENT FOR INLETS SHALL BE LUMP SUM INCLUDING REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT.

5. L= (2.67xN)- 0.15 IN WHICH N= THE NUMBER OF DOUBLE GRATINGS.

FOR DES. 7-0 INLET, N=1
FOR DES. 7-2 INLET, N=2
FOR DES. 7-3 INLET, N=3
FOR DES. 7-4 INLET, N=4

6. FOR INLET WITH MULTIPLE DOUBLE GRATES, CONTRACTOR SHALL USE TYPE "B" FRAME FOR LEFT AND RIGHT ASSEMBLY AND TYPE "C" FOR ADDITIONAL GRATES AS PER DETAIL SHOWN HERE. FRAME INSTALLATION SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.

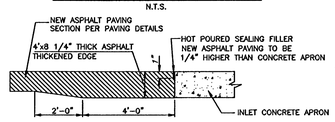
7. CONCRETE SHALL BE AIR ENTRAINED PER KDOT SPECS.



NEENAH FOUNDARY

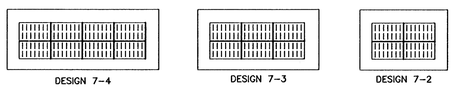
N.T.S.

(405) 323-7811
(405) 942-8118



PAVEMENT-THICKENED EDGE DETAIL FOR NEW ASPHALT PAVING

N.T.S



GRATE & FRAME LAYOUT

N.T.S.

GENERAL NOTE:

1. STORM SEWER STRUCTURES (JUNCTION BOX/MANHOLE/INLETS) SHALL BE PRE-CAST. NO BRICK CONSTRUCTION IS ALLOWED.

2. A MINIMUM OF 6" THICK 1 1/2" CLEAN ROCK/AGGREGATE BASE (ASTM #57) WILL BE REQUIRED UNDER STORM SEWER STRUCTURES (JUNCTION BOX/MANHOLE/INLETS).

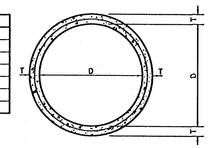
INLET FRAME TYPES

N.T.S.

GENERAL NOTES

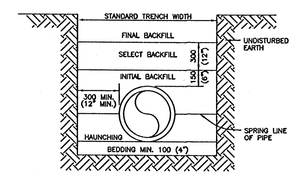
1. CHAMFER ALL EXPOSED EDGES 3/4"
2. ALL CONSTRUCTION AND MATERIALS REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS.
3. MINIMUM DEPTH OF FILL OVER CULVERTS SHALL BE 1'-0"
4. UNLESS OTHERWISE SPECIFIED, ALL EXPOSED CONCRETE SURFACES SHALL HAVE A FINISH IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS.

DIMENSIONS	
D	T
15"	2 1/4"
18"	2 1/2"
24"	3"
30"	3 1/2"
36"	4"
42"	4 1/2"



REINFORCED CONCRETE PIPE

N.T.S.



BEDDING MATERIALS								
BACKFILL DESCRIPTION	NON-PAVED AREAS				PAVED AREAS (See Note 9)			
	CORRUGATED		CONCRETE	HDPE	CORRUGATED		CONCRETE	HDPE
	ALUMINUM	STEEL			ALUMINUM	STEEL		
FINAL BACKFILL	EXCAVATED MATERIAL	EXCAVATED MATERIAL	EXCAVATED MATERIAL	EXCAV. MAT.	SBM	SBM	SBM	SBM
SELECT BACKFILL	EXCAVATED MATERIAL	EXCAVATED MATERIAL	EXCAVATED MATERIAL	EXCAV. MAT.	SBM	SBM	SBM	SBM
INITIAL BACKFILL	SAND	SAND	SELECT FILL	SAND	SBM	SBM	SBM	SBM
HAUNCHING	SBM	SBM	SELECT FILL	SBM	SBM	SBM	SBM	SBM
BEDDING	SEE NOTE 5				SEE NOTE 5			

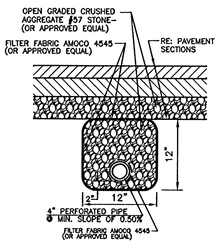
NOTES:
1. INSTALLATION AND BACK FILLING SHALL MEET MANUFACTURERS RECOMMENDATIONS.
2. SELECT FILL CONSISTS OF EXCAVATED MATERIALS CONTAINING NO MATERIAL LARGER THAN 50 MM (2") DIAMETER.
3. STANDARD BEDDING MATERIAL (SBM) SHALL CONFORM TO KDOT TYPE AB-3 AGGREGATE BASE OR FLOWABLE FILL OR APPROVED EQUAL.
4. COMPACTION REQUIREMENTS:
95% MAXIMUM STANDARD PROCTOR DENSITY.
5. IF TRENCH IS DRY BEDDING SHALL BE 100 MM (4") SAND OR TYPE A AGGREGATE BASE, AND IF WET SHALL BE NO. 57 OR NO. 67 ROCK PER ASTM D448.
6. NO WATER JETTING ALLOWED.
7. IN SANDY NON-PAVED AREAS, SAND CAN BE USED FOR ALL BACKFILL.
8. FOR CONCRETE PIPE IN NON-PAVED AREAS, SAND CAN BE USED FOR ALL BACKFILL IF THE CONCRETE PIPE USES RUBBER O-RING JOINTS.
9. THE BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF 2-FEET BEHIND THE BACK OF CURB, OR THE EDGE OF PAVEMENT WHERE NO CURB EXISTS.
10. ADDITIONAL BEDDING MAY BE REQUIRED FOR SOFT SOIL AND SHALLOW GROUNDWATER CONDITIONS.

(METRIC UNITS ARE IN MM WITH ENGLISH UNITS IN PARENTHESIS, UNLESS INDICATED OTHERWISE.)

STORM SEWER PIPE TRENCHING AND BEDDING

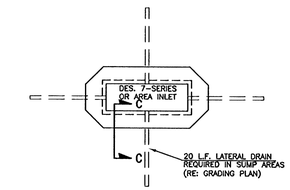
GENERAL NOTES - INFILTRATION DRAINS

1. INFILTRATION DRAINS ARE PROVIDED HERE PER WAL-MART CONSTRUCTION MANAGER'S DIRECTION.
2. INFILTRATION DRAINS WILL BE INSTALLED IN ADDITION OF THE WEEP HOLES.
3. STORM SEWER SYSTEM SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF INFILTRATION DRAINS. CONTRACTOR SHALL ESTABLISHED LAYOUT OF THE INFILTRATION DRAINS WITHOUT CAUSING ANY CONFLICT WITH THE PROPOSED STORM SEWER SYSTEM AND OTHER UNDERGROUND UTILITIES.



INFILTRATION DRAIN DETAIL

N.T.S



INFILTRATION DRAINS AT AREA INLET

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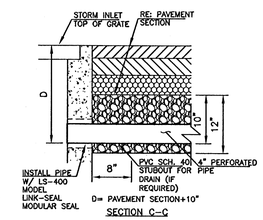

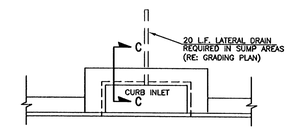

INFILTRATION DRAINS AT CURB INLET

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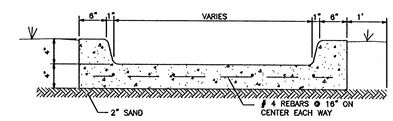
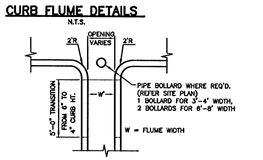


NOTE:
1. PROVIDE CONTRACTION JOINTS @ 10' c/c.
2. CONCRETE SHALL BE AIR ENTRAINED CLASS 'A' KDOT STANDARDS.
3. ALL CONCRETE FLUMES SHALL BE CONSTRUCTED W/ CONTRACTION JOINTS @ 10' c/c AND CONSTRUCTION JOINTS @ 100' MAXIMUM. JOINTS SHALL BE SEALED PER CONCRETE JOINT DETAIL PROVIDED IN "MISCELLANEOUS DETAILS" SHEETS.

CURB FLUME DETAILS

N.T.S.



CURB OPENING (TYPICAL)

N.T.S.

MISCELLANEOUS STORM SEWER DETAILS

WAL-MART SUPERCENTER #4321-00

NW 53rd ST. NORTH & N. MERIDIAN
WICHITA, KANSAS

SMC Consulting Engineers, P.C.
815 West Main - Oklahoma City, OK 73106
PH: 405-232-7715 Fax: 405-232-7859
SMC
KANSAS CERTIFICATE OF AUTHORIZATION NO. E-335 EXP. DEC. 2008

No	Revision	By	Date
1	Per City comments	MGS	03/23/07

TERENCE L. HAYNES LICENSED 14583 KANSAS PROFESSIONAL ENGINEER
NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK
3/26/07

DATE: 12/12/06
DRAWN BY: TN
PROJECT NO.: 4344.00
SCALE: NTS
ENGINEER: TERENCE L. HAYNES, P.E. #14583
SHEET NO. C-8.14

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