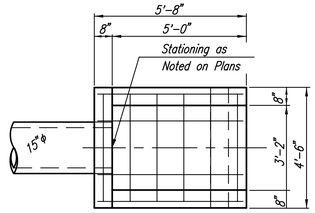
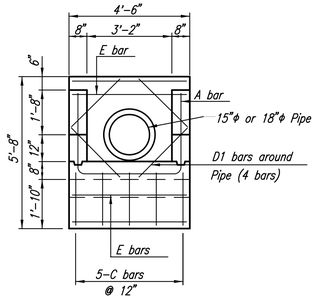
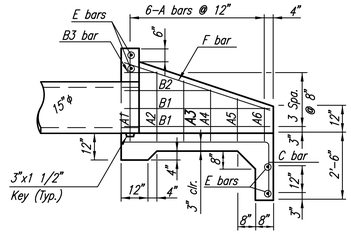


PLAN



FRONT

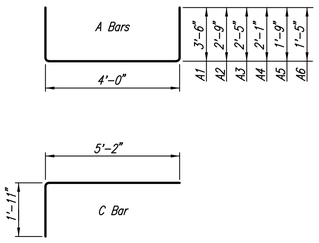


SECTION

RE-BAR SCHEDULE				
Mark	Shape	No.	Length	Weight
A1	⌊	1	11'-0"	7.35
A2	⌊	1	9'-6"	6.35
A3	⌊	1	8'-10"	5.90
A4	⌊	1	8'-2"	5.46
A5	⌊	1	7'-6"	5.01
A6	⌊	1	6'-10"	4.56
B1	——	4	5'-5"	14.47
B2	——	2	3'-6"	4.68
B3	——	2	1'-5"	1.89
C	⌐	5	7'-1"	23.66
D1	——	4	2'-6"	6.68
E	——	4	4'-4"	11.58
F	——	2	5'-9"	7.68

18"	Total Rebars	106	Lbs.
	Concrete	1.66	C.Y.
15"	Total Rebars	106	Lbs.
	Concrete	1.68	C.Y.

All Concrete Reinforcement to be #4 bars.



BENDING DIAGRAMS

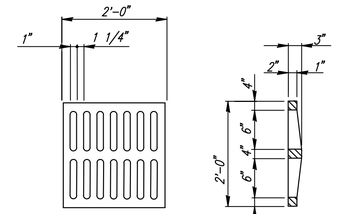
15" HEADWALL

CONCRETE HEADWALL NOTES

Concrete: Bevel all exposed edges with a 3/4" triangular molding or finish with an approved edging tool. Concrete shall be as per City of Wichita Standard Specifications for concrete paving mix except that it shall have a minimum 28 day compressive strength of 4,000 p.s.i. All pipes shall be flush cut prior to being cast into the headwall.

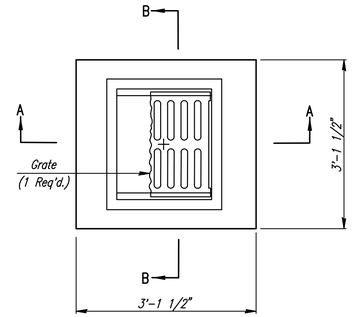
Reinforcing Steel: All dimensions relative to reinforcing steel are to centerline of bar unless otherwise noted. All clearances shall be 2" unless otherwise noted. All reinforcing steel shall conform to A.S.T.M. designation A615 Grade 60.

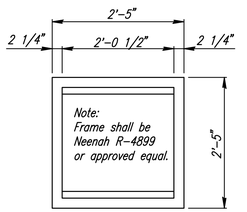
Payment: A deduction in concrete quantities has been made for the pipe opening. Headwalls shall be paid for at the unit price bid per each by size in place including concrete, reinforcing steel, excavation and all other miscellaneous materials, labor, tools, equipment, and incidentals necessary to complete the work. Quantities shown are for information only.



Note:
Grate shall be Neenah R-4826 or approved equal.

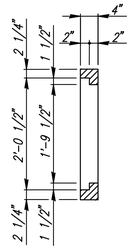
GRATE DETAIL
(Wt.=190 lbs.)
(1 Required)

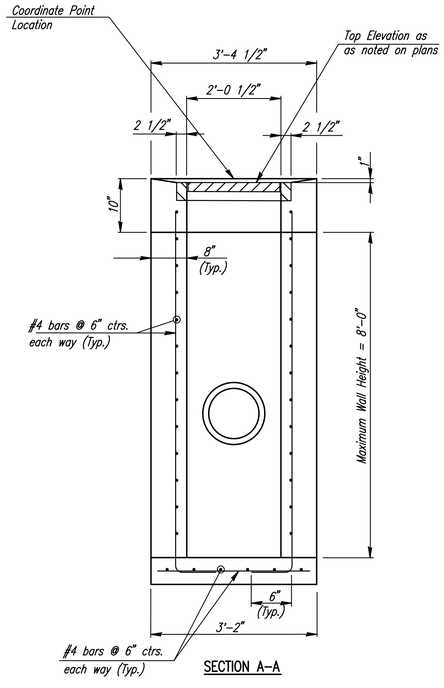




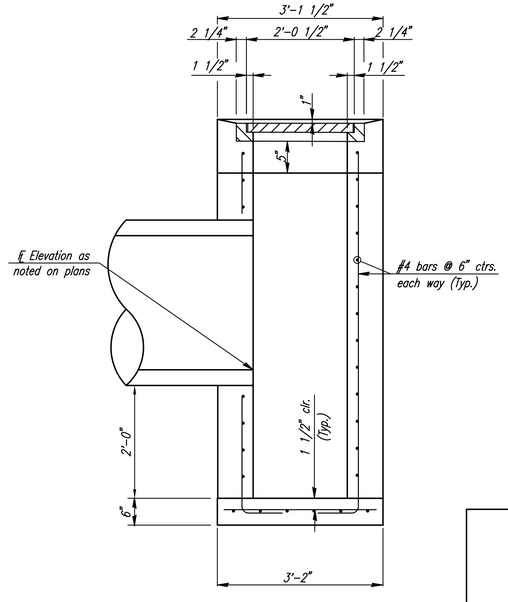
FRAME DETAIL
(Wt.=220 lbs.)

Note:
Frame to mate with Neenah R-4826 Grate or approved equal.





SECTION A-A



SECTION B-B

STANDARD AREA INLET (2'X2')

GENERAL NOTES-AREA INLETS

PLAN

CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI. ALL PIPES SHALL BE FLUSH CUT PRIOR TO BEING CAST INTO WALLS.

REINFORCING STEEL SHALL BE GRADE 60, A.S.T.M. A615. ALL DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO THE CENTERLINE OF BARS UNLESS OTHERWISE NOTED.

INLET CASTINGS SHALL BE MANUFACTURED USING DUCTILE IRON CONFORMING TO ASTM A536-80 GRADE 65-45-12. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

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

PIPES ENTERING EXISTING STRUCTURE SHALL BE CENTERED ON INSIDE FACE OF WALL.

ALL EXPOSED STRUCTURAL STEEL SHALL BE PAINTED WITH A COAT OF INORGANIC ZINC PRIMER AND THEN WITH A TOP COAT OF OR A FIELD COAT OF ORGANIC ZINC, EACH COAT TO BE 3 TO 4 MILS. STRUCTURAL STEEL USED TO FABRICATE THE SPECIAL AREA INLET FRAME SHALL COMPLY WITH A.S.T.M. A36. WELDING SHALL COMFORM TO THE STRUCTURAL WELDING CODE A.W.S. D1.1-88.

AREA INLETS MAY BE PRECAST AT THE CONTRACTOR'S OPTION, WITH APPROVAL OF THE ENGINEER.

No.	Revision	By	Date

PHASE II - STORM WATER DRAIN #332

2'x2' AREA INLET AND 15" HEADWALL DETAILS

JAMES L. ARMOUR, P.E.- CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-84396

Professional Engineering Consultants, P.A.
303 S. TOPEKA • WICHITA, KANSAS 67202
316-262-2691 • FAX 316-262-3003

Designed by EJJ, SCU	Job No.	35-04274-042	Sht. 40 of 63
Drawn by CAE	Date	SEPTEMBER 2009	

Saved 09-29-2009 11:34:42 AM by CAE
Plot Scale = 1.2.61 09-29-2009 1:48:17 PM by CAE
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