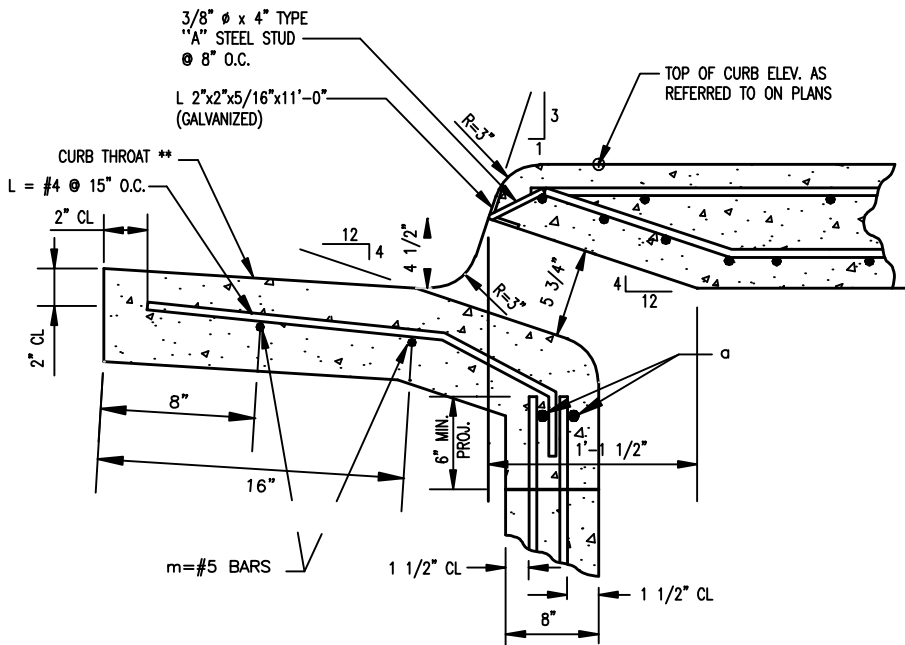
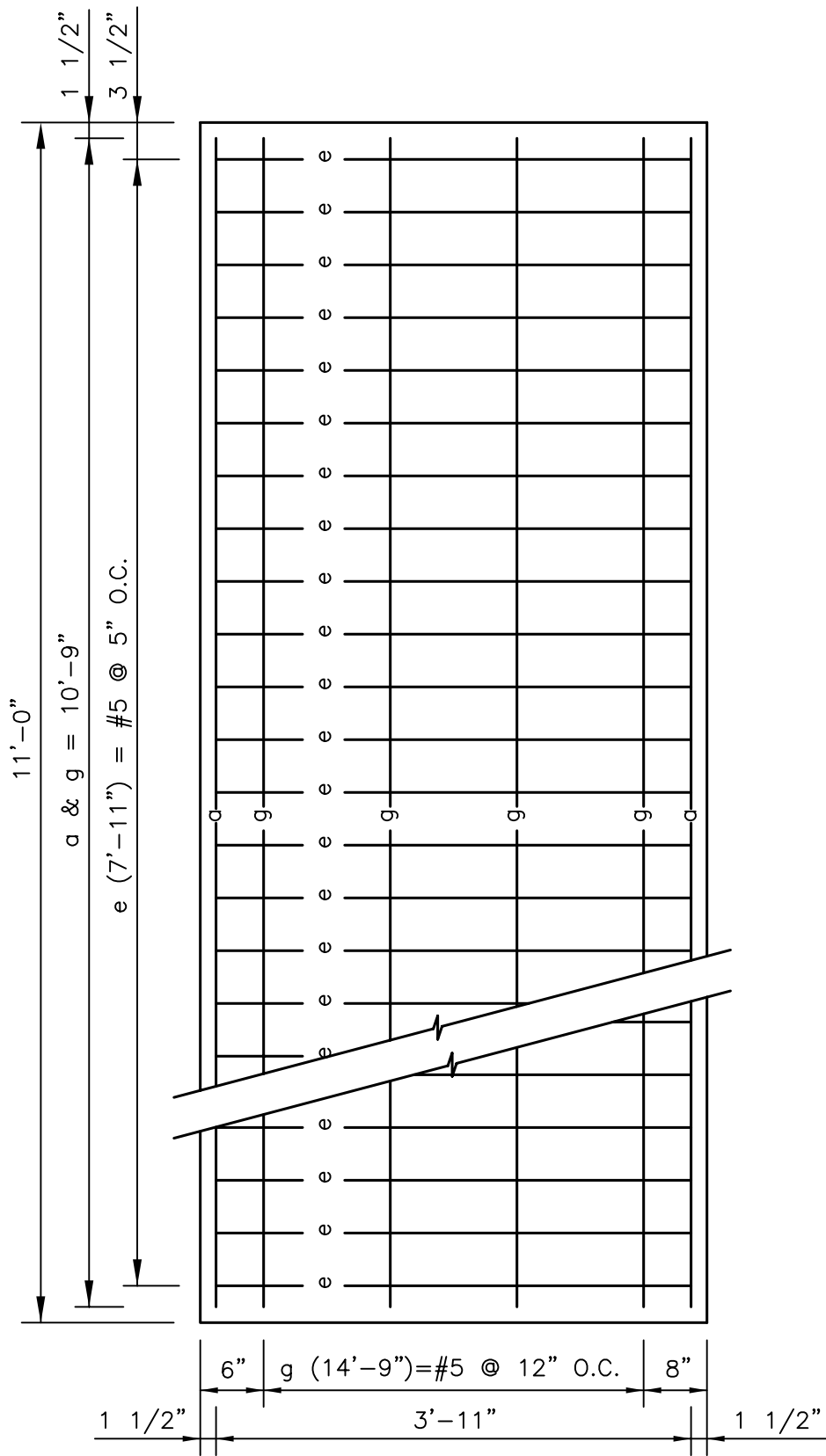


*TRANSITION BLOCK TO BE POURED MONOLITHIC WITH BOX OR THROAT



CURB/THROAT DETAIL

- * TRANSITION BLOCK TO BE POURED MONOLITHIC WITH BOX OR THROAT.
- ** THE CURB THROAT COMPONENT SHALL BE THE LAST POUR ON THE INLET (AFTER THE LID).
- ** NO CURB OPENINGS (HANDICAP RAMPS, DRAINS, ETC) SHALL BE PERMITTED WITHIN THE CURB TRANSITION AREA. THIS INCLUDES THE TRANSITION/TAPER OF THE CURB OPENINGS



B.B.S. (BOTTOM OF THE BOTTOM SLAB)

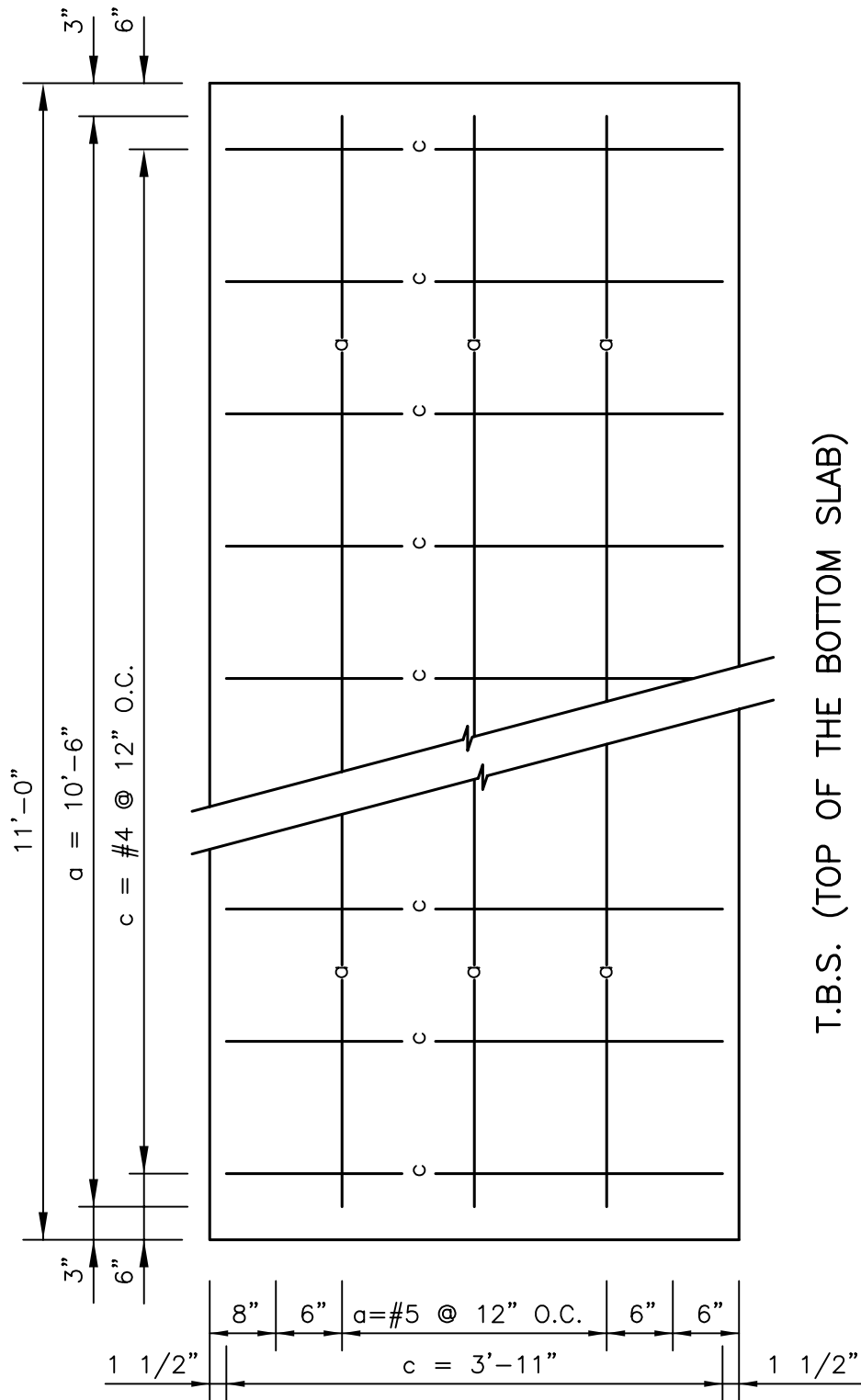
CITY OF RAPID CITY

PUBLIC WORKS DEPARTMENT

STANDARD TYPE "E" INLET
(12"-30" DIA. PIPE)

DATE: 5-1-07

SEC. SHT.
62-1c



T.B.S. (TOP OF THE BOTTOM SLAB)

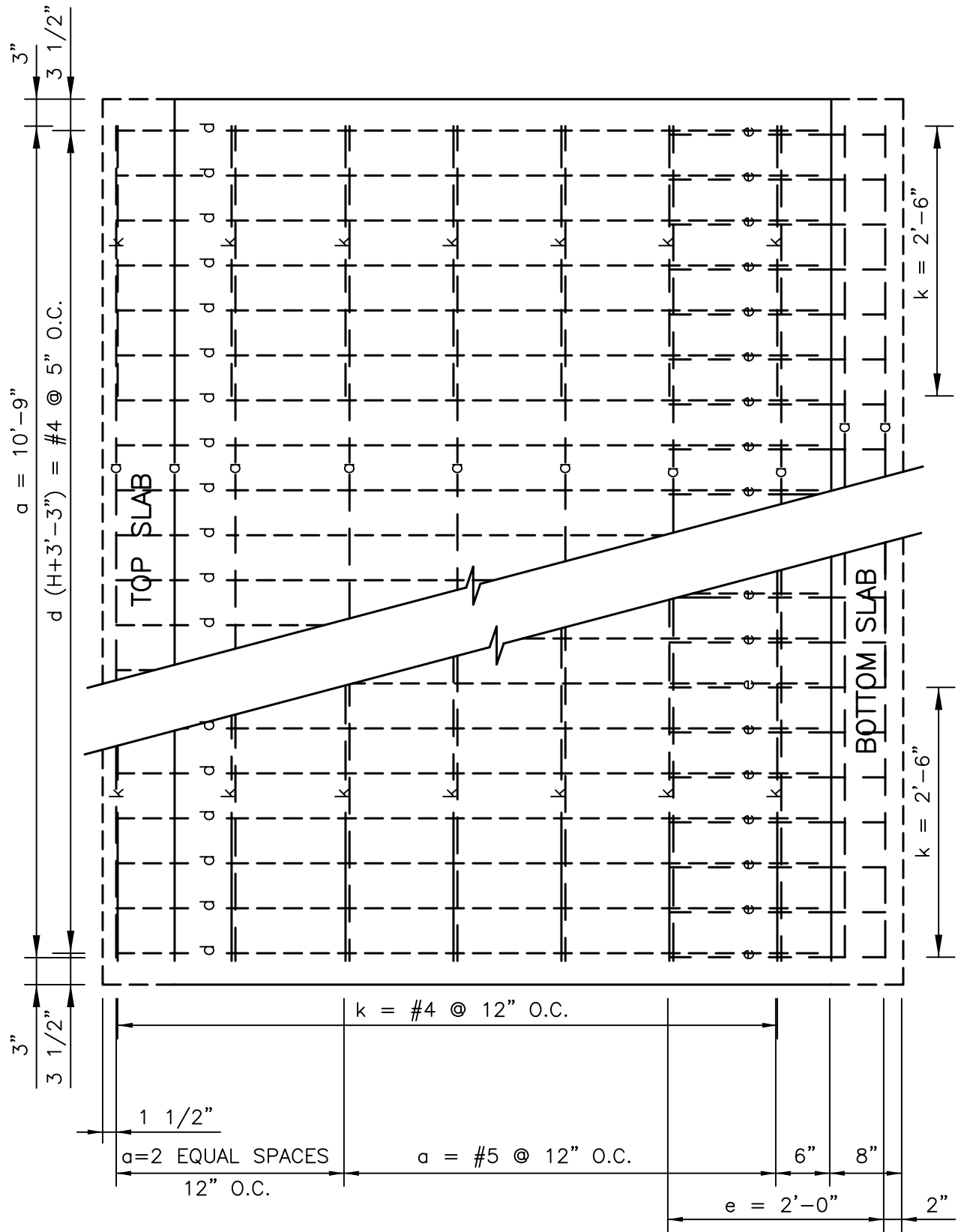
CITY OF RAPID CITY

PUBLIC WORKS DEPARTMENT

STANDARD TYPE "E" INLET
 (12"-30" DIA. PIPE)

DATE: 5-1-07

SEC. SHT.
 62-1d



B.W. (BACK WALL)

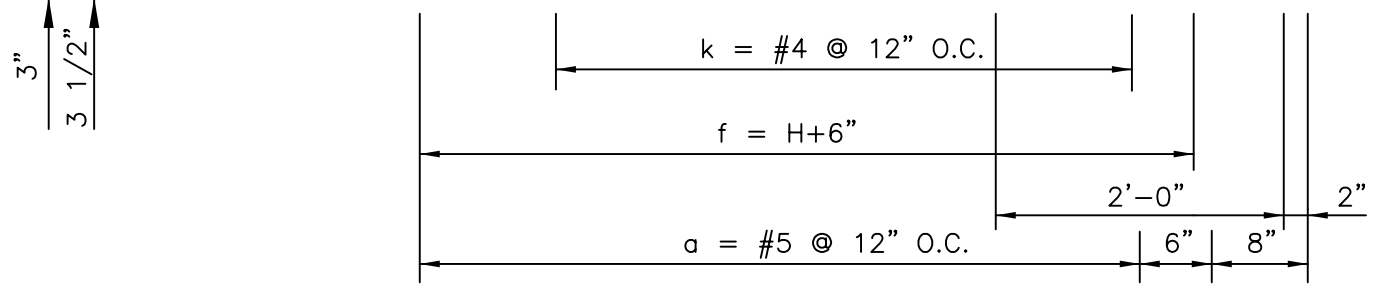
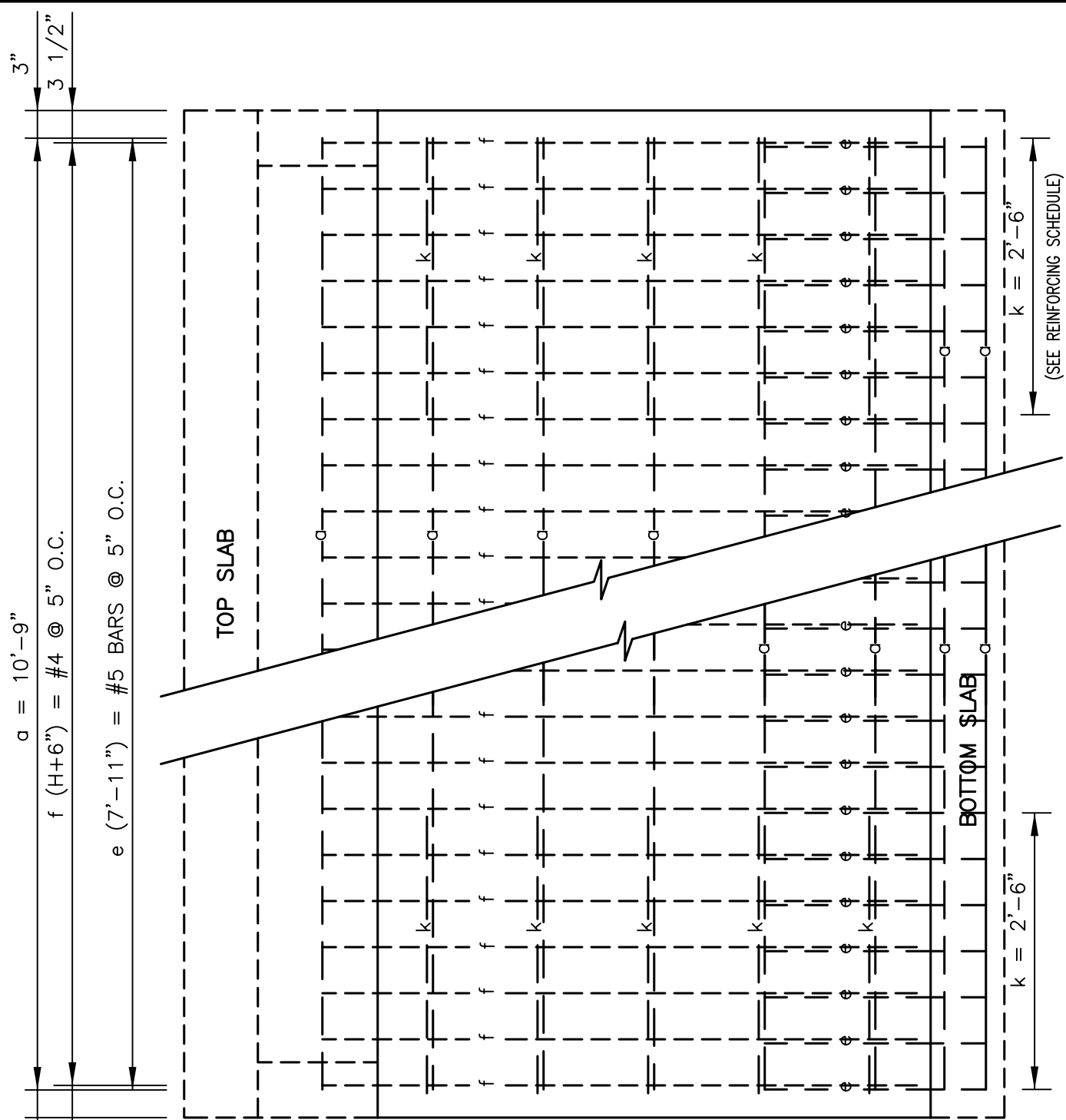
CITY OF RAPID CITY

PUBLIC WORKS DEPARTMENT

STANDARD TYPE "E" INLET
 (12"-30" DIA. PIPE)

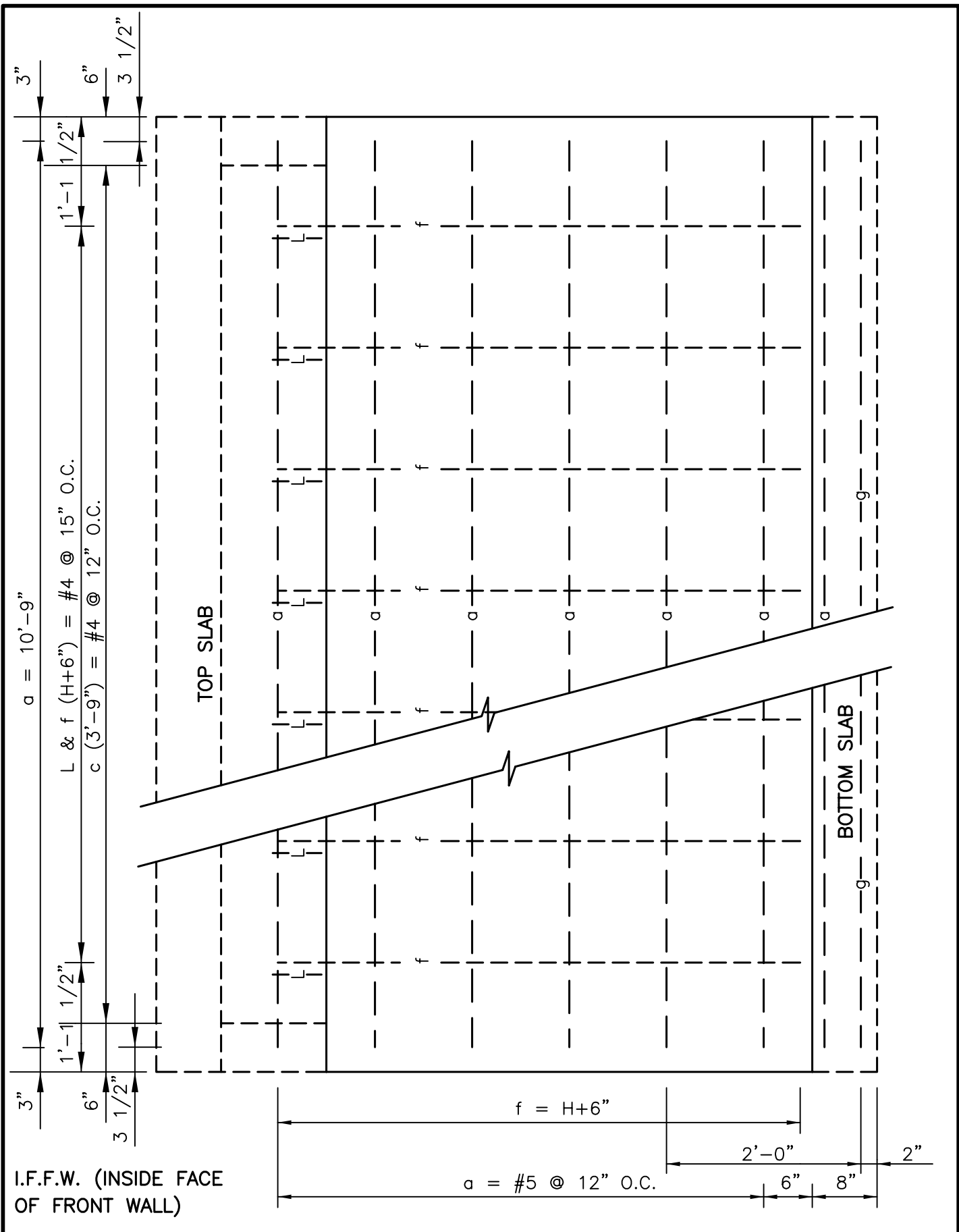
DATE: 5-1-07

SEC. SHT.
 62-1e



O.F.F.W. (OUTSIDE FACE OF FRONT WALL)

CITY OF RAPID CITY	PUBLIC WORKS DEPARTMENT
STANDARD TYPE "E" INLET (12"-30" DIA. PIPE)	DATE: 5-1-07
	SEC. 62-1f SHT.



CITY OF RAPID CITY

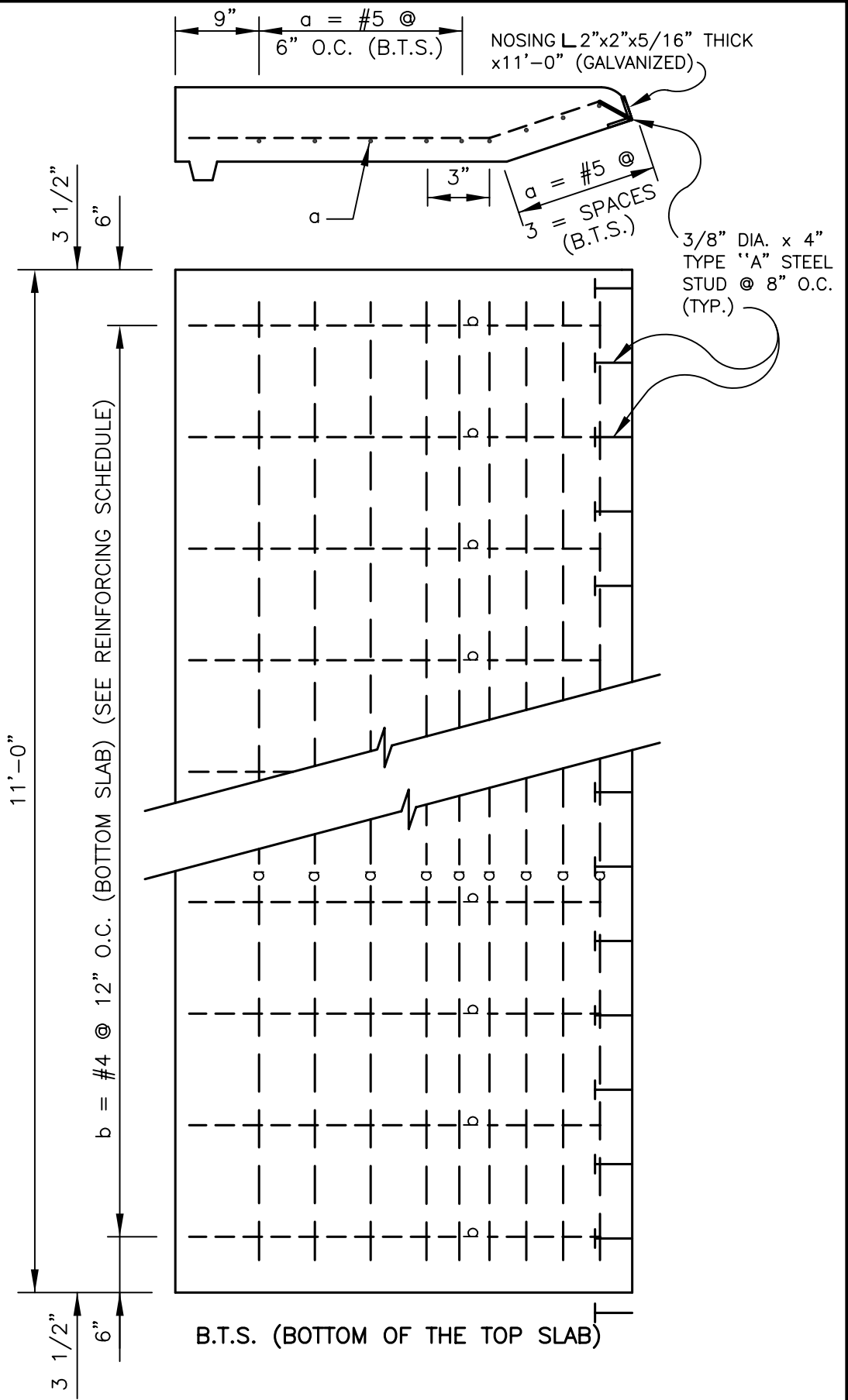
PUBLIC WORKS DEPARTMENT

STANDARD TYPE "E" INLET
(12"-30" DIA. PIPE)

DATE: 5-1-07

SEC. SHT.

62-1g



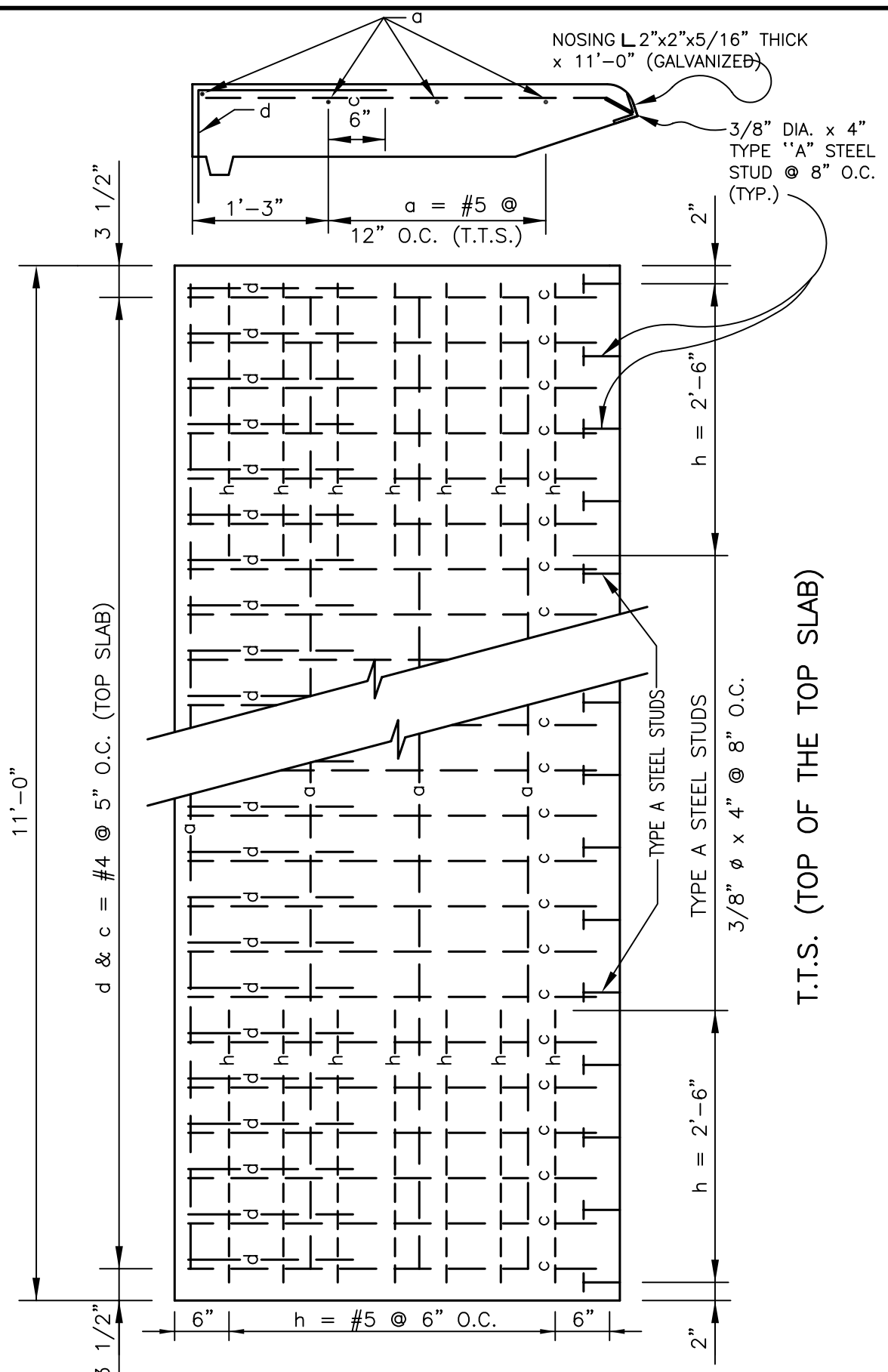
CITY OF RAPID CITY

PUBLIC WORKS DEPARTMENT

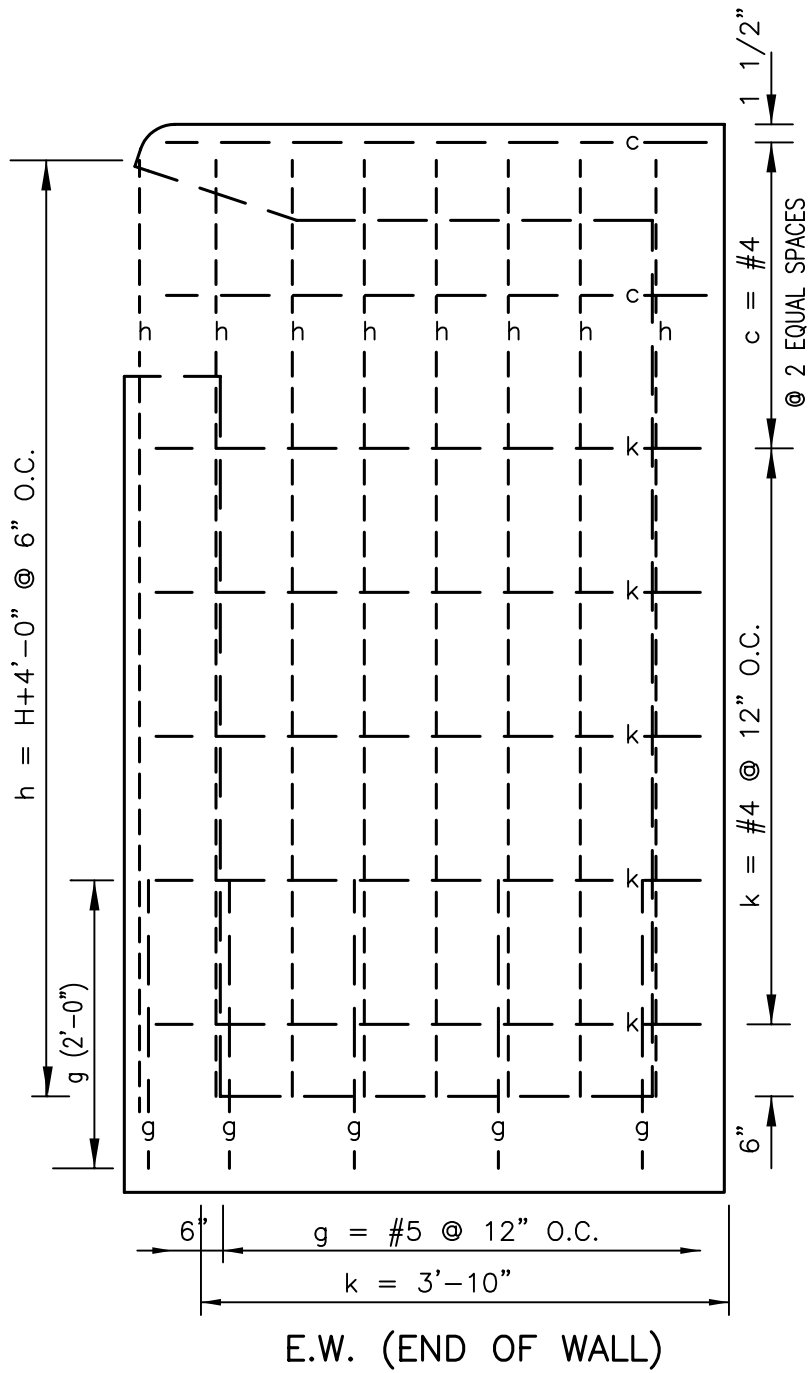
STANDARD TYPE "E" INLET
(12"-30" DIA. PIPE)

DATE: 5-1-07

SEC. SHT.
62-1h



CITY OF RAPID CITY	PUBLIC WORKS DEPARTMENT
STANDARD TYPE "E" INLET (12"-30" DIA. PIPE)	DATE: 5-1-07
	SEC. SHT. 62-1i



CITY OF RAPID CITY

PUBLIC WORKS DEPARTMENT

STANDARD TYPE "E" INLET
 (12"-30" DIA. PIPE)

DATE: 5-1-07

SEC. SHT.

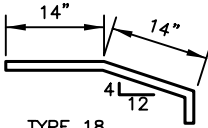
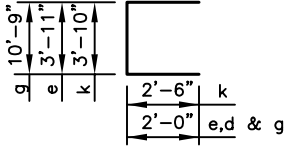
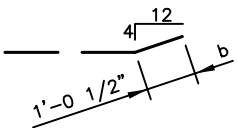
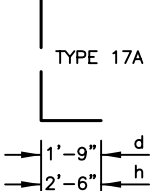
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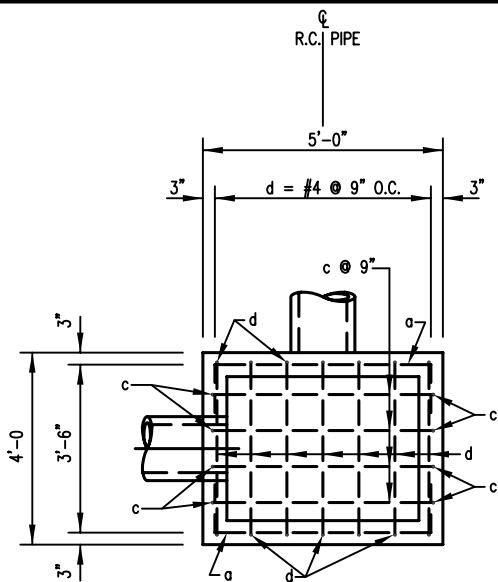
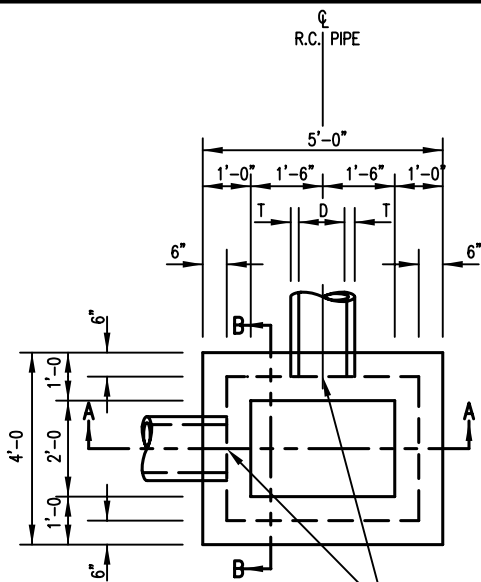
GENERAL NOTES

1. INLETS SHALL BE BUILT IN CONFORMANCE WITH CURRENT CITY OF RAPID CITY SPECIFICATIONS.
2. DESIGN LOADING: HF 20 - 44 AND ALTERNATE LOADING.
3. ALL REINFORCING STEEL SHALL BE EPOXY COATED CONFORMING TO ASTM A615.
4. STRUCTURAL STEEL SHALL CONFORM TO ASTM A36.
5. THE 3/8" DIA. HEADED TYPE A STEEL STUD SHALL CONFORM TO SECTION 7 OF THE LATEST EDITION OF ANSI/AWS D1.1 STRUCTURAL STEEL WELDING CODE.
6. AFTER WELDING IS COMPLETE GALVANIZE THE ANGLE AND STEEL STUDS IN ACCORDANCE WITH AASHTO M111 (ASTM A123).
7. USE MINIMUM 1" CLEAR COVER ON ALL REINFORCING STEEL EXCEPT AS SHOWN.
8. CUT AND BEND REINFORCING STEEL IN FIELD AS NECESSARY TO FIT PIPE AND MANHOLE OPENINGS. SUCH OPENINGS ARE NOT SHOWN IN THESE DETAILS. THE NUMBER, SIZE AND LOCATION OF PIPE ENTERING THE DROP INLET ARE SHOWN ELSEWHERE IN THE PLANS.
9. CAST IRON FRAME AND LID ASSEMBLY SHALL CONFORM TO AASHTO M105 CLASS 30.
10. THE DIMENSIONS OF "H" IS IN FEET
11. INLETS SHALL BE CAST IN-PLACE. PRE-CASTING IS NOT PERMITTED.

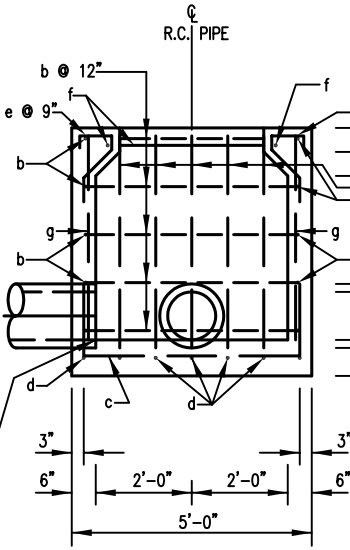
SPECIFICATION NOTES:

1. DESIGN SPECIFICATIONS: A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES 1992 EDITION. (SERVICE LOAD).
2. CONSTRUCTION SPECIFICATIONS: CURRENT CITY OF RAPID CITY STANDARD SPECIFICATIONS, LATEST EDITION.

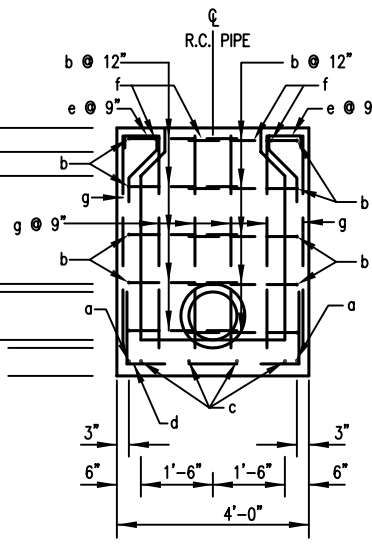
<p>LEGEND FOR PLACING RE-STEEL</p> <p>T.T.S. - TOP OF TOP SLAB B.T.S. - BOTTOM OF TOP SLAB T.B.S. - TOP OF BOTTOM SLAB B.B.S. - BOTTOM OF BOTTOM SLAB O.F.F.W. - OUTSIDE FACE OF FRONT WALL I.F.F.W. - INSIDE FACE OF FRONT WALL B.W. - BACK WALL E.W. - END WALL</p>	<p>BENDING DETAILS</p> <p>NOTE: ALL DIMENSIONS ARE OUT TO OUT OF BAR</p>  <p style="text-align: center;">TYPE 18</p>	 <p style="text-align: center;">TYPE 17</p>  <p style="text-align: center;">TYPE 19A</p>	 <p style="text-align: center;">TYPE 17A</p> <table border="1" style="float: right; margin-top: 20px;"> <thead> <tr> <th>MK.</th> <th>SIZE</th> <th>TYPE</th> </tr> </thead> <tbody> <tr><td>a</td><td>5</td><td>STR.</td></tr> <tr><td>b</td><td>4</td><td>19A</td></tr> <tr><td>c</td><td>4</td><td>STR.</td></tr> <tr><td>d</td><td>4</td><td>17A</td></tr> <tr><td>e</td><td>5</td><td>17</td></tr> <tr><td>f</td><td>4</td><td>STR.</td></tr> <tr><td>g</td><td>5</td><td>17</td></tr> <tr><td>h</td><td>5</td><td>17A</td></tr> <tr><td>k</td><td>4</td><td>17</td></tr> <tr><td>L</td><td>4</td><td>18</td></tr> <tr><td>m</td><td>5</td><td>STR.</td></tr> </tbody> </table>	MK.	SIZE	TYPE	a	5	STR.	b	4	19A	c	4	STR.	d	4	17A	e	5	17	f	4	STR.	g	5	17	h	5	17A	k	4	17	L	4	18	m	5	STR.
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CITY OF RAPID CITY		PUBLIC WORKS DEPARTMENT																																					
<h1 style="margin: 0;">STANDARD TYPE "E" INLET</h1> <h2 style="margin: 0;">(12" - 30" DIA. PIPE)</h2>		DATE: 5-1-07 SEC. SHT. 62-1k																																					



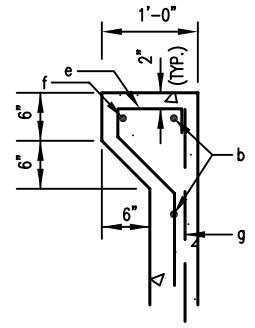
INLET AND OUTLET PIPES SHALL BE FLUSH WITH THE INSIDE WALL OF THE INLET ON ALL PENETRATIONS. (TYP.)



* MAXIMUM (H) IS 10'-0"



OUTLET PIPE INVERT SHALL BE THE SAME ELEVATION AS THE FLOOR ELEVATION



CITY OF RAPID CITY	PUBLIC WORKS DEPARTMENT
REINFORCED CONCRETE SPECIAL TYPE "B" INLET	DATE: 5-1-07
DROP INLETS FOR 12" TO 36" DIA. PIPE	SEC. SHT. 62-4

GENERAL NOTES:

* REDUCE TOTAL QUANTITIES OF CONCRETE BY THE AMOUNT OF CONCRETE DISPLACED BY THE PIPE. TOTAL QUANTITY OF CONCRETE TO BE COMPUTED TO NEAREST HUNDREDTH OF A CU. YD. TOTAL QUANTITY OF REINFORCING STEEL TO BE COMPUTED TO THE NEAREST POUND,

DROP INLETS SHOWN MAY BE MODIFIED BY THE ADDITION OR OMISSION OF CONNECTING PIPES AS SHOWN IN LAYOUT.

EPOXY COATED REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60 LAP b AND f BARS 12 INCHES. CUT AND BEND REINFORCING STEEL AS REQUIRED TO PLACE PIPE(S) THRU DROP INLET WALL. ALL REINFORCING STEEL SHALL BE TIED & CHAIRED. ALL REBAR SHALL BE COLD BENT AT CORNERS.

PRE CASTING OF REINFORCED DROP INLETS MAY BE PERMISSIBLE. PRIOR TO PRE CASTING, THE CONTRACTOR SHALL SUBMIT DETAILS TO THE ENGINEER FOR APPROVAL.

ALL STRUCTURAL JOINTS SHALL BE KEYED AND WATER TIGHT.

MAXIMUM PIPE DIAMETER SHOULD NOT EXCEED 30 INCHES OF THE 4 FOOT SIDE SIDE OF THE DROP INLET.

IN SITUATIONS WHERE MULTIPLE INLETS ARE TO BE CONSTRUCTED ADJACENT TO ONE ANOTHER, THE COMMON INLET WALL SHALL BE CONSTRUCTED 12" THICK WITH THE EQUIVALENT AMOUNT OF REBAR AS REQUIRED FOR EACH INLET INDIVIDUALLY. THE CONVEYANCE OF STORM WATER THRU THE COMMON WALL SHALL BE BY INSTALLING THE APPROPRIATELY SIZED REINFORCED CONCRETE PIPE.

NOTE: STRUCTURE EXCAVATION INFORMATIONAL

ESTIMATED QUANTITIES

ITEM	UNIT	VARIABLE QUANTITY	VARIABLE QUANTITY
*CLASS M-6 CONCRETE	CU. YD.	0.72	0.2963H
REINFORCING STEEL	LB.	89	26.7200H
GRATE ASSEMBLY	EACH	1	
STRUCTURE EXCAVATION	CU. YD.	0.56	

PIPE DISPLACEMENT REDUCTIONS

R.C. PIPE DIAMETER INCHES	T INCHES	CLASS M-6 CONCRETE CU. YD.
12	2	0.03
15	2 1/4	0.04
18	2 1/2	0.05
24	3	0.09
30	3 1/2	0.14
36	4	0.20

REINFORCING SCHEDULE

BENDING DETAILS

MK.	NO.	SIZE	LENGTH	TYPE	
a	2	4	6'-6"	17	
b	2H	4	9'-0"	17	
c	4	4	7'-6"	17	
d	7	4	6'-6"	17	
e	24	4	36"	16A	
f	2	4	8'-0"	17	
g	18	4	H-2"	STR.	

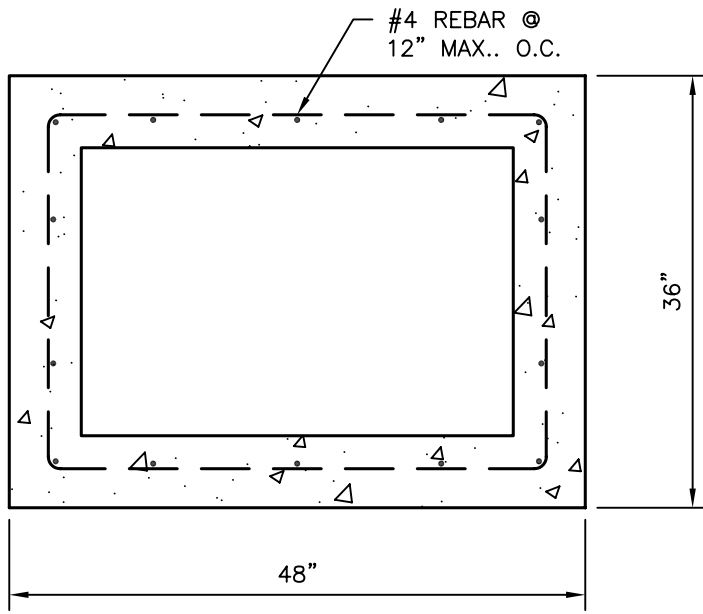
CITY OF RAPID CITY

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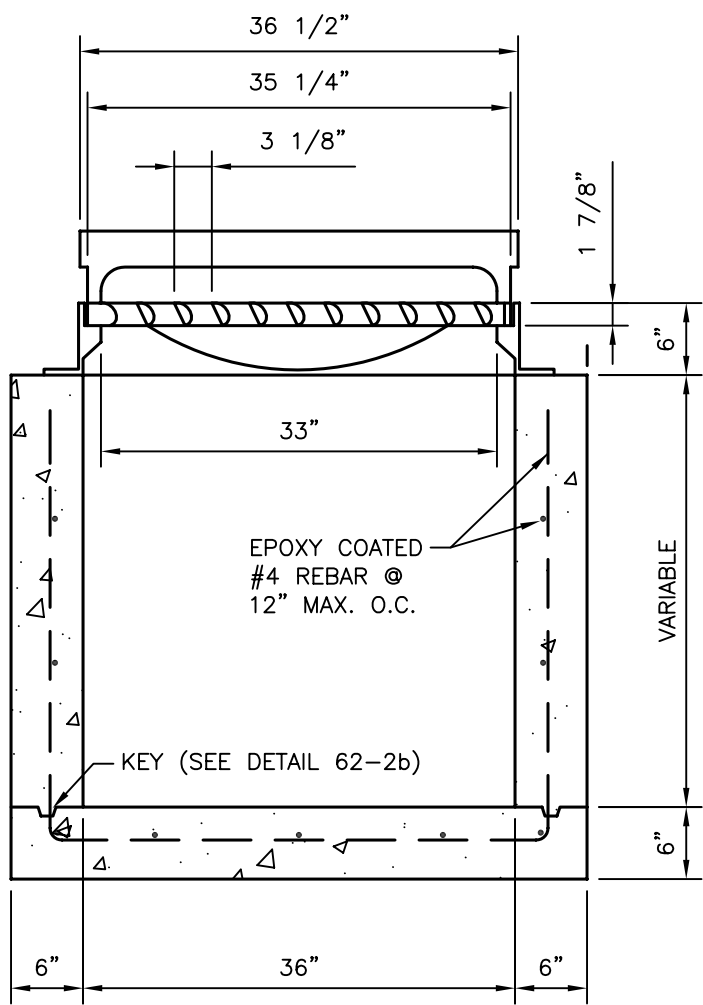
REINFORCED CONCRETE SPECIAL TYPE "B" INLET
DROP INLETS FOR 12" TO 36" DIA. PIPE

DATE: 5-1-07

SEC. SHT.
62-4a



TOP VIEW



FRONT VIEW

GENERAL NOTES:

CONCRETE SHALL HAVE 4000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.

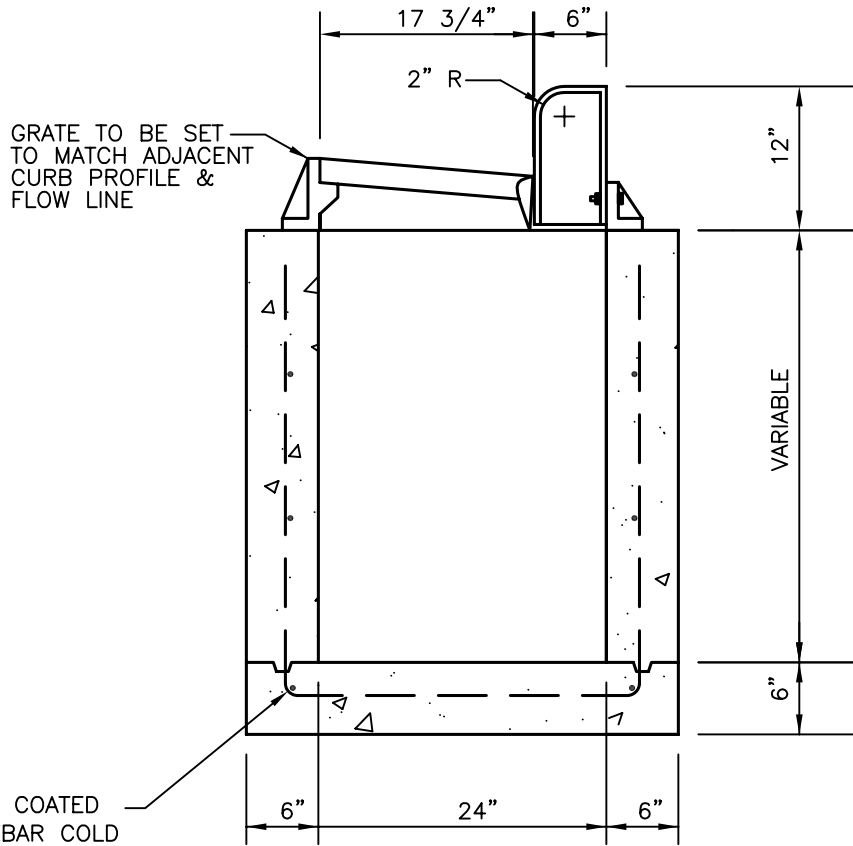
ALL STRUCTURAL JOINTS SHALL BE KEYED & WATER TIGHT.

EPOXY COATED REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60. CUT AND BEND BARS AS REQUIRED TO PLACE PIPE(S) THRU DROP INLET WALL.

PRE CASTING OF TYPE "B" INLETS MAY BE PERMISSIBLE PRIOR TO RECASTING, THE CONTRACTOR SHALL SUBMIT DETAILS TO ENGINEER FOR APPROVAL.

MAXIMUM PIPE DIAMETER SHOULD NOT EXCEED 21 INCHES ON THE 3 FOOT WIDE SIDE OF THE TYPE "B" INLET.

IN SITUATIONS WHERE MULTIPLE INLETS ARE TO BE CONSTRUCTED ADJACENT TO ONE ANOTHER, THE COMMON INLET WALL SHALL BE CONSTRUCTED 12 INCHES THICK WITH THE EQUIVALENT AMOUNT OF REBAR AS IS REQUIRED FOR EACH INLET INDIVIDUALLY. THE CONVEYANCE OF STORM WATER THRU THE COMMON WALL SHALL BE BY INSTALLING THE APPROPRIATELY SIZED REINFORCED CONCRETE PIPE.



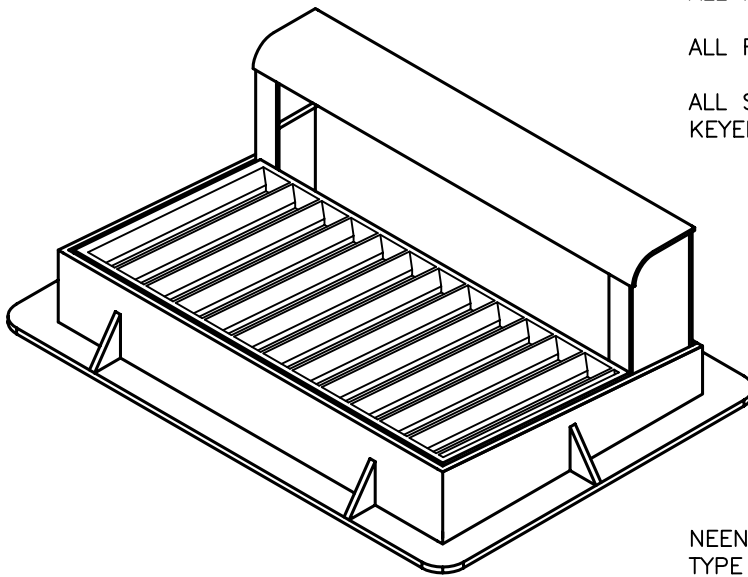
GENERAL NOTES:

CONCRETE SHALL HAVE 4000 P.S.I. COMPRESSIVE STRENGTH AT 28 DAYS

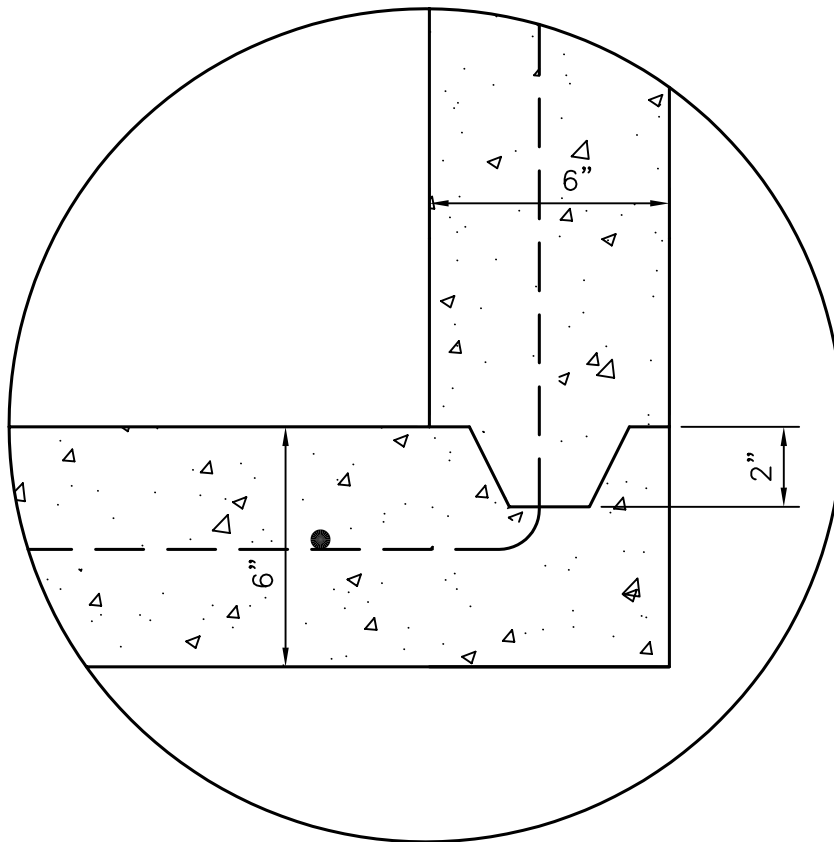
ALL REINFORCING STEEL SHALL BE TIED & CHAIRED

ALL REBAR SHALL BE COLD BENT AT CORNERS

ALL STRUCTURAL JOINTS SHALL BE KEYPED & WATER TIGHT



NEENAH R-3067, V CURB INLET, OR EQUAL WITH TYPE V GRATE (FLOW-RIGHT SHOWN)



NOTE: BOX MANHOLE, TYPE "B" DETAILS

CITY OF RAPID CITY

PUBLIC WORKS DEPARTMENT

DATE: 5-1-07

TYPICAL KEY JOINT

SEC. SHT.
62-5b