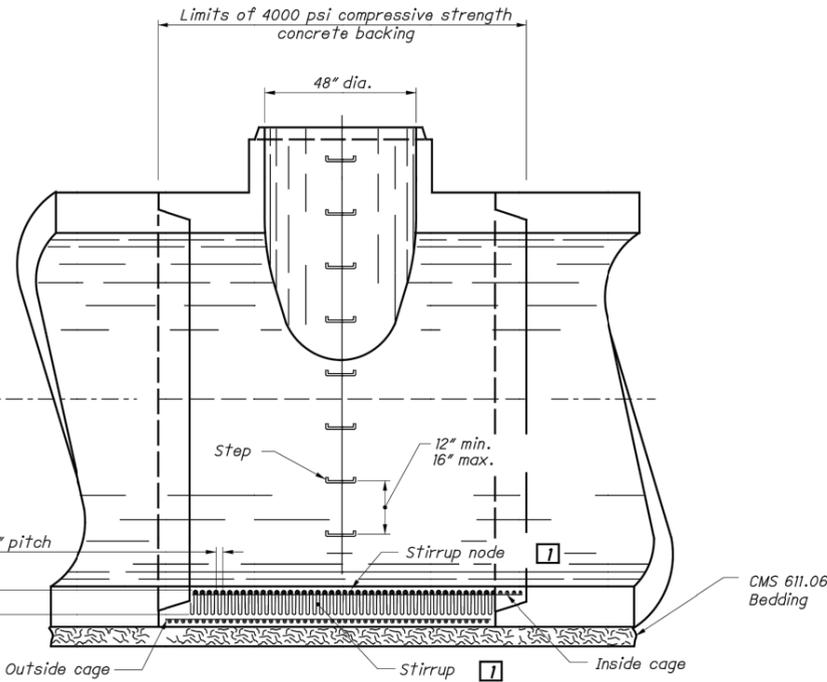


6'-0" 45° diagonal reinforcing bars (CMS 709.01) for 72" and larger only. See TABLE 2, Sheet 2 of 2.

PLAN VIEW

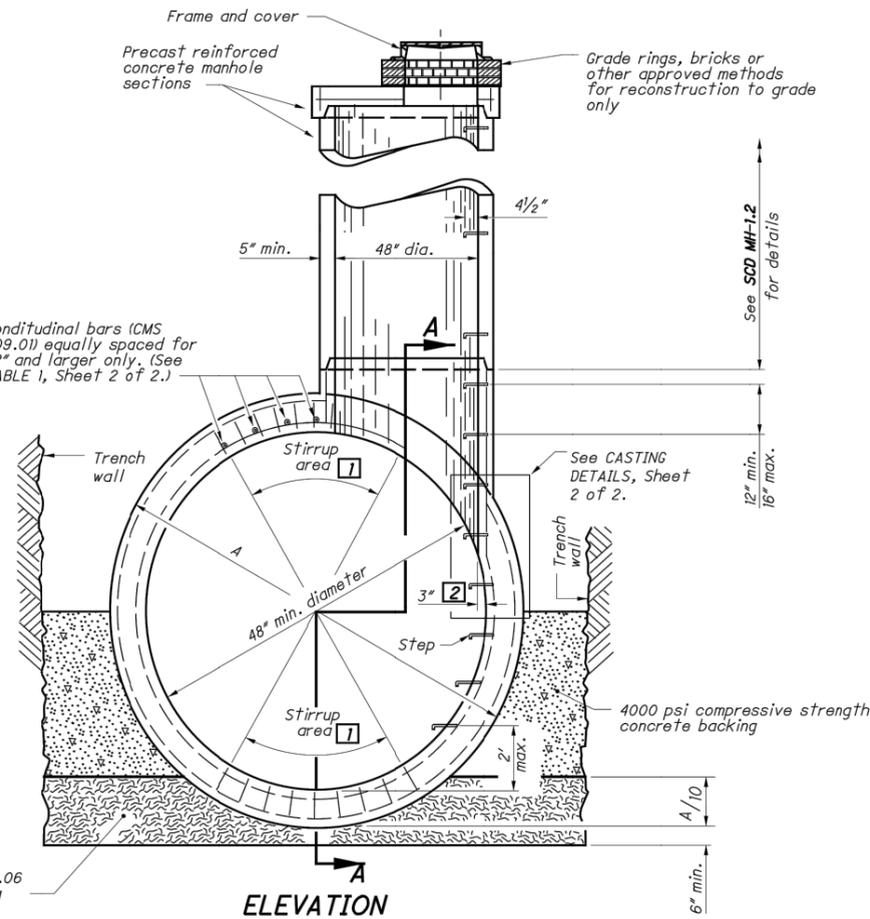
LEGEND

- 1 If required by conduit specification.
- 2 On all sizes except 48".
- 3 One-half of the required number to each side of hole. (See Sht. 2/2.)



SECTION A-A

(Showing stirrup detail)



ELEVATION

NOTES

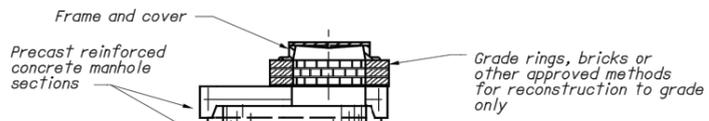
**GENERAL:** Base pipe, 48" dia. through 144" dia., consists of the design shown and as required for the stronger of the two adjoining sections of conduit. Provide other manhole components above the base as detailed or specified on **SCD MH-3**.

**APPLICATION:** The Manhole No. 4 shown here may be used where no change in pipe size, direction or slope occurs, and no lateral sewers enter the manhole below the riser section.

**BEDDING:** Provide the same bedding as used under the adjoining conduits that meets the requirements of CMS 611.06.

**STEPS:** Provide steps that meet the requirements of **SCD MH-1**.

**PAYMENT:** Payment for Manhole No. 4 includes only the cost of the eccentric spur, additional pipe reinforcing, concrete backing, steps, riser sections, rings, castings and drop pipes. No deductions will be made in the lengths of the sanitary sewer conduit.



STATE OF OHIO DEPARTMENT OF TRANSPORTATION HYDRAULIC ENGINEER	Jeffery E. Syar
REVISIONS	
7-20-01	
7-19-02	
7-20-12	
1-18-13	
7-16-21	
ROADWAY HYDRAULIC ENGINEER	M. Cozzoli
OFFICE OF HYDRAULICS ENGINEERING	MANHOLE No. 4
STANDARD HYDRAULIC CONSTRUCTION DRAWING	
DRAWING	MH-4
	1 / 2



**CITY OF ALLIANCE**  
**ENGINEERING DEPARTMENT**  
 504 E. MAIN ST.  
 ALLIANCE, OH 44601  
 PHONE: (330) 823-5122 FAX: (330) 829-2236

**MANHOLE No. 4**

NOT TO SCALE  
 ENGSERV1 / E:/ DATA / ENGINEERING DOCUMENTS / STANDARD DRAWINGS / MH-4.DWG

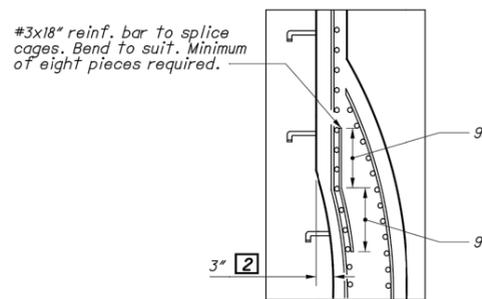
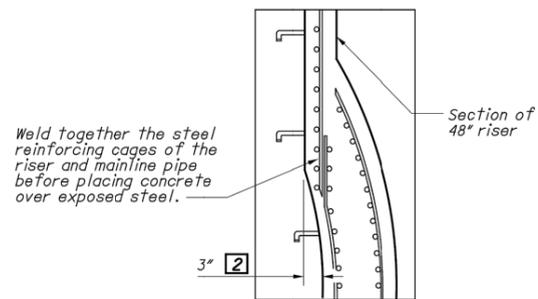
APPROVED BY:

*V. A. Mueser* PE, S.T.  
 VINCENT MUESER, P.E., S.I.T.  
 ALLIANCE CITY ENGINEER

**ALLIANCE MH-4**  
**(1 OF 2)**

Revisions / Drawn By

02-19-10 / CAF  
 01-31-22 / ANP



**LEGEND**

- 1** If required by conduit specification. (See Sht. 1/2.)
- 2** On all sizes except 48".
- 3** One-half of the required number to each side of hole.

**INTEGRALLY CAST**

See ELEVATION Detail, Sheet 1 of 2.  
**CASTING DETAILS**

See ELEVATION Detail, Sheet 1 of 2.

**TABLE 1 (English)**

D-LOAD	1000			1350			2000			3000		
	Longitudinal Bars											
	Dia.	Size	Length	No. Req'd	Size	Length	No. Req'd	Size	Length	No. Req'd	Size	Length
72"	#5	7'-5"	4	#5	7'-5"	4	#5	7'-5"	4	#5	7'-5"	4
78"	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4
84"	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4
90"	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4
96"	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4
102"	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4
108"	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4	#6	7'-5"	4
114"	#5	7'-5"	6	#5	7'-5"	6	#5	7'-5"	6	#5	7'-5"	6
120"	#7	7'-5"	4	#7	7'-5"	4	#7	7'-5"	4	#7	7'-5"	4
126"	#7	7'-5"	4	#7	7'-5"	4	#7	7'-5"	4	#7	7'-5"	4
132"	#7	7'-5"	4	#7	7'-5"	4	#7	7'-5"	4	#7	7'-5"	4
144"	#7	7'-5"	4	#7	7'-5"	4	#7	7'-5"	4	#7	7'-5"	4

See PLAN VIEW Detail, Sheet 1 of 2.

**TABLE 2 (English)**

D-LOAD	1000		1350		2000		3000	
	Diag. Bars		Diag. Bars		Diag. Bars		Diag. Bars	
	Dia.	Size	No. Req'd	Size	No. Req'd	Size	No. Req'd	Size
72"	#5	2	#5	2	#5	4	#5	4
78"	#5	2	#5	2	#5	4	#6	4
84"	#5	2	#4	4	#5	4	#6	4
90"	#5	2	#4	4	#5	4	#6	4
96"	#5	2	#4	4	#5	4	#7	4
102"	#4	4	#5	4	#6	4	#7	4
108"	#4	4	#5	4	#6	4	#7	4
114"	#4	4	#5	4	#6	4	#7	4
120"	#5	4	#5	4	#6	4	#6	6
126"	#5	4	#5	4	#6	4	#6	6
132"	#5	4	#5	4	#7	4	#7	6
144"	#5	4	#6	4	#7	4	#7	6

STATE OF OHIO DEPARTMENT OF TRANSPORTATION HYDRAULIC ENGINEER  
Jeffery E. Syar

REVISIONS  
7-20-01  
7-19-02  
7-20-12  
1-18-13  
7-16-21

ROADWAY HYDRAULIC ENGINEER  
M. Cozzoli

OFFICE OF HYDRAULICS ENGINEERING

STANDARD HYDRAULIC CONSTRUCTION DRAWING  
**MANHOLE No. 4**

DRAWING  
**MH - 4**

2 / 2

**CITY OF ALLIANCE**  
**ENGINEERING DEPARTMENT**  
504 E. MAIN ST.  
ALLIANCE, OH 44601  
PHONE: (330) 823-5122 FAX: (330) 829-2236

**MANHOLE No. 4**  
NOT TO SCALE  
ENGSERV1 / E:/ DATA / ENGINEERING DOCUMENTS / STANDARD DRAWINGS / MH-4.DWG

APPROVED BY:  
  
VINCENT MUESER, P.E., S.I.T.  
ALLIANCE CITY ENGINEER

**ALLIANCE MH-4**  
**(2 OF 2)**

Revisions / Drawn By

02-19-10 / CAF
01-31-22 / ANP