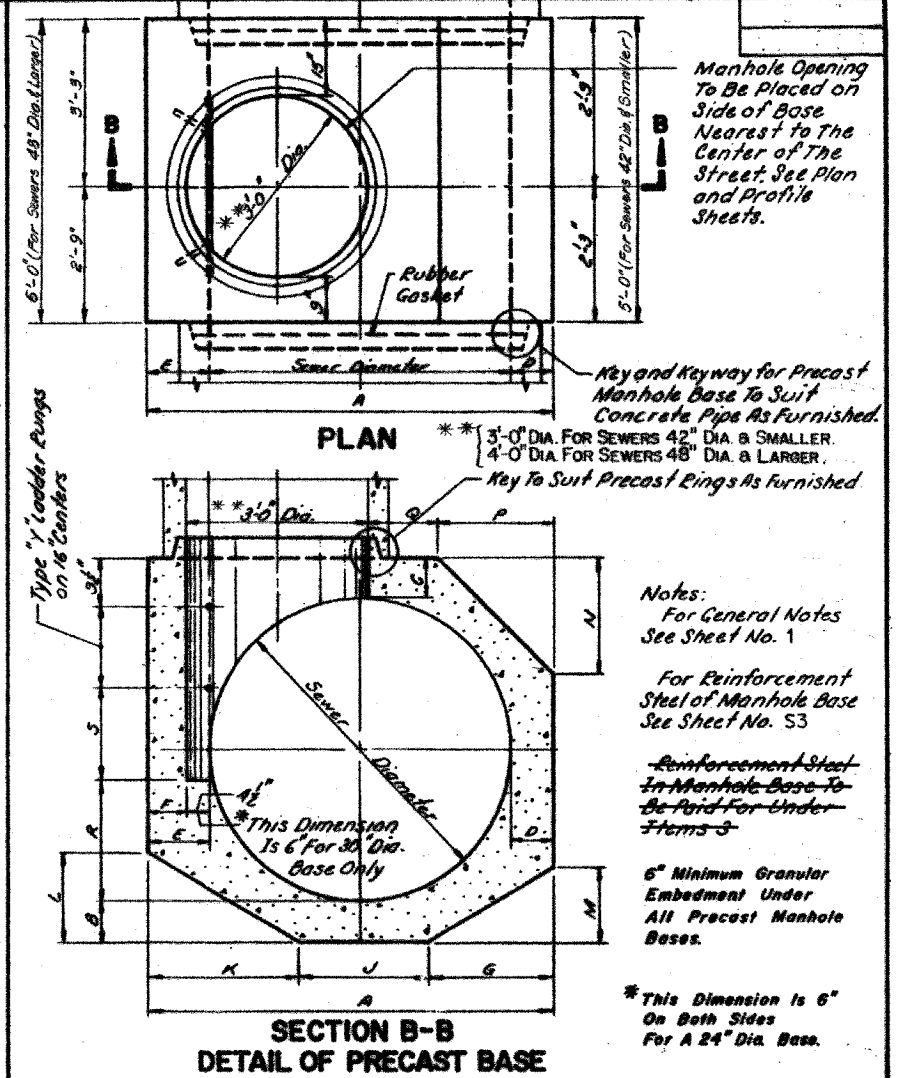
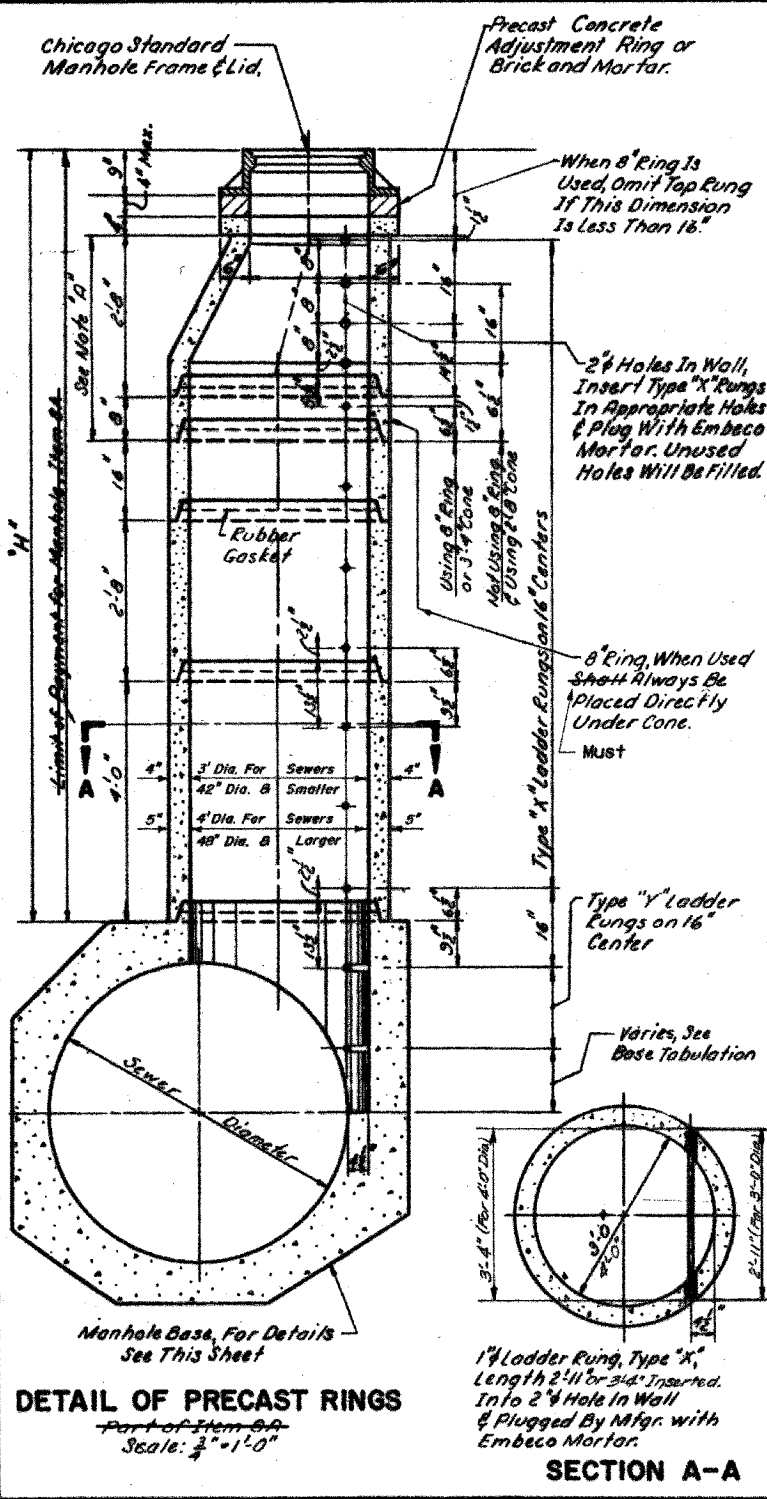


**NUMBER OF PRECAST RINGS REQUIRED FOR MANHOLES OF VARIOUS HEIGHTS**

TOTAL HEIGHT "H"	PRECAST RINGS				BRICK AND/OR MORTAR	TOTAL HEIGHT "H"	PRECAST RINGS				BRICK AND/OR MORTAR
	4'-0"	4'-4"	4'-8"	5'-0"			4'-0"	4'-4"	4'-8"	5'-0"	
3'-0"	1	1	1	1		3'-0"	1	1	1	1	
3'-4"	1	1	1	1		3'-4"	1	1	1	1	
3'-8"	1	1	1	1		3'-8"	1	1	1	1	
4'-0"	1	1	1	1	1	4'-0"	1	1	1	1	1
4'-4"	1	1	1	1	1	4'-4"	1	1	1	1	1
4'-8"	1	1	1	1	1	4'-8"	1	1	1	1	1
5'-0"	1	1	1	1	1	5'-0"	1	1	1	1	1
5'-4"	1	1	1	1	1	5'-4"	1	1	1	1	1
5'-8"	1	1	1	1	1	5'-8"	1	1	1	1	1
6'-0"	1	1	1	1	1	6'-0"	1	1	1	1	1
6'-4"	1	1	1	1	1	6'-4"	1	1	1	1	1
6'-8"	1	1	1	1	1	6'-8"	1	1	1	1	1
7'-0"	1	1	1	1	1	7'-0"	1	1	1	1	1
7'-4"	1	1	1	1	1	7'-4"	1	1	1	1	1
7'-8"	1	1	1	1	1	7'-8"	1	1	1	1	1
8'-0"	1	1	1	1	1	8'-0"	1	1	1	1	1
8'-4"	1	1	1	1	1	8'-4"	1	1	1	1	1
8'-8"	1	1	1	1	1	8'-8"	1	1	1	1	1
9'-0"	1	1	1	1	1	9'-0"	1	1	1	1	1
9'-4"	1	1	1	1	1	9'-4"	1	1	1	1	1
9'-8"	1	1	1	1	1	9'-8"	1	1	1	1	1
10'-0"	1	1	1	1	1	10'-0"	1	1	1	1	1
10'-4"	1	1	1	1	1	10'-4"	1	1	1	1	1
10'-8"	1	1	1	1	1	10'-8"	1	1	1	1	1
11'-0"	1	1	1	1	1	11'-0"	1	1	1	1	1
11'-4"	1	1	1	1	1	11'-4"	1	1	1	1	1
11'-8"	1	1	1	1	1	11'-8"	1	1	1	1	1
12'-0"	1	1	1	1	1	12'-0"	1	1	1	1	1



SEWER DIA.	PART OF ITEM	DIMENSIONS OF PRECAST MANHOLE BASE																NO. OF RINGS
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	
12" 36		2'-4"	12"	12"	12"	16"	12"	4'-0"	4'-0"	4'-4"	2'-7"	2'-5"	5'-6"	3'-6"	3'-10"	2'-0"	18"	6
10" 30		1'-4"	12"	12"	12"	16"	12"	3'-6"	3'-6"	4'-0"	2'-6"	2'-6"	3'-2"	3'-2"	3'-2"	2'-0"	16"	6
10" 30		1'-4"	12"	12"	12"	16"	12"	3'-6"	3'-6"	4'-0"	2'-4"	2'-1"	3'-0"	3'-0"	2'-10"	2'-0"	16"	6
9" 27		1'-0"	11"	11"	11"	15"	11"	3'-3"	3'-3"	3'-8"	2'-3"	2'-3"	2'-10"	2'-10"	2'-5"	2'-0"	14"	5
9" 27		1'-0"	11"	11"	11"	15"	11"	3'-1"	3'-1"	3'-8"	2'-6"	2'-6"	2'-8"	2'-8"	2'-0"	2'-0"	14"	4
8" 24		9'-0"	10"	10"	10"	14"	10"	2'-11"	2'-11"	3'-3"	2'-3"	2'-3"	2'-11"	2'-11"	1'-9"	2'-0"	12"	4
7" 21		8'-0"	10"	10"	10"	14"	10"	2'-9"	2'-9"	3'-0"	2'-2"	2'-2"	2'-4"	2'-4"	1'-4"	2'-0"	10"	4
7" 21	36	7'-0"	9"	9"	9"	13"	9"	2'-6"	2'-6"	2'-10"	2'-1"	2'-1"	2'-4"	2'-4"	1'-4"	2'-0"	10"	3
6" 18		7'-4"	9"	9"	9"	13"	9"	2'-4"	2'-4"	2'-8"	1'-7"	1'-7"	2'-0"	2'-0"	7"	2'-0"	9"	3
6" 18	36	6'-9"	8"	8"	8"	12"	8"	2'-10"	2'-10"	2'-6"	1'-8"	1'-8"	1'-5"	1'-5"	7"	2'-0"	10"	2
5" 15		6'-2"	8"	8"	8"	12"	8"	2'-3"	2'-3"	2'-4"	1'-7"	1'-7"	1'-11"	1'-11"	7"	2'-0"	10"	2
4" 12		5'-6"	7"	7"	7"	11"	7"	2'-0"	2'-0"	2'-1"	1'-5"	1'-5"	4"	4"	7"	2'-0"	11"	1
4" 12	36	5'-0"	7"	7"	7"	11"	7"	1'-8"	1'-8"	1'-9"	1'-11"	1'-11"	---	---	---	---	---	1
3" 9		4'-6"	6"	6"	6"	10"	6"	1'-6"	1'-6"	1'-7"	1'-9"	1'-9"	---	---	---	---	---	1
3" 9	36	4'-0"	6"	6"	6"	12"	6"	1'-4"	1'-4"	1'-4"	1'-9"	1'-9"	---	---	---	---	---	1
2" 6		4'-0"	6"	6"	6"	12"	6"	1'-6"	1'-6"	1'-6"	1'-9"	1'-9"	---	---	---	---	---	1

DRAWN BY REPRODUCTION  
 CHECKED BY N.S.  
 EXAMINED BY A.A.

**NOTES:**  
 Precast Concrete Rings Must Conform To A. S. T. M. Designation C76 For 'Reinforced Concrete Covert, Storm Drain, and Sewer Pipe', Class II, Wall B. Standard Lengths of Rings Are: 4'-0", 2'-8", 1'-4", 0'-8" and 0'-4" Collar.  
 All Reinforcement Steel Required for Precast Concrete Rings Must Be Included In The Price Bid for Item 8-A.  
 For Revisions To Item 8-Manholes See Specifications, Part I, G, F.

**REVISIONS**

DATE	DESCRIPTION
8-20-99	Revised to Suit 48" Dia. Rings. A
3/26/01	PRELIMINARY PLAN
	APPROVED PLAN

Scale of Drawing: 1/2" = 1'-0"

CITY OF CHICAGO  
 DEPARTMENT OF WATER MANAGEMENT  
 BUREAU OF ENGINEERING SERVICES

**TYPE "A" MANHOLE  
 PRECAST BASES AND RINGS**

SCALE AS SHOWN  
 CONTRACT SHEET NO.

NOTE: THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY. ALL REFERENCES TO PAY ITEMS OR PAY LIMITS SHOULD BE IGNORED. SEE SPECIAL PROVISIONS FOR PAY ITEMS.

TYLIN INTERNATIONAL

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94 (DAN RYAN EXPRESSWAY)

CITY OF CHICAGO  
 DEPARTMENT OF WATER MANAGEMENT  
 SEWER RELOCATION DETAIL  
 (SHEET 6 OF 9)

SCALE: NONE  
 DATE: MARCH 25, 2005  
 DRAWN BY: MB  
 CHECKED BY: MPG