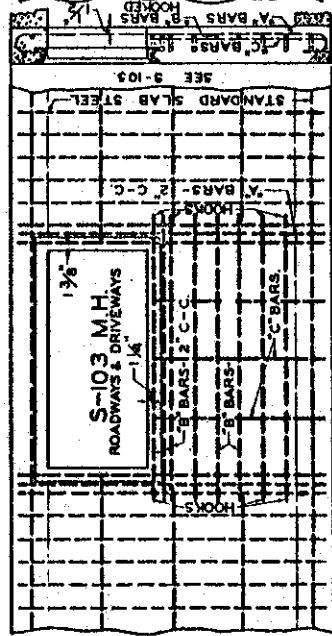
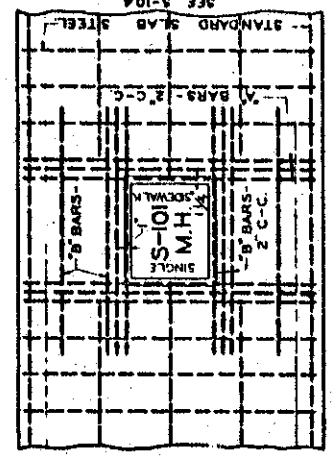


S-103 MANHOLE BOX NO.	'A' BARS ALL STRAIGHT NO. SIZE LENGTH	'B' BARS ALL STRAIGHT NO. SIZE LENGTH	'C' BARS ALL STRAIGHT NO. SIZE LENGTH
2 R.	6 3/8 @ 3'-0 1/2"	0	0
2.5 R.	6 5/8 @ 4'-3 1/2"	4 5/8 @ 6'-6"	0
3 R.	6 3/8 @ 5'-1 1/2"	6 5/8 @ 6'-6"	6 5/8 @ 1'-0"
3.5 R.	6 5/8 @ 5'-7 1/2"	6 5/8 @ 6'-6"	6 5/8 @ 1'-3"
4 R.	6 3/8 @ 6'-1 1/2"	8 5/8 @ 6'-6"	6 5/8 @ 1'-6"
4.5 R.	6 5/8 @ 6'-7 1/2"	8 5/8 @ 6'-6"	6 5/8 @ 1'-9"
5 R.	6 3/8 @ 7'-4 3/4"	8 5/8 @ 6'-6"	6 5/8 @ 2'-0"
5.5 R.	6 3/8 @ 7'-10 3/4"	10 5/8 @ 6'-6"	6 5/8 @ 2'-3"
6 R.	6 3/8 @ 8'-4 3/4"	10 5/8 @ 6'-6"	6 5/8 @ 2'-6"

PLAN--MANHOLE ON CENTER LINE OF CULVERT BOX.

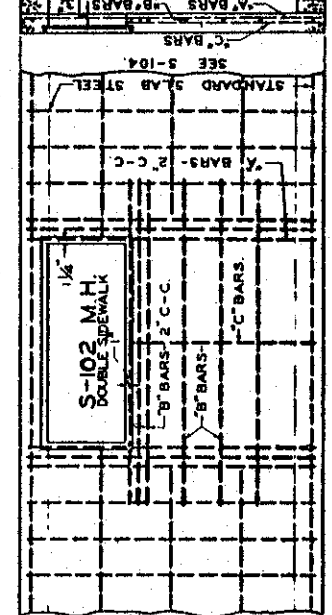
S-102 MANHOLE BOX NO.	'A' BARS ALL STRAIGHT NO. SIZE LENGTH	'B' BARS ALL STRAIGHT NO. SIZE LENGTH	'C' BARS ALL STRAIGHT NO. SIZE LENGTH
2 S.	6 3/8 @ 2'-0"	2 3/8 @ 6'-0"	0
2.5 S.	6 3/8 @ 3'-3"	6 3/8 @ 6'-0"	2 3/8 @ 0'-10"
3 S.	6 3/8 @ 3'-9"	6 3/8 @ 6'-0"	2 3/8 @ 1'-1"
3.5 S.	6 3/8 @ 4'-3"	6 3/8 @ 6'-0"	2 3/8 @ 1'-4"
4 S.	6 3/8 @ 4'-9"	6 3/8 @ 6'-0"	2 3/8 @ 1'-7"
4.5 S.	6 1/2 @ 5'-3"	6 3/8 @ 6'-0"	2 3/8 @ 1'-10"
5 S.	6 1/2 @ 5'-9"	6 3/8 @ 6'-0"	2 3/8 @ 2'-1"
5.5 S.	6 1/2 @ 6'-3"	10 3/8 @ 6'-0"	2 3/8 @ 2'-4"
6 S.	6 1/2 @ 6'-9"	10 3/8 @ 6'-0"	2 3/8 @ 2'-7"

S-101 MANHOLE BOX NO.	'A' BARS ALL STRAIGHT NO. SIZE LENGTH	'B' BARS ALL STRAIGHT NO. SIZE LENGTH	'C' BARS ALL STRAIGHT NO. SIZE LENGTH
2 S.	6 3/8 @ 2'-0"	2 3/8 @ 4'-6"	0
2.5 S.	6 3/8 @ 3'-3"	6 3/8 @ 4'-6"	0
3 S.	6 3/8 @ 3'-9"	6 3/8 @ 4'-6"	0
3.5 S.	6 3/8 @ 4'-3"	6 3/8 @ 4'-6"	0
4 S.	6 3/8 @ 4'-9"	6 3/8 @ 4'-6"	0
4.5 S.	6 1/2 @ 5'-3"	6 3/8 @ 4'-6"	0
5 S.	6 1/2 @ 5'-9"	6 3/8 @ 4'-6"	0
5.5 S.	6 1/2 @ 6'-3"	6 3/8 @ 4'-6"	0
6 S.	6 1/2 @ 6'-9"	10 3/8 @ 4'-6"	0



S-103 MANHOLE BOX NO.	'A' BARS ALL STRAIGHT NO. SIZE LENGTH	'B' BARS ALL STRAIGHT NO. SIZE LENGTH	'C' BARS ALL STRAIGHT NO. SIZE LENGTH
2 R.	6 3/8 @ 3'-0 1/2"	0	0
2.5 R.	6 5/8 @ 4'-3 1/2"	4 5/8 @ 6'-6"	3 5/8 @ 1'-0"
3 R.	6 3/8 @ 5'-1 1/2"	4 5/8 @ 6'-6"	3 5/8 @ 1'-6"
3.5 R.	6 5/8 @ 5'-7 1/2"	4 5/8 @ 6'-6"	3 5/8 @ 2'-2"
4 R.	6 3/8 @ 6'-1 1/2"	6 5/8 @ 6'-6"	3 5/8 @ 2'-6"
4.5 R.	6 5/8 @ 6'-7 1/2"	6 5/8 @ 6'-6"	3 5/8 @ 3'-2"
5 R.	6 3/8 @ 7'-4 3/4"	6 5/8 @ 6'-6"	3 5/8 @ 3'-6"
5.5 R.	6 3/8 @ 7'-10 3/4"	8 5/8 @ 6'-6"	3 5/8 @ 4'-2"
6 R.	6 3/8 @ 8'-4 3/4"	8 5/8 @ 6'-6"	3 5/8 @ 4'-6"

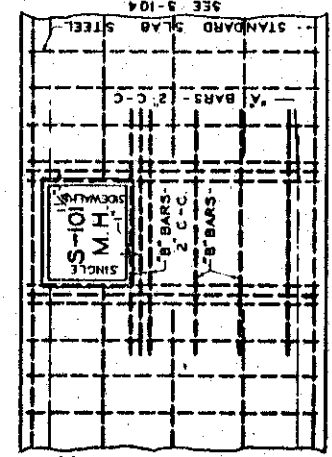
NOTE--'A' BARS FOR USE WITH S-103 M.H. TO BE SIMILAR TO STANDARD TRANSVERSE STEEL SEE S-105.



S-102 MANHOLE BOX NO.	'A' BARS ALL STRAIGHT NO. SIZE LENGTH	'B' BARS ALL STRAIGHT NO. SIZE LENGTH	'C' BARS ALL STRAIGHT NO. SIZE LENGTH
2 S.	6 3/8 @ 2'-0"	3 3/8 @ 6'-0"	1 3/8 @ 0'-11"
2.5 S.	6 3/8 @ 3'-3"	3 3/8 @ 6'-0"	1 3/8 @ 1'-5"
3 S.	6 3/8 @ 3'-9"	3 3/8 @ 6'-0"	1 3/8 @ 1'-11"
3.5 S.	6 3/8 @ 4'-3"	3 3/8 @ 6'-0"	1 3/8 @ 2'-5"
4 S.	6 3/8 @ 4'-9"	3 3/8 @ 6'-0"	1 3/8 @ 2'-11"
4.5 S.	6 1/2 @ 5'-3"	3 3/8 @ 6'-0"	1 3/8 @ 3'-5"
5 S.	6 1/2 @ 5'-9"	7 3/8 @ 6'-0"	1 3/8 @ 3'-11"
5.5 S.	6 1/2 @ 6'-3"	8 3/8 @ 6'-0"	1 3/8 @ 4'-3"
6 S.	6 1/2 @ 6'-9"	9 3/8 @ 6'-0"	1 3/8 @ 4'-11"

PLAN--MANHOLE ON SIDEWALL OF CULVERT BOX.

S-101 MANHOLE BOX NO.	'A' BARS ALL STRAIGHT NO. SIZE LENGTH	'B' BARS ALL STRAIGHT NO. SIZE LENGTH	'C' BARS ALL STRAIGHT NO. SIZE LENGTH
2 S.	6 3/8 @ 2'-0"	2 3/8 @ 4'-6"	0
2.5 S.	6 3/8 @ 3'-3"	6 3/8 @ 4'-6"	0
3 S.	6 3/8 @ 3'-9"	6 3/8 @ 4'-6"	0
3.5 S.	6 3/8 @ 4'-3"	6 3/8 @ 4'-6"	0
4 S.	6 3/8 @ 4'-9"	6 3/8 @ 4'-6"	0
4.5 S.	6 1/2 @ 5'-3"	6 3/8 @ 4'-6"	0
5 S.	6 1/2 @ 5'-9"	6 3/8 @ 4'-6"	0
5.5 S.	6 1/2 @ 6'-3"	6 3/8 @ 4'-6"	0
6 S.	6 1/2 @ 6'-9"	10 3/8 @ 4'-6"	0



DETAIL OF 'B' BARS FOR USE WITH S-103 M.H.

CITY OF PASADENA
APPROVED BY *George W. H. ...*
CITY ENGINEER & CHIEF OF STREETS
DATE: May 3, 1932.

STANDARD
STEEL DETAIL AT MANHOLES
FOR SINGLE BOX CULVERTS.
SUBMITTED BY *A.C. ...*
ASSISTANT ENGINEER CHECKED BY *A.C.M.*

S-108.