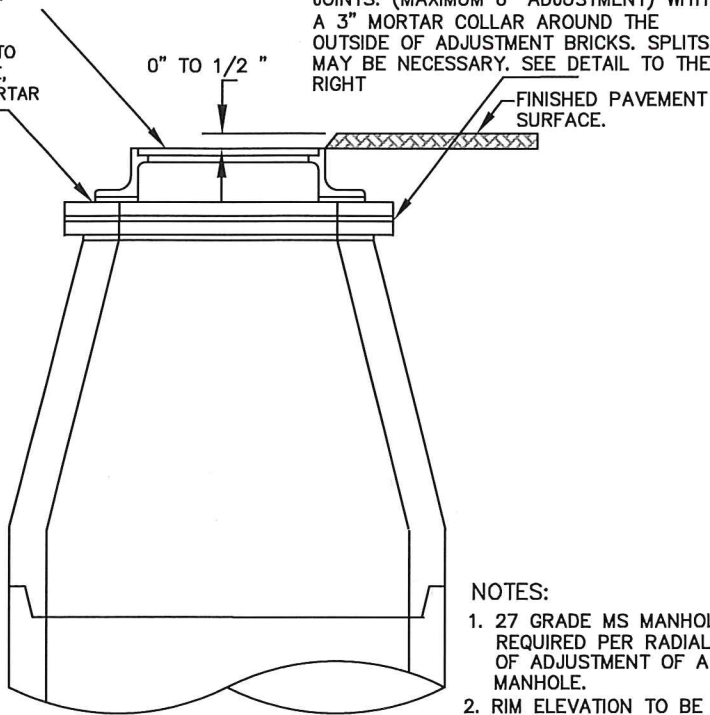


## ADJUST MANHOLE 0" TO 6"

CASTINGS A & B  
(UNLESS NOTED OTHERWISE)  
STD. PLATES 2201E & 2202D  
SEE NOTE 2.

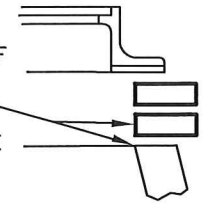
SHIM FRAME TO MATCH GRADE,  
1/2" MIN. MORTAR  
THICKNESS.



ADJUSTMENT TO BE MADE WITH  
GRADE MS MANHOLE BRICK (ASTM C-32)  
PLACED RADIALLY ON A MINIMUM  
1/2" THICK MORTAR AND 3/8" MORTAR  
JOINTS. (MAXIMUM 6" ADJUSTMENT) WITH  
A 3" MORTAR COLLAR AROUND THE  
OUTSIDE OF ADJUSTMENT BRICKS. SPLITS  
MAY BE NECESSARY. SEE DETAIL TO THE  
RIGHT

### SIDE VIEW

MATCH SHORT SIDE OF  
GRADE MS MANHOLE  
BRICK (ASTM C-32)  
WITH INSIDE RADIUS  
OF PRECAST MANHOLE



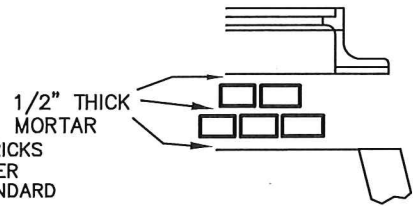
### TOP VIEW

GRADE MS MANHOLE  
BRICK (ASTM C-32)  
PLACED RADIALLY ON  
A MINIMUM OF 1/2"  
THICK MORTAR

3/8" MORTAR JOINTS  
AT INSIDE RADIUS OF  
PRECAST MANHOLE

3" MORTAR COLLAR  
AROUND THE OUTSIDE  
OF THE ADJUSTMENT  
BRICKS

STAGGER BRICKS OVER JOINTS



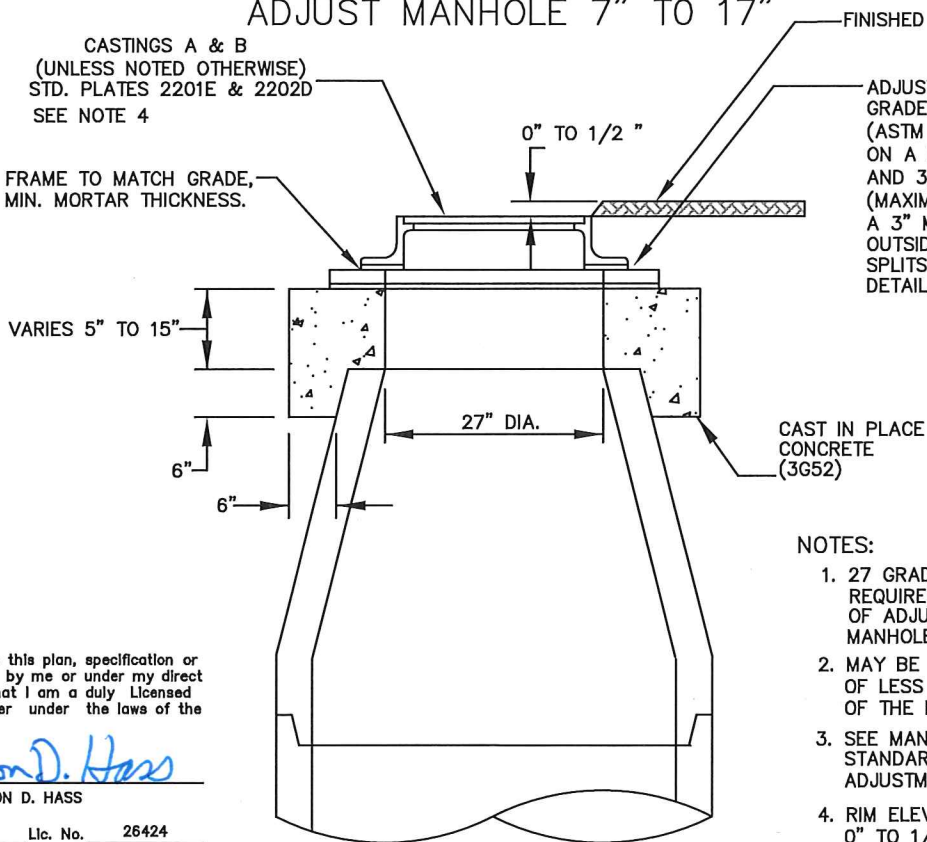
#### NOTES:

1. 27 GRADE MS MANHOLE BRICKS  
REQUIRED PER RADIAL LAYER  
OF ADJUSTMENT OF A STANDARD  
MANHOLE.
2. RIM ELEVATION TO BE 0" TO 1/2 "  
BELOW FINISHED SURFACE.

## ADJUST MANHOLE 7" TO 17"

CASTINGS A & B  
(UNLESS NOTED OTHERWISE)  
STD. PLATES 2201E & 2202D  
SEE NOTE 4

SHIM FRAME TO MATCH GRADE,  
1/2" MIN. MORTAR THICKNESS.



FINISHED PAVEMENT SURFACE.

ADJUSTMENT TO BE MADE WITH  
GRADE MS MANHOLE BRICK  
(ASTM C-32) PLACED RADIALLY  
ON A MINIMUM 1/2" THICK MORTAR  
AND 3/8" MORTAR JOINTS.  
(MAXIMUM 2" ADJUSTMENT) WITH  
A 3" MORTAR COLLAR AROUND THE  
OUTSIDE OF ADJUSTMENT BRICKS.  
SPLITS MAY BE NECESSARY. SEE  
DETAIL ABOVE.

CAST IN PLACE  
CONCRETE  
(3652)

#### NOTES:

1. 27 GRADE MS MANHOLE BRICKS  
REQUIRED PER RADIAL LAYER  
OF ADJUSTMENT OF A STANDARD  
MANHOLE
2. MAY BE USED FOR ADJUSTMENTS  
OF LESS THAN 7" WITH APPROVAL  
OF THE ENGINEER.
3. SEE MANHOLE RECONSTRUCTION  
STANDARD PLATE 2322F FOR  
ADJUSTMENTS GREATER THAN 17".
4. RIM ELEVATION TO BE  
0" TO 1/2 " BELOW FINISHED  
SURFACE.

I hereby certify that this plan, specification or  
report was prepared by me or under my direct  
supervision and that I am a duly Licensed  
Professional Engineer under the laws of the  
State of Minnesota

*Aaron D. Hass*

AARON D. HASS

Date 11-21-2019 Lic. No. 26424

APPROVED 11-21-2019  
*Paul Kuvit*  
CITY ENGINEER

CITY OF ST. PAUL  
DEPARTMENT OF PUBLIC WORKS  
MANHOLE, ADJUST

Date of  
Revision  
NOV.  
2019

Standard  
Plate  
No.  
2321C