



SECTION IX

PROCUREMENT AND MANUFACTURING DETAILS

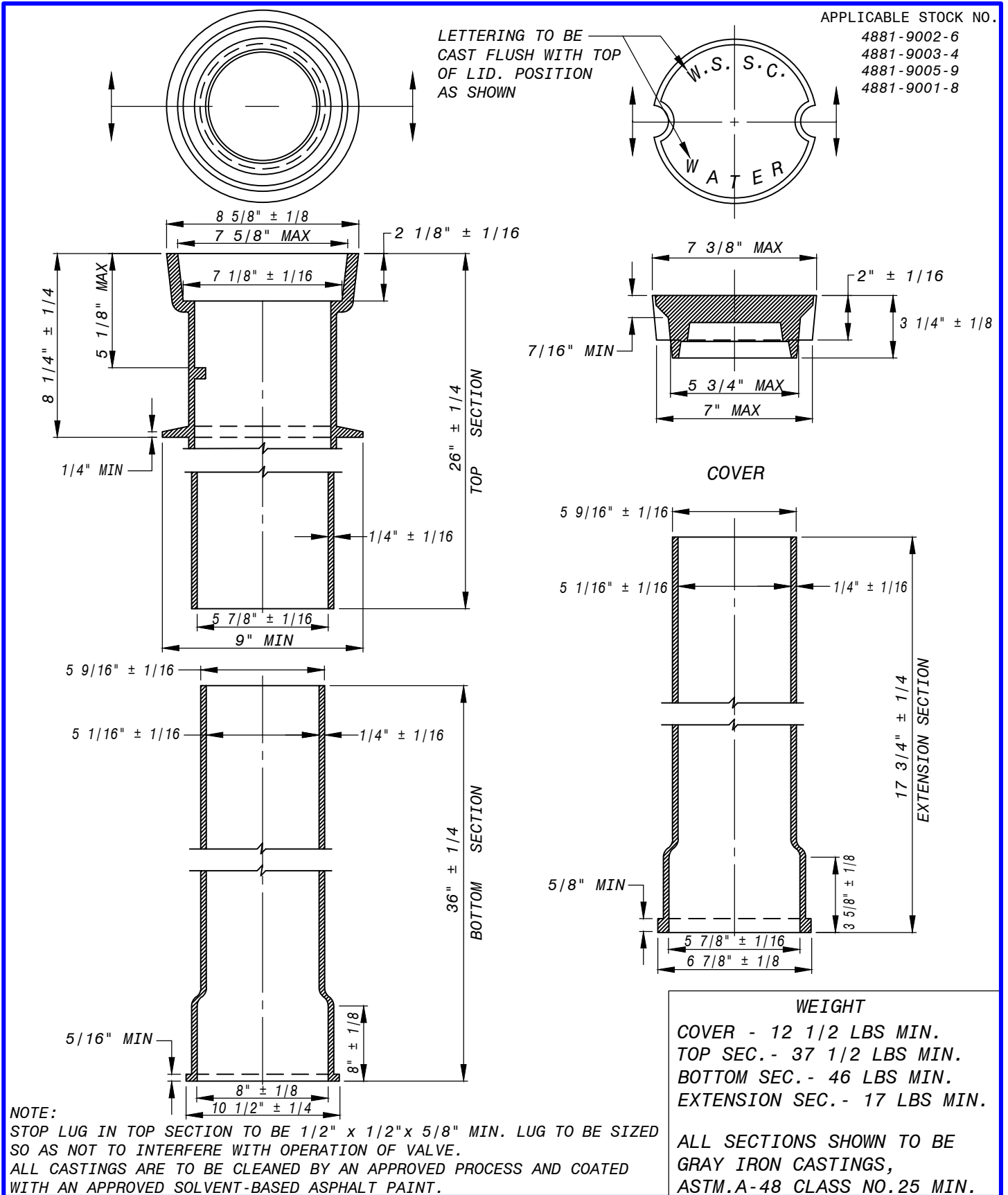
SECTION IX - PROCUREMENT AND MANUFACTURING DETAILS**TABLE OF CONTENTS**

| <u>TITLE</u> | <u>NUMBER</u> |
|---|---------------|
| Adjustable Valve Box Round Head Sliding Type | P&M /1.0 |
| Adjustable Valve Box Bottom Section with Cutout | P&M /1.1 |
| Adjustable Valve Box Cover Marker Sewer | P&M /1.2 |
| Valve Extension Stem for Valve Boxes | P&M /1.4 |
| Curb Box Bolt | P&M /2.0 |
| Curb Box Bottom Section | P&M /2.1 |
| Curb Box Cover | P&M /2.2 |
| Curb Box Extension | P&M /2.3 |
| Curb Box Top Section | P&M /2.4 |
| Curb Box Foot Piece | P&M /2.5 |
| Manhole Frame Washer | P&M /3.0 |
| Meter Frames for 15", 18" and 21" Meter Housing | P&M /4.0 |
| Type "A" Meter Frames For Meter Housing | P&M /4.0a |
| Single and Double Meter Covers | P&M /4.1 |
| Single and Double Meter Covers | P&M /4.2 |
| Meter Covers Parts | P&M /4.3 |
| 9" Standard Meter Covers | P&M /4.4 |
| 9" Traffic 2 Holes Meter Covers | P&M /4.5 |
| 9" Traffic Single Hole Meter Covers | P&M /4.6 |
| 12" Standard Single Hole Meter Covers | P&M /4.7 |



| | |
|--|-------------|
| 12" Standard Double Hole Meter Covers | P&M /4.8 |
| 12" Traffic Single Hole Meter Covers | P&M /4.9 |
| 12" Traffic Double Hole Meter Covers | P&M /4.10 |
| 21" Standard Single Hole Meter Covers | P&M /4.11 |
| Lamp Hole Frame and Cover | P&M /5.0 |
| 22-Inch Non-Watertight Manhole Adjusting Ring | P&M /6.0 |
| 22-Inch Non-Watertight Manhole Adjusting Ring, 1 ½" and 2" Height | P&M /6.1 |
| 22-Inch Non-Watertight Manhole Adjusting Ring, 3" Height | P&M /6.2 |
| Curb Box Repair Lid for Paved Areas (Assembly) | P&M /7.0 |
| Curb Box Repair Lid for Paved Areas (Details) | P&M /7.1 |
| Air Release Pipe Vent Box Base Pad | P&M /8.0 |
| Air Release Pipe Vent Box | P&M /8.5 |
| Main Valve for Improved L.D. Wood Matthews Adaptor Type Fire Hydrant | P&M /9.0 |
| Locking Type – Watertight 30" Manhole Frame and Cover | P&M /10.1a |
| Locking Type – Watertight 30" Manhole Frame and Cover | P&M /10.1b |
| Locking Type – Watertight 36" Manhole Frame and Cover | P&M /10.2a |
| Locking Type – Watertight 36" Manhole Frame and Cover | P&M /10.2b |
| Lightweight Manhole Frame and Cover | P&M /10.4a |
| Lightweight Manhole Frame and Cover | P&M /10.4a1 |
| Standard 22" Non-Watertight Manhole Frame and Cover | P&M /10.5a |
| Standard 22" Non-Watertight Manhole Frame and Cover | P&M /10.5b |
| Alternate Locking Type - Watertight 22" Manhole Frame and Cover | P&M /10.7a |
| Alternate Locking Type - Watertight 22" Manhole Frame and Cover | P&M /10.7b |





WASHINGTON
 SUBURBAN
 SANITARY
 COMMISSION

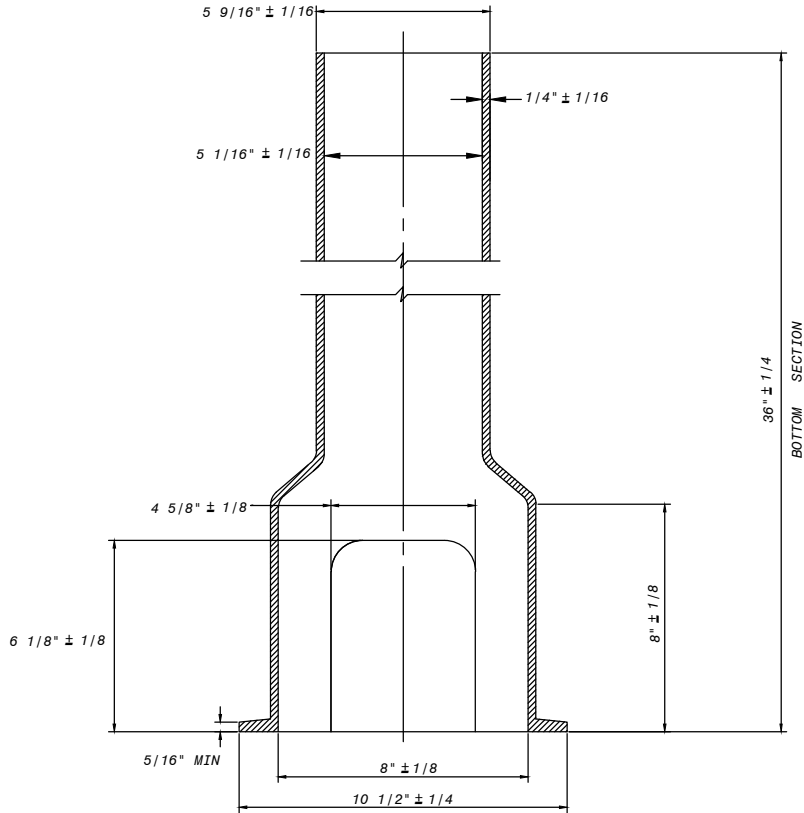
REVISIONS:
 APPROVED: May 3, 2021 | 9:23 PM EDT

DocuSigned by:
Jaime Garcia
 B7DBE23469C84BD
 MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

ADJUSTABLE VALVE
 BOX ROUND HEAD
 SLIDING TYPE

P&M
 1.0



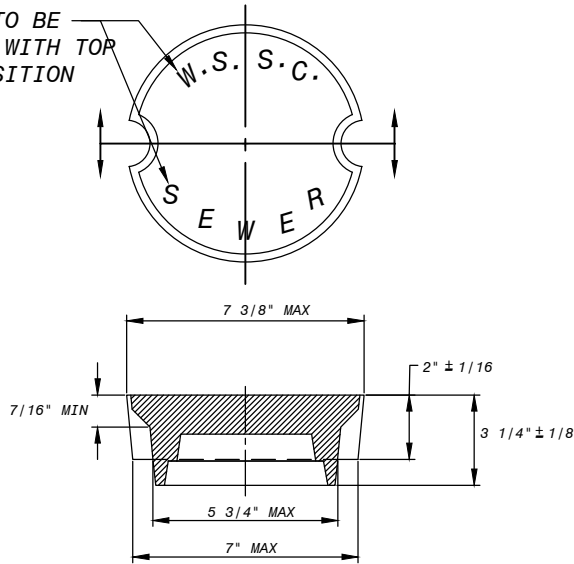
WEIGHT: 47 LBS

- SECTION TO BE GRAY IRON CASTING, ASTM A-48 CLASS NO. 25 MIN.
- CASTINGS ARE TO BE CLEANED BY AN APPROVED PROCESS AND COATED WITH AN APPROVED SOLVENT-BASED ASPHALT PAINT.

APPLICABLE STOCK NO.
4881-9007-5

| | | | |
|--|--|---|--------------------------------------|
| <p>WASHINGTON SUBURBAN SANITARY COMMISSION</p> | <p>REVISIONS: APPROVED: <u>May 3, 2021 9:23 PM EDT</u> DocuSigned by: <i>Jaime Garcia</i> MATERIALS MANAGEMENT DIVISION MANAGER</p> | <p>PROCUREMENT AND MANUFACTURING DETAIL ADJUSTABLE VALVE BOX BOTTOM SECTION WITH CUT</p> | <p><u>P&M</u> <u>1.1</u></p> |
|--|--|---|--------------------------------------|

LETTERING TO BE
CAST FLUSH WITH TOP
OF LID. POSITION
AS SHOWN



COVER

WEIGHT : 12 1/2 LBS MIN.

- SECTION TO BE GRAY IRON CASTING, ASTM A-48 CLASS NO. 25 MIN.
- ALL CASTINGS ARE TO BE CLEANED BY AN APPROVED PROCESS AND COATED WITH AN APPROVED SOLVENT-BASED ASPHALT PAINT.

APPLICABLE STOCK NO.
4881 -9006 -7

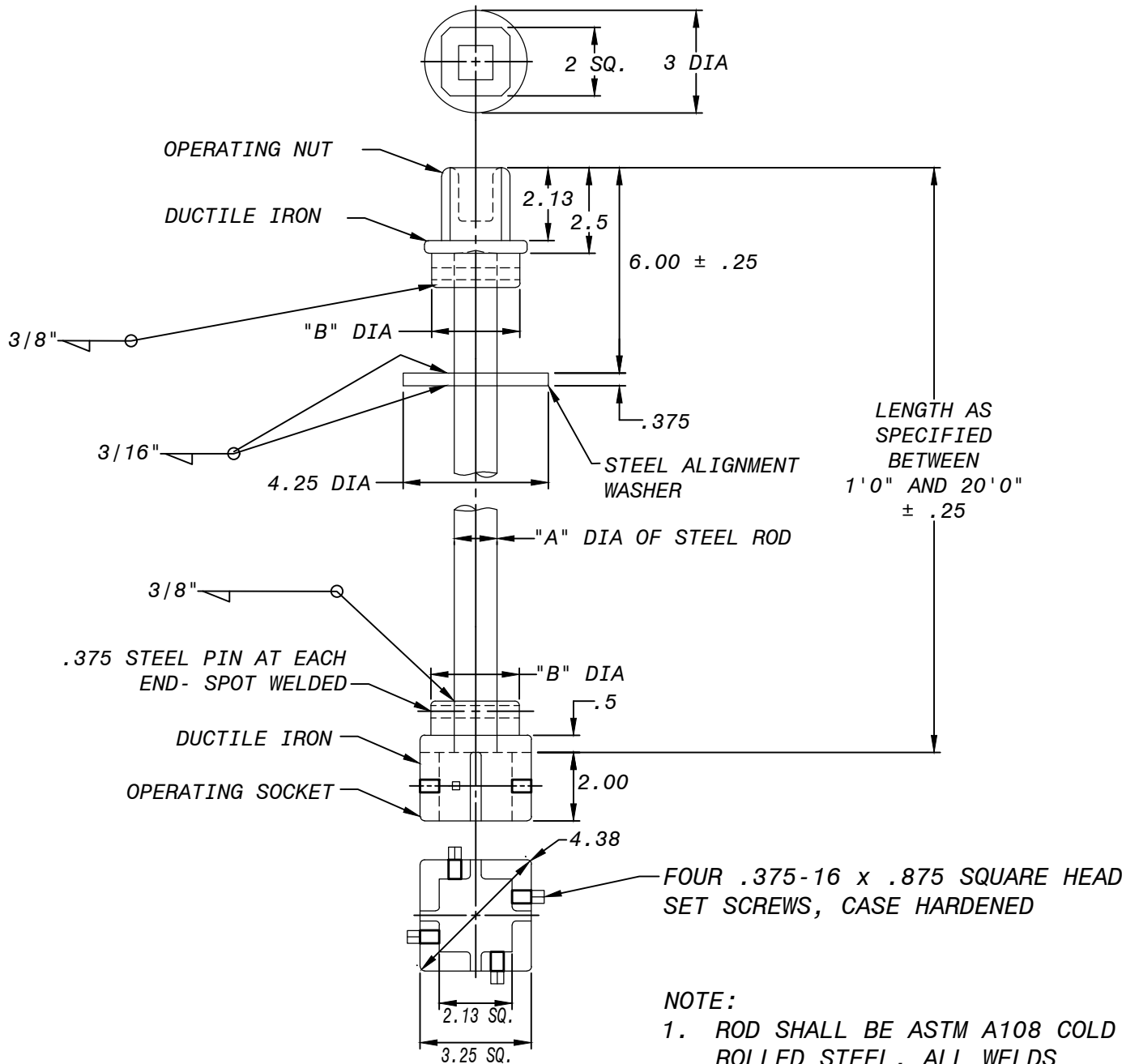
| | | | |
|--|--|---|--------------------------------------|
| <p>WASHINGTON SUBURBAN SANITARY COMMISSION</p> | <p>REVISIONS: APPROVED: <u>May 3, 2021 9:23 PM EDT</u></p> <p>DocuSigned by: <i>Jaime Garcia</i></p> <p><small>B7DBE23469C84BD MATERIALS MANAGEMENT DIVISION MANAGER</small></p> | <p>PROCUREMENT AND MANUFACTURING DETAIL ADJUSTABLE VALVE BOX COVER MARKED SEWER (ALSO USED AS COVER FOR 4" SEWER CLEANOUT FRAME)</p> | <p>P&M 1.2</p> |
|--|--|---|--------------------------------------|

"A" DIAMETER OF STEEL ROD: 1-1/4"

"B" DIAMETER: 2"

APPLICABLE STOCK NO'S.

4840-0001-3
THRU-0007-0



ALL DIMENSIONS ARE IN INCHES OTHERWISE SPECIFIED.

TOLERANCES:

ALL 2 PLACE DECIMALS ± .06
ALL 3 PLACE DECIMALS ± .062

NOTE:

1. ROD SHALL BE ASTM A108 COLD ROLLED STEEL. ALL WELDS SHALL BE RADIUS 1/2"
2. APPROVED ALTERNATE DESIGN: KRAVITCH MACHINE CO. MODEL NO. GVENOXXCR
3. SHALL BE CLEANED AND COATED BY AN APPROVED PROCESS AND COATING(2 COATS)

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

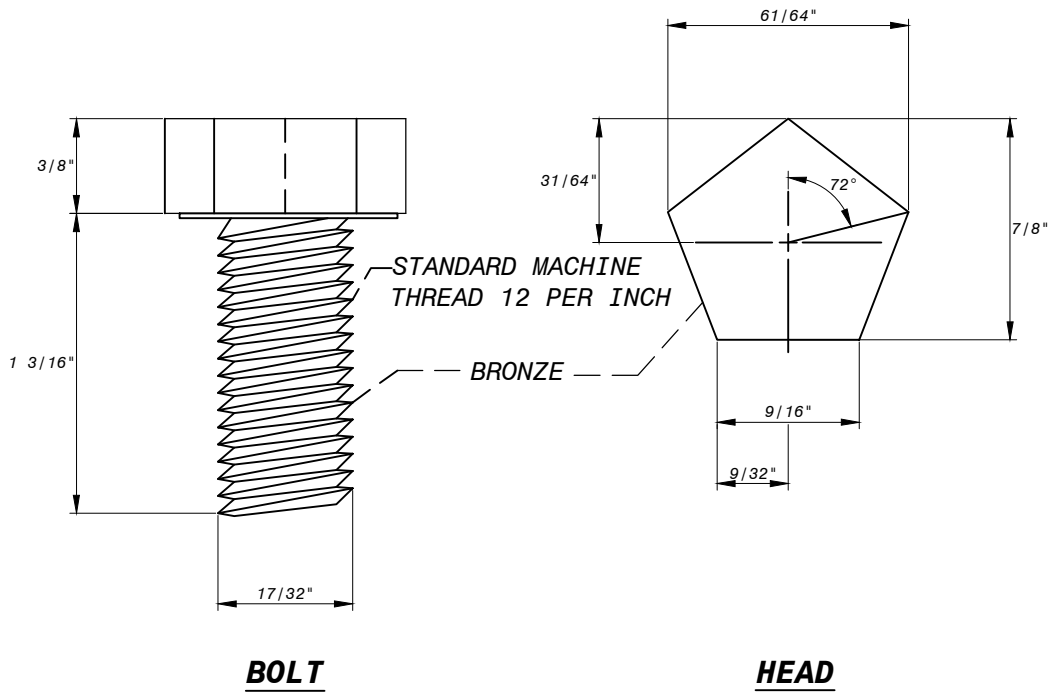
REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

DocuSigned by:
Jaime Garcia
B7DBE23469C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

VALVE EXTENSION
STEM FOR VALVE
BOXES

P&M
1.4



CURB BOX BOLT
NOT TO SCALE

FORGED ALLOY HIGH SILICON BRONZE MIN. TENSILE STRENGTH = 65,000 PSI
MIN. YEILD STRENGTH = 38,000 PSI

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

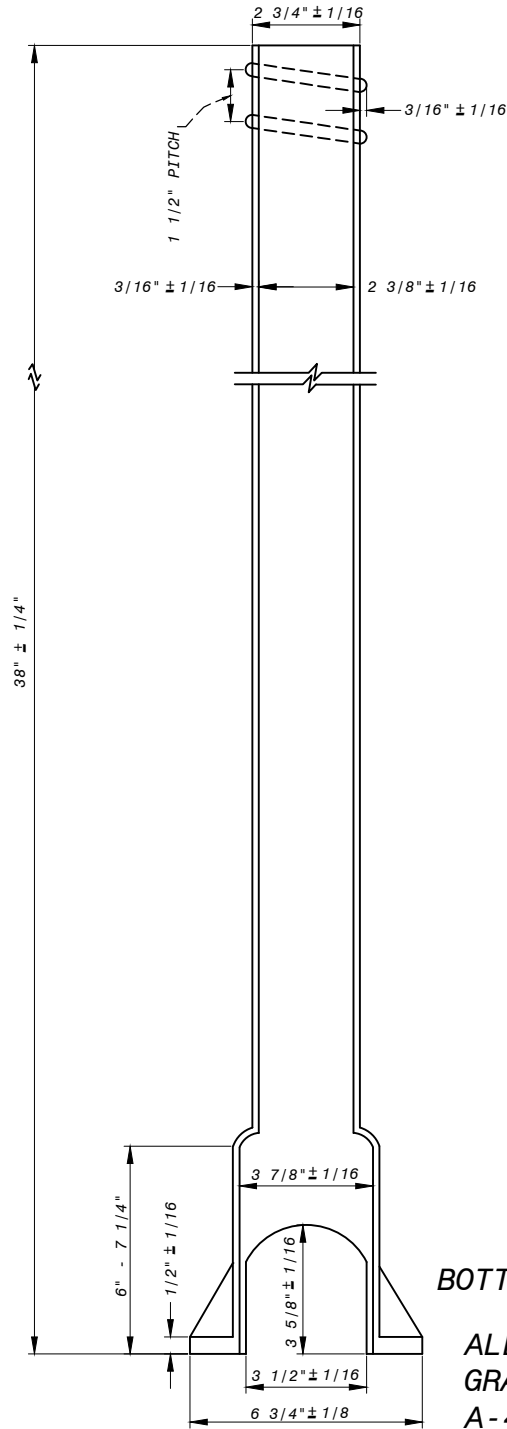
DocuSigned by:
Jaime Garcia

B7DBE23469C846D
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

CURB BOX BOLT

P&M
2.0



BOTTOM SECTION

WEIGHT

BOTTOM SELECTION-20 LBS. MIN

ALL SECTIONS SHOWN TO BE GRAY IRON CASTINGS, ASTM. A-48 CLASS NO.25 MIN. -CASTING TO BE CLEANED BY AN APPROVED PROCESS AND COATED WITH AN APPROVED SOLVENT-BASED ASPHALT PAINT.

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS: May 3, 2021 | 9:23 PM EDT
APPROVED: _____

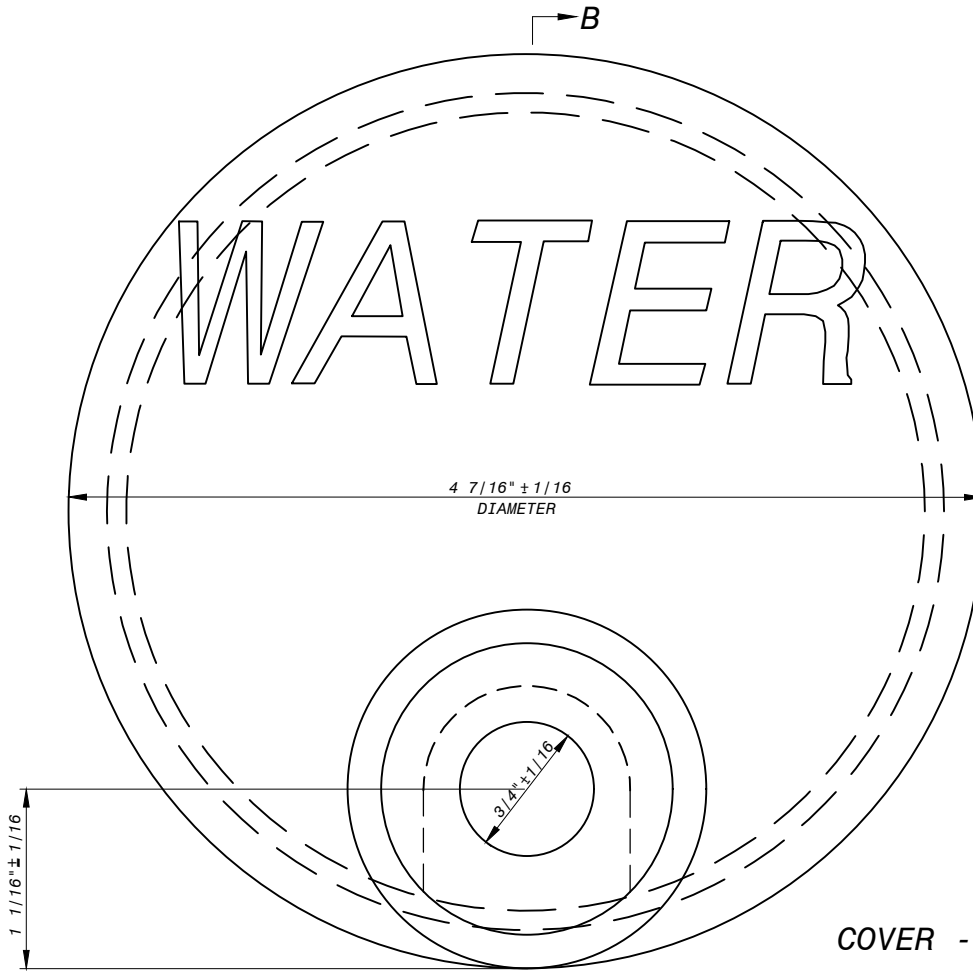
DocuSigned by:
Jaime Garcia

B7DBE23469C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

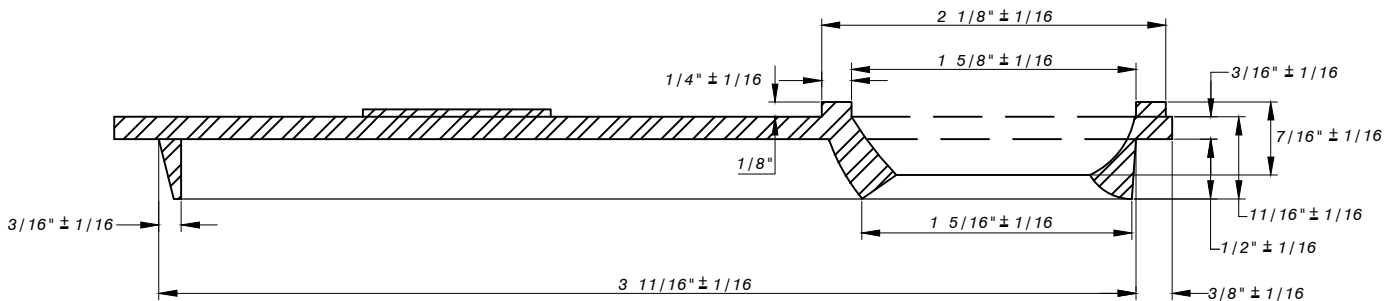
**CURB BOX BOTTOM
SECTION**

**P&M
2.1**



WEIGHT
COVER - 1.1 LBS. MIN.

CURB BOX COVER



CASTING TO BE CLEANED BY AN APPROVED PROCESS AND COATED WITH AN APPROVED SOLVENT-BASED ASPHALT PAINT.

SECTION B-B

ALL SECTIONS SHOWN TO BE GRAY IRON CASTINGS, ASTM. A-48 CLASS NO. 25 MIN.

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS: May 3, 2021 | 9:23 PM EDT
APPROVED: _____

DocuSigned by:
Jaime Garcia

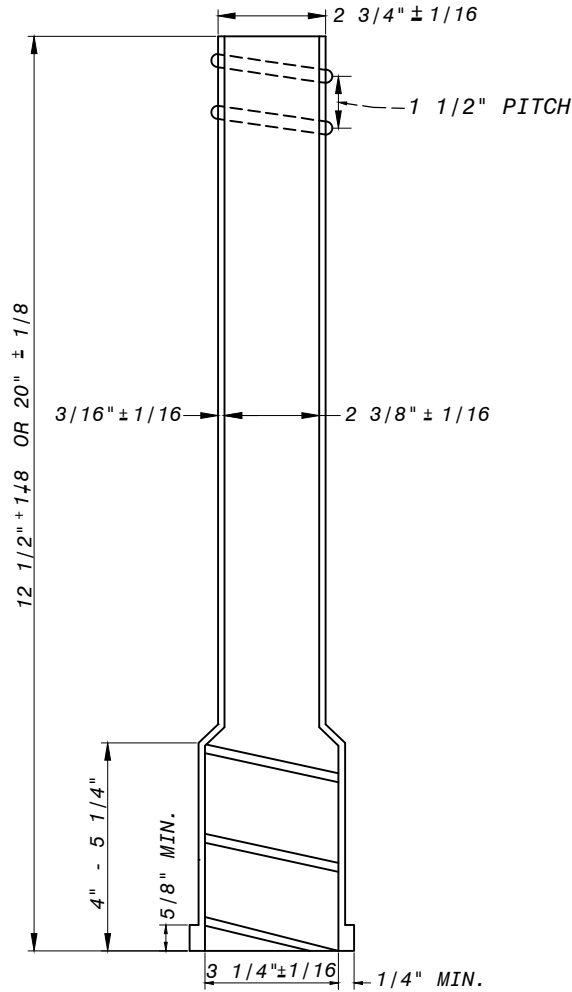
B7DFE23469C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

CURB BOX COVER

P&M
2.2

APPLICABLE STOCK NOS.
 4880-9004-4
 4880-9005-1



WEIGHT

CURB BOX EXTENSION

EXTENSION- 8 1/2 LBS. MIN.
 ALL SECTIONS SHOWN TO BE GRAY
 IRON CASTINGS, ASTM. A-48
 CLASS NO.25 MIN.
 CASTING SHALL BE CLEANED BY AN
 APPROVED PROCESS AND COATED
 WITH AN APPROVED SOLVENT-BASED
 ASPHALT PAINT.

WASHINGTON
 SUBURBAN
 SANITARY
 COMMISSION

REVISIONS: May 3, 2021 | 9:23 PM EDT
 APPROVED: _____

DocuSigned by:
Jaime Garcia

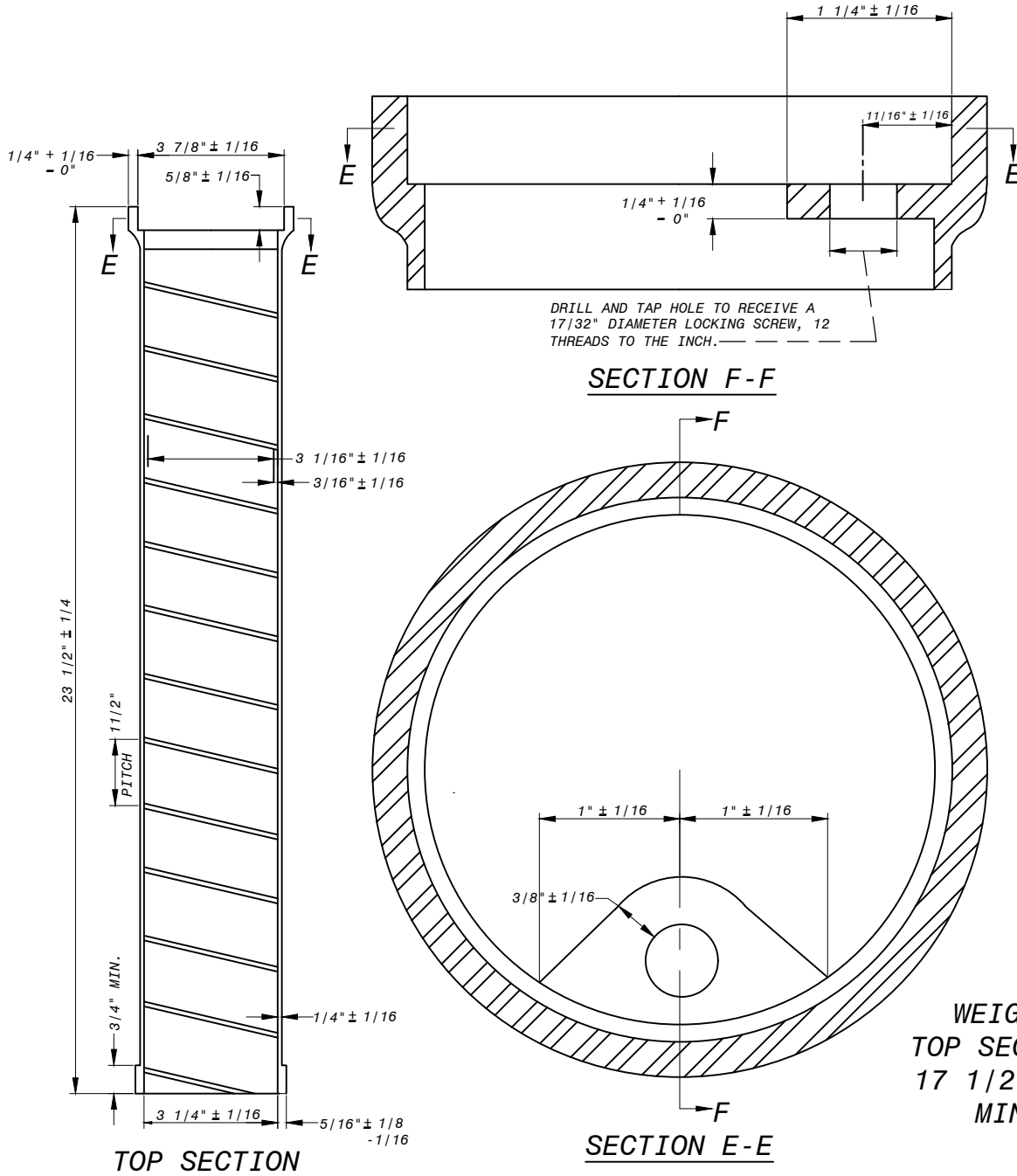
87DBE23469C84BD
 MATERIALS MANAGEMENT BY SYSTEM MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

CURB BOX EXTENSION

P&M
2.3

APPLICABLE STOCK NO.
4880-9006-9



- ALL CASTINGS ARE TO BE CLEANED BY AN APPROVED PROCESS AND COATED WITH AN APPROVED SOLVENT-BASED ASPHALT PAINT.
- ALL SECTIONS SHOWN TO BE GRAY IRON CASTINGS, ASTM. A-48 CLASS NO.25 MIN.
- REFER TO SPECIFICATIONS FOR APPROVED CURB BOX ROD

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

DocuSigned by:
Jaime Garcia

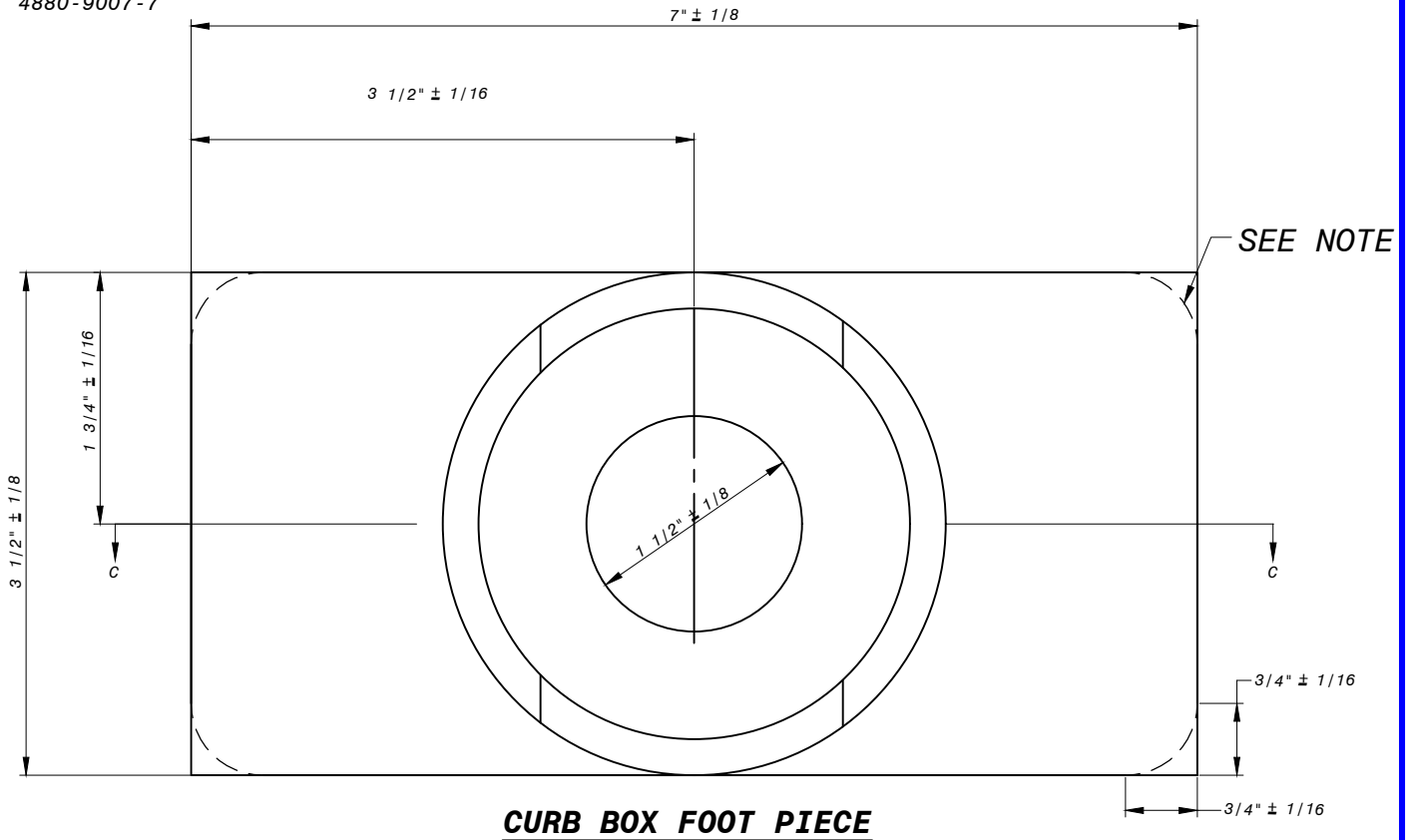
B7DBE23489C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

CURB BOX TOP SECTION

P&M
2.4

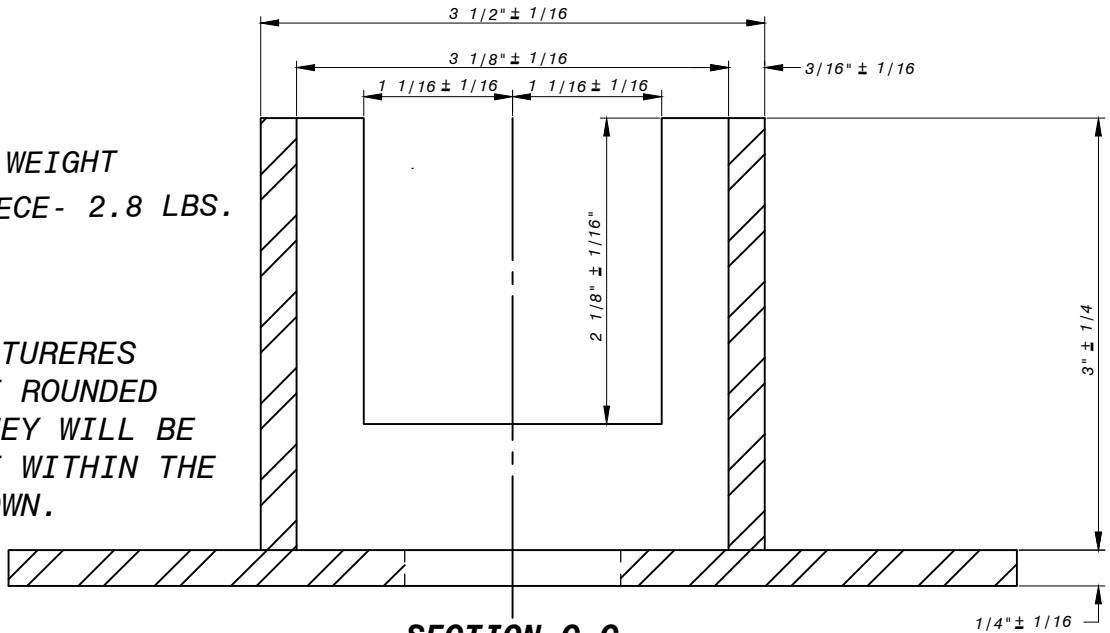
APPLICABLE STOCK NO.
4880-9007-7



CURB BOX FOOT PIECE

WEIGHT
FOOT PIECE- 2.8 LBS.
MIN.

NOTE:
IF MANUFACTURERES
MOLDS HAVE ROUNDED
CORNERS THEY WILL BE
ACCEPTABLE WITHIN THE
LIMITS SHOWN.



SECTION C-C

ALL SECTIONS SHOWN TO BE GRAY IRON CASTINGS,
ASTM.A-48 CLASS NO.25 MIN.
CASTINGS SHALL BE CLEANED BY AN APPROVED PROCESS AND
COATED WITH AN APPROVED SOLVENT-BASED ASPHALT PAINT.

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

DocuSigned by:
Jaime Garcia

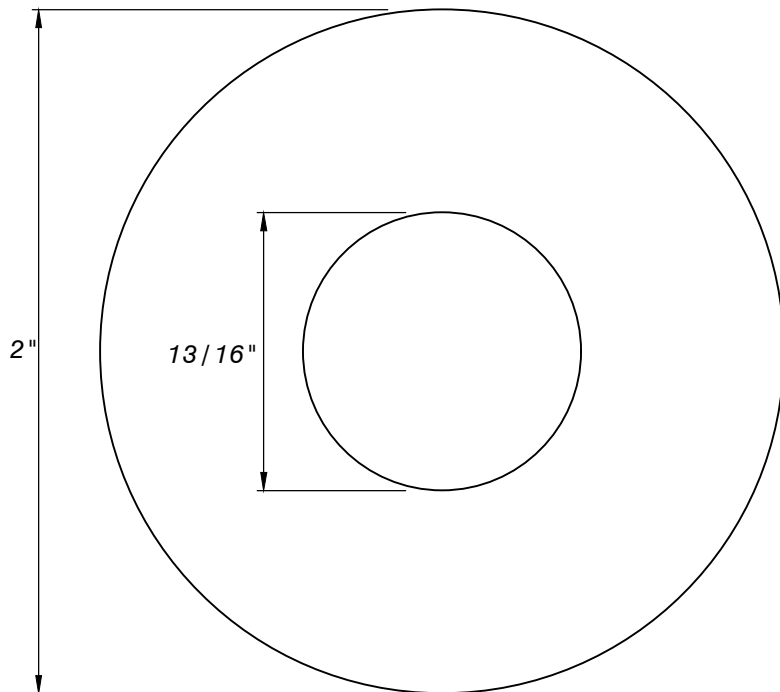
B7DBE23460C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

CURB BOX FOOT PIECE

P&M
2.5

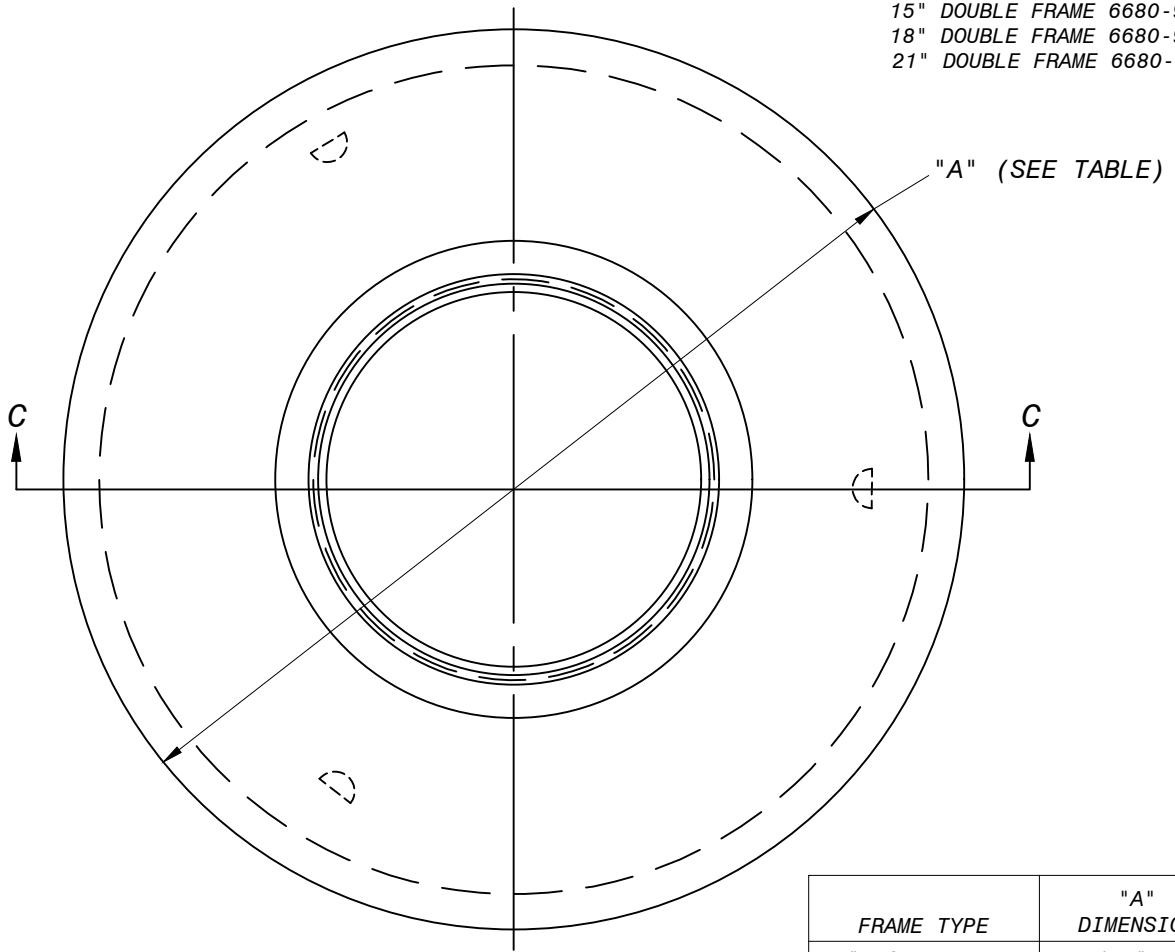
APPLICABLE STOCK NO.
5310-9400-1



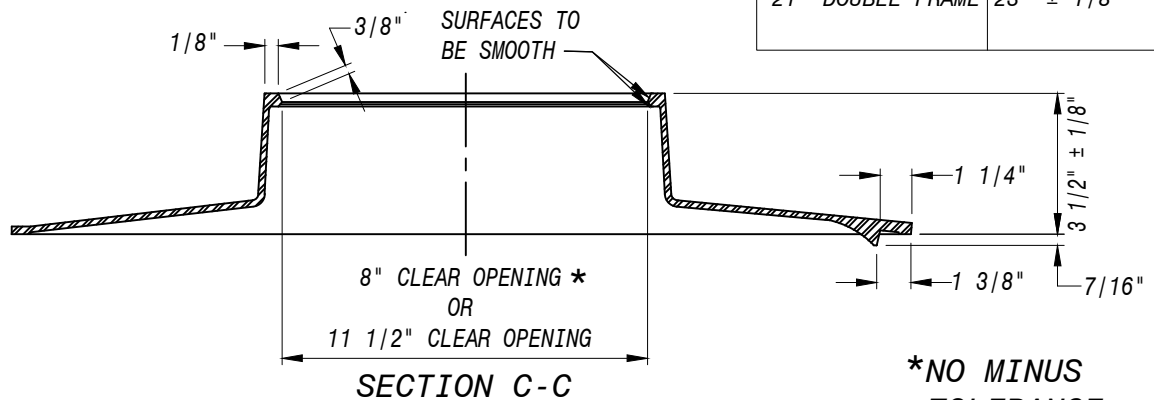
MATERIAL:
LOW ALLOY STEEL IN
ACCORDANCE WITH ASTM A307,
LATEST REVISION
THICKNESS: 1/4"

| | | | |
|--|--|---|-------------------------------|
| <p>WASHINGTON SUBURBAN SANITARY COMMISSION</p> | <p>REVISIONS: APPROVED: <u>May 3, 2021 9:23 PM EDT</u></p> <p>DocuSigned by: <i>Jaime Garcia</i></p> <p><small>MATERIALS MANAGEMENT DIVISION MANAGER</small></p> | <p>PROCUREMENT AND MANUFACTURING DETAIL</p> <p>MANHOLE FRAME WASHER, NOMINAL DIAMETER 3/4"</p> | <p>P&M 3.0</p> |
|--|--|---|-------------------------------|

APPLICABLE STOCK NOS.
 15" DOUBLE FRAME 6680-9040-0
 18" DOUBLE FRAME 6680-9041-8
 21" DOUBLE FRAME 6680-9042-6




| FRAME TYPE | "A" DIMENSION |
|------------------|----------------|
| 15" DOUBLE FRAME | 17 5/16" ± 1/8 |
| 18" DOUBLE FRAME | 20" ± 1/8 |
| 21" DOUBLE FRAME | 23" ± 1/8 |



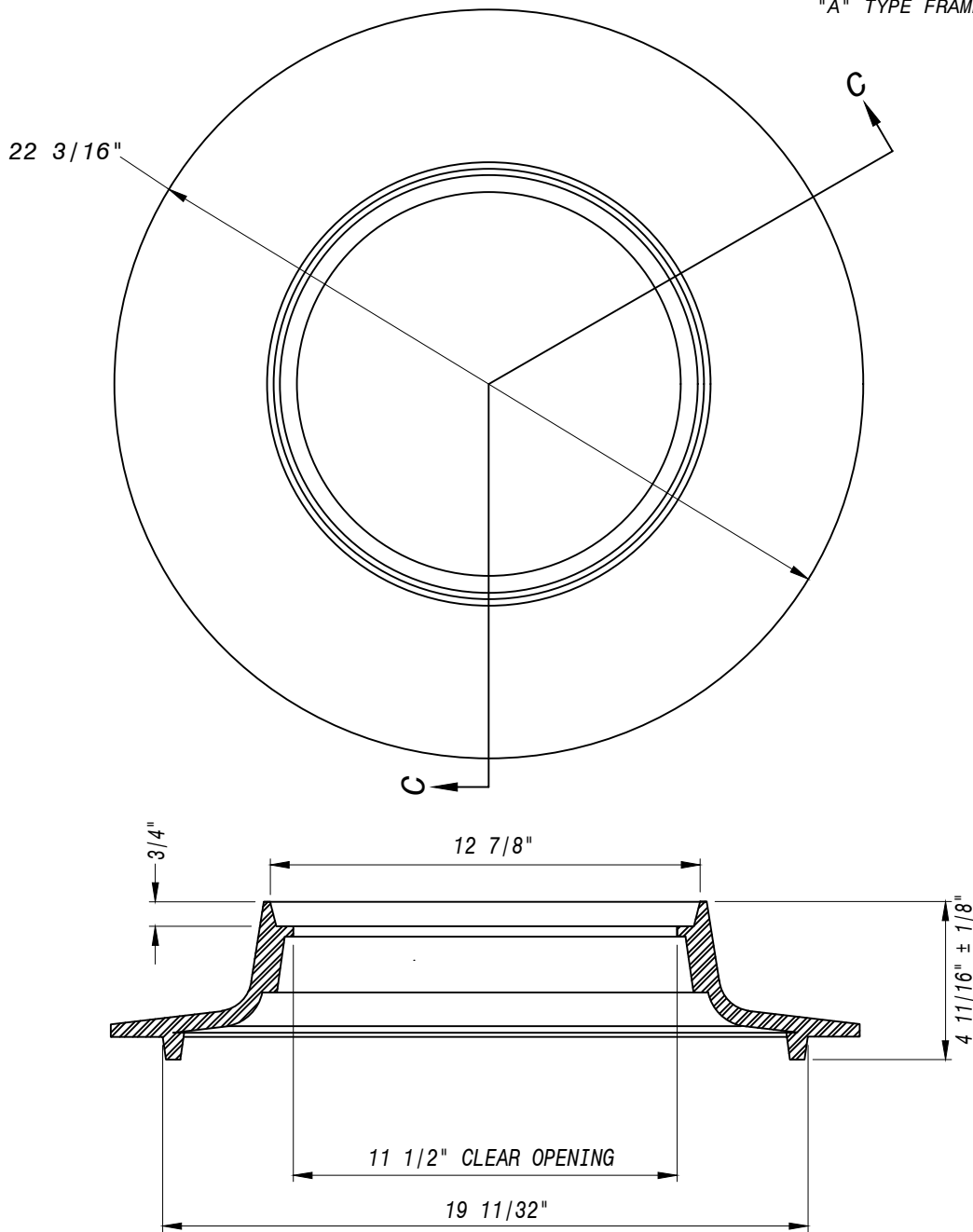
***NO MINUS TOLERANCE**

NOTE:

1. ALL GRAY IRON CASTINGS TO BE ASTM A-48 CLASS 25 MIN.
2. SEE P&M/4.1 FOR WEIGHTS
3. TOLERANCE OF +/- 1/16" UNLESS NOTED OTHERWISE
4. CASTING SHALL BE CLEANED BY AN APPROVED PROCESS AND COATED WITH AN APPROVED SOLVENT-BASED ASPHALT PAINT.
5. WSSC IS NO LONGER USING METER FRAME "C" TYPE FOR NEW INSTALLATIONS.

| | | | |
|--|--|---|------------|
| WASHINGTON SUBURBAN SANITARY COMMISSION | REVISIONS: APPROVED: <u>May 3, 2021 9:23 PM EDT</u> | PROCUREMENT AND MANUFACTURING DETAIL | P&M 4.0 |
| | DocuSigned by:  MATERIALS MANAGEMENT DIVISION MANAGER | TYPE "C" METER FRAMES FOR 15", 18" AND 21" METER HOUSING | |

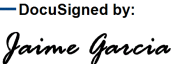
APPLICABLE STOCK NOS.
 "A" TYPE FRAME 6680-9043-4

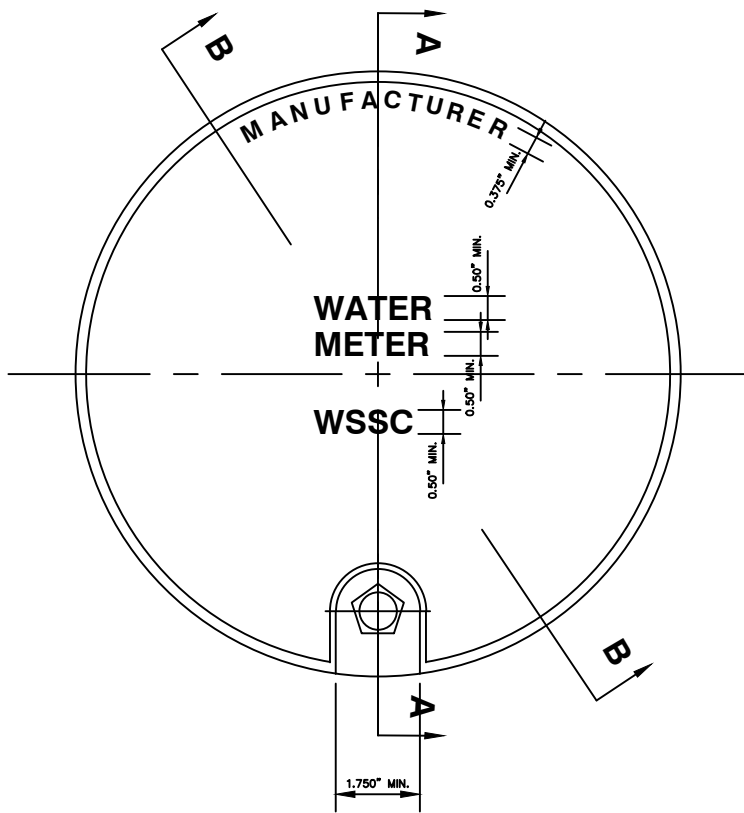


SECTION C-C

NOTE:

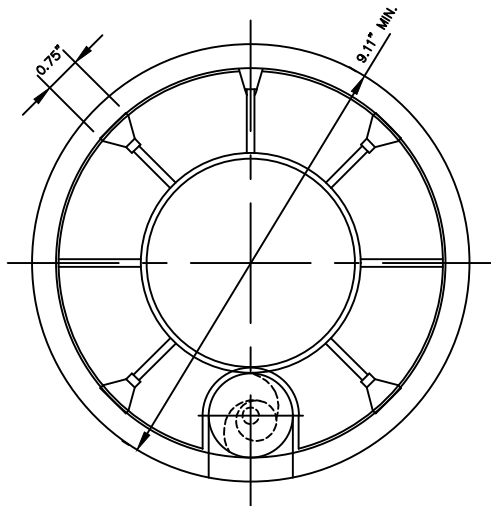
1. ALL GRAY IRON CASTINGS TO BE ASTM A-48 CLASS 25 MIN.
2. SEE P&M/4.1 FOR WEIGHTS
3. TOLERANCE OF +/- 1/16" UNLESS NOTED OTHERWISE
4. CASTING SHALL BE CLEANED BY AN APPROVED PROCESS AND COATED WITH AN APPROVED SOLVENT-BASED ASPHALT PAINT.

| | | | |
|--|---|--|-------------|
| WASHINGTON SUBURBAN SANITARY COMMISSION | REVISIONS: APPROVED: <u>May 3, 2021 9:23 PM EDT</u> DocuSigned by:  B7DBE23469C84BD MATERIALS MANAGEMENT DIVISION MANAGER | PROCUREMENT AND MANUFACTURING DETAIL TYPE "A" METER FRAMES FOR METER HOUSING | P&M 4.0a |
|--|---|--|-------------|



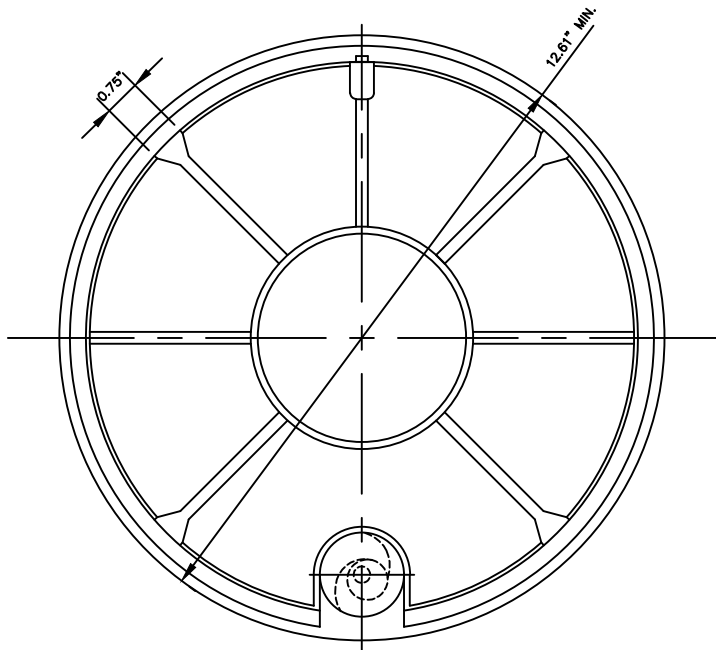
TOP VIEW
(TYP SINGLE AND DOUBLE)

SCALE: 1"=4.0"



BOTTOM VIEW DOUBLE COVER

SCALE: 1"=4.0"



BOTTOM VIEW DOUBLE COVER

SCALE: 1"=4.0"

WEIGHT

| | |
|------------------|----------------|
| 15" DOUBLE FRAME | 12 3/4 LBS MIN |
| 18" SINGLE FRAME | 20 1/4 LBS MIN |
| 18" DOUBLE FRAME | 18 1/4 LBS MIN |
| 21" DOUBLE FRAME | 28 1/2 LBS MIN |
| SINGLE LID | 4 3/4 LBS MIN |
| DOUBLE LID | 10 3/4 LBS MIN |

ALL GRAY IRON CASTINGS TO BE
ASTM A48CLASS 25 MIN.

APPLICABLE STOCK NOS.
SINGLE COVER 6680-9031-9
DOUBLE COVER 6680-9030-1

NOTES:

1. TOLERANCE OF $\pm 1/16"$ UNLESS NOTED OTHERWISE
2. SEE P&M/4.2 FOR FURTHER DETAILS
3. CASTING SHALL BE CLEANED BY AN APPROVED PROCESS AND COATED WITH AN APPROVED ASPHALTUM
4. LOCATIONS OF HOLES AND RECESSES SHOWN ON DETAILS
P&M/4.4-P&M/4.11.

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

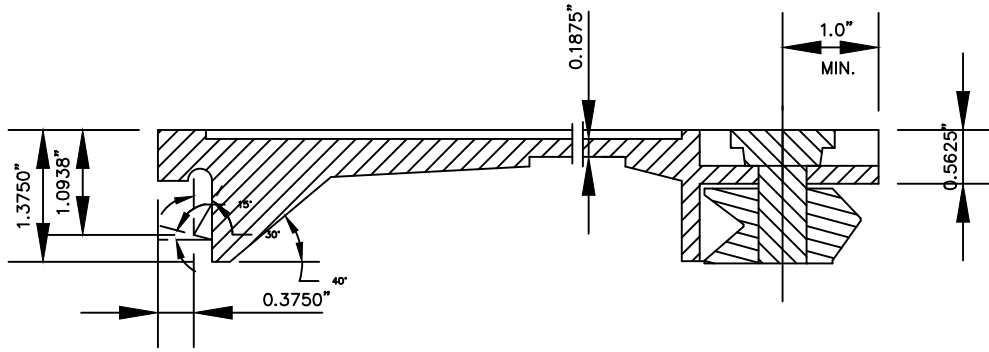
REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

DocuSigned by:
Jaime Garcia
MATERIALS MANAGER

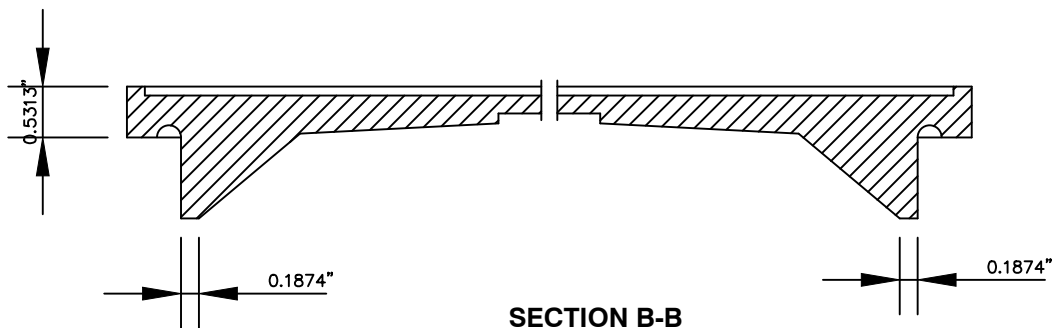
PROCUREMENT AND MANUFACTURING DETAIL

**SINGLE AND DOUBLE
METER COVERS**

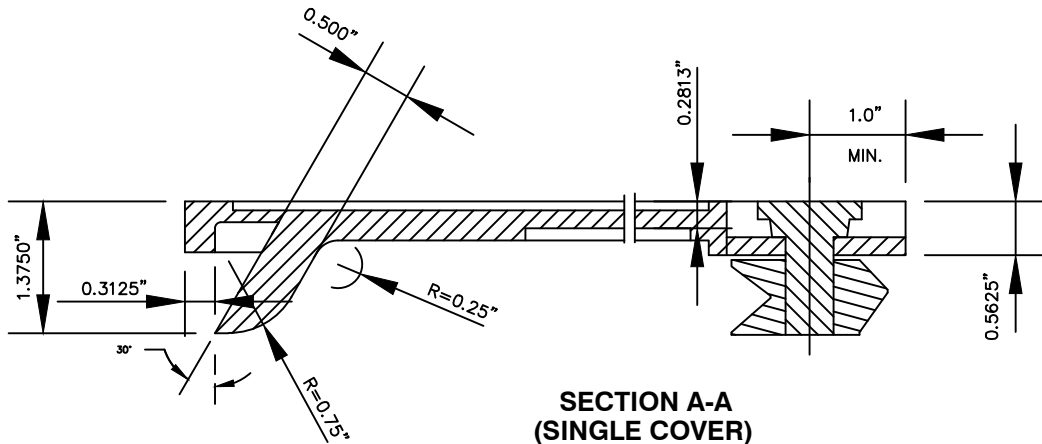
P&M
4.1



**SECTION A-A
(DOUBLE COVER)**
SCALE: 1"=2.0"



**SECTION B-B
(TYP SINGLE COVER AND DOUBLE COVER)**
SCALE: 1"=2.0"

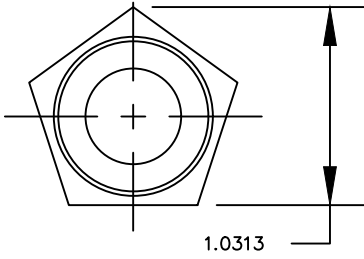


**SECTION A-A
(SINGLE COVER)**
SCALE: 1"=2.0"

NOTES:

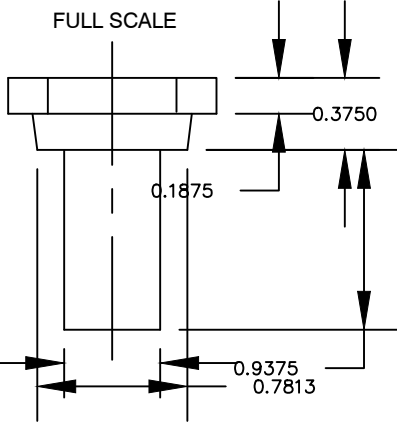
1. ALL GRAY IRON CASTINGS TO BE ASTM A48 CLASS 25 MIN.
2. SEE P&M/4.1 FOR FURTHER DETAILS
3. TOLERANCE OF +/- 1/16 UNLESS NOTED OTHERWISE
4. CASTING SHALL BE CLEANED BY AN APPROVED PROCESS AND COATED WITH AN APPROVED ASPHALTIC COATING

| | | | |
|--|---|---|------------|
| WASHINGTON SUBURBAN SANITARY COMMISSION | REVISIONS: APPROVED: <u>May 3, 2021 9:23 PM EDT</u> | PROCUREMENT AND MANUFACTURING DETAIL | P&M 4.2 |
| | DocuSigned by: <i>Jaime Garcia</i> 87DBE23469C84BD MATERIALS MANAGEMENT DIVISION MANAGER | SINGLE AND DOUBLE METER COVERS | |



TOP VIEW

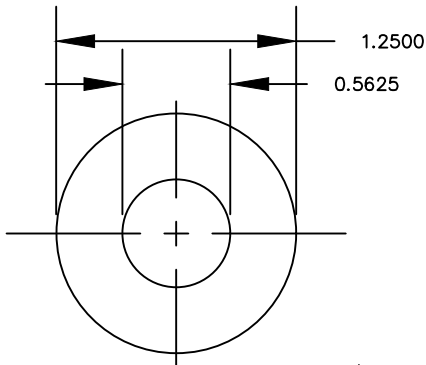
FULL SCALE



SIDE VIEW

PENTAGON HEAD BOLT

FULL SCALE

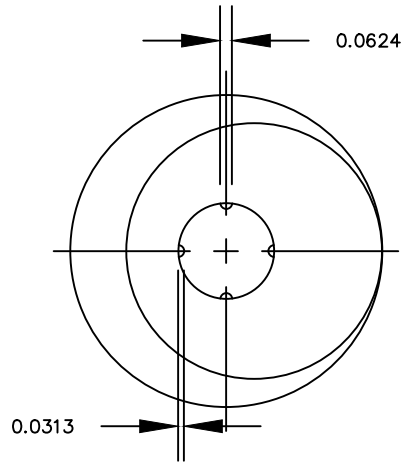


BRONZE OR PLASTIC WASHER

FULL SCALE

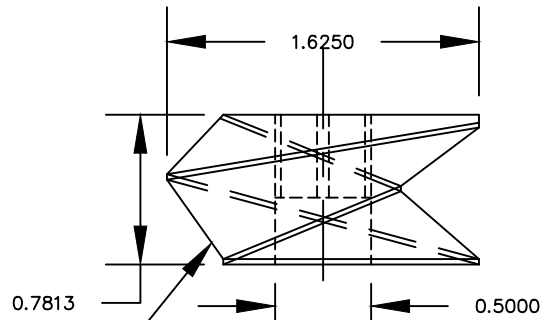
NOTES:

1. PENTAGON HEAD BOLT TO BE ATTACHED TO CAST IRON WORM BY MEANS OF 1/32" SPLINES CAST ON INTERIOR OF WORM. THE END OF THE BOLT SHALL BE SPLIT WITH A PUNCH, A SPLIT BOLT WILL NOT BE ACCEPTED.



TOP VIEW

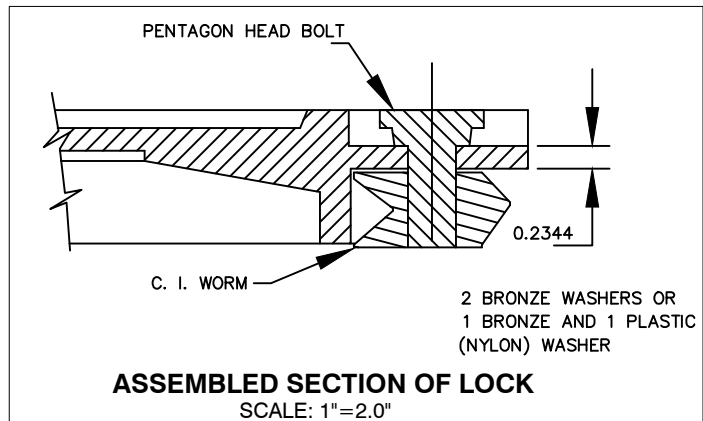
FULL SCALE



SIDE VIEW
CAST IRON WORM

FULL SCALE

THD. 7 1/2 PER INCH



ASSEMBLED SECTION OF LOCK

SCALE: 1"=2.0"

2 BRONZE WASHERS OR
1 BRONZE AND 1 PLASTIC
(NYLON) WASHER

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

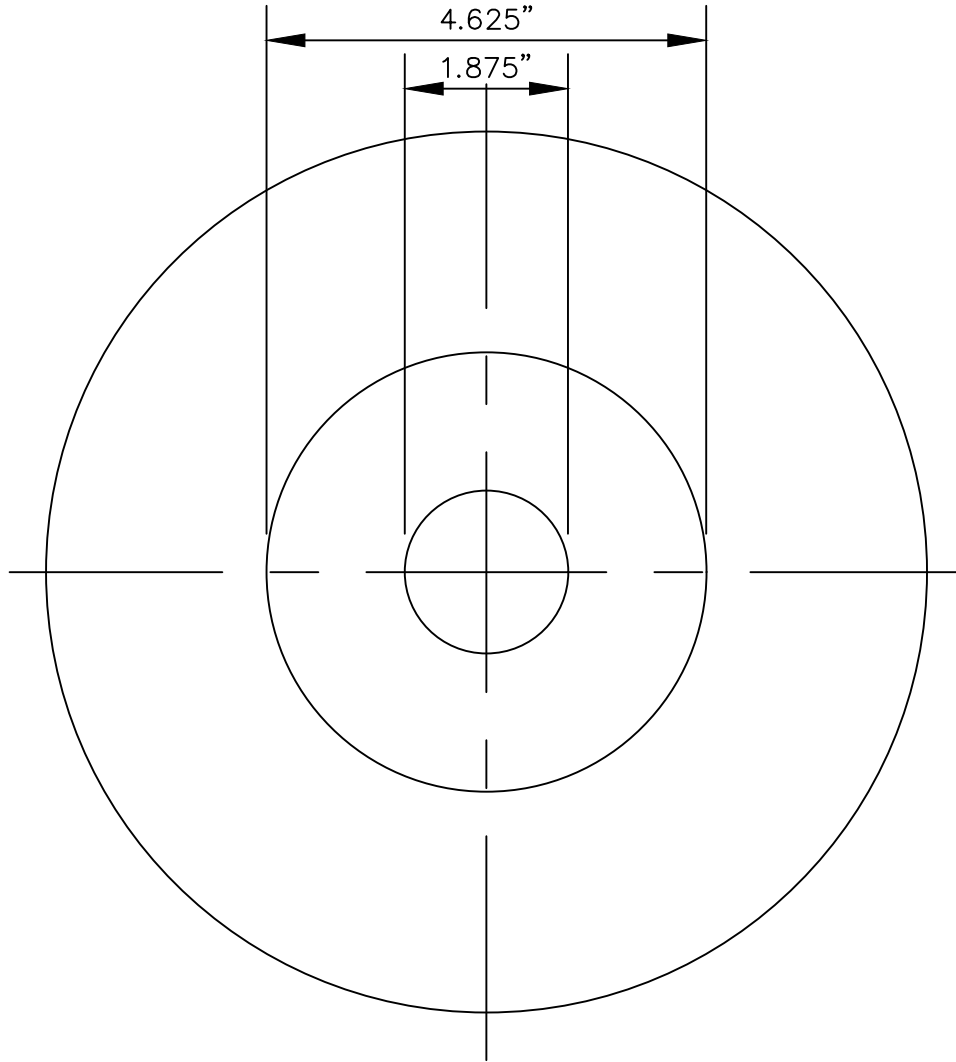
REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

DocuSigned by:
Jaime Garcia
B7DBE23469C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

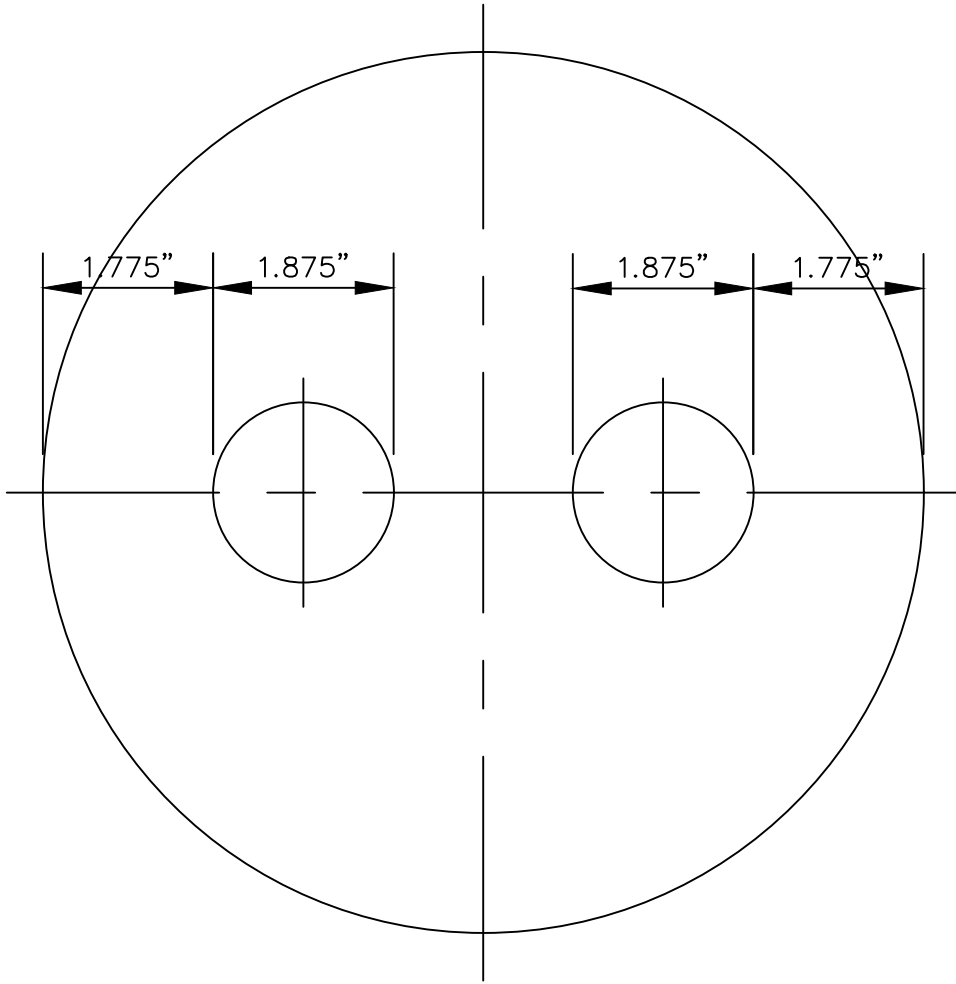
METER COVER PARTS

P&M
4.3



SCALE: 1"=2.0"

| | | | |
|--|---|--|--------------------------------------|
| <p>WASHINGTON SUBURBAN SANITARY COMMISSION</p> | <p>REVISIONS: <u>May 3, 2021 9:23 PM EDT</u> APPROVED: _____ DocuSigned by: <i>Jaime Garcia</i> B7DBE23469C84BD MATERIALS MANAGEMENT DIVISION MANAGER</p> | <p>PROCUREMENT AND MANUFACTURING DETAIL</p> <p>9" STANDARD METER COVERS</p> | <p>P&M 4.4</p> |
|--|---|--|--------------------------------------|



SCALE: 1"=2.0"

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

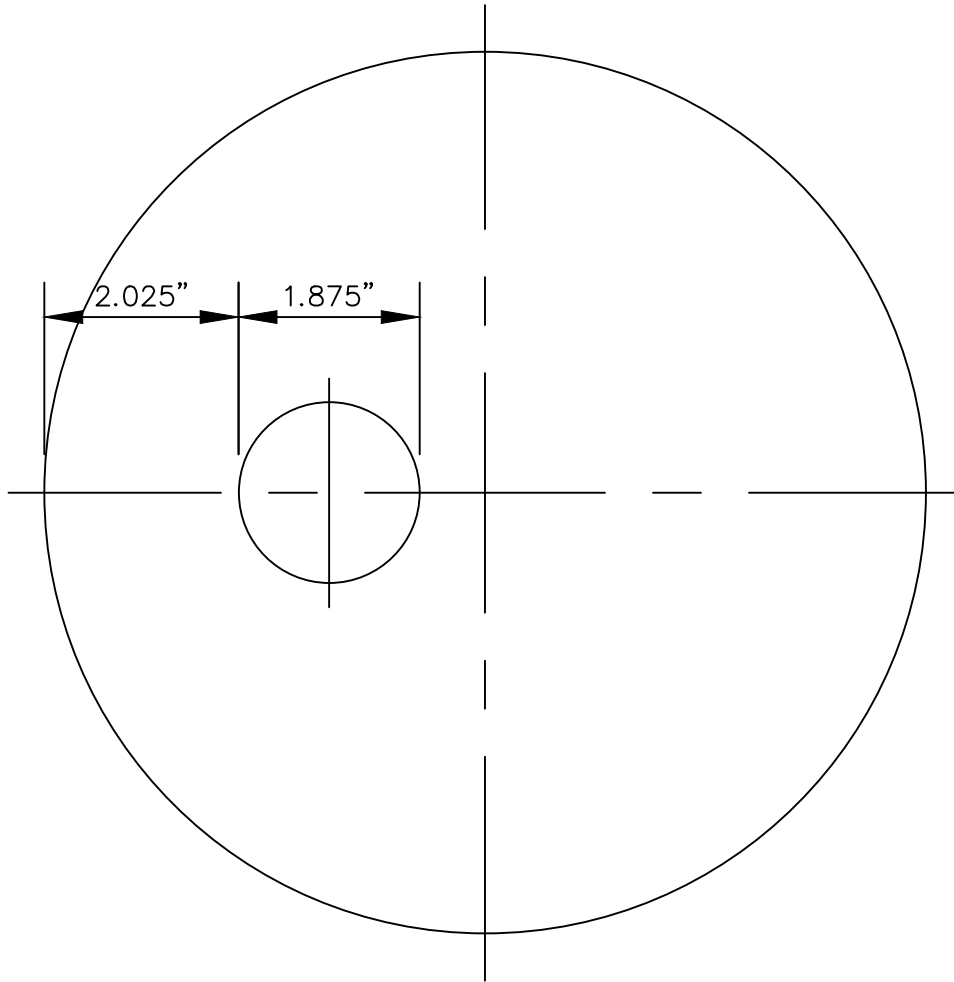
REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

DocuSigned by:
Jaime Garcia
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

9" TRAFFIC 2 HOLES
METER COVERS

P&M
4.5



SCALE: 1"=2.0"

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

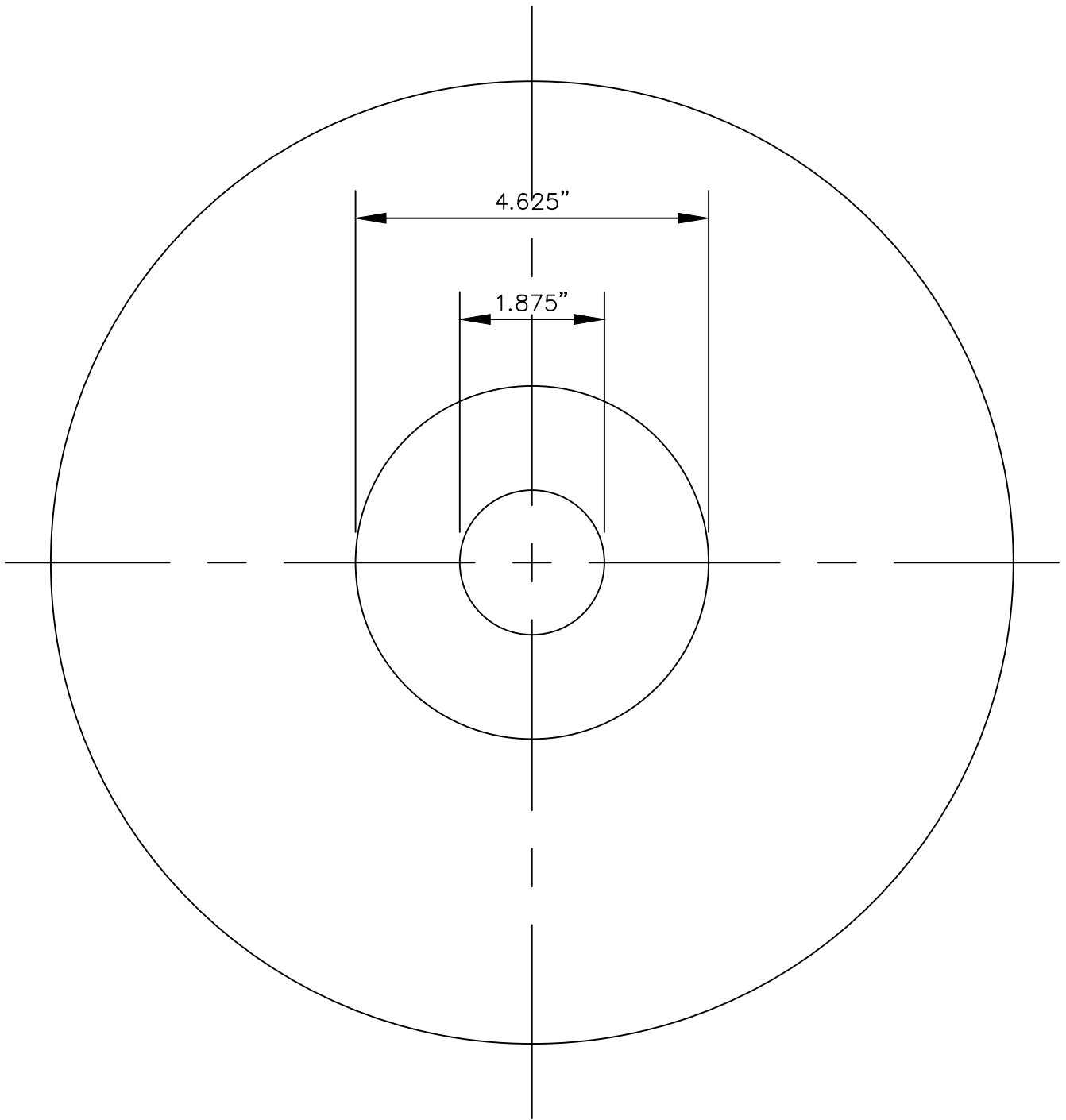
REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

DocuSigned by:
Jaime Garcia
B7DBE23469C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

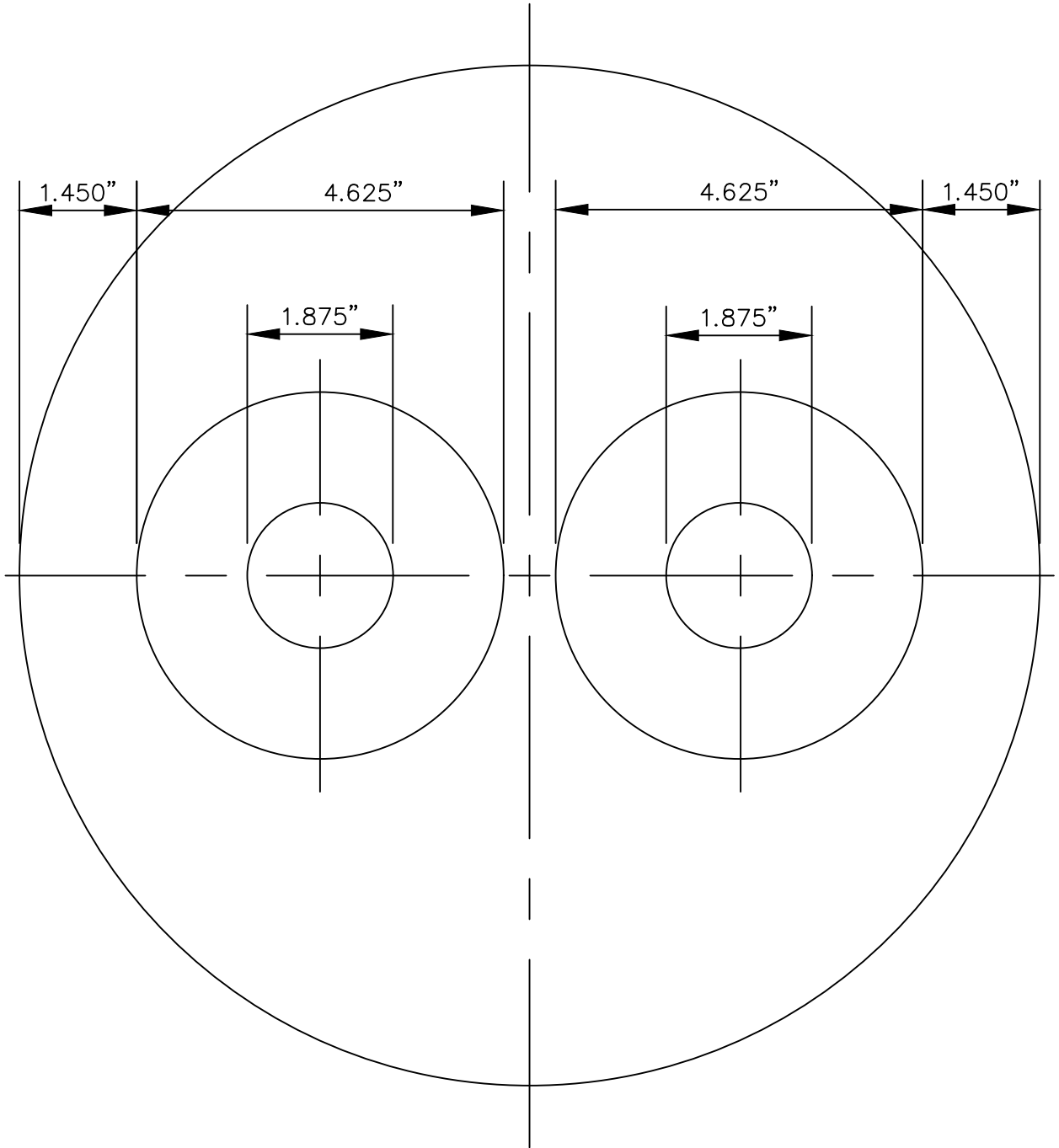
9" TRAFFIC SINGLE HOLE
METER COVERS

P&M
4.6



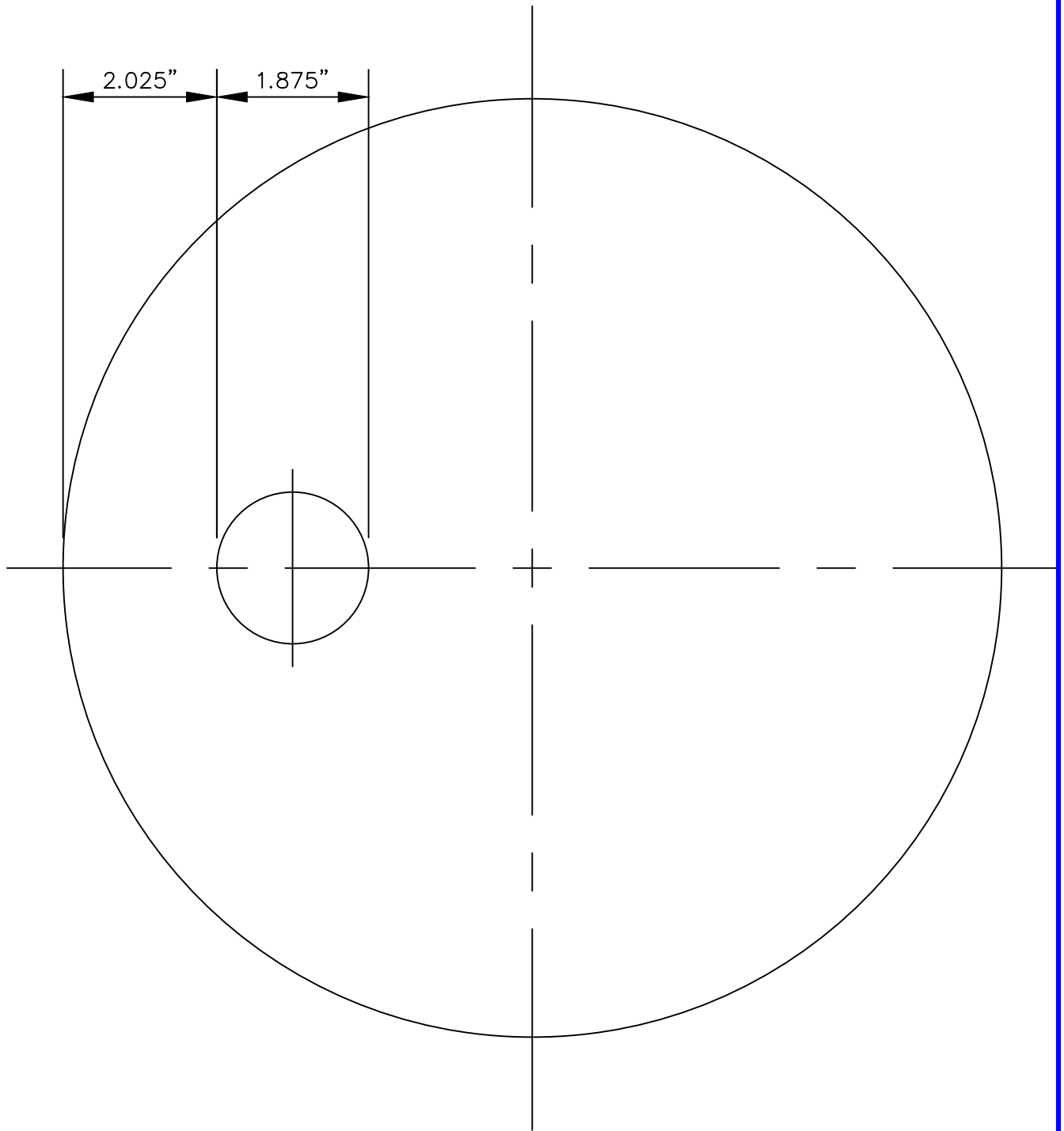
SCALE: 1"=2.0"

| | | | |
|--|--|---|------------------------|
| <p>WASHINGTON SUBURBAN SANITARY COMMISSION</p> | <p>REVISIONS: May 3, 2021 9:23 PM EDT APPROVED: _____ DocuSigned by: <i>Jaime Garcia</i> MATERIALS MANAGEMENT DIVISION MANAGER</p> | <p>PROCUREMENT AND MANUFACTURING DETAIL 12"STANDARD SINGLE HOLE METER COVERS</p> | <p>P&M 4.7</p> |
|--|--|---|------------------------|



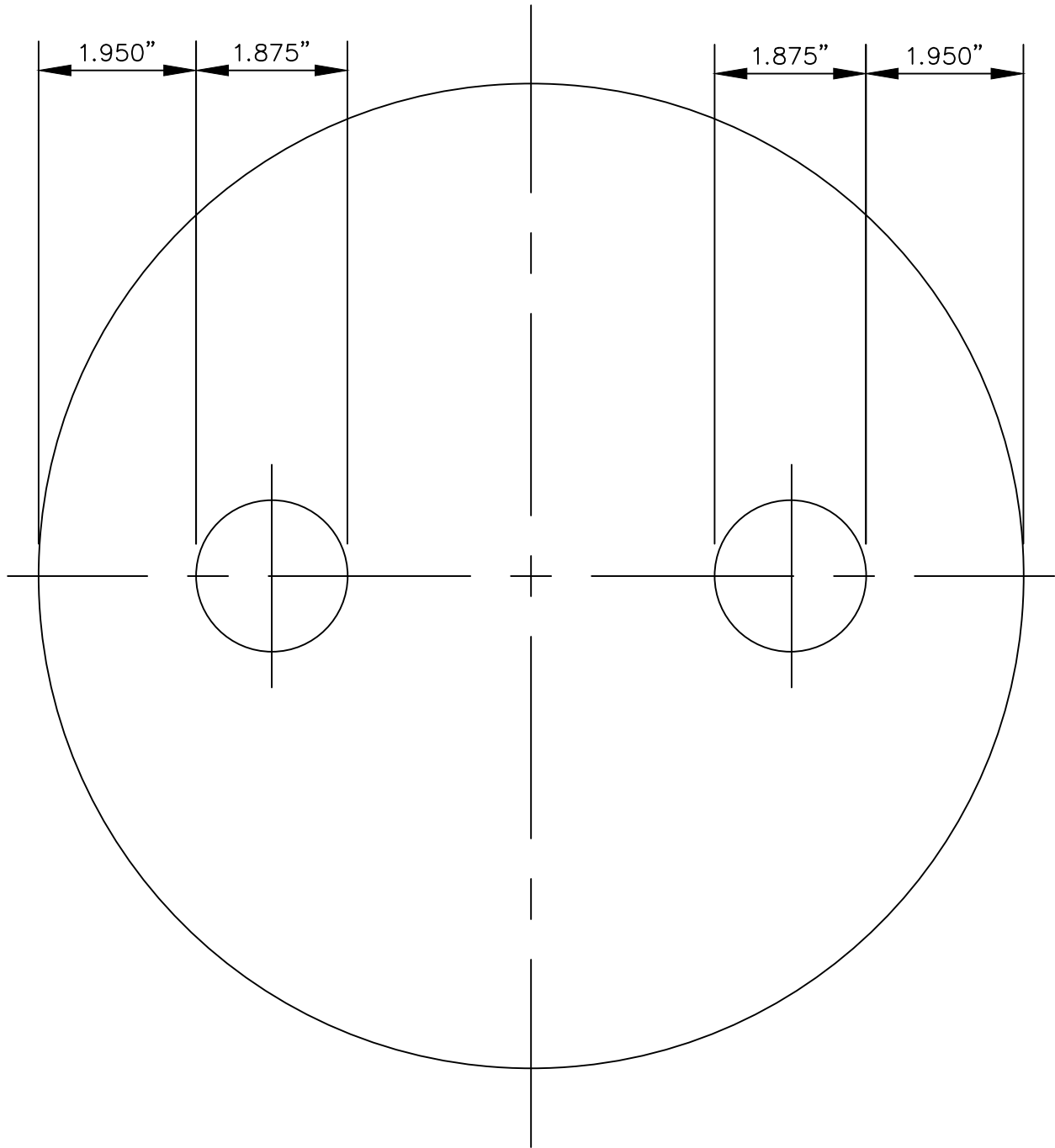
SCALE: 1"=2.0"

| | | | |
|--|--|--|-------------------------------|
| <p>WASHINGTON SUBURBAN SANITARY COMMISSION</p> | <p>REVISIONS: APPROVED: <u>May 3, 2021 9:23 PM EDT</u> DocuSigned by: <i>Jaime Garcia</i> MATERIALS MANAGER</p> | <p>PROCUREMENT AND MANUFACTURING DETAIL 12" STANDARD DOUBLE HOLE METER COVERS</p> | <p>P&M <u>4.8</u></p> |
|--|--|--|-------------------------------|



SCALE: 1"=2.0"

| | | | |
|--|--|---|-------------------------------|
| <p>WASHINGTON SUBURBAN SANITARY COMMISSION</p> | <p>REVISIONS: APPROVED: <u>May 3, 2021 9:23 PM EDT</u> DocuSigned by: <i>Jaime Garcia</i> MATERIALS MANAGEMENT DIVISION MANAGER</p> | <p>PROCUREMENT AND MANUFACTURING DETAIL 12" TRAFFIC SINGLE HOLE METER COVERS</p> | <p><u>P&M</u> 4.9</p> |
|--|--|---|-------------------------------|



SCALE: 1"=2.0"

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

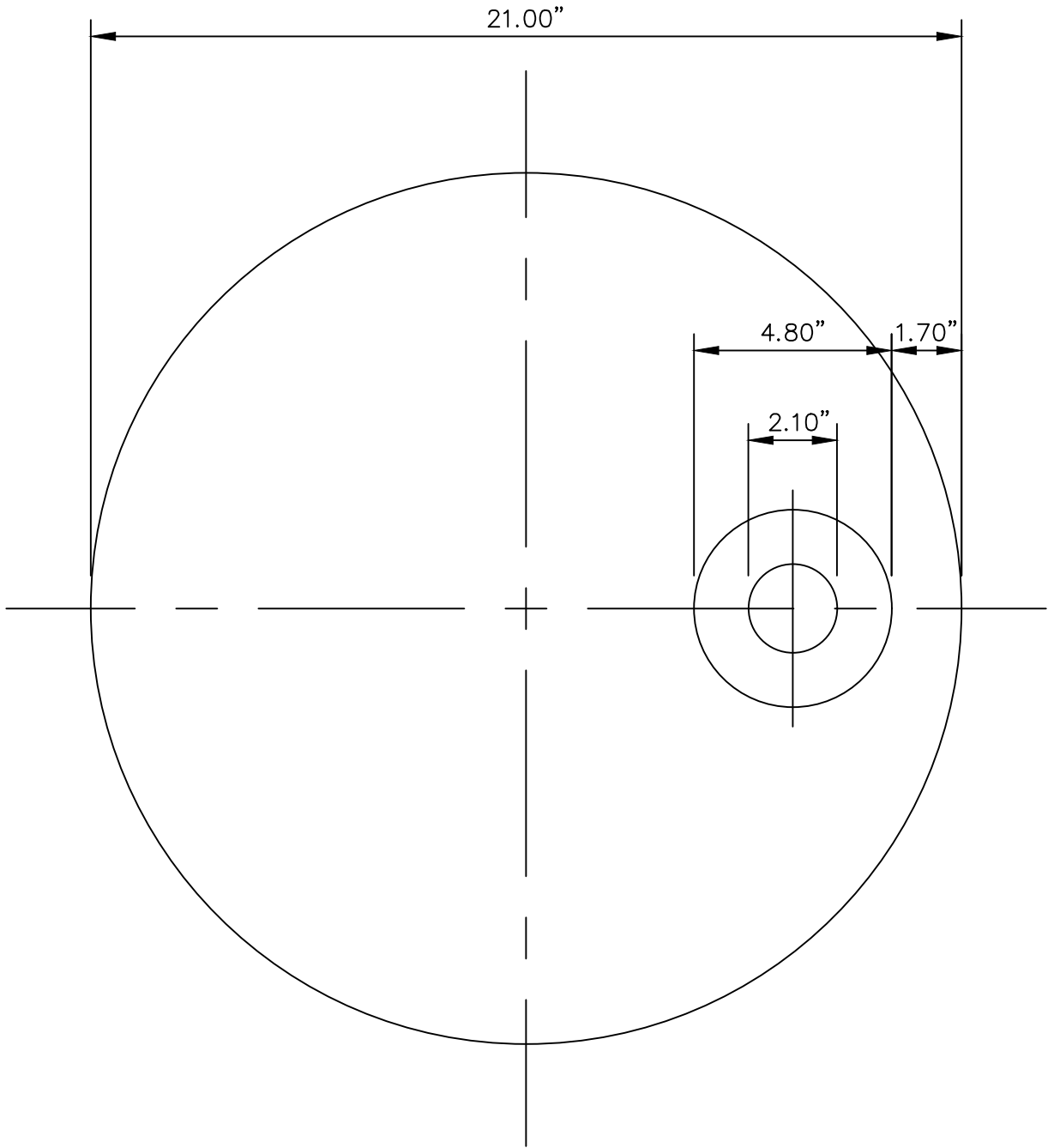
REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

DocuSigned by:
Jaime Garcia
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

12"TRAFFIC DOUBLE HOLE
METER COVERS

P&M
4.10



SCALE: 1"=4.0"

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

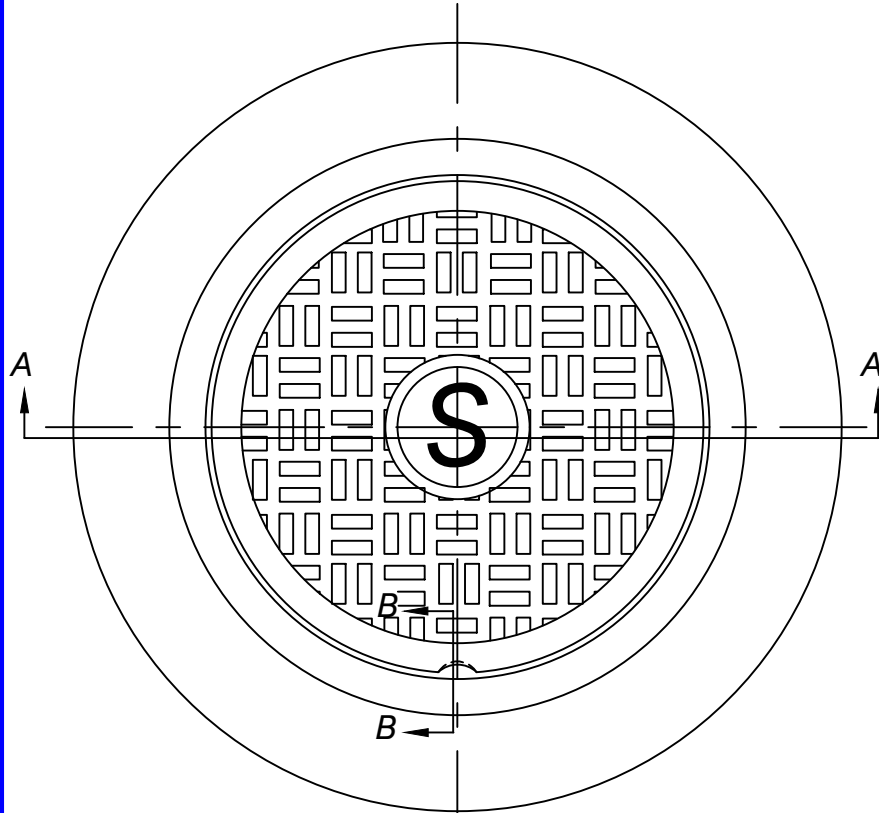
DocuSigned by:
Jaime Garcia
MATERIALS MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

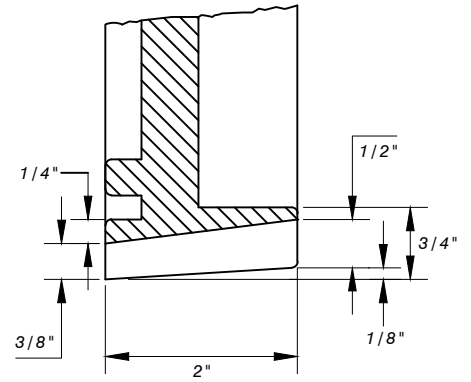
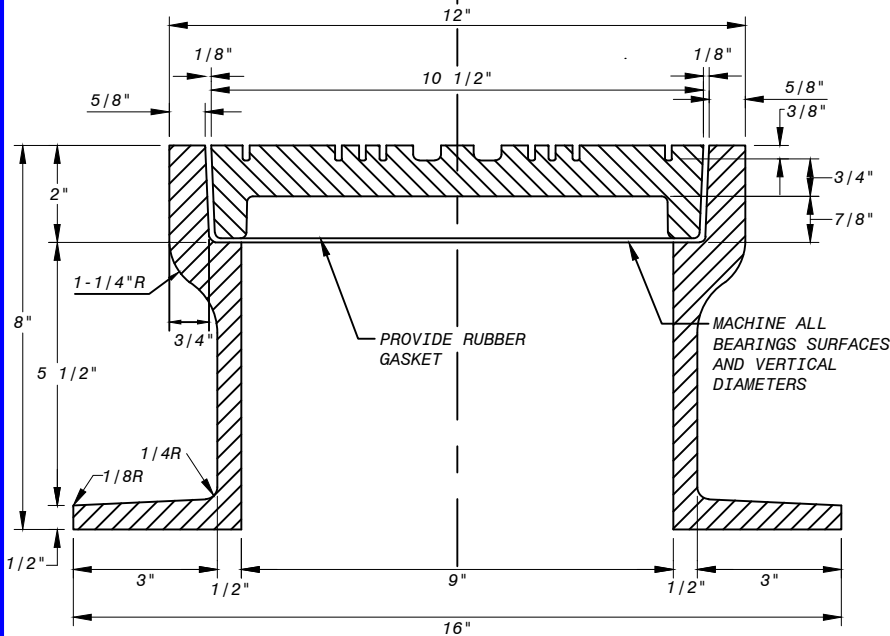
21" STANDARD SINGLE HOLE
METER COVERS

P&M
4.11

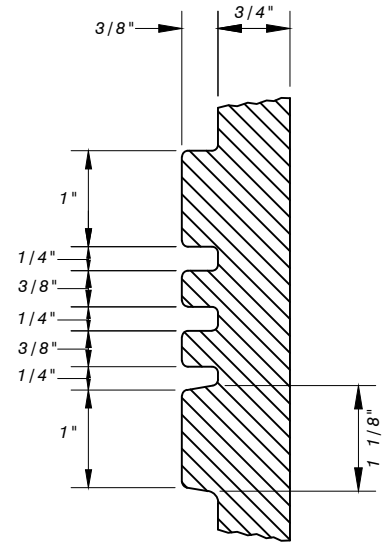
APPLICABLE STOCK NOS.
5681 - 9001 - 1
5681 - 9002 - 9



PLAN
1/4" = 1'



SECTION B-B



DETAIL OF CORRUGATIONS

WEIGHT
COVER - 19 LB. MIN
FRAME - 66 1/2 LB. MIN

ALL SECTIONS SHOWN TO BE GRAY
IRON CASTINGS, ASTM A-48 CLASS
NO. 35B MIN.

NOTE: ALL DIMESIONS ARE $\pm 1/16"$.

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

DocuSigned by:
Jaime Garcia

B7DBE23469C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

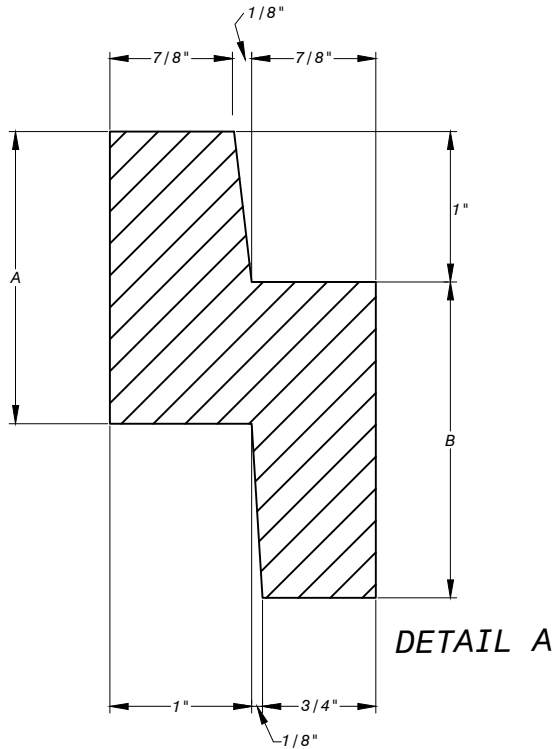
PROCUREMENT AND MANUFACTURING DETAIL

LAMP HOLE FRAME
AND COVER

P&M
5.0

APPLICABLE STOCK NOS.

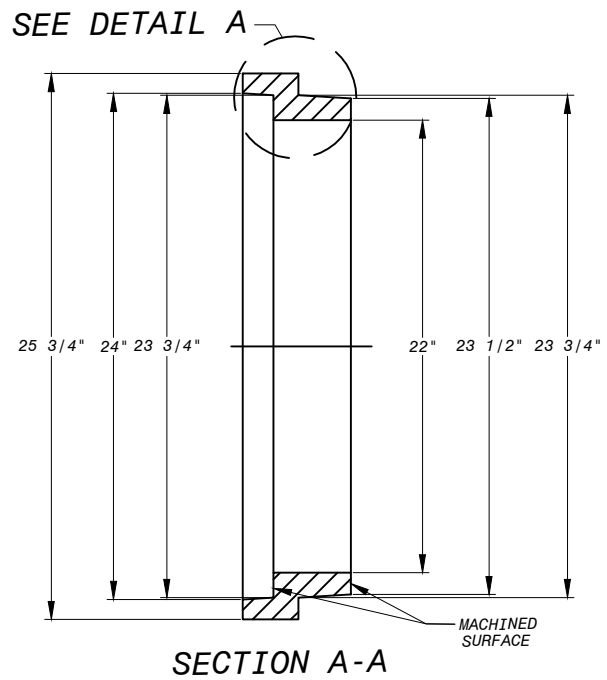
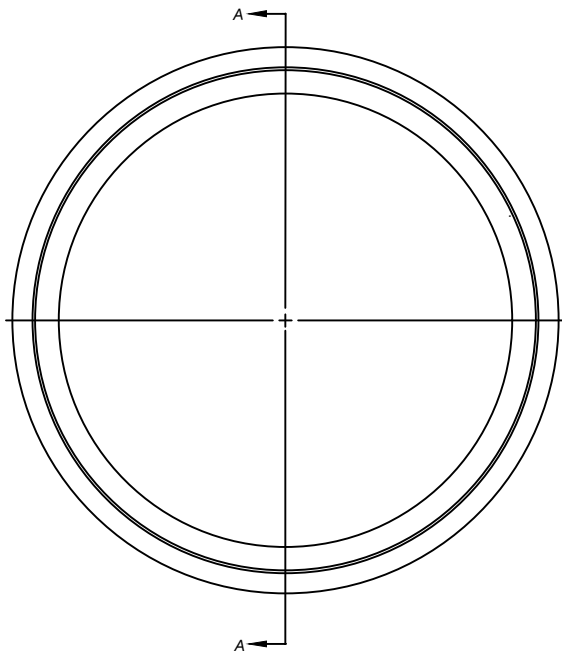
5680-9001-3, 1 1/2"
5680-9002-1, 2"



-SECTION TO BE GRAY IRON CASTING,
ASTM A-48 CLASS NO. 35B

-CASTING SHALL CONFORM TO AND
BE MANUFACTURED IN ACCORDANCE
WITH THE REQUIREMENTS OF AASHTO
STD M306, LATEST REVISION

| NOMINAL RISE | A | B |
|--------------|--------|--------|
| 1 1/2" | 1 1/2" | 3-1/8" |
| 2" | 2" | 3-1/8" |



ALL DIMENSION ARE IN INCHES
UNLESS OTHERWISE SPECIFIED.

TOLERANCES: ± 1/16"

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 3, 2021 | 9:23 PM EDT

DocuSigned by:
Jaime Garcia

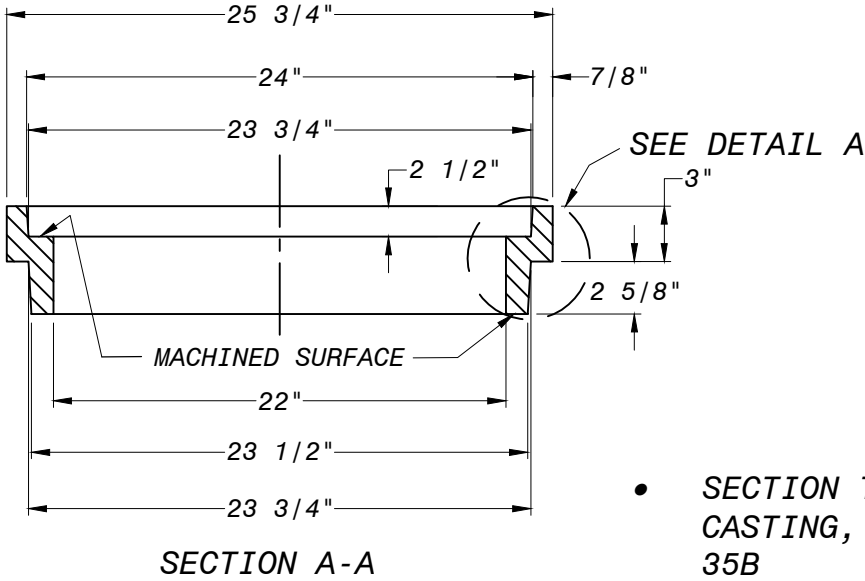
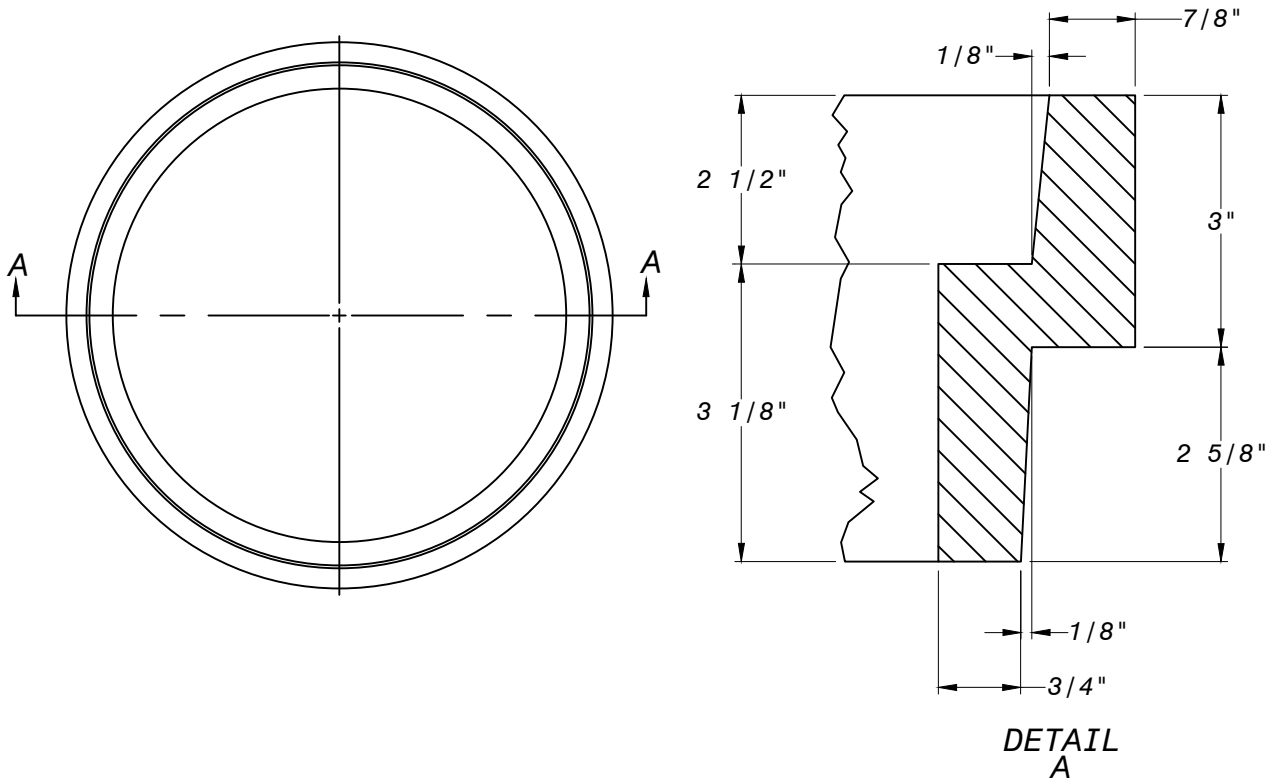
MATERIALS MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

22-INCH NON-WATERTIGHT
MANHOLE ADJUSTING RING,
1 1/2" AND 2" HEIGHT

P&M
6.0

APPLICABLE STOCK NO.
5680-9003-9



- SECTION TO BE GRAY IRON CASTING, ASTM A-48 CLASS NO. 35B
- CASTING SHALL CONFORM TO AND BE MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO STD M306, LATEST REVISION

ALL DIMENSION ARE IN INCHES
UNLESS OTHERWISE SPECIFIED.

TOLERANCES: $\pm 1/16$ "

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 4, 2021 | 12:46 PM EDT

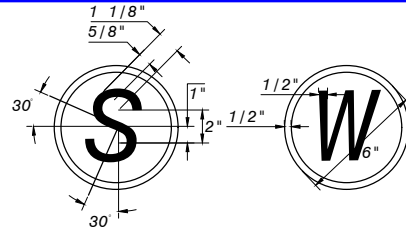
DocuSigned by:
Jaime Garcia

B7DBE23469C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

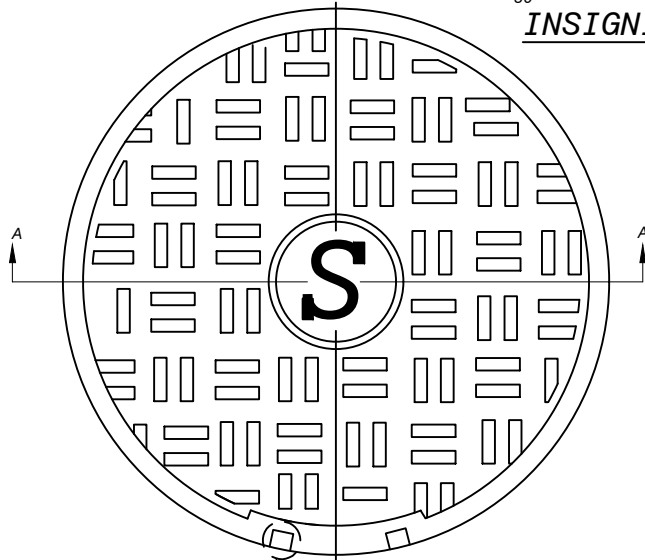
PROCUREMENT AND MANUFACTURING DETAIL
**22-INCH NON-WATERTIGHT
MANHOLE ADJUSTING RING,
3" HEIGHT**

**P&M
6.1**

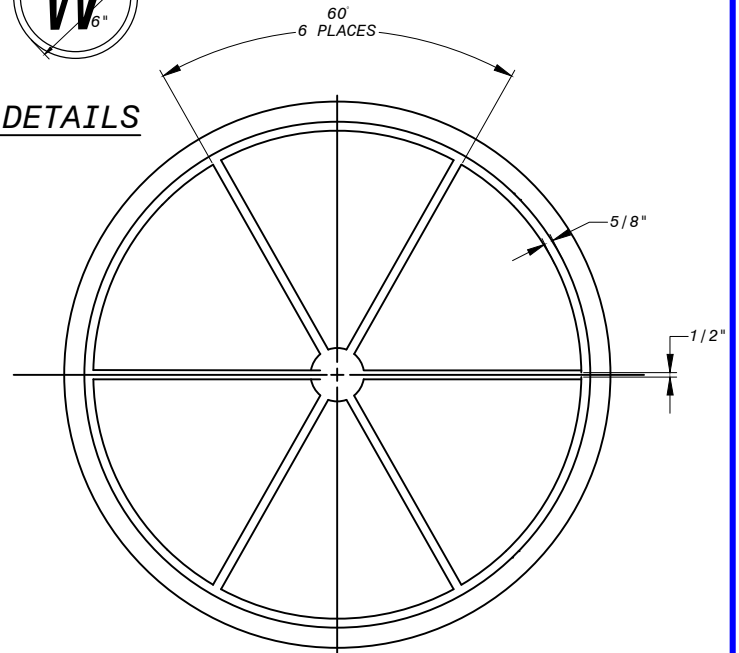
APPLICABLE STOCK NO.
5690-9004-7 (SEWER)



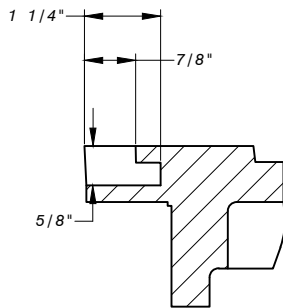
INSIGNIA DETAILS



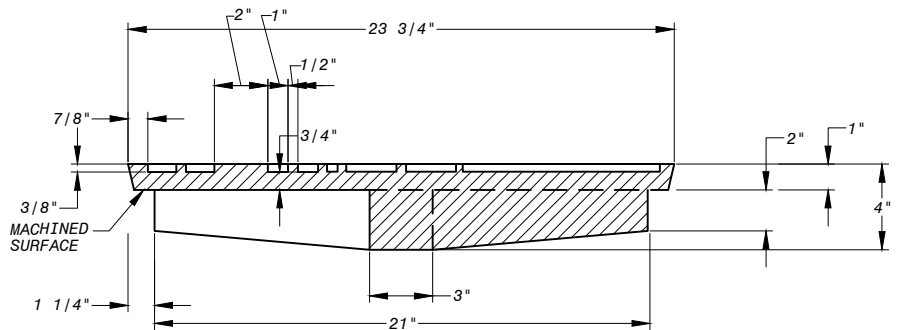
SEE DETAIL B TOP



BOTTOM



DETAIL B
PICKHOLE



SECTION A-A

SECTION TO BE GRAY IRON CASTING,
ASTM A-48 CLASS NO. 35B

CASTING SHALL CONFORM TO AND BE MANUFACTURED
IN ACCORDANCE WITH THE REQUIREMENTS OF
AASHTO STD M306, LATEST REVISION

NOTE: COVER FOR USE ONLY WITH THE FOLLOWING:
- 1 1/2". ADJUSTING RING, WSSC SN 5680-9001-3
- 2" ADJUSTING RING, WSSC SN 5680-9002-1

* AT THE MANUFACTURER'S OPTION, IN PLACE OF 6 RIBS,
60° APART, 8 RIBS CAN BE PLACED 45° APART.

ALL DIMENSION ARE IN INCHES
UNLESS OTHERWISE SPECIFIED.

TOLERANCES: ± 1/16"

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 4, 2021 | 12:46 PM EDT

DocuSigned by:
Jaime Garcia

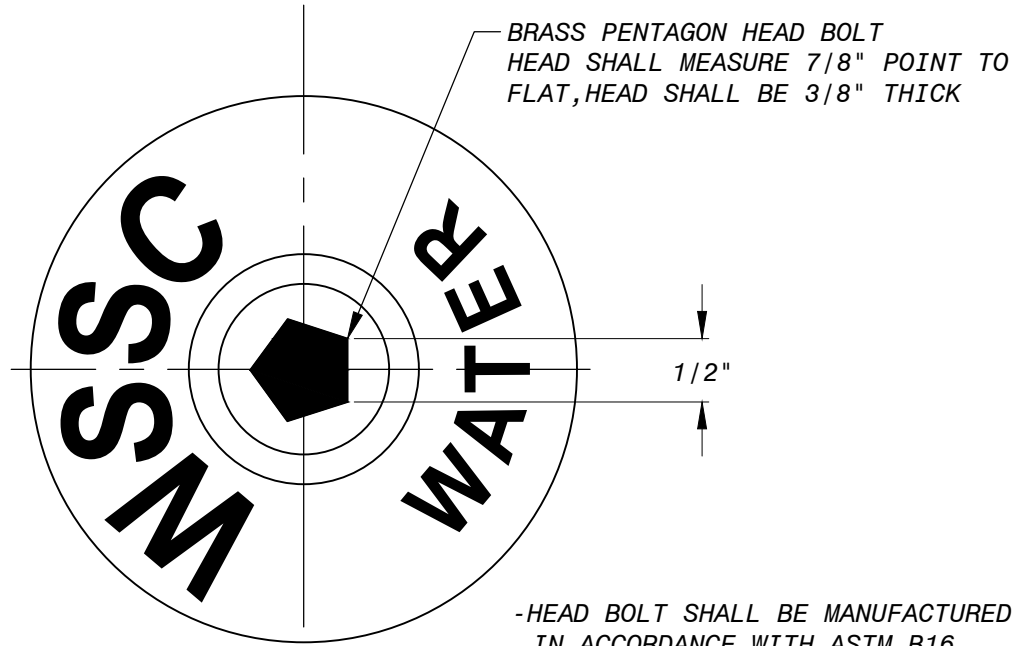
B7DBE23469C84BD...
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

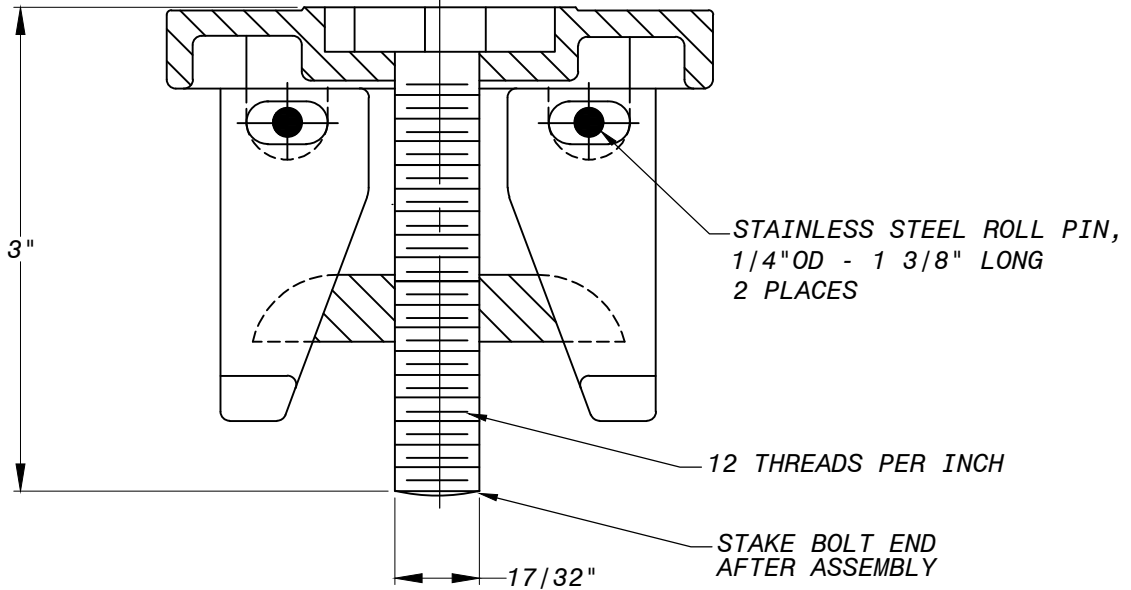
22" MANHOLE ADJUSTING
RING COVER

P&M
6.2

APPLICABLE STOCK NO.
4880-9035-8



- HEAD BOLT SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM B16, LATEST REVISION
- BOLTS SHALL BE HALF-HARD TEMPERED
- MIN. TENSILE STRENGTH: 55,000 PSI
- MIN. YIELD STRENGTH: 25,000 PSI



REPAIR LID ASSEMBLY
SCALE: NONE

ALL DIMENSION ARE IN INCHES
UNLESS OTHERWISE SPECIFIED.

TOLERANCES: $\pm 1/16"$

CASTING SHALL BE CLEANED BY AN APPROVED
PROCESS AND COATED WITH AN APPROVED
SOLVENT-BASED ASPHALT PAINT

ASTM A48
CLASS NO. 25

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 4, 2021 | 12:46 PM EDT

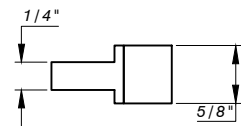
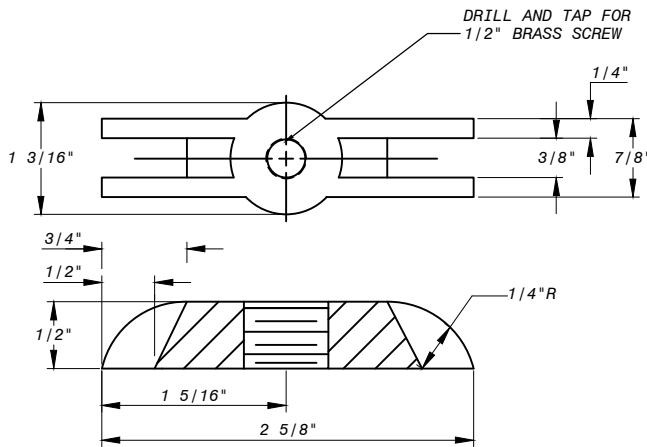
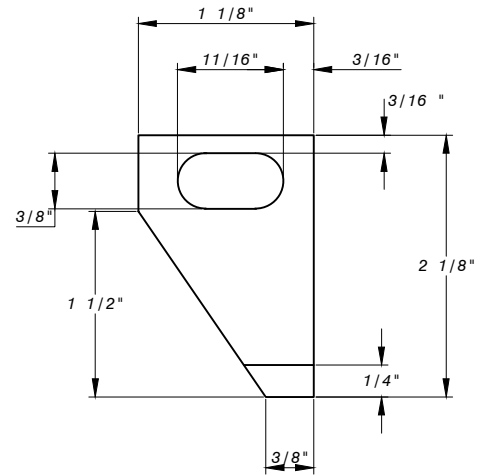
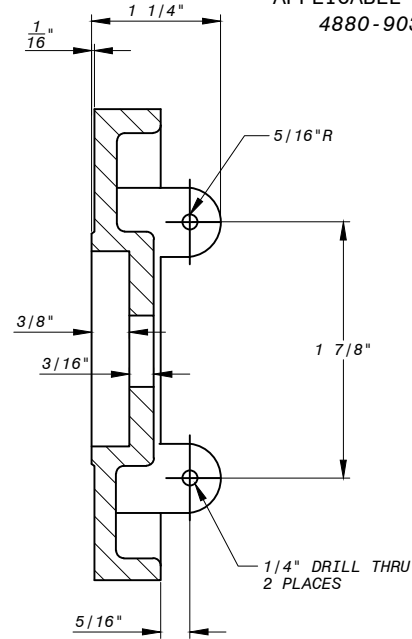
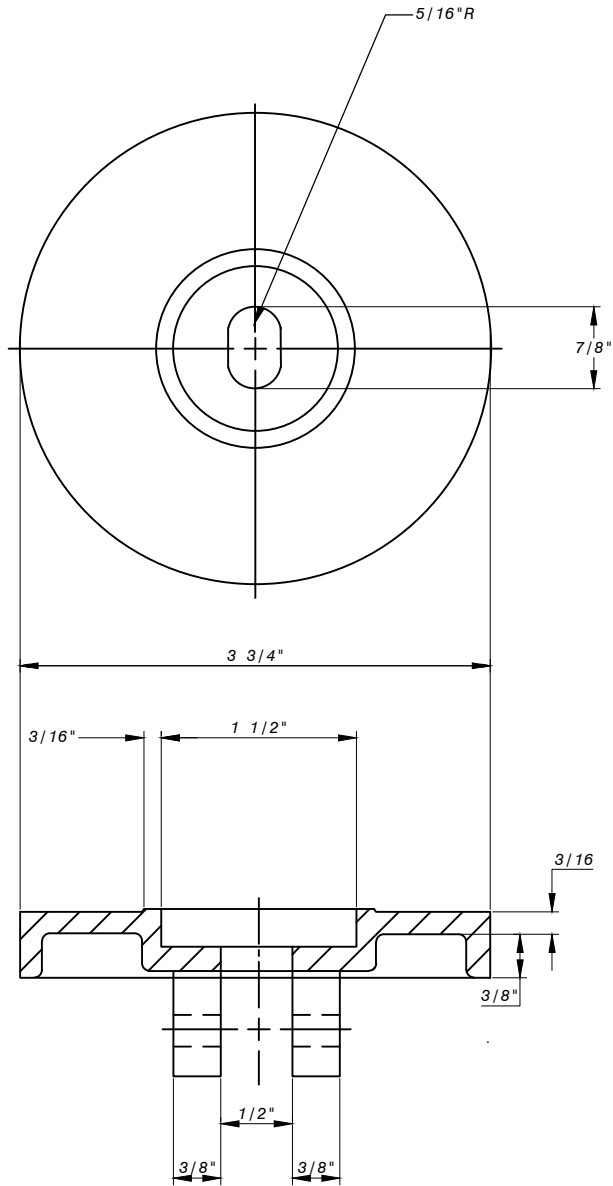
DocuSigned by:
Jaime Garcia
MATERIAL AND SPECIFICATIONS LEADER

PROCUREMENT AND MANUFACTURING DETAIL

**CURB BOX REPAIR LID
FOR PAVED AREAS
(ASSEMBLY)**

**P&M
7.0**

APPLICABLE STOCK NO.
4880-9035-8



WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS: May 4, 2021 | 12:46 PM EDT

APPROVED: _____

DocuSigned by:
Jaime Garcia

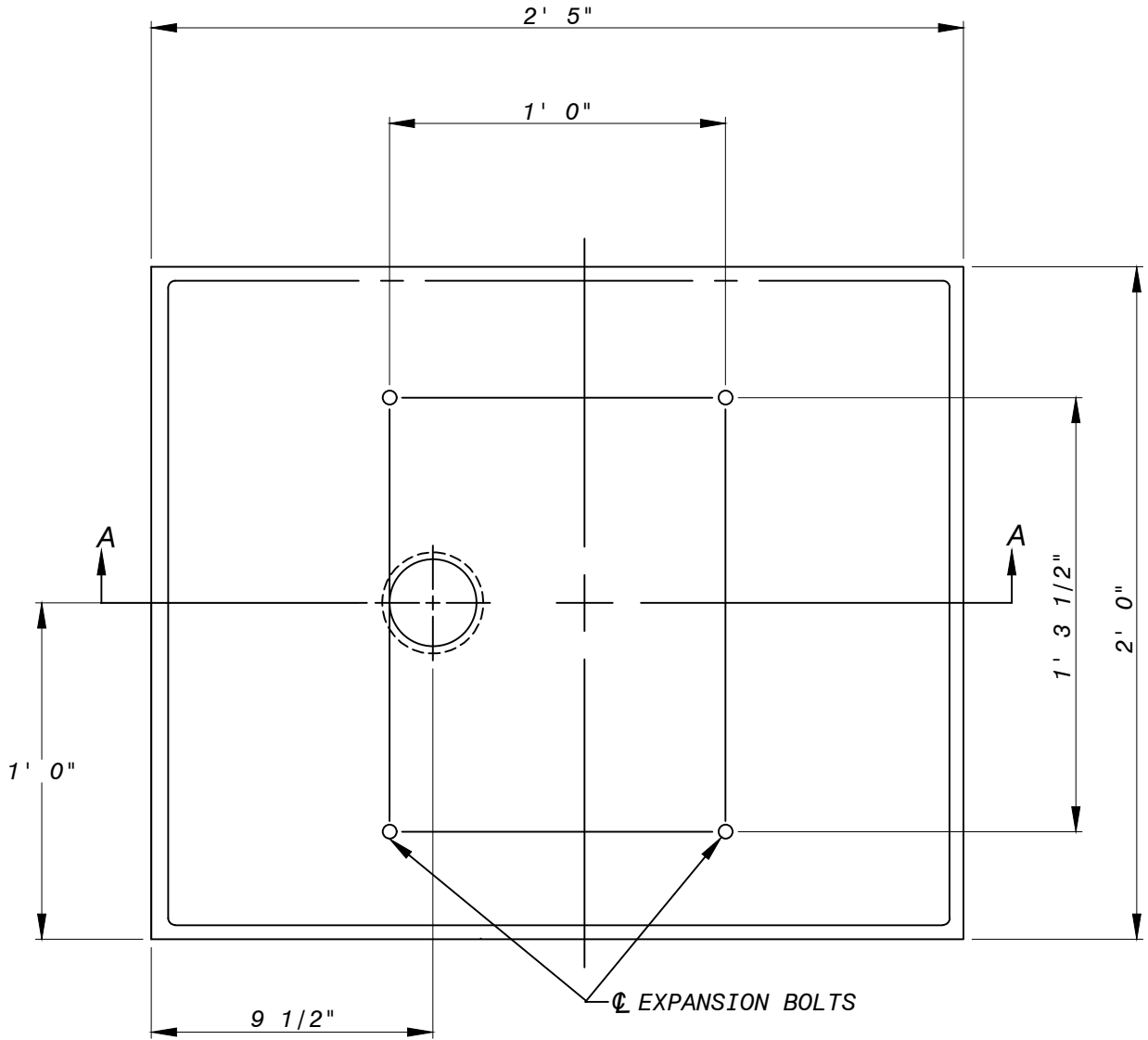
B7DBE23469C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

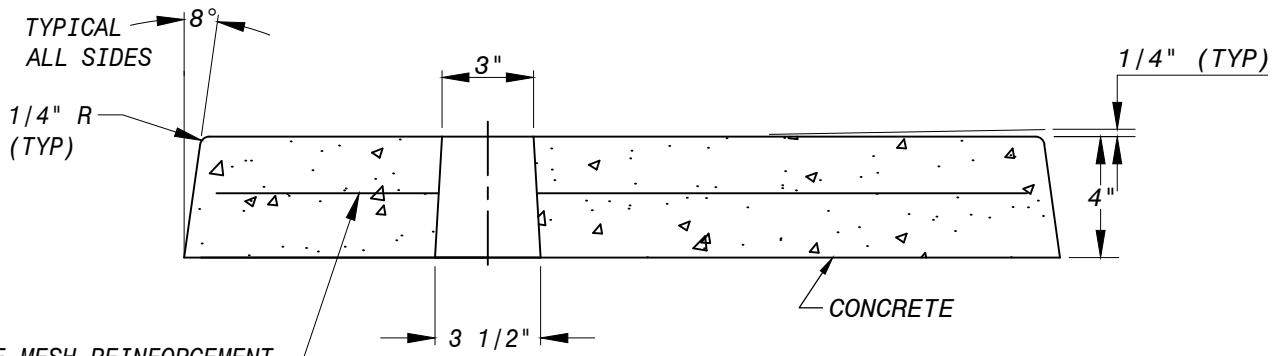
**CURB BOX REPAIR LID
FOR PAVED AREAS
(DETAILS)**

**P&M
7.1**

APPLICABLE STOCK NOS.
5676-9100-1



TOP VIEW



SECTION A-A

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 4, 2021 | 12:46 PM EDT

DocuSigned by:
Jaime Garcia

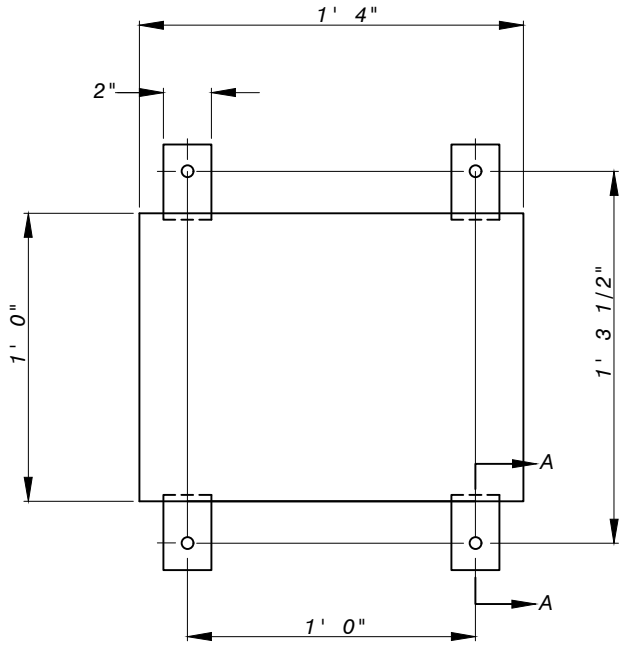
MATERIALS MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

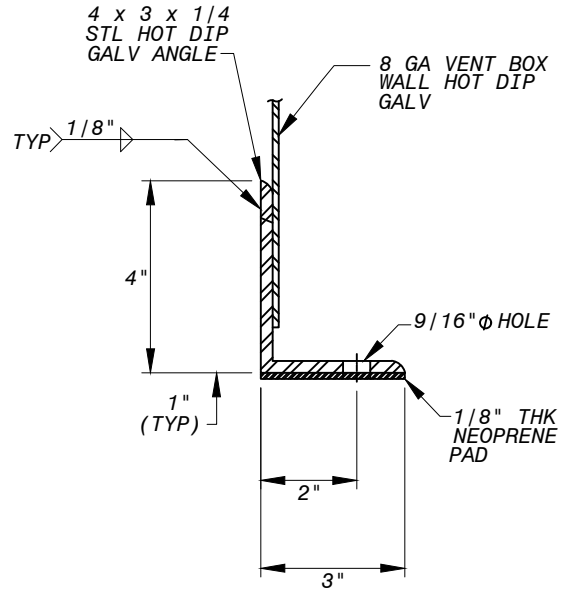
AIR RELEASE PIPE VENT
BOX BASE PAD

P&M
8.0

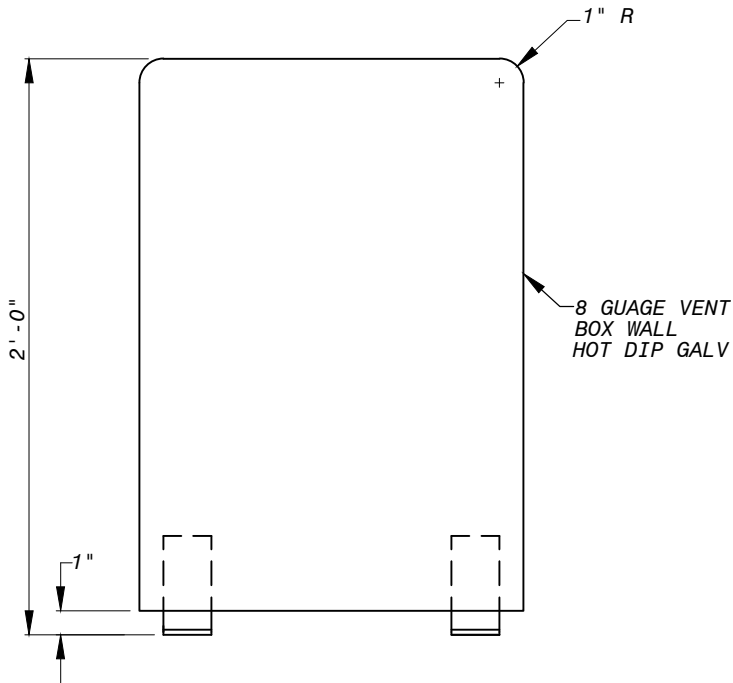
APPLICABLE STOCK NO.
5676-9150-6



TOP VIEW



SECTION A-A



SIDE VIEW

NOTE:
GALVANIZE THE BOX
AFTER FABRICATION
AND WELDING OF STEEL
ANGLES.

SEE MATERIALS
SPECIFICATION FOR
REQUIRED MARKINGS.

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 4, 2021 | 12:46 PM EDT

DocuSigned by:
Jaime Garcia

B7DBE23469C84BD...
MATERIALS MANAGEMENT DIVISION MANAGER

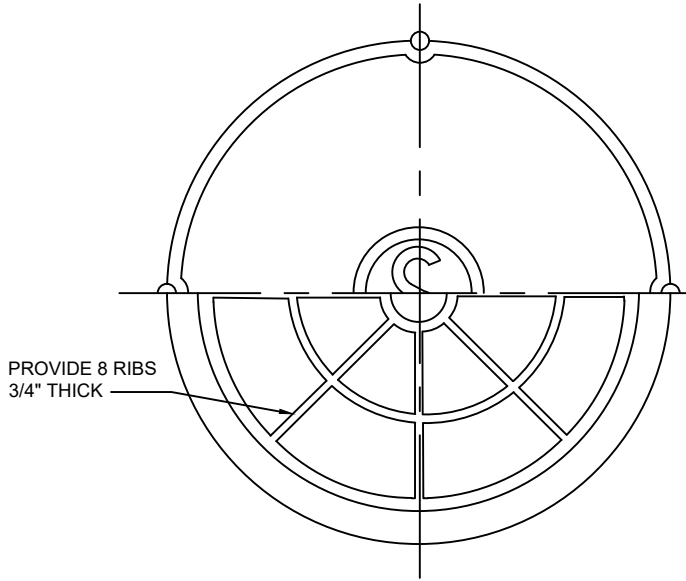
PROCUREMENT AND MANUFACTURING DETAIL

AIR RELEASE
PIPE VENT BOX

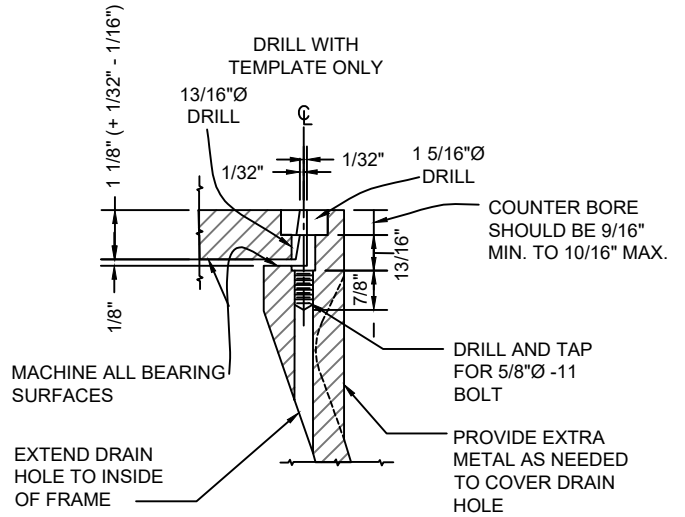
P&M
8.5

APPLICABLE STOCK NOS.

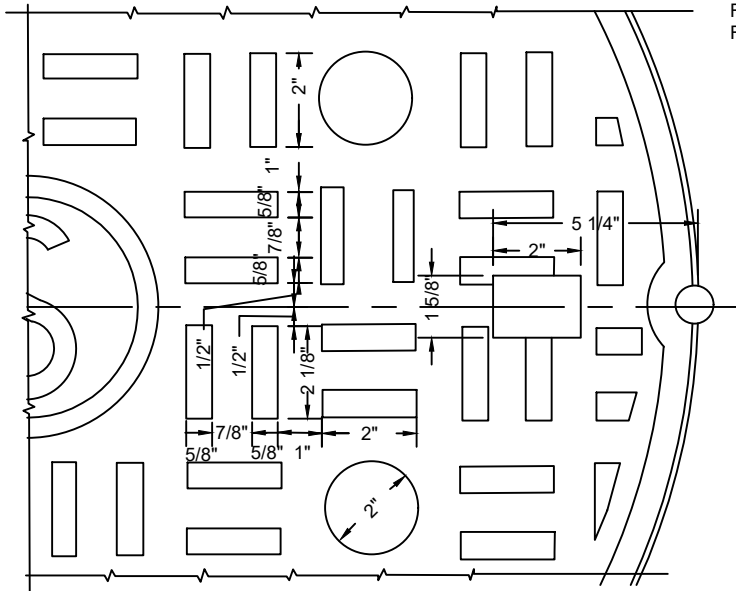
- 5680-9026-0
- 5680-9051-8
- 5680-9029-4
- 5680-9060-9



BOTTOM VIEW



SECTION A-A



SECTION OF RING

MATERIAL SPECIFICATION:

GRAY IRON ASTM A48 CL35B

CASTINGS SHALL CONFORM TO AND BE MANUFACTURED
IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO
STD M306, LATEST REVISION

REFERENCE WSSC DWG NO. 721471Y, LATEST REVISION 1-29-81

SEE DETAIL P&M 10.1b
FOR CONTINUATION

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 4, 2021 | 12:46 PM EDT

DocuSigned by:
Jaime Garcia

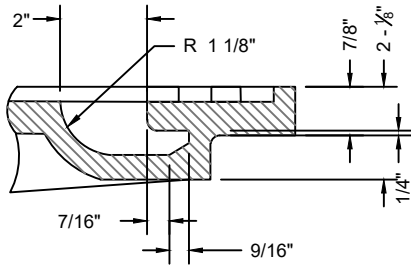
B7DBE23469C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

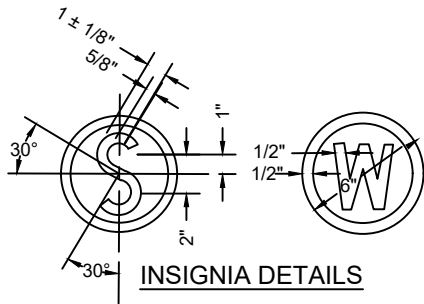
LOCKING TYPE-WATERTIGHT
30" MANHOLE FRAME & COVER

P&M
10.1a

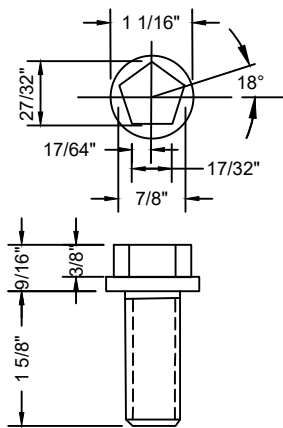
APPLICABLE STOCK NOS.
 5680-9026-0 5680-9029-4
 5680-9051-8 5680-9060-9



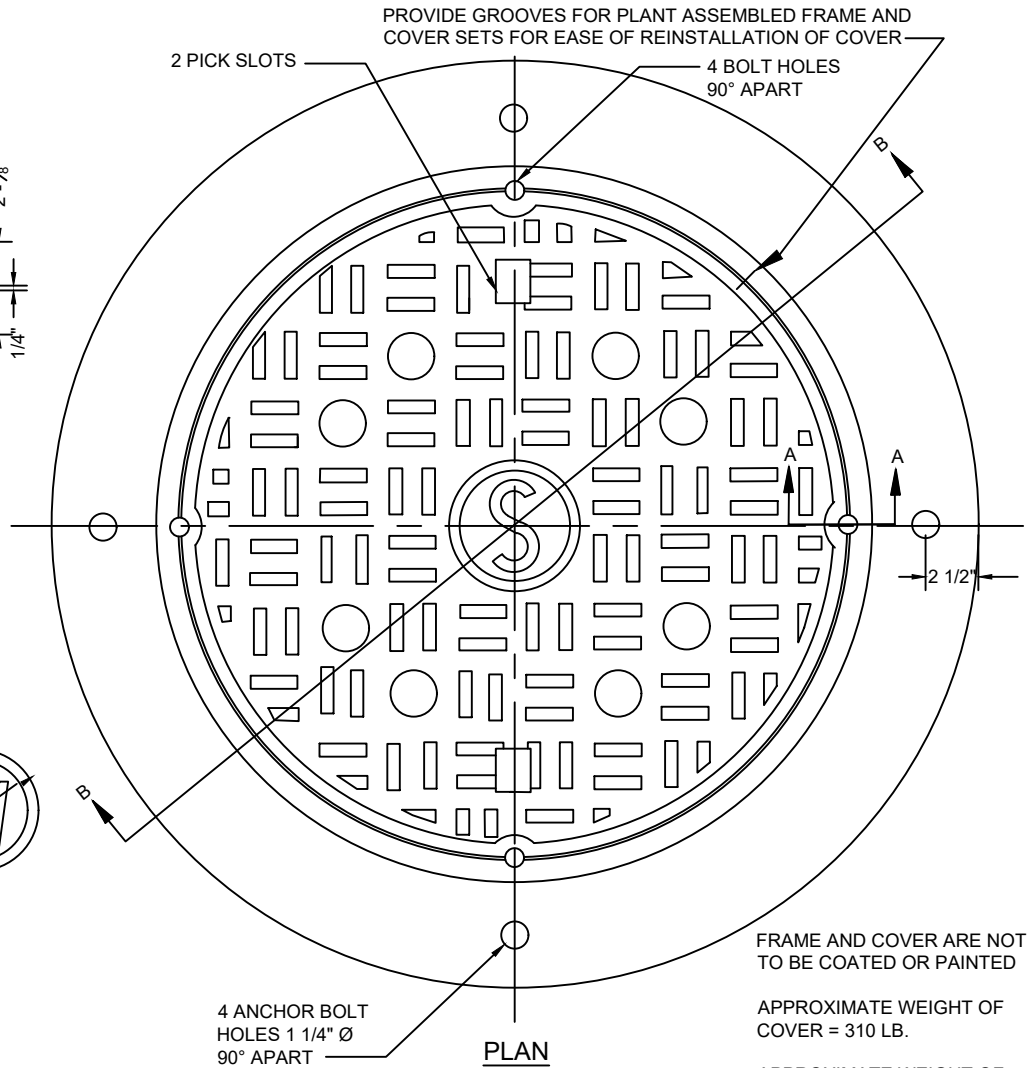
PICKHOLE DETAIL



INSIGNIA DETAILS



**STAINLESS STEEL
 LOCK BOLT
 AISI TYPE 304
 STAINLESS STEEL**

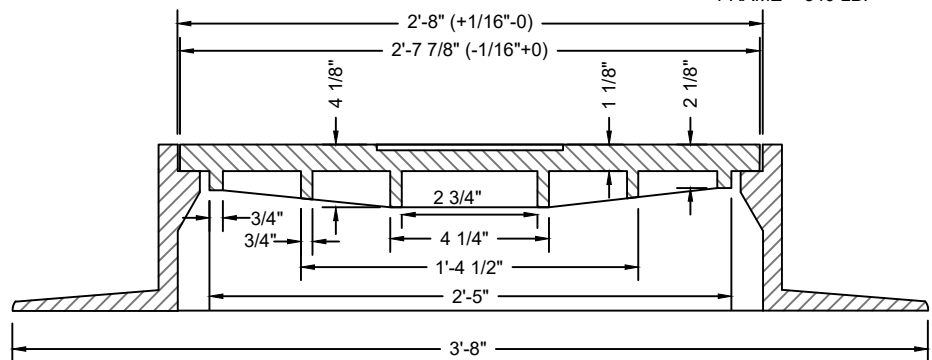


PLAN

FRAME AND COVER ARE NOT TO BE COATED OR PAINTED

APPROXIMATE WEIGHT OF COVER = 310 LB.

APPROXIMATE WEIGHT OF FRAME = 340 LB.



SECTION B-B

**SEE DETAIL P&M 10.1a
 FOR CONTINUATION**

MATERIAL SPECIFICATION:
 GRAY IRON ASTM A48 CL35B
 CASTINGS SHALL CONFORM TO AND BE MANUFACTURED
 IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO
 STD M306, LATEST REVISION

REFERENCE WSSC DWG NO. 721471Y, LATEST REVISION 1-29-81

WASHINGTON
 SUBURBAN
 SANITARY
 COMMISSION

REVISIONS: May 4, 2021 | 12:46 PM EDT

APPROVED: _____

DocuSigned by:
Jaime Garcia

B7DBE23469C84BD
 MATERIALS MANAGEMENT DIVISION MANAGER

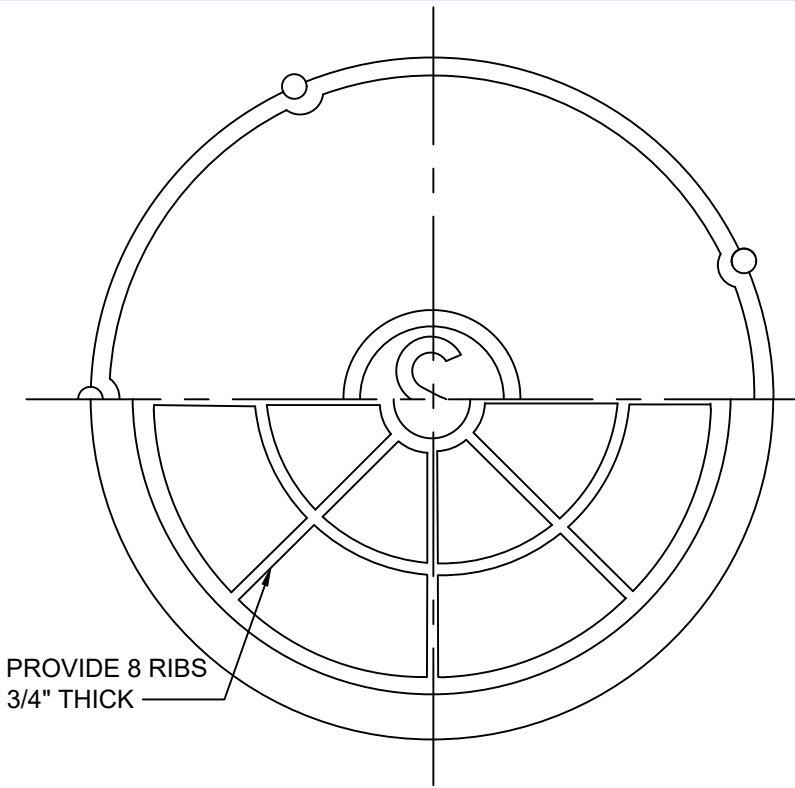
PROCUREMENT AND MANUFACTURING DETAIL

**LOCKING TYPE-WATERTIGHT
 30" MANHOLE FRAME & COVER**

**P&M
 10.1b**

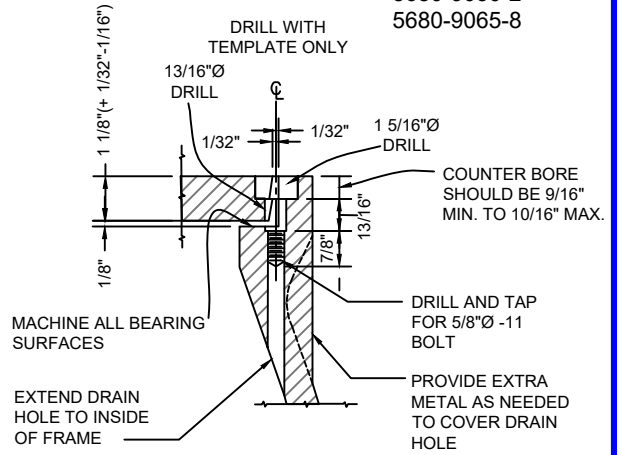
APPLICABLE STOCK NOS.

- 5680-9027-8
- 5680-9052-6
- 5680-9030-2
- 5680-9065-8

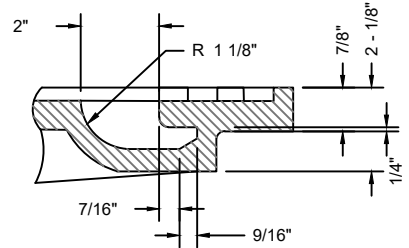


PROVIDE 8 RIBS
3/4" THICK

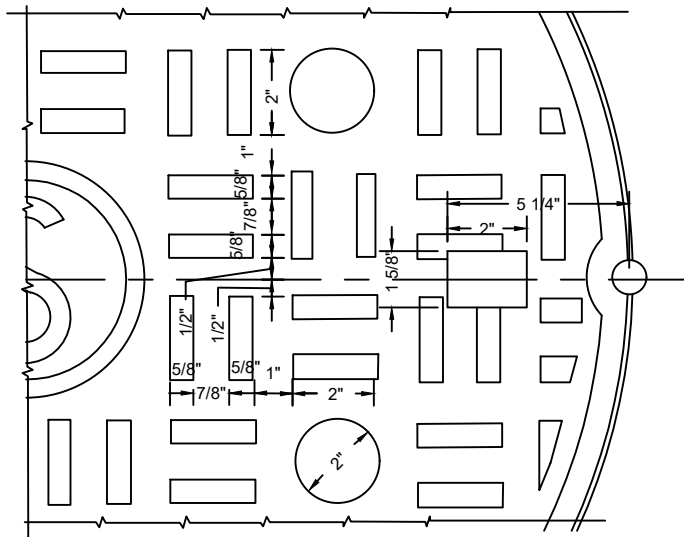
BOTTOM VIEW



SECTION A-A



SECTION THROUGH PICK SLOT

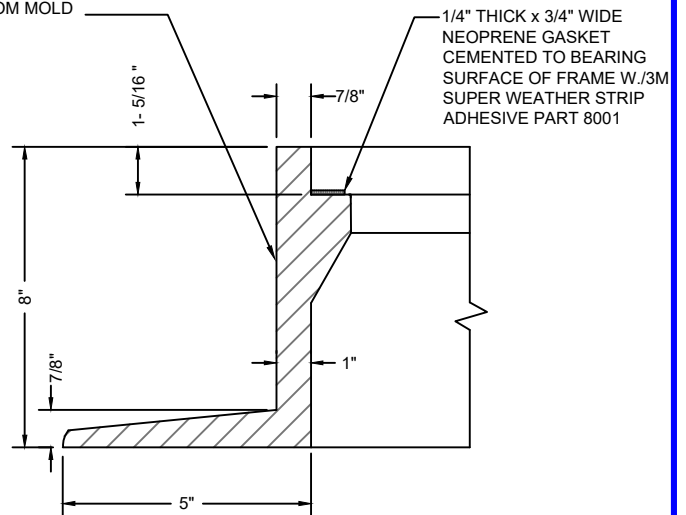


SEE DETAIL P&M 10.2b
FOR CONTINUATION

MATERIAL SPECIFICATION:
GRAY IRON ASTM A48 CL35B

CASTINGS SHALL CONFORM TO AND BE MANUFACTURED
IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO
STD M306, LATEST REVISION

PROVIDE APPROPRIATE
DRAFT TO ENABLE
REMOVAL OF PATTERN
FROM MOLD



SECTION OF RING

REFERENCE WSSC DWG NO. 721472Y, LATEST REVISION 1-29-81

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 4, 2021 | 12:46 PM EDT

DocuSigned by:
Jaime Garcia

87DBE23469C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

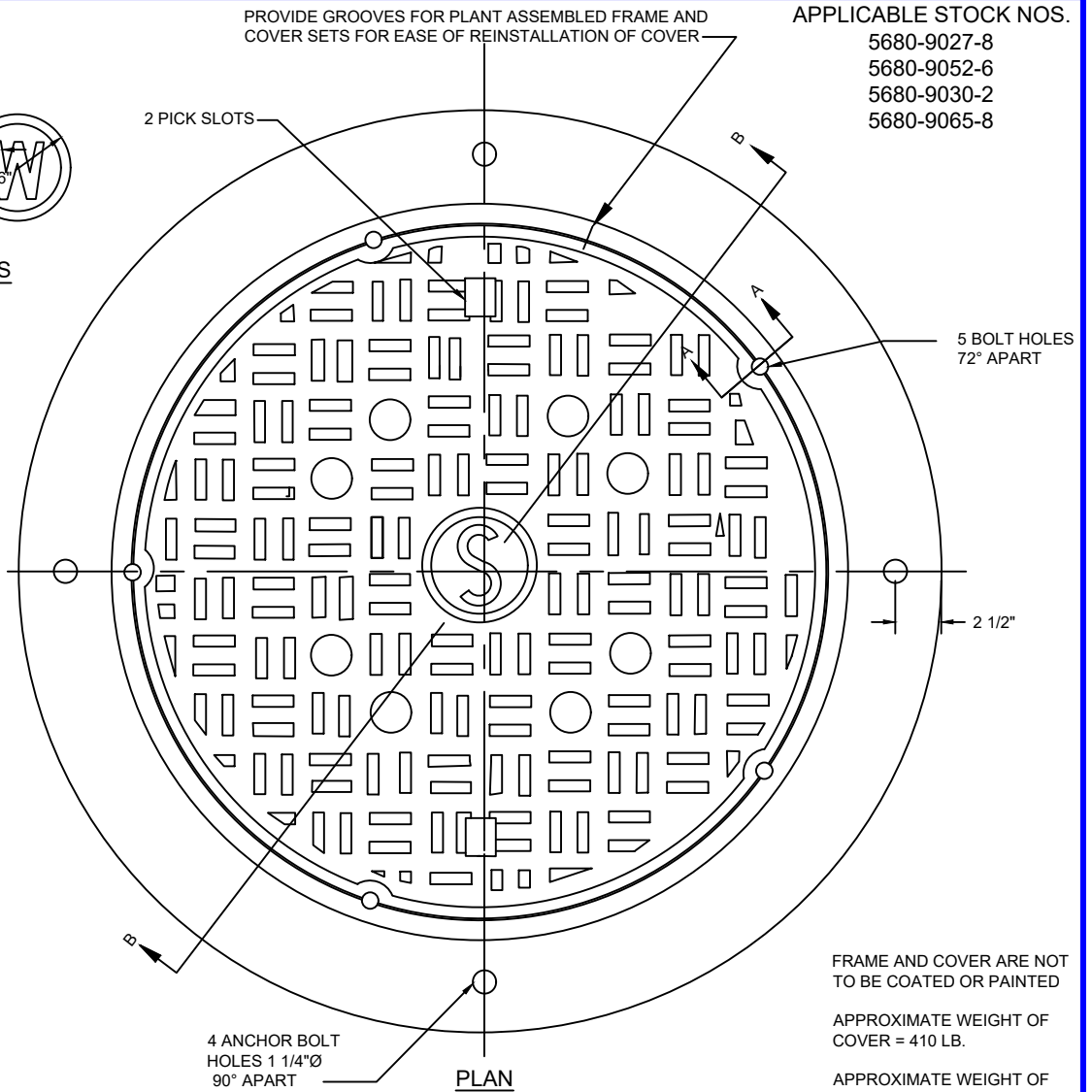
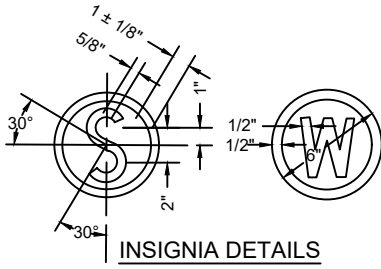
PROCUREMENT AND MANUFACTURING DETAIL

**LOCKING TYPE-WATERTIGHT
36" MANHOLE FRAME & COVER**

**P&M
10.2a**

APPLICABLE STOCK NOS.

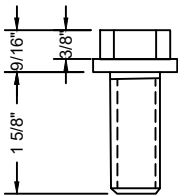
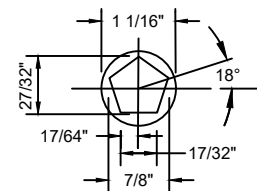
- 5680-9027-8
- 5680-9052-6
- 5680-9030-2
- 5680-9065-8



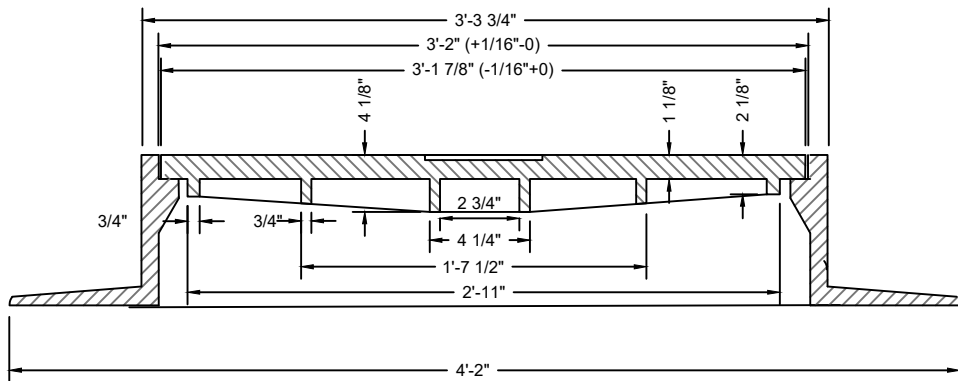
FRAME AND COVER ARE NOT TO BE COATED OR PAINTED

APPROXIMATE WEIGHT OF COVER = 410 LB.

APPROXIMATE WEIGHT OF FRAME = 420 LB.



STAINLESS STEEL LOCK BOLT
 AISI TYPE 304
 STAINLESS STEEL



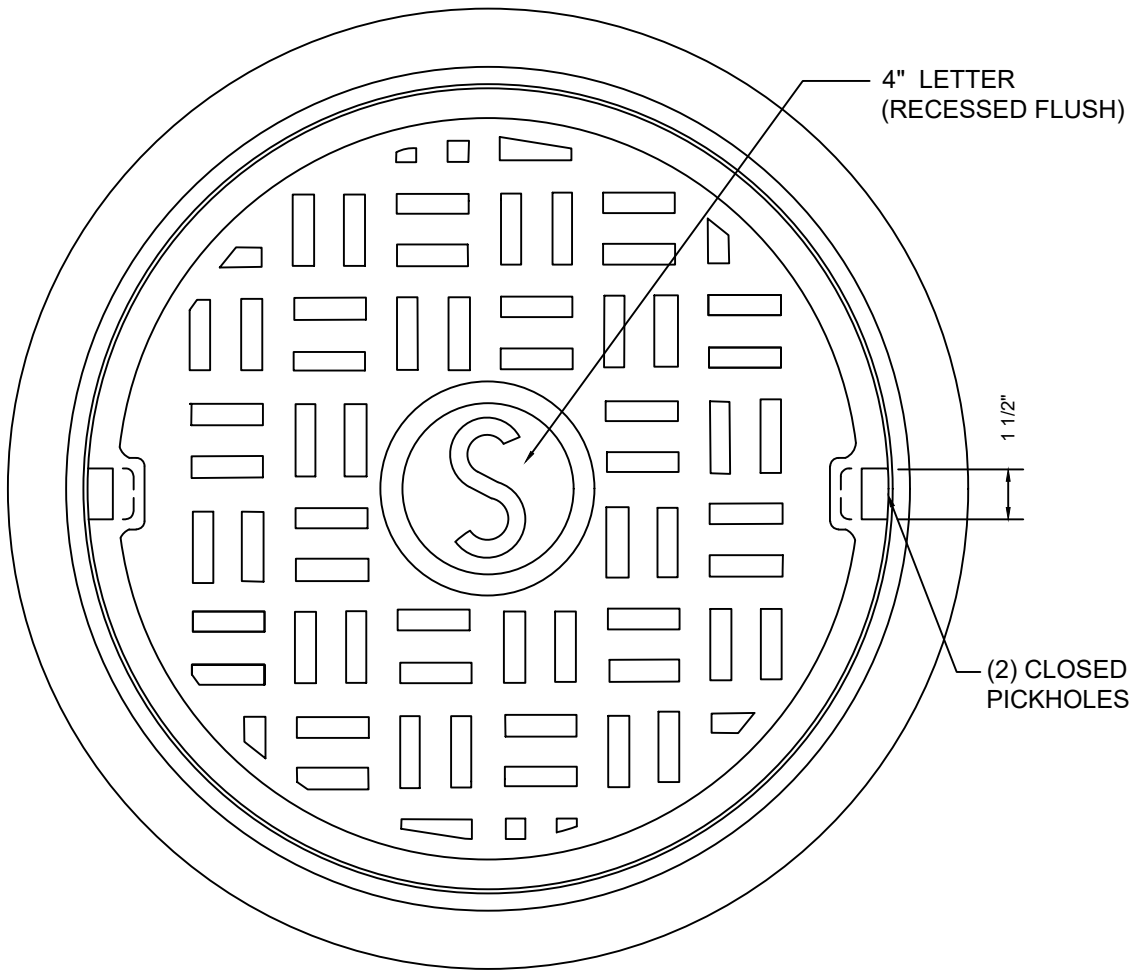
MATERIAL SPECIFICATION:
 GRAY IRON ASTM A48 CL35B

CASTINGS SHALL CONFORM TO AND BE MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO STD M306, LATEST REVISION

SEE DETAIL P&M 10.2a FOR CONTINUATION

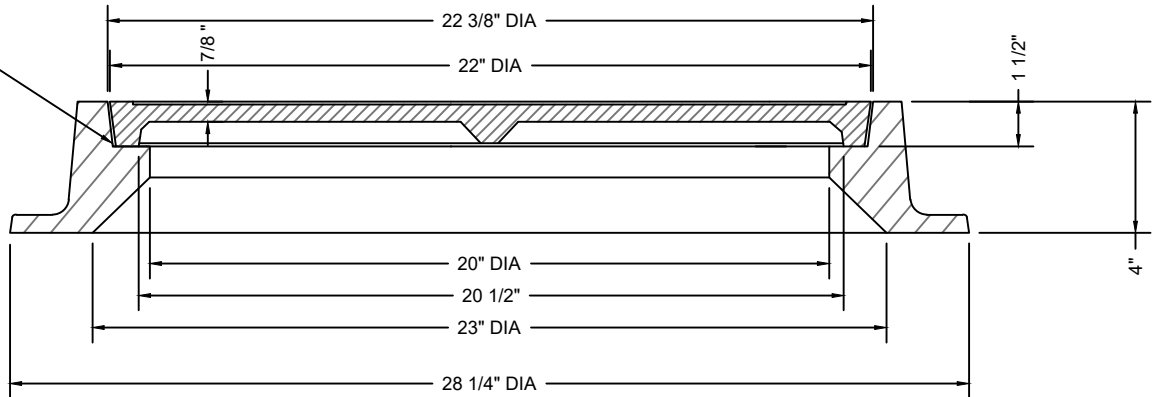
REFERENCE WSSC DWG NO. 721472Y, LATEST REVISION 1-29-81

| | | | |
|--|--|---|--------------|
| WASHINGTON SUBURBAN SANITARY COMMISSION | REVISIONS: APPROVED: May 4, 2021 12:46 PM EDT | PROCUREMENT AND MANUFACTURING DETAIL LOCKING TYPE-WATERTIGHT 36" MANHOLE FRAME & COVER | P&M 10.2b |
| | DocuSigned by: <i>Jaime Garcia</i> MATERIALS MANAGEMENT DIVISION MANAGER | | |



PLAN

MACHINE BEARING SURFACES



FRAME AND COVER SECTION

MATERIAL SPECIFICATION:
GRAY IRON ASTM A48 CL35B


FRAME SHALL CONFORM TO AND BE MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO STD M306, LATEST REVISION

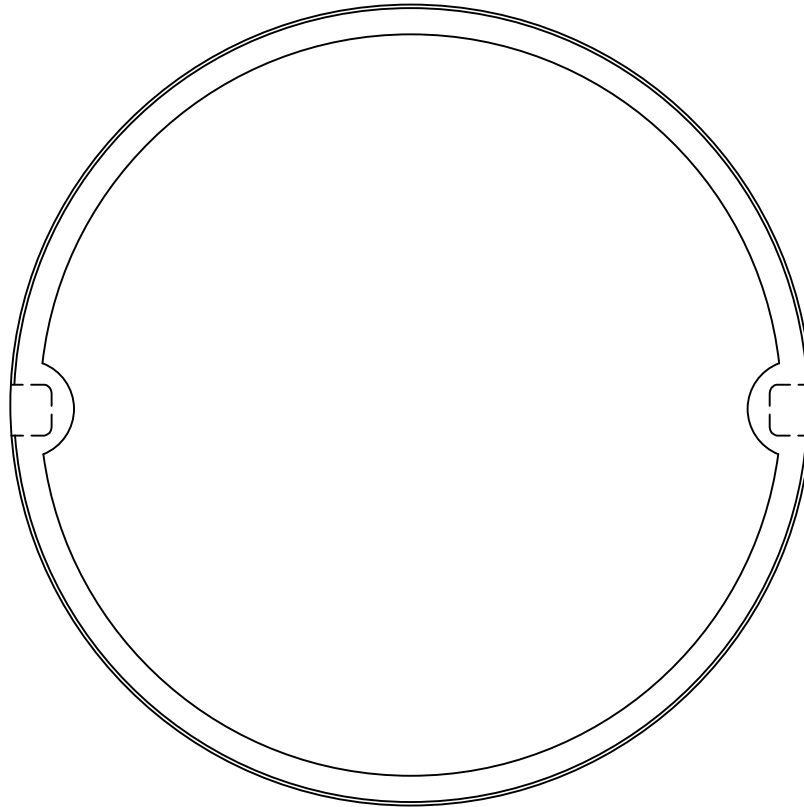
SEE DETAIL P&M 10.4a1 FOR CONTINUATION

APPLICABLE STOCK NOS.

- 5680-9011-2
- 5680-9012-0
- 5680-9021-1
- *5680-9013-8

* TRAFFIC RATED WATER COVER (SEE P&M/10.4B)

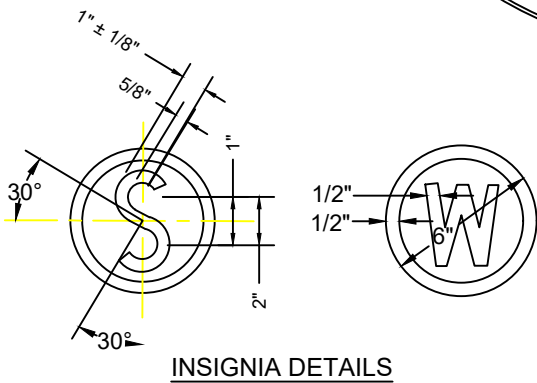
| | | | |
|--|---|---|--------------|
| WASHINGTON SUBURBAN SANITARY COMMISSION | REVISIONS: APPROVED: <u>May 4, 2021 12:46 PM</u> EDT | PROCUREMENT AND MANUFACTURING DETAIL | P&M 10.4a |
| | DocuSigned by:  B7DBE23469C84BD MATERIALS MANAGEMENT DIVISION MANAGER | LIGHTWEIGHT TRAFFIC RATED MANHOLE FRAME & COVER | |



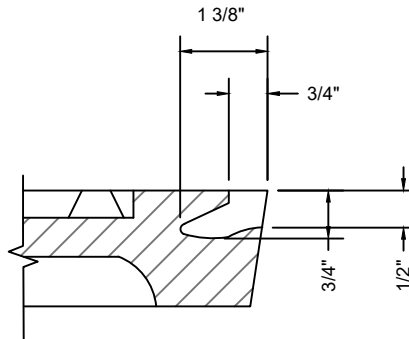
BOTTOM VIEW

APPROXIMATE WEIGHT OF FRAME = 130 LBS

APPROXIMATE WEIGHT OF NON-TRAFFIC COVER = 65 LBS



INSIGNIA DETAILS



PICKHOLE DETAIL

MATERIAL SPECIFICATION:
GRAY IRON ASTM A48 CL35B


FRAME SHALL CONFORM TO AND BE MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO STD M306, LATEST REVISION

SEE DETAIL P&M 10.4a FOR CONTINUATION

APPLICABLE STOCK NOS.

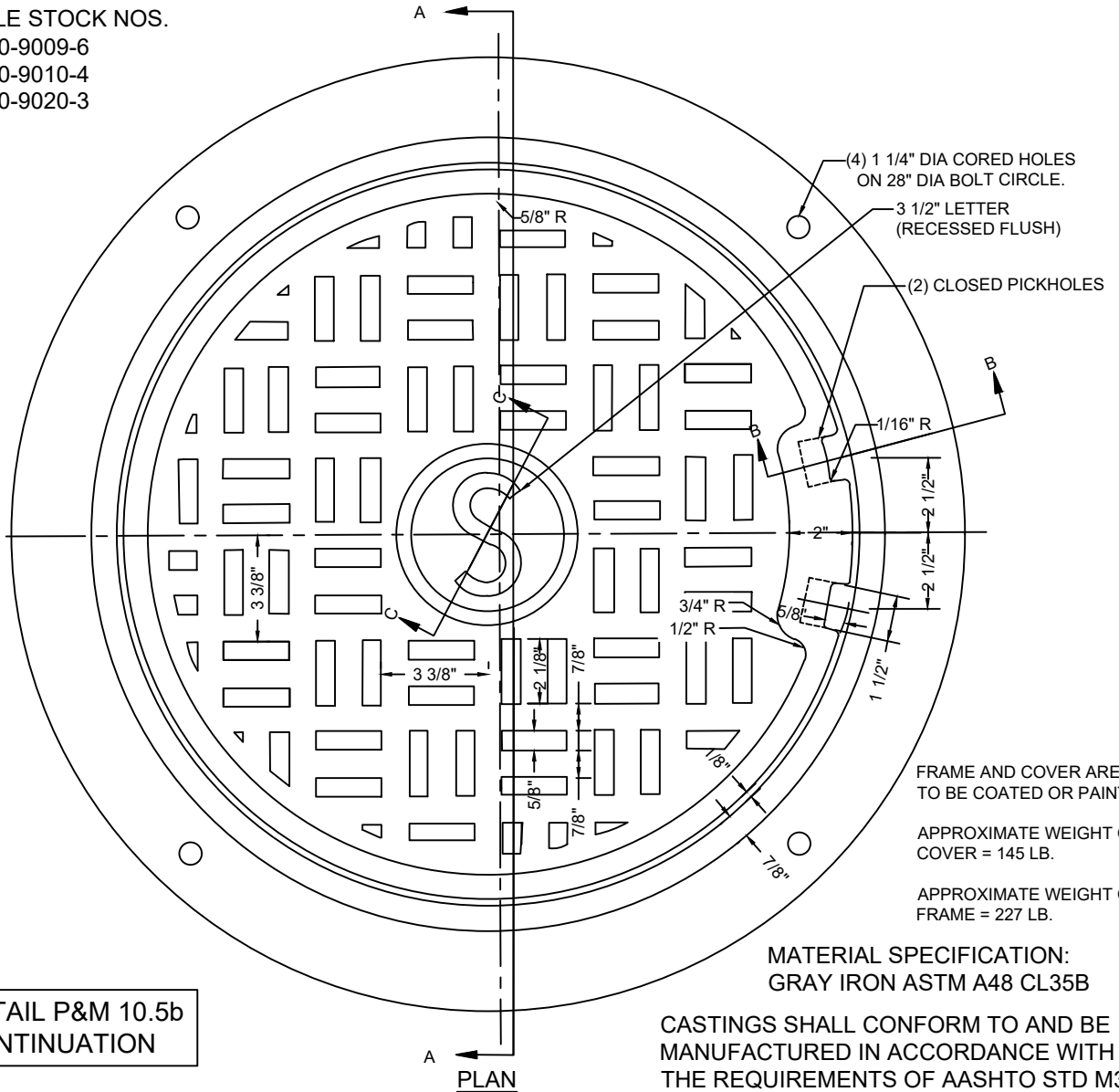
- 5680-9011-2
- 5680-9012-0
- 5680-9021-1
- *5680-9013-8

* TRAFFIC RATED WATER COVER (SEE P&M/10.4B)

| | | | |
|--|---|---|---------------|
| WASHINGTON SUBURBAN SANITARY COMMISSION | REVISIONS: <u>May 4, 2021 12:46 PM</u> EDT | PROCUREMENT AND MANUFACTURING DETAIL | P&M 10.4a1 |
| | APPROVED:  B7DBE23469C84BD... MATERIALS MANAGEMENT DIVISION MANAGER | LIGHTWEIGHT TRAFFIC RATED MANHOLE FRAME & COVER | |

APPLICABLE STOCK NOS.

- 5680-9009-6
- 5680-9010-4
- 5680-9020-3



FRAME AND COVER ARE NOT TO BE COATED OR PAINTED

APPROXIMATE WEIGHT OF COVER = 145 LB.

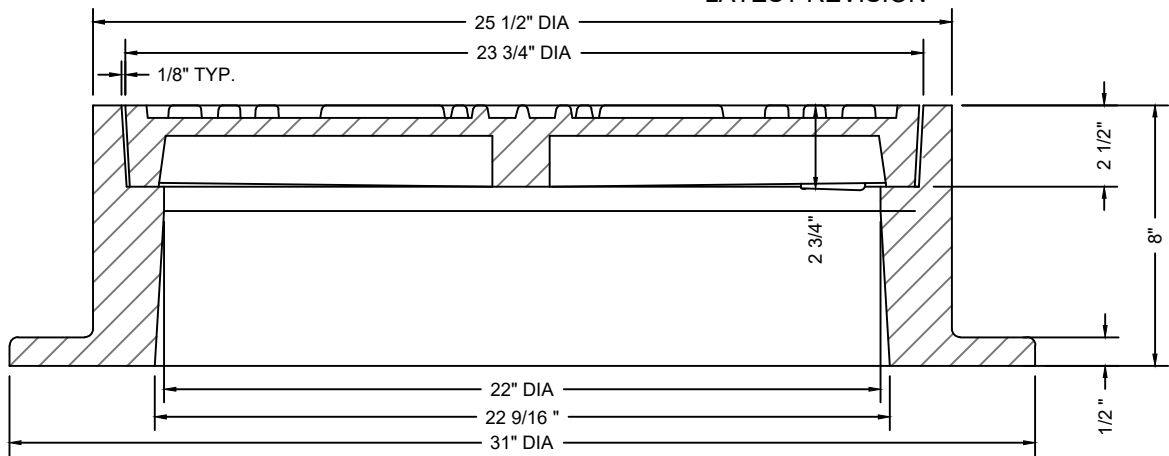
APPROXIMATE WEIGHT OF FRAME = 227 LB.

MATERIAL SPECIFICATION:
GRAY IRON ASTM A48 CL35B

CASTINGS SHALL CONFORM TO AND BE MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO STD M306, LATEST REVISION

SEE DETAIL P&M 10.5b FOR CONTINUATION

PLAN



FRAME SECTION A-A

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS: May 4, 2021 | 12:46 PM EDT PROCUREMENT AND MANUFACTURING DETAIL

APPROVED: _____

DocuSigned by:
Jaime Garcia

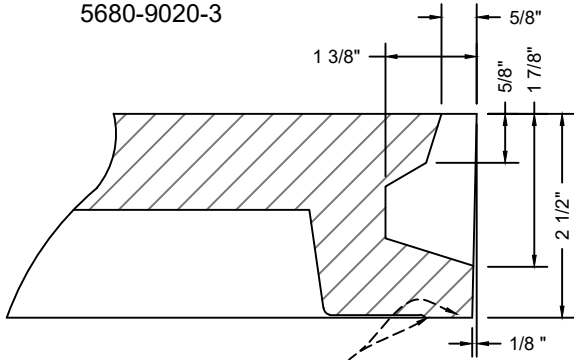
B7DBE23469C84BD
MATERIALS MANAGEMENT DIVISION MANAGER

NON-LOCKING STANDARD 22"
NON-WATERTIGHT
MANHOLE FRAME & COVER

P&M
10.5a

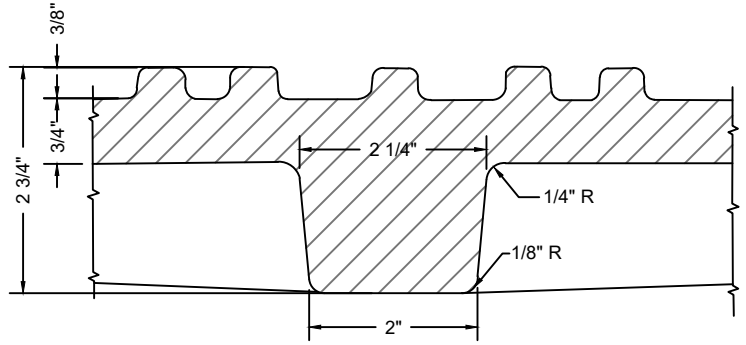
APPLICABLE STOCK NOS.

- 5680-9009-6
- 5680-9010-4
- 5680-9020-3

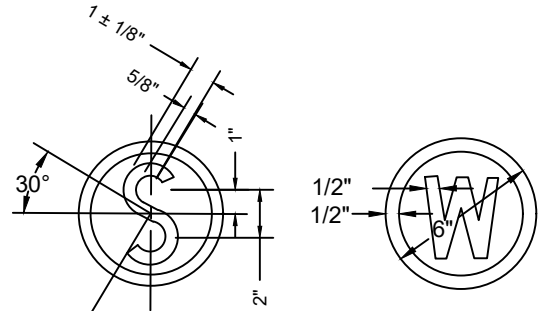


MACHINE ALL BEARING SURFACES

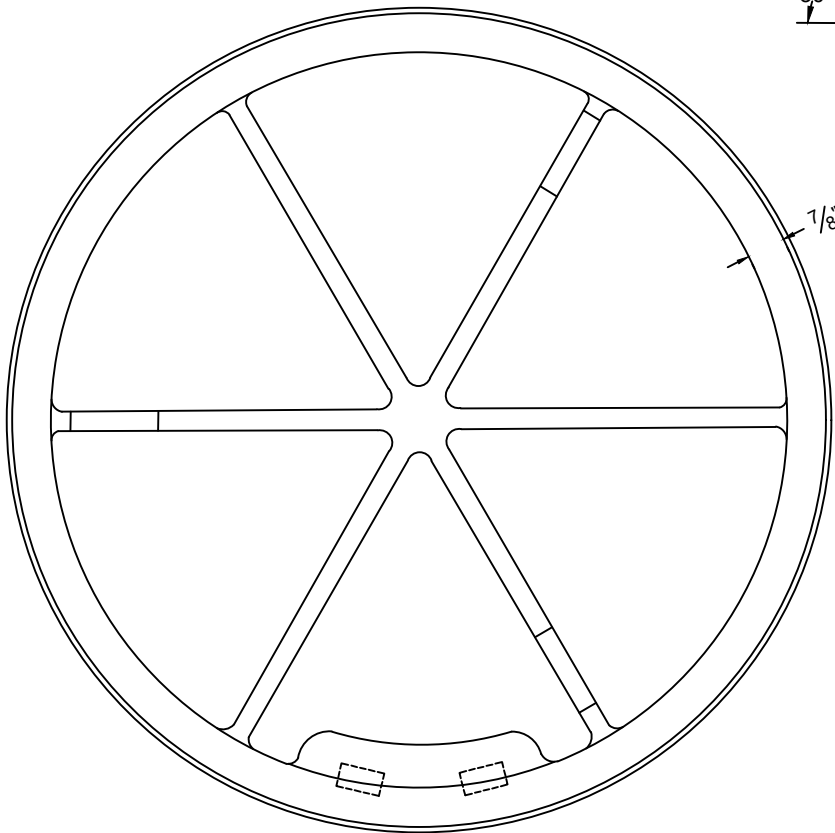
SECTION B-B



SECTION C-C



INSIGNIA DETAILS



BOTTOM VIEW OF COVER

SEE DETAIL P&M 10.5a FOR CONTINUATION

MATERIAL SPECIFICATION:
GRAY IRON ASTM A48 CL35B

CASTINGS SHALL CONFORM TO AND BE MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO STD M306, LATEST REVISION

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS: May 4, 2021 | 12:46 PM EDT

APPROVED:

DocuSigned by:

Jaime Garcia

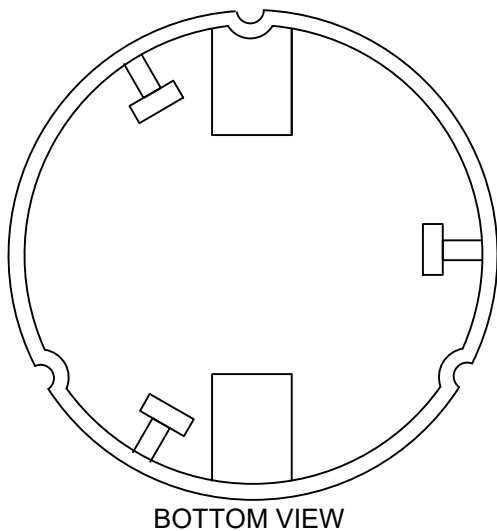
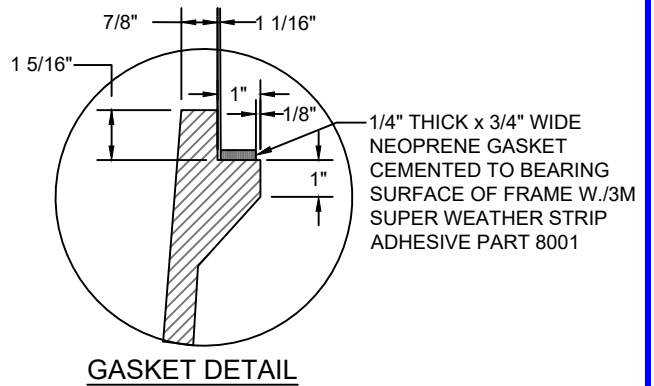
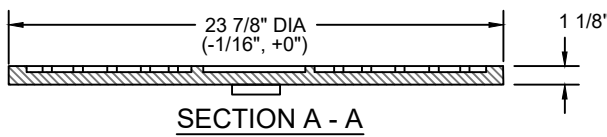
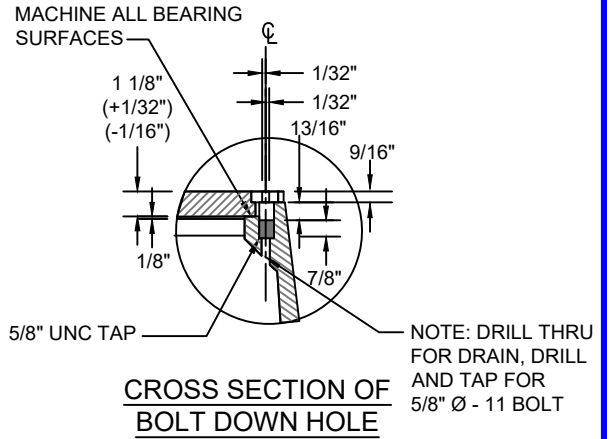
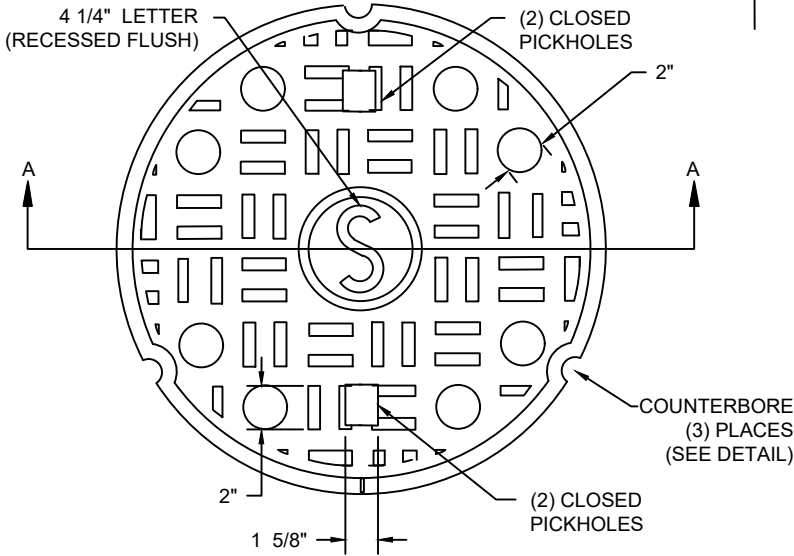
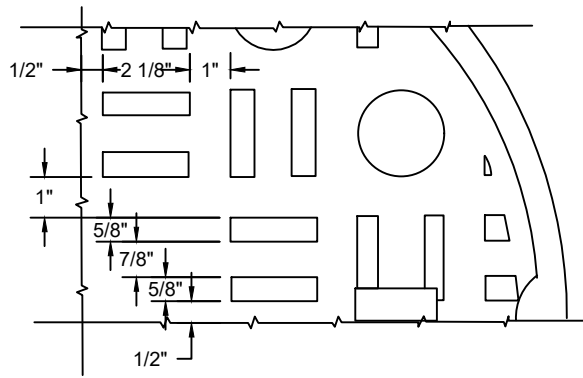
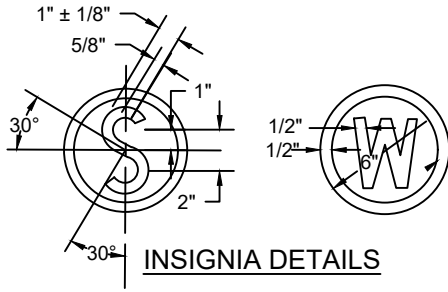
B7DBE23469C84BD

MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL

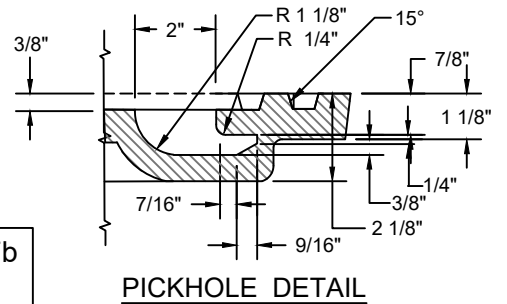
**NON-LOCKING STANDARD 22"
NON-WATERTIGHT
MANHOLE FRAME & COVER**

**P&M
10.5b**



SEE DETAIL P&M 10.7b FOR CONTINUATION

MATERIAL SPECIFICATION:
GRAY IRON ASTM A48 CL35B



APPLICABLE STOCK NOS.
5680-9025-2
5680-9028-6
5680-9050-0

CASTINGS SHALL CONFORM TO AND BE MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO STD M306, LATEST REVISION

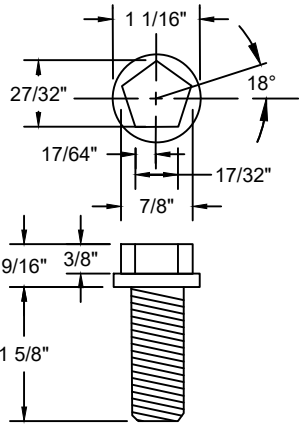
WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 4, 2021 | 12:46 PM EDT
DocuSigned by:
Jaime Garcia
B7DBE23469C84BD...
MATERIALS MANAGEMENT DIVISION MANAGER

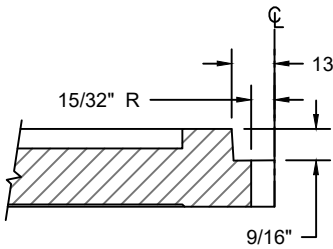
PROCUREMENT AND MANUFACTURING DETAIL

LOCKING TYPE-
WATERTIGHT 22" MANHOLE
FRAME & COVER

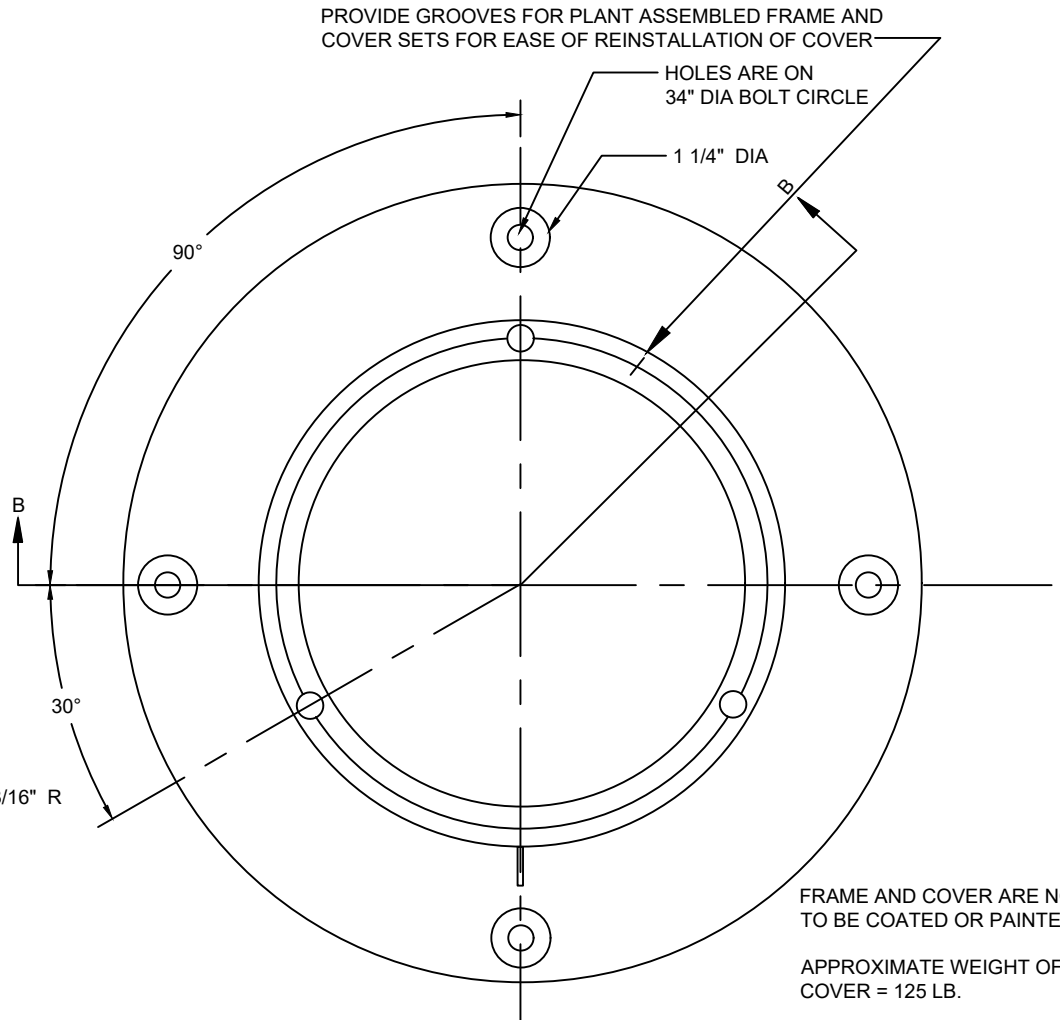
P&M
10.7a



**STAINLESS BOLT
DETAILS**



COUNTERBORE DETAIL



PROVIDE GROOVES FOR PLANT ASSEMBLED FRAME AND COVER SETS FOR EASE OF REINSTALLATION OF COVER

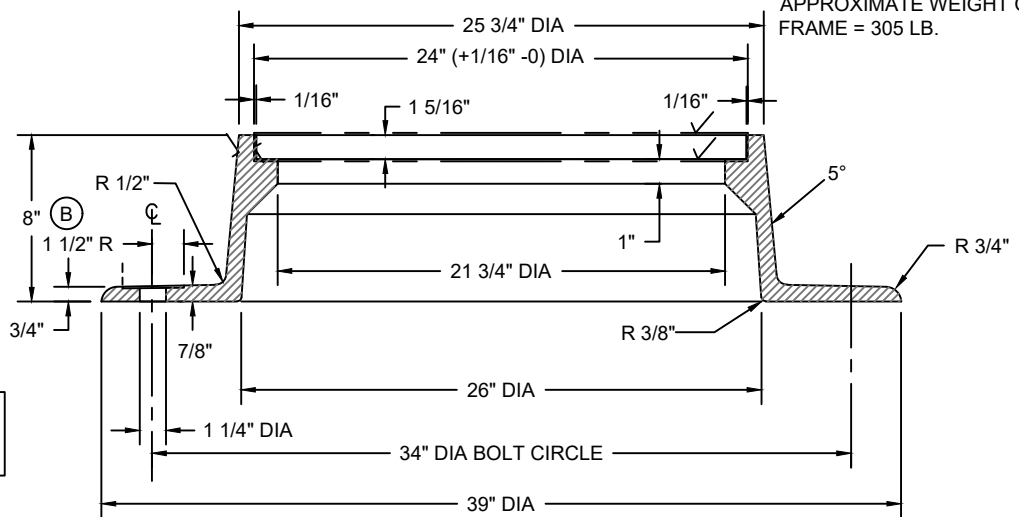
HOLES ARE ON 34" DIA BOLT CIRCLE

1 1/4" DIA

FRAME AND COVER ARE NOT TO BE COATED OR PAINTED

APPROXIMATE WEIGHT OF COVER = 125 LB.

APPROXIMATE WEIGHT OF FRAME = 305 LB.



SECTION B - B

SEE DETAIL P&M 10.7a FOR CONTINUATION

MATERIAL SPECIFICATION:
GRAY IRON ASTM A48 CL35B

CASTINGS SHALL CONFORM TO AND BE MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO STD M306, LATEST REVISION

APPLICABLE STOCK NOS.

- 5680-9025-2
- 5680-9028-6
- 5680-9050-0

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

REVISIONS:
APPROVED: May 4, 2021 | 12:46 PM EDT

DocuSigned by:
Jaime Garcia
MATERIALS MANAGEMENT DIVISION MANAGER

PROCUREMENT AND MANUFACTURING DETAIL
**LOCKING TYPE-
WATERTIGHT 22" MANHOLE
FRAME & COVER**

**P&M
10.7b**