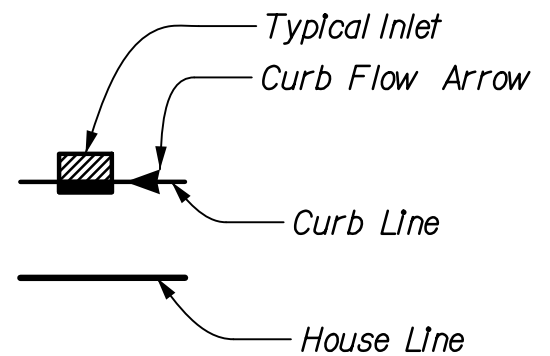
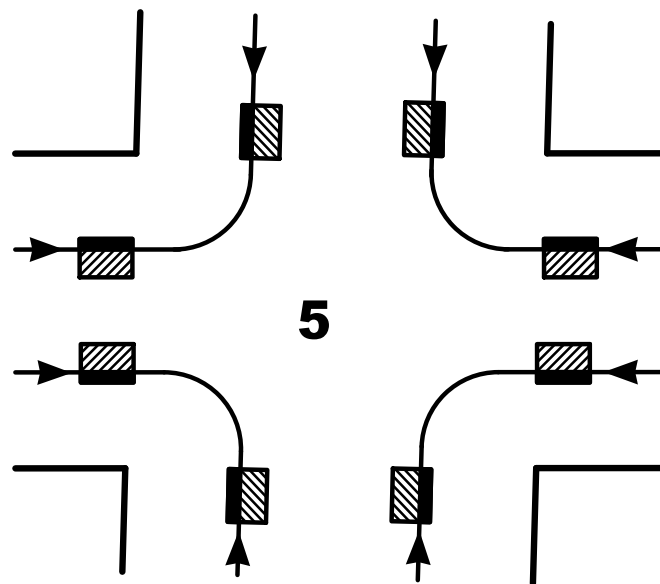
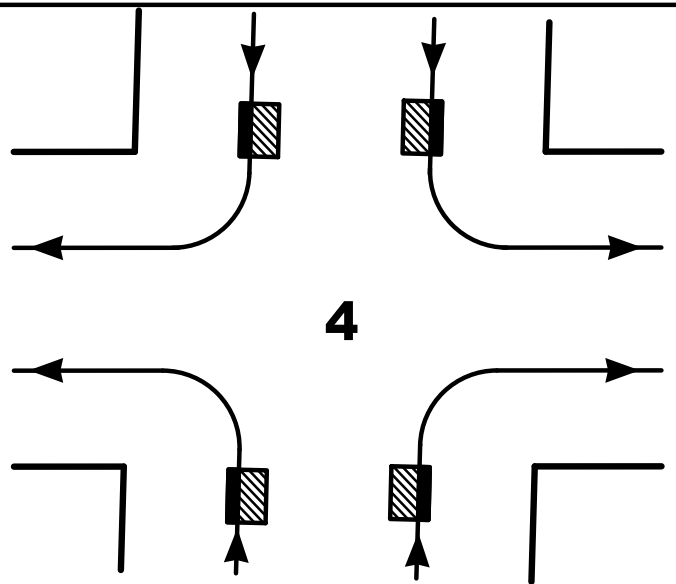
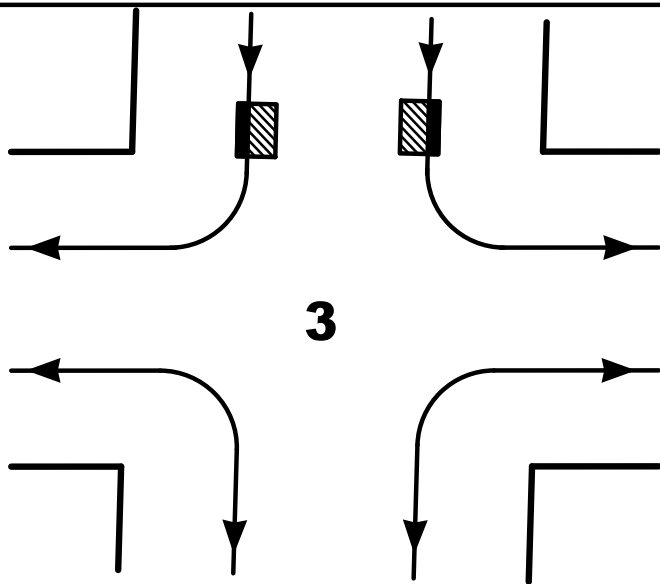
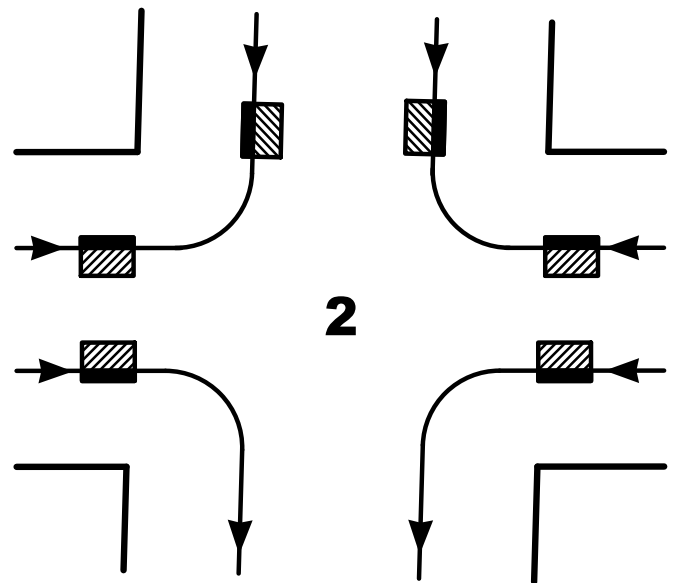
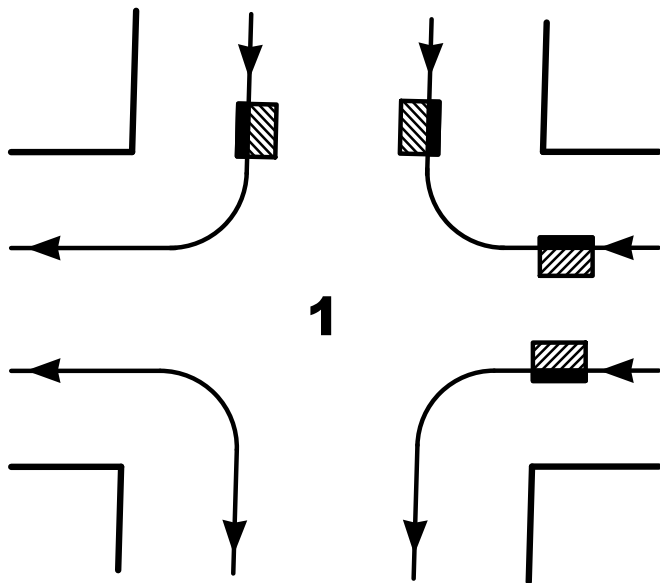


REFERENCE PLANS AND INFORMATION

Appendix



- [a](#) – Preferred Inlet Locations
 - [b](#) – Inlet Pictures
 - [c](#) – Upper End Vent Pipe Picture
 - [d](#) – Drainage Plat Map*
 - [e](#) – Water Plat Map*
 - [f](#) – 1907 Standard Details for Sewers
 - [g](#) – Streets Department Survey Districts*
 - [h](#) – Highway Districts*
 - [i](#) – State Highway Route Numbers (List)
 - [j](#) – State Highway Route Numbers (Map)*
 - [k](#) – Wards*
- *Link to Google Earth KML Reference File



Legend

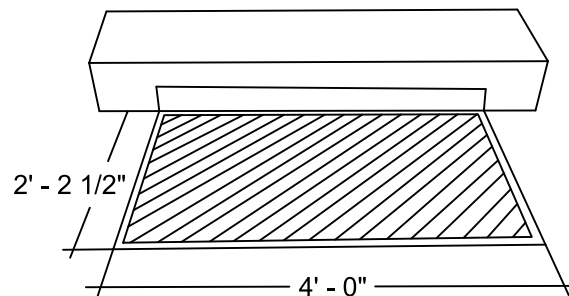
INLET PICTURES TABLE OF CONTENTS

4' OPEN MOUTH GRATE INLET	<u>1</u>
6' OPEN MOUTH GRATE INLET	<u>2</u>
4' CITY INLET	<u>3</u>
6' CITY INLET	<u>4</u>
4' OPEN MOUTH INLET	<u>5</u>
4' HIGHWAY GRATE INLET	<u>6</u>
6' HIGHWAY GRATE INLET	<u>7</u>
#1 CITY INLET WITH ROUND CLEAN-OUT COVERS	<u>8</u>
#1 CITY INLET WITH RECTANGULAR CLEAN-OUT COVERS	<u>9</u>
#2 CITY INLET WITH ROUND CLEAN-OUT COVERS	<u>10</u>
#2 CITY INLET WITH RECTANGULAR CLEAN-OUT COVERS	<u>11</u>
#3 CITY INLET WITH ROUND CLEAN-OUT COVERS	<u>12</u>
#3 CITY INLET WITH RECTANGULAR CLEAN-OUT COVERS	<u>13</u>
#4 CITY INLET WITH RECTANGULAR CLEAN-OUT COVERS	<u>14</u>
#1 GRATE INLET	<u>15</u>
#2 GRATE INLET	<u>16</u>
#3 GRATE INLET	<u>17</u>
#4 GRATE INLET	<u>18</u>



{67}

[Back to Appendix V](#)



4' OPEN MOUTH GRATE INLET



DATE

8/19/14

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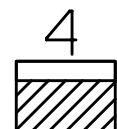
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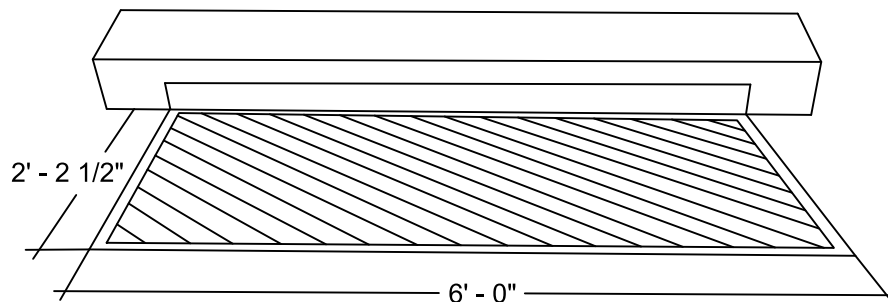
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1 OF 18

INLET SYMBOL FOR
EXISTING INLET AS SHOWN
ON PLAN SHEETS.

SEE APPENDIX II k
FOR PROPOSED
INLET SYMBOL.





6' OPEN MOUTH GRATE INLET



DATE

8/19/14

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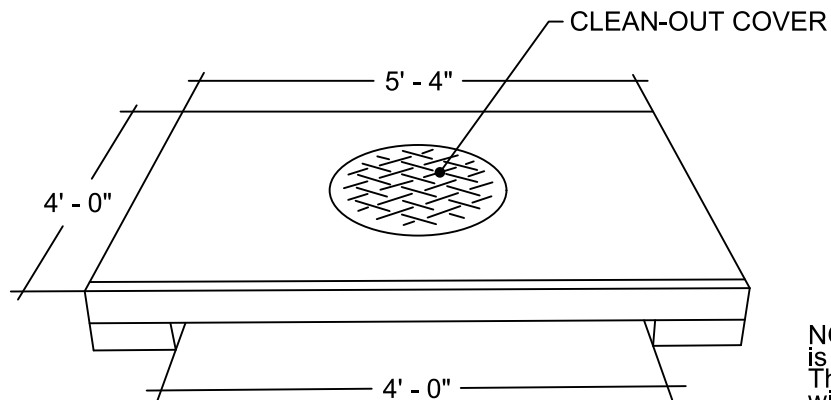
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2 OF 18

INLET SYMBOL FOR
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ON PLAN SHEETS.SEE APPENDIX II k
FOR PROPOSED
INLET SYMBOL.

6





NOTE: Inlet wall is behind the curb. This causes an 8" wide throat between the top slab and the inlet wall.

4' CITY INLET



DATE

9/22/14

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PAGE No

3 OF 18

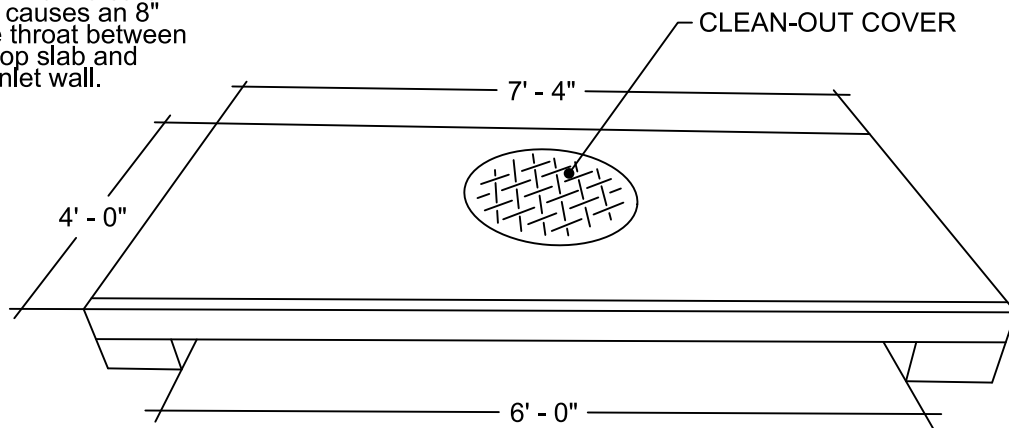
INLET SYMBOL FOR EXISTING INLET AS SHOWN ON PLAN SHEETS.

SEE APPENDIX II k FOR PROPOSED INLET SYMBOL.

4CI



NOTE: Inlet wall is behind the curb. This causes an 8" wide throat between the top slab and the inlet wall.



6' CITY INLET



DATE

10/30/14

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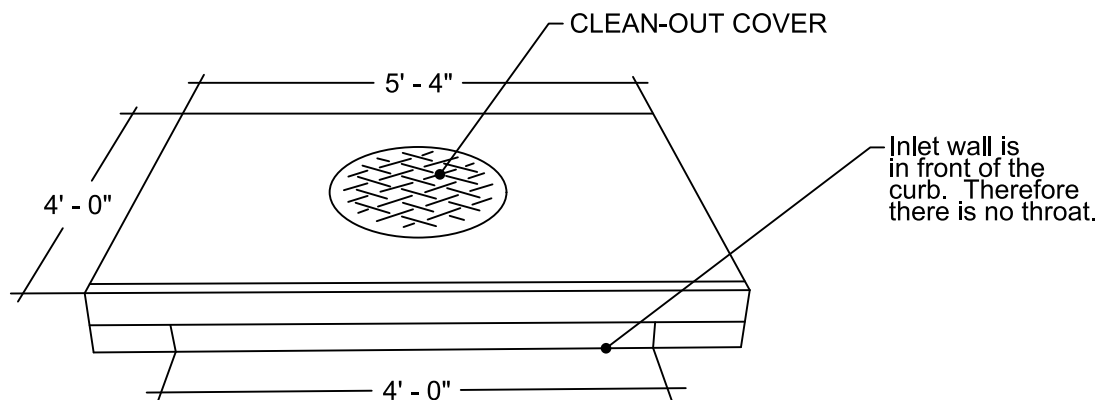
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4 OF 18

INLET SYMBOL FOR EXISTING INLET AS SHOWN ON PLAN SHEETS.

SEE APPENDIX II k FOR PROPOSED INLET SYMBOL.

6CI



4' OPEN MOUTH INLET



DATE

9/22/14

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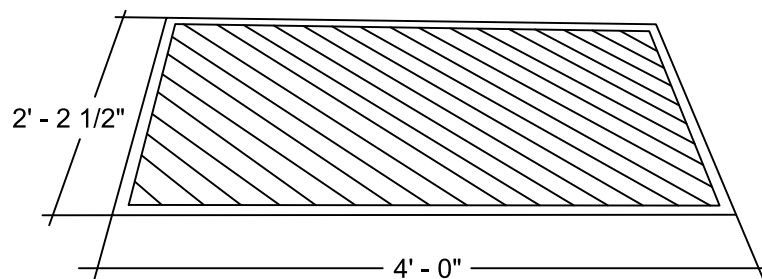
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5 OF 18

INLET SYMBOL FOR
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FOR PROPOSED
INLET SYMBOL.

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4' HIGHWAY GRATE INLET



DATE

8/19/14

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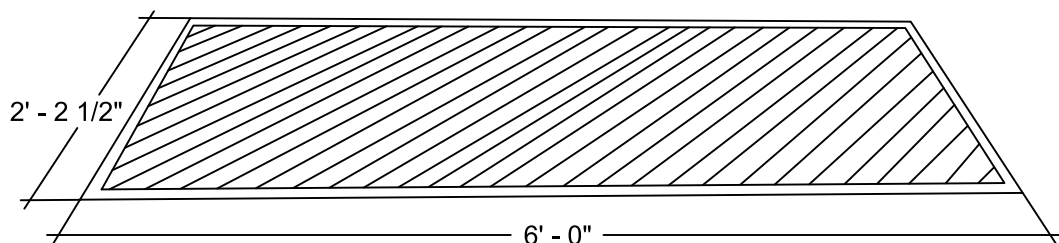
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6 OF 18

INLET SYMBOL FOR
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FOR PROPOSED
INLET SYMBOL.

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6' HIGHWAY GRATE INLET



DATE

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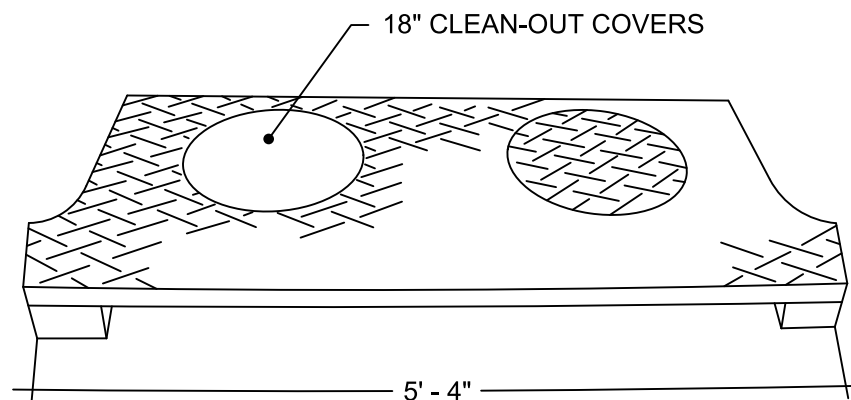
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7 OF 18

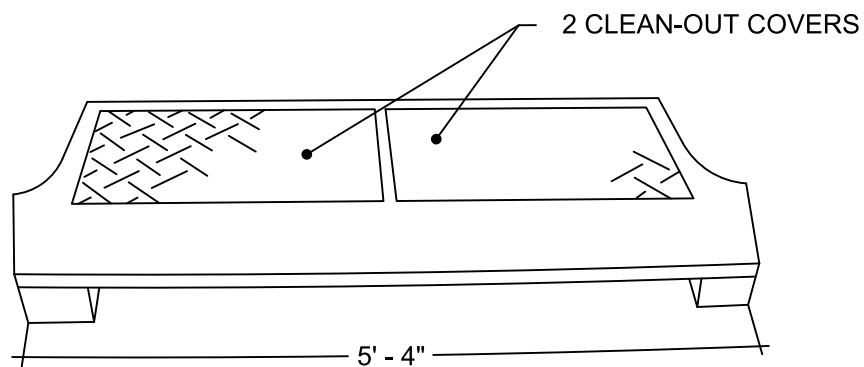
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6





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	DATE	11/20/14	INLET SYMBOL FOR EXISTING INLET AS SHOWN ON PLAN SHEETS.	
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	PAGE No			
	8	OF	18	#/



#1 CITY INLET WITH RECTANGULAR CLEAN-OUT COVERS

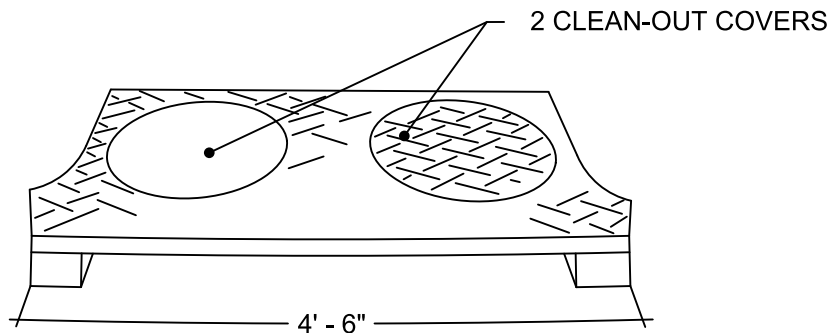
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PAGE No
9 OF 18

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#2 CITY INLET WITH ROUND CLEAN-OUT COVERS

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11/20/14

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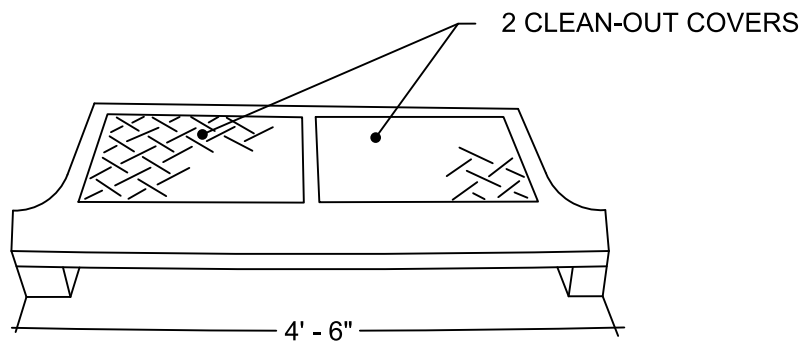
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10 OF 18

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#2 CITY INLET WITH RECTANGULAR CLEAN-OUT COVERS

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11/20/14

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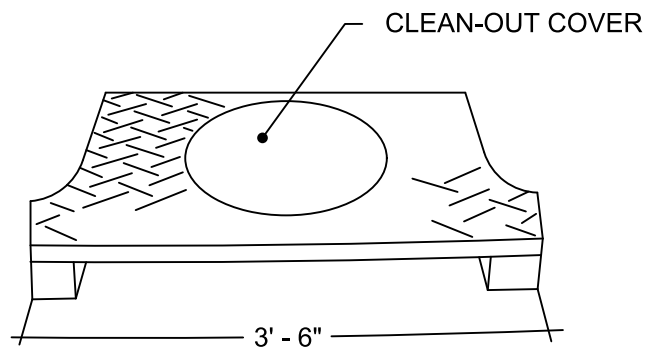
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11 OF 18

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#3 CITY INLET WITH ROUND CLEAN-OUT COVERS



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11/20/14

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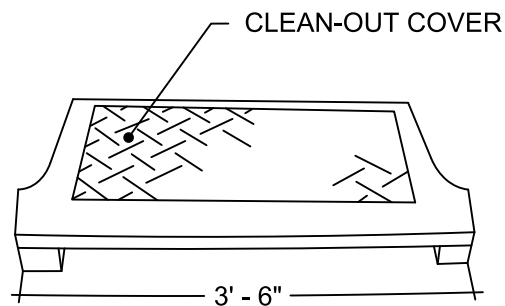
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12 OF 18

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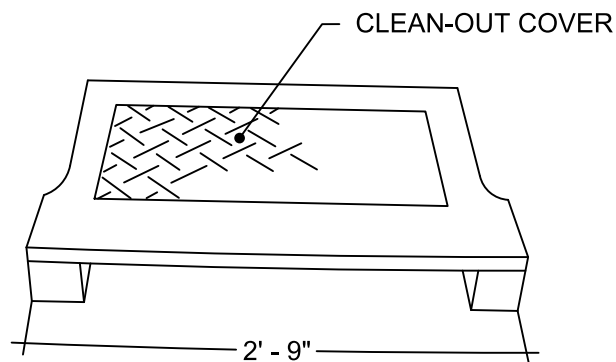
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PAGE No

13 OF 18

INLET SYMBOL FOR
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#3



#4 CITY INLET WITH RECTANGULAR CLEAN-OUT COVERS



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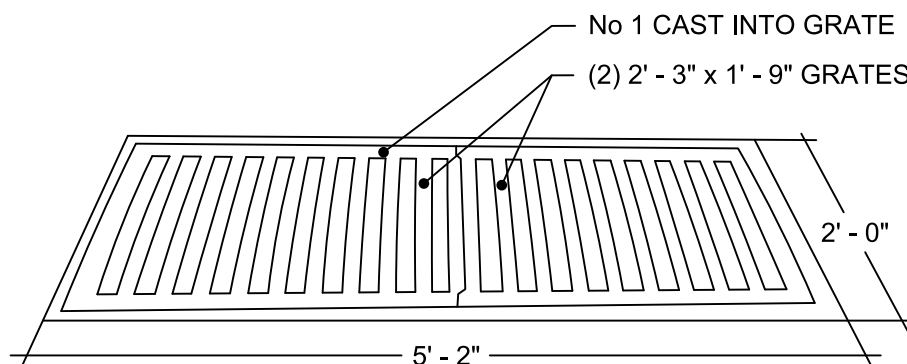
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#4



#1 GRATE INLET



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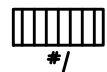
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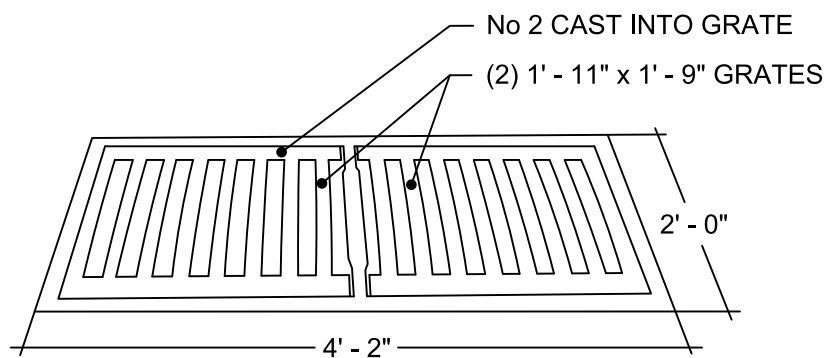
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#/



#2 GRATE INLET



DATE

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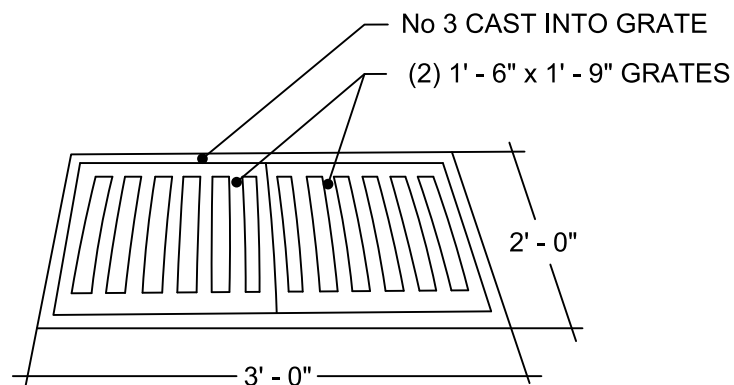
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#3 GRATE INLET



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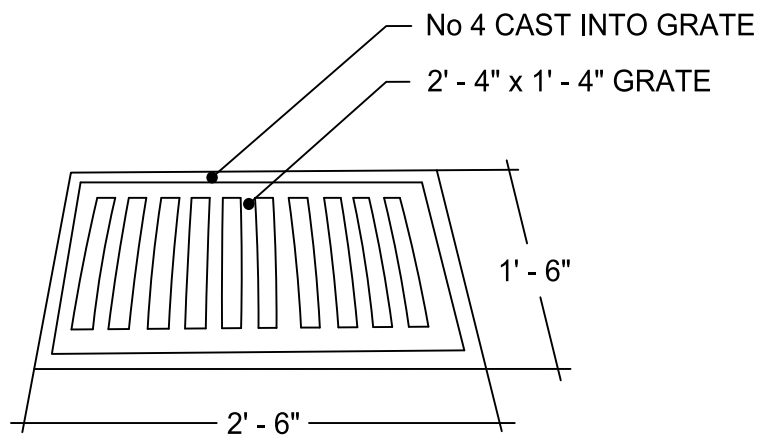
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#4 GRATE INLET



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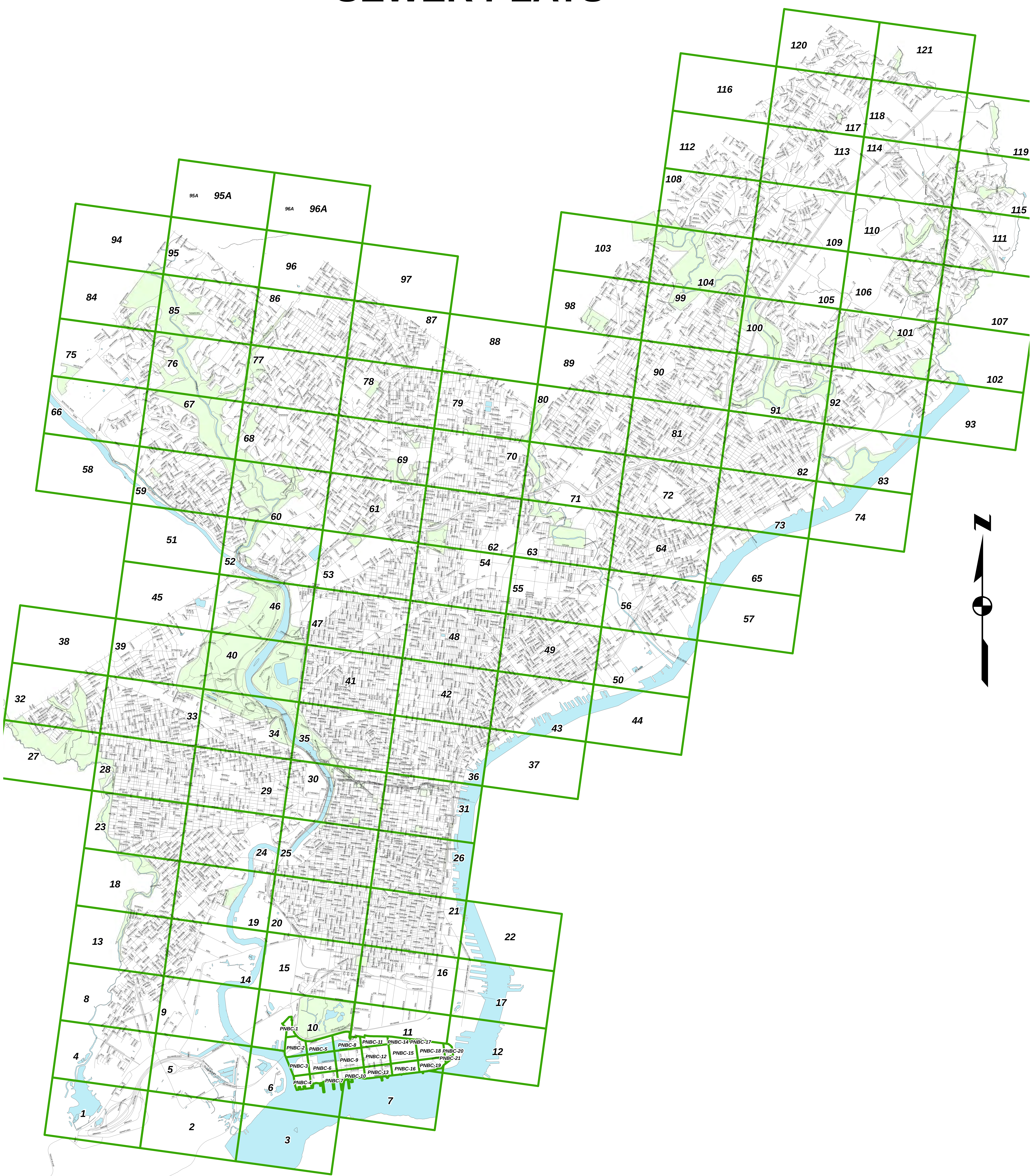
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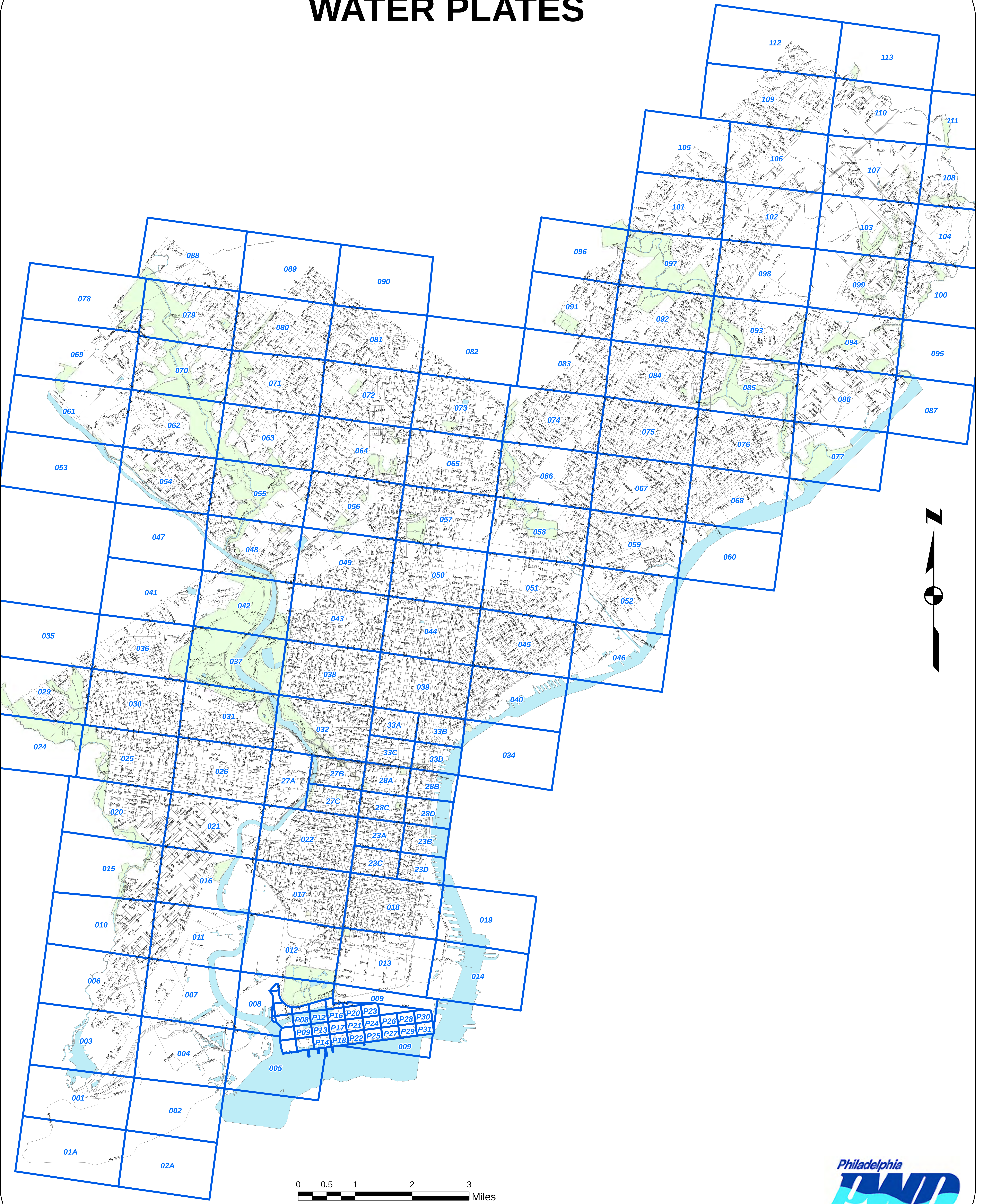




SEWER PLATS



WATER PLATES



*A. Maltman**A. E. Burbidge**J 795A*

STANDARD DETAILS

FOR

SEWERS

DEPARTMENT OF PUBLIC WORKS

Bureau of Surveys

PHILADELPHIA

1907

GEORGE S. WEBSTER,
CHIEF ENGINEER.

The 1907 Standard Details for Sewers shows typical old brick sewer design. An index has been added for your convenience. Page numbers have also been added to replace the original roman numerals. Since brick sewer design did not change, these standard details should be all that is needed. However, if you need other standard details, the following years are available @ phillywaterdesign.org: 1902, 1905, 1907, 1925, 1934, 1947, 1956, 1970, and 1985.

Also, the handwritten signatures on this cover page probably belonged to the original men that used this book. If you know the history of these men please submit it on the comment page and we will try to share it.

1907 Sewer Detail Table of Contents

1. [2'-0" & 2'-3" Dia.](#)
 2. [2'-6" & 2'-9" Dia.](#)
 3. [3'-0" & 3'-6" Dia.](#)
 4. [4'-0" & 4'-3" Dia.](#)
 5. [4'-6" Dia.](#)
 6. [4'-9" Dia.](#)
 7. [2'-3"x1'-6" & 2'-6"x1'-8" Egg](#)
 8. [3'-0"x2'-0" & 3'-3"x2'-2" Egg](#)
 9. [3'-6"x2'-4" & 4'-0"x2'-8" Egg](#)
 10. [4'-6"x3'-0" & 5'-0"x3'-4" Egg](#)
 11. [General Sections for Separate System](#)
 12. [Manhole and General Details for Vit Pipe Sewers](#)
 13. [Manhole for Junctions](#)
 14. [General Details for Egg Shaped Sewers](#)
 15. [Standard Wellhole Details](#)
 16. [Cast Iron Manhole Cover & Frame](#)
 17. [Asphaltum Filled Cast Iron Manhole Covers & Frames](#)
 18. [Standard Manhole Bucket](#)
 19. [No. 1 Open Mouth Inlet](#)
 20. [No. 2 & 3 Open Mouth Inlet](#)
 21. [No. 4 Open Mouth Inlet](#)
 22. [Details of Castings for No. 2 & 3 Open Mouth Inlets](#)
 23. [No. 1, 2 & 3 Grate Top](#)
 24. [No. 4 Grate Top](#)
 25. [No. 1 Inlet Design for Grate Top](#)
 26. [No. 2 Inlet Design for Grate Top](#)
 27. [No. 3 Inlet Design for Grate Top](#)
 28. [Country Road Inlet No. 3B](#)
-

GENERAL SECTIONS OF CIRCULAR SEWERS

2' 0" 5' 0" 10' 0" 20' 0"
Scale

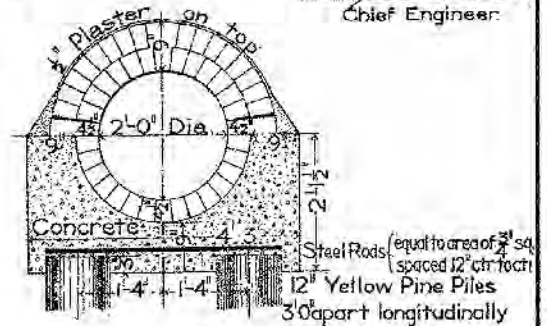
DEPARTMENT OF PUBLIC WORKS
BUREAU OF SURVEYS
PHILADELPHIA
1906

E. H. Whitton
Chief Engineer

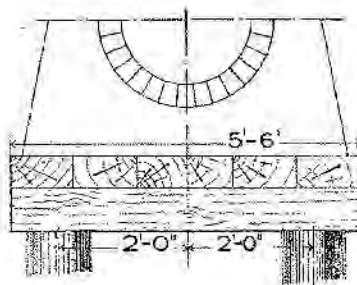


MINIMUM SECTION

All Slants for Inlet connections to be
15" dia. for N^o 1 and N^o 2 Inlets,
12" dia. for N^o 3 Inlets, and
8" dia. for N^o 4 Inlets.



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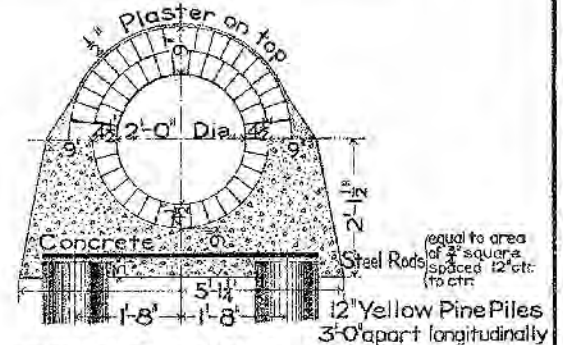


SECTION SHOWING PLATFORM and PILES

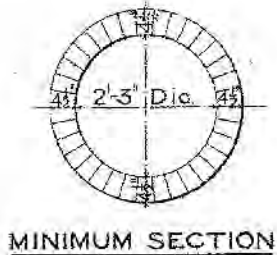


VITRIFIED SHALE BRICK INVERT

6" Yellow Pine Planking laid close
8" x 8" Yellow Pine Stringers
3'-0" apart longitudinally
12" Yellow Pine Piles
3'-0" apart longitudinally.



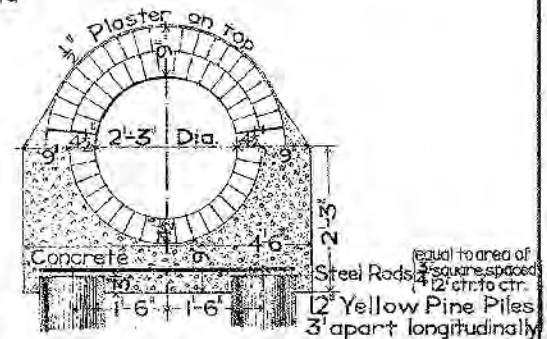
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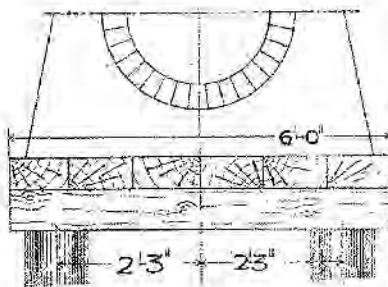
MINIMUM SECTION

Steel Rods (equal to area of $\frac{3}{4}$ " square) and
Piles, or Piles and Platform, if required,
will be paid for at the price in the
contract when ordered by the
Chief Engineer.

Filling over top of Sewer to be
at least 3 feet deep and with
a slope not less than $\frac{1}{2}$ ft horizontal
over 1 ft vertical extending to the
surface of the ground.



SECTION IN REDUCED CRADLE

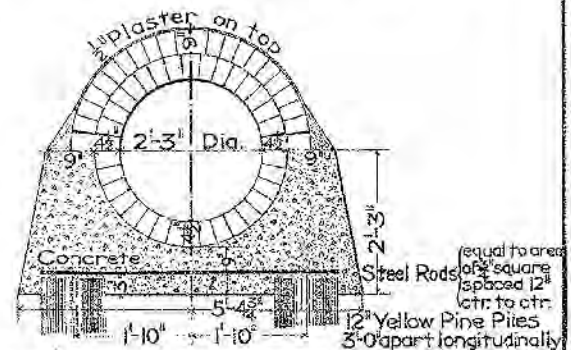


SECTION SHOWING PLATFORM and PILES



VITRIFIED SHALE BRICK INVERT

6" Yellow Pine Planking laid close
8" x 8" Yellow Pine Stringers
3'-0" apart longitudinally
12" Yellow Pine Piles
3'-0" apart longitudinally



SECTION IN MAXIMUM CRADLE

GENERAL SECTIONS OF CIRCULAR SEWERS

DEPARTMENT OF PUBLIC WORKS

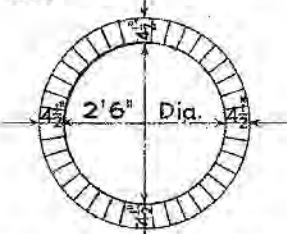
BUREAU OF SURVEYS

PHILADELPHIA

1906

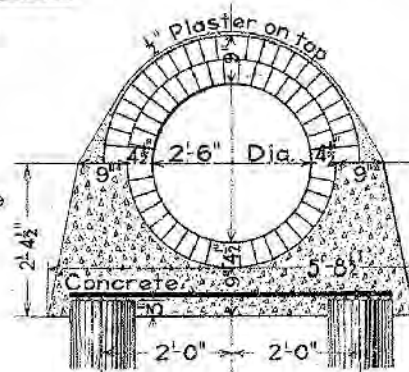
E. H. Hester
Chief Engineer

Scale
12' 9' 6' 3' 0' 1' 2' 1'



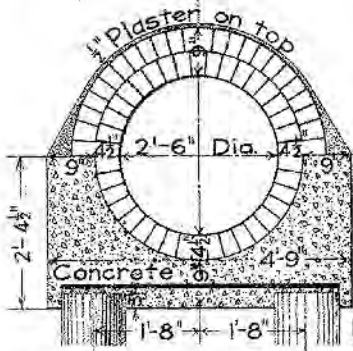
MINIMUM SECTION

All Slants for Inlet connections to be 15" dia. for N^o1 and N^o2 Inlets, 12" dia. for N^o3 Inlets, and 8" dia. for N^o4 Inlets.

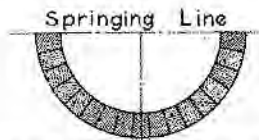


SECTION IN MAXIMUM CRADLE

Steel Rods (equal to area of $\frac{3}{4}$ " sq. spaced 12" ctr. to ctr.)
12" Yellow Pine Piles
3'-0" apart longitudinally

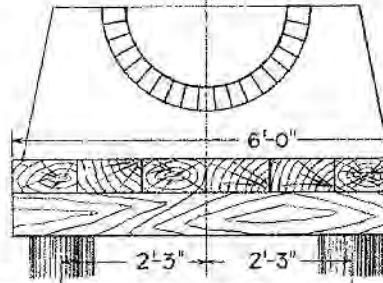


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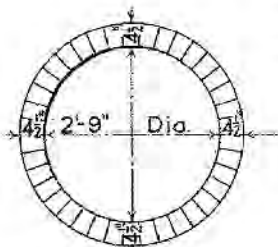
VITRIFIED SHALE BRICK INVERT

Steel Rods (equal to area of $\frac{3}{4}$ " sq. spaced 12" ctr. to ctr.)
12" Yellow Pine Piles
3'-0" apart longitudinally



SECTION SHOWING PLATFORM and PILES

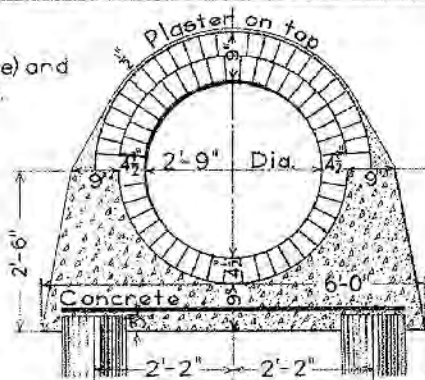
6" Yellow Pine Planking laid close
8" 8" Yellow Pine Stringers
3'-0" apart longitudinally
12" Yellow Pine Piles
3'-0" apart longitudinally



MINIMUM SECTION

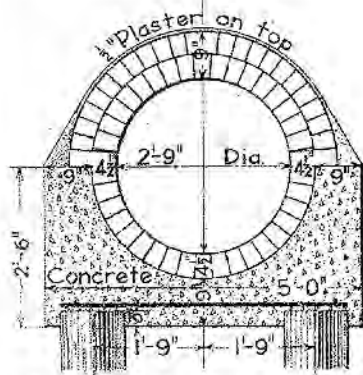
Steel Rods (equal to area of $\frac{3}{4}$ " square) and Piles, or Piles and Platform, if required, will be paid for at the price in the contract when ordered by the Chief Engineer.

Filling over top of Sewer to be at least 3 feet deep and with a slope not less than $\frac{1}{2}$ ft. horizontal over 1 ft. vertical extending to the surface of the ground.

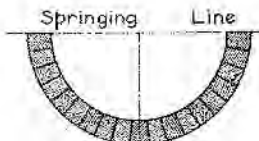


SECTION IN MAXIMUM CRADLE

Steel Rods (equal to area of $\frac{3}{4}$ " sq. spaced 12" ctr. to ctr.)
12" Yellow Pine Piles
3'-0" apart longitudinally

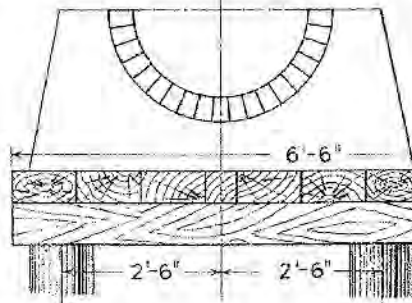


SECTION IN REDUCED CRADLE



VITRIFIED SHALE BRICK INVERT

Steel Rods (equal to area of $\frac{3}{4}$ " sq. spaced 12" ctr. to ctr.)
12" Yellow Pine Piles
3'-0" apart longitudinally



SECTION SHOWING PLATFORM and PILES

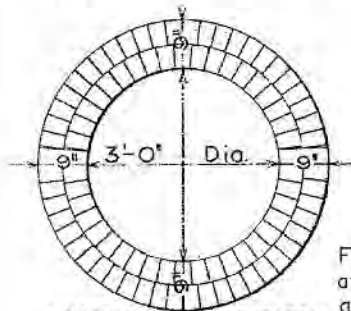
6" Yellow Pine Planking laid close
8" 8" Yellow Pine Stringers
3'-0" apart longitudinally
12" Yellow Pine Piles
3'-0" apart longitudinally

GENERAL SECTIONS OF CIRCULAR SEWERS

Scale
12' 0" 6' 0" 3' 0" 1 FT 2 FT

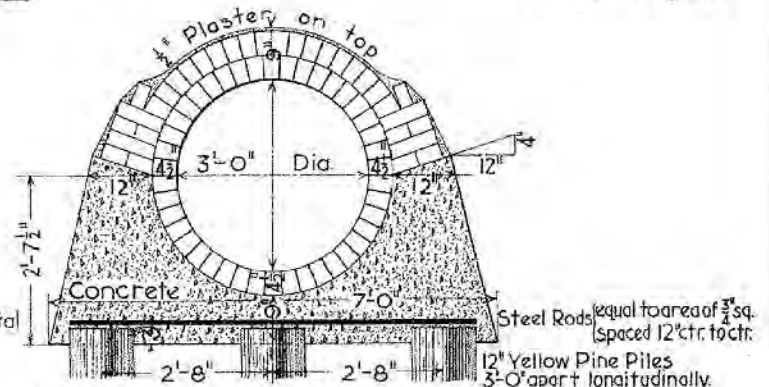
DEPARTMENT OF PUBLIC WORKS
BUREAU OF SURVEYS
PHILADELPHIA
1906

E. C. Minter
Chief Engineer

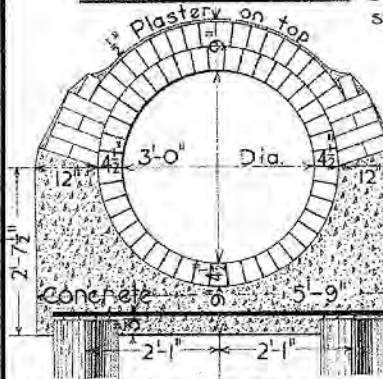


MINIMUM SECTION

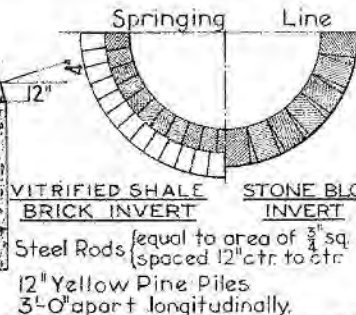
Filling over top of Sewer to be at least 3 feet deep and with a slope not less than $\frac{1}{2}$ ft. horizontal over 1 ft. vertical extending to the surface of the ground.



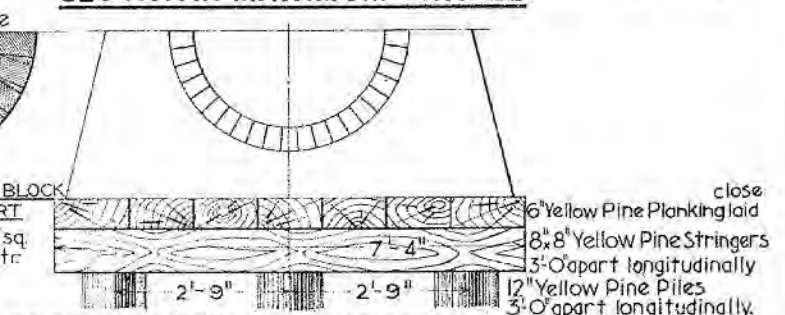
SECTION IN MAXIMUM CRADLE



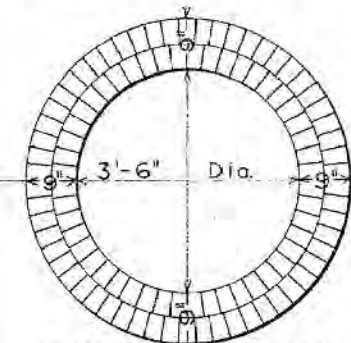
SECTION IN REDUCED CRADLE



VITRIFIED SHALE
BRICK INVERT
STONE BLOCK
INVERT
Steel Rods (equal to area of $\frac{3}{4}$ sq. spaced 12" ctr. to ctr.)
12" Yellow Pine Piles
3'-0" apart longitudinally.

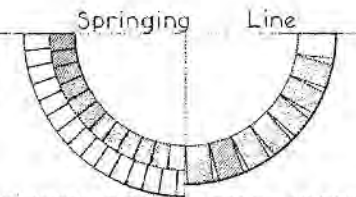


SECTION SHOWING PLATFORM and PILES

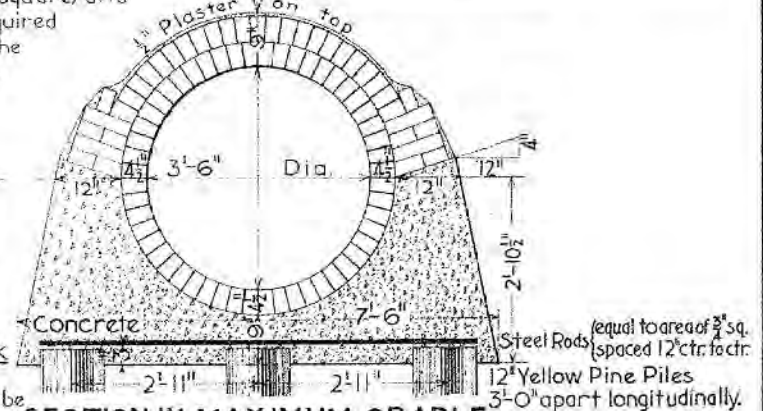


MINIMUM SECTION

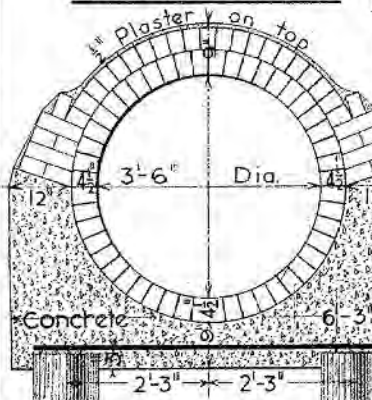
Steel Rods (equal to area of $\frac{3}{4}$ square) and Piles, or Piles and Platform, if required will be paid for at the price in the contract when ordered by the Chief Engineer.



VITRIFIED SHALE
BRICK INVERT
STONE BLOCK
INVERT
All Slants for Inlet connections to be 15" dia. for N^o1 and N^o2 Inlets, 12" dia. for N^o3 Inlets, and 8" dia. for N^o4 Inlets.

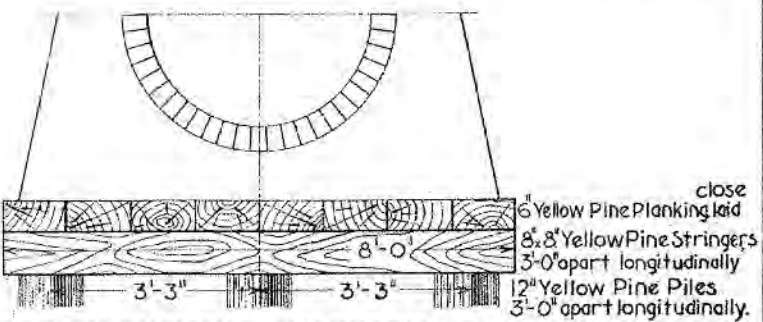


SECTION IN MAXIMUM CRADLE



SECTION IN REDUCED CRADLE

Steel Rods (equal to area of $\frac{3}{4}$ sq. spaced 12" ctr. to ctr.)
12" Yellow Pine Piles
3'-0" apart longitudinally.



SECTION SHOWING PLATFORM and PILES

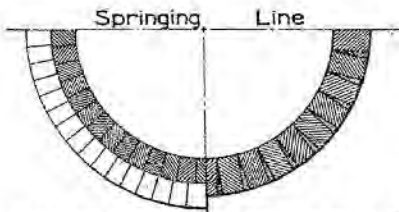
GENERAL SECTIONS OF CIRCULAR SEWERS

DEPARTMENT OF PUBLIC WORKS
BUREAU OF SURVEYS

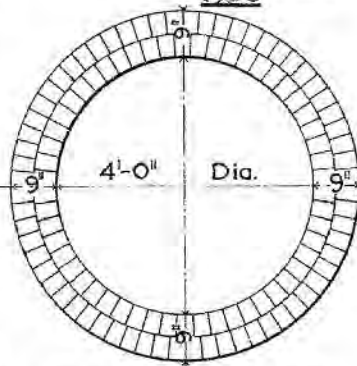
PHILADELPHIA
1906

Chief Engineer

Scale
0' 3' 6' 9' 12'



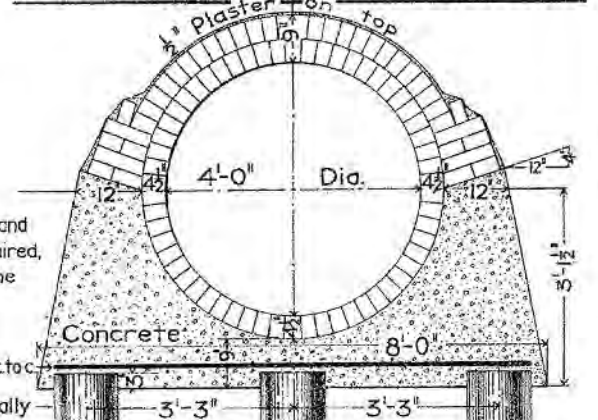
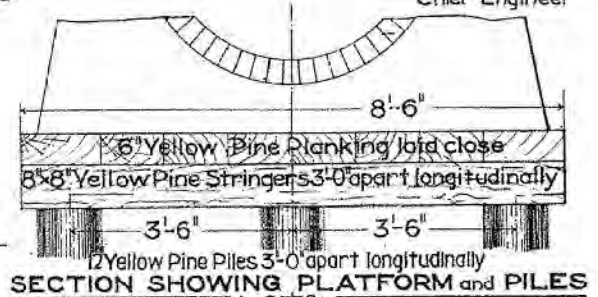
VITRIFIED SHALE
BRICK INVERT



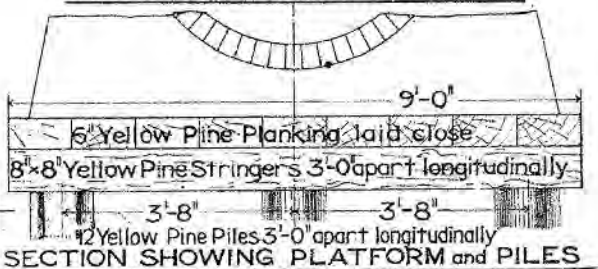
MINIMUM SECTION

Steel Rods (equal to area of $\frac{3}{4}$ " square) and Piles, or Piles and Platform, if required, will be paid for at the price in the contract when ordered by the Chief Engineer.

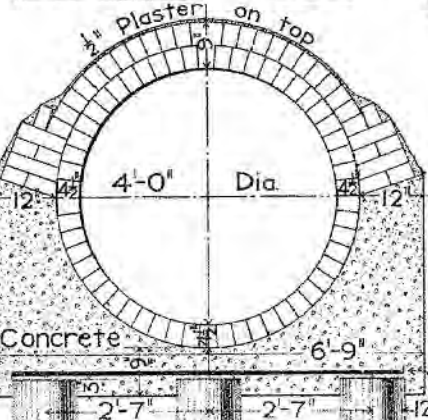
Steel Rods—equal to area of $\frac{3}{4}$ " sq. spaced 12" c. to c.



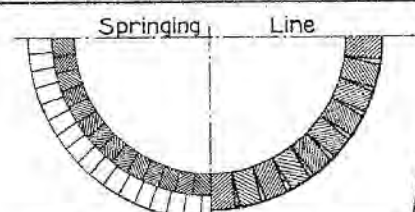
SECTION IN MAXIMUM CRADLE



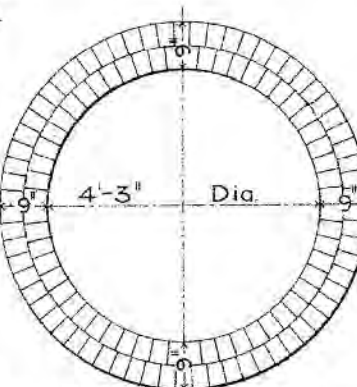
SECTION SHOWING PLATFORM and PILES



SECTION IN REDUCED CRADLE



VITRIFIED SHALE
BRICK INVERT

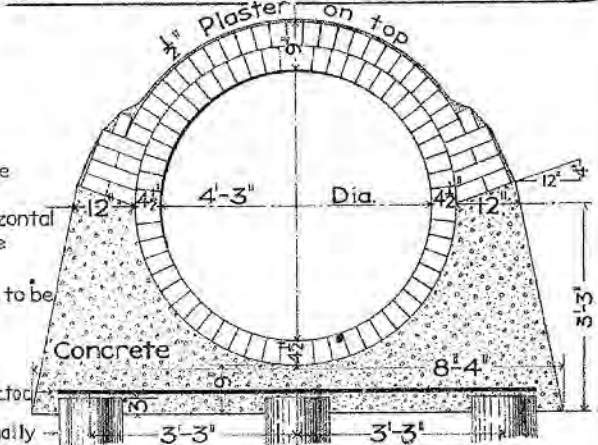


MINIMUM SECTION

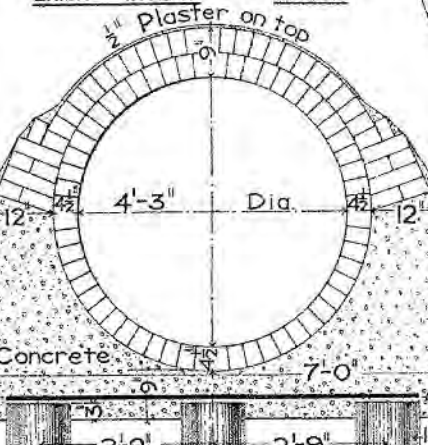
Filling over top of Sewer to be at least 3 feet deep and with a slope not less than $\frac{1}{2}$ ft. horizontal over 1 ft. vertical extending to the surface of the ground.

All Slants for Inlet connections to be 15" dia. for N^o1 and N^o2 Inlets, 12" dia. for N^o3 Inlets, and 8" dia. for N^o4 Inlets.

Steel Rods equal to area of $\frac{3}{4}$ " sq. spaced 12" c. to c.



SECTION IN MAXIMUM CRADLE



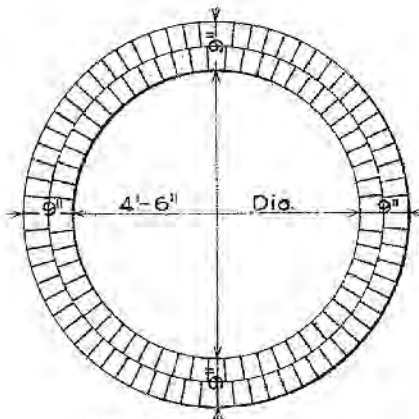
SECTION IN REDUCED CRADLE

GENERAL SECTIONS OF CIRCULAR SEWERS



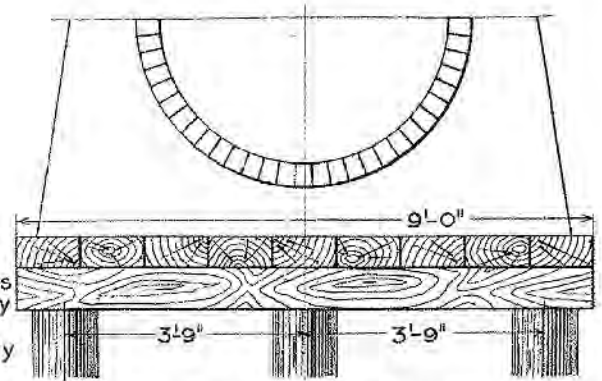
DEPARTMENT OF PUBLIC WORKS
BUREAU OF SURVEYS
PHILADELPHIA
1906

E. H. Halston
Chief Engineer



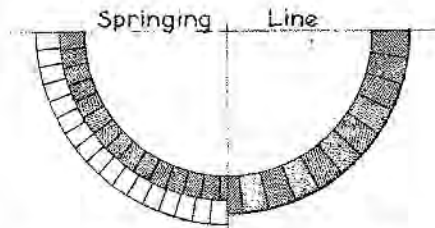
MINIMUM SECTION

6" Yellow Pine Planking laid close
8" x 8" Yellow Pine Stringers
3'-0" apart longitudinally
12" Yellow Pine Piles
3'-0" apart longitudinally



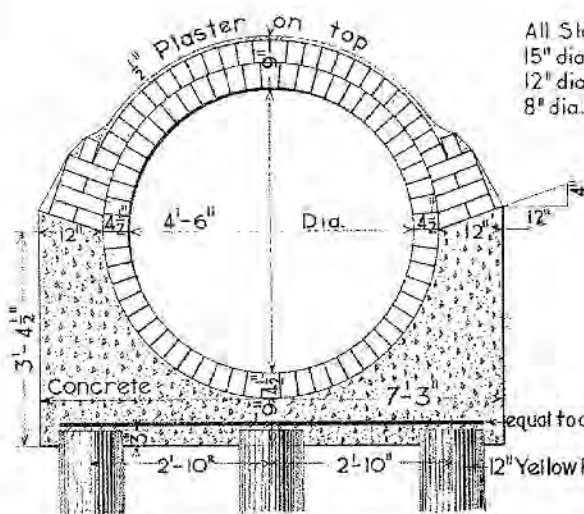
SECTION SHOWING PLATFORM and PILES

Filling over top of Sewer to be at least 3 feet deep and with a slope not less than $\frac{1}{2}$ ft. horizontal over 1 ft. vertical extending to the surface of the ground.



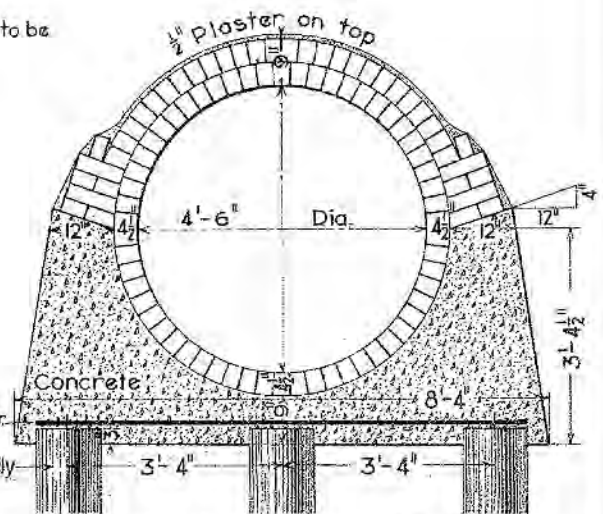
Steel Rods (equal to area of $\frac{3}{4}$ " square) and Piles, or Piles and Platform, if required, will be paid for at the price in the contract when ordered by the Chief Engineer.

VITRIFIED SHALE BRICK INVERT STONE BLOCK INVERT



SECTION IN REDUCED CRADLE

All Slants for Inlet connections to be 15" dia. for No 1 and No 2 Inlets, 12" dia. for No 3 Inlets, and 8" dia. for No 4 Inlets.



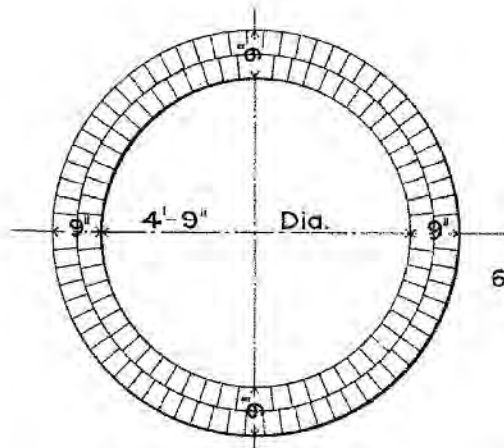
SECTION IN MAXIMUM CRADLE

GENERAL SECTIONS OF CIRCULAR SEWERS



DEPARTMENT OF PUBLIC WORKS
BUREAU OF SURVEYS
PHILADELPHIA
1906

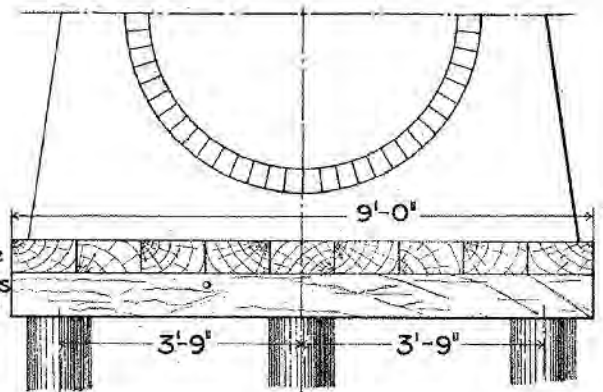
S. H. Weston
Chief Engineer



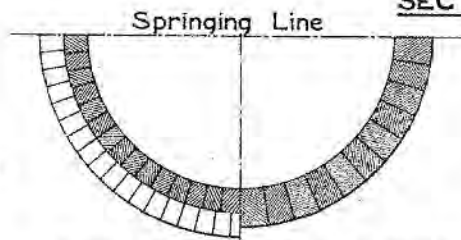
MINIMUM SECTION

Filling over top of Sewer to be at least 3 Feet deep and with a slope not less than $\frac{1}{2}$ ft. horizontal over 1 ft. vertical, extending to the surface of the ground.

6" Yellow Pine Planking laid close
8" x 8" Yellow Pine Stringers
3'-0" apart longitudinally
12" Yellow Pine Piles
3'-0" apart longitudinally



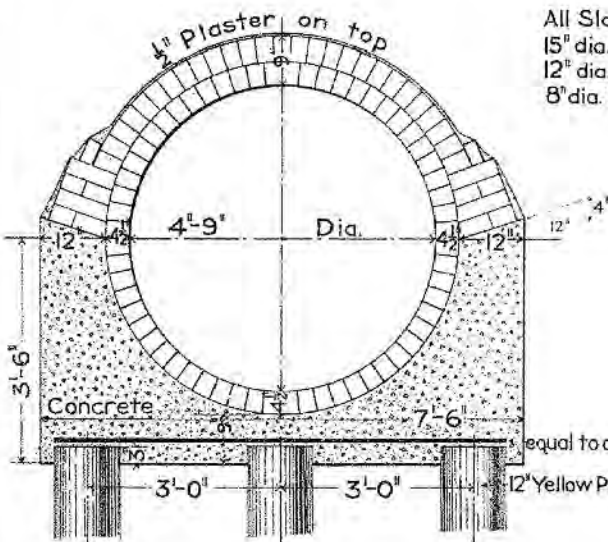
SECTION SHOWING PLATFORM and PILES



VITRIFIED SHALE
BRICK INVERT

STONE BLOCK
INVERT

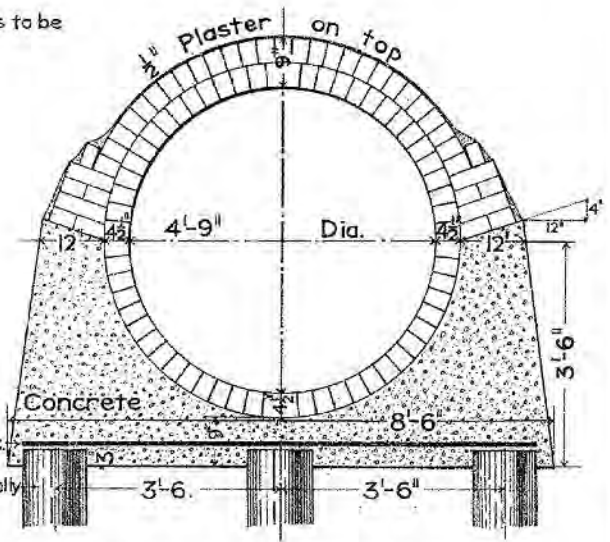
Steel Rods (equal to area of $\frac{3}{4}$ " square) and Piles, or Piles and Platform, if required, will be paid for at the price in the contract when ordered by the Chief Engineer.



SECTION IN REDUCED CRADLE

All Slants for Inlet connections to be
15" dia. for N^o 1 and N^o 2 Inlets,
12" dia. for N^o 3 Inlets, and
8" dia. for N^o 4 Inlets.

Steel Rods
equal to area of $\frac{3}{4}$ " sq. spaced 12" c. to c.
12" Yellow Pine Piles 3'-0" apart longitudinally



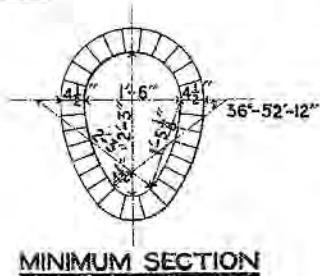
SECTION IN MAXIMUM CRADLE

GENERAL SECTIONS OF EGG-SHAPED SEWERS

DEPARTMENT OF PUBLIC WORKS
BUREAU OF SURVEYS
PHILADELPHIA
1906

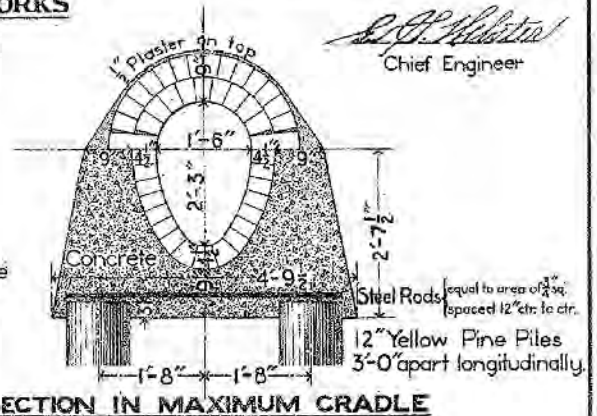
E. J. Mott
Chief Engineer

12" 9" 6" 3" 0" 1" 2" 2"
Scale

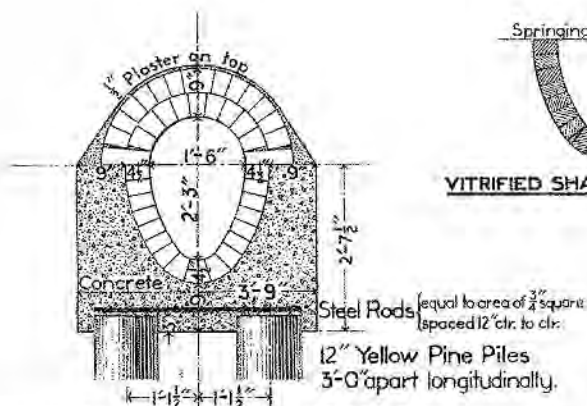


MINIMUM SECTION

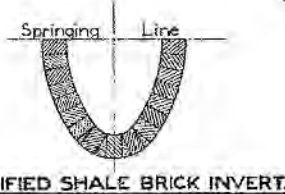
All Slants for Inlet Connections to be 15" dia. for N^o 1 and N^o 2 Inlets, 12" dia. for N^o 3 Inlets, and 8" dia. for N^o 4 Inlets.



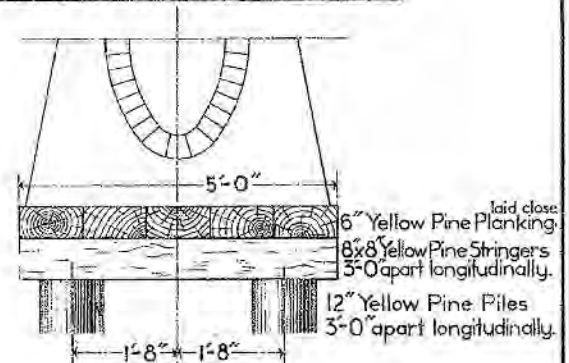
SECTION IN MAXIMUM CRADLE



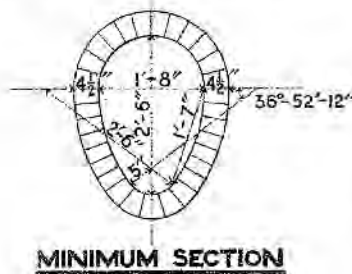
SECTION IN REDUCED CRADLE



VITRIFIED SHALE BRICK INVERT.



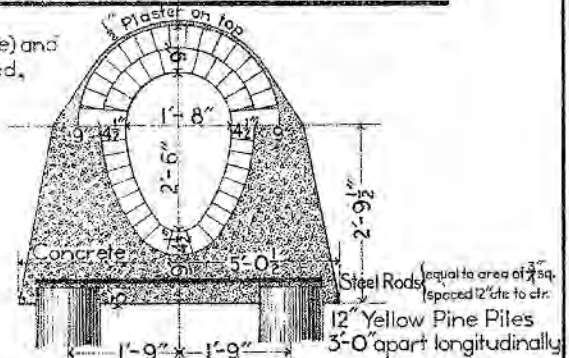
SECTION SHOWING PLATFORM AND PILES



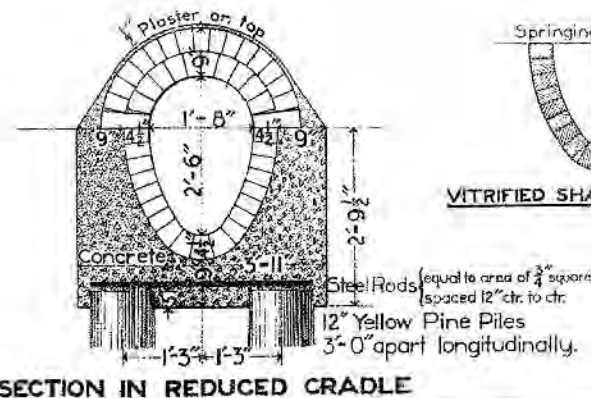
MINIMUM SECTION

Steel Rods (equal to area of $\frac{3}{4}$ " square) and Piles, or Piles and Platform, if required, will be paid for at the price in the contract when ordered by the Chief Engineer.

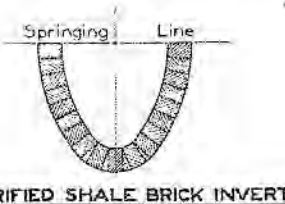
Filling over top of Sewer to be at least 3 feet deep and with a slope not less than $\frac{1}{2}$ ft. horizontal over 1 ft. vertical, extending to the surface of the ground.



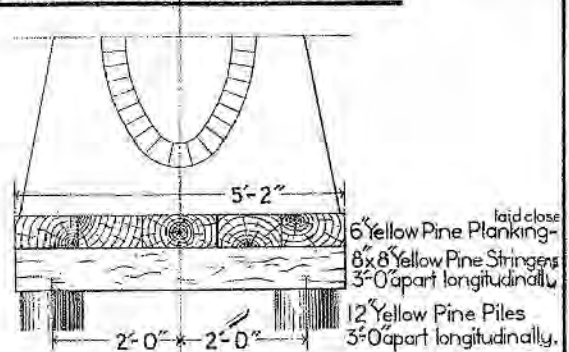
SECTION IN MAXIMUM CRADLE



SECTION IN REDUCED CRADLE



VITRIFIED SHALE BRICK INVERT.



SECTION SHOWING PLATFORM AND PILES

GENERAL SECTIONS OF EGG-SHAPED SEWERS

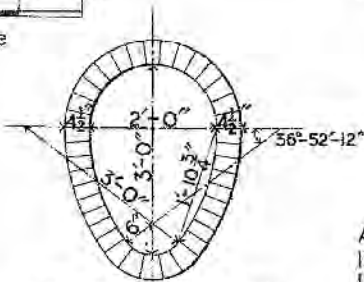
DEPARTMENT OF PUBLIC WORKS

BUREAU OF SURVEYS

PHILADELPHIA

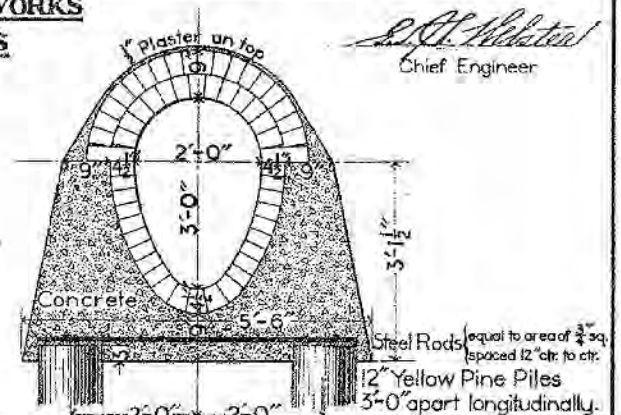
1906

12" 9" 6" 3" 0"
Scale 1 FT. 2 FT.

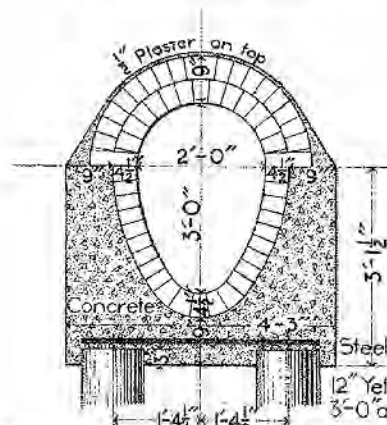


MINIMUM SECTION

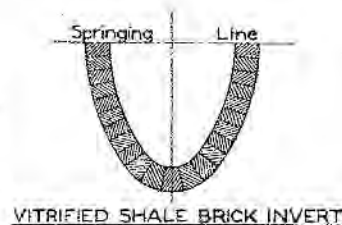
All Slants for Inlet Connections to be 15" dia. for N^o 1 and N^o 2 Inlets, 12" dia. for N^o 3 Inlets, and 8" dia. for N^o 4 Inlets.



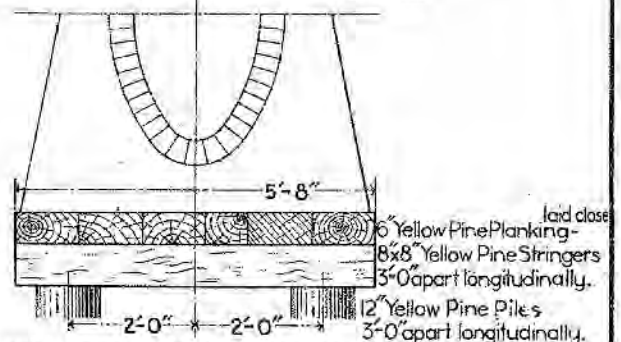
SECTION IN MAXIMUM CRADLE



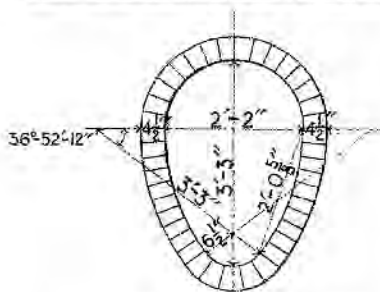
SECTION IN REDUCED CRADLE



VITRIFIED SHALE BRICK INVERT



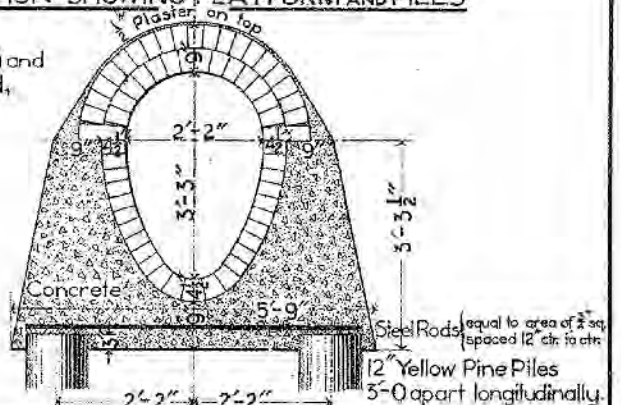
SECTION SHOWING PLATFORM AND PILES



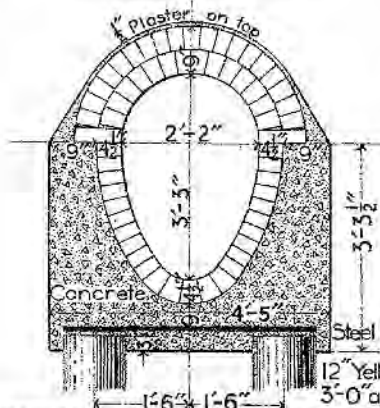
MINIMUM SECTION

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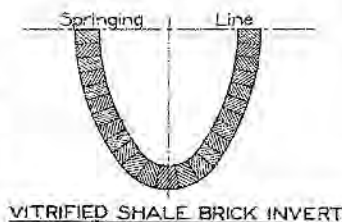
Filling over top of Sewer to be at least 3 feet deep and with a slope not less than $\frac{1}{2}$ ft. horizontal over 1 ft. vertical, extending to the surface of the ground.



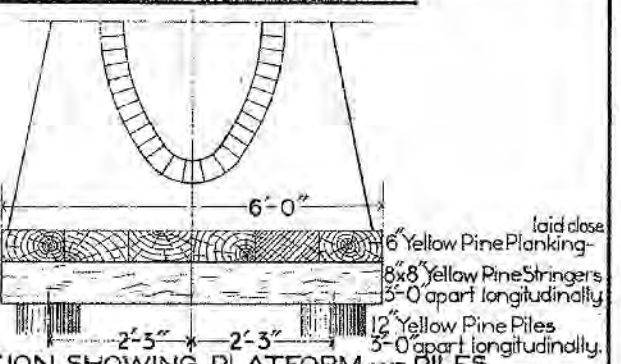
SECTION IN MAXIMUM CRADLE



SECTION IN REDUCED CRADLE



VITRIFIED SHALE BRICK INVERT



SECTION SHOWING PLATFORM AND PILES

GENERAL SECTIONS OF EGG-SHAPED SEWERS

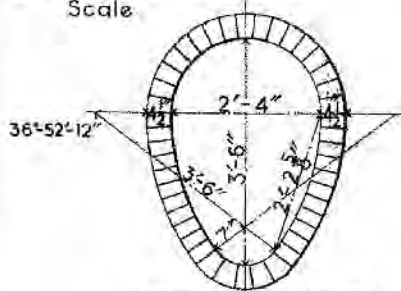
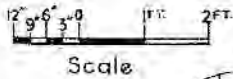
DEPARTMENT OF PUBLIC WORKS

BUREAU OF SURVEYS

PHILADELPHIA

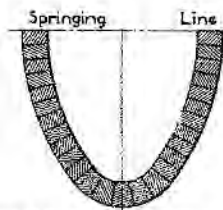
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E. J. H. H. H.
Chief Engineer

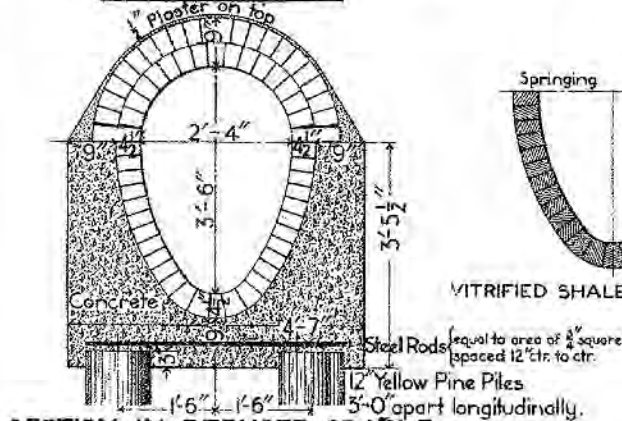


MINIMUM SECTION

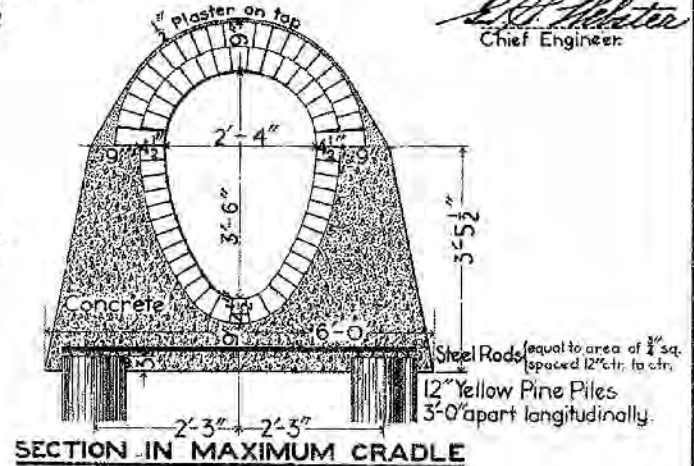
All Slants for Inlet Connections to be 15" dia. for No 1 and No 2 Inlets, 12" dia. for No 3 Inlets, and 8" dia. for No 4 Inlets.



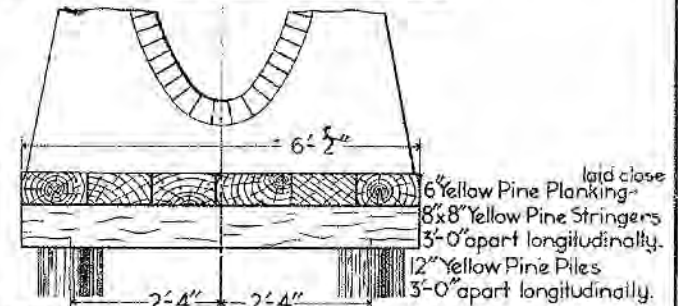
VITRIFIED SHALE BRICK INVERT



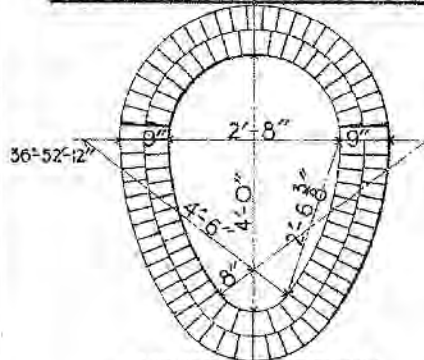
SECTION IN REDUCED CRADLE



SECTION IN MAXIMUM CRADLE



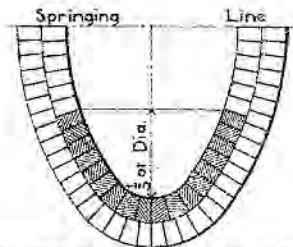
SECTION SHOWING PLATFORM AND PILES



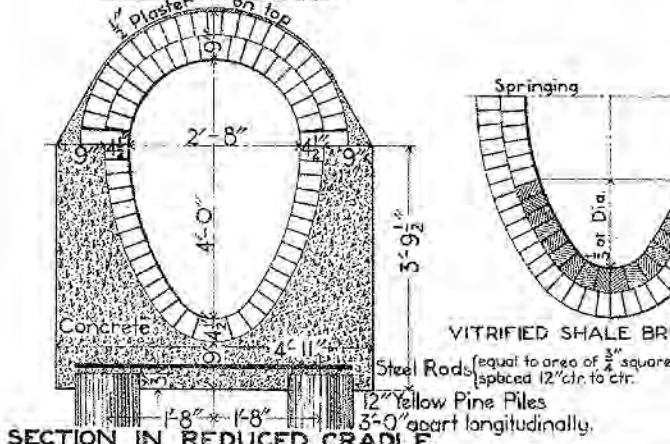
MINIMUM SECTION

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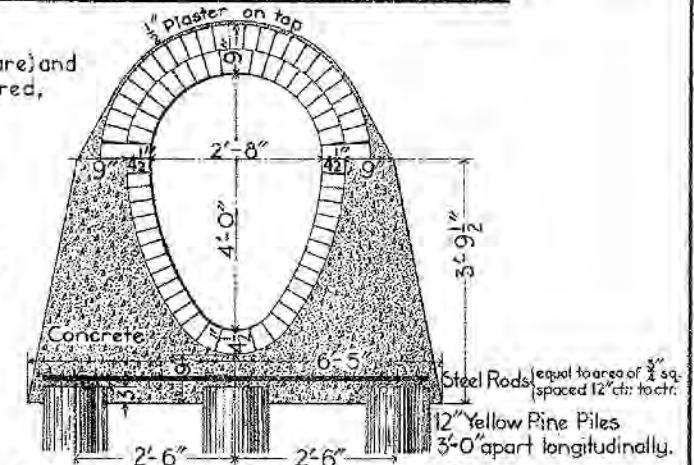
Filling over top of Sewer to be at least 3 feet deep and with a slope not less than $\frac{1}{2}$ ft. horizontal over 1 ft. vertical, extending to the surface of the ground.



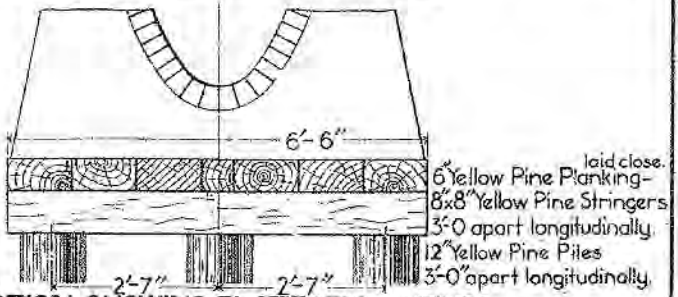
VITRIFIED SHALE BRICK INVERT



SECTION IN REDUCED CRADLE



SECTION IN MAXIMUM CRADLE

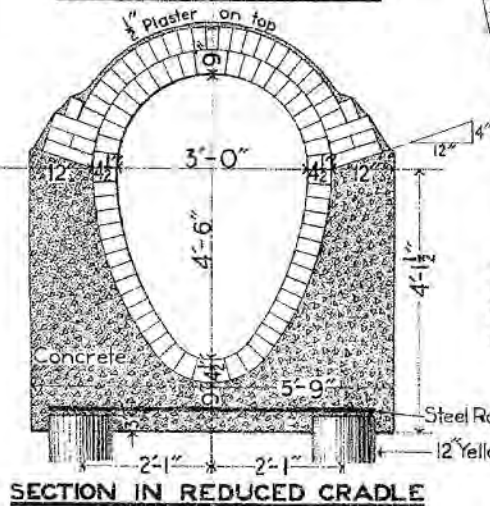
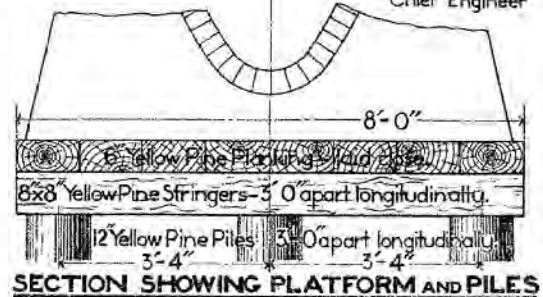
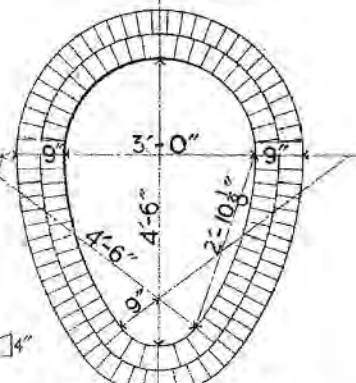
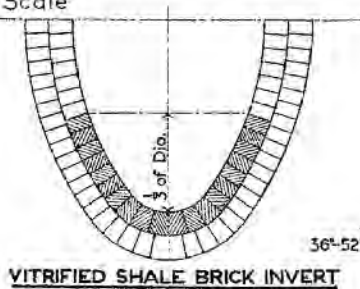
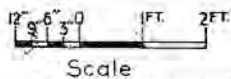


SECTION SHOWING PLATFORM AND PILES

GENERAL SECTIONS OF EGG-SHAPED SEWERS

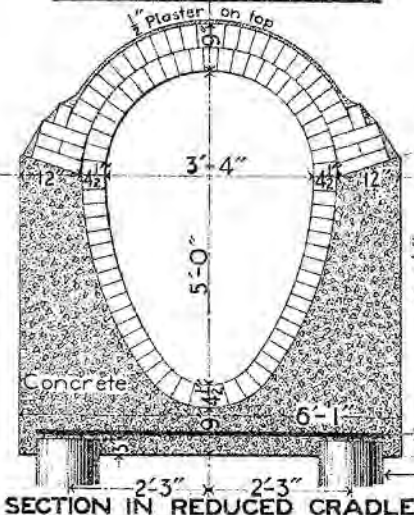
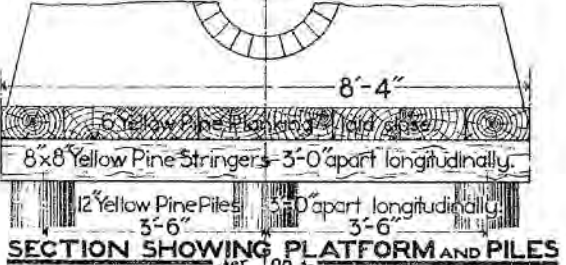
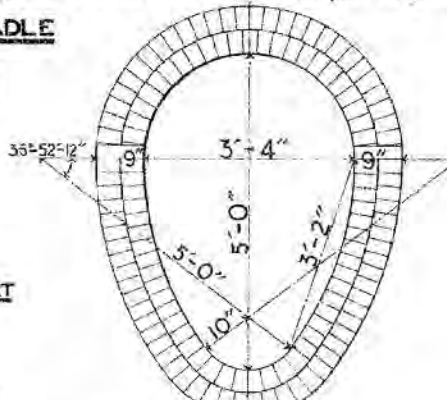
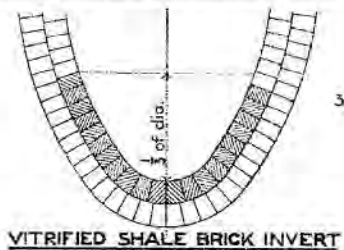
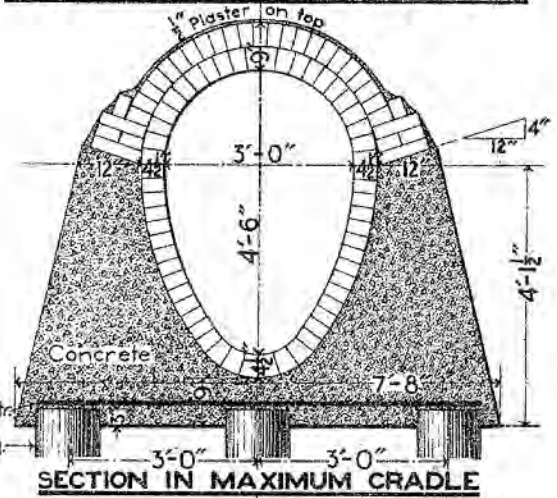
DEPARTMENT OF PUBLIC WORKS
BUREAU OF SURVEYS
PHILADELPHIA
1906

E. H. Miller
Chief Engineer



All Slants for Inlet Connections to be 15" dia. for No 1 and No 2 Inlets, 12" dia. for No 3 Inlets, and 8" dia. for No 4 Inlets.

Steel Rods—equal to area of $\frac{3}{4}$ sq. — spaced 12" ctr. to cr.
12" Yellow Pine Piles 3'-0" apart longitudinally.

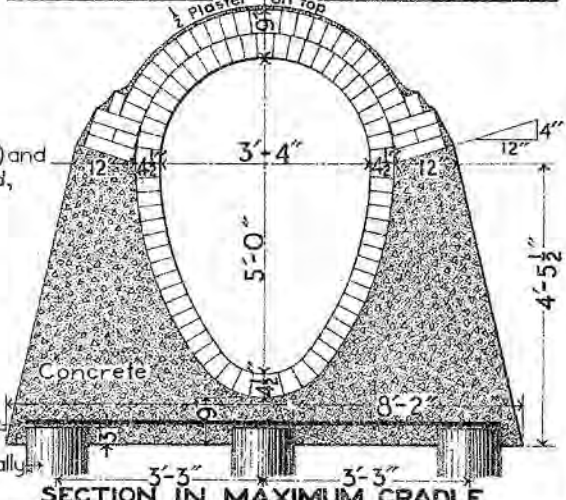


MINIMUM SECTION

Steel Rods (equal to area of $\frac{3}{4}$ square) and Piles, or Piles and Platform, if required, will be paid for at the price in the contract when ordered by the Chief Engineer.

Filling over top of Sewer to be at least 3 feet deep and with a slope not less than $\frac{1}{2}$ ft. horizontal over 1 ft. vertical, extending to the surface of the ground.

Steel Rods—equal to area of $\frac{3}{4}$ sq. — spaced 12" c. to c.
12" Yellow Pine Piles 3'-0" apart longitudinally.



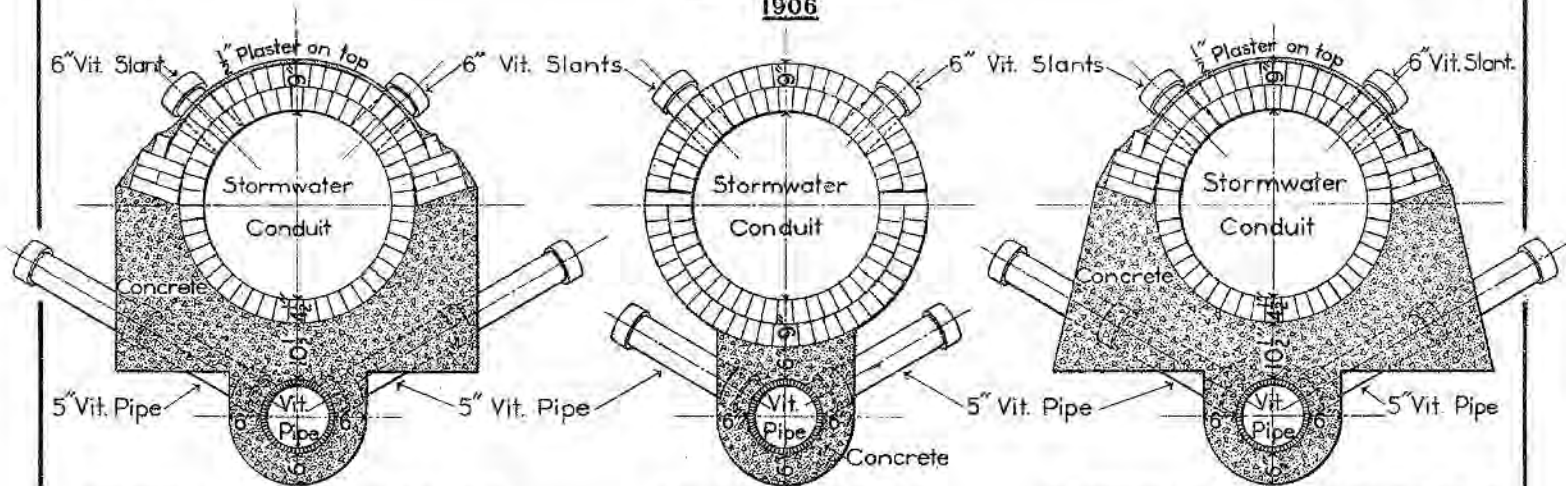
GENERAL SECTIONS FOR SEPARATE SYSTEM

12" 9" 6" 3" 0" 1 FT. 2 FT.
Scale

DEPARTMENT OF PUBLIC WORKS
BUREAU OF SURVEYS
PHILADELPHIA

1906

E. H. Wharton
Chief Engineer



SECTION IN REDUCED CRADLE

MINIMUM SECTION

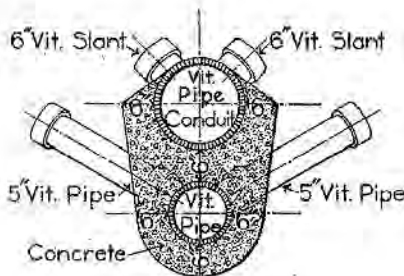
SECTION IN MAXIMUM CRADLE

RELATIVE POSITION FOR ALL CONDUITS OVER 2'-9" DIA.

6" dia. Vit. Slants for stormwater, and 5" dia. Vit. Slants and Pipes for house connections, as shown on sections, to be built every 15 feet, and included in price per linear foot of sewer.

All Slants for Inlet Connections to be 15" dia. for N^o 1 and N^o 2 Inlets, 12" dia. for N^o 3 Inlets, and 8" dia. for N^o 4 Inlets, to connect to stormwater conduit only.

The Cross Sections of the Separate System must conform in all respects to the General Details of Brick and Pipe Sewers.

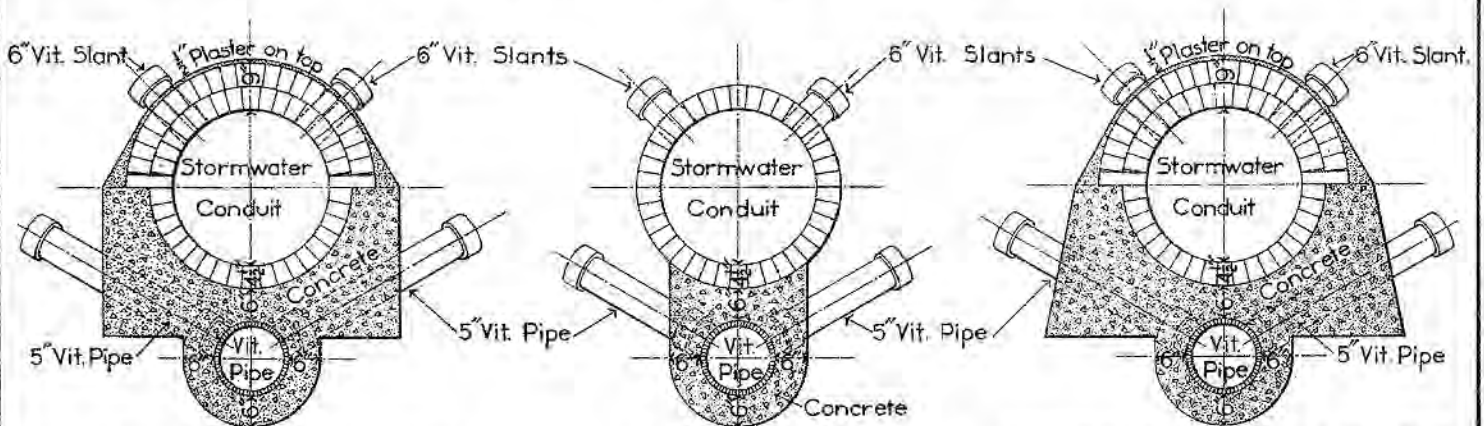


RELATIVE POSITION OF PIPE SEWERS

Concrete to be not less than 6" between outsides of Conduit and Pipe, but may be increased in special cases when required.

Concrete may be reduced in rock excavation only, as per specifications.

Filling over top of sewer to be at least 3 feet deep and with a slope not less than 1 1/2 ft. horizontal over 1 ft. vertical, extending to the surface of the ground.



SECTION IN REDUCED CRADLE

MINIMUM SECTION

SECTION IN MAXIMUM CRADLE

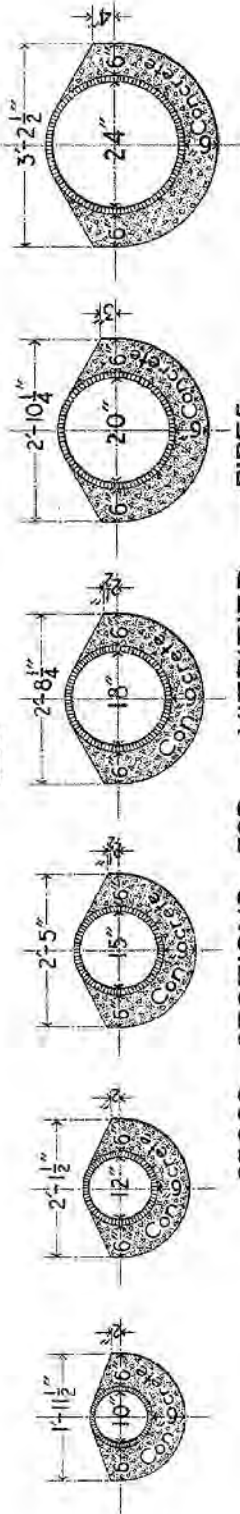
RELATIVE POSITION FOR ALL CONDUITS UNDER 3'-0" DIA.

MANHOLE AND GENERAL DETAILS FOR VIT PIPE SEWERS

DEPARTMENT OF PUBLIC WORKS
BUREAU OF SURVEYS
PHILADELPHIA

1906

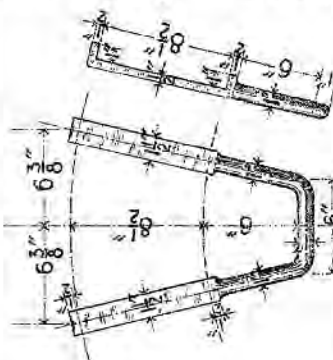
E. P. Hutton
Chief Engineer



All Slants for Inlet Connections to be 15" dia. for No 1 and No 2 Inlets, 12" dia. for No 3 Inlets, and 8" dia. for No 4 Inlets.

5" dia. Slants for House Connections to be not less than 15 ft. apart on each side by means of single Y's.

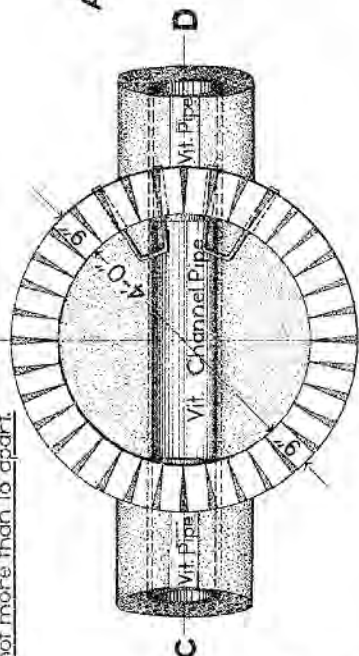
Filling over top of Sewer to be at least 3 ft. deep and with a slope not less than 1/4 ft. horizontal over 1 ft. vertical, extending to the surface of the ground.



GALVANIZED WROUGHT-IRON STEPS FOR MANHOLES

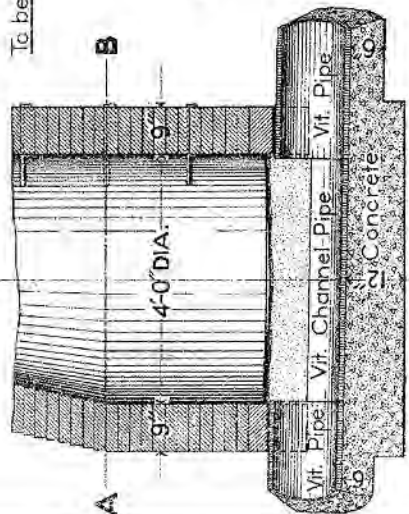
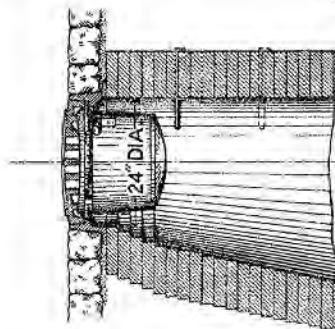
To be not more than 18" apart.

7



PLAN A-B

DETAILS OF MANHOLE FOR VITRIFIED PIPES



SECTION C-D

SECTION E-F

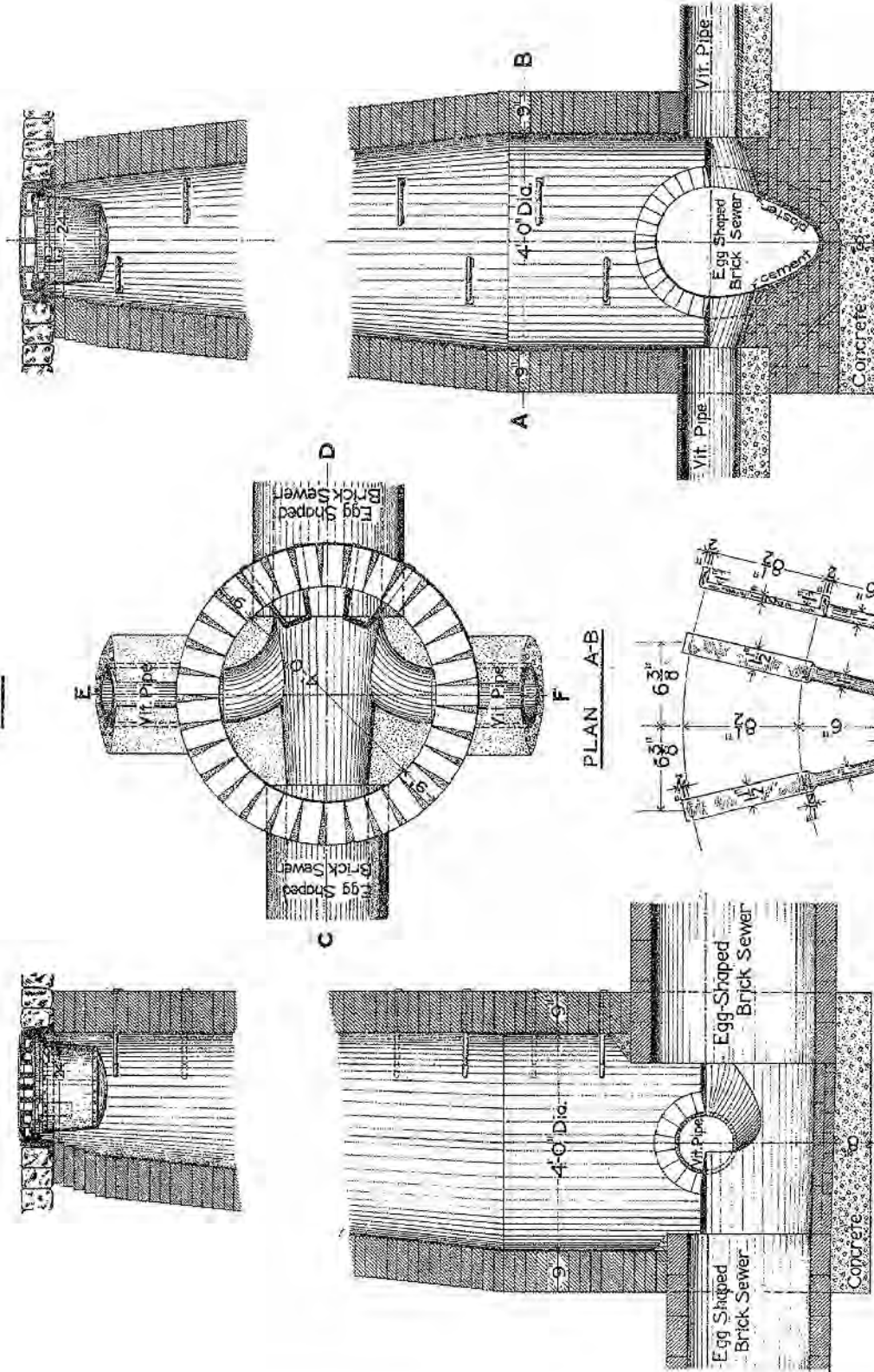
MANHOLE FOR JUNCTIONS

DEPARTMENT OF PUBLIC WORKS
BUREAU OF SURVEYS
PHILADELPHIA

1906



E. P. Mott
Chief Engineer

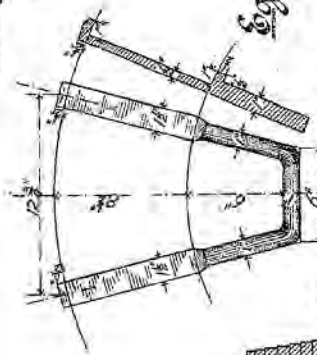


GALVANIZED WROUGHT-IRON STEPS
FOR MANHOLES
To be not more than 18" apart

General Details for Egg-shaped Sewers, City of Philadelphia.

DEPT. OF PUBLIC WORKS,
BUREAU OF SURVEYS,
FEB. 1895.
Revised Jan. 1903

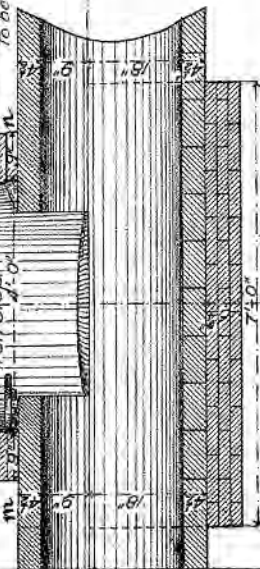
Edw. H. Mott
CHIEF ENGINEER.



Manholes

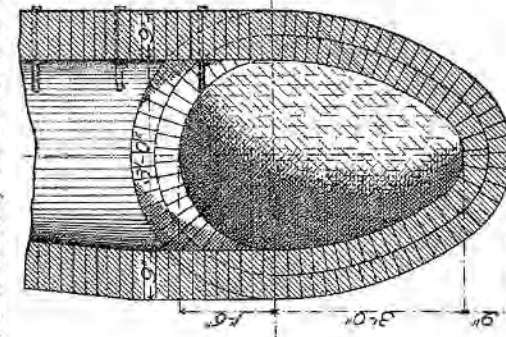
Egg-shaped Sewers 16' 2 3/4' to 24' x 36'.

Wrought-iron Steps
To be Galvanized



Section a-b

Foundation of concrete under brickwork where directed

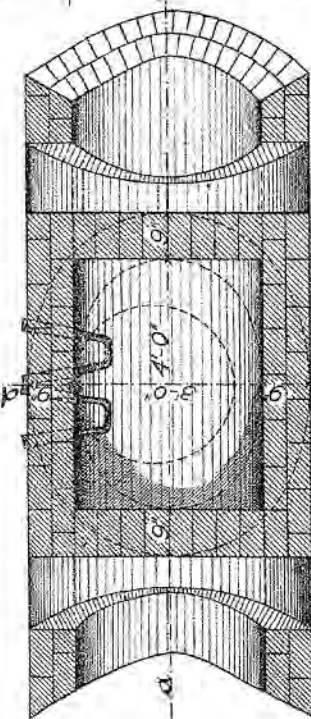


Section c-d

Wrought-iron Ladder Bars
To be Galvanized



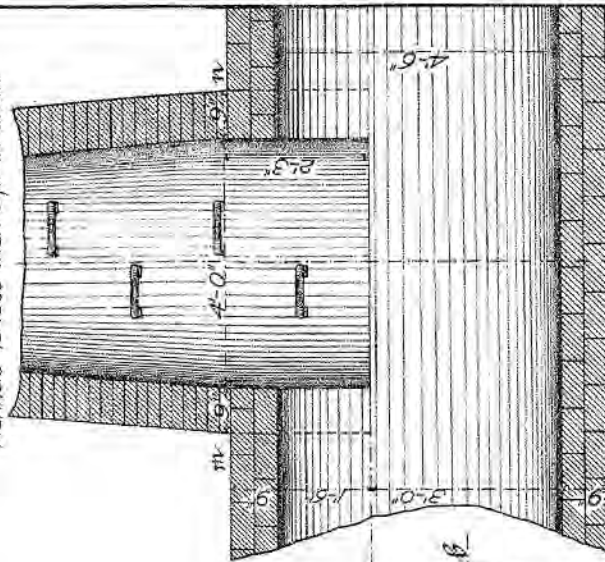
Plan m-n



Plan p-q

Section c-d

Ladder Bars to be used where Manhole is less than 3ft. in diam.



Section a-b

Foundation of concrete under brickwork where directed

Manholes for Egg-shaped Sewers

Chas. F. Mott

STANDARD WELLHOLE DETAILS

DEPARTMENT OF PUBLIC WORKS

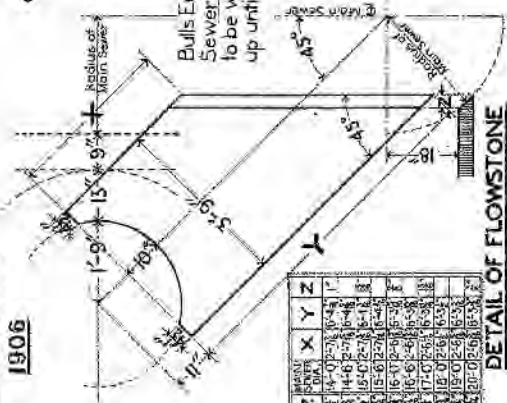
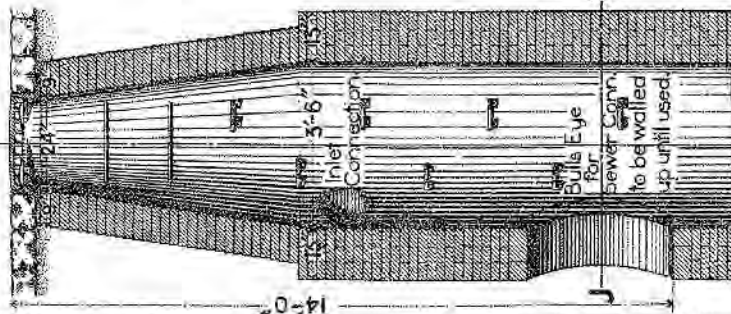
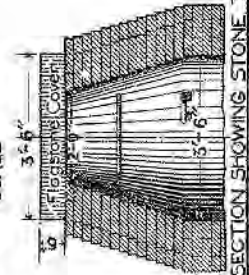
BUREAU OF SURVEYS

PHILADELPHIA

1906

E. P. Mather
Chief Engineer

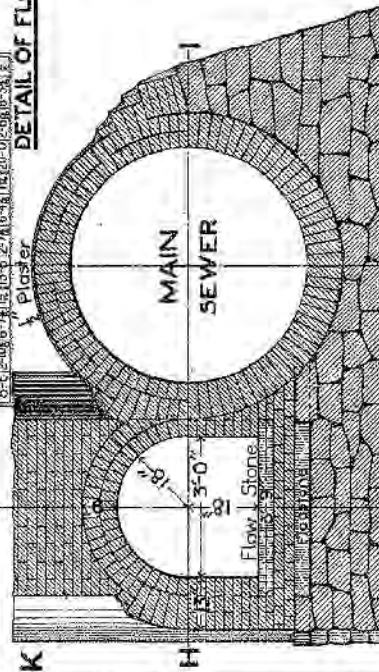
SCALE
1" = 1'-0"
1" = 2'-0"
1" = 3'-0"



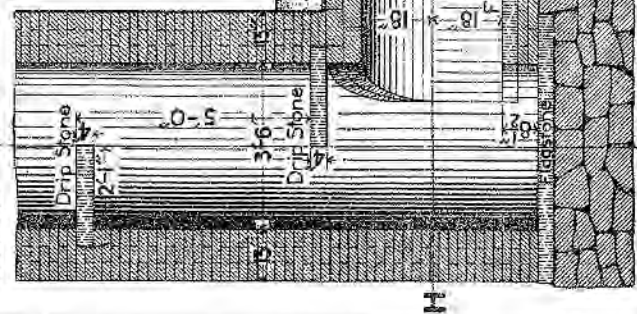
MAIN SEWER	X	Y	Z	X	Y	Z	X	Y	Z	MAIN SEWER
14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"
13'-0"	13'-0"	13'-0"	13'-0"	13'-0"	13'-0"	13'-0"	13'-0"	13'-0"	13'-0"	13'-0"
12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
11'-0"	11'-0"	11'-0"	11'-0"	11'-0"	11'-0"	11'-0"	11'-0"	11'-0"	11'-0"	11'-0"
10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
9'-0"	9'-0"	9'-0"	9'-0"	9'-0"	9'-0"	9'-0"	9'-0"	9'-0"	9'-0"	9'-0"
8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"
6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"
5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"
4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"
3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"
2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"
1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"

PLAN SECTION ON J-K

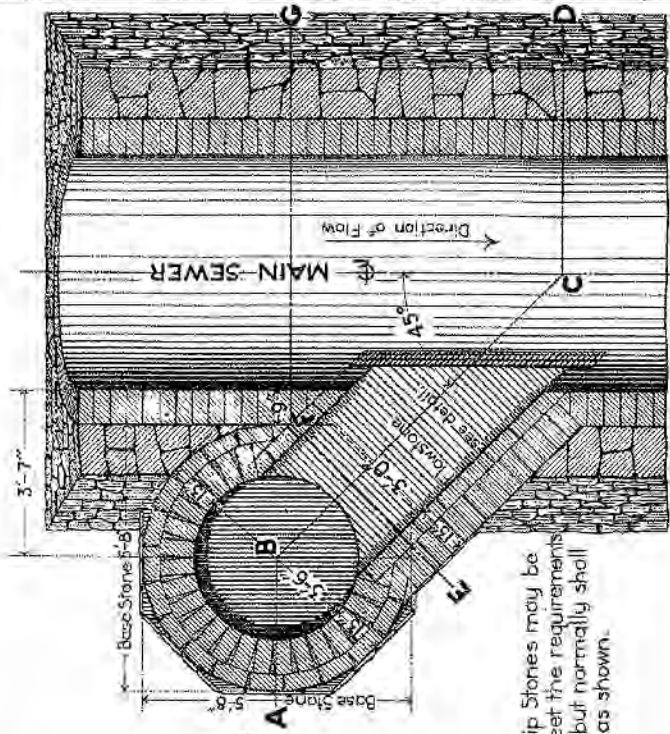
DETAIL OF FLOWSTONE



SECTION ON E-F-G



SECTION ON A-B-C-D



PLAN SECTION ON H-I

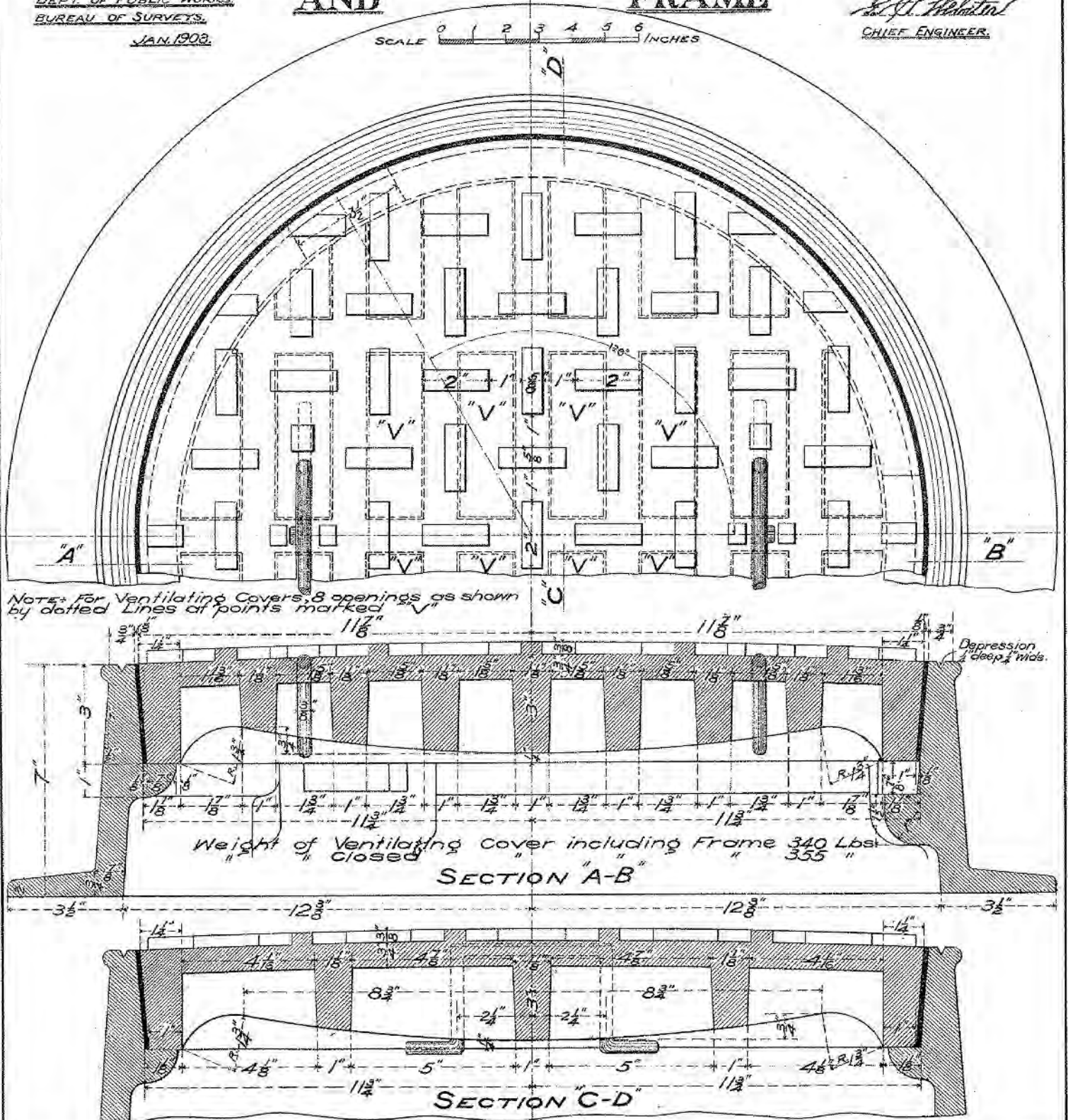
NOTE
Location of Drip Stones may be adjusted to meet the requirements of each case, but normally shall be 5'-0" apart as shown.

CAST IRON MANHOLE COVER. AND FRAME

DEPT. OF PUBLIC WORKS.
BUREAU OF SURVEYS.
JAN. 1903.

E. H. Whitford
CHIEF ENGINEER

SCALE 0 1 2 3 4 5 6 INCHES



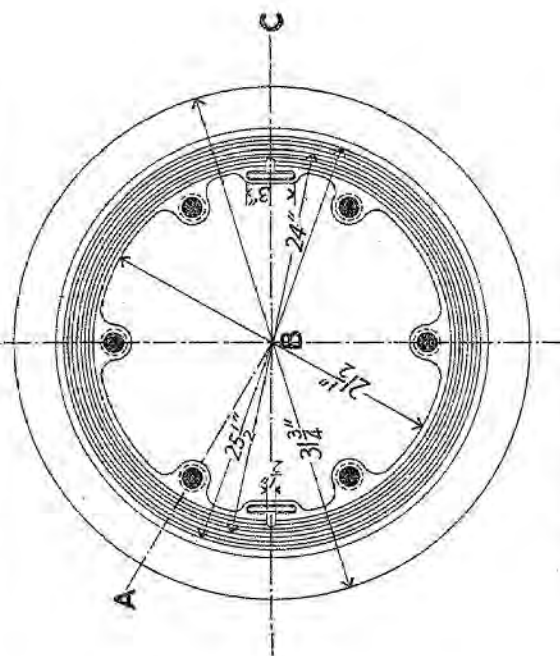
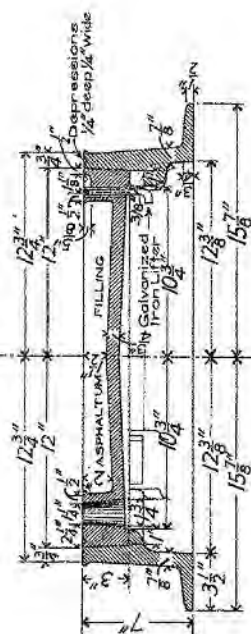
ASPHALTUM FILLED CAST IRON MANHOLE COVERS AND FRAMES

DEPARTMENT OF PUBLIC WORKS
BUREAU OF SURVEYS
JANUARY 1900

[Signature]
CHIEF ENGINEER

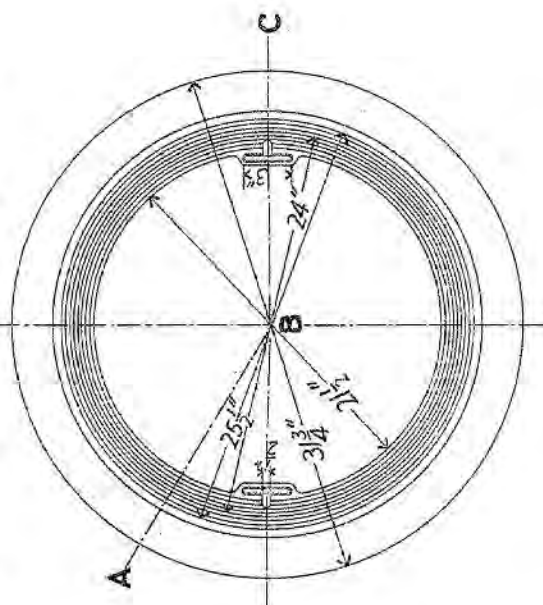
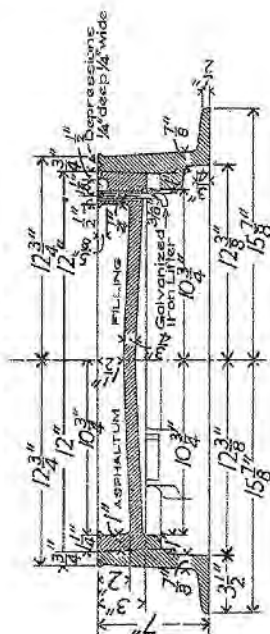


SECTION A-B-C



VENTILATING COVER AND FRAME

SECTION A-B-C



CLOSED COVER AND FRAME

STANDARD

MANHOLE

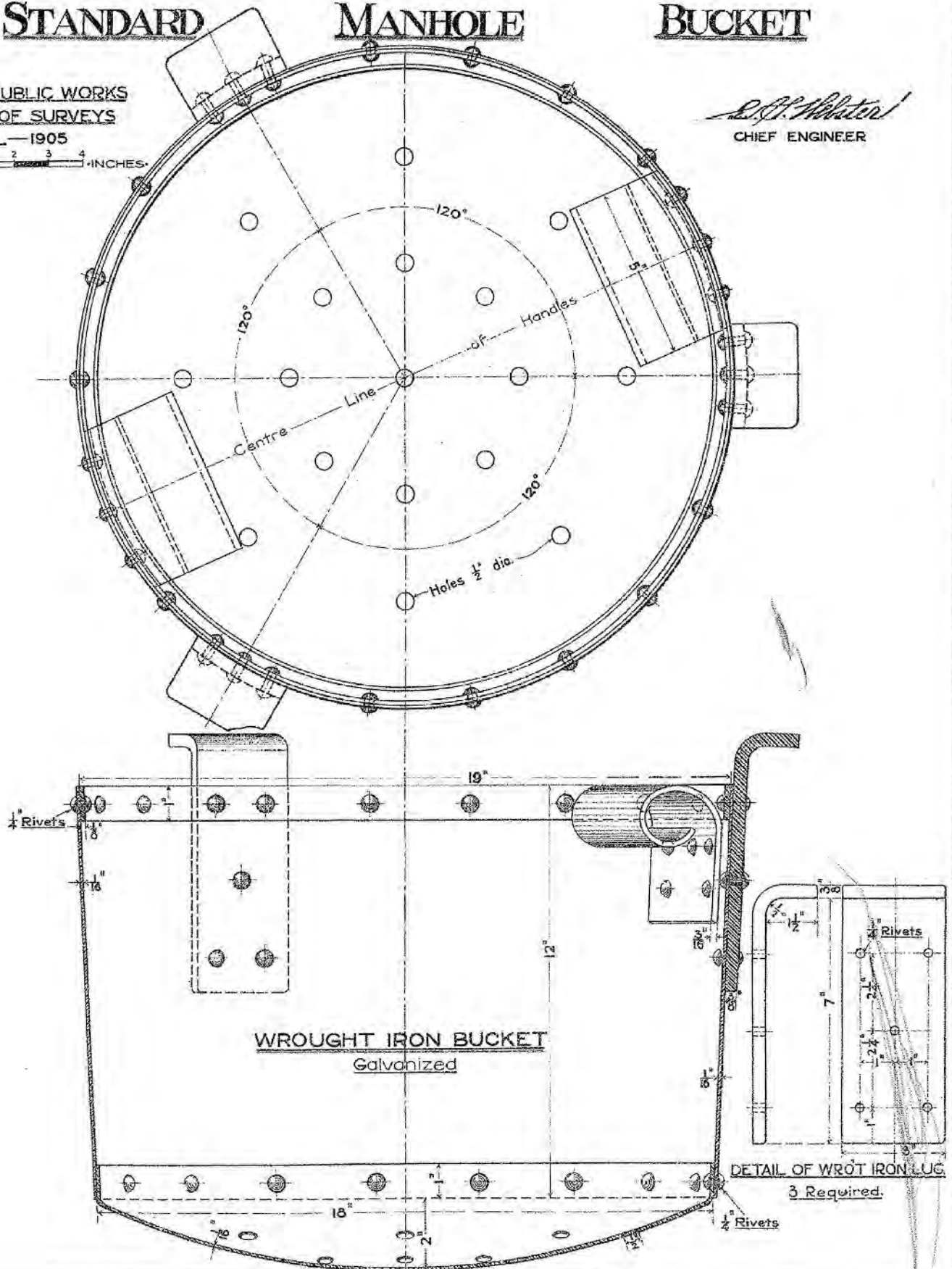
BUCKET

DEPT. OF PUBLIC WORKS
BUREAU OF SURVEYS

APRIL—1905

SCALE 0 1 2 3 4 INCHES

E. J. Whelan
CHIEF ENGINEER



No 1. OPEN MOUTH BRICK AND STONE INLET.

Dept of Public Works Bureau of Surveys

Phila. Jan. 1899
Revised Jan. 1903.

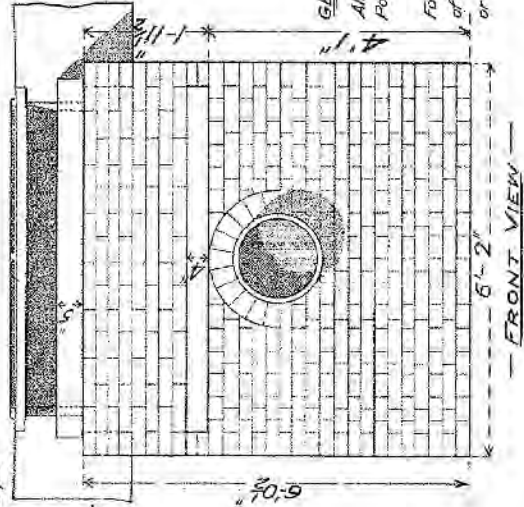
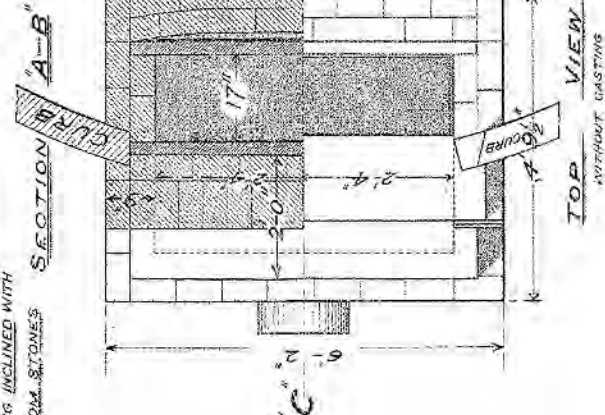
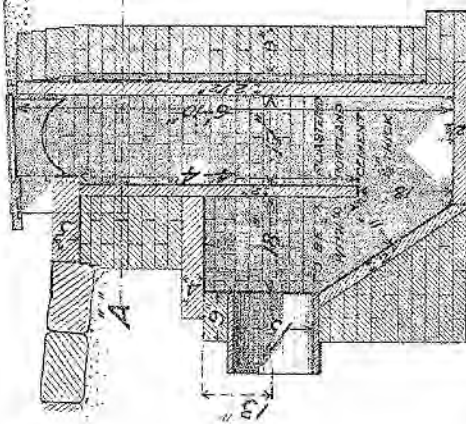
Scales Chief Engineer



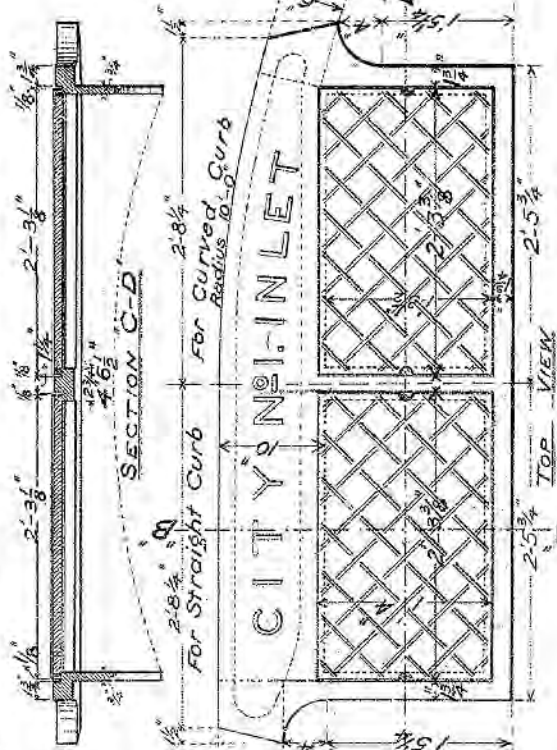
BILL OF LADING FOR INLET.

Drip Stone	1'-4" x 5'-6" x 5"
Trap "	4'-4" x 5'-4" x 2"
Back "	6'-10" x 5'-4" x 2 1/2"
Cover "	2'-0" x 5'-4" x 4"
Inclined "	2'-10" x 5'-4" x 2"
Bottom "	2'-5 1/2" x 5'-4" x 2 1/2"

WEIGHT OF CASTINGS
FOR STRAIGHT CURB 630 LBS
FOR CURVED CURB 630 LBS



DETAILS FOR CASTING



GENERAL NOTES
All Brickwork to be laid in
Portland Cement Mortar.
Foundation of Inlet to be
of Rubble Masonry, Timber
or Concrete as directed.

No 2&3. OPEN MOUTH BRICK AND STONE INLETS

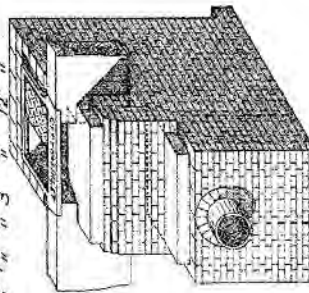
Dept of Public Works Bureau of Surveys
Phila. Jan. 1899.
Revised Jan. 1903.

L. P. Wheeler
Chief Engineer

SCALE
12" 6" 0" 1" 2" 3"

GENERAL NOTES

All Brickwork to be laid in Portland Cement Mortar.
Foundation of Inlet to be of Rubble Masonry, Timber or
Concrete as directed.
Outlet Pipe for No 2, Inlets 15" dia.
Outlet Pipe for No 3, Inlets 12" dia.



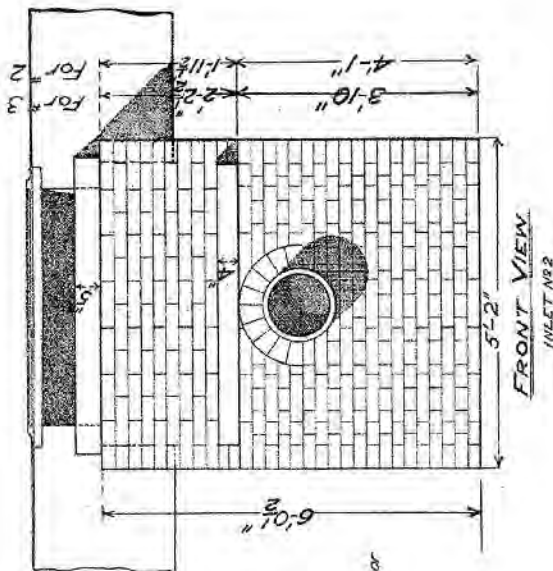
ISOMETRIC VIEW

BILL OF FLAGGING FOR INLET No 2.

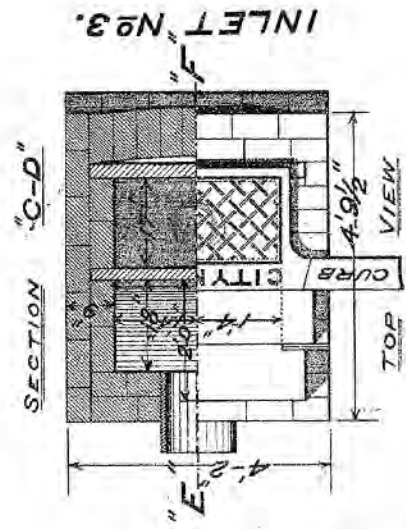
Drip Stone	1'-4" x 4'-8" x 5"
Trap	4'-4" x 4'-4" x 2"
Back	5'-0" x 4'-4" x 2 1/2"
Cover	2'-0" x 4'-4" x 4"
Inclined	2'-10" x 4'-4" x 2"
Bottom	2'-3" x 4'-4" x 2 1/2"

BILL OF FLAGGING FOR INLET No 3.

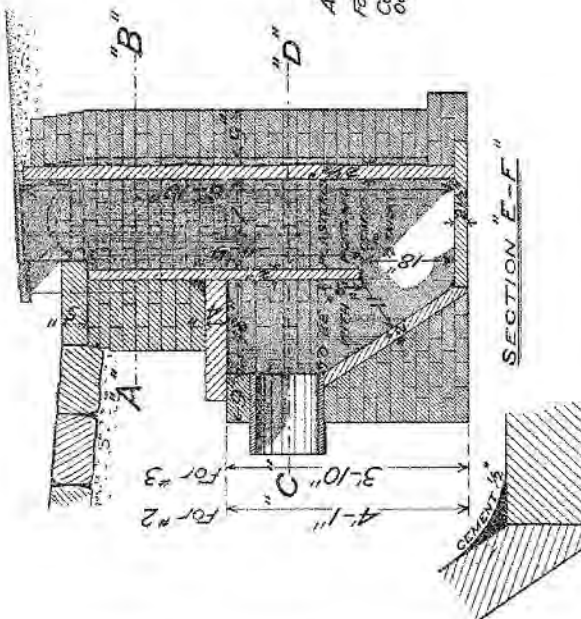
Drip Stone	1'-4" x 3'-8" x 5"
Trap	4'-4" x 3'-4" x 2"
Back	6'-10" x 3'-4" x 2 1/2"
Cover	2'-0" x 3'-4" x 4"
Inclined	2'-10" x 3'-4" x 2"
Bottom	2'-3" x 3'-4" x 2 1/2"



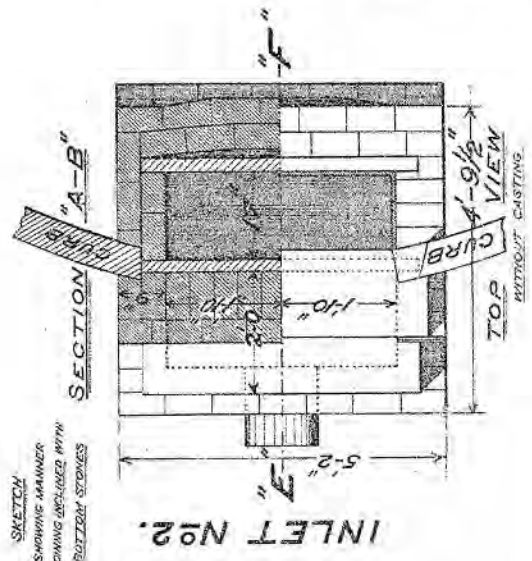
FRONT VIEW
INLET No 2



SECTION "C-D"
INLET No 3.



SECTION "E-F"
INLET No 2.

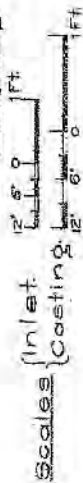


SECTION "A-B"
INLET No 2.

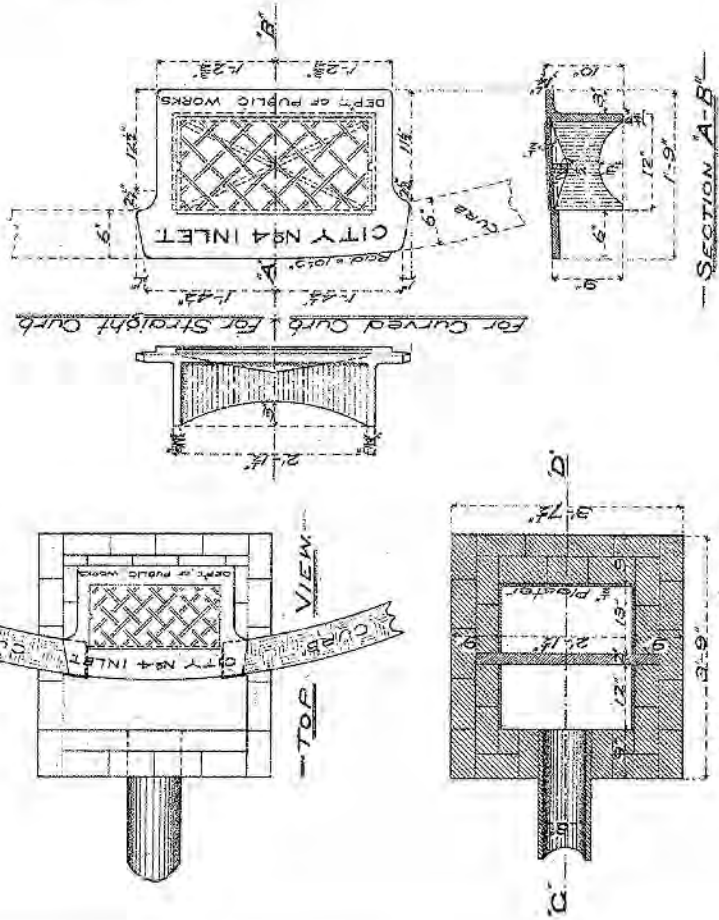
SKETCH
SHOWING MANNER
OF JOINING UNCLER WITH
BOTTOM STONES

No. 4 OPEN MOUTH BRICK AND STONE INLET.

—Dept. of Public Works— Bureau of Surveys.—
—Phila. Jan. 1897. —
Revised Jan. 1903. *E. A. Mott*
Chief Engineer.

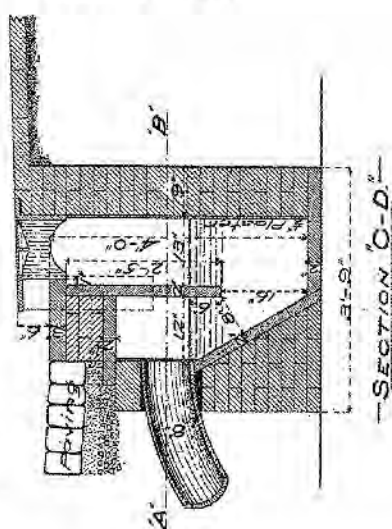
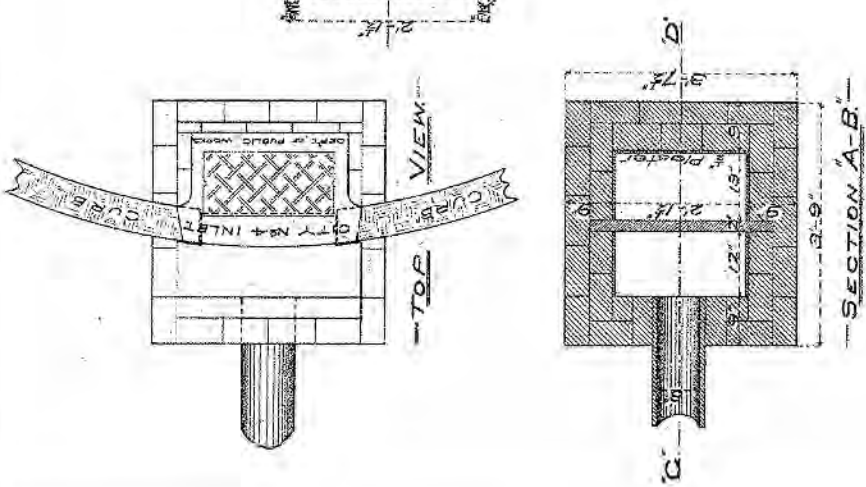


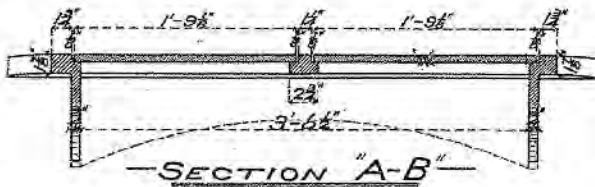
—GENERAL NOTES—
All Brickwork to be Laid
in Portland Cement Mortar
All Brickwork inside of
Inlet to be Plastered
with Portland Cement Mortar.
Foundation of Inlet to
be Rubble Masonry, Timber
or Concrete when directed



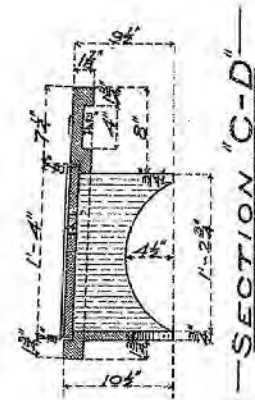
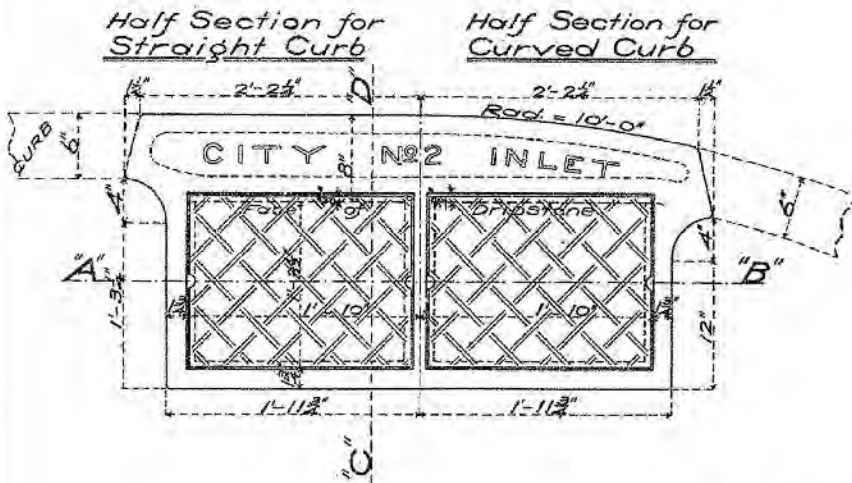
DETAILS FOR CASTING.

BILL OF FLAGGING FOR INLET.	
Top Stone	2' 3" x 2' 10"
Bottom "	2' 0" x 3' 7 1/2"
Inside "	2' 0" x 2' 10"
Grill "	3' 1" x 3' 2 1/2"
Cover "	2' 1" x 2' 10"
WEIGHT OF CASTINGS	
Straight Curb	250 Lbs.
Curved "	223 "





WEIGHTS OF CASTINGS		
No 2	Curved	Curb 485 Lbs.
	Straight	" 495 "
No 3	Curved	" 340 "
	Straight	" 345 "

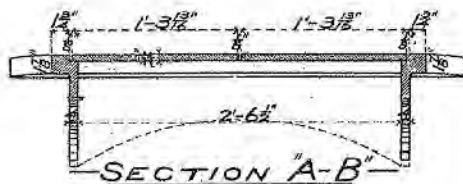


DETAILS OF CASTINGS FOR No 2 AND No 3 OPEN MOUTH INLETS

—Dept. of Public Works—Bureau of Surveys—

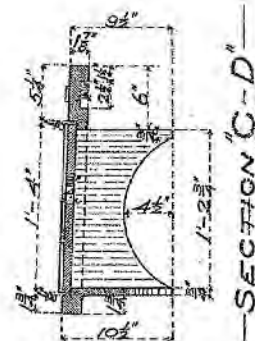
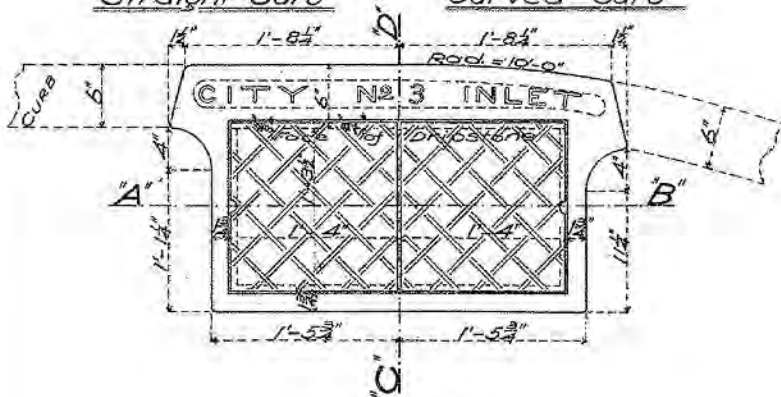
—Phila. Jan. 1897—

E. J. Heister
Chief Engineer



Half Section for
Straight Curb

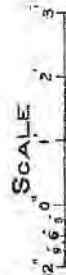
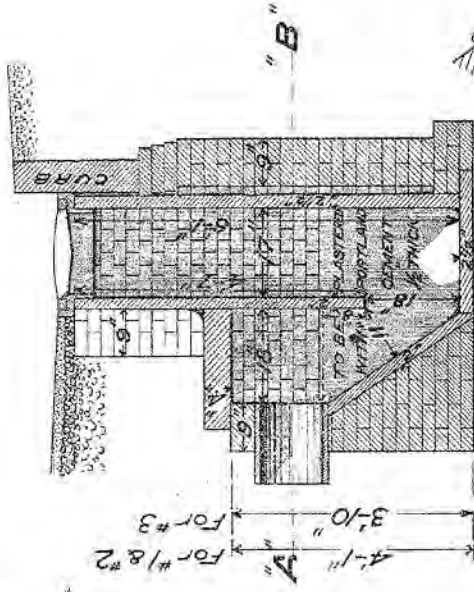
Half Section for
Curved Curb



No. 1, 2 & 3. GRATE TOP BRICK AND STONE INLETS.

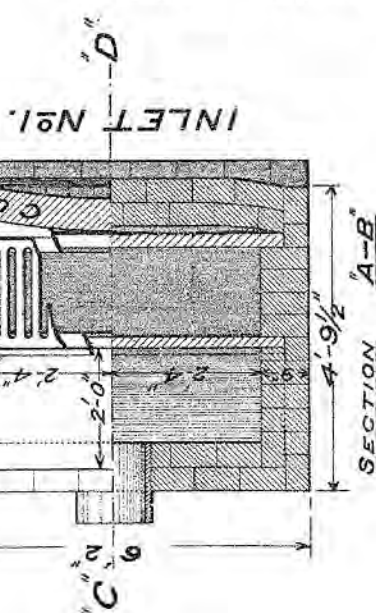
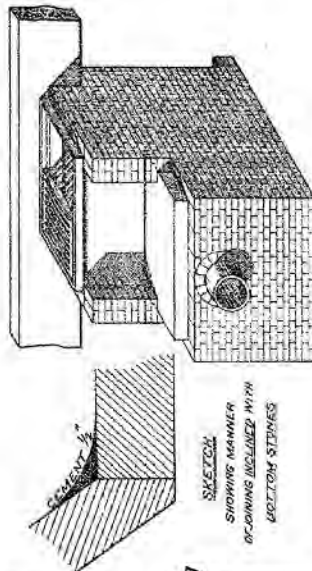
Dept of Public Works Bureau of Surveys
Phila. Jan. 1899

E. J. Hester
Chief Engineer



BILL OF FLAGGING FOR INLET No. 1.

Trap Stone	4'-7" x 5'-4" x 2"
Back "	6'-1" x 5'-4" x 2 1/2"
Cover "	2'-0" x 5'-4" x 4"
Inclined "	2'-10" x 5'-4" x 2"
Bottom "	2'-3" x 5'-4" x 2 1/2"



BILL OF FLAGGING FOR INLET No. 2.

Trap Stone	4'-7" x 4'-4" x 2"
Back "	6'-1" x 4'-4" x 2 1/2"
Cover "	2'-0" x 4'-4" x 4"
Inclined "	2'-10" x 4'-4" x 2"
Bottom "	2'-3" x 4'-4" x 2 1/2"

BILL OF FLAGGING FOR INLET No. 3.

Trap Stone	4'-7" x 3'-4" x 2"
Back "	6'-1" x 3'-4" x 2 1/2"
Cover "	2'-0" x 3'-4" x 4"
Inclined "	2'-10" x 3'-4" x 2"
Bottom "	2'-3" x 3'-4" x 2 1/2"

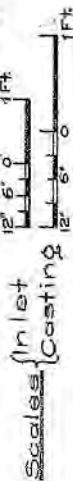
GENERAL NOTES

All Brickwork to be laid in Portland Cement Mortar.
Foundation of Inlet to be of Rubble Masonry, Timber or Concrete as directed.
Outlet Pipe for Nos. 1 & 2 Inlets 15" dia
" " " " 3 " 12" "

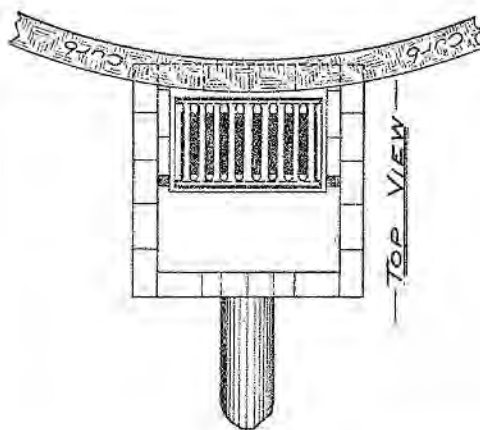
No. 4 GRATE TOP BRICK AND STONE INLET

— Dept. of Public Works— Bureau of Surveys—
— Phila. Jan. 1897.

E. A. Mott
Chief Engineer

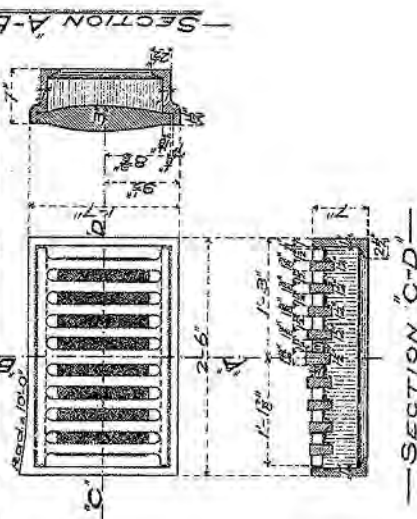


DETAILS OF CASTING



TOP VIEW

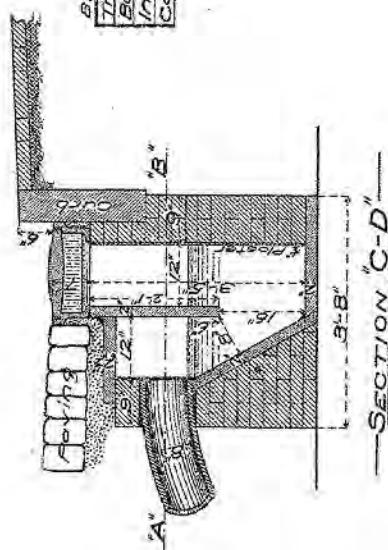
For —
Curved Curb * Straight Curb



— GENERAL NOTES —
All Brickwork to be Laid
in Portland Cement Mortar

All Brickwork inside of
Inlet to be plastered
with Portland Cement Mortar

Foundation of Inlet to
be Rubble Masonry, Timber,
or Concrete when directed.

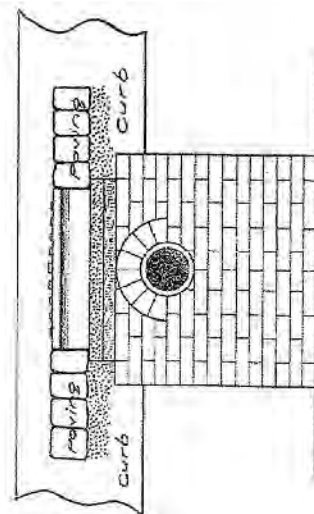


SECTION "C-D"

BILL OF FLAGGING FOR INLET

Trap Stone	2' x 2' 1" x 2'-10"
Bottom	2' x 2'-0" x 3'-7 1/2"
Inclined	2' x 2'-5" x 2'-10"
Cover	2 1/2' x 1'-4 1/2" x 2'-10"

WEIGHT OF GRATING
INCLUDING FRAME
315 LBS.



FRONT VIEW

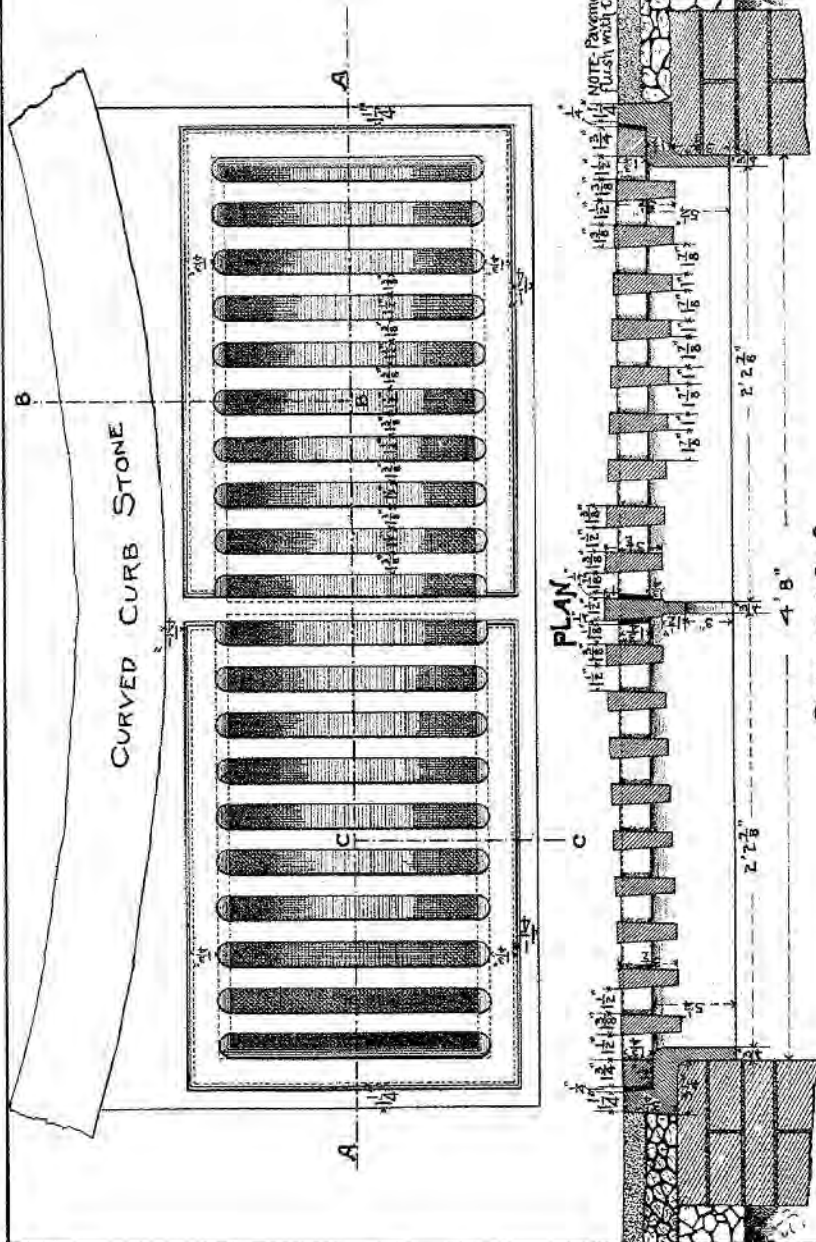
DESIGN FOR GRATE TOP BRICK & STONE INLET No 1

DEPT. OF PUBLIC WORKS
BUREAU OF SURVEYS
PHILADELPHIA

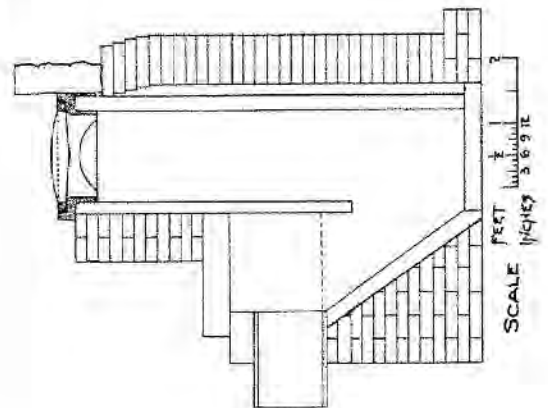
NOVEMBER 1893

L. P. Hildner
CHIEF ENGINEER

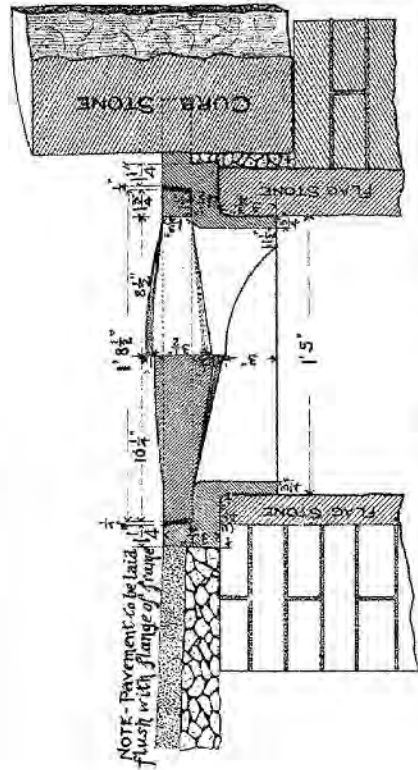
SCALE -
INCHES - 0 1 2 3 4 5 6 7 8 9 10 12



SECTION A-A

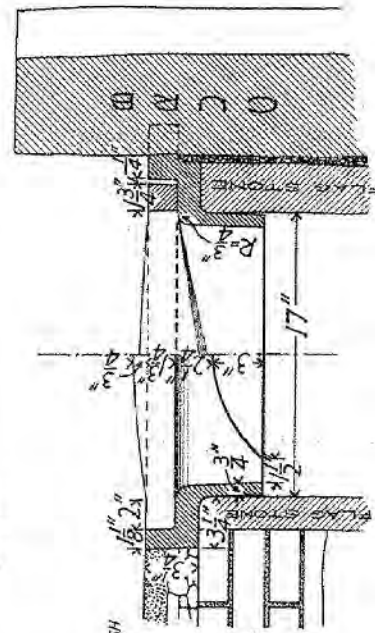


SECTION C-C SECTION B-B

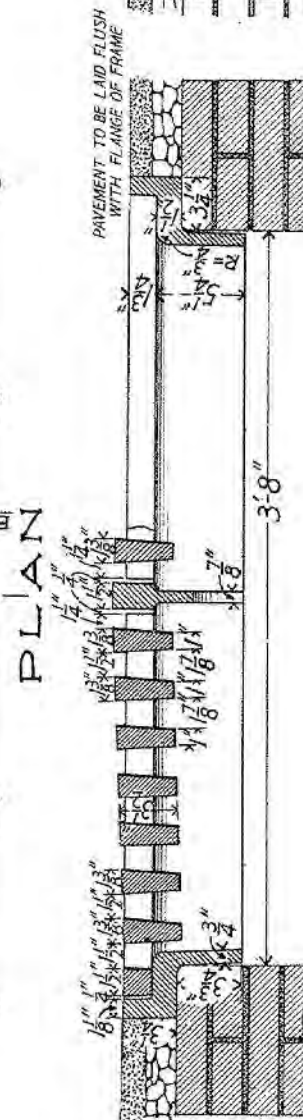


—No 2.—

E. J. Winter
CHIEF ENGINEER

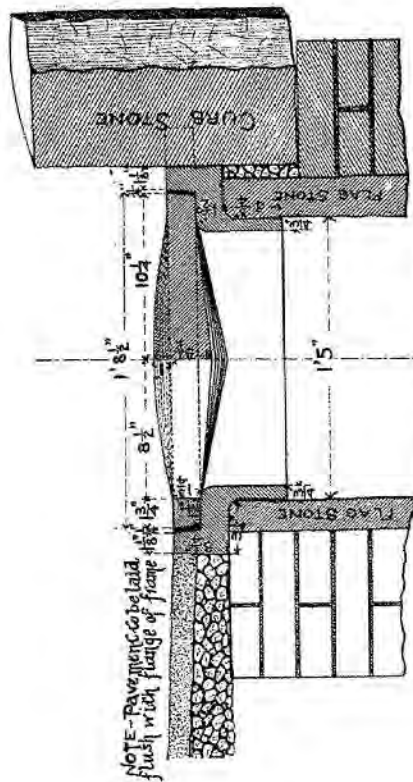
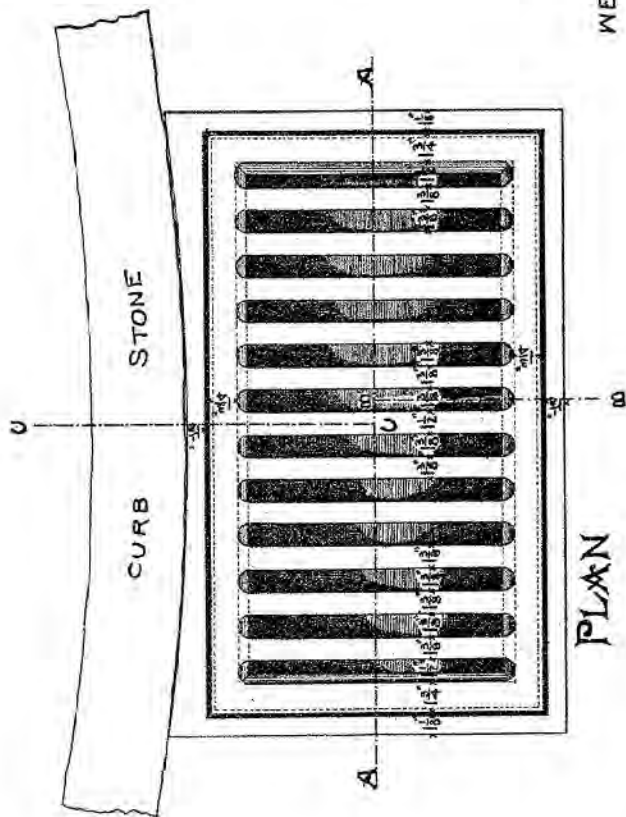


SECTION B-B SECTION C-C



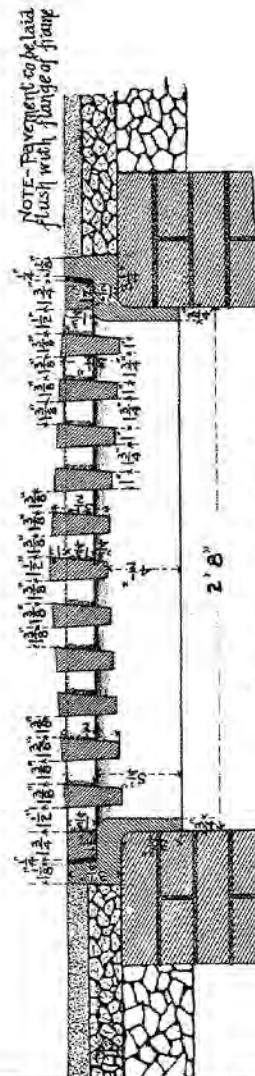
SECTION A-A

WEIGHT OF FRAME AND GRATE 650 LBS.



SECTION B-B SECTION C-C

WEIGHT OF GRATING INCLUDING FRAME COMPLETE 490 LBS.



SECTION A-A

DESIGN FOR GRATE TOP BRICK & STONE INLET No. 3

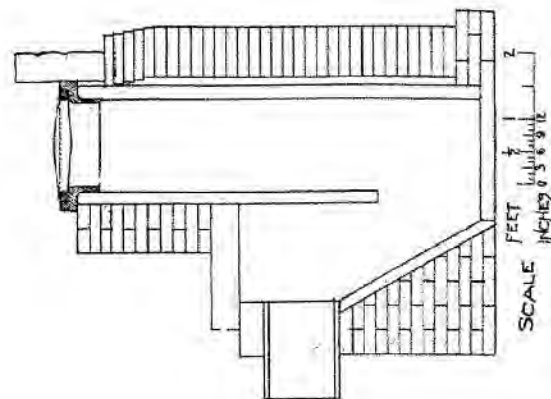
DEPT. OF PUBLIC WORKS
BUREAU OF SURVEYS

PHILADELPHIA

L. B. Hester
CHIEF ENGINEER

DECEMBER 1893

SCALE
FEET 0 1 2 3 4 5 6 7 8 9 10 11 12
INCHES 0 1 2 3 4 5 6 7 8 9 10 11 12



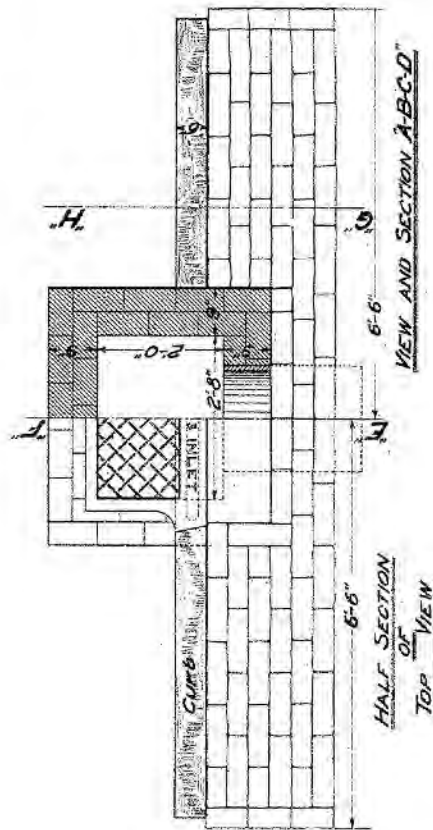
SCALE
FEET 0 1 2 3 4 5 6 7 8 9 10 11 12
INCHES 0 1 2 3 4 5 6 7 8 9 10 11 12

COUNTRY ROAD INLET NO.3B.

Dept. of Public Works Bureau of Surveys
 Phila. July 1904.

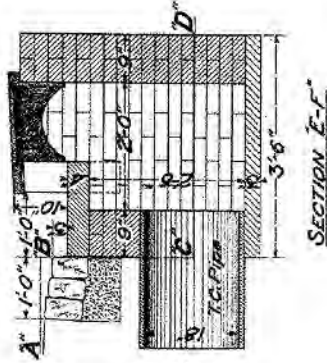
E. O. Water
 Chief Engineer

SCALE

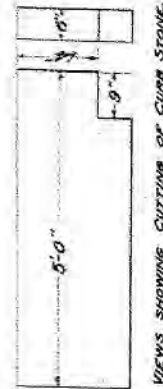
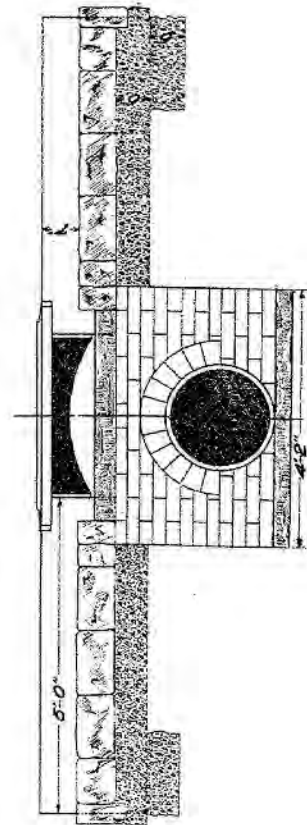


GENERAL NOTES

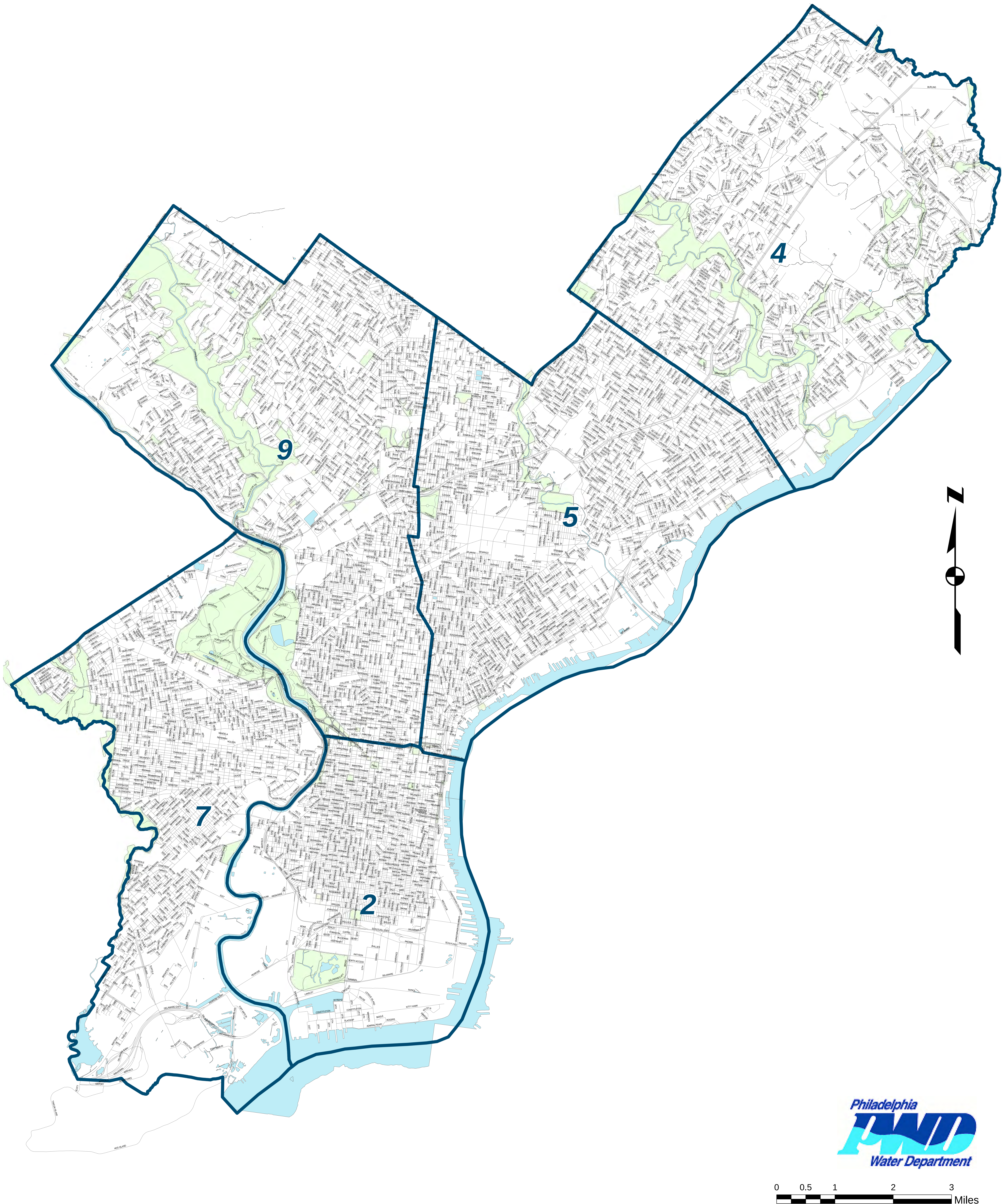
All Brickwork to be Laid in Portland Cement Mortar.
 Foundation of Inlet to be Rubble Masonry, or Concrete when directed.
 The Casting shall be that of a Standard No.3 Open Mouth Inlet.
 The price for Inlet shall include a Belgian Block Curb on a Concrete Base, for a distance of least 6'-6" on each side from the centre line of the Inlet, as shown.



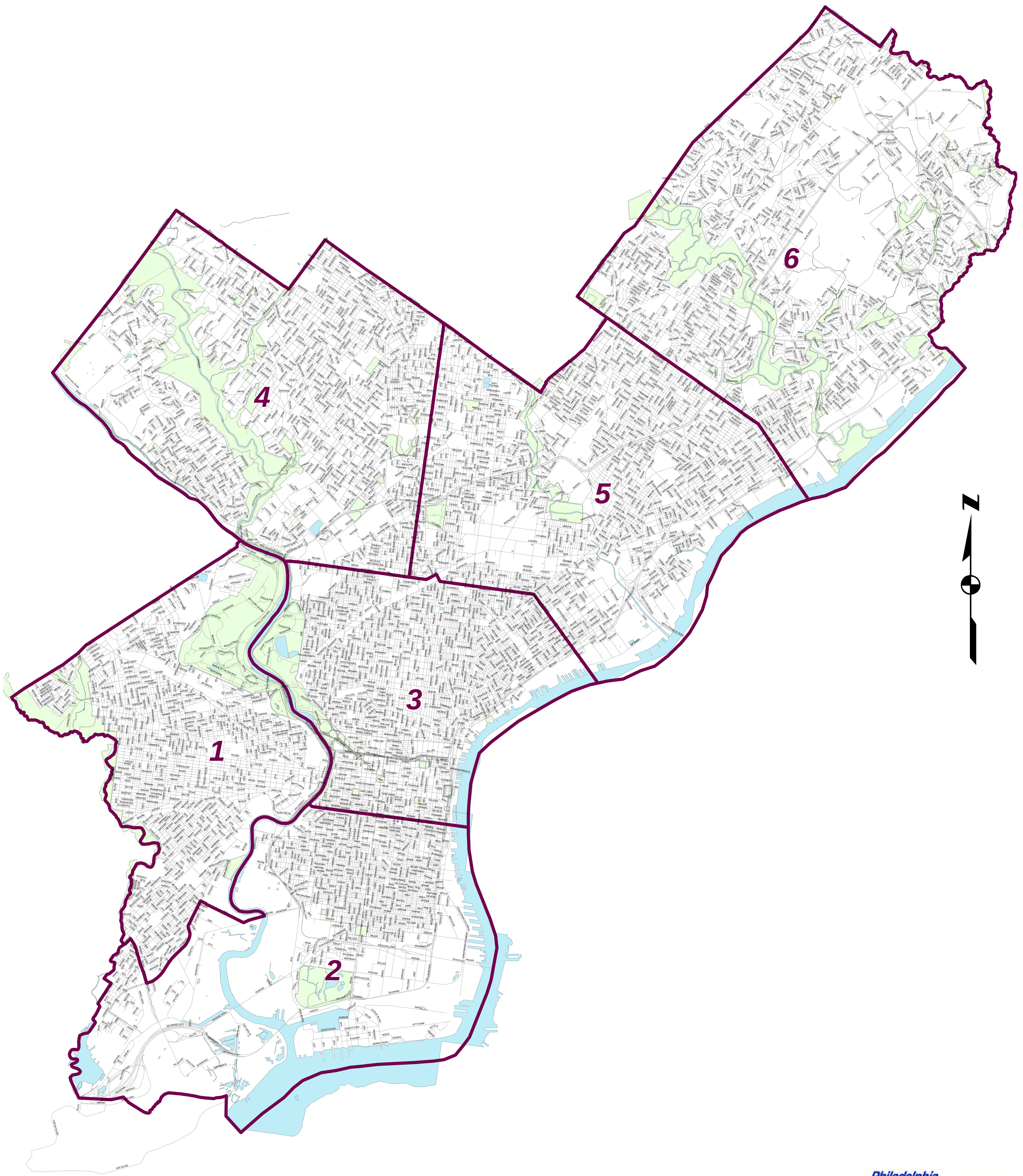
Bill of Materials for Inlet
 Drip Stone 3'-5" x 3'-5"
 Bottom 3'-5" x 3'-5"



SURVEY DISTRICTS



HIGHWAY DISTRICTS



APPENDIX Vi

STATE HIGHWAY ROUTE NUMBERS

LEGEND:

SR – STATE ROUTE

LR – LEGISLATIVE ROUTE

(OLD DESIGNATION FOR STATE HIGHWAYS)

SEPTEMBER 25, 2000

STREET	SR#	LR#	FROM	TO	MILES
Academy Rd	1013	1032	I-95/Delaware Expy	Willits Rd	0.66
	1013	67294	Willits Rd	Knights Rd	4.13
Adams Ave	1002	67049	Crescentville Rd	Roosevelt Blvd	0.98
	1007	67350	Torresdale Ave	Tacony St	0.07
Allegheny Ave	2014	67288	Ridge Ave	Delaware Ave	5.4
Allens Ln	4003	67329	Wissahickon Ave	Germantown Ave	1.3
Aramingo Ave	2009	67047	Delaware Ave	Harbison Ave	4.01
Arch St.	3007	67317	Columbus Blvd	16th St	1.35
	3031	67005 A	Schuylkill Ave W	30th St	0.11
B St	1003	67339	Allegheny Ave	Erie Ave	0.6
Baltimore Ave	13	67283	39th St	City Limits	2.55
Bartram Ave	3019		I-95/Delaware Expy	Island Ave	1.41
	3002		Island Ave	84th St	0.59
Belmont Ave	3005	67365	Lancaster Ave	City Ave	2.34
Berkley St	4009	67306	Wayne Ave	Germantown Ave	0.17
Bethlehem Pike	4007	67028	Germantown Ave	Stenton Ave	0.66
Bridge St	1009	67298	Frankford Ave	Tacony St	0.75
	1009	67340	Tacony St	Richmond St	0.53
Broad St	3001	67373	I-95/Delaware Expy	Oregon Ave	1.2
	291	67312	Oregon Ave	S Penn Sq	2.33
	611	67312	Filbert St	67th Ave	6.88
Bustleton Ave	1009	67332	Frankford Ave	Harbison Ave	1.28
	1009		Harbison Ave	Welsh Rd	3.81
	532	67332	Welsh Rd	Woodhaven Rd	2.03
	532		Woodhaven Rd	County Line Rd	0.9
Castor Ave	1005	67288	Delaware Ave	Richmond St	0.53
	1005	67347	Richmond St	Bustleton Ave	6.08
Cecil B Moore Ave	2010		10th St	Ridge Ave	1.11
Cheltenham Ave	1002	67059	Crescentville Rd	Old York Rd	1.58
	309	46116	Old York Rd	Ogontz Ave	1.09
	2035	46116	Ogontz Ave	Ivy Hill Rd	1.46
Chester Ave	3023	67282	65th St (W)	65th St (E)	0.04
	3023	67282	52nd St	45th St	0.62
	3023		45th St	42nd St	0.21
Chestnut St	3008	67318	Columbus Blvd	Broad St	1.12
	3	67318	Broad St	Schuylkill Ave W	1.01
	3	67351	Schuylkill Ave W	Cobbs Creek Pkwy	3.38
Chew Ave	4004	67346	Olney Ave	Mt Airy Ave	2.16
City Ave	4006		Ridge Ave	I-76/Schuylkill Expy	0.34
	1		I-76/Schuylkill Expy	City Limits	4.45
Civic Center Bl	3005	67060	University Ave	Convention Ave	0.35
Clarissa St	4007	67306	Hunting Park Ave	Roberts Ave	0.51
Cliveden St	4013	67029	Park Line Dr	Lincoln Dr	0.45
Cobbs Creek Pkwy	3015	67368	Woodland Ave	Hoffman Ave	1.95
	3015	67284	Baltimore Ave	Walnut St	1.36
	3	67367	Walnut St	Market St	0.2
Columbus Blvd	2001	67025	Oregon Ave	Spring Garden St	3.01
Cottman Ave	1012	67293	I-95/Delaware Expy	State Rd	0.11
	73	67293	State Rd	City Limits	4.41
County Line Rd	2038	9033	Bustleton Ave	City Limits	0.38

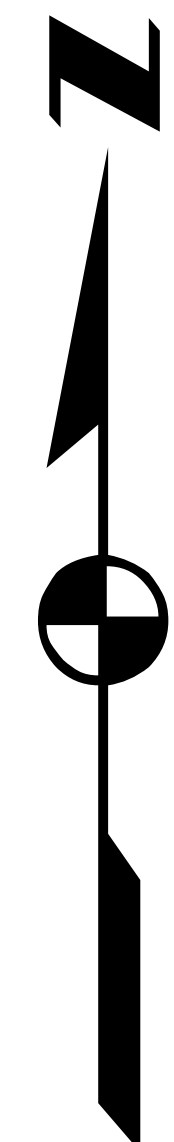
STREET	SR#	LR#	FROM	TO	MILES
Crescentville Rd	1002	67059	Adams Ave	Cheltenham Ave	0.29
Dauphin St	2012	67332	Aramingo Ave	Front St	0.84
	2012		Front St	Broad St	1.25
	2012		Broad St	Ridge Ave	1.59
Delaware Ave	2001	67025	Spring Garden St	Aramingo Ave	1.09
	1005	67288	Allegheny Ave	Castor Ave	0.49
Eakins Oval	3007	67030	South/East side		0.08
	3007	67002	North/West side		0.08
Easton Rd	4021	67354	Mt Airy Ave	Wadsworth Ave	0.46
Elmwood Ave	3021	67308	Lindbergh Blvd	58th St	0.2
	3021		58th St	63rd St	0.5
	3021		63rd St	Island Ave	1.09
Erie Ave	1004	67331	Kensington Ave	Hunting Park Ave	3.56
Essington Ave	3019	67311	Passyunk Ave	Bartram Ave	1.52
Filbert St	2004		Juniper St	Broad St	0.06
Frankford Ave	2007		Delaware Ave	Kensington Ave	3.74
	2007		Kensington Ave	Robbins St	2.11
	13		Robbins St	City Limits	4.62
B Franklin Pkwy	3007	67002	16th St	Logan Circle (east)	0.21
	3007	67002	Logan Circle (west)	Eakins Oval	0.65
Germantown Ave	4005	67353	Broad St	Washington La	2.79
	4007	67303	Washington La	Bethlehem Pike	2.37
Girard Ave	2008	67302	Richmond St	S College Ave	2.65
	2008	67030	W College Ave	29th St	0.3
	2006	67301	29th St	34th St	0.61
	30	67301	34th St	Lancaster Ave	1.22
Godfrey Ave	4002		Crescentville Rd	Broad St	1.55
Grant Ave	1018	67357	State Rd	Welsh Rd	3.15
Grays Ave	3021	67309	49th St	Lindbergh Blvd	0.29
Grays Ferry Ave	3021	67309	34th St	Woodland Ave	0.83
Harbison Ave	2009	67047	Aramingo Ave	Roosevelt Blvd	1.79
Haverford Ave	3018		Lancaster Ave	City Ave	3.91
Henry Ave	4001	67343	Allegheny Ave	Cathedral Rd	5.14
Hoffman Ave	3015	67368	58th St	Cobbs Creek Pkwy	0.12
Holme Ave	1016	67296	Roosevelt Blvd	Academy Rd	1.88
Huntingdon Pk	232	67325	Pine Rd	Fillmore St	0.14
Hunting Park Ave	3033	67286	Kelly Dr	Ridge Ave	0.11
	13	67286	Ridge Ave	Broad St	2.34
I-76/Schuylkill Expy	76	67278	Passyunk Ave	City Ave	9.34
I-95/Delaware Expy	95	795	City Limits	City Limits	21.92
I-676/Vine St Expy	676	67045	I-95/Delaware Expy	I-76/Schuylkill Expy	2.02
Independence Mall E	2003		Walnut St	Race St	0.34
Independence Mall W	2005		Walnut St	Race St	0.34
Industrial Hwy	291	67054	Island Ave	City Limits	1.53
Island Ave	3013	67281	Woodland Ave	Industrial Hwy	1.93
Juniper St	2004	67360	Market St	Filbert St	0.07
Kelly Dr	3007		Eakins Oval	Lincoln Dr	4.48
J F Kennedy Blvd	2004		Broad St	15th St	0.08
	3037		15th St	Schuylkill Ave W	0.84
	3028		30th St	Market St	0.24

STREET	SR#	LR#	FROM	TO	MILES
Keystone St	1024	67327	Robbins St	Levick St	0.12
Kingsessing Ave	3023	67282	52nd St	61st St	0.92
	3023		61st St	Cemetery Ave	0.21
	3023		Cemetery Ave	65th St	0.09
Knights Rd	1015	67338	Frankford Ave	City Limits	2.49
Lancaster Ave	3005	67314	33rd St	34th St	0.12
	3005		34th St	Belmont Ave	1.11
	3012	67010	Belmont Ave	Girard Ave	0.55
	30	67010	Girard Ave	City Ave	2.11
Lehigh Ave	2014	67356	Richmond St	Kensington Ave	1.04
	2014		Kensington Ave	Ridge Ave	3.25
Levick St	1008	67022	State Rd	Frankford Ave	0.88
	13	67020	Frankford Ave	Roosevelt Blvd	0.75
	1008	67358	Roosevelt Blvd	Rising Sun Ave	1.6
Lincoln Dr	3007		Kelly Dr	Ridge Ave	0.02
	4013	67029	Cliveden St	Mt Pleasant Ave	1.14
	4013		Mt Pleasant Ave	Allens La	0.2
Lindbergh Blvd	3021	67309	Grays Ave	Elmwood Ave	0.47
	3025	67309	Elmwood Ave	65th St	0.8
Linden Ave	1016	67295	Academy Rd	I-95/Delaware Expy	0.95
Logan Circle	3007	67002			0.05
Market St	2004	67360	Columbus Blvd	Juniper St	1.14
	3010	67313	15th St	Cobbs Creek Pkwy	4.29
	3	67313	Cobbs Creek Pkwy	City Limits	0.11
Marshall Rd	3031	67284	Cobbs Creek Pkwy	City Limits	0.06
Midvale Ave	4011	67363	Kelly Dr	Wissahickon Ave	1.22
Mt Airy Ave	4021	67354	Germantown Ave	Easton Rd	0.98
Moyamensing Ave	291	67023	Broad St	20th St	0.62
Old York Rd	611	67014	67th Ave	Cheltenham Ave	0.53
Olney Ave	4004	67346	Rising Sun Ave	Wister St	2.25
Oregon Ave	2001	67025	Columbus Blvd	Broad St	1.73
Oxford Ave	232	67341	Roosevelt Blvd	Rhawn St	3.05
Parkside Ave	3017	67369	Girard Ave	52nd St	1.12
Park Line Dr	4013	67029	Walnut La	Cliveden St	0.07
Passyunk Ave	3019	67310	Broad St	Essington Ave	2.72
Pennsylvania Ave	2006	67030	Spring Garden St	25th St	0.18
	3011	67301	25th St	26th St	0.1
	291	67023	20th St	Pattison Ave	0.54
Penrose Ave	291		Pattison Ave	26th St	0.26
	291		26th St	Island Ave	2.44
Philmont Ave	1030	67346	Byberry Rd	City Limits	1.02
Poplar St	2008	67302	24th St	W College Ave	0.09
Princeton Ave	73	67328	Frankford Ave	State Rd	0.81
	1010	67328	State Rd	I-95/Delaware Expy	0.11
Race St	3009	67004	6th St	8th St	0.17
Rhawn St	1014	67359	Pine Rd	State Rd	4.56
Richmond St	2001	67348	Delaware Ave	Lehigh Ave	0.62
	2001		Lehigh Ave	Bridge St	3.05

STREET	SR#	LR#	FROM	TO	MILES
Ridge Ave	3009		Spring Garden St	33rd St	2.24
	13	67030	33rd St	Hunting Park Ave	0.86
	3009	67030	Hunting Park Ave	Allegheny Ave	0.38
	3009	67030	Allegheny Ave	Gustine Lk Ramp (S)	1.03
	3009	67029	Gustine Lk Ramp (S)	Main St	0.31
	3009		Main St	Northwestern Ave	4.7
Rising Sun Ave	1001	67326	Roosevelt Blvd	Cottman Ave	3.08
Robbins St	13	67327	Roosevelt Blvd	Frankford Ave	0.91
	1024	67327	Frankford Ave	Keystone St	0.64
Roberts Ave	4009	67364	Henry Ave	Wayne Ave	1.31
Roosevelt Blvd	1	67009	9th St	City Limits	11.7
Roosevelt Expy	1	67058	I-76/Schuylkill Expy	9th St	2.95
Schuylkill Ave W	3026	67057	Walnut St	Arch St	0.29
Sedgley Ave	2016		Allegheny Ave/9th St	Allegheny Ave/11th St	0.2
Snyder Ave	2002	67372	Columbus Blvd	Vare Ave	2.81
S College Ave	2008	67302	24th St	Girard Ave	0.26
S Penn Sq	3022	67002	Broad St	15th St	0.07
Spring Garden St	2006	67030	Columbus Blvd	Eakins Oval (E)	2.18
	3014	67002	Eakins Oval (W)	Lancaster Ave	1.13
State Rd	73	67350	Levick St	Cottman Ave	1.11
	1007	67350	Cottman Ave	Grant Ave	2.86
	1007		Grant Ave	City Limits	0.07
Stenton Ave	4002	67017	Broad St	Ogontz Ave	0.45
	4002	67049	Ogontz Ave	Bethlehem Pike	3.94
	3003	46086	Bethlehem Pike	Northwestern Ave	0.73
Tacony St	1007	67350	Adams Ave	Bridge St	1.01
	1007	67048	Bridge St	Levick St	1.43
Torresdale Ave	1004	67331	Kensington Ave	Linden Ave	5.93
University Ave	3003	67278	34th St	Baltimore Ave	0.63
Upsal St	4017	67345	Germantown Ave	Cheltenham Ave	2.15
Vare Ave	76	67278	Passyunk Ave	34th St	0.7
Verree Rd	1001	67324	Oxford Ave	Bustleton Ave	4.07
Vine St (service rds)	2676	67045	7th St	20th St	1.09
Wadsworth Ave	4021	67354	Thouron Ave	Cheltenham Ave	0.46
Walnut La	4013		Ridge Ave	Park Line Dr	0.8
	4015	67345	Park Line Dr	Wayne Ave	0.78
Walnut St	3006	67319	Columbus Blvd	Broad St	1.12
	3	67319	Broad St	Schuylkill Ave W	1.01
	3	67352	Schuylkill Ave W	Cobbs Creek Pkwy	3.35
Washington La	4007	67304	Wayne Ave	Germantown Ave	0.91
	4019	67304	Germantown Ave	Cheltenham Ave	1.93
Wayne Ave	4007	67305	Windrim Ave	Washington La	1.74
	4015	67345	Washington La	Lincoln Dr	0.27
Welsh Rd	1011	67321	Willits Rd	Roosevelt Blvd	1.02
	532	67321	Roosevelt Blvd	Bustleton Ave	0.93
	1011	67321	Bustleton Ave	City Limits	1.09
W College Ave	2006	67030	Poplar St	Girard Ave	0.09
Whitaker Ave	1003	67339	Erie Ave	Roosevelt Blvd	1.7
Whitby Ave	3017	67370	52nd St	Cobbs Creek Pkwy	0.67
Willits Rd	1011	67321	Welsh Rd	Academy Rd	1.39

STREET	SR#	LR#	FROM	TO	MILES
Wissahickon Ave	4003	67330	Hunting Park Ave	Allens La	3.26
Woodhaven Rd	1022	67334	City Limits	Roosevelt Blvd	1.49
	63	1029	Roosevelt Blvd	City Limits	2.6
Woodland Ave	3021	67309	Grays Ferry Ave	49th St	0.02
	3013	67281	Island Ave	City Limits	0.12
5th St	2003		Race St	Spring Garden St	0.61
6th St	2005		Race St	Spring Garden St	0.61
8th St	3009		Race St	Vine St	0.11
15th St	3022	67002	S Penn Sq	Kennedy Blvd	0.11
	3029	67006 A	Kennedy Blvd	Vine St	0.31
16th St	3027	67006 B	Kennedy Blvd	Vine St	0.31
25th St	2006		Pennsylvania Ave	Poplar St	0.38
26th St	3003	67278	Penrose Ave	I-76/Schuylkill Expy	1.13
	3011	67031	Pennsylvania Ave	Girard Ave	0.41
29th St	3011	67030	Girard Ave	Allegheny Ave	1.99
	3011		Allegheny Ave	Hunting Park Ave	0.07
30th St	3031	67005	Market St	Arch St	0.09
33rd St	3005	67060	Convention Ave	Lancaster Ave	0.47
	13	67333	Girard Ave	Ridge Ave	1.19
34th St	3003	67278	I-76/Schuylkill Expy	University Ave	0.41
	3035	67316	Market St	Lancaster Ave	0.09
38th St	13	67278	Baltimore Ave	Chestnut St	0.32
	13		Chestnut St	Lancaster Ave	0.35
	3003	67278	Lancaster Ave	Haverford Ave	0.22
42nd St	3023	67282	Chester Ave	Baltimore Ave	0.06
49th St	3021	67309	Grays Ave	Woodland Ave	0.14
52nd St	3023	67282	Kingsessing Ave	Chester Ave	0.09
	3017	67370	Whitby Ave	Haverford Ave	0.9
	3017		Haverford Ave	Lancaster Ave	0.82
	3017		Lancaster Ave	Parkside Ave	0.32
58th St	3015	67368	Hoffman Ave	Baltimore Ave	0.18
63rd St	3004	67371	Passyunk Ave	Lindbergh Blvd	0.49
	3015	67367	Market St	City Ave	1.87
65th St	3004	67320	Lindbergh Blvd	Chester Ave	1.02
	3004	67282	Chester Ave	City Limits	0.29
84th St	3002	67280	Bartram Ave	City Limits	0.8

STATE HIGHWAYS



WARD MAP

