GENERAL NOTES:

1. Install light duty cast iron cover and frame in accordance with Specifications 962.

2. Use Class J concrete. Use No. 3 bars (Grade 60) on 8" centers both ways, sides and bottom.

3. Furnish covers with pick holes. Do not use fitted lifts or handles.

4. Manhole Type P Alternate A, Index 425-010, Type I Frame and Cover, Index 425-001, may be used in lieu of the box detailed in this Index.

<table>
<thead>
<tr>
<th>TABLE OF CONTENTS:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet</td>
<td>Description</td>
</tr>
<tr>
<td>1</td>
<td>General Notes and Contents</td>
</tr>
<tr>
<td>2</td>
<td>Typical Inspection Box Installation</td>
</tr>
<tr>
<td>3</td>
<td>Typical Urban, Slope, and Top Adjustment Installations</td>
</tr>
</tbody>
</table>

FRENCH DRAIN ASSEMBLY

1. Install light duty cast iron cover and frame in accordance with Specifications 962.

2. Use Class J concrete. Use No. 3 bars (Grade 60) on 8" centers both ways, sides and bottom.

3. Furnish covers with pick holes. Do not use fitted lifts or handles.

4. Manhole Type P Alternate A, Index 425-010, Type I Frame and Cover, Index 425-001, may be used in lieu of the box detailed in this Index.
NOTES:
2. For additional sump bottom information see Index 425-001.
3. Construct weep holes only where called for in the Plans.
4. Only cast and ductile iron sanitary sewer, or cast iron, ductile and steel water mains will be allowed to pass directly through French drain (without sleeves).
5. Use only steel, cast or ductile iron sleeves.
6. No slots or perforations.

2. For additional sump bottom information see Index 425-001.
3. Construct weep holes only where called for in the Plans.
4. Only cast and ductile iron sanitary sewer, or cast iron, ductile and steel water mains will be allowed to pass directly through French drain (without sleeves).
5. Use only steel, cast or ductile iron sleeves.
6. No slots or perforations.

SECTION A-A

FRENCH DRAIN SYSTEM

FOREIGN DRAIN

CONCRETE PIPE

SECTION A-A

FRENCH DRAIN

(Round Pipe Shown)

PLAN

ELEVATION

CONCRETE PIPE

SECTION A-A

FRENCH DRAIN

(Round Pipe Shown)

PLAN

ELEVATION

CONCRETE PIPE

SECTION A-A

FRENCH DRAIN

(Round Pipe Shown)

PLAN

ELEVATION

CONCRETE PIPE

SECTION A-A

FRENCH DRAIN

(Round Pipe Shown)

PLAN

ELEVATION

CONCRETE PIPE

SECTION A-A

FRENCH DRAIN

(Round Pipe Shown)

PLAN

ELEVATION

CONCRETE PIPE
CONCRETE SLOTTED PIPE OPTIONS

OPTION A - ROUND PIPE

SECTION A-A

SIDE VIEW

CONCRETE PIPE

15° to 30°

36° to 72°

SECTION B-B

SECTION C-C

OPTION B - ROUND OR ELLIPTICAL PIPE

SECTION D-D

SIDE VIEW

CONCRETE PIPE

NOTES:
1. 2'-0" for 8'-0" joints of pipe; 2'-6" for 12'-0" joints of pipe.
2. A curved cut is acceptable provided the control dimension is maintained.

ROUND PIPE

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>Slot Cut Opening (C)</th>
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<tbody>
<tr>
<td>Min</td>
<td>Max</td>
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<tr>
<td>15&quot;</td>
<td>12&quot; 14&quot;</td>
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<tr>
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ELLIPICAL PIPE

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<tbody>
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<td>Max</td>
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<tr>
<td>18&quot;x27&quot;</td>
<td>10&quot; 12&quot;</td>
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<td>18&quot;x30&quot;</td>
<td>16&quot; 16&quot;</td>
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<td>20&quot; 22&quot;</td>
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<tr>
<td>30&quot;x60&quot;</td>
<td>20&quot; 22&quot;</td>
</tr>
</tbody>
</table>

NOTE:
Opening (C) varies is maintained.

FRENCH DRAIN

INDEX

REVISED

DESCRIPTION:

FY 2020-21

STANDARD PLANS

443-001

3 of 3