Introduction

The purpose of the investigation is to conduct an assessment of the storm sewer condition of the closed drainage system associated with Franklin Avenue. The method of inspection was a visual inspection of the manholes and a robotic inspection of the storm conduits. Existing plans of the drainage system were obtained by the City of Cleveland prior to the inspection and used as a baseline for the inspection. The stationing convention starts at the top of the drainage system adjacent to W.25th Street along the original alignment of Franklin Avenue and continues to the south east toward Columbus Road. Data sheets for each manhole that was inspected are included in the report that describe the inlet and outlet pipes, direction of flow and invert depth.

Storm Drainage Findings

The closed drainage system on Franklin Ave consists of vitrified clay pipe (VCP) with brick manholes. The average invert depth of the storm water conduit system is 15’. As anticipated with a VCP system, there was displacement in the joints ranging from 1” – 3”. The drainage system flows from W. 25th Street to Columbus Road and outlets to the Cuyahoga River via 30” brick lined sewer. There was no water flow present in the first three manholes at the top of Franklin Avenue, water was present and flowing at the manhole that extends from Bridge Avenue and ties into Franklin Avenue at Station 10 + 74 and flowing without any indication of blockage to the manhole connection at Columbus Road. The inspection findings are detailed in the subsequent pages. In general, the system is functioning relatively well despite the age and type of pipe used, because of the theory that a deep seated slide has occurred in the past and VCP is relatively brittle.
Irishtown Bend Drainage Survey

Franklin Road – Storm Sewer (Station 1 + 54)

Depression Area
MH Station 1 + 54
Picture 4 - Comes from a Curbside Catch Basin
12” Outlet Pictures 5
12” Inlet Pictures 2 & 3

<table>
<thead>
<tr>
<th>1: MH STA. 1 + 54</th>
<th>2: 12” W. VCP Inlet</th>
<th>3: 12” W. VCP Inlet</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Picture 1" /></td>
<td><img src="image2" alt="Picture 2" /></td>
<td><img src="image3" alt="Picture 3" /></td>
</tr>
</tbody>
</table>
# Irishtown Bend Drainage Survey

## Franklin Road – Storm Sewer (Station 1 + 54)

<table>
<thead>
<tr>
<th>4: 12” E. VCP Inlet From Catch Basin</th>
<th>5: 12” S.E. VCP Outlet</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image of 4: 12” E. VCP Inlet From Catch Basin" /></td>
<td><img src="image2.png" alt="Image of 5: 12” S.E. VCP Outlet" /></td>
</tr>
</tbody>
</table>
Comments: NO WATER FLOW PRESENT. BRICK SEWER. LOCATED IN FRONT OF THE OHIO CITY GARDEN ENTRANCE OFF FRANKLIN.
Irishtown Bend Drainage Survey

Franklin Road – Storm Sewer (Station 4 +52)

1: MH Sta. 4 + 52
2: 12” S.W. VCP Inlet
3: 12” W. VCP Inlet

Depression Area
MH Station 4 + 52
15” Outlet Picture 6
12” Inlet Picture 5
Pictures 2, 3 & 4 Lead to catch basins along the curbs and sidewalk
# Irishtown Bend Drainage Survey

## Franklin Road – Storm Sewer (Station 4 +52)

<table>
<thead>
<tr>
<th>4: 12” N. VCP Inlet</th>
<th>5: 12” N.W. VCP Inlet Main Sewer</th>
<th>6: 15” S.E. VCP Outlet Main Sewer</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="Image 1" /></td>
<td><img src="image2.jpg" alt="Image 2" /></td>
<td><img src="image3.jpg" alt="Image 3" /></td>
</tr>
</tbody>
</table>
Franklin Road – Station 4 + 52

12" VCP 15' Invert
12" VCP/6' Invert
Leads to curbside
catch basin 19.5' away
12" VCP/5' Invert
Leads to curbside catch basin 20.5' away
15' Depth

15" VCP 15' Invert

Comments: NO WATER FLOW PRESENT. BRICK SEWER.
Irishtown Bend Drainage Survey

Franklin Road – Storm Sewer (Station 7 + 34)

1: 12” S.W. VCP Inlet
2: 12” W. VCP Inlet
3: 12” N. VCP Inlet
Irishtown Bend Drainage Survey

Franklin Road – Storm Sewer (Station 7 + 34)

| 4: 15" N.W. VCP Inlet Main Sewer | 5: 15" N.W. VCP Inlet Main Sewer | 6: 18" S.E. VCP Outlet Main Sewer |
Franklin Road – Station 7 + 34

- 15" VCP 14' INVERT
- 12" VCP/5' INVERT LEADS TO CURB SIDE CATCH BASIN 24' AWAY
- 12" VCP/6' INVERT LEADS TO CATCH BASIN 18.5' AWAY
- 12" VCP/6.5' INVERT
- 18" VCP 14' INVERT

14' DEPTH

N

Comments: NO WATER FLOW AT THE BOTTOM. BRICK SEWER
Irishtown Bend Drainage Survey

Franklin Road – Storm Sewer (Station 10 + 74)

<table>
<thead>
<tr>
<th>1: MH Sta. 10 + 74</th>
<th>2: MH Sta. 10 + 74</th>
<th>3: 30&quot; S.W. RCP Inlet (Bridge Ave.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="18&quot; Inlet Picture 4" /></td>
<td><img src="image" alt="30&quot; Inlet Picture 3" /></td>
<td><img src="image" alt="30&quot; Outlet Picture 5" /></td>
</tr>
<tr>
<td>Pictures 6 &amp; 7 Lead to Curbside Catch Basins</td>
<td>MH Station 10 + 74</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="MH Station 10 + 74" /></td>
<td><img src="image" alt="18&quot; Inlet Picture 4" /></td>
<td><img src="image" alt="30&quot; Outlet Picture 5" /></td>
</tr>
</tbody>
</table>

1: MH Sta. 10 + 74

2: MH Sta. 10 + 74

3: 30" S.W. RCP Inlet (Bridge Ave.)
## Irishtown Bend Drainage Survey

### Franklin Road – Storm Sewer (Station 10 + 74)

<table>
<thead>
<tr>
<th>Station</th>
<th>Description</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>4: 18” N.W. VCP Inlet Main Sewer</td>
<td>4: 18” N.W. VCP Inlet Main Sewer</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>5: 30” E. RCP Outlet Main Sewer</td>
<td>5: 30” E. RCP Outlet Main Sewer</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>6: 12” S.W. VCP Inlet</td>
<td>6: 12” S.W. VCP Inlet</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>7: 12” N. VCP Inlet</td>
<td>7: 12” N. VCP Inlet</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
</tbody>
</table>
Franklin Road – Station 10 + 74

18" VCP 12.5' INVERT

12" VCP 5.5' INVERT LEADS TO CURBSIDE CB 34.5' AWAY

30" RCP 12.5' INVERT

(1) 12" VCP / 5.5' INVERT
(2) 12" VCP / 6.5' INVERT
(3) 30" RCP / 12.5' INVERT PIPE COMES DOWN SLOPE FROM BRIDGE AVE.

Comments: WATER IS FLOWING AND PRESENT. BRICK SEWER
Irishtown Bend Drainage Survey

Franklin Road – Storm Sewer (Station 14 + 59)

1: 12” S.W. VCP Inlet
2: 30” W. RCP Inlet
3: 30” E. Brick Outlet

MH Station 14 + 59
30” Inlet Picture 2
Picture 1 Lead to a Curbside Catchbasin
30” Outlet Pictures 3 & 4
Franklin Road – Storm Sewer (Station 14 + 59)
Franklin Road – Station 14 + 59

36" RCP 15' invert

12" VCP 11.5' invert

36" brick 15' invert

15' depth

Comments: Water is flowing and present. Pipe flows into Columbus Road main sewer line. Brick sewer