Drainage Structure
Field Survey Forms
Tewksbury Storm Drain Mapping Task

Date: __________________

Inspectors: ________________________________

Photo Number: ______________________________

Structure #: ________________________________

Drawing: ________________________________

Street: ________________________________

Nearest Structure: ________________________________

Type of Structure: Headwall (Y/N)? Material: ________________________________

Size of Structure: ________________________________

Invert: ________________________________

Condition: ________________________________

Connectivity: ________________________________

Crown Above or Below Surface Water?: ________________________________

Dry Weather Flow Conditions: ________________________________

Description of Visual Characteristics or Odors: ________________________________

Comments (any differences between Inlet and Outlet?): ________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
**Drainage Reconnaissance Inventory Sheet**

**Section 1: Background Data**

<table>
<thead>
<tr>
<th>Investigators:</th>
<th>Date/Time: / /2010 - : M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of weather:</td>
<td>Approximate Air Temperature: °F</td>
</tr>
<tr>
<td>Location of Catch Basin (street address, what side of street, other description of location):</td>
<td></td>
</tr>
</tbody>
</table>

**Rainfall (in.):** Last 24 hours: ___________ Last 48 hours: ___________

**Shape of Catch Basin (square, circle, d-frame):** ___________

**Depth of Catch Basin (feet):** ___________

**INV₁ = ___________ INV₂ = ___________ OUT₁ = ___________ OUT₂ = ___________**

Pipe Not Available ---> □ Yes

**Can you see water flowing through the catch basin:** ___________

**Is the Catch Basin filled with debris:** ___________

Where does Catch Basin lead to (Drain Manhole, another Catch Basin, Outfall or Unknown):

<table>
<thead>
<tr>
<th>Additional notes:</th>
<th>Was Catch Basin Marked with Stencil? □ Yes □ No</th>
</tr>
</thead>
</table>

**Section 2: Outfall Description (1. □ Outfall Located, 2. □ No outfall determined, 3. □ Not accessible)**

IF — 1. Fill in section below, 2. or 3. If no outfall is determined or accessible, skip to Section 3

<table>
<thead>
<tr>
<th>Location</th>
<th>Material</th>
<th>Shape</th>
<th>Dimensions (in)</th>
<th>Submerged?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Closed Pipe</td>
<td>□ RCP □ CMP</td>
<td>□ Circular □ Single</td>
<td>Diameter/Dimensions: □ Partially □ Fully</td>
<td>In Water: □ No</td>
</tr>
<tr>
<td></td>
<td>□ PVC □ HDPE</td>
<td>□ Elliptical □ Double</td>
<td></td>
<td>With Sediment: □ No</td>
</tr>
<tr>
<td></td>
<td>□ Steel</td>
<td>□ Box □ Triple</td>
<td></td>
<td>□ Partially □ Fully</td>
</tr>
<tr>
<td></td>
<td>□ Other:</td>
<td>□ Other: □ Other:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

□ Open Drainage (Ex. Swales)

|          | □ Concrete □ Trapezoid | Depth: ___________ |
|          | □ Earthen □ Parabolic | Top Width: ___________ |
|          | □ Rip-rap □ Other: | Bottom Width: ___________ |

Flow Present? □ Yes □ No

**Section 3: Sampling Data**

<table>
<thead>
<tr>
<th>Temperature of the sample</th>
<th>°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH of the sample</td>
<td>-</td>
</tr>
<tr>
<td>Nitrates</td>
<td>ppm</td>
</tr>
<tr>
<td>Phosphates</td>
<td>ppm</td>
</tr>
<tr>
<td>Salinity</td>
<td>%</td>
</tr>
<tr>
<td>Coliforms</td>
<td>colonies</td>
</tr>
</tbody>
</table>

Spring 2010
Date ______ Time _______ Page ______ of ________
Inspector(s) _______ Photo ______ CATCH BASIN NO: ______

STREET: ____________________________
NEAREST MARKER OR ADDRESS: __________________________
Number of Pipes Exiting CB: __________________________

Frame Shape: ___
Frame Dimensions: ___
Frame Opening (select one):
Grid Vane Bar
Curb Inlet: Yes___, No___

Leachina Catch Basin?: _____________
Sewer Plans Reference: Cont #_________ Sheet #_________
CB Condition: New, Good, Poor, Failed
Latitude______
Longitude______

FINISHED GRADE
Approx. El. ___

OPENING CENTERED?
YES ___ NO ___

DIA. =

Plan View Sketch
Include: Pipe No.'s & Flow Direction
Utility Poles & MH's
House Numbers

Depth to Bottom from G.S.: ____

Soil/Debris: Yes ___ No ___
Cleaning of CB Recommended:
Yes ___ No ___

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Incl. MH or CB No.)</th>
<th>Hood?</th>
<th>A</th>
<th>B</th>
<th>Elevation</th>
<th>Insert</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Town of Tewksbury, MA
DEFECTS:
(Cover, frame, grout, steps, shelf, pipes, or channels)

1. 

2. 

3. 

4. 

5. 

6. 

7. 

8. 

(USE REVERSE SIDE FOR ADDITIONAL DEFECTS TO BE NOTED.)

<table>
<thead>
<tr>
<th>PIPE SIZE</th>
<th>LENGTH</th>
<th>TO MH#</th>
<th>EST. FLOW</th>
<th>TYPE FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>B-</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>C-</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>D-</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

REMARKS:  (Include need for repairs)
**Physical Inventory Sheet**

**Sewer Plan Reference:** Contract # ____________________  **Sheet** ______________

<table>
<thead>
<tr>
<th>Location</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address</td>
<td>District / City</td>
</tr>
</tbody>
</table>

**Manhole Condition:** New___, Good___, Poor___, Failed___: Diameter_________

<table>
<thead>
<tr>
<th>Cover</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shape</td>
<td>Size</td>
</tr>
</tbody>
</table>

**Watertight:** Yes___ No___, Conditions:__________  **Vent Hole Size/Number:**________

<table>
<thead>
<tr>
<th>Pipe Connections</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Position*</td>
<td>Invert Elevation</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Based on the true North

**Manhole Construction:** Precast___, Block___, Brick___ Other___

**Invert Construction:** Concrete___, Brick___ Other_______

**Additional Comments**

**Manhole Sketch**
Tewksbury Storm Drain Mapping
HEADWALL & OUTFALL INSPECTION FORM

Date: ________________________ Inspectors: ________________________

Photo Number(s): ________________________________________________

Structure #: _____________________________________________________

Drawing: ________________________________________________________

Street: __________________________________________________________

Nearest Structure: _______________________________________________

Type of Structure: Headwall (Y/N)? Materials ________________________

Size of Structure & Pipes: _________________________________________

Invert: __________________________________________________________

Condition (Sediment, Erosion, Access): ______________________________

Connectivity (Upgradient, Basins?): _________________________________

Crown Above or Below Surface Water?: ______________________________

Dry Weather Flow Conditions: _____________________________________

Description of Visual Characteristics or Odors(I illicit connections?): ______________

Comments (any differences between Inlet and Outlet?): ________________

PHOTO #1

PHOTO #2
CROSS CULVERT INSPECTION

CROSS CULVERT LOCATION

1. Is water flowing during time of inspection, how much? [Y/N]
2. Is there any evidence of damage or deterioration to culvert or headwalls? [Y/N]
3. Is there any channel scouring? [Y/N]
4. Is there any road surface sink holes or settling? [Y/N]
5. Is Rip Rap in need of maintenance? [Y/N]
6. Is headwall free from any debris, obstructions or excessive vegetation? [Y/N]

7. Additional Survey Notes:
   - Culvert Number
   - Plan Reference/Contract #
   - Nearest Address
   - Latitude: [ ]
   - Longitude: [ ]
   - Culvert Shape (Circular, Elliptical, Box)
   - Culvert Type (Stone Culvert, Precast Concrete Box Culvert, CMP, PVC, etc.)
   - Culvert Dimensions (Pipe Diameter, Box Dimensions)
   - Culvert Age
   - Invert Elevation (IN)
   - Invert Elevation (OUT)
   - Culvert Condition
   - Water Depth (during Insp.)
   - Maximum Headwater over Crown of Culvert
   - Wingwall Dimensions (if applicable)
   - Flared Ends: Yes [ ] NO [ ] Size: [ ]

Show: north arrow, headwalls and wingwalls, rip rap, pole #'s, ties, entering pipes

Plan:

Elevation:
**Long Pond 319 Grant - Water Sampling Data Sheet: Drainage System**

Watershed ___________________________ Location Description ___________________________ Structure I.D. ___________________________

Street Name ___________________________ Tewksbury, MA Near House # ________ Volunteer Name ___________________________

CB ____ MH ____ Outfall ____ Culvert ____ Pond ____ Lake ____ Wetland ____ Stream ____ River ____ Other(specify) ______________________

Date of Collection ________________________ Time ________ (AM/PM) Sample Site Flow (estimate) __________________________ (GPM/cfs)

Air Temperature °C ________ Last Rain ________ Rain Amount ________ Wind Direction ________ Wind Speed ________

Remarks (color/turbidity/sediment/etc.)


<table>
<thead>
<tr>
<th>Lab ID</th>
<th>Station ID</th>
<th>Visual Observation of Sample Substrate</th>
<th>Collection Time</th>
<th>Grab or Composite</th>
<th>NO-3 ppm</th>
<th>PO-4 ppm</th>
<th>Temp. °F</th>
<th>Salinity (%)</th>
<th>pH (SU)</th>
<th>Coliform (colonies)</th>
<th>OTHER:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Relinquished by: ___________________________ Date: __________ Time: __________

Received by: ___________________________ Date: __________ Time: __________
Deliverable 4.3
Tewksbury Student Watershed Outreach Program
LONG POND WATERSHED ACADEMY

Student Field Training Program

• Field Water Quality Monitoring Training

• Drainage Structure Connectivity Training
# Long Pond 319 Grant - Water Sampling Data Sheet: Drainage System

<table>
<thead>
<tr>
<th>Lab ID</th>
<th>Station ID</th>
<th>Visual Observation of Sample Substrate</th>
<th>Collection Time</th>
<th>Grab or Composite</th>
<th>NO-3</th>
<th>PO-4</th>
<th>Temp. °F</th>
<th>Salinity (%)</th>
<th>pH (SU)</th>
<th>Coliform (colonies)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Drain #3</td>
<td>Sediments + Algae</td>
<td>9:30-11:00 a.m.</td>
<td>Cab 6</td>
<td>1</td>
<td>0.5</td>
<td>45</td>
<td>0</td>
<td>6</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Pond</td>
<td>Sediments + Algae</td>
<td></td>
<td></td>
<td>0</td>
<td>0.5</td>
<td>45</td>
<td>0</td>
<td>5</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Underwater</td>
<td>Clear &amp; Organic matter</td>
<td></td>
<td></td>
<td>1</td>
<td>0.5</td>
<td>45</td>
<td>0</td>
<td>6</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>#60</td>
<td>Clear</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>45</td>
<td>0</td>
<td>6</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>140</td>
<td>Clear w/ Sand</td>
<td></td>
<td></td>
<td>1</td>
<td>0.5</td>
<td>45</td>
<td>0</td>
<td>8</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>135</td>
<td>Light Yellow Tint</td>
<td></td>
<td></td>
<td>1</td>
<td>0.5</td>
<td>45</td>
<td>0</td>
<td>6</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>161</td>
<td>Clear W/ Sediments</td>
<td></td>
<td></td>
<td>2</td>
<td>0.5</td>
<td>45</td>
<td>0</td>
<td>6</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>162</td>
<td>Clear, Mosquito Larvae Sediment</td>
<td></td>
<td></td>
<td>0</td>
<td>0.5</td>
<td>45</td>
<td>0</td>
<td>6</td>
<td>Negative</td>
</tr>
</tbody>
</table>

Remarks (color/turbidity/sediment/etc.): Mostly clear w/ sediments (Sand, silt)

Remarks: Mostly clear w/ sediments (Sand, silt)
**CATCH BASIN NO:**

**STREET:** Ferncroft Rd

**NEAREST MARKER OR ADDRESS:** 19 Ferncroft

**Number of Pipes Exiting CB:**

**Frame Shape:** Square

**Frame Dimensions:** 2x2

**Frame Opening (select one):** Grid

**Curb Inlet:** Yes

---

**Leachina Catch Basin?:** NO

**Sewer Plans Reference:** Cont # Sheet #

**CB Condition:** New, Good, Poor ✓, Failed

**FINISHED GRADE**

**Approx. El.**

**Latitude**

**Longitude**

---

**Plan View Sketch**

Include: Pipe No.'s & Flow Direction

Utility Poles & MH's

House Numbers

**Depth to Bottom from G.S:** 4½ ft

**Soil/Debris:** Yes ✓ No

Cleaning of CB Recommended:

Yes ✓ No

---

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (incl. MH or CB No.)</th>
<th>Hood?</th>
<th>A</th>
<th>B</th>
<th>Elevation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>12&quot;</td>
<td>Concrete</td>
<td>Manhole MH</td>
<td>None</td>
<td>30° 48' 0&quot;</td>
<td>48&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Town of Tewksbury, MA**

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---
DATE: 2/20
TIME: 9:15 AM

Inspector(s): Charles Randolph

CATCH BASIN NO: ___
STREET: Ferncroft Road
NEAREST MARKER OR ADDRESS: #2 Ferncroft
Number of Pipes Exiting CB: ___

Frame Shape: Square
Frame Dimensions: 2 x 2
Frame Opening (select one): Grid, Vane Bar
Curb Inlet: Yes, No

Leaching Catch Basin?: 

Sewer Plans Reference: Cont #, Sheet #
CB Condition: New, Good, Poor, Failed

Latitude 
Longitude

Plan View Sketch
Include: Pipe No.'s & Flow Direction
Utility Poles & MH's
House Numbers

Depth to Bottom from G.S.: 4 ft 2 in
Soil/Debris: Yes, No
Cleaning of CB Recommended: Yes, No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Ind. MH or CB No.)</th>
<th>Hood?</th>
<th>A</th>
<th>B</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Concrete</td>
<td>Muncie MH</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Town of Tewksbury, MA
Date 12/13/11  Time 9am - 12pm
Inspector(s) THS  Photo ______ CATCH BASIN NO: ______

STREET: FERN CROFT ROAD
NEAREST MARKER OR ADDRESS: Below power lines, 26 Ferncroft

Number of Pipes Exiting CB: ______

Frame Shape: [ ] SQUARE  [X] RECTANGULAR
Frame Dimensions: [X] 2' x 2'
Frame Opening (select one): [ ] Grid  [ ] Vane  [X] Bar
Curb Inlet: [X] Yes  [ ] No

Leaching Catch Basin?: [ ] No  [X] Yes

Sewer Plans Reference: Cont # ______  Sheet # ______
CB Condition: New [ ] Good [X] Poor [ ] Failed

FINISHED GRADE

Latitude

Longitude

APPROX. EL. ______

OPENING CENTERED?: [X] YES  [ ] NO

DIA. = 65''

CB Material (select one):
[ ] Concrete  [ ] Concrete Block  [ ] Brick  [ ] Other

Plan View Sketch

Include: Pipe No.'s & Flow Direction  Utility Poles & MH's  House Numbers

Depth to Bottom from G.S. 55''

Soil/Debris: [X] Yes  [ ] No

Cleaning of CB Recommended:
[ ] Yes  [X] No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (incl. MH or CB No.)</th>
<th>Hood?</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Concrete</td>
<td>DMH</td>
<td>NO 37'' 49'' 2'' 49''</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OUGHLIN ENVIRONMENTAL SERVICES, LLC

Town of Tewksbury, MA
**CATCH BASIN NO:** 2

**STREET:** 

**NEAREST MARKER OR ADDRESS:**  

**Number of Pipes Exiting CB:** 

**Frame Shape:**  

**Frame Dimensions:** 

**Frame Opening (select one):**  

**Curb Inlet:** Yes / No  

**Leachina Catch Basin?:** No  

**FINISHED GRADE**  

**APPROX. EL.:** 

**Latitude:** 

**Longitude:** 

---

**Plan View Sketch**  

Include: Pipe No.'s & Flow Direction  
Utility Poles & MH's  
House Numbers  

**Depth to Bottom from C.S.:** 55  

**Soil/Debris:** Yes / No  

**Cleaning of CB Recommended:** Yes / No  

---

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Incl. MH or CB No.)</th>
<th>Hood?</th>
<th>A</th>
<th>B</th>
<th>Elevation:</th>
<th>Invert:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18</td>
<td>Concrete</td>
<td>Drain - manhole</td>
<td>yes</td>
<td>37</td>
<td>49</td>
<td>2</td>
<td>49</td>
</tr>
</tbody>
</table>

---

**Town of Tewksbury, MA**

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**Comments:**  
(door, observations, stormwater source, public/private property)
CATCH BASIN NO: __________

STREET: __________________________

NEAREST MARKER OR ADDRESS: __________

Number of Pipes Exiting CB: __________

Frame Shape: __________
Frame Dimensions: __________
Frame Opening (select one): ______
Curb Inlet: Yes, No

FINISHED GRADE
Approx. El. __________

Latitude __________
Longitude __________

OPENING CENTERED? YES ______ NO ______

DIA. = __________

CB Material (select one):
Concrete
Concrete Block
Brick
Other

Include: Pipe No.'s & Flow Direction
Utility Poles & MH's
House Numbers

Depth to Bottom from G.S.: __________

Soil/Debris: Yes, No
Cleaning of CB Recommended: Yes, No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (incl. MH or CB No.)</th>
<th>Hood?</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>CONCRETE</td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
CATCH BASIN NO: ____

STREET: FERNCROFT ROAD

NEAREST MARKER OR ADDRESS: "Below Powerlines"

Number of Pipes Exiting CB: 1

Frame Shape: SQUARE
Frame Dimensions: 2' x 2'
Frame Opening (select one): Grid

Leaching Catch Basin?: No

Sewer Plans Reference: Cont # Sheet #
CB Condition: New × Good Poor Failed

Latitude
Longitude

Plan View Sketch
Include: Pipe No.'s & Flow Direction
Utility Poles & MH's
House Numbers

Depth to Bottom from G.S.: 55"

Soil/Debris: Yes × No
Cleaning of CB Recommended: Yes × No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (incl. MH or CB No.)</th>
<th>Hood?</th>
<th>Elevation: A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>12&quot;</td>
<td>Concrete</td>
<td>DH</td>
<td>NO 37&quot; 49&quot; G&quot; 49&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CATCH BASIN NO: 2
STREET: Ferncroft
NEAREST MARKER OR ADDRESS: Under Power lines
Number of Pipes Exiting CB: One

Leaching Catch Basin?: No
Sewer Plans Reference: Cont # Sheet #
CB Condition: New Good Poor Failed
Latitude
Longitude

Plan View Sketch
Include: Pipe No.'s & Flow Direction, Utility Poles & MH's House Numbers

Depth to Bottom from G.S.: 55
Soil/Debris: Yes No
Cleaning of CB Recommended: Yes No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Inc. MH or CB No.)</th>
<th>Hood?</th>
<th>A</th>
<th>B</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>Concrete</td>
<td>DMA</td>
<td>No</td>
<td>32</td>
<td>40</td>
<td>12</td>
</tr>
</tbody>
</table>

Town of Tewksbury, MA
CATCH BASIN NO: ______

STREET: ____________________________

NEAREST MARKER OR ADDRESS: ____________________________

Number of Pipes Exiting CB: ____________________________

Frame Shape: ____________________________

Frame Dimensions: ____________________________

Frame Opening (select one): ____________________________

Grid Vane Bar Curb Inlet: Yes ______ No ______

Leaching Catch Basin?: ____________________________

Sewer Plans Reference: Cont # ______ Sheet # ______

CB Condition: New ______ Good ______ Poor ______ Failed ______

Latitude ____________________________

Longitude ____________________________

 FINISHED GRADE Approx. El. ____________________________

Plan View Sketch

Include: Pipe No.'s & Flow Direction Utility Poles & MH's House Numbers

Depth to Bottom from G.S.: ______

Soil/Debris: Yes ______ No ______

Cleaning of CB Recommended: Yes ______ No ______

| Pipe No. | Size | Material | Destination (Inc. MH or CB No.) | Hood? | A | B | Elevation: |
|---------|------|----------|---------------------------------|-------|___|___|-----------|
|         |      |          |                                 |       |   |   |           |
|         |      |          |                                 |       |   |   |           |

Comments: (odor, observations, stormwater source, public/private property)

Town of Tewksbury, MA

Doughlin Environmental Services, LLC
**CATCH BASIN NO:**

**STREET:** FERNCASTLE ROAD

**NEAREST MARKER OR ADDRESS:** 60 FERNCASTLE

Number of Pipes Exiting CB: 1

Frame Shape: SQUARE

Frame Dimensions: 3' x 3'

Frame Opening (select one):
- Grid
- Vane
- Bar

Curb Inlet: Yes

Leaching Catch Basin?: No

Sewer Plans Reference: Cont # Sheet #

CB Condition: New

FINISHED GRADE

Approx. El.: ___

Latitude: ___

Longitude: ___

Plan View Sketch

Include:
- Pipe No.'s & Flow Direction
- Utility Poles & MH's
- House Numbers

Depth to Bottom from G.S.: 4.4'

Soil/Debris: Yes X No

Cleaning of CB Recommended:
- Yes X No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (incl. MH or CB No.)</th>
<th>Hood</th>
<th>A</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12&quot;</td>
<td>CONCRETE</td>
<td>DMH</td>
<td>NO</td>
<td>3'</td>
<td>4.18'</td>
<td>2&quot;</td>
</tr>
</tbody>
</table>

---

Town of Tewksbury, MA
CATCH BASIN NO: 

STREET: 

NEAREST MARKER OR ADDRESS: 00 Fenwyck

Number of Pipes Exiting CB: 1

Frame Shape: □

Frame Dimensions: 2 x 2

Frame Opening (select one):

Vane Bar

Curb Inlet: Yes No

FINISHED GRADE

Approx. El.

Latitude

Longitude

Sewer Plans Reference: Cont # Sheet #

CB Condition: New Good , Poor Failed

Leaching Catch Basin?: no

OPENING CENTERED? YES NO

DIA. = 4 ft

CB Material (select one):

Concrete

Concrete Block

Brick

Other

Plan View Sketch

Include: Pipe No.'s & Flow Direction

Utility Poles & MH’s

House Numbers

Depth to Bottom from G.S.: 4.5 feet

Soil/Debris: Yes No

Cleaning of CB Recommended: Yes No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Incl. MH or CB No.)</th>
<th>Hood?</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 in.</td>
<td>concrete</td>
<td>main hole</td>
<td>yes</td>
<td>3.0</td>
<td>4.0</td>
</tr>
</tbody>
</table>

OUGHLIN ENVIRONMENTAL SERVICES, LLC

Town of Tewksbury, MA
Date 12/31/14 Time 9:21
Inspector(s) E H Photo ______ CATCH BASIN NO: ______
STREET: Ferncroft Rd
NEAREST MARKER OR ADDRESS: Go Ferncroft Rd
Number of Pipes Exiting CB: 1

Frame Shape: Square
Frame Dimensions: 1x2
Frame Opening (select one):
- Grid
- Vane
- Bar
Curb Inlet: Yes , No

FINISHED GRADE
Approx. El. ______
Latitude ______
Longitude ______

OPENING CENTERED? YES ______ NO ______
DIA. ______

CB Material (select one):
- Concrete
- Concrete Block
- Brick
- Other

Plan View Sketch
Include: Pipe No.'s & Flow Direction
- Utility Poles & MH's
- House Numbers
- Sanitary Sewer
- Drainage

Depth to Bottom from C.S.: 4.4 ft
Soil/Debris: Yes _____ No _____
Cleaning of CB Recommended: Yes _____ No _____

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (incl. MH or CB No.)</th>
<th>Hood?</th>
<th>Elevation:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 in</td>
<td>Concrete</td>
<td>NWH</td>
<td>No</td>
<td>5.44 4.14 7</td>
</tr>
</tbody>
</table>

OUGHLIN ENVIRONMENTAL SERVICES, LLC

Town of Tewksbury, MA
CATCH BASIN NO: __________

STREET: FERNcroft ROAD

NEAREST MARKER OR ADDRESS: G9 FERNcroft

Number of Pipes Exiting CB: ______

Frame Shape: SQUARE

Frame Dimensions: 2' x 2'

Frame Opening (select one):
- Grid
- Vane
- Bar

Curb Inlet: Yes [ ] No [x]

Leaching Catch Basin?: [ ] No

Sewer Plans Reference: Cont # _______ Sheet # _______

CB Condition: New [ ] Good [x] Poor [ ] Failed [ ]

FINISHED GRADE
Approx. El. ______

Latitude ______

Longitude ______

Plan View Sketch

Include: Pipe No.'s & Flow Direction
Utility Poles & MH's
House Numbers

Depth to Bottom from G.S.: 56'

Soil/Debris: Yes [x] No [ ]
Cleaning of CB Recommended: Yes [x] No [ ]

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Inc. MH or CB No.)</th>
<th>Hood?</th>
<th>A'</th>
<th>B'</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12''</td>
<td>CONCRETE</td>
<td>DMH</td>
<td>No</td>
<td>33''</td>
<td>47''</td>
<td>4''</td>
<td>47''</td>
</tr>
</tbody>
</table>

Town of Tewksbury, MA
CATCH BASIN NO: 3

STREET: Ferncroft

NEAREST MARKER OR ADDRESS: 69 Ferncroft

Number of Pipes Exiting CB: 1

Frame Shape: Square
Frame Dimensions: 2 x 2

Frame Opening (select one):
- Grid
- Vane
- Bar
Curb Inlet: Yes

Leaching Catch Basin?: No

Sewer Plans Reference: Cont # ______ Sheet # ______

CB Condition: New ___ Good ___ Poor ___ Failed ___

FINISHED GRADE
Approx. El. ______

Latitude ______
Longitude ______

Plan View Sketch

Include: Pipe No.'s & Flow Direction
Utility Poles & MH's
House Numbers

Depth to Bottom from G.S. 5 ft

Soil/Debris: Yes ___ No ___

Cleaning of CB Recommended: Yes ___ No ___

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Incl. MH or CB No.)</th>
<th>Hood?</th>
<th>A</th>
<th>B</th>
<th>Elevation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>Concrete</td>
<td>Down manhole</td>
<td>No</td>
<td>33.47</td>
<td>47</td>
<td>4.7</td>
</tr>
</tbody>
</table>

OUGHLIN ENVIRONMENTAL SERVICES, LLC

Town of Tewksbury, MA
CATCH BASIN NO:   
STREET:  Francaist (3rd hole)  
NEAREST MARKER OR ADDRESS: 12A  
Number of Pipes Exiting CB:  one  
Leaching Catch Basin?:  No  
Sewer Plans Reference: Cont #  Sheet #  
CB Condition: New  , Good  , Poor  , Failed  
Latitude  
Longitude  

Plan View Sketch  
Include: Pipe No.'s & Flow Direction  
Utility Poles & MH's  
House Numbers  
Depth to Bottom from G.S.: 25  
Soil/Debris: Yes  , No  
Cleaning of CB Recommended:  Yes  , No  

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (incl. IH or CB No.)</th>
<th>Hood?</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipe 3</td>
<td>12</td>
<td>concrete</td>
<td>drain manhole</td>
<td>no</td>
<td>57 47 3 in 47</td>
</tr>
</tbody>
</table>

Town of Tewksbury, MA
CATCH BASIN NO: ______

STREET: ________________________________

NEAREST MARKER OR ADDRESS: _________________

Number of Pipes Exiting CB: ________________

Frame Shape: _______ Square _______

Frame Dimensions: ________x_______

Frame Opening (select one): Grid ___________ Vane ___________ Bar ___________ Grate ___________

Current Inlet: Yes _______ No _______

FINISHED GRADE
Approx. El. _______

Latitude _______

Longitude _______

Sewer Plans Reference: Cont # ______ Sheet # ______

CB Condition: New ______ Good ______ Poor ______ Failed ______

Plan View Sketch
Include: Pipe No.'s & Flow Direction
Utility Poles & MH's
House Numbers

Depth to Bottom from G.S.: ______

Soil/Debris: Yes ______ No ______
Cleaning of CB Recommended: Yes ______ No ______

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (incl. MH or CB No.)</th>
<th>Hood A</th>
<th>Elevation (in)</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>Concrete</td>
<td></td>
<td>34</td>
<td>54</td>
</tr>
</tbody>
</table>

Town of Tewksbury, MA
CATCH BASIN NO: 7

STREET: Ferncroft

NEAREST MARKER OR ADDRESS: 81

Number of Pipes Exiting CB: 1

Frame Shape: 
Frame Dimensions: 
Frame Opening (select one): Grid Vane Bar 
Curb Inlet: Yes No 

Leachining Catch Basin?: 
Sewer Plans Reference: Cont # Sheet #

CB Condition: New Good Poor Failed

FINISHED GRADE Approx. El. 
Latitude 
Longitude 

Plan View Sketch
Include: Pipe No.'s & Flow Direction Utility Poles & MH's House Numbers

Depth to Bottom from G.S.: 57

Soil/Debris: Yes No 
Cleaning of CB Recommended: Yes No 

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (incl. MH or CB No.)</th>
<th>Hood?</th>
<th>A</th>
<th>B</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>Concrete</td>
<td>Drain manhole</td>
<td>No</td>
<td>33</td>
<td>41</td>
<td>2 54</td>
</tr>
</tbody>
</table>

OGHLIN
ENVIRONMENTAL
SERVICES, LLC

Town of Tewksbury, MA
Date _______  Time _______  Page _______ of _______
Inspector(s) _______  Photo _______  CATCH BASIN NO: _______
STREET: Amhurst (hole 4)  NEAREST MARKER OR ADDRESS: __________
Number of Pipes Exiting CB: __________
Frame Shape: _______  Frame Dimensions: _______ x _______
Frame Opening (select one): Grid  Vane  Bar  Curb Inlet: Yes  No
Leaching Catch Basin?: __________
Sewer Plans Reference: Cont # _______  Sheet # _______
CB Condition: New  Good  Poor  Failed
FINISHED GRADE Approx. El. _______
Latitude _______  Longitude _______

Plan View Sketch
Include: Pipe No.'s & Flow Direction  Utility Poles & MH's  House Numbers

Depth to Bottom from G.S.: 57
Soil/Debris: Yes  No
Cleaning of CB Recommended: Yes  No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (incl. MH or CB No.)</th>
<th>Hood?</th>
<th>A</th>
<th>B</th>
<th>Elevation:</th>
<th>Import</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OUGHLIN ENVIRONMENTAL SERVICES, LLC

Town of Tewksbury, MA
CATCH BASIN NO: ______

STREET: ____________

NEAREST MARKER OR ADDRESS: ______

Number of Pipes Exiting CB: ______

Frame Shape: ______

Frame Dimensions: ______

Frame Opening (select one) ______

Curb Inlet: Yes ______

Leaching Catch Basin?: ______

Sewer Plans Reference: ______

CB Condition: ______ Good ______ Poor ______ Failed ______

FINISHED GRADE Approx. El. ______

Latitude ______

Longitude ______

Plan View Sketch

Include: Pipe No.'s & Flow Direction Utility Poles & MH's House Numbers

Depth to Bottom from G.S.: ______

Soil/Debris: Yes ______ No ______

Cleaning of CB Recommended: Yes ______ No ______

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Incl. MH or CB No.)</th>
<th>Hood?</th>
<th>A</th>
<th>B</th>
<th>Elevation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 inch</td>
<td>Concrete</td>
<td>MH</td>
<td>No</td>
<td>r.v.</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Town of Tewksbury, MA
STREET: Ferncroft St
NEAREST MARKER OR ADDRESS: 135 Ferncroft St
Number of Pipes Exiting CB:

Frame Shape: Square
Frame Dimensions: 2x2 ft
Frame Opening (select one):
- Brick
- Vane
- Bar
Curb Inlet: Yes, No

Leachina Catch Basin?: No
Sewer Plans Reference: Cont #, Sheet #
CB Condition: New, Good, Poor, Failed
FINISHED GRADE Approx. El.
Latitude
Longitude

Plan View Sketch
Include: Pipe No.'s & Flow Direction
Utility Poles & MH's
House Numbers

Depth to Bottom from G.S.: 
Soil/Debris: Yes, No
Cleaning of CB Recommended: Yes, No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Incl. MH or CB No.)</th>
<th>Hood?</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 in</td>
<td>Concrete</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Town of Tewksbury, MA
Date 12/21/11 Time 9am-12pm

Inspector(s) THS Photo CATCH BASIN NO: _______

STREET: FERNCROFT ROAD
NEAREST MARKER OR ADDRESS: 1641 FERNCROFT

Number of Pipes Exiting CB: _______

Frame Shape: SQUARE
Frame Dimensions: 2' x 3'
Frame Opening (select one): Bar
Curb Inlet: Yes ☑ No ☐

FINISHED GRADE
Approx. El. _______

Leaching Catch Basin?: No

Sewer Plans Reference: Cont # __________ Sheet # __________
CB Condition: New ☐ Good ☑ Poor ☐ Failed ☐

Latitude _______
Longitude _______

OPENING CENTERED? YES ☑ NO ☐

DIA. = 3' 10"

PLAN VIEW SKETCH
Include: Pipe No.'s & Flow Direction
Utility Poles & MH's
House Numbers

Depth to Bottom from G.S.: 4' 2"

Soil/Debris: Yes ☑ No ☐
Cleaning of CB Recommended: Yes ☑ No ☐

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Inn. MH or CB No.)</th>
<th>Hood?</th>
<th>A</th>
<th>Elev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12''</td>
<td>CONCRETE</td>
<td>DMH</td>
<td>NO</td>
<td>32''</td>
<td>1'</td>
<td>3' 3&quot;</td>
</tr>
</tbody>
</table>

Town of Tewksbury, MA
CATCH BASIN NO: 

STREET: Ferncraft Rd

NEAREST MARKER OR ADDRESS: 161 Ferncraft Rd

Number of Pipes Exiting CB: 1

Frame Shape: 5 x 4

Frame Dimensions: 2.6 x 3

Frame Opening (select one): Grid Vane Bar

Curb Inlet: Yes, No

Leaching Catch Basin?: No

Sewer Plans Reference: Cont # Sheet #

CB Condition: New, Good, Poor, Failed

FINISHED GRADE Approx. El.

Latitude

Longitude

Plan View Sketch

Include: Pipe No.'s & Flow Direction, Utility Poles & MH's, House Numbers

Depth to Bottom from G.S.: 4 ft 2 in

Soil/Debris: Yes, No

Cleaning of CB Recommended: Yes, No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Incl. MH or CB No.)</th>
<th>Hood?</th>
<th>Elevation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 1/2&quot;</td>
<td>Concrete</td>
<td>MH</td>
<td>None</td>
<td>2.5</td>
<td>3 ft 15 in</td>
</tr>
</tbody>
</table>

TOWNHILL ENVIRONMENTAL SERVICES, LLC

Town of Tewksbury, MA
CATCH BASIN NO: 

STREET: FERNCROFT ROAD

NEAREST MARKER OR ADDRESS: 162 FERNCROFT

Number of Pipes Exiting CB: 1

Frame Shape: SQUARE

Leaching Catch Basin?: NO

Sewer Plans Reference: Cont # Sheet #

CB Condition: New, Good, Poor, Failed

FINISHED GRADE

Latitude

Longitude

Plan View Sketch

Include: Pipe No.'s & Flow Direction
Utility Poles & MH's
House Numbers

Depth to Bottom from G.S.: 5'7"

Soil/Debris: Yes, No
Cleaning of CB Recommended: Yes, No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (incl. MH or CB No.)</th>
<th>Hood?</th>
<th>Elevation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>12&quot;</td>
<td>CONCRETE</td>
<td>DMH</td>
<td>NO 3'3&quot; 4'7&quot; 1'4&quot; 4'7&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:
(door, observations, stormwater source, public/private property)

TOWN LIN ENVIRONMENTAL SERVICES, LLC

Town of Tewksbury, MA
CATCH BASIN NO: 162 Ferncroft

Number of Pipes Exiting CB: 1

Leaching Catch Basin?: NO

Frame Shape: Square
Frame Dimensions: 24" x 24"
Frame Opening (select one): Grid
Curb Inlet: Yes

Sewer Plans Reference: Cont. Sheet
CB Condition: New, Good, Poor, Failed

FINISHED GRADE Approx. El. __________
Latitude __________
Longitude __________

Plan View Sketch
Include: Pipe No.'s & Flow Direction
Utility Poles & MH's
House Numbers

Opening Centered?: YES _ NO

DIA. = 4½'

CB Material (select one): Concrete
Concrete Block
Brick
Other

Depth to Bottom from G.S.: 5ft 7½'

Soil/Debris: Yes _ No
Cleaning of CB Recommended: Yes _ No

<table>
<thead>
<tr>
<th>Pipe No.</th>
<th>Size</th>
<th>Material</th>
<th>Destination (Incl. MH or CB No.)</th>
<th>Hood?</th>
<th>A</th>
<th>B</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12&quot;</td>
<td>Concrete</td>
<td>MH</td>
<td>None</td>
<td>34&quot;</td>
<td>7½&quot;</td>
<td>4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Town of Tewksbury, MA