HOMETOWN AMERICA
COMMUNITIES

# Supplement No. 1 to the Oakhill Stormwater Management System Operation & Maintenance Program Document

**(created in Year 1 of the O&M Program and current as of October 2022)**

## Overview

This first supplement to the Oakhill Stormwater Management System Operation & Maintenance Program Document is designed to provide additional clarity and specificity with respect to the identification and description of all components of the stormwater management system that serves the Oakhill community, and the schedule for the routine inspection and maintenance of those system components. Oakhill has determined that this supplement is appropriate for purposes of facilitating the inspection, maintenance, and reporting process that is required by the Oakhill Stormwater Program and the O&M Program Document.[1] This Supplement No. 1 includes the following additions and clarifications to the O&M Program Document:

- Supplement to Section 1: Stormwater Management System Components, to:
  - Incorporate the Enhanced Locus Site Plan, Revision #1 (05/17/22), which provides greater clarity and legibility, and harmonizes the terminology used on the Locus Site Plan with the terminology used in the O&M Program Document;
  - Include a description of the Water Quality Units at Oakhill, which were depicted on the Locus Site Plan attached to the court-approved O&M Program Document, but not described in the text of that document; and

[1] Reference is made to the Oakhill Stormwater Program that is incorporated into the parties' Stipulation of Settlement, a/k/a the Oakhill Settlement Agreement (ECF 171-1), which was approved by and incorporated by reference into Judge Sorokin's September 23, 2021 Partial Final Order and Judgment Pursuant to Rule 54(b) (ECF 217), in the case entitled *Barbara Craw et al., v. Hometown America, LLC, et al.*, Case 18-cv-12149-LTS (D. Mass.). Nothing in this Supplement No. 1 is intended or shall be construed as detracting in any way from the requirements of the court-approved Oakhill Stormwater Program as described in the O&M Program Document that is attached as Exhibit G to the Stipulation of Settlement (pages 115-22 of ECF 171-1); to the contrary, this supplement is intended and shall be construed only to provide additional detail and clarity to the existing program requirements.

    - Describe and differentiate the two subcategories of subsurface Infiltration/Retention Structures at Oakhill, *i.e.*, Infiltration Chambers and Leaching Catch Basins; for purposes of facilitating inspections and enhancing the reporting process;
- Supplement to Section 2: Maintenance Schedule and Procedure, to:
    - Specify the recommended schedule and procedure for inspections and maintenance of the Water Quality Units; and
- Supplement to Section 4: Summary of Maintenance Activities and Schedule, to:
    - Incorporate the O&M schedule for the Water Quality Units into the comprehensive Summary of Maintenance Activities and Schedule.

Each of these supplemental items is described below.

## 1. STORMWATER MANAGEMENT SYSTEM COMPONENTS

The components of the Oakhill stormwater management system are described in the court-approved O&M Program Document as supplemented by the text below. The locations of the structural components are shown on the attached **Enhanced Locus Site Plan** (rev. 1, dated May 17, 2022), prepared by Allen and Major Associates, Inc.

### Water Quality Units[2]

A water quality unit is an underground structure placed within the stormwater treatment train and designed with the purpose of removing sediments and other pollutants through the process of settling before discharging to a receiving body. To remove coarser sediments and floatables, the power of swirling or flowing water is used as well as the process of gravity separation. Due to limited storage capacity and pollutant removal, water quality units may be used only for pretreatment purposes and, in some cases, for spill control. All of the water quality units at the Oakhill community are Stormceptor structures.

### Subcategories of Infiltration/Retention Structures

The court-approved O&M Program Document generally describes and identifies the infiltration/retention structures present at Oakhill. During the first year of implementing the O&M Plan, it became apparent that distinguishing between the types of infiltration/retention structures would add specificity to the O&M Plan and facilitate the reporting of the inspections and maintenance of the structures. Accordingly, this

[2] Water quality units are also sometimes referred to as "proprietary separators" because different manufacturers make various types of units which have differing proprietary specifications and maintenance requirements for separating sediments and other pollutants from stormwater. At the Oakhill community, all of the water quality units are "Stormceptor" units, which is a Contech Engineered Solutions product. In light of that fact, the more colloquially descriptive and simple term "water quality unit" has been chosen for use in the Oakhill Stormwater Program.

Supplement No. 1 describes the two types of infiltration/retention structures present at Oakhill, which are Leaching Catch Basins and Underground Infiltration Chambers.

### Leaching Catch Basins

A leaching catch basin a pre-cast concrete barrel and riser with an open bottom and evenly spaced perforations around the outer perimeter. Leaching catch basins are classified as a subsurface infiltration/retention structure under this Operation and Maintenance plan but are distinguished from other subsurface structures as they are commonly located within travelled ways and provide direct conveyance of water from paved surface into the concrete structure where it is recharged directly into the adjacent soil. Leaching catch basins are used in place of 'standard' catch basins where runoff water is simply conveyed to another handling device.

### Infiltration Chambers

An underground infiltration chamber(s) is a subsurface structure that receives stormwater runoff that provides for recharge into the underlying soil while accommodating increased storage volume to handle larger intensity runoff events. Stored water infiltrates into the soil after passing through a bedding of stone that provides a structural base for the chamber as well as some filtration. Underground infiltration chambers may be a variety of different materials including concrete galleys, pre-cast high density polyethylene (HDPE) plastic arches , corrugated metal pipe, or HDPE perforated piping. They all perform similar function and are selected based on the available design area and capture volume required.

## 2. MAINTENANCE SCHEDULE AND PROCEDURE

### Water Quality Units

The Stormceptor water quality units at Oakhill should be inspected and cleaned in accordance with the current recommendations of their manufacturer. Twice-annual inspections for these water quality units are generally appropriate. Although two inspections of the water quality units were performed during Year 1 of the Oakhill Stormwater Program, Oakhill expects to arrange for these components to be inspected four times annually in Year 2 and subsequent years. This more frequent inspection schedule is being implemented as a matter of administrative convenience, to allow for the routine coordination of the water quality unit inspections with the inspections of other types of structures that are on a four-times-a-year schedule.

For Stormceptor units, the manufacturer recommends removal of sediment when depth reaches approximately 15% of the sediment capacity of the unit. The storage capacity of the unit varies depending on the model in use and all models can be found within the unit's owner's manual. Cleaning is also recommended immediately after an oil, fuel, or chemical spill. Cleaning of water quality units is subject to site-specific review, and these structures may not require cleaning in accordance with general recommendations if observed conditions do not indicate the need for such cleaning.

## Subcategories of Infiltration/Retention Structures

### Leaching Catch Basin

Leaching catch basins are subject to the inspection and maintenance schedule previously established by the court-approved O&M Program Document for all Infiltration/Retention Structures. In summary, that schedule requires inspections of the inlets on an annual basis, with any debris that might cause the structure to clog to be removed on those occasions, and any additional cleaning of subsurface structures to be determined based on site-specific review, subject to performance observations and feasibility considerations.

### Infiltration Chamber

Infiltration chambers are also subject to the inspection and maintenance schedule previously established by the court-approved O&M Program Document for all Infiltration/Retention Structures. In summary, that schedule requires inspections of the inlets on an annual basis, with any debris that might cause the structure to clog to be removed on those occasions, and any additional cleaning of subsurface structures to be determined based on site-specific review, subject to performance observations and feasibility considerations.

## 4. COMPREHENSIVE UPDATED SUMMARY OF MAINTENANCE ACTIVITIES AND SCHEDULE

| System Component | Maintenance Activity | Recommended Frequency |
|---|---|---|
| Drainage Channels/Swales | Inspection | Following construction, and then twice annually |
| | Cleaning (removal of sediment) | Once annually, plus as needed based on twice-a-year inspections |
| | Evaluation of need for re-seeding | Once annually, in the spring |
| | Mowing, fertilizing, liming, watering, pruning, weeding, and pest control | As needed |
| Catch Basins | Inspection | Four times annually |
| | Cleaning | Once annually, plus as needed based on quarterly inspections |
| Drain Manholes | Inspection and cleaning | Consider doing each year during dry weather, and establish semi-regular frequency based on experience |
| Infiltration/Retention Structures | Inspection | Once annually for inlets, and other subsurface structure components |
| | Cleaning (removal of debris) | As needed based on performance observations and feasibility considerations |
| Outlet Structures | Inspection | Once annually |
| | Cleaning (removal of debris) | As needed based on once annual inspections |
| Yard and Trench Drains | Inspection | Four times annually |
| | Cleaning | As needed based on quarterly inspections |
| | Turf edging | During routine mowing, as needed |
| Water Quality Units | Inspection | Two times or four times (after Year 1) annually |
| | Cleaning (sediment removal per manufacturer instructions) | As needed, based on site-specific review and during dry weather when sediment depth reaches 15% of unit capacity, and immediately after any oil, fuel, or chemical spill |

Attachment: Enhanced Locus Site Plan (rev. 1, dated 05/17/22)

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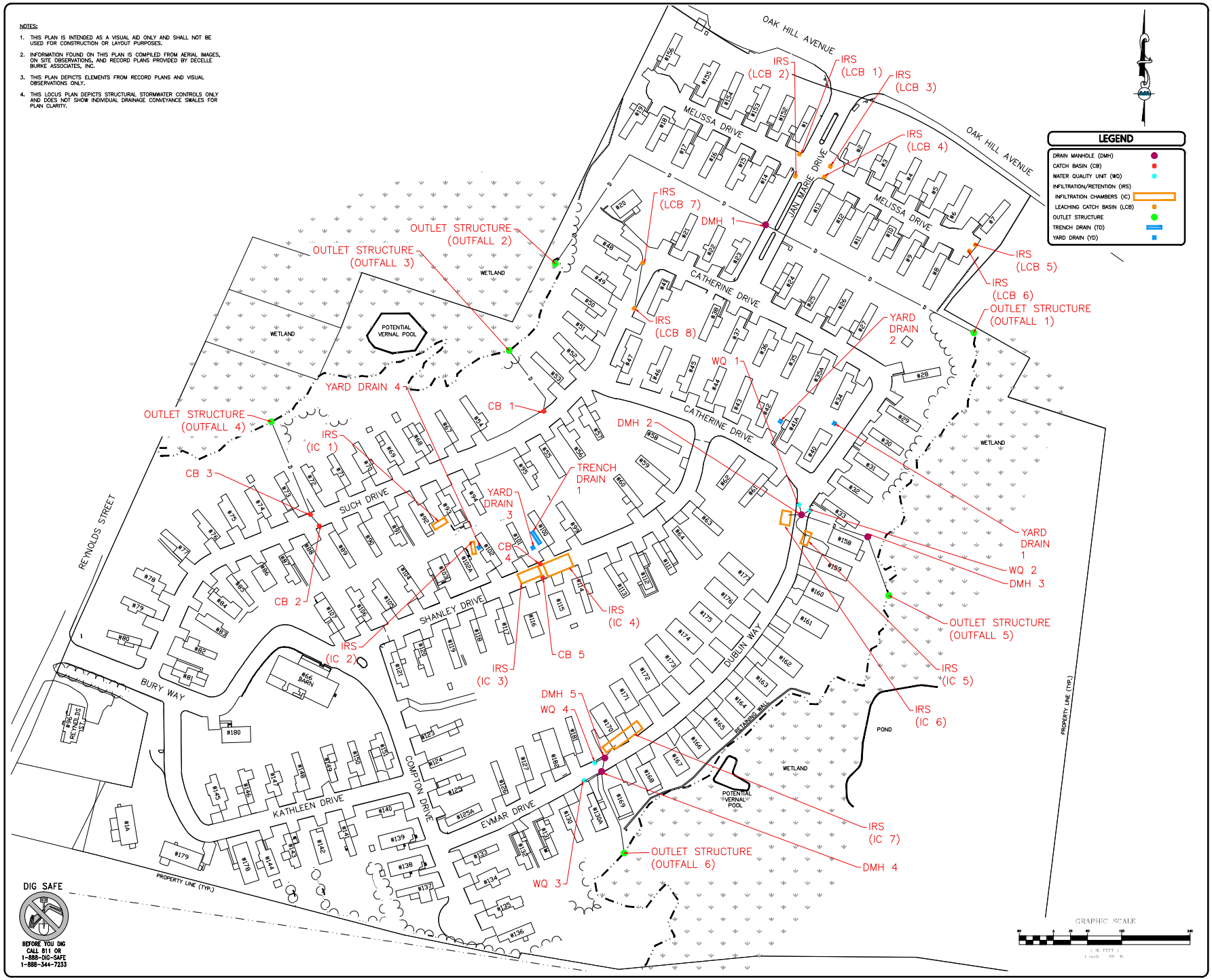


| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 05-17-2022 | REVISED STRUCTURE LABELS |

APPLICANT/OWNER:
HOMETOWN OAKHILL, LLC
1003 OAKHILL AVENUE
ATTLEBORO, MA

PROJECT:
OAK HILL
1003 OAKHILL AVENUE
ATTLEBORO, MA

| | | | |
|---|---|---|---|
| PROJECT NO. | 16930-STA | DATE: | 10-21-2021 |
| SCALE: | 1" = 60' | DWG. NAME: | C16930-STA |
| DESIGNED BY: | JPS | CHECKED BY: | PLC |

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DRAWING TITLE:
STORMWATER MANAGEMENT SYSTEM LOCUS PLAN

SHEET No.
1