Site Plan

AREA A
30.8 AC

AREA B
13.5 AC

LOT 57
LOT 58
LOT 56
LOT 55A
LOT 55
LOT 54
LOT 53
LOT 52
LOT 51
LOT 50

Check Dam

CONN GRID SYSTEM

300'

GRAPHIC SCALE

(IN FEET)
1 inch = 100 ft.

100   0   50 100   200   400

CHECK DAM DETAIL

CROSS SECTION
LIGHT STONE FILLING
#1 OR #2 CRUSHED GRAVEL OR STONE FACE
FLOW
GEOTEXTILE BEDDING
ANCHOR GEOTEXTILE 6" MIN.
CUTOFF TRENCH
12"
2'-0" (MAX.)
18"
9'-0" (TYP.)

CROSS SECTION
LIGHT STONE FILLING
ANCHOR GEOTEXTILE BEDDING
CJTOFF TRENCH
12"
18"
13'-0" (TYP.)

PROFILE
FLOW 1 2
DAM TOE DAM CREST
EQUAL ELEVATION
CUTOFF TRENCH
BOTTOM OF DITCH
2'-0" (TYP.)

PROFILE
FLOW 6
DAM TOE DAM CREST
EQUAL ELEVATION
CUTOFF TRENCH
BOTTOM OF DITCH

SECTION A-A
SIDE SLOPE
MATCH DITCH BOTTOM
GEOTEXTILE BEDDING
EXISTING GROUND
2'-0" (TYP.)

SECTION B-B
SIDE SLOPE
MATCH DITCH BOTTOM
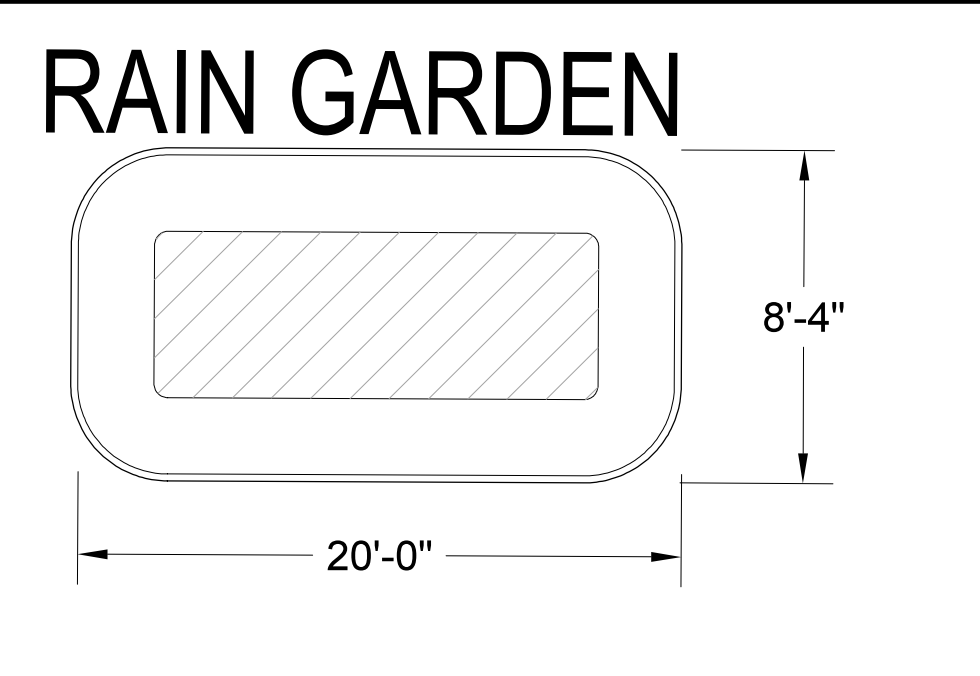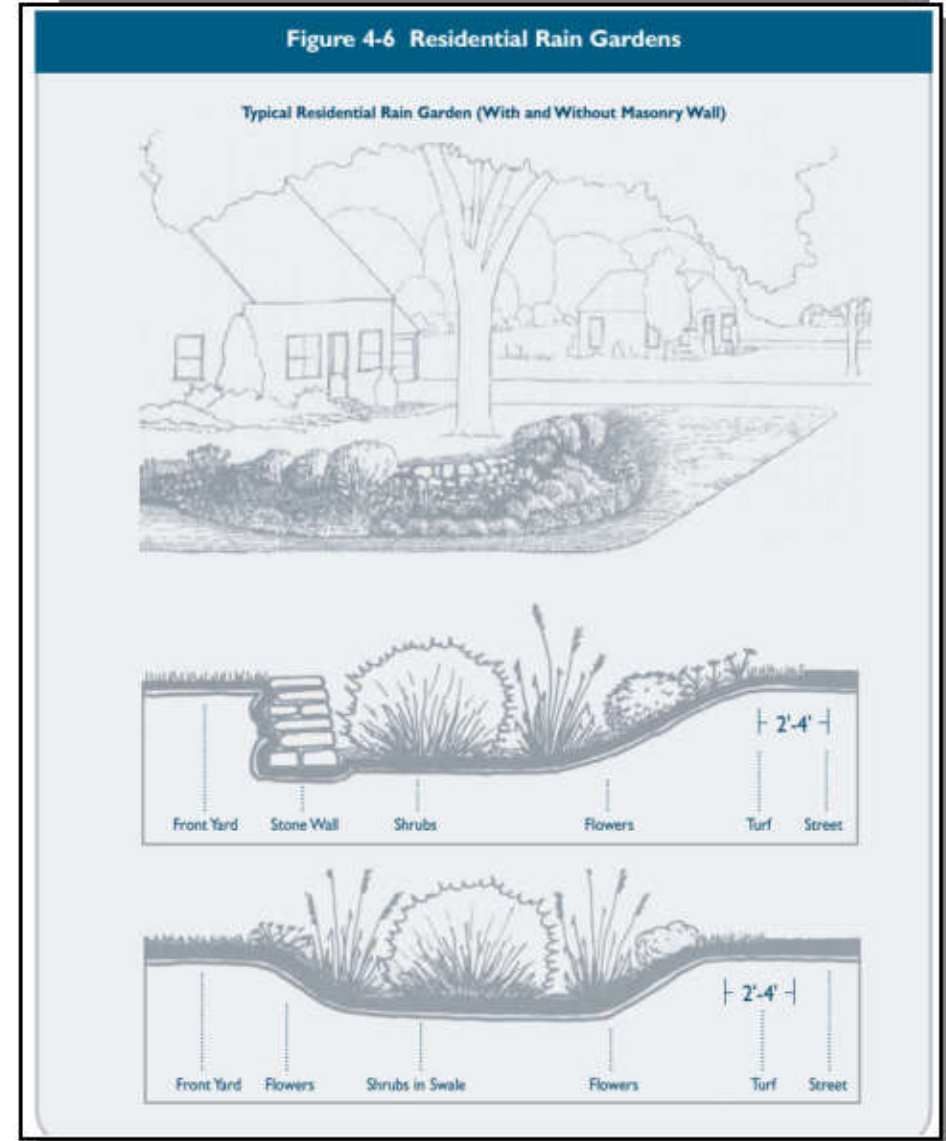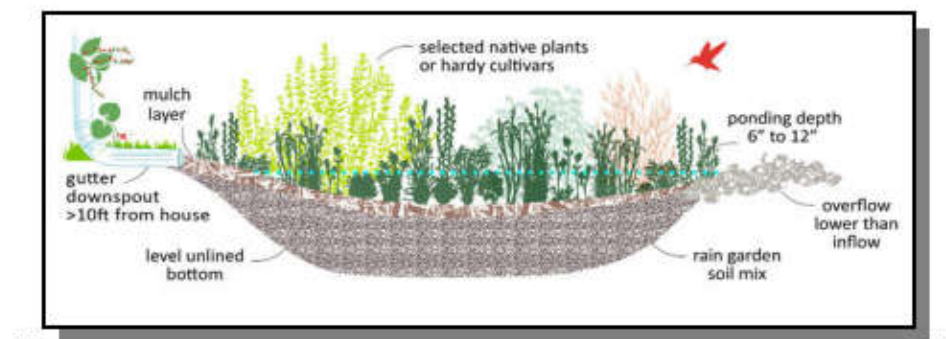GEOTEXTILE BEDDING
EXISTING GROUND

RAIN GARDEN

8'-4"
20'-0"

Water Quality Volume rainfall event 1" WQV rainfall

where:

P = design precipitation, inches (1" for water quality storm)
A = drainage area (acres) roof area 2,400 sf >> 0.055 ac
V = runoff volume CF
V = (1"/12) ft x 2400 sf = 200 CF
Rain Garden size 10-feet wide X 20-feet long x 1-foot deep= 200CF

selected native plants or hardy cultivars
mulch layer
ponding depth 6" to 12"
gutter downspout >10ft from house
overflow lower than inflow
level unlined bottom
rain garden soil mix

Figure 4-6 Residential Rain Gardens

Typical Residential Rain Garden (With and Without Masonry Wall)

Front Yard Stone Wall Shrubs Flowers Turf Street
2'-4"

Front Yard Flowers Shrubs in Swale Flowers Turf Street
2'-4"

APPLICATION NOTES:

A. THE PRIMARY PURPOSE OF A CHECK DAM IS TO REDUCE EROSION IN A CHANNEL BY REDUCING FLOW VELOCITY IN THE CHANNEL.

B. CHECK DAMS WILL CAPTURE SEDIMENT THAT FALLS OUT OF SUSPENSION BEHIND THE UPSTREAM SIDE OF THE CHECK DAM DUE TO DECREASED VELOCITY.

C. CHECK DAMS ARE NOT INTENDED TO, AND WILL NOT FILTER SEDIMENT FROM TURBID WATER.

D. SLOPES EXCEEDING 10% SHALL INCLUDE A CHANNEL PROTECTIVE LINING.

E. PERMANENT STONE CHECK DAMS LOCATED WITHIN THE ESTABLISHED ROADWAY CLEAR ZONE SHALL BE IN CONFORMANCE WITH CTDOT ROADSIDE DESIGN GUIDANCE.

GENERAL NOTES:

1. MAXIMUM DRAINAGE AREA CONTRIBUTING TO TEMPORARY STONE CHECK DAM SHALL BE 2 ACRES. MAXIMUM DRAINAGE AREA CONTRIBUTING TO PERMANENT STONE CHECK DAM SHALL BE 1 ACRE.

2. MEASURES SHALL BE INSPECTED EVERY (7) CALENDAR DAYS OR AFTER EACH RAINFALL OF ½" OR MORE WITHIN A 24 HOUR PERIOD. MEASURES SHALL BE CLEANED AND REPAIRED AS REQUIRED.

3. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.

4. COARSE AGGREGATE FACING MATERIAL FOR THE STONE CHECK DAM SHALL MEET THE GRADATION REQUIREMENTS OF SIZE DESIGNATION #1 OR #2 OF TABLE 703-4. STONE FILLING CORE MATERIAL FOR THE STONE CHECK DAM SHALL MEET THE GRADATION REQUIREMENTS OF LIGHT STONE FILLING.

STONE CHECK DAM PLACEMENT INTERVAL •

DITCH SLOPE	TEMPORARY CHECK DAM PLACEMENT INTERVAL (BASED ON 2' HEIGHT)	PERMANENT CHECK DAM PLACEMENT INTERVAL (BASED ON 1' HEIGHT)
1 %	200'	100'
2 %	100'	50'
3 %	67'	33'
4 %	50'	25'
5 %	40'	20'
6 %	33'	17'
8 %	25'	-
10 %	20'	-

• I = H / S

WHERE:
I = CHECK DAM SPACING INTERVAL
H = CHECK DAM HEIGHT
S = CHANNEL SLOPE

Title Block

May Engineering LLC
Civil Engineering and Site Planning
1297 RT 163 Oakdale, CT 06370
860 884-9671

Project
Nottingham Hills Subdivision Phase V
121 Upper Pattagansett Rd.
East Lyme, CT. 06333

DESCRIPTION: Building Lot Development and Grading Rain Garden Location and Drainage

PROPOSED BUILDING
SCALE: 1" = 100' & as noted
DATE: 10 OCT 2021
JOB NUMBER | SHEET
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