

**Impervious Surfaces
299 Rockland Street
Existing Driveways**

Current conditions: 2,500 sq ft

Planned conditions: 2,884

Net increase in area: 384 sq ft

See following diagrams of current conditions and planned conditions.

Items to mitigate increase:

1. Gutters with downspouts

As part of remodel, construction plans are to include gutters and downspouts to direct the water as per plans into rain barrels and downspouts

2. Rain barrels to collect rainwater

Owner wants to use rain barrels to collect runoff for use in watering lawn/garden. See survey plan showing location of two planned rain barrel locations. Overflow from rain barrels will feed into drywells.

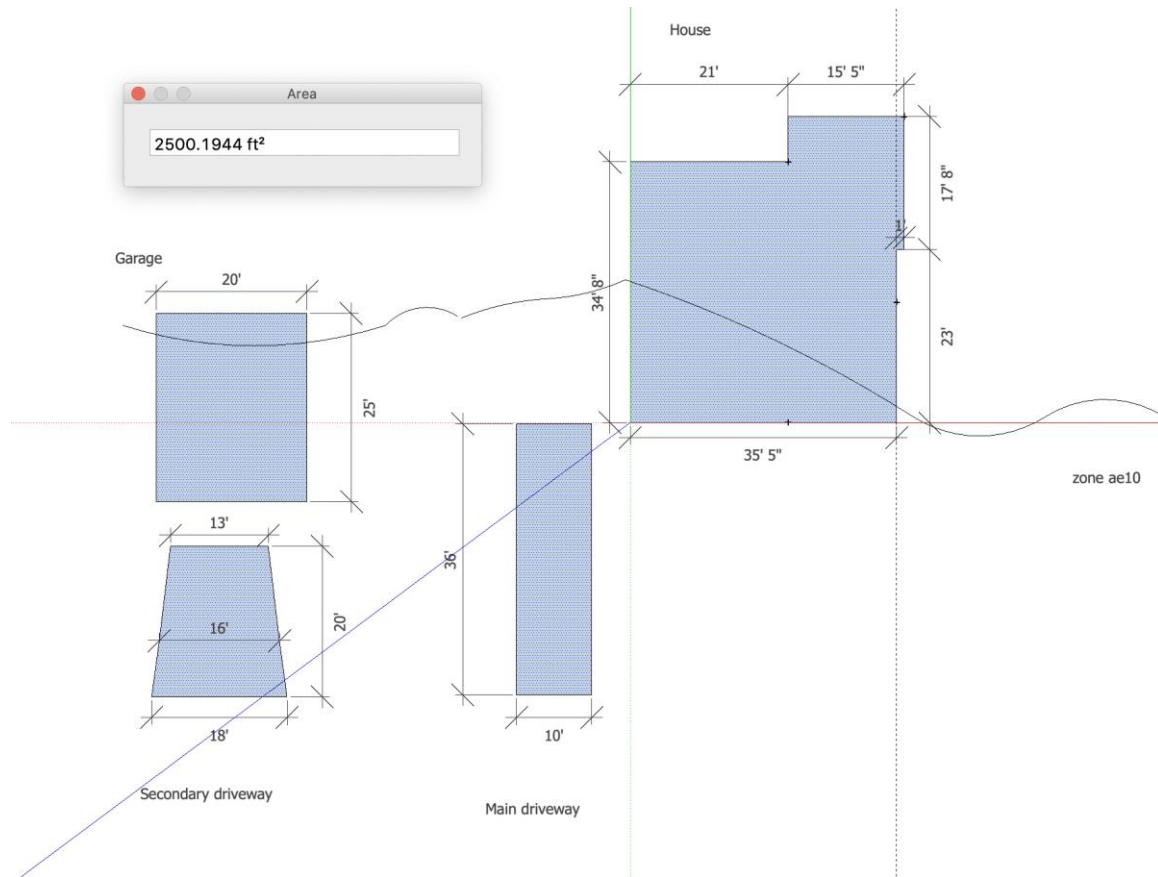
3. Overflow from rain barrels to go to drywells.

See drywell calculator to calculate number of drywells with specifications on installation. These will be connected to downspouts noted on included survey plan.

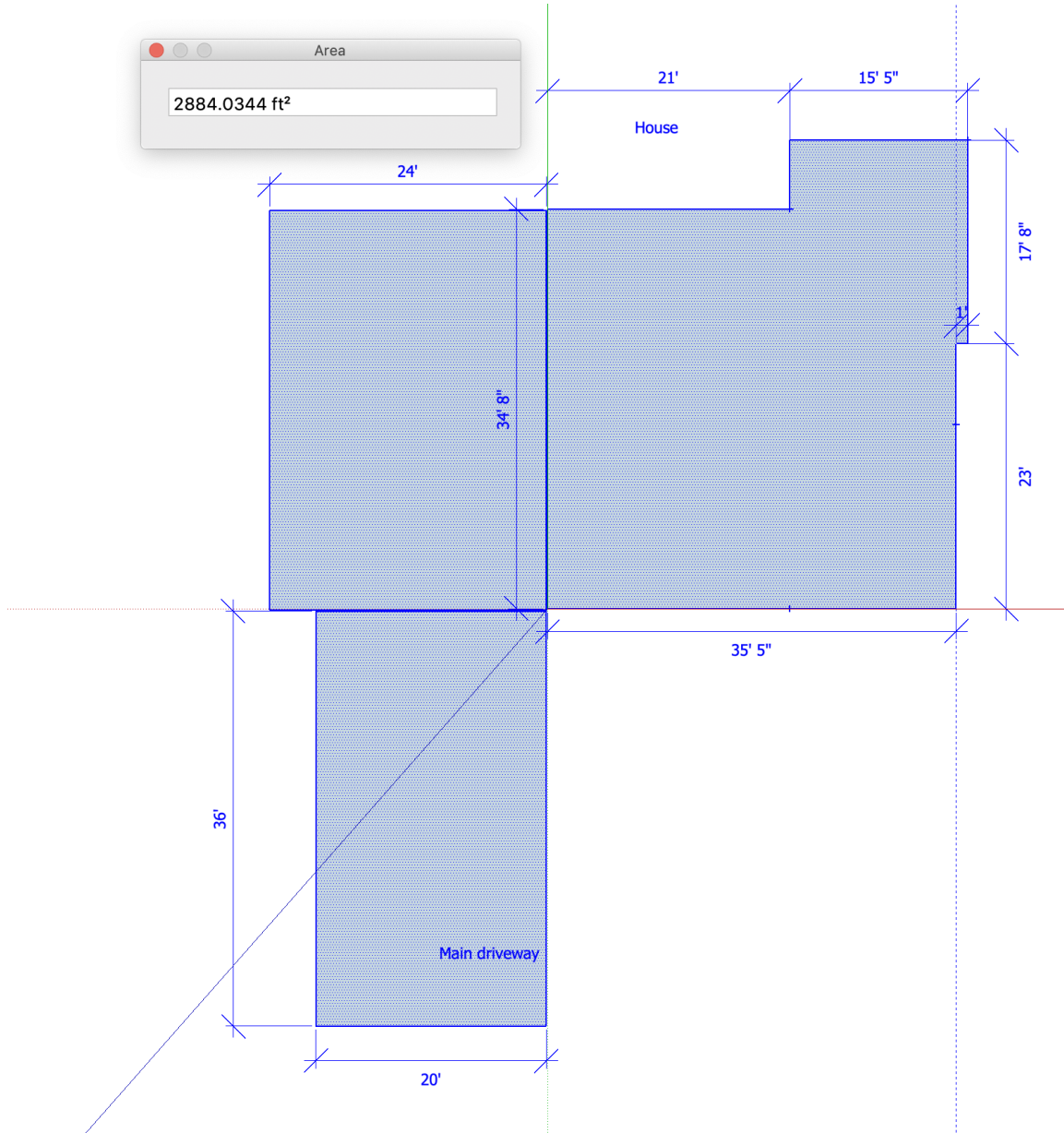
4. Planting of vegetation/Restoration of permeable area.

The homeowner plans to restore the impermeable garage and secondary driveway after their removal by planting a garden along the edge of their property along with planting grass in its place. We estimate that the garden would be approximately 2' wide and 35' long as shown on the proposed condition plan. This would bring the area of gardens to 110 sq feet of plantings to include plants that absorb water such as Daylilies, red columbine, seaside goldenrod, switchgrass and pink tickseed

Current Conditions
299 Rockland Street



299 Rockland Street
Planned Conditions:



Drywell calculator for increase in area:

NDS Flo-Well Calculator

Step 1:

Enter the Square Feet of Drainage Area 1: (Ex. Roof)

384

Enter the Square Feet of Drainage Area 2: (Ex. Grass)

0

Step 2:

Choose the Coefficient of Runoff for Area 1:

1.0 (Concrete/As ▾)

Choose the Coefficient of Runoff for Area 2:

0.35 (Grass ▾)

Step 3:

Choose the 25 Year Rainfall: ([see rainfall map](#)), 1.75 ▾ in/hr

Step 4:

Enter the depth of the gravel backfill beneath the Flo-Well:

(Dimension A) 2 ft

Step 5:

Enter the thickness of the gravel backfill around the Flo-Well:

(Dimension B) 1 ft

Step 6:

Press the Calculate button for results: [Calculate](#) [Reset](#)

[Print](#)

Step 7: View results:

| | |
|------------------------------|------------------------------------|
| Runoff | 6.99 GPM 0.02 CFS |
| Volume of water to be stored | 209.70 Gallons 28.03 Cubic feet |

of Flo-Well(s) Needed 2

| | |
|-------------------------|--------------------------------------|
| Amount of Gravel Needed | 2.61 Cubic yards 70.47 Cubic feet |
|-------------------------|--------------------------------------|

Download Installation Details

[Stacked Flo-Well\(TM\) Installation Detail](#)
[Side-by-Side Flo-Well\(TM\) Installation Detail](#)

[illegible]

