

39 Catoonah Street

Ridgefield, CT

LEED for Homes, Platinum

“This center village renovation project is LEED certified Platinum, without the benefit of solar energy”

LEED Points	Points Awarded	Project Size:
Sustainable Sites	15	1,829 SF Renovations
Water Efficiency	10	1,916 SF Additions
Energy & Atmosphere	30.5	3,745 SF Total
Materials & Resources	14	
Indoor Environmental Quality	12	Anticipated Annual Savings:
Innovation & Design	7.5	\$4,068 in energy efficiency
Location & Linkages	10	38,200G in exterior water
Awareness & Education	1	78,200G in interior water

This single family home has been completely renovated with three additions to meet the owners' functional needs.

High Performance Features:

Recycling & Transport

The existing home was recycled and completely renovated, re-using the foundation and much of the framing. It is located on a small 0.4 acre site adjacent to downtown Ridgefield which allows the owners easy access to many services and amenities, reducing their need to use cars to get around.

Temperature Regulation

Spray foam insulation, at two different densities, was used from the basement slab and walls up to the roof to dramatically reduce heat loss and gain. Both the walls and roof received extra 2x3 framing that crossed the studs and rafters to reduce thermal bridging and to increase the insulation levels to R32 in the walls and R58 in the roof. This allowed for the installation of a small geothermal heating and cooling system, which will cost much less to operate over the life of the home.

Water Efficiency

Landscape water use has been greatly reduced by a rainwater collection system that is expected to collect and store sufficient water to irrigate the extensive landscape plantings that were specially selected for drought resistance. Any additional stormwater than can be stored on site is directed to a rain garden and porous paver driveway, which helps to reduce problematic stormwater run-off.



Project Team:

Architect: Mose Associates Architects, Ridgefield, CT (203) 438-5355

Builder: BPC Green Builders, Wilton, CT (203) 563-9909

<http://www.bpcgreenbuilders.com>

Certification provider: Steven Winter Associates, Norwalk, CT (203) 857-0200 <http://www.swinter.com>

HERS rater: RPM Energy Solutions, Hamden, CT (203) 889-0505

Landscape architect: Didona Associates, Danbury, CT (203) 778-1840 <http://www.didonaassociates.com>

Resources:

CL&P energy efficient homes -

<http://www.clp.com/Home/SaveEnergy/Rebates/NewConstruction.aspx>

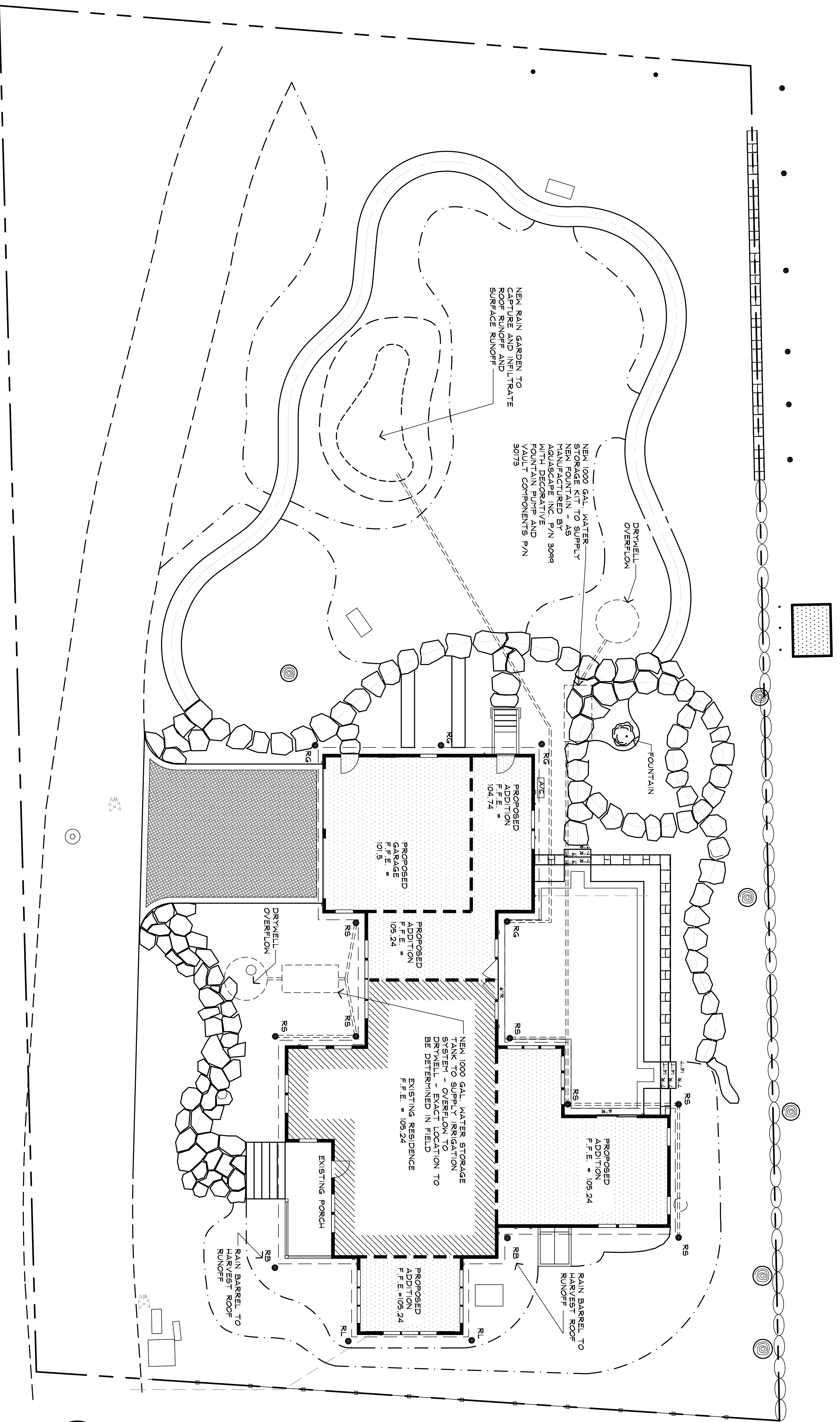
Energy Star homes - <http://www.energystar.gov>

USGBC green homes - <http://greenhomeguide.com>

Northeast Sustainable Energy Association - <http://www.nesea.org>



The Connecticut Chapter of the US Green Building Council



NEW RAIN GARDEN TO CAPTURE AND INFILTRATE SURFACE RUNOFF

NEW 1000 GAL. WATER STORAGE KIT TO SUPPLY NEW FOUNTAIN - AS MANUFACTURED BY AQUASCAPES INC. P/N 3099 WITH DECORATIVE AND VAULT COMPONENTS P/N 3075

DRYWELL OVERFLOW

FOUNTAIN

PROPOSED ADDITION F.F.E. = 104.74

PROPOSED GARAGE F.F.E. = 101.5

PROPOSED ADDITION F.F.E. = 105.24

NEW 1000 GAL. WATER STORAGE KIT TO SUPPLY NEW FOUNTAIN TO DRYWELL - EXACT LOCATION TO BE DETERMINED IN FIELD

EXISTING RESIDENCE F.F.E. = 105.24

PROPOSED ADDITION F.F.E. = 105.24

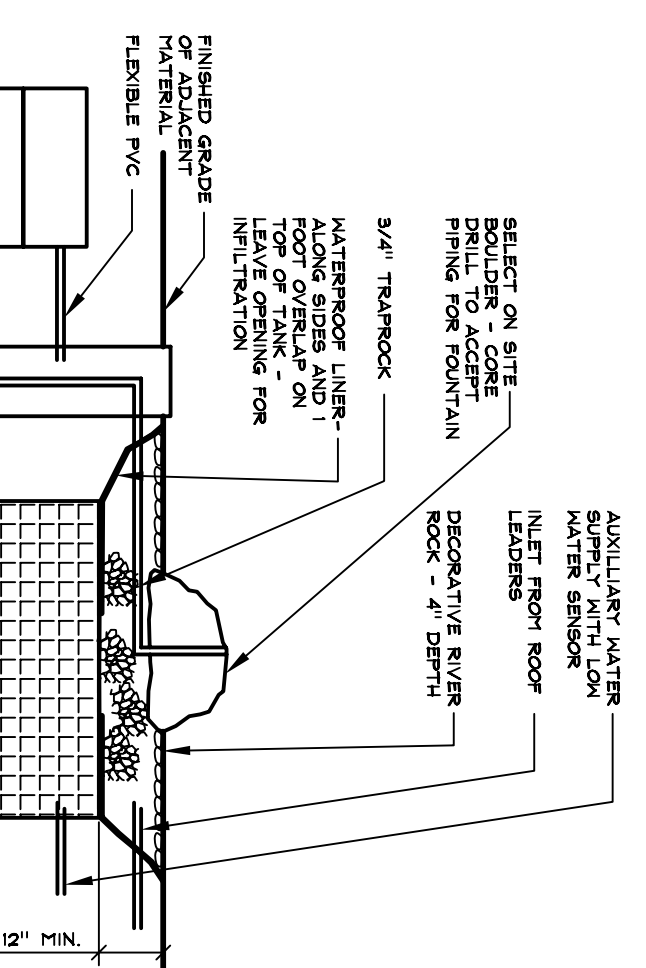
PROPOSED ADDITION F.F.E. = 105.24

RAIN BARREL TO HARVEST ROOF RUNOFF

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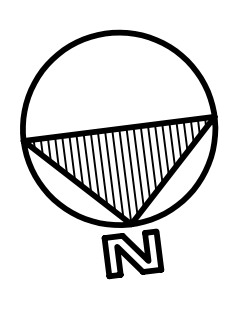
EXISTING PORCH



LEGEND

- PROPERTY LINE
- - - - - EXISTING PLANT BED LINE
- ○ ○ ○ ○ EXISTING STONEMALL TO REMAIN
- ○ ○ ○ ○ EXISTING FENCE TO REMAIN
- ○ ○ ○ ○ EXISTING TREE TO REMAIN
- ■ ■ ■ ■ NEW STONE WALL
- NEW DRAINAGE PIPE
- 4" PVC PIPE(TYP)
- RS ● ROOF LEADER TO RAIN STORAGE
- RC ● ROOF LEADER TO RAIN GARDEN
- RB ● ROOF LEADER TO RAIN BARREL
- RL ● ROOF LEADER TO GRADE

STORMWATER HARVESTING PLAN
RESIDENCE AT 39 CATOONAH STREET
RIDGEFIELD, CONNECTICUT
 DATE: DECEMBER 20, 2009 SCALE: 1/8" = 1'



NOTE: MANUFACTURER'S INSTRUCTIONS MUST BE FOLLOWED FOR PROPER OPERATION AND MAINTENANCE.
 2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL BY ARCHITECT.
 3. CONTRACTOR TO PURCHASE AND INSTALL ALL NECESSARY EQUIPMENT TO COMPLETE WORK.
 FOUNTAIN
 NOT TO SCALE