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Advanced Design and Building Information Modeling February

Your Name:	Anil K. Dipu
Name of Project:	Watershed House, Team Maryland
Preference:	“Water Conservation”
Use of Passive Solar Strategies	
Solar Passive Strategies used in this house are: Solar Panel use on slope roof, Natural Ventilation for openings on sides of house, glazing, and wall assembly for natural heat control.	
Use of Sustainable strategies-	
Several sustainable strategies are Grey Water usage for heat and daily routines, Sloping Shed Roofs to increase solar energy usage, and green roof. There are also snow guards that help green roof stay in place, and High performance Envelope with structure.	
Use of Technology	
Sustainable innovation and use of technology include Solar panels with sloped roof, High Performance Envelop (Spray foam cavity-insulation –also with flooring, water-leak prevention, Micro-line finish, EPDM Gasket, “Cor-a-vent strip”, TREMCO Liquid-Applied Membrane etc.), high performance windows and doors, Thermo treated wood clad panels, Micro-Inverters (DC to AC), water pump, Liquid Desiccant Wall etc.	



Use of materials

The material of wood, concrete, glass, steel, and other materials such as soy based spray foam, Extruded polystyrene rigid insulation, liquid applied air and water barrier, etc.

Photovoltaic strategy

Solar paneling is used to produce maximum energy and usage. The system saves cost from Con Ed and provides the self-convenience for efficient use of electricity throughout the house. While also Micro-invertors for direct current transformed into alternative current.

What strategy would you copy? What is the greatest strength?

The use of Wall Envelop and green roof technology. Greatest strength would be is the wall envelop with solar energy use.

What is the greatest weakness of the entry? What would you avoid?

The greatest weakness is that it would still need to sustain wind load impact depending on its wall structure.

Additional comments?

I admire the use of its Green Roof and garden areas.