BOSTON ENERGY POSITIVE HOUSING PROPOSAL - 61 MARCELLA STREET, ROXBURY

The site principles are based on the economic, zero-waste and self-organizing properties of natural processes. By emulating wild ecosystems, the landscape is functional, productive and enduring.

- Conveniences, Comfort & Livability
- Durability
- Beauty of Land & Design
- Food & Health
- Climate & Environment
- Energy & (Cost) Savings
- Materials & Resources
- Water Efficiency
- Community

Trees: All trees on site to be removed to accommodate buildings (with unobstructed south-facing exposure for full benefit of PV cells) on patios and parking. Most of the immediate trees are undesirable and/or invasive species. However, trees will be transplanted for new planting of trees that will be either native species specific to site conditions (filling environmental and design gaps) or fruit bearing for human and wildlife consumption.

Water: Water on roof will be collected in above grade 300 gallon plastic rain barrel with a spigot located at the patio. The minimally collected water is for use as required during dry spells. Drip irrigation after vegetation establishment is a goal except in cases of severe drought. The budget does not allow full collection of precipitation before grade and site collection. However, permeable surfacing materials, planting and grading are designed to allow maximum ground water recharge while eliminating erosion concerns.

Driveways and Terraces: Driveways and terraces will be low albaco permeable asphalt. Terraces are to be planted with native perennials, shrubs, and trees, while the parking areas will be of dry soil permeable brick pavers to be both functional and maximize ground water recharge.

Flowspace: Terraces are created due to the close proximity of a large neighborhood park which has a lot for recreational purposes.

Patio: Patios are located in front and rear yards allowing for maximum living space and community connection. The informal front yard gathering areas shall vary with 1/4AB minus space and while the more formal rear and patios shall be of dry soil permeable brick pavers to be both functional and maximize ground water recharge.

Exterior Screens & Storage: Privacy vegetation growing screen at rear patios and trash enclosure shall be made from recycled lumber or other similarly recycled. The bike & outdoor storage shed for gardening tools, etc. shall be made from recycled lumber.

Food Garden and Vegetation: All sites have communal food growing areas located in accessible, full sun to partially shaded locations. The site supports a permaculture philosophy and includes edible plants for human and wildlife consumption which are established as perennial crops. Trees, shrubs and hedges are composed of native species to support ecosystem. The practice of right plant right place and vegetation adaptability is followed to reduce maintenance and resource expenditure, as well as support the context offerings (use to dry shade to rain etc). Multi-purpose and multi-layered plantings are offered for visual and environmental richness as well as privacy.

Mulch: No shredded bark mulch shall be used. Instead, the use of locally processed composted leaf mulch shall enhance gardens until an equilibrium is established of the garden producing own mulch.

Compost: Mixing units to have indoor composting units for convenience. Outdoor food waste recycling is outside composting system will process garden waste and compost from indoor systems. Leaf collection (also provided) for production of leaf mulch for on-site use. Nothing needs to be taken out.,