Ashland Sustainability Best Practices

Working with the Ashland Sustainability Committee to support the Town's Resolution to achieve Net Zero by 2040 as well as other sustainability goals, and in consideration of impacts on town services and infrastructure, the Planning Board and the Design Review Committee encourages applicants to apply the following best practices to projects requiring a site plan review and/or a special permit.

1. **Vegetation and Landscaping**: The proposed project protects and creates sustainable landscaping.
    - Minimal site disturbance to protect and preserve the natural landscape and habitats.
    - Invasive species have been removed.
    - Mature trees are protected and preserved.
    - New trees are provided that outnumber the quantity of trees removed from the site.
    - A minimum of 70 percent of the on-site plantings are native species.
    - Drought-tolerant shrubs and perennials are provided on all sides of the site.
    - Where screening is needed, dense and layered plantings are provided; single rows of trees are avoided.
    - The use of natural turf grass is minimized or eliminated, and the use of synthetic grass is eliminated.
    - After establishment, no potable water is used for watering of the landscape.
    - Captured stormwater is used to water landscaping.
    - Areas of designated snow storage do not infringe on trees or shrubs.
    - An O&M plan for the care of landscaping and the control of invasive species (performed by a licensed applicator) has been provided.

2. **Rainwater/Stormwater Management:** The proposed project employs Low Impact Development (LID) best practices to conserve natural resources.
    - Natural features of the landscape are maintained and protected.
    - Stormwater is managed naturally using Green Stormwater Infrastructure (GSI) such as vegetated swales, rain gardens, bioretention planters, and underground infiltration systems.
    - Stormwater is collected to irrigate landscaping.
    - Permeable pavement is used to filter and absorb runoff.

- Trees and shrubs are placed within GSI green islands in parking lots to reduce heat island effects.

3. **Energy Sources and Use:** The proposed project uses electric energy over fossil fuels.
    - The project does not use fossil fuels, except for emergency generators.
    - The project utilizes electric heat pumps or geothermal heat pumps for HVAC.
    - The project will be built solar ready.
    - The project will provide solar panels at the time of the occupancy permit.
    - The project utilizes energy efficient appliances and equipment such as:
        - Interior LED lights
        - Energy Star appliances
        - Induction cooktops
        - High efficiency two-stage heat-pump compressors
        - Heat pump water heaters

4. **Alternative Transportation:** The proposed project provides means for alternative transportation.
    - Bike racks are provided in a secure location.
    - The site provides a safe stop for local MWRTA bus service and/or school bus service.
    - The project supports Complete Streets by providing connecting sidewalks at site boundaries.
    - Provides parking for other modes of transportation: e-bicycles, scooters and mopeds.

5. **Electric Vehicle Charging Stations:** The proposed project provides EV charging stations at parking spaces to meet present and future needs.

    Commercial Projects
    - Rapid (400 Volt or greater) EV charging systems are provided (for a fee) for 20% of spaces.
    - An additional 40% of spaces are provided with conduit and/or wiring for future chargers.
    - Project includes electrical capacity to support all present and future charging stations.
    - Provides EV chargers for other modes of transportation: e-bicycles, scooters and mopeds.

    Mixed-Use Residential Projects
    - EV charging systems (Level 2 or greater) are provided for 20% of spaces.
    - All other spaces are provided with conduit and/or wiring for future chargers.

- Project includes electrical capacity to support all present and future charging stations.
- Provides EV chargers for other modes of transportation: e-bicycles, scooters and mopeds.

6. **Site Lighting:** The proposed project provides carefully manages exterior lighting.
    - Dark sky lighting is provided through the following criteria:
        - Uses the lowest wattage or lumen output necessary for the needed purpose.
        - Fixtures are mounted as low as possible.
        - Provides a corelated color temperature (CCT) of 3000K or less.
        - Provides long wavelengths (560 nm or more) without filters, gels, or lenses.
        - Provides full cutoff fixtures shielding lamps/glowing lenses from direct visibility.
    - Solar lighting (instead of wired) is used for decorative site lighting.
    - Site lighting is low profile, illuminating only required pathways and entries.
    - Photocell sensors or timers manage lighting levels overnight to only provide one footcandle (FC), where required.

7. **Water and Waste:** The proposed project provides the following:
    - Infrastructure for both trash and recycling.
    - Infrastructure for on-site curbside composting.
    - Low flow toilets and flow restricted faucets and other plumbing fixtures.

8. **Certification:** Does the project strive to meet any certification?
    - LEED
    - Passive House (PHIUS)
    - Net Zero
    - Other