

#### **Project Team**

- Developer
  - Johnston Winsor III, LLC
- Attorney
  - John Mancini, Esq.
  - Alfred A. Russo, Jr. Esq. (Co-Counsel)
- Civil & Site Engineer
  - Kevin Morin Green Development, LLC
- Wetlands Biologist
  - Joseph McCue McCue Environmental
- Landscape Architect
  - Kevin Alverson, LA Kevin M. Alverson Landscape Architecture
- Planner
  - Joseph Lombardo, AICP JDL Enterprises
- Real Estate Consultant
  - Thomas Sweeney, SIOR Sweeney Real Estate & Appraisal



### **About Green Development**

- Founded in 2009
- Locally based & locally owned
- Currently employs 70+ people
- Largest owner/operator of onshore renewables in Rhode Island
- Comprehensive and vertically integrated
- Over 160 MW in operational wind and solar projects









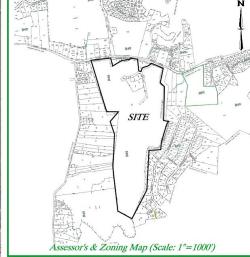
#### **Project Overview**

- Project Location
  - 112 Winsor Avenue, Johnston, Rhode Island, 02919 (AP 59 Lot 15)
- Existing Conditions
  - The property is zoned R-40 (Rural, Farming, Residential)
  - Access from Winsor Ave
  - Property predominantly consists of wooded uplands and swamp
  - Wetlands delineated onsite by Natural Resource Services, Inc.
  - Existing historical cemetery to be preserved
  - Existing residential structures (2) to be removed
  - Total Property Area: ±158.71 acres
- Proposed Development
  - Solar Capacity: 19 MW AC
  - Undisturbed Area: ±52% of Parcel (82.8± acres)
  - Disturbed Area: ±48% of Parcel (75.9± acres)
  - Fenced Area: ±43% of Parcel (67.7± acres)
  - Panel Surface Area: ±17% of Parcel (26.8± acres)
- Open Space Donation to the Town
  - ±82.8 acres after project construction (±52% of Parcel)
  - ±75.9 additional acres after project decommissioning (±48% of Parcel)









Kimball Res USGS Map (Scale: 1"=1,000')

#### **Existing Conditions Legend**



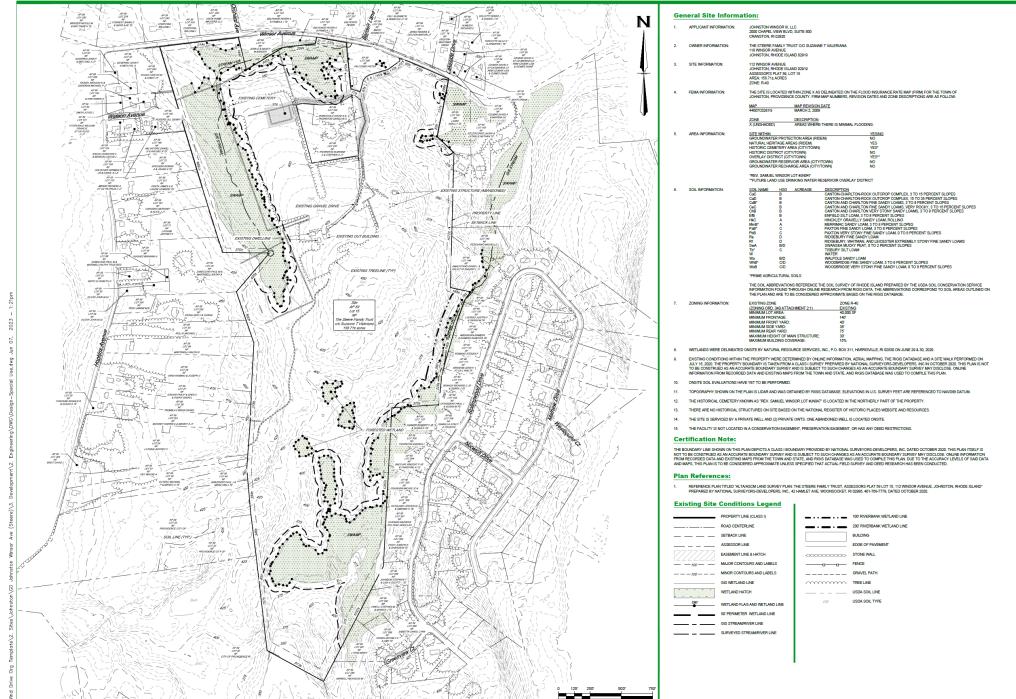
TOWN OF JOHNSTON - FUTURE LAND USE DRINKING WATER RESERVOIR OVERLAY DISTRICT



BROWN AVENUE HISTORIC DISTRICT - RI HISTORICAL PRSERVATION & HERITAGE COMMISSION



SHEET NO.: G-2 of 13



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Johnston

Green Development, The Ste

Existing Conditions Plan Winsor III
T(AC): 19.00 MW GD Johnston

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#### **General Site Information:**

 APPLICANT INFORMATION: JOHNSTON WINSOR III, LLC 2000 CHAPEL VIEW BLVD, SUITE 500 CRANSTON, RI 02920

2. OWNER INFORMATION:

THE STEERE FAMILY TRUST C/O SUZANNE T VALERIANA 118 WINSOR AVENUE JOHNSTON, RHODE ISLAND 02919

112 WINSOR AVENUE JOHNSTON, RHODE ISLAND 02919 ASSESSOR'S PLAT 59, LOT 15 AREA: 158.71± ACRES ZONE: R-40 SITE INFORMATION

SPECIAL USE PERMIT - ZONING (TOWN)
DEVELOPMENT PLAN REVIEW - PLANNING (TOWN)
FRESHWATER WETLANGSRIPEGS - RICEM (STATE)
PHYSICAL ALTERATION PERMIT/ UTILITY PERMIT-RIDOT (STATE) REQUIRED PERMITS:

PRELIMINARY ARRAY SPECS:

PRELIM. ARRAY INFORMATION:

ARRAY NORTH PANEL COUNT: DIRECT CURRENT(DC): ALTERNATING CURRENT(AC):

ARRAY SOUTH
PANEL COUNT:
DIRECT CURRENT(DC):
ALTERNATING CURRENT(AC): ARRAY SMALL PANEL COUNT:

PROPOSED DEVELOPMENT INFORMATION:

158.71± ACRES (100% OF PARCEL AREA) 82.79± ACRES (52.16% OF PARCEL AREA) 75.92± ACRES (47.54% OF PARCEL AREA) 67.67± ACRES (42.64% OF PARCEL AREA) 26.78± ACRES (16.87% OF PARCEL AREA) TOTAL SITE AREA: UNDISTURBED AREA: DISTURBED AREA: FENCED AREA: PANEL SURFACE AREA:

ZONING INFORMATION: EXISTING ZONE EXISTING ZONE
(ZONING ORD, 340 ATTACHMENT 2-1)
MINIUM LOT AREA:
MINIUM FRONT FARC:
MINIUM FRONT FARC:
MINIUM FRONT FARC:
MINIUM SECOND FARC:
MINIUM SECOND FARC:
MINIUM SECOND FARC:
MAXIMUM FIGHT OF MAIN STRUCTURE:
MAXIMUM SULLDING COVERAGE:

EXISTING CONDITIONS WITHIN THE PROPERTY VESTE CENTERMED BY CAULE REFORMATION, ASSIN, MARPHIN, THE BRISD DATABLES AND A TEXT MUNK PERFORMED CHALLY 15, 2023. THE PROPERTY RESUMENT Y TEMBER FROM, A CAULES JURGAY FERREFORM IN NATIONAL, SOMETIVE DEVINORS FOR THE PROPERTY OF THE PROPERTY AND IS SUBJECT TO SUCH CHAUSES, AS AN ADDURATE BOUNDARY SURVEY MAY DISCUSSE, ONLINE PROPRIATION FROM RECORDED DATA AND EXISTING MAPS FROM THE TOWN AND STATE, AND BOUNDARY DATABLES AND ADDURATE BOUNDARY SURVEY MAY DISCUSSE, ONLINE PROPRIATION FROM RECORDED DATA AND EXISTING MAPS FROM THE TOWN AND STATE, AND BOUNDARY DATABLES WAS USED TO COMPARE THE STOTE COMPARE THE STOTE OF THE TOWN AND STATE, AND BOUNDARY DATABLES AND STATE AND ADDITIONAL PROPRIATION FROM RECORDED DATA AND EXISTING MAPS FROM THE TOWN AND STATE, AND BOUNDARY DATABLES AND STATE AND ADDITIONAL PROPRIATION FROM RECORDED DATA AND EXISTING MAPS FROM THE TOWN AND STATE, AND BOUNDARY DATABLES AND STATE AN

THE HISTORICAL CEMETERY KNOWN AS "REV. SAMUEL WINSOR LOT #JN047" IS LOCATED IN THE NORTHERLY PART OF THE PROPERTY.

THERE ARE NO HISTORICAL STRUCTURES ON SITE BASED ON THE NATIONAL REGISTER OF HISTORIC PLACES WEBSITE AND RESOURCES.

NO OUTDOOR LIGHTING IS PROPOSED FOR THIS PROJECT

NO SIGNAGE IS PROPOSED FOR THIS PROJECT EXCEPT REQUIRED WARNING SIGNAGE PER ELECTRIC CODE AND RHODE ISLAND ENERGY REQUIREMENTS.

PRELIMINARY ARRAY SIZES ARE SUBJECT TO ADDITIONAL STUDY BY RHODE ISLAND ENERGY AS WELL AS FINAL PANEL AND EQUIPMENT AVAILABILITY. THE SIZE OF THE PROJECT WILL BE NO MORE THAN 19 MM AC.

LIMIT OF DISTURBANCE

i Toposeu oiti	e Developilient Legel
***************************************	SOLAR PANELS
	CONCRETE EQUIPMENT PAD
	ACCESS PATH EDGE
88888	ACCESS PATH HATCH
	PROPOSED LANDSCAPE BUFFER
	FENCE LINE
	DRAINAGE BASIN
mmmm	TREE LINE

#### Proposed Site Development Legend Existing Site Conditions Legend



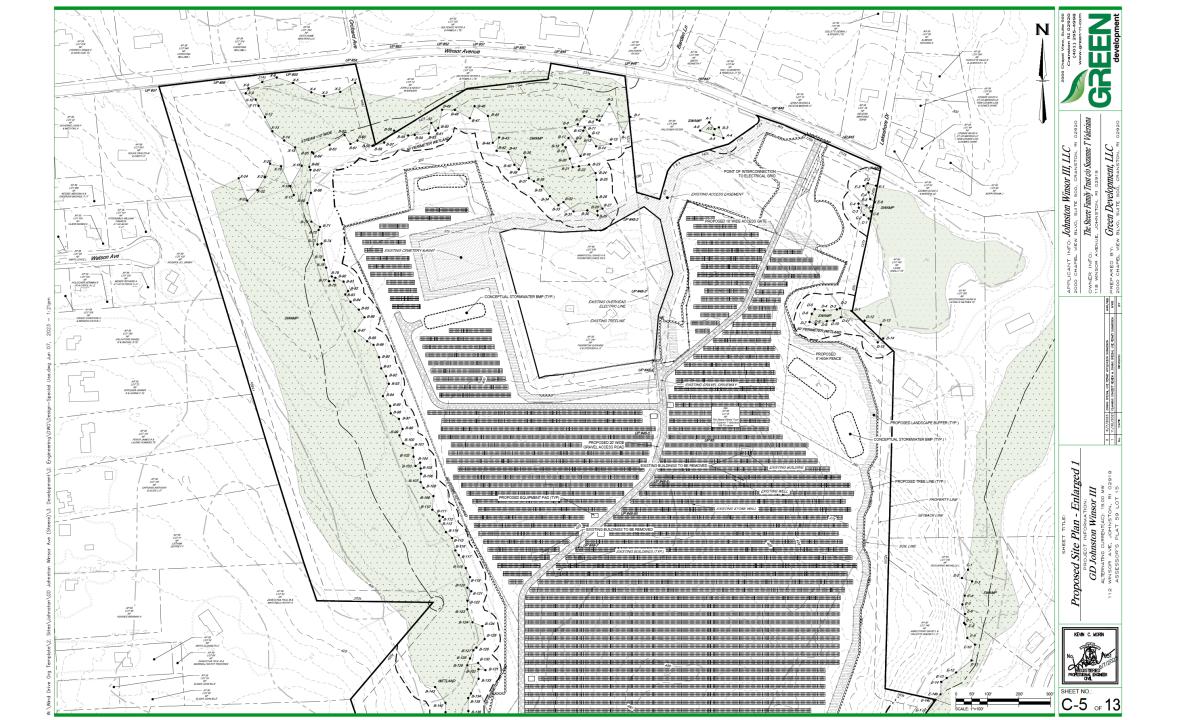
Johnston Winsor III, LLC

Green Development, BLVD. SUITE 500, CRANS The Steere I

GD Johnston Winsor III Proposed Site Plan



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#### **Site Details**

- Ground mounted solar to be installed in existing wooded and field areas
- Grading required throughout the site
- Maximum height of 12' above ground
- All electrical connections within the array to be underground
- Pollinator meadow habitat to be planted within solar array
- Stormwater BMPs to protect downstream areas from runoff
- 6' minimum perimeter security fence
- Landscaping buffers at project edge
- Project to interconnect at Putnam Pike Substation

Solar Equipment Specifications						
Installation Method:	Ground Mount - Fixed					
Orientation & Tilt Angle:	180 Azimuth, 25 Degrees					
Proposed Panel:	Paradea 540W (or equivalent)					
Proposed Inverter:	Sungrow SG250HX (or equivalent)					
Proposed Racking:	Terrasmart (or equivalent)					





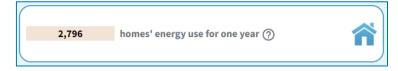
### **Project Benefits**

- Financial Benefit
  - Revenue positive use with a minimum demand for public services
  - Estimated 1<sup>st</sup> year tax revenue of \$133,000, over 25 years totals \$3,325,000 (based on 19.00 MW AC)
- Land Use Benefit
  - Open Space donation to the Town
    - ±82.8 acres after project construction (±52% of Parcel)
    - ±75.9 additional acres after project decommissioning (±48% of Parcel)
  - Developer is obligated to decommission the project at the end of its lifetime and stabilize the site
- Low Impact & Passive Use
  - Minimal traffic generation during project lifetime (after construction phase)
  - No Town services required
- Environmental Benefits\*\*
  - Equivalent to CO2 emissions from the energy usage of **2,796 homes** per year
  - Carbon sequestered by **26,451 acres of US forests** in one year
  - Creates pollinator meadow habitat





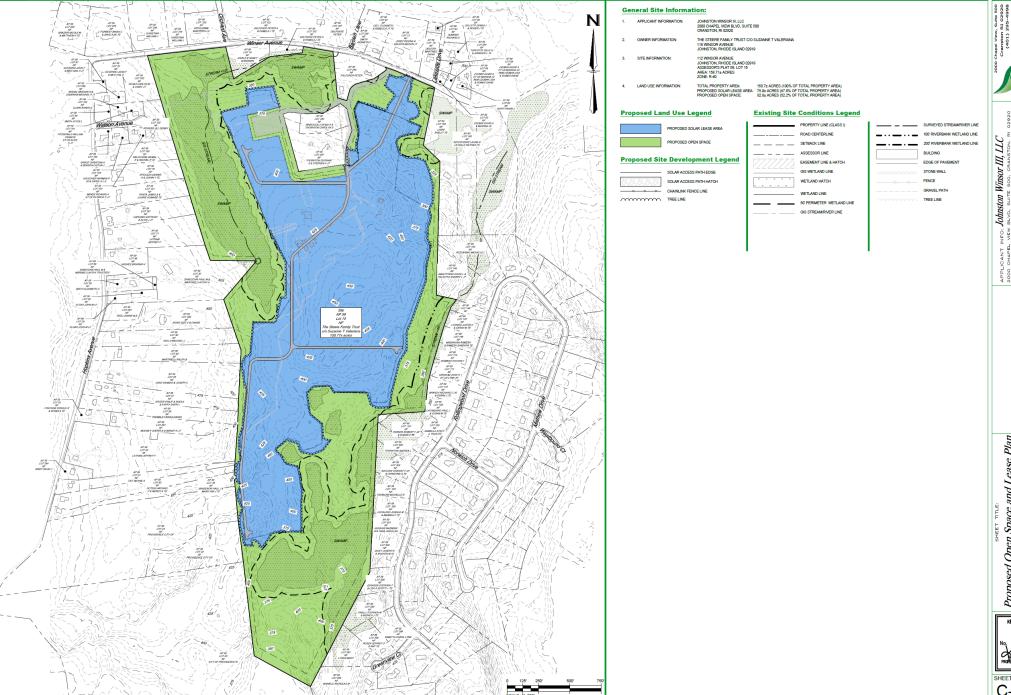
#### CO2 emissions from:



#### Carbon sequestered by:







Green Development, LLC

The Stee

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#### **Common Concerns & Environmental Impacts**

- Lighting
  - No lighting proposed within solar array
- Air Pollution
  - Dust to be controlled during construction
- Soil Erosion & Stormwater Runoff
  - Site designed to meet or exceed RIDEM stormwater standards
  - BMPs to drain completely after rainfall events
- Array Access
  - Knox Box for emergency services
- Solar Glare & Thermal Effect
  - Panels designed to absorb light
  - Manufactured with dark color and anti-reflective coating
  - No heat islanding anticipated





### **Common Concerns & Environmental Impacts**



#### Noise

- Designed to conform with Town ordinance
- Equipment locations selected to minimize noise at sensitive areas
- Detailed noise study to be provided at Preliminary review stage
- Hazardous Materials
  - Transformer contain non-toxic mineral oils
  - Panels fabricated from silicon-based cells with tempered glass
    - No fluid leakage even if glass was to become cracked
  - Cleaning of panels via rain and snow only no manual washing
  - No pesticide or herbicide use for vegetation management
- Blasting
  - Minimized to the extent possible (more detail at Preliminary review stage)
  - Permit issued by State Fire Marshal notification distributed to neighbors
  - Bond & insurance required



### **Landscape Screening & Buffering**

- Walked property in April of 2022 to observe site with minimal leaves
  - Analyzed existing vegetation at project perimeter and identified probable gaps
- Potential Landscaping Strategies
  - Preserve existing vegetation at project edge
  - Minimize removal of understory and shrubs in managed areas outside of solar array
  - Construct buffers with complimentary native plantings
  - Use topography to screen viewsheds and install stockade fencing in sensitive areas
- Detailed landscape plans to be provided at the Preliminary review stage



Supplemental Evergreen Plantings

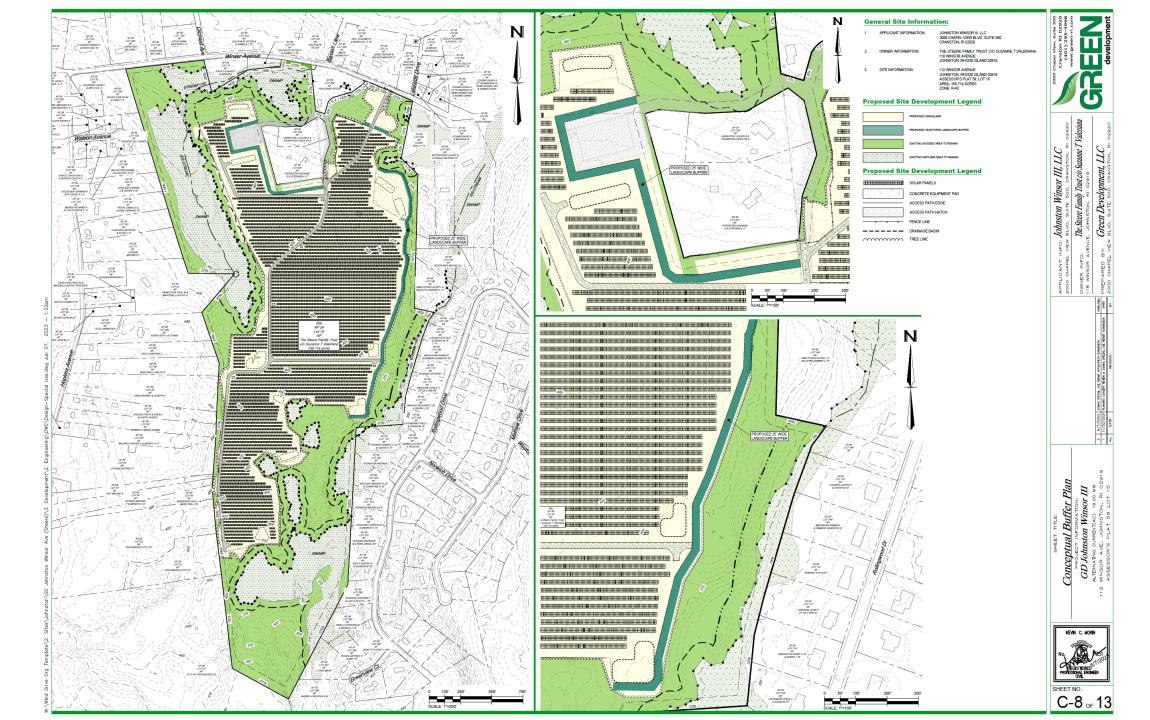


Mixed Evergreen, Deciduous, & Shrub Plantings



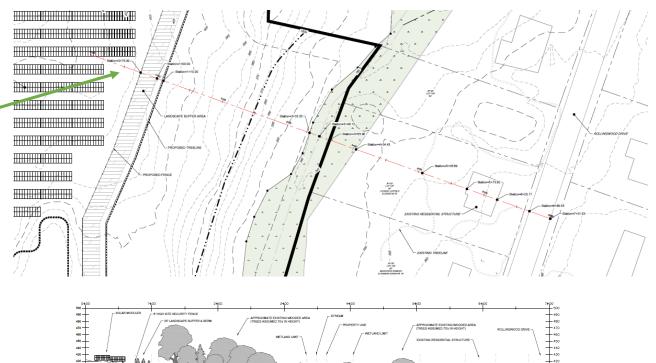
Stockade Fencing, Deciduous, & Shrub Plantings



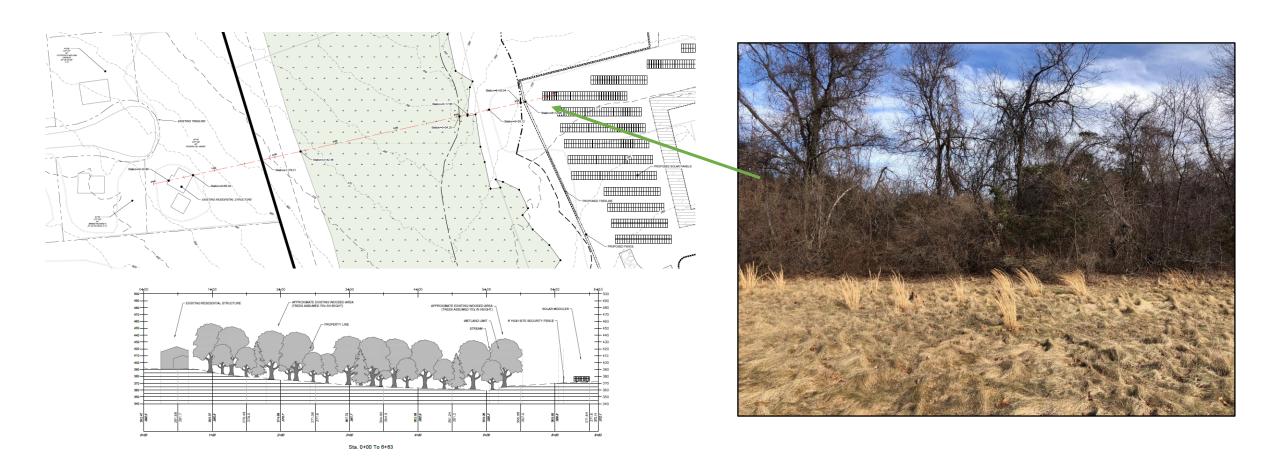


## **View from Project Eastern Edge**





## **View from Project Northwestern Edge**



#### Wildlife Impacts, Mitigation, & Enhancement

- Protect jurisdictional wetlands from excess stormwater runoff to provide a food, water and travel corridor
- Schedule tree clearing and significant site work to take place outside of normal breeding seasons
- Specify perimeter fences to include a 6-inch gap above the ground to allow for free movement of small wildlife
- Preserve habitat features and augment habitat conditions
  - Leave stone walls undisturbed
  - Build slash and brush piles
  - Construct downed logs
  - Install bird nesting boxes
  - Plant pollinator wildflower meadows
  - Establish landscaping that supplements natural habitats
- Conduct turtle sweeps in areas adjacent to wetlands
- Design stormwater BMPs to offer aquatic habitats





# Wildlife Enhancement Examples











**Downed Logs** 



**Nesting Boxes** 



#### **Pollinator Habitat**

- Planted pollinator meadow to enhance habitat value with diverse native species
- A 10-acre pollinator meadow is equivalent to more than four-thousand 10' x 10' backyard pollinator gardens
- Grasslands under and around solar arrays create necessary habitat for birds, butterflies, and bees





**Representative Site Photos** 



### **Comprehensive Plan Consistency**

- Future Land Use is identified as Residential
- The proposed use is allowed by Special Use Permit in a residential zone (R20 & R40)
- Town Comprehensive Plan identifies the need for both preservation & development w/ balance

Use Classification	R-40	R-20	R-15	R-10	R-7	B-1	B-2	B-3	PD	PMUD	I	I-S	I-L	ROD
Subsection 5. Public utility uses.														
Electric power substation	S	S	S	S	S	S	S	S	S	S	S	S	S	N
Electric power generating     plant, however fueled	S	S	S	S	S	S	S	S	S	S	S	S	S	N
High voltage electric transmission towers	S	S	S	S	S	S	S	S	S	S	S	S	S	N

**Town of Johnston Zoning Ordinance - Table of Use Regulations** 



### **Special Use Permit Approval Criteria**

- (1) That granting of the special use permit will be compatible with the neighboring uses and will not adversely affect the surrounding neighbors' use and enjoyment of their property;
- (2) That granting of the special use permit will be environmentally compatible with neighboring properties and the protection of property values;
- (3) That granting of the special use permit will be compatible with the orderly growth and development of the Town of Johnston, and will not be environmentally detrimental therewith;
- (4) That the best practices and procedures to minimize the possibility of any adverse effects on neighboring property, the Town of Johnston, and the environment have been considered and will be employed, including but not limited to considerations of soil erosion, water supply protection, septic disposal, wetland protection, traffic limitation, safety and circulation;
- (5) That the purposes of this chapter, and as set forth in the Comprehensive Plan, shall be served by said special use permit;
- (6) That granting of the special use permit will substantially serve public convenience and welfare; and
- (7) That granting of the special use permit will not result in or create conditions that will be inimical to the public health, safety, morals and general welfare of the community.



#### **Next Steps**

- Town Preliminary Plan Review
  - Stormwater Management Plan
  - Soil Erosion & Sediment Control Plan
  - Detailed Landscape Plans
- RIDEM Freshwater Wetlands & RIPDES Permit (In Progress)
- RIDOT Physical Alteration Permit
- RIHPHC Historical Preservation Project Review (In Progress)
- Rhode Island Energy Interconnection Service Agreement (In Progress)
- Town Final Plan Review
- Town Soil Erosion Permit
- Town Fire Review
- Town Building Permit



