

The following is an environmental evaluation for the IR Robbinsville properties known as

Block	Lot	Municipality	County	Acreage	Real Estate Tax
17	6	Robbinsville	Mercer	57.1	\$694.77
17	17	Robbinsville	Mercer	0.69	\$ 17.94
17	18	Robbinsville	Mercer	0.92	\$ 23.93
17	19	Robbinsville	Mercer	0.88	\$ 22.90
17	20	Robbinsville	Mercer	0.78	\$ 20.29
46	10	East Windsor	Mercer	10.0	\$499.80

For all the properties listed above the owner of record is IR Robbinsville, NJ.

**USGS Map**

The unnamed Tributary to the Bear Brook runs through Block 17, Lot 6 the property. The UNT Bear Brook is classified by the NJ Surface Water Quality Standards as a FW2-NT watercourse.

**Soils:**

The site consists of the following soils as identified on the attached Soils map

Soil Symbol	Soil Type	Area (Ac)
Ekba	Elkton silt loam, 0 to 2 percent slopes	9.3
FamA	Fallsington sandy loams, 0 to 2 percent slopes, Northern Coastal Plain	9.5
GKAWO	Glassboro and Woodstown sandy loams, 0 to 5 percent slopes	18.0
MBYB	Mattapex and Bertie loams, 0 to 5 percent slopes	0.1
OthA	Othello silt loams, 0 to 2 percent slopes, Northern Coastal Plain	16.3
PortA	Portsmouth variant silt loam, 0 to 2 percent slopes	3.0
SacA	Sassafras sandy loam, 0 to 2 percent slopes, Northern Coastal Plain	4.1
SacB	Sassafras sandy loam, 2 to 5 percent slopes, Northern Coastal Plain	9.8
WomfB	Woodstown-Fallsington sandy loams, 0 to 5 percent slopes	0.24

### **Ekba - Elkton silt loam, 0 to 2 percent slopes**

This soil is nearly level. In some places layers of fine sand are interbedded in the clayey substratum. The permeability of this soil is slow; this is too slow to permit practical removal of water by underdrains. Open ditches are more effective than underdrains for removing excess water, and bedding is needed in some places.

Wetness and slow permeability make the limitations for this soil severe for use as homesites or as sites for commercial buildings. Drainage fields for septic tanks do not function well, and seepage of water into basements can be expected.

#### **Properties and qualities**

- *Slope:* 0 to 2 percent
- *Depth to restrictive feature:* More than 80 inches
- *Natural drainage class:* Poorly drained
- *Runoff class:* Very high
- *Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)
- *Depth to water table:* About 0 to 12 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Available water storage in profile:* High (about 9.9 inches)

### **Fama - Fallsington sandy loams, 0 to 2 percent slopes, Northern Coastal Plain**

This soil is nearly level and runoff is slow and water stands on some areas. The water table can be lowered by means of tile drains or open ditches. When drained this soil is suited to the common farm crops and to pasture.

#### **Properties and qualities**

- *Slope:* 0 to 2 percent
- *Depth to restrictive feature:* More than 80 inches
- *Natural drainage class:* Poorly drained
- *Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.01 to 1.98 in/hr)
- *Depth to water table:* About 0 to 10 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* Occasional
- *Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.3 mmhos/cm)
- *Available water storage in profile:* Moderate (about 8.8 inches)

### **GKAWOB - Glassboro and Woodstown sandy loams, 0 to 5 percent slopes**

#### **Properties and qualities**

- *Slope:* 0 to 5 percent
- *Depth to restrictive feature:* More than 80 inches
- *Natural drainage class:* Somewhat poorly drained
- *Runoff class:* Very high
- *Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)

- *Depth to water table:* About 6 to 18 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Available water storage in profile:* Low (about 5.5 inches)

### **MbpA - Mattapex and Bertie loams, 0 to 5 percent slopes**

As a general rule, the Bertie soils occupies lower positions in the landscape and is less sloping than the Mattapex soil. Wetness is the result of a moderately high water table and interferes with use of these soils. The Bertie soil is somewhat poorly drained and the Mattapex soil is moderately well drained. Both soils can be farmed more easily and are better suited to crops after they are artificially drained. If adequately drained, they are suited to vegetables and the common farm crops.

Limitations of the soils are severe for septic fields.

#### **Properties and qualities**

- *Slope:* 0 to 5 percent
- *Depth to restrictive feature:* More than 80 inches
- *Natural drainage class:* Moderately well drained
- *Runoff class:* Very high
- *Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 2.00 in/hr)
- *Depth to water table:* About 18 to 42 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Available water storage in profile:* Moderate (about 8.9 inches)

### **OthA - Othello silt loams, 0 to 2 percent slopes, Northern Coastal Plain**

This soil is nearly level, runoff is slow and water stands on some areas. Title drains or open ditches can be installed to lower the water table. Surface drainage of some areas is needed. Limitations of this soil are severe for use as homesites and as septic fields.

#### **Properties and qualities**

- *Slope:* 0 to 2 percent
- *Depth to restrictive feature:* More than 80 inches
- *Natural drainage class:* Poorly drained
- *Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)
- *Depth to water table:* About 10 to 20 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* Rare
- *Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
- *Available water storage in profile:* Moderate (about 8.8 inches)

### **PortA - Portsmouth variant silt loam, 0 to 2 percent slopes**

This soil is nearly level, runoff is slow and water stands on some areas part or much of the time. Title drains or open ditches can be installed to lower the very high water table. Surface drainage is also needed in some of the areas if crops are grown.

Limitations of this soil are severe for use as homesites or for septic systems.

#### **Properties and qualities**

- *Slope*: 0 to 2 percent
- *Depth to restrictive feature*: More than 80 inches
- *Natural drainage class*: Very poorly drained
- *Runoff class*: Very high
- *Capacity of the most limiting layer to transmit water (Ksat)*: Moderately high to high (0.60 to 2.00 in/hr)
- *Depth to water table*: About 0 to 12 inches
- *Frequency of flooding*: None
- *Frequency of ponding*: None
- *Available water storage in profile*: Moderate (about 6.3 inches)

#### **SacA - Sassafras sandy loam, 0 to 2 percent slopes, Northern Coastal Plain**

The Sassafras series consists of deep, well drained soils on uplands. These soils were formed in deeply weathered, nonglauconitic, quartzose, medium textured and moderated fine textured materials that are underlain by sand and gravel. They are mostly gently sloping or sloping. Permeability of the surface later and of the more clayey subsoil is moderate. That of the underlying loose sand or sand and gravel is moderately rapid. Natural fertility is moderate. The reaction is extremely acid or very strongly acid unless lime has been applied.

The hazard of erosion on this soil is slight. This soil is well suited to most crops. Many fields of crops in this soil are irrigated.

#### **Properties and qualities**

- *Slope*: 0 to 2 percent
- *Depth to restrictive feature*: More than 80 inches
- *Natural drainage class*: Well drained
- *Capacity of the most limiting layer to transmit water (Ksat)*: Moderately high to high (0.20 to 2.00 in/hr)
- *Depth to water table*: More than 80 inches
- *Frequency of flooding*: None
- *Frequency of ponding*: None
- *Available water storage in profile*: Moderate (about 7.1 inches)

#### **SacB - Sassafras sandy loam, 2 to 5 percent slopes, Northern Coastal Plain**

The Sassafras series consists of deep, well drained soils on uplands. These soils were formed in deeply weathered, nonglauconitic, quartzose, medium textured and moderated fine textured materials that are underlain by sand and gravel. They are mostly gently sloping or sloping. Permeability of the surface later and of the more clayey subsoil is moderate. That of the underlying loose sand or sand and gravel is moderately rapid. Natural fertility is moderate. The reaction is extremely acid or very strongly acid unless lime has been applied.

The hazard of erosion is slightly greater on it than on the nearly level Sassafras soils. Small gravelly spots are common. This soil is well suited to most crops.

#### Properties and qualities

- *Slope*: 2 to 5 percent
- *Depth to restrictive feature*: More than 80 inches
- *Natural drainage class*: Well drained
- *Capacity of the most limiting layer to transmit water (Ksat)*: Moderately high to high (0.20 to 2.00 in/hr)
- *Depth to water table*: More than 80 inches
- *Frequency of flooding*: None
- *Frequency of ponding*: None
- *Available water storage in profile*: Moderate (about 7.1 inches)

#### WomfB - Woodstown-Fallsington sandy loams, 0 to 5 percent slopes

This complex consists mainly of Woodstown soils, which are moderately well drained. The slopes are complex and follow no definite pattern. These soils are typically very wet in the Spring and after heavy rains.

The undulating soils are difficult to work. These soils are subject to slight to moderate hazard of erosion if they are not protected. They also show severe limitations for use as homesites and as fields for disposal of sewage from septic tanks.

#### Properties and qualities

- *Slope*: 2 to 5 percent
- *Depth to restrictive feature*: More than 80 inches
- *Natural drainage class*: Moderately well drained
- *Runoff class*: Very low
- *Capacity of the most limiting layer to transmit water (Ksat)*: Moderately high to high (0.20 to 6.00 in/hr)
- *Depth to water table*: About 18 to 42 inches
- *Frequency of flooding*: None
- *Frequency of ponding*: None
- *Available water storage in profile*: Moderate (about 6.7 inches)

#### **Land Use Land Cover Map, Environmental Features Map and Wetlands Map:**

These maps identify that the site consists of the following land uses:

Agricultural Lands:	12.6	acres
Forest	11.9	acres
Urban:	5.2	acres
Wetlands	40.3	acres

Please note that the NJDEP GIS data also revealed the presence of Acid Producing Soils throughout the site (Merchantville Formation and Woodbury). Most vegetation is incapable of growth at this pH level. Adjacent land and receiving waters will be negatively impacted by the acid leachate. Care should be taken with acid producing soils.

Block 46, Lot 10 (East Windsor Township) is within the East Windsor Municipal Utilities Authority Public Water Service area and Block 17, Lots 17, 18, 19, 20 (Robbinsville Township) are within

Aqua NJ 0 Hamilton’s Water Service. All properties are outside of an approved sewer service area.

### **Landscape Project**

The Landscape Project was designed to provide users with peer-reviewed, scientifically sound information that transparently documents threatened and endangered species habitat. Landscape Project data is easily accessible and can be integrated with the planning, protection and land management programs of non-government organizations and private landowners and at every level of government – federal, state, county and municipal. Landscape maps and overlays provide a foundation for proactive land use planning, such as the development of local habitat protection ordinances, zoning to protect critical wildlife areas, management guidelines for imperiled species conservation on public and private lands, and land conservation projects. The maps help increase predictability for local planners, environmental commissions, and developers, and help facilitate local land use decisions that appropriately site and balance development and habitat protection. The Landscape Project maps allow the regulated public to anticipate potential environmental regulation in an area and provide some level of assurance regarding areas where endangered, threatened or species of special concern are not likely to occur, affording predictability to the application and development process. Thus, Landscape Project maps can be used proactively by regulators, planners and the regulated public in order to minimize conflict and protect imperiled species. This minimizes time and money spent attempting to resolve after-the-fact endangered and threatened species conflicts.

The project site is located within the Piedmont Plains Landscape Region. This landscape region also combines two of New Jersey’s physiographic regions, the Piedmont and the Inner Coastal Plain. It encompasses all or parts of Burlington, Camden, Gloucester, Salem, Mercer, Middlesex, Monmouth, Hunterdon, Somerset, Union, Essex, Hudson, Passaic, and Bergen counties. It is dominated by the Delaware and Raritan rivers and is characterized by farmed areas, extensive grasslands, fragmented woodlands and productive tidal marshes. Imperiled species within this landscape include grassland birds such as the endangered upland sandpiper and raptors such as the American kestrel and barred owl.

Mapped within the parcel boundaries, the following species were identified:

Rank 2	Special Concern	
	Eastern Box turtle	Occupied Habitat
	Northern Copperhead	Occupied Habitat
	Spotted Turtle	Occupied Habitat
Rank 3	State Threatened	
	Wood Turtle	Occupied Habitat
Rank 4	State Endangered	
	Bald Eagle	Foraging

Within a mile radius of the subject property the following species were identified:

Rank 1	Habitat Specific Requirements	
Rank 2	Special Concern	
	Great Blue Heron	Foraging
	Tricolored Heron	Foraging
	Snowy Egret	Foraging
	Eastern Box turtle	Occupied Habitat
	Northern Copperhead	Occupied Habitat
	Spotted Turtle	Occupied Habitat
Rank 3	State Threatened	
	Black crowned Night heron	Foraging
	Yellow-crowned Night Heron	Foraging
	Wood Turtle	Occupied Habitat
	Northern Pine Snake	Occupied Habitat
Rank 4	State Endangered	
	Bald Eagle	Foraging
Rank 5	Federally Listed	
	Bog Turtle	Occupied Habitat

Both the Wood Turtle and the Bog Turtle are threatened and endangered species that are critically dependent on regulated waters for their survival. In order to determine compliance with the NJ Flood Hazard Area Control Act rules at NJAC 7:13, each application for a flood hazard verification, individual permit, or general permit must include an analysis of the projects status with regard to the Landscape Project and natural heritage program.

In 2001, ENSP partnered with Rutgers University Center for Remote Sensing and Spatial Analysis (CRSSA) to develop a method for mapping potential vernal pools throughout New Jersey. Through an on-screen visual interpretation of digital orthophotography, CRSSA identified over 13,000 potential pools throughout the state. A subset of these pools was field verified and confirmed, with an 88% accuracy rate, to meet the physical characteristics to qualify as a vernal pool. In accordance with N.J.A.C. 7:7A-1.4, the term “vernal habitat” includes a vernal pool - or the area of ponding - plus any freshwater wetlands adjacent to the vernal pool. Vernal habitat areas mapped in the Landscape Project rely upon those data developed by the DEP and CRSSA to identify sites that should be field checked for possible identification as vernal habitat areas. DEP staff is in the process of field-verifying these pools. The Department also maps vernal habitat areas based upon on-the-ground assessment of sites not captured by the CRSSA mapping. The Landscape Project includes all of the CRSSA-identified sites, as well as sites identified by on-the-ground reconnaissance, categorized as either “potential vernal habitat areas” or “vernal habitat areas” as defined below. Note that the occurrence area is not intended to suggest or correspond with any specific regulatory requirement. Rather, the area added around the point accounts for variations in the size of individual vernal pools, variations in the width of freshwater wetlands adjacent to the pool, plus adjacent habitats sufficient to include the estimated home range for vernal pool obligate species. If there is an overlap between areas mapped around two or more

nearby points, the boundaries are conjoined to generate contiguous patches. If the resulting patch contains areas mapped as “vernal habitat area” and areas mapped as “potential vernal habitat areas,” the entire patch is labeled as a “vernal habitat area.”

There are areas of Vernal Habitat identified within a one (1) mile radius of the subject property.

Other areas of investigation revealed:

- No Freshwater Mussel Habitat is on or in the vicinity of the property boundaries.
- There are two (2) historic districts on or within a one-mile radius of the subject property, namely 1) Windsor Historic District and 2) Camden & Amboy Railroad Main Line Historic District.
- No Many Properties were identified within the one (1) mile radius and within the historic districts identified above:
  - 10 Church Street
  - 11 Main Street
  - 12 Main Street
  - 13 Main Street
  - 15 Main Street
  - 16 Church Street
  - 16 Main Street
  - 16 School Drive
  - 17 Main Street
  - 18 School Drive
  - 19 Main Street
  - 20 Church Street
  - 21 Church Street
  - 21 Main Street
  - 22 School Drive
  - 23 Main Street
  - 24 Main Street
  - 25-27 Main Street
  - 26 & 26B Main Street
  - 29 Main Street
  - 30 Main Street
  - 32 School Drive
  - 39 Church Street
  - 4 Church Street
  - 41 Church Street
  - 43 Church Street
  - 46 Church Street
  - 48 Church Street
  - 5 Main Street
  - 5 Church Street

- 50 Church Street
  - 52 Church Street
  - 54 Church Street
  - 55 Church Street
  - 58 Church Street
  - 59 Church Street
  - 63 Church Street
  - 64 Church Street
  - 67 Church Street
  - 77 Church Street
  - 81 Church Street
  - Basket Factory - 26 School Drive
  - Church Street
  - Cider House – 23 Church Street
  - I South House – 73 Church Street
  - Judge Randall C. Robbins House – 9 Main Street
  - Robbins/Taylor House – 7 Main Street
  - Shirt Factory/Odd Fellows Hall/Grange Hall – 24 Church Street
  - Site of Old Brick Store – Main Street
  - Baptist Church – 14 Church Street
  - Treats Garage/Washington Township Road Department – 33 Main Street
  - Whittington – Hutchinson House / Windsor Rest Home – 11 Church Street
  - Windsor Hotel/Sherwood Crossing Inn – Main Street
  - Windsor Methodist Episcopal Church and Methodist Cemetery – 45 Church Street
  - Windsor Public School – School Drive
- There are **no** rare plant species or rare ecological community habitat in the project vicinity or within 1.5 miles as based on the Natural Heritage Grid (Refer to Grid M, Grid S or Both on the Landscape map).

Grid S means the location of an occurrence of a rare plant species or ecological community is precisely known and falls somewhere within the grid cell.

Grid M means the location of a rare plant species or ecological community occurrence is not precisely known, there may be up to 1.5 miles of uncertainty in the mapped location.

BOTH – means both precisely known (S) and less precise (M) occurrences for rare plant species or ecological communities are found within the site boundaries.