

## Appendix II-A7a

### Natural Resources Conservation Service Mapped Soils Report Cardiff Study Area

May 2024

# Natural Resources Conservation Service

## Mapped Soils Report

Cardiff and O&M Facility Study Areas

Egg Harbor Township, Pleasantville City, and Atlantic City,  
Atlantic County, New Jersey

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## 1.0 INTRODUCTION

Atlantic Shores Offshore Wind, LLC (Atlantic Shores) is a 50/50 joint venture between EDF-RE Offshore Development, LLC (a wholly owned subsidiary of EDF Renewables, Inc. [EDF Renewables]) and Shell New Energies US LLC (Shell). Atlantic Shores is developing a Construction and Operations Plan (COP) for submittal to the Bureau of Ocean Energy Management (BOEM) for two offshore wind energy generation projects within the southern portion of Lease Area OCS-A 0499 (the Lease Area) off the coast of New Jersey with onshore interconnections in two areas of New Jersey.

Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR), was contracted by Atlantic Shores to identify the Natural Resources Conservation Service (NRCS) soils types mapped proximate to the onshore infrastructure necessary to support the Projects' interconnection to the existing Cardiff Substation located in Egg Harbor Township, Atlantic County, New Jersey. The desktop soils analysis study area (herein referred to as the Cardiff Study Area) includes the proposed onshore interconnection route rights-of-way (ROWs) from the proposed Atlantic Landfall locations in the City of Atlantic City, Atlantic County, New Jersey; the proposed onshore substation and/or converter station site options located in Egg Harbor Township, New Jersey; and the Cardiff point of interconnection (POI). In addition, this report also includes the results of the desktop soils analysis study area associated with Atlantic Shores' proposed Operations and Maintenance (O&M) Facility site (referred to herein as the O&M Facility Study Area) also located in Atlantic City, New Jersey. Collectively the Cardiff and O&M Facility Study Areas are referred to as the Study Areas (Figure 1).

### 1.1 Purpose

The purpose of this report is to identify NRCS soil units that are mapped within the Study Areas and describe specific characteristics such as: physical characteristics, soil inclusions, hydric status, acidity, construction suitability, and other notable characteristics.

This report is intended to provide the information necessary to guide the identification of onshore geotechnical investigation locations within the Study Areas.

### 1.2 Data Sources

Information supporting this report was largely obtained from the Natural Resources Conservation Service (NRCS) Web Soil Survey (Soil Survey Staff, 2023) with supplemental information used from the NRCS List of Hydric Soils of the State of New Jersey (NRCS, 2018).

## 2.0 SOIL DESCRIPTIONS

The Study Areas are located within the Coastal Plain physiographic province of the state of New Jersey. The geography in this province consists of unconsolidated deposits that dip gently to the southeast. The drainage divide between the Delaware River and the Atlantic Ocean contain mostly flat land with a maximum elevation of 391 feet above mean sea level. The streams and waterbodies that flow northwest to the Delaware River consist of narrow valleys and have steeper gradients than the streams that flow to the southeast. Elevations within the Study Areas range from 0 to 76 feet above mean sea level (see Figure 1).

Sections 2.1 and 2.2 identifies the soil types mapped within the Study Areas, provides a physical description and summary of other soil characteristics such as hydric rating, acidity and construction limitations.

### 2.1 Soil Types

A total of 19 soil units are mapped within the Study Areas as shown in Figure 2. Table 1 below provides a list of the soil types, inclusions, and acres mapped within the Study Areas.

Table 1. Study Areas Mapped Soils

Mapping Unit Symbol	Soil Series	Slope (%)	Area within Study Areas (Acres)	Soil Series Inclusions
AtsAO	Atsion sand	0 to 2	2.4	Berryland, occasionally flooded (5%), Lakehurst (5%)
AugaA	Aura sandy loam	0 to 2	8.3	Sassafras (10%), Woodstown (5%), Downer (5%)
AugaB	Aura sandy loam	2 to 5	32.1	Woodstown (5%), Sassafras (5%), Downer (5%)
DocBO	Downer loamy sand	0 to 5	126.8	Hammonton (10%), Atsion (5%), Evesboro (5%)
FobB	Fort Mott sand	0 to 5	11.5	Evesboro (3%), Galloway (3%), Mullica, rarely flooded (3%), Aura (3%), Downer (3%)
GamB	Galloway loamy sand	0 to 5	43.7	Downer (5%), Mullica, rarely flooded (5%), Atsion (5%)
HbmB	Hammonton loamy sand	0 to 5	8.4	Fallsington (5%), Mullica, rarely flooded (5%), Atsion (5%), Glassboro (5%)
HoruBr	Hooksan-Urban land complex	0 to 10	0.8	Transquaking, very frequently flooded (5%), Beaches, frequently flooded (5%), Appoquinimink, very frequently flooded (5%)

Mapping Unit Symbol	Soil Series	Slope (%)	Area within Study Areas (Acres)	Soil Series Inclusions
LakB	Lakehurst sand	0 to 5	6.7	Quakerbridge (5%), Atsion, rarely flooded (5%), Berryland, rarely flooded (5%)
MakAt	Manahawkin muck	0 to 2	<0.1	None
MumA	Mullica sandy loam	0 to 2	10.4	Fallsington (5%), Berryland (5%)
PHG	Pits sand and gravel	--	4.8	None
PssA	Psamments	0 to 2	40.6	Mullica (5%), Atsion (5%), Berryland, rarely flooded (5%)
PstAt*	Psammaquents sulfidic substratum	0 to 2	137.0 (5.4 acres in O&M)	Pawcatuck, very frequently flooded (5%), Transquaking, very frequently flooded (5%), Appoquinimink, very frequently flooded (5%)
SacAO	Sassafras sandy loam	0 to 2	25.9	Ingleside (9%), Downer (4%), Woodstown (4%), Aura (3%)
SacBO	Sassafras sandy loam	2 to 5	12.5	Ingleside (9%), Downer (4%), Woodstown (4%), Aura (3%)
TrkAv*	Transquaking peat	0 to 1	12.4 (0.2 acer in O&M)	Appoquinimink, very frequently flooded (5%), Broadkill, very frequently flooded (5%)
WATERs*	Water, saline	--	67.0 (1.1 acres in O&M)	Beaches, very frequently flooded (5%)
WoeAO	Woodstown sandy loam	0 to 2	15.0	Fallsington (6%), Hammonton (6%), Hambrook (4%), Mattapex (4%)

\* Indicates soil types that occur within the O&M Facility Study Area

## 2.2 Soil Types

**Atsion sand** – This soil series consists of sandy eolian deposits and/or fluviomarine deposits typically located in flats, drainageways, depressions and deflation flats. A typical profile ranges from peat (0 to 2 inches) to sand (2 to 80 inches), is poorly drained, and this soil is classified as a Farmland of unique importance. This soil series is designated as hydric with the following inclusions: Berryland, occasionally flooded, five percent, hydric; and Lakehurst, five percent, not hydric.

**Aura sandy loam** – This soil series consists of coarse-loamy eolian deposits over loamy gravelly fluviomarine deposits that is located in fluviomarine terraces or flats. A typical profile ranges from sandy loam (0 to 23 inches), gravelly sandy loam (23 to 31 inches), gravelly sandy clay loam (31 to 45 inches), and gravelly loamy coarse sand (45 to 80 inches), is well drained, and is classified as prime farmland. This soil series is not designated as hydric and has the following inclusions: Sassafras, 10 percent, not hydric; Woodstown, five percent, not hydric; and Downer, five percent, not hydric.

**Downer loamy sand** – This soil series consists of loamy fluviomarine deposits and is typically located in knolls and low hills. A typical profile ranges from loamy sand (0 to 16 inches) to sandy loam (16 to 28 inches) to loamy sand (28 to 48 inches) to sand (48 to 80 inches), is well drained, and is designated as Farmland of statewide importance. This soil series is not designated as hydric and has the following inclusions: Hammonton, 10 percent, not hydric; Atsion, five percent, hydric; and Evesboro, five percent, not hydric.

**Fort Mott sand** – This soil series consists of sandy eolian deposits and/or fluviomarine deposits found in knolls. A typical profile ranges from moderately decomposed plant material (0 to 2 inches) to sand (2 to 24 inches) to sandy loam (24 to 35 inches) to stratified sand to sandy loam (35 to 49 inches) to loamy sand (49 to 72 inches), is well drained, and is classified as Farmland of statewide importance. This soil series is not designated as hydric and has the following inclusions: Evesboro, three percent, not hydric; Galloway, three percent, not hydric; Mullica, rarely flooded, three percent, hydric; Aura, three percent, not hydric; Downer, three percent, not hydric.

**Galloway loamy sand** – This soil series consists of unconsolidated sandy marine deposits located in flats and dunes. The profile ranges from loamy sand (0 to 36 inches) to sand (36 to 60 inches), is somewhat poorly drained, and is described as Farmland of statewide importance. This soil series is not designated as hydric and has the following inclusions: Downer, five percent, not hydric; Mullica, rarely flooded, five percent, hydric; and Atsion, five percent, hydric.

**Hammonton loamy sand** – This soil series consists of coarse-loamy fluviomarine deposits found in flats and depressions. A typical profile ranges from loamy sand (0 to 18 inches) to sandy loam (18 to 36 inches) to sand (36 to 80 inches), it is moderately well drained, and is classified as a Farmland of statewide importance. This soil series is not designated as hydric and has the following inclusions: Fallsington, five percent, hydric; Mullica, rarely flooded, five percent, hydric; Atsion, five percent, hydric; and Glassboro, five percent, not hydric.

**Hooksan-Urban land complex** – This soil series consists of sand and artificial fill material generally found on barrier islands. The profile includes sand or other anthropogenic fill material to depths exceeding 90 inches below the ground surface, is excessively drained, and is not designated as prime farmland or farmland of statewide importance. This soil series is not designated as hydric and has the following inclusions: Transquaking, very frequently flooded, five percent, hydric; Beaches, frequently flooded, five percent, hydric; and Appoquinimink, very frequently flooded, five percent, hydric.

**Lakehurst sand** – This soil series consists of sandy fluviomarine deposits located in flats and dunes. The profile ranges from slightly decomposed plant material (0 to 2 inches) to sand (2 to 80 inches) and is

moderately well drained. This soil series is not designated as hydric and has the following inclusions: Quakerbridge, five percent, not hydric; Atsion, rarely flooded, five percent, hydric; and Berryland, rarely flooded, five percent, hydric.

**Manahawkin muck** – This soil series consists of organic deposits underlain by sandy fluviomarine sediments and is found in lake basins, back swamps, floodplains and freshwater channels adjacent to tidal waters in the coastal plain. The profile ranges from various compositions of muck (0 to 39 inches) to sand (39 to 46 inches) to gravelly sand (46 to 60 inches) and is very poorly drained. This soil series is designated as hydric.

**Mullica sandy loam** – This soil series consists of loamy and sandy fluviomarine deposits and is found in floodplains, depressions, and drainageways. The profile ranges from mucky peat (0 to 2 inches) to sandy loam (2 to 28 inches) to loamy sand (28 to 31 inches) to sand (31 to 40 inches), to gravelly loamy sand (40 to 80 inches), is very poorly drained, and is classified as Farmland of statewide importance, if drained. This soil series is designated as hydric and has the following inclusions: Fallsington, five percent, hydric; Berryland, five percent, hydric.

**Pits, sand and gravel** – This soil series consists of sandy material distributed by human activity. There is no “typical” profile description regarding this series due to the significant disturbed nature of the soil.

**Psamments** – This soil series consists of sandy human-transported material located in flats. The profile ranges from coarse sand (0 to 12 inches) to gravelly coarse sand (12 to 36 inches) to sand (36 to 80 inches), is well drained, and is classified as Not prime farmland. This soil series is not designated as hydric and has the following inclusions: Mullica, five percent, hydric; Atsion, five percent, hydric; and Berryland, rarely flooded, five percent, hydric.

**Psammaquents, sulfidic substratum** – This soil series consists of sandy lateral spread deposits over organic material that is found in flats. The profile ranges from coarse sand (0 to 12 inches) to gravelly sand (12 to 36 inches) to mucky peat (36 to 80 inches), is very poorly drained, and is not classified as prime farmland. This soil series is designated as hydric and has the following inclusions: Pawcatuck, very frequently flooded, five percent, hydric; Transquaking, very frequently flooded, five percent, hydric; and Appoquinimink, very frequently flooded, five percent, hydric.

**Sassafras sandy loam** – This soil series consists of loamy fluviomarine deposits located in flats and fluviomarine terraces. The profile ranges from sandy loam (0 to 18 inches) to sandy clay loam (18 to 28 inches) to loamy sand (28 to 40 inches) to sand (40 to 80 inches), is well drained, and is classified for all areas as prime farmland. This soil series is not designated as hydric and has the following inclusions: Ingleside, nine percent, not hydric; Woodstown, four percent, not hydric; Downer, four percent, not hydric; and Aura, three percent, not hydric.

**Transquaking peat** – This soil series consists of herbaceous organic material over loamy fluviomarine deposits and is found in tidal marshes. The profile ranges from peat (0 to 9 inches) to mucky peat (9 to 46 inches) to muck (46 to 65 inches) to silty clay (65 to 80 inches), is very poorly drained, and is classified as



Farmland of unique importance. This soil series is designated as hydric and has the following inclusions: Appoquinimink, very frequently flooded, five percent, hydric; and Broadkill, very frequently flooded, five percent, hydric.

**Woodstown sandy loam** – This soil series consists of loamy fluviomarine deposits located in fluviomarine terraces, depressions, broad interstream divides, and flats. The profile ranges from sandy loam (0 to 29 inches) to fine sandy loam (29 to 45 inches) to loamy sand (45 to 80 inches), is moderately well drained, and all areas are considered prime farmland. This soil series is not designated as hydric and has the following inclusions: Fallsington, six percent, hydric; Hammonton, six percent, not hydric; Hambrook, four percent, not hydric; and Mattapex, four percent, not hydric.

Additional physical characteristics of these mapped soil such as slope, acidity, construction limitations and hydric rating, are summarized in Table 2.

Table 2. Soil Series Characteristics

Mapping Unit Symbol	Series	Slope (%)	pH (Acidity)	Construction Limitations/Suitability <sup>1</sup>	Hydric <sup>2</sup>
AtsAO	Atsion sand	0 to 2	3.6	Severe/Wetness, Sandiness, Flooding	Yes
AugaB	Aura sandy loam	2 to 5	4.0	Slight/Dusty	No
DocBO	Downer loamy sand	0 to 5	6.3	Slight/Dusty	Partially
FobB	Fort Mott sand	0 to 5	N/A	Moderate/Sandiness, Low strength, Dusty	Partially
GamB	Galloway loamy sand	0 to 5	4.3	Moderate/Wetness	Partially
HbmB	Hammonton loamy sand	0 to 5	5.5	Slight	Partially
HoruBr	Hooksan-Urban land complex	0 to 10	6.5	High risk of corrosion to concrete and steel	No
LakB	Lakehurst sand, 0 to 5% slopes	0 to 5	3.6	Moderate/Sandiness	No
MakAt	Manahawkin muck, 0 to 2% slopes	0 to 2	4.5	Severe/Flooding	Yes
MumA	Mullica sandy loam, 0 to 2% slopes	0 to 2	4.0	Severe/Wetness, Dusty, Sandiness	Yes
PHG	Pits sand and gravel	--	N/A	Not Rated	No
PssA	Psamments, 0 to 2% slopes	0 to 2	4.3	Severe/Flooding, Sandiness, Wetness, Dusty	Partially
PstAt	Psammaquents sulfidic substratum, 0 to 2% slopes	0 to 2	4.3	Severe/Flooding, Wetness, Sandiness, Low strength, Dusty	Yes
SacAO	Sassafras sandy loam, 0 to 2% slopes	0 to 2	6.3	Slight/Dusty	No
SacBO	Sassafras sandy loam, 2 to 5% slopes	2 to 5	6.3	Slight/Dusty	No

<b>Mapping Unit Symbol</b>	<b>Series</b>	<b>Slope (%)</b>	<b>pH (Acidity)</b>	<b>Construction Limitations/Suitability<sup>1</sup></b>	<b>Hydric<sup>2</sup></b>
TrkAv	Transquaking peat, 0 to 1% slopes	0 to 1	N/A	Severe/Flooding, Low strength, Wetness, Dusty	Yes
WATERs	Water, saline	--	N/A	Not Rated	N/A
WoeAO	Woodstown sandy loam, 0 to 2% slopes	0 to 2	5.7	Slight/Dusty	Partially

<sup>1</sup> Construction suitability and limitations criteria are derived from NRCS Web Soil Survey.

<sup>2</sup> Hydric soil determined using the New Jersey Portion of the 2018 National Hydric Soil List. Partially Hydric Status indicates that the major soil component is classified as not hydric but includes minor soil components that are classified as hydric

The location and extent of the mapped soils within the Study Areas are shown in Figure 2.

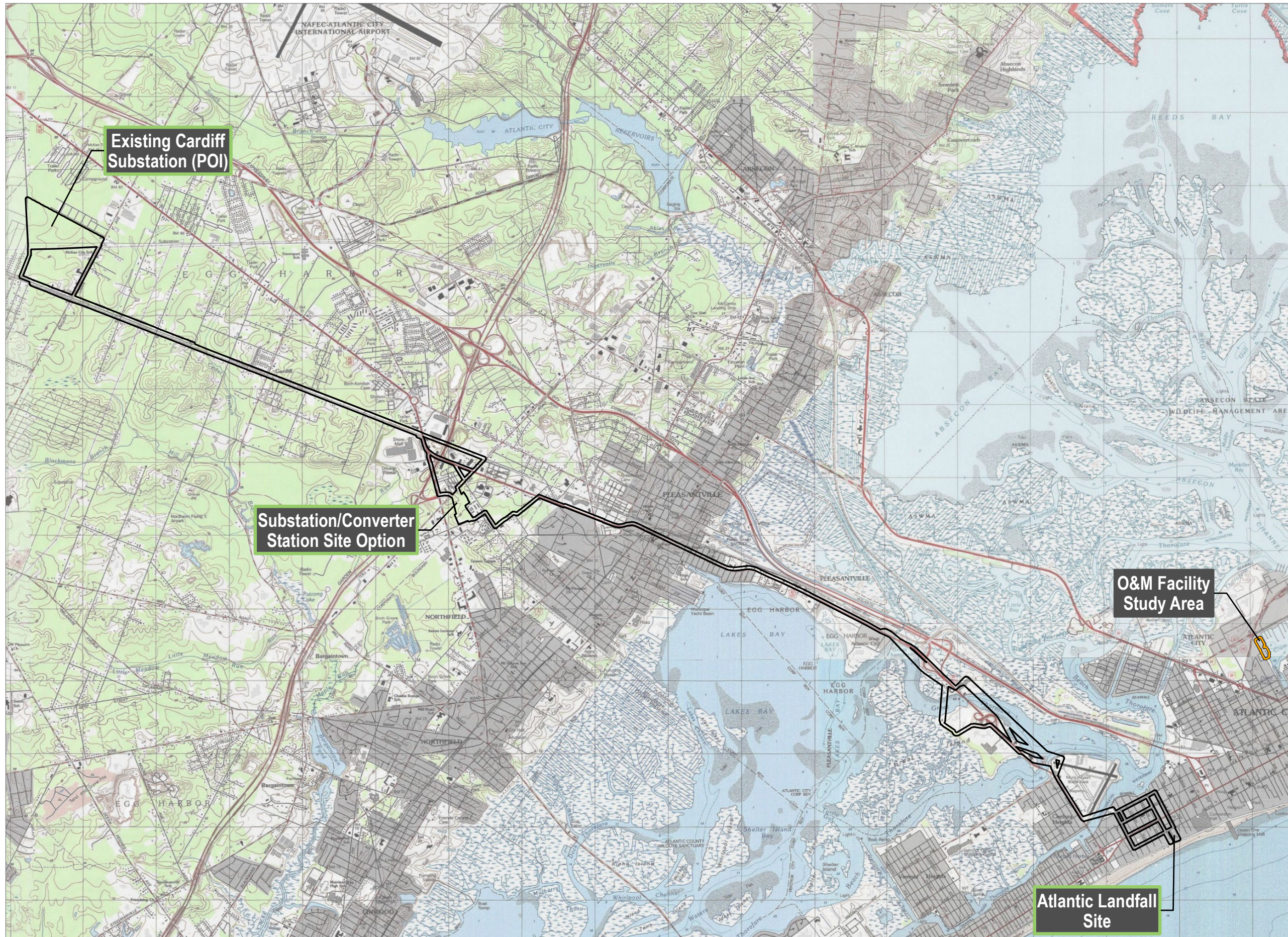
### 3.0 CONCLUSIONS

There are a total of 18 soil units mapped within the Study Areas. The information provided in this report is based on publicly available NRCS soils data and is provided for the purpose of guiding the determination of geotechnical investigation locations within the Study Areas to support onshore design.

## **Appendix A**

### Figures

Figure 1. USGS Project Location Map

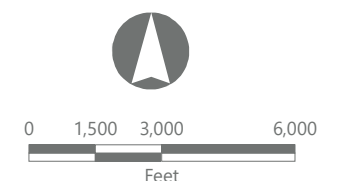


### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of Pleasantville, and Egg Harbor Township, Atlantic County, New Jersey

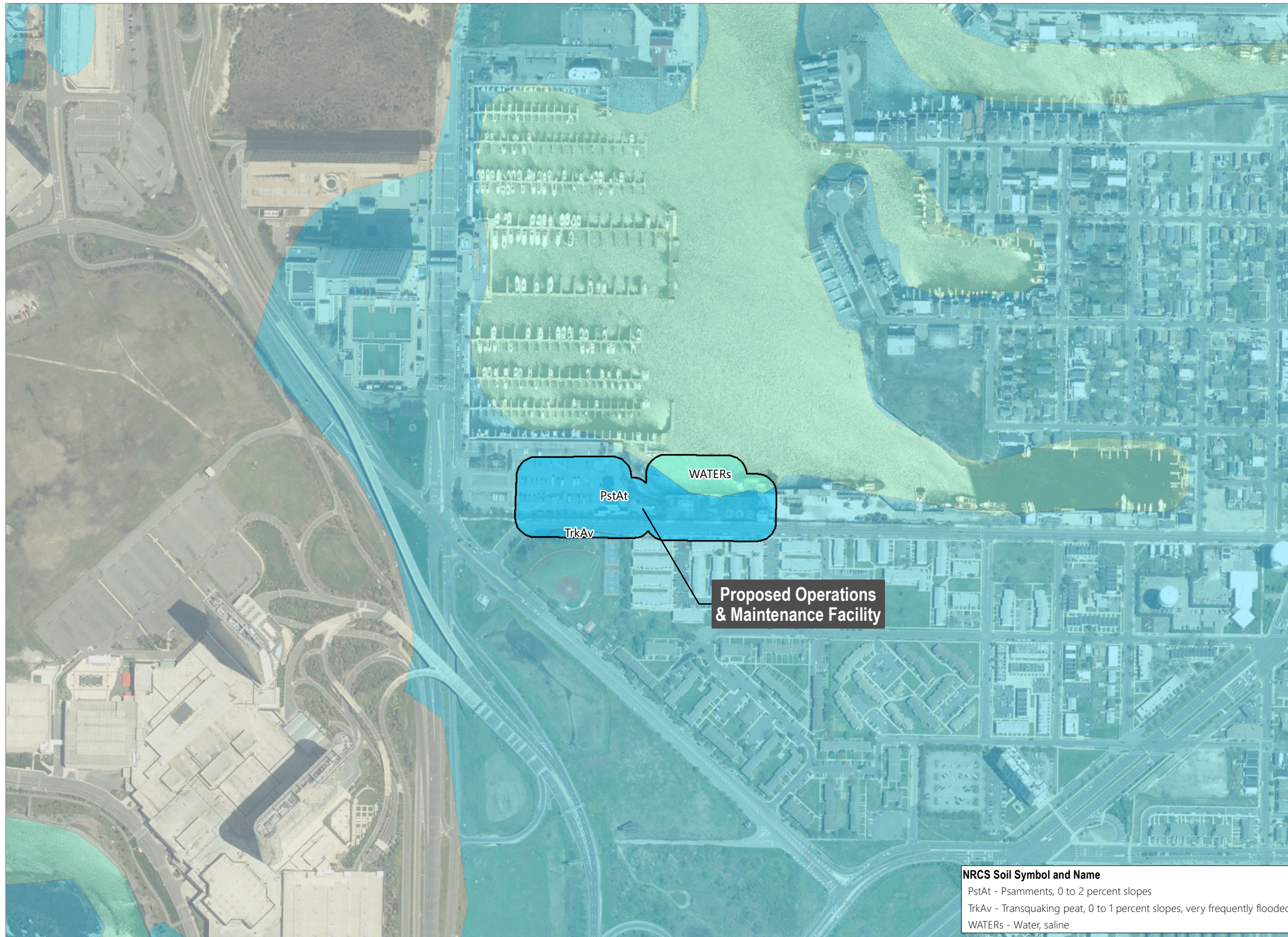
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□ Cardiff Study Area



Prepared November 22, 2023  
Basemap: ESRI ArcGIS Online "USA Topo Maps" map service.



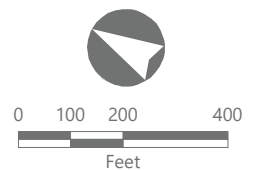
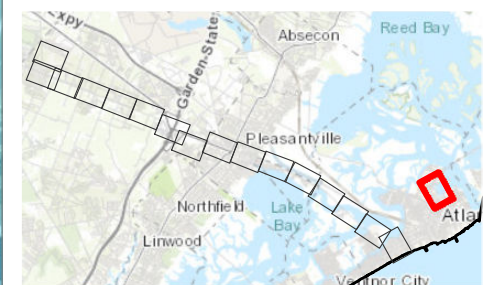


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City of Atlantic City, City of Pleasantville, and Egg Harbor Township, Atlantic County, New Jersey

#### Natural Resources Conservation Service Soils Report

- Study Area
- NRCS (SSURGO) Soils
- Hydric
- Partially Hydric\*
- Water
- Not Hydric

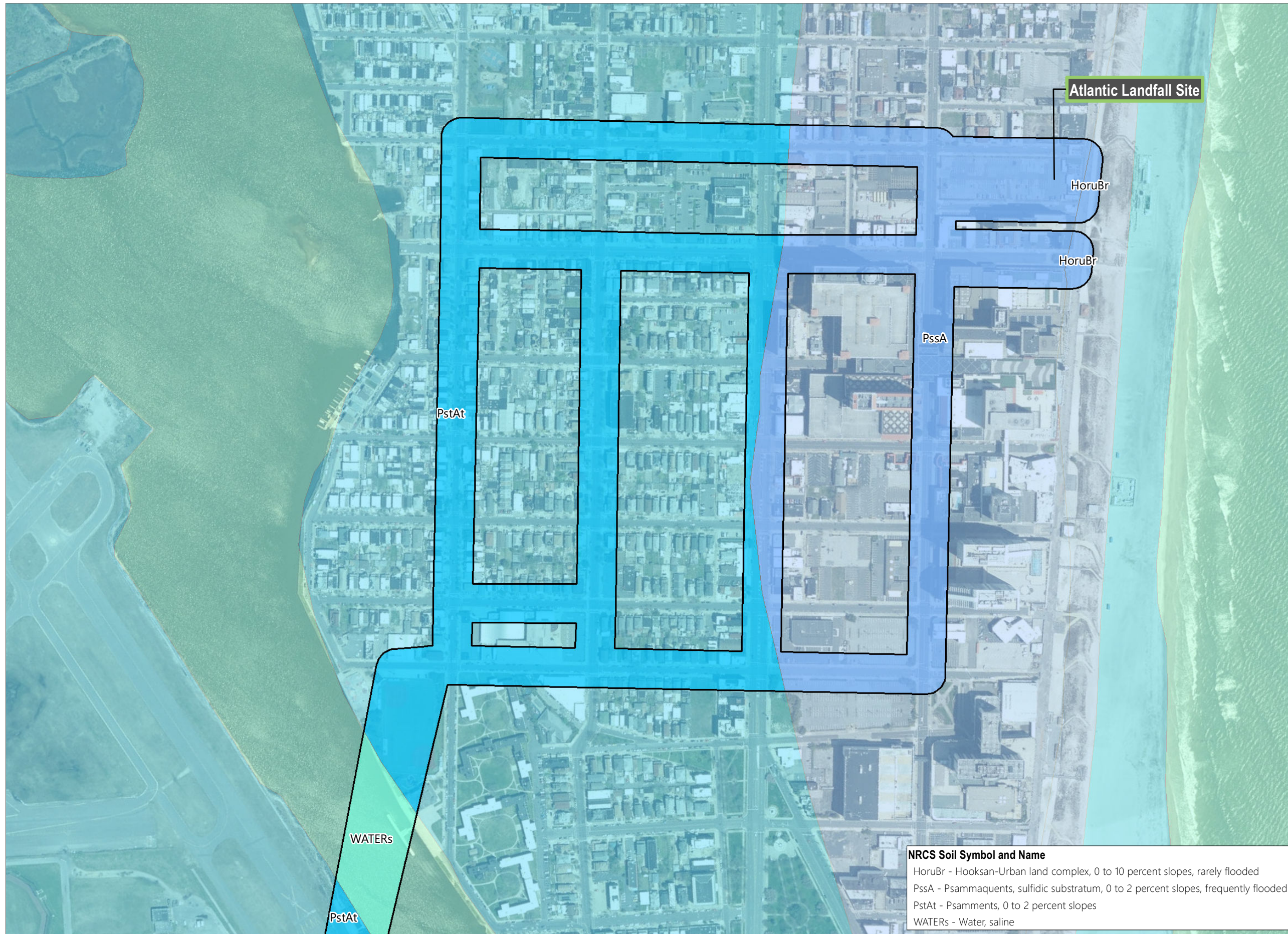


Prepared November 22, 2023  
 Basemap: NJ Office of GIS 2020 Natural Color Imagery

NRCS Soil Symbol and Name
PstAt - Psammets, 0 to 2 percent slopes
TrkAv - Transquaking peat, 0 to 1 percent slopes, very frequently flooded
WATERS - Water, saline

\*Partially Hydric Status indicates that the major soil component is classified as not hydric but includes minor soil components that are classified as hydric



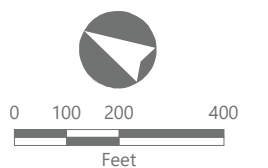
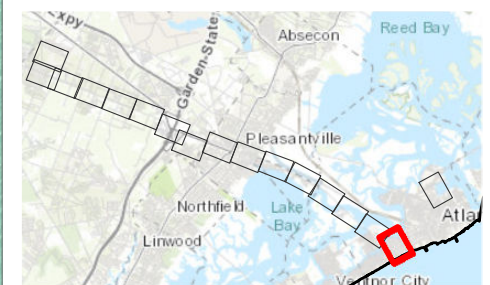


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#### Natural Resources Conservation Service Soils Report

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- Not Hydric



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 Basemap: NJ Office of GIS 2020 Natural Color Imagery

NRCS Soil Symbol and Name	
HoruBr	Hooksan-Urban land complex, 0 to 10 percent slopes, rarely flooded
PssA	Psammaquents, sulfidic substratum, 0 to 2 percent slopes, frequently flooded
PstAt	Psammits, 0 to 2 percent slopes
WATERS	Water, saline

\*Partially Hydric Status indicates that the major soil component is classified as not hydric but includes minor soil components that are classified as hydric



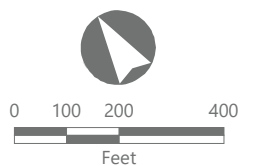
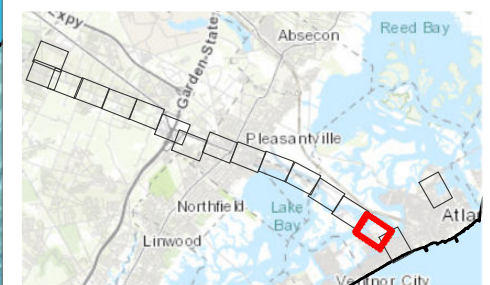


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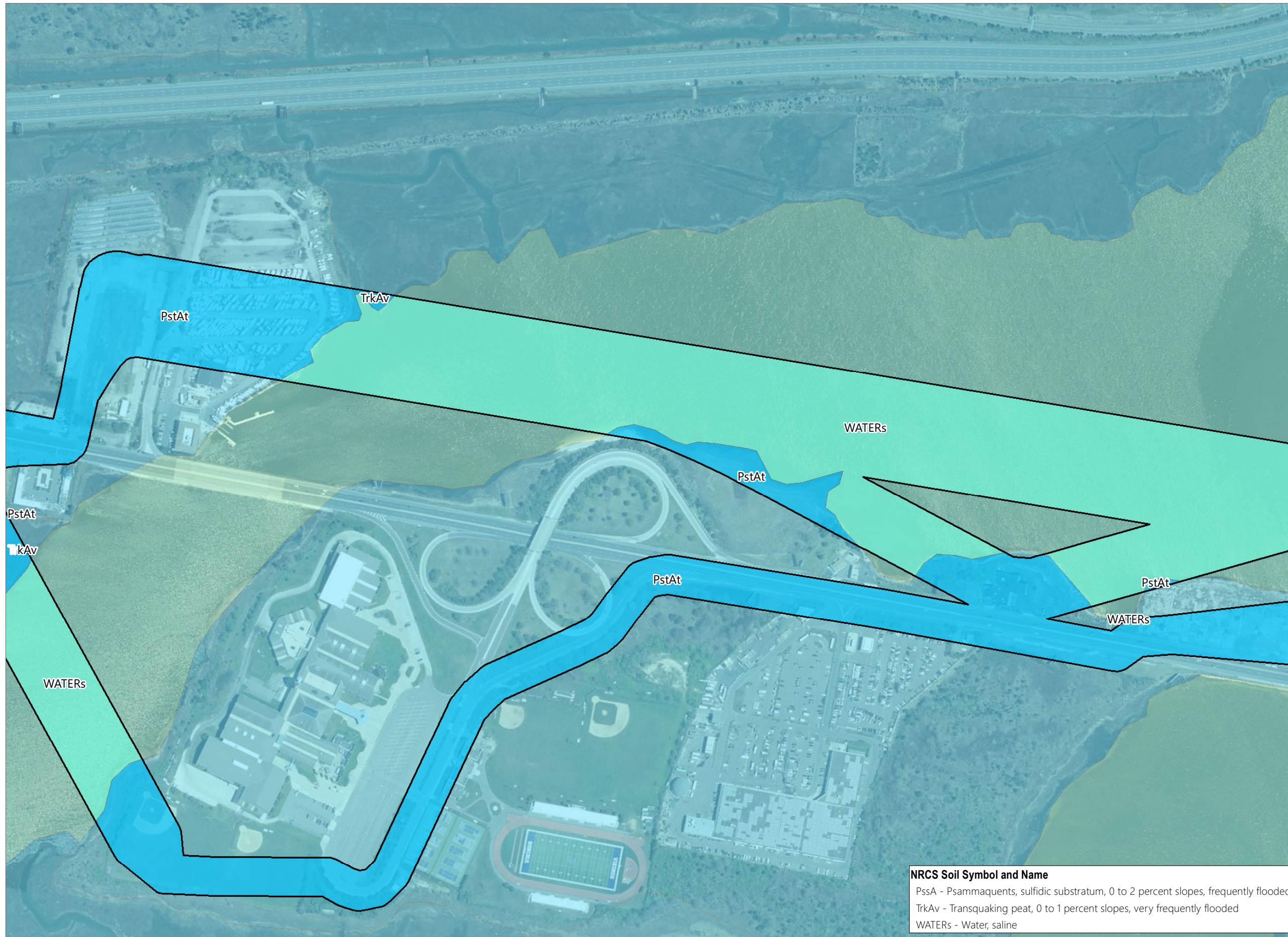
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**Soil Symbol and Name**

PstAt  
 Psammaquents, sulfidic substratum, 0 to 2 percent slopes, frequently flooded  
 s - Water, saline

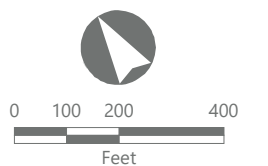
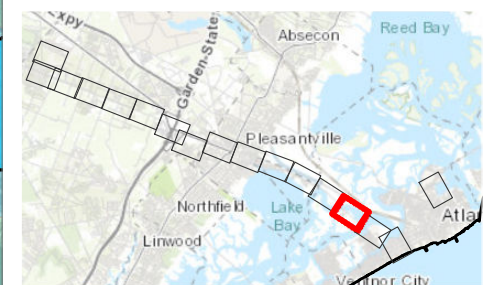


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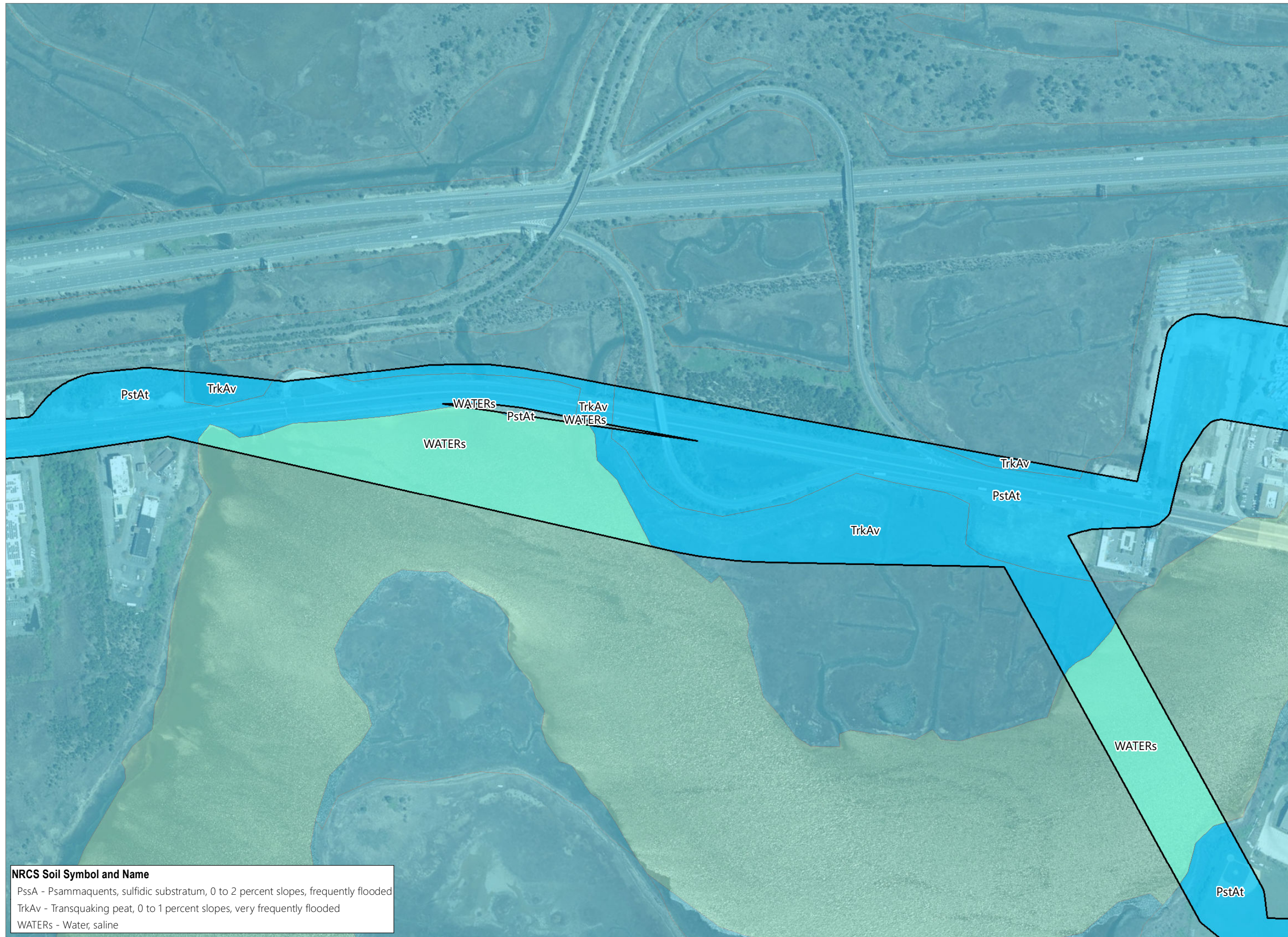
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 Basemap: NJ Office of GIS 2020 Natural Color Imagery

**NRCS Soil Symbol and Name**  
 PssA - Psammaquents, sulfidic substratum, 0 to 2 percent slopes, frequently flooded  
 TrkAv - Transquaking peat, 0 to 1 percent slopes, very frequently flooded  
 WATERS - Water, saline

\*Partially Hydric Status indicates that the major soil component is classified as not hydric but includes minor soil components that are classified as hydric





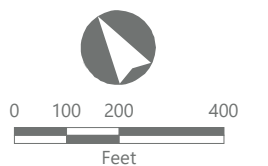
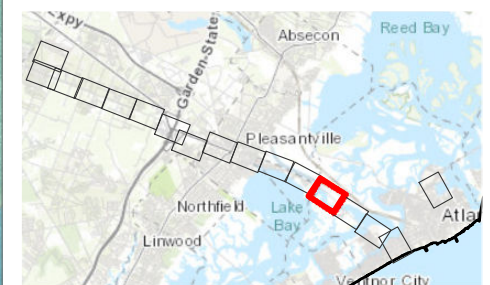


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#### Natural Resources Conservation Service Soils Report

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


NRCS Soil Symbol and Name	
PssA	- Psammaquents, sulfidic substratum, 0 to 2 percent slopes, frequently flooded
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WATERS	- Water, saline

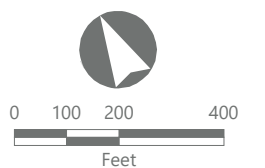
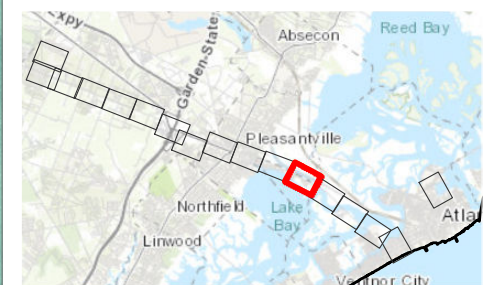


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**S Soil Symbol and Name**






- A - Psammaquents, sulfidic substratum, 0 to 2 percent slopes, frequently flooded
- v - Transquaking peat, 0 to 1 percent slopes, very frequently flooded
- TERs - Water, saline

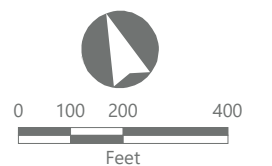
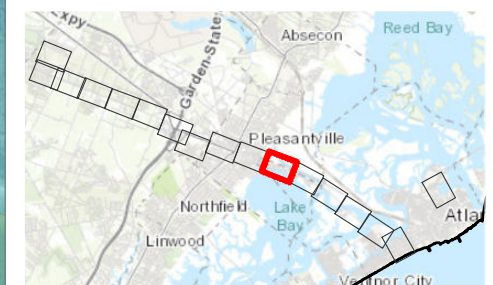


### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of  
Pleasantville, and Egg Harbor  
Township, Atlantic County,  
New Jersey

**Natural Resources Conservation  
Service Soils Report**

-  Study Area
- NRCS (SSURGO) Soils
-  Hydric
-  Partially Hydric\*
-  Water
-  Not Hydric

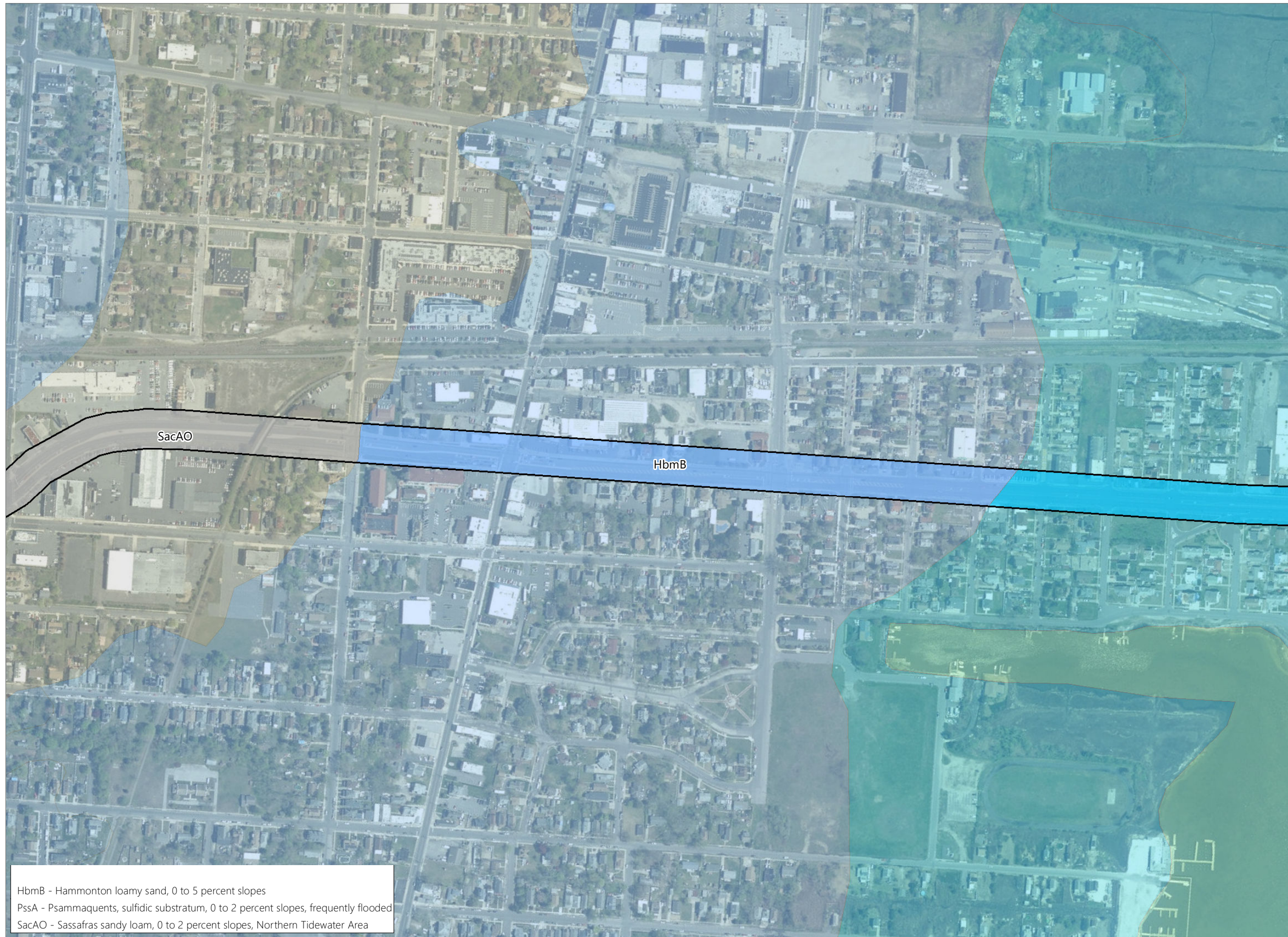


Prepared November 22, 2023  
Basemap: NJ Office of GIS 2020 Natural Color Imagery

\*Partially Hydric Status indicates that the major soil component is classified as not hydric but includes minor soil components that are classified as hydric



NRCS Soil Symbol and Name
PssA - Psammaquents, sulfidic substratum, 0 to 2 percent slopes, frequently flooded

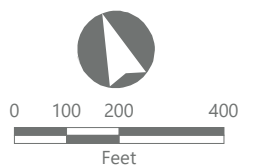
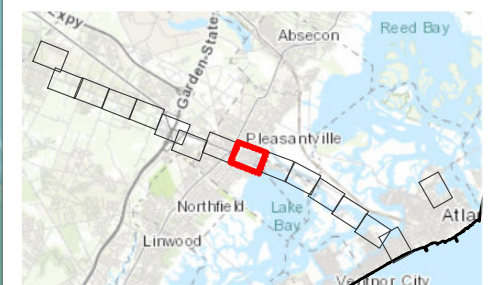


### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of Pleasantville, and Egg Harbor Township, Atlantic County, New Jersey

#### Natural Resources Conservation Service Soils Report

- Study Area
- NRCS (SSURGO) Soils
- Hydric
- Partially Hydric\*
- Water
- Not Hydric



Prepared November 22, 2023  
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HbmB - Hammonton loamy sand, 0 to 5 percent slopes  
 PssA - Psammaquents, sulfidic substratum, 0 to 2 percent slopes, frequently flooded  
 SacAO - Sassafras sandy loam, 0 to 2 percent slopes, Northern Tidewater Area

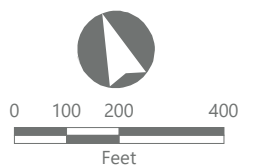
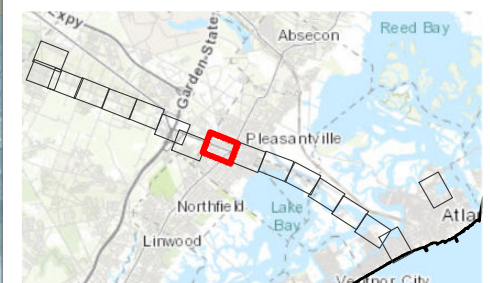


### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of Pleasantville, and Egg Harbor Township, Atlantic County, New Jersey

#### Natural Resources Conservation Service Soils Report

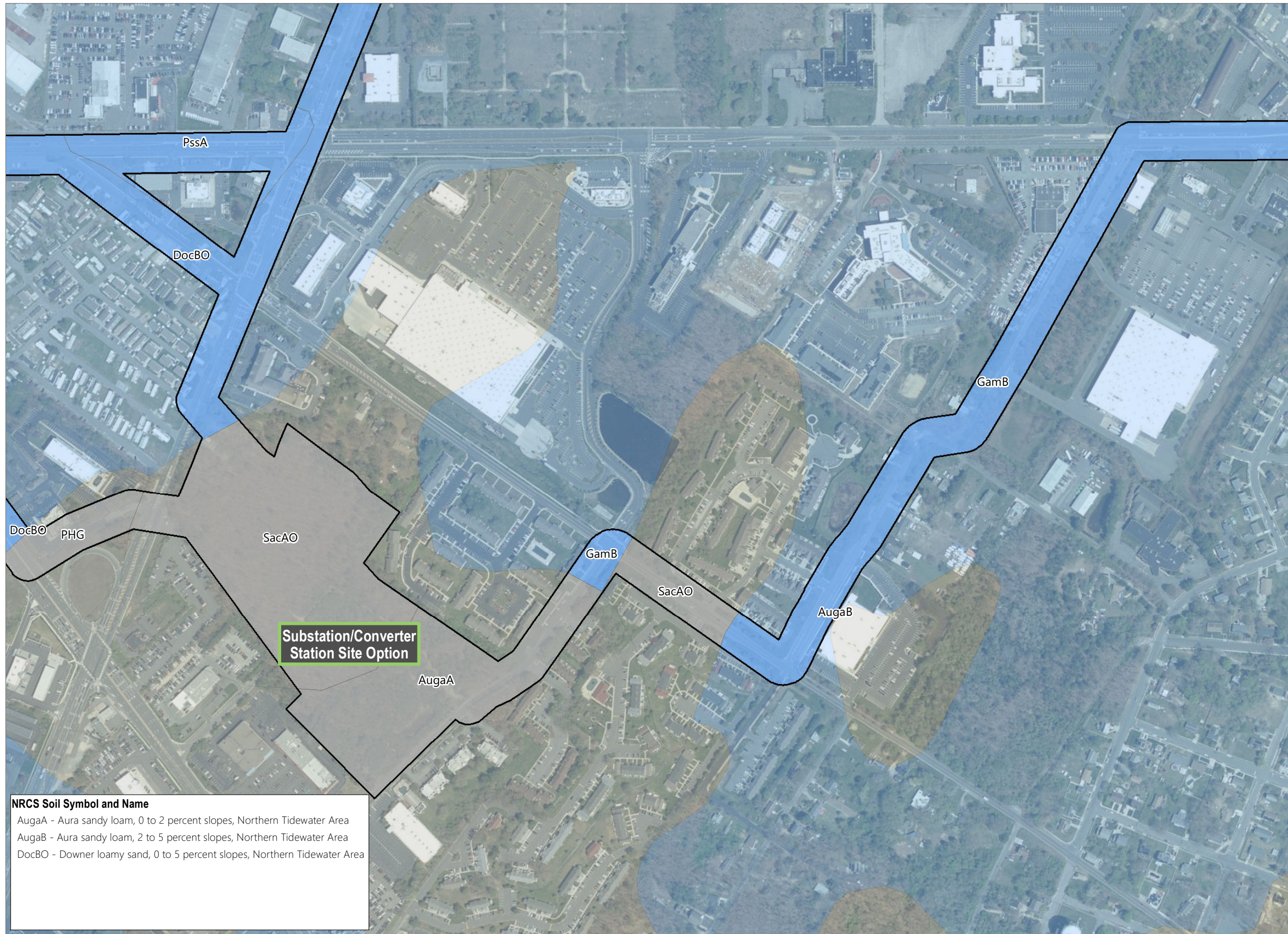
-  Study Area
- NRCS (SSURGO) Soils
-  Hydric
-  Partially Hydric\*
-  Water
-  Not Hydric



Prepared November 22, 2023  
 Basemap: NJ Office of GIS 2020 Natural Color Imagery

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RCS Soil Symbol and Name
GamB - Galloway loamy sand, 0 to 5 percent slopes
PstAt - Psammments, 0 to 2 percent slopes
SacAO - Sassafras sandy loam, 0 to 2 percent slopes, Northern Tidewater Area

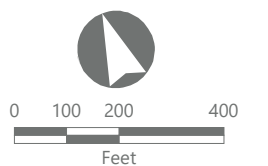
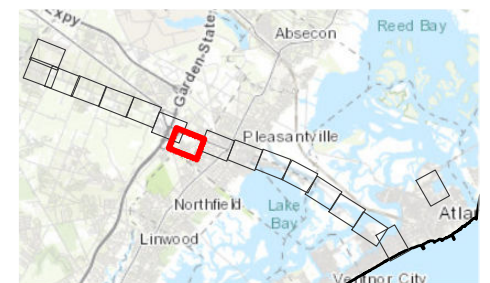


### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of Pleasantville, and Egg Harbor Township, Atlantic County, New Jersey

#### Natural Resources Conservation Service Soils Report

- Study Area
- NRCS (SSURGO) Soils
  - Hydric
  - Partially Hydric\*
  - Water
  - Not Hydric

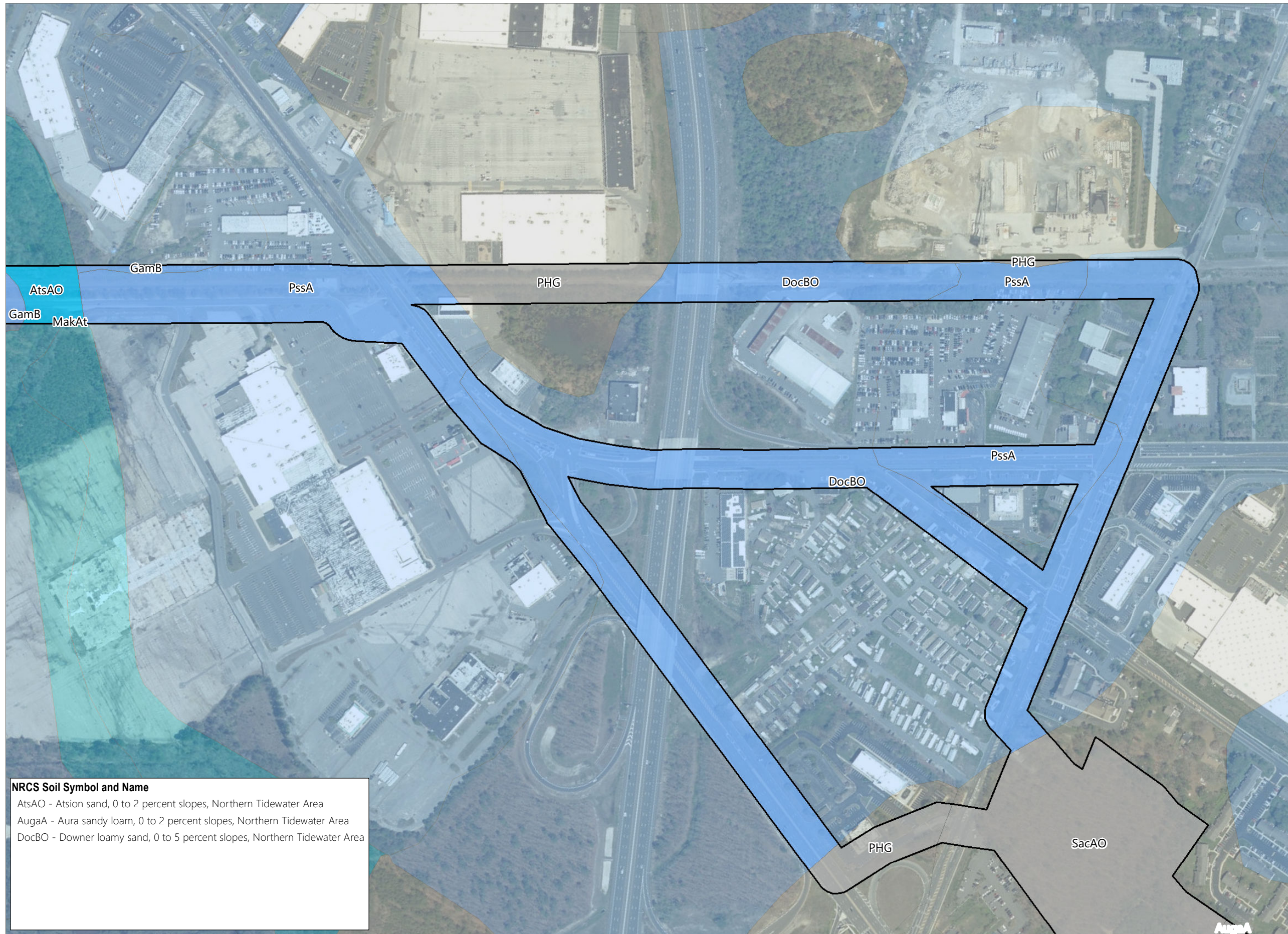


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**NRCS Soil Symbol and Name**  
 AugaA - Aura sandy loam, 0 to 2 percent slopes, Northern Tidewater Area  
 AugaB - Aura sandy loam, 2 to 5 percent slopes, Northern Tidewater Area  
 DocBO - Downer loamy sand, 0 to 5 percent slopes, Northern Tidewater Area

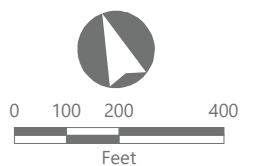
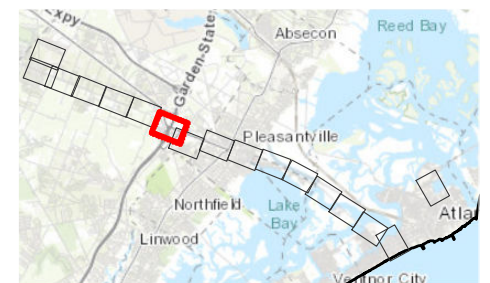


### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of Pleasantville, and Egg Harbor Township, Atlantic County, New Jersey

#### Natural Resources Conservation Service Soils Report

- Study Area
- NRCS (SSURGO) Soils
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  - Water
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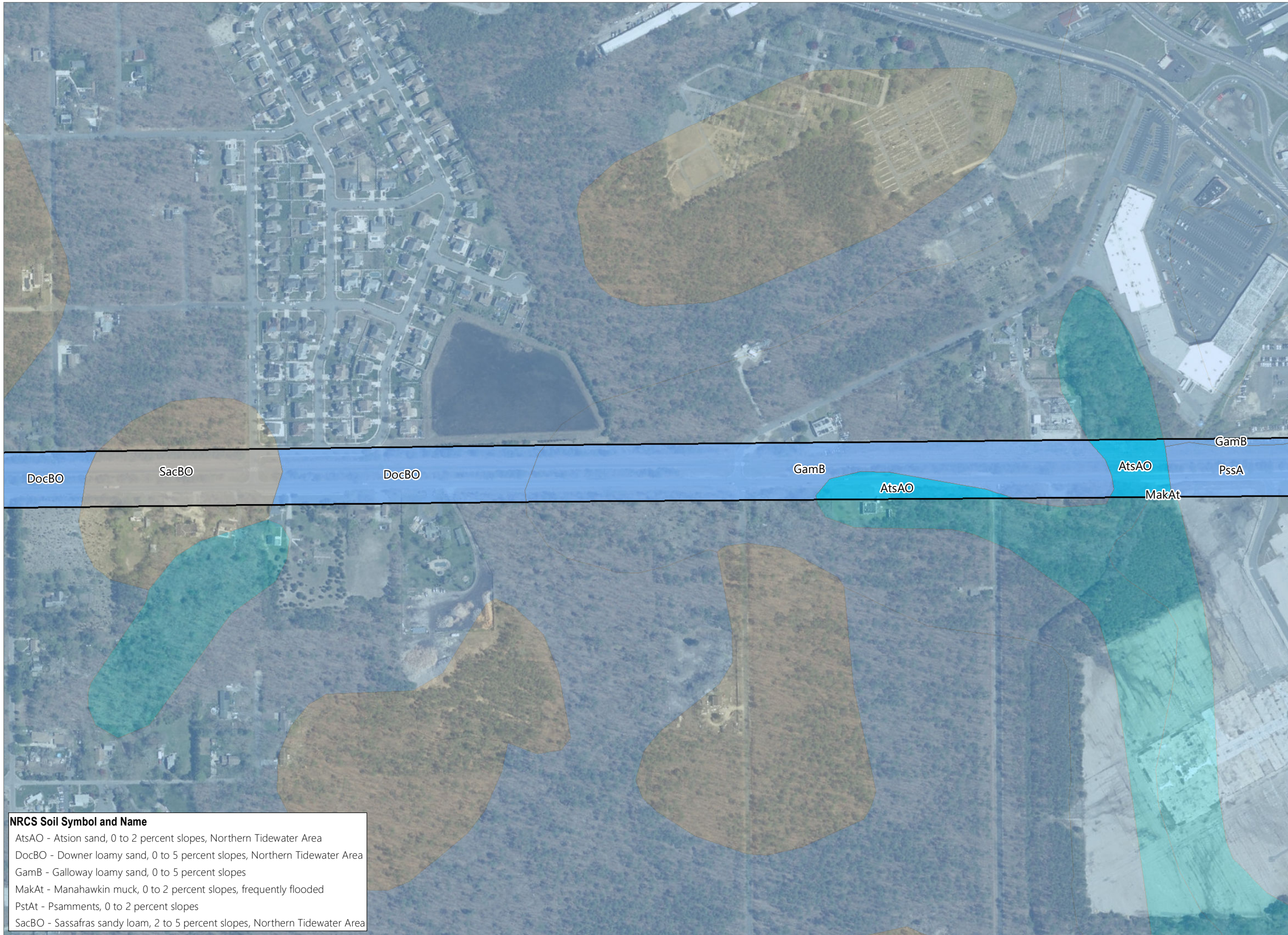


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**NRCS Soil Symbol and Name**  
 AtsAO - Atsion sand, 0 to 2 percent slopes, Northern Tidewater Area  
 AugaA - Aura sandy loam, 0 to 2 percent slopes, Northern Tidewater Area  
 DocBO - Downer loamy sand, 0 to 5 percent slopes, Northern Tidewater Area

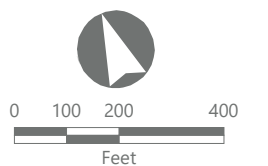
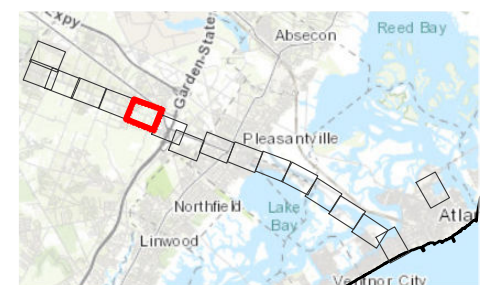


### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of Pleasantville, and Egg Harbor Township, Atlantic County, New Jersey

#### Natural Resources Conservation Service Soils Report

- Study Area
- NRCS (SSURGO) Soils
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- Partially Hydric\*
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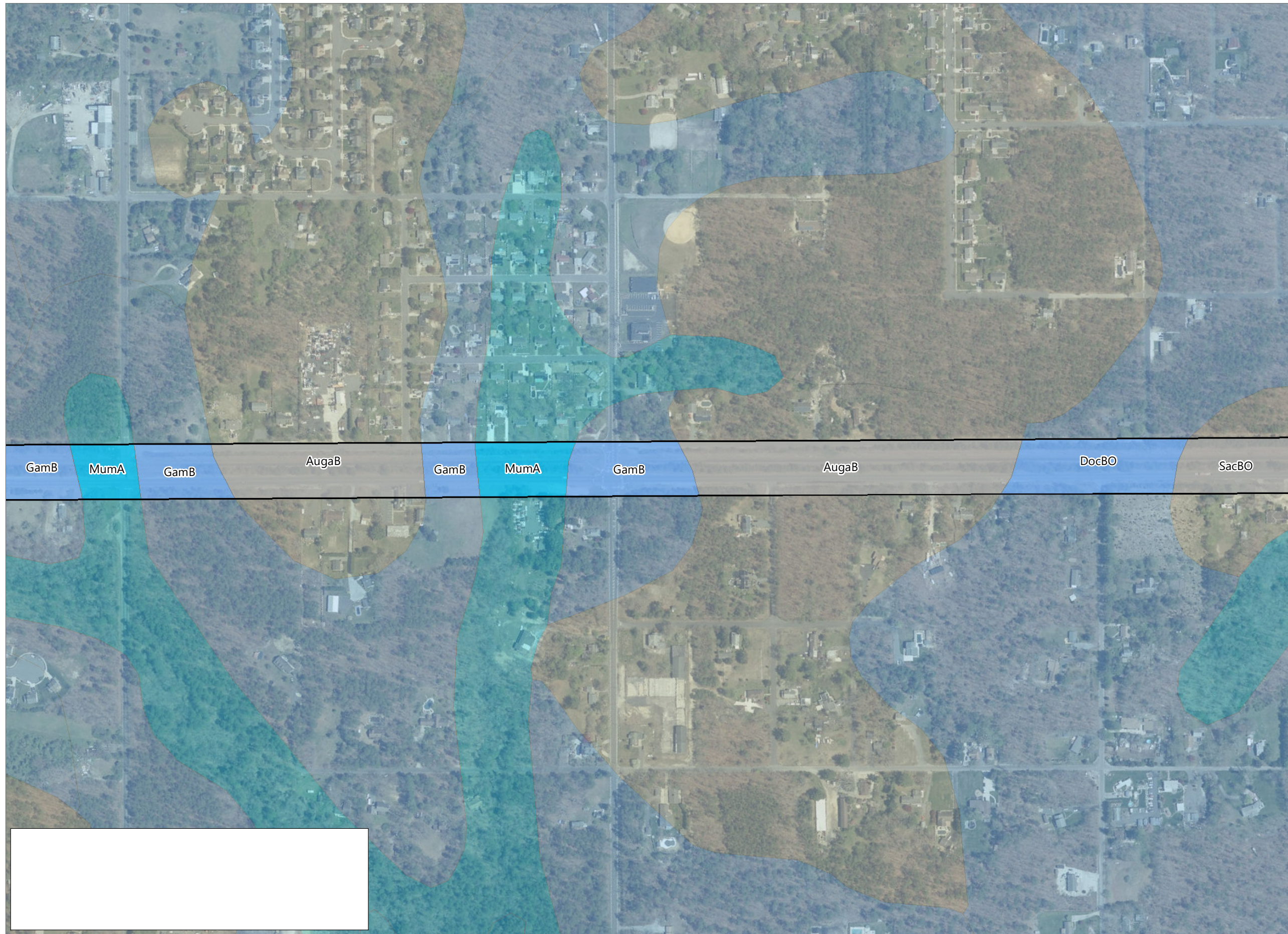


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NRCS Soil Symbol and Name
AtsAO - Atsion sand, 0 to 2 percent slopes, Northern Tidewater Area
DocBO - Downer loamy sand, 0 to 5 percent slopes, Northern Tidewater Area
GamB - Galloway loamy sand, 0 to 5 percent slopes
MakAt - Manahawkin muck, 0 to 2 percent slopes, frequently flooded
PstAt - Psammets, 0 to 2 percent slopes
SacBO - Sassafras sandy loam, 2 to 5 percent slopes, Northern Tidewater Area








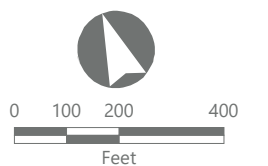
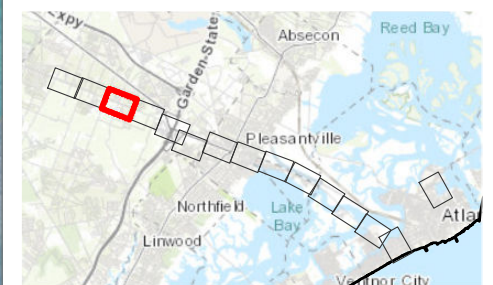


### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of  
Pleasantville, and Egg Harbor  
Township, Atlantic County,  
New Jersey

#### Natural Resources Conservation Service Soils Report

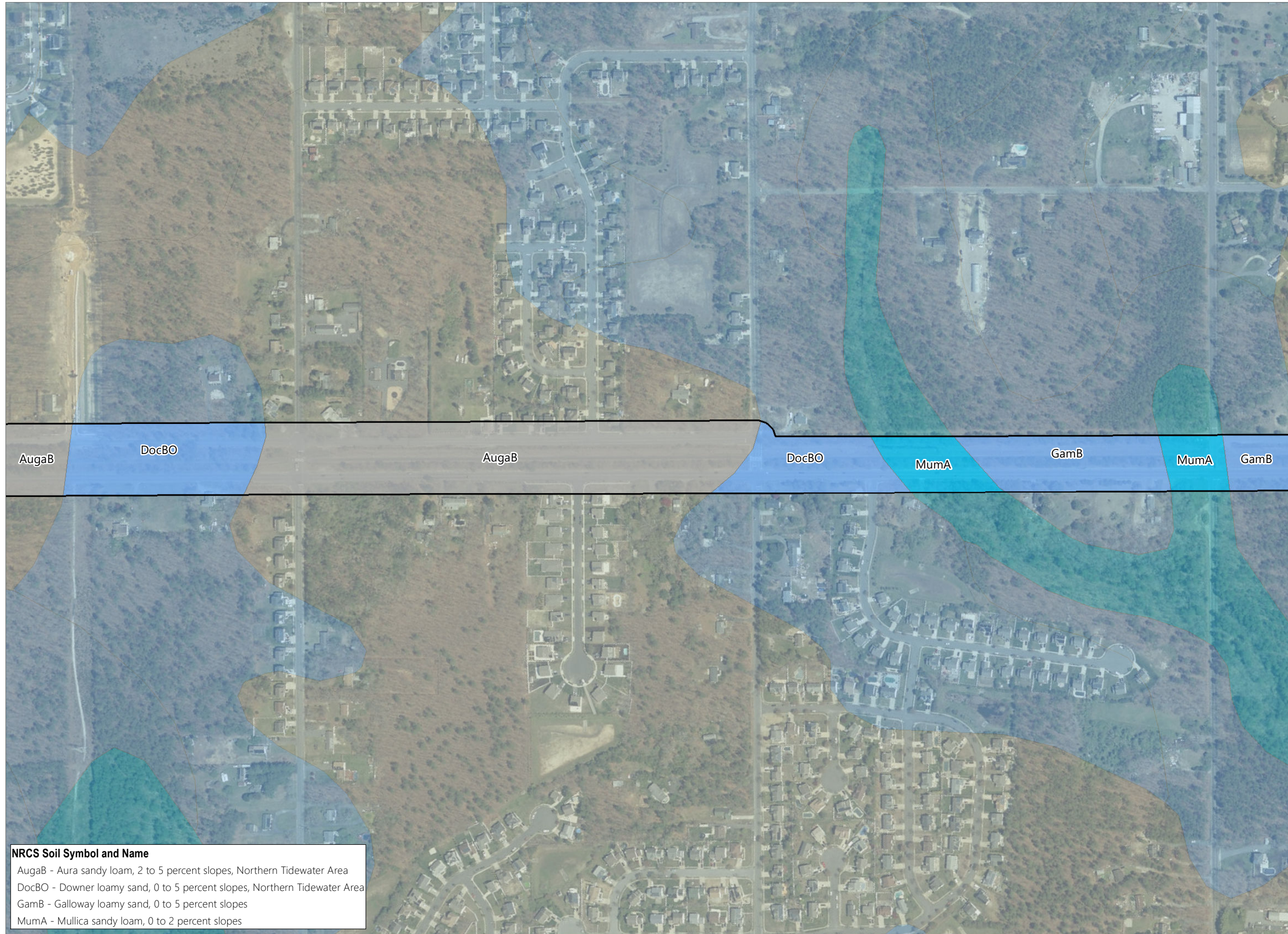
-  Study Area
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-  Partially Hydric\*
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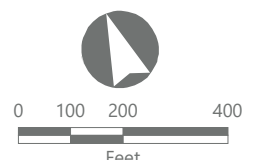
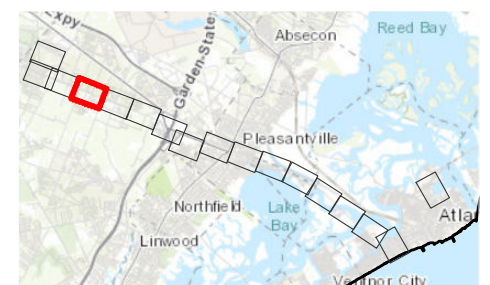
### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of Pleasantville, and Egg Harbor Township, Atlantic County, New Jersey

#### Natural Resources Conservation Service Soils Report

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AugaB DocBO AugaB DocBO MumA GamB MumA GamB



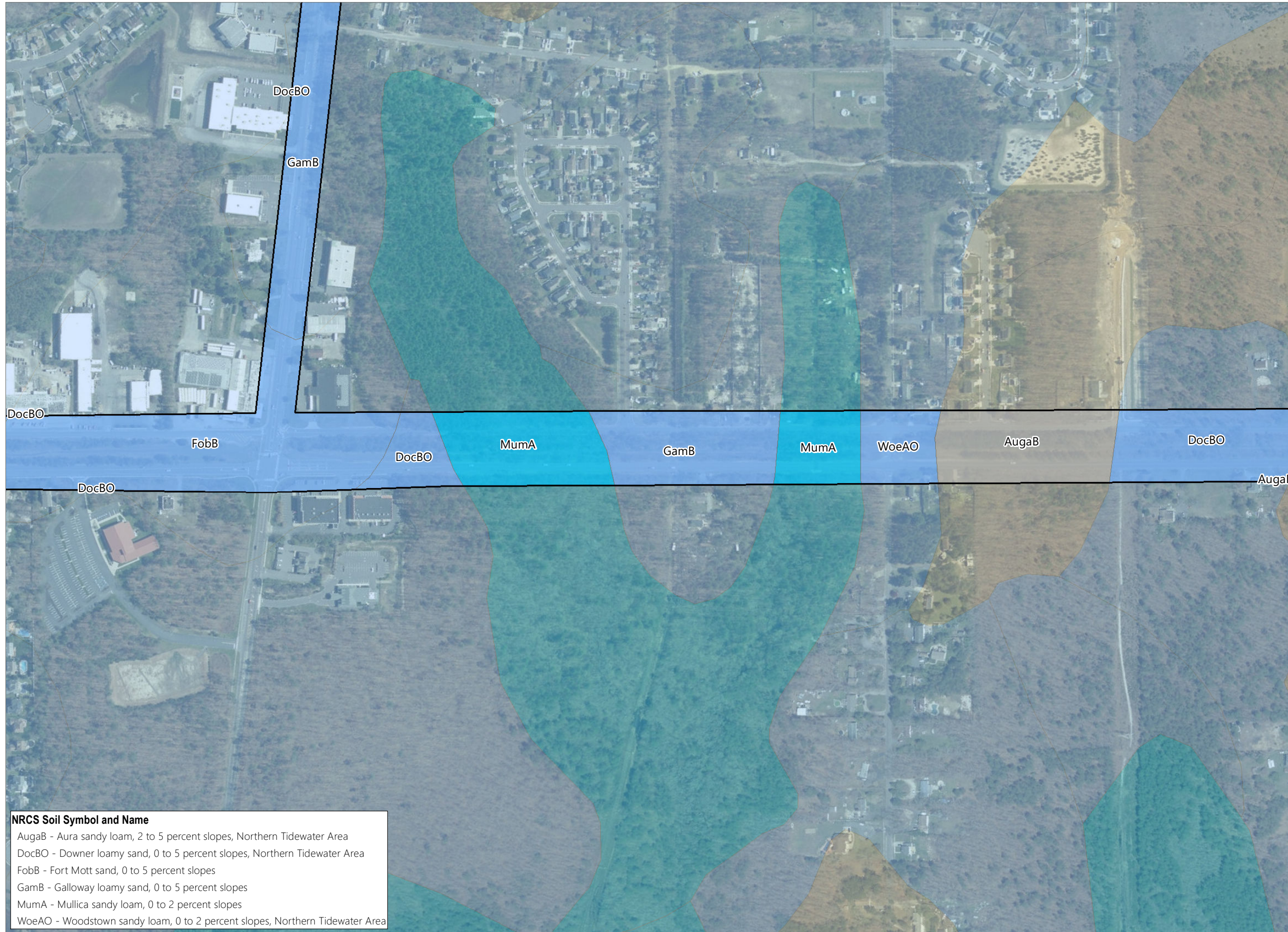
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**NRCS Soil Symbol and Name**

AugaB	- Aura sandy loam, 2 to 5 percent slopes, Northern Tidewater Area
DocBO	- Downer loamy sand, 0 to 5 percent slopes, Northern Tidewater Area
GamB	- Galloway loamy sand, 0 to 5 percent slopes
MumA	- Mullica sandy loam, 0 to 2 percent slopes

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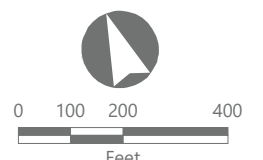
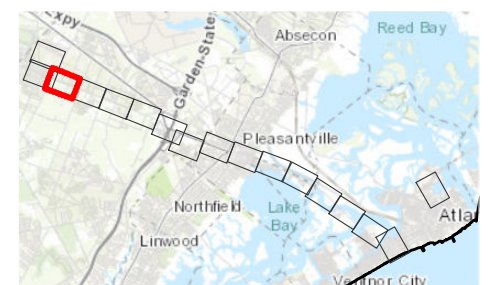


### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of Pleasantville, and Egg Harbor Township, Atlantic County, New Jersey

**Natural Resources Conservation Service Soils Report**

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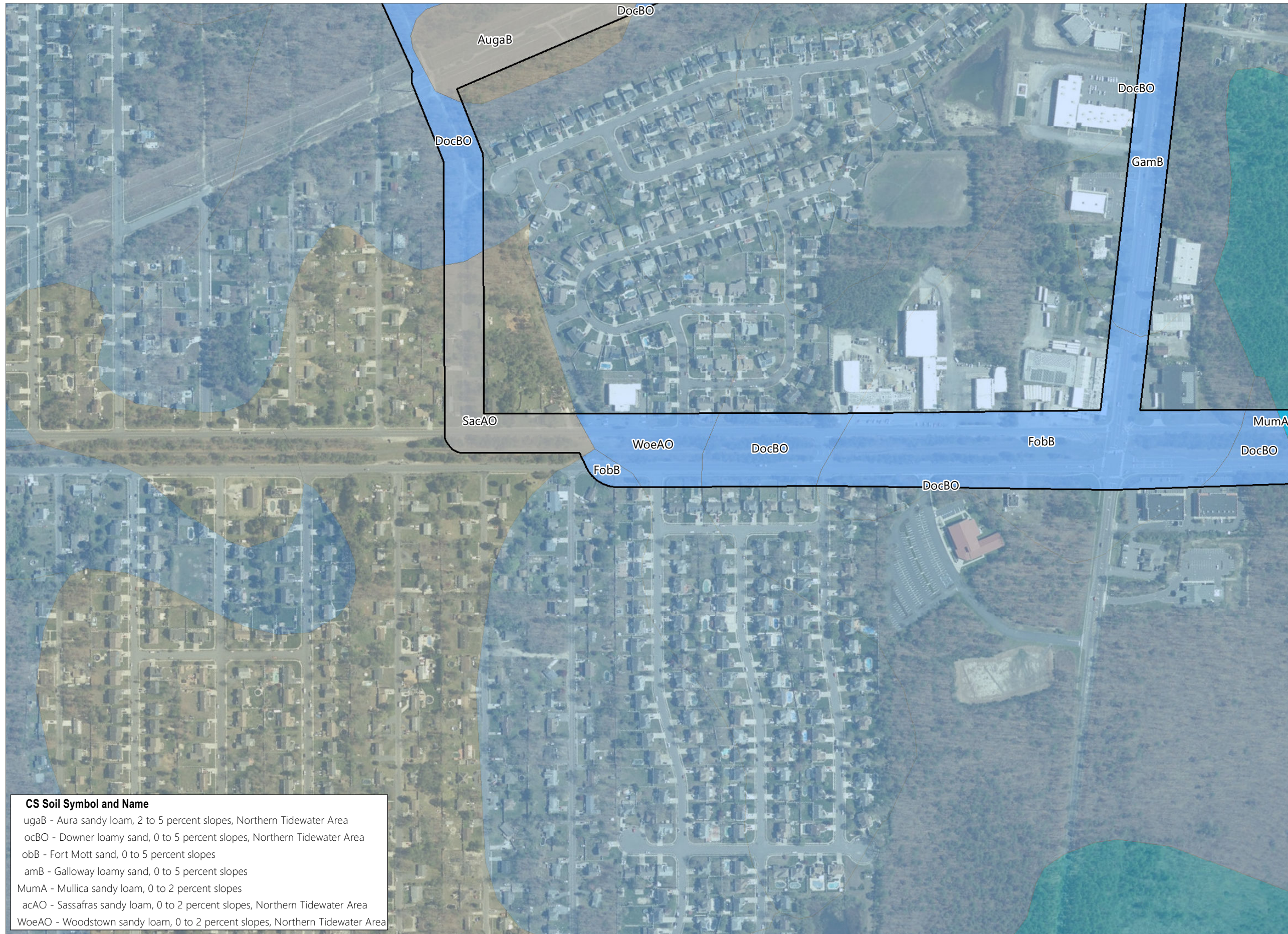
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**NRCS Soil Symbol and Name**

AugaB	- Aura sandy loam, 2 to 5 percent slopes, Northern Tidewater Area
DocBO	- Downer loamy sand, 0 to 5 percent slopes, Northern Tidewater Area
FobB	- Fort Mott sand, 0 to 5 percent slopes
GamB	- Galloway loamy sand, 0 to 5 percent slopes
MumA	- Mullica sandy loam, 0 to 2 percent slopes
WoeAO	- Woodstown sandy loam, 0 to 2 percent slopes, Northern Tidewater Area

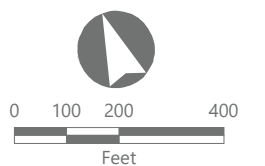
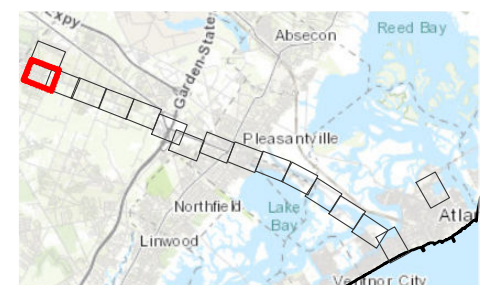


### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of Pleasantville, and Egg Harbor Township, Atlantic County, New Jersey

#### Natural Resources Conservation Service Soils Report

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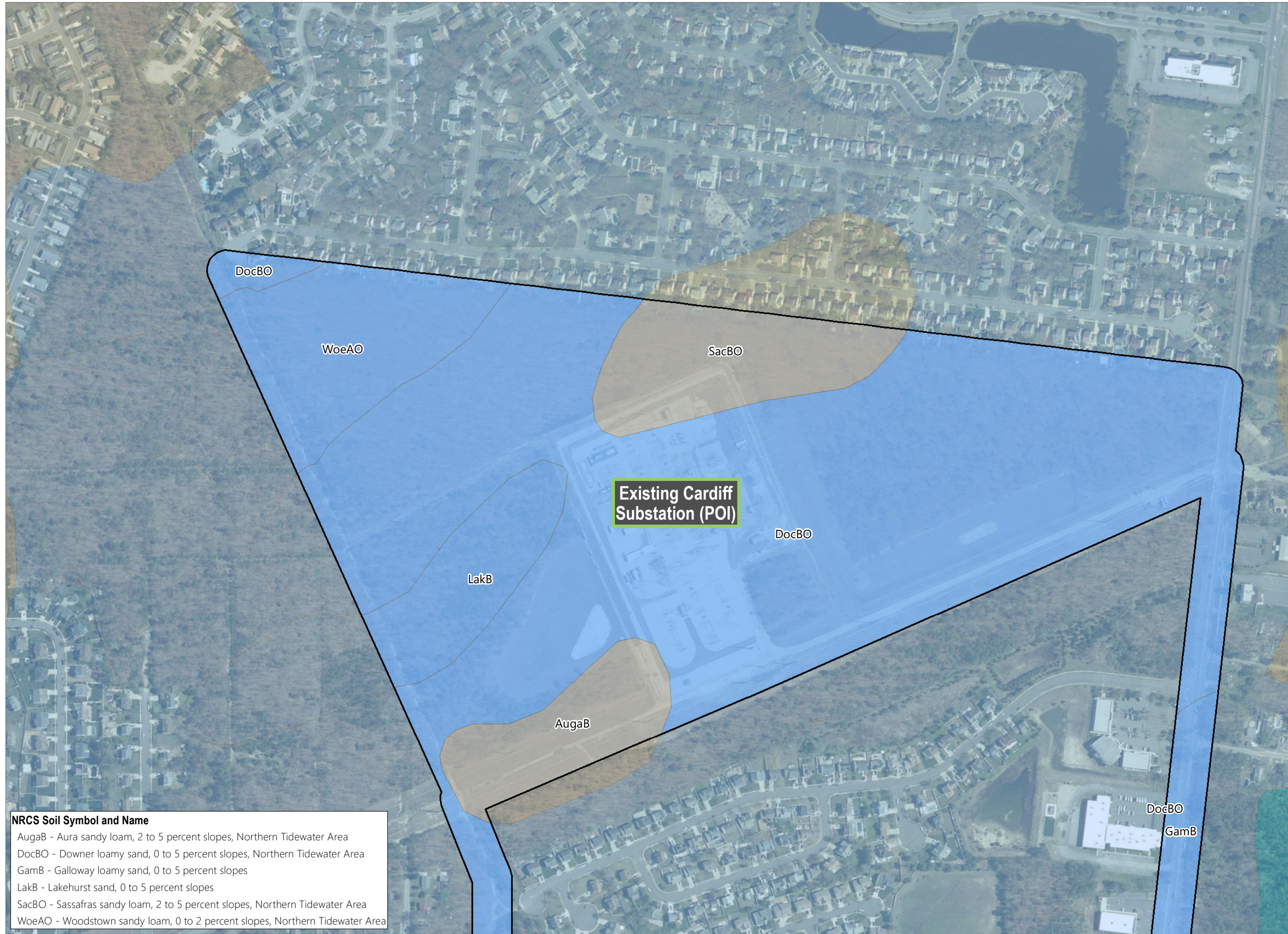
CS Soil Symbol and Name
ugaB - Aura sandy loam, 2 to 5 percent slopes, Northern Tidewater Area
ocBO - Downer loamy sand, 0 to 5 percent slopes, Northern Tidewater Area
obB - Fort Mott sand, 0 to 5 percent slopes
ambB - Galloway loamy sand, 0 to 5 percent slopes
MumA - Mullica sandy loam, 0 to 2 percent slopes
acAO - Sassafras sandy loam, 0 to 2 percent slopes, Northern Tidewater Area
WoeAO - Woodstown sandy loam, 0 to 2 percent slopes, Northern Tidewater Area



### Atlantic Shores South Offshore Wind – Cardiff and O&M Facility Study Areas

City of Atlantic City, City of  
Pleasantville, and Egg Harbor  
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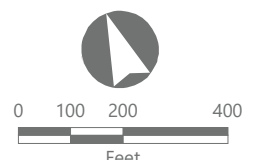
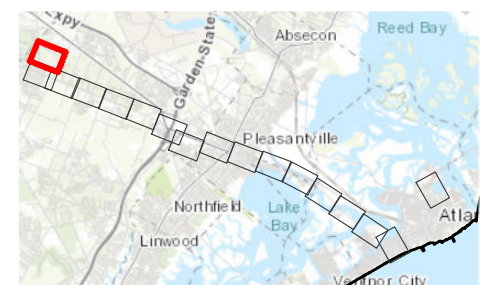
#### Natural Resources Conservation Service Soils Report



- Study Area
- NRCS (SSURGO) Soils
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- Water
- Not Hydric

**NRCS Soil Symbol and Name**

AugaB	- Aura sandy loam, 2 to 5 percent slopes, Northern Tidewater Area
DocBO	- Downer loamy sand, 0 to 5 percent slopes, Northern Tidewater Area
GamB	- Galloway loamy sand, 0 to 5 percent slopes
LakB	- Lakehurst sand, 0 to 5 percent slopes
SacBO	- Sassafras sandy loam, 2 to 5 percent slopes, Northern Tidewater Area
WoeAO	- Woodstown sandy loam, 0 to 2 percent slopes, Northern Tidewater Area



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