ENVIRONMENTAL IMPACT STATEMENT

FOR

COMPLETELY INCLUSIVE PARK

AT

MAPLECREST PARK

(237 OAKLAND ROAD OR OAKLAND ROAD/OAKVIEW AVE)

IN

MAPLEWOOD, NJ

January 2024

Township of Maplewood

Prepared by:

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Township Engineer

Contents

INTRODUCTION

Maplewood Township is preparing the Environmental Impact Statement for the 14.51 acre lot designated as Block 31.34, Lot 301 ("the site") located within Maplewood Township, Essex County, New Jersey. The project entails the construction of an inclusive play ground and associated accessible bathroom improvements (termed, "the project"). This Environmental Impact Statement (EIS) presents an assessment of the probably or potential impacts the proposed development project may have upon natural resources at the project site and in the surrounding area and provides an overview of measures taken to minimize any adverse environmental impacts that may be caused by these improvements.

The subject site is presently developed as a park and is suitable for the proposed project and site design layout. The proposed project has been designed to avoid critical environmental areas to the maximum extent practicable.

METHODOLOGY

The Township Engineering department performed a comprehensive site investigation of the site in July, November, December 2023 and January 2024. Onsite hydrology, freshwater wetlands, soils, vegetation communities, wildlife, and existing and surrounding land uses were evaluated in direct relation to probable or potential impacts that may be imposed upon these resources by the proposed project. Weather was variable during the site investigations, include mostly sunny during the July 2023 visit and cold and partly cloudy during the January 2024 visit.

SITE LOCATION & EXISTING LANDUSE/LAND COVERAGE

The subject site is located on Sheet 24 of the official tax map of Maplewood Township (refer to Fig 1). The site is located to the north of Tuscan Road and Vermont Avenue, bounded by Tuscan Road and Oakland Road to the south and west, respectively. The northernmost portions of Boyden Parkway also provide access to the site from the east. The site can be found on the Roselle United States Geological Survey (USGS) Quadrangles with NAD 1983 State plane coordinates (feet) of E(x) 558,178.478 and N (y) 688,477.041 at the approximate center of the site (refer to Fig 2: Roselle USGS Quadrangle maple). The site is located in Elizabeth River Sub watershed , in the Raritan water region in the Elizabeth River watershed, under the Arthur Kill Watershed Management Area.

The property presently is a recreational park and parking area. Several baseball and softball fields, playgrounds, shelterhouse with restroom facilities, and walking paths exist. At the time of this report, tennis courts exist, however these are scheduled to be removed before summer 2024. The site is bordered by roads to the west and south. A public library and police station exist along the southern borders of the site. Single family residential homes are present to the west, north and east of the site. Refer to Figure X, depicting the uses surrounding the project site.

PROJECT DESCRIPTION

The project includes a 8,400 square foot accessible and inclusive playground, including safety play surface, fencing and improvements to walking paths for accessible and inclusive ADA access. Further,

improvements to onsite bathroom facilities will be made. The project will be depicted on plans to be finalized at a later date with an as yet to be selected consultant.

SITE INVENTORY & ENVIRONMENTAL ASSESSMENT

PLANNING, ZONING & DEMOGRAPHICS

ZONING & MASTER PLAN

The site lies within Maplewood Township's R-1-5 Zone, according to the Final Zoning Map, approved October 2022. The use is existing, and will not be changing. The proposed improvements will not impact any setbacks or require any variances.

The Master Plan of the Maplewood Township, readopted in October 2023, does prioritize improving municipal park spaces as well as increasing accessibility for differently abled communities, and this project promotes and advances these objectives. As the Township population, and regional population increase, the need for an inclusive play area will increase. This project will answer this need.

DEMOGRAPHICS

As of the 2019 United States Census, Maplewood Township's population was 25,684, an increase from the 2010 population of 23,867. In 2018, there were 8,401 households within the Township. The population density as of 2020 is 6,629.8 per square mile. Of the 8,401 households, 33.5% are children under the age of 18, 11.2% are persons 65 years and older, and 48.6% are female persons.

Geology & Subsurface Water

BEDROCK GEOLOGY

The site is located within the Passaic Formation (Lower Jurassic and Upper Triassic). This formation is characterized as sandstone, siltstone and shale. This is based on referencing NJDEP's "Bedrock Geologic Map 2014".

SUBSURFACE WATER

The site is presently developed. Minimal disturbance into underlying formations will occur as a result of grading, subsurface utility installation, foundation construction and associated earth disturbances which will mostly be limited to the developed portion of the site. Since the site is developed, such disturbances will displace and slightly modify underlying soils, which will remain on-site during construction of the project. There are no geologic limitations including faults, dikes or impermeable bedrock that may pose development limitations.

Recharge to the aquifer system occurs primarily through infiltration of precipitation in permeable areas. The site is mostly permeable, and the impervious surface added by this project will restrict infiltration a negligible amount. Further, the project and site will be graded such that stormwater runoff will be directed towards permeable areas for infiltration. Stormwater runoff will be safely conveying in accordance with all local and state requirements. Details of the stormwater management features shall be provided on the plans with all applicable detail sheets on the proposed plan set.

Well-head protection areas are areas that delineate the horizontal extent of groundwater captured by a well pumping at a specific rate over two-, five-, and twelve-year periods of time. According to the NJDEP Geo-Web Map Viewer, the site is not situated within a Community or Non-community well head protection area, nor is a wellhead on the site. The nearest mapped Community wellhead protection area

is 0.3 miles to the north of the site. The proposed project will not need water service and will not require an on-site well that will impact the well head protection area in the vicinity of the site.

The site already has a connection to public sewer with existing facilities onsite. These facilities will be improved and enhanced for compliance with Jake's Law for family use and accessibility.

The site already has a potable water connection through a public service with existing facilities onsite. The water purveyor for Maplewood Township is New Jersey American Water. The existing connection, will not impose any drawdown of the water-table aquifer in the local area, thereby avoiding subsurface hydrologic flow impacts to the ground water table and adjacent wetlands and waterway in the general vicinity of the site.

ESSEX COUNTY SOIL SURVEY

According to the interactive map data provided by the USDA Natural Resources Conservation Service (NCRS), one (1) soil mapping unit is mapped on the subject site (refer to Figure 3: Soils Map). The following information is referenced directly from the Soil Survey of Essex County (USDA NRCS).

BooB - Boonton silt loam, red sandstone lowland, 3 to 8 percent slopes

The Boonton Series makes up only 95% of the map unit, in the area of the Watchung Mountain, a setting of till plain and ground moraine. The parent material is coarse-loamy basal till derived from basalt. This soil is well drained. This soil is not hydric.

Table 1: Physical properties, suitabilities, and/or limitations of on-site soils in regards to proposed project

Soil Name	**Soil Properties Affecting Playgrounds**	**Paths and Trails**
BooB	Somewhat limited Slow water movement Slope	Not Limited

* Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

SEWERAGE

The site is serviced by an existing sanitary sewer service connection. The Township Sanitary Sewer system is managed and maintained by a division of Public Works. The Sanitary Sewer system conveys its waste to the Joint Meeting of Essex and Union Counties for treatment.

FRESHWATER WETLANDS, HYDROLOGY & SURFACE WATER QUALITY

NJDEP GIS freshwater wetland digital mappings do depict freshwater wetlands on the site, but not on the exact location of the project. Field investigations shall be conducted to confirm the presence of a wetland feature on this site. The wetland limits shall be delineated on this site in accordance with the Three Parameter Approach set forth in a manual entitled Federal Manual for Identifying and Delineating Jurisdictional Wetlands (Federal Manual), published under the Federal Interagency Committee for Wetland Delineation (FICWD), 1989. (Figure 4 – Geoweb Wetlands)

NJDEP GIS surface water quality standards digital mapping does not depict any streams or other surface water features located on the site. The nearest mapped waterway is the East Branch of the Rahway River located approximately 0.92 miles west northwest of the site. A field inspection of the site confirmed the absence of natural surface water features on the site.

The project site is not associated with any regulated waters based on NJDEP mapping, and is not mapped within a FEMA flood zone.

TOPOGRAPHY & SLOPE

The site is relatively flat, pitched to permit drainage. The slope across the site varies, however it is generally under 5%.

VEGETATION COMMUNITIES

Native vegetation comprises a majority of the community. Mainly consisting of taller deciduous trees and evergreens. The overall site is primarily characterized and developed. A majority of the site is developed as a recreational park.

It is currently proposed that the location of the project shall not displace or remove any trees or shrubs.

WILDLIFE

A field investigation was performed. It is not apparent that threatened or endangered species are prevalent at the site. The location is within the Piedmont Plains region. The NJDEP will evaluate if this project will impact wildlife, as the area is already developed.

AIR QUALITY

Existing sources of air contaminants surrounding the site would primarily be emissions from vehicles utilizing the existing surrounding roadways to access the commercial and residential development surrounding the subject site.

The proposed project will be an additional recreational facility in an already developed recreational space. It is not anticipated that this will result in additional vehicular traffic. There will be no emissions or other pollutants resulting from the recreational equipment. Pollutant emissions and impacts to air quality will be temporary and limited to effects resulting from the construction of the project.

CULTURAL, HISTORIC & ARCHEOLOGICAL RESOURCES

A review of the NJDEP NJ-Geoweb Map Viewer data layers entitled “NJDEP Historic Properties of New Jersey” and “NJDEP Historic Districts of New Jersey were reviewed. The Historic Properties and Historic Districts data layers display historic properties that are either included in the New Jersey or National Registers of Historic Places, have been determined eligible for inclusion through federal or state processes as administered by the New Jersey HPO, or have been identified through cultural resource survey or other documentation on file at the HPO. The historic fill layer has also been reviewed, which identifies areas of historic fill that exceed approximately five (5) acres in size.

The referenced layers conclude that the subject site is not identified as a historic property and is not identified as a State or National Registered property. The NJDEP GIS does not identify this site as a State or National Registered resource. Due to the existing development on and surrounding the site, and minimal undeveloped clearing/earthwork proposed, it is the determination of DuBois that there will be no impacts to cultural or historic resources.

NOISE CHARACTERISTICS

Consistent contributors to existing local and regional noise levels in the area are primarily associated with the traffic from adjacent roadways and surrounding development. Noise levels are not likely to change as a result of this project.

During the construction phase of this project, noise levels will be temporarily increased from heavy equipment, trucks, and various construction practices. Construction activities will occur during permitted working hours to minimize impacts. The anticipated increases in local noise levels with the post-construction conditions of the residential development will be as a result of movement of cars and standard daily residential activities, and maintenance activities of the properties (i.e. lawn mowing, snow plowing, etc). The noise levels are anticipated to be consistent with the surrounding residential development to the west of the site. The project is in compliance with the requirements presented in the Noise Control regulations at N.J.A.C.7:29. The project is not associated with a proposed industrial, commercial, or community service development, and therefore those restrictions and requirements of the referenced regulations are not applicable to the project. Noise levels will be associated with movement of cars into and out of the residential development, and will not be associated with a "continuous airborne sound".

AESTETICS

Visual resources that define a landscape's aesthetic quality are the lines, forms, spaces, colors, and textures experienced from where people live, work, recreate and travel. The quality of visual resources is important to those who reside in and travel through a landscape (USDA NRCS 2004). The property is the site of an existing park and the Township would like to enhance the park to serve a broader community. The site is surrounded by a mix of commercial and residential development with a gas station on the adjacent property to the north and is located along a major roadway.

The proposed project is a recreational park, which is compatible with the sites existing use as a recreational park. Further, this is compatible and complimentary to the surrounding residential uses to the north, east and west. It is anticipated at this time that existing vegetation on the site will not be disturbed and will remain intact.

HAZARDOUS OR MISCELLANEOUS NON.HAZARDOUS MATERIALS

There will be no storage and/or transport of solid waste or hazardous materials on or off of the site. Trash enclosures are located throughout the space. The waste will be transported off-site by Department of Public Works and will be compliant with state and local regulations and standards. No on-site individual subsurface sanitary sewer facilities or septic fields are proposed on-site, therefore no impacts are anticipated as a result of wastewater generation or discharge and implementation of specific environmental performance controls are not necessary for this project.

REQUIRED LICENSES, PERMITS & APPROVALS

Agency	**Status**
Hudson Essex Passaic Soil Conservation District	Application not yet filed
NJDEP Wetlands Delineation	Application not yet filed

ALTERNATIVES ANALYSIS

It is alternately proposed to not provide this recreational facility, not constructing this. This would result in the denial of a recreational space to the disabled and differently abled youth who can not safely use existing recreational spaces.

ADVERSE INVIORNMENTAL IMPACTS THAT CANNOT BE AVOIDED

A number of undesirable environmental impacts are unavoidable during and after construction.

- A permanent displacement of the surficial geologic deposits in the form of underlying soils will occur as a result of grading, foundations, and roadway construction and other earth disturbances, primarily in the rear of the site where existing development is absent;
- Traffic conditions within the area of the project will temporarily increase during the construction phase of the project. It has been determined through the referenced traffic impact study that the increase in traffic post-development will be at acceptable Levels of Service and will not result in significant impact during peak hours;
- Locally, temporary increases in noise levels will be encountered as a result of site clearing, heavy machinery, construction, and increased traffic conditions during construction;
- During construction, clearing and grading may give rise to wind-blown dust, soil erosion, sedimentation, and a reduction of air and water quality within the site. These adverse environmental impacts shall be controlled to the maximum extent possible through proper implementation of BMP environmental performance controls.

SUMMARY & DISCUSSION

The proposed project will have minimal impact on the environment. Temporary impacts as a result of construction will conclude once the construction is complete. The project will provide recreational space to the handicapped community and the site has been determined to be well-suited to the project.

Authors

Paul Kittner, PE – Township Engineer – Served Maplewood Township for 8 years, previously served as a planning and zoning board engineering consultant and prepared several environmental impact statements for various developments and projects.

David Barry, PE – Assistant Township Engineer – Served Maplewood Township for 1 year, previously served as a planning and zoning board engineering consultant and prepared several environmental impact statements for various developments and projects.

APPENDICES

Figure 1

Tax Map

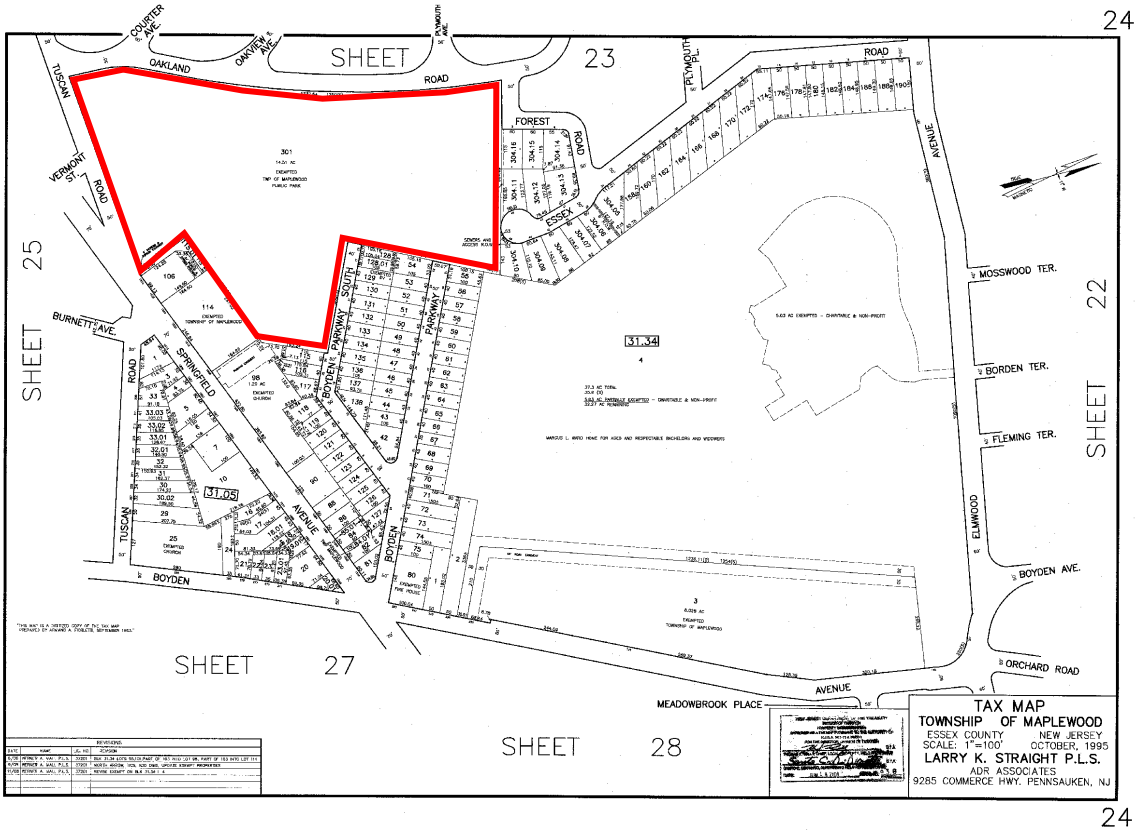

Figure 2

USGS Quad Map

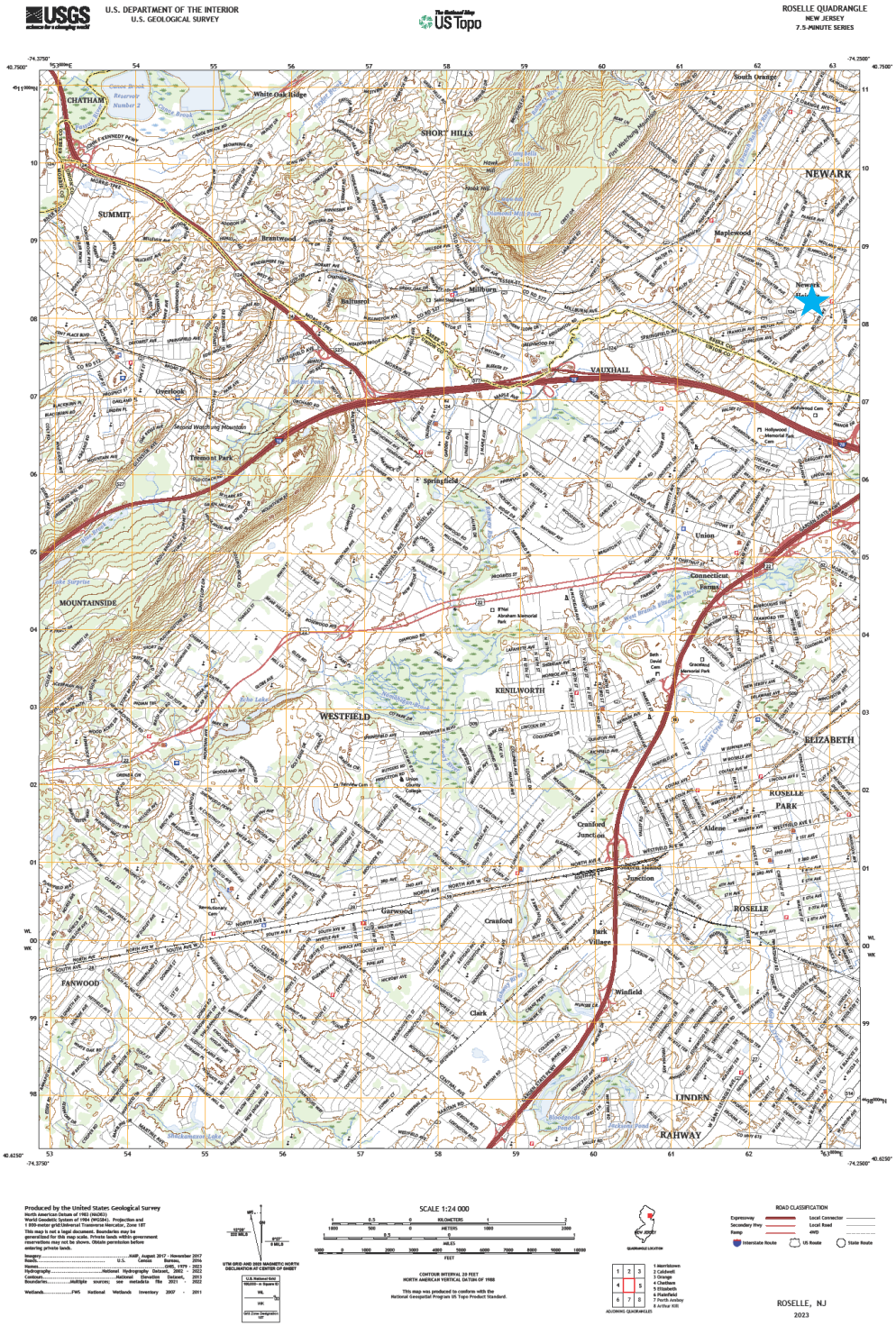

Figure 3

Soils Map

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Essex County, New Jersey
Survey Area Data: Version 19, Aug 29, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 10, 2022—Oct 16, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BooB	Boonton silt loam, red sandstone lowland, 3 to 8 percent slopes	14.5	21.4%
BooBc	Boonton silt loam, red sandstone lowland, 0 to 8 percent slopes, extremely stony	5.2	7.7%
BooC	Boonton silt loam, red sandstone lowland, 8 to 15 percent slopes	3.5	5.2%
BowrB	Boonton - Urban land, Boonton substratum complex, red sandstone lowland, 0 to 8 percent slopes	26.4	39.1%
URBOOB	Urban land, Boonton substratum, 0 to 8 percent slopes, red sandstone lowland	9.5	14.0%
USBOOB	Urban land, Boonton substratum - Boonton complex, red sandstone lowland, 0 to 8 percent slopes	8.6	12.7%
Totals for Area of Interest		67.7	100.0%

Figure 4

Geoweb Wetlands