2021

Master Plan Element Section VI

Utilities Plan Element

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Township of West Windsor | Mercer County, New Jersey

BURGIS ASSOCIATES, INC.


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Utilities Plan Element of the Master Plan

Township of West Windsor
Mercer County, New Jersey

Prepared for the Township of West Windsor
Planning Board

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The original document was appropriately signed and sealed on _____ in accordance with Chapter 41 of Title 13 of the State Board of Professional Planners

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Contents

Section 1: Introduction

The following section provides an introduction to the 2021 Township of West Windsor Utilities Plan Element of the Master Plan.


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1.1: Introduction to the Plan

The effective management of wastewater, water supply, and stormwater utilities is essential for healthy community development. In order to address ever-evolving development patterns, changing socioeconomic trends, on-going development pressures, and various judicial, legislative, and administrative actions, the planning of utility systems must be revisited on a periodic basis.

Thus, the following 2021 Utilities Plan Element of the Master Plan has been prepared to ensure the proper management of these systems. Historically, extensions of utility systems throughout the Township have been constructed by private interests to serve various developments. The construction of these systems has been in conformance with the Township's technical standards and, to the greatest extent practicable, has also largely been in conformance with the Township's Master Plan.

Today, the ownership, operation, and maintenance of these systems are associated with a variety of different entities. Significant portions of the Township's wastewater and stormwater utility systems are the responsibility of West Windsor. However, some portions of the Township's wastewater system remain with various private owners, while other portions of the stormwater system remain with existing homeowner's associations. Meanwhile, the ownership, operations, and maintenance of water for consumption and for fire service are the responsibility of New Jersey American Water, a private corporation under a franchise agreement governed by the State Board of Public Utilities.

A consistent theme of this 2021 Utilities Plan Element is the consideration of the visual impacts of above-ground utilities. The placement of all utilities underground has been promoted in the Township's regulations and substantially accomplished for new development. The relocation of existing above-ground utilities, particularly in redevelopment areas such as Princeton Junction, is also strongly encouraged.

The following Utilities Plan Element of the Master Plan is divided into the following sections:

- Section 1: Introduction and Overview

  The remainder of this introductory section discusses what a master plan is, as well as the statutory requirements for master plans and utility elements in particular.

- Section 2: Goals and Policies

  Next, Section 2 outlines the goals and policies of the Township of West Windsor as they relate to its utilities.

- Section 3: Wastewater Management

  Section 3 discusses the Township's management of wastewater as it relates to the Mercer County Wastewater Management Plan, wastewater conveyance, and wastewater treatment.

- Section 4: Water Supply

  Section 4 discusses the management of the Township's water supply.

- Section 5: Stormwater

  Section 5 provides a brief overview of stormwater collection and conveyance.

- Section 6: Telecommunications

  The penultimate section of this Utilities Plan Element provides a brief overview of telecommunications.

- Section 7: Recommendations

  Finally, Section 7 offers several recommendations regarding general utility systems, wastewater, water supply, and stormwater.

1.2: Overview of a Master Plan

The Municipal Land Use Law (MLUL), which serves as the guiding legal document for planning and zoning throughout the State of New Jersey, identifies a master plan as:

> *"...a composite of one or more written or graphic proposals for the development of the municipality as set forth in and adopted pursuant to section 19 of P.L. 1975, c.291 (C.40:55D-28)."*

In other words, a master plan is a comprehensive, long-term strategic document which is intended to guide the growth and development of a community. It is essentially a roadmap which identifies where a municipality presently is and where it wishes to be in the future. A master plan develops the general parameters around which development is to occur and, specifically, where different types of development should occur. By doing so, a master plan ultimately links a municipality's land use vision to its existing and proposed zoning regulations.

Therefore, master plans ultimately provide municipalities with the legal basis to control development through the adoption of development ordinances which are designed to implement its goals, policies, and recommendations.

As established by NJSA 40:55D-28 of the MLUL, the planning board is the designated entity responsible for the preparation and adoption of a master plan. A master plan must be adopted at a public hearing after proper public notice, thus ensuring that the community has an opportunity to contribute, ask questions, and offer recommendations.

The MLUL further identifies the mandatory contents of a master plan, which include:

- A statement of objectives, principles, assumptions, policies, and standards upon which the constituent proposals for the physical, economic, and social development of the municipality are based;
- A land use plan;
- A recycling plan, and;
- A housing plan.

In addition, the MLUL identifies a number of other optional plan elements which may be incorporated into a comprehensive master plan. These optional elements include the following. As shown, a circulation element is optional.

Economic development	Circulation	Open space
Recreation	Community facilities	Historic preservation
Downtown development	Farmland preservation	Utilities

1.3: Utilities Plan Element Requirements

Furthermore, the MLUL at NJSA 40:55D-28.b(5) identifies the requirements of a utilities plan element. Specifically, the MLUL notes that a utilities element should analyze:

> *"...the need for and showing the future general location of water supply and distribution facilities, drainage and flood control facilities, sewerage and waste treatment, solid waste disposal, and provision for other related utilities, and including any stormwater management plan required pursuant to NJSA 40:55D-93..." (40:55D-28.B(5))*

The MLUL further specifies that if a municipality prepares a utility service plan element as a condition for adopting a development transfer ordinance, the plan must address the provision of utilities in the receiving zone. Due to the breadth and depth of content required to be covered under the subject of stormwater management, the subject matter is addressed separately and in greater detail within the Stormwater Management Plan Element.

Section 2:
Goals and Policies

The following section outlines the goals and policies of the Township of West Windsor as they relate to utilities.


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The following goal and associated polices are hereby established for the Township of West Windsor as they relate to utilities.

Goal:

Ensure the provision of adequate and appropriate wastewater treatment, water supply, and stormwater utilities systems to protect the public health, welfare, and the natural environment in a cost effective manner.

Policy 1: Ensure that moderate and higher density developments are adequately served by public water, sewer, storm drainage, and other utility systems in an economical and coordinated manner, as well as in a manner consist with the Mercer County Wastewater Management Plan.

Policy 2: Ensure that development proposed in septic service areas adhere to strict environmental performance standards and follow sound septic management techniques to assure high levels of water quality to ground and streams.

Policy 3: Continue to encourage clustering where appropriate as a design technique to help preserve open space, protect environmentally sensitive areas, and reduce infrastructure and maintenance costs. Encourage efficiencies in the design of new development that will minimize public service costs.

Policy 4: Utilize best management practices for: efficient conveyance of wastewater; efficient distribution of potable water; efficient and responsible collection and conveyance of stormwater runoff; and environmental protection.

Policy 5: Maintain master utility plans and ordinances, which will provide cost effective service for current and future Township needs.

Policy 6: Coordinate the construction and installation of improvements to ensure that utility services are in good condition and available when needed. Road projects should not proceed until underlying storm sewers, sanitary sewers, and other public utilities are investigated and repaired, as may be necessary.

Policy 7: Municipal policy has been, and continues to be, not to extend utilities. Developers or individual property owners must extend utilities at their own cost.

Policy 8: Promote utility construction and relocation to be underground including existing above-ground telephone and electric lines in selected areas, such as Princeton Junction.

Policy 9: Coordinate utility services with other private and public agencies where beneficial.

Policy 10: Maintain the adequacy of existing and proposed culverts and bridges, dams, and other structures.

Policy 11: Maintain the integrity of stream channels for their natural functions, including drainage and ecological purposes.

Policy 12: Continue to design sewer flow and sewer system expansion based on a gravity flow design wherever possible and practical.

Policy 13: Where new telecommunications facilities are required, they should be co-located on existing facilities such as utility transmission towers. If a new tower or monopole is necessary because of radio frequency requirements, it should be capable of accommodating additional carriers so as to limit the number of towers within West Windsor.

Section 3: Wastewater Management

The following section discusses the Township's management of wastewater as it relates to the Mercer County Wastewater Management Plan, wastewater conveyance, and wastewater treatment.


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3.1: Wastewater Management Plan

Municipal wastewater management planning is controlled by the New Jersey Department of Environmental Protection's (NJDEP) review and approval of a regional Water Quality Management Plan. Consistent with the 2012 Water Quality Planning Act, Mercer County is the regional agency responsible to the NJDEP for the Township's Wastewater Management Plan, which is also known as a "208 Plan" from its legislative authorization. Water quality planning consists of establishing protective measures for both surface waters and groundwaters. The conveyance, treatment, and re-entry of treated wastewater to the environment are addressed by the Water Quality Planning process. The Mercer County Wastewater Management Plan (WMP), an areawide plan for all of Mercer County, was first adopted in 2013, and replaced all local plans.

The Township's chapter in the WMP identifies two (2) categories of wastewater treatment: those areas of the Township which are approved to be served by public sewers, and those areas which are to be served by on-site disposal systems (otherwise known as septic systems). The designation of these areas is intrinsically linked with environmental conditions as well as the Township's Land Use Plan and land use development regulations. These areas are identified on the accompanying Sanitary Sewer Map.

The process of reviewing and approving the WMP is a dynamic one. Amendments to the Plan are periodically proposed and approved to address evolving environmental, land development, and zoning issues. There are presently developed properties on septic systems within the Township which are within a designated public sewer area. Specifically, there are more than one thousand (1,000) single-family dwellings with septic systems within the northerly and easterly portions of West Windsor built within the past thirty (30) years located within an approved public sewer service area. Groundwater quality within this area, as well as surface water quality downstream, have been monitored for more than twenty (20) years. These properties remain on septic because there are not, as of yet, sufficient collection and conveyance systems in place in these areas to facilitate their connection to public sewers. Septic system rehabs and replacements do occur on a routine basis and within the expected percentages, and thus do not indicate any threat to water quality.

Recent amendment to the WMP includes several features within Mercer County Park (serviced by the Hamilton Township Water Pollution Control Facility). These enhancements are in recognition of the park's growth in servicing the active and passive recreation and entertainment needs of residents in the region. Similarly, the Township has begun the WMP amendment process for the Conover Road Recreation Fields, located at the corner of South Post Road and Conover Road (identified by municipal tax records as Block 24.14 Lot 24.01), after acquiring the property from Mercer County. This amendment is to allow for water and sewer extensions to the property in accordance with the anticipated future needs.

The Hilton Realty property at the corner of Old Trenton Road and Dorchester Drive (identified by municipal tax records as Block 37 Lot 7) also requires a WMP amendment in order to allow for planned residential development in accordance with the Township's 2019 Housing Element and Fair Share Plan. The property was formerly within the Township's 208 Plan but was removed by the State following the adoption of Water Quality Planning Act due a portion of the land having environmental constraints. The proposed WMP amendment would exclude constrained lands on the property from the developable area.

3.3: Wastewater Conveyance

The Township of West Windsor owns and maintains more than one hundred (100) miles of underground wastewater collection and conveyance pipes as well as six (6) pumping stations, all of which collect and convey waste from homes and businesses within its municipal borders. Furthermore, there are privately owned and maintained sewer mains and pumping facilities within office parks, corporate campuses, educational campuses, and larger high-density residential developments.

The Township's conveyance system has predominantly been built by private development funds over the past thirty-five (35) years, under the jurisdiction of the Township and subject to compliance with NJDEP regulations. A master plan based on multiple drainage basins, which favored gravity flow and minimized pump stations, has been followed to the greatest extent feasible. Those pump stations which have been constructed were located and designed to be abandoned when in-fill development brought master planned gravity trunklines within close proximity to them. Easements for the master planned system have been secured as properties have been proposed for development.

The Utilities Plan Element of the Master Plan continues the intent of the long-term economy of a gravity conveyance system. The underlying studies for the wastewater master plan of West Windsor Township are represented in the following documents:

- For the Stony Brook Drainage Basin, "May 1975 Status Report of Sewerage Facilities" by Ditmars and Carmichael 1975, amended January 1976, and associated addenda.
- For the Assunpink Drainage Basin, Assunpink Drainage Basin Study - Sewer Master Plan Revisions, Phase II Report," dated February 1, 1982, by Fellows, Read and Associates.
- Sanitary Sewer Flow Map of West Windsor Township, January 2000.

Land use development patterns throughout West Windsor over the past thirty-five (35) years, as well as evolving land use preferences, land development regulations, and environmental protection regulations, have modified the requirements for the Master Plan Wastewater Collection System. Portions of the conveyance system are reaching capacity. Moreover, portions of the master planned gravity system may not be built for an extended period of time. Some of the "temporary" pump stations that have been in operation for thirty years may be required for additional extended periods. The modification and modernization of some of these facilities have already commenced with developer funding.

Expected near-term improvements to the system as of the time of preparation of this Utilities Plan Element include:

- Permitting, bidding and construction to decommission the Duck Pond Run Pump Station - the largest of the municipal pump stations - and converting flow to gravity conveyance. Besides the long-term reduction in municipal costs of maintaining a "temporary" pump station, this improvement will increase flow into the D&R Canal Interceptor (thereby addressing low flow conditions there) and free up flow capacity in the Washington Road and Millstone Interceptors.

- A recent study of the Southfield Road Pump Station drainage area has determined that improvements to the Southfield Road Pump Station and downstream infrastructure, including gravity mains which are tributary to the Assunpink Interceptor and the South Post Road Pump Station, are required in order to service projects planned in accordance with 2019 Housing Element and Fair Share Plan, as well as non-residential properties planned for development within the drainage area. Consistent with past practice, the Township will establish a pro rata fair share reimbursement procedure for costs to implement study-recommended improvements, as is consistent with Policy 7 of this Utilities Plan Element.

- The purchaser of the Atlantic Realty Site (formerly known as the Howard Hughes tract) located near the intersection of US Route 1 and Quakerbridge Road (County Route 533) has begun developing preliminary conceptual and engineering plans for a warehouse and distribution center consistent with the property's recent rezoning. This development will result in the decommissioning of the on-site wastewater treatment plant and the extension of the South Branch of the Duck Pond Run Sewer Interceptor. Environmental constraints may result in deviations from the master planned alignment for the Interceptor, but the requirement to achieve sewering of other area properties remains required. The Township would establish a pro rata fair share reimbursement procedure for costs to achieve sewering, as is consistent with Policy 7 of this Utilities Plan Element.

3.4: Wastewater Treatment

The vast majority of wastewater generated within the Township is treated at a facility located on River Road in Princeton. This facility is operated by the Stony Brook Regional Sewerage Authority (SBRSA). West Windsor is one of seven (7) municipal members of the SBRSA. As per its charter, SBRSA must take the flows that member municipalities send.

The Township's wastewater is conveyed from its conveyance piping to a SBRSA trunkline via Meter Station #7 (located off of Alexander Road) and the Millstone Pump Station (located off Harrison Street). From those locations, it is then distributed to the SBRSA River Road treatment plant (NJPDES Permit #NJ00331119). The Township's wastewater flow, which now exceeds 2,300,000 gallons per day, is expected to increase as commercial and residential developments continue to be approved in the public sewer service area of the Township. Properties in the Township which have received preliminary and final site plan approval but have not yet been constructed hold reservations of treatment capacity that are in excess of two hundred and fifty thousand (250,000) gallons per day[1]. The full buildout of the Township's remaining undeveloped land and connection of existing properties not on public sewers would generate an additional wastewater flow of 1,970,000 gallons per day.

In consideration of the above, discussion with the seven-member municipalities of the SBRSA is warranted in order to evaluate the capacity and timing for facility upgrades that would be required in order to accommodate the build-out sewage flow from West Windsor. The current capacity values of the SBRSA River Road treatment plan are highlighted in the following table:

Table 1: SBRSA River Road Treatment Plan Capacities

Plant Permitted Capacity (GPD)	13,064,000
Actual Flow* (GPD)	10,090,000
Reserved Capacity* (GPD)	915,000
Available Capacity* (GDP)	2,055,000

** for all municipalities served including West Windsor Township.*
*** on a "first come, first serve" basis among the member municipalities.*

[1] This does not include the 350 acres of recently acquired open space/farmland which would have generated a demand of 30,000 gallons of wastewater.

Furthermore, the Township's chapter in the Mercer County WMP identifies several properties within West Windsor which are served or approved to be served by other wastewater treatment agencies. This include the following:

- Hamilton Township treats the wastewater generated by the Mercer County educational facilities in the southwesterly corner of the Township. One residential property on Line Road has successfully negotiated a connection into the Robbinsville Township system, which drains to the Hamilton treatment plant. A number of additional single-family residential properties in the Old Trenton Road area, located to the west of Windsor Road, have been approved for sewer service, with eventual treatment via Hamilton. However, no formal designs or agreements with Robbinsville and Hamilton Township have been undertaken.
- The Ewing - Lawrence Sewerage Authority (ELSA) currently receives and treats the wastewater from two commercial properties along Quakerbridge Road: a PNC Bank located at 4200 Quakerbridge Road (identified by municipal tax records as Block 7.16 Lot 1.01) and a medical office building located at 4065 Quakerbridge Road (identified by municipal tax records as Block 23 Lot 91). ELSA has expressed reluctance in accepting additional Township properties into their treatment facility's drainage area.
- The Atlantic Realty Site is approved to treats the wastewater from its own facilities at an onsite plant. However, permits have been pulled by the current owner to demolish all the buildings on the property. The plant has been inactive for a number of years and is limited in expansion potential. As previously noted, the proposed future development of the site will require connection to the public sewer system through the Duck Pond Run (south branch) Interceptor line.


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Section 4: Water Supply

The following section discusses the management of the Township's water supply.


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4.1: Introduction

Potable water for consumption and fire-fighting is provided in most of the developed portions of the Township by an underground piping system which is owned, operated, and maintained by New Jersey American Water (formerly the Elizabethtown Water Company). Furthermore, there are also a limited number of residential neighborhoods within the Township which have individual on-site wells.

4.2: New Jersey American Water

The New Jersey American Water system is interconnected with adjoining municipalities, which are also served by the company. The long-term availability of water is presently not an issue, as their piping network is supplied by both deep wells and surface water sources. These wells and water sources are predominantly located outside of West Windsor, except for several wells located in the northwesterly corner of the Township near Harrison Street which are utilized intermittently. The water supply system is shown on the following Water Distribution Map.

4.3: On-Site Wells

Properties with on-site wells are located in the older developed portions of the Township which are also served by septic systems (e.g., Cubberly Road, Joanne Street, South Post Road, South Lane, Windsor Road). In March 2001, the New Jersey Private Well Testing Act (PWTA) was signed into law, and its regulations became effective in September 2002. The PWTA is a consumer information law that requires sellers (or buyers) of property with wells in New Jersey to test their ground water for a variety of water quality parameters, and to review the test results prior to closing of title. Landlords are also required to test their well water once every five (5) years and to provide each tenant with a copy of the test results.

The extension of public water systems to these areas would serve to reduce potential hazard risks and increase public safety by providing hydrants for fire-fighting. However, developers or individual property owners would be responsible to extend the utility at their own cost. The responsibility for providing water is solely with New Jersey American Water, which maintains a master plan for their system within West Windsor Township. No separate master plan is maintained by the Township.


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Section 5: Stormwater

The following section provides a brief overview of stormwater collection and conveyance. Due to the breadth and depth of content required to be covered under the subject of stormwater management by N.J.A.C. 7-14A-25 *Municipal Stormwater Regulations*, the subject matter is addressed in greater detail within the Stormwater Management Plan Element, first created and adopted in 2005.


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5.1: Introduction

The Township of West Windsor is located on a drainage divide in central New Jersey. Precipitation falling in the westerly and southerly portions of the Township runs off to watercourses tributary to the Delaware River, primarily Assunpink Creek. The northerly and easterly portions of the Township drain to watercourses which flow to the Delaware and Raritan Canal and the Millstone River. These watercourses include Big Bear Brook, Little Bear Brook, and Duck Pond Run.

The relatively flat topography of the Township would provide substantial opportunities for flooding if not for the construction of onsite stormwater management facilities as development occurs. Stormwater management facilities provide flood protection, promote groundwater recharge, prevent soil erosion, and enhance the quality of groundwater and surface water. Recent regulations enacted by the Township require the use of green infrastructure best management practices (BMPs) to satisfy groundwater recharge and water quality standards. A green infrastructure BMP is one that manages stormwater close to its source by treating runoff through filtration by vegetation or soil, infiltration into subsoil, or storing runoff for reuse.

5.2: Flood Control

There are relatively few known impacts to buildings in the Township during storm events from flooded watercourses. The majority of these properties are located within the floodplain of the Little Bear Brook in the area of Alexander and Washington Roads. They were developed at a time before current flood hazard regulations. Per the Mercer County Office of Emergency Management and the National Flood Insurance Program (NFIP), there are a total of one hundred and thirty-eight (138) properties within the Township with NFIP policies in effect in 2021.

In 2015, the Township retained the firm SWM Consulting to study the Little Bear Brook. The resulting "Little Bear Brook Flood Hazard Assessment, Phase I – Little Bear Brook and Millstone River" study ultimately determined that flooding is not caused by any deficiency with Little Bear Brook, but rather is due to the excessive flows and flood water levels associated with the Millstone River. The study also concluded there are no relatively cost-effective means of addressing or preventing the floods from the Millstone River from occurring.

Several roads in other low-lying areas within the Township do flood with some regularity, which in turn compromises emergency services. Flooding also currently occurs on roads crossing Duck Pond Run (Penn Lyle Road) and along Clarksville Road near both the Atlantic Realty Site and near Grover's Mill Pond. Some of this flooding has been found to be attributed to beaver dams constructed along these waterways, or within the County bridge structures. These dams – combined with downed trees, branches, and other debris resulting from Hurricane Irene, Superstorm Sandy, and several winter nor-easters – raise the normal water surface elevation and reduce the carrying capacity, thus resulting in flooding. The following streams are believed to be currently affected by such blockages:

- Little Bear Brook – between Alexander Road and Washington Road;
- Little Bear Brook – between Washington Road and Millstone River; and
- Bridegroom Run – between South Lane and Old Trenton Road.

One obstacle to cleaning these streams is the NJDEP permit and approval process, which is both time-consuming and expensive. Cleaning streams also requires unrestricted access to the water as well as a means of transporting and disposing all of the removed debris, which may require temporary easements on privately owned land. Efforts may also be met with vocal objections from residents with concerns on environmental protection and preservation. It is recommended to include these types of projects in the municipal capital budget process, beginning with assessments and surveys of the waterways. The Township should also begin to educate residents on the benefits of stream cleaning, such as the abatement of flood damage and reduction in environment conducive to mosquito breeding.

The existing major flood control facilities in the Township include Grover's Mill Pond Dam on the Big Bear Brook and the Lake Mercer Dam on the Assunpink Creek. These facilities are owned and maintained by the Township and Mercer County, respectively. Clarksville Road at Grover's Mill Dam overtops the road during larger storm events. The facility was significantly improved and "hardened" by the Township as part of a 2005 capital project. As a part of that project, the outlet structure was repaired, a sluice gate added, and both the upstream and downstream embankments were armored against erosion. Regular inspections of the dam are performed in compliance with State regulations, and identified deficiencies and repairs addressed through the Township's capital budget process.

A fortunate result of the Township developing later in the 20th century has been that, as development in the Township has occurred, on-site stormwater management facilities for each development have been required by municipal, county, and state agencies. These facilities typically include vegetated swales, collection and conveyance systems, and stormwater management facilities; typically, detention (dry) or retention (wet pond) basins. Recent regulations require new facilities to utilize green infrastructure techniques. The Township is responsible for the maintenance of many of these facilities in residential neighborhoods. Funding for maintenance was provided by annuities established by developers prior to transferring ownership of open space areas to the Township. That program proved successful, with funds far outlasting their projected life span. Recently, those funds have been expended and maintenance of facilities incorporated into the annual

budget process. Recent regulations will require private facility owners to begin regularly reporting their annual inspection and maintenance of each facility to the Township.

Neither the frequency nor the magnitude of flood events in West Windsor Township has changed to a noticeable degree during the past thirty-year (35) period of significant land development. Nevertheless, the use of best management practices including prohibition of construction within floodplains and the development and maintenance of stormwater management facilities must be continued.

5.3: Groundwater Recharge

Groundwater recharge is necessary to resupply the aquifers from which the Township's potable water wells draw. The characteristics and magnitude of groundwater recharge is dependent on several factors. Land development, including farming, can substantially impact groundwater recharge. Residential and commercial development thwarts recharge by covering and/or compacting soil and piping away runoff. These negative impacts can be substantially mitigated by appropriate zoning standards as well as the implementation of best management practices. Matching or exceeding a site's predevelopment groundwater recharge on major development projects has been a municipal and state requirement since 2005. Achieving this through the use of green infrastructure BMPs is a recent and important requirement.

5.4: Water Quality

Unrestricted runoff from developed sites transports contaminants into environmentally sensitive areas and watercourses. Once again, negative impacts can be mitigated by the use of green infrastructure best management practices. Bioretention basins, for example, can enhance water quality by slowing stormwater discharge, filtering silt and oils through vegetation, organic matter, and soil before they can enter surface water or groundwater. The Township's Stormwater Pollution Prevention Plan, Chapter 150 in the municipal Code, has enacted multiple ordinances to protect water quality by addressing the issues of litter control, pet waste control, wildlife feeding, yard waste collection, refuse containers and dumpsters, improper waste disposal, illicit connections to storm sewer system, and private storm drain retrofitting. Each of these measures reduce the amount of pollutants and litter coming into contact with stormwater and reaching our waterways.


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Section 6: Telecommunications

Section 6 provides a brief overview of telecommunications.

6.1: Telecommunications

If new telecommunications facilities are required, they should be co-located on existing towers such as utility towers. If a new tower or monopole is necessary because of radio frequency requirements, it should be capable of accommodating additional carriers so as to limit the number of towers within West Windsor. This is supported by the Municipal Land Use Law (MLUL), which encourages co-location on existing wireless telecommunication towers.

In more recent years, the Township has received requests from wireless service providers to permit the installation of their small network nodes infrastructure on existing utility poles within the Township's municipal rights-of-way. As the demand for wireless service increases each year and with each generation of users, these small network nodes are not to extend coverage to areas of poor reception, but rather enhance signal density in areas that receive high data usage demands. The review of these facilities includes their proximity to existing improvements and the visual impact of the proposed equipment locations to homes and businesses. Due to its location within a public right-of-way, equipment may also not block or interfere with sightlines of existing signage (i.e., road, commercial, directional and street signs) or traffic signals, or otherwise impair motorists' visibility.


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Section 7: Recommendations

The following section provides several recommendations regarding general utility systems, wastewater, water supply, and stormwater collection and conveyance.


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7.1: General Utility Systems

The following recommendations are offered regarding general utility systems:

1. Encourage cost effective extensions of utilities by developers and private property owners through fair share cost reimbursement agreements.
2. Require new development to pay its proportionate share of any off-tract improvements for utility services, to the extent permitted by law.
3. Require existing above ground utilities to be relocated underground for redevelopment projects, to the extent allowed by law.
4. Require co-location of new telecommunications facilities whenever feasible.

7.2: Wastewater

The following recommendations are offered regarding wastewater.

1. Based on the Township's 2020 Land Use Plan and development regulations, identify the required conveyance and treatment capacity in order to determine future facility requirements.
2. Identify facility requirements and potential schedule for any unsewered "fringe" neighborhoods, e.g. Conover Road, to facilitate efficient use of private funds.
3. Monitor inflow and infiltration in West Windsor Township and implement programs to reduce and to minimize illicit connections. Encourage SBRSA municipalities to repair their collection systems to allow efficient utilization of existing SBRSA wastewater treatment facility.
4. Continue to coordinate with the Division of Health on septic system maintenance and replacements. If and when necessary, the Township Sanitary Sewer Plan should be updated to deal with areas of potential septic failure.
5. Require that new development within the sewer service area be served by sewer, and all new development should be served by public water.

7.3: Water Supply

The following recommendations are offered regarding water supply.

1. Identify water supply demand at buildout and confirm capacity availability with New Jersey American Water.
2. Identify developed areas which do not have public water and encourage system extension.
3. Where possible, require public water service to new development rather than private wells.

7.4: Stormwater

The following recommendations are offered regarding stormwater collection and conveyance.

1. Identify infrastructure limitations and feasible solutions, if any, to flooding on existing roads including but not limited to: Penn Lyle Road and North Post Road at Duck Pond Run; Washington Road, Bear Brook Road, and Alexander Road at Little Bear Brook; Clarksville Road at the Atlantic Realty Site; Clarksville Road at Grover's Mill Pond.
2. Amend Township ordinances to conform to the adopted Master Plan and the Residential Site Improvement Standards (RSIS), and require best management practices.
3. Stream cleaning projects should be implemented in areas with elevated normal water surface levels and flooding, and combined with public education for area residents on the benefits of stream cleaning.
4. Require new development to assess capacity of existing infrastructure and ensure repairs, replacements and upgrades to existing infrastructure occur in concert with development.

Appendices

SANITARY SEWER MAP

OF

WEST WINDSOR TOWNSHIP

MERCER COUNTY, N.J.

FRANCIS A. GUZIK - Township Engineer
JOHN B. TAYLOR - Assistant Township Engineer

Date of Printing: September 1, 2020

SCALE : 1 inch = 1000 feet

Legend

- Municipal Boundary
- Parcels
- Water
- Existing Pump Station
- 8" Sewer Mains
- Force Main
- Future Main
- Abandoned in Place
- Septic Service Area
- Existing Dry Line Area
- Drainage Flow Area
- Newly Adopted Parcels that can be in Public Sewer System
- 5.24 — Asbuilt Capacity

* Capacity is limited by downstream conditions or backwater analysis

PRINCETON GREENS
1 ASTOR COURT
2 FOUNTAYNE COURT
3 BELLAIRE DRIVE
4 HUCKLEBERRY DRIVE
5 CARLYLE COURT
6 BAYBERRY DRIVE
7 HANOVER COURT
8 EXETER COURT
9 LEXINGTON COURT

CARNEGIE RESIDENTIAL VILLAGE
10 DORSET COURT
11 COLEBROOK COURT
12 KENSINGTON COURT
13 YORKBRIDGE DRIVE
14 CLARIDGE COURT
15 DELAMERE DRIVE
16 WORLIDGE COURT
17 FEDERAL COURT
18 COMMONWEALTH COURT
19 STONEBRIDGE LANE
20 HEATH COURT
21 TRUMBULL COURT
22 TOWPATH COURT
23 ALDGATE COURT
24 HERITAGE BOULEVARD
25 SALEM COURT
26 LOWELL COURT
27 TRINITY COURT
28 CARILLON BOULEVARD
29 THORNGATE COURT
30 CROMWELL COURT
31 HAMPSTEAD COURT
32 FIELDWOOD COURT
33 NOTTINGHAM CIRCLE

COLONNADE POINTE
34 RAINIER COURT
35 ACADIA COURT
36 SEQUOIA COURT
37 CASCADE COURT
38 BISCAYNE COURT
39 WRANGEL COURT
40 MAYFAIR DRIVE
41 LASSEN COURT
42 OLYMPIC COURT

ENCLAVE AT PRINCETON JUNCTION
90 GOLDFINCH BOULEVARD
91 PEACOCK WAY
92 HAWFINCH DRIVE
93 MAGPIE LANE
94 BRAMBLING ROAD

PROJECT FREEDOM
95 FREEDOM BOULEVARD

ESTATES AT PRINCETON JUNCTION
43 TOLLHOUSE DRIVE
44 RENFIELD DRIVE
45 BARKLEY DRIVE
46 CASSELBERRY WAY
47 INVERNESS DRIVE
48 HASTINGS LANE
49 ASCOT CRESCENT
50 CALEB LANE
51 CRAFTWOOD DRIVE
52 WEDGEWOOD COURT
53 TREE SWALLOW DRIVE
54 NESTLEWOOD WAY
55 STILLBROOK LANE
56 WESSEX PLACE
57 DALTON WAY
58 WINDRIDGE COURT
59 GAGE PLACE
60 GOSSAMER COURT
61 HARCROSS COURT
62 WINTERBERRY WAY
63 GREYLYNNE DRIVE
64 NORBRIDGE DRIVE
65 HEDLEY DRIVE
66 WINTHROP WAY
67 DEVONSHIRE DRIVE
68 ESTERBROOK DRIVE
69 LOCKWOOD DRIVE
70 GRIFFIN WAY
71 NIPPERT WAY
72 KENT COURT
73 LENMORE COURT
74 JULIET COURT
75 GOODROW COURT
76 GRAYVIEW COURT

WINDSOR PONDS DEVELOPMENT
77 STIRLING ROAD
78 HAMPTON COURT
79 LEEDS COURT
80 CARDIFF COURT
81 WINDSOR POND ROAD
82 STAFFORD DRIVE
83 TUDOR WAY
84 NORMANDY DRIVE
85 REGENT BOULEVARD
86 WARWICK ROAD
87 LANCASTER COURT
88 LUDLOW COURT
89 YORK ROAD

BEAR CREEK DEVELOPMENT
1 GRANDE SCHLLEVARD
2 WINDFLOWER LANE
3 WINDFLOWER LANE
4 CONEFLOWER LANE
5 PINFLOWER LANE
6 HONEYFLOWER LANE
7 RAINFLOWER LANE
8 GLOBEFLOWER LANE
9 MADENFLOWER LANE
10 MISTFLOWER LANE
11 BEAR CREEK BOULEVARD
12 TUNICFLOWER LANE
13 BLANKETFLOWER LANE
14 SUNFLOWER LANE

WATER DISTRICT MAP

OF

WEST WINDSOR TOWNSHIP

MERCER COUNTY, N.J.

FRANCIS A. GUZIK - Township Engineer
BRIAN E. ARONSON - Assistant Manager of Engineering

Date of Printing: January 11, 2018

SCALE : 1 inch = 1000 feet

Legend

- Municipal Boundary
- Parcels
- Water
- Hydrant

Water Main

- 4"
- 6"
- 8"
- 10"
- 12"
- 16"
- 20"

PRINCETON GREENS
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