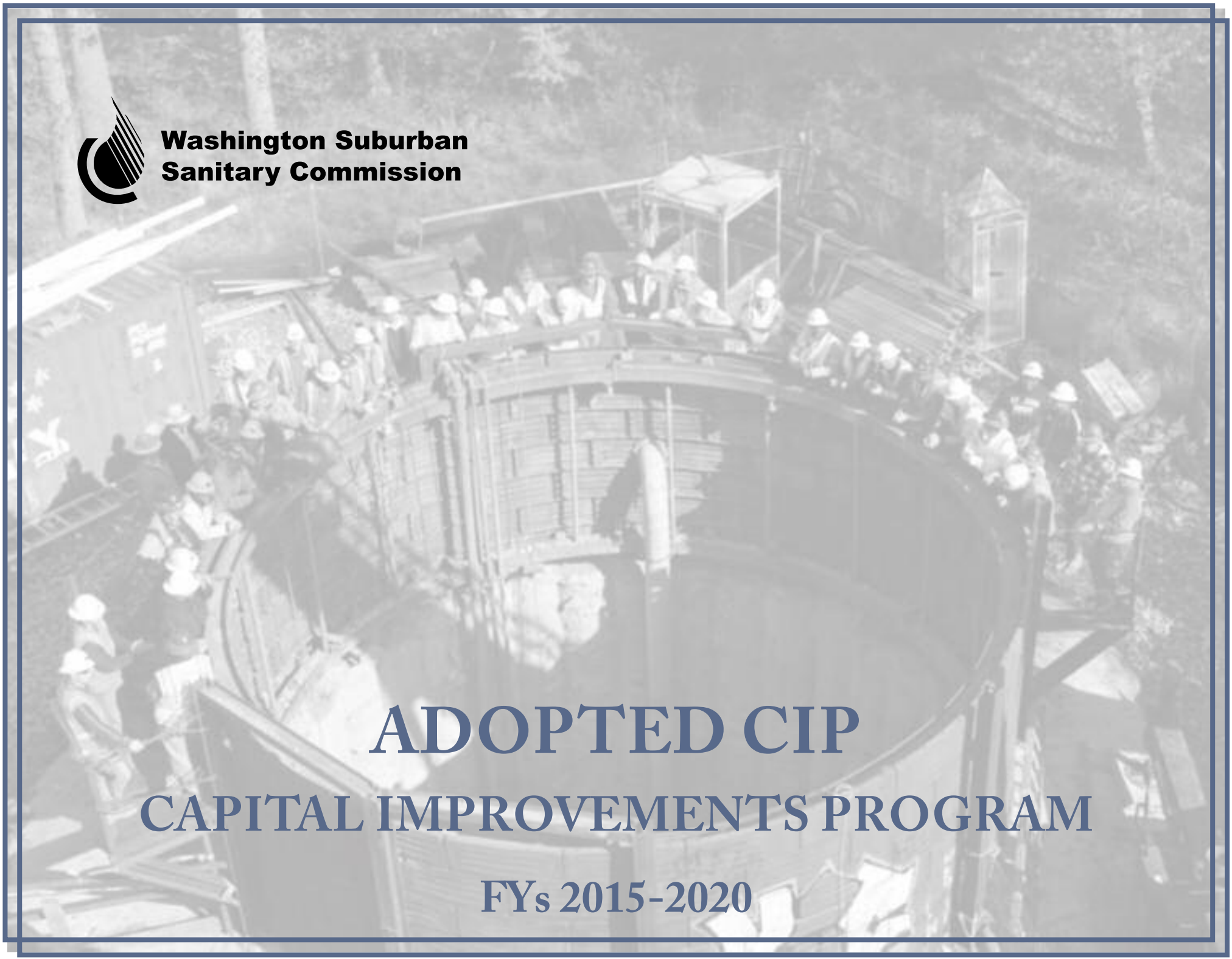

Washington Suburban
Sanitary Commission

ADOPTED CIP

CAPITAL IMPROVEMENTS PROGRAM

FYs 2015-2020

Washington Suburban Sanitary Commission

Adopted
Six-Year Capital Improvements Program
Fiscal Years 2015 - 2020

June 18, 2014

On our cover: *This 35-foot diameter, 164-foot deep access shaft served as the starting point for construction of our new 5.3 mile Bi-County Water Tunnel. First envisioned more than 20 years ago, the new 84-inch diameter finished water pipeline stretches from I-270 to Rock Creek Park and will connect two existing water mains. When placed in service in the fall of 2014 the new line will have the capacity to carry 100 million gallons of water a day, allowing WSSC to meet projected future capacity requirements for new customers in Montgomery and Prince George's counties.*

The new $145 million tunnel will be 100% funded from our System Development Charge (SDC) at no cost to our rate-payers. The SDC was first approved in 1993 through the leadership and support of our State Legislature, County Councils and Commissioners and their commitment to the principle that growth pays for growth.

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WASHINGTON SUBURBAN SANITARY COMMISSION
ADOPTED CAPITAL IMPROVEMENTS PROGRAM
FISCAL YEARS 2015-2020

LEGAL AUTHORITY AND RESPONSIBILITY

Statutory Basis

Under Section 23-301 of the Public Utilities Article, WSSD Laws, Annotated Code of Maryland, the Washington Suburban Sanitary Commission (WSSC) is responsible for annually preparing a Six-Year Capital Improvements Program (CIP) for major water and sanitary sewerage facilities and transmitting it to the County Council and the County Executive of Montgomery County and the County Executive of Prince George's County by October 1 each year. The Commission, where required by the two County Councils' final action on the program, must revise the same and then, prior to the commencement of the first fiscal year of the six-year program, adopt the Capital Improvements Program.

Section 23-301 defines major projects for inclusion in the CIP as water mains at least 16 inches in diameter, sewer mains at least 15 inches in diameter, water or sewage pumping stations, force mains, storage facilities, and other major facilities. Project information presented in this document complies with all legal requirements of the ten-year water and sewerage plans and is in direct support of the two counties' approved land use plans and policies for orderly growth and development. The Adopted FYs 2015-2020 CIP reflects the actions of the Montgomery County Council by Resolution No. 17-1117 dated May 22, 2014, and the Prince George's County Council by Resolution No. CR-34-2014 dated May 27, 2014. By WSSC Resolution No. 2014-2055 dated June 18, 2014, the Commission adopted the FYs 2015-2020 CIP as amended.

WSSC's Role

The Commission is a bi-county agency established in 1918 by an act of the Maryland General Assembly. The WSSC is responsible for planning, designing, constructing, operating, and maintaining water and sewerage systems, and acquiring facility sites and rights-of-way in order to provide potable water and sanitary sewer services to residents, businesses, and federal, state, and local municipalities within the Washington Suburban Sanitary District (WSSD). The WSSD encompasses nearly all of Montgomery and Prince George's Counties and provides water and sewer service to approximately 1.8 million customers in an area of nearly 1,000 square miles. A board of six commissioners directs the WSSC, three appointed by the County Executive of Prince George's County and confirmed by the Prince George's County Council, and three appointed by the Montgomery County Executive and confirmed by the Montgomery County Council. Commissioners serve four-year staggered terms.

WSSC's Mission

The WSSC's mission is to provide safe and reliable water to our customers and to return clean water to the environment in an ethically and financially responsible manner. The Commission, in working with the county governments, has been successful in carrying out this mission and meeting spending affordability limits.

WSSC's Responsibilities

The WSSC's primary responsibilities include:

- protecting the health and safety of the residents of both counties by providing an adequate supply of safe drinking water;
- meeting fire-fighting requirements;
- collecting and adequately treating wastewater before it is returned to the waters of the State of Maryland;
- managing and safeguarding the watershed and the water supply by implementing sound forestation and land use practices, and by discouraging development within the watershed buffer;
- monitoring the collection and treatment of wastewater;
- discharging an effluent cleansed of nutrients, pollutants, and hazardous materials;
- managing treated wastewater biosolids responsibly;
- maintaining the existing water and wastewater systems;
- planning for the orderly growth of the Sanitary District and WSSC services to meet the needs of the communities it serves;
- monitoring adherence to all plumbing and gasfitting standards and ensuring proper coordination with other public utilities; and
- managing operations to provide efficient service to its customers while keeping costs as low as possible.

The projects contained in this Capital Improvements Program represent the WSSC's plan to successfully meet its responsibilities. The WSSC strives to maintain a balance between the use of valuable resources and the public's demand for clean water. In carrying out these activities that will help ensure that we fulfill our core mission, we are energized by the opportunity to strengthen our local economies by assuring that we maintain fair, ethical and equitable contracting practices. This will allow us to secure high quality and competitively priced goods and services from our diverse and talented local businesses in Prince George's and Montgomery Counties.

PROGRAM OVERVIEW

Objective

The principal objective of the Capital Improvements Program (CIP) is the six-year programming of planning, design, land acquisition, and construction activities on a yearly basis for major water and sewerage facilities. These facilities may be necessary for system improvements and/or service to existing customers, to comply with federal and/or state environmental mandates, and to support new development in accordance with the counties' approved plans and policies for orderly growth and development.

Spending Affordability and Fiscal Implications

Projects in this CIP are primarily financed with funds from the Water Supply and Sewage Disposal Bond Funds. The Commission largely finances these projects with the proceeds from the sale of long-term debt. Water supply bonds are issued to finance the planning, design, and construction of major water treatment, storage, and transmission facilities. Sewage disposal bonds are issued to finance the planning, design, and construction of major sewage collection, treatment, and disposal facilities.

The water supply and sewage disposal bonds are repaid to bond holders over a 20 or 30-year period by annual principal and interest payments known as debt service. In this manner, the initial high cost of capital improvements is spread over time and paid for by future customers who will benefit from the facilities, as well as by current customers. The annual debt service on outstanding bonds is paid from the Commission's operating funds. The primary funding source for the repayment of debt is the revenue generated by water consumption and sewer use charges. Water and sewer charges are set on an annual basis to cover both operational and debt service costs (associated with the water supply and sewage disposal bonds) of the Commission. It is through this capital project financing process that the size of the CIP impacts the size of water and sewer bond issues, the associated debt service costs, and, ultimately, our customers' water and sewer bills.

Several capital spending and funding practices are noteworthy. The Commission:

- continues an aggressive program to rehabilitate or replace the older portions of the Commission's 5,500 miles of water mains and 5,400 miles of sewer mains;
- finances capital facilities needed to accommodate growth with the System Development Charge (SDC). This charge is reviewed annually by the County Councils. (Refer to Appendices A and B for details. A comparison of SDC revenues and estimated growth spending for the six-year program period is displayed on the table titled "Growth Funding Gap" in the Funding Growth section of this document.);

- uses PAYGO (Pay-As-You-Go): the practice of using current revenues, when budgeted, to the extent practical to help fund the capital program, thereby reducing the need for debt financing;
- maximizes and manages the collection of funding from alternative sources including state and federal grants, and payments from other jurisdictions for projects which specifically benefit them. The amount of these collections varies from year to year. The WSSC's reliance on rate-supported debt to build the capital program is reduced to the extent that these sources are available to help fund capital projects; and
- does not allow the use of rate-supported debt to fund CIP-sized water and sewer projects requested by Applicants in support of new development. These projects, identified as Development Services Process (DSP) projects, may only proceed if built at the Applicant's expense. (An explanation of the DSP process is included in the Development Services Process section of this document.) However, since these projects are eligible for SDC credits (to the extent that SDC funds are available), the Applicants should eventually recoup their costs. (Refer to Appendix B for definitions and details.)

In May 1993, the Montgomery and Prince George's County Councils created the Bi-County Working Group on WSSC Spending Controls (Working Group) to review WSSC finances and recommend spending control limits. The Working Group's January 1994 report recommended "the creation of a spending affordability process that requires the Counties to set annual ceilings on the WSSC's rates and debt (debt in this context means both bonded indebtedness and debt service), and then place corresponding limits on the size of the capital and operating budgets of the Commission." The objective of this process is to create a framework for controlling costs and achieving low or moderate water/sewer bill increases, as well as slowing the rate at which the WSSC is incurring debt, thus reducing the portion of WSSC water/sewer bills dedicated to paying off debt. This valuable process focuses debate on the need to balance affordability considerations against providing the resources necessary to serve existing customers, meet environmental mandates, and provide the facilities needed for growth.

The Commission has submitted a CIP and budget, which generally conforms to the Spending Affordability Guidelines (SAG) established by both county governments since 1994. Over the five-year period from FY'96 through FY'00, CIP spending was reduced by a total of $85.9 million. Over the period from FY'01 to FY'07, the Commission submitted budgets that did not require any further reductions. In two of the three years from FY'08 to FY'10, CIP spending was reduced or deferred by a total of $95.8 million. The FY'11 through FY'15 CIPs did not require any reductions.

The FY'15 expenditures are estimated at $472.0 million, which represents a decrease of approximately $157.3 million from the approved funding level for FY'14. The primary reasons for the decrease are due to the significant decrease in the Trunk Sewer Reconstruction project due to the reduction in planned priority two work and projected decreases in the Enhanced Nutrient Removal projects and the Blue Plains WWTP Digester projects as they move through construction.

Funding Sources

The projects included in this Capital Improvements Program are funded primarily by issuance of water and sewer rate-supported debt (WSSC Bonds). To a lesser degree, projects may also be funded by the following:

- State Grants – a share of the support provided on a local level in conjunction with the Federal Grants Program. The State of Maryland also provides additional funding under a separate grants program for enhanced nutrient removal at existing wastewater treatment plants as part of the Chesapeake Bay Program and Federal Clean Water Act;
- Federal Grants - Department of Energy grants related to WSSC's Energy Performance Program and Anaerobic Digestion/Combined Heat & Power projects to study and develop green energy sources;
- Local Government Contributions – payments to the WSSC for co-use of regional facilities, or funding provided by county governments for projects they are sponsoring;
- PAYGO – when budgeted, the practice of using current revenues to the extent practical to help fund the capital program, thereby reducing the need for debt financing;
- SDC – anticipated revenue from the System Development Charge (SDC); and
- Contribution/Other – projects funded by Applicants for growth projects where the County Councils have directed that no WSSC rate-supported debt be used to pay for the project.

A graph is provided on page 25 which displays the funding allocations for the major funding categories.

Funding Growth

The portion of the CIP needed to accommodate growth is approximately $264 million, which equals 16% of all expenditures in the six-year program. The major funding sources for this part of the program are System Development Charge (SDC) revenues and payments by Applicants. In the event that growth costs are greater than the income generated by growth funding sources, rate-supported water/sewer bonds may be used to close any gap.

The Maryland General Assembly, in 1993, first approved legislation authorizing the Montgomery and Prince George's County Councils to establish, and the WSSC to impose, a System Development Charge. This is a charge on new development to pay for that part of the Commission's Capital Improvements Program needed to accommodate growth in the WSSC's customer base. In accordance with the enabling legislation, the Councils approved, and the Commission began to phase in, this charge beginning in FY'94. The SDC charge was eventually approved at the maximum rate of $160 per fixture unit by Commission Resolution No. 95-1457, adopted May 24, 1995, and became effective July 1, 1995. In the 1998 legislative session, the General Assembly modified the charge by passage of House Bill 832 setting the fee at $200 per fixture unit with a provision for annual inflation adjustments. Subsequent resolutions have established a process for approving partial and full exemptions for elderly housing and biotechnology properties, as well as exemptions for properties in designated economic revitalization areas. For FY'15, the Montgomery County and Prince George's Councils increased the maximum allowable charge by the 1.4% increase in the CPI-U, but maintained the current rate of $203 per fixture unit by Resolution Numbers 17-1078 approved May 13, 2014, and, CR-38-2014 approved May 27, 2014, respectively. The Commission adopted the Councils' actions by Resolution Number 2014-2053 dated June 18, 2014. Policies and other information associated with the System Development Charge are included in this document in Appendices A through D.

It is estimated that there will be an overall growth funding gap of $78.2 million over the six-year program period. The gap between growth funding sources (SDC, developer contributions, and Applicant payments under System Extension Permits) and the estimated growth-related expenditures vary over the six-year period. If growth-related expenditures were to exceed the available SDC account balance, WSSC would issue new SDC supported debt to cover this temporary gap rather than increasing the SDC. The debt will be repaid through future SDC collections, as allowed by State Law. Further, it is anticipated that no significant additional growth projects will evolve in the later years of the six-year period. (A listing of SDC-eligible projects is included in Appendix D.)

An estimate of the gap or surplus for each fiscal year is presented in the table that follows. To estimate the gap/surplus for an individual fiscal year, it is assumed that 80% of the eligible expenditures will actually be incurred in a given year due to scheduling and other delays. The projected gap/surplus is the difference between the eligible expenditures adjusted for completion and the sum of the various funding sources.

GROWTH FUNDING GAP
(In Millions)

	FY'15	FY'16	FY'17	FY'18	FY'19	FY'20	6 YEAR TOTAL
CIP GROWTH EXPENDITURES	$89.4	$88.5	$49.7	$23.3	$8.0	$5.3	$264.2
Expenditures Adjusted for Completion	71.5	88.7	57.5	28.5	11.1	5.8	263.1
FUNDING SOURCES							
Privately Funded Projects	15.6	15.3	8.3	1.4	0.0	0.0	40.6
Estimated SDC Revenue	25.8	26.3	26.8	27.0	27.0	27.0	159.9
Less SDC Developer Credits	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(9.6)
Less SDC Exemptions [1]	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(6.0)
TOTAL FUNDING SOURCES	$38.8	$39.0	$32.5	$25.8	$24.4	$24.4	$184.9
FUNDING GAP							
ADJUSTED FOR COMPLETION	**$32.7**	**$49.7**	**$25.0**	**$2.7**	**($13.3)**	**($18.6)**	**$78.2**

[1] Each County may grant SDC exemptions, as identified in Appendix A, totaling up to $500,000 per fiscal year as provided for in Maryland State Law (Public Utilities Article, Section 25-403(b)). Unused exemption amounts are available for use in future fiscal years. Cumulative unused SDC exemptions totaled approximately $5.0 million for Montgomery County and $2.5 million for Prince George's County through June 30, 2014.

Expenditures

The FYs 2015-2020 Capital Improvements Program includes 87 projects for a grand total of $3.7 billion dollars. Expenditures for the six-year program period are estimated at $1.6 billion. FY'15 expenditures are estimated at $472.0 million, which is $157.3 million less than the funding level approved for FY'14. Of the $472.0 million, $129.9 million is for the Water Program and $342.1 million is for the Sewerage Program. More than a third of the projects in this CIP are Development Services Process (DSP) growth projects. The DSP projects' estimated six-year program cost is $40.7 million, with approximately $19.5 million programmed in FY'15. There are 3 new projects totaling $154.2 million in the six-year program period. These projects are shown on the New Projects Listing near the end of this section.

A table comparing the Adopted FYs 2014-2019 CIP to the Adopted FYs 2015-2020 CIP follows:

WSSC CIP - COMPARISON

(In Thousands)

	TOTAL PROGRAM	TOTAL SIX YEARS	BUDGET YEARS COMPARISON
Adopted FYs 2014-2019	$3,734,781	$2,039,507	$629,300
Adopted FYs 2015-2020	3,708,020	1,620,811	472,036
Change	($26,761)	($418,696)	($157,264)

Six-year program expenditures are estimated at approximately $1.6 billion, $613.4 million for the Water Program and $1.0 billion for the Sewerage Program. This is a $418.7 million decrease from the six-year total in the Adopted FYs 2014-2019 CIP. The primary reasons for the decrease are due to the significant decrease in the Trunk Sewer Reconstruction project due to the reduction in planned priority two work and projected decreases in the Enhanced Nutrient Removal projects and the Blue Plains WWTP Digester projects as they move through construction.

Expenditure Categories

Expenditures are divided into three main categories: projects needed for growth, projects needed to implement environmental regulations, and projects needed for system improvements. The categories are defined as follows:

Growth – any project, or part of a project, that increases the demand for treatment and delivery of potable water and/or increases system requirements to collect and treat more sewage in response to new, first time, service hookups to the WSSC's existing customer base.

Environmental Regulations – any project which is required to meet changes in federal regulations, such as the Clean Water Act, or in response to more stringent state operating permit requirements, but does not increase system capacity. Any part of this type of a project that provides for additional capacity is for growth.

System Improvements – any project which improves or replaces components of existing water and sewerage systems or provides for mainline relocations required in response to county or state transportation department road projects where the intended purpose is not to increase the capacity of any system components. This category also includes program-sized water main extensions for which the primary function is to provide water supply redundancy to pressure zones or smaller areas in the Sanitary District. Any part of this type of a project not dictated by maintenance or rehabilitation needs and that provides for additional capacity is for growth. (Refer to Figure 3, which displays funding allocations for all three categories.)

CIP Development Schedule

The CIP production cycle spans 13 months, beginning in May of each year. The organizational units responsible for project initiation submit project description forms (commonly referred to as PDFs) to the WSSC's Finance Office (Budget Group). The proposals, expenditures, and schedules displayed on each PDF represent the WSSC's best estimate of the cost and the time it will take to plan, design, and construct a project. These submittals are comprehensively reviewed with the General Manager/CEO and Senior Staff each June to assess the addition of new projects, changes in cost or scope, criticality, priority, environmental sensitivity, adherence to county growth and public outreach policies, and construction schedule changes.

Following this comprehensive review, worksessions are conducted by the WSSC Budget Group with the Prince George's and Montgomery County Governments, Maryland-National Capital Park and Planning Commission (M-NCP&PC), and local municipality representatives to solicit their input, and a draft document is presented to the WSSC's Commissioners for their consideration. Draft CIP Public Hearing documents are published and distributed and the Commissioners' public hearings are held in September. The hearings are advertised in a major newspaper circulated in Prince George's and Montgomery Counties, and special notices are sent to the Prince George's and Montgomery Counties' State Senators and Delegates, County Council members, County Government and M-NCP&PC staffs, civic associations, building and industry associations, civic federations and environmental groups. In addition, a notice is included with each water bill mailed to WSSC customers throughout the months of June, July, and August inviting them to participate in the public hearings. After considering all relevant comments, the Commissioners approve the Proposed CIP document for transmittal to both county governments before October 1, in accordance with state law.

After January of the following year, the Prince George's and Montgomery County Executives transmit their recommendations to their respective County Councils. Each County Council conducts separate public hearings and worksessions to consider additional modifications to the Proposed CIP. On or before May 15th, the County Councils meet jointly to agree on required changes, and on or before June 1st each year, enact formal resolutions identifying project modifications and approving the addition of new projects. The WSSC then adopts these changes and additions before the beginning of the new fiscal year on July 1. If the Councils do not jointly agree on changes by June 1, under law, the CIP is approved as proposed by the WSSC.

Program Description

Individual project information is displayed on the project description forms. The content of these forms, as prescribed under Section 23-301 of the Public Utilities Article, WSSD Laws, Annotated Code of Maryland, includes as applicable: estimated diameter, length, and location of pipelines; design capacity; maximum population and area to be served; project justification; project expenditure schedule showing the estimated cost and funding sources; and a map. Project description forms are organized within the following major sections: Montgomery County Water, Montgomery County Sewer, Bi-County Water, Bi-County Sewer, Prince George's County Water, Prince George's County Sewer, and Information Only Projects. A financial summary of expenditures by major section is included at the end of this narrative. Project number prefixes indicate a water (W-), sewerage (S-), or administrative (A-) project. Administrative projects are included in the Information Only section and refer to projects that may include a combination of water and sewerage sub-projects.

Each major section includes a financial summary for the projects in that section, a list of new projects, a PDF for each project, and a list of projects that are being closed out in the section. Several of the sections also contain "composite" PDFs that include multiple, active projects on one form. In the Prince George's County Water and Sewer Projects sections, conceptual design projects are combined with Development Services Process projects onto composite project forms (W-197.00 and S-187.00, respectively). The conceptual design projects are in the final stages of planning or early design, for which reliable design and construction costs and completion schedules were not available when the CIP was prepared. The WSSC's intent is to begin preliminary design for projects requiring final planning phase approval, consultant design contract negotiations, sub-surface investigations, and land and rights-of-way acquisition. Further, these projects may require in-house review and county government interaction as detailed design data is developed. Generally, as projects progress beyond the 30% design stage for facility projects and the 60% design stage for pipeline projects, a separate, stand-alone PDF may be prepared for display in the next CIP cycle. These projects will include updated costs and completion schedules.

Anticipated land and rights-of-way acquisition costs are consolidated onto composite PDFs (refer to W/S-200.00 series). This format provides flexibility in expending funds in a specific fiscal year and permits the WSSC to respond to the uncertainty of implementation schedules, unpredictable delays, unanticipated rights-of-way requirements, and the need to assure the WSSC an equitable negotiation position by avoiding project-specific cost displays prior to contacting property owners. When a land purchase has been concluded, this cost is transferred back to the individual project.

A Projects Pending Close-Out list is included at the end of each major section. Each list contains projects which were approved and included in the prior adopted CIP, but which do not appear in this program for reasons such as expected construction completion or project cancellation.

The CIP document also contains an Information Only Projects section. Projects in this section are not required to be in the program under Section 23-301 of the Public Utilities Article, WSSD Laws, Annotated Code of Maryland, but may be included for any number of reasons such as: fiscal planning purposes; the reader's improved understanding of the full scope of a specific set of projects; or responding to requests from county governments. Expenditures for Information Only projects are not included as part of the CIP six-year program costs, but are shown separately on the bottom line of the financial summary at the end of this section for informational purposes.

Funding requirements for the first year of the six-year program, as shown on each project description form (PDF) in Block B, Column 12, are included in the Commission's capital and operating budgets. In addition to adopting a six-year CIP, the Montgomery and Prince George's County Governments also annually review and approve the WSSC's capital and operating budget.

The following symbols are used on the individual project maps to represent different types of water and sewerage system components:

- Water Main/Gravity Sewer 
- Water/Wastewater Pumping Station 
- Sewage Force Main 
- Water/Sewage Storage Facility 
- Water Filtration Plant Project 
- Wastewater Treatment Plant Project 

CIP PLANNING PROCESS

Water Treatment/Distribution Systems

The provision of potable water involves three major areas: supply, treatment, and distribution. The Potomac and Patuxent Rivers are the two sources of water supply for the Washington Suburban Sanitary District (WSSD), with the majority of water coming from the Potomac. Raw water is taken directly from the natural flow of the Potomac River into the Potomac Water Filtration Plant in Montgomery County. Water from the Patuxent River is impounded in two reservoirs by the Brighton and T. Howard Duckett Dams, which are the sources of supply to the Patuxent Water Filtration Plant in northern Prince George's County. The Triadelphia and T. Howard Duckett reservoirs have a combined storage capacity of approximately 10.2 billion gallons of water. The two filtration plants have produced an average of 166.3 million gallons of potable water per day over the last five fiscal years.

The natural flow in the Potomac River can be augmented during low flow conditions by two other reservoirs. The Jennings Randolph Reservoir impounds 13.0 billion gallons of emergency raw water supply. The reservoir is located on the North Fork of the Potomac River in West Virginia, and is owned and operated by the U.S. Army Corps of Engineers. Little Seneca Lake in Montgomery County provides an additional 3.8 billion gallons of useable raw water storage, and is owned and operated by the WSSC. Both reservoirs are shared by users in the Washington Metropolitan area, including the U.S. Army Corps of Engineers, the Fairfax County Water Authority, and the WSSC. Withdrawal during low flow conditions is restricted by the terms of the Potomac Low Flow Allocation Agreement of 1981, and is administered by the Interstate Commission on the Potomac River Basin.

As raw water enters a plant, it goes through several stages of filtration and purification. Much of the finished water produced at the WSSC's plants has to be pumped into the distribution system. Pumping stations are strategically located throughout the Sanitary District to help move water to higher topographic elevations to maintain adequate system pressure. The WSSD is divided into 17 major pressure zones that represent hydraulically separated segments of the water system. The pipelines within each of the zones must be designed to serve not only customers within the confines of that zone, but also customers in adjacent interconnected zones. Water to zones at higher elevations must be pumped; water to lower elevations must be closely controlled with pressure regulating valves. A system under pressure enables the pipes to be laid uphill or downhill, with the flow direction independent of the slope of the ground. The design and operation of a water system is a complex task which requires detailed knowledge of the interrelationships between the source of supply, the location of pumping stations, pump characteristics, pressure reducing valves, storage facilities, pipe diameters and capacity characteristics, consumption patterns throughout the day, operating techniques and costs, and location of our customers spread out over our 1,000 square mile service area.

More than 40 elevated tanks, standpipes, and ground-level storage structures in the distribution system are filled with finished, filtered water to meet daily peak customer demand and to provide reserves for fire protection and emergencies. A network of more than 5,500 miles of underground water pipeline delivers water to homes, apartments, schools, hospitals, businesses, and all other types of buildings where water meters measure the amount of water used. Customers are billed based upon individual usage. These facilities are operated and maintained by the WSSC 24 hours a day, 7 days a week, including holidays throughout the year, in order to provide safe and reliable service to our customers.

Wastewater Treatment/Collection Systems

Wastewater facilities are divided into two functions: treatment and conveyance of sewage. Sewage treatment is accomplished through a network of facilities, the base of which is the regional treatment plant. The WSSC owns and operates 6 wastewater treatment plants, which receive and process waste from residences, businesses (where waste is a by-product of the manufacturing process), restaurants, hospitals, and other commercial and industrial users.

During the treatment process, solid material is removed, harmful organisms are destroyed, and excess disinfection products are neutralized before the remaining liquid is sent back to the river. The WSSC's 6 treatment plants have a combined treatment capacity of 89 million gallons per day (mgd). These plants include Piscataway, Western Branch, Parkway, Seneca, Damascus, and Hyattstown. Unlike the water system, operation of the sewerage system is highly dependent upon other area jurisdictions and, for this reason, the WSSC has purchased 169 mgd of treatment capacity at the Blue Plains Regional Wastewater Treatment Plant located in the District of Columbia, 3 mgd of capacity at the Mattawoman Wastewater Treatment plant located in northern Charles County, and 20,000 gallons per day of capacity in the Town of Poolesville's wastewater treatment plant. The capital costs of the Blue Plains and Mattawoman plants are shared among the users based upon treatment capacity allocations. The WSSC also pays to the District of Columbia and Charles County a share of the operating, maintenance, and overhead costs at each plant, in proportion to actual flows. These cost-sharing arrangements were agreed to in the Intermunicipal Agreement of 2012 and the Mattawoman Agreement of 1980, respectively. Sewer capacity purchased by the WSSC in the Poolesville plant is in accordance with the May 1984 agreement between the WSSC, the Town of Poolesville, and the Montgomery County Government to alleviate health hazards from failing septic systems in the Jonesville and Jerusalem communities. The 6 WSSC-owned-and-operated plants were built to augment treatment in the Blue Plains service area and to serve areas that are out of reach of the Blue Plains system.

The other function of the sewerage system is to convey waste flows from the point of origin (for example, from a customer's home) to a point of treatment. The sewerage network contains more than 5,400 miles of pipeline, with pipe sizes ranging from 6 to 102 inches in diameter, and is predominantly a gravity system. This means the flow travels in a downhill direction without any other help and, therefore, sewers need to be located generally along streambeds at the lowest elevation in a basin. The sewers in one drainage basin are independent of those in other basins. There are 13 major drainage basins in the Sanitary District.

The largest diameter pipelines (interceptor sewers) run from the treatment plant to the major lines (trunk lines) within individual drainage basins. Smaller diameter pipelines (outfall) run up sub-basins from the major lines. Even smaller lines (lateral), usually built in or along subdivision streets to provide service to abutting properties, lead to hundreds of thousands of individual service connections (hookups from the pipe in the street to a private home or building) to be served by the remainder of the conveyance system. Ideally, the entire system would provide for the gravitational flow of waste from the individual houses, businesses, and other sources through the subdivision lines to the outfall pipelines to the larger diameter main lines to the treatment plant. Because gravity cannot always be used to accomplish this ideal pattern of flow, the WSSC has more than 40 wastewater pumping stations in operation, and others in standby status, throughout the Sanitary District. These pumping stations range from 0.08 to 306 mgd in capacity. Pumping stations lift wastewater through a pressure line called a force main, over ridges or from stream valleys that have no continuous trunk sewer, into the gravity-flow system of an adjacent drainage basin that contains existing pipeline and treatment facilities. All WSSC wastewater flows through enclosed trunk line systems and is completely separate an independent from the storm drain system. Pipeline projects to extend service to new customers and to augment the service capability of this network are among the most numerous types in this document. These facilities are also operated and maintained by the WSSC 24 hours a day, 7 days a week, including holidays throughout the year, in order to provide safe and reliable service to all of our customers.

In addition, small pressure systems exist throughout the Sanitary District. A typical system is comprised of a grinder pump (one for each dwelling unit grouped in a small residential development) contained in a 60-gallon sump, pumping 11 gallons per minute through a 1¼-inch diameter plastic force main, and then connecting to a gravity sewer line located nearby. This type of system is limited in size, and is necessary to overcome minor changes in topography to avoid the construction of a conventional gravity line in another direction where the distance to an existing sewer would be considerably greater and less cost effective.

Approximately 66% of all wastewater originating in Montgomery County and central Prince George's County follows the Anacostia, Rock Creek, and Potomac River Valleys, to the Blue Plains Wastewater Treatment Plant. The WSSC's proportionate share of capital costs to meet suburban Maryland's treatment requirements represents the most significant expenditure appropriations in this document.

The WSSC's wastewater collection and treatment systems are nationally recognized as components of one of the country's most effective pollution control networks. All of the above-mentioned sewage treatment plants go beyond conventional, second-stage treatment to provide "tertiary treatment," which is an advanced treatment process. With the completion of the Piscataway WWTP's biological nutrient removal (BNR) project in 2004, all of the WSSC's plants now have integrated nutrient removal processes to significantly reduce the amount of nitrogen and phosphorous reaching the Chesapeake Bay. These features ensure that the quality of the effluent (treated wastewater discharged from the plants) is better than the natural waters into which it is returned. The purpose of the projects contained in this document and their associated cost is to expand, replace, or rehabilitate the existing water and sewerage systems described above; to continue a very high level of continuous service and reliability; and to protect the health of current and new customers, while mitigating impacts on the environment.

Environmental Concerns

By adoption of a resolution dated January 29, 1992, the Commission reaffirmed its commitment to protect the natural environment of Prince George's and Montgomery Counties as it carries out its mandate to provide sanitary sewer and drinking water services. This commitment focuses on those unique natural and manmade features (waterways, woodlands, and wetlands, as well as parklands, historical sites, and residential areas) that have been indicated by federal, state, and local environmental protection laws and regulations. Specific impact information must accompany the evaluation of all alternatives during the Commission's Facility Planning Process, if the environment features will be affected by the proposed construction of a project. Six areas are addressed as appropriate:

- Stream Valleys – identify the classification of the stream and, in general terms, the published water quality. From published maps, show the topography including the 100-year floodplain;
- Wetlands (Tidal and Non-tidal) – using published maps, show the locations of these and give their classification;
- Woodlands or Forested Areas – using aerial photographs or published maps, show the location of these and identify their type;
- Parklands – using published maps, show the location of all land holdings of the Maryland-National Capital Park & Planning Commission, the Department of Natural Resources, and the National Park Service;
- Steep Slopes – using published maps, show all slopes greater than 15%; and,
- Historical/Archaeological Sites – the Maryland Geological Survey (State Archaeologist) and Maryland Historical Trust will provide information on sites near the project alternatives. The Maryland-National Capital Park & Planning Commission or county government may provide additional information of local interest.

A further extension of these protections has been funded by the approximately $244 million included in the six-year program which is attributable to meeting environmental regulations. These projects, currently estimated at 15% of the total six-year costs in this CIP, are mandated by the U.S. Environmental Protection Agency and the State of Maryland in response to pollution controls embodied in the Federal Clean Water Act and to more stringent state discharge permit requirements. The environmental component is allocated among the projects listed on the following page, and project details can be found on the individual project description forms included elsewhere in this document. On the first page of each section of the CIP, projects which benefit the environment are designated with the following symbol:

Environmental Spending

	(Dollars in Millions)
• W-73.20, Potomac WFP Stage 2 Disinfection Byproducts Rule Implementation	0.2
• W-172.05, Patuxent WFP Phase II Expansion	10.9
• S-22.10, Blue Plains WWTP: Enhanced Nutrient Removal	160.8
• S-22.11, Blue Plains: Pipelines & Appurtenances	50.1
• S-53.21, Seneca WWTP Enhanced Nutrient Removal	0.7
• S-57.93, Western Branch WWTP Enhanced Nutrient Removal	2.9
• S-57.94, Western Branch WWTP Incinerator Emissions Control	17.7
• S-89.22, Anacostia Storage Facility	0.5
Total Six-Year Program Expenditures Allocated to Environmental Regulations	$243.8

The Customer Advisory Board (CAB) was created in the spring of 1989 to provide the WSSC Commissioners and staff with customer input on current practices and proposed policies and to augment communication with our customers. The CAB assists in meeting environmental protection challenges. This committee provides for volunteer members from the general public. Among other responsibilities, the CAB reviews major projects and makes recommendations pertaining to environmental policy to the WSSC's General Manager/CEO and staff.

Public Outreach

The Commission's proactive community outreach program is an integral part of our process to include early public involvement in projects. The objective is to inform affected communities about the WSSC's plans, actively seek their input, and respond to their concerns. The WSSC's planning approach is an open process, receptive to public comment and involvement. Residents of Prince George's and Montgomery Counties are given the opportunity to review clear, accessible documents that describe the rationale behind program planning and project decisions. The overall outreach goals are to:

- identify community and public policy issues early in the planning stage;
- address the known community concerns and environmental issues that are within the reasonable context of the planning effort;
- promote community understanding of system needs and demands, and the planning process used by the WSSC to maintain public health standards and water quality protection;
- provide constructive forums for community involvement and information throughout the planning process;
- provide a clear understanding of the decision-making process;
- address potential health and environmental risks; and
- establish and maintain open lines of communication.

The process advocates achieving planning goals through a collaborative effort among WSSC staff, technical experts, citizens and/or organizations, and public officials. Fostering community involvement allows the WSSC to be responsive and sensitive to community concerns, to define the best approach to addresses customers' concerns, and to garner community support while meeting public health objectives.

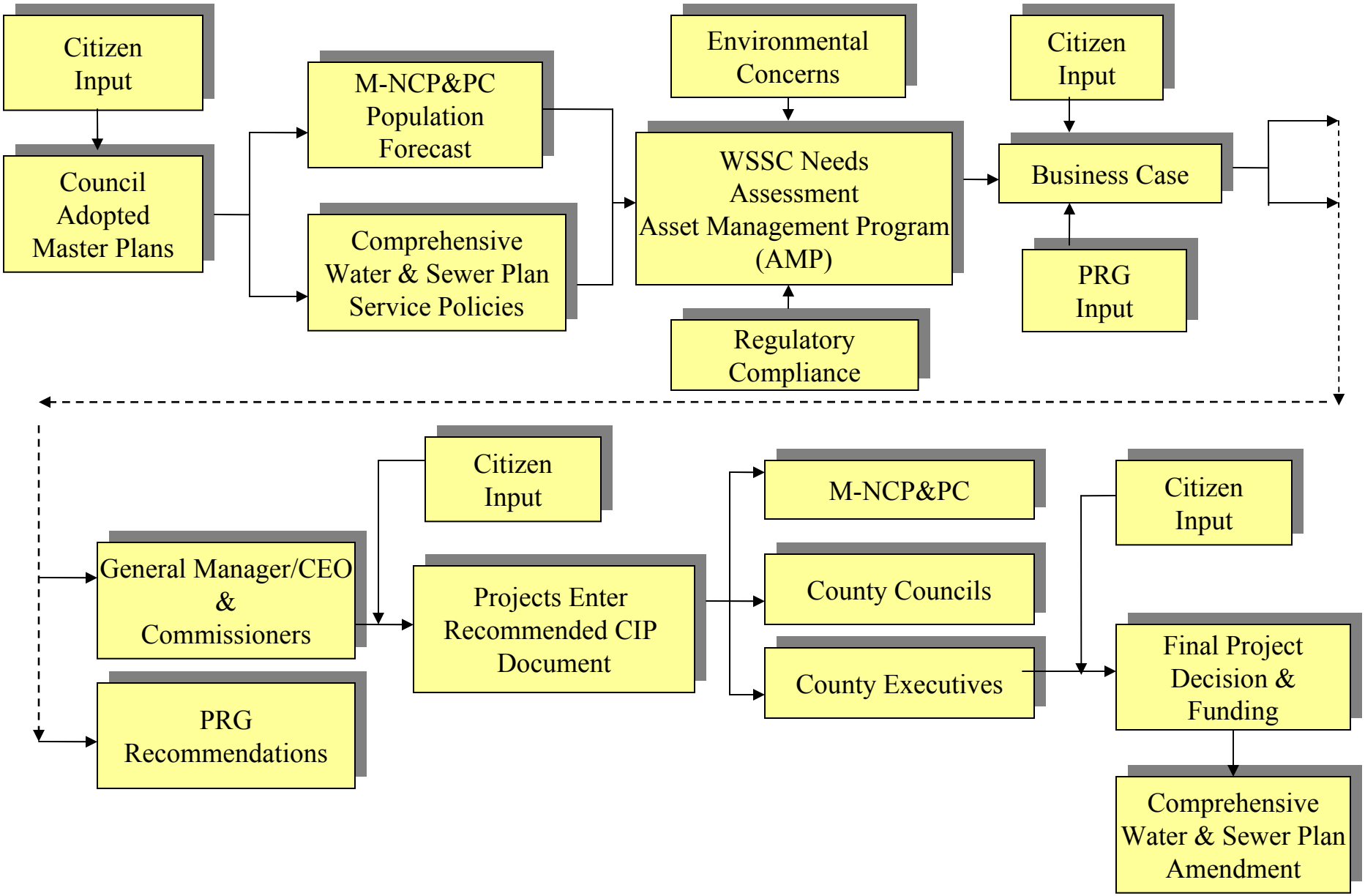
The Planning Process

Effective planning is the application of a well-thought-out process that combines engineering data, environmental requirements, economic factors, and public interaction to establish a sound basis for making competent decisions, for efficiently conducting and documenting specific work tasks, and for successfully implementing needed solutions. The WSSC's planning process includes business case studies to identify needs, develop and evaluate options, and identify a preferred solution. An important goal in the process is to produce a result that is acceptable to citizens, elected officials, regulatory agencies, and the WSSC at a reasonable cost.

A number of outside influences affect the WSSC's project planning. Water and sewer projects are essentially an infrastructure response to land use decisions made by the two county governments and demographic information (population forecasts) provided by the Washington Council of Governments and the Maryland-National Capital Park & Planning Commission. These elements are used by the WSSC to calculate projected water and sewerage demands. The WSSC must also consider environmental consequences and compliance with federal and state regulations such as the Clean Water Act. The WSSC's needs analysis is also influenced by both county governments' guidance on service policies as contained in the Comprehensive Ten-Year Water and Sewerage Plans. Generally stated, the goals, purposes, and concepts provided by the Prince George's and Montgomery County Governments require that the water and sewerage systems be consistent with officially-approved local and general plans, and provide adequate capacity to accommodate the foreseeable development of the area served based upon population and employment projections. This requirement corresponds with what has always been Commission policy: to provide utility service to the type and location of development that each county governing body has approved, if economically and otherwise feasible. Figure 1, on the following page, displays the overall project planning and approval process.

FIGURE 1

PROJECT DEVELOPMENT & APPROVAL PROCESS



WSSC Asset Management Program

One of the WSSC's top priorities, in the core strategy of Infrastructure Asset Management, is to improve capital investment management. The objective of the Asset Management Program (AMP) is to identify infrastructure needs and investment strategies for the next 30 years, and develop and implement an asset management framework for optimal investment decision making. A key task is to identify the existing and future capacity, regulatory, and rehabilitation/ repair/replacement requirements for the next 30 years. The AMP provides input to the Commission's multi-year financial forecasting and develops and refines a 30-year capital investment projection based on the following requirements: regulatory, capacity, maintenance, rehabilitation/replacement, process control, energy conservation, and reliability.

How Projects Enter the CIP

The Asset Management Program (AMP) systematically identifies and validates water and wastewater needs, and is the primary source of new projects. Figure 2 depicts some of the important elements common to WSSC Asset Management Program.

FIGURE 2

Overview of WSSC AMP Process		
Genesis and Validation	**Business Case Development**	**Review and Approval**
Asset Management Plans • Establishment of Need • Need Validation • Funding	Technical Analysis and Documentation • Coordination • Community Outreach • Project Validation • Solution Recommendation	• CIP Prioritization • Public Comment • County Governments • WSSC CIP
Implementation		

The WSSC's needs assessments may identify other potential projects. A project may be added in response to relocation requirements due to road improvements or the need to construct a short segment of pipe in advance of paving. Projects may also be included at the request of either county government, usually to provide service to a planned county service facility, such as a new youth soccer complex, or in response to a request for service from an Applicant for new development. Projects may also enter the CIP when they are split from previously approved projects. Projects may be split either at the request of the Applicant or by WSSC for administrative reasons such as to afford better project management or to provide greater clarity to the reader.

Development Services Process

Development Services Process (DSP) projects are undertaken to support future growth. Service to properties approved under the DSP almost always require the extension of small diameter subdivision lines and may involve program-sized pipes that must be included in the WSSC's CIP. This document includes only the portion of an Applicant's total pipe extension or pumping facility requirements and associated costs that conform to the definition provided in the section titled "Statutory Basis" at the beginning of this narrative.

To initiate a project, the WSSC will review the Applicant's subdivision preliminary plan submissions to the respective M-NCP&PC for water and/or sewer service, including a determination if the property to be served is located within the appropriate "service category." (Service category designations are a staging tool employed by and strictly administered in the Comprehensive Ten-Year Water and Sewerage Plans by both county governments. If the property is not in the correct service category, the Applicant must then contact the appropriate county office to begin a County Ten-Year Plan amendment process for reconsideration of the service area designation currently assigned to the property. If a designation change is approved later by the County Council, the Applicant may proceed with the construction of the project.) Once it has been determined that the property to be served is located within the appropriate service category, and a request for hydraulic planning analysis is made and completed, the WSSC issues a Letter of Findings which delineates the project conditions that must be met prior to the start of construction. When the project contains complex water and sewer issues such as the need for a CIP sized project, the WSSC will require that the Applicant submit a feasibility study. If necessary, a revised Letter of Findings is issued. Finally, the WSSC will perform a review for system integrity of the design plans. Construction can begin when design plans have been approved, all necessary construction permits and rights-of-way have been obtained, and the Applicant has satisfied all project conditions. Almost half of the projects in this document are DSP-related.

For those projects serving one new residence or providing relief from a residential health hazard, the WSSC will prepare the feasibility study and issue a Letter of Findings. The Letter of Findings will again delineate any project conditions and advise the Applicant of their cost responsibilities. If the Applicant elects to proceed with the project, the WSSC will prepare the design plans and obtain any necessary construction permits and rights-of-way. Once the Applicant has met all the project conditions, the design plans are approved, and all permits and rights-of-way are acquired, the WSSC will proceed with the construction of the project. However, such projects rarely include CIP-sized mains.

Project Development Criteria

It has been the WSSC's policy to have facilities in service when, or before, they are needed so that new development demands on the system do not result in a reduction of the level of service provided to existing customers. This policy provides for unrestricted water supply and no sewage overflows and avoids a water or sewer connection moratorium. This general service policy has guided the planning and sizing of the WSSC's systems for many years and requires that both the water and wastewater systems are sized to handle the peak or maximum demands, adjusted for weather-related usage. The task is to balance cost and spending affordability limits with environmental consequences, risk and system reliability.

Water and wastewater systems are composed of functionally different sub-systems: treatment, transmission, distribution, collection, and storage. Ideally, the capacity of each component should match the capacity of the other parts of the system. An example of a real situation from the past is the comparison of the Blue Plains Wastewater Treatment Plant to the Muddy Branch and Seneca Creek wastewater transmission systems. The plant had enough capacity but, in contrast, probable peak flows in the sewers exceeded pipeline capacity. These were part of the same network, yet one of the sub-systems had excess capacity, while other parts, although connected, were deficient. Transmission projects to correct this imbalance were completed in these basins, restoring capacity to handle future flows in the conveyance systems.

For most facilities, the WSSC plans enough capacity to last 20 years or more. When it seems clear that adding capacity incrementally will not be economical, feasible, or is significantly disruptive, longer range planning is done. A pipeline is sized for full development, or "build out" of its service area, to avoid repeated environmental and community disruption caused by construction. In most cases, this results in a service life that extends beyond 20 years. Since the weather-related usage and future population projections are broad-based estimates of future conditions used in the calculation of future flow demands, the rate at which predicted flows increase or decrease in a pipeline system is somewhat variable, but still useful in providing a long-range target for timing the WSSC's project construction. The WSSC conservatively estimates the lead time required to plan, design, and construct a facility, and projects enter the CIP on that basis. It is not unusual for 10 or more years to elapse before a major facility project, such as a treatment plant, is finished following its initial appearance in this document.

Twenty-year estimates of increases in customer demand are based on the most recent M-NCP&PC demographic forecasts of population, dwelling units, and employment. Estimates of full development demands are based on the most current land use and zoning information available from the M-NCP&PC. This data is organized by Traffic Analysis Zones in Montgomery County and by Policy Analysis Zones in Prince George's County. The information is then disaggregated for the WSSC by sub-basins for use in the planning and sizing of projects.

Project Estimates

Pipeline cost estimates are developed through the use of a detailed checklist of cost elements. The comprehensiveness and uniformity of planning-level cost estimates has significantly improved through the inclusion of more site-specific details, previously not considered until advanced stages of design. The number of projects with cost increases that typically occur when a project transitions from the preliminary planning phase to the design phase has been greatly reduced. Many of the estimates in earlier CIP documents were based upon planning studies and reports that included average costs calculated solely from past construction contracts.

Actual design plans and profiles, if available, are analyzed together with United States Geological Survey soil maps. Additional factors such as site access, excessive traffic, known jurisdictional constraints, presence of rock or running sand, work through existing neighborhoods or open fields, and proximity to other existing utility lines are taken into consideration. The base prices upon which the estimates are predicated have been derived from both historical cost data and the most recent bid information. The specific final unit prices are increased or decreased, dependent upon factors such as those listed above. In addition, all environmental mitigation costs for efforts such as reforestation are already included in the individual project costs. Regardless of the extensive checklist, some additional costs may be required by permitting agencies to reflect unpredictable requirements for things such as more complex traffic management plans or for changes in permit requirements for more stringent erosion protection measures at construction sites. The need for these kinds of features is project specific and is identified on individual project description forms (PDFs) when appropriate.

Cost estimates for major facility projects (e.g., treatment plants and pumping stations) in the planning and design phases are normally based on estimates developed by consulting engineers. By nature, these estimates are complex, and from the point of conceptual design details change, project scopes are redefined, processes are modified, equipment and piping are reconfigured or resized, decisions are made on elements such as equipment redundancy, and costs are subjected, selectively, to a Value Engineering review. All of these adjustments are expected to result in cost modifications. The WSSC requires that projects be re-evaluated by consulting engineers at the 30% and 70% stages of design. Estimated construction costs, reflecting these modifications, are identified on the individual PDFs, if applicable, and displayed in the CIP. Because the costs displayed in the CIP are estimates and not actual costs, construction contingencies may be added.

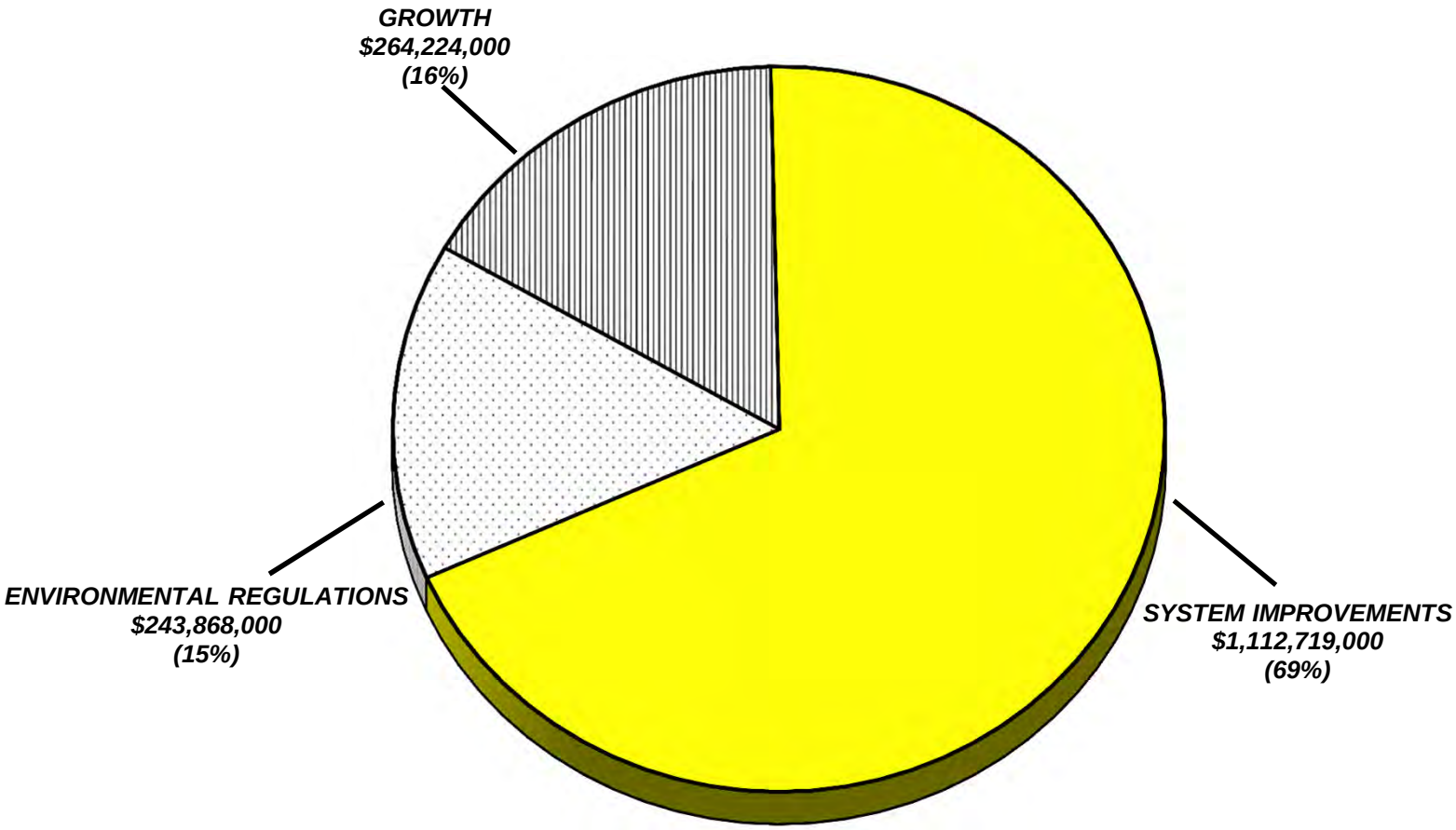
The "Other" cost element, displayed in Block B, Line 5 in the Expenditure Schedule on each PDF, is a broad estimate of the direct and indirect expenses associated with the implementation of each project and is not covered by the other major cost categories. These costs include direct support costs for a project such as salaries, wages, and related personnel costs (social security, retirement), and materials, services, rentals, supplies, mileage, and other expenses. (General overhead costs, which may be allocated to a project, are not included.) This element is estimated for the majority of the projects in this document by multiplying the sum of the project's Planning, Design and Supervision, Land, and Construction cost elements in each column on the PDF by a constant 15%. There are exceptions: a value, based upon 1%, is applied to Blue Plains project costs; a constant of 10% is used to more realistically estimate these expenses for projects with a total estimated cost of $10 to $49 million; and, a constant of 5% is used for projects with a total estimated cost of $50 million or more.

A project's previous expenditures, which include overhead, are shown on the PDF in the Block B Expenditure Schedule under Column (9). These expenditures are accessed from the WSSC's financial information system through the period ending April 30th of each year. End of the fiscal year expenditures were not available in time for the development of project expenditure schedules and are estimated.

FIGURE 3

WSSC ADOPTED FYS 2015-20 CIP

SIX-YEAR PROGRAM EXPENDITURES BY MAJOR CATEGORY*



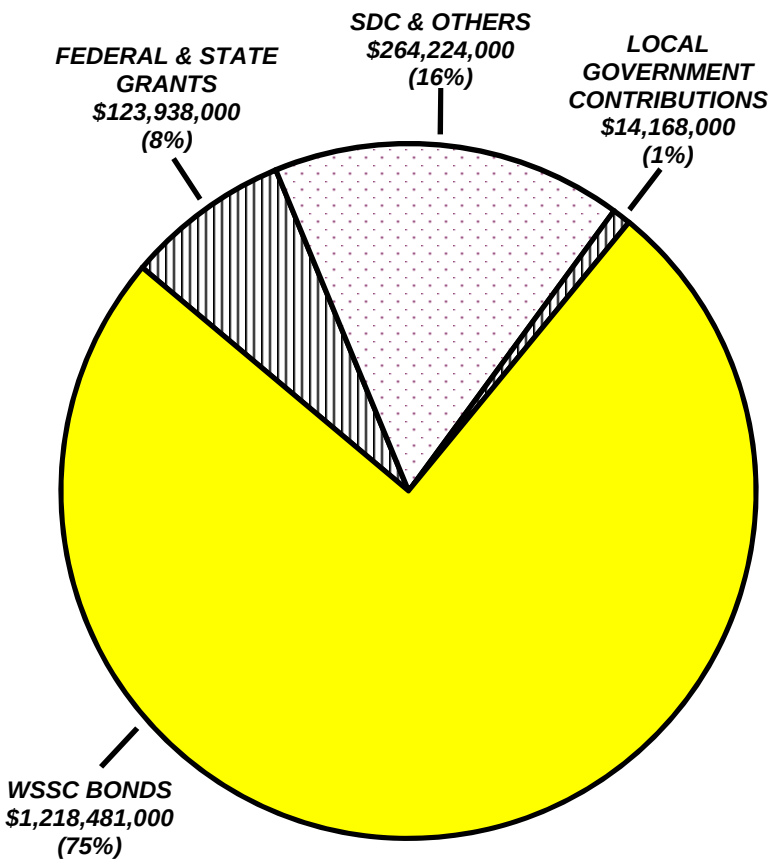
SIX-YEAR PROGRAM TOTAL
$1,620,811,000*

* Totals do not include $1,292,069,000 in System Improvements project capital expenditures for Information Only Projects.

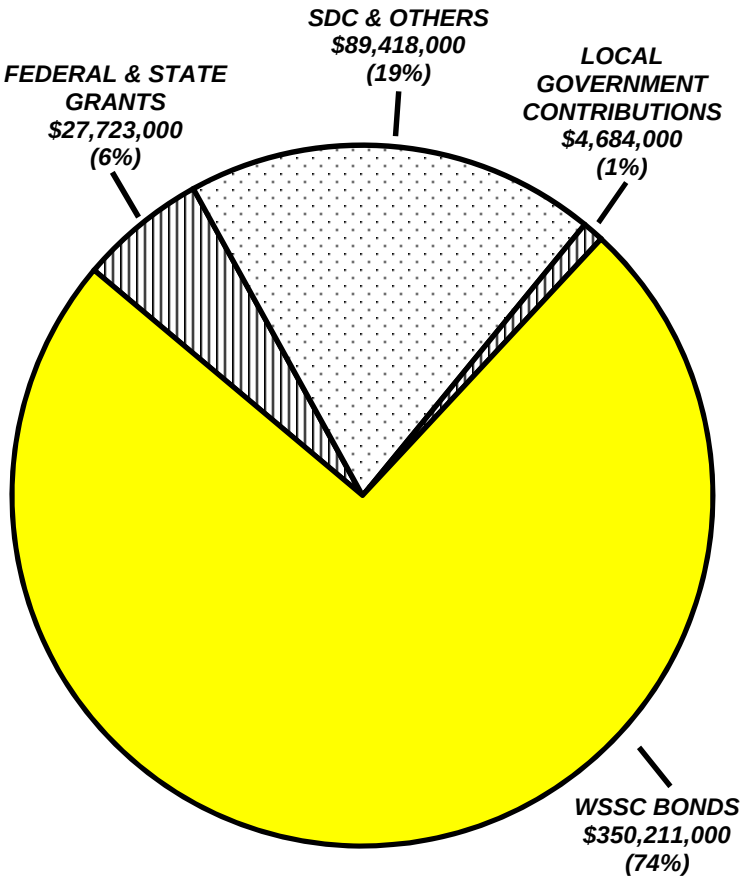
FIGURE 4

WSSC ADOPTED FYS 2015-20 CIP

FUNDING BY SOURCE*



SIX-YEAR PROGRAM TOTAL
$1,620,811,000*



FY'15 BUDGET YEAR TOTAL
$472,036,000*

* Totals do not include $1,292,069,000 and $153,861,000 in capital expenditures for Information Only projects in the six-year program and budget year, respectively.

WSSC FYS 2015 - 20120 CIP
NEW PROJECTS LISTING
(costs in thousands)

Agency Number	Project Name	Total Project Cost	6 Year Program Cost	Budget Year Cost	% of Growth
Montgomery County Sewer Projects					
S-85.21	Shady Grove Station Sewer Augmentation	$2,254	$2,254	$723	100%
S-103.16	Cabin John Trunk Sewer Relief	7,999	7,999	2,666	100%
Bi-County Sewer Projects					
S-103.02	Anaerobic Digestion/Combined Heat & Power	$143,980	$138,002	$7,138	0%
	TOTALS	**$154,233**	**$148,255**	**$10,527**	

3 New Projects

WSSC FYS 2015 - 20120 CIP

ALL PROJECTS PENDING CLOSE-OUT

(costs in thousands)

Agency Number	Project Name	Estimated Total Cost	Expenditures Thru FY'13	Estimated Expenditures FY'14	Remarks
Montgomery County Water Projects					
W-153.00	Laytonsville Elevated Tank & Pumping Station	$6,303	$4,404	$1,899	Project completion expected in FY'14.
Montgomery County Sewer Projects					
S-82.21	Montgomery College Germantown Campus Sewer	791	716	75	Project completion expected in FY'14.
Bi-County Water Projects					
W-73.16	Potomac WFP Improvements	130,867	130,413	454	Project completion expected in FY'14.
Bi-County Sewer Projects					
S-22.08	Blue Plains WWTP: Biological Nutrient Removal	74,896	74,896	0	Project completed.
Prince George's County Water Projects					
W-147.01	Marlboro Zone Water Storage Facility	348	348	0	Project no longer required.
Prince George's County Sewer Projects					
S-28.19	Konterra Town Center East Sewer, Part 2	76	76	0	Project no longer CIP sized.
S-77.18	Parkway WWTP Enhanced Nutrient Removal	19,119	17,815	1,304	Project completion expected in FY'14.
Information Only Projects					
A-103.01	Anaerobic Digestion/Combined Heat & Power	0	0	0	Project transferred to Bi-County Sewer section of CIP.
	TOTALS	**$232,400**	**$228,668**	**$3,732**	

8 Projects Pending Close-Out

FINANCIAL SUMMARY

DATE: October 1, 2013

(ALL FIGURES IN THOUSANDS)

TOTAL WSSC CIP

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 13	EST. EXPEND 14	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BUDGET REQUEST 15	PDF PAGE NUM
						YR 1 15	YR 2 16	YR 3 17	YR 4 18	YR 5 19	YR 6 20		
	Montgomery County Water Projects	42,849	9,656	6,524	26,669	11,190	7,339	6,911	1,229	0	0	11,190	1-1
	Prince George's County Water Projects	219,122	11,403	20,591	167,196	38,039	41,511	41,861	19,181	14,628	11,976	38,039	5-1
	Bi-County Water Projects	828,451	325,057	83,852	419,542	80,702	75,532	89,801	72,717	49,652	51,138	80,702	3-1
	TOTAL WATER PROJECTS	**1,090,422**	**346,116**	**110,967**	**613,407**	**129,931**	**124,382**	**138,573**	**93,127**	**64,280**	**63,114**	**129,931**	
	Montgomery County Sewerage Projects	78,348	38,224	16,717	23,407	11,900	7,579	3,823	105	0	0	11,900	2-1
	Prince George's County Sewerage Projects	425,697	99,210	80,888	245,599	89,208	82,526	34,899	29,762	9,204	0	89,208	6-1
	Bi-County Sewerage Projects	2,113,553	980,432	361,679	738,398	240,997	157,377	119,178	107,150	85,286	28,410	240,997	4-1
	TOTAL SEWERAGE PROJECTS	**2,617,598**	**1,117,866**	**459,284**	**1,007,404**	**342,105**	**247,482**	**157,900**	**137,017**	**94,490**	**28,410**	**342,105**	
	TOTAL WSSC PROGRAM	**3,708,020**	**1,463,982**	**570,251**	**1,620,811**	**472,036**	**371,864**	**296,473**	**230,144**	**158,770**	**91,524**	**472,036**	
	Total Information Only Projects	1,564,508	47,581	166,883	1,321,008	159,048	208,698	228,641	249,363	243,729	231,529	159,048	7-1

Notes for costs beyond six years:

Includes 33,044 for Bi-County Sewer Projects.
Includes 19,932 for Prince George's County Water Projects.
Includes 29,036 for Information Only Projects.
Includes 82,012 for all costs beyond six years.

Section 1 - Montgomery County Water Projects

DATE: October 1, 2013

FINANCIAL SUMMARY

(ALL FIGURES IN THOUSANDS)

MONTGOMERY COUNTY WATER PROJECTS

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 13	EST. EXPEND 14	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BUDGET REQUEST 15	PDF PAGE NUM
						YR 1 15	YR 2 16	YR 3 17	YR 4 18	YR 5 19	YR 6 20		
W-3.02	Olney Standpipe Replacement	6,931	1,206	163	5,562	2,415	1,954	1,193	0	0	0	2,415	1-2
W-46.14	Clarksburg Area Stage 3 Water Main, Parts 1, 2 & 3	5,695	357	2,381	2,957	2,260	607	90	0	0	0	2,260	1-4
W-46.15	Clarksburg Elevated Water Storage Facility	4,592	174	216	4,202	334	490	2,487	891	0	0	334	1-5
W-46.18	Newcut Road Water Main, Part 2	1,593	759	357	477	477	0	0	0	0	0	477	1-6
W-46.24	Clarksburg Area Stage 3 Water Main, Part 4	5,413	1,309	679	3,425	2,111	1,162	152	0	0	0	2,111	1-7
W-90.04	Brink Zone Reliability Improvements	4,141	115	58	3,968	230	1,438	2,300	0	0	0	230	1-8
W-138.02	Shady Grove Standpipe Replacement	8,181	1,332	771	6,078	3,363	1,688	689	338	0	0	3,363	1-9
	Projects Pending Close-Out	6,303	4,404	1,899	0	0	0	0	0	0	0	0	1-10
	TOTAL MONTGOMERY COUNTY WATER PROJECTS	42,849	9,656	6,524	26,669	11,190	7,339	6,911	1,229	0	0	11,190	

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
063801	W-3.02	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Olney Standpipe Replacement

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Olney & Vicinity P.A. 23

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**1,644**	1,202	142	**300**	100	100	100				
Land											
Site Improvements & Utilities											
Construction	**4,540**	4		**4,536**	2,000	1,599	937				
Other	**747**		21	**726**	315	255	156				
Total	**6,931**	**1,206**	**163**	**5,562**	**2,415**	**1,954**	**1,193**				

C. Funding Schedule (000's)

WSSC Bonds	**6,931**	1,206	163	**5,562**	2,415	1,954	1,193				

D. Description & Justification

DESCRIPTION

This project provides for the community outreach, planning, site selection, design and construction of up to 1.5 million gallons (MG) of elevated storage to serve the Olney area, and for the removal of the existing Olney Standpipe.

Service Area Montgomery High Pressure Zone HG560I **Capacity** 1.5 MG

JUSTIFICATION

Plans & Studies

Montgomery County High Zone Facility Plan, Boyle Engineering (1991); Memorandum from Jeff Asner to Karen Wright dated March 22, 2004; Water Storage Volume Criteria Report (November 2005).

Specific Data

The efforts of the Systems Control Group have improved the minimum chlorine residual concentrations and appear to have lowered the THM concentrations in the distribution system. However, these efforts still leave the Olney area with troublesome chlorine residuals and result in low-pressure complaints during the drawdown efforts. The existing Olney Standpipe with 1.8 million gallons of non-usable storage requires constant attention to maintain acceptable water quality.

Cost Change

Not applicable.

STATUS Final Design Complete (WSSC Contract No. BE4473A06,).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are based upon final design and may change based upon actual bid. The project has been delayed due to easement requirements and permitting with the Maryland State Highway Administration.

COORDINATION

Maryland State Highway Administration, Montgomery County Government and Maryland-National Capital Park & Planning Commission (anticipates receiving Mandatory Referral submissions).

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

		FY of Impact		
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	533	....	18
Total Costs		533	....	18
Impact on Water or Sewer Rate		1¢	....	18

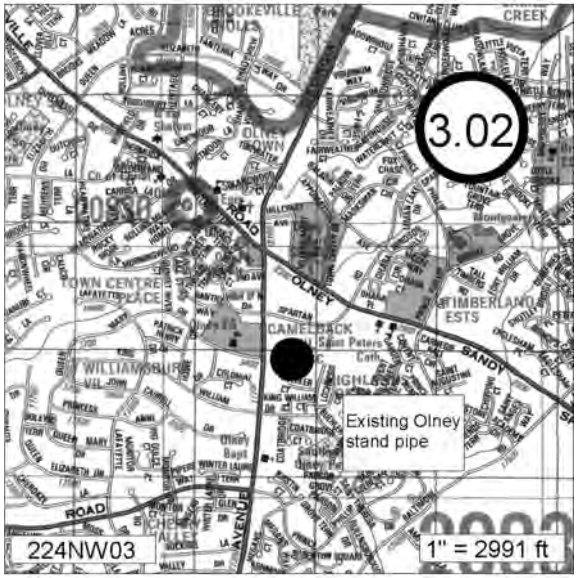
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 06
Date First Approved	FY 06
Initial Cost Estimate	3,911
Cost Estimate Last FY	6,775
Present Cost Estimate	6,931
Approved Request, Last FY	2,611
Total Expenditures & Encumbrances	1,206
Approval Request FY 15	2,415
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not determined
% Project Completion:	D-100%
Est. Completion Date:	FY 2017

H. Map **Map Reference Code:**



GERMANTOWN/CLARKSBURG AREA PROJECTS
(costs in thousands)

PROJECT NUMBER	PROJECT NAME	ADOPTED FY'14 TOTAL COST	ADOPTED FY'15 TOTAL COST	CHANGE $	CHANGE %	SIX-YEAR COST	COMPLETION DATE (est)
W-46.14	Clarksburg Area Stage 3 Water Main, Parts 1, 2 & 3	$5,529	$5,695	$166	3.0%	$2,957	Developer Dependent
W-46.15	Clarksburg Elevated Water Storage Facility	4,442	4,592	150	3.4%	4,202	FY 2018
W-46.18	Newcut Road Water Main, Part 2	1,547	1,593	46	3.0%	477	Developer Dependent
W-46.24	Clarksburg Area Stage 3 Water Main, Part 4	5,255	5,413	158	3.0%	3,425	Developer Dependent
	TOTALS	$16,773	$17,293	$520	3.1%	$11,061	

Summary: These projects are in response to the growth in the up-county area including Germantown and Clarksburg. The Clarksburg Area Stage 3 Water Main, Parts 1, 2 & 3 project (W-46.14), Newcut Road Water Main, Part 2 project (W-46.18), and Clarksburg Area Stage 3 Water Main, Part 4 project (W-46. 24) will serve the areas designated as "Stage 3" in the Clarksburg Master Plan and Hyattstown Special Study Area. The Clarksburg Elevated Water Storage Facility project (W-46.15) provides funding for a .75 million gallon elevated water storage facility, which is needed as the Clarksburg area continues to develop.

Cost Impact: Revised total cost estimates reflect information provided by the project Applicants and adjustments for inflation.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
973818	W-46.14	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Clarksburg Area Stage 3 Water Main, Parts 1, 2 & 3

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clarksburg & Vicinity P.A. 13

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**920**	237	270	**413**	345	60	8				
Land											
Site Improvements & Utilities											
Construction	**4,078**	120	1,800	**2,158**	1,620	468	70				
Other	**697**		311	**386**	295	79	12				
Total	**5,695**	**357**	**2,381**	**2,957**	**2,260**	**607**	**90**				

C. Funding Schedule (000's)

Contribution/Other	**5,695**	357	2,381	**2,957**	2,260	607	90				

D. Description & Justification

DESCRIPTION

This project provides for the design and construction of 7,100 feet of 24-inch diameter water main to the proposed Clarksburg Elevated Water Storage Facility (WSSC Project W-46.15) and 9,300 feet of 16-inch water main along Whalen Lane, Clarksburg Road, and various proposed subdivision streets.

Service Area Brink Pressure Zone HG760A, Cedar Heights Pressure Zone HG836A

JUSTIFICATION

Plans & Studies

General Plan and M-NCP&PC Round 6 growth forecasts.

Specific Data

This water main is planned to serve the area designated as "Stage 3" in the Clarksburg Master Plan and Hyattstown Special Study Area, approved and adopted in June 1994.

Cost Change

Costs were increased based upon expanded scope and recently received contractor's bids for similar water main installations.

STATUS Under Construction (WSSC Contract Nos. DA3226D02 , DA3226E02 , DA3226F02 , DA3226H02).

OTHER

The project scope has been modified to include additional CIP-sized waterlines along Clarksburg Road. Expenditure and schedule projections shown in Block B are based upon information provided by the developer. Design and construction will be performed by the developer under System Extension Permits. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Montgomery County Government, Maryland-National Capital Park & Planning Commission and WSSC Projects S-84.47, Clarksburg Triangle Outfall Sewer, Part 2, W-46.15, Clarksburg Elevated Water Storage Facility and W-46.24, Clarksburg Area Stage 3 Water Main, Part 4.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance	237	....	18
	Debt Service		....	
Total Costs		237	....	18
Impact on Water or Sewer Rate			....	

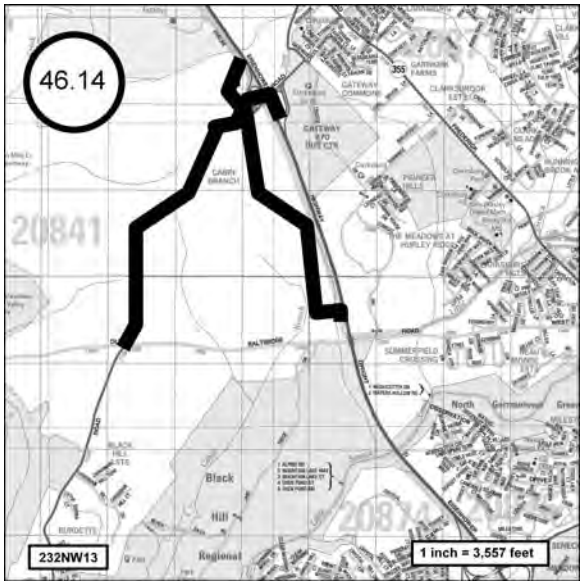
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 97
Date First Approved	FY 97
Initial Cost Estimate	3,376
Cost Estimate Last FY	5,529
Present Cost Estimate	5,695
Approved Request, Last FY	2,333
Total Expenditures & Encumbrances	357
Approval Request FY 15	2,260
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	C-5%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
973819	W-46.15	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Clarksburg Elevated Water Storage Facility

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clarksburg & Vicinity P.A. 13

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**803**	174	188	**441**	190	126	63	62			
Land											
Site Improvements & Utilities											
Construction	**3,213**			**3,213**	100	300	2,100	713			
Other	**576**		28	**548**	44	64	324	116			
Total	**4,592**	**174**	**216**	**4,202**	**334**	**490**	**2,487**	**891**			

C. Funding Schedule (000's)

SDC	**4,592**	174	216	**4,202**	334	490	2,487	891			

D. Description & Justification

DESCRIPTION

This project provides for the community outreach, site selection, planning, design, and construction for a 0.75 million gallon (MG) elevated storage facility in the HG760 water pressure zone.

Service Area Clarksburg Pressure Zone HG760B **Capacity** 0.75 MG

JUSTIFICATION

Plans & Studies

Montgomery County High Zone Supply Facility Plan, WSSC; M-NCP&PC Round 6.2 growth forecasts; Western Clarksburg Facility Plan, Rogers Associates (December 2004); Water Storage Volume Criteria Report (November 2005).

Specific Data

This project is required to meet projected future growth in the HG760 pressure zone. Reevaluation of this project with Round 6.2 growth forecasts indicates a storage deficit for this zone. The facility plan identified the preferred location for the water storage facility. As noted in the facility plan, public meetings were held to obtain comments concerning the location.

Cost Change

Not applicable.

STATUS Preliminary Design (WSSC Contract Nos. BE1442A95 , DA3326A02).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are planning level estimates and may change based upon site-specific conditions and design constraints. The resulting decision of the Montgomery County Planning Board Mandatory Referral is for WSSC to hold a design charrette to address the aesthetic and landscaping concerns and submit details of the final landscaping surrounding the facility before going into final design. Land costs are included in WSSC Project W-200.00.

COORDINATION

Montgomery County Government, Maryland-National Capital Park & Planning Commission (Mandatory Referral Hearing was held on April 3, 2008) and WSSC Project W-46.14, Clarksburg Area Stage 3 Water Main, Parts 1, 2 & 3.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	....
	Other	....
Facility Costs	Maintenance	....
	Debt Service	....
Total Costs		....
Impact on Water or Sewer Rate		....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 97
Date First Approved	FY 97
Initial Cost Estimate	138
Cost Estimate Last FY	4,442
Present Cost Estimate	4,592
Approved Request, Last FY	230
Total Expenditures & Encumbrances	174
Approval Request FY 15	334
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status: Site selected
% Project Completion: D-0%
Est. Completion Date: FY 2018

H. Map **Map Reference Code:**

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
013802	W-46.18	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Newcut Road Water Main, Part 2

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clarksburg & Vicinity P.A. 13

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**381**	332	10	**39**	39						
Land											
Site Improvements & Utilities											
Construction	**1,103**	427	300	**376**	376						
Other	**109**		47	**62**	62						
Total	**1,593**	**759**	**357**	**477**	**477**						

C. Funding Schedule (000's)

Contribution/Other	**1,593**	759	357	**477**	477						

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of 6,000 feet of 16-inch diameter water main along Newcut Road between Route 355 and Skylark Road.

Service Area Montgomery High Zone Pressure Zone 560I

JUSTIFICATION

Plans & Studies

Clarksburg Master Plan, Stage 3; M-NCP&PC Round 5 Population Projections; General Plan.

Specific Data

This main is proposed to serve areas designated as "Stage 3" in the Clarksburg Master Plan and Hyattstown Special Study Area, approved and adopted in June 1994.

Cost Change

Not applicable.

STATUS Under Construction (WSSC Contract Nos. DA4321Z06 , DA4321S06 , DA4321M06 , DA4321W06).

OTHER

The project scope has remained the same. Expenditures and schedule projections shown in Block B are based upon information provided by the developer. Design and construction will be performed by the developer under System Extension Permits. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Montgomery County Department of Public Works and Transportation, Montgomery County Government and Maryland-National Capital Park & Planning Commission.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

		FY of Impact		
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance	101	....	16
	Debt Service		....	
Total Costs		101	....	16
Impact on Water or Sewer Rate			....	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 01
Date First Approved	FY 01
Initial Cost Estimate	800
Cost Estimate Last FY	1,547
Present Cost Estimate	1,593
Approved Request, Last FY	255
Total Expenditures & Encumbrances	759
Approval Request FY 15	477
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	No land or R/W required
% Project Completion:	C-40%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
113800	W-46.24	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Clarksburg Area Stage 3 Water Main, Part 4

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clarksburg & Vicinity P.A. 13

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**631**	109	190	**332**	230	90	12				
Land											
Site Improvements & Utilities											
Construction	**4,246**	1,200	400	**2,646**	1,606	920	120				
Other	**536**		89	**447**	275	152	20				
Total	**5,413**	**1,309**	**679**	**3,425**	**2,111**	**1,162**	**152**				

C. Funding Schedule (000's)

Contribution/Other	**5,413**	1,309	679	**3,425**	2,111	1,162	152				

D. Description & Justification

DESCRIPTION

This project provides for the design and construction of 4,000 feet of 24-inch diameter water main along Brink Road and Route 355 and 1,500 feet of 24-inch diameter water main along West Old Baltimore Road; and 2,400 feet of 24-inch diameter water main along West Old Baltimore Road.

Service Area Brink Pressure Zone HG760A

JUSTIFICATION

Plans & Studies

General Plan and M-NCP&PC Round 6 growth forecasts.

Specific Data

This water main is planned to serve the area designated as "Stage 3" in the Clarksburg Master Plan and Hyattstown Special Study Area, approved and adopted in June 1994.

Cost Change

Costs were increased based upon the Developer's latest estimates.

STATUS Under Construction (WSSC Contract Nos. DA3326B02 , DA3326C02).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are based on information provided by the Developer. Design and construction will be performed by the developer under System Extension Permits. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Montgomery County Government, Maryland-National Capital Park & Planning Commission and WSSC Projects W-46.14, Clarksburg Area Stage 3 Water Main, Parts 1, 2 & 3 and W-46.15, Clarksburg Elevated Water Storage Facility.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	141	18
	Debt Service	....	....
Total Costs		141	18
Impact on Water or Sewer Rate		....	

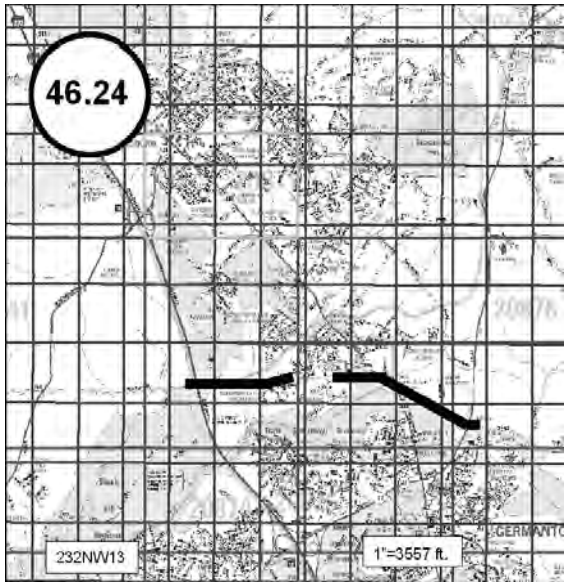
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 11
Date First Approved	FY 97
Initial Cost Estimate	1,954
Cost Estimate Last FY	5,255
Present Cost Estimate	5,413
Approved Request, Last FY	2,493
Total Expenditures & Encumbrances	1,309
Approval Request FY 15	2,111
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	C-30%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
143800	W-90.04	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

5.Agency: **WSSC**

3. Project Name: Brink Zone Reliability Improvements

4. Program: **Sanitation** 6. Planning Area: Montgomery County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**415**	115	50	**250**	200	50					
Land											
Site Improvements & Utilities											
Construction	**3,200**			**3,200**		1,200	2,000				
Other	**526**		8	**518**	30	188	300				
Total	**4,141**	**115**	**58**	**3,968**	**230**	**1,438**	**2,300**				

C. Funding Schedule (000's)

WSSC Bonds	**4,141**	115	58	**3,968**	230	1,438	2,300				

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of a new water pumping station and pipeline to increase reliability and redundancy to the Montgomery County High Zone water transmission system, specifically the HG760, HG836, and HG960, and dependant pressure zones.

Service Area Brink Pressure Zone HG760A, Woodfield Pressure Zone HG740A, Clarksburg Pressure Zone HG740B, Clarksburg Pressure Zone HG760B, Sweepstakes Pressure Zone HG835A, Seneca Springs Pressure Zone HG835B, Cedar Heights Pressure Zone HG836A, Kings Bridge Pressure Zone HG836B, Kingstead Knolls Pressure Zone HG842A, Tralee Pressure Zone HG850A, Damascus Pressure Zone HG960A

JUSTIFICATION

Plans & Studies

Business Case Evaluation: Brink Reliability Assessment, Black & Veatch, (June 2013)

Specific Data

The Neelsville Water Pumping Station is the sole delivery of water from the Montgomery County High Zone (HG660) through a single 24-inch diameter PCCP Water Transmission Main that crosses 2 miles to the Brink Elevated Tank (HG760). The selected alternative will effectively deliver water to the Brink Elevated Tank and, in turn, the Cedar Heights (HG836), Damascus (HG960), and dependent pressure zones.

Cost Change

Initial cost estimates were updated to include order of magnitude estimates for design and construction.

STATUS Planning

OTHER

The project scope has evolved beyond exploring alternatives to address reliability and redundancy issues, to provide for the planning, design, and construction of a new water pumping station and pipeline. Expenditure and schedule estimates for design and construction were developed through an engineering and business case analysis. FY'13 expenditures are those related to the business case analysis.

COORDINATION

Montgomery County Government and Montgomery County Department of Environmental Protection.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

		FY of Impact	
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	....	....
	Debt Service	285	 18
Total Costs		285	 18
Impact on Water or Sewer Rate			....

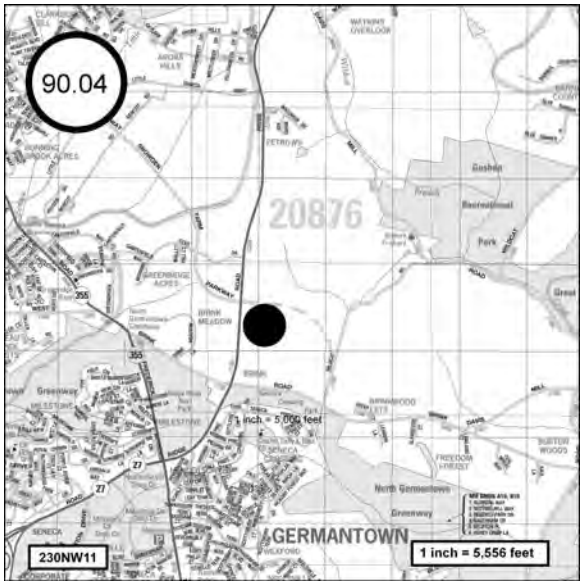
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 14
Date First Approved	FY 14
Initial Cost Estimate	345
Cost Estimate Last FY	345
Present Cost Estimate	4,141
Approved Request, Last FY	345
Total Expenditures & Encumbrances	115
Approval Request FY 15	230
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not Applicable
% Project Completion:	P-90%
Est. Completion Date:	FY 2017

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
093801	W-138.02	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Shady Grove Standpipe Replacement

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Gaithersburg & Vicinity P.A. 20

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**1,537**	1,332	95	**110**	49	30	24	7			
Land											
Site Improvements & Utilities											
Construction	**5,750**		575	**5,175**	2,875	1,438	575	287			
Other	**894**		101	**793**	439	220	90	44			
Total	**8,181**	**1,332**	**771**	**6,078**	**3,363**	**1,688**	**689**	**338**			

C. Funding Schedule (000's)

WSSC Bonds	**8,181**	1,332	771	**6,078**	3,363	1,688	689	338			

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of 3.0 million gallons (MG) of elevated storage to replace the existing Shady Grove Standpipe.

Service Area Montgomery High Pressure Zone HG660A **Capacity** 3.0 MG

JUSTIFICATION

Plans & Studies

Water Storage Volume Criteria Report (November 2005); 2006 Water Production Projections; WSSC Memorandum dated May 7, 2007, from Karen Wright, Systems Control Group Leader; WSSC Memorandum dated May 24, 2007, from Tim Hirrel, Planning Group.

Specific Data

The existing 5.0 MG standpipe is in need of extensive repairs. Replacing the standpipe with a smaller elevated storage facility will provide the same level of service while helping to meet U.S. Environmental Protection Agency regulations for disinfectant by-products and improving water quality.

Cost Change

Costs decreased based upon revised engineering estimates stemming from a decision to proceed with a composite style tank in lieu of all steel.

STATUS Final Design (WSSC Contract No. BE5061A09,).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are design level estimates and may change based upon site-specific conditions and actual bid.

COORDINATION

Montgomery County Government, City of Rockville, Maryland Department of the Environment and Maryland Department of Natural Resources.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	563	....	19
Total Costs		563	....	19
Impact on Water or Sewer Rate		1¢	....	19

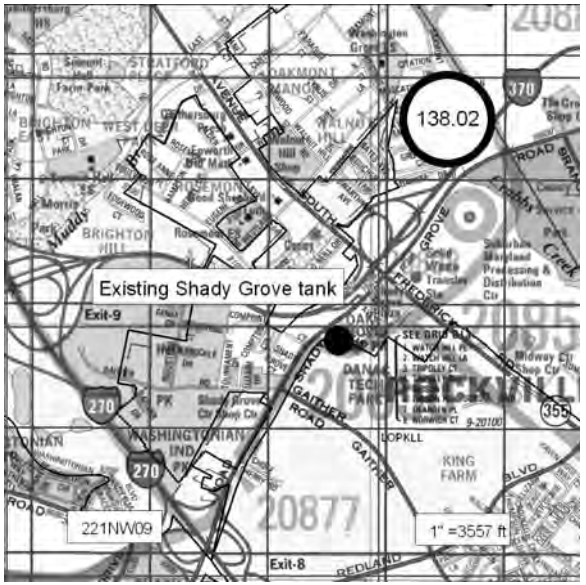
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 09
Date First Approved	FY 09
Initial Cost Estimate	7,475
Cost Estimate Last FY	9,687
Present Cost Estimate	8,181
Approved Request, Last FY	2,083
Total Expenditures & Encumbrances	1,332
Approval Request FY 15	3,363
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Public/Agency owned land
% Project Completion:	D-98%
Est. Completion Date:	FY 2018

H. Map **Map Reference Code:**



PROJECTS PENDING CLOSE-OUT

Montgomery County Water Projects

(costs in thousands)

Project Number	Agency Number	Project Name	Estimated Total Cost	Expenditures Thru FY'13	Estimated Expenditures FY'14	Remarks
023800	W-153.00	Laytonsville Elevated Tank & Pumping Station	$6,303	$4,404	$1,899	Project completion expected in FY'14.
		TOTALS	$6,303	$4,404	$1,899	

Section 2 - Montgomery County Sewer Projects

DATE: October 1, 2013

FINANCIAL SUMMARY

(ALL FIGURES IN THOUSANDS)

MONTGOMERY COUNTY SEWER PROJECTS

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 13	EST. EXPEND 14	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BUDGET REQUEST 15	PDF PAGE NUM
						YR 1 15	YR 2 16	YR 3 17	YR 4 18	YR 5 19	YR 6 20		
S-25.03	Twinbrook Commons Sewer	1,009	572	59	378	125	109	108	36	0	0	125	2-3
S-25.04	Mid-Pike Plaza Sewer Main, Phase 1	1,559	369	748	442	442	0	0	0	0	0	442	2-4
S-25.05	Mid-Pike Plaza Sewer Main, Phase 2	6,094	119	1,434	4,541	3,107	1,434	0	0	0	0	3,107	2-5
S-38.01	Preserve at Rock Creek Wastewater Pumping Station	1,967	10	886	1,071	683	388	0	0	0	0	683	2-6
S-38.02	Preserve at Rock Creek WWPS Force Main	391	18	122	251	135	116	0	0	0	0	135	2-7
S-53.21	Seneca WWTP Enhanced Nutrient Removal	13,618	9,506	3,394	718	718	0	0	0	0	0	718	2-9
S-53.22	Seneca WWTP Expansion, Part 2	28,984	19,258	7,756	1,970	1,970	0	0	0	0	0	1,970	2-11
S-84.47	Clarksburg Triangle Outfall Sewer, Part 2	2,539	423	1,620	496	445	51	0	0	0	0	445	2-13
S-84.60	Cabin Branch Wastewater Pumping Station	2,342	12	13	2,317	449	1,566	302	0	0	0	449	2-14
S-84.61	Cabin Branch WWPS Force Main	424	0	17	407	143	240	24	0	0	0	143	2-15
S-84.65	Tapestry Wastewater Pumping Station	683	7	231	445	223	222	0	0	0	0	223	2-16
S-84.66	Tapestry WWPS Force Main	134	8	45	81	46	35	0	0	0	0	46	2-17
S-85.21	Shady Grove Station Sewer Augmentation	2,254	0	0	2,254	723	740	722	69	0	0	723	2-18
S-94.12	Damascus WWTP Enhanced Nutrient Removal	7,536	7,206	317	13	13	0	0	0	0	0	13	2-19
S-103.16	Cabin John Trunk Sewer Relief	7,999	0	0	7,999	2,666	2,666	2,667	0	0	0	2,666	2-21
S-201.00	Land & Rights-of-Way Acquisition - Montgomery County	24	0	0	24	12	12	0	0	0	0	12	2-22
	Projects Pending Close-Out	791	716	75	0	0	0	0	0	0	0	0	2-23
	TOTAL MONTGOMERY COUNTY SEWER PROJECTS	78,348	38,224	16,717	23,407	11,900	7,579	3,823	105	0	0	11,900	

Denotes projects which include an environmental component (see page 15 in the opening narrative.)

Montgomery County Sewer Projects
New Projects Listing
(costs in thousands)

Agency Number	Project Name	Total Project Cost	Budget Year Cost	Page Number
S-85.21	Shady Grove Station Sewer Augmentation	$2,254	$723	2-18
S-103.16	Cabin John Trunk Sewer Relief	7,999	2,666	2-21
	TOTALS	$10,253	$3,389	

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-25.03	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Twinbrook Commons Sewer

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: North Bethesda P.A. 30

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**417**	380	10	**27**	8	7	6	6			
Land											
Site Improvements & Utilities											
Construction	**535**	192	41	**302**	101	88	88	25			
Other	**57**		8	**49**	16	14	14	5			
Total	**1,009**	**572**	**59**	**378**	**125**	**109**	**108**	**36**			

C. Funding Schedule (000's)

Contribution/Other	**1,009**	572	59	**378**	125	109	108	36			

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of 1,300 feet of 18-inch diameter sewer main to provide service to Twinbrook Commons.

Service Area Rock Creek Drainage Basin **Capacity** 3.26 to 4.33 MGD

JUSTIFICATION

Plans & Studies

Phase I Letter of Findings (April 5, 2006).

Cost Change

Costs were increased for inflation.

STATUS Under Construction (WSSC Contract Nos. DA4159B05 , DA4159Z05 , DA4159A05).

OTHER

The project scope has remained the same. This project will be completed in two phases. The first phase, Contract No. DA4159A05, was built and released for service in January 2010. The second phase, Contract No. DA4159B05, is in the preliminary design stage. The expenditures and schedule projections shown in Block B may change based upon site-specific conditions and design constraints. Design and construction will be performed by the developer under a System Extension Permit. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Washington Metropolitan Area Transit Authority, Montgomery County Government, City of Rockville and Local Community Civic Associations.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

		FY of Impact		
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance	24	....	19
	Debt Service		....	
Total Costs		24	....	19
Impact on Water or Sewer Rate			....	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 08
Date First Approved	FY 08
Initial Cost Estimate	677
Cost Estimate Last FY	980
Present Cost Estimate	1,009
Approved Request, Last FY	116
Total Expenditures & Encumbrances	572
Approval Request FY 15	125
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	D-20%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
123801	S-25.04	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Mid-Pike Plaza Sewer Main, Phase 1

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: North Bethesda P.A. 30

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**252**	119	101	**32**	32						
Land											
Site Improvements & Utilities											
Construction	**1,151**	250	549	**352**	352						
Other	**156**		98	**58**	58						
Total	**1,559**	**369**	**748**	**442**	**442**						

C. Funding Schedule (000's)

Contribution/Other	**1,559**	369	748	**442**	442						

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of 4,000 feet of 15, 18, and 21-inch diameter sewer main to provide service to Mid-Pike Plaza, Phase 1.

Service Area Cabin John Drainage Basin **Capacity** 3.47 mgd **Population** 2,007

JUSTIFICATION

Plans & Studies

Mid-Pike Plaza Hydraulic Planning Analysis, (March 2012).

Cost Change

Costs were increased for inflaton.

STATUS Under Construction (WSSC Contract Nos. DA5238Z11 , DA5238A11 , DA5238C11).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are based upon information provided by applicant. Design and construction will be performed by the developer under a Systems Extension Permit. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Montgomery County Government, Montgomery County Department of Environmental Protection and Local Community Civic Associations.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

		FY of Impact		
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance	34	....	16
	Debt Service		....	
Total Costs		34	....	16
Impact on Water or Sewer Rate			....	

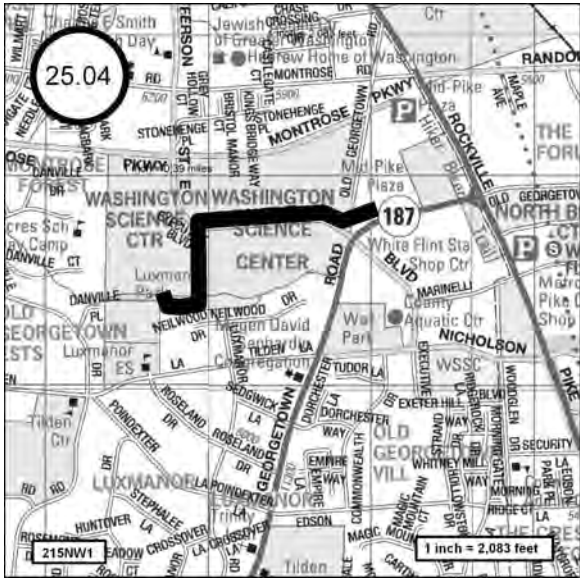
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 12
Date First Approved	FY 12
Initial Cost Estimate	1,488
Cost Estimate Last FY	1,514
Present Cost Estimate	1,559
Approved Request, Last FY	669
Total Expenditures & Encumbrances	369
Approval Request FY 15	442
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	R/W required
% Project Completion:	C-25%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
143801	S-25.05	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Mid-Pike Plaza Sewer Main, Phase 2

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: North Bethesda P.A. 30

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**860**	119	247	**494**	247	247					
Land											
Site Improvements & Utilities											
Construction	**4,455**		1,000	**3,455**	2,455	1,000					
Other	**779**		187	**592**	405	187					
Total	**6,094**	**119**	**1,434**	**4,541**	**3,107**	**1,434**					

C. Funding Schedule (000's)

Contribution/Other	**6,094**	119	1,434	**4,541**	3,107	1,434					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of 3,600 feet of 21-inch and 24-inch diameter sewer main to provide service to Mid-Pike Plaza.

Service Area Cabin John Drainage Basin

JUSTIFICATION

Plans & Studies

Mid-Pike Plaza Hydraulic Planning Analysis, (March 2012).

Cost Change

Cost increase due to inflation.

STATUS Planning (WSSC Contract No. DA5238Z11,).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are planning level estimates and may change depending upon site-specific conditions and design constraints. Expenditures shown in prior years are an allocation of the Hydraulic Planning Analysis costs developed for phase 1 of the Mid-Pike Plaza project. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Montgomery County Government, Montgomery County Department of Environmental Protection and Local Community Civic Associations.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	66	 17
	Debt Service	....	....
Total Costs		66	 17
Impact on Water or Sewer Rate			....

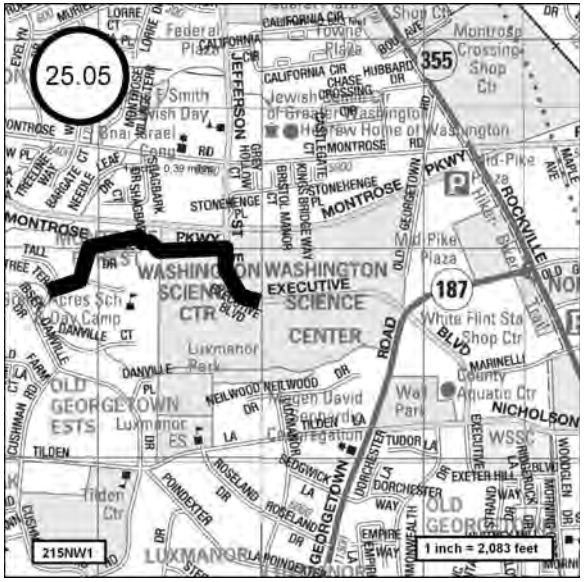
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 14
Date First Approved	FY 14
Initial Cost Estimate	5,917
Cost Estimate Last FY	5,917
Present Cost Estimate	6,094
Approved Request, Last FY	2,728
Total Expenditures & Encumbrances	119
Approval Request FY 15	3,107
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	R/W required
% Project Completion:	P-100%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
103800	S-38.01	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Preserve at Rock Creek Wastewater Pumping Station

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Upper Rock Creek P.A. 22

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**296**	10	180	**106**	60	46					
Land											
Site Improvements & Utilities											
Construction	**1,415**		590	**825**	534	291					
Other	**256**		116	**140**	89	51					
Total	**1,967**	**10**	**886**	**1,071**	**683**	**388**					

C. Funding Schedule (000's)

Contribution/Other	**1,967**	10	886	**1,071**	683	388					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of a 0.07 MGD wastewater pumping station to serve The Preserve at Rock Creek Subdivision.

Service Area Rock Creek Drainage Basin **Capacity** 0.07 MGD **Population** 200

JUSTIFICATION

Plans & Studies

M-NCP&PC Upper Rock Creek Master Plan (April 2004); The Amended Hydraulic Planning Analysis and Letter of Findings #2 for the Preserve at Rock Creek Subdivision (August, 2012).

Specific Data

Montgomery County required this project and the accompanying force main to avoid gravity sewer construction through an environmentally sensitive area on the project site.

Cost Change

Costs were increased based on developer provided estimates.

STATUS Preliminary Design (WSSC Contract No. CP4770A08,).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are preliminary design level estimates and may change depending on site-specific conditions and design constraints. Estimated completion date is developer dependent. Design and construction will be performed by the developer under a Memorandum of Understanding. No WSSC rate supported debt will be used for this project.

COORDINATION

Montgomery County Government and WSSC Project S-38.02, Preserve at Rock Creek WWPS Force Main.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	....
	Other	....
Facility Costs	Maintenance	....
	Debt Service	....
Total Costs.....		....
Impact on Water or Sewer Rate.....		....

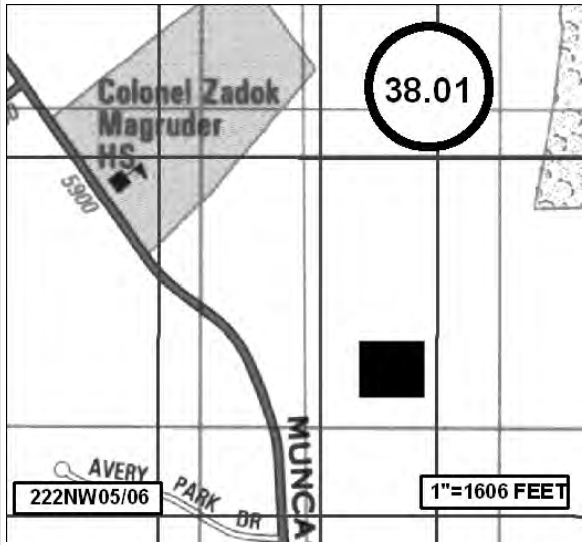
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 10
Date First Approved	FY 10
Initial Cost Estimate	1,124
Cost Estimate Last FY	1,194
Present Cost Estimate	1,967
Approved Request, Last FY	265
Total Expenditures & Encumbrances	10
Approval Request FY 15	683
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Site provided by applicant
% Project Completion:	D-25%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
103801	S-38.02	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Preserve at Rock Creek WWPS Force Main

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Upper Rock Creek P.A. 22

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**40**	18	8	**14**	7	7					
Land											
Site Improvements & Utilities											
Construction	**302**		98	**204**	110	94					
Other	**49**		16	**33**	18	15					
Total	**391**	**18**	**122**	**251**	**135**	**116**					

C. Funding Schedule (000's)

Contribution/Other	**391**	18	122	**251**	135	116					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of 2,600 feet of 3-inch diameter force main to serve The Preserve at Rock Creek Subdivision.

Service Area Rock Creek Drainage Basin **Capacity** 0.07 MGD **Population** 200

JUSTIFICATION

Plans & Studies

M-NCP&PC Upper Rock Creek Area Master Plan (April 2004); The Amended Hydraulic Planning Analysis and Letter of Findings #2 for the Preserve at Rock Creek Subdivision (August, 2012).

Specific Data

Montgomery County required this project and the accompanying wastewater pumping station to avoid gravity sewer construction through an environmentally sensitive area on the project site.

Cost Change

Costs were increased for inflation.

STATUS Preliminary Design (WSSC Contract No. DA4770D08,).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are preliminary design level estimates and may change depending on site-specific conditions and design constraints. Estimated completion date is developer dependent. No WSSC rate support debt will be used for this project.

COORDINATION

Maryland State Highway Administration, Montgomery County Government and WSSC Project S-38.01, Preserve at Rock Creek Wastewater Pumping Station.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	46	17
	Debt Service	....	....
Total Costs		46	17
Impact on Water or Sewer Rate		....	

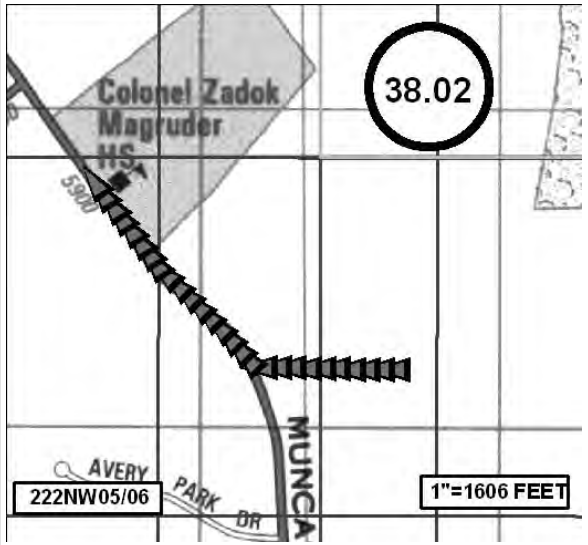
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 10
Date First Approved	FY 10
Initial Cost Estimate	339
Cost Estimate Last FY	380
Present Cost Estimate	391
Approved Request, Last FY	74
Total Expenditures & Encumbrances	18
Approval Request FY 15	135
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not determined
% Project Completion:	D-25%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**



SENECA WASTEWATER TREATMENT PLANT PROJECTS
(costs in thousands)

PROJECT NUMBER	PROJECT NAME	ADOPTED FY'14 TOTAL COST	ADOPTED FY'15 TOTAL COST	CHANGE $	CHANGE %	SIX-YEAR COST	COMPLETION DATE (est)
S-53.21	Seneca WWTP Enhanced Nutrient Removal	$13,513	$13,618	$105	0.8%	$718	January 2015
S-53.22	Seneca WWTP Expansion, Part 2	29,502	28,984	(518)	-1.8%	1,970	January 2015
	TOTALS	$43,015	$42,602	($413)	-1.0%	$2,688	

Summary: The Seneca WWTP Enhanced Nutrient Removal (ENR) project (S-53.21) provides for the planning, design, and construction of improvements necessary to meet the requirements of MDE's Enhanced Nutrient Removal Program. The Seneca WWTP Expansion, Part 2 project (S-53.22) provides for the planning, design, and construction of improvements at the Seneca WWTP necessary to meet projected growth in this service area by increasing the capacity from 20 MGD to 26 MGD while also meeting the requirements of MDE's Enhanced Nutrient Removal Program. The individual project description forms on the pages following this summary provide additional information.

Cost Impact: Project costs for the Seneca WWTP Enhanced Nutrient Removal (ENR) (S-53.21) and the Seneca WWTP Expansion, Part 2 (S-53.22) were revised to reflect current construction cost estimates.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
073800	S-53.21	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Seneca WWTP Enhanced Nutrient Removal

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Lower Seneca P.A. 18

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**4,224**	3,450	551	**223**	223						
Land											
Site Improvements & Utilities											
Construction	**8,857**	6,056	2,400	**401**	401						
Other	**537**		443	**94**	94						
Total	**13,618**	**9,506**	**3,394**	**718**	**718**						

C. Funding Schedule (000's)

WSSC Bonds	**7,398**	3,286	3,394	**718**	718						
State Aid	**6,220**	6,220									

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of improvements at the Seneca WWTP necessary to meet the requirements of the Maryland Department of the Environment (MDE) Enhanced Nutrient Removal (ENR) Program at 20 MGD. The recommendations include modification of the existing basins to Flexible Modified Ludzack-Ettinger (MLE) mode, methanol storage and distribution system, upgrade of the existing 13 filters, and expansion of the filter gallery to include 3 new sand filters designed for phosphorous removal down to the permit goal of 0.18 mg/l at the maximum month flow of 33 MGD (design flow is 26 MGD).

Service Area Seneca Creek Drainage Basin

JUSTIFICATION

Plans & Studies

ENR Alternatives for the Seneca Wastewater Treatment Plant, Gannett Fleming (June 2005); Maryland Department of the Environment, Feasibility Study Approval Letter (July 27, 2005); WSSC Preliminary Engineering Report (September 2008); Design Criteria Report (November 2008).

Specific Data

The Bay Restoration Fund Enhanced Nutrient Removal (ENR) Program's purpose is to meet the commitments under the 2000 Chesapeake Bay Agreement. Reductions of nutrient pollutants from all sources including sewage treatment plants are necessary. The ENR strategy builds on the success of the Biological Nutrient Removal (BNR) Program already in place. The MDE is using the Bay Restoration Fund to upgrade the 66 major wastewater treatment plants which discharge to the Chesapeake Bay with ENR technologies. Once upgraded, these plants are expected to reduce nitrogen and phosphorus in the wastewater down to 3 mg/l total nitrogen and 0.3 mg/l total phosphorus, achieving approximately one-third of the needed reduction under the Chesapeake Bay 2000 Agreement. Other pollutants will continue to be reduced by more than 90%.

Cost Change

Not Applicable

STATUS Under Construction (WSSC Contract Nos. CD4260A05 , CD4260C05).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are based upon the actual bid and future change orders. The funding schedule reflects the final cost sharing agreement with MDE. WSSC's share of the project will be financed through a low interest loan from the MDE's Water Quality Administration State Revolving Loan Program. WSSC and MDE are negotiating a consent agreement for this project. The currently proposed date for the ENR substantial completion is January 1, 2016 and effluent discharge compliance by January 1, 2017.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	....	....
	Debt Service	583	 16
Total Costs		583	 16
Impact on Water or Sewer Rate		1¢	 16

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 07
Date First Approved	FY 07
Initial Cost Estimate	22,862
Cost Estimate Last FY	13,513
Present Cost Estimate	13,618
Approved Request, Last FY	2,542
Total Expenditures & Encumbrances	9,506
Approval Request FY 15	718
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	No land or R/W required
% Project Completion:	C-50%
Est. Completion Date:	January 2015

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 53.21 **Project Name: Seneca WWTP Enhanced Nutrient Removal**

COORDINATION

Montgomery County Government, Montgomery County Department of Environmental Protection, Maryland Department of the Environment and WSSC Project S-53.22, Seneca WWTP Expansion, Part 2.

NOTE This project supports 100% Environmental Regulation.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
083802	S-53.22	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Seneca WWTP Expansion, Part 2

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Lower Seneca P.A. 18

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**7,055**	5,505	1,104	**446**	446						
Land											
Site Improvements & Utilities											
Construction	**20,660**	13,753	5,640	**1,267**	1,267						
Other	**1,269**		1,012	**257**	257						
Total	**28,984**	**19,258**	**7,756**	**1,970**	**1,970**						

C. Funding Schedule (000's)

SDC	**28,984**	19,258	7,756	**1,970**	1,970						

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of improvements at the Seneca WWTP necessary to meet the projected growth in this service area while adhering to the requirements of the Maryland Department of the Environment (MDE) Enhanced Nutrient Removal (ENR) Program at 26 MGD (an increase from 20 MGD). The project will provide an additional aeration basin, an additional 150-foot clarifier, expansion of the filter gallery to include 4 new sand filters designed for phosphorous removal down to the permit goal of 0.18 mg/l at the maximum month flow of 33 MGD (design flow is 26 MGD), and biosolids handling system improvements. The biosolids handling improvements consist of an additional centrifuge and biosolids conveyance modifications which will provide system redundancy. The electrical distribution system will also be evaluated.

Service Area Seneca Creek Drainage Basin

JUSTIFICATION

Plans & Studies

ENR Alternatives for the Seneca Wastewater Treatment Plant, Gannett Fleming (June 2005); Maryland Department of the Environment, Feasibility Study Approval Letter (July 27, 2005); WSSC Preliminary Engineering Report (September 2008); Design Criteria Report (November 2008).

Specific Data

The planned improvements at the Seneca WWTP will adhere to the requirements of MDE's ENR Program at 26 MGD in accordance with the reduction goals under the Chesapeake Bay 2000 Agreement. The design provides for phosphorous removal down to the permit goal of 0.18 mg/l at the maximum month flow of 33 MGD (design flow is 26 MGD).

Cost Change

Not Applicable

STATUS Under Construction (WSSC Contract No. CD4260B05,).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are based upon actual bid.

COORDINATION

Montgomery County Government, Montgomery County Department of Environmental Protection, Maryland Department of the Environment and WSSC Project S-53.21, Seneca WWTP Enhanced Nutrient Removal.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	....
	Other	....
Facility Costs	Maintenance	....
	Debt Service	....
Total Costs.....		....
Impact on Water or Sewer Rate.....		....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 08
Date First Approved	FY 07
Initial Cost Estimate	16,478
Cost Estimate Last FY	29,502
Present Cost Estimate	28,984
Approved Request, Last FY	6,965
Total Expenditures & Encumbrances	19,258
Approval Request FY 15	1,970
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Public/Agency owned land
% Project Completion:	C-50%
Est. Completion Date:	January 2015

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

CABIN BRANCH AREA PROJECTS
(costs in thousands)

PROJECT NUMBER	PROJECT NAME	ADOPTED FY'14 TOTAL COST	ADOPTED FY'15 TOTAL COST	CHANGE $	CHANGE %	SIX-YEAR COST	COMPLETION DATE (est)
S-84.47	Clarksburg Triangle Outfall Sewer, Part 2	$2,465	$2,539	$74	3.0%	$496	Developer Dependent
S-84.60	Cabin Branch Wastewater Pumping Station	2,274	2,342	68	3.0%	2,317	Developer Dependent
S-84.61	Cabin Branch WWPS Force Main	411	424	13	3.2%	407	Developer Dependent
	TOTALS	$5,150	$5,305	$155	3.0%	$3,220	

Summary: This group of Development Services Process (DSP) projects is programmed to serve new development in the Clarksburg area west of Route 355, including the Clarksburg Triangle and Cabin Branch areas. The need for these projects was identified in the Stage 3 requirements of the Clarksburg Master Plan and Hyattstown Special Study Area reports. Estimated completion schedules are dependent upon the property developers' schedules. No WSSC rate supported debt will be used for these projects. The projects that will impact local wetlands will be coordinated with the Maryland-National Capital Park & Planning Commission, Montgomery County Department of Environmental Protection, Maryland Department of the Environment, Maryland Department of Natural Resources, and the U.S. Fish & Wildlife Service. The individual project description forms on the pages following this summary provide additional information.

Cost Impact: Project costs were increased for inflation.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
023811	S-84.47	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Clarksburg Triangle Outfall Sewer, Part 2

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clarksburg & Vicinity P.A. 13

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**468**	173	259	**36**	34	2					
Land											
Site Improvements & Utilities											
Construction	**1,795**	250	1,150	**395**	353	42					
Other	**276**		211	**65**	58	7					
Total	**2,539**	**423**	**1,620**	**496**	**445**	**51**					

C. Funding Schedule (000's)

Contribution/Other	**2,539**	423	1,620	**496**	445	51					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of approximately 4,200 feet of 24-inch, 350 feet of 21-inch, 1,760 feet of 18-inch, and 1,040 feet of 15-inch diameter outfall sewer along a tributary west of and parallel to U.S. Interstate 270, north of West Old Baltimore Road. This sewer is projected to serve new development in Stage 3 of the Clarksburg planning area west of I-270 and potentially serve Clarksburg Development Stage 4 as specified in the 1994 Clarksburg Master Plan.

Service Area Seneca Creek Drainage Basin **Capacity** 10.8 MGD **Population** 16,500

JUSTIFICATION

Plans & Studies

Clarksburg Master Plan and Hyattstown Special Study Area (1994); Montgomery County Council Resolution Number 14-772; Water and Sewer Plan Service Area Map Amendments for the Clarksburg Master Plan Area (Adopted February 13, 2001); Clarksburg Stages 3 and 4 Area Facility Plan, Rodgers Consulting (December 2004).

Specific Data

The Cabin Branch neighborhood includes Clarksburg Triangle and other Stage 3 properties west of I-270 and east of Clarksburg Road.

Cost Change

Costs were increased for inflation.

STATUS Under Construction (WSSC Contract Nos. DA3326D02 , DA3326H02).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are based upon information provided by the applicant. Design and construction will be performed by the developer under a Systems Extension Permit. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Maryland-National Capital Park & Planning Commission, Montgomery County Department of Environmental Protection, Maryland Department of the Environment (Non-Tidal Wetlands Permit), Maryland Department of Natural Resources, U.S. Fish and Wildlife Service and WSSC Projects S-84.46, Clarksburg Triangle Outfall Sewer, Part 1 and W-46.14, Clarksburg Area Stage 3 Water Main, Parts 1, 2 & 3.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	140	17
	Debt Service	....	....
Total Costs		140	17
Impact on Water or Sewer Rate		....	

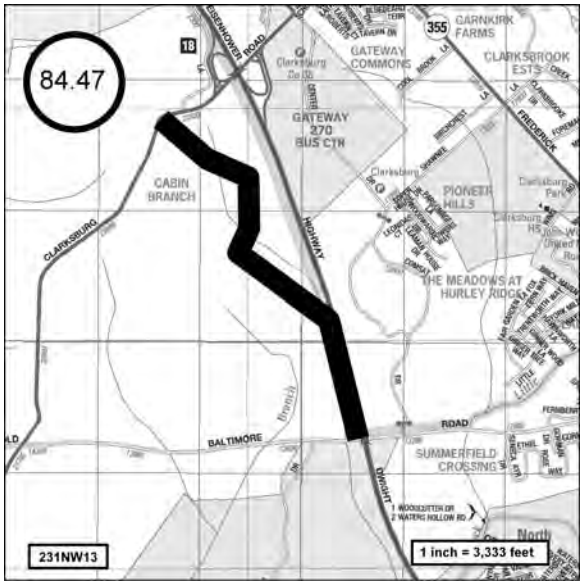
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 02
Date First Approved	FY 02
Initial Cost Estimate	22
Cost Estimate Last FY	2,465
Present Cost Estimate	2,539
Approved Request, Last FY	1,328
Total Expenditures & Encumbrances	423
Approval Request FY 15	445
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	C-10%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
023807	S-84.60	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Cabin Branch Wastewater Pumping Station

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clarksburg & Vicinity P.A. 13

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**483**	12	11	**460**	75	315	70				
Land											
Site Improvements & Utilities											
Construction	**1,555**			**1,555**	315	1,047	193				
Other	**304**		2	**302**	59	204	39				
Total	**2,342**	**12**	**13**	**2,317**	**449**	**1,566**	**302**				

C. Funding Schedule (000's)

Contribution/Other	**2,342**	12	13	**2,317**	449	1,566	302				

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of a 0.9 MGD wastewater pumping station. This wastewater pumping station is projected to serve new development in Stage 3 of the Clarksburg planning area west of I-270.

Service Area Seneca Creek Drainage Basin **Capacity** 0.9 MGD **Population** 1,550

JUSTIFICATION

Plans & Studies

Clarksburg Master Plan and Hyattstown Special Study Area (1994); Montgomery County Council Resolution Number 14-772; Water and Sewer Plan Service Area Map Amendments for the Clarksburg Master Plan Area (Adopted February 13, 2001); Clarksburg Stages 3 and 4 Area Facility Plan, Rodgers Consulting (December 2004). WSSC Project # DA3326Z02 Cabin Branch - Amended Phase I Letter of Findings #5 (March, 2013)

Specific Data

The Cabin Branch neighborhood includes Clarksburg Triangle and other Stage 3 properties west of I-270 and east of Clarksburg Road.

Cost Change

Costs were increased for inflation.

STATUS Facility Planning (WSSC Contract Nos. CP3326A02 , CP3326B02).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are planning level estimates and may change depending on site-specific conditions and design constraints. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Maryland-National Capital Park & Planning Commission, Montgomery County Department of Environmental Protection, Maryland Department of the Environment (Non-Tidal Wetlands Permit), Maryland Department of Natural Resources, U.S. Fish and Wildlife Service and WSSC Projects S-84.46, Clarksburg Triangle Outfall Sewer, Part 1 and S-84.61, Cabin Branch WWPS Force Main.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	....
	Other	....
Facility Costs	Maintenance	....
	Debt Service	....
Total Costs.....		....
Impact on Water or Sewer Rate.....		....

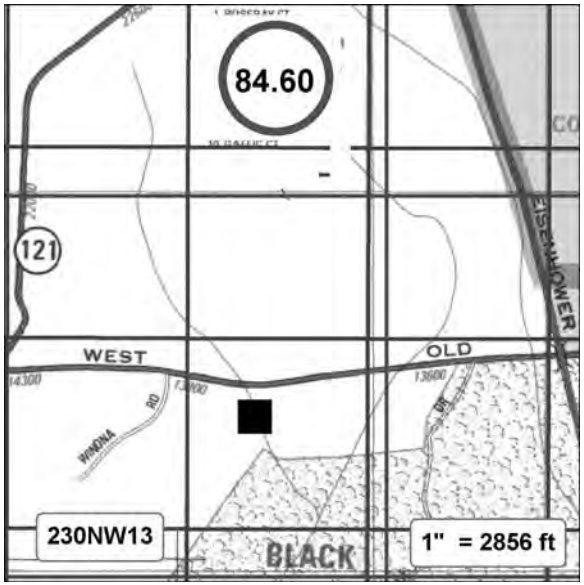
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 02
Date First Approved	FY 02
Initial Cost Estimate	22
Cost Estimate Last FY	2,274
Present Cost Estimate	2,342
Approved Request, Last FY	437
Total Expenditures & Encumbrances	12
Approval Request FY 15	449
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	P-95%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
023808	S-84.61	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Cabin Branch WWPS Force Main

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clarksburg & Vicinity P.A. 13

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**90**		15	**75**	27	45	3				
Land											
Site Improvements & Utilities											
Construction	**279**			**279**	97	164	18				
Other	**55**		2	**53**	19	31	3				
Total	**424**		**17**	**407**	**143**	**240**	**24**				

C. Funding Schedule (000's)

Contribution/Other	**424**		17	**407**	143	240	24				

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of 2,000 feet of 10-inch diameter force main downstream of the Cabin Branch Wastewater Pumping Station. The wastewater pumping station and force main will provide service to new development in Stage 3 of the Clarksburg planning area, west of I-270.

Service Area Seneca Creek Drainage Basin **Capacity** 0.9 MGD **Population** 1,550

JUSTIFICATION

Plans & Studies

Clarksburg Master Plan and Hyattstown Special Study Area (1994); Montgomery County Council Resolution Number 14-772; Water and Sewer Plan Service Area Map Amendments for the Clarksburg Master Plan Area (Adopted February 13, 2001); Clarksburg Stages 3 and 4 Area Facility Plan, Rodgers Consulting (December 2004). WSSC Project #DA3326Z02 Cabin Branch - Amended Phase I Letter of Findings #5 (March, 2013)

Specific Data

The Cabin Branch neighborhood includes Clarksburg Triangle and other Stage 3 properties west of I-270 and east of Clarksburg Road.

Cost Change

Costs were increased for inflation.

STATUS Planning

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are planning level estimates and may change depending on pipe size decisions, site-specific conditions, and design constraints. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project. Land costs are included in WSSC Project S-201.00.

COORDINATION

Maryland-National Capital Park & Planning Commission, Montgomery County Department of Environmental Protection, Maryland Department of the Environment (Non-Tidal Wetlands Permit), Maryland Department of Natural Resources, U.S. Fish and Wildlife Service and WSSC Projects S-84.46, Clarksburg Triangle Outfall Sewer, Part 1, S-84.47, Clarksburg Triangle Outfall Sewer, Part 2 and S-84.60, Cabin Branch Wastewater Pumping Station.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	36	18
	Debt Service	....	....
Total Costs		36	18
Impact on Water or Sewer Rate		....	

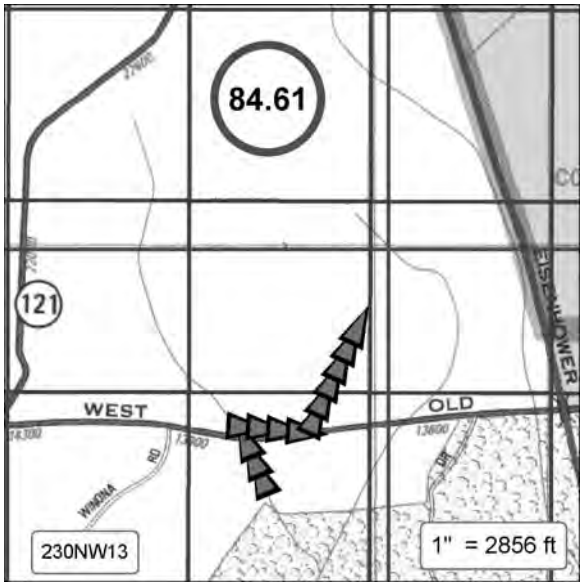
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 02
Date First Approved	FY 02
Initial Cost Estimate	22
Cost Estimate Last FY	411
Present Cost Estimate	424
Approved Request, Last FY	138
Total Expenditures & Encumbrances	
Approval Request FY 15	143
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	P-100%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
083803	S-84.65	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Tapestry Wastewater Pumping Station

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clarksburg & Vicinity P.A. 13

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**114**	7	42	**65**	33	32					
Land											
Site Improvements & Utilities											
Construction	**481**		159	**322**	161	161					
Other	**88**		30	**58**	29	29					
Total	**683**	**7**	**231**	**445**	**223**	**222**					

C. Funding Schedule (000's)

Contribution/Other	**683**	7	231	**445**	223	222					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of a 0.34 MGD wastewater pumping station to serve the Tapestry Subdivision.

Service Area Seneca Creek Drainage Basin **Capacity** 0.34 MGD **Population** 590

JUSTIFICATION

Plans & Studies

Tapestry Subdivision Amended Hydraulic Planning Analysis and Letter of Findings #1 (November, 2006).

Cost Change

Costs were increased for inflation.

STATUS Planning (WSSC Contract No. DA3993Z04,).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are planning level estimates and may change depending on site-specific conditions and design constraints. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Montgomery County Government, Local Community Civic Associations and WSSC Project S-84.66, Tapestry WWPS Force Main.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	....
	Other	....
Facility Costs	Maintenance	....
	Debt Service	....
Total Costs		....
Impact on Water or Sewer Rate		....

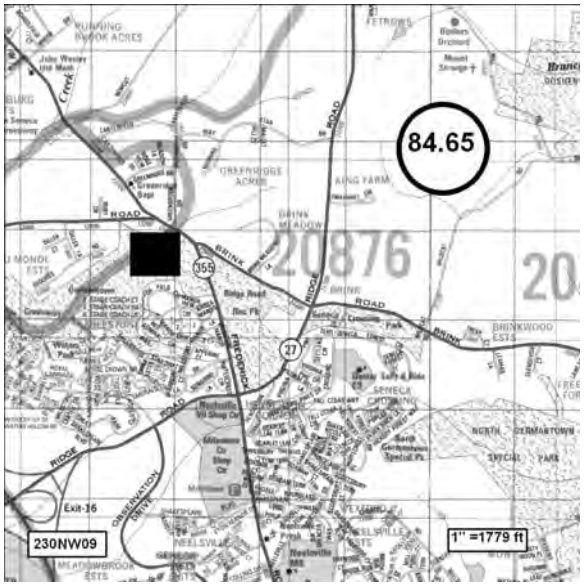
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 08
Date First Approved	FY 08
Initial Cost Estimate	552
Cost Estimate Last FY	663
Present Cost Estimate	683
Approved Request, Last FY	216
Total Expenditures & Encumbrances	7
Approval Request FY 15	223
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Site provided by applicant
% Project Completion:	P-100%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
083804	S-84.66	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Tapestry WWPS Force Main

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clarksburg & Vicinity P.A. 13

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**26**	8	5	**13**	8	5					
Land											
Site Improvements & Utilities											
Construction	**91**		34	**57**	32	25					
Other	**17**		6	**11**	6	5					
Total	**134**	**8**	**45**	**81**	**46**	**35**					

C. Funding Schedule (000's)

Contribution/Other	**134**	8	45	**81**	46	35					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of 2,150 feet of 4-inch diameter force main to serve the Tapestry Subdivision.

Service Area Seneca Creek Drainage Basin **Population** 590

JUSTIFICATION

Plans & Studies

Tapestry Subdivision Amended Hydraulic Planning Analysis and Letter of Findings #1 (November, 2006).

Cost Change

Costs were increased for inflation.

STATUS Planning

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are planning level estimates and may change depending on site-specific conditions and design constraints. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Montgomery County Government, Maryland-National Capital Park & Planning Commission (Mandatory Referral Process), Local Community Civic Associations and WSSC Project S-84.65, Tapestry Wastewater Pumping Station.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	38	17
	Debt Service	....	....
Total Costs		38	17
Impact on Water or Sewer Rate		....	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 08
Date First Approved	FY 08
Initial Cost Estimate	110
Cost Estimate Last FY	130
Present Cost Estimate	134
Approved Request, Last FY	45
Total Expenditures & Encumbrances	8
Approval Request FY 15	46
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	P-100%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
153800	S-85.21	Add

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Shady Grove Station Sewer Augmentation

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Gaithersburg & Vicinity P.A. 20

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**41**			**41**	21	10	10				
Land											
Site Improvements & Utilities											
Construction	**1,919**			**1,919**	608	634	618	59			
Other	**294**			**294**	94	96	94	10			
Total	**2,254**			**2,254**	**723**	**740**	**722**	**69**			

C. Funding Schedule (000's)

Contribution/Other	**2,254**			**2,254**	723	740	722	69			

D. Description & Justification

DESCRIPTION

This project provides for the planning, design and construction of approximately 4,000 feet of 15-inch to 18-inch diameter sewers. These sewers will replace existing an 10-inch diameter sewer main near Crabbs Branch Creek and CSX Railroad and terminate at a manhole approximatley 300 feet southeast of Redland Road.

Service Area Rock Creek Drainage Basin **Capacity** 1.0 - 2.7 mgd **Population** 5,500

JUSTIFICATION

Plans & Studies

Due to development density proposed in DA5409Z12, the projected peak wastewater flow exceeds the capacity of existing sewers.

Specific Data

The new 15-inch and 18-inch diameter sewers will serve the area encompassed by Shady Grove Road, I-370 and CSX Railroad.

Cost Change

Not applicable.

STATUS Planning (WSSC Contract No. DA5409Z12,).

OTHER

The project scope was developed for the FY 2015 CIP and has a total estimated cost of $2,254,000. The expenditures and schedule projections shown in Block B are planning level estimates and may change based on site-specific conditions and design constraints. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Montgomery County Department of Public Works and Transportation and Montgomery County Government.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	74	19
	Debt Service	....	....
Total Costs		74	19
Impact on Water or Sewer Rate		....	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 15
Date First Approved	FY 15
Initial Cost Estimate	2,254
Cost Estimate Last FY	
Present Cost Estimate	2,254
Approved Request, Last FY	
Total Expenditures & Encumbrances	
Approval Request FY 15	723
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	P-10%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
073801	S-94.12	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Damascus WWTP Enhanced Nutrient Removal

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Damascus & Vicinity P.A. 11

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**3,056**	2,806	241	**9**	9						
Land											
Site Improvements & Utilities											
Construction	**4,437**	4,400	35	**2**	2						
Other	**43**		41	**2**	2						
Total	**7,536**	**7,206**	**317**	**13**	**13**						

C. Funding Schedule (000's)

WSSC Bonds	**2,301**	1,971	317	**13**	13						
State Aid	**5,235**	5,235									

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of improvements at the Damascus WWTP necessary to meet the requirements of the Maryland Department of the Environment (MDE) Enhanced Nutrient Removal (ENR) Program. The project will convert the existing basin configuration to Bardenpho process and provide methanol feed capability. The existing two process trains will be divided into four process trains which will provide tankage/process redundancy for periodic maintenance. Splitting the existing process trains into four trains also allows the treatment capacity to more closely match the current influent flows. The carbon source will be designed for methanol and several other biodiesel byproducts. Additional improvements will include modifications to reactors, Final Clarifier Distribution Box, Supplemental Carbon Feed Facilities, Supplemental Carbon Feed Building, demolition of existing facilities, instrumentation, and associated site work.

Service Area Patuxent North Drainage Basin

JUSTIFICATION

Plans & Studies

ENR Alternatives for Damascus WWTP, Gannett Fleming (June 2005); Maryland Department of the Environment, Feasibility Study Approval Letter (July 27, 2005); Maryland Department of the Environment, Eligibility Determination Letter (December 22, 2008).

Specific Data

The Bay Restoration Fund Enhanced Nutrient Removal (ENR) Program's purpose is to meet the commitments under the 2000 Chesapeake Bay Agreement. Reductions of nutrient pollutants from all sources including sewage treatment plants are necessary. The ENR strategy builds on the success of the Biological Nutrient Removal (BNR) Program already in place. The MDE is using the Bay Restoration Fund to upgrade the 66 major wastewater treatment plants which discharge to the Chesapeake Bay with ENR technologies. Once upgraded, these plants are expected to reduce nitrogen and phosphorus in the wastewater down to 3 mg/l total nitrogen and 0.3 mg/l total phosphorus, achieving approximately one-third of the needed reduction under the Chesapeake Bay 2000 Agreement. Other pollutants will continue to be reduced by more than 90%.

Cost Change

Not Applicable

STATUS Under Construction (WSSC Contract No. CD4261A05,).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are based upon the construction contract. The funding schedule reflects the final cost sharing agreement with the MDE. Funding shown in FY'14 includes site/landscaping restoration and future change orders. The NPDES effluent discharge compliance date is January 1, 2014.

E. Annual Operating Budget Impact (000's)

		FY of Impact	
Program Costs	Staff	....	
	Other	....	
Facility Costs	Maintenance	....	
	Debt Service	35	15
Total Costs		35	15
Impact on Water or Sewer Rate		....	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 07
Date First Approved	FY 07
Initial Cost Estimate	1,560
Cost Estimate Last FY	7,707
Present Cost Estimate	7,536
Approved Request, Last FY	23
Total Expenditures & Encumbrances	7,206
Approval Request FY 15	13
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	No land or R/W required
% Project Completion:	C-99%
Est. Completion Date:	February 2015

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 94.12 **Project Name: Damascus WWTP Enhanced Nutrient Removal**

COORDINATION

Montgomery County Government, Montgomery County Department of Environmental Protection and Maryland Department of the Environment.

NOTE This project supports 100% Environmental Regulation.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
153801	S-103.16	Add

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Cabin John Trunk Sewer Relief

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bethesda-Chevy Chase & Vicinity P.A. 35

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**1,159**			**1,159**	386	386	387				
Land											
Site Improvements & Utilities											
Construction	**5,796**			**5,796**	1,932	1,932	1,932				
Other	**1,044**			**1,044**	348	348	348				
Total	**7,999**			**7,999**	**2,666**	**2,666**	**2,667**				

C. Funding Schedule (000's)

Contribution/Other	**7,999**			**7,999**	2,666	2,666	2,667				

D. Description & Justification

DESCRIPTION

Approximately 2,700 feet of 36-inch to 42-inch diameter sewer in two segments in the Cabin John Basin, southwest of River Road and Seven Locks Road.

Service Area Cabin John Drainage Basin **Capacity** 29.37 to 36.74 MGD

JUSTIFICATION

Plans & Studies

DA5238Z11 Mid-Pike Plaza Hydraulic Planning Analysis.

Cost Change

Not applicable.

STATUS Planning (WSSC Contract No. DA5238Z11,).

OTHER

The project scope was developed for the FY 2015 CIP and has an estimated total cost of $7,999,000. The expenditures and schedule projections shown in Block B are planning level estimates and may change depending upon site-specific conditions and design constraints. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION

Maryland-National Capital Park & Planning Commission, Montgomery County Department of Environmental Protection, Maryland Department of the Environment, Maryland Department of Natural Resources and WSSC Projects S-25.04, Mid-Pike Plaza Sewer Main, Phase 1 and S-25.05, Mid-Pike Plaza Sewer Main, Phase 2.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	50	18
	Debt Service	....	....
Total Costs		50	18
Impact on Water or Sewer Rate		....	

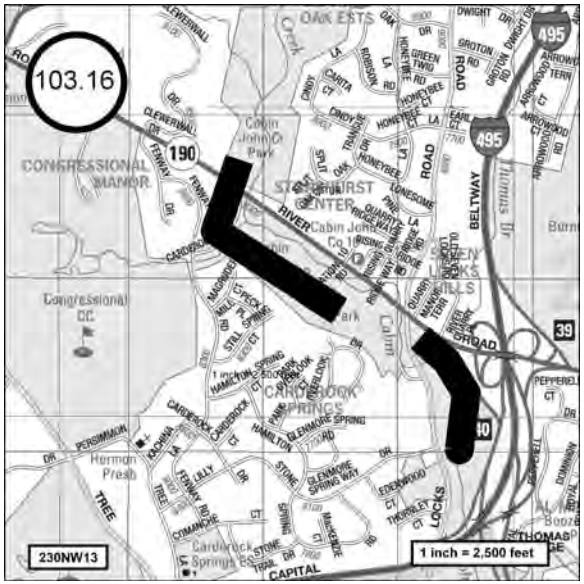
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 15
Date First Approved	FY 15
Initial Cost Estimate	7,999
Cost Estimate Last FY	
Present Cost Estimate	7,999
Approved Request, Last FY	
Total Expenditures & Encumbrances	
Approval Request FY 15	2,666
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Land & R/W to be acquired
% Project Completion:	P-50%
Est. Completion Date:	FY 2017

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
983854	S-201.00	Change

2. Date: October 1, 2013

Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Land & Rights-of-Way Acquisition - Montgomery County

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision											
Land	**24**			**24**	12	12					
Site Improvements & Utilities											
Construction											
Other											
Total	**24**			**24**	**12**	**12**					

C. Funding Schedule (000's)

Contribution/Other	**24**			**24**	12	12					

D. Description & Justification

DESCRIPTION

This PDF provides a consolidated estimate of funding for the acquisition of land and rights-of-way for previously approved projects and new projects, as needed. Expenditures are programmed based upon anticipated schedules and are required for the completion of those specific projects. These costs do not include purchases which have already been completed.

JUSTIFICATION

Plans & Studies

Acquisition needs are determined by the WSSC and are based upon facility planning efforts, alignment studies, field surveys, realignments required by other agencies, or requirements identified within the Development Services Process (DSP).

Specific Data

Consolidation of expenditures for land and rights-of-way acquisitions provides flexibility in expending funds in a specific fiscal year and permits the WSSC to respond to the uncertainty of project-specific implementation schedules. Other considerations include the accommodation of unpredictable delays for extended community outreach which impacts the timing of a planned purchase, unanticipated rights-of-way requirements for approved projects due to minor alignment changes identified late in the design phase, and the need to assure the WSSC an equitable negotiation position by avoiding project-specific cost displays prior to contacting property owners.

Cost Change

Not applicable.

STATUS Not Applicable

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are estimates only and may change based upon actual negotiations. When purchases are complete, the actual cost will be displayed in the expenditure schedule on the appropriate project description form elsewhere in this program.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff	.....	....
	Other	.....	....
Facility Costs	Maintenance	.....	....
	Debt Service	.....	....
Total Costs		.....	....
Impact on Water or Sewer Rate		.....	....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 98
Date First Approved	FY 98
Initial Cost Estimate	
Cost Estimate Last FY	24
Present Cost Estimate	24
Approved Request, Last FY	12
Total Expenditures & Encumbrances	
Approval Request FY 15	12
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Land & R/W to be acquired
% Project Completion:	Not Applicable
Est. Completion Date:	Not Applicable

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

PROJECTS PENDING CLOSE-OUT

Montgomery County Sewer Projects
(costs in thousands)

Project Number	Agency Number	Project Name	Estimated Total Cost	Expenditures Thru FY'13	Estimated Expenditures FY'14	Remarks
123800	S-82.21	Montgomery College Germantown Campus Sewer	$791	$716	$75	Project completion expected in FY'14.
		TOTALS	$791	$716	$75	

Section 3 - Bi-County Water Projects

DATE: October 1, 2013

FINANCIAL SUMMARY

BI-COUNTY WATER PROJECTS

(ALL FIGURES IN THOUSANDS)

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 13	EST. EXPEND 14	TOTAL SIX YEARS	EXPENDITURE SCHEDULE YR 1 15	YR 2 16	YR 3 17	YR 4 18	YR 5 19	YR 6 20	BUDGET REQUEST 15	PDF PAGE NUM
W-73.18	Power Reliability and Arc Flash Implementation	4,813	3,845	853	115	115	0	0	0	0	0	115	3-2
W-73.19	Potomac WFP Outdoor Substation No. 2 Replacement	15,572	1,268	59	14,245	4,785	5,885	3,575	0	0	0	4,785	3-4
W-73.20	Potomac WFP Stage 2 Disinfection Byproducts Rule Implementation	10,480	4,071	6,172	237	237	0	0	0	0	0	237	3-5
W-73.21	Potomac WFP Corrosion Mitigation	18,164	439	10,016	7,709	7,590	119	0	0	0	0	7,590	3-6
W-73.22	Potomac WFP Pre-Filter Chlorination & Air Scour Improvements	7,935	57	511	7,367	767	447	3,761	2,392	0	0	767	3-7
W-73.30	Potomac WFP Submerged Channel Intake	28,433	2,308	1,263	24,862	1,076	3,649	15,918	4,219	0	0	1,076	3-8
W-73.32	Potomac WFP Main Zone Pipeline	1,125	100	335	690	690	0	0	0	0	0	690	3-10
W-127.01	Bi-County Water Tunnel	146,489	118,846	25,242	2,401	2,401	0	0	0	0	0	2,401	3-11
W-139.02	Duckett & Brighton Dam Upgrades	15,167	6,233	2,983	5,951	3,689	2,262	0	0	0	0	3,689	3-14
W-161.01	Large Diameter Water Pipe Rehabilitation Program	345,476	38,788	31,915	274,773	38,275	40,748	46,789	48,194	49,639	51,128	38,275	3-15
W-172.05	Patuxent WFP Phase II Expansion	62,904	6,106	2,100	54,698	11,130	15,383	15,383	12,802	0	0	11,130	3-18
W-172.07	Patuxent Raw Water Pipeline	22,973	8,451	605	13,917	3,095	1,372	4,355	5,095	0	0	3,095	3-20
W-172.08	Rocky Gorge Pump Station Upgrade	17,685	4,132	1,139	12,414	6,772	5,642	0	0	0	0	6,772	3-21
W-202.00	Land & Rights-of-Way Acquisition - Bi-County	368	0	205	163	80	25	20	15	13	10	80	3-22
	Projects Pending Close-Out	130,867	130,413	454	0	0	0	0	0	0	0	0	3-23
	TOTAL BI-COUNTY WATER PROJECTS	828,451	325,057	83,852	419,542	80,702	75,532	89,801	72,717	49,652	51,138	80,702	

Denotes projects which include an environmental component (see page 15 in the opening narrative.)

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
033805	W-73.18	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Power Reliability and Arc Flash Implementation

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**4,687**	3,845	742	**100**	100						
Land											
Site Improvements & Utilities											
Construction											
Other	**126**		111	**15**	15						
Total	**4,813**	**3,845**	**853**	**115**	**115**						

C. Funding Schedule (000's)

WSSC Bonds	**4,813**	3,845	853	**115**	115						

D. Description & Justification

DESCRIPTION

This project provides for a comprehensive analysis of WSSC's emergency power capabilities, reliability and requirements for both the water treatment & distribution system and wastewater treatment & collection system. Requirements identified will be prioritized. This project also provides for an arc flash and shock hazard study for all facilities.

Service Area Bi-County Area

JUSTIFICATION

Plans & Studies

"Draft Chapter III - Needs Assessment Chapter IV - Alternatives Development", O`Brien & Gere Engineers Inc. (November 2001); In-house Study (April 2002); WSSC Memorandum from Chuck Attick to Kathy McGinnis (May 2008); "Accelerated Potomac Power Reliability Analysis - Part 2 - Electrical Analysis for Design and Construction Phase", Greeley & Hansen (June 2012).

Cost Change

Planning and Design costs for future projects have been removed.

STATUS Planning (WSSC Contract No. BM4620A07,).

OTHER

The project scope remains the same. Any additional CIP-sized projects identified through the modeling and analysis processes will be split out into new, separate projects in the appropriate counties.

COORDINATION

Montgomery County Government, Prince George's County Government, Montgomery County Department of Environmental Protection, Potomac Electric Power Company, Washington Gas Light Company, Maryland Department of the Environment, Prince George's County Department of Environmental Resources, Utilities Inc. of Maryland and Baltimore Gas & Electric.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	....	....
	Debt Service	331	 15
Total Costs		331	 15
Impact on Water or Sewer Rate			....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 04
Date First Approved	FY 03
Initial Cost Estimate	11,991
Cost Estimate Last FY	7,032
Present Cost Estimate	4,813
Approved Request, Last FY	897
Total Expenditures & Encumbrances	3,845
Approval Request FY 15	115
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	No land or R/W required
% Project Completion:	P-95%
Est. Completion Date:	June 2015

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

POTOMAC WATER FILTRATION PLANT PROJECTS
(costs in thousands)

PROJECT NUMBER	PROJECT NAME	ADOPTED FY'14 TOTAL COST	ADOPTED FY'15 TOTAL COST	CHANGE $	CHANGE %	SIX-YEAR COST	COMPLETION DATE (est)
W-73.19	Potomac WFP Outdoor Substation No. 2 Replacement	$15,526	$15,572	$46	0.3%	$14,245	February 2017
W-73.20	Potomac WFP Stage 2 Disinfection Byproducts Rule Implementation	10,280	10,480	200	1.9%	237	July 2014
W-73.21	Potomac WFP Corrosion Mitigation	7,443	18,164	10,721	144.0%	7,709	October 2015
W-73.22	Potomac WFP Pre-Filter Chlorination & Air Scour Improvements	5,602	7,935	2,333	41.6%	7,367	February 2018
W-73.30	Potomac WFP Submerged Channel Intake	27,818	28,433	615	2.2%	24,862	FY 2018
	TOTALS	$66,669	$80,584	$13,915	20.9%	$54,420	

Summary: This group of projects represents operational improvements to the Potomac Water Filtration Plant (WFP) in Montgomery County. The Potomac WFP Outdoor Substation No. 2 Replacement project (W-73.19) provides for the replacement of the Outdoor Substation No. 2 (OSS-2) at the Potomac Water Filtration Plant which is over 30 years old and contains 5kV switchgear that houses air magnetic breakers which are obsolete. The Potomac WFP Stage 2 Disinfection Byproducts Rule Implementation project (W-73.20) provides for the facilities necessary to meet the EPA Stage 2 Disinfection Byproducts Rule. The Potomac WFP Corrosion Mitigation (W-73.21) provides for upgrading/replacing existing metallic components in the eight sedimentation basins due to accelerated corrosion, along with upgrading components in the rapid mix and flocculation processes. The Potomac WFP Pre-Filter Chlorination & Air Scour Improvements project (W-73.22) provides for a pre-filter chlorination system and evaluation of retrofitting an air scour system into existing plant filters to improve the performance of the underdrain system. The Potomac WFP Submerged Channel Intake project (W-73.30) will provide an additional barrier against drinking water contamination, enhance reliability, and reduce treatment costs by drawing water from a location with a cleaner, more stable water quality. The Potomac WFP Improvements project (W-73.16) was completed and included on the close out list.

Cost Impact: Costs were increased for escalated material cost and increased quantities of equipment to be replaced (W-73.21), and revised construction cost estimates (W-73.22).

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
113802	W-73.19	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Potomac WFP Outdoor Substation No. 2 Replacement

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**2,272**	1,268	54	**950**	350	350	250				
Land											
Site Improvements & Utilities											
Construction	**12,000**			**12,000**	4,000	5,000	3,000				
Other	**1,300**		5	**1,295**	435	535	325				
Total	**15,572**	**1,268**	**59**	**14,245**	**4,785**	**5,885**	**3,575**				

C. Funding Schedule (000's)

WSSC Bonds	**15,572**	1,268	59	**14,245**	4,785	5,885	3,575				

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction required to replace the Outdoor Substation No. 2 (OSS-2) and two motor control centers (MCCs) located in the Raw Water Pumping Station No. 1 at the Potomac Water Filtration Plant. OSS-2 is over 30 years old and contains 5kV switchgear that houses air magnetic breakers which are obsolete. The two MCCs are over 50 years old, and the manufacturer is no longer in business, making replacement parts difficult to obtain.

JUSTIFICATION

Plans & Studies

Energy Performance Project, Phase ID, Energy Systems Group (ESG) (March 2009). Raw Water Pump Testing and subsequent site visits and meetings at Potomac from April to June 2009 by ESG, Whitman Requardt & Assoc., and Shah Assoc. (sub-consultants to ESG).

Specific Data

The Phase ID - Energy Performance Project included engineering, and planning of equipment and operations upgrades to develop an energy efficient and guaranteed savings program to upgrade/replace pumps at the Potomac Raw Water Pumping Stations (RWPS) #1 and #2, and upgrade Main Zone pump #3. Subsequent tests and inspections of OSS-2 serving RWPS #1 and #2 resulted in a report indicating that OSS-2 was unsafe and in poor condition, and that WSSC should move in an expeditious manner to replace the switchgear in its entirety. Industry practice is to replace 5 kV switchgear between 25 and 30 years old, when in an environment with airborne chemicals. The old breakers in OSS-2 have misalignment problems, and the switchgear housing is corroded, which can pose safety risks to the plant electrical and mechanical maintenance staff as well as the operators.

Cost Change

Not applicable

STATUS Final Design Complete (WSSC Contract No. BF5157A10,).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B above are design level estimates and may change based upon final bid.

COORDINATION

WSSC Projects A-103.00, Energy Performance Program and W-73.16, Potomac WFP Improvements.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	1071	....	18
Total Costs		1071	....	18
Impact on Water or Sewer Rate		2¢	....	18

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 11
Date First Approved	FY 11
Initial Cost Estimate	7,934
Cost Estimate Last FY	15,526
Present Cost Estimate	15,572
Approved Request, Last FY	2,310
Total Expenditures & Encumbrances	1,268
Approval Request FY 15	4,785
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Public/Agency owned land
% Project Completion:	D-100%
Est. Completion Date:	February 2017

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
113806	W-73.20	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Potomac WFP Stage 2 Disinfection Byproducts Rule Implementation

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**4,152**	2,721	1,411	**20**	20						
Land											
Site Improvements & Utilities											
Construction	**5,745**	1,350	4,200	**195**	195						
Other	**583**		561	**22**	22						
Total	**10,480**	**4,071**	**6,172**	**237**	**237**						

C. Funding Schedule (000's)

WSSC Bonds	**10,480**	4,071	6,172	**237**	237						

D. Description & Justification

DESCRIPTION

This project provides for the design, upgrade and expansion of the existing sulfuric acid system and the design and construction of new ferric chloride and caustic soda feed systems and related facilities capable of reliably providing low pH coagulation at the plant design capacity of 285 MGD in order to meet the EPA Stage 2 Disinfection Byproducts Rule.

Service Area Bi-County Area

JUSTIFICATION

Plans & Studies

Stage 2 Disinfection Byproducts Rule Compliance Strategy Studies (November 2008).

Specific Data

The sulfuric acid system upgrades and new ferric chloride feed system are necessary to facilitate the enhanced coagulation strategy to comply with the EPA Stage 2 Disinfection Byproducts Rule. The caustic soda feed system will supplement raw water alkalinity when ferric chloride is fed and may also be used to adjust finished water pH.

Cost Change

Project costs were increased due to actual design field services during construction contract amount and inflation.

STATUS Under Construction (WSSC Contract Nos. BF5024A09 , BF5027A09).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown above are based upon actual bid.

COORDINATION

Montgomery County Department of Environmental Protection, Maryland Department of the Environment, Prince George's County Department of Environmental Resources, U.S. Environmental Protection Agency, Region III and WSSC Project W-73.16, Potomac WFP Improvements.

NOTE This project supports 100% Environmental Regulation.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	682	....	15
Total Costs		682	....	15
Impact on Water or Sewer Rate		1¢	....	15

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 11
Date First Approved	FY 11
Initial Cost Estimate	7,959
Cost Estimate Last FY	10,280
Present Cost Estimate	10,480
Approved Request, Last FY	3,322
Total Expenditures & Encumbrances	4,071
Approval Request FY 15	237
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Public/Agency owned land
% Project Completion:	C-30%
Est. Completion Date:	July 2014

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
143802	W-73.21	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Potomac WFP Corrosion Mitigation

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**669**	439	105	**125**	100	25					
Land											
Site Improvements & Utilities											
Construction	**15,883**		9,000	**6,883**	6,800	83					
Other	**1,612**		911	**701**	690	11					
Total	**18,164**	**439**	**10,016**	**7,709**	**7,590**	**119**					

C. Funding Schedule (000's)

WSSC Bonds	**18,164**	439	10,016	**7,709**	7,590	119					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design and construction required to upgrade and replace the existing metallic components in the eight Sedimentation Basins due to accelerated corrosion observed since the implementation of the full-scale Low pH Enhanced Coagulation Program in 2008. The project will also upgrade components in the Rapid Mix and Flocculation process areas in anticipation of the Ferric Chloride Feed System Project completion that will introduce a coagulant that is not compatible with several of the existing metallic components.

JUSTIFICATION

Plans & Studies

Technical Memorandum No. 1 - Impact of Ferric Chloride on Existing Facilities, Hazen and Sawyer, (May 2010); Potomac Sedimentation Basin Corrosion Study, Hatch Mott MacDonald, (July 2010).

Specific Data

Sedimentation Basin components, such as valve hardware, pipe couplings, operator extensions, cross beams, cross collector drive chains and pipe support brackets, are all essential elements. Failure could mean losing important and significant process capacity, possibly for extended periods of time. This could hinder the Commission's ability to meet water supply demands, particularly when the system may need to recover quickly, as in the case of a major water main break. Replacing the metallic components with 316 Stainless Steel will help maintain the integrity of our system. The project also includes the replacement of the existing polyurethane sprockets, chains for the cross collector drive, augers, auger shafts, and auger chains.

Cost Change

The change in cost is the result of escalated material cost and increased quantities of equipment to be replaced.

STATUS Final Design (WSSC Contract No. BF5250A11,).

OTHER

The project scope has remained the same. Expenditures and schedule projections shown in Block B above are design level estimates and may change based on site-specific conditions and design constraints.

COORDINATION

WSSC Project W-73.20, Potomac WFP Stage 2 Disinfection Byproducts Rule Implementation(Ferric Chloride Feed System).

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	....	....
	Debt Service	1250	 17
Total Costs		1250	 17
Impact on Water or Sewer Rate		3¢	 17

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 14
Date First Approved	FY 14
Initial Cost Estimate	7,443
Cost Estimate Last FY	7,443
Present Cost Estimate	18,164
Approved Request, Last FY	4,644
Total Expenditures & Encumbrances	439
Approval Request FY 15	7,590
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	D-100%
Est. Completion Date:	October 2015

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
143803	W-73.22	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Potomac WFP Pre-Filter Chlorination & Air Scour Improvements

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**1,907**	57	444	**1,406**	667	389	214	136			
Land											
Site Improvements & Utilities											
Construction	**5,000**			**5,000**			3,056	1,944			
Other	**1,028**		67	**961**	100	58	491	312			
Total	**7,935**	**57**	**511**	**7,367**	**767**	**447**	**3,761**	**2,392**			

C. Funding Schedule (000's)

WSSC Bonds	**7,935**	57	511	**7,367**	767	447	3,761	2,392			

D. Description & Justification

DESCRIPTION

This project provides for the planning, design and construction of a pre-filter chlorination system for the Potomac Water Filtration Plant. It also includes evaluation of retrofitting an air scour system into the existing plant filters, and the planning, design and construction of an appropriate system if the evaluation deems it favorable for implementation.

JUSTIFICATION

Plans & Studies

Engineering Standard - I. M. S. Cap Monitoring Operation, and Maintenance Instructions, ITT Water & Wastewater, Leopold, Inc., (April 2009). Memo from John Geibel, P.E., Sr. Product Engineer @ ITT Water & Wastewater, Leopold, Inc. - Potomac Filtration Plant Visit April 2009 - to Joseph Johnson, Potomac Plant Superintendent, (May 2010);

Specific Data

The Potomac Water Filtration Plant has experienced six separate incidents of catastrophic filter underdrain failures since October 2006. Subsequent investigation conducted by WSSC and ITT Leopold, suppliers of the failed underdrain systems, revealed that the ITT Leopold underdrain system with an Integral Media Support (IMS) cap is not compatible with the biologically active filters at the Potomac WFP.

Cost Change

Total project cost has increased based on revised construction cost estimates.

STATUS Preliminary Design (WSSC Contract No. BF5339A12,).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B above are planning level estimates, and may change based on site-specific conditions and design constraints. The project schedule has been delayed by eleven months due to a new A/E selection process.

COORDINATION

Montgomery County Government and Prince George's County Government.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	546	....	19
Total Costs		546	....	19
Impact on Water or Sewer Rate		1¢	....	19

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 14
Date First Approved	FY 14
Initial Cost Estimate	5,602
Cost Estimate Last FY	5,602
Present Cost Estimate	7,935
Approved Request, Last FY	759
Total Expenditures & Encumbrances	57
Approval Request FY 15	767
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not Applicable
% Project Completion:	D-0%
Est. Completion Date:	February 2018

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
033812	W-73.30	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Potomac WFP Submerged Channel Intake

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**5,942**	2,308	1,148	**2,486**	978	742	566	200			
Land											
Site Improvements & Utilities											
Construction	**20,115**			**20,115**		2,575	13,905	3,635			
Other	**2,376**		115	**2,261**	98	332	1,447	384			
Total	**28,433**	**2,308**	**1,263**	**24,862**	**1,076**	**3,649**	**15,918**	**4,219**			

C. Funding Schedule (000's)

WSSC Bonds	**28,433**	2,308	1,263	**24,862**	1,076	3,649	15,918	4,219			

D. Description & Justification

DESCRIPTION

This project includes planning, which involves community outreach and coordination with elected officials, design and construction of a submerged channel intake to provide an additional barrier against drinking water contamination (particularly Giardia cysts and Cryptosporidium oocysts), as well as to enhance reliability and reduce treatment costs by drawing water from a location with cleaner, more stable water quality.

Service Area Potomac WFP Pressure Zone HGPOWF

JUSTIFICATION

Plans & Studies

"Technical Memorandum No. 2 Water Quality Needs Assessment," O'Brien & Gere Engineers, Inc. (November, 2001); "Draft Source Water Assessment Study," Maryland Department of the Environment (April, 2002); "Potomac WFP Facility Plan," O'Brien & Gere Engineers, Inc. (September, 2002).

Specific Data

The project is expected to pay for itself over time based upon the reduced chemical and solids handling costs resulting from the cleaner raw water source. It also provides for a more reliable supply by eliminating the current problems associated with ice and vegetation blocking the existing bank withdrawal. This project is consistent with the industry's recommended multiple barrier approach.

Cost Change

Costs were increased for inflation.

STATUS Planning (WSSC Contract Nos. BF2028F97 , BF2028I97).

OTHER

The project scope has remained the same. As part of the planning phase of this project, significant outreach activities will occur. A series of briefings with State legislators, County Council members, County Executive staff and County Council staff will be undertaken prior to commencement of further engineering work. As the planning process moves into its final stages and the National Environmental Policy Act (NEPA) approval process is underway, elected officials, county government staffs, environmental community members, and the general public will be engaged in an on-going information, outreach and project participation program. Expenditure and schedule projections shown above are planning level estimates and may change based on site-specific conditions and design constraints. Both Councils will review the results of the detailed study and must approve continuing with the project before design and construction may proceed.

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E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	2198	....	19
Total Costs		2198	....	19
Impact on Water or Sewer Rate		4¢	....	19

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 04
Date First Approved	FY 03
Initial Cost Estimate	936
Cost Estimate Last FY	27,818
Present Cost Estimate	28,433
Approved Request, Last FY	1,227
Total Expenditures & Encumbrances	2,308
Approval Request FY 15	1,076
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	P-60%
Est. Completion Date:	FY 2018

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: W - 73.30 **Project Name: Potomac WFP Submerged Channel Intake**

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COORDINATION

Montgomery County Government, Prince George's County Government, National Park Service, Montgomery County Department of Environmental Protection, Maryland Department of the Environment, Maryland Department of Natural Resources, Prince George's County Department of Environmental Resources and U.S. Army Corps of Engineers.

NOTE This project supports 100% System Improvement.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
133800	W-73.32	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Potomac WFP Main Zone Pipeline

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Potomac-Cabin John & Vicinity P.A. 29

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**991**	100	291	**600**	600						
Land											
Site Improvements & Utilities											
Construction											
Other	**134**		44	**90**	90						
Total	**1,125**	**100**	**335**	**690**	**690**						

C. Funding Schedule (000's)

WSSC Bonds	**1,125**	100	335	**690**	690						

D. Description & Justification

DESCRIPTION

This project provides for the initial planning and preliminary design to provide redundancy to 1,500 feet of 78-inch diameter PCCP pipeline leaving the Potomac WFP via the Finished Water Main Zone Water Pumping Station.

Service Area Montgomery Main Pressure Zone 495A, Prince George's Main Pressure Zone HG320A, Prince George's High Pressure Zone HG450A **Capacity** Approximately 200 mgd

JUSTIFICATION

Plans & Studies

E-mail from M. Woodcock to C. Fricke and E. Betanzo dated April 27, 2011.

Specific Data

The existing 78-inch diameter PCCP pipeline is the major feed to the 96-inch diameter Montgomery County Main Zone Pipeline and the 66-inch diameter River Road Pipeline. The primary purpose of this project is to provide redundancy for the existing line. A Business Case Study is currently underway to evaluate the alternatives.

Cost Change

Initial cost estimates were increased to include the Business Case Study and preliminary design work.

STATUS Planning (WSSC Contract No. BL5285A11,).

OTHER

The project scope has remained the same. As the project develops, additional design and construction cost estimates will be added to the project.

COORDINATION

Maryland State Highway Administration, Montgomery County Department of Public Works and Transportation and Montgomery County Government.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

				FY of Impact
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance	28	....	
	Debt Service	77	....	16
Total Costs		105	....	16
Impact on Water or Sewer Rate			....	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 13
Date First Approved	FY 13
Initial Cost Estimate	330
Cost Estimate Last FY	356
Present Cost Estimate	1,125
Approved Request, Last FY	183
Total Expenditures & Encumbrances	100
Approval Request FY 15	690
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	P-25%
Est. Completion Date:	Undetermined

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
934855	W-127.01	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Bi-County Water Tunnel

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**26,239**	23,056	2,000	**1,183**	1,183						
Land											
Site Improvements & Utilities											
Construction	**117,737**	95,790	20,947	**1,000**	1,000						
Other	**2,513**		2,295	**218**	218						
Total	**146,489**	**118,846**	**25,242**	**2,401**	**2,401**						

C. Funding Schedule (000's)

WSSC Bonds	**700**	690	10								
SDC	**145,789**	118,156	25,232	**2,401**	2,401						

D. Description & Justification

DESCRIPTION

This project provides for the design and construction of approximately 28,400 feet of 84-inch diameter water main between the intersection of Tuckerman Lane and Route I-270 and the western terminus of the Bi-County Water Tunnel near the area where Rock Creek crosses the Capital Beltway (Maryland Route 495). The project will be constructed as a deep tunnel, minimizing community and environmental impacts. The project also includes relining 450 feet of existing 96-inch PCCP with 84-inch steel pipe at the I-270 connection between this pipeline and the new tunnel.

Service Area Prince George's High Pressure Zone HG450A, Montgomery Main Pressure Zone HG495A

JUSTIFICATION

Plans & Studies

Montgomery and Prince George's Main Zone Facility Plan, Black and Veatch, Inc. (October, 1990); Technical Memoranda #s1, 2, & 3 (Draft), Louis Berger & Associates (1997); Updated Water Demand Projections (dated April 6, 2001); and the General Plan. Final Alignment Report, Black and Veatch, Inc. (July, 2005).

Specific Data

This project will significantly increase transmission capacity from the Potomac Water Filtration Plant to the Montgomery County Main Zone and Prince George's County. The alignment study completed in July 2005 recommended that the water main be constructed as a pipeline with a deep rock tunnel from 90 to 250 feet below the ground surface.

Cost Change

The cost decrease reflects the latest available estimates.

STATUS Under Construction (WSSC Contract Nos. BL9972A94 , BL9972B94 , BL9972C94).

OTHER

The project scope remains the same. Expenditures shown in Block B above are definitive and are the sum of the design services, construction management services and construction contract amounts. In late 2005, both Councils reviewed the results of the detailed alignment study and agreed upon the final alignment and construction method. Substantial completion of the tunnel is expected in June 2014. Funding shown in FY'15 includes site/landscaping restoration.

As part of the permit requirements for work within Cabin John and Rock Creek Parks, M-NCP&PC calls for stream restoration along Old Farm Creek. This work will be handled under a separate contract with costs tracked separately. The relining of 450 feet of existing 96-inch diameter PCCP, at a cost of $700,000, is not subject to SDC funding.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff		....
	Other		....
Facility Costs	Maintenance	329	....
	Debt Service	61	....
Total Costs		390	....
Impact on Water or Sewer Rate			....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 93
Date First Approved	FY 93
Initial Cost Estimate	63,000
Cost Estimate Last FY	150,975
Present Cost Estimate	146,489
Approved Request, Last FY	14,442
Total Expenditures & Encumbrances	118,846
Approval Request FY 15	2,401
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Site selected
% Project Completion:	C-80%
Est. Completion Date:	July 2015

H. Map **Map Reference Code:**

SEE ATTACHED MAP

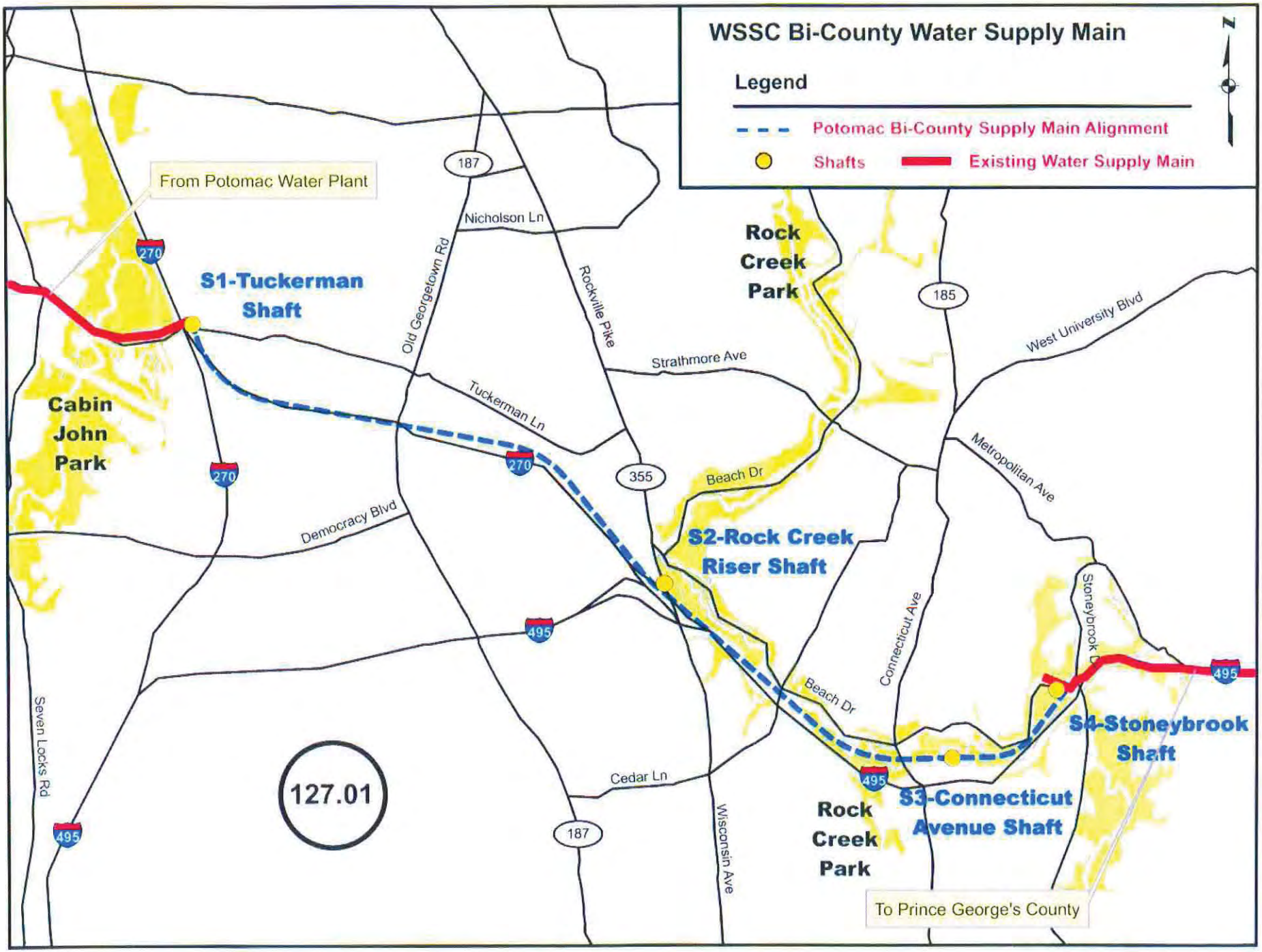
D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: W - 127.01 **Project Name: Bi-County Water Tunnel**

COORDINATION

Montgomery County Government, Prince George's County Government, Maryland-National Capital Park & Planning Commission (Mandatory Referral submissions are approved), Maryland Department of Natural Resources and Maryland State Department of Transportation.

NOTE This project supports 99% Growth and 1% System Improvement.


WSSC Bi-County Water Supply Main
Legend
Potomac Bi-County Supply Main Alignment
Shafts
Existing Water Supply Main
N
From Potomac Water Plant
S1-Tuckerman Shaft
S2-Rock Creek Riser Shaft
S3-Connecticut Avenue Shaft
S4-Stoneybrook Shaft
Cabin John Park
Rock Creek Park
Rock Creek Park
127.01
To Prince George's County
Nicholson Ln
Old Georgetown Rd
Rockville Pike
Strathmore Ave
Tuckerman Ln
Democracy Blvd
Beach Dr
Beach Dr
Cedar Ln
Seven Locks Rd
Wisconsin Ave
Connecticut Ave
Metropolitan Ave
West University Blvd
Stoneybrook Dr
187
187
185
355
270
270
270
495
495
495
495

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
073802	W-139.02	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Duckett & Brighton Dam Upgrades

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**4,335**	3,696	468	**171**	171						
Land											
Site Improvements & Utilities											
Construction	**10,020**	2,537	2,244	**5,239**	3,183	2,056					
Other	**812**		271	**541**	335	206					
Total	**15,167**	**6,233**	**2,983**	**5,951**	**3,689**	**2,262**					

C. Funding Schedule (000's)

WSSC Bonds	**15,167**	6,233	2,983	**5,951**	3,689	2,262					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design and construction of the upgrades required to enable the T. Howard Duckett Dam to meet current Maryland Department of the Environment (MDE) dam safety standards including the Probable Maximum Flood (PMF) criteria and maximum credible earthquake loadings. The upgrades include parapet walls on both embankments of the dam and three foot thick scour slabs tied into the rock on the downstream side of the dam. This project also includes improvements to the Brighton Dam to assure continued safe operation.

JUSTIFICATION

Plans & Studies

December 13, 2004 letter from MDE; "Comprehensive Safety Evaluation of the T. Howard Duckett Dam", URS Corporation (January, 2007); June 28, 2007 letter from MDE.

Specific Data

The MDE requested that WSSC perform a safety analysis of the T. Howard Duckett Dam to ensure that the dam can safely pass the Probable Maximum Flood criteria. MDE also requested that the evaluation include an analysis of the dam's ability to withstand the maximum credible earthquake loadings. The safety analysis includes geotechnical and structural evaluations.

Cost Change

Costs were increased for inflation.

STATUS Under Construction (WSSC Contract No. BD4144A05,).

OTHER

The project scope has remained the same. Expenditures and schedule projections shown in block B above are a combination of design level estimates and actual bids. A report with a presentation of alternatives to enable the dam to safely pass the PMF and any other safety requirements was delivered to MDE in January 2007. In June 2007, MDE formally concurred with the recommended alternative. The information shown in Block G is based on the work at Duckett Dam. Brighton Dam is currently in design. The estimated completion date has been pushed back 18 months. The delay is due to addititional design work to include traffic control plans and sequencing of construction, along with a longer construction time on Brighton due to the complexity of the project.

COORDINATION

Maryland State Highway Administration, Montgomery County Government, Prince George's County Government, Howard County Government, City of Laurel, Maryland Department of the Environment and U.S. Army Corps of Engineers.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	1043	....	17
Total Costs		1043	....	17
Impact on Water or Sewer Rate		2¢	....	17

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 07
Date First Approved	FY 07
Initial Cost Estimate	575
Cost Estimate Last FY	14,715
Present Cost Estimate	15,167
Approved Request, Last FY	6,024
Total Expenditures & Encumbrances	6,233
Approval Request FY 15	3,689
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	C-40%
Est. Completion Date:	June 2016

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
113803	W-161.01	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Large Diameter Water Pipe Rehabilitation Program

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**25,859**	3,103	2,680	**20,076**	2,503	3,310	3,409	3,512	3,617	3,725	
Land											
Site Improvements & Utilities											
Construction	**305,012**	35,685	27,715	**241,612**	33,949	35,498	41,152	42,387	43,658	44,968	
Other	**14,605**		1,520	**13,085**	1,823	1,940	2,228	2,295	2,364	2,435	
Total	**345,476**	**38,788**	**31,915**	**274,773**	**38,275**	**40,748**	**46,789**	**48,194**	**49,639**	**51,128**	

C. Funding Schedule (000's)

WSSC Bonds	**345,476**	38,788	31,915	**274,773**	38,275	40,748	46,789	48,194	49,639	51,128	

D. Description & Justification

DESCRIPTION

The purpose of this program is to plan, design and rehabilitate or replace Large Diameter Water Transmission Mains that have reached the end of their useful life. Condition Assessment and/or corrosion monitoring is performed on metallic pipelines, including ductile iron, cast iron, and steel, to identify lengths of pipe requiring replacement or rehabilitation and cathodic protection. The PCCP Inspection and Condition Assessment Program identifies individual pipe segments that require repair or replacement to assure the continued safe and reliable operation of the pipeline. The Program also identifies extended lengths of pipe that require the replacement of an increased number of pipe segments in varying stages of deterioration that are most cost effectively accomplished by the replacement or rehabilitation of long segments of the pipeline or the entire pipeline. Rehabilitation or replacement of these mains provides value to the customer by minimizing the risk of catastrophic failure and ensuring a safe and reliable water supply. The Program includes installation of Acoustic Fiber Optic Monitoring equipment in order to accomplish these goals in PCCP mains.

* EXPENDITURES FOR LARGE DIAMETER WATER PIPE REHABILITATION ARE EXPECTED TO CONTINUE INDEFINITELY.

JUSTIFICATION

Plans & Studies

Utility Wide Master Plan, (December 2007); 30 Year Infrastructure Plan (2007); FY2012 Water Transmission System Asset Management Plan, GHD, Inc. (March 2011).

Specific Data

WSSC has approximately 960 miles of large diameter water main ranging from 16-inch to 96-inch in diameter. This includes 350 miles of cast iron, 225 miles of ductile iron, 35 miles of steel and 350 miles of PCCP. Internal inspection and condition assessment is performed annually on PCCP pipelines 36-inch and larger in diameter. Of the 350 miles of PCCP, 145 miles are 36-inch diameter and larger, and 59 miles are 54-inch diameter or larger. The inspection program includes internal visual and sounding, sonic/ultrasonic testing, and electromagnetic testing to establish the condition of each pipe section and determine if maintenance repairs, rehabilitation, or replacement are needed.

Cost Change

The cost increase is due to the continued ramp-up in the number of miles of PCCP pipeline inspections from 18 miles to 20 miles and the number of miles of cast iron pipe being replaced and receiving cathodic protection. Also, as we move into the smaller 42-inch and 36-inch diameter PCCP pipelines, where carbon-fiber repairs are not always possible, there is an increase in the number of PCCP pipe segments that require replacement.

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E. Annual Operating Budget Impact (000's)

				FY of Impact
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	15803	....	21
Total Costs		15803	....	21
Impact on Water or Sewer Rate		32¢	....	21

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 11
Date First Approved	FY 11
Initial Cost Estimate	60,000
Cost Estimate Last FY	248,178
Present Cost Estimate	345,476
Approved Request, Last FY	37,028
Total Expenditures & Encumbrances	38,788
Approval Request FY 15	38,275
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	On-Going
Est. Completion Date:	On-going

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: W - 161.01 **Project Name: Large Diameter Water Pipe Rehabilitation Program**

STATUS Not Applicable (WSSC Contract Nos. BM5063A09 , BM5063B09).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B above are Order of Magnitude estimates and are expected to change based upon the results of the inspections and condition assessments. Additional costs associated with inspection, monitoring and emergency repairs are included in the Operating Budget.

COORDINATION

Maryland State Highway Administration, Montgomery County Department of Public Works and Transportation, Montgomery County Government (including localities where work is to be performed), Prince George's County Government (including localities where work is to be performed), Maryland-National Capital Park & Planning Commission, Prince George's County Department of Public Works & Transportation, Local Community Civic Associations and WSSC Projects A-107.00, Specialty Valve Vault Rehabilitation Program and W-1.00, Water Reconstruction Program.

NOTE This project supports 100% System Improvement.

PATUXENT WATER FILTRATION PLANT PROJECTS
(costs in thousands)

PROJECT NUMBER	PROJECT NAME	ADOPTED FY'14 TOTAL COST	ADOPTED FY'15 TOTAL COST	CHANGE $	CHANGE %	SIX-YEAR COST	COMPLETION DATE (est)
W-172.05	Patuxent WFP Phase II Expansion	$64,220	$62,904	($1,316)	-2.0%	$54,698	FY 2018
W-172.07	Patuxent Raw Water Pipeline	22,688	22,973	285	1.3%	13,917	FY 2018
W-172.08	Rocky Gorge Pump Station Upgrade	17,001	17,685	684	4.0%	12,414	May 2016
	TOTALS	$103,909	$103,562	-$347	-0.3%	$81,029	

Summary: The Patuxent Water Filtration Plant (WFP) Phase II Expansion project (W-172.05) provides for the addition of a sixth treatment train, a new electrical substation, upgrades to existing yard piping, upgrades to chemical facilities, new UV disinfection facilities, an upgrade to the existing potassium permanganate feed system, upgrades to the existing sewer system and new solids removal facilities. In conjunction with the WFP Phase II Expansion project, the Patuxent Raw Water Pipeline project (W-172.07) and the Rocky Gorge Pump Station Upgrade project (W-172.08) provide for a new raw water pipeline and the necessary modification/expansion to the pumping station to allow the delivery of up to 110 million gallons per day (MGD) of raw water to the Patuxent WFP.

Cost Impact: Costs reflect the latest design level estimates and adjustments for inflation.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
033807	W-172.05	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Patuxent WFP Phase II Expansion

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**12,901**	6,106	500	**6,295**	1,600	1,650	1,650	1,395			
Land											
Site Improvements & Utilities											
Construction	**47,297**		1,500	**45,797**	9,000	13,000	13,000	10,797			
Other	**2,706**		100	**2,606**	530	733	733	610			
Total	**62,904**	**6,106**	**2,100**	**54,698**	**11,130**	**15,383**	**15,383**	**12,802**			

C. Funding Schedule (000's)

WSSC Bonds	**62,904**	6,106	2,100	**54,698**	11,130	15,383	15,383	12,802			

D. Description & Justification

DESCRIPTION

This project provides for the addition of a sixth treatment train, a new electrical substation, a new residuals handling facility, new UV disinfection facilities, upgrades to existing yard piping, and upgrades to chemical facilities at the Patuxent WFP along with an upgrade to the existing potassium permanganate and carbon feed systems at the Patuxent Pretreatment Facility and a new relief sewer which upgrades the existing sewer system along Sweitzer Lane to accommodate the new residuals facility.

Service Area Bi-County Area

Capacity 72 MGD nominal/110 MGD emergency

JUSTIFICATION

Plans & Studies

"Patuxent WFP Facility Plan", O'Brien & Gere Engineers, Inc., (April, 1997); In-House Study (April, 2002); Patuxent Expansion Design Criteria Report (April 2005), "Parkway WWTP Biosolids Facility Plan", CH2M Hill (October 2009); "Evaluation of Residuals Handling Process Alternatives", AECOM Technical Services, (July 2011)

Specific Data

Phase II will add a sixth treatment train consisting of a three stage flocculation chamber, sedimentation basin with chain and flight solids removal and plate settlers, disinfectant contact chamber, and two deep bed granular carbon filters. A fourth raw water pipeline from Rocky Gorge Raw Water Pipeline (W-172.07) and the modification and expansion of the Rocky Gorge Water Pumping Station (W-172.08) will provide a firm raw water pumping/transmission capacity of 110 MGD. These improvements will give the plant a firm nominal capacity of 72 MGD, with emergency capacity of 110 MGD. New UV disinfection facilities are being added to the plant in order to assure compliance with future EPA regulations for Cryptosporidium treatment and Stage 2 Disinfection Byproducts Rule effective 2012. This project also adds a residuals handling facility to remove the solids from impacting the Parkway WWTP and a relief sewer along Sweitzer Lane to assure no sanitary sewer overflows (SSO) occur as a result of Plant wastewater discharge.

Cost Change

Not applicable.

STATUS Final Design Complete (WSSC Contract Nos. BF1582H91 , CT1582A91).

OTHER

The project scope has remained the same. In the event of an outage at the Potomac WFP, additional capacity at the Patuxent WFP will reduce customer impact. However, emergency conservation measures will still be required. Expenditure and schedule estimates shown above are design level estimates and may change when the construction contracts are bid and awarded. The project has experienced a 9-month delay caused by very long permit application processes and difficulties in obtaining Rights of Way. Land costs are included in WSSC Project W-202.00.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	4328	....	19
Total Costs		4328	....	19
Impact on Water or Sewer Rate		9¢	....	19

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 04
Date First Approved	FY 03
Initial Cost Estimate	33,002
Cost Estimate Last FY	64,220
Present Cost Estimate	62,904
Approved Request, Last FY	25,969
Total Expenditures & Encumbrances	6,106
Approval Request FY 15	11,130
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	R/W required
% Project Completion:	D-99%
Est. Completion Date:	FY 2018

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: W - 172.05 **Project Name: Patuxent WFP Phase II Expansion**

COORDINATION

Montgomery County Government, Prince George's County Government, Maryland-National Capital Park & Planning Commission, Maryland Department of the Environment, Maryland State Department of Transportation, Baltimore Gas & Electric and WSSC Projects W-12.02, Prince George's County HG415 Zone Water Main, W-172.07, Patuxent Raw Water Pipeline, W-172.08, Rocky Gorge Pump Station Upgrade and W-73.18, Power Reliability and Arc Flash Implementation(Coordination of UV Criteria).

NOTE This project supports 80% System Improvement and 20% Environmental Regulation.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
063804	W-172.07	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Patuxent Raw Water Pipeline

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	128	18
	Debt Service	1397	18
Total Costs		1525	18
Impact on Water or Sewer Rate		3¢	18

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**3,939**	2,703	350	**886**	207	210	239	230			
Land											
Site Improvements & Utilities											
Construction	**17,714**	5,748	200	**11,766**	2,607	1,037	3,720	4,402			
Other	**1,320**		55	**1,265**	281	125	396	463			
Total	**22,973**	**8,451**	**605**	**13,917**	**3,095**	**1,372**	**4,355**	**5,095**			

C. Funding Schedule (000's)

WSSC Bonds	**22,973**	8,451	605	**13,917**	3,095	1,372	4,355	5,095			

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 06
Date First Approved	FY 03
Initial Cost Estimate	18,750
Cost Estimate Last FY	22,688
Present Cost Estimate	22,973
Approved Request, Last FY	3,099
Total Expenditures & Encumbrances	8,451
Approval Request FY 15	3,095
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Land & R/W to be acquired
% Project Completion:	D-70%
Est. Completion Date:	See Block D "Other"

D. Description & Justification

DESCRIPTION

This project provides for community outreach, planning, design and construction of a new 48-inch diameter raw water pipeline from the Rocky Gorge Raw Water Pumping Station to the Patuxent Water Filtration Plant, cleaning of the existing water lines and replacement of valves.

JUSTIFICATION

Plans & Studies

Patuxent WFP Facility Plan (April 1997); In-House Study (April 2002).

Specific Data

The existing raw water supply facilities are hydraulically limited to 72 MGD with all pumps running at the Rocky Gorge Pumping Station. In order to convey more than 72 MGD of raw water, a new raw water pipeline is required. A fourth raw water pipeline from Rocky Gorge Pumping Station to the Patuxent Plant and modification/expansion of the Rocky Gorge Pumping Station will provide a firm raw water pumping transmission capacity of 110 MGD. These improvements, in conjunction with expansion of the Patuxent Water Filtration Plant, will give the Plant a firm nominal capacity of 72 MGD, with an emergency capacity of 110 MGD.

Cost Change

Not applicable.

STATUS Preliminary Design (WSSC Contract Nos. BF1582E91 , BF1582C91).

OTHER

The project scope has remained the same. The Rocky Gorge Valve Replacement and the cleaning of existing raw water pipelines are 100% complete. The new raw water pipeline is currently in design. Expenditure and schedule estimates for the new raw water pipeline may change based upon design constraints and permitting issues. As with any construction project, areas disturbed by construction will be restored. This restoration includes paving of impacted roads in accordance with Prince George's County Policy and Specifications for Utility Installation and Maintenance Manual (Section 4.7.2). Land costs are included in WSSC Project W-202.00.

COORDINATION

Montgomery County Government, Prince George's County Government, Maryland-National Capital Park & Planning Commission, Maryland Department of the Environment, Interstate Commission on the Potomac River Basin, Local Community Civic Associations (West Laurel Civic Association), Baltimore Gas & Electric and WSSC Projects W-172.05, Patuxent WFP Phase II Expansion and W-172.08, Rocky Gorge Pump Station Upgrade.

NOTE This project supports 100% System Improvement.

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
063805	W-172.08	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Rocky Gorge Pump Station Upgrade

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**4,022**	2,638	115	**1,269**	692	577					
Land											
Site Improvements & Utilities											
Construction	**12,430**	1,494	920	**10,016**	5,464	4,552					
Other	**1,233**		104	**1,129**	616	513					
Total	**17,685**	**4,132**	**1,139**	**12,414**	**6,772**	**5,642**					

C. Funding Schedule (000's)

WSSC Bonds	**17,685**	4,132	1,139	**12,414**	6,772	5,642					

D. Description & Justification

DESCRIPTION

This project provides for the modification and/or expansion of the Rocky Gorge Pump Station to allow the station to provide up to 110 MGD of raw water to the Patuxent Water Filtration Plant.

JUSTIFICATION

Plans & Studies

Patuxent WFP Facility Plan (April 1997); In-House Study (April 2002)

Specific Data

The modification and expansion of the Rocky Gorge Raw Water Pumping Station will provide a firm raw water pumping capacity of 110 MGD. The improvements to the pump station, along with a fourth water pipeline (W-172.07) and expansion of the Patuxent Plant (W-172.05) will give the Patuxent Plant a firm nominal capacity of 72 MGD, with emergency capacity of 110 MGD.

Cost Change

Costs were increased for inflation.

STATUS Final Design (WSSC Contract No. BF1582G91,).

OTHER

The project scope remains the same. Expenditure estimates shown in Block B above are design level estimates and may change based upon actual bids. The current plan calls for construction to begin in May 2014, following completion of the Prince George's side of the Duckett Dam upgrade. The construction expenditures through FY'13 include the upgrade of the station's existing turbines, which were part of the overall station upgrade, but were contracted separately.

COORDINATION

Maryland State Highway Administration, Montgomery County Government, Prince George's County Government, Maryland Department of the Environment, Baltimore Gas & Electric and WSSC Projects W-139.02, Duckett & Brighton Dam Upgrades, W-172.05, Patuxent WFP Phase II Expansion and W-172.07, Patuxent Raw Water Pipeline.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	1217	....	17
Total Costs		1217	....	17
Impact on Water or Sewer Rate		2¢	....	17

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 06
Date First Approved	FY 03
Initial Cost Estimate	12,930
Cost Estimate Last FY	17,001
Present Cost Estimate	17,685
Approved Request, Last FY	3,209
Total Expenditures & Encumbrances	4,132
Approval Request FY 15	6,772
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	No land or R/W required
% Project Completion:	D-100%
Est. Completion Date:	May 2016

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
983857	W-202.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Land & Rights-of-Way Acquisition - Bi-County

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision											
Land	**368**		205	**163**	80	25	20	15	13	10	
Site Improvements & Utilities											
Construction											
Other											
Total	**368**		**205**	**163**	**80**	**25**	**20**	**15**	**13**	**10**	

C. Funding Schedule (000's)

WSSC Bonds	**368**		205	**163**	80	25	20	15	13	10	

D. Description & Justification

DESCRIPTION

This PDF provides a consolidated estimate of funding for the acquisition of land and rights-of-way for previously approved projects and new projects, as needed. Expenditures are programmed based upon anticipated schedules and are required for the completion of those specific projects. These costs do not include purchases which have already been completed.

JUSTIFICATION

Plans & Studies

Acquisition needs are determined by the WSSC and are based upon facility planning efforts, alignment studies, field surveys, realignments required by other agencies, or requirements identified within the Development Services Process (DSP).

Specific Data

Consolidation of expenditures for land and rights-of-way acquisitions provides flexibility in expending funds in a specific fiscal year and permits the WSSC to respond to the uncertainty of project-specific implementation schedules. Other considerations include the accommodation of unpredictable delays for extended community outreach which impacts the timing of a planned purchase, unanticipated rights-of-way requirements for approved projects due to minor alignment changes identified late in the design phase, and the need to assure the WSSC an equitable negotiation position by avoiding project-specific cost displays prior to contacting property owners.

Cost Change

Not applicable.

STATUS Not Applicable

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are estimates only and may change based upon actual negotiations. When purchases are complete, the actual cost will be displayed in the expenditure schedule on the appropriate project description form elsewhere in this program.

NOTE This project supports 92% System Improvement and 8% Environmental Regulation.

E. Annual Operating Budget Impact (000's)

		FY of Impact		
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	10	....	21
Total Costs		10	....	21
Impact on Water or Sewer Rate			....	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 98
Date First Approved	FY 98
Initial Cost Estimate	
Cost Estimate Last FY	378
Present Cost Estimate	368
Approved Request, Last FY	18
Total Expenditures & Encumbrances	
Approval Request FY 15	80
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Land & R/W to be acquired
% Project Completion:	Not Applicable
Est. Completion Date:	Not Applicable

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

PROJECTS PENDING CLOSE-OUT

Bi-County Water Projects

(costs in thousands)

Project Number	Agency Number	Project Name	Estimated Total Cost	Expenditures Thru FY'13	Estimated Expenditures FY'14	Remarks
033811	W-73.16	Potomac WFP Improvements	$130,867	$130,413	$454	Project completion expected in FY'14.
		TOTALS	$130,867	$130,413	$454	

Section 4 - Bi-County Sewer Projects

DATE: October 1, 2013

FINANCIAL SUMMARY

(ALL FIGURES IN THOUSANDS)

BI-COUNTY SEWER PROJECTS

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 13	EST. EXPEND 14	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BUDGET REQUEST 15	PDF PAGE NUM
						YR 1 15	YR 2 16	YR 3 17	YR 4 18	YR 5 19	YR 6 20		
S-22.06	Blue Plains WWTP: Liquid Train Projects, Part 2	280,210	230,587	11,158	38,243	9,932	7,730	7,361	7,001	5,343	876	9,932	4-4
S-22.07	Blue Plains WWTP: Biosolids Management, Part 2	387,209	252,008	92,399	42,802	27,969	8,900	5,011	912	10	0	27,969	4-5
S-22.09	Blue Plains WWTP: Plant-wide Projects	212,336	170,371	11,252	29,000	8,109	3,633	3,721	7,635	4,096	1,806	8,109	4-6
S-22.10	Blue Plains WWTP: Enhanced Nutrient Removal	366,743	144,264	48,214	160,758	49,031	50,314	35,457	23,202	1,527	1,227	49,031	4-7
S-22.11	Blue Plains: Pipelines & Appurtenances	161,952	37,301	16,004	91,045	23,795	17,888	9,685	10,484	20,699	8,494	23,795	4-8
S-89.22	Anacostia Storage Facility	21,689	18,411	2,739	539	539	0	0	0	0	0	539	4-9
S-103.02	Anaerobic Digestion/Combined Heat & Power	143,980	1,218	4,760	138,002	7,138	7,138	42,828	42,828	38,070	0	7,138	4-11
S-170.08	Septage Discharge Facility Planning & Implementation	11,136	796	495	9,845	165	2,420	7,260	0	0	0	165	4-13
S-170.09	Trunk Sewer Reconstruction Program	453,402	50,580	174,658	228,164	114,319	59,354	7,855	15,088	15,541	16,007	114,319	4-15
	Projects Pending Close-Out	74,896	74,896	0	0	0	0	0	0	0	0	0	4-17
	TOTAL BI-COUNTY SEWER PROJECTS	2,113,553	980,432	361,679	738,398	240,997	157,377	119,178	107,150	85,286	28,410	240,997	

Denotes projects which include an environmental component (see page 15 in the opening narrative.)

Notes for costs beyond six years:

Includes 222 for Project S-22.06, Blue Plains WWTP: Liquid Train Projects, Part 2
Includes 1,713 for Project S-22.09, Blue Plains WWTP: Plant-wide Projects
Includes 13,507 for Project S-22.10, Blue Plains WWTP: Enhanced Nutrient Removal
Includes 17,602 for Project S-22.11, Blue Plains: Pipelines & Appurtenances

Bi-County Sewer Projects
New Projects Listing
(costs in thousands)

Agency Number	Project Name	Total Project Cost	Budget Year Cost	Page Number
S-103.02	Anaerobic Digestion/Combined Heat & Power	$143,980	$7,138	4-11
	TOTALS	$143,980	$7,138	

BLUE PLAINS WASTEWATER TREATMENT PLANT PROJECTS
(costs in thousands)

PROJECT NUMBER	PROJECT NAME	ADOPTED FY'14 TOTAL COST	ADOPTED FY'15 TOTAL COST	CHANGE $	CHANGE %	SIX-YEAR COST	COMPLETION DATE (est)
S-22.06	Blue Plains WWTP: Liquid Train Projects, Part 2	$274,457	$280,210	$5,753	2.1%	$38,243	On-Going
S-22.07	Blue Plains WWTP: Biosolids Management, Part 2	387,315	387,209	(106)	0.0%	42,802	On-Going
S-22.09	Blue Plains WWTP: Plant-wide Projects	214,599	212,336	(2,263)	-1.1%	29,000	On-Going
S-22.10	Blue Plains WWTP: Enhanced Nutrient Removal	404,053	366,743	(37,310)	-9.2%	160,758	On-Going
S-22.11	Blue Plains: Pipelines & Appurtenances	124,720	161,952	37,232	29.9%	91,045	On-Going
	TOTALS	$1,405,144	$1,408,450	$3,306	0.2%	$361,848	

Summary: These five projects, with an estimated total cost of $1.4 billion, provide funding for the upgrade, expansion, and enhancement of wastewater treatment and solids handling facilities at the Regional Blue Plains Wastewater Treatment Plant, located in the District of Columbia. Whereas typical WSSC projects encompass planning, design, construction, and start-up for a single project, with defined starting and ending dates, the Blue Plains projects are comprised of many sub-projects and are "open-ended." As the Blue Plains Facility Plans move forward and new sub-projects are approved, the costs of these new sub-projects are added to the appropriate existing Blue Plains project. The expenditures displayed represent the WSSC's calculated share. There are four main funding divisions: liquid treatment train (S-22.06); biosolids management (S-22.07); plant-wide projects (S-22.09); and, pipelines & appurtenances (S-22.11). Project S-22.10 Enhanced Nutrient Removal (ENR) will achieve nutrient removal levels surpassing BNR as determined in the Tributary Strategy process of 2005 in order to meet Chesapeake Bay water quality targets. Project S-22.08 Biological Nutrient Removal (BNR) was completed and included on the close out list.

Cost Impact: These five Blue Plains projects, the largest group of expenditures in the CIP, represent 38% of the total program. The figures shown above are derived from the latest available spending projections provided by the District of Columbia Water and Sewer Authority (DCWASA). Officials at the DCWASA have indicated that they have the fiscal capacity as well as the engineering capability to implement these projects. Spending at the DCWASA staff-proposed rate in future years may challenge the WSSC's ability to stay within County-established spending affordability limits. It is, therefore, recommended that the coordination of development and approval of the DCWASA's and WSSC's CIPs be sustained in order that the economic development and environmental objectives of the region be met, without causing a rapid increase in WSSC customers' bills. An explanation of the cost changes for each project is included on the individual project description forms that immediately follow this summary page.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
954811	S-22.06	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Blue Plains WWTP: Liquid Train Projects, Part 2

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**89,738**	74,210	3,614	**11,695**	4,724	2,089	2,085	1,489	851	457	219
Land											
Site Improvements & Utilities											
Construction	**189,980**	156,377	7,433	**26,169**	5,110	5,564	5,203	5,443	4,439	410	1
Other	**492**		111	**379**	98	77	73	69	53	9	2
Total	**280,210**	**230,587**	**11,158**	**38,243**	**9,932**	**7,730**	**7,361**	**7,001**	**5,343**	**876**	**222**

C. Funding Schedule (000's)

WSSC Bonds	**264,829**	217,929	10,545	**36,145**	9,387	7,306	6,957	6,617	5,050	828	210
City of Rockville	**15,381**	12,658	613	**2,098**	545	424	404	384	293	48	12

D. Description & Justification

DESCRIPTION

This project provides funding for WSSC's share of Blue Plains liquid train projects for which construction began after June 30, 1993. Major projects include: Filtration and Disinfection Rehabilitation, Raw Wastewater Pumping Station No. 2, Dual Purpose Sedimentation Basins Rehabilitation, and Primary Treatment Facilities Upgrade Phase II.

Service Area Bi-County Area **Capacity** 370 MGD

JUSTIFICATION

Plans & Studies

The Blue Plains Intermunicipal Agreement of 2012; the DCWASA Master Plan (1998); and the DCWASA Approved FY 2013 Capital Improvements Program.

Specific Data

This is a continuation of the DCWASA's upgrading of the Blue Plains Wastewater Treatment Plant.

Cost Change

Cost increase is primarily due to further revised higher estimates for the Dual Purpose Sedimentation Basins Rehab, Filtration/Disinfection Facilities Rehab Phase II, Liquid Processing Program Management, and Raw Water Pumping Station No. 2.

STATUS Not Applicable

OTHER

The project scope has remained the same. Project costs are derived from the DCWASA Capital & Operating Budget 10-year forecast of spending and DCWASA's latest project management data, and fully reflect DCWASA's current cost estimates and expenditure schedules. Given the open-ended nature of the Blue Plains projects, this PDF does not fully reflect the total project costs. These projects are, in fact, expected to continue indefinitely. As new sub-projects are added to the Blue Plains facility plans, the associated costs will be added to this project. The funding schedule also indicates the calculated Rockville share of the cost.

COORDINATION

City of Rockville (responsible for a share of funding), District of Columbia Water & Sewer Authority (responsible for design and construction) and WSSC Projects S-22.08, Blue Plains WWTP: Biological Nutrient Removal and S-22.10, Blue Plains WWTP: Enhanced Nutrient Removal.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff		....
	Other		....
Facility Costs	Maintenance		....
	Debt Service	18220	....
Total Costs		18220	....
Impact on Water or Sewer Rate		40¢	....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 95
Date First Approved	FY 95
Initial Cost Estimate	69,745
Cost Estimate Last FY	274,457
Present Cost Estimate	280,210
Approved Request, Last FY	5,308
Total Expenditures & Encumbrances	230,587
Approval Request FY 15	9,932
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	On-Going
Est. Completion Date:	On-Going

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
954812	S-22.07	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Blue Plains WWTP: Biosolids Management, Part 2

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**98,786**	80,455	8,733	**9,598**	5,913	1,508	1,372	805			
Land											
Site Improvements & Utilities											
Construction	**287,084**	171,553	82,751	**32,780**	21,779	7,304	3,589	98	10		
Other	**1,339**		915	**424**	277	88	50	9			
Total	**387,209**	**252,008**	**92,399**	**42,802**	**27,969**	**8,900**	**5,011**	**912**	**10**		

C. Funding Schedule (000's)

WSSC Bonds	**365,953**	238,174	87,327	**40,452**	26,434	8,411	4,736	862	9		
City of Rockville	**21,256**	13,834	5,072	**2,350**	1,535	489	275	50	1		

D. Description & Justification

DESCRIPTION

This project provides funding for WSSC's share of the Blue Plains biosolids handling projects for which construction began after June 30, 1993. Major projects include: new Digestion Facilities; Gravity Thickener Facilities; and Solids Processing Building/Dewatered Sludge Loading Facility.

Service Area Bi-County Area **Capacity** 370 MGD

JUSTIFICATION

Plans & Studies

The Blue Plains Intermunicipal Agreement of 2012; the DCWASA Master Plan (1998); EPMC IV Facility Plan (CH2MHILL, 2001); the Biosolids Management at DCWASA Blue Plains Wastewater Treatment Plant Phase II - Design and Cost Considerations for Treatment Alternatives Report (December 2007); and the DCWASA Approved FY 2013 Capital Improvement Program.

Specific Data

This project is needed to implement a set of facilities which will provide a permanent biosolids management program for Blue Plains.

Cost Change

Not Applicable

STATUS Not Applicable

OTHER

The project scope has remained the same. Project costs are derived from the DCWASA Capital & Operating Budget 10-year forecast of spending and DCWASA's latest project management data, and fully reflect DCWASA's current cost estimates and expenditure schedules. Given the open-ended nature of the Blue Plains projects, this PDF does not fully reflect the total project costs. These projects are, in fact, expected to continue indefinitely. As new sub-projects are added to the Blue Plains facility plans, the associated costs will be added to this project. The funding schedule also indicates the calculated Rockville share of the cost.

COORDINATION

City of Rockville (responsible for a share of funding) and District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	25178	....	20
Total Costs		25178	....	20
Impact on Water or Sewer Rate		55¢	....	20

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 95
Date First Approved	FY 95
Initial Cost Estimate	77,296
Cost Estimate Last FY	387,315
Present Cost Estimate	387,209
Approved Request, Last FY	72,504
Total Expenditures & Encumbrances	252,008
Approval Request FY 15	27,969
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	On-Going
Est. Completion Date:	On-Going

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
023805	S-22.09	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Blue Plains WWTP: Plant-wide Projects

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**69,205**	56,499	2,711	**9,251**	2,036	1,384	1,964	1,607	1,095	1,165	744
Land											
Site Improvements & Utilities											
Construction	**142,715**	113,872	8,430	**19,461**	5,993	2,213	1,720	5,952	2,960	623	952
Other	**416**		111	**288**	80	36	37	76	41	18	17
Total	**212,336**	**170,371**	**11,252**	**29,000**	**8,109**	**3,633**	**3,721**	**7,635**	**4,096**	**1,806**	**1,713**

C. Funding Schedule (000's)

WSSC Bonds	**200,681**	161,019	10,634	**27,409**	7,664	3,434	3,517	7,216	3,871	1,707	1,619
City of Rockville	**11,655**	9,352	618	**1,591**	445	199	204	419	225	99	94

D. Description & Justification

DESCRIPTION

This project provides funding for WSSC's share of Blue Plains plant-wide projects for which construction began after June 30, 1993. Major projects include: Plantwide Program Management; comprehensive Management Program; Electrical Power Systems - Switch Gear; Instrumentation, Control, and Electric Engineering Project Management Consultant; New Warehouse Facility; and Central Office Facility (COF) Renovations and Additions.

Service Area Bi-County Area **Capacity** 370 MGD

JUSTIFICATION

Plans & Studies

The Blue Plains Intermunicipal Agreement of 2012; the WASA Master Plan (1998); and the DCWASA Approved FY 2013 Capital Improvement Program.

Specific Data

This is a continuation of the DCWASA's upgrading of the Blue Plains Wastewater Treatment Plant.

Cost Change

Not Applicable

STATUS Not Applicable

OTHER

The project scope has remained the same. Project costs are derived from the DCWASA Capital & Operating Budget 10-year forecast and latest project management data, and reflect DCWASA's current expenditure estimates and schedules. Given the open-ended nature of the project, this PDF does not fully reflect the total project costs. These projects are, in fact, expected to continue indefinitely. As new sub-projects are added to the Blue Plains facility plans, the associated costs will be added to this project. The funding schedule also indicates the calculated Rockville share of the cost.

COORDINATION

City of Rockville (responsible for a share of funding) and District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff		....
	Other		....
Facility Costs	Maintenance		....
	Debt Service	16643	....
Total Costs		16643	....
Impact on Water or Sewer Rate		37¢	....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 95
Date First Approved	FY 02
Initial Cost Estimate	84,650
Cost Estimate Last FY	214,599
Present Cost Estimate	212,336
Approved Request, Last FY	8,391
Total Expenditures & Encumbrances	170,371
Approval Request FY 15	8,109
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	On-Going
Est. Completion Date:	On-Going

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
083800	S-22.10	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Blue Plains WWTP: Enhanced Nutrient Removal

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**69,039**	27,463	11,657	**28,515**	10,717	6,588	4,957	4,045	1,006	1,202	1,404
Land											
Site Improvements & Utilities											
Construction	**295,502**	116,801	36,080	**130,652**	37,829	43,228	30,149	18,927	506	13	11,969
Other	**2,202**		477	**1,591**	485	498	351	230	15	12	134
Total	**366,743**	**144,264**	**48,214**	**160,758**	**49,031**	**50,314**	**35,457**	**23,202**	**1,527**	**1,227**	**13,507**

C. Funding Schedule (000's)

WSSC Bonds	**152,437**	13,457	23,684	**102,776**	26,275	32,364	24,596	18,067	697	777	12,520
State Aid	**205,452**	130,025	23,154	**52,013**	21,230	16,070	9,432	4,086	790	405	260
City of Rockville	**8,854**	782	1,376	**5,969**	1,526	1,880	1,429	1,049	40	45	727

D. Description & Justification

DESCRIPTION

This project provides funding for WSSC's share of the Blue Plains Enhanced Nutrient Removal projects required to achieve nutrient removal to levels below BNR levels to meet the Chesapeake Bay water quality targets determined in the 2005 Tributary Strategy process. Sub-projects include: Nitrogen Removal Facilities, Centrate Treatment, Enhanced Clarification Facility, and Blue Plains Tunnel and Dewatering Pumping Station; and Program Management.

Service Area Bi-County Area **Capacity** 370 MGD

JUSTIFICATION

Plans & Studies

Chesapeake Bay Program Tributary Strategies Process (2005); Blue Plains Strategic Process Study, Metcalf & Eddy (2005); Selection of the Enhanced Nitrogen Removal Process Alternative for the Blue Plains Advanced Wastewater Treatment Facility, Metcalf & Eddy (2009); DCWASA Approved FY 2013 Capital Improvement Program, and the Blue Plains Intermunicipal Agreement of 2012.

Specific Data

The funding schedule reflects the final cost sharing agreement with the Maryland Department of the Environment.

Cost Change

Total project cost decrease is based on revised construction cost estimates from DCWASA. Projects extending beyond those supported by State Aid include rehabilitation and upgrades to older projects.

STATUS Not Applicable (WSSC Contract Nos. CB4168L05 , CB4168Q05).

OTHER

The project scope has remained the same. Project costs are derived from the DCWASA Capital & Operating Budget 10-year forecast and latest project management data, and reflect DCWASA's current expenditure estimates and schedules.

COORDINATION

Maryland Department of the Environment, U.S. Environmental Protection Agency, Region III and District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 100% Environmental Regulation.

E. Annual Operating Budget Impact (000's)

		FY of Impact	
Program Costs	Staff		....
	Other		....
Facility Costs	Maintenance		....
	Debt Service	10488	....
Total Costs		10488	....
Impact on Water or Sewer Rate		23¢	....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 08
Date First Approved	FY 07
Initial Cost Estimate	648
Cost Estimate Last FY	404,053
Present Cost Estimate	366,743
Approved Request, Last FY	60,966
Total Expenditures & Encumbrances	144,264
Approval Request FY 15	49,031
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	On-Going
Est. Completion Date:	On-Going

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
113804	S-22.11	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Blue Plains: Pipelines & Appurtenances

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**35,836**	9,083	3,834	**18,222**	2,714	2,878	2,905	4,058	2,982	2,685	4,697
Land											
Site Improvements & Utilities											
Construction	**124,882**	28,218	12,012	**71,921**	20,845	14,833	6,684	6,322	17,512	5,725	12,731
Other	**1,234**		158	**902**	236	177	96	104	205	84	174
Total	**161,952**	**37,301**	**16,004**	**91,045**	**23,795**	**17,888**	**9,685**	**10,484**	**20,699**	**8,494**	**17,602**

C. Funding Schedule (000's)

WSSC Bonds	**156,988**	35,716	15,629	**88,885**	23,162	17,426	9,581	10,309	20,138	8,269	16,758
City of Rockville	**4,964**	1,585	375	**2,160**	633	462	104	175	561	225	844

D. Description & Justification

DESCRIPTION

This project provides funding for WSSC's share of Blue Plains-associated projects which are "outside the fence" of the treatment plant. Major projects include: Potomac Interceptor Rehabilitation; Upper Potomac Interceptor; Potomac Sewage Pumping Station Rehabilitation; Influent Sewers Rehabilitation; and projects associated with the Combined Sewer Overflow (CSO) Long Term Control Plan (e.g. Anacostia Tunnel).

Service Area Bi-County Area **Capacity** Various

JUSTIFICATION

Plans & Studies

The Blue Plains Intermunicipal Agreement of 2012; the WASA Master Plan (1998); Technical Memorandum No. 1, Multi-Jurisdictional Use Facilities Capital Cost Allocation, (June 2013); and the DCWASA Approved FY 2013 Capital Improvement Program.

Specific Data

This is a continuation of DCWASA's upgrading of the Blue Plains-associated projects outside the fence.

Cost Change

Cost increase is due to revised estimates for projects to rehabilitate DCWASA interceptor sewers and pumping stations that carry WSSC wastewater from their points of connection at the MD/DC boundary to the Blue Plains WWTP; including: the Upper RockCreek Interceptor and Anacostia Long Term Control Plan.

STATUS Not Applicable

OTHER

The project scope has remained the same. Project costs are derived from the DC-WASA Capital & Operating Budget 10-year forecast and latest project management data, and reflect WASA's current expenditure estimates and schedules. Given the open-ended nature of the project, this PDF does not fully reflect the total project costs. These projects are, in fact, expected to continue indefinitely. As new sub-projects are added to the Blue Plains facility plans, the associated costs will be added to this project. The funding schedule also indicates the calculated Rockville share of the cost which varies by project based on the City's relative share of WSSC's flow as derived in the Multijurisdiction Use Facilities Study.

COORDINATION

City of Rockville (responsible for a share of funding) and District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 45% System Improvement and 55% Environmental Regulation.

E. Annual Operating Budget Impact (000's)

		FY of Impact	
Program Costs	Staff		....
	Other		....
Facility Costs	Maintenance		....
	Debt Service	10801	....
Total Costs		10801	....
Impact on Water or Sewer Rate		24¢	....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 11
Date First Approved	FY 02
Initial Cost Estimate	102,833
Cost Estimate Last FY	124,720
Present Cost Estimate	161,952
Approved Request, Last FY	14,454
Total Expenditures & Encumbrances	37,301
Approval Request FY 15	23,795
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not Applicable
% Project Completion:	On-Going
Est. Completion Date:	On-Going

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
083807	S-89.22	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Anacostia Storage Facility

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**6,048**	5,568	390	**90**	90						
Land											
Site Improvements & Utilities											
Construction	**15,343**	12,843	2,100	**400**	400						
Other	**298**		249	**49**	49						
Total	**21,689**	**18,411**	**2,739**	**539**	**539**						

C. Funding Schedule (000's)

WSSC Bonds	**19,520**	16,570	2,465	**485**	485						
SDC	**2,169**	1,841	274	**54**	54						

D. Description & Justification

DESCRIPTION

This project provides for the customer outreach, planning, design and construction of a new seven million gallon sewer overflow storage facility and needed power reliability upgrades at the existing Anacostia No.2 Wastewater Pumping Station. It includes relocation of an existing PCCP material storage yard, being displaced by the new storage facility, to another location.

Service Area Lower Anacostia Drainage Basin **Capacity** 7 MG

JUSTIFICATION

Plans & Studies

"Anacostia Wastewater Pumping Station No.2 Hydraulic Study", Whitman, Requardt & Associates, LLP (October 2005); "Overflow Event June 25 - 26, 2006 Anacostia WWPS", Whitman, Requardt & Associates, LLP (November 2006); Preliminary Design Criteria Report, Whitman, Requardt & Associates (March 2008); Anacostia WWPS Power Reliability Study, Whitman, Requardt & Associates, Shah & Associates (April 2008).

Specific Data

Currently, Anacostia WWPS No. 2 receives flows from the Hyattsville WWPS and by gravity from several basins within the Tributary Area of the Anacostia River. The WWPS discharge is piped directly to DCWASA's sewer system. By agreement between WSSC and DCWASA, the Anacostia WWPS No. 2 cannot discharge wastewater at a rate in excess of 199 MGD. In the past, during extreme rainfall events, the influent flow to Anacostia WWPS No. 2 exceeded the 199 MGD limit, thus creating sanitary overflows on the station site and/or at Junction Chamber No.1, in the vicinity of the Hyattsville WWPS. The Consent Decree between WSSC, MDE, and the EPA was entered into on December 7, 2005, stipulating that the WSSC develop and formally submit a Facility Plan for the Anacostia No. 2 Pump Station to EPA/MDE. The Facility Plan, which recommends the building of a new storage facility intended to eliminate weather related sanitary sewer overflows at the Anacostia No. 2 Pump Station, was approved by EPA/MDE July 31, 2006.

Cost Change

Cost increase is primarily due to revised higher estimates for the new Anancostia WWPS Power Reliability Part 2 project.

STATUS Under Construction (WSSC Contract Nos. CD4441C06 , CP4441B06 , CS4441A06 , CP4441D06).

OTHER

The project scope remains the same. The new sewer overflow storage facility constructed on the site of the existing Anacostia No.2 Wastewater Pumping Station will be substantially completed in summer 2013. Anacostia WWPS Power Reliability project was accepted in October 2010. PCCP Material Storage Yard was accepted in October 2011. Anacostia WWPS Power Reliability Part 2 project is currently in design with substantial completion expected in FY'15.

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E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	2828	....	16
Total Costs		2828	....	16
Impact on Water or Sewer Rate		6¢	....	16

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 08
Date First Approved	FY 08
Initial Cost Estimate	33,957
Cost Estimate Last FY	18,797
Present Cost Estimate	21,689
Approved Request, Last FY	2,231
Total Expenditures & Encumbrances	18,411
Approval Request FY 15	539
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Public/Agency owned land
% Project Completion:	C-85%
Est. Completion Date:	November 2014

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 89.22 **Project Name: Anacostia Storage Facility**

COORDINATION

Montgomery County Government, Prince George's County Government, Potomac Electric Power Company, Maryland Department of the Environment, Prince George's County Department of Environmental Resources, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Region III and U.S. Fish and Wildlife Service.

NOTE This project supports 10% Growth and 90% Environmental Regulation.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
153802	S-103.02	Add

2. Date: October 1, 2013
Revised: May 8, 2014

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Anaerobic Digestion/Combined Heat & Power

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**23,878**	1,218	4,532	**18,128**	6,798	618	3,708	3,708	3,296		
Land											
Site Improvements & Utilities											
Construction	**113,300**			**113,300**		6,180	37,080	37,080	32,960		
Other	**6,802**		228	**6,574**	340	340	2,040	2,040	1,814		
Total	**143,980**	**1,218**	**4,760**	**138,002**	**7,138**	**7,138**	**42,828**	**42,828**	**38,070**		

C. Funding Schedule (000's)

WSSC Bonds	**72,028**	647	2,380	**69,001**	3,569	3,569	21,414	21,414	19,035		
Federal Aid	**71,952**	571	2,380	**69,001**	3,569	3,569	21,414	21,414	19,035		

D. Description & Justification

DESCRIPTION

This project will develop a comprehensive program for the engineering, design, construction, maintenance, and monitoring and verification necessary to add sustainable energy equipment and systems to produce biogas at a location(s) to be determined. The program will provide a reduction in energy and energy-related costs (electricity, natural gas, transportation, and disposal of biosolids) which may in part be guaranteed by the contractor. The potential guaranteed reduction component includes annual avoided energy costs as well as operations and maintenance, chemicals, and biosolids transportation and disposal costs. The program will enhance existing operating conditions and reliability while continuing to meet all permit requirements, and ensure a continued commitment to environmental stewardship at WSSC sites. The scope of work will include, but is not limited to, the addition of anaerobic digestion equipment, thermal hydrolysis pretreatment equipment, gas cleaning systems, hydrogen sulfide and siloxane removal, tanks, piping, valves, pumps, sludge dewatering/thickening equipment, grit removal, effluent disinfection systems, instrumentation, flow metering, power measurement, and combined heat and power generation systems.

In March 2009, the WSSC received approval for a federal Department of Energy grant of $570,900 for the feasibility study/conceptual design phase. On June 16, 2010, the WSSC awarded the study contract to AECOM Technical Services, Inc., of Laurel, Maryland. The study was completed in December 2011, and the Thermal Hydrolysis/Mesophilic Anaerobic Digestion/Combined Heat & Power facility was recommended to be constructed and was presented to the Commission in April 2012. The WSSC will continue to pursue federal capital funding as a source of cost sharing as the project develops.

JUSTIFICATION

Plans & Studies

Appel Consultants, Urban Waste Grease Resource Assessment-NREL (November 1998); Environmental Protection Agency (EPA), Opportunities For and Benefits Of Combined Heat and Power at Wastewater Treatment Facilities (December 2006); Brown & Caldwell, Anaerobic Digestion and Electric Generation Options for WSSC (November 2007); Metcalf & Eddy, WSSC Sludge Digestion Study for Piscataway and Seneca (December 2007); Black & Veatch, WSSC Digester Scope and Analysis (December 2007); JMT, Prince George's County Septage (FOG) Discharge Facility Study (February 2008); JMT, Western Research Institute (WRI) Biogas Feasibility Study Scope of Work - WSSC (April 2008); JMT, Montgomery County Septage (FOG) Discharge Facility Study (January 2010); Facility Plan for the Rock Creek Wastewater Treatment Plant (January 2010); AECOM Technical Services, Inc., Anaerobic Digestion/Combined Heat & Power Study (December 2011).

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E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	3425	....	20
Total Costs		3425	....	20
Impact on Water or Sewer Rate		8¢	....	20

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 15
Date First Approved	FY 10
Initial Cost Estimate	345
Cost Estimate Last FY	146,399
Present Cost Estimate	143,980
Approved Request, Last FY	4,840
Total Expenditures & Encumbrances	1,218
Approval Request FY 15	7,138
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	No land or R/W required
% Project Completion:	P-99%
Est. Completion Date:	(See "Specific Data" for details)

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 103.02 **Project Name: Anaerobic Digestion/Combined Heat & Power**

Specific Data

The EPA is urging wastewater utilities to utilize this commercially available technology (anaerobic digestion) to produce power at a cost below retail electricity, displace purchased fuels for thermal needs, produce renewable fuel for green power programs, enhance power reliability for the wastewater treatment plant to prevent sanitary sewer overflows, reduce biosolids production and improve the health of the Chesapeake Bay, and to reduce greenhouse gas (GHG) and other air pollutants. In April 2009, the EPA announced that greenhouse gases contributed to air pollution that may endanger public health or welfare, and began proceedings to regulate CO2 under the Clean Air Act.

Based on AECOM's feasibility study work as of May 2011, the capital cost (detail design + construction) estimate for a regional/centralized plant at a location to be determined based on a Thermal Hydrolysis/Mesophillic Anaerobic Digestion/Combined Heat & Power (TH/MAD/CHP) process supplemented by restaurant grease fuel design is $110 million, with a 36 month construction period. The environmental benefits and expected outcomes determined from the feasibility study are estimated as follows:

1. Recover 2-3 MW of renewable energy from biomass
2. Reduce Greenhouse Gas production by 11,800 tons/year
3. Reduce biosolids output by more than 50,500 tons/year
4. Reduce lime demand by 4,100 tons/year
5. Reduce nutrient load to the Chesapeake Bay
6. Reduce 5 million gallons/year of grease discharge to sewers
7. Produce Class A Biosolids

The economic benefits determined from the feasibility study are estimated as follows:

1. Recover more than $1.5 million of renewable energy costs/year
2. Reduce biosolids disposal costs by ~ $1.7 million/year
3. Reduce chemical costs by ~ $400,000/year
4. Hedge against rising costs of power, fuel, and chemicals
5. Net Payback of 15 to 18 years (net based on capital cost of TH/MAD/CHP minus capital cost of lime stabilization upgrade of WSSC WWTP facilities through 2030) (Any Federal Aid received would shorten the payback period.)

Cost Change

Order of Magnitude cost estimates were adjusted for inflation and to reflect the reduction in the "Other" calculated cost percentage from 10% to 5%.

STATUS Planning

OTHER

The project scope has remained the same. Now that the feasibility study has been completed, the Commission has a defined scope, capital cost, and energy and energy-related cost savings estimates to be able to proceed with the detailed design and construction of the anerobic digestion, biomass, and combined heat and power generation system facilities.

The Montgomery and Prince George's Councils must be briefed on the project and approve by resolution before the project can move into design.

It is envisioned that either the entire project, or only portions of the project that include the thermal hydrolysis, anaerobic digestion or combined heat and power, include a guarantee by the contractor that the capital cost will be paid back 100% from energy and energy-related cost savings with the payback period not exceeding 15 years. The energy savings for other completed WSSC Energy Performance projects have surpassed the contracts' guaranteed amount every year of the monitoring and verification period. Any Federal Aid received would shorten the payback period. Previous expenditures reflect the planning phase of this project which was completed under the Information Only project A-103.01, Anaerobic Digestion/Combined Heat & Power.

COORDINATION

Montgomery County Government, Prince George's County Government, Maryland-National Capital Park & Planning Commission (Mandatory Referral Process), Montgomery County Department of Environmental Protection, Maryland Department of the Environment and WSSC Project S-96.14, Piscataway WWTP Facility Upgrades.

NOTE This project supports 100% System Improvement.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
103802	S-170.08	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Septage Discharge Facility Planning & Implementation

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**2,196**	796	450	**950**	150	200	600				
Land											
Site Improvements & Utilities											
Construction	**8,000**			**8,000**		2,000	6,000				
Other	**940**		45	**895**	15	220	660				
Total	**11,136**	**796**	**495**	**9,845**	**165**	**2,420**	**7,260**				

C. Funding Schedule (000's)

WSSC Bonds	**11,136**	796	495	**9,845**	165	2,420	7,260				

D. Description & Justification

DESCRIPTION

This project provides for a facility plan to develop alternatives to address current and future requirements for managing septage and Fats, Oils, Grease (FOG) discharge facilities in the sanitary district. The plan will address changes and/or revisions to existing facilities or any new facilities that may be recommended. Outsourcing of portions or the entire process to a privately or publicly owned operation will be one of the alternatives considered. The plan will develop separate and distinct reports and recommendations for each county including outreach programs to provide opportunities for active involvement of interested citizens.

JUSTIFICATION

Plans & Studies

Concept Report Waste Haulers Discharges, AMT and Associates, Inc. (August 2005); Septage Discharge Facility Study, JMT & Associates (October 2010); Facility Plan Rock Creek Wastewater Treatment Plant (January 2010).

Specific Data

Currently septage waste is discharged at four locations: Muddy Branch Road Disposal Site in Montgomery County; and Temple Hill Road Disposal Site, Ritchie Road Disposal Site and Bladensburg Disposal Site in Prince George's County. The types of waste discharged are as follows: Septic Tank Pump-Out (Sludge), Waste Holding Tank Discharge (Gray Water); Grease Trap Pump Out (FOG), Bus Holding Tank Discharge (Sewage and Chemicals), Small Food Service Providers (Low Volume FOG Waste), and Hazardous Materials. FOG wastes should not be returned to the Commission's waste system without treatment. Therefore, means and methods to affect and promote this treatment of FOG wastes at the disposal sites will be included in the facility plan.

Cost Change

Not applicable.

STATUS Facility Planning (WSSC Contract No. CM4363A06,).

OTHER

The project scope has remained the same. Recommendations from the study were presented to the Montgomery County Planning Board as an information item for Mandatory Referral on March 3, 2011and to the Commission on April 18, 2012. The project provides for facility planning and an Order of Magnitude estimate for the design and construction of three septage and two FOG discharge facilities. This project has been delayed pending a decision on WSSC Project S-103.02, Anaerobic Digestion and Combined Heat and Power.

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E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	974	....	18
Total Costs		974	....	18
Impact on Water or Sewer Rate		2¢	....	18

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 10
Date First Approved	FY 10
Initial Cost Estimate	10,835
Cost Estimate Last FY	11,168
Present Cost Estimate	11,136
Approved Request, Last FY	550
Total Expenditures & Encumbrances	796
Approval Request FY 15	165
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not determined
% Project Completion:	P-100%
Est. Completion Date:	March 2017

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 170.08 **Project Name: Septage Discharge Facility Planning & Implementation**

COORDINATION

Montgomery County Government, Prince George's County Government, Maryland-National Capital Park & Planning Commission (Mandatory Referral), Montgomery County Department of Environmental Protection, Prince George's County Department of Environmental Resources, Prince George's County Health Department and WSSC Project S-103.02, Anaerobic Digestion/Combined Heat & Power.

NOTE This project supports 100% System Improvement.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
113805	S-170.09	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Trunk Sewer Reconstruction Program

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**168,362**	49,000	73,059	**46,303**	19,483	8,903	3,507	4,662	4,802	4,946	
Land											
Site Improvements & Utilities											
Construction	**224,617**	1,580	75,400	**147,637**	77,688	41,548	3,170	8,163	8,408	8,660	
Other	**60,423**		26,199	**34,224**	17,148	8,903	1,178	2,263	2,331	2,401	
Total	**453,402**	**50,580**	**174,658**	**228,164**	**114,319**	**59,354**	**7,855**	**15,088**	**15,541**	**16,007**	

C. Funding Schedule (000's)

WSSC Bonds	**453,402**	50,580	174,658	**228,164**	114,319	59,354	7,855	15,088	15,541	16,007	

D. Description & Justification

DESCRIPTION

The Trunk Sewer Reconstruction Program provides for the inspection, evaluation, planning, design and construction required for the rehabilitation of sewer mains and their associated manholes in environmentally sensitive areas. This includes both trunk sewers 15-inches in diameter and greater, along with associated smaller diameter pipe less than 15-inches diameter. The smaller diameter pipe is included due to its location within the environmentally sensitive areas.

JUSTIFICATION

Plans & Studies

WSSC Sanitary Sewer Overflow Consent Decree (December 7, 2005)

Specific Data

Under the terms of the Consent Decree the WSSC Trunk Sewer Inspection Program inspected all required sewers in 21 basins by December 2010 and Sewer System Evaluation Surveys (SSES) were completed for 9 basins. WSSC shall conduct rainfall, groundwater and flow monitoring to determine I/I rates and identify areas of limited capacity through collection system modeling. Where appropriate, WSSC shall use additional means to identify sources of I/I, including CCTV, smoke and/or dye testing.

All the Trunk Sewer Inspections, SSES work and other related collection system evaluations are now complete. As required by Article 6 of the Consent Decree, a Sewer Basin Repair, Replacement, Rehabilitation Plan (SR3 Plan) for each basin was completed and submitted to the EPA and MDE by March 2013. Eighteen of the SR3 Plans have been approved by EPA and MDE as of May 2013.

* At the current rate of acquiring environmental permits, the required trunk sewer reconstruction work is expected to extend beyond the Consent Decree's December 2015 deadline. In addition to limited contractor availability, WSSC is experiencing significant delays in acquiring both permission and required permits to work in environmentally sensitive areas. WSSC worked with the MDE and the USACE and identified a way to expedite environmental permit approvals. An umbrella permit was issued by the USACE on May 8, 2012. Based upon an estimated table of impacts, MDE and the USACE agreed to permit the entire Consent Decree with special conditions under an umbrella type permit. As basins move toward a 30% design stage, an updated permit application for the basin will be submitted, with final Joint Permit approval issued as an addendum to the umbrella permit with special conditions to address minimization and avoidance of impacts.

Cost Change

The cost has decreased due to a reduction of priority 2 assets to be designed after Consent Decree is completed. Workplan will follow a design by basin approach.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	31194	....	21
Total Costs		31194	....	21
Impact on Water or Sewer Rate		69¢	....	21

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 11
Date First Approved	FY 11
Initial Cost Estimate	504,993
Cost Estimate Last FY	758,992
Present Cost Estimate	453,402
Approved Request, Last FY	186,246
Total Expenditures & Encumbrances	50,580
Approval Request FY 15	114,319
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	D-80%
Est. Completion Date:	See Block D

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 170.09 **Project Name: Trunk Sewer Reconstruction Program**

STATUS Final Design

OTHER

The project scope remains the same. Reconstruction work will include: reduction of inflow and infiltration (I/I); replacement of substandard sewer segments; in situ lining of sewer segments; pipeline and manhole protection; rebuilding of manholes; and correction of structural defects and poor alignment. The reconstruction that will be performed in each sewer basin will be prioritized to most effectively prevent SSOs and backups. The Consent Decree requires that all rehabilitation work be substantially complete by December 5, 2015.

The design work for the SR3 Plans pertaining to Trunk Sewer reconstruction began in FY 2010. The expenditures and schedule shown in Block B above are Order of Magnitude level estimates and are expected to change as individual basin designs are completed and construction contracts are bid. Construction will begin in each basin as the individual designs are completed.

Work is underway in 24 basins in FY2014. For FY2015, work will continue in environmentally sensitive areas, encompassing mainline reconstruction, and providing exposed pipeline and manhole protection from high stream flows and stream bank erosion where required. Maryland DNR will not approve Forest Conservation Plans until WSSC resolves the long term conservation easements. This affects work in all basins.

COORDINATION

Maryland State Highway Administration, Montgomery County Department of Public Works and Transportation, Maryland-National Capital Park & Planning Commission, National Park Service, Maryland Department of the Environment, Maryland Department of Natural Resources (Critical Area Commission, FSD Approval Forest Conservation/Reforestation Rare, Threatened or Endangered Species), Prince George's County Department of Public Works & Transportation, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Region III, Maryland Historical Trust and WSSC Project S-1.01, Sewer Reconstruction Program.

NOTE This project supports 100% System Improvement.

PROJECTS PENDING CLOSE-OUT

Bi-County Sewer Projects

(costs in thousands)

Project Number	Agency Number	Project Name	Estimated Total Cost	Expenditures Thru FY'13	Estimated Expenditures FY'14	Remarks
973817	S-22.08	Blue Plains WWTP: Biological Nutrient Removal	$74,896	$74,896	$0	Project completed.
		TOTALS	$74,896	$74,896	$0	

Section 5 - Prince George's County Water Projects

DATE: October 1, 2013

FINANCIAL SUMMARY

PRINCE GEORGE'S COUNTY WATER PROJECTS

(ALL FIGURES IN THOUSANDS)

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 13	EST. EXPEND 14	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BUDGET REQUEST 15	PDF PAGE NUM
						YR 1 15	YR 2 16	YR 3 17	YR 4 18	YR 5 19	YR 6 20		
W-12.02	Prince George's County HG415 Zone Water Main	3,391	79	401	2,911	2,046	865	0	0	0	0	2,046	5-2
W-34.02	Old Branch Avenue Water Main	14,946	1,052	340	13,554	268	3,160	6,592	3,534	0	0	268	5-3
W-34.03	Water Transmission Improvements 385B Pressure Zone	26,496	425	275	25,796	1,018	798	2,680	7,984	7,984	5,332	1,018	5-4
W-34.04	Branch Avenue Water Transmission Improvements	30,091	5	1,733	28,353	770	12,631	13,778	1,174	0	0	770	5-5
W-34.05	Marlboro Zone Reinforcement Main	4,657	0	246	4,411	299	1,182	2,695	235	0	0	299	5-6
W-62.05	Clinton Zone Water Storage Facility Implementation	12,938	731	836	11,371	589	1,540	6,848	2,394	0	0	589	5-7
W-65.10	St. Barnabas Elevated Tank Replacement	10,666	136	522	10,008	8,278	1,610	120	0	0	0	8,278	5-8
W-84.02	Ritchie Marlboro Road Transmission Main & PRV	8,811	460	449	7,902	909	883	3,496	2,614	0	0	909	5-9
W-84.05	Prince George's County 450A Zone Water Main	38,170	0	386	17,852	385	1,467	1,466	1,246	6,644	6,644	385	5-10
W-111.05	Hillmeade Road Water Main	5,490	858	46	4,586	2,293	2,293	0	0	0	0	2,293	5-11
W-119.01	John Hanson Highway Water Main, Part 1	7,741	1,041	495	6,205	1,608	4,597	0	0	0	0	1,608	5-12
W-123.20	Oak Grove/Leeland Roads Water Main, Part 2	12,760	1,670	3,216	7,874	5,080	1,862	932	0	0	0	5,080	5-13
W-129.12	Church Road Water Main, Part 2	950	6	230	714	656	58	0	0	0	0	656	5-14
W-137.02	South Potomac Supply Improvement	10,543	1,214	391	8,938	4,375	4,563	0	0	0	0	4,375	5-15
W-147.00	Collington Elevated Water Storage Facility	17,480	1,244	6,832	9,404	6,742	1,474	1,188	0	0	0	6,742	5-16
W-197.00	DSP & Conceptual Design Water Projects	9,904	2,134	1,017	6,753	2,209	2,478	2,066	0	0	0	2,209	5-17
W-204.00	Land & Rights-of-Way Acquisition - Prince George's County	3,740	0	3,176	564	514	50	0	0	0	0	514	5-22
	Projects Pending Close-Out	348	348	0	0	0	0	0	0	0	0	0	5-23
	TOTAL PRINCE GEORGE'S COUNTY WATER PROJECTS	219,122	11,403	20,591	167,196	38,039	41,511	41,861	19,181	14,628	11,976	38,039	

Notes for costs beyond six years:

Includes 19,932 for Project W-84.05, Prince George's County 450A Zone Water Main.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-12.02	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Prince George's County HG415 Zone Water Main

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Patuxent P.A. 15

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**433**	79	123	**231**	159	72					
Land											
Site Improvements & Utilities											
Construction	**2,526**		226	**2,300**	1,620	680					
Other	**432**		52	**380**	267	113					
Total	**3,391**	**79**	**401**	**2,911**	**2,046**	**865**					

C. Funding Schedule (000's)

WSSC Bonds	**3,391**	79	401	**2,911**	2,046	865					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of 1,500 feet of 24-inch diameter water main and new isolation valves, which will improve system reliability by improving the flexibility of the delivery system to the Montgomery County High Zone HG660 and Patuxent Pressure Zone HG415A 30-inch and 42-inch diameter transmission mains leaving the Patuxent Plant.

Service Area Patuxent Pressure Zone HG415A, Montgomery High Zone Pressure Zone 660A

JUSTIFICATION

Plans & Studies

BOA Contract No. PM0003A05, Task Order No. 12: Patuxent Pressure Zone HG415A Redundancy Study, Whitman, Requardt & Asslciates, LLP (February 2009); BOA Contract No. PM0019A08, Task Order No. 11, Patuxent Pressure Zone HG415A 24-inch Transmission Main, EBA Engineering (December 2011).

Specific Data

The new water main will provide a redundant feed to the Montgomery County High Zone HG660 and Patuxent Pressure Zone HG415A from the Potomac Plant in the event the Patuxent Plant is out of service.

Cost Change

The cost increased with the addition of a second flow control valve.

STATUS Preliminary Design (WSSC Contract No. BL5057A09,).

OTHER

The project scope has remained the same. Expenditures and schedule projections shown in Block B are planning level estimates and may change depending on site-specific conditions and design constraints. Land costs are included in WSSC Project W-204.00.

COORDINATION

Prince George's County Government and Prince George's County Department of Environmental Resources.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance	25	....	17
	Debt Service	100	....	17
Total Costs		125	....	17
Impact on Water or Sewer Rate			....	

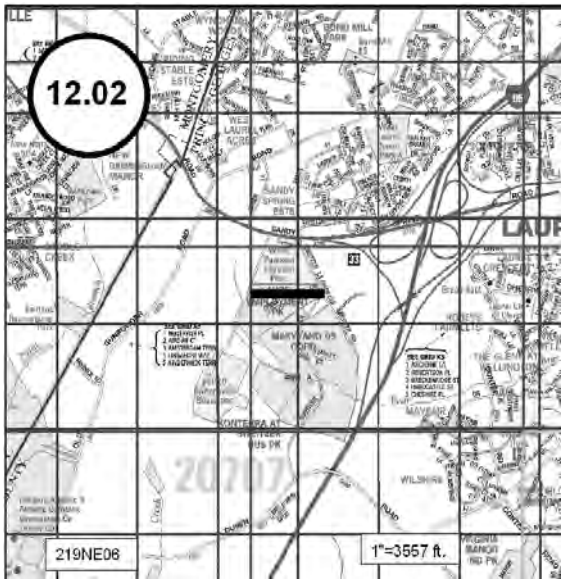
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 11
Date First Approved	FY 11
Initial Cost Estimate	1,074
Cost Estimate Last FY	2,989
Present Cost Estimate	3,391
Approved Request, Last FY	1,696
Total Expenditures & Encumbrances	79
Approval Request FY 15	2,046
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	R/W required
% Project Completion:	D-30%
Est. Completion Date:	FY 2016

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-34.02	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Old Branch Avenue Water Main

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clinton & Vicinity P.A. 81A

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**2,829**	1,052	310	**1,467**	244	260	565	398			
Land											
Site Improvements & Utilities											
Construction	**10,856**			**10,856**		2,614	5,428	2,814			
Other	**1,261**		30	**1,231**	24	286	599	322			
Total	**14,946**	**1,052**	**340**	**13,554**	**268**	**3,160**	**6,592**	**3,534**			

C. Funding Schedule (000's)

WSSC Bonds	**7,473**	526	170	**6,777**	134	1,580	3,296	1,767			
SDC	**7,473**	526	170	**6,777**	134	1,580	3,296	1,767			

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of approximately 10,600 feet of 24-inch diameter water main and approximately 4,400 feet of 30-inch diameter water main along Old Branch Avenue, from Allentown Road to Piscataway Road.

Service Area Clinton Pressure Zone HG385B

JUSTIFICATION

Plans & Studies

General Plan; M-NCP&PC Round 7.0 growth forecasts; WSSC Memorandum dated May 16, 2006.

Specific Data

This project will provide redundancy to a large area of Prince George's County, including the 85,000 customers in Clinton Pressure Zone HG385B and dependent zones. Service to these zones would be severely disrupted with the loss of the Marlboro Road Pressure Reducing Valves or associated piping. The WSSC attempts to provide for average day demands in the event of the loss of any one water system facility and this project will meet that goal for Clinton Pressure Zone HG385B and dependent zones.

Cost Change

The cost increased due to inflation.

STATUS Preliminary Design (WSSC Contract No. BL4985A09,).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are planning level estimates and may change based upon final pipeline alignment, site-specific conditions, and design constraints. Land costs are included in WSSC Project W-204.00.

COORDINATION

Maryland State Highway Administration, Prince George's County Government, Maryland-National Capital Park & Planning Commission, Maryland Department of the Environment and Prince George's County Department of Public Works & Transportation.

NOTE This project supports 50% Growth and 50% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	182	 19
	Debt Service	463	 19
Total Costs		645	 19
Impact on Water or Sewer Rate		1¢	 19

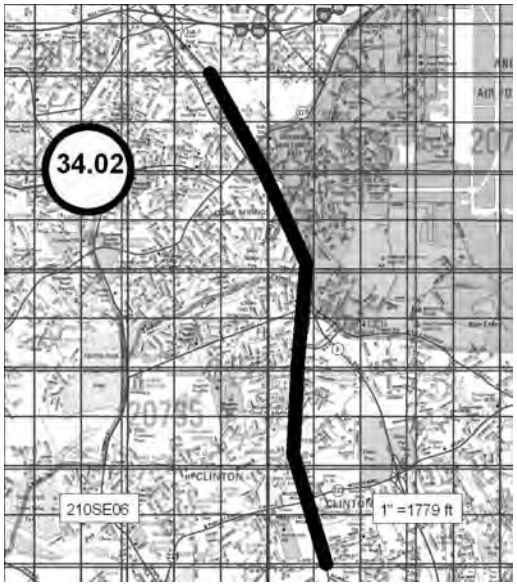
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 08
Date First Approved	FY 08
Initial Cost Estimate	10,350
Cost Estimate Last FY	14,460
Present Cost Estimate	14,946
Approved Request, Last FY	288
Total Expenditures & Encumbrances	1,052
Approval Request FY 15	268
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	R/W required
% Project Completion:	D-85%
Est. Completion Date:	FY 2018

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-34.03	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Water Transmission Improvements 385B Pressure Zone

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clinton & Vicinity P.A. 81A

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**2,425**	425	250	**1,750**	925	725	25	25	25	25	
Land											
Site Improvements & Utilities											
Construction	**21,699**			**21,699**			2,411	7,233	7,233	4,822	
Other	**2,372**		25	**2,347**	93	73	244	726	726	485	
Total	**26,496**	**425**	**275**	**25,796**	**1,018**	**798**	**2,680**	**7,984**	**7,984**	**5,332**	

C. Funding Schedule (000's)

SDC	**26,496**	425	275	**25,796**	1,018	798	2,680	7,984	7,984	5,332	

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction for 24,000 feet of 24-inch diameter water transmission main and a flow control valve along Accokeek Road that will improve system reliability through the HG385 and HG345 pressure zones.

Service Area Clinton Pressure Zone HG385B

JUSTIFICATION

Plans & Studies

Clinton Zone WSF & Transmission Improvements Modeling and Master Plan Report, Gannett Fleming, Inc. (February 2012).

Specific Data

The existing transmission mains have been stressed by recent development in southern Prince George's County. In addition, head-loss due to increased water use is preventing the Accokeek elevated tank from operating as designed. A new water main will improve our transmission capacity to serve recent and future growth, and will also improve overall reliability for southern Prince George's County customers.

Cost Change

The project cost has increased due to the more defined design and construction scope of services based on the completed capacity and alignment study.

STATUS Planning (WSSC Contract No. BL5273A11,).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are Order of Magnitude level estimates and are expected to change once the project moves into design. The design phase will determine the final alignment. Land costs are included in WSSC Project W-204.00.

COORDINATION

Maryland State Highway Administration, Maryland-National Capital Park & Planning Commission (Mandatory Referral Process), Prince George's County Department of Environmental Resources, Prince George's County Department of Public Works & Transportation and WSSC Projects W-34.02, Old Branch Avenue Water Main, W-34.04, Branch Avenue Water Transmission Improvements, W-34.05, Marlboro Zone Reinforcement Main and W-62.05, Clinton Zone Water Storage Facility Implementation.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	427	21
	Debt Service	....	....
Total Costs		427	21
Impact on Water or Sewer Rate		....	

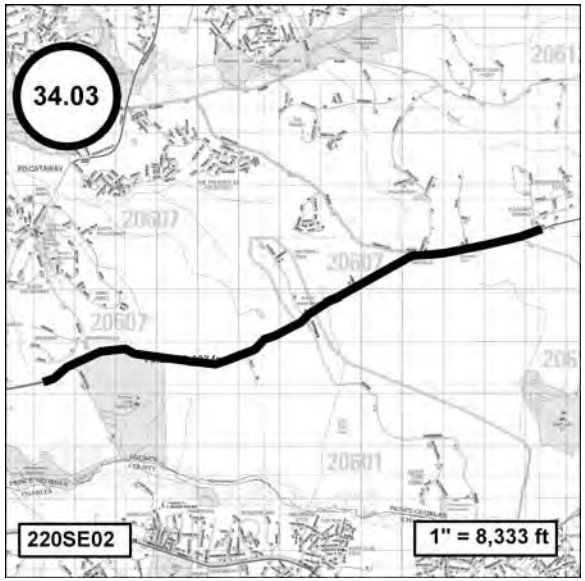
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 12
Date First Approved	FY 12
Initial Cost Estimate	173
Cost Estimate Last FY	20,420
Present Cost Estimate	26,496
Approved Request, Last FY	5,775
Total Expenditures & Encumbrances	425
Approval Request FY 15	1,018
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	P-90%
Est. Completion Date:	FY 2020

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-34.04	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Branch Avenue Water Transmission Improvements

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**2,355**	5	1,575	**775**	700	25	25	25			
Land											
Site Improvements & Utilities											
Construction	**25,000**			**25,000**		11,458	12,500	1,042			
Other	**2,736**		158	**2,578**	70	1,148	1,253	107			
Total	**30,091**	**5**	**1,733**	**28,353**	**770**	**12,631**	**13,778**	**1,174**			

C. Funding Schedule (000's)

SDC	**30,091**	5	1,733	**28,353**	770	12,631	13,778	1,174			

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of approximately 28,000 feet of 42-inch diameter water transmission main and a flow control valve along Branch Avenue in the Clinton area.

Service Area Clinton Pressure Zone HG385B

JUSTIFICATION

Plans & Studies

Clinton Zone WSF & Transmission Improvements Modeling and Master Plan Report, Gannett Fleming, Inc. (February 2012).

Specific Data

The new water main will serve as a supply feed for the proposed Clinton South Tank.

Cost Change

The current cost estimate has increased based on the recommendation of the completed alignment and capacity study.

STATUS Planning (WSSC Contract Nos. BL5273B11 , BL5273D11).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are planning level estimates and are expected to change once the project moves into design. The design phase will determine the final alignment. This project will be expedited to coordinate with SHA's schedule to reconstruct Branch Avenue. SHA agreed to allow WSSC to place the main in the road as long as the northern portion of the project is constructed by the Fall of 2016. Land costs are included in WSSC Project W-204.00.

COORDINATION

Maryland State Highway Administration, Maryland-National Capital Park & Planning Commission (Mandatory Referral Process), Prince George's County Department of Environmental Resources, Prince George's County Department of Public Works & Transportation and WSSC Projects W-34.02, Old Branch Avenue Water Main, W-34.03, Water Transmission Improvements 385B Pressure Zone, W-34.05, Marlboro Zone Reinforcement Main and W-62.05, Clinton Zone Water Storage Facility Implementation.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	498	19
	Debt Service	....	....
Total Costs		498	19
Impact on Water or Sewer Rate		....	

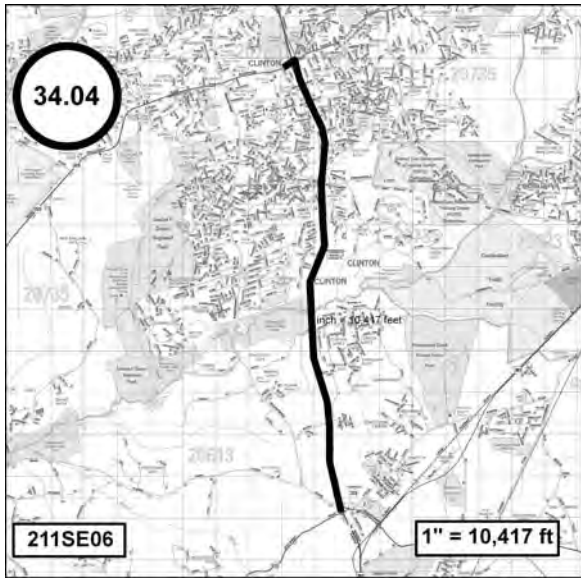
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 14
Date First Approved	FY 14
Initial Cost Estimate	23,705
Cost Estimate Last FY	23,705
Present Cost Estimate	30,091
Approved Request, Last FY	550
Total Expenditures & Encumbrances	5
Approval Request FY 15	770
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	P-90%
Est. Completion Date:	FY 2018

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-34.05	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Marlboro Zone Reinforcement Main

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**550**		214	**336**	260	56	10	10			
Land											
Site Improvements & Utilities											
Construction	**3,499**			**3,499**		972	2,333	194			
Other	**608**		32	**576**	39	154	352	31			
Total	**4,657**		**246**	**4,411**	**299**	**1,182**	**2,695**	**235**			

C. Funding Schedule (000's)

WSSC Bonds	**4,657**		246	**4,411**	299	1,182	2,695	235			

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of approximately 4,000 feet of 16-inch diameter water transmission main and a flow control valve along Old Marlboro Pike in the Clinton area.

Service Area Clinton Pressure Zone HG385B

JUSTIFICATION

Plans & Studies

Clinton Zone WSF & Transmission Improvements Modeling and Master Plan Report, Gannett Fleming, Inc. (February 2012).

Specific Data

This new water main will provide system reliability and redundancy by connecting the 385B and 280A pressure zones.

Cost Change

Not applicable.

STATUS Planning (WSSC Contract No. BL5273C11,).

OTHER

The project scope has remianed the same. Expenditure and schedule projections shown in Block B are Order of Magnitude level estimates and are expected to change once the project moves into design. Land costs are included in WSSC Project W-204.00.

COORDINATION

Maryland State Highway Administration, Maryland-National Capital Park & Planning Commission (Mandatory Referral Process), Prince George's County Department of Environmental Resources, Prince George's County Department of Public Works & Transportation and WSSC Projects W-34.02, Old Branch Avenue Water Main, W-34.03, Water Transmission Improvements 385B Pressure Zone, W-34.04, Branch Avenue Water Transmission Improvements and W-62.05, Clinton Zone Water Storage Facility Implementation.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	71	 19
	Debt Service	456	 19
Total Costs		527	 19
Impact on Water or Sewer Rate		1¢	 19

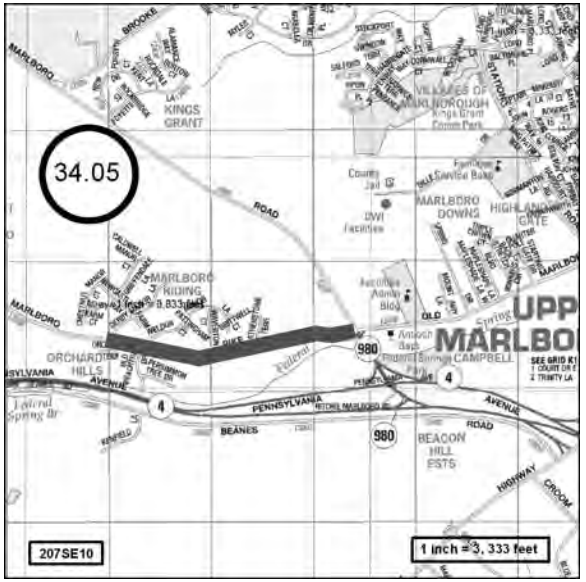
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 14
Date First Approved	FY 14
Initial Cost Estimate	5,234
Cost Estimate Last FY	5,234
Present Cost Estimate	4,657
Approved Request, Last FY	460
Total Expenditures & Encumbrances	
Approval Request FY 15	299
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	P-90%
Est. Completion Date:	FY 2018

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-62.05	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Clinton Zone Water Storage Facility Implementation

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Clinton & Vicinity P.A. 81A

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	....
	Other	....
Facility Costs	Maintenance	....
	Debt Service	....
Total Costs		....
Impact on Water or Sewer Rate		....

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**2,827**	731	760	**1,336**	535	400	225	176			
Land											
Site Improvements & Utilities											
Construction	**9,000**			**9,000**		1,000	6,000	2,000			
Other	**1,111**		76	**1,035**	54	140	623	218			
Total	**12,938**	**731**	**836**	**11,371**	**589**	**1,540**	**6,848**	**2,394**			

C. Funding Schedule (000's)

SDC	**12,938**	731	836	**11,371**	589	1,540	6,848	2,394			

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 13
Date First Approved	FY 13
Initial Cost Estimate	7,993
Cost Estimate Last FY	13,082
Present Cost Estimate	12,938
Approved Request, Last FY	812
Total Expenditures & Encumbrances	731
Approval Request FY 15	589
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status: Site not selected
% Project Completion: P-95%
Est. Completion Date: FY 2018

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of approximately 4.0 million gallons (MG) of water storage to serve the Clinton area. The site selection phase of this project will include a Community Outreach Program.

Service Area Clinton Pressure Zone HG385B **Capacity** 4.0 MG

JUSTIFICATION

Plans & Studies

WSSC Memorandum dated May 9, 2005, from Timothy Hirrel, Unit Coordinator, to Craig Fricke, Planning Group Leader; 2006 Water Production Projections; 2005 Water Storage Volume Criteria; Clinton Zone WSF & Transmission Improvements Modeling and Master Plan Report, Gannett Fleming, Inc. (February 2012).

Specific Data

Clinton Pressure Zone HG385B serves a large and growing area of Southern Prince George's County and currently has only one storage facility. Since storage facilities must be periodically removed from service for maintenance, having only one in a large zone creates operational problems. The Modeling and Master Plan Report indicates that there will be approximately 4.0 MG of storage deficit in Clinton Pressure Zone HG385B by the year 2040.

Cost Change

Not applicable.

STATUS Planning (WSSC Contract No. BE4507A06,).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are Order of Magnitude level estimates and are expected to change once the project moves into design. Land costs are included in WSSC Project W-204.00.

COORDINATION

Prince George's County Government, Maryland-National Capital Park & Planning Commission, Maryland Department of the Environment, Prince George's County Department of Environmental Resources and WSSC Projects W-34.02, Old Branch Avenue Water Main, W-34.03, Water Transmission Improvements 385B Pressure Zone, W-34.04, Branch Avenue Water Transmission Improvements and W-34.05, Marlboro Zone Reinforcement Main.

NOTE This project supports 100% Growth.

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-65.10	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: St. Barnabas Elevated Tank Replacement

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Suitland-District Heights & Vicinity P.A. 75A

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**1,210**	136	375	**699**	625	64	10				
Land											
Site Improvements & Utilities											
Construction	**8,500**		100	**8,400**	6,900	1,400	100				
Other	**956**		47	**909**	753	146	10				
Total	**10,666**	**136**	**522**	**10,008**	**8,278**	**1,610**	**120**				

C. Funding Schedule (000's)

WSSC Bonds	**5,333**	68	261	**5,004**	4,139	805	60				
SDC	**5,333**	68	261	**5,004**	4,139	805	60				

D. Description & Justification

DESCRIPTION

This project provides for the design and construction of approximately 2.5 million gallons (MG) of water storage to serve Prince George's High Pressure Zone HG450A and it includes the demolition of the existing St. Barnabas elevated water storage tank.

Service Area Prince George's High Pressure Zone HG450A, Clinton Pressure Zone HG385B, Patuxent Pressure Zone HG415A

Capacity 2.5 MG

JUSTIFICATION

Plans & Studies

Prince George's County High Zone Storage Study, Hazen & Sawyer (June 2012).

Specific Data

This project is necessary to provide storage capacity and address water quality issues in Prince George's High Pressure Zone HG450A. Specifically, the existing St. Barnabas and Camp Springs elevated tanks have low overflow elevations that impact water quality in the zone.

Cost Change

The cost increase is due to the prelimary design level estimate vs. the previous planning level estimate.

STATUS Preliminary Design (WSSC Contract Nos. BE3227B02 , BE3227A02).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are based on the preliminary design estimate and may change as the design is finalized. The Prince George's County High Zone Storage Study recommended moving forward with design and construction of a new tank on the existing St. Barnabas site. The new tank will replace the existing St. Barnabas elevated tank. The study also recommended pursuing acquisition of an additional site for long-term water storage needs. Land costs are included in WSSC Project W-204.00.

COORDINATION

Prince George's County Government, Maryland-National Capital Park & Planning Commission (Related to acquisition of future storage site.), Maryland Department of the Environment and Federal Aviation Administration.

NOTE This project supports 50% Growth and 50% System Improvement.

E. Annual Operating Budget Impact (000's)

		FY of Impact		
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	317	....	18
Total Costs		317	....	18
Impact on Water or Sewer Rate			....	

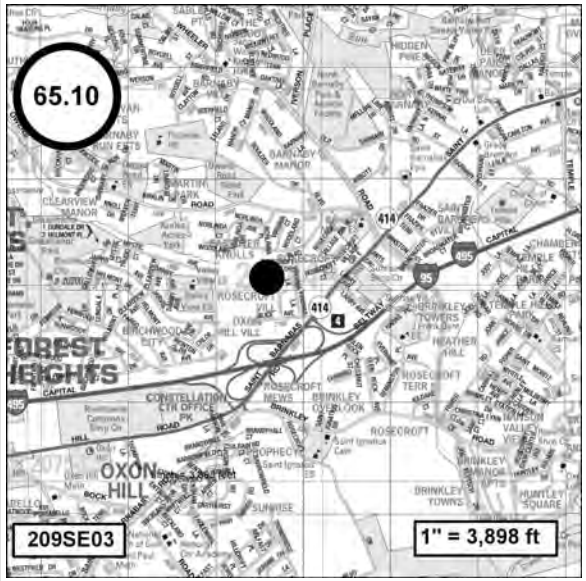
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 13
Date First Approved	FY 13
Initial Cost Estimate	7,274
Cost Estimate Last FY	7,274
Present Cost Estimate	10,666
Approved Request, Last FY	482
Total Expenditures & Encumbrances	136
Approval Request FY 15	8,278
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	See text in Block D
% Project Completion:	D-90%
Est. Completion Date:	FY 2017

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-84.02	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Ritchie Marlboro Road Transmission Main & PRV

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Westphalia & Vicinity P.A. 78

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**1,660**	460	390	**810**	790	10	10				
Land											
Site Improvements & Utilities											
Construction	**6,061**			**6,061**		758	3,030	2,273			
Other	**1,090**		59	**1,031**	119	115	456	341			
Total	**8,811**	**460**	**449**	**7,902**	**909**	**883**	**3,496**	**2,614**			

C. Funding Schedule (000's)

SDC	**8,811**	460	449	**7,902**	909	883	3,496	2,614			

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of approximately 13,100 feet of 24-inch diameter main and a pressure reducing valve (PRV) to serve the Westphalia area. The watermain will be constructed along Ritchie Marlboro Road from South of Westphalia Road to the Beltway.

Service Area Prince George's High Pressure Zone HG450A, Southern Pressure Zone 385B

JUSTIFICATION

Plans & Studies

Prince George' County High Zone Water Main Alignment and Capacity Study, Chester Engineering (September 2012)

Cost Change

Project design and construction cost estimate was refined based on the recommendation of the capacity and alignment study which included the addition of new pressure reducing valve.

STATUS Planning (WSSC Contract No. BL5020A09,).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown above are Order of Magnitude level estimates and may be updated once the project moves into design. This project was previously included under WSSC Project W-197.00, DSP & Conceptual Design Water Projects under the name Prince George's High Zone Water Main. Based upon the results of the study the project has been renamed and moved up as a stand alone project with revised estimates for design and construction. Land costs are included in WSSC Project W-204.00.

COORDINATION

Maryland State Highway Administration, Prince George's County Government, Maryland-National Capital Park & Planning Commission and Prince George's County Department of Public Works & Transportation.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	140	19
	Debt Service	....	....
Total Costs		140	19
Impact on Water or Sewer Rate		....	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 08
Date First Approved	FY 08
Initial Cost Estimate	2,496
Cost Estimate Last FY	3,124
Present Cost Estimate	8,811
Approved Request, Last FY	169
Total Expenditures & Encumbrances	460
Approval Request FY 15	909
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Right-of-Way may be required
% Project Completion:	P-90%
Est. Completion Date:	FY 2018

H. Map **Map Reference Code:**

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-84.05	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Prince George's County 450A Zone Water Main

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Prince George's County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**4,701**		351	**4,230**	350	1,334	1,333	1,133	40	40	120
Land											
Site Improvements & Utilities											
Construction	**30,000**			**12,000**					6,000	6,000	18,000
Other	**3,469**		35	**1,622**	35	133	133	113	604	604	1,812
Total	**38,170**		**386**	**17,852**	**385**	**1,467**	**1,466**	**1,246**	**6,644**	**6,644**	**19,932**

C. Funding Schedule (000's)

WSSC Bonds	**38,170**		386	**17,852**	385	1,467	1,466	1,246	6,644	6,644	19,932

D. Description & Justification

DESCRIPTION

This project provides for a capacity and alignment study, design, and construction of approximately ten miles of new redundant transmission main for Prince George's High Pressure Zone HG450A. Portions of the transmission main that currently serve the HG450A and HG290B Pressure Zones will be out of service almost every year to meet the goals of the PCCP inspection program. A redundant transmission main is required to continue to provide service to our customers while the existing transmission main is planned to be out of service and to provide service in case the existing main fails.

Service Area Prince George's High Pressure Zone HG450A

JUSTIFICATION

Specific Data

When portions of the existing main are out of service, the remaining mains lack sufficient capacity and pumping against these restrictions can cause high pressure that may result in pipe failure. The new main should be a minimum of 30-inch diameter and will start where the existing 54-inch diameter main inside the beltway connects to an existing 24-inch diameter main at D'arcy Road. The new transmission main may parallel or replace existing mains as determined by modeling. The new transmission main shall tie in to the existing 42-inch diameter main on the south side of I-495 where it splits into the existing 42-inch diameter and 36-inch diameter mains.

Cost Change

The project has been updated to include design and construction cost estimates.

STATUS Planning

OTHER

The project scope has remained the same. Expenditure and schedule projections shown above are Order of Magnitude level estimates and are expected to change once the project moves into planning and design.

COORDINATION

Maryland State Highway Administration, Prince George's County Government, Maryland-National Capital Park & Planning Commission (Mandatory Referral Process) and Prince George's County Department of Public Works & Transportation.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	972	....
	Debt Service	26	....
Total Costs		998	....
Impact on Water or Sewer Rate		2¢	 23

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 13
Date First Approved	FY 13
Initial Cost Estimate	374
Cost Estimate Last FY	385
Present Cost Estimate	38,170
Approved Request, Last FY	184
Total Expenditures & Encumbrances	
Approval Request FY 15	385
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not determined
% Project Completion:	P-0%
Est. Completion Date:	FY 2023

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-111.05	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Hillmeade Road Water Main

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bowie & Vicinity P.A. 71A

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**964**	858	40	**66**	33	33					
Land											
Site Improvements & Utilities											
Construction	**3,922**			**3,922**	1,961	1,961					
Other	**604**		6	**598**	299	299					
Total	**5,490**	**858**	**46**	**4,586**	**2,293**	**2,293**					

C. Funding Schedule (000's)

SDC	**5,490**	858	46	**4,586**	2,293	2,293					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of approximately 7,300 feet of 24-inch diameter water main along Hillmeade Road from Lanham-Severn Road to an existing 24-inch diameter water main in Hillmeade Road at Daisy Lane.

Service Area Bowie Pressure Zone HG350E

JUSTIFICATION

Plans & Studies

Bowie-Glen Dale Water Storage Facility Plan, O'Brien & Gere Engineers, Inc. (October 1990); Water Resources Planning Section Memorandum dated May 31, 1996; M-NCP&PC Round 6 growth forecasts.

Specific Data

The purpose of this project is to provide adequate pressure in response to growth in the Bowie area.

Cost Change

Costs were increased for inflation.

STATUS Final Design (WSSC Contract No. BL1782A96,).

OTHER

The project scope has remained the same. Expenditures and schedule projections shown in Block B are design level estimates and may change based upon site-specific conditions and actual bid. This project has been delayed due to outstanding permitting issues. Land costs are included in WSSC Project W-204.00.

COORDINATION

Maryland State Highway Administration, Prince George's County Government, Maryland-National Capital Park & Planning Commission, AMTRAK Railroad, Maryland Department of Natural Resources, Prince George's County Department of Public Works & Transportation and U.S. Army Corps of Engineers.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	126	 17
	Debt Service	....	....
Total Costs		126	 17
Impact on Water or Sewer Rate			....

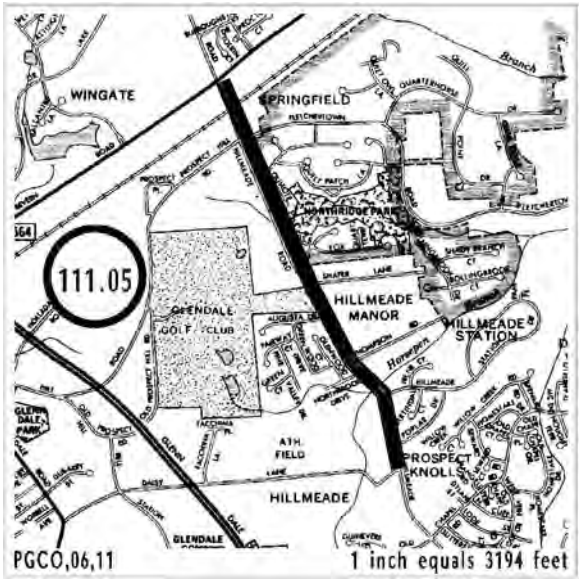
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 98
Date First Approved	FY 98
Initial Cost Estimate	1,898
Cost Estimate Last FY	5,191
Present Cost Estimate	5,490
Approved Request, Last FY	3,267
Total Expenditures & Encumbrances	858
Approval Request FY 15	2,293
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	R/W required
% Project Completion:	D-95%
Est. Completion Date:	March 2016

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-119.01	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: John Hanson Highway Water Main, Part 1

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Largo-Lottsford & Vicinity P.A. 73, Collington & Vicinity P. A. 74B

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**1,672**	1,041	430	**201**	201						
Land											
Site Improvements & Utilities											
Construction	**5,194**			**5,194**	1,197	3,997					
Other	**875**		65	**810**	210	600					
Total	**7,741**	**1,041**	**495**	**6,205**	**1,608**	**4,597**					

C. Funding Schedule (000's)

SDC	**7,741**	1,041	495	**6,205**	1,608	4,597					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of 9,300 feet of 36-inch diameter water main along John Hanson Highway and Martin Luther King Jr. Highway, from Whitfield Chapel Road to Folly Branch.

Service Area Prince George's Main Pressure Zone HG320A, Prince George's Intermediate Pressure Zone HG317A

JUSTIFICATION

Plans & Studies

General Plan; M-NCP&PC Round 6.2 growth projections; WSSC Memorandum dated April 7, 1997.

Specific Data

This project will provide service to the growing area of Bowie and to the low pressure area north of Route 50, Prince George's Main Pressure Zone HG320A. This main will provide redundancy to existing and future developments in the Bowie area.

Cost Change

Costs were increased for inflation.

STATUS Final Design (WSSC Contract No. BL7053A86,).

OTHER

The project scope has remained the same. The redundancy and water system reliablity benefits of this project would be immediate. Expenditure and schedule projections shown in Block B are design level estimates and may change based upon site-specific conditions and actual bid.

COORDINATION

Maryland State Highway Administration, Prince George's County Government and Prince George's County Department of Environmental Resources.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	101	17
	Debt Service	....	....
Total Costs		101	17
Impact on Water or Sewer Rate		....	

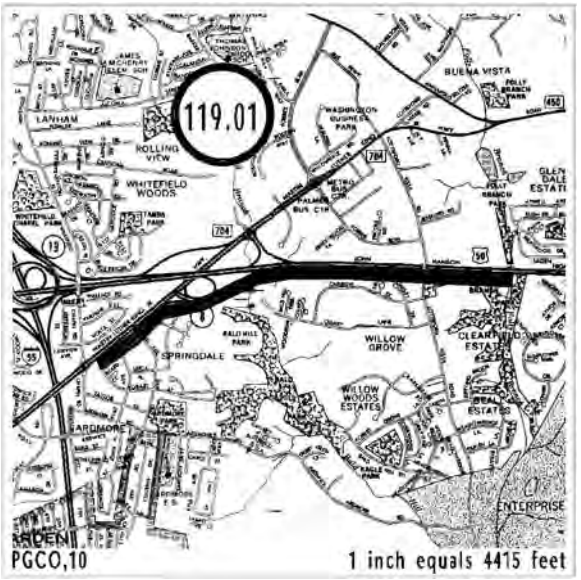
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 82
Date First Approved	FY 82
Initial Cost Estimate	675
Cost Estimate Last FY	7,470
Present Cost Estimate	7,741
Approved Request, Last FY	1,443
Total Expenditures & Encumbrances	1,041
Approval Request FY 15	1,608
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Land & R/W to be acquired
% Project Completion:	D-100%
Est. Completion Date:	November 2015

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-123.20	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Oak Grove/Leeland Roads Water Main, Part 2

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Mitchellville & Vicinity P.A. 74A

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**1,670**	1,670									
Land											
Site Improvements & Utilities											
Construction	**10,083**		2,924	**7,159**	4,618	1,694	847				
Other	**1,007**		292	**715**	462	168	85				
Total	**12,760**	**1,670**	**3,216**	**7,874**	**5,080**	**1,862**	**932**				

C. Funding Schedule (000's)

WSSC Bonds	**6,380**	835	1,608	**3,937**	2,540	931	466				
SDC	**6,380**	835	1,608	**3,937**	2,540	931	466				

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of approximately 16,805 feet of 24-inch diameter water main along Oak Grove and Leeland Roads, and 1,240 feet of 16-inch diameter water main in Church Road in the Upper Marlboro Planning Area of Prince George's County.

Service Area Prince George's Intermediate Pressure Zone HG317A

JUSTIFICATION

Plans & Studies

Intermediate & Marlboro Zones Water Storage Facility (September 1999).

Specific Data

The Intermediate & Marlboro Zones Water Storage Facility siting study recommended the placement of 4 million gallons of storage at the Safeway Distribution Center near the intersection of Leeland Road and Route 301 in Prince George's County. Based upon the final site selection, a 24-inch diameter water main along Oak Grove and Leeland Roads will be needed to connect to the new storage facility and provide adequate hydraulic capacity to the Intermediate Pressure Zone HG317A distribution system. This project will also provide a second feed to the Beechtree development west of Route 301 and south of Leeland Road.

Cost Change

The overall project construction costs were revised to reflect the actual bid price for Contract A and the cost estimate received with the 100% design drawings for Contract B.

STATUS Under Construction (WSSC Contract Nos. BL3192A01 , BL3192B01).

OTHER

The project scope has remained the same. Expenditures and schedule projections in Block B are based upon the actual bid for Contract A and the 100% complete design estimate for Contract B. The project will be bid under two separate contracts: Contract A was bid on 9/26/12 and Contract B is expected to bid November 2013.

COORDINATION

Prince George's County Government and WSSC Project W-147.00, Collington Elevated Water Storage Facility.

NOTE This project supports 50% Growth and 50% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff		
	Other		
Facility Costs	Maintenance	322	18
	Debt Service	571	18
Total Costs		893	18
Impact on Water or Sewer Rate		2¢	18

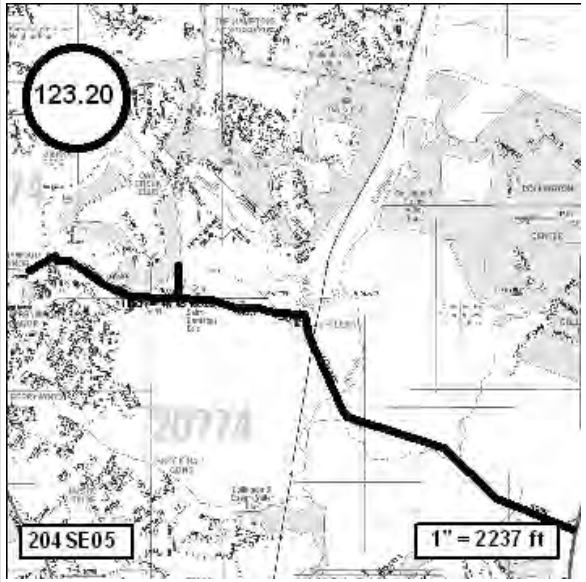
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 02
Date First Approved	FY 02
Initial Cost Estimate	4,117
Cost Estimate Last FY	12,862
Present Cost Estimate	12,760
Approved Request, Last FY	5,607
Total Expenditures & Encumbrances	1,670
Approval Request FY 15	5,080
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	R/W acquired
% Project Completion:	C-0%
Est. Completion Date:	July 2016

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-129.12	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Church Road Water Main, Part 2

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bowie & Vicinity P.A. 71A

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**226**	6	200	**20**	20						
Land											
Site Improvements & Utilities											
Construction	**600**			**600**	550	50					
Other	**124**		30	**94**	86	8					
Total	**950**	**6**	**230**	**714**	**656**	**58**					

C. Funding Schedule (000's)

SDC	**950**	6	230	**714**	656	58					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of approximately 1,400 feet of 24-inch diameter water main along Church Road from the existing 30-inch diameter water main in John Hanson Highway to an existing 24-inch diameter water main in Church Road.

Service Area Bowie Pressure Zone HG350E

JUSTIFICATION

Plans & Studies

WSSC Memorandum from Planning Group regarding Justification of Church Road Water Main Project dated June 7, 2005; M-NCP&PC Round 6.2 growth forecasts; General Plan.

Specific Data

The purpose of this project is to provide service to future development in Bowie Pressure Zone HG350E.

Cost Change

Costs were increased to reflect revised estimates for design and construction.

STATUS Planning (WSSC Contract No. BL4263A05,).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are Order of Magnitude level estimates and are expected to change once the project moves into planning and design. This project initially included a pressure reducing valve (PRV), however, planning recommended that the PRV be combined with a future line to be constructed at a later date.

COORDINATION

Maryland State Highway Administration, Prince George's County Government and Maryland-National Capital Park & Planning Commission (Mandatory Referral Process).

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	23	17
	Debt Service	....	....
Total Costs		23	17
Impact on Water or Sewer Rate		....	

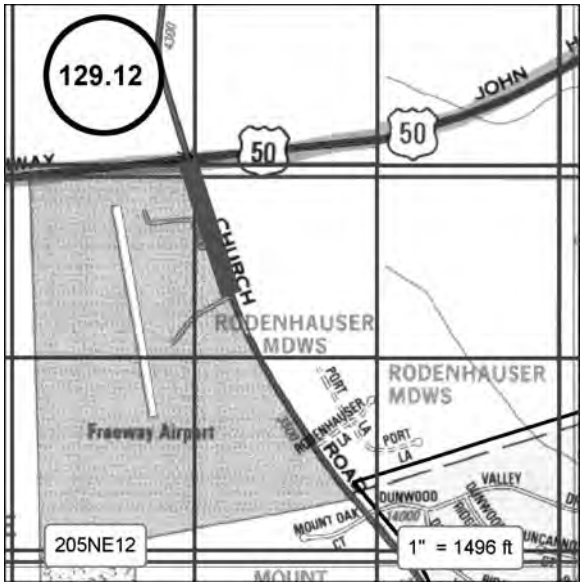
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 07
Date First Approved	FY 07
Initial Cost Estimate	589
Cost Estimate Last FY	746
Present Cost Estimate	950
Approved Request, Last FY	51
Total Expenditures & Encumbrances	6
Approval Request FY 15	656
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	No land or R/W required
% Project Completion:	P-0%
Est. Completion Date:	FY 2016

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-137.02	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: South Potomac Supply Improvement

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Henson Creek P.A. 76B

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**2,223**	1,214	340	**669**	334	335					
Land											
Site Improvements & Utilities											
Construction	**7,103**			**7,103**	3,470	3,633					
Other	**1,217**		51	**1,166**	571	595					
Total	**10,543**	**1,214**	**391**	**8,938**	**4,375**	**4,563**					

C. Funding Schedule (000's)

SDC	**10,543**	1,214	391	**8,938**	4,375	4,563					

D. Description & Justification

DESCRIPTION

This project provides for the design and construction of a new 42-inch diameter ductile iron pipe approximately 2.1 miles in length to replace an out-of-service, 42-inch diameter PCCP water transmission main, a new flow control valve vault, and associated piping and appurtenances, in conformity with the Commission's DG-03 design guidelines.

Service Area Rosecroft Pressure Zone HG290A

JUSTIFICATION

Plans & Studies

"Henson Creek 42-inch Prestressed Concrete Cylinder Pipe Transmission Main Rehabilitation Study," Patton, Harris, Rust & Associates, Inc. (October 2008).

Specific Data

This project will provide a second major feed to Rosecroft Pressure Zone HG290A, which serves southwestern Prince George's County, primarily areas west of Indian Head Highway, including National Harbor. The north section for the zone is approximately 10,600 feet of 42-inch diameter PCCP water main originally installed in the 1970's and consists of lined (PS-5) cylinder pipe and possible class IV wire. The WSSC has confirmed that the condition of the pipe is extremely poor and would present a service liability in the event of failure.

Cost Change

Costs were increased for inflation.

STATUS Final Design Complete (WSSC Contract No. BR4797A08,).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are design level estimates and may change based upon site-specific conditions and actual bid.

COORDINATION

Prince George's County Government, Maryland-National Capital Park & Planning Commission and Prince George's County Department of Public Works & Transportation.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	182	 17
	Debt Service	....	....
Total Costs		182	 17
Impact on Water or Sewer Rate			....

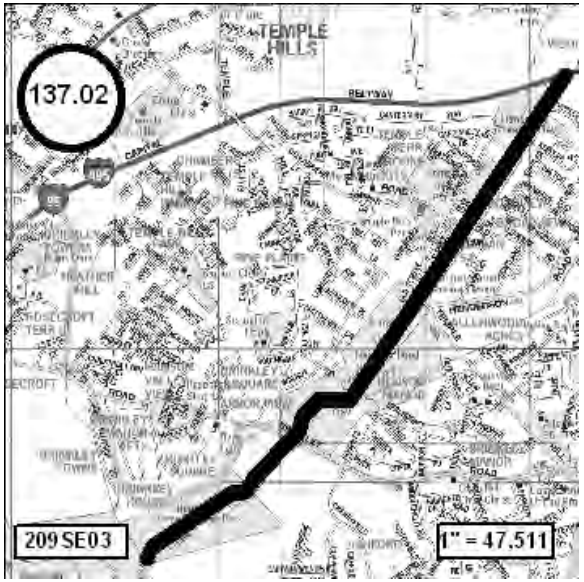
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 12
Date First Approved	FY 07
Initial Cost Estimate	25
Cost Estimate Last FY	10,274
Present Cost Estimate	10,543
Approved Request, Last FY	4,294
Total Expenditures & Encumbrances	1,214
Approval Request FY 15	4,375
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	D-100%
Est. Completion Date:	July 2015

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-147.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Collington Elevated Water Storage Facility

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Collington & Vicinity P.A. 74B

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**2,065**	1,114	411	**540**	300	140	100				
Land	**130**	130									
Site Improvements & Utilities											
Construction	**13,810**		5,800	**8,010**	5,830	1,200	980				
Other	**1,475**		621	**854**	612	134	108				
Total	**17,480**	**1,244**	**6,832**	**9,404**	**6,742**	**1,474**	**1,188**				

C. Funding Schedule (000's)

WSSC Bonds	**8,740**	622	3,416	**4,702**	3,371	737	594				
SDC	**8,740**	622	3,416	**4,702**	3,371	737	594				

D. Description & Justification

DESCRIPTION

This project provides for the site selection, planning, design, and construction of 4 million gallons (MG) of elevated storage to serve the Intermediate Zone. The site selection phase included a Community Outreach Program. A portion of the Safeway Distribution Facility property, at Leeland Road and Route 301, was acquired as the site for the new water storage tanks. This project also includes modifications at the existing Central Avenue Water Pumping Station to add an additional pump and upgrade an existing pump in order to optimize the utilization of the new Collington Tanks and provide redundancy in the affected zones.

Service Area Prince George's Intermediate Pressure Zone HG317A **Capacity** 4.0 MG

JUSTIFICATION

Plans & Studies

Prince George's County High Zone Facility Plan (April 1996); Water Storage Volume Criteria Report (November 2005).

Specific Data

The Prince George's High Zone Facility Plan indicates there is a need to provide up to 4 MG of additional storage to the Intermediate Zone to meet demands to the year 2020. During the siting phase, this project determined the site and size of the new facility.

Cost Change

Costs were increased for inflation.

STATUS Final Design (WSSC Contract Nos. BE1775D96 , BP5410A12).

OTHER

The project scope has remained the same. Expenditures and schedule projections shown in Block B are design level estimates and may change based upon site-specific conditions and actual bid.

COORDINATION

Prince George's County Government, Maryland-National Capital Park & Planning Commission, City of Bowie and WSSC Project W-123.20, Oak Grove/Leeland Roads Water Main, Part 2.

NOTE This project supports 50% Growth and 50% System Improvement.

E. Annual Operating Budget Impact (000's)

		FY of Impact		
Program Costs	Staff			
	Other			
Facility Costs	Maintenance			
	Debt Service	718	....	18
Total Costs		718	....	18
Impact on Water or Sewer Rate		1¢	....	18

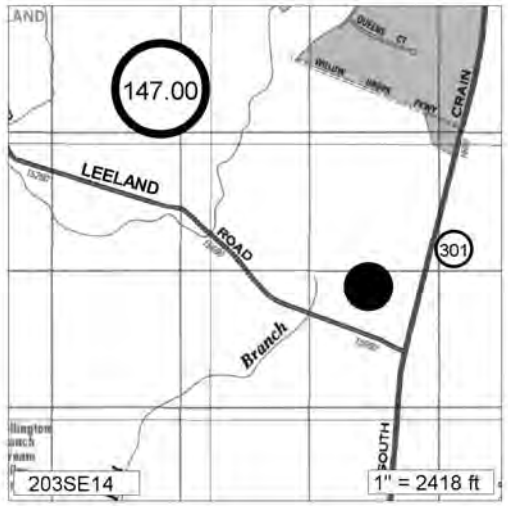
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 98
Date First Approved	FY 98
Initial Cost Estimate	12,536
Cost Estimate Last FY	16,972
Present Cost Estimate	17,480
Approved Request, Last FY	9,020
Total Expenditures & Encumbrances	1,244
Approval Request FY 15	6,742
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status: Site acquired
% Project Completion: D-99%
Est. Completion Date: FY 2017

H. Map **Map Reference Code:**



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-197.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: DSP & Conceptual Design Water Projects

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Prince George's County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**1,597**	539	197	**861**	324	300	237				
Land											
Site Improvements & Utilities											
Construction	**7,295**	1,595	688	**5,012**	1,598	1,856	1,558				
Other	**1,012**		132	**880**	287	322	271				
Total	**9,904**	**2,134**	**1,017**	**6,753**	**2,209**	**2,478**	**2,066**				

C. Funding Schedule (000's)

Contribution/Other	**9,904**	2,134	1,017	**6,753**	2,209	2,478	2,066				

D. Description & Justification

DESCRIPTION

This PDF provides the necessary approval to design and construct projects which serve new development or are to be built in conjunction with new development to reinforce the existing system or to avoid future disruption to the area. Such projects are referred to as Development Services Process (DSP) projects. This PDF also provides funds for projects in the Conceptual Design (CD) phase or final stages of facility planning for which reliable design costs, construction costs, and completion schedules were not available when this CIP was prepared. Preliminary construction expenditure data for this class of projects has been included at the request of the County government representatives for information to aid in fiscal, infrastructure, and resource planning for the six-year program period. See the pages that follow for a comprehensive project listing.

JUSTIFICATION

Plans & Studies

DSP projects to serve new development do not proceed unless the development has the appropriate service area and an approved preliminary plan of subdivision or a recorded plat. The need for various projects in the Conceptual Design phase has been established through the Facility Planning Process or other mechanisms. The WSSC's intent is to allow for beginning preliminary design for projects which require final planning phase approval, consultant design, contract negotiations, sub-surface investigations, and land and rights-of-way acquisition. Where applicable, anticipated land acquisition costs are included in WSSC Project W-204.00. Further, these projects may require in-house review and County Government Policy Review Group (PRG) interaction, as detailed design data is developed.

Specific Data

When Conceptual Design projects progress beyond the 30% design stage for facility projects and 60% design stage for pipeline projects, a separate PDF will be prepared by the WSSC. These PDF's will include firm construction costs and completion dates, and will be displayed as stand-alone PDF's in the CIP in the next cycle. This last criteria does not apply to DSP projects.

Cost Change

Not applicable.

STATUS Not Applicable

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	....
	Other	....
Facility Costs	Maintenance	....
	Debt Service	....
Total Costs		....
Impact on Water or Sewer Rate		....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 85
Date First Approved	FY 85
Initial Cost Estimate	
Cost Estimate Last FY	
Present Cost Estimate	
Approved Request, Last FY	
Total Expenditures & Encumbrances	
Approval Request FY 15	
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	Not Applicable
Est. Completion Date:	Not Applicable

H. Map **Map Reference Code:**

SEE ATTACHED MAPS

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: W - 197.00 **Project Name: DSP & Conceptual Design Water Projects**

OTHER

The project scope has remained the same. Implementation of DSP projects listed under this PDF is contingent upon the Applicants' meeting the project specified conditions. This requirement indicates that the Applicant is making a "good faith" effort to proceed to construction. Consequently, the implementation schedules of DSP projects are largely beyond the control of the WSSC and, instead, depend upon the actions of the Applicant. All new DSP projects are included with the stipulation that no WSSC rate supported debt will be used for these projects. The expenditure schedule reflected in this PDF is not intended to be a restriction but only an estimate of expenditures based on such considerations as historical trends, market expectations, Applicant schedules, and the number, stage, and scope of projects currently moving through the DSP. This PDF does not include funding for facility planning projects which also require county government review and approval and public interaction. Construction costs for Conceptual Design projects shown in Block B are very preliminary planning level estimates only, with approximate completion schedules, and may increase or decrease depending on site-specific conditions, design constraints, and market conditions. Construction costs for DSP projects are typically based upon preliminary design plans. The information in Block F pertains to this PDF in general and not to the individual projects listed on the pages that follow. DSP projects included in the listing that follows are 100% in support of future growth. The growth percentage for Conceptual Design projects vary and, therefore, is indicated on each individual listing as appropriate.

W-84.03 Smith Home Farms Water Main (DA4358Z06, DA4358A, C, & F 06)

7,600 feet of 16-inch diameter water main to serve the Smith Home Farms Subdivision. Water main alignment will be dependent on the road alignments selected by the Westphalia Sector Plan. Service Area: Southern Pressure Zone 385B; Status: C-25%; Estimated Total Project Cost: $2,500,000. Design and construction will be performed by the Applicant under a System Extension Permit. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

W-84.04 Westphalia Town Center Water Main

4,700 feet of 16-inch diameter water main to serve Westphalia Town Center and vicinity. Service Area: Prince George's County, Prince George's Pressure Zone 385B; Status: D-25%; Estimated Total Project Cost: $1,438,000. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

W-93.01 Konterra Town Center East Water Main (DA4623Z07)

4,000 feet of 16-inch diameter water main to serve Konterra Town Center East (DA4623Z07), located in the vicinity of Muirkirk Road and Virginia Manor Road, Prince George's County. Pressure Zone: Prince George's 415A; Status: P-100%; Estimated Total Project Cost: $707,000. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

W-105.01 Marlton Section 18 Water Main, Lake Marlton Avenue (DA3599A,C&Z03)

6,500 feet of 16-inch diameter water main to provide service to East Marlton, Section 18, along Heathermore Boulevard and Lake Marlton Avenue. Service Area: Southern Pressure Zone 385B; Status: D-50%. This project will be completed in four phases. The project design for phase one, 900 feet of 16-inch diameter water main extending in an easterly direction along Heathermore Boulevard (DA3599A03), has been approved and will be constructed under a System Extension Permit at an estimated cost of $348,000. The remaining phases will be built in succession. Estimated Total Project Cost: $2,708,000. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

W-120.14 Lakeview at Brandywine Water Main, Part 1 (DA9381Z92)

1,100 feet of 16-inch diameter water main to serve the Lakeview at Brandywine project. Status: P-100%; Estimated Total Project Cost: $193,000. The project will need to be re-evaluated when the Owner/Developer is ready to develop. A new cost estimate and schedule will be required at that time. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

W-120.15 Lakeview at Brandywine Water Main, Part 2 (DA9381Z92)

3,700 feet of 16-inch diameter water main to serve the Lakeview at Brandywine project. Status: P-100%; Estimated Total Project Cost: $617,000. The project will need to be re-evaluated when the Owner/Developer is ready to develop. A new cost estimate and schedule will be required at that time. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

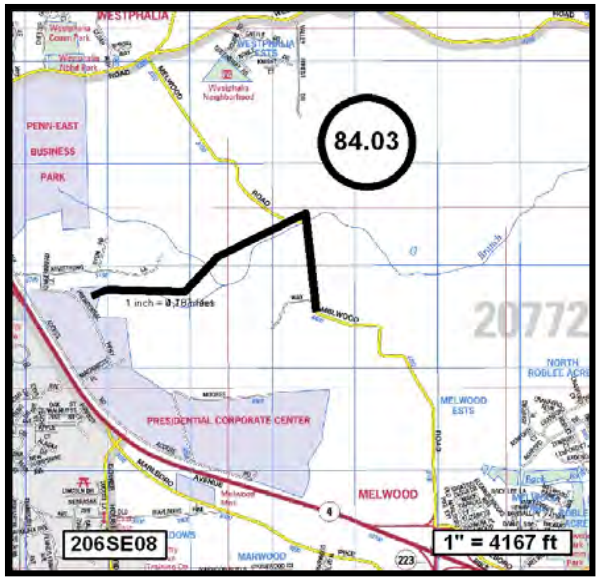
W-120.16 Lakeview at Brandywine Water Main, Part 3 (DA9381Z92)

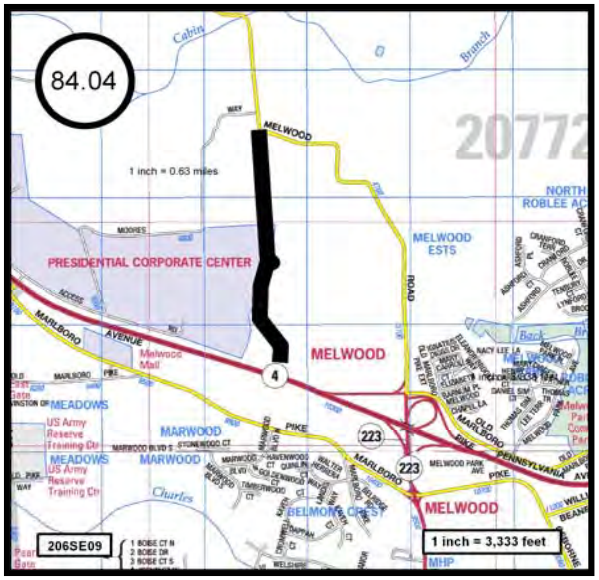
200 feet of 16-inch diameter water main to serve the Lakeview at Brandywine project. Status: P-100%; Estimated Total Project Cost: $47,000. The project will need to be re-evaluated when the Owner/Developer is ready to develop. A new cost estimate and schedule will be required at that time. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

W-123.14 Old Marlboro Pike Water Main (DA3538Z, A,D,E,H&J03)

9,000 feet of 16-inch diameter water main along Old Marlboro Pike and on-site at the Applicant's property to serve the Addison Property development. Service Area: Southern Pressure Zone 385B; Status: C-80%; Estimated Total Project Cost: $1,694,000. Design and construction will be performed by the developer under a System Extension Permit. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

* New entry on listing


84.03
206SE08
1" = 4167 ft
PRESIDENTIAL CORPORATE CENTER
MELWOOD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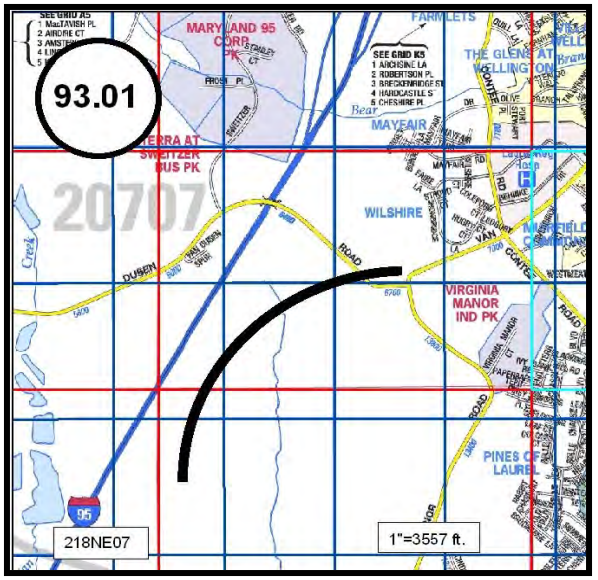
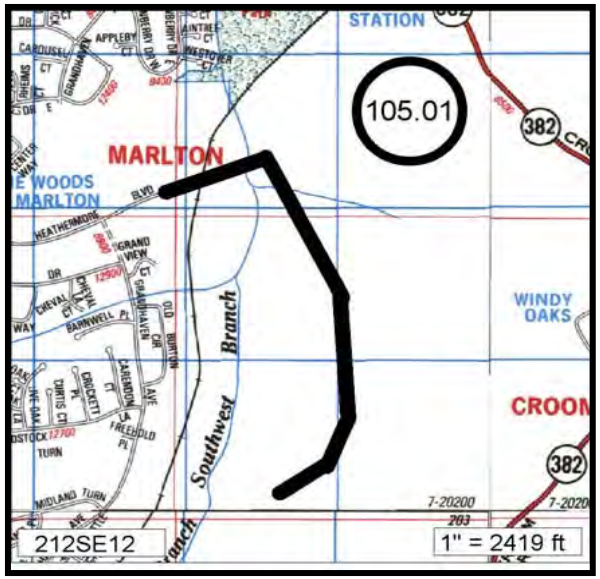
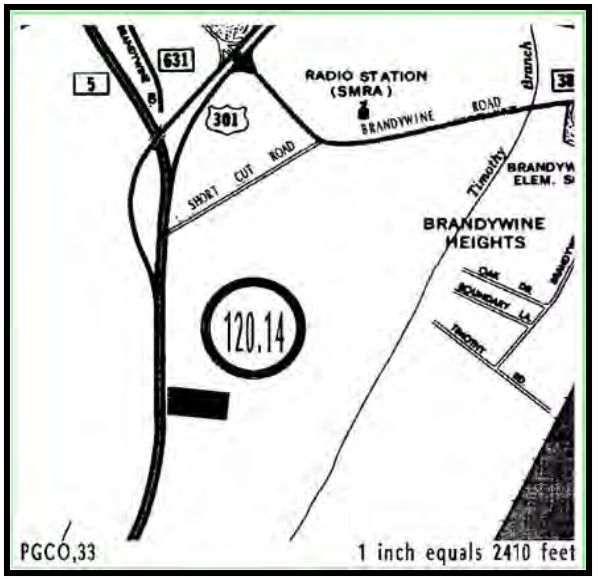
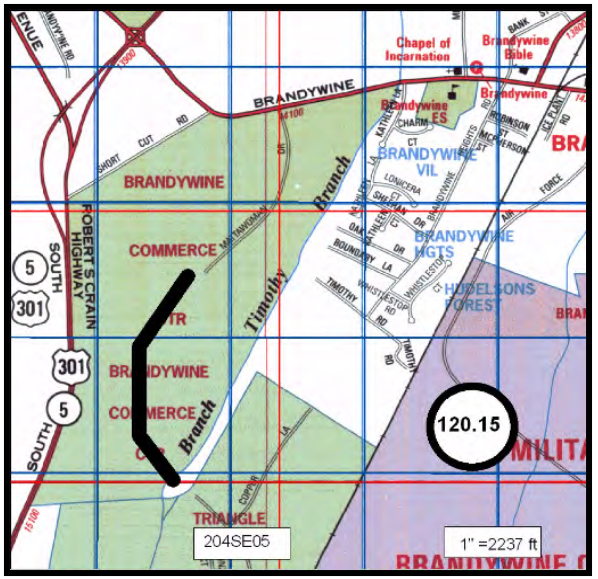
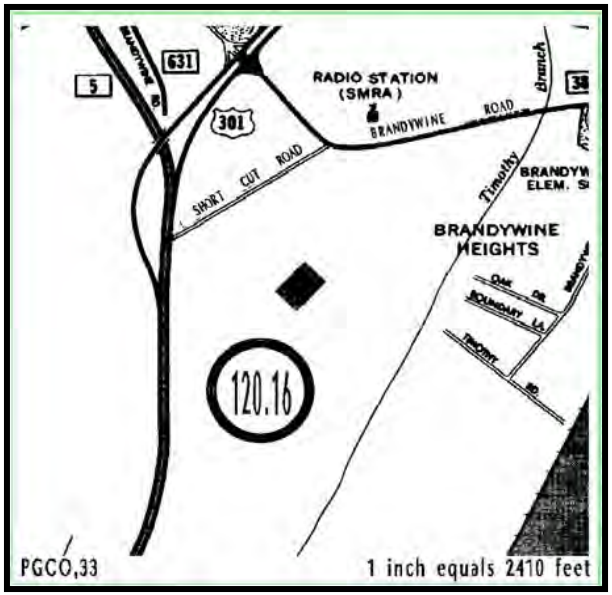
206SE09
1 inch = 3,333 feet
PRESIDENTIAL CORPORATE CENTER
MELWOOD

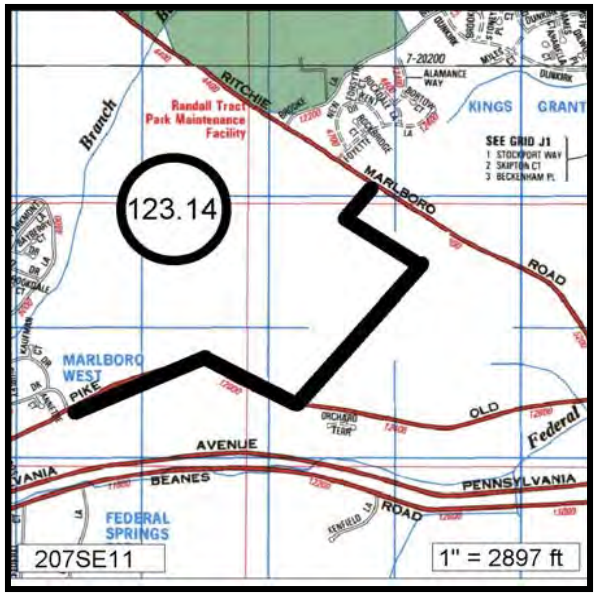

93.01
218NE07
1"=3557 ft.
WILSHIRE
VIRGINIA MANOR IND PK


105.01
212SE12
1" = 2419 ft
MARLTON
WINDY OAKS


120.14
PGCO,33
1 inch equals 2410 feet
RADIO STATION (SMRA)
BRANDYWINE HEIGHTS


120.15
204SE05
1" =2237 ft
BRANDYWINE
COMMERCE
TRIANGLE


5
631
301
RADIO STATION
(SMRA)
BRANDYWINE
ROAD
SHORT CUT ROAD
Timothy
BRANDYWINE
HEIGHTS
120.16
PGCO,33
1 inch equals 2410 feet


Branch
RITCHIE
Randall Tract
Park Maintenance
Facility
7-20200
ALAMANCE WAY
KINGS GRANT
SEE GRID J1
1 STOCKPORT WAY
2 SKIPTON CT
3 BECKENHAM PL
123.14
MARLBORO ROAD
MARLBORO WEST
PIKE
OLD
Federal
AVENUE
BEANES
PENNSYLVANIA
ROAD
FEDERAL SPRINGS
207SE11
1" = 2897 ft

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-204.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Land & Rights-of-Way Acquisition - Prince George's County

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision											
Land	**3,740**		3,176	**564**	514	50					
Site Improvements & Utilities											
Construction											
Other											
Total	**3,740**		**3,176**	**564**	**514**	**50**					

C. Funding Schedule (000's)

WSSC Bonds	**583**		483	**100**	50	50					
SDC	**3,157**		2,693	**464**	464						

D. Description & Justification

DESCRIPTION

This PDF provides a consolidated estimate of funding for the acquisition of land and rights-of-way for previously approved projects and new projects, as needed. Expenditures are programmed based upon anticipated schedules and are required for the completion of those specific projects. These costs do not include purchases which have already been completed.

JUSTIFICATION

Plans & Studies

Acquisition needs are determined by the WSSC and are based upon facility planning efforts, alignment studies, field surveys, realignments required by other agencies, or requirements identified within the Development Services Process (DSP).

Specific Data

Consolidation of expenditures for land and rights-of-way acquisitions provides flexibility in expending funds in a specific fiscal year and permits the WSSC to respond to the uncertainty of project-specific implementation schedules. Other considerations include the accommodation of unpredictable delays for extended community outreach which impacts the timing of a planned purchase, unanticipated rights-of-way requirements for approved projects due to minor alignment changes identified late in the design phase, and the need to assure the WSSC an equitable negotiation position by avoiding project-specific cost displays prior to contacting property owners.

Cost Change

Not applicable.

STATUS Not Applicable

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are estimates only and may change based upon actual negotiations. When purchases are complete, the actual cost will be displayed in the expenditure schedule on the appropriate project description form elsewhere in this program.

NOTE This project supports 84% Growth and 16% System Improvement.

E. Annual Operating Budget Impact (000's)

		FY of Impact		
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	38	....	16
Total Costs		38	....	16
Impact on Water or Sewer Rate			....	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 98
Date First Approved	FY 98
Initial Cost Estimate	
Cost Estimate Last FY	2,044
Present Cost Estimate	3,740
Approved Request, Last FY	845
Total Expenditures & Encumbrances	
Approval Request FY 15	514
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Land & R/W to be acquired
% Project Completion:	Not Applicable
Est. Completion Date:	Not Applicable

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

PROJECTS PENDING CLOSE-OUT

Prince George's Water Projects

(costs in thousands)

Project Number	Agency Number	Project Name	Estimated Total Cost	Expenditures Thru FY'13	Estimated Expenditures FY'14	Remarks
	W-147.01	Marlboro Zone Water Storage Facility	$348	$348	$0	Project no longer required.
		TOTALS	$348	$348	$0	

Section 6 - Prince George's County Sewer Projects

DATE: October 1, 2013

FINANCIAL SUMMARY

(ALL FIGURES IN THOUSANDS)

PRINCE GEORGE'S COUNTY SEWER PROJECTS

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 13	EST. EXPEND 14	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BUDGET REQUEST 15	PDF PAGE NUM
						YR 1 15	YR 2 16	YR 3 17	YR 4 18	YR 5 19	YR 6 20		
S-43.02	Broad Creek WWPS Augmentation	173,761	20,065	33,077	120,619	50,925	50,925	11,059	7,710	0	0	50,925	6-2
S-57.92	Western Branch Facility Upgrade	45,815	27,631	15,400	2,784	2,784	0	0	0	0	0	2,784	6-4
S-57.93	Western Branch WWTP Enhanced Nutrient Removal	39,109	25,185	11,000	2,924	2,924	0	0	0	0	0	2,924	6-5
S-57.94	Western Branch WWTP Incinerator Emissions Control	19,868	360	1,789	17,719	7,590	9,469	660	0	0	0	7,590	6-7
S-75.21	Mattawoman WWTP Upgrades	8,056	2,616	1,115	4,325	1,508	1,322	479	527	489	0	1,508	6-8
S-77.19	Parkway WWTP Biosolids Facility Plan Implementation	32,509	2,647	12,244	17,618	12,244	5,280	94	0	0	0	12,244	6-9
S-96.14	Piscataway WWTP Facility Upgrades	73,868	1,103	2,100	70,665	6,825	12,075	21,525	21,525	8,715	0	6,825	6-10
S-131.10	Fort Washington Forest No. 1 WWPS Augmentation	2,995	380	86	2,529	1,139	973	417	0	0	0	1,139	6-11
S-187.00	DSP & Conceptual Design Sewer Projects	10,121	1,332	2,373	6,416	3,269	2,482	665	0	0	0	3,269	6-12
S-205.00	Land & Rights-of-Way Acquisition - Prince George's County	400	0	400	0	0	0	0	0	0	0	0	6-18
	Projects Pending Close-Out	19,195	17,891	1,304	0	0	0	0	0	0	0	0	6-19
	TOTAL PRINCE GEORGE'S COUNTY SEWER PROJECTS	425,697	99,210	80,888	245,599	89,208	82,526	34,899	29,762	9,204	0	89,208	

Denotes projects which include an environmental component (see page 15 in the opening narrative.)

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-43.02	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Broad Creek WWPS Augmentation

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: South Potomac Sector P.A. 80

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**17,885**	9,425	728	**7,732**	3,500	3,500	532	200			
Land	**227**	227									
Site Improvements & Utilities											
Construction	**148,330**	10,413	30,774	**107,143**	45,000	45,000	10,000	7,143			
Other	**7,319**		1,575	**5,744**	2,425	2,425	527	367			
Total	**173,761**	**20,065**	**33,077**	**120,619**	**50,925**	**50,925**	**11,059**	**7,710**			

C. Funding Schedule (000's)

WSSC Bonds	**29,539**	3,411	5,623	**20,505**	8,657	8,657	1,880	1,311			
SDC	**144,222**	16,654	27,454	**100,114**	42,268	42,268	9,179	6,399			

D. Description & Justification

DESCRIPTION

This project provides for modifications to the Broad Creek Wastewater Pumping Station and Force Main system for conveying Broad Creek sewerage basin flows to the Piscataway Wastewater Treatment Plant. The Broad Creek WWPS Facility Plan (WSSC Project S-43.01), which included assessments of engineering, economic, environmental, and local community impacts, recommended the construction of a 48-inch diameter force main and capacity enhancing modifications at the pumping station. At the Piscataway WWTP, a concrete storage facility will be constructed in one of the existing basins allowing intermittent storage of excess sewage until flows at the plant allow treatment. Implementation of this alternative is dependent on approval from the Environmental Protection Agency and the Maryland Department of the Environment (MDE). Construction costs shown above also provide for an emergency generator in the event of power outages. The emergency generators have been installed.

Service Area Broad Creek Drainage Basin

JUSTIFICATION

Plans & Studies

Broad Creek Flow Monitoring and I/I Analysis (1996); Broad Creek SSES (1996 to 1999); Broad Creek I/I Analysis and SSES Phase II (2001 to 2005); Broad Creek Facility Plan, Delon Hampton & Associates, Inc. (January 2007); FY2012 Broad Creek WWPS Asset Management Plan, GHD, Inc. (March 2011).

Specific Data

This project stems from the following litigation: Section V (Remedial Measures), Article 10, Section B.8 (Pump Stations - Broad Creek), Sanitary Sewer Overflows (SSO) Consent Order Decree (Civil Action PJM-04-3679), Judge Messite, December 7, 2005.

Cost Change

The project cost decreased due to actual design services during construction contract being less than estimated and reduction in "Other" percentage from 10% to 5% for the project.

STATUS Final Design Complete (WSSC Contract Nos. CM4231A05 , CM4231B05 , CM4231C05 , CP4231B05 , CP4231C05 , CD4231D05 , CT4231E05 , CT4231F05 , CP4231G05).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B reflect design level estimates. The WSSC has compressed the design schedule and will be implementing multiple contracts for construction in order to expedite the completion of the construction phase. Land costs are included in WSSC Project S-205.00.

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E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance	494	....	19
	Debt Service	2031	....	19
Total Costs		2525	....	19
Impact on Water or Sewer Rate		6¢	....	19

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 09
Date First Approved	FY 09
Initial Cost Estimate	80,850
Cost Estimate Last FY	182,892
Present Cost Estimate	173,761
Approved Request, Last FY	53,240
Total Expenditures & Encumbrances	20,065
Approval Request FY 15	50,925
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Site or R/W partly acquired
% Project Completion:	D-100%
Est. Completion Date:	April 2017

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 43.02 **Project Name: Broad Creek WWPS Augmentation**

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COORDINATION

Maryland State Highway Administration, Prince George's County Government, Maryland-National Capital Park & Planning Commission, National Park Service, Maryland Department of the Environment, Maryland Department of Natural Resources, Prince George's County Department of Environmental Resources, U.S. Army Corps of Engineers and U.S. Environmental Protection Agency, Region III.

NOTE This project supports 83% Growth and 17% System Improvement.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-57.92	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Western Branch Facility Upgrade

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**10,483**	7,783	2,000	**700**	700						
Land											
Site Improvements & Utilities											
Construction	**33,679**	19,848	12,000	**1,831**	1,831						
Other	**1,653**		1,400	**253**	253						
Total	**45,815**	**27,631**	**15,400**	**2,784**	**2,784**						

C. Funding Schedule (000's)

WSSC Bonds	**45,815**	27,631	15,400	**2,784**	2,784						

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of improvements at the Western Branch WWTP required to rehabilitate aging systems and to continue to meet all the terms of its NPDES discharge permit. Improvements include sludge thickener for waste activation, biosolids stabilization and storage facilities, a new scum removal system, raw sewage pump station upgrades, additional grit chambers, air blower replacements, HVAC, and electrical upgrades.

Service Area Western Branch Drainage Basin **Capacity** 30.6 MGD

JUSTIFICATION

Plans & Studies

Western Branch Facility Plan, Johnson, Mirmiran & Thompson (May 2005); ESP Project Number S-647.38, Western Branch WWTP Facility Plan; Western Branch Enhanced Nutrient Removal and Facility Upgrade Project - Evaluation Phase, Metcalf and Eddy (August 2007).

Specific Data

The plant was originally designed in the 1970s. It is the only WSSC WWTP that does not utilize Biological Nitrogen Removal (BNR); instead, relying on the addition of methanol for nitrogen removal.

Cost Change

Not applicable

STATUS Under Construction (WSSC Contract No. CD4173A05,).

OTHER

The project scope has remained the same. The schedule and expenditures projections shown in Block B are based upon an updated construction contract schedule. The permit application process was started in May 2009. The MDE construction permit was obtained in March 2011. The NTP was issued on October 31, 2011. This project is financed through a low interest loan from the MDE's Water Quality Administration State Revolving Loan Program.

COORDINATION

Prince George's County Government, Maryland Department of the Environment, Prince George's County Department of Environmental Resources and WSSC Project S-57.93, Western Branch WWTP Enhanced Nutrient Removal.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	3898	....	16
Total Costs		3898	....	16
Impact on Water or Sewer Rate		9¢	....	16

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 06
Date First Approved	FY 06
Initial Cost Estimate	6,325
Cost Estimate Last FY	45,392
Present Cost Estimate	45,815
Approved Request, Last FY	17,798
Total Expenditures & Encumbrances	27,631
Approval Request FY 15	2,784
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	No land or R/W required
% Project Completion:	C-50%
Est. Completion Date:	October 2014

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-57.93	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Western Branch WWTP Enhanced Nutrient Removal

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**7,713**	6,115	1,000	**598**	598						
Land											
Site Improvements & Utilities											
Construction	**30,130**	19,070	9,000	**2,060**	2,060						
Other	**1,266**		1,000	**266**	266						
Total	**39,109**	**25,185**	**11,000**	**2,924**	**2,924**						

C. Funding Schedule (000's)

State Aid	**39,109**	25,185	11,000	**2,924**	2,924						

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of improvements at the Western Branch WWTP necessary to meet the requirements of the Maryland Department of the Environment (MDE) Enhanced Nutrient Removal (ENR) Program at 30 MGD. The ENR design continues the operation of the existing 3 sludge systems with upgrades. The upgrades include the addition of a Return Activated Sludge pumping station, ENR monitoring and control enhancements, ENR associated electrical upgrades, and waste activated sludge improvements.

Service Area Western Branch Drainage Basin

JUSTIFICATION

Plans & Studies

Western Branch Enhanced Nutrient Removal Evaluation, Johnson, Mirmiran & Thompson (May 2005); Western Branch Enhanced Nutrient Removal and Facility Upgrade Project - Evaluation Phase, Metcalf and Eddy (August 2007); Maryland Department of the Environment Eligibility Determination Letter (September 29, 2011).

Specific Data

The Bay Restoration Fund Enhanced Nutrient Removal (ENR) Program's purpose is to meet the commitments under the 2000 Chesapeake Bay Agreement. Reductions of nutrient pollutants from all sources including sewage treatment plants are necessary. The ENR strategy builds on the success of the Biological Nutrient Removal (BNR) Program already in place. The MDE is using the Bay Restoration Fund to upgrade the 66 major wastewater treatment plants which discharge to the Chesapeake Bay with ENR technologies. Once upgraded, these plants are expected to reduce nitrogen and phosphorus in the wastewater down to 3 mg/l total nitrogen and 0.3 mg/l total phosphorus, achieving approximately one-third of the needed reduction under the Chesapeake Bay 2000 Agreement. Other pollutants will continue to be reduced by more than 90%.

Cost Change

Not applicable

STATUS Under Construction (WSSC Contract No. CD4257A05,).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are based upon the construction contract's baseline schedule. The funding schedule reflects the final cost sharing agreement with MDE. The permit application process was started in May 2009. The MDE construction permit was obtained in March 2011. The project substantial completion date is August 2014. WSSC and MDE are negotiating a consent agreement for this project. The currently proposed date for the ENR substantial completion is January 1, 2016 and effluent discharge compliance by January 1, 2017.

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E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	....
	Other	....
Facility Costs	Maintenance	....
	Debt Service	....
Total Costs.....		....
Impact on Water or Sewer Rate.....		....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 07
Date First Approved	FY 07
Initial Cost Estimate	70,950
Cost Estimate Last FY	39,109
Present Cost Estimate	39,109
Approved Request, Last FY	14,850
Total Expenditures & Encumbrances	25,185
Approval Request FY 15	2,924
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not Applicable
% Project Completion:	C-50%
Est. Completion Date:	October 2014

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 57.93 **Project Name: Western Branch WWTP Enhanced Nutrient Removal**

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COORDINATION

Maryland Department of the Environment, Prince George's County Department of Environmental Resources, Local, State & Congressional Officials, Patuxent River Commission and WSSC Project S-57.92, Western Branch Facility Upgrade.

NOTE This project supports 100% Environmental Regulation.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-57.94	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Western Branch WWTP Incinerator Emissions Control

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**3,094**	360	1,626	**1,108**	400	608	100				
Land											
Site Improvements & Utilities											
Construction	**15,000**			**15,000**	6,500	8,000	500				
Other	**1,774**		163	**1,611**	690	861	60				
Total	**19,868**	**360**	**1,789**	**17,719**	**7,590**	**9,469**	**660**				

C. Funding Schedule (000's)

WSSC Bonds	**19,868**	360	1,789	**17,719**	7,590	9,469	660				

D. Description & Justification

DESCRIPTION

This project provides for the planning, design and construction of the modifications required for the Western Branch WWTP incinerators to meet the US EPA Final Rule for compliance of existing and new sewage biosolids incinerators, which classified sewage biosolids as "solid waste" under the Clean Air Act, Section 129 regulations for solid waste incineration. The required emissions control equipment could include a Wet Electro-static Precipitator and a Regenerative Thermal Oxidizer.

JUSTIFICATION

Plans & Studies

Western Branch Incinerator Emissions Control Project - Phase 1 Final Technical Memorandum, HDR Engineering, Inc., (July 2013).

Specific Data

The Western Branch WWTP produces approximately 30 dry tons per day of biosolids. The biosolids are thickened, dewatered and incinerated onsite. The existing biosolids facilities include five dissolved air flotation thickeners, two thickened biosolids storage tanks, three decant tanks, two high speed centrifuges, and two multiple hearth incinerators. The Final Rule sets limits for nine pollutants under Section 129 and they include Cadmium, Carbon Monoxide, Hydrogen Chloride, Lead, Mercury, Nitrogen-Oxides, Particulate Matter, Sulfur Dioxide, Polychlorinated dibenzo-p-dioxins, and Polychlorinated dibenzofurans. The limits for incineration vary depending upon whether the incinerator is categorized as "New" or "Existing". The determination is based on the amount of money (as a % of the original cost) spent on upgrading or repairing the facilities. The incinerators are required to be in compliance by March 21, 2016.

Cost Change

Costs were increased for inflation.

STATUS Preliminary Design (WSSC Contract No. CD5415A12,).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are planning level estimates and are expected to change based on site-specific conditions and design constraints.

COORDINATION

Prince George's County Department of Environmental Resources and WSSC Project A-103.00, Energy Performance Program.

NOTE This project supports 100% Environmental Regulation.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	1367	....	18
Total Costs		1367	....	18
Impact on Water or Sewer Rate		3¢	....	18

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 14
Date First Approved	FY 14
Initial Cost Estimate	19,457
Cost Estimate Last FY	19,457
Present Cost Estimate	19,868
Approved Request, Last FY	1,738
Total Expenditures & Encumbrances	360
Approval Request FY 15	7,590
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	D-0%
Est. Completion Date:	FY 2017

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-75.21	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Mattawoman WWTP Upgrades

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Accokeek P.A. 83, Brandywine & Vicinity P. A. 85A, Cedarville & Vicinity P. A. 85B, Piscataway & Vicinity P. A. 84

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**2,060**	875	258	**927**	289	262	114	138	124		
Land											
Site Improvements & Utilities											
Construction	**5,941**	1,741	845	**3,355**	1,204	1,047	360	384	360		
Other	**55**		12	**43**	15	13	5	5	5		
Total	**8,056**	**2,616**	**1,115**	**4,325**	**1,508**	**1,322**	**479**	**527**	**489**		

C. Funding Schedule (000's)

WSSC Bonds	**8,056**	2,616	1,115	**4,325**	1,508	1,322	479	527	489		

D. Description & Justification

DESCRIPTION

This project provides for the WSSC's share of the evaluation, design, and construction of capital projects to upgrade Charles County's Mattawoman Interceptor and Wastewater Treatment Plant. Current projects include: Influent/Effluent Pump Station Upgrades, Plant Automation, Electrical System Replacement, Sewer I/I Project, Laboratory Renovation, In-Plant Water System Evaluation and Improvement, Biosolids Feasibility Study, Flow Equalization Study, and Clarifier and Thickener Upgrades.

Service Area Mattawoman Drainage Basin

Capacity 3 MGD for WSSC in Total Plant Capacity of 20 MGD

JUSTIFICATION

Plans & Studies

Agreement dated October 22, 1980; Agreement Addendum No. 1 dated April 15, 2004.

Specific Data

Prior evaluations of equipment and structural facilities concluded the need existed for various upgrade projects. A further thorough evaluation of the Head Works, Influent/Effluent Pumps, and Influent Wet Well was also deemed necessary in order to identify the specific scope of hydraulic, control, capacity, and safety upgrades to the Influent/Effluent Pump Station. Plant automation will improve the efficiency of operation and maintenance, thereby minimizing resource utilization and avoiding costs. The I/I Project is justified by high wet weather flows. The Biosolids Study is to investigate the production of Class A biosolids.

Cost Change

The expenditure schedule reflects the latest information provided by Charles County.

STATUS Not Applicable (WSSC Contract No. CB3555B03,).

OTHER

The project scope has remained the same. Under the terms of the 1980 Agreement with Charles County, the WSSC has the use of 3 MGD of the WWTP's capacity, and pays a proportionate share of the capital expenses. As new upgrade sub-projects are added, the associated costs will be added to this project. Beginning in FY 2007, the total plant capacity increased to 20 MGD, and WSSC's proportionate cost share decreased to 15% under the terms of Agreement Addendum No.1. This project is expected to continue indefinitely.

COORDINATION

Charles County Government (Depts of Utilities, Planning & Growth Management, and Fiscal Services).

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	669	....	20
Total Costs		669	....	20
Impact on Water or Sewer Rate		1¢	....	20

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 08
Date First Approved	FY 08
Initial Cost Estimate	760
Cost Estimate Last FY	7,674
Present Cost Estimate	8,056
Approved Request, Last FY	1,610
Total Expenditures & Encumbrances	2,616
Approval Request FY 15	1,508
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Public/Agency owned land
% Project Completion:	On-Going
Est. Completion Date:	On-Going

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-77.19	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Parkway WWTP Biosolids Facility Plan Implementation

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: South Laurel - Montpelier P.A. 62

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**5,344**	2,647	1,131	**1,566**	1,131	400	35				
Land											
Site Improvements & Utilities											
Construction	**24,450**		10,000	**14,450**	10,000	4,400	50				
Other	**2,715**		1,113	**1,602**	1,113	480	9				
Total	**32,509**	**2,647**	**12,244**	**17,618**	**12,244**	**5,280**	**94**				

C. Funding Schedule (000's)

WSSC Bonds	**32,509**	2,647	12,244	**17,618**	12,244	5,280	94				

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of new solids handling facilities and equipment for the Parkway WWTP.

Service Area Parkway Drainage Basin **Capacity** 7.5 MGD

JUSTIFICATION

Plans & Studies

Memorandum from the Production Team dated April 27, 2007; WSSC Parkway WWTP Biosolids Facility Plan, Volumes I & II, CH2M Hill, Inc. (October 2009).

Specific Data

Currently, the facility utilizes centrifuges to dewater approximately 1,500 wet tons of solids/month. The centrifuges are installed in 2 parallel configurations which cannot be operated simultaneously. One side consists of 3 35-year old centrifuges and supporting equipment, such as plow blenders and belt conveyors. The other side consists of 1 centrifuge, lime screw conveyors, a pugmill, lime stabilized conveyors, and a lime stabilized sludge storage silo. The facility plan evaluated the solids handling capabilities of the Parkway WWTP and recommended the replacement of the aging facility and equipment.

Cost Change

The project cost increase is reflective of the actual construction bid and the final value of the DSDC contract.

STATUS Under Construction (WSSC Contract Nos. CD4643B07 , CP4643A07 , CP4643B07).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown above are based upon actual bid.

COORDINATION

Prince George's County Government, Maryland Department of the Environment, Prince George's County Department of Environmental Resources and WSSC Project S-77.18, Parkway WWTP Enhanced Nutrient Removal.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

		FY of Impact		
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	1945	....	18
Total Costs		1945	....	18
Impact on Water or Sewer Rate		4¢	....	18

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 09
Date First Approved	FY 09
Initial Cost Estimate	288
Cost Estimate Last FY	30,005
Present Cost Estimate	32,509
Approved Request, Last FY	12,761
Total Expenditures & Encumbrances	2,647
Approval Request FY 15	12,244
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	C-0%
Est. Completion Date:	September 2016

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-96.14	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Piscataway WWTP Facility Upgrades

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Accokeek P.A. 83

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**13,103**	1,103	2,000	**10,000**	3,000	1,000	2,500	2,500	1,000		
Land											
Site Improvements & Utilities											
Construction	**57,300**			**57,300**	3,500	10,500	18,000	18,000	7,300		
Other	**3,465**		100	**3,365**	325	575	1,025	1,025	415		
Total	**73,868**	**1,103**	**2,100**	**70,665**	**6,825**	**12,075**	**21,525**	**21,525**	**8,715**		

C. Funding Schedule (000's)

WSSC Bonds	**73,868**	1,103	2,100	**70,665**	6,825	12,075	21,525	21,525	8,715		

D. Description & Justification

DESCRIPTION

This project provides for a Facility Plan and design and construction of the upgrades required to prevent plant overflows or permit violations which can occur during significant rainfall events. The work will remove bottlenecks within the plant process trains, address the physical capacity of the system, and rehabilitate existing equipment that has reached its expected service life ensuring the ability of the plant to achieve its permit-required level of service

Service Area Piscataway Creek Drainage Basin **Capacity** 30 MGD

JUSTIFICATION

Plans & Studies

FY 2012 Piscataway WWTP Asset Management Plan, GHD, Inc. (March 2011).

Specific Data

In the Asset Management Plan the condition assessment process identified several areas of concern within the plant process trains that could potentially result in capacity or level of service failures during significant rainfall events.

Cost Change

Initial Order of Magnitude estimates were updated based upon preliminary planning level estimates.

STATUS Planning (WSSC Contract No. CD5170A11,).

OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B represent an Order of Magnitude estimate with a confidence level rating of +/- 30%. These projections will be updated as the Facility Plan progresses.

COORDINATION

Prince George's County Government, Maryland Department of the Environment, Prince George's County Department of Environmental Resources and WSSC Project S-43.02, Broad Creek WWPS Augmentation.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	5870	....	20
Total Costs		5870	....	20
Impact on Water or Sewer Rate		13¢	....	20

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 12
Date First Approved	FY 12
Initial Cost Estimate	66,396
Cost Estimate Last FY	68,867
Present Cost Estimate	73,868
Approved Request, Last FY	220
Total Expenditures & Encumbrances	1,103
Approval Request FY 15	6,825
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not Applicable
% Project Completion:	P-40%
Est. Completion Date:	FY 2019

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-131.10	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Fort Washington Forest No. 1 WWPS Augmentation

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**708**	380	75	**253**	90	100	63				
Land											
Site Improvements & Utilities											
Construction	**1,946**			**1,946**	900	746	300				
Other	**341**		11	**330**	149	127	54				
Total	**2,995**	**380**	**86**	**2,529**	**1,139**	**973**	**417**				

C. Funding Schedule (000's)

WSSC Bonds	**2,995**	380	86	**2,529**	1,139	973	417				

D. Description & Justification

DESCRIPTION

This project provides for the planning, design and construction of the rehabilitation work required for the Fort Washington Forest No.1 WWPS to upsize a 900 foot segment of failing 4-inch diameter force main to an 8-inch diameter force main. The rehabilitation will result in more than doubling the pumping station's capacity. In addition, approximately 2,700 feet of downstream 8-inch diameter gravity sewer will be upsized to 12-inch diameter to accommodate the additional flow. At Fort Washington Estates, improvements will be planned, designed and constructed at the WWPS facility to improve it's reliability and the existing downstream 8-inch diameter gravity sewers will be upsized to accommodate the additional flow.

JUSTIFICATION

Plans & Studies

July 2005 Study by Ken Dixon, Planning Group, outlined work to be done on the Fort Washington Forest No. 1 WWPS and Fort Washington Estates WWPS.

Specific Data

There have been additional overflows at both pumping stations (since the original 2005 study). On January 22, 2013, the EPA approved a 180-Day Report, making Fort Washington Forest No. 1 part of the Consent Decree.

Cost Change

Not applicable.

STATUS Final Design (WSSC Contract Nos. CP6009A11 , CP6009B11).

OTHER

The project scope has remained the same. Expenditure and schedule projections shown above are design level estimates and may change based upon site conditions and actual bid. The information in Block G reflects the Fort Washington Forest No. 1 WWPS component of the project. At the Fort Washington Estates WWPS design will begin in October 2013 with construction start in FY 2016.

COORDINATION

Prince George's County Government, Maryland-National Capital Park & Planning Commission, Prince George's County Department of Environmental Resources and U.S. Environmental Protection Agency, Region III.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

		FY of Impact		
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	127	....	18
Total Costs		127	....	18
Impact on Water or Sewer Rate			....	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 13
Date First Approved	FY 13
Initial Cost Estimate	1,454
Cost Estimate Last FY	2,912
Present Cost Estimate	2,995
Approved Request, Last FY	794
Total Expenditures & Encumbrances	380
Approval Request FY 15	1,139
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not determined
% Project Completion:	D-100%
Est. Completion Date:	June 2015

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-187.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: DSP & Conceptual Design Sewer Projects

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Prince George's County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**1,668**	577	452	**639**	414	159	66				
Land											
Site Improvements & Utilities											
Construction	**7,307**	755	1,611	**4,941**	2,428	2,001	512				
Other	**1,146**		310	**836**	427	322	87				
Total	**10,121**	**1,332**	**2,373**	**6,416**	**3,269**	**2,482**	**665**				

C. Funding Schedule (000's)

Contribution/Other	**10,121**	1,332	2,373	**6,416**	3,269	2,482	665				

D. Description & Justification

DESCRIPTION

This PDF provides the necessary approval to design and construct projects which serve new development or are to be built in conjunction with new development to reinforce the existing system or to avoid future disruption to the area. Such projects are referred to as Development Services Process (DSP) projects. This PDF also provides funds for projects in the Conceptual Design (CD) phase or final stages of facility planning for which reliable design costs, construction costs, and completion schedules were not available when this CIP was prepared. Preliminary construction expenditure data for this class of projects has been included at the request of the County government representatives for information to aid in fiscal, infrastructure, and resource planning for the six-year program period. See the pages that follow for a comprehensive project listing.

JUSTIFICATION

Plans & Studies

DSP projects to serve new development do not procceed unless the development has the appropriate service area and an approved preliminary plan of subdivision or a recorded plat. The need for various projects in the Conceptual Design phase has been established through the Facility Planning Process or other mechanisms. The WSSC's intent is to allow for beginning preliminary design for projects which require final planning phase approval, consultant design, contract negotiations, sub-surface investigations, and land and rights-of-way acquisition. Where applicable, anticipated land acquisition costs are included in WSSC Project S-205.00. Further, these projects may require in-house review and County Government Policy Review Group (PRG) interaction, as detailed design data is developed.

Specific Data

When Conceptual Design projects progress beyond the 30% design stage for facility projects and 60% design stage for pipeline projects, a separate PDF will be prepared by the WSSC. These PDF's will include firm construction costs and completion dates, and will be displayed as stand-alone PDF's in the CIP in the next cycle. This last criteria does not apply to DSP projects.

Cost Change

Not applicable.

STATUS Not Applicable

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	....
	Other	....
Facility Costs	Maintenance	....
	Debt Service	....
Total Costs		....
Impact on Water or Sewer Rate		....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 85
Date First Approved	FY 85
Initial Cost Estimate	
Cost Estimate Last FY	
Present Cost Estimate	
Approved Request, Last FY	
Total Expenditures & Encumbrances	
Approval Request FY 15	
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not Applicable
% Project Completion:	Not Applicable
Est. Completion Date:	Not Applicable

H. Map **Map Reference Code:**

SEE ATTACHED MAPS

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 187.00 **Project Name: DSP & Conceptual Design Sewer Projects**

OTHER

The project scope has remained the same. Implementation of DSP projects listed under this PDF is contingent upon the Applicants' meeting project specified conditions. This requirement indicates that the Applicant is making a "good faith" effort to proceed to construction. Consequently, the implementation schedules of DSP projects are largely beyond the control of the WSSC and, instead, depend upon the actions of the Applicant. All new DSP projects are included with the stipulation that no WSSC rate supported debt will be used for these projects. The expenditure schedule reflected in this PDF is not intended to be a restriction but only an estimate of expenditures based on such considerations as historical trends, market expectations, Applicant schedules, and the number, stage, and scope of projects currently moving through the DSP. This PDF does not include funding for facility planning projects which also require County government review and approval and public interaction. Construction costs for Conceptual Design projects shown in Block B are very preliminary planning level estimates only, with approximate completion schedules, and may increase or decrease depending on site-specific conditions, design constraints, and market conditions. Construction costs for DSP projects are typically based upon preliminary design plans. The information in Block F pertains to this PDF in general and not to the individual projects listed on the pages that follow. DSP projects included in the listing that follows are 100% in support of future growth. The growth percentage for Conceptual Design projects vary and, therefore, is indicated on each individual listing as appropriate.

S-27.08 Westphalia Town Center Sewer Main (DA4599Z07)

4,550 feet of 15-inch to 21-inch diameter sewer main to serve the Westphalia Town Center. Capacity: 3.2 MGD; Service Area: Western Branch drainage basin; Population: 7,600; Status: D-25%; Estimated Total Project Cost: $401,000. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

S-28.18 Konterra Town Center East Sewer (DA4623A07 DA4623B07)

5,400 feet of 24-inch diameter sewer main, 240 feet of 24-inch steel sleeve, and 240 feet of 48-inch steel sleeve to provide service to Konterra Town Center East. Capacity: 6.5 MGD; Service Area: Northeast Branch drainage basin; Population: 8,500; Status: C-25%; Estimated Total Project Cost: $2,646,000. Design and construction will be performed by the developer under a System Extension Permit. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

S-68.01 Landover Mall Redevelopment (DA5019Z09)

2,500 feet of 27-inch, 300 feet of 24-inch, and 1,450 feet of 18-inch diameter sewer main to provide service for the Landover Mall Redevelopment. Capacity: 5.63 MGD; Status: P-20%. This project is dependent upon a future sewer augmentation/feasibility study along Cattail Branch. Estimated Total Project Cost: $1,241,000. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

S-75.19 Brandywine Woods Wastewater Pumping Station (DA4449Z06)

Planning, design, and construction of a new wastewater pumping station to provide service to the Brandywine Woods Property. Capacity: 0.28 MGD; Service Area: Mattawoman; Population: 490; Status: P-100%; Estimated Total Project Cost: $302,000. Estimated completion date is developer dependent. No WSSC rate suported debt will be used for this project.

S-75.20 Brandywine Woods WWPS Force Main (DA4449Z06)

1,600 feet of 4-inch diameter force main from the Brandywine Woods Wastewater Pumping Station to provide service to the Brandywine Woods Property. Capacity: 0.28 MGD; Service Area: Mattawoman; Population: 490; Status: P-100%; Estimated Total Project Cost: $117,000. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

S-86.19 Karington Subdivision Sewer (DA4249A05, DA4249C05, DA4249Z05)

970 feet of 15-inch and 18-inch diameter sewer main to serve the Karington Subdivision. Capacity: 1.7 to 2.87 MGD; Service Area: Mitchellville & Vicinity; Population: 2,102; Status: D-100%; Estimated Total Project Cost: $979,000. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

S-87.15 Rodenhauser Wastewater Pumping Station (DA4100Z05 & CP4100A05)

Planning, design, and construction of a new wastewater pumping station to provide service to the Rodenhauser Property. Capacity: 0.15 MGD; Service Area: Western Branch; Population: 200; Status: D-90%; Estimated Total Project Cost: $1,200,000. Design and construction will be performed by the developer under a Memorandum of Understanding. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

S-87.16 Rodenhauser WWPS Force Main (DA4100B05, DA4100C05)

2,000 feet of 4-inch diameter force main from the Rodenhauser Wastewater Pumping Station to provide service to the Rodenhauser Property. Capacity: 0.15 MGD; Service Area: Western Branch; Population: 200; Status: D-95%; Estimated Total Project Cost: $164,000. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

S-131.05 Pleasant Valley Sewer Main, Part 2 (DA4757B08)

2,750 feet of 21-inch diameter sewer main to provide service to the Estates of Pleasant Valley and the Ridges III Subdivisions. Capacity: 3.5 MGD; Service Area: Burch Branch of Piscataway Creek; Population: 2,000; Status: D-60%; Estimated Total Project Cost: $801,000. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

S-131.07 Pleasant Valley Sewer Main, Part 1 (DA4757A08)

10,000 feet of 15-inch and 18-inch diameter sewer main to serve The Estates at Pleasant Valley Subdivision. Capacity: Between 1.7 and 2.2 MGD; Service Area: Piscataway Creek; Population: 2,800; Status: D-80%; Estimated Total Project Cost: $1,623,000. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

* New entry on listing

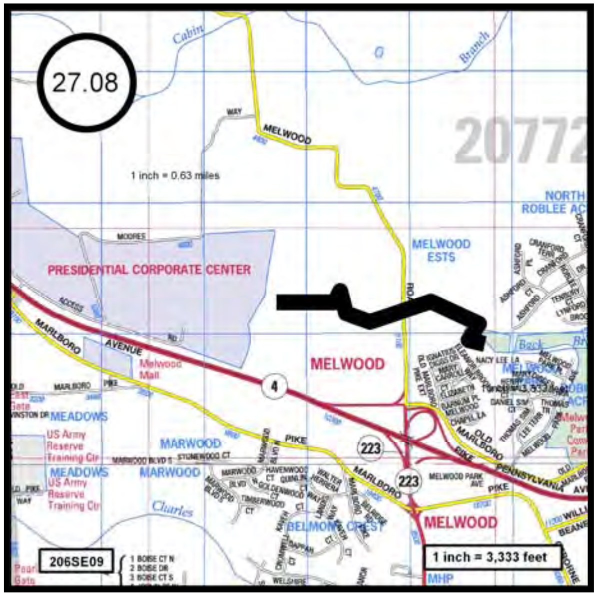
S-131.08 Preserves of Piscataway Wastewater Pumping Station (DA1543Z96)

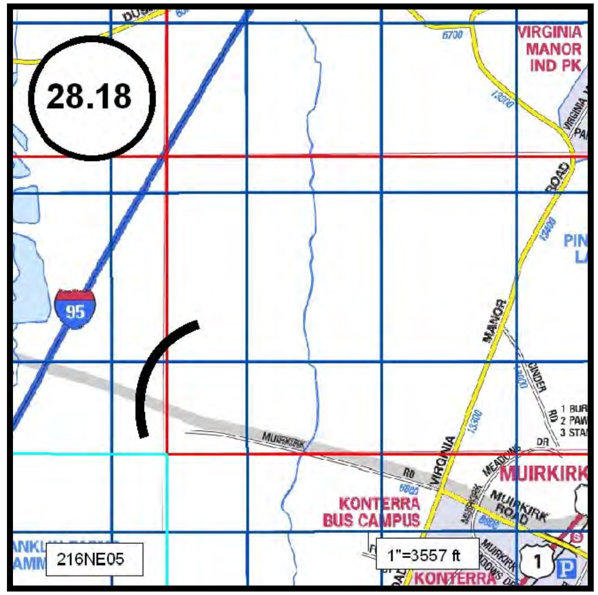
Planning, design, and construction of a new wastewater pumping station to provide service to the Preserves of Piscataway Subdivision. Capacity: 0.12 MGD; Service Area: Piscataway; Population: 220; Status: D-0%; Estimated Total Project Cost: $562,000. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project

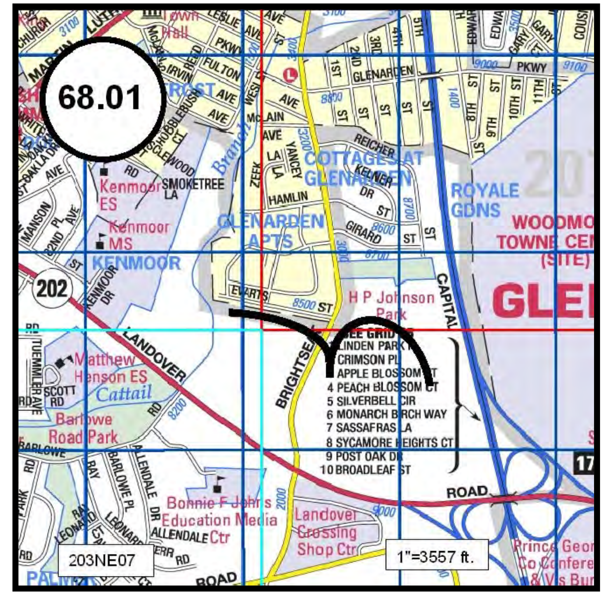
S-131.09 Preserves of Piscataway WWPS Force Main (DA1543Z96)

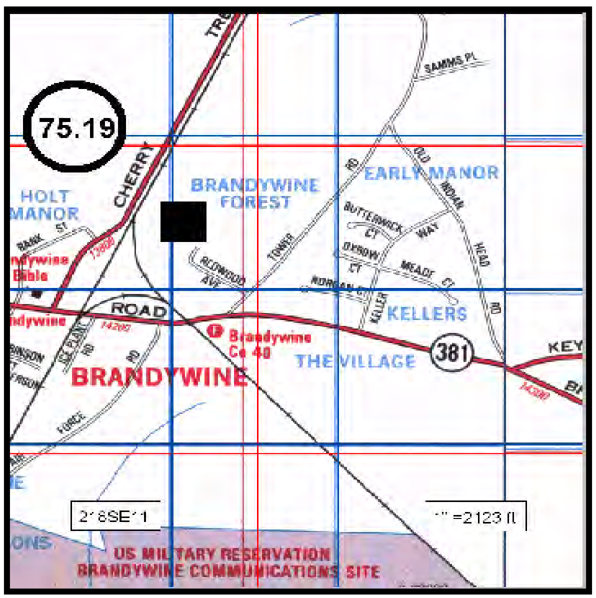
700 feet of 4-inch diameter force main from the Preserves of Piscataway Wastewater Pumping Station to provide service to the Preserves of Piscataway Subdivision. Capacity: 0.12 MGD; Service Area: Piscataway; Population: 220; Status: D-0%; Estimated Total Project Cost: $85,000. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

* New entry on listing

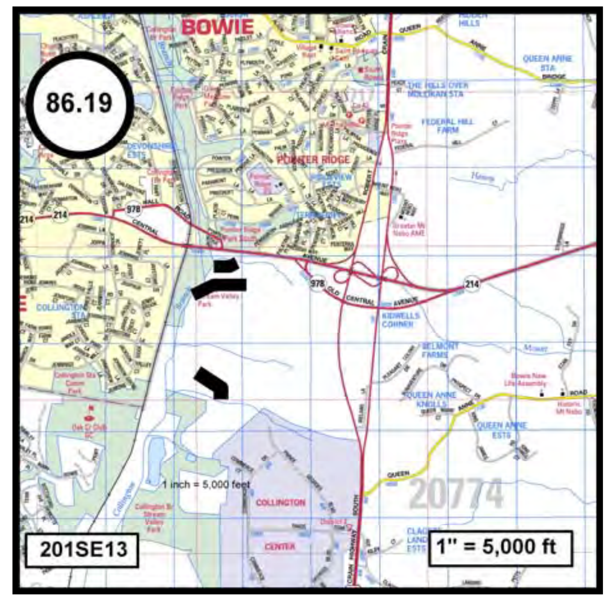

27.08
MELWOOD
PRESIDENTIAL CORPORATE CENTER
1 inch = 0.63 miles
206SE09
1 inch = 3,333 feet

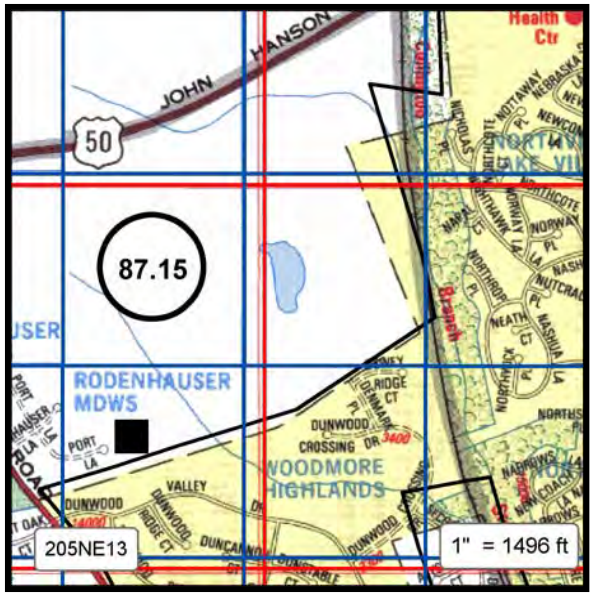

28.18
VIRGINIA MANOR IND PK
KONTERRA BUS CAMPUS
MUIRKIRK
216NE05
1"=3557 ft

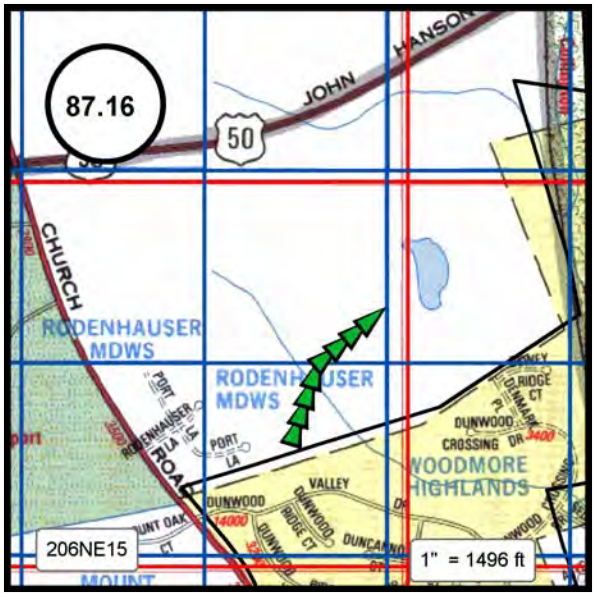

68.01
KENMOOR
COTTAGES AT GLENARDEN
GLENARDEN APTS
ROYALE GDNS
LINDEN PARK
CRIMSON PL
APPLE BLOSSOM
4 PEACH BLOSSOM CT
5 SILVERBELL CIR
6 MONARCH BIRCH WAY
7 SASSAFRAS LA
8 SYCAMORE HEIGHTS CT
9 POST OAK DR
10 BROADLEAF ST
203NE07
1"=3557 ft.

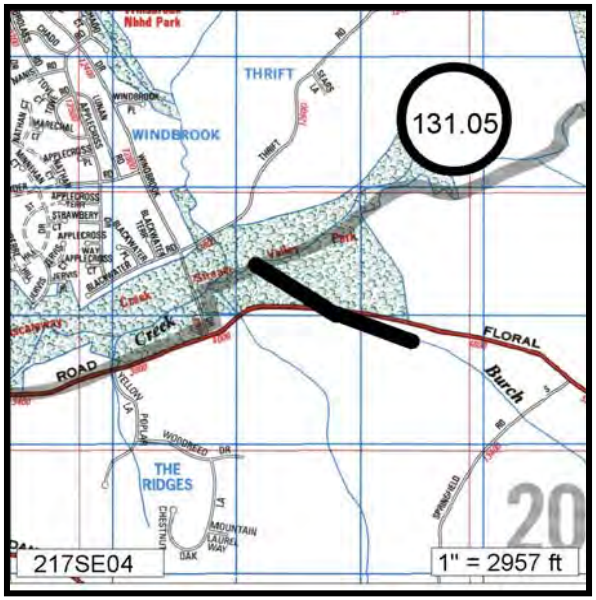

75.19
HOLT MANOR
BRANDYWINE FOREST
EARLY MANOR
KELLERS
THE VILLAGE
BRANDYWINE
US MILITARY RESERVATION
BRANDYWINE COMMUNICATIONS SITE

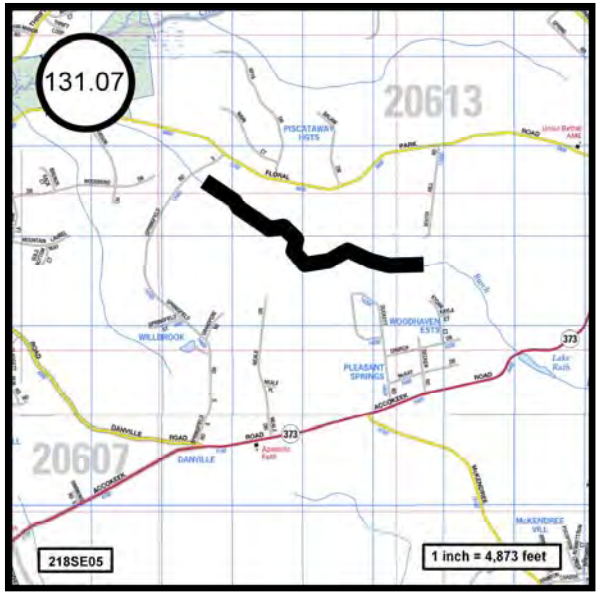

75.20
HOLT MANOR
BRANDYWINE FOREST
KELLERS
THE VILLAGE
BRANDYWINE
US MILITARY RESERVATION
BRANDYWINE COMMUNICATIONS SITE
218SE11
1" =2123 ft

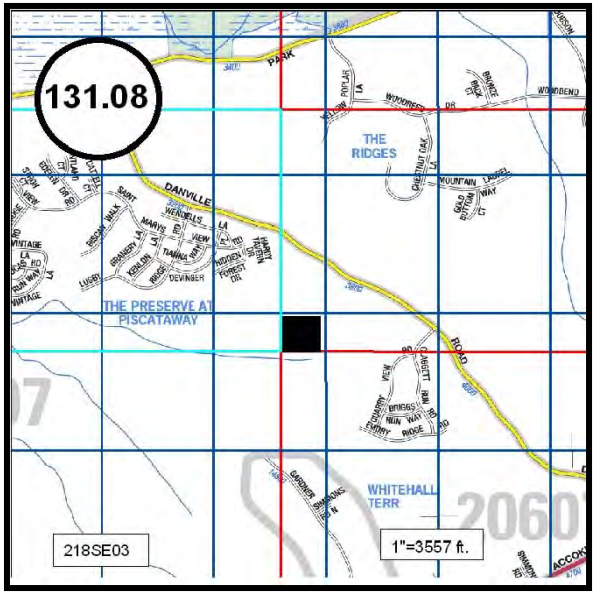

86.19
BOWIE
1 inch = 5,000 feet
20774
201SE13
1" = 5,000 ft

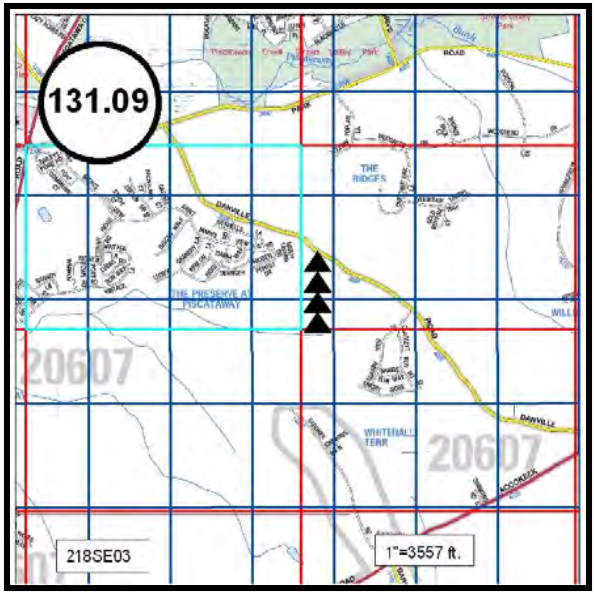

87.15
205NE13
1" = 1496 ft


87.16
206NE15
1" = 1496 ft


131.05
217SE04
1" = 2957 ft


131.07
218SE05
1 inch = 4,873 feet


131.08
218SE03
1"=3557 ft.


131.09
218SE03
1"=3557 ft.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-205.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Land & Rights-of-Way Acquisition - Prince George's County

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision											
Land	**400**		400								
Site Improvements & Utilities											
Construction											
Other											
Total	**400**		**400**								

C. Funding Schedule (000's)

WSSC Bonds	**68**		68								
SDC	**332**		332								

D. Description & Justification

DESCRIPTION

This PDF provides a consolidated estimate of funding for the acquisition of land and rights-of-way for previously approved projects and new projects, as needed. Expenditures are programmed based upon anticipated schedules and are required for the completion of those specific projects. These costs do not include purchases which have already been completed.

JUSTIFICATION

Plans & Studies

Acquisition needs are determined by the WSSC and are based upon facility planning efforts, alignment studies, field surveys, realignments required by other agencies, or requirements identified within the Development Services Process (DSP).

Specific Data

Consolidation of expenditures for land and rights-of-way acquisitions provides flexibility in expending funds in a specific fiscal year and permits the WSSC to respond to the uncertainty of project-specific implementation schedules. Other considerations include the accommodation of unpredictable delays for extended community outreach which impacts the timing of a planned purchase, unanticipated rights-of-way requirements for approved projects due to minor alignment changes identified late in the design phase, and the need to assure the WSSC an equitable negotiation position by avoiding project-specific cost displays prior to contacting property owners.

Cost Change

Not applicable.

STATUS Not Applicable

OTHER

The project scope has remained the same. Expenditure and schedule projections shown in Block B are estimates only and may change based upon actual negotiations. When purchases are complete, the actual cost will be displayed in the expenditure schedule on the appropriate project description form elsewhere in this program.

NOTE This project supports 83% Growth and 17% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	....	....
	Debt Service	58	15
Total Costs		58	15
Impact on Water or Sewer Rate		....	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 98
Date First Approved	FY 98
Initial Cost Estimate	800
Cost Estimate Last FY	
Present Cost Estimate	400
Approved Request, Last FY	
Total Expenditures & Encumbrances	
Approval Request FY 15	
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Land & R/W to be acquired
% Project Completion:	Not Applicable
Est. Completion Date:	Not Applicable

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

PROJECTS PENDING CLOSE-OUT

Prince George's Sewer Projects

(costs in thousands)

Project Number	Agency Number	Project Name	Estimated Total Cost	Expenditures Thru FY'13	Estimated Expenditures FY'14	Remarks
	S-28.19	Konterra Town Center East Sewer, Part 2	$76	$76	$0	Project no longer CIP sized.
	S-77.18	Parkway WWTP Enhanced Nutrient Removal	19,119	17,815	1,304	Project completion expected in FY'14.
		TOTALS	$19,195	$17,891	$1,304	

Section 7 - Information Only Projects

DATE: October 1, 2013

FINANCIAL SUMMARY

(ALL FIGURES IN THOUSANDS)

INFORMATION ONLY PROJECTS

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 13	EST. EXPEND 14	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BUDGET REQUEST 15	PDF PAGE NUM
						YR 1 15	YR 2 16	YR 3 17	YR 4 18	YR 5 19	YR 6 20		
W-1.00	Water Reconstruction Program	775,766	0	87,491	688,275	104,509	110,024	113,304	116,681	120,078	123,679	104,509	7-2
S-1.01	Sewer Reconstruction Program	428,819	0	52,346	376,473	16,419	54,574	62,116	78,736	81,097	83,531	16,419	7-4
A-102.00	Engineering Support Program	106,000	0	14,000	92,000	17,000	18,000	15,000	14,000	14,000	14,000	17,000	7-6
A-103.00	Energy Performance Program	41,655	31,875	545	8,905	435	610	2,370	4,030	1,280	180	435	7-7
A-104.00	Entrepreneurial Projects	41,905	1,573	866	10,760	5,785	699	107	6	6	4,157	5,785	7-10
A-105.00	Water Storage Facility Rehabilitation Program	35,000	0	5,000	30,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	7-11
A-106.00	Asset Management Program	19,724	9,810	2,935	6,979	1,320	1,472	633	1,777	1,777	0	1,320	7-12
A-107.00	Specialty Valve Vault Rehabilitation Program	25,290	3,364	930	20,996	7,359	4,576	3,751	2,773	1,555	982	7,359	7-13
A-109.00	Advanced Metering Infrastructure	89,500	875	2,525	86,100	960	13,484	26,360	26,360	18,936	0	960	7-14
S-300.01	D'Arcy Park North Relief Sewer	849	84	245	520	261	259	0	0	0	0	261	7-15
	TOTAL INFORMATION ONLY PROJECTS	1,564,508	47,581	166,883	1,321,008	159,048	208,698	228,641	249,363	243,729	231,529	159,048	

Denotes projects which include an environmental component (see page 15 in the opening narrative.)

Notes for costs beyond six years:
Includes 330 for Project A-103.00, Energy Performance Program
Includes 28,706 for Project A-104.00, Entrepreneurial Projects

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-1.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Water Reconstruction Program

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**281,095**		32,669	**248,426**	37,748	39,736	40,903	42,100	43,305	44,634	
Land											
Site Improvements & Utilities											
Construction	**370,987**		39,900	**331,087**	50,106	52,940	54,532	56,172	57,817	59,520	
Other	**123,684**		14,922	**108,762**	16,655	17,348	17,869	18,409	18,956	19,525	
Total	**775,766**		**87,491**	**688,275**	**104,509**	**110,024**	**113,304**	**116,681**	**120,078**	**123,679**	

C. Funding Schedule (000's)

WSSC Bonds	**775,766**		87,491	**688,275**	104,509	110,024	113,304	116,681	120,078	123,679	

D. Description & Justification

DESCRIPTION

The purpose of this program is to renew and extend the useful life of water mains. Portions of the water system are more than 80 years old. Bare cast iron mains, installed generally before 1965, permit the build-up of tuberculation which can reduce flow and cause discoloration at the customer's tap. Selected replacement is necessary to supply water in sufficient quantity, quality and pressure for domestic use and fire fighting. As the system ages, water main breaks are increasing. Selected mains are chronically breaking and other mains are undersized for the current flow standards. Replacement of these mains provides added value to the customer. Galvanized, copper and cast iron water services, as well as all other water main appurtenances including meter and PRV vaults are replaced on an as needed basis when they have exceeded their useful life.

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* EXPENDITURES FOR WATER RECONSTRUCTION ARE EXPECTED TO CONTINUE INDEFINITELY.
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Service Area Bi-CountyArea

JUSTIFICATION

Plans & Studies

Flow studies, water system modeling, and field surveys are routinely conducted. A staff level report: Water Main Condition Assessment, 1915-1998; Analysis and Recommendations by the Water Main Reconstruction Work Group (June, 1999) examined the historical main break data for performance measures to define, characterize, and prioritize the future replacement needs of the distribution system. An early outcome of this project identified the need to increase the frequency of water main replacement. "FY2012 Water Distribution System Asset Management Plan", GHD, Inc. (March 2011).

Specific Data

The program's projected work units and expenditure levels for FY'15 (including overhead) are as follows: design and construction of main replacement and associated water house connection renewals, 60 miles - $95M; cathodic protection - $3M; design and construction of large water service replacements - $6.5M. Note: The specific mix and type of water main reconstruction may vary in any given year depending on the nature and priority of the work to be addressed. Program level may be adjusted in future years based upon the results of the Asset Management Plan. WSSC pilot tested one mile of cleaning and lining using new methods intended to add structural integrity to the lined main.

Cost Change

The program cost increase in FY 2015 primarily reflects an increase in replacement miles.

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E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	61663	....	20
Total Costs		61663	....	20
Impact on Water or Sewer Rate		123¢	....	20

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY --
Date First Approved	FY --
Initial Cost Estimate	
Cost Estimate Last FY	793,935
Present Cost Estimate	775,766
Approved Request, Last FY	96,774
Total Expenditures & Encumbrances	
Approval Request FY 15	104,509
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	On-Going
Est. Completion Date:	On-Going

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: W - 1.00 **Project Name: Water Reconstruction Program**

STATUS Under Construction

OTHER

The project scope has remained the same. The water reconstruction program has been ongoing since 1979. Funding in the six-year program period is subject to Spending Affordability Guideline limits. The following work accomplishments through FY'14 summarize the magnitude of the reconstruction effort: water main cleaning and lining, 1,142 miles completed; water main replacement, 463 miles completed; large water service/meter replacement, 115 large water service/meters replaced. It is anticipated water reconstruction activity will be a perpetual element of future work programs.

COORDINATION

Maryland State Highway Administration, Montgomery County Department of Public Works and Transportation, Montgomery County Government (including local municipalities where work is to be performed), Prince George's County Government (including local municipalities where work is to be performed), Prince George's County Department of Public Works & Transportation and Local Community Civic Associations.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-1.01	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Sewer Reconstruction Program

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**100,223**		11,181	**89,042**	5,492	13,284	13,204	18,461	19,015	19,586	
Land											
Site Improvements & Utilities											
Construction	**285,713**		35,930	**249,783**	9,285	35,833	42,700	52,401	53,972	55,592	
Other	**42,883**		5,235	**37,648**	1,642	5,457	6,212	7,874	8,110	8,353	
Total	**428,819**		**52,346**	**376,473**	**16,419**	**54,574**	**62,116**	**78,736**	**81,097**	**83,531**	

C. Funding Schedule (000's)

WSSC Bonds	**428,819**		52,346	**376,473**	16,419	54,574	62,116	78,736	81,097	83,531	

D. Description & Justification

DESCRIPTION

This program funds a comprehensive sewer system rehabilitation program in residential areas. The main component of this program is the rehabilitation and/or repair of sewer mains less than 15" in diameter and house connections. The program addresses infiltration and inflow control, exposed pipe problems, and future capacity needs for the basin. The rehabilitation and repair funded by this program includes the rehabilitation and repair recommended by comprehensive basin studies as well as that resulting from sewer systems evaluations, line blockage assessments, field surveys, and closed circuit TV inspections. This program does not include funding for any major capital projects (e.g. CIP size relief or replacement sewers) that may result from a comprehensive basin study. These are funded separately in the CIP.

* EXPENDITURES FOR SEWER RECONSTRUCTION ARE EXPECTED TO CONTINUE INDEFINITELY.
.

Service Area Bi-CountyArea

JUSTIFICATION

Plans & Studies

Comprehensive Basin Studies, Sewer System Evaluation Surveys, Line Blockage Assessments, field surveys, closed circuit TV inspections, and/or other activities investigating specific portions of the collection system.

Specific Data

The FY'15 work units and associated costs are based on our historical experience with regards to timing of design and construction work, cost per linear foot, availability of authorized contractors for proprietary rehabilitation techniques, and management's availability to oversee and manage the total number of individual contracts. The program's projected work units and expenditure levels for FY'15 (including overhead) are as follows: 3 miles of residential line construction - $7.9M; 1 mile of lateral line construction and associated sewer house connection renewals - $6.5M; emergency repairs - $2M. Note: The specific mix and type of sewer reconstruction may vary in any given year depending on identified system defects.

Cost Change

The overall program cost decreased due to a continued focus on the Trunk Sewer Reconstruction Program (S-170.09) and a reduction of priority 2 work to be performed post Consent Decree.

STATUS Under Construction

OTHER

The project scope has remained the same. The program schedule and expenditures shown above reflect the terms of the Sanitary Sewer Overflow Consent Decree. The Consent Decree between WSSC, Maryland Department of the Environment (MDE), and the

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	....	....
	Debt Service	57153	 20
Total Costs		57153	 20
Impact on Water or Sewer Rate		114¢	 20

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY --
Date First Approved	FY --
Initial Cost Estimate	
Cost Estimate Last FY	655,424
Present Cost Estimate	428,819
Approved Request, Last FY	49,902
Total Expenditures & Encumbrances	
Approval Request FY 15	16,419
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	On-Going
Est. Completion Date:	On-Going

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 1.01 **Project Name: Sewer Reconstruction Program**

EPA was entered into on December 7, 2005. The sewer reconstruction program was established in 1979. Expenditures for grouting repairs are included in the operating budget.

The following work accomplishments through FY'14 summarize the magnitude of this reconstruction effort: sewer main reconstruction, 373 miles; and sewer house connection renewals, 18,081. It is anticipated that sewer reconstruction activity will be a perpetual element of future work programs.

COORDINATION

Maryland State Highway Administration, Montgomery County Department of Public Works and Transportation, Montgomery County Government (including local municipalities where work is to be performed), Prince George's County Government (including local municipalities where work is to be performed), Maryland Department of the Environment (SSO Consent Decree Compliance), Prince George's County Department of Public Works & Transportation, U.S. Environmental Protection Agency, Region III (SSO Consent Decree Compliance) and Local Community Civic Associations.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	A-102.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Engineering Support Program

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision											
Land											
Site Improvements & Utilities											
Construction	**106,000**		14,000	**92,000**	17,000	18,000	15,000	14,000	14,000	14,000	
Other											
Total	**106,000**		**14,000**	**92,000**	**17,000**	**18,000**	**15,000**	**14,000**	**14,000**	**14,000**	

C. Funding Schedule (000's)

WSSC Bonds	**78,000**		10,000	**68,000**	13,000	14,000	11,000	10,000	10,000	10,000	
Water Operating Funds	**14,000**		2,000	**12,000**	2,000	2,000	2,000	2,000	2,000	2,000	
Sewer Operating Funds	**14,000**		2,000	**12,000**	2,000	2,000	2,000	2,000	2,000	2,000	

D. Description & Justification

DESCRIPTION

The Engineering Support Program (ESP) represents a consolidation of a diverse group of projects whose unified purpose is to support the extensive water and sewer infrastructure and numerous support facilities that are owned, operated, and maintained by the WSSC.

EXPENDITURES FOR ENGINEERING SUPPORT ARE EXPECTED TO CONTINUE INDEFINITELY.

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JUSTIFICATION

Plans & Studies

Asset Management Implementation Plan, Sterns & Wheler (April 2008).

Specific Data

ESP projects may be identified in Asset Management Plans or result from direct requests from the Customer Care and Production Teams for engineering support. Support services are in the form of planning, design, and construction to meet a wide range of needs. As such, ESP projects are diverse in scope and typically include work needed to upgrade operating efficiency, modify existing processes, satisfy regulatory requirements, improve safety and security, or rehabilitate aging facilities. The ESP does not include proposed "major projects" which, by law, must be programmed in the WSSC Six-Year Capital Improvements Program or projects to serve new development.

Cost Change

Costs were increased in FY'15 - FY'17 for RGH Building Electrical Upgrade projects.

STATUS Not Applicable

OTHER

The project scope has remained the same. The ESP process provides a stable funding level for projects that require engineering support. Each year, the requested projects will be prioritized and then initiated subject to the available funding for the fiscal year.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	6104	....	20
Total Costs		6104	....	20
Impact on Water or Sewer Rate		12¢	....	20

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 87
Date First Approved	FY 87
Initial Cost Estimate	
Cost Estimate Last FY	98,000
Present Cost Estimate	106,000
Approved Request, Last FY	17,000
Total Expenditures & Encumbrances	
Approval Request FY 15	17,000
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	On-Going
Est. Completion Date:	On-Going

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	A-103.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Energy Performance Program

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**8,835**	6,385	510	**1,640**	410	560	160	170	170	170	300
Land											
Site Improvements & Utilities											
Construction	**31,990**	25,490		**6,500**			2,000	3,500	1,000		
Other	**830**		35	**765**	25	50	210	360	110	10	30
Total	**41,655**	**31,875**	**545**	**8,905**	**435**	**610**	**2,370**	**4,030**	**1,280**	**180**	**330**

C. Funding Schedule (000's)

WSSC Bonds	**38,190**	31,410		**6,780**			2,010	3,660	1,110		
Contribution/Other	**1,165**	465		**700**			300	300	100		
Water Operating Funds	**696**		118	**529**	101	142	60	70	70	86	49
Sewer Operating Funds	**1,604**		427	**896**	334	468				94	281

D. Description & Justification

DESCRIPTION

This program provides for the engineering audit, design, construction, and monitoring and verification necessary to replace and upgrade energy consuming equipment and systems at all major Commission facilities. All projects included in the program will provide a reduction in energy and energy-related costs (electricity, fuel oil, natural gas, or other fuel). The program will maintain or enhance existing operating conditions and reliability while continuing to meet all permit requirements and ensuring a continued commitment to environmental stewardship at WSSC sites. Energy conservation measures may include, but are not limited to, the replacement or upgrade of water and wastewater process equipment, aeration equipment, piping, valves and motors, sludge dewatering/thickening equipment, grit removal, effluent disinfection systems, wastewater pumps, water pump/valve/motor replacement and rebuild, pump instrumentation, flow metering, power measurement, incinerator upgrades, peak shaving and backup power generation systems, variable speed drives, HVAC equipment/systems, and lighting. A baseline is established for each energy conservation measure to identify energy usage and costs before the energy conservation measures (equipment upgrades) are implemented. After all construction is completed and accepted by the WSSC, the combined baseline for all energy conservation measures will be compared annually to the actual energy savings to quantify the savings. The program will be completed in several phases. Additional details on each phase are included in the "Specific Data" section below.

JUSTIFICATION

Plans & Studies

Stearns & Wheler, Western Branch Study BNR Modifications (Cyclical Aeration) (June 1996); Water Environment Federation, Energy Conservation for Wastewater Treatment Facilities (1997); EMA, WSSC Operations Branch Competitiveness Assessment (January 1997); EMA, WSSC Adopt Best Practices Report, Competitive Action Plan, TPO Work Team (June 1999); Stearns & Wheler, Western Branch Aeration Study (July 2000); O'Brien & Gere Study, Potomac Filtration Plant Water Quality and Electric Reliability; Energy Information Administration (Department of Energy), Annual Energy Outlook 2002 with Projections to 2020 (December 2001); American Water Works Association Research Foundation, Best Practices for Energy Management; In-house Study (April 2002); The Khepra Group, Potomac Water Filtration Plant Pump Systems Evaluation (May 2008); Whitman, Requardt & Associates/Shah Associates, Solar Photovoltaic Concept Study for Potomac WFP and Western Branch WWTP (May 2010).

Specific Data

Phases I-A and I-B of the Energy Performance Program were awarded to Constellation Energy Projects and Services (CEPS) in March 2001. Phase I-A included detailed engineering audits, supply analysis, engineering, and planning of equipment and operations

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff		....
	Other		....
Facility Costs	Maintenance		....
	Debt Service	2627	....
Total Costs		2627	....
Impact on Water or Sewer Rate		5¢	....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 03
Date First Approved	FY 03
Initial Cost Estimate	22,200
Cost Estimate Last FY	40,502
Present Cost Estimate	41,655
Approved Request, Last FY	1,105
Total Expenditures & Encumbrances	31,875
Approval Request FY 15	435
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	No land or R/W involved
% Project Completion:	Not Applicable
Est. Completion Date:	(See "Specific Data" for details.)

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

upgrades to develop an energy efficient and guaranteed savings program Commission-wide. The Phase II-A implementation project, awarded in December 2002 and completed in May 2006, included detailed design, construction, maintenance, savings monitoring, and energy/energy-related savings guarantee at the Western Branch, Parkway, Piscataway, and Damascus WWTPs and the RGH Office Building.

The Phase II-B implementation project was awarded to CEPS in August 2006, and included detailed design, construction, maintenance, savings monitoring, and energy/energy-related savings guarantee for incinerator upgrades at the Western Branch WWTP, backup/peak-shaving engine-generation system at the Seneca WWTP, and the addition of smaller, more efficient pumps at the Anacostia No. 2 WWPS to handle average dry daily flows. The construction of the Seneca and Anacostia components were completed in October 2008. Incinerator upgrades at the Western Branch WWTP were completed in January 2011.

Projects included in Phases II-A and II-B are guaranteed by CEPS to reduce energy-related costs. The guaranteed reduction includes annual avoided energy costs as well as operations and maintenance, chemicals, and biosolids disposal cost savings. CEPS will pay the WSSC for any yearly shortfall if the total guaranteed savings figure is not achieved. If the actual savings exceed the guaranteed amount, the WSSC retains the savings on a yearly basis. The energy guarantee for Phase II-A and Phase II-B work can be applied up to 15 years as prescribed by the State of Maryland. The energy savings for projects completed under Phase II-A have surpassed the contract's guaranteed amount of $700,000/year for the first 5 years of the monitoring and verification period.

Phase II-C, awarded in March 2004, includes the supply of electricity generation and transmission for a period of 15 years. Phase II-C was amended in December 2006 to include 33% of generation from renewable wind power at a fixed price for a 10-year period under a Power Purchase Agreement (PPA), starting in 2008. Phase II-C, including the amendment for wind energy, does not involve any capital funds.

Phase I-D, awarded to Energy Systems Group (ESG) in March 2009, provided for instrumentation, pump replacement, pump rebuild, and valve and piping modifications at the Raw Water Pumping and Main Zone Pumping Stations located within the Potomac Water Filtration Plant (WFP). After performing an initial engineering analysis and additional pump tests, the Commission accepted ESG's Phase II-D proposal in December 2010 for the rehabilitation of 5 raw water (RW) pumps and 1 Main Zone (MZ) pump, reconditioning of electric motors for the 6 pumps, new instrumentation for all the RW, MZ, and High Zone (HZ) pumps, commissioning, training, energy savings guarantee, and monitoring and verification of energy savings for 10 years. Phase II-D total program cost (over 10 years) will be 100% paid from guaranteed energy savings, avoid future capital expenditures, and improve plant reliability. Construction was completed in April 2013. PEPCO contributed $465,000 in capital rebates over the two-year construction period as part of its Commercial & Industrial Energy Efficiency Program.

The remaining pumps in the Main and High Zones Pumping Stations (as well as in the Raw Water Zone Pumping Station) are 30-50 years old and will have reached the end of their useful life in the next 5-10 years. New instrumentation included in Phase II-D (power monitors to measure amperage, voltage, power factor, kw, and discharge pressure transmitters for the RW pumps and differential pressure transmitters for the MZ and HZ pumps) will more accurately monitor and track pump efficiency, allowing us to identify and prioritize the replacement of additional pumps, motors, and variable frequency drives based upon efficiency and reliability data. Future pump replacements at the Potomac WFP are not currently included in the expenditure schedule above and could add an additional $10,000,000 in future updates, possibly extending the program into FY 2020, if warranted, based upon the cost analysis.

Phase II-E will provide for the supply of on-site generated photo-voltaic (PV) solar power at a rate competitive with conventional or "brown" power. A Solar PV Study completed in May 2010 concluded that the optimum form of constructing a Solar PV System at WSSC sites was through a Power Purchase Agreement (PPA), similar to our existing Wind Farm Agreement. Under this arrangement, the WSSC will negotiate a long-term (20 year) agreement with a solar power provider to buy electricity at a fixed rate/kWh with a possible annual escalation. The provider will design, build, and operate the Solar PV System at the Seneca and Western Branch WWTP sites, with the WSSC providing review and oversight. Renewable Energy Credits (RECs) will be transferred to the solar provider (as part of the fixed electricity price) to generate the revenue required for the solar provider to offer a low enough rate to the WSSC that would be competitive (lower than brown power). Under the agreement, the entire capital cost of the Solar PV System will be the responsibility of the solar provider. The contract was awarded to Standard Solar and Washington Gas Energy Services in October 2012. Construction of the solar arrays at Seneca and Western Branch are expected to be completed in the fall of 2013.

Phase I-F will provide for detailed engineering audits, supply analysis, engineering, and planning of equipment and operations upgrades to develop an energy efficient and guaranteed savings program for energy efficient HVAC and lighting upgrades at field offices, upgrades to water distribution and wastewater pumps, and additional upgrades at water and wastewater treatment plants. Responses to a Request for Proposals for Phase I-F were received in April 2013. A Phase I-F ESCO contract is expected to be awarded in summer of 2013. It is anticipated that the site visits, analysis, and preparation of a Phase II-F proposal will take

approximately 18 months. We project that Phase II-F will be awarded during the fall of 2014, with detailed design/construction lasting approximately 24 months. If the Commission elects to proceed with Phase II-F, we expect energy efficient rebates from BGE, Pepco, and SMECO of approximately $700,000 to subsidize the total construction cost of the project

Cost Change

The overall project costs were increased based upon revised estimates for Phase II-F.

STATUS Under Construction (WSSC Contract Nos. AM3614E03 , CD3614A03 , CD3614B03 , CD3614C03 , CD3614D03 , CD3614G03 , CD3614H03 , CP3614F03).

OTHER

The project scope has remained the same. Expenditures shown for Planning, Design & Supervision include operating cost estimates for annual maintenance, warranty, performance bond, and monitoring and verification (M&V). The annual maintenance and M&V costs are estimated to continue for a period not exceeding 15 years. Portions of the program have been financed by low interest loans through the Maryland Department of the Environment's Water Quality Administration State Revolving Loan Program.

COORDINATION

Montgomery County Government (including coordination with the County's ICEUM Committee), Prince George's County Government and WSSC Projects W-73.16, Potomac WFP Improvements, W-73.18, Power Reliability and Arc Flash Implementation and W-73.19, Potomac WFP Outdoor Substation No. 2 Replacement.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	A-104.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Entrepreneurial Projects

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision											
Land											
Site Improvements & Utilities											
Construction	**36,644**	1,573	753	**9,356**	5,030	608	93	5	5	3,615	24,962
Other	**5,261**		113	**1,404**	755	91	14	1	1	542	3,744
Total	**41,905**	**1,573**	**866**	**10,760**	**5,785**	**699**	**107**	**6**	**6**	**4,157**	**28,706**

C. Funding Schedule (000's)

Contribution/Other	**41,905**	1,573	866	**10,760**	5,785	699	107	6	6	4,157	28,706

D. Description & Justification

DESCRIPTION

This project represents a consolidation of capital projects that generate additional revenues through the sale of products, services, and/or real property as part of an overall strategy to hold down rates for existing customers. Project currently reflects the Joint Base at Bolling (JBAB) Contract, No. SP0600-04-C-8250. Expenditures for renewal and replacement are expected to continue for the entire contract term.

JUSTIFICATION

Plans & Studies

"Replace/Add Water Mains and Valves, Project BXUR95-1042, Bolling Air Force Base" (July 1995); "Study Report for Project BXUR92-1221 Sanitary Sewer Main Study for Bolling Air Force Base" (March 1997); Bolling Infrastructure Master Plan; "Capital Upgrades and Renewals and Replacements Plan for Bolling AFB Water & Wastewater Systems," Malcolm Pirnie, Inc. (September 2000); WSSC Resolution Number 2003-1657 (October 2002).

Specific Data

Under the terms of the contract, the WSSC will own, operate and maintain the JBAB water and wastewater systems for a 50-year term (ending in June 2054); implement an Initial Capital Upgrades Plan to bring the systems up to WSSC standards; and then maintain that standard through a Renewals and Replacements Plan for the duration of the contract period.

Cost Change

The expenditure schedule has been updated to reflect the Capital Upgrades Plan submitted for approval on March 1, 2013, including costs beyond FY 2020.

STATUS Not Applicable (WSSC Contract Nos. EW4028A05 , EW4088A05 , EW4974Z09 , FS4029A05 , FS4030A05 , FS4031A05 , FS4032A05 , FS4087A05 , FS4974A09 , FS4974Z09 , FS5294B11 , FS5294C11 , FS5294D11 , FS5294E11 , FS5294F11 , FS5294G11 , FS5294H11 , FS5294I11 , FS5294J11 , FS5294K11 , FS5294L11 , FS5294Z11).

OTHER

The project scope has remained the same. The contract value over the full 50-year term is up to $42 million. The contract can be adjusted periodically to account for inflation and changed conditions. All expenditures will be reimbursed in full by JBAB. Drinking water supply and wastewater treatment will continue to be supplied to JBAB by the District of Columbia Water and Sewer Authority. The project estimated completion date refers to the length of the contract - 50 years.

COORDINATION

District of Columbia Water & Sewer Authority and Bolling Air Force Base.

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	....
	Other	....
Facility Costs	Maintenance	....
	Debt Service	....
Total Costs		....
Impact on Water or Sewer Rate		....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 05
Date First Approved	FY 06
Initial Cost Estimate	3,900
Cost Estimate Last FY	8,964
Present Cost Estimate	41,905
Approved Request, Last FY	1,613
Total Expenditures & Encumbrances	1,573
Approval Request FY 15	5,785
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	Not Applicable
Est. Completion Date:	FY 2054 (See "Other" for details.)

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	A-105.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Water Storage Facility Rehabilitation Program

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision											
Land											
Site Improvements & Utilities											
Construction	**35,000**		5,000	**30,000**	5,000	5,000	5,000	5,000	5,000	5,000	
Other											
Total	**35,000**		**5,000**	**30,000**	**5,000**	**5,000**	**5,000**	**5,000**	**5,000**	**5,000**	

C. Funding Schedule (000's)

WSSC Bonds	**35,000**		5,000	**30,000**	5,000	5,000	5,000	5,000	5,000	5,000	

D. Description & Justification

DESCRIPTION

The Water Storage Facility Rehabilitation Program provides for the comprehensive rehabilitation of the Commission's 59 water storage facilities located throughout the WSSC service area holding 200 million gallons of finished drinking water. The Program provides for structural metal and concrete foundation repairs, equipment upgrades to meet current OSHA standards, lead paint removal, security upgrades, advanced mixing systems to improve water quality, and altitude valve vault and supply pipe replacements.

EXPENDITURES FOR WATER STORAGE REHABILITATON ARE EXPECTED TO CONTINUE INDEFINITELY.
.

JUSTIFICATION

Specific Data

Currently, there are more than 20 steel tanks whose last painting contract was finished 10 or more years ago. Many older tanks have accumulated significant layers of paint which have lost their bonding strength to the steel. It is expected that the old coatings will need to be completely removed and costly lead abatement techniques will be required in many cases. The recommended practice is to do this extra work every third re-coating to extend the service life of the structure. Today's coating systems should extend the length of service between coatings from the current 10 years to somewhere between 15 to 20 years.

Cost Change

Not applicable.

STATUS Not Applicable

OTHER

The project scope has remained the same. Tanks are prioritized based on the condition of the existing coating and structural integrity issues. The Program plan for FY'15 will address the following water storage facilities: Andrews, Brink, Greenbelt, Alta Vista, North Woodside, Air Park, South Laurel, St. Barnabas and Hill Road Reservoirs Nos. 2 and 3.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	2808	....	21
Total Costs		2808	....	21
Impact on Water or Sewer Rate		6¢	....	21

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 09
Date First Approved	FY 09
Initial Cost Estimate	18,000
Cost Estimate Last FY	32,200
Present Cost Estimate	35,000
Approved Request, Last FY	5,000
Total Expenditures & Encumbrances	
Approval Request FY 15	5,000
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	On-Going
Est. Completion Date:	On-Going

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	A-106.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Asset Management Program

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**18,430**	9,810	2,552	**6,068**	1,148	1,280	550	1,545	1,545		
Land											
Site Improvements & Utilities											
Construction											
Other	**1,294**		383	**911**	172	192	83	232	232		
Total	**19,724**	**9,810**	**2,935**	**6,979**	**1,320**	**1,472**	**633**	**1,777**	**1,777**		

C. Funding Schedule (000's)

WSSC Bonds	**9,936**	5,266	1,205	**3,465**	568	894	229	887	887		
Water Operating Funds	**4,894**	2,272	865	**1,757**	376	289	202	445	445		
Sewer Operating Funds	**4,894**	2,272	865	**1,757**	376	289	202	445	445		

D. Description & Justification

DESCRIPTION

This project provides for establishing an Asset Management Strategy and the development of Asset Management Plans which will identify and examine overall infrastructure needs over 30 years. The Plans will encompass the water and wastewater networks (treatment, transmission, distribution, collection, pumping, and storage); buildings and grounds; and information technology assets (SCADA system, security services, telephony, radio system, data network, paging system, microwave network, and antenna support structures). The Plans will examine rehabilitation/replacement needs, existing and future capacity needs, and regulatory needs. The project will build on previous efforts that address particular components of the networks.

JUSTIFICATION

Plans & Studies

Phase 1 High Level Utility Wide Master Plan Reports (December 2007), Asset Implementation Plan (April 2008).

Cost Change

Not applicable.

STATUS Planning (WSSC Contract Nos. BM4626A07 , CM4626A07).

OTHER

The project scope has remained the same. The program includes four phases. Phase 1, completed in December 2007, identified high level infrastructure needs. Track 2, Phase 1, completed in April 2008, developed a road map for establishing an asset management structure. Phase 2, completed in March 2011, developed 6 Asset Management Plans, 12 Asset Management processes, and 69 Asset Management procedures. Phase 3 started in June 2012 and will develop 9 Asset Management Plans and 70 Asset Management procedures. Phase 4 will continue development of detailed Asset Management Plans for various types of assets. The percentage of project completion is based on completion of the 4 Phases.

COORDINATION

Montgomery County Government and Prince George's County Government.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	684	....	20
Total Costs		684	....	20
Impact on Water or Sewer Rate		1¢	....	20

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 10
Date First Approved	FY 08
Initial Cost Estimate	6,900
Cost Estimate Last FY	19,271
Present Cost Estimate	19,724
Approved Request, Last FY	2,197
Total Expenditures & Encumbrances	9,810
Approval Request FY 15	1,320
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status: Not Applicable
% Project Completion: P-51%
Est. Completion Date: FY 2019

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	A-107.00	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Specialty Valve Vault Rehabilitation Program

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**4,598**	1,655	510	**2,433**	760	440	440	440	330	23	
Land											
Site Improvements & Utilities											
Construction	**18,699**	1,709	335	**16,655**	5,930	3,720	2,970	2,081	1,084	870	
Other	**1,993**		85	**1,908**	669	416	341	252	141	89	
Total	**25,290**	**3,364**	**930**	**20,996**	**7,359**	**4,576**	**3,751**	**2,773**	**1,555**	**982**	

C. Funding Schedule (000's)

WSSC Bonds	**25,290**	3,364	930	**20,996**	7,359	4,576	3,751	2,773	1,555	982	

D. Description & Justification

DESCRIPTION

This Program provides for the planning, design, and construction of improvements and replacement of Specialty Valves and their associated vaults, including pressure reducing valves, pressure relief valves, altitude and metering valves, throughout the water distribution system. The Program includes valves ranging in size from 8-inches to 60-inches in diameter. The Program will systematically evaluate the condition of individual installations, some of which were constructed as early as the 1930's, and upgrade or relocate the structures and equipment as necessary. This Program will improve reliability and increase the efficiency of system operations.

JUSTIFICATION

Plans & Studies

Candidate PRVs were originally identified in an October 26, 2005, memo from Jeff Asner to Karen Wright, and a subsequent May 7, 2007, memo from Karen Wright to Thomas Heikkinen. Currently, there are 23 candidate vaults within this Program as identified by the Systems Control Group; "PRV Vault Rehabilitation Evaluation Study", EBA Engineering, Inc. (September 2010).

Specific Data

The facilities included in this Program are in need of rehabilitation due to factors such as: location within heavily traveled roadways, age deterioration, and obsolescence. The highest priority valves are: (1) Bright Seat PRV - 30-inch diameter PRV built in 1976. Valves are in poor condition and need to be upgraded to include flow control to increase efficiency (construction to be completed in June 2013). (2) Old Baltimore Avenue PRV - 24-inch diameter PRVs built in 1955. Isolation valves no longer hold and need replacement. The PRVs need to be updated to include flow control to increase efficiency. (3) Adelphi Road PRV - This facility is located on a 60-inch diameter water main and is in extremely poor condition, located in a major county road, and replacement parts are of limited availability. This vault is being relocated and updated to current standards. The PRV Vault Rehabilitation Evaluation Study includes planning level cost estimates for repair and relocation of 20 specialty valve vaults. Completion of design for the Adelphi PRV (largest vault in the Program) has been delayed due to land acquisition issues.

Cost Change

Cost increase includes inflation and reflects updated estimates for design and construction costs.

STATUS Under Construction (WSSC Contract Nos. BL4830A08 , BL4830B08 , BM4396A06 , BM4396B06).

OTHER

The project scope has remained the same. Land and rights-of-way costs are included in WSSC Project W-202.00.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	1567	....	20
Total Costs		1567	....	20
Impact on Water or Sewer Rate		3¢	....	20

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 11
Date First Approved	FY 11
Initial Cost Estimate	17,560
Cost Estimate Last FY	21,068
Present Cost Estimate	25,290
Approved Request, Last FY	4,912
Total Expenditures & Encumbrances	3,364
Approval Request FY 15	7,359
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Land & R/W to be acquired
% Project Completion:	C-5%
Est. Completion Date:	On-Going

H. Map **Map Reference Code:**

MAP NOT APPLICABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	A-109.00	Change

2. Date: October 1, 2013

Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Advanced Metering Infrastructure

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**5,075**	75	1,750	**3,250**	950	600	600	600	500		
Land											
Site Improvements & Utilities											
Construction	**83,550**	800	750	**82,000**		12,750	25,500	25,500	18,250		
Other	**875**		25	**850**	10	134	260	260	186		
Total	**89,500**	**875**	**2,525**	**86,100**	**960**	**13,484**	**26,360**	**26,360**	**18,936**		

C. Funding Schedule (000's)

WSSC Bonds	**89,500**	875	2,525	**86,100**	960	13,484	26,360	26,360	18,936		

D. Description & Justification

DESCRIPTION

This project provides for the implementation of a system-wide automated meter reading infrastructure system (System). All meters will receive new Meter Interface Units with internal antenna capable of obtaining and/or transmitting the meter register reading. All readings will be collected remotely by either a mobile system or a fixed network communications system.

JUSTIFICATION

Plans & Studies

Dial Outbound AMR Trial Final Report, Metering Services, Inc. (1990); An Economic Evaluation of AMR for WSSC, Marilyn Harrington (1992); Cost of Meter Reading Study, Marilyn Harrington (2000); The WSSC Experience with Radio-Frequency AMR on Commercial & Industrial Meters (2002); Radio Frequency Solution for Meter Reading (2003); AMR Phase I (July 2005); Customer Care Team Departmental Action Item #20 - AMR Installation (2007); Advanced Metering Infrastructure Study, R.W. Beck (March 2011).

Specific Data

The System will be required to obtain accurate register readings from a variety of water meters located in indoor, pit-set, and underground vault settings, and be universally compatible with the existing meters and encoder registers in the distribution system.

Cost Change

Not applicable.

STATUS Planning

OTHER

The project scope has remained the same. AMI will improve both customer service and operational efficiency. The expected results include: Monthly billing based on actual meter readings. This would reduce bill size to help customers stay current with their payments, help customers develop a greater awareness of their water consumption, and ensure that problems such as excessive consumption due to leaks are addressed more quickly; Active notification of customers with abnormal consumption that might signify leaks before they get high consumption bills; Reduced customer calls; Reduced field investigation visits; Opportunities to employ more sophisticated rate structures; Analysis of individual consumption patterns to detect meters suspected of wearing out, or perform meter sizing analysis to ensure that large meters are optimally sized; Monitoring of individual consumption to perform precise, targeted conservation enforcement during droughts; Opportunities to improve the monitoring and operation of the distribution system, in order to detect and reduce non-revenue water. The AMI project has been postponed until the upgrade of the Commission's Customer Service Information System (CSIS) is completed. The upgrade the remaining monthly meters to the AMR standard continues.

COORDINATION

Montgomery County Government and Prince George's County Government.

E. Annual Operating Budget Impact (000's)

			FY of Impact	
Program Costs	Staff		....	
	Other		....	
Facility Costs	Maintenance		....	
	Debt Service	6156	....	20
Total Costs		6156	....	20
Impact on Water or Sewer Rate		12¢	....	20

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 13
Date First Approved	FY 13
Initial Cost Estimate	86,000
Cost Estimate Last FY	86,000
Present Cost Estimate	89,500
Approved Request, Last FY	2,500
Total Expenditures & Encumbrances	875
Approval Request FY 15	960
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	Not determined
% Project Completion:	P-15%
Est. Completion Date:	FY 2019

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-300.01	Change

2. Date: October 1, 2013
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: D'Arcy Park North Relief Sewer

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Suitland-District Heights & Vicinity P.A. 75A

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	**256**	84	88	**84**	43	41					
Land											
Site Improvements & Utilities											
Construction	**493**		125	**368**	184	184					
Other	**100**		32	**68**	34	34					
Total	**849**	**84**	**245**	**520**	**261**	**259**					

C. Funding Schedule (000's)

Contribution/Other	**849**	84	245	**520**	261	259					

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of 1,110 feet of 12-inch diameter (non-SDC eligible) PVC relief sewer to provide service to D'Arcy Park North.

Service Area Western Branch Drainage Basin **Capacity** 1.6 mgd

JUSTIFICATION

Plans & Studies

D'Arcy Park North Hydraulic Planning Analysis, (September 2008)

Cost Change

Not applicable.

STATUS Planning (WSSC Contract No. DA4850Z08,).

OTHER

The project scope has remained the same. The expenditures and schedule projections shown in Block B are planning level estimates and may change depending upon site-specific conditions and design constraints. Expenditures shown in prior years are for the Hydraulic Planning Analysis costs for the project. Estimated completion date is developer dependent. No WSSC rate supported debt may be used for this project.

COORDINATION

Prince George's County Government, Prince George's County Department of Environmental Resources and Local Community Civic Associations.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	20	17
	Debt Service	....	....
Total Costs		20	17
Impact on Water or Sewer Rate		....	

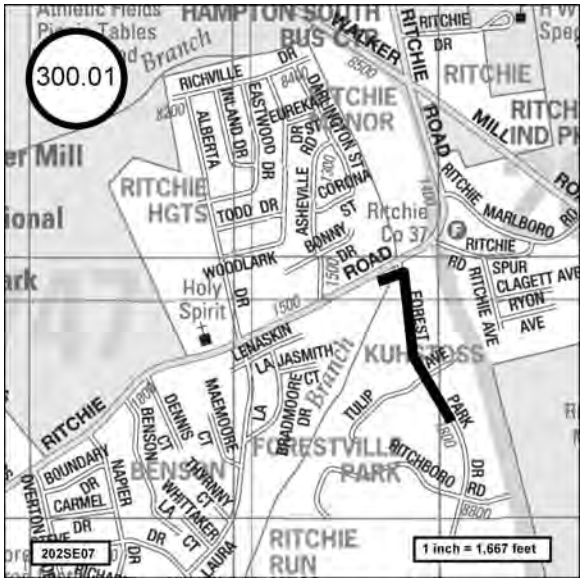
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 14
Date First Approved	FY 14
Initial Cost Estimate	824
Cost Estimate Last FY	824
Present Cost Estimate	849
Approved Request, Last FY	220
Total Expenditures & Encumbrances	84
Approval Request FY 15	261
Supplemental Approval Request Current FY (14)	

G. Status Information

Land Status:	R/W required
% Project Completion:	P-100%
Est. Completion Date:	Developer Dependent

H. Map **Map Reference Code:**



PROJECTS PENDING CLOSE-OUT

Information Only Projects

(costs in thousands)

Project Number	Agency Number	Project Name	Estimated Total Cost	Expenditures Thru FY'13	Estimated Expenditures FY'14	Remarks
	A-103.01	Anaerobic Digestion/Combined Heat & Power	$0	$0	$0	Project transferred to Bi-County Sewer section of CIP.
		TOTALS	$0	$0	$0	

Appendices

RESOLUTION NO. 2014-2053
Adopted: June 18, 2014
Effective Date: July 1, 2014

WASHINGTON SUBURBAN SANITARY COMMISSION

SUBJECT: A RESOLUTION modifying the System Development Charge (SDC) to help finance the capital costs of expanding and augmenting water and sewerage systems to accommodate service to subscribers in the Washington Suburban Sanitary District (WSSD) and to provide a financing mechanism to aid the Washington Suburban Sanitary Commission (Commission) in paying for the capital projects thereof by providing methods and procedures by which the SDC is to be implemented and/or collected.

WHEREAS, the Maryland General Assembly enacted House Bill 883, Chapter 559, Laws of Maryland 1993, System Development Charge legislation during its 1993 Session, a bill which provides the enabling authority for the Montgomery and Prince George's County Councils to establish a fee which will be paid by applicants for new service; and

WHEREAS, the Maryland General Assembly enacted House Bill 832, Chapter 713, Laws of Maryland 1998, System Development Charge legislation during its 1998 Session, a bill which, among other things, alters the schedule for the payment of the System Development Charge to the Commission for certain properties; establishes a new maximum System Development Charge per fixture unit; allows for and limits the amount of certain exemptions; establishes a maximum System Development Charge based on the number of toilets per dwelling; authorizes a change in the maximum System Development Charge for certain residential units based on the number of toilets per dwelling; and

WHEREAS, the Maryland General Assembly enacted House Bill 636, Chapter 124, Laws of Maryland 2013, System Development Charge legislation during its 2013 session, a bill which allows partial exemptions to certain properties used primarily for recreational and educational programs and services to youth; and

WHEREAS, the Commission owns and operates various water treatment and sewage treatment disposal plants and facilities within the WSSD and utilizes and has an equity share in sewage treatment plants operated by other jurisdictions to treat sewage generated in portions of the WSSD; and

WHEREAS, it is necessary that the Commission, with the advice and consent of the local governing bodies within the WSSD, develop alternative funding to cover the costs of providing quality water and sewer service in the WSSD and to similarly accommodate new growth therein as authorized by the County Governments; and

RESOLUTION NO. 2014-2053
Adopted: June 18, 2014
Effective Date: July 1, 2014

WHEREAS, the System Development Charge is a component of the Commission's Fiscal Year 2015 capital and operating budgets prepared pursuant to §17-202, Division II of the Public Utilities Article, Annotated Code of Maryland; and

WHEREAS, the Commission last modified the System Development Charge effective July 1, 2013 by Commission Resolution No. 2013-2012; and

WHEREAS, for all of the foregoing reasons it is necessary or desirable to continue the imposition of a System Development Charge fee; and

WHEREAS, Chapter 713, 1998 Laws of Maryland provides that the Montgomery and Prince George's County Councils may adopt and the Commission may implement a System Development Charge not to exceed $200.00 per fixture unit or, for residential properties with five or fewer toilets, not to exceed certain enumerated amounts based on the number of toilets per dwelling unit, effective July 1, 1998; and

WHEREAS, Chapter 713, 1998 Laws of Maryland further provides that on July 1, 1999 and each July 1 of each succeeding year, the maximum charge may be changed by an amount equal to the prior calendar year's change in the consumer price index published by the Bureau of Labor Statistics of the United States Department of Labor for urban wage earners and clerical workers for all items for the Washington, D.C. metropolitan area; and

WHEREAS, the consumer price index published by the Bureau of Labor Statistics of the United States Department of Labor for urban wage earners and clerical workers for all items for the Washington, D.C. metropolitan area increased 1.4% from November 2012 to November 2013; and

WHEREAS, the Commission recommends keeping the System Development Charge rates unchanged for FY'15. However, the Commission recommends increasing the maximum allowable charge by 1.4% from FY'14 limits in order to maintain future rate flexibility to address future potential growth funding gaps; and

WHEREAS, the County Councils of Prince George's County and Montgomery County have approved the modifications to the System Development Charge set forth below.

NOW, THEREFORE, BE IT RESOLVED THIS 18th day of June, 2014, that the Commission hereby adopts the approved System Development Charge fee schedule as set forth herein. For the purposes of this Resolution, the following definitions apply:

RESOLUTION NO. 2014-2053
Adopted: June 18, 2014
Effective Date: July 1, 2014

Definitions:

1) Apartment Unit means one of several single family residential units within one building that is not a "multi-unit dwelling." An "apartment unit" must contain at least one full bath and kitchen, but not more than two toilets. An "apartment unit" typically includes, but is not limited to, an individual dwelling unit in a garden, medium or high-rise type residential building.

2) Biotechnology Research and Development or Manufacturing means any development as jointly defined and approved by the Montgomery and Prince George's County Councils as eligible for a waived System Development Charge, more particularly described in Schedule C, attached.

3) Drainage Charge is the portion of the System Development Charge applicable to drainage fixture units for apartments and residential properties having five or fewer toilets.

4) Drainage Fixture Unit Value is a measure of the probable discharge into the drainage system by a particular plumbing fixture in terms of volume rate of discharge and duration of a single drainage operation and the time between successive operations.

5) Dwelling Unit means a single-family housing unit used as a residence, including trailers and mobile homes.

6) Elderly Housing means residential units as jointly defined and approved by the Montgomery and Prince George's County Councils as eligible for a waived System Development Charge, more particularly described in Schedule D, attached.

7) Hookup means the joining of the on-site water and/or sewer line(s) to the Commission's service connection or the installation of plumbing fixtures in a building served by the Commission's water and/or sewer facilities.

8) Multi-Unit Dwelling means a building that will accommodate several housing units on a lateral basis; namely, semi-attached houses, row houses, or townhouses used as residences.

9) New Service means:

   a) the first-time hook-up of a property to the Commission's water and/or sewer system; or

   b) a new connection or increased water meter size for a property previously or currently served by the Commission if the new connection or increased meter size is needed because of a change in the use of the property or an increase in demand for service at the property.

10) Non-Residential Unit is a structure not otherwise defined as a Residential Unit, generally commercial or industrial in nature. Examples may include shopping

malls, non-residential townhouses, warehouses, industrial buildings, restaurants, schools, dormitories, hospitals, hotels, motels, nursing homes, office buildings, churches, theaters, and similar commercial or industrial buildings.

11) Property Used Primarily for Recreational and Educational Programs and Services to Youth means real property, owned in fee simple, by a Community Based Organization that is exempt from taxation under § 501(c)(3) of the Internal Revenue Code; and as more fully jointly defined and approved by the Montgomery and Prince George's County Councils as eligible for a System Development Charge exemption, more particularly described in Schedule F, attached.

12) Public Sponsored or Affordable Housing means units as jointly defined and approved by the Montgomery and Prince George's County Councils as eligible for a waived System Development Charge, more particularly described in Schedule A, attached.

13) Residential Unit means any housing unit defined in Paragraphs 1, 5, and 8 above used as a residence.

14) Revitalization means any development as jointly defined and approved by the Montgomery and Prince George's County Councils as eligible for a waived System Development Charge, more particularly described in Schedule B, attached.

15) System Development Charge means that charge imposed by the Commission pursuant to the provisions of §25-403, Division II of the Public Utilities Article, Annotated Code of Maryland. (Maximum allowable System Development Charge is the maximum charge authorized by law, but not necessarily imposed in a given year.)

16) Toilet is a water closet as set forth in the WSSC Plumbing and Fuel Gas Code; and

17) Water Supply Charge is the portion of the System Development Charge applicable to water supply fixture units for apartments and residential properties having five or fewer toilets; and

18) Water Supply Fixture Unit Value is a measure of the probable hydraulic demand on the water supply by a particular plumbing fixture in terms of volume rate of supply and duration of a single supply operation and the time between successive operations; and

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Adopted: June 18, 2014
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BE IT FURTHER RESOLVED, that the System Development Charge rates for FY'15 shall be as follows:

Property Type	FY'14 Charge	Maximum Allowable Charge
Apartment Unit		
Water	$896	$1,257
Sewer	1,140	1,602
1-2 Toilets / Residential		
Water	1,344	1,887
Sewer	1,710	2,398
3-4 Toilets / Residential		
Water	2,240	3,145
Sewer	2,850	4,000
5 Toilets / Residential		
Water	3,135	4,401
Sewer	3,991	5,603
6 or More Toilets / Residential*		
Water	88	124
Sewer	115	162
Non-Residential*		
Water	88	124
Sewer	115	162

*Per Fixture Unit

(The System Development Charge for non-residential properties and dwelling units or multi-unit dwellings with more than five toilets shall be based on the number of plumbing fixtures and the assigned values for those fixtures as set forth in the WSSC Plumbing and Fuel Gas Code.); and

BE IT FURTHER RESOLVED, that the System Development Charge, as established herein, shall be paid to the Commission at the time of application for plumbing permit to install fixtures or hookup(s) to the Commission's water and/or sewage system(s) except that an applicant for a plumbing permit for a residential unit may pay the System Development Charge in two payments as follows:

1) One-half at the time of Plumbing Permit Application;
2) The remaining one-half within 12 months after the first payment or prior to the transfer of title to the property, whichever occurs first.

At the time of the first payment, the applicant for the plumbing permit for a residential unit shall deposit with the Commission security for the second payment in an amount and form established and approved by the Commission; and

RESOLUTION NO. 2014-2053
Adopted: June 18, 2014
Effective Date: July 1, 2014

BE IT FURTHER RESOLVED, that the fees established herein shall be in addition to, and not a substitution for, any other fees, rates, charges, or assessments allowed by law; and

BE IT FURTHER RESOLVED, that the System Development Charge shall be waived for any public sponsored or affordable housing as defined in Schedule A; and

BE IT FURTHER RESOLVED, that the System Development Charge shall, subject to the below provisions of this Resolution No. 2014-2053, be waived for Revitalization projects as defined in Schedule B; and

BE IT FURTHER RESOLVED, that the System Development Charge partial exemptions for Elderly Housing are established by Schedule E; and

BE IT FURTHER RESOLVED, that the System Development charge, subject to the below provisions of this Resolution No. 2014-2053, be waived, up to $80,000, for Properties Used Primarily for Recreational and Educational Programs and Service to Youth as defined in Schedule F; and

BE IT FURTHER RESOLVED, that the System Development Charge partial exemptions for Biotechnology Research and Development or Manufacturing shall be $18 per water supply fixture with an assigned fixture unit value of 1 and $25 per drainage fixture with an assigned drainage fixture unit value of 1, or $43 per combined fixture unit value; and

BE IT FURTHER RESOLVED, that the County Councils of Prince George's and Montgomery Counties may adopt implementing resolutions for System Development Charge partial exemptions for Biotechnology Research and Development or Manufacturing, Elderly Housing, and Property Used Primarily for Recreational and Educational Programs and Services to Youth as defined in Schedules C, D, and F and the System Development Charge full exemption for Revitalization as defined in Schedule B. The amount of the aforementioned full and partial exemptions authorized by this Resolution No. 2014-2053 for individual properties or projects may be limited by the provisions of the aforementioned Council resolutions. In addition, the aforementioned full and partial exemptions authorized by this Resolution No. 2014-2053, except those granted for affordable housing (as defined on Schedule A), shall not take effect unless and until the Council for the County in which the exempted project is located adopts the said implementing resolution; and

BE IT FURTHER RESOLVED, that nothing herein shall be construed as creating a contract between the Commission and the applicant for service, and that the providing of water and/or sewer service to an applicant's property shall be subject

RESOLUTION NO. 2014-2053
Adopted: June 18, 2014
Effective Date: July 1, 2014

to intervention of other governmental authority; the duly adopted policies of Montgomery and Prince George's Counties, and the Commission's ability to otherwise provide such service; and

BE IT FURTHER RESOLVED, that Commission Resolution No. 2013-2012 adopted June 19, 2013 on the same subject matter be, and the same is hereby superseded by this Commission Resolution No. 2014-2053; and

BE IT FURTHER RESOLVED, that the System Development Charge established herein shall take effect on July 1, 2014.

A True Copy

Attest:

Sheila R. Finlayson, Esq., Corporate Secretary

SCHEDULE A

"Public sponsored or affordable housing" means:

1) any dwelling unit built or financed under a government program, regulation, or binding agreement that limits for at least 10 years the price or rent charged for the unit in order to make the unit affordable to households earning less than 80% of the area median income, adjusted for family size;

2) any Moderately Priced Dwelling Unit built under Chapter 25A of the Montgomery County Code or Subtitles 13 and 27 of the Prince George's County Code;

3) any Productivity Housing Unit, as defined in Section 25B-17 (k) of the Montgomery County Code;

4) any unit in an Opportunity Housing Project built under Sections 56-28 through 56-32 of the Montgomery County Code or Subtitle 13, Division 8, of the Prince George's County Code, which is reserved for occupancy only by persons with low or moderate incomes (as defined in applicable provisions of State and County Law);

5) any dwelling unit constructed pursuant to the Capturing Housing Opportunities in Communities Everywhere (CHOICE) Program in Prince George's County which is reserved for occupancy only by persons with low or moderate incomes (as defined in applicable provisions of State and County Law).

SCHEDULE B

1) "Revitalization" means a project located in one of the following geographic areas and meeting any additional criteria that may be adopted by the respective county council or applicable municipal council:

   a) any state-designated revitalization area as defined by the Maryland Department of Housing and Community Development (DHCD).

   b) any state-designated enterprise zone as defined by the Maryland Department of Business and Economic Development (DBED).

   c) any federally-designated economic development district as defined by the U.S. Department of Commerce, Economic Development Administration (EDA).

   d) any federally-designated empowerment zone and developable sites as defined by the U.S. Department of Housing and Urban Development (HUD).

   e) any Transit District Overlay Zone (T-D-O Zone) as defined by Subtitle 27, Part 10A, Division 1, of the Prince George's County Code.

   f) any Prince George's County designated revitalization area as defined in Subtitle 10 of the Prince George's County Code.

   g) any state-designated Neighborhood Business Development Program, as defined in Subtitle 2, of Title 4, of Article 83B, of the Annotated Code of Maryland.

   h) any Montgomery County designated neighborhoods, as determined by the Montgomery County Executive and County Council, as a revitalization neighborhood for activities that will act to preserve, stabilize, and enhance the social, physical, and economic conditions of the neighborhood. Activities may include concentrated housing code inspections and enforcement, housing rehabilitation, social service programs, public infrastructure improvements, and private and/or public capital investment.

SCHEDULE C

"Biotechnology Research and Development or Manufacturing" means:

Any activity that substantially involves research, development, or manufacturing of:

a. Biologically-active molecules;

b. Devices that employ or affect biological processes; or

c. Devices and software for production or management of specific biological information.

SCHEDULE D

"Elderly Housing" include the following types of housing:

As defined in the Prince George's County Zoning Ordinance:

Sec. 27-107.01. Definitions

(a) Terms in the Zoning Ordinance are defined as follows:

(20.1) Assisted Living Facility
(54) Congregate Living Facility
(151.1) Mixed Retirement Development

Sec. 27-352.01 Elderly Housing (one-family attached dwellings)

Sec. 27-374 Medical / residential campus

Sec. 27-395 Planned retirement community

OR

As defined in the Montgomery County Zoning Ordinance:

Sec. 59-G-2.35 Housing and related facilities for elderly or handicapped persons

Sec. 59-G-2.35.1 Life Care (continuing care) facility

Sec. 59-C-7.4 Housing constructed in a planned retirement community zone

OR

As defined in a municipal zoning ordinance in a municipality having separate zoning powers and that is found by the Director of the Department of Housing and Community Affairs to be equivalent to the definition for the county in which the municipality is located. The review of equivalency should be based upon age of occupants and the inclusion of assisted living dwelling units.

SCHEDULE E

Maximum "elderly housing" exemptions are as follows:

1.	Apartment unit	$436.00
2.	Dwelling unit or housing unit within a multi-unit dwelling with one or two toilets	$654.00
3.	Dwelling unit or housing unit within a multi-unit dwelling with three or four toilets	$1,090.00
4.	Dwelling unit or housing unit with a multi-unit dwelling with five toilets	$1,526.00
5.	For other housing that meets the elderly housing exemption criteria	Not more than $43 per combined fixture unit value

SCHEDULE F

1. "Property Used Primarily for Recreational and Educational Programs and Services to Youth" means:

Real property, owned in fee simple, by a Community Based Organization, located within the Washington Suburban Sanitary District, which is used to advance the mission and purpose of providing recreational and educational program and services to youth in Prince George's and/or Montgomery County.

2. "Community Based Organization" means:

A not-for-profit entity duly incorporated in or authorized to do business by the State of Maryland and in good standing under the laws of the State of Maryland, which has as its primary mission and purpose to provide recreational and educational programs and services to youth in Prince George's and/or Montgomery County.

3. "Exempt From Taxation" means:

A not-for-profit, charitable or educational organization as determined by the Internal Revenue Service, under Section 501(c) (3) of the Internal Revenue Code.

STANDARD PROCEDURES OF THE WASHINGTON SUBURBAN SANITARY COMMISSION

ORIGINATOR	SP NUMBER	APPROVE BY/DATE	EFFECTIVE DATE	PAGE
Joseph P. McNerney Customer Affairs Bureau Director	CUS 98-01 Supersedes CUS 94-06 & CUS 93-02	COMMISSION	July 1, 1998	1 OF 7

SUBJECT

SYSTEM DEVELOPMENT CHARGE LEVY AND COLLECTION

PURPOSE

1.1 To document the levy, collection and deposit of the System Development Charge (SDC) in accordance with Article 29, §6-113 of the Annotated Code of Maryland and WSSC's Resolution No. 98-1555.

1.2 Define terms and phrases referencing SDC as commonly used in the issuance of plumbing permits.

DEFINITIONS

2.1 Apartment Unit means one of several single family housing units within one building and not specifically classified as a multi-unit dwelling, e.g., individual dwelling units in garden, medium and high-rise type residential buildings.

2.2 Base SDC Fee is the WSSC approved dollar charge for a plumbing fixture having a Drainage Fixture Unit Value and/or a Water Supply Fixture Unit Value of one for non-residential properties or residential units with more than five toilets. The Base SDC Fee for residential units with five or fewer toilets is the WSSC approved dollar charge based upon the unit's number of toilets

2.3 Drainage Fixture Unit Value is a measure of the probable discharge into the drainage system by a particular plumbing fixture in terms of volume rate of discharge and duration of a single drainage operation and the time period between successive operations.

2.4 Dwelling Unit means a single family housing unit used as a residence, including trailers and mobile homes.

2.5 Hookup means the joining of a property's on-site water and/or sewer line(s) to the Commission's service connection or the installation of plumbing fixtures in a building served by the Commission's water and/or sewer facilities.

2.6 Multi-Unit Dwelling means a building that will accommodate several housing units on a lateral basis; namely, semi-attached houses, row houses or townhouses used as residences.

2.7 New Service means:

(a) the first-time hook-up of a property to the Commission's water and/or sewer system; or

(b) a new connection or increased water meter size for a property, previously or currently served by the Commission, if the new connection or increased meter size is needed because of a change in the use of the property or an increase in demand for service at the property.

2.8 Non-Residential Unit is a structure not otherwise defined as a Residential Unit, generally commercial or industrial in nature. Examples may include Shopping Malls, non-Residential Townhouses, Warehouses, Industrial Buildings, Restaurants, Schools, Dormitories, Hospitals, Hotels, Motels, Nursing Homes, Office Buildings, Churches, Theaters and similar commercial or industrial buildings.

2.9 Plumbing Permit is the approved instrument, resulting from an application filed by a Registered Master Plumber, which allows for hookup of fixtures or onsite piping to the Commission's water and/or sewer systems.

2.10 Property means an improvement(s) or building(s) on a lot or parcel of land containing plumbing fixtures described in terms of Drainage Fixture Unit Values or Water Supply Fixture Unit Values.

2.11 Public Sponsored and Affordable Housing means:

(1) any dwelling unit built or financed under a government program, regulation, or binding agreement that limits for at least 10 years the price or rent charged for the unit in order to make the unit affordable to households earning less than 80% of the area median income, adjusted for family size;

(2) any Moderately Priced Dwelling Unit built under Chapter 25A of the Montgomery County Code or Subtitles 13 and 27 of the Prince George's County Code;

(3) any Productivity Housing Unit, as defined in Section 25B-17(m) of the Montgomery County Code;

(4) any unit in an Opportunity Housing Project built under Sections 56-28 through 56-33 of the Montgomery County Code or Subtitle 13, Division 8, of the Prince George's County Code, which is reserved for occupancy only by persons with low or moderate incomes (as defined in applicable provisions of State and County Law);

(5) any dwelling unit constructed pursuant to the Capturing Housing Opportunities in Communities Everywhere (CHOICE) Program in Prince George's County which is reserved for occupancy only by persons with low or moderate incomes (as defined in applicable provisions of State and County Law).

2.12 Residential Unit means any housing unit defined in Paragraphs 2.1, 2.4, and 2.6 above used as a residence.

2.13 Residential Applicant means a builder on whose behalf a Registered Master Plumber applies for and receives from the Commission plumbing permits for construction of new residential units.

2.14 SDC Sewer Charge is the product of a fixture's Drainage Fixture Unit Value and its associated Base SDC Fee for non-residential properties or dwelling and multi-unit housing units with more than five toilets. For residential properties with five or fewer toilets, the SDC Sewer Charge is the Commission approved drainage portion of the Base SDC Fee.

2.15 SDC Water Charge is the product of a fixture's Water Supply Fixture Unit Value and its associated Base SDC Fee for non-residential properties or dwelling and multi-unit housing units with more than five toilets. For residential properties with five or fewer toilets, the SDC Water Charge is the Commission approved water supply portion of the Base SDC Fee.

2.16 Sub-District Charge means that charge established by the Commission pursuant to the provisions of §6-103, Article 29, Annotated Code of Maryland.

2.17 Toilet means a water closet, as set forth in the WSSD Plumbing and Gasfitting Regulations.

2.18 Water Supply Fixture Unit Value is a measure of the probable hydraulic demand on the water supply by a particular plumbing fixture in terms of volume rate of supply and duration of a single supply operation and the time period between successive operations.

GENERAL

3.1 SDC is a fee established pursuant to provisions of Article 29, § 6-113 of the Annotated Code of Maryland, to help finance the capital cost of upgrading existing plants and facilities as well as the construction of new capital projects attributable to the addition of new service.

3.2 The Base SDC Fee level is established by Commission Resolution representing a formal adoption of the fee level mutually agreed upon by the Montgomery and Prince George's County Councils.

3.3 The SDC fee for a non-residential property or a dwelling unit or housing unit within multi-unit dwelling with more than five toilets is determined by the type and number of fixtures, existing and/or proposed, for which hookup to the WSSC's water and/or sewerage system(s) is proposed. The SDC levy is the sum of SDC Water Charges and SDC Sewer Charges, prevailing at the time of application for hook-up, which are associated with the individual fixtures proposed for hookup.

3.4 The SDC fee for a residential unit with five or fewer toilets is determined by the number of toilets, existing and/or proposed, for which hookup to the WSSC's water and/or sewerage system(s) is proposed. The SDC levy is the sum

of SDC Water Charges and SDC Sewer Charges, prevailing at the time of application for hook-up, which are associated with the number of toilets proposed for hookup.

3.5 Except as provided by Section 3.9, a property's calculated SDC fee is payable in full and shall accompany the application for plumbing permit for hookup of a property's fixtures to the WSSC system. Any "credit" pursuant to WSSC Standard Procedure CUS 94-03, entitled *SDC DEVELOPER CREDITS AND REIMBURSEMENTS*, may be substituted as payment, on a dollar for dollar basis, as therein described. Collected SDC fees shall be deposited in established revenue accounts and reconciled through the Service Applications & Records Section's remittance-processing system.

3.6 When a request is made to add a fixture(s) to a plumbing permit which has been issued under a previous SDC rate structure and which has not received final inspection approval, the additional SDC shall be calculated and collected based upon the fixture unit rate in effect at the time of request, except that the total SDC for a residential unit permit with five or less toilets shall not exceed the current Base SDC fee for such a unit.

3.7 When an application is made to add a toilet(s) to an existing dwelling or housing unit within an existing multi-unit dwelling, the resulting permit may be subject to a SDC fee only if the unit was previously assessed a SDC fee or an increase is required in the size of the unit's connection or meter. In either situation, a SDC fee will be actually assessed only if the number of toilets is being increased from one toilet based rate category to the next. For housing units with five or fewer toilets, the SDC fee assessed will be equal to the difference in the SDC base charge currently applicable to the number of existing toilets and that applicable to the total number of existing and proposed toilets. The SDC fee assessed for existing housing units with more than five toilets is the sum of the SDC Base fees at the current SDC rate structure for all added fixtures.

3.8 When an application is made to add fixtures to a Non-residential Unit, the resulting permit may be subject to a SDC fee only if the unit was previously assessed a SDC fee or an increase is required in the size of the unit's connection or meter. In either situation, the SDC fee assessed is the sum of the SDC Base fees at the current SDC rate structure for all added fixtures.

3.9 A residential applicant who elects to delay paying a portion of the system development charge shall pay one half the charge at the time of filing application for plumbing permit. The remaining one half of the system development charge for each residential unit shall be paid to the Commission within 12 months after the first payment or prior to the transfer of title to the property, whichever occurs first. A residential applicant must provide security for the remaining one half of the system development charge at the time of filing the plumbing permit application in one of the following forms:

(a). An irrevocable letter of credit that is automatically renewed from a bank that is rated "C" or better by Thomson BankWatch.

(b). A financial guaranty bond in a form substantially similar to the form attached here as Appendix "A." The bond shall be executed by the applicant and a corporate bonding company licensed to transact such business in the State of Maryland and named on the current list of "surety companies acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of this bond shall be paid by the applicant. If at any time the surety on any such bond is declared bankrupt or loses its right to do business in the State of Maryland or is removed from the list of surety companies accepted on Federal bonds, the applicant shall within ten days after notice from the Commission to do so, substitute an acceptable bond in such forms and sum and signed by such other surety or sureties as may be satisfactory to the Commission.

(c). For the residential applicant who certifies that he or she applies for four or fewer permits for the construction of residential units within the same calendar year, the General Counsel is hereby authorized to accept other forms of security proposed by the applicant and that in the judgment of the General Counsel will protect the Commission's interests in the same manner as the letter of credit and financial guaranty bond described above.

3.10 Fixtures verified by WSSC inspection prior to removal may result in credits toward SDC in a replacement structure. Following written application by a Registered Master Plumber, Postcard Permit inspections to confirm fixtures prior to removal will be the basis for calculating any SDC credit. No credit

will be afforded for rough-in piping or fixtures removed prior to inspection. SDC credit under this paragraph may only be obtained by submitting the original Master Plumber's copy of the approved Postcard Permit document at the time of application for hook-up of the replacement or remodeled structure. Credit obtained under this provision may only be used toward the remodeling of the existing structure or the redevelopment of a property from which the original fixtures were removed.

EXEMPTIONS

4.1 Additional fixtures installed in a structure or building are exempt from the levy of an SDC fee only if inspection of the initial hookup of the building or structure's plumbing to the WSSC's system(s) was approved under a permit issued as a result of an application filed before July 19, 1993, and the change in fixtures does not require an increase in the property's connection(s) or meter size.

4.2 The hook-up of a residential unit which is certified by Montgomery or Prince George's County as being a Public Sponsored or Affordable Housing Unit, as defined by Commission Resolution No. 98-1555, shall be exempted from any SDC fee.

4.3 The initial hook-up of a residential unit to the Commission's water and/or sewerage system will be exempted from the levy of any SDC fee if the unit existed and was served by a private well and/or septic system on or before July 16, 1993, and the applicable WSSC water or sewer main was in service or its construction was the subject of "Formal Notice To Proceed" (to the WSSC contractor) on or before the same July 16, 1993.

REFUNDS

5.1 In the event a permit to install plumbing fixtures expires or is canceled pursuant to provisions of Section 206.2 of the Plumbing and Gasfitting Regulations, all SDC fees paid in association with the application for plumbing permit to hook-up may be refunded, provided Code Enforcement Section's inspection records confirm that no work covered by the permit has been accomplished. Such refunds will be made to the original SDC payer at the time of application.

5.2 SDC payments for fixtures represented on an application, but not installed, may be refunded to the original payer provided a written request for refund is filed with the Service Applications & Records Section prior to a request for final inspection. Upon confirmation by the Code Enforcement Section that the fixtures or related rough-in work referenced in the written request have not been installed, the fixtures will be deleted from the permit database record and SDC refund action will be initiated.

5.3 The reimbursement of SDC payments to comply with credit requirements set forth in Article 29, §6-113.(e) of the Annotated Code of Maryland shall be

accomplished as specified by WSSC Standard Procedure CUS 94-03, entitled *SDC CREDITS AND REIMBURSEMENT*.

5.4 A request for full or partial refund of previously remitted SDC which has been denied may be appealed under provisions of Article 29, §6-111 of the Annotated Code of Maryland.

AUTHORITY CLAUSE

The General Counsel certifies that the statutory authority for adoption of this Standard Procedure is Article 29, §§ 6-113 and 9-101 of the Annotated Code of Maryland.

Distribution List

MASTER VOLUME LIST:

General Manager's Office
Internal Audit Office
Secretary's Office
Human Resources Division

Other Distribution:

Commissioner's Office
Administration Branch
Operations Branch
General Counsel's Office
Budget and Financial Planning Office
Construction Bureau
Customer Affairs Bureau
Finance Bureau
Customer Services Division
Financial Operations Division
Regulatory Compliance Division
Code Enforcement Section
General Accounting Section
Service Applications & Records Section

APPENDIX "A"

FINANCIAL GUARANTY BOND

Plumbing Permit Number _____

Bond Number _____

Date Bond Executed _____

KNOW ALL MEN BY THESE PRESENTS:

That _____,
(here insert the legal name of the Applicant)

_____,
(here insert the address of the Applicant)

as Principal, hereinafter called "Applicant", and

_____,
(here insert the legal name of the Surety)

_____,
(here insert the address of the Surety)

as Surety, hereinafter called "Surety", are held and firmly bound unto the WASHINGTON SUBURBAN SANITARY COMMISSION, Laurel, Maryland, a public and governmental corporate agency of the State of Maryland, as Obligee, hereinafter called the "Commission", in the amount of

_____

_____ dollars ($_____), being 50 percent of the System Development Charge of the herein-mentioned application, for the payment whereof Applicant and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

WHEREAS, the Applicant has applied for a plumbing permit to install fixtures or hookup a residential property to the Commission's water and/or sewerage system(s) under Plumbing Permit No. _____ and has promised to pay the full system development charge within 12

months of the date of the application or prior to the transfer of title to the property, whichever occurs first.

NOW, THEREFORE, the condition of this obligation is such that if the Applicant shall promptly and faithfully pay the system development charge in a timely manner, then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the Commission.

Whenever Applicant shall be, and declared by Commission to be, in default in payment of the system development charge, the Commission having performed Commission's obligations thereunder, the Surety shall promptly pay the amount owed by the Applicant to the Commission.

Any suit under this bond must be instituted before the expiration of eighteen (18) months from the date payment is due. No right of action shall accrue on this bond to or for the use of any person or corporation other than the Commission or its successors and assigns.

The bond is executed in two (2) counterparts, each of which shall, without proof or accounting for the other counterpart, be deemed an original thereof.

Signed and sealed this _____ day of _____, _____.

ATTEST: _____
Applicant Name

_____ By: _____
(Title)

_____
(Surety Name)

_____ By: _____
(Title)

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed, or caused to be executed by their duly authorized officials, this performance bond in (_____) copies each of which shall be deemed an original on the date first above written. (The following is applicable if applicant is corporation or incorporated joint venture.)

A Corporation _____

By: _____ Date: _____
(Title)

Attest: _____
Secretary of Corporation

Certificate as to Corporation (Corporate Seal)

I, _____, certify that I am Secretary of the Corporation named as Applicant herein, that _____ who signed this Performance Bond on behalf of the Applicant was then _____ of said Corporation; that I know his signature thereto is genuine; that the Bond was duly signed and sealed in behalf of said Corporation by authority of its governing body, and is within the scope of its corporate powers.

_____
Secretary of Corporation

(The following is applicable if Applicant is individual, partnership or unincorporated joint venture.)

Signed and Sealed in the full names of all partners and all members of Joint Ventures.

_____
(Print) Name (Signature)

_____
Address

_____
(Print) Name (Signature)

_____ _____
Address (Seal)

_____ _____
(Print) Name (Signature) (Seal)

_____
Address

_____
(Print) Name (Signature)

_____
Address

STANDARD PROCEDURES OF THE WASHINGTON SUBURBAN SANITARY COMMISSION

ORIGINATOR & POSITION	SP NUMBER	APPROVE BY/DATE	EFFECTIVE DATE	PAGE
Richard Shagogue, Team Chief Engineering & Construction Team	ENG 04-01 Supercedes CUS 94-03	Acting Corp. Secretary Commissioners March 10, 2004	March 24, 2004	1 OF 8

SUBJECT:
SDC APPLICANT CREDITS AND REIMBURSEMENTS

PURPOSE

1.0 Define procedures for the issuance of a System Development Charge (SDC) Credit earned through private design and construction to serve the Applicant's property. These procedures pertain only to either an approved Capital Improvement Program (CIP) Project or a project that provides only local service, is 2,000 feet or less in length, is either a sewer main 15 inches or greater in diameter, or water main 16 inches or greater in diameter and is built to avoid unnecessary and uneconomical duplication when a major project is constructed.

1.1 Describe how the SDC Credit due an Applicant will be determined.

1.2 Describe when SDC credit and reimbursement will occur.

DEFINITIONS

2.0 Systems Development Charge (SDC) - A fee paid to the WSSC at the time of application for a plumbing permit intended to cover the cost of building CIP Projects needed to accommodate growth.

2.1 Applicant - Any firm, corporation, partnership, joint venture, municipality, agency, person or persons whom WSSC has authorized to design and construct a Qualified Project eligible for SDC credit or whom WSSC has required to provide eligible private funding of the Commission's costs to design and construct such a Project.

2.2 System Extension Permit (SEP) – A permit/agreement made between the WSSC and an Applicant pursuant to the "Development Services Process Manual" adopted by the Commission, effective July 1, 2000, and subsequent adopted revisions. **A qualified project built under a System Extension Permit issued without a signed accompanying SDC Credit Agreement is not eligible for SDC applicant credits or reimbursement.**

2.3 Memorandum of Understanding (MOU) - An agreement made pursuant to provisions of Standard Procedure # PD-93-06 entitled "Procedure for Developing a Memorandum of

Understanding for the Construction of WSSC Systems by Others" between the WSSC and an Applicant which covers the Applicant's design and construction of a CIP Project and which identifies the estimated total Applicant costs eligible for SDC credit and/or reimbursement. **A qualified project built without a signed MOU is not eligible for SDC applicant credits or reimbursement.**

2.4 Qualified Project - Any CIP facility, CIP line, sewer main 15 inches or greater, or water main 16 inches or greater in diameter necessary to serve the Applicant's property, which is designed and constructed by and at the sole expense of an Applicant pursuant to an MOU or SEP or other agreement. Also, any CIP project which is constructed by WSSC that the Applicant is required to provide eligible private funding of WSSC design and construction costs.

2.5 Qualified Properties - The specific properties located within the geographic area which WSSC identifies as served by the Qualified Project, as defined in Section 3.2.

2.6 Eligible Private Funding - Payment required by and made to WSSC by an Applicant to cover WSSC costs to design and construct a CIP Project needed to accommodate growth.

2.7 SDC Credit - A dollar value which is credited to an Applicant against SDC payable in connection with Qualified Properties and which equals the total eligible costs as defined in Section 3.6 incurred by the Applicant in the Applicant's design and construction of a Qualified Project or the amount of eligible private funding made by the Applicant to cover WSSC costs to design and construct a Qualified Project. An Applicant who designs a Qualified Project must also construct that Project in order to be eligible to receive SDC Credits.

2.8 SDC Credit Agreement – An agreement that summarizes the eligible costs considered for SDC Credit (as described in Section3.6). The SDC Credit Agreement is appended to an SEP. The credit agreement is included in the MOU as Attachment A.

2.9 SDC Ledger - The record of SDC credit authorized for an Applicant and the amount(s) of SDC credit issued or reimbursed to the Applicant for fixtures covered by plumbing permits obtained in the course of developing Qualified Properties associated with a Qualified Project.

2.10 Credit Voucher - The document (Attachment "B"), executed by the Applicant, which serves as the instrument to obtain SDC credit associated with an application for permit to install plumbing fixtures. Each Credit Voucher may apply only to a single application for plumbing permit and shall:

- identify the Qualified Project from which credit is derived; and
- specify the Qualified Property for which the credit is requested; and
- be signed by the Applicant or its authorized agent, be duly notarized; and
- show the amount to be credited in lieu of SDC payment

2.11 Qualified Project Scope - The specific scope of the qualified project. For pipelines built under an SEP, the specific scope will be included with the SDC Credit Agreement, and

will include pipeline lengths and diameters, valves, vaults and any other appurtenant structures. For facility projects, the specific scope of work will be included with the MOU.

PROCEDURES

3.0 An Applicant shall declare a desire to design and construct a Qualified Project eligible for SDC credit either as an element of its request for a Hydraulic Planning Analysis filed with the Development Services Group or in a written response to the Letter of Findings prepared by the Development Services Group. For projects that were previously authorized, but have not yet been issued an SEP or MOU, the Applicant may request an authorization amendment to allow the Applicant to design and construct a Qualified Project eligible for SDC credit.

3.1 The Applicant agrees to pay WSSC all review fees normally due WSSC. Letters of credit are not acceptable in lieu of fees.

3.2 When an Applicant has requested that it be permitted to design and construct a CIP Project, the Development Services Group shall prepare a map during its hydraulic planning analysis that identifies the Qualified Properties to be served by the CIP Project which the Applicant has requested to design and construct. SDC Credit will only be issued to properties within the geographic boundaries identified in the map as Qualified Properties. A copy of the prepared map will be sent to the Applicant.

3.3 If WSSC either authorizes the Applicant to design and construct a Qualified Project or requires eligible private funding from the Applicant of WSSC's design and construction costs, then the properties identified as served by the Project will receive credit and/or be subject to SDC Payments which may be reimbursed to the Applicant up to the total eligible amount. The Permit Services Unit will establish an Applicant's SDC Ledger following either 1) execution of a MOU or SEP covering Applicant design and construction of the Qualified Project or 2) WSSC receipt of eligible private funding of the Qualified Project from the Applicant. Prior to establishing the Applicant's SDC Ledger, the Permit Services Unit requires a map identifying all Qualified Properties to be served by the Qualified Project from the Development Services Group. **Please note that for pipeline jobs, the Applicant will not receive SDC credit or reimbursement unless the SDC credit agreement is signed before the SEP is issued.**

3.4 The SDC Ledger will reflect the total amount of SDC credit/reimbursement that the Applicant is eligible to receive. If the Applicant is designing and constructing the Qualified Project, the Ledger will initially reflect the Applicant's SDC credit based upon the estimated total eligible costs agreed upon in the MOU or SEP. The Applicant's initial Ledger credit amount will be adjusted to reflect the actual total eligible costs for the Qualified Project, as determined by the WSSC's Internal Audit Manager (as discussed in Sections 3.5, 3.6, 3.7, 3.8 and 3.12), after the Qualified Project has been accepted and placed in service by WSSC. If WSSC is designing and constructing a Qualified Project, the Ledger will reflect the total amount of eligible private funding received from the Applicant.

3.5 SDC credits may not exceed 50% of the estimated total eligible project cost (not to

include contingency for increase in scope items (see Section 3.8)) until such time as final audit is completed and the actual total eligible project cost is determined. Once the actual total eligible project cost is determined, SDC credits are available up to the eligible project cost and quarterly refunds (based upon SDC collected for qualified properties) will commence. Prior to the final audit, the Credit Voucher is the only method of reimbursement to the Applicant.

Following WSSC receipt of eligible private funding, SDC credits against the ledger amount may be granted. However in the SDC credits toward the private funding may not exceed 50% of the total estimated project cost.

3.6 When an Applicant is designing and constructing a Qualified Project, SDC Credit is the total eligible Project cost incurred and paid by the Applicant. The SDC Credit is subject to the general guidelines that (1) eligible costs will be the types of costs that WSSC would have incurred had WSSC designed and constructed the Qualified Project, and (2) the SDC Credit will not exceed the maximum amount mutually agreed upon in the SDC Credit Agreement. Eligible costs must be directly allocable to the Qualified Project. Examples include, but are not limited to

Engineering Costs: design, reprographics, survey (topo), soil borings, As-built drawing preparation, and bonding fees.

Permits Costs: Costs for permits that WSSC would have had to acquire had WSSC built the project.

WSSC Fees for Pipelines: Fees for extra WSSC reviews or re-testing will be considered only if non-eligible portions of the job do not require extra reviews or re-testing. Unless mentioned otherwise, fees will be allocated to the Qualified Project based on estimated costs and overall water and sewer project cost for the project number.

WSSC Fees for Facilities: All WSSC direct costs and overhead associated with the qualified project as stated in the MOU.

Construction Costs: Contractors bid price, survey (stake out), Geotech (compaction testing), off-site restoration, and construction management.

Interest Costs: Interest costs for funds used during design and construction, at an average interest rate not to exceed the rate paid by WSSC on short-term construction notes outstanding during the period beginning with the date of WSSC signature on the SEP or MOU agreement and ending when the Qualified Project is substantially complete.

Off-Property Rights of Way: Acquisition costs are eligible up to amount appraised by WSSC for purchase of off-Applicant's property right-of-way and construction strips, plus up to 25 percent of the appraised amount for direct costs associated with purchase of off-site rights-of-way and construction strips.

3.7 Examples of costs that are not eligible include, but are not limited to

Area wide planning not directly related to the Qualified Project;

Attorneys fees

The WSSC Hydraulic Review Fee

Costs for negotiation of SDC Credit Agreement or MOU;

Bonus payments or acceleration costs paid to the contractor for completion of construction;

Third party inspection costs for facility projects;

Applicant's overhead costs not directly attributable to the Qualified Project;

Costs outside the scope of the Qualified Project;

Permit costs associated with a development rather than the Qualified Project;

Site acquisition costs beyond what WSSC would have paid;

Facilities capital cost of money;

Fines and penalties;

Maintenance Costs;

Maintenance Bond Costs that are beyond both two years after substantial completion and beyond one year after release of service or final acceptance.

Grading of rights of way;

Sediment control for grading;

Clearing and grubbing for public rights-of-way in which the Qualified Project will be installed;

Federal and state income taxes;

Administrative or Management Fees not directly associated with the Qualified Project; and

Personal injury compensation or damages.

3.8 The maximum SDC reimbursement shall not exceed 110 percent of the contractor bid price plus other eligible costs.

3.9 The SDC Credit Agreement will not provide payment to the Applicant for costs the Applicant did not incur or for costs reimbursed to the Applicant from other sources. The SDC Credit Agreement will not provide any premiums for expedited work.

3.10 Prior to SDC Credit Agreement or MOU approval, the WSSC project manager for the project is responsible to have components of the SDC Credit Agreement or MOU

reviewed by other offices. The Contract Technical Services Unit should review the Applicant's construction costs using a copy of the signed plans. Internal Audit is to review any item that the WSSC project manager proposes which is contrary to items 3.6 or 3.7. Other appropriate WSSC offices should be consulted such as the Land Acquisition Unit for additional land acquisition costs and the Planning Group for planning costs.

3.11 For Qualified Projects, the SEP or MOU agreements should indicate that the Maintenance Bond should remain in effect at least two years beyond the date of substantial completion for SEP projects or at least one year beyond the date of final acceptance for MOU projects. The Applicant will submit a written request for audit to WSSC's Internal Audit Manager, after the Qualified Project built by the Applicant has been released for service (pipelines) or finally accepted (facilities). Along with the request, the Applicant must submit an itemized listing of eligible Qualified Project costs, incurred and paid, supporting the total amount of SDC Credit claimed. **It should be emphasized that the Applicant should retain all the contracts, invoices and payments for WSSC Internal Audit to inspect and review to determine the SDC credits.**

3.12 In compliance with Article 29 § 6-113(e)(4), of the Annotated Code of Maryland, WSSC's Internal Audit Manager shall review and approve the costs incurred by the Applicant. The Internal Audit Manager will strive to initiate the audit within 90 days of the Applicant's request, if the request includes the required itemized cost listing. The Internal Audit Report will be the formal document that communicates the final results of the audit to WSSC and the Applicant. When an audit is complete, prior to the final Internal Audit Report, the Internal Audit Manager will issue to the Applicant an unsigned DISCUSSION DRAFT to allow the Applicant an opportunity to discuss with Internal Audit any concerns the Applicant has with the proposed SDC Credit. Subsequently, the Internal Audit Manager will issue to the Applicant its final Report on the SDC Credit to be provided the Applicant.

3.13 SDC credits against an Applicant's SDC Credit balance will be issued by WSSC upon receipt of a complete and fully executed Credit Voucher submitted at the time of plumbing permit application. The application must be made in connection with a Qualified Property served by the Qualified Project (being) built by the Applicant. Also, the amount specified in the Credit Voucher shall not exceed the calculated SDC for plumbing fixtures covered by the permit application. Credit Vouchers reflecting and specifying an amount in excess of calculated SDC for the requested permit will not be accepted. The plumbing permit will be issued after verification that a sufficient credit balance remains to cover the Credit Voucher Amount. Insofar as possible, Credit Vouchers will be considered on a "first come-first served" basis. For a plumbing permit application accompanied by a Credit Voucher for which an Applicant's credit balance has been exhausted, the credit voucher and the associated application will be returned to the applicant. WSSC is not responsible for managing or assisting the Applicant in managing the issuance of Credit Vouchers. Managing the issuance of Credit Vouchers is not an eligible cost for reimbursement.

3.14 In the event an issued Plumbing Permit expires or is cancelled by the owner or

plumber, no SDC reimbursement to the Applicant will be approved for that permit. In such cases, any Credit Voucher will be voided and the credit amount added to the Applicant's outstanding Ledger balance.

3.15 In conformance with Section 3.18, SDC payments received in association with applications for plumbing permits for Qualified Properties will be identified as eligible for reimbursement (after the Internal Audit Report has been completed - see Section 3.12) to the Applicant who has constructed the Qualified Projects serving those Qualified Properties.

3.16 For those situations where more than one Qualified Project serves a Qualified Property, SDC reimbursement payments shall be made in proportional shares to the Applicants who have built or funded the Qualified Projects. A proportional share is calculated based upon a Qualified Project's actual eligible costs or funding expressed as a percentage of the sum of all actual eligible costs and/or funding of Qualified Projects serving the Qualified Property.

3.17 At the conclusion of each calendar quarter, the Permit Services Unit will determine the total SDC receipts eligible for reimbursement made for each previously identified Qualified Property. Only those SDC receipts filed in association with plumbing permits under which all covered work has received an approved final inspection are eligible for reimbursement.

3.18 Based upon the quarterly reconciliation, the Permit Services Unit will prepare and forward to the Accounting Group a Payment Request to be made to the appropriate Applicant in an amount equal to the sum of qualifying SDC receipts not yet reimbursed, and a memorandum recommending reimbursement of SDC receipts and identifying the maximum amount recoverable. The memorandum shall be accompanied by a statement detailing eligible plumbing permits.

3.19 Following review of the recommended reimbursement, the Accounting Group will forward the Payment Request and supporting documentation to the Disbursements Group which will issue payment to the Applicant.

3.20 When an Applicant has designed and constructed a Qualified Project, the sum of SDC Credits and Reimbursements pursuant to this procedure will be made only to the maximum determined by the Internal Audit Report and only to the Applicant identified in the MOU or SEP.

3.21 The Applicant may issue credit vouchers to multiple builders to facilitate construction of residential or non-residential structures within the Qualified Property and reimbursement of Qualified Project costs. If the Applicant wishes to transfer its right and title to any remaining SDC credit from a Qualified Project, the Applicant shall notify the Permit Services Unit of the requested transfer. Such notification shall be in writing and shall identify the single entity to receive the entire remaining balance of SDC credit from a Qualified Project. The Permit Services Unit will acknowledge the credit transfer and forward the written request for inclusion in the Qualified Project's MOU or SEP as an amendment. Thereafter, all Qualified Property SDC credits or reimbursements will be issued to the last designated entity in the MOU or SEP as amended.

3.22 Notwithstanding any other provision of this Procedure, SDC Credit or reimbursements

for costs identified in Section 3.3 of this Procedure are limited to SDC transactions for Qualified Properties served by the Qualified Project within a twenty-year period, or until the sum of credits and reimbursements equals the total approved SDC Credit. The twenty-year period will commence for SEP, MOU, or eligible funding projects on the day of release for service. At the conclusion of the twenty-year period, the Permit Services Unit will close the SDC Reimbursement Ledger and will provide written notification of exhaustion or termination of the SDC Credit to the last designated recipient.

AUTHORITY

The General Counsel certifies that this Standard Procedure was adopted pursuant to the authority of Sections 6-113 and 9-101 of Article 29 of the Annotated Code of Maryland.

Distribution List:

MASTER VOLUME LIST:

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Rate Stabilization and Debt Reduction Team
General Counsel's Office
Development Services Group
Project Delivery Group
Regulatory Services Group
Planning Group
Systems Inspection Group
Customer Relations Group
Permit Services Unit
Accounting Group
Budget Group
Disbursements Group

SDC CREDITS ESTIMATE

	ESTIMATED AMOUNT
Design	
Permits	
Administration	
Interest	
WSSC's Fees	
Construction Costs	
TOTAL ESTIMATED ELIGIBLE COSTS	

ATTACHMENT B

WASHINGTON SUBURBAN SANITARY COMMISSION

System Development Charge Credit Voucher

I, _____ hereby affirm under penalty of perjury that I am the Developer
(name printed)

or its authorized agent, entitled to an SDC credit pursuant to an approved System Extension Permit or Memorandum of Understanding for _____, a Qualified Project. Pursuant to the current

(WSSC Contract No. & C.I.P No.)

WSSC Standard Operating Procedure, I hereby request that $_____ be charged against the remaining eligible SDC credit balance for the specified Qualified Project. The above credit amount shall be applied against SDC due in connection with an application for plumbing permit to install fixtures in an improvement on property described as: _____

_____ which is a "Qualified Property" served by the above named "Qualified Project."

I agree to indemnify and hold harmless the Washington Suburban Sanitary Commission to whom this request is presented and its agents and employees, from and against all claims, damages, losses and expenses, including reasonable attorneys' fees, arising out of or by reason of complying with this request.

_____
(Developer's Signature)

Subscribed and sworn to before me this _____ day of _____, 20___.

_____
(Notary Public)

_____
(Name Printed)

My Commission Expires _____

STANDARD PROCEDURES
OF
THE WASHINGTON SUBURBAN SANITARY COMMISSION

ORIGINATOR	DEPT. & NUMBER	APPROVED BY/DATE	EFFECTIVE DATE	PAGE 1
Water Resources Planning Section	PD 93-01	Cortez A. White General Manager	July 1, 1993	OF 3

SUBJECT

PROCEDURE FOR DETERMINING PERCENT GROWTH FOR CIP PROJECTS

I. PURPOSE AND APPLICABILITY

The purpose of this procedure is to establish a method for determining what proportion of certain WSSC CIP projects is for growth. This procedure applies after June 30, 1993: 1) to projects which are added to the CIP; and 2) to any revisions of projects already programmed which change the amount of system capacity added by the projects.

II. PROCEDURE AND METHODOLOGY

The Water Resources Planning Section will determine the percent growth for all applicable CIP Projects using the following methodology.

The method involves the following three steps:

Step 1. Test for 100% Growth

If flows/demands remained at June 1993 levels, would a project still be required?

No ==> Growth = 100%
Yes ==> Continue to Step 2

Step 2. Test for 0% Growth

Does the project improve or replace components of an existing facility without increasing the capacity of any of the components?

Yes ==> Growth = 0%
No ==> Continue to Step 3

Step 3. Determine Percent Growth

1. Identify system capacity added by the project.
2. Identify and subtract June 30, 1993 capacity deficit, if any.
3. Divide result by total project design capacity.

Notes:

1. For most water and wastewater facilities, there is a straight-forward relationship between demand, capacity requirements, and facility size. For water transmission mains, however, the relationship is more complicated. There are many factors other than size which must be considered to determine capacity. These factors include length, the size and number of interconnections and the allowable energy differential between the points connected by the transmission system. Capacity analysis of a transmission network normally requires computer modeling. Previous water system analyses will be used to the extent they are applicable; however, where no previous analysis exists, computer modeling will be required.

2. If an existing facility with available system capacity is being replaced by a new project which increases total system capacity, the available capacity in the existing facility is lost or wasted. In such cases, existing available capacity will be treated as a negative deficit in Step 3, part 2.

Examples:

1. An existing sewer has a safe capacity of 20 mgd. The June 30, 1993 peak flow is 17 mgd. A proposed parallel sewer will add 10 mgd of capacity for growth. Since the existing sewer can handle the June 30, 1993 flows the project is 100% for growth. (Step 1)

2. An existing sewer has a safe capacity of 20 mgd; its maximum capacity before overflow is 27 mgd. The June 30, 1993 peak flow is 21 mgd. A proposed parallel sewer will add 10 mgd of capacity for growth. Since the existing sewer can handle the June 30, 1993 flows, the project is 100% for growth. (Step 1)

3. An existing pumping station has 1 mgd of capacity. The June 30, 1993 flow is 0.8 mgd. A proposed replacement pumping station will have a total capacity of 1.5 mgd. The existing pumping station is old, and a rehab project would be needed if the new pumping station were not built. Therefore, the station is not 100% for growth. (Step 1) It adds capacity, so it is not 0% growth. (Step 2) The percent for growth is calculated as follows: 0.5 mgd [the capacity added by the new pumping station] plus 0.2 mgd [the amount of lost available capacity] divided by 1.5 mgd [the total capacity of the new pumping station] = 47%. (Step 3)

4. An existing pumping station in good condition has 1 mgd of capacity. The June 30, 1993 flow is 0.8 mgd. A proposed replacement pumping station, located downstream to increase the service area, will have a total capacity of 1.5 mgd. The proposed pumping station is 100% for growth. (Step 1)

5. A pressure zone has a 1 mg storage deficit based on June 30, 1993 demands. When we finally get agreement to build a 3 mg tank in the zone, the deficit has risen to 2 mg. The tank is 66.7% for growth. [3 mg added - 1 mg deficit]/3 mg total capacity = 67.7%. (Step 3)

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WASHINGTON SUBURBAN SANITARY COMMISSION
ADOPTED FYS 2015 - 2020 CIP
SDC ELIGIBLE PROJECTS
SUMMARY
(In Thousands)

PROGRAM NAME	TOTAL COST	FY 2013	FY 2014	TOTAL 6 YEARS	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	BEYOND 6 YEARS
MONTGOMERY COUNTY WATER PROJECTS											
Total Project Costs *	$17,293	$2,599	$3,633	$11,061	$5,182	$2,259	$2,729	$891	$0	$0	$0
SDC Eligible Costs	$17,293	$2,599	$3,633	$11,061	$5,182	$2,259	$2,729	$891	$0	$0	$0
BI-COUNTY WATER PROJECTS											
Total Project Costs *	$146,489	$118,846	$25,242	$2,401	$2,401	$0	$0	$0	$0	$0	$0
SDC Eligible Costs	$145,789	$118,156	$25,232	$2,401	$2,401	$0	$0	$0	$0	$0	$0
PRINCE GEORGE'S COUNTY WATER PROJECTS											
Total Project Costs *	$172,556	$10,976	$19,558	$142,022	$35,309	$37,997	$37,700	$17,700	$7,984	$5,332	$0
SDC Eligible Costs	$144,047	$8,925	$13,620	$121,502	$25,075	$33,894	$33,284	$15,933	$7,984	$5,332	$0
TOTAL WATER PROJECT COSTS	$336,338	$132,421	$48,433	$155,484	$42,892	$40,256	$40,429	$18,591	$7,984	$5,332	$0
TOTAL WATER SDC ELIGIBLE COSTS	$307,129	$129,680	$42,485	$134,964	$32,658	$36,153	$36,013	$16,824	$7,984	$5,332	$0
MONTGOMERY COUNTY SEWERAGE PROJECTS											
Total Project Costs *	$56,403	$20,796	$12,931	$22,676	$11,169	$7,579	$3,823	$105	$0	$0	$0
SDC Eligible Costs	$56,403	$20,796	$12,931	$22,676	$11,169	$7,579	$3,823	$105	$0	$0	$0
BI-COUNTY SEWERAGE PROJECTS											
Total Project Costs *	$21,689	$18,411	$2,739	$539	$539	$0	$0	$0	$0	$0	$0
SDC Eligible Costs	$2,169	$1,841	$274	$54	$54	$0	$0	$0	$0	$0	$0
PRINCE GEORGE'S COUNTY SEWERAGE PROJECTS											
Total Project Costs *	$184,282	$21,397	$35,850	$127,035	$54,194	$53,407	$11,724	$7,710	$0	$0	$0
SDC Eligible Costs	$154,675	$17,986	$30,159	$106,530	$45,537	$44,750	$9,844	$6,399	$0	$0	$0
TOTAL SEWERAGE PROJECT COSTS	$262,374	$60,604	$51,520	$150,250	$65,902	$60,986	$15,547	$7,815	$0	$0	$0
TOTAL SEWERAGE SDC ELIGIBLE COSTS	$213,247	$40,623	$43,364	$129,260	$56,760	$52,329	$13,667	$6,504	$0	$0	$0
TOTAL PROJECT COSTS	$598,712	$193,025	$99,953	$305,734	$108,794	$101,242	$55,976	$26,406	$7,984	$5,332	$0
TOTAL SDC ELIGIBLE COSTS	$520,376	$170,303	$85,849	$264,224	$89,418	$88,482	$49,680	$23,328	$7,984	$5,332	$0

* Total Project Costs – This is the total cost for all projects needed to support growth. SDC Eligible Costs – That portion of Total Project Costs specifically for growth.
(i.e. if a project supports 50% Growth and 50% System Improvements, SDC Eligible Costs refer only to the 50% Growth portion).

WASHINGTON SUBURBAN SANITARY COMMISSION
ADOPTED FY'S 2015 - 2020 CIP
SDC ELIGIBLE PROJECTS
(In Thousands)

PROJECT NUMBER	PROJECT NAME	TOTAL COST	FY 2013	FY 2014	TOTAL 6 YEARS	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	BEYOND 6 YEARS
	WATER PROJECTS											
BI-COUNTY PROJECTS												
W-127.01	BI-COUNTY WATER TUNNEL	$146,489	$118,846	$25,242	$2,401	$2,401	$0	$0	$0	$0	$0	$0
	TOTAL GROWTH COSTS	145,789	118,156	25,232	2,401	2,401	0	0	0	0	0	0
SUBTOTAL BI-COUNTY WATER PROJECTS		$146,489	$118,846	$25,242	$2,401	$2,401	$0	$0	$0	$0	$0	$0
SUBTOTAL BI-COUNTY SDC ELIGIBLE COSTS		$145,789	$118,156	$25,232	$2,401	$2,401	$0	$0	$0	$0	$0	$0
MONTGOMERY COUNTY PROJECTS												
W-46.14	CLARKSBURG AREA STAGE 3 WATER MAIN, PARTS 1, 2, & 3	$5,695	$357	$2,381	$2,957	$2,260	$607	$90	$0	$0	$0	$0
	TOTAL GROWTH COSTS	5,695	357	2,381	2,957	2,260	607	90	0	0	0	0
W-46.15	CLARKSBURG ELEVATED WATER STORAGE FACILITY	4,592	174	216	4,202	334	490	2,487	891	0	0	0
	TOTAL GROWTH COSTS	4,592	174	216	4,202	334	490	2,487	891	0	0	0
W-46.18	NEWCUT ROAD WATER MAIN, PART 2	1,593	759	357	477	477	0	0	0	0	0	0
	TOTAL GROWTH COSTS	1,593	759	357	477	477	0	0	0	0	0	0
W-46.24	CLARKSBURG AREA STAGE 3 WATER MAIN, PART 4	5,413	1,309	679	3,425	2,111	1,162	152	0	0	0	0
	TOTAL GROWTH COSTS	5,413	1,309	679	3,425	2,111	1,162	152	0	0	0	0
SUBTOTAL MONTGOMERY COUNTY WATER PROJECTS		$17,293	$2,599	$3,633	$11,061	$5,182	$2,259	$2,729	$891	$0	$0	$0
SUBTOTAL MONTGOMERY COUNTY SDC ELIGIBLE COSTS		$17,293	$2,599	$3,633	$11,061	$5,182	$2,259	$2,729	$891	$0	$0	$0
PRINCE GEORGE'S COUNTY PROJECTS												
W-34.02	OLD BRANCH AVENUE WATER MAIN	$14,946	$1,052	$340	13,554	$268	$3,160	$6,592	$3,534	$0	$0	$0
	TOTAL GROWTH COSTS	7,473	526	170	6,777	134	1,580	3,296	1,767	0	0	0
W-34.03	WATER TRANSMISSION IMPROVEMENTS 385B PRESSURE ZONE	26,496	425	275	25,796	1,018	798	2,680	7,984	7,984	5,332	0
	TOTAL GROWTH COSTS	26,496	425	275	25,796	1,018	798	2,680	7,984	7,984	5,332	0

WASHINGTON SUBURBAN SANITARY COMMISSION
ADOPTED FY'S 2015 - 2020 CIP
SDC ELIGIBLE PROJECTS
(In Thousands)

PROJECT NUMBER	PROJECT NAME	TOTAL COST	FY 2013	FY 2014	TOTAL 6 YEARS	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	BEYOND 6 YEARS
PRINCE GEORGE'S COUNTY PROJECTS (CONTINUED)												
W-34.04	BRANCH AVENUE WATER TRANSMISSION IMPROVEMENTS	$30,091	$5	$1,733	$28,353	$770	$12,631	$13,778	$1,174	$0	$0	$0
	TOTAL GROWTH COSTS	30,091	5	1,733	28,353	770	12,631	13,778	1,174	0	0	0
W-62.05	CLINTON ZONE WATER STORAGE FACILITY IMPLEMENTATION	12,938	731	836	11,371	589	1,540	6,848	2,394	0	0	0
	TOTAL GROWTH COSTS	12,938	731	836	11,371	589	1,540	6,848	2,394	0	0	0
W-65.10	ST. BARNABAS ELEVATED TANK REPLACEMENT	10,666	136	522	10,008	8,278	1,610	120	0	0	0	0
	TOTAL GROWTH COSTS	5,333	68	261	5,004	4,139	805	60	0	0	0	0
W-84.02	RITCHIE MARLBORO ROAD TRANSMISSION MAIN & PRV	8,811	460	449	7,902	909	883	3,496	2,614	0	0	0
	TOTAL GROWTH COSTS	8,811	460	449	7,902	909	883	3,496	2,614	0	0	0
W-111.05	HILLMEADE ROAD WATER MAIN	5,490	858	46	4,586	2,293	2,293	0	0	0	0	0
	TOTAL GROWTH COSTS	5,490	858	46	4,586	2,293	2,293	0	0	0	0	0
W-119.01	JOHN HANSON HIGHWAY WATER MAIN, PART 1	7,741	1,041	495	6,205	1,608	4,597	0	0	0	0	0
	TOTAL GROWTH COSTS	7,741	1,041	495	6,205	1,608	4,597	0	0	0	0	0
W-123.20	OAK GROVE/LEELAND ROADS WATER MAIN, PART 2	12,760	1,670	3,216	7,874	5,080	1,862	932	0	0	0	0
	TOTAL GROWTH COSTS	6,380	835	1,608	3,937	2,540	931	466	0	0	0	0
W-129.12	CHURCH ROAD WATER MAIN, PART 2	950	6	230	714	656	58	0	0	0	0	0
	TOTAL GROWTH COSTS	950	6	230	714	656	58	0	0	0	0	0
W-137.02	SOUTH POTOMAC SUPPLY IMPROVEMENT	10,543	1,214	391	8,938	4,375	4,563	0	0	0	0	0
	TOTAL GROWTH COSTS	10,543	1,214	391	8,938	4,375	4,563	0	0	0	0	0
W-147.00	COLLINGTON ELEVATED WATER STORAGE FACILITY	17,480	1,244	6,832	9,404	6,742	1,474	1,188	0	0	0	0
	TOTAL GROWTH COSTS	8,740	622	3,416	4,702	3,371	737	594	0	0	0	0
W-197.00	DSP & CONCEPTUAL DESIGN WATER PROJECTS	9,904	2,134	1,017	6,753	2,209	2,478	2,066	0	0	0	0
	TOTAL GROWTH COSTS	9,904	2,134	1,017	6,753	2,209	2,478	2,066	0	0	0	0

WASHINGTON SUBURBAN SANITARY COMMISSION
ADOPTED FY'S 2015 - 2020 CIP
SDC ELIGIBLE PROJECTS
(In Thousands)

PROJECT NUMBER	PROJECT NAME	TOTAL COST	FY 2013	FY 2014	TOTAL 6 YEARS	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	BEYOND 6 YEARS
PRINCE GEORGE'S COUNTY PROJECTS (CONTINUED)												
W-204.00	LAND & RIGHTS-OF-WAY ACQUISITION - PRINCE GEORGE'S COUNTY	$3,740	$0	$3,176	$564	$514	$50	$0	$0	$0	$0	$0
	TOTAL GROWTH COSTS	3,157	0	2,693	464	464	0	0	0	0	0	0
SUBTOTAL PRINCE GEORGE'S COUNTY WATER PROJECTS		$172,556	$10,976	$19,558	$142,022	$35,309	$37,997	$37,700	$17,700	$7,984	$5,332	$0
SUBTOTAL PRINCE GEORGE'S COUNTY SDC ELIGIBLE COSTS		$144,047	$8,925	$13,620	$121,502	$25,075	$33,894	$33,284	$15,933	$7,984	$5,332	$0
TOTAL WATER PROJECTS COSTS		$336,338	$132,421	$48,433	155,484	$42,892	$40,256	$40,429	$18,591	$7,984	$5,332	$0
TOTAL WATER SDC ELIGIBLE COSTS		$307,129	$129,680	$42,485	134,964	$32,658	$36,153	$36,013	$16,824	$7,984	$5,332	$0
	SEWERAGE PROJECTS											
BI-COUNTY PROJECTS												
S-89.22	ANACOSTIA STORAGE FACILITY	$21,689	$18,411	$2,739	$539	$539	$0	$0	$0	$0	$0	$0
	TOTAL GROWTH COSTS	2,169	1,841	274	54	54	0	0	0	0	0	0
SUBTOTAL BI-COUNTY SEWERAGE PROJECTS		$21,689	$18,411	$2,739	$539	$539	$0	$0	$0	$0	$0	$0
SUBTOTAL BI-COUNTY SDC ELIGIBLE COSTS		$2,169	$1,841	$274	$54	$54	$0	$0	$0	$0	$0	$0
MONTGOMERY COUNTY PROJECTS												
S-25.03	TWINBROOK COMMONS SEWER	$1,009	$572	$59	$378	$125	$109	$108	$36	$0	$0	$0
	TOTAL GROWTH COSTS	1,009	572	59	378	125	109	108	36	0	0	0
S-25.04	MID-PIKE PLAZA SEWER MAIN, PHASE 1	1,559	369	748	442	442	0	0	0	0	0	0
	TOTAL GROWTH COSTS	1,559	369	748	442	442	0	0	0	0	0	0
S-25.05	MID-PIKE PLAZA SEWER MAIN, PHASE 2	6,094	119	1,434	4,541	3,107	1,434	0	0	0	0	0
	TOTAL GROWTH COSTS	6,094	119	1,434	4,541	3,107	1,434	0	0	0	0	0
S-38.01	PRESERVE AT ROCK CREEK WASTEWATER PUMPING STATION	1,967	10	886	1,071	683	388	0	0	0	0	0
	TOTAL GROWTH COSTS	1,967	10	886	1,071	683	388	0	0	0	0	0

WASHINGTON SUBURBAN SANITARY COMMISSION
ADOPTED FY'S 2015 - 2020 CIP
SDC ELIGIBLE PROJECTS
(In Thousands)

PROJECT NUMBER	PROJECT NAME	TOTAL COST	FY 2013	FY 2014	TOTAL 6 YEARS	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	BEYOND 6 YEARS
MONTGOMERY COUNTY PROJECTS (CONTINUED)												
S-38.02	PRESERVE AT ROCK CREEK WWPS FORCE MAIN	$391	$18	$122	$251	$135	$116	$0	$0	$0	$0	$0
	TOTAL GROWTH COSTS	391	18	122	251	135	116	0	0	0	0	0
S-53.22	SENECA WWTP EXPANSION, PART 2	28,984	19,258	7,756	1,970	1,970	0	0	0	0	0	0
	TOTAL GROWTH COSTS	28,984	19,258	7,756	1,970	1,970	0	0	0	0	0	0
S-84.47	CLARKSBURG TRIANGLE OUTFALL SEWER, PART 2	2,539	423	1,620	496	445	51	0	0	0	0	0
	TOTAL GROWTH COSTS	2,539	423	1,620	496	445	51	0	0	0	0	0
S-84.60	CABIN BRANCH WASTEWATER PUMPING STATION	2,342	12	13	2,317	449	1,566	302	0	0	0	0
	TOTAL GROWTH COSTS	2,342	12	13	2,317	449	1,566	302	0	0	0	0
S-84.61	CABIN BRANCH WWPS FORCE MAIN	424	0	17	407	143	240	24	0	0	0	0
	TOTAL GROWTH COSTS	424	0	17	407	143	240	24	0	0	0	0
S-84.65	TAPESTRY WASTEWATER PUMPING STATION	683	7	231	445	223	222	0	0	0	0	0
	TOTAL GROWTH COSTS	683	7	231	445	223	222	0	0	0	0	0
S-84.66	TAPESTRY WWPS FORCE MAIN	134	8	45	81	46	35	0	0	0	0	0
	TOTAL GROWTH COSTS	134	8	45	81	46	35	0	0	0	0	0
S-85.21	SHADY GROVE STATION SEWER AUGMENTATION	2,254	0	0	2,254	723	740	722	69	0	0	0
	TOTAL GROWTH COSTS	2,254	0	0	2,254	723	740	722	69	0	0	0
S-103.16	CABIN JOHN TRUNK SEWER RELIEF	7,999	0	0	7,999	2,666	2,666	2,667	0	0	0	0
	TOTAL GROWTH COSTS	7,999	0	0	7,999	2,666	2,666	2,667	0	0	0	0
S-201.00	LAND & RIGHTS-OF-WAY ACQUISITION - MONTGOMERY COUNTY	24	0	0	24	12	12	0	0	0	0	0
	TOTAL GROWTH COSTS	24	0	0	24	12	12	0	0	0	0	0
SUBTOTAL MONTGOMERY COUNTY SEWERAGE PROJECTS		$56,403	$20,796	$12,931	$22,676	$11,169	$7,579	$3,823	$105	$0	$0	$0
SUBTOTAL MONTGOMERY COUNTY SDC ELIGIBLE COSTS		$56,403	$20,796	$12,931	$22,676	$11,169	$7,579	$3,823	$105	$0	$0	$0

WASHINGTON SUBURBAN SANITARY COMMISSION
ADOPTED FY'S 2015 - 2020 CIP
SDC ELIGIBLE PROJECTS
(In Thousands)

PROJECT NUMBER	PROJECT NAME	TOTAL COST	FY 2013	FY 2014	TOTAL 6 YEARS	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	BEYOND 6 YEARS
PRINCE GEORGE'S COUNTY PROJECTS												
S-43.02	BROAD CREEK WWPS AUGMENTATION	$173,761	$20,065	$33,077	$120,619	$50,925	$50,925	$11,059	$7,710	$0	$0	$0
	TOTAL GROWTH COSTS	144,222	16,654	27,454	$100,114	42,268	42,268	9,179	6,399	0	0	0
S-187.00	DSP & CONCEPTUAL DESIGN SEWER PROJECTS	10,121	1,332	2,373	6,416	3,269	2,482	665	0	0	0	0
	TOTAL GROWTH COSTS	10,121	1,332	2,373	6,416	3,269	2,482	665	0	0	0	0
S-205.00	LAND & RIGHTS-OF-WAY ACQUISITION - PRINCE GEORGE'S COUNTY	400	0	400	0	0	0	0	0	0	0	0
	TOTAL GROWTH COSTS	332	0	332	$0	0	0	0	0	0	0	0
SUBTOTAL PRINCE GEORGE'S COUNTY SEWERAGE PROJECTS		$184,282	$21,397	$35,850	$127,035	$54,194	$53,407	$11,724	$7,710	$0	$0	$0
SUBTOTAL PRINCE GEORGE'S COUNTY SDC ELIGIBLE COSTS		$154,675	$17,986	$30,159	$106,530	$45,537	$44,750	$9,844	$6,399	$0	$0	$0
TOTAL SEWERAGE PROJECTS COSTS		$262,374	$60,604	$51,520	150,250	$65,902	$60,986	$15,547	$7,815	$0	$0	$0
TOTAL SEWERAGE SDC ELIGIBLE COSTS		$213,247	$40,623	$43,364	129,260	$56,760	$52,329	$13,667	$6,504	$0	$0	$0
TOTAL PROJECT COSTS		$598,712	$193,025	$99,953	305,734	$108,794	$101,242	$55,976	$26,406	$7,984	$5,332	$0
TOTAL SDC ELIGIBLE COSTS		$520,376	$170,303	$85,849	264,224	$89,418	$88,482	$49,680	$23,328	$7,984	$5,332	$0