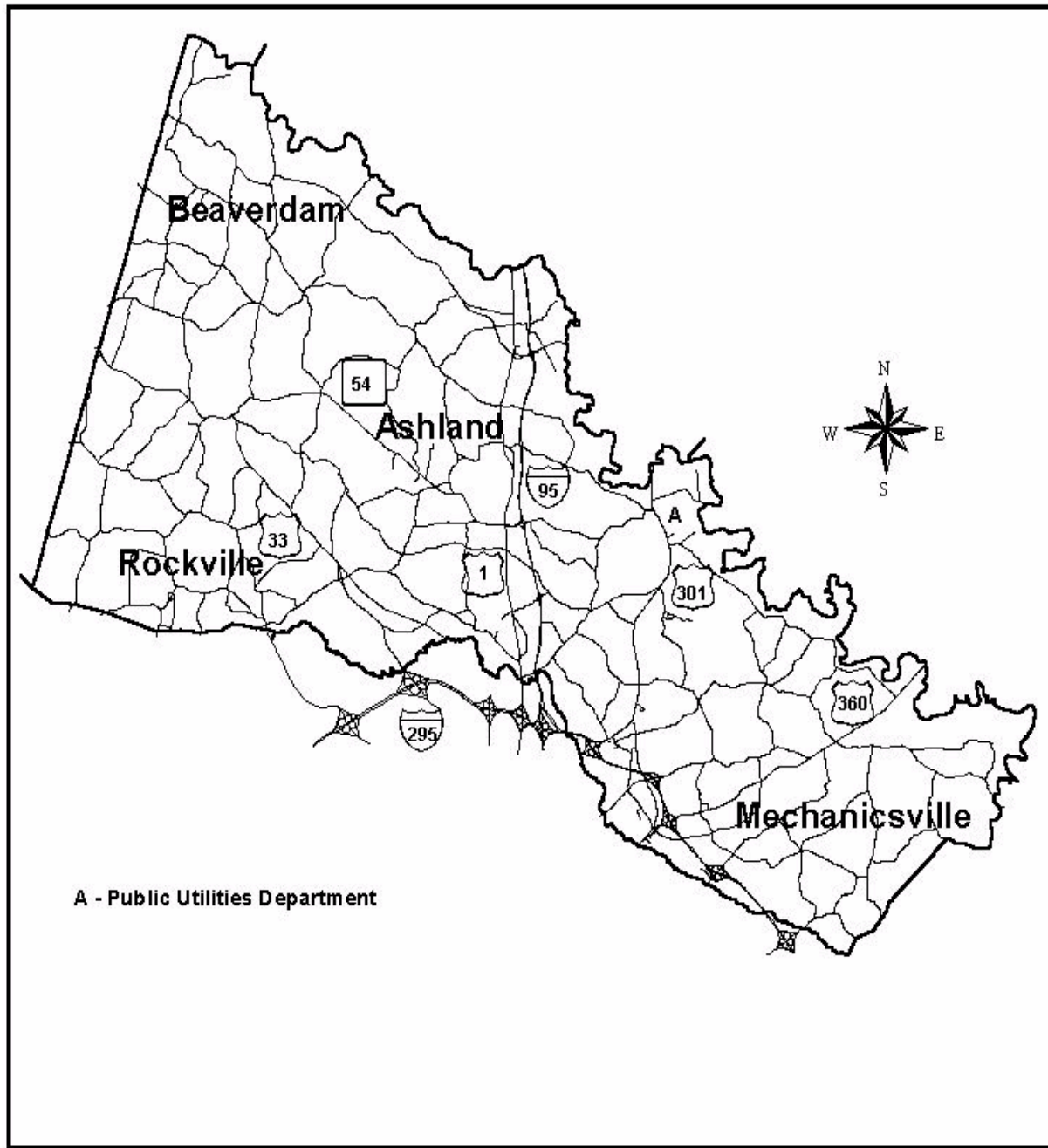


PUBLIC UTILITIES

The Public Utilities Department is located at the Hanover County Complex on Rt. 301. Capital improvements (e.g., water/sewer lines) are shown with a map, if applicable. Refer to the description of the Public Utilities Department in the operating budget document for a comprehensive overview of the utility system.



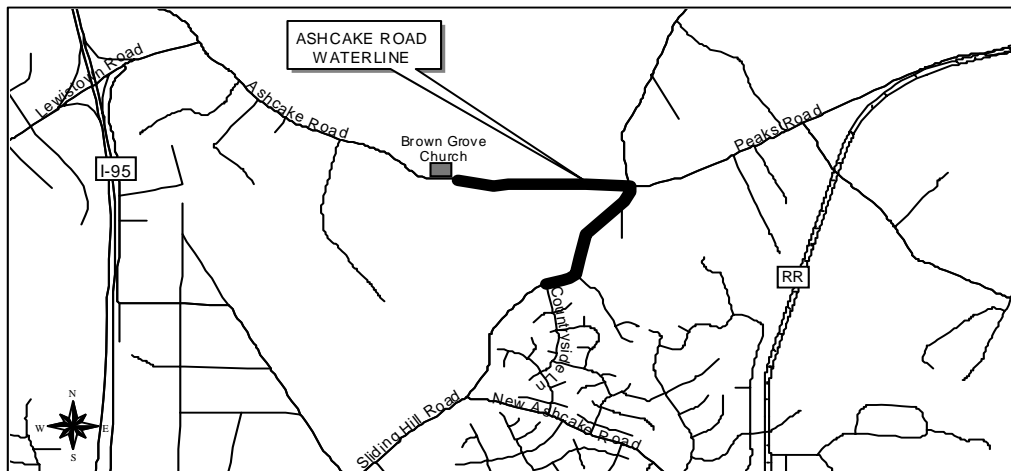
ASHCAKE ROAD WATERLINE

Functional Area: **Utilities**

Department (s): Public Utilities

Location: Ashcake Road from Countryside Lane to Brown Grove Church

Description/
Justification: This project provides design and construction of 7,000' of 20" (construction FY13 @ \$1,163,000) waterline along Sliding Hill Road from Countryside Lane to Ashcake Road then along Ashcake Road to Brown Grove Church.



Timetable: Design and easement acquisition (FY10)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	-	27,400	-	-	27,400
Capacity Fees	-	-	246,600	-	-	246,600
Grants	-	-	-	-	-	-
Total Sources	\$ -	\$ -	\$ 274,000	\$ -	\$ -	\$ 274,000
Funding Uses						
Professional	-	-	137,000	-	-	137,000
Land	-	-	137,000	-	-	137,000
Construction	-	-	-	-	-	-
Total Uses	\$ -	\$ -	\$ 274,000	\$ -	\$ -	\$ 274,000

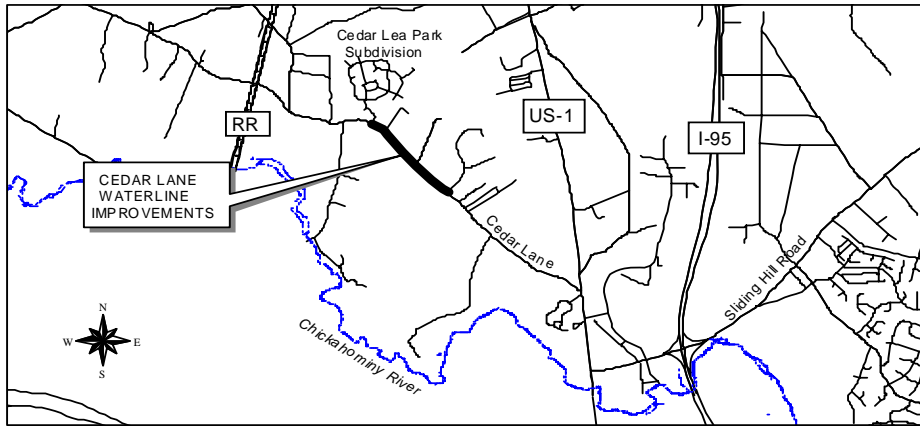
CEDAR LANE WATERLINE IMPROVEMENTS

Functional Area: **Utilities**

Department (s): Public Utilities

Location: Cedar Lane from Brookhollow Drive to CedarLea Parkway

Description: This project provides design, easement acquisition and construction of 3,300' of 24" waterline along Cedar Lane from Brookhollow Drive to CedarLea Parkway. This waterline provides improved water distribution service for both domestic service and fire suppression use along Cedar Lane and is sized to convey water from a planned water treatment plant as discussed in the 2002-2022 Comprehensive Plan.



Timetable: Design and easement acquisition (FY10); Construction (FY11)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	-	43,500		-	43,500
Capacity Fees	-	-	130,500	750,000	-	880,500
Long Term Debt	-					
VDEQ-WQIA						
Grants	-					
Total Sources	\$ -	\$ -	\$ 174,000	\$ 750,000	\$ -	\$ 924,000
Funding Uses						
Professional	-		74,000	-	-	74,000
Land	-		100,000	-	-	100,000
Construction	-	-		750,000	-	750,000
Total Uses	\$ -	\$ -	\$ 174,000	\$ 750,000	\$ -	\$ 924,000

CHAMBERLAYNE ROAD WATERLINE IMPROVEMENTS

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Along Studley Road and Atlee Road from Times Dispatch Boulevard to Chamberlayne Road and along Chamberlayne Road from Shady Grove Road to Crown Colony Parkway

Description: This project provides in FY08 for the design and easement acquisition of 3,000' of 24" waterline along Studley Road and Atlee Road from Times Dispatch Boulevard to Chamberlayne Road. Construction of the first portion of the waterline is planned for FY09. Design, easement acquisition and construction of an additional 3,600' of 24" waterline from Shady Grove Road to Crown Colony Parkway along Chamberlayne Road is planned during FY10 and FY11. These waterline improvements provide increased transmission capacity to the planned Garnett Road Water Storage Tank and Pump Station while maintaining pressure for domestic service and fire suppression use in the Chamberlayne Road and New Ashcake Road areas.



Timetable: FY08-FY09 Design and easement acquisition (FY08); Construction (FY09)
FY10-FY11 Design and easement acquisition (FY10); Construction (FY11)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
Capacity Fees	150,000	730,000	130,000	920,000	-	1,930,000
Long Term Debt	80,000					80,000
Total Sources	\$ 230,000	\$ 730,000	\$ 130,000	\$ 920,000	\$ -	\$ 2,010,000
Funding Uses						
Professional	70,000	-	90,000	-	-	160,000
Land	160,000	-	40,000	-	-	200,000
Construction	-	730,000		920,000	-	1,650,000
Total Uses	\$ 230,000	\$ 730,000	\$ 130,000	\$ 920,000	\$ -	\$ 2,010,000

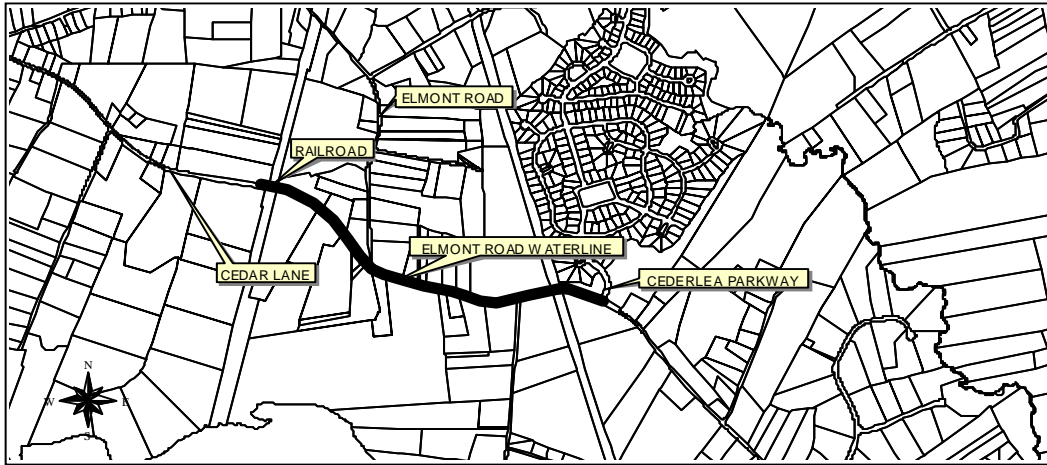
ELMONT ROAD WATERLINE

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: West along Cedar Lane from Cedarlea Parkway to just west of the railroad tracks

Description: This project provides for design in FY11 and construction in FY12 of 2,700' of 24" waterline and 1,600' of 30" waterline along Cedar Lane from CedarLea Parkway to just west of the railroad tracks.



Timetable: Design & easement acquisition (FY11)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees						
Capacity Fees	-	-	-	450,000	1,800,000	2,250,000
Long Term Debt						
VDEQ-WQIA						
Grants						
Total Sources	\$ -	\$ -	\$ -	\$ 450,000	\$1,800,000	\$ 2,250,000
Funding Uses						
Professional	-	-	-	225,000	-	225,000
Land	-	-	-	225,000	-	225,000
Construction	-	-	-	-	1,800,000	1,800,000
Total Uses	\$ -	\$ -	\$ -	\$ 450,000	\$1,800,000	\$ 2,250,000

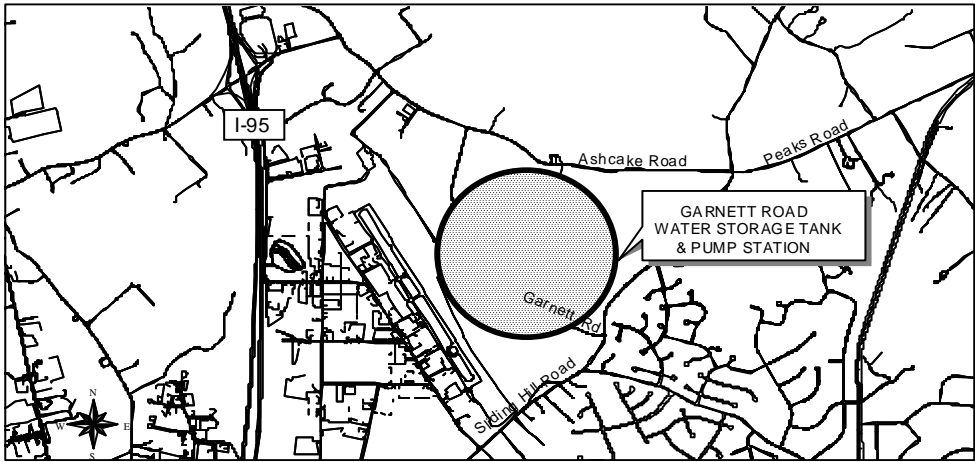
GARNETT ROAD WATER STORAGE TANK AND PUMP STATION

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: In the vicinity of the intersection of Sliding Hill Road and Garnett Road

Description: This project provides for design in FY10 and construction in FY12 of a one million gallon water storage tank and pump station in the vicinity of the intersection of Sliding Hill Road and Garnett Road. The facility will pump water from the Lockwood service area to the Ashland service area. It is required in order to meet domestic service and fire suppression demands.



Timetable: Design (FY10); Construction (FY12)

PY Allocation: \$200,000

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	-	32,000	-	214,200	246,200
Capacity Fees	-	-	288,000	-	1,927,800	2,215,800
Long Term Debt	-	-	-	-	-	-
VDEQ-WQIA						
Grants						
Total Sources	\$ -	\$ -	\$ 320,000	\$ -	\$ 2,142,000	\$ 2,462,000
Funding Uses						
Professional	-	-	320,000	-	-	320,000
Land	-	-	-	-	-	-
Construction	-	-	-	-	2,142,000	2,142,000
Total Uses	\$ -	\$ -	\$ 320,000	\$ -	\$ 2,142,000	\$ 2,462,000

HANOVER-RICHMOND WATERLINE

Functional Area: **Public Utilities**

Department (s): Public Utilities

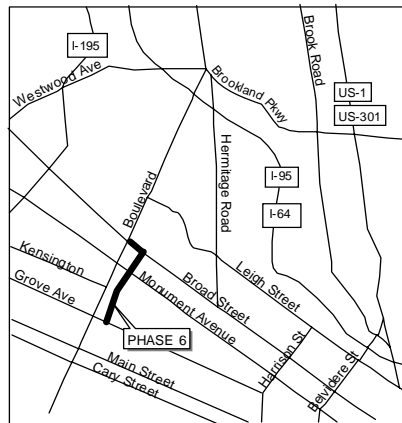
Location: Vicinity of Broad Street at The Boulevard within City of Richmond

Description: This project provides for water resource development to serve the Suburban Service Area via a water transmission pipeline from the City of Richmond. The previous five phases funded construction of a 30" and 36" water transmission main generally along Chamberlayne Avenue, Westwood Avenue, and Hermitage Road from the City of Richmond at the intersection of Broad Street and Boulevard to the County.

FY09-FY10 is the final segment and will increase the diameter of the transmission main to 42" and extend it 3,000' from Broad Street to Grove Avenue either along Mulberry Street or The Boulevard. The approximate hydraulic capacity will be 20 MGD upon completion of the FY09-FY10 segment.

Included in this project is \$26,472,827 over five years for jointly funded capital improvements in the City.

In FY11, a capacity payment to the City of Richmond of \$3,489,000 is required by contract for the purchase of an additional 5 MGD of water treatment plant capacity. The total amount of water treatment plant capacity purchased from Richmond after this payment is 20 MGD.



Timetable: Annual joint capital costs (FY08-12); Richmond WTP capacity payment for total of 20 MGD (FY11); Phase 6 Design (FY09); Phase 6 Construction (FY10)

PY Allocation: \$2,426,000 (FY07)

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees						
Capacity Fees	370,000	4,611,000	5,912,000	9,927,000	7,686,000	28,506,000
Long Term Debt	3,500,000	-	-	-	-	3,500,000
VDEQ-WQIA Grants						
Total Sources	\$ 3,870,000	\$ 4,611,000	\$ 5,912,000	\$ 9,927,000	\$ 7,686,000	\$ 32,006,000
Funding Uses						
Professional	-	153,500	-	-	-	153,500
Land	-	153,500	-	-	-	153,500
Construction	-	-	1,738,000	-	-	1,738,000
Joint Capital	3,870,000	4,304,000	4,174,000	6,438,000	7,686,000	26,472,000
Capacity Payments	-	-	-	3,489,000	-	3,489,000
Total Uses	\$ 3,870,000	\$ 4,611,000	\$ 5,912,000	\$ 9,927,000	\$ 7,686,000	\$ 32,006,000

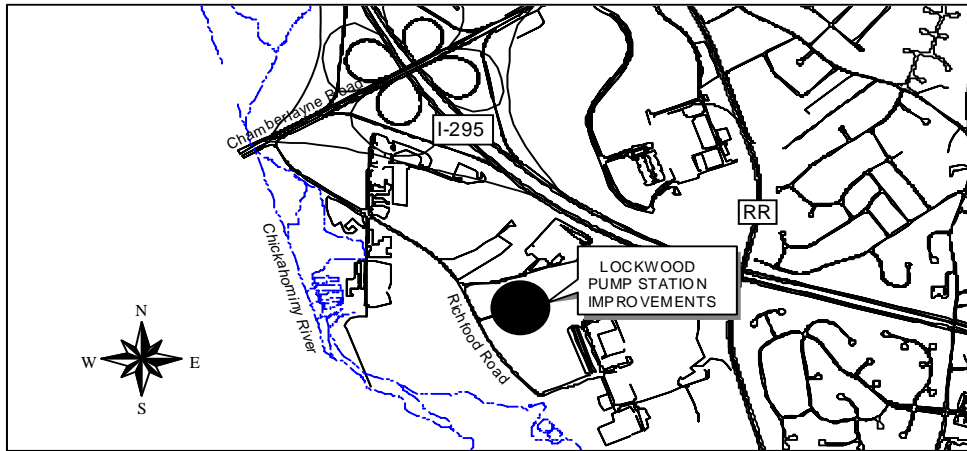
LOCKWOOD PUMP STATION IMPROVEMENTS

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Lockwood Pump Station on Richfood Road

Description: This project provides additional pumping capacity at the Lockwood Water Pump Station. The FY11-FY12 improvements will provide a total pumping capacity of 20MGD. These capacity increases are coordinated with the increases in purchased plant capacity from the City of Richmond.



Timetable: Design (FY11) ; Construction (FY12)

PY Allocation: \$400,000

Operating Impact: FY08 \$39,000 FY09 \$41,000 FY10 \$43,000 FY11 \$45,000

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees				184,500	632,000	816,500
Capacity Fees				184,500	632,000	816,500
Long Term Debt						
VDEQ-WQIA						
Grants	-	-	-	-	-	-
Total Sources	\$ -	\$ -	\$ -	\$ 369,000	\$ 1,264,000	\$ 1,633,000
Funding Uses						
Professional	-	-	-	369,000	-	369,000
Land						
Construction	-	-	-	-	1,264,000	1,264,000
Total Uses	\$ -	\$ -	\$ -	\$ 369,000	\$ 1,264,000	\$ 1,633,000

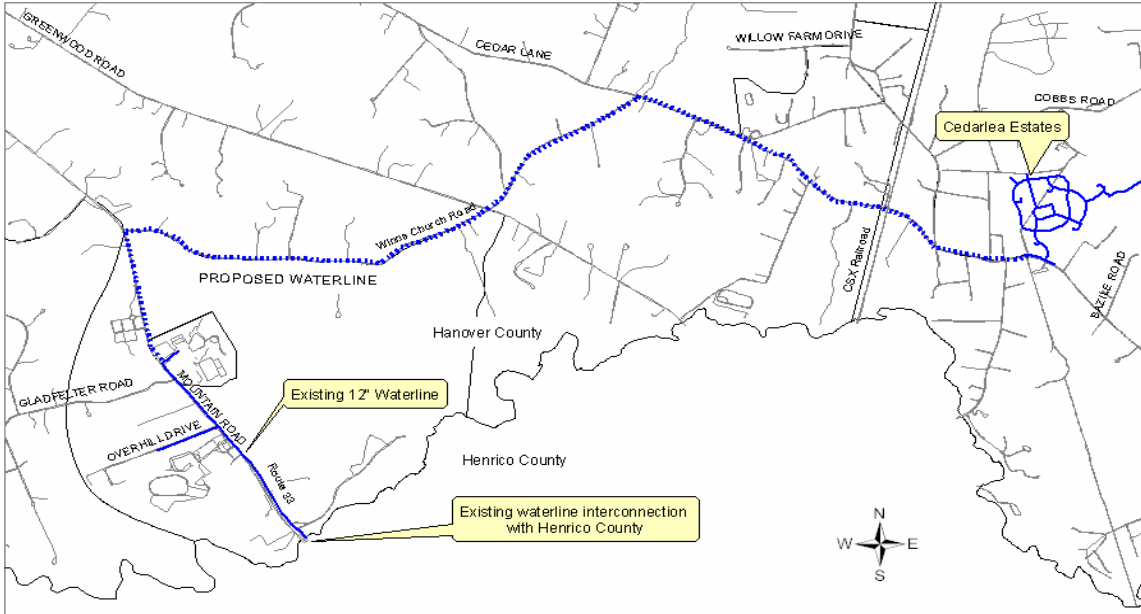
CEDAR LANE - WINNS CHURCH ROAD - ROUTE 33 WATERLINE

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Public Utilities

Description: Preliminary engineering and design for approximately 28,000' of 16" water line to connect the Overhill Esattes Water System (PWS ID# 4085649) to the Hanover Surburban Water System (PWS ID# 4085398).



Funding Sources: Capacity fees and Long Term Debt

Timetable: Design in FY 2008

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	-		-	-	-
Capacity Fees	60,000					60,000
Long Term Debt	240,000					240,000
Grants						-
Total Sources	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ 300,000
Funding Uses						
Professional	300,000	-	-	-	-	300,000
Land	-	-	-	-	-	-
Construction	-	-	-	-	-	-
Total Uses	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ 300,000

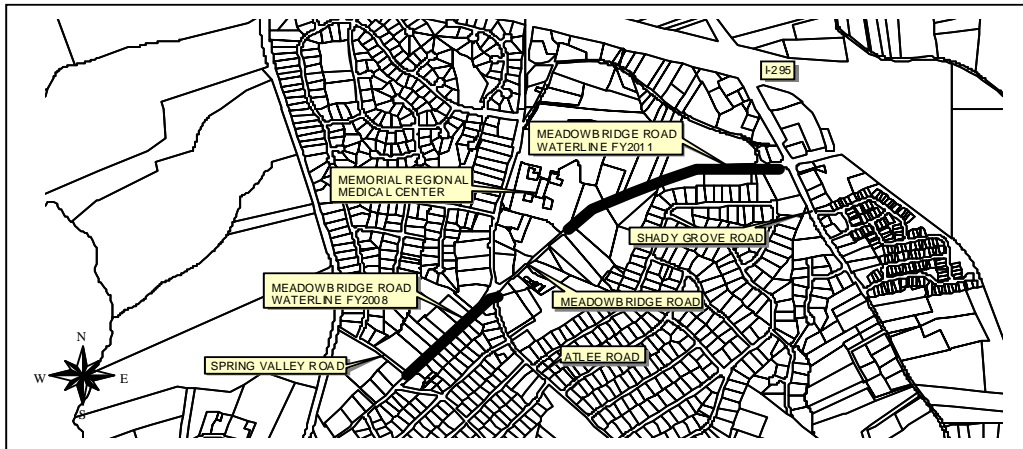
MEADOWBRIDGE ROAD WATERLINE

Functional Area: **Public Utilities**

Department (s): **Public Utilities**

Location: **Meadowbridge Road from Spring Valley Road to Atlee Road and Memorial Regional Medical Center entrance to Shady Grove Road**

Description: **This project provides design, easement acquisition and construction in FY08 of 1,500' of 16" waterline from the vicinity of Spring Valley Road to Atlee Road. This waterline will provide increased water supply to the Mechanicsville area to meet projected demands. FY11 funds are for the design and easement acquisition of 2,800' of 16" waterline from the east entrance to Memorial Regional Medical Center to Shady Grove Road.**



Timetable: **Design, easement acquisition & construction (FY08)**
Design, easement acquisition (FY11); Construction (FY12)

PY Allocation: **\$0**

Operating Impact: **\$0**

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	74,000	-	-	24,000	96,750	194,750
Capacity Fees	142,000	-	-	72,000	290,250	504,250
Long Term Debt	80,000	-	-	-	-	80,000
VDEQ-WQIA Grants						
Total Sources	\$ 296,000	\$ -	\$ -	\$ 96,000	\$ 387,000	\$ 779,000
Funding Uses						
Professional	48,000	-	-	48,000	-	96,000
Land	48,000	-	-	48,000	-	96,000
Construction	200,000	-	-	-	387,000	587,000
Total Uses	\$ 296,000	\$ -	\$ -	\$ 96,000	\$ 387,000	\$ 779,000

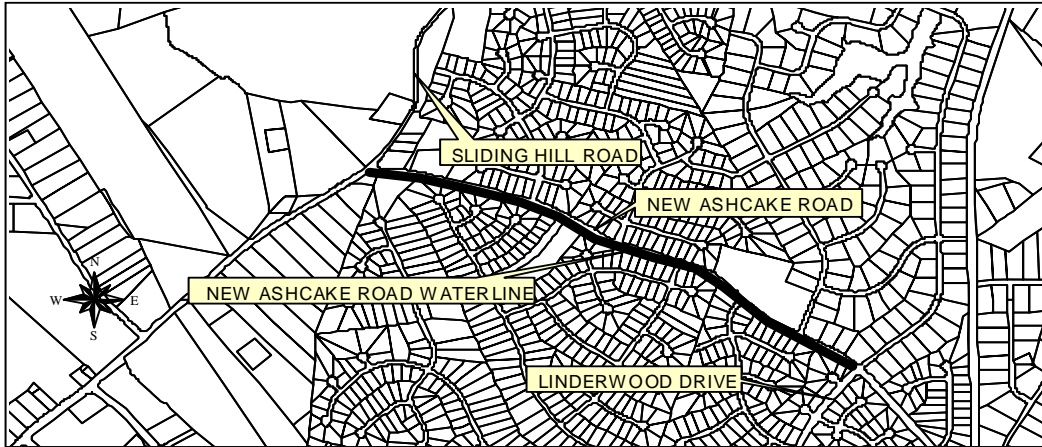
NEW ASHCAKE ROAD WATERLINE

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: New Ashcake Road between Linderwood Drive and Sliding Hill Road

Description: This project provides for design in FY10 and construction in FY13 (\$1,100,000) of 5,400' of 24" waterline along New Ashcake Road from Linderwood Drive to Sliding Hill Road. The waterline will provide capacity to transfer water from the Lockwood Pump Station to the Hanover Industrial Air Park, Route 1, and Ashland areas. It is required in order to meet projected domestic and fire suppression demands.



Timetable: Design and easement acquisition (FY10); Construction (FY13)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	-	22,000	-	-	22,000
Capacity Fees	-	-	198,000	-	-	198,000
Long Term Debt						
VDEQ-WQIA						
Grants						
Total Sources	\$ -	\$ -	\$ 220,000	\$ -	\$ -	\$ 220,000
Funding Uses						
Professional	-	-	110,000	-	-	110,000
Land	-	-	110,000	-	-	110,000
Construction	-	-	-	-	-	-
Total Uses	\$ -	\$ -	\$ 220,000	\$ -	\$ -	\$ 220,000

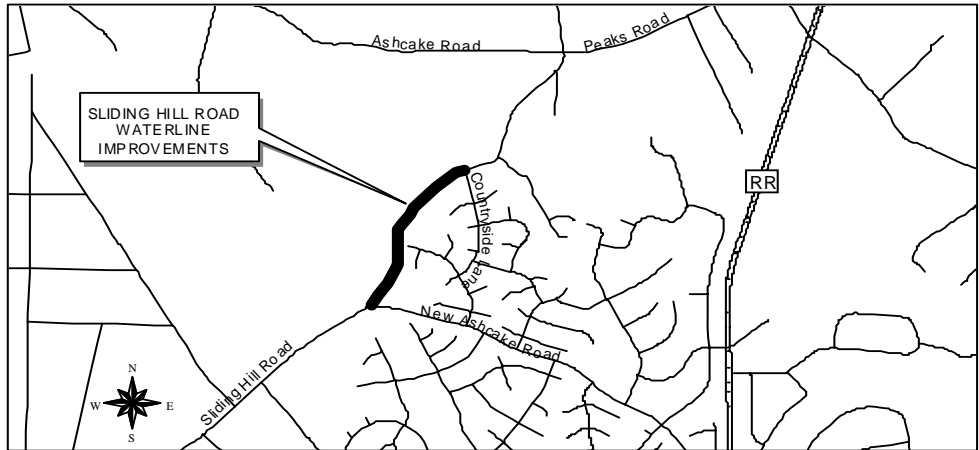
SLIDING HILL ROAD WATERLINE IMPROVEMENTS

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Sliding Hill Road from New Ashcake Road to Countryside Lane

Description: This project provides for design in FY10 and construction in FY13 of 2,700' of 20" waterline along Sliding Hill Road from New Ashcake Road to Countryside Lane.



Timetable: Design and easement acquisition (FY10)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees						
Capacity Fees	-	-	53,000	-	-	53,000
Long Term Debt						
VDEQ-WQIA						
Grants						
Total Sources	\$ -	\$ -	\$ 53,000	\$ -	\$ -	\$ 53,000
Funding Uses						
Professional	-	-	26,500	-	-	26,500
Land	-	-	26,500	-	-	26,500
Construction	-	-	-	-	-	-
Total Uses	\$ -	\$ -	\$ 53,000	\$ -	\$ -	\$ 53,000

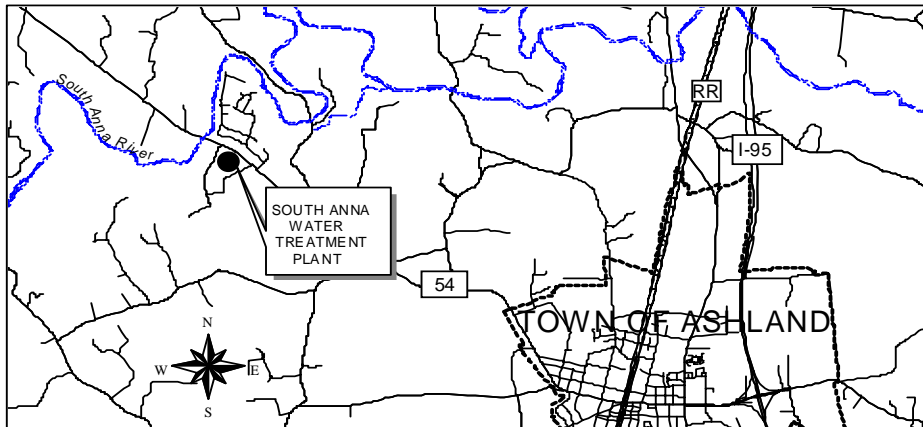
SOUTH ANNA WATER TREATMENT PLANT UPGRADE

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: South Anna Water Treatment Plant

Description: The South Anna Water Treatment Plant was taken out of service in 1999 because it was neither cost effective to have it in service, nor was it equipped to meet all VDH regulatory requirements. This project will include design and construction necessary to upgrade the water treatment plant to current VDH standards at its existing capacity of 2.0 MGD.



Timetable: Design and construction (FY12)

PY Allocation: \$0

FY12

Operating Impact:

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	-	-	-		-
Capacity Fees					1,600,000	1,600,000
Long Term Debt						
VDEQ-WQIA						
Grants						
Total Sources	\$ -	\$ -	\$ -	\$ -	\$ 1,600,000	\$ 1,600,000
Funding Uses						
Professional	-	-	-	-	165,000	165,000
Land						
Construction	-	-	-	-	1,435,000	1,435,000
Total Uses	\$ -	\$ -	\$ -	\$ -	\$ 1,600,000	\$ 1,600,000

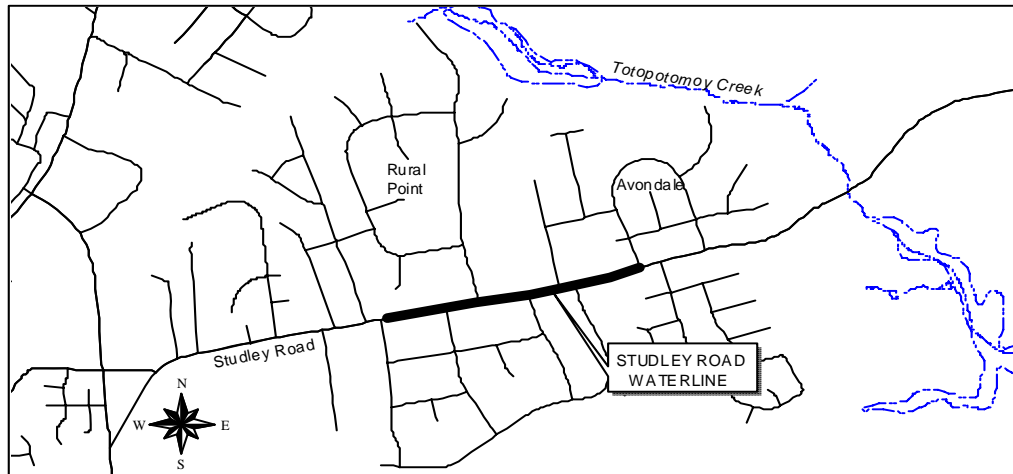
STUDLEY ROAD WATERLINE

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Studley Road from Rural Point Subdivision to West Wenlock Drive

Description: This project provides for 3,200' of 12" waterline along Studley Road from Rural Point Subdivision to West Wenlock Drive. This waterline is required to provide increased fire suppression flow to the Avondale Subdivision and to support future waterline extensions to Rural Point Road.



Timetable: Design and easement acquisition (FY10); Construction (FY11)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees						
Capacity Fees	-	-	70,000	329,000	-	399,000
Long Term Debt						
VDEQ-WQIA						
Grants						
Total Sources	\$ -	\$ -	\$ 70,000	\$ 329,000	\$ -	\$ 399,000
Funding Uses						
Professional	-	-	35,000	-	-	35,000
Land	-	-	35,000	-	-	35,000
Construction	-	-	-	329,000	-	329,000
Total Uses	\$ -	\$ -	\$ 70,000	\$ 329,000	\$ -	\$ 399,000

VULNERABILITY ASSESSMENT IMPLEMENTATION

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Various Infrastructure Facilities

Description: This project involves implementing the recommended security enhancements defined in the federally-mandated "Vulnerability Assessment", which was conducted on the county's water treatment and distribution facilities.

Timetable: N/A

PY Allocation: \$252,000

FY08 FY09 FY10

Operating Impact:

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	249,000	-	-	-	-	249,000
Capacity Fees						
Long Term Debt	-	-	-	-	-	-
VDEQ-WQIA Grants						
Total Sources	\$ 249,000	\$ -	\$ -	\$ -	\$ -	\$ 249,000
Funding Uses						
Professional	87,150	-	-	-	-	87,150
Land						
Construction	161,850	-	-	-	-	161,850
Total Uses	\$ 249,000	\$ -	\$ -	\$ -	\$ -	\$ 249,000

WATERLINE EXTENSIONS AND FACILITY IMPROVEMENTS

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Suburban Service Area

Description: This project provides for waterline extensions and facility improvements to enhance service within the Suburban Service Area. These extensions and improvements will support the existing customer base and economic development projects.

Timetable: Design and construction (FY08-FY12)

PY Allocation: \$125,000

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	13,000	13,500	14,000	14,500	15,000	70,000
Capacity Fees	117,000	121,500	126,000	130,500	135,000	630,000
Long Term Debt	-	-	-	-	-	-
VDEQ-WQIA						
Grants						
Total Sources	\$ 130,000	\$ 135,000	\$ 140,000	\$ 145,000	\$ 150,000	\$ 700,000
Funding Uses						
Professional	13,000	13,500	14,000	14,500	15,000	70,000
Land						
Construction	117,000	121,500	126,000	130,500	135,000	630,000
Total Uses	\$ 130,000	\$ 135,000	\$ 140,000	\$ 145,000	\$ 150,000	\$ 700,000

WATERLINE REPLACEMENT

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Suburban Service Area

Description: This project provides for the replacement of aged and undersized waterlines in various streets within the Suburban Service Area to improve flow for fire suppression and capacity.

Timetable: Design and construction (FY08-FY12)

PY Allocation: \$125,000

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	130,000	135,000	140,000	145,000	150,000	700,000
Capacity Fees						
Long Term Debt	-	-	-	-	-	-
VDEQ-WQIA Grants						
Total Sources	\$ 130,000	\$ 135,000	\$ 140,000	\$ 145,000	\$ 150,000	\$ 700,000
Funding Uses						
Professional Land	22,000	25,000	25,000	25,000	25,000	122,000
Construction	108,000	110,000	115,000	120,000	125,000	578,000
Total Uses	\$ 130,000	\$ 135,000	\$ 140,000	\$ 145,000	\$ 150,000	\$ 700,000

WATER TANK REHABILITATION

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Suburban and Rural water systems

Description: This project provides for the continuing funding of rehabilitating existing water storage tanks throughout the Suburban and Rural water systems. Specific and planned repairs are scheduled for the following tanks: Diane Ridge, FY08; Strawhorn, FY09; Jackson Avenue, FY10; Airpark (as needed) FY11.

Timetable: Design and construction (FY08-FY12)

PY Allocation: \$225,000

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	80,000	60,000	225,000	64,000	66,000	495,000
Capacity Fees						
Long Term Debt	-	-	-	-	-	-
VDEQ-WQIA Grants						
Total Sources	\$ 80,000	\$ 60,000	\$ 225,000	\$ 64,000	\$ 66,000	\$ 495,000
Funding Uses						
Professional	16,000	6,000	22,500	6,400	6,600	57,500
Land						
Construction	64,000	54,000	202,500	57,600	59,400	437,500
Total Uses	\$ 80,000	\$ 60,000	\$ 225,000	\$ 64,000	\$ 66,000	\$ 495,000

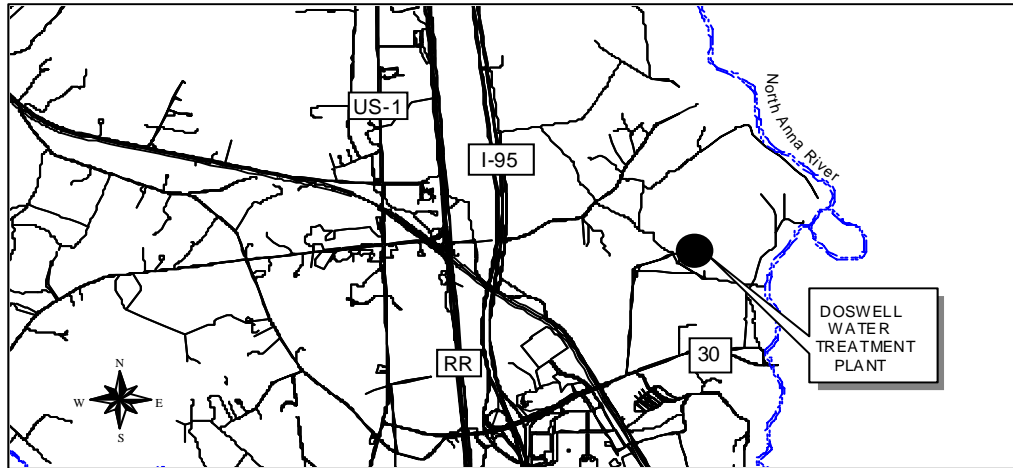
WATER TREATMENT PLANT REHABILITATION

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Doswell Water Treatment Plant

Description: This project provides for the continuing funding of rehabilitating various equipment, structural components and process enhancements at the Doswell Water Treatment Plant. FY08 Raw Pump Drive # 1; FY11 Sludge Collector Drive Basin # 3.



Timetable: Design and construction (FY08-FY12)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	60,000	-	-	70,000	66,000	196,000
Capacity Fees						
Long Term Debt	-	-	-	-	-	-
VDEQ-WQIA Grants						
Total Sources	\$ 60,000	\$ -	\$ -	\$ 70,000	\$ 66,000	\$ 196,000
Funding Uses						
Professional	6,000	-	-	7,000	6,600	19,600
Land						
Construction	54,000	-	-	63,000	59,400	176,400
Total Uses	\$ 60,000	\$ -	\$ -	\$ 70,000	\$ 66,000	\$ 196,000

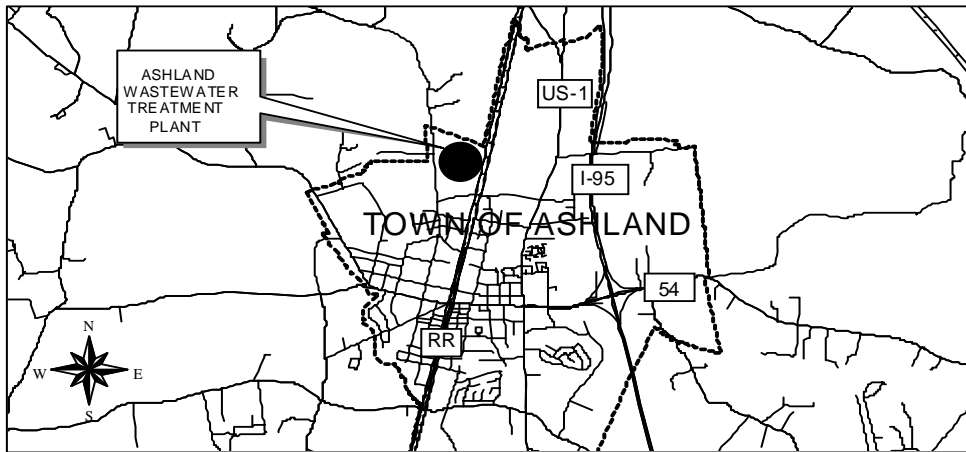
ASHLAND WWTP BIOLOGICAL NUTRIENT REMOVAL

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Ashland WWTP

Description: This project provides for the design, construction & implementation of process changes and improvements to meet more stringent biological nutrient removal requirements. The Virginia Department of Environmental Quality has adopted regulations requiring POTW's to limit the amount of nitrogen and phosphorous discharged by wastewater treatment plants in the Chesapeake Bay watershed. The project includes replacement of existing pump equipment (MPS, RAS and WAS pumps) with in-kind equipment.



Timetable: Design and construction (FY09)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees						
Capacity Fees		929,000				929,000
Long Term Debt	-	1,429,000		-	-	1,429,000
VDEQ - WQIA	-	500,000		-	-	500,000
Grants						
Total Sources	\$ -	\$ 2,858,000	\$ -	\$ -	\$ -	\$ 2,858,000
Funding Uses						
Professional	-	256,800		-	-	256,800
Land	-	-		-	-	-
Construction	-	2,601,200		-	-	2,601,200
Total Uses	\$ -	\$ 2,858,000	\$ -	\$ -	\$ -	\$ 2,858,000

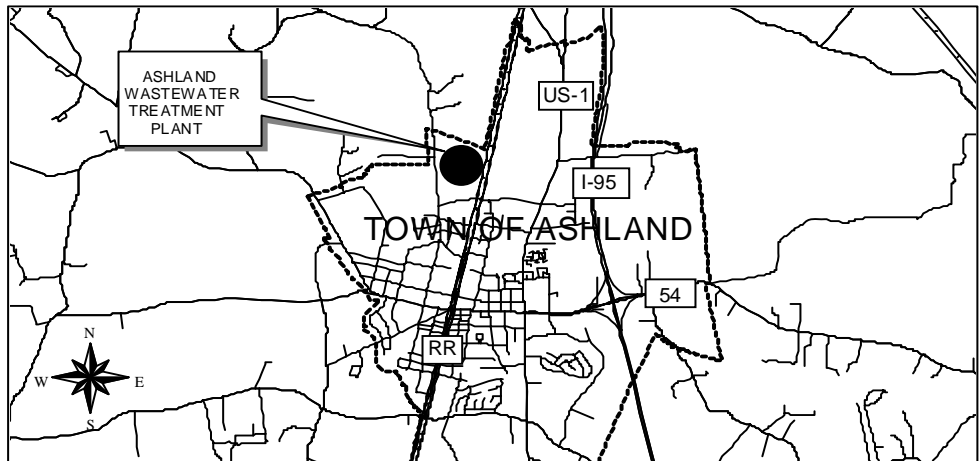
ASHLAND WWTP RETURN ACTIVATED SLUDGE PUMP UPGRADE

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Ashland WWTP

Description: The return activated sludge pump's VFDs are 12 years old and parts are becoming increasing difficult to secure. This project includes the purchase and installation of three drive units.



Timetable: Design and construction (FY08)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	155,000	-	-	-	-	155,000
Capacity Fees						
Long Term Debt						
VDEQ-WQIA						
Grants						
Total Sources	\$ 155,000	\$ -	\$ -	\$ -	\$ -	\$ 155,000
Funding Uses						
Professional	15,000	-	-	-	-	15,000
Land						
Construction	140,000	-	-	-	-	140,000
Total Uses	\$ 155,000	\$ -	\$ -	\$ -	\$ -	\$ 155,000

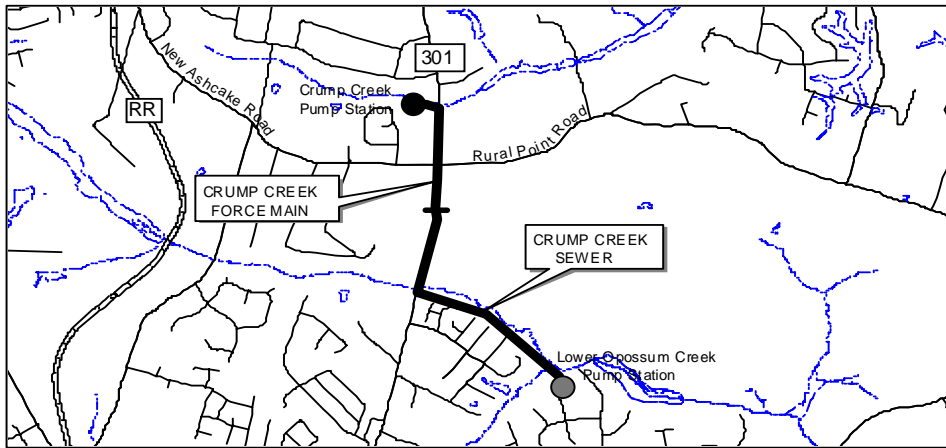
CRUMP CREEK SEWERAGE IMPROVEMENTS

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Crump Creek Pump Station near Pearsons Corner and along Chamberlayne Road and Totopotomoy Creek from the pump station to Opossum Creek

Description: This project provides for design and easement acquisition in FY10 and construction in FY12 of improvements to the Crump Creek Pump Station to achieve a capacity of 0.5 MGD, 2,600' of 10" force main and 5,900' of 15" and 30" sanitary sewer. These improvements will provide increased capacity at the Crump Creek Pump Station for projected growth in the service area.



Timetable: Design and easement acquisition (FY10); Construction (FY12)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees						
Capacity Fees	-	-	300,000	-	2,312,000	2,612,000
Long Term Debt						
VDEQ-WQIA						
Grants						
Total Sources	\$ -	\$ -	\$ 300,000	\$ -	\$ 2,312,000	\$ 2,612,000
Funding Uses						
Professional	-	-	250,000	-	-	250,000
Land	-	-	50,000	-	-	50,000
Construction	-	-	-	-	2,312,000	2,312,000
Total Uses	\$ -	\$ -	\$ 300,000	\$ -	\$ 2,312,000	\$ 2,612,000

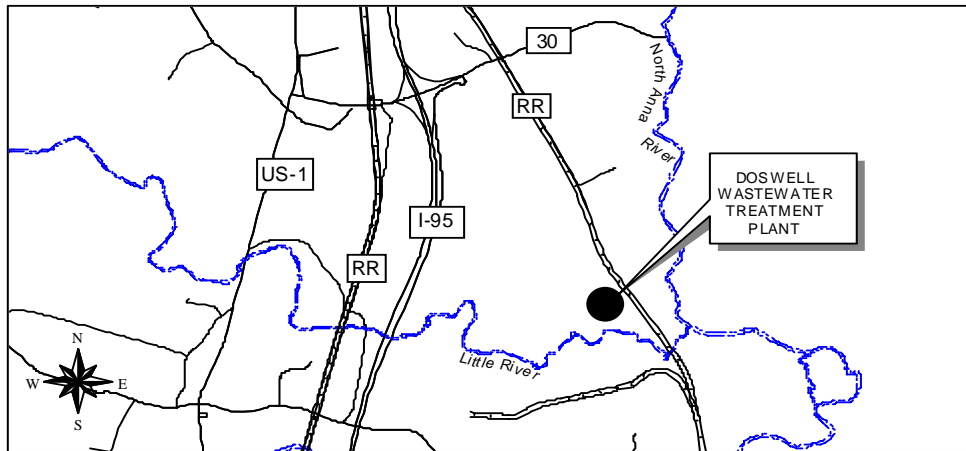
DOSWELL WWTP BIOLOGICAL NUTRIENT REMOVAL

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Doswell Wastewater Treatment Plant

Description: This project provides for the design, construction & implementation of process changes and improvements to meet more stringent biological nutrient removal requirements. The Virginia Department of Environmental Quality has adopted regulations requiring POTW's to limit the amount of nitrogen and phosphorous discharged by wastewater treatment plants in the Chesapeake Bay watershed.



Timetable: Design and construction (FY09)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees						
Capacity Fees		1,300,000				1,300,000
Long Term Debt	-	1,800,000		-	-	1,800,000
VDEQ - WQIA	-	500,000		-	-	500,000
Grants						
Total Sources	\$ -	\$ 3,600,000	\$ -	\$ -	\$ -	\$ 3,600,000
Funding Uses						
Professional	-	318,000		-	-	318,000
Land	-	-		-	-	-
Construction	-	3,282,000		-	-	3,282,000
Total Uses	\$ -	\$ 3,600,000	\$ -	\$ -	\$ -	\$ 3,600,000

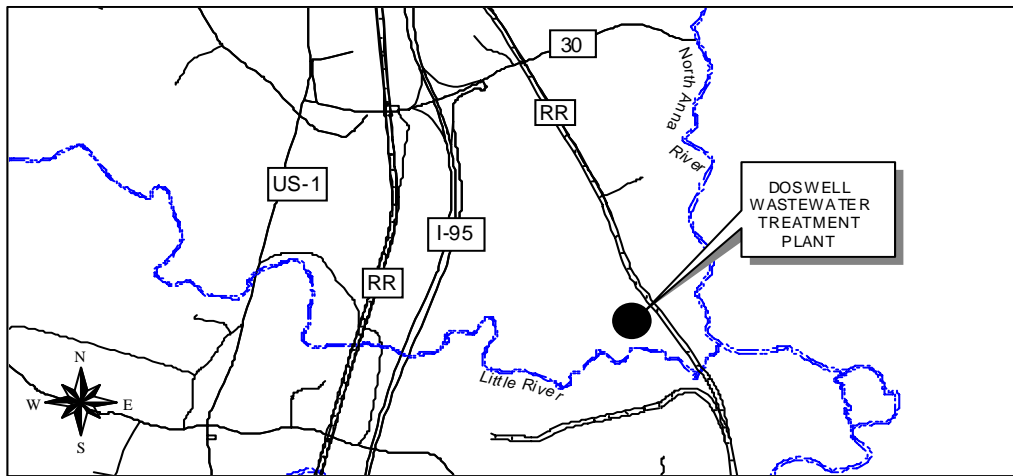
DOSWELL WWTP GENERATOR REPLACEMENT

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Doswell Wastewater Treatment Plant

Description: This project provides for the FY08 replacement of the existing 350 KW generator, which is over twenty years old and has served its useful life. The project also includes the replacement of the transfer switch and miscellaneous improvements.



PY Allocation: Construction (FY08) \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	129,000	-	-	-	-	129,000
Capacity Fees						
Long Term Debt						
VDEQ-WQIA						
Grants						
Total Sources	\$ 129,000	\$ -	\$ -	\$ -	\$ -	\$ 129,000
Funding Uses						
Professional						
Land						
Construction						
Equipment	129,000	-	-	-	-	129,000
Total Uses	\$ 129,000	\$ -	\$ -	\$ -	\$ -	\$ 129,000

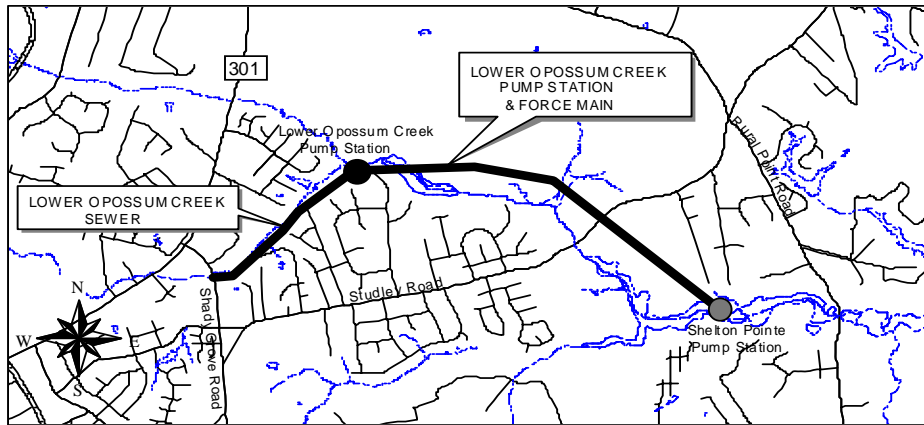
LOWER OPOSSUM CREEK SEWERAGE IMPROVEMENTS

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Along Opossum Creek from Shady Grove Road to Totopotomoy Creek and generally along Totopotomoy Creek from Opossum Creek to the Shelton Pointe Pump Station

Description: This project provides for the FY09 construction of a 3.8 MGD pump station near the confluence of Opossum and Totopotomoy Creeks, 4,400' of 30" sanitary sewer along Opossum Creek from Shady Grove Road to the new pump station, and 11,500' of 24" force main from the new pump station to the existing Shelton Pointe Pump Station. The project also includes the abandonment of the existing Avondale and Berkeley Forest pump stations.



Timetable: Construction (FY09)

PY Allocation: \$1,442,000

Operating Impact: **FY10**
\$25,000

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	1,001,154	-	-	-	1,001,154
Capacity Fees	-	5,499,846	-	-	-	5,499,846
Long Term Debt	-	-	-	-	-	-
VDEQ-WQIA Grants	-	-	-	-	-	-
Total Sources	\$ -	\$ 6,501,000	\$ -	\$ -	\$ -	\$ 6,501,000
Funding Uses						
Professional	-	-	-	-	-	-
Land	-	-	-	-	-	-
Construction	-	6,501,000	-	-	-	6,501,000
Total Uses	\$ -	\$ 6,501,000	\$ -	\$ -	\$ -	\$ 6,501,000

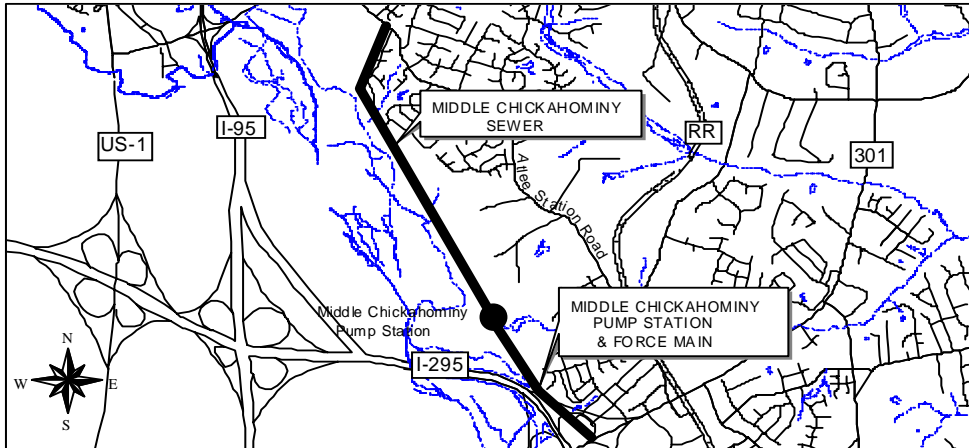
MIDDLE CHICKAHOMINY RIVER SEWERAGE IMPROVEMENTS

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Along the Chickahominy River between Green Ridge Subdivision and Chamberlayne Road

Description: This project provides for the FY09 construction of a new pump station, approximately 13,200' of sanitary sewer, and approximately 4,500' of force main along the Chickahominy River from west of Green Ridge Subdivision to Chamberlayne Road. The project will provide local sanitary sewer service and will convey wastewater from the existing Sliding Hill Pump Station to the existing 24" sanitary sewer at Chamberlayne Road. The project includes the abandonment of the existing Beechwood Farms Pump Station.



Timetable: Construction (FY09)

PY Allocation: \$0

Operating Impact: FY09 FY10
\$25,750 \$26,500

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	1,008,288	-			1,008,288
Capacity Fees	-	3,659,712	-	-	-	3,659,712
Long Term Debt						
VDEQ-WQIA						
Grants						
Total Sources	\$ -	\$ 4,668,000	\$ -	\$ -	\$ -	\$ 4,668,000
Funding Uses						
Professional	-	-	-	-	-	-
Land	-	-	-	-	-	-
Construction	-	4,668,000	-	-	-	4,668,000
Total Uses	\$ -	\$ 4,668,000	\$ -	\$ -	\$ -	\$ 4,668,000

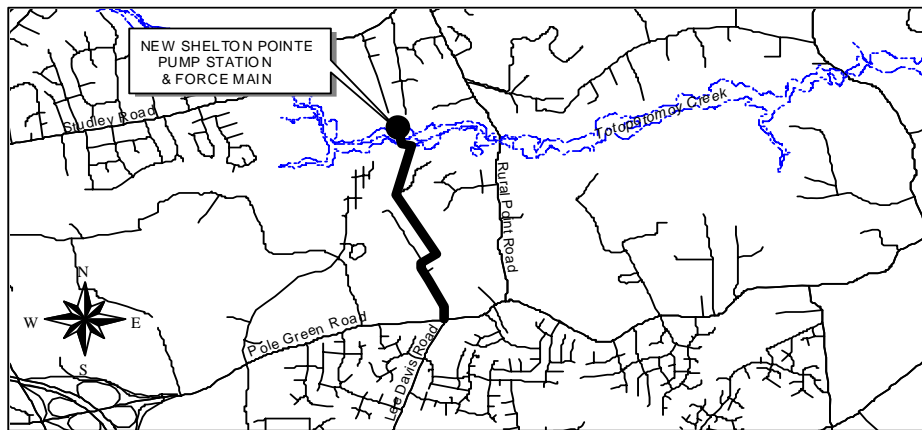
SHELTON POINTE WASTEWATER PUMP STATION AND FORCE MAIN

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Site of existing Shelton Pointe Pump Station and from the pump station to the intersection of Pole Green Road and Lee Davis Road

Description: The FY08 project consists of replacing the existing Shelton Pointe Pump Station and constructing 7,000' of 16" force main. This project will increase the capacity of the facility from 0.09 MGD to 0.8 MGD. The force main will begin at the site of the existing pump station and end in the general vicinity of the intersection of Pole Green Road and Lee-Davis Road where it will connect to the existing 24" Lee-Davis Road Pump Station Force Main. The FY11-FY12 project is for the design, easement acquisition and construction for a 30" force main from the Shelton Pointe Pump Station directly to the Totopotomoy Wastewater Treatment Plant.



Timetable: Construction (FY08); Design and easement acquisition (FY11); Construction (FY12)

PY Allocation: \$0

Operating Impact: **FY09** \$25,000 **FY10** \$25,750

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	396,770	-	-	91,080	303,490	791,340
Capacity Fees	230,230	-	-	736,920	2,455,510	3,422,660
Long Term Debt	2,980,000					2,980,000
Total Sources	\$ 3,607,000	\$ -	\$ -	\$ 828,000	\$2,759,000	\$ 7,194,000
Funding Uses						
Professional	-	-	-	414,000	-	414,000
Land	-	-	-	414,000	-	414,000
Construction	3,607,000	-	-	-	2,759,000	6,366,000
Total Uses	\$ 3,607,000	\$ -	\$ -	\$ 828,000	\$2,759,000	\$ 7,194,000

POTEET WASTEWATER LIFT STATION REPLACEMENT

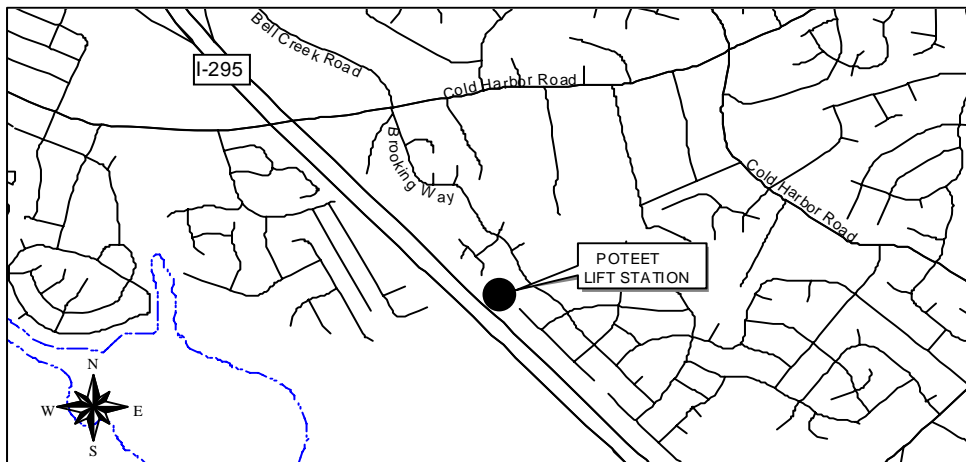
Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Poteet Lift Station in High Point Farms subdivision

Project Contact: Chief of Operations and Maintenance - (804) 365-6019

Description: This project includes design of a replacement for a pump station that was constructed in 1985 and is at the end of its service life.



Timetable: Design (FY09); Construction (FY10)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	-	325,000	-	-	325,000
Capacity Fees						
Long Term Debt	-	50,000	-	-	-	50,000
VDEQ-WQIA Grants						
Total Sources	\$ -	\$ 50,000	\$ 325,000	\$ -	\$ -	\$ 375,000
Funding Uses						
Professional	-	50,000	-	-	-	50,000
Land	-	-	-	-	-	-
Construction	-	-	325,000	-	-	325,000
Total Uses	\$ -	\$ 50,000	\$ 325,000	\$ -	\$ -	\$ 375,000

SANITARY SEWER AND FACILITY REHABILITATION

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Suburban and Courthouse Systems

Description: This project provides for minor sanitary sewer and facility rehabilitation and improvements that become necessary in order to maintain wastewater infrastructure. The next priority is Airpark collection system rehabilitation. This includes \$65K (FY08) for replacement of the grinder at the Beaverdam pump station; \$51K (FY09) for replacement of Atlee HS pumps; \$156K (FY11) for a mezzanine at the Operations Center.

Timetable: Design and construction (FY08-FY12)

PY Allocation: \$210,000 (FY07)

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	280,000	271,000	-	386,000	235,000	1,172,000
Capacity Fees						
Long Term Debt	-	-	225,000	-	-	225,000
VDEQ-WQIA Grants						
Total Sources	\$ 280,000	\$ 271,000	\$ 225,000	\$386,000	\$ 235,000	\$ 1,397,000
Funding Uses						
Professional	28,000	22,000	22,500	38,600	23,500	134,600
Land						
Construction	252,000	249,000	202,500	347,400	211,500	1,262,400
Total Uses	\$ 280,000	\$ 271,000	\$ 225,000	\$386,000	\$ 235,000	\$ 1,397,000

SANITARY SEWER EXTENSIONS AND FACILITY IMPROVEMENTS

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Suburban Area and Courthouse Systems

Description: This project provides for sanitary sewerline extensions and facility improvements necessary to provide increased service capacity to wastewater infrastructure.

Timetable: Design and construction (FY08-FY12)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees						
Capacity Fees	30,000	120,000	-	120,000	120,000	390,000
Long Term Debt	90,000	-	120,000	-	-	210,000
VDEQ-WQIA						
Grants						
Total Sources	\$ 120,000	\$ 120,000	\$ 120,000	\$120,000	\$ 120,000	\$ 600,000
Funding Uses						
Professional	12,000	12,000	12,000	12,000	12,000	60,000
Land						
Construction	108,000	108,000	108,000	108,000	108,000	540,000
Total Uses	\$ 120,000	\$ 120,000	\$ 120,000	\$120,000	\$ 120,000	\$ 600,000

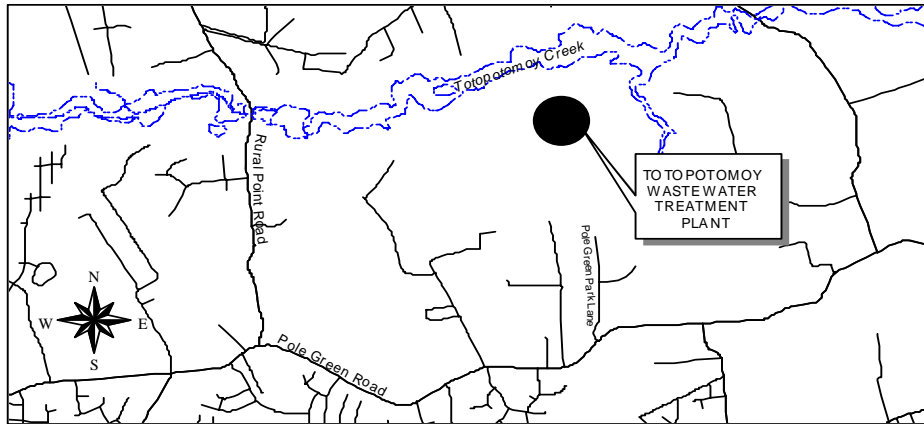
TOTOPOTOMOY WWTP EFFLUENT FILTERS

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Totopotomoy Wastewater Treatment Plant

Description: These improvements are required to meet more stringent nutrient limits mandated by the Virginia Department of Environmental Quality in response to requirements of the Chesapeake Bay program.



Timetable: Design & Construction (FY09)

PY Allocation: \$0

Operating Impact: **FY09** \$33,000 **FY10** \$33,000

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	1,340,000	-	-	-	1,340,000
Capacity Fees						
Long Term Debt	-	2,400,000	-	-	-	2,400,000
VDEQ-WQIA Grants						
Total Sources	\$ -	\$ 3,740,000	\$ -	\$ -	\$ -	\$ 3,740,000
Funding Uses						
Professional	-	340,000	-	-	-	340,000
Land						
Construction	-	3,400,000	-	-	-	3,400,000
Total Uses	\$ -	\$ 3,740,000	\$ -	\$ -	\$ -	\$ 3,740,000

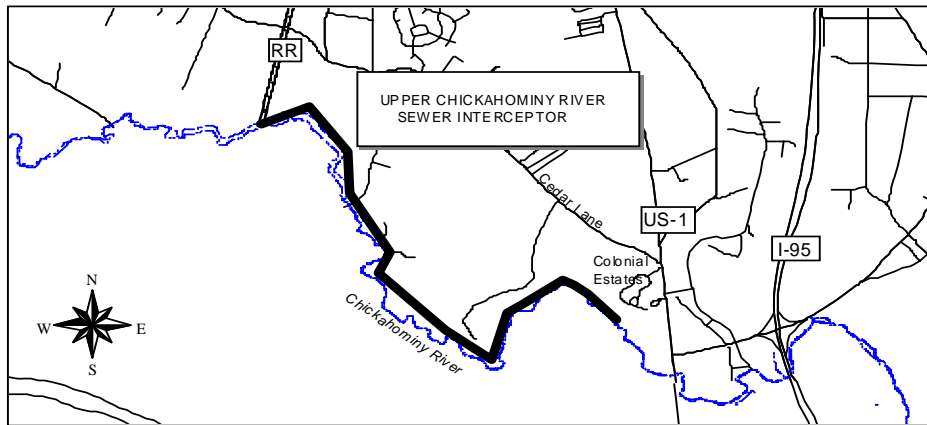
UPPER CHICKAHOMINY RIVER SANITARY SEWER INTERCEPTOR

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Along the Chickahominy River from Colonial Estates to Holly Hill Road and along the Chickahominy River from Holly Hill Road to CSX Railroad

Description: This project provides for the design and easement acquisition in FY09 of 16,100' of 30" sanitary sewer along the Chickahominy River from Colonial Estates to the west side of CSX Railroad. Construction is planned for FY11. The project will provide sanitary sewer service to the 2009-2012 development phase west of the CSX Railroad.



Timetable: Design & easement acquisition (FY09); Construction (FY11)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees						
Capacity Fees				6,592,000	-	6,592,000
Long Term Debt	-	1,559,000	-	-	-	1,559,000
VDEQ-WQIA						
Grants						
Total Sources	\$ -	\$ 1,559,000	\$ -	\$ 6,592,000	\$ -	\$ 8,151,000
Funding Uses						
Professional	-	779,500	-	-	-	779,500
Land	-	779,500	-	-	-	779,500
Construction	-	-	-	6,592,000	-	6,592,000
Total Uses	\$ -	\$ 1,559,000	\$ -	\$ 6,592,000	\$ -	\$ 8,151,000

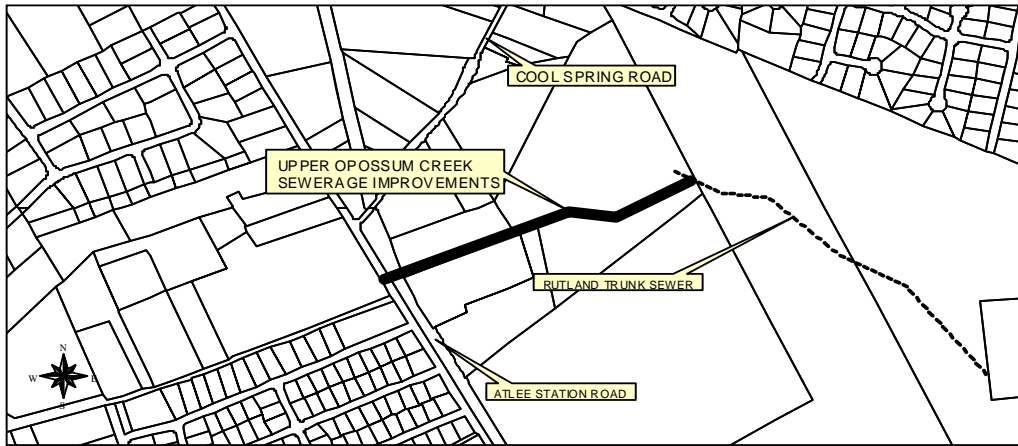
UPPER OPOSSUM CREEK SEWERAGE IMPROVEMENTS

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: From an existing force main in Atlee Station Road to the proposed Rutland Trunk Sewer

Description: This project provides for the design and easement acquisition in FY08 and construction in FY09 of 1,700' of 16" force main to connect the existing Pump Station #5 (behind Atlee High School) force main to the 36" trunk sewer that is to be constructed in conjunction with the Rutland Subdivision project. This project will provide the County with the ability to treat additional wastewater at the Totopotomoy Wastewater Treatment Plant, if it desires, once the Lower Opossum Creek Sewerage Improvements project is placed into service.



Timetable: Design and easement acquisition (FY08); Construction (FY09)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees						
Capacity Fees	44,000	-	-	-	-	44,000
Long Term Debt	30,000	245,000	-	-	-	275,000
VDEQ-WQIA Grants						
Total Sources	\$ 74,000	\$ 245,000	\$ -	\$ -	\$ -	\$ 319,000
Funding Uses						
Professional	37,000	-	-	-	-	37,000
Land	37,000	-	-	-	-	37,000
Construction	-	245,000	-	-	-	245,000
Total Uses	\$ 74,000	\$ 245,000	\$ -	\$ -	\$ -	\$ 319,000

WASTEWATER TREATMENT PLANT REHABILITATION

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Ashland, Doswell and Courthouse Wastewater Treatment Plants

Description: This project provides for the continuing funding of rehabilitating existing wastewater treatment plants (Ashland, Doswell and Courthouse). FY06 included the replacement of Ashland WWTP scraper arms/blades, scum troughs, skimmer assemblies and scum blades with in-kind equipment for two clarifier units. FY08 includes replacing Ashland WWTP fencing along perimeter of plant (\$65k) and general rehab at the DWWTP and STP; FY09 includes replacing two Ashland WWTP clarifier drive units with in-kind equipment, replacing 4 Doswell WWTP treatment unit aerators and 2 treatment unit mixers with in-kind equipment within the equalization tanks. FY10 AWWTP 3 raw influent pumps, 2 RAS pumps and 2 WAS pumps

Timetable: Design and construction (FY08-12)

PY Allocation: \$115,000

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	120,000	-	141,000	135,000	140,000	536,000
Capacity Fees						
Long Term Debt	-	295,000	-	-	-	295,000
VDEQ-WQIA Grants						
Total Sources	\$ 120,000	\$ 295,000	\$ 141,000	\$ 135,000	\$ 140,000	\$ 831,000
Funding Uses						
Professional	10,000	29,500	13,000	13,500	14,000	80,000
Land						
Construction	110,000	265,500	128,000	121,500	126,000	751,000
Total Uses	\$ 120,000	\$ 295,000	\$ 141,000	\$ 135,000	\$ 140,000	\$ 831,000

COMMUNICATION SYSTEM RADIO REPLACEMENT

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: N/A

Description: This project provides for the replacement of 6 base stations and 57 hand held radios for the department. The replacement will coincide with the implementation of the County's new Communication System.

Timetable: Radio replacement (FY10)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	-	167,000	-	-	167,000
Capacity Fee						
Long Term Debt						
Grants						
Total Sources	\$ -	\$ -	\$ 167,000	\$ -	\$ -	\$ 167,000
Funding Uses						
Professional	-	-	-	-	-	
Land	-	-	-	-	-	
Construction	-	-	-	-	-	
Equipment	-	-	167,000	-	-	167,000
Total Uses	\$ -	\$ -	\$ 167,000	\$ -	\$ -	\$ 167,000

LABORATORY INFORMATION MANAGEMENT SYSTEM

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Bruce Center - will be utilized over the WAN

Description: This project provides funding for a software package designed to connect via computers to the central laboratory located at the Operations Center at Pole Green.

Timetable: FY09

PY Allocation:

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	70,000	-	-	-	70,000
Capacity Fees	-	-	-	-	-	-
Long Term Debt	-	-	-	-	-	-
Grants	-	-	-	-	-	-
Total Sources	\$ -	\$ 70,000	\$ -	\$ -	\$ -	\$ 70,000
Funding Uses						
Professional	-	-	-	-	-	-
Land	-	-	-	-	-	-
Construction	-	70,000	-	-	-	70,000
Total Uses	\$ -	\$ 70,000	\$ -	\$ -	\$ -	\$ 70,000

METER REPLACEMENT

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: Town of Ashland

Description: This project provides for the replacement of water meters within the Town of Ashland, which are reaching the end of their useful life. The meters, which were installed in the late 1980's or early 1990's, will be replaced with Sensus/Invensys SR-II Water Meter with TRPL Registers. Also, Housing Reading will be in 1,000 gallons, an improvement from the 100 gallons which approximately 50% of the meters currently read. The Sensus/Invensys meters will be consistent Suburban Service Area standards.

Timetable: Meter replacement (FY08)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	230,000	-	-	-		230,000
Capacity Fees						
Long Term Debt						
Grants						
Total Sources	\$ 230,000	\$ -	\$ -	\$ -	\$ -	\$ 230,000
Funding Uses						
Professional	-	-	-	-	-	-
Land	-	-	-	-	-	
Construction	-	-	-	-	-	
Utility Meters	230,000	-	-	-	-	230,000
Total Uses	\$ 230,000	\$ -	\$ -	\$ -	\$ -	\$ 230,000

VEHICLE REPLACEMENT

Functional Area: **Public Utilities**

Department (s): Public Utilities

Location: N/A

Description: This project replaces the 1985 eight ton crane truck with a sixteen ton vehicle (FY09) and Maintenance Vehicle # 9301 (FY11). The estimated mileage at the beginning of the replacement year will be approximately 252,000 to 261,000.

Timetable: Purchase vehicle (FY10)

PY Allocation: \$0

Operating Impact: \$0

	FY08	FY09	FY10	FY11	FY12	Totals
Funding Sources						
User Fees	-	125,000	-	60,000		185,000
Capacity Fees						
Long Term Debt						
Grants						
Total Sources	\$ -	\$ 125,000	\$ -	\$ 60,000	\$ -	\$ 185,000
Funding Uses						
Professional	-	-	-	-	-	-
Land						
Construction						
Utility Truck	-	125,000		60,000	-	185,000
Total Uses	\$ -	\$ 125,000	\$ -	\$ 60,000	\$ -	\$ 185,000