

48" PATUXENT RAW WATER PIPELINE, PHASE 1

Project Number: BF1582E91

Washington Suburban Sanitary Commission

WWW.WSSCWATER.COM

T. HOWARD DUCKETT COMMUNITY CENTER
16601 SUPPLEE LANE
LAUREL, MD 20707
09/18/2018 7:00-8:30 PM

48" Patuxent Raw Water Pipeline

Project No. BF1582E91

Project Team

- **Tesfai Giorgis – WSSC Project Manager (Design)**
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- **Jason Flory, PE – WSSC Construction Manager**
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- **David Wilkins – WSSC Customer Advocate**
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- **Melanie Deggins – WSSC Project Outreach Manager**
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- **Project Design Consultant**
 - WRA, LLP

Project Scope/Background

Patuxent Water Filtration Plant:

- WSSC customers receive water from our 2 Water Filtration Plants
 - Patuxent Water Filtration Plant
 - Potomac Water Filtration Plant
- The project involves the installation of a 48" raw water pipeline to increase the production capacity of the Patuxent Water Filtration Plant.
- Sources of Patuxent Filtration Plant Water Supply
 - Duckett Reservoir (Patuxent River Intake)
 - Rocky Gorge Pumping Station
 - 3 Pipelines
- Increase Patuxent Water Filtration Plant capacity to a maximum of 110 Million Gallons per Day.
 - Typically will produce approximately 72 MGD

Project Scope/Background

Project Benefits:

- What is Raw Water?
 - Untreated water that comes straight from the source
- The benefits of a new raw water transmission line are:
 - Additional capacity for water treatment to supply water demands and project growth
 - Redundancy of raw water supply which results in more dependable service across the community
 - Robust infrastructure
 - Reduction of future operation/maintenance needs
 - Minimizes interruption in raw water supply

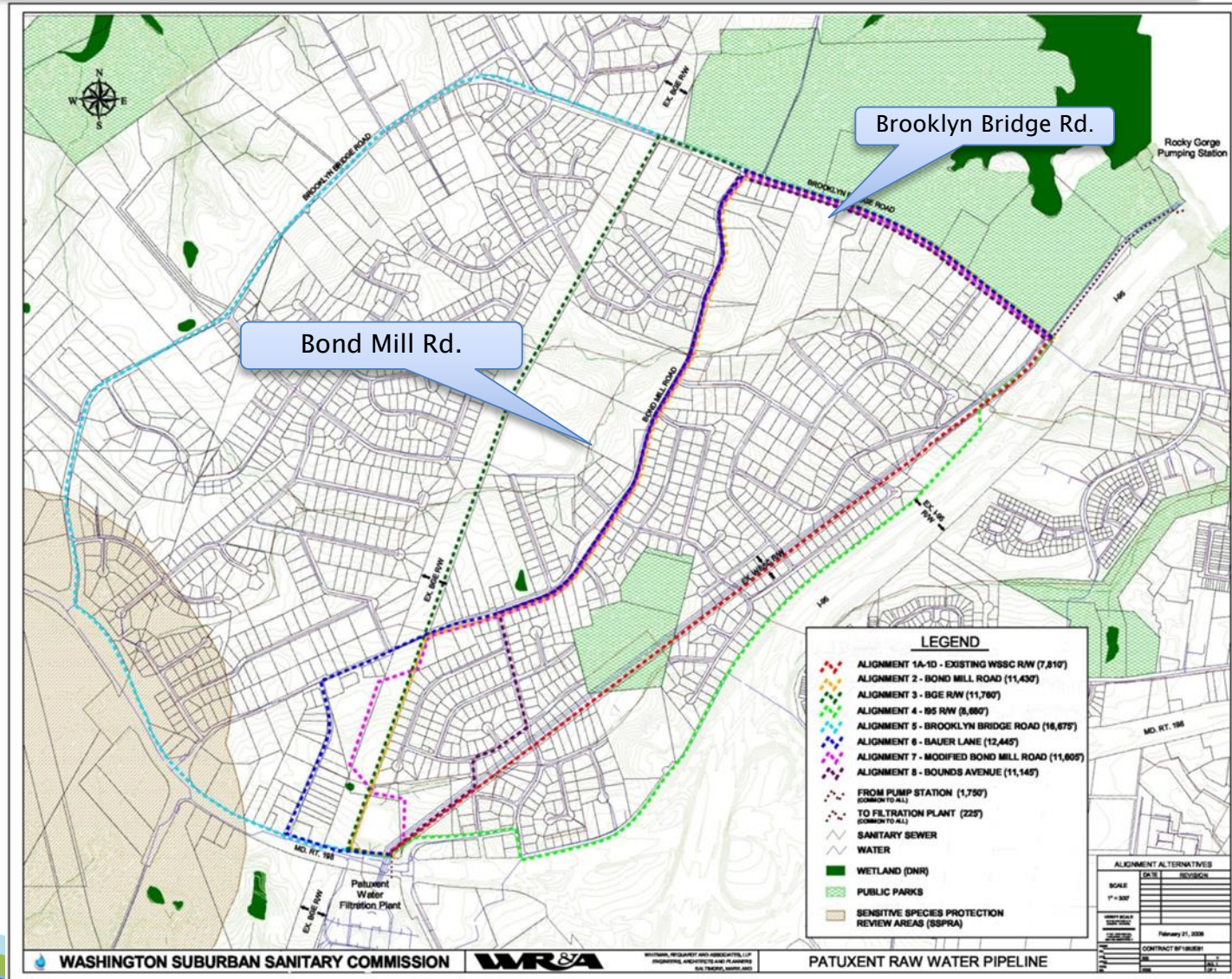
Project Scope/Background

Project History:

- 2004 - Project Selection/Design Start – 2004
 - *Project was placed on hold due to WSSC budgetary constraints*
- 2009 – Project Design Restarted
- 2011- Community Meetings and Final Alignment Selected
 - Project delays: private easement acquisition and permits
- Fall 2018 - Final Design, Phase 1 – Fall 2018
 - Approximately 2.5 miles of 48” pipe
- Spring 2019 - Advertisement / Contract Award

Project Design

Alignment Study

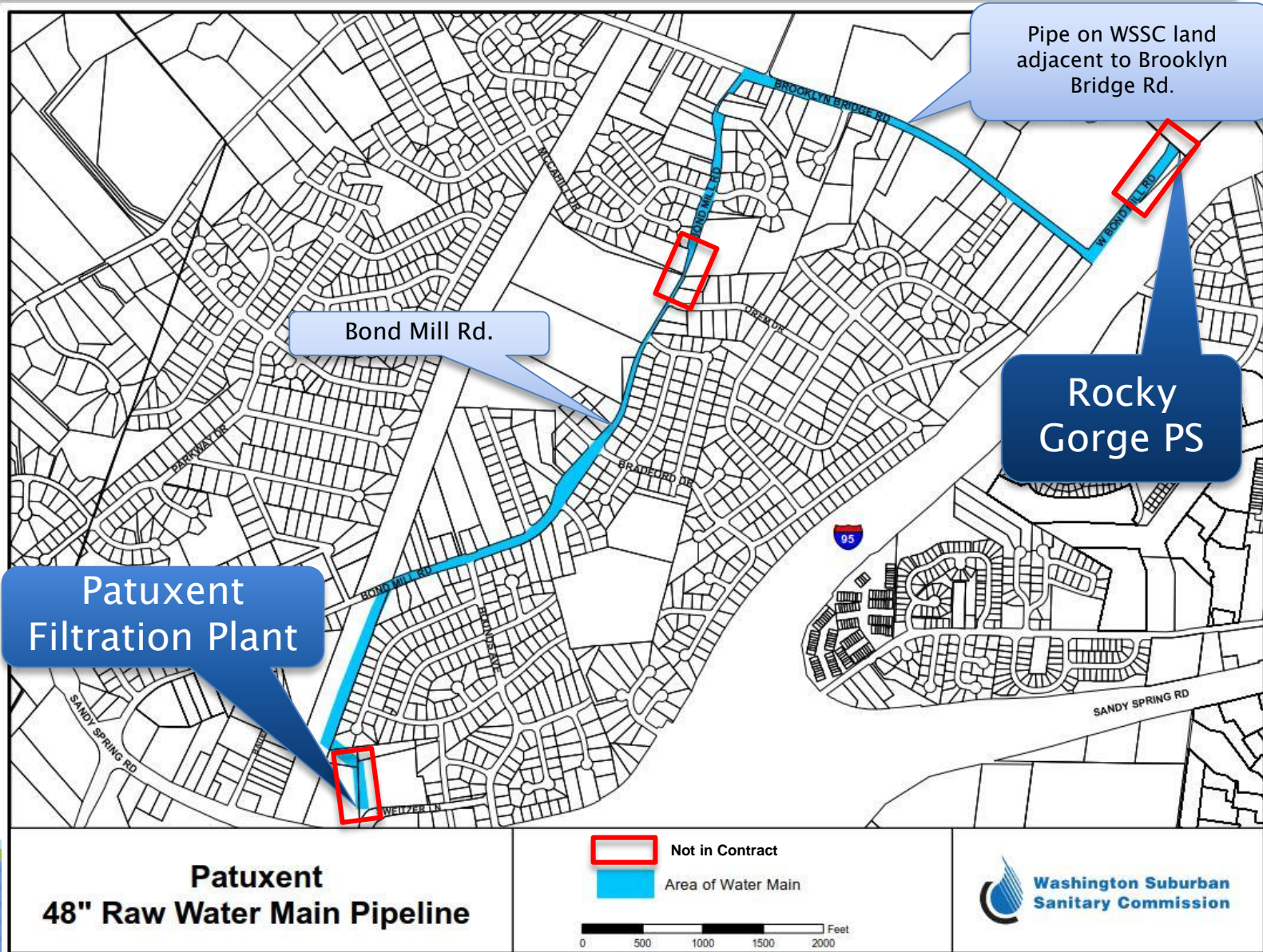


Project Design

Alignment Study:

- Alignment Study/Selection (MAP) – 2011
 - Approximately 2.5 miles of 48-inch pipeline
- WSSC began with eight (8) options
 - BGE Easement – Longitudinal crossing not allowed by BGE
 - Interstate 95 – Not permitted by State Highway Administration (SHA) due to highway proximity. Adverse impacts to private property.
- Final selected alignment path:
 - Begin at Rocky Gorge and proceed down Brooklyn Bridge Road to Bond Mill Road, on to BGE right-of-way and on to Patuxent Water Filtration Plant
 - Alignment will be off of Brooklyn Bridge Road

Project Design



Project Design

Project Phases

- Phase 1 Alignment path - MAP
 - Alignment will be off of Brooklyn Bridge Road
 - Bond Mill Road Full Width/Length Re-Pave

- Phase 2 Alignment Path – MAP
 - Culvert Crossing Design
 - Connection to Rocky Gorge Pumping Station
 - Connection to Patuxent Filtration Plant

- Phase 1 Final Design – Fall 2018
 - Advertisement / Award – Spring of 2019

Construction

Project Construction Overview:

- Approximately 2.5 miles of 48-inch large diameter raw water pipeline will be installed.
- New pipe will be installed under Bond Mill Road.
- New pipe will be installed on WSSC property adjacent to Brooklyn Bridge Road.
- Approximately .11 miles of 8-inch small diameter water pipeline will be relocated.
- Fitzpatrick Water Main Replacement Project Coordination
 - 8-inch water main replacement on Bond Mill Road

West Laurel Construction



Construction

What to expect:

- Anticipated Work Schedule: 9:00 am to 3:00 pm, Monday-Friday
- Construction Activities:
 - Surveying and Utility Mark-Outs
 - Field Reviews and Inspection
 - Open-Cut (trench method)
 - Excavation/Water Main Installation
- Heavy Construction Equipment
- Reliable water service will be maintained
- Short periods of water service interruptions can be expected:
 - Shut-down periods up to 8-hours (maximum)
 - 48-hour advanced notification will be provided prior to service shut-offs

Construction

What to expect:

- Home Access
 - WSSC will Not required access in homes to complete this project.
 - All WSSC employees and contractors will display identification at all times.
- Construction signs (with contact information) will be posted throughout the project area.
- Gas, Electric, Fiber Optics, Storm Drainage and other utilities will not be impacted.
- No parking on streets within active construction zones
 - 48-hours advanced notification will be provided.
 - 'NO PARKING' signs will be posted.
 - All roads will remain accessible at all times during construction. However, certain activities may require temporary closures and delays.

Construction

Project Construction Summary:



Construction

Example: Typical Water Main Construction and Notification Signage Pictures



Construction

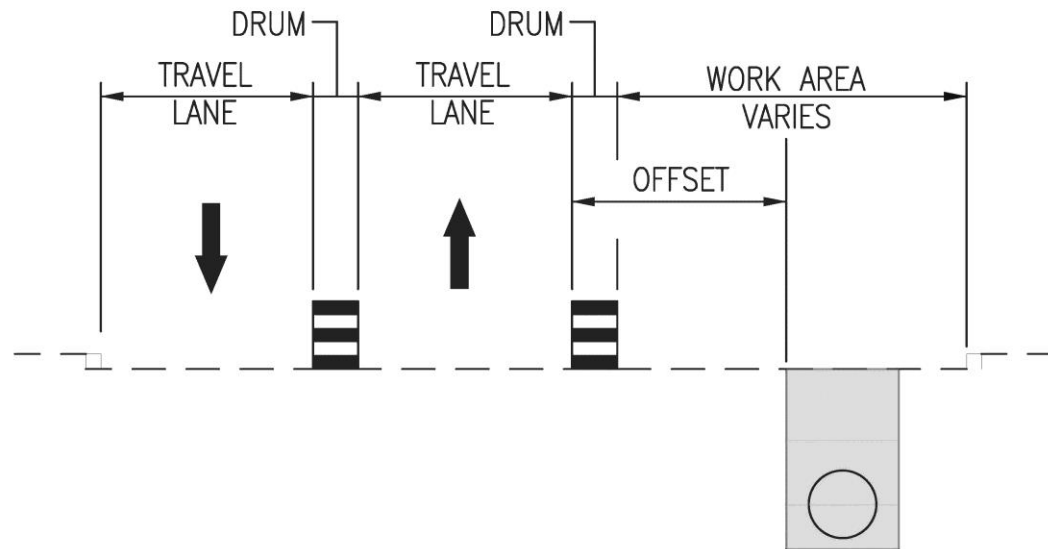
Traffic Control:

- Traffic control will be in place to minimize community impact
- Motorist should expect lane closures
- Roadway/driveway access to businesses and homes will be maintained at all times.



Construction

Traffic Control / Maintenance of Traffic

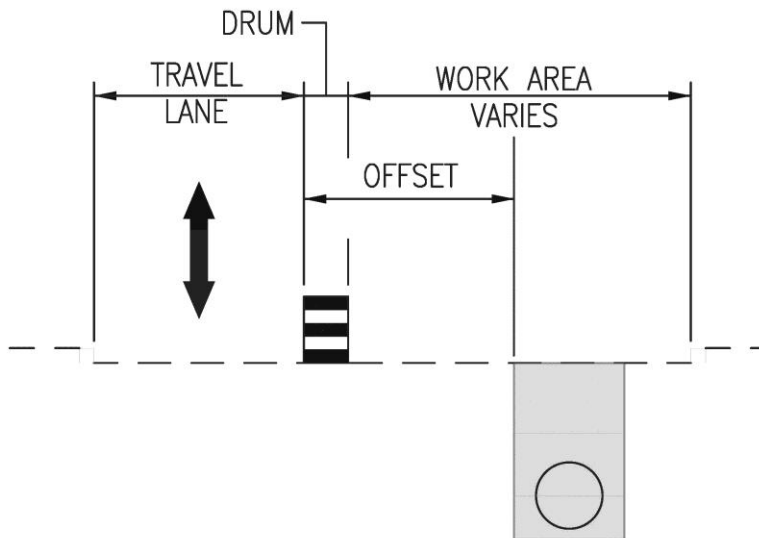


TEMPORARY TWO-LANE, TWO-WAY TRAFFIC CONFIGURATION

SCALE: N.T.S.

Construction

Traffic Control / Maintenance of Traffic



TEMPORARY ONE-LANE, TWO-WAY FLAGGING TRAFFIC CONFIGURATION

SCALE: N.T.S.

Anticipate Project Schedule

Anticipated Construction Schedule:

- Construction Start: Summer 2019
- Construction Completion: Fall 2021
 - *(Weather Permitting)*

48" Patuxent Raw Water Pipeline

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Summary:

- The proposed 48" raw water pipeline is required to provide additional supply and redundancy to WSSC's existing water treatment facility.
- WSSC is committed to minimizing service disruptions during construction.
 - Fitzpatrick Water Main Replacement Project coordination on Bond Mill Road.
- WSSC will restore all areas impacted by construction activities at the end of the project. (Repave entire width/length of Bond Mill Rd)
- WSSC's goal is to provide a reliable water system to our affected customers.

Thank You!

Questions?