Appendix A:

Interview Transcripts and Summaries

A.1
Interview Log

Summary of Project Field Visit, Project Team and External Stakeholder Interviews						
Project	Type	Team Interviewed	Representative	WSP Team	Interview Time	Interview Status
48" Patuxent Raw Water Main ((BF1582E91))	Field Visit	WSSC Construction Team	Construction Manager, Inspector	WSP Interview Team	8/6/2025	Completed
	Project Team Interviews	WSSC Project Team	Designer PM, Construction Manager, Contract Manager, Public Outreach, Material Department	WSP Interview Team	9/5/2025	Completed
		Designer Team (Planning/Design Phase)	WRA	WSP Interview Team	-	Designer did not participate interview, nor have the resource to answer project related questions in email.
		Designer Team (Design During Construction)	The Wilson T. Ballard Company	WSP Interview Team	8/21/2025	Completed
		Contractor Team	Allan Myers	WSP Interview Team	9/3/2025	Completed
	External Stakeholder Interviews	Elected Officials	Senator Jim Rosapepe	WSP Interview Team	9/2/2025	Completed
			Delegate Mary Lehman	WSP Interview Team	8/26/2025	Completed
			Council Member Tom Dernoga	WSP Interview Team	9/8/2025	Completed
			Delegate Ben Barnes	WSP Interview Team	9/17/2025	
		Community Representatives/Association	Community Member	WSP Interview Team	9/4/2025	Completed
			President of West Laurel Civil Association	WSP Interview Team	8/27/2025	Completed
			West Laurel Task Force Community Representative	WSP Interview Team	8/28/2025	Completed

A.2
Field Visit Notes

PROJECT NAME	WSSC WATER –- Independent Evaluation and Audit of Water Main Pipeline Projects
PROJECT NUMBER	Contract 67580
DATE	08/06/2025
TIME	09 :00 AM – 4:00 PM
LOCATION	In Person Field Visit
SUBJECT	Field investigation for three Project sites
CLIENT	WSSC WATER
ATTENDEES	WSP Field Team

MEETING AGENDA

The purpose of this meeting is for WSP multidisciplinary team to visit the three project sites on selected locations, and understanding site constraints, construction incidence as part of the Independent Evaluation process.

1. BF1582E91 – 48in Patuxent Raw Water Main Project

- Meet Time: 1:30PM – 4:00 PM (Depending on discussion)
- Meet Location: T. Howard Duckett Playground
- WSSC Water Team:
    - Contract Manager
    - Inspector
- Selected location for visit and Discussion
    - The WSSC Water Contract Manager and Inspector were not involved in the project from the beginning.
    - Design Change during construction
        - PCO-03,04,05 : Rock and Elevation Issue at Access Vault G, Chemical Feed Lines at Pump Station, Station 4+00 (Phase II C-1, C-21, S-1)
            - Chemical feed lines were left out at design, and WSSC Water plant requested to add it back in during construction.
        - PCO-08: 16601 Supplee Lane : Sewer House Connection Repair, Station 45+00 to 46+00 (Phase I C-7, C-22); PCO-23: Discovered SHC at Stat. 99+16 / Down time and Encasement (98+79 to 99+16, Phase I C-15), PCO-26&29: SHC at Stat. 105+00 & 103+95, Phase I C-16
            - PCO-08, the contractor was unaware of the SHC during excavation, resulting in damage that was only discovered after a resident reported a sewer backup. A conflict between the SHC and the 48" WM was found during construction, requiring redesigns of the SHC and MH to resolve issues and causing delays.
            - Similar conflicts between existing SHCs and proposed WM were identified at other locations, which requiring redesign.
        - PCO-15: Rock - Bond Mill Road (~Stat. 57+00 to 70+00): Phase1-C-9 to C-10
            - Rock elevation was found between sections during construction. Only two borings shown the rocks which were in lower elevation as Contractor found at the field.
            - B-24 the boring shown hard rock, but the rock elevation claimed by contractor appeared to be higher.
            - Contractor claimed 1000 ft of hard rock, however, WSSC Water team disagreed. WSSC Water considered only 300 ft from 66+50 to 70+00 to be considered as hard rock, while others should be considered as ridable rocks.
            - WSSC Water leadership currently under negotiation with contractor on PCO-15.
            - WSP asked if any additional soil borings were taken during construction, when rock was encountered at higher elevations. WSSC Water Contract Manager indicated additional borings were taken after Orem Drive (pass 70+00), to

determine the end of the rock, and no rock was encountered after station 70+00, however, not additional borings were taken between 57+00 to 70+00.

- WSP asked when encountering hard rock, if any design change alternatives were evaluated. WSSC Water Contract Manager indicated that because the project is a linear project, all the pipe pieces were supplied by WSSC Water. Due to the supply chain issues, WSSC Water had prefabricated all the pieces with US Pipes, and had a set lay schedule to follow. Hence, the changes of design were not an option given this reason.

- PCO-16: Rehandling of C&M Pipe in BGE ROW
  - Contractor used the site to store the preordered pipes.
- PCO-21: Repair of WHC at Stat. 89+67.5, Phase I C-13
  - A temporary water main broke
- PCO-22: Leaking Water Main / Added Dewatering (92+27 to 92+57, Phase I C-14); Soil condition is not suitable at one location at Shewood and Bond Mill, disturbed school crossing at Bond Mill Elementary School Phase I C-14
  - The leaking water valve was not the constructed 48" WM. It was a distribution main which the water valve was found leaking during the trench excavation. The location had sandy soil, which the leaking causing messy conditions. WSSC Water had utility services to come up to fix the leaking valve later the day. The location is at the intersection that was the only entrance to the elementary school. Lane closure impacts some parents who used to park along the shoulder when sending the kids to school. Also the construction had greater impact during school dismissal time, when all students were dismissed at the same time causing more traffic.
  - Soil condition was found sandy soil, which causing harder on maintaining excavated trench. Whether the water valve leaked was causing by construction or not was unknown, as the excavation trench was not overlapped with the 8" WM. The messy construction zone with impact to the school. WSSC Water inspection team had communicated with school principal on the impact. MOT was provided on site to facilitate the traffic during school hours.
- PCO 07 and PCO 09 : Receiving Vault H Concerns / 12" WM Relocation and Electrical Vault (98+79 to 99+16, Phase I C-15) – The WSSC Water Contract Manager at the field visit didn't work on this project when the PCO initiated.
- Tie-In to 30", 36" and 42", Repair of Ex. PCCP, Phase II C-19

o Shutdown valves impact? – One complain related to contractor shutoff without proper notification?

- WSSC Water Team indicated the letters were provided to the customer for all scheduled shutdown, weather permitted. There were incidents during emergencies that the shutdown was not planned, WSSC Water team was the liaison to notify the customers for the impact.

o Supply chain impact – All WM pieces, fittings were preordered to avoid supply chain impact.

- Temporary Patching related locations
    - Compaction/settlement may not be the big contribution on the temporary patching issues.
    - Cold weather issues appear worst. Hot mix used for temp patching.
    - Existing conditions on Bond Mill Road were already full of patching and uneven conditions. Some complaints were actually outside of the project work areas.
    - Temporary patching were left too long before permanent repairs.
- Overall Traffic impact on the community
    - Prolong project causing complaints
    - Multiple construction locations at one time.
- Incidents- Allan Myers Accidents 2024-11-05: Accident where equipment overturned
    - Two incidents happened on the same day. One truck forgot to lower the back of truck, and hit tele pole. Pole felt down to damage additional utility including elec, 4 houses out of power, no vehicle damaged. Then another incident happened on the same day, that a roller turned over, causing an injury to an operator.
- Incident Report about Compaction 2024-02-07- The Contractor did not follow specs or proper procedure before backfilling pipe. Also the third party Geotech inspector was not following proper testing procedures
    - Contractors used some native soil to backfill trench, up to 10%.
    - Contractor didn't store backfill material onsite, use truck to transport, keep site clean.
- Other items/incidents to discuss?

A.3
Interview With WSSC Project Team

PROJECT NAME	WSSC WATER –- Independent Evaluation and Audit of Water Main Pipeline Projects
PROJECT NUMBER	Contract 67580
DATE	09/05/2025
TIME	11:00 AM – 1:00PM
LOCATION	Team Meeting
SUBJECT	Interview with WSSC Water Project Team on **BF1582E91 48in Patuxent Raw Water Main**
CLIENT	WSSC WATER
ATTENDEES	WSP Team WSSC Water Design Manager, Construction Manager, Contract Manager, Public Outreach Specialist, Material Department Director

MEETING AGENDA

The purpose of this meeting is for the WSP multidisciplinary team to interview WSSC Water Project team as part of the Independent Evaluation process.

The meeting agenda was shown in black fonts below, and notes from meeting discussions were recorded in blue.

1. **Project background and history**

    a. The planning contract appears starting in 2004. What was the background and history of the project?

    WSSC Water: The project has been planned for over 20 years. Initially, it was managed by the facilities division, prior to the pipeline design division overseeing large transmission main projects (until approximately 2014). Documentation may indicate that the scope of work was created by facilities in 2004. The project transitioned to PDD in 2015 or 2016. Over its duration, there have been three to four project managers (design project manager), with Tesfai being the most recent to complete the project. Three others also served as project managers. In 2016, the project was restarted with an updated scope of work in collaboration with Whitman Requardt (WRA).

    b. In 2011, preliminary alignment alternatives were presented to the community and eventually selected; however, the project did not resume until 2015–2016. What factors contributed to this delay?

    WSSC Water: In 2011, through documents the design project manager inherited, WSSC Water began discussing this fourth raw water main, in addition to the three already in service. According to the documents that design project manager has seen, multiple alignment studies—also conducted by Whitman Requardt—were completed in 2011. The community participated in the selection process and expressed objections to certain alignments, particularly regarding Bond Mill. The community preferred using the BGE right-of-way (ROW) and an open field that crosses under BGE power lines. Although that seemed easy to spot and preferred by community, it was not approved by BG&E – citing their need for the ROW for power lines and only

permitting crossings at specific angles, not parallel alignments. As a result, alternative alignments were not feasible. Ultimately, WSSC Water moved forward with the current alignment following several community outreach meetings where consensus was reached. The design project manager does not have information regarding why there was a delay from 2004 to 2011 before initiating alignment studies, nor why the final design was not prepared by Whitman until 2016. Possible reasons mentioned include budgetary constraints and the lack of urgency since the filtration plant upgrade was not imminent, with completion of the plant preceding the water main work. This may explain the eventual accelerated effort to finish the project.

c. Design efforts were restarted in 2016, initially structured as two distinct phases. What was the scope of the original two-phase plan, and what led to the decision to combine them into a single contract?

WSSC Water: It was originally designed to go as one project and one contract. During the attempt to bid, there was a delay in obtaining the DPW&T permit of crossing of their culvert by the water main about mid-way of Bond Mill Road. It was a 60-inch or 72-inch culvert. According to DPW&T, there was a maintenance history associated with the culvert creating concerns with approving a water main crossing the culvert which may need to be maintained in the near future. WSSC Water considered going under the culvert and iterated through options to address the DPW&T concern. This issue caused a huge delay – they even considered going around and avoiding a culvert crossing, so there was a new task order to cross the creek and then go back to Bond Mill Road. WSSC Water believed they may not obtain the DPW&T permit, but the (former) chief engineer at that point had pressure to move forward with this project because the filtration plant upgrades were nearing completion and construction on the raw water line hadn't started. This led to the decision to phase the project – starting with the pump station to the culvert crossing while WSSC Water waited on the permit to be cleared. The project did progress this way – WRA broke it in two Phases to get a leg up on construction. But during the bidding process, there was agreement made with DPW&T for cost sharing reinforcement work on the culvert itself which addressed the DPW&T concerns. That agreement cleared the way so that they could get the DPW&T permit to cross the culvert on Bond Mill Road. As such, this ultimately led to the project reverting to a one phase project.

WSP: On plan set, it says phase 1 and phase 2.

WSSC Water: The culvert is only separating factor – north of culvert is phase 1, south is phase 2 (or vice versa).

d. Following the initial community meetings held in 2011, were there any additional community meetings conducted during the subsequent design phase?

Summary of 1d: After the initial 2011 community meetings, WSSC Water held additional outreach meetings during the design and construction phases, partnering with the local association and responding to residents' concerns about road impacts, safety features, and pavement markings. The community's main objection was disruption to Bond Mill Road, a key corridor, and skepticism about project benefits, but WSSC Water worked to accommodate requests and communicated updates through meetings. Meeting presentations were sometimes verbal, and while questions were answered live, no formal log of questions and responses was kept.

WSP: Were there community meetings after 2016? During design phase were there community meetings?

WSSC Water: As WSSC Water normally does once an alignment approved design is in progress, WSSC Water did community outreach meetings where the community was invited. One the WSSC Water Design project manager attended was well attended and included elected officials, two of which lived in the West Laurel community. The WSSC Water construction manager

presented with Design project manager and WRA. There was some heckling during meeting. This was around 2017 or 2018. That was one of many others that would follow during construction. Lately, WSSC Water had a task force formed to communicate with the community the final paving of Bond Mill Rd itself, which included, per residents' request, to have formation of new pavement marking that would include a bike lane. Due to width of road, it is actually a multi-use lane with two eleven-foot-wide travel lanes. In addition, the community wanted raised crossings, school crossing, and other things where community was heard and accommodated by WSSC Water, which was in exchange for the Bond Mill Road construction. It is a nice road with safety features and markings. It was an involved community and WSSC Water did work to meet them halfway.

WSP: What reasons did the community have for opposing this alignment of the 48-inch, other than disturbances in the roadway?

WSSC Water: The main reason is because Bond Mill Road is main corridor (collector road) for the residents of the community, to get to 198 and I-95 It's a main road for the West Laurel community. They knew this was a large main in the middle of the road and did not want traffic disruption. This is the main reason; unknown if there was another main reason for their objections.

WSP: Were the community meetings held by West Laurel Community Association (WLCA) or did WSSC Water host them?

WSSC Water: WLCA hosted a meeting on September 18, 2018, in which WSSC Water was included on the agenda. WSSC Water hosted a virtual meeting on May 20, 2021.
As the project approached critical milestones beginning in June 2024, community meetings were held regularly both within the community and at the Support Center in Laurel. Meetings on June 24, 2024, December 2, 2024, and April 16, 2025, demonstrated WSSC Water's ongoing commitment to keeping residents informed and engaged. One of these sessions was hybrid, and each included at least one elected official, key staff from DPIE and DPW&T, and members of the WSSC Water team.
One of the more pressing concerns raised during the December meeting was the presence of 115 tripping hazards along the existing sidewalk. In response, WSSC Water performed sidewalk inspections alongside community members who had initially documented and reported these hazards to DPW&T in 2021. WSSC Water repaired affected areas through coordination with DPIE and DPW&T and power-washed the sidewalks, curbs, and gutters, even in unaffected areas of Bond Mill Road between Brooklyn Bridge Road and MD Route 198.
On January 10, 2025, the West Laurel Task Force was established to develop a reasonable and actionable list of improvements related to the 48" Raw Water Main Project on Bond Mill Road. The task force met monthly.
Seasonal and historical project updates were provided on: https://www.wsscwater.com/patuxentrwp
After the interview, WSSC Water team provided additional information related to the necessary sidewalk repairs with photos.

WSP: Was the impact to community lives from the project explained to community?

WSSC Water: WSSC Water had branding that they wanted to be clear on. Community was against this project because it wouldn't benefit them – the project is moving raw water from reservoir to the treatment plant. The community saw it as for the developing other communities and not for them. WSSC Water's message was that the improvements impact everybody within the drinking water area. Adding a fourth line was for redundancy. There's a property in Laurel that could be developed, and community didn't want to help the neighboring

development of Prince George's County. WSSC Water holds meetings, virtual meetings, and hands out fliers to the communities. There were some meetings WSSC construction manager conducted with the community not listed on website back in 2022.

WSP: Are the presentations for the meetings not on the website or on eBuilder?

WSSC Water: There wasn't a presentation; it was a verbal update to community that the contractor manager provided. This was in already established civic association meeting.

WSP: Was there a log for questions and responses?

WSSC Water: No log – they gave a statement of progress, where the project was at, and what to expect. It was not in a written format. Somebody would raise their hand and WSSC Water contract manager would verbally answer the question.

e. During construction, there was a change in engineering consultants after the original designer no longer maintained an active BOA. Were there any challenges encountered as a result of this transition while providing engineering services throughout construction?

WSP: Whitman Requardt Associates (WRA) did design, and Wilson T Ballard (WTBC) served as design engineer during construction.

WSSC Water: The design scope was given to WTBC because they have a historically good record with WSSC Water design team in Pipeline Design Division. While it would've been ideal to use WRA, they didn't have a BOA contract. WSSC Water felt comfortable for WTBC to do construction engineering. WSSC Water believes they performed well considering it was not their original design project; ultimately, their BOA expired, too. Towards the end, there was no support and WSSC Water was relying on internal civil support for any RFIs and change orders.

2. **Furnished Materials and Lay schedule**

a. In this project, WSSC Water supplied the materials, but in some other projects, contractors furnished the materials. Was consideration given during the planning or design phase to allowing the contractor to supply materials for this project? What was WSSC Water 's general strategy for material supply in large diameter projects, and has it changed since then?

WSSC Water: Around 2015, the commission initiated what they call the Strategic Sourcing Team. This team was looking to procure items more efficiently that are high cost for the Commission. One of the first projects that was decided to go under the Strategic Sourcing Team was for ductile iron pipe (DIP). WSSC Water built a team across departments who went through many hours and resources to determine how they would best obtain DIP (Ductile Iron Pipe) in the future. They awarded the contract to the best option (as opposed to lowest cost), which was Core & Main and US Pipe. One of biggest items found in need was identification of lay schedules on projects. Before 2015, the Commission had not supported lay schedule projects. Starting in 2016, WSSC Water started supporting lay schedule projects with the idea that Core and Main and US Pipe could review the lay schedule in anticipation of a contract being awarded, with knowledge that the ultimate lay schedule would be on the contractor. This contract expired in 2021, and WSSC Water went back to being just the low cost bid, where idea of having assistance with lay schedule was no longer available. WSSC Water had supported large diameter projects but not to the extent of any more lay schedule projects. When Covid struck, WSSC Water could not support construction contractors with timing and ability of providing construction materials, resulting in significant number of claims against WSSC Water for delay of projects. In 2022 or 2023, WSSC Water decided projects moving forward would be contractor furnished materials. WSSC Water is considering going back to hybrid approach, so WSSC Water could in the future provide materials to contracts for projects 16-inch or smaller in diameter or for low cost items (Fire Hydrants -FHs, etc).However, WSSC Water decided it could not provide material for future contracts for large diameter pipe or lay schedule projects.

b. The project utilized a lay schedule. What was the process for selecting this method? Were any risks associated with this approach assessed based on potential site challenges? Core & Main supplied the materials; were steps in the specifications followed properly?

WSSC Water: This was the second lay schedule that was managed by WSSC Water in its entirety. They had done one by Clinton Zone previously. Because WSSC Water would order pipes from Core & Main and because of the urgency and importance from this project, WSSC Water implemented a lot of concepts that were not traditionally used. For example, WSSC Water ordered some fittings in advance to make sure they were onsite. One issue they had was that materials are typically ordered after NTP. For this project, WSSC Water identified lay schedule and items to be ordered well before NTP, because they wanted to match start of construction to receiving materials. This is unusual and different than any other project at WSSC Water. This could have created some problems in that they weren't used to doing some things that way.

Materials were furnished and delivered to site, which required additional storage that wasn't initially considered.

c. It seems that all materials were furnished and delivered to the project site, requiring additional storage. Was this need for extra storage part of the original plan, or did circumstances change to create this requirement? Was the possibility of storing all materials at one of WSSC Water's treatment facilities considered? What were the challenges?

Summary of 2c: All project materials were delivered directly to the site to avoid double handling and potential damage, rather than storing at WSSC Water facilities, which was not considered practical or standard procedure. The contractor had to lease additional storage space (BGE right-of-way) due to bulk deliveries and supply chain uncertainties from Covid-19, which complicated matching material delivery to the lay schedule. WSSC Water typically does not secure laydown areas for contractors, so finding and renting storage was the contractor's responsibility, resulting in extra costs and logistical challenges.

WSSC Water: WSSC Water understood they didn't want to handle any pieces twice. Idea was WSSC Water would ship as close to site as possible, due to the pipe and fittings being corrosion protected, and they didn't want to take risk of mishandling and damage to the product. WSSC Water had cases even with pipes delivered to the site being damaged. In other projects, they would store at Anacostia yard then have contractor deliver to site, but here that wasn't prudent or viable path to follow.

WSP: Did the contractor follow procedures properly for obtaining materials?

WSSC Water: This is an oddity. Normally, what happens when a construction contract is awarded, WSSC Water manages supply, delivery, and issuance of materials with an inventory management system. So, contractor would email the warehouse and request authorized items. Staff would call the contractor to pick up the materials. Due to changes of pipes, pipe cuts, and number of configurations of materials, the manufacturer did not create card numbers – ordering happened by the description of materials in an offline way (because there were no part numbers on materials, materials could not be input into the computer system, hence ordering happened by description in offline way). WSSC Water would receive notification from the contractor or Core and Main to order materials based on sequence of construction, and Core and Main would send this to US pipe, who would start the manufacturing and delivery process.

WSP: At some point there was a bulk delivery of material, so the contractor had to lease BGE ROW. They couldn't store to match the lay schedule; they had to lump them to store which delayed them in finding the proper material according to lay schedule.

WSSC Water: This was directly related to the supply chain crisis from Covid-19. WSSC Water was against uncertainty that if they didn't receive certain materials, they didn't know when

they would get them. WSSC Water directed Core and Main to send materials to the jobsite so the Contractor had it.

WSP: When WSSC Water received a big chunk of material, why not send it to a facility owned by WSSC Water? Why did the contractor have to lease a lot?

WSSC Water: WSSC Water does not procure or secure laydown area. There was a laydown area coincidently because it was on WSSC Water facilities. Typically, they do not do that. It is on the contractor in their bid to allocate and figure out where to put it. They tried different methods of securing space near the reservoir, which turned into availability and ease of contractor to secure unused land (renting from BGE). WSSC Water did not make that arrangement. In the utility world, BGE does not reply to WSSC Water. Project went overtime, and so did leasing and therefore the costs was more than anticipated.

3. **Geotechnical Challenges**
   - **Rock issues**

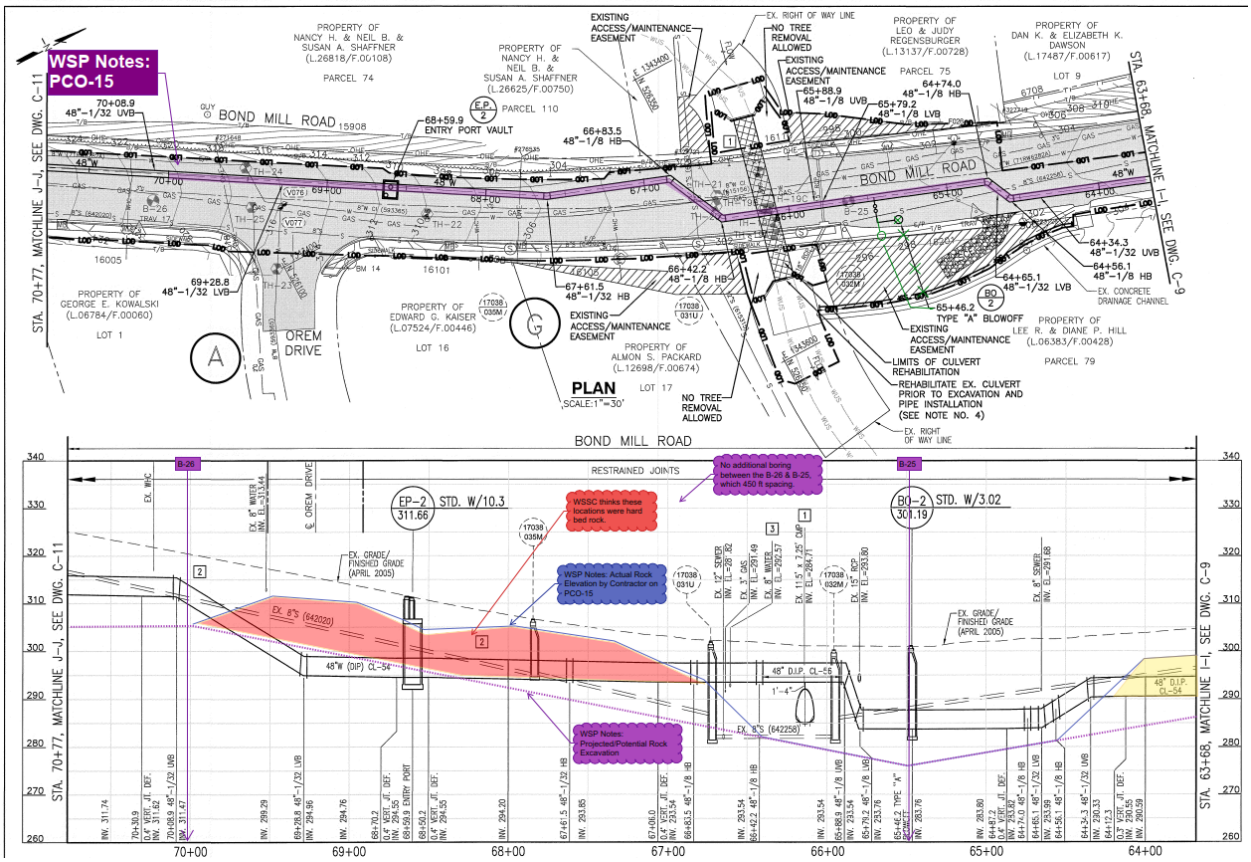
The SOW for design phase indicated up to 80 borings allow, with max avg depth of 20-ft, with intervals of approximate 300 ft, and at depth at least 3ft below proposed WM inverts. It seems that the general spacing is approximately 300 feet between borings, except for B-25 and B-26, which were spaced 450 feet apart.

a. What is WSSC Water 's process for reviewing the geotechnical information, and was there any discussion during the design phase to evaluate whether the boring spacing was adequate, after receiving the boring results and updated design?

WSSC Water: This was initiated by the former chief engineer when visited Rocky Gorge, and he saw outcroppings as he went uphill of the pumping station. He questioned why there weren't additional boring in that area. Because of that, WSSC Water added a new task order for the consultant to engage with a subconsultant to go out and do additional borings. (Former) chief engineer concern was if you stand there near rocks where the alignment is, you can see I-95 across. If they were to discover huge rocks, then excavation would impact sound, vibration towards the highway. Because of these concerns, decision was made to add borings and to add a refraction survey to look at the rock formation in area. What they discovered was shale, aged rock, which was easily broken, which isn't an issue. Issue came during construction when they discovered rock.

If you look at boring logs on the main route, they were performed way early in the design. Design was completed in 2019 and the borings were done in 2014. Any variation that may have occurred regarding the alignment during design and the culvert issue with DPIE may have caused overlooking potential issues with boring logs at that location.
WSP: The original alignment was going to be on the other side of road, which is why borings from 2014 were not at same location of the final alignment.

b. Was Rock identified as potential risk during design phase?



WSSC Water: The borings were set and done back in 2014. By the time that WSSC Water got into design, boring logs were in the background as completed and done, but no one had discussed something that should be investigated more. The former chief engineer went to the pumping station site, saw rock, and further investigation was done in that area later, and in hindsight, the whole site should have been questioned.

c. Contractor indicated that WSSC Water didn't provide the soil boring report until later requested. Geotechnical information was requested in the RFI on 2023/4/10. Were the reports intended to be shared with the Contractor during bid phase? It appears the information was submitted by consultant in the RTA package.

WSSC Water: This has been discussed in subsequent WSSC Water meetings. For whatever reason, Geotech boring logs made it into the bid documents, but the report did not. Not sure why it wasn't. Intent was to include it in the bid package.

WSP: There were notes of additional borings. Did contractors have access to that?

WSSC Water: Yes, logs for additional borings did make it into the bid documents.

d. When on June 30, 2022 Allen Myers notified the Commission that they encountered rock, what was WSSC Water's response?

Summary of 3d: WSSC Water communicated delays to the community through meetings, explaining the contractor's demobilization for a higher-priority job and assuring residents the project would continue, though completion dates were missed due to ongoing rock issues. WSSC Water agreed to the demobilization and the contractor was allowed to demobilize, and they left the site fully backfilled and cleared of equipment.

WSSC Water: Allen Myers (AM) was the contractor. WSSC Water began discussions with AM on how to approach the issue of rock when the issue was first encountered. Given the rock was in a community and there was a culvert nearby, blasting was taken off table. After hitting it with a hoe ram, the contractor started drilling to make it easier to rip the rock as opposed to hitting it with a hammer. WSSC Water discussed options with AM. AM brought in a subcontractor to do drilling about a foot apart to the left and right, and AM would excavate so rock was in smaller pieces. When excavating rock, if you are doing 10' trench it can quickly become 15' trench because of how the rock breaks apart.

WSP: What was the communication with community members once rock was identified, to make them aware of delays and disruption?

WSSC Water: There was a community meeting that WSSC Water had. There were two projects in that same area (a small diameter project along with the raw water). WSSC Water was in communication with WLCA president. WLCA president reached out with areas of concern, which were not related to raw water pipe. WSSC Water said they would update community on status of these two projects, and they did have a community meeting, where the contract manager informed community there was rock. At this point, the contractor had demobilized. The community asked if the project would be finished because they noticed AM had demobilized; the community was concerned WSSC Water would abandon the site. The contract manager assured the community that AM had an emergency and would finish the project. The contract manager also explained rock is the reason the crew had been at the same place for longer periods of time. He provided a completion date, which ultimately wasn't met. WSSC Water conducted more meetings after this meeting, and provided additional updates regarding the anticipated completion dates. However, because the project had continual issues with rock along the proposed alignment, the updated completion dates were not met and kept getting pushed back.

WSP: What was the emergency the contractor left for?

WSSC Water: They demobilized to attend a higher priority in Montgomery County. WSSC Water didn't know what the emergency was.

WSP: Could you provide an answer to the community to answer the question on why contractor can demobilize? Contractually, how could they demobilize?

WSSC Water: WSSC Water hired the contractor and the contractor has a start and end date. If the contractor doesn't meet end date, WSSC Water can obtain liquidated damages. Additionally, they demobilized right before they got into the real vein of rock that took a year to remove. They asked, and WSSC Water agreed. Once AM returned, they hit the rock and didn't get much done for a year due to rock.

WSP: Before they demobilized, was there communication on how they would leave site? Materials, equipment, etc.? Condition of site?

WSSC Water: They took all equipment with them; they completely demobilized. They backfilled completely. There were some steel plates on the jobsite; however they were not at the location they were working on; the steel plates were at the equipment yard. Pipe, fittings, etc. were in the laydown yard. At the location where they were working, they completely backfilled and there were no steel plates out on the road.

e. What alternatives were presented/ discussed to mitigate the rock issue and evaluate the impact to the schedule?

f. What is/was WSSC Water's process for validating Contractor's claim of rock presence higher than shown in the boring logs?

Summary of 3f: WSSC Water reviewed the contractor's claim of unexpected rock by comparing field notes and boring logs, generally agreeing on some of the locations and extent of hard rock encountered. Alternatives like micro tunneling or pipe relocation were dismissed due to high cost, schedule impacts, and supply chain delays, so the project continued with the original lay schedule despite excavation challenges. While WSSC Water provided general updates to the community, they did not specifically communicate the seriousness of the rock issue due to many unknowns at the time.

WSSC Water: Based on boring logs 22, 23, 24, or 25, it indicates blow counts get significant and they can't penetrate; it is known they are getting to hard stuff. Connecting Boring log 22 to 25 has this information. Contractor did exhibit where they noted where they anticipated hitting it, and they have notes in field where AM actually encountered it.. In terms of validation process, WSSC Water is in discussions negotiating PCO 15.

WSP: For drills on road surface to loosen rock: how often was it on asphalt and how long were they there (loosen and excavate same day, or loosen in advance)? Was relocating pipe an alternative? Was micro tunneling discussed as an alternative?

WSSC Water: For alternatives, micro tunnelling's cost took it off the table. Timing and delays as well took it off the table. This project was a lay schedule, so piece A connects to B to C, etc., and so any relocations would have tremendously delayed project. This was during Covid supply chain issues: for reference, at this time on other projects when additional materials were needed,, WSSC Water was hearing 2+ year delays to get the materials. As such, any changes to lay schedule would be huge. In hindsight, they can't say if changes to alignment would have taken longer than excavating rock. Either way, this is a huge cost to WSSC Water.

WSP: Once construction got near Sherwood Ave and Bond Mill Road (near Bond Mill elementary school) soil got sandy and contractor had issues with keeping the trench open. At any point in Geotech investigations, has this been brought up or identified as a concern during design or early in construction phases? In this school area, residents hoped construction would be in summer.

WSSC Water: This piggybacks on lay schedule. WSSC Water decided not to introduce any breaks in the lay schedule (WSSC Water Construction Manager had argued for adding breaks such that the pipe could be installed without a strict lay schedule, but it would've been at additional cost to WSSC Water). Allen Myers started on the south end of the site and procured their own (at their own cost) special fittings where they can connect pipes. In original schedule, AM was planning to hit completion date before hitting rock, and then given the delays with rock the sentiment of the project became we need to get pipe in service as soon as possible to get additional water to treatment plant that was renovated. WSSC Water planned to reduce capacity to their other treatment plant due to another construction, so it was important this 48-inch line was constructed.

WSP: Since the project already had a delay and there was need to complete as soon as possible, did WSSC Water consider adding fittings to increase flexibility and make construction go faster?

WSSC Water: Not really. They were hitting our own utilities and existing utilities. There was a complexity of things going on. It was a lay schedule, so you have to make it perfect and adding breaks increases complexity for having things line up perfectly.

WSP: How was the hardness of the rock tested to confirm contractor's claim? Were people relying on the boring logs because of blow counts? Was the rock that was found higher than indicated by the boring logs tested for hardness with a Schmidt hammer (or other tool)?

WSSC Water: WSSC Water does not recall rock being tested. Visually, AM had a 300 series excavator and WSSC Water could see them working on construction site with efforts indicating that this was hard rock. The contractor would hammer rock for minutes to hours and rock would not budge. It would break but it takes a long time.

WSP: Were there efforts to share with the community the seriousness of the issue? Or make them understand the issue? Site visits, hand outs, etc. to explain the difficult situation?

WSSC Water: It was mainly updated in the beginning, but not a particular effort to explain the hardness of rock, because there were so many unknown factors at that time (e,g, how long it would take to move past the rock).

4. **Permits Management:**

    a. It appears that a new pavement and striping plan was developed during construction as part of the DPIE permit process. Were these modifications initiated at DPIE's request? Additionally, a recent redline plan was issued; were these changes requested by the community and subsequently approved by DPIE?

[All WSSC Water team had to leave the interview by now (12:30) except for the Contract Manager and Communication Specialist. Question 4a was asked via email to WSSC Water.]
WSSC Water: Two raised crosswalks were installed near the elementary school, per the request of the community via the West Laurel Task Force. There was a field meeting with DPW&T to coordinate the location and provide on-site approval. WSSC Water used their capital budget to install the crosswalks, and DPW&T provided signage. No DPIE approval was needed.

5. **Utility Conflicts:**
    a. Per 01110 Contractor was responsible for test pit stakeout to provide actual utility locations to the engineer, did the contractor provide test pit stakeout for WSSC Water review?

WSSC Water: The contractor did do stake outs. In beginning, they would stake out the whole area; however, the contract manager was not involved at the beginning so he doesn't have info on when they did it. The whole area was staked out.

WSP: Was the stake out for survey or data on where utilities are located?

WSSC Water: Stakeouts were for surveying. Based on DIRs, they did test pitting for utility crossings at the jobsite. Issue stems from some of the SHC that they hit was that some didn't show on drawing and others were not supposed to be in direct conflict with the pipeline. There was one that was shown on the plans that had 3' vertical clearance but it turned out in the field it was in direct conflict. Others weren't shown in correct location.

- SHC: There was damage to a SHC as well as other conflicts with SHCs. Was the plumbing card information provided to the Contractor at the bid-phase or beginning of the construction?

WSSC Water: In general, plumbing cards are provided to contractor at pre-bid. If contractor would have asked, it would have been provided to them as well.

- Gas line: There was a gas main that was not located during design phase, which caused redesign, is there any background related to this conflict?
    a. Why was relocating a 3in gas line not a cheaper option, did WSSC Water make a value-engineering assessment?

WSSC Water: The question was not answered during interview as the design project manager was no longer present on the call. After the interview, he provided the audit team with supplementary information regarding the value engineering assessment for the relocation of the 3-inch gas main. Documentation indicated that WSSC Water received the proposed cost estimate for the gas main relocation from BGE. The estimated cost for relocating the gas main was substantially higher—nearly seven times—than the adjustment to the water main elevation as reflected in change order CO#1. Therefore, the decision was made to proceed with the water main adjustment.

6. **Temporary Patching to Permanent Patching timeline:** Community made complaints about the temporary patching

- What was the originally anticipated timeline for converting to permanent patching in this project? The contractor's submitted baseline schedule indicated that permanent patching was planned for the end of the project, following pressure testing of the entire water main system. Did WSSC Water review this schedule and provide any feedback or comments? Additionally, did WSSC Water request that the contractor performs permanent pavement as an ongoing activity throughout the project duration, particularly in response to complaints from neighbors or customers?

Summary of 6: Permanent patching was planned for the end of the project after pressure testing the entire water main, as early permanent pavement could complicate leak detection and risk costly rework if tests failed. WSSC Water reviewed and accepted the contractor's baseline schedule which allowed pavement at project completion, with temporary pavement sometimes exceeding the spec's maximum duration. WSSC Water's Geotech team performed periodic spot checks on compaction, but inspection reports are managed by a separate division and may not be readily available.

WSSC Water: Permanent patching was planned to be done at completion because of constraints they had (no breaks between the over 12,000 ft of pipe). Pipe was to be pressure tested all at once. If they were to permanent patch prior to main line being tested, it could fail and the contractor would have to repave. Normally for WSSC Water, that is means and methods of contractors. Some contractors do permanent pavement as they install pipeline, which is a decision they make. If there was to be a failed pressure test they would have to re-excavate. Most contractors refrain because permanent pavement makes it hard to find a leak. That's why permanent pavement wasn't put. It could also cause delays because it would take them longer to identify issues – leaks could bubble up somewhere else. Permanent paving was planned to be done at the end of the project.

WSP: In the WSSC Water spec, temporary pavement maximum time is 60 days. If it was known this would be paved at the end of the project, was anything done to mitigate the fact that temporary pavement may not last the entire time.

WSSC Water: Not that the contract manager is aware.

WSP: Given the magnitude of project, the permanent pavement wouldn't be feasible within 7 days. Was there a waiver given to contractor to not pave within spec requirement? It was means and methods on the contractor to decide to permanently pave.

WSSC Water: There is no waiver given to contractor.

WSP: It was allowed that they perform permanent pavement at end?

WSSC Water: Yes, it is. The schedule AM submitted at the beginning indicated this. It was what they followed during the project.

WSP: Did WSSC Water have a separate compaction inspector, besides the daily inspector the contractor paid?

WSSC Water: Yes, WSSC Water has their own Geotech who comes to job site periodically and do spot checks on the third party Geotech. Believes this was since the beginning of project. The contract Manager cannot speak to the period of time before he joined project, but he would be surprised if WSSC Water's Geotech wasn't going to jobsite periodically.

WSP: Does WSSC Water have those reports?

WSSC Water: The Geotech team reports to a different division. Unsure if they have inspection report documents.

7. **Schedule**

- Does WSSC Water have a project control team reviewing project baseline and schedule updates? Any comments on schedule transmittals from reviewers? Has WSSC Water reviewed any of monthly progress updated of CPM schedule?

WSSC Water: The contract manager would normally review the schedules; there is no team that has baseline schedules submitted to them. Contract managers had changed during the project period. Normally there is no response to the CPM schedule.

WSP: Who owns float in schedule for WSSC Water? The contractor had 5 months of float in the schedule and they demobilized for a period of time. Did they give WSSC Water credit for the time they were demobilized? Did WSSC Water charge them liquid damages?

WSSC Water: Change order currently being negotiated by leadership. Liquidated damages may or may not be assessed, but WSSC Water cannot make further comments since it's being looked at.

8. **Lessons Learned:** What lessons have been learned from this project, and what would you like to suggest for improvements for future projects? Process, contract, communication, specification, plan etc.

WSSC Water: The boring log information regarding spacings has been a learning lesson. Giving more attention to the geotechnical data is something that could mitigate this situation moving forward.

WSP: What is chain of command in WSSC Water, if an issue is identified at the site by the inspector?

WSSC Water: The inspector is onsite daily. Inspector would file a DIR. The DIR will go to contract manager. WSSC Water construction manager, also has access to DIR along with the division manager.

A.4

Interview With Design Engineer (Construction Phase)

PROJECT NAME	WSSC WATER –- Independent Evaluation and Audit of Water Main Pipeline Projects
PROJECT NUMBER	Contract 67580
DATE	08/21/2025
TIME	8 :15 AM – 9:45 AM
LOCATION	Team Meeting
SUBJECT	Interview with The Wilson T. Ballard Company Team WSSC Water BF1582E91 48" Patuxent Raw WM
CLIENT	WSSC WATER
ATTENDEES	WSP Team The Wilson T. Ballard Company Team (WTBC)

MEETING AGENDA

The purpose of this meeting is for WSP multidisciplinary team to interview the WTBC Team as part of the Independent Evaluation process.

PURPOSE OF THE PROJECT

Three recent/on-going projects: BF1582E91 48" Patuxent Raw WM, BT6289A17 Allentown Road WM, BT6824A19 South Osbourne Road WM, have raised concerns related to community complaints due to the extended project duration and regarding the condition of temporary patches. WSP is conducting a comprehensive, independent evaluation and audit of the planning, design, and construction of these three projects to identify root causes of delays, site conditions challenges, and impacts the community. The review is to include inception to through construction including any concerns with inspections, and coordination with local and state agencies.

The meeting agenda was shown in black fonts below, and notes from meeting discussions were recorded in blue.

BF1582E91 48" PATUXENT RAW WM

- What role did your team play in supporting RFIs, submittals, and permitting during construction in this project?

  WTBC was brought in after construction began because the original design team's contract had ended, around late 2020 or early 2021.

- What role did your team play in resolving the sewer house connection repair at Supplee Lane and the leaking water main at Station 92+27? What about the other sewer house connection conflicts?

  WTBC responded to the issues by developing several concepts to address them. These concepts were discussed with the project manager, taking into account the provided field conditions, and subsequently, red lines were established to resolve the problem while accommodating as many constraints as possible.

- What role did your team play in the Rock issue encountered during construction?

WTB pointed the project manager, construction manager, and contractor to the specifications provided to address questions related to the rock. The original designer and support staff are no longer with WTBC, so specific details about the team's role concerning the rock cannot be confirmed. WTBC does not have a record of PCO 15, which pertains to the rock.

- Did your team support respond to community concerns about traffic control and patching near Bond Mill Elementary School?

  WTBC does not see reference to this in their records.

OVERALL

- For Design Services During Construction, what's the level of involvement from the Engineering Team?
  - Some problems that the contractor sent to WSSC Water were resolved in house and WTBC was not involved. It depended on the project manager at WSSC Water: some would get an RFI and immediately send it to WTBC, while others would resolve it themselves.
- What tools or platforms (e.g., e-Builder, e-plan) did your team use to manage design documentation and construction support, and how effective were they?
  - E-builder/Trimble, ProjectDox were used
- Looking back, are there any specific design decisions you would reconsider or improve based on how construction unfolded?
- Any lesson learned or suggestions that the WTBC may provide based on your experience with these projects?
  - Involve permitting agencies often and frequently. They have requirements sometimes that contradict with the utility design, so discussions would aid in resolving issues.
  - For larger diameter pipe projects, consider having more regular touch in meetings to monitor the progress and issues at the design process.
  - If WSSC Water staffs are aware of new releases of standards or specifications, communicate to pass along this information.
  - Involve and coordinate with agencies, owners, and stakeholders at early design stages to inform them what the design is; with proper communication, they are more understanding and amenable to WSSC Water's requirements and constraints.
  - Currently, the contractor is paid by how much pipe is installed, and so it's in their best interest to install as much pipe as they can and minimize the time to temporary patch. Recommend WSSC Water does not pay the contractor until the temporary patch is accepted, to avoid issues of temporary patch not being to standards.
  - The completion date estimates are based on historical production rates, but more can be done to recognize flexibility needed for long projects like this. Breaking projects into phasing can offer some of this flexibility. Revise the completion time to account for the break points or phasing of construction.

A.5
Interview With Contractor

PROJECT NAME	WSSC WATER –- Independent Evaluation and Audit of Water Main Pipeline Projects
PROJECT NUMBER	Contract 67580
DATE	09/03/2025
TIME	10 :00 AM – 11:00 AM
LOCATION	Team Meeting
SUBJECT	Interview with Contractor Team on BF1582E91 48in Patuxent Raw Water Main
CLIENT	WSSC WATER
ATTENDEES	WSP Team Allen Myers, Construction Manager

MEETING AGENDA

The purpose of this meeting is for the WSP multidisciplinary team to interview WSSC Water Project team as part of the Independent Evaluation process.

The meeting agenda was shown in black fonts below, and notes from meeting discussions were recorded in blue.

Allen Myers construction manager was present as representative of Allen Myers. Originally there were two items regarding rock and schedule to be discussed as part of the interview. Since these two items were associated with ongoing change order negotiations with WSSC Water, Allen Myers is hesitant to give detailed comments to avoid compromising the ongoing negotiation or adding confusion. Allen Myers (AM)spoke in general terms about these items.

1. Did the owner supplied the materials? How was it coordinated with the owner/Contractor (release, delivery, receival)?
    a. BGE lease, did the owner evaluate the option of storing all materials in one of their treatment facilities? Were there any discussions in this regard or did AM lease BGE's property to store the materials. Why was the lease not extended, instead of hauling the materials, for which apparently AM is requesting compensation?

Summary of 1: WSSC Water provided 90% of materials via Core and Main. AM leased BGE ROW because the staging area provided was on one end of the long, linear project. The BGE staging area was not meant to hold large amounts of materials; however, WSSC Water purchased and had a large number of pipes sent to the staging area, to AM's protest, likely due to uncertainty of price (during supply chain concern) in near future.

Allen Myers (AM):

- WSSC Water provided 90% of materials for the project. The contract was well defined regarding what was in WSSC Water's court vs AM's court. WSSC Water supplied 48-inch pipe and its associated parts, which came from Core & Main. WSSC Water set up the purchase order with Core & Main, and AM would coordinate the delivery schedule, coordinate delivery, and offload the materials once they were there. For materials from WSSC's warehouse, per the specifications, Allen Myer was required to provide a 72 hour notice to place a pickup order for materials supplied by WSSC, and the WSSC warehouse had windows of time (8am-4pm on weekdays) for Allen Myers to pick up the materials and deliver them to the project site.

- At one point, Core & Main had fabricated some of the pipe and wanted it out of their facility. AM wasn't privy to agreements between WSSC Water and Core & Main; AM just provided the delivery schedule and coordinated delivery to the job site.
- For WSSC Water warehouse materials, there was a process online to flag material to be pulled from the stockpile and coordinate pickup/delivery. Despite AM's 72-hour notice, a lot of materials weren't ready on hand. As such, AM would go to the warehouse at 11am and the order would only be partially ready. AM would start loading the materials as WSSC Water brought them out, but then at 12pm WSSC Water would take a lunch break, and it would push the material pickup back. This was an issue earlier on and WSSC Water and AM worked through it.

WSP: Why did AM lease the BGE ROW?

AM:

- The contract provided a staging area near the ball fields This was used to house Allen Myers equipment and supplies – large material would be dropped there in chunks. This staging area was at one end of the linear project site.
- Because of travel time between one end of the site to the staging area, AM decided to lease a spot with BGE to be a secondary contractor staging area. AM entered this agreement with BGE and shared this agreement documentation with WSSC Water. The BGE area was rented on a month-to-month basis. They did not renew the lease a few months before substantial completion.
- This BGE area was never intended to house a significant number of permanent materials (just materials, trench boxes, etc.). The intent for pipe delivery was to have it delivered in the ROW and string it out along the pipeline.
    - However, WSSC Water coordinated with Core & Main to purchase and deliver a large amount of pipe, to AM's protest. Core & Main was threatening to increase the price of their pipe. Reading between lines, WSSC Water was under pressure to purchase and store this pipe or have the pipe cost increase.
    - It took a couple of extra days to unload the pipe and place it in the BGE staging yard. Offloading material was a contractual obligation for AM. AM filed a change notice with WSSC Water to pursue additional costs due to the rehandling involved and for utilizing the BGE staging yard. The rehandling of material was due to the bulk pipe delivery not stored in the lay schedule order.
    - Towards the end, even though AM didn't need BGE staging yard, AM couldn't void their agreement with BGE because they were still holding pipe there. For this reason, WSSC Water ended up paying for part of the stage yard cost.

2. Permits Management:
    a. Except that E&S permit was issued directly to AM, other permits (MDE Water Construction permit, MD State Programmatic General Permit 5, PG County Special Utility Permit, Tree Care Maintenance Authorization). Did WSSC Water provide these permits to AM? In case of expiration how was the permit extended, or was a new permit required?

AM: There were issues that didn't ultimately impact anything. WSSC Water is self-governed with MDE, which is a nice agreement they have in place for the E&S permit. WSSC Water does their own (E&S) permits and inspections. The other permits they provided in bidding documents, which AM would keep track of and notify of renewals needed as a courtesy. AM doesn't believe there was ever a lapse in permits.

3. Questions: Rock issues
    a. When Allen Myers notified the Commission that they encountered rock on June 30, 2022, what was WSSC Water's response?
    b. Did AM keep their crews onsite to continue digging the rock? How many crews were onsite at the time?

c. Was the excavation operation actually through bedrock or rock fragments as pictures in DIRs suggest?
d. How AM calculated the height of the rock in the trench?
e. How was the hardness of rock tested to verify it was in fact genesis
f. How AM reach the conclusion that projected rock's elev. based on Boring Logs would change linearly?
g. What alternatives were presented/ discussed with the Commission to mitigate the rock issue?

WSP: WSP is interested in obtaining a general sense of how the rock situation happened, and whatever AM is comfortable sharing.

AM: This was overwhelmingly the largest issue on the job, affecting cost and schedule. WSSC Water provided borings and details of the rock, and what AM found was a significant amount of more rock – at both earlier and shallower than anticipated. At some places, the rock was only 6 inches below pavement. The report from WSSC Water indicated that rock was largely rippable, which a typical excavator should be able to handle. What the material ended up being was, in general, largely bedrock. AM would be able to punch holes 6 inches deep in half a day. The rock was sparking. Ripper tees were not working, so hoe rams were being used. AM researched other methods and a lot of them were precluded, such as blasting, which wasn't an option due to jurisdictional regulations. On average, AM was installing 40-60' of pipe per day at average depth, but after encountering rock it became 5' per month.

4. Utility Conflicts: What challenges encountered related to utilities?
   a. Per 01110 AM was responsible for test pit stakeout to provide actual utility locations to the engineer; has this happened?
      - SHC
      - Gas line
      - Utility pole bracings.

Summary of 4: AM field-located utilities based on plans and visible evidence, coordinated with Miss Utility and WSSC Water, and addressed unexpected findings (including missing sewer connections and buried cables) through additional investigation and design changes. AM proactively suggested solutions for rock excavation and utility conflicts, though some proposals received limited response from WSSC Water. When rock was encountered, shifting the alignment horizontally was not an option due to existing utilities, and AM did test pitting 100', 200' forward, as well as pilot/relief holes.

AM:

- AM field located the utilities. This was an issue earlier on and was generally resolved. AM could only test pit what they knew, which was both what was on plans and anything they saw evidence that could be present. AM coordinated with Miss Utility; if Miss Utility found something not on the plan set, AM would test pit it as well. AM did, however, encounter utilities not on plans, that AM didn't know about, and that WSSC Water didn't know about.
- Specifically, on the pump station side (beginning of work), there were buried cables and telephone lines that weren't in the plans. This area was on WSSC Water property and therefore is not accessible by Miss Utility. WSSC Water has a group (Pinpoint) that operated like Miss Utility. AM coordinated with them.
- AM found a couple large issues related to sewer house connections that weren't portrayed on the plans and ran cameras which found utility conflicts that resulted in design changes.

WSP: Gas lines, utility pole bracings, etc. take time. Verizon has utilities that need to be braced, and it takes certain efforts to get Verizon on site. Have you have any of those experiences?

AM: Typically, yes but not on this project. AM worked on a design build in downtown Baltimore with heavy BGE involvement, and so they had several years of direct contact with BGE. BGE was relatively responsive on this project. There was a fund in place by WSSC Water to handle those direct costs. This went pretty smoothly. There was a redline for a 3-inch gas main that was discovered. AM worked on red line to address, which BGE was involved in. They dropped the 48-inch water main around it.

WSP: Wasn't it possible to relocate the gas main instead of lowering the 48-inch WM?

AM: Those two options were presented. Theres a cost and time associated with both. BGE is not typically the fastest responding entity. It would require redesign and discussion of costs with WSSC Water for implementation. The easiest was to redesign the invert of the 48 inch, so they just redefined the invert.

WSP: There was a utility pole that collapsed and a safety incident (one of laborers got hurt). Do you have any insight on that? A roller also flipped over.

AM: Does not recall pole falling but didn't have chance to dig back further in files. The roller happened about a year or so ago. The laborer was dispatched to pick up a small fitting. AM used a rental labor service depending on task at hand to support or supplement crew onsite. Without permission, he got on trench roller and rolled downhill. Had raised asphalt and the machine rolled over and he pinned an ankle under it.

WSP: This was not due to utility pole?

AM: Can't imagine it was too related. AM does not recall pole and so doesn't think this incident had a pole involved.

WSP: This may have been two different incidents on the same day.

WSP: There was a conflict, for example, with a gas line, which required a redesign. Our understanding is the pipe is on a lay schedule; how has redesigning impacted your process? If they do a redesign in order to avoid the gas main, has that part of the material been furnished and provided onsite, which means additional segments of pipe have to be changed? I want to understand the context.

AM: It would depend on when they discovered the conflict and what the redesign looked like. Lessons learned was lay schedule in general. If far enough ahead of the station, they can make revisions needed. If conflict is more immediate, can look to flip flop beveled ends or fittings to gain adjusted alignment – borrow pieces from upstream station and then return to alignment. AM does not recall how ultimately this situation was addressed.

WSP: When AM hit big area of rock, did anyone throw out the idea of checking to see where rock wasn't? Such as test pitting for rock. All of utilities per the plans are on the other side of road, so there's a possibility there wasn't rock on that side. Understand there is a lay line schedule, but did anyone propose putting pipe on other side of road, or test pit 50', 100' 200' feet down or across the road?

AM: A lot of things were suggested. AM did test pit, but only linearly ahead of pipe installation to get idea of where the limits of the rock was. Shifting alignment horizontally wasn't an option because of the gas main and sewer line there. AM not sure if there was room to make it fit. The only plan implemented was to test pit ahead to see when would rock stop impacting the project construction operation.

WSP: Clarifying the previous question, regarding if the option to relocate the water main to the other side of the roadway was navigated by test pitting close to utilities on that other side of the roadway; The option to test pit to see where utilities were was never explored? Was lateral test pitting off road, so 50' to left and right, explored? Was it WSSC Water saying no? Understand it would require delay to get pieces to make changes work.

AM: Yes, the parallel utilities were test pitted for verification of location. We know drawings aren't 100% accurate. If you look at the alignment of the job, there just wasn't 50' given width of road. Not saying there was no window, but AM offered it up. AM put out a notice and didn't get response in timely manner from WSSC Water. Nobody knew the impact when they first experienced rock. AM tried to suggest things and gain audience with WSSC Water, and they tried to work to accelerate things with WSSC Water to recover time lost once they were past rock. AM got nothing from WSSC Water. Allen Myers Construction Manager had a meeting with contract manager and chief manager. After pleading with them to put eyes on the rock, the Construction Manager wanted people on WSSC Water's end with influence to see what's going on. There was nothing AM and WSSC Water could get alignment on. AM wanted to ascertain how much longer rock would be issue – test pitted 100', 200' and did pilot/relief holes. There was negligible change from drilling relief holes to excavate bedrock. Realignment was considered, but this may not have been option for WSSC Water. AM proposed shallowing up the pipe. There was small diameter water and sewer line. AM proposed relocating those to help solve the problem. AM received no response. AM proposed these things that could have been done to mitigate rock problem to help the contractor and the project.

WSP: Was micro tunneling discussed as an option?

AM: Not discussed and not an option. AM was not confident with that level of rock, providing launching pit and receiving pit, and the cost to do so over that distance. It would be faster but not cheaper.

5. Inspections (QA/QC):
   a. Did AM have a dewatering plan in place? Only Sump pumps were used for dewatering?

      AM: Nothing formal. Water wasn't too much to deal with on this project. Pumps and using filter bags to maintain WSSC Water requirements was enough.

   b. Per 02315 Borrow material's information (source, designations, intent of use, etc.) shall be submitted to the Client, had this been reported to WSSC Water? Was a proctor test submitted to WSSC Water?

Summary of 5b: Yes, proctor tests were provided to WSSC Water. Near the end of the project, backfilling became an issue for WSSC Water.

AM: AM supplied proctor test for all backfill materials, for stone and soil. Tested native soils to backfill with this material where allowed. Those were approved for duration of job, until material changed, then AM would resubmit a proctor for that material. Backfill became an issue on tail end of the job – it seemed everything was working as it should, and then after some emails and calls, there was a meeting scheduled with the WSSC Water general manager to discuss backfill. AM believes they were working in accordance with specifications and WSSC Water had Geotech representative who would spot check AM work.

WSP: At what point did WSSC Water's Geotech QA Team start checking backfill/compactions? Had temporary pavement been installed and they were checking backfill?

AM: There were areas that were temporarily patched and some permanently repaired. There was still construction so there were excavated areas where backfill was still being put in. This is not something happening for duration of project, inspector was implemented towards latter portion of project.

WSP: Did AM have their own independent Geotech?

AM: Yes they had their own Geotech. Towards the end WSSC Water had their own Geotech inspector as well.

c. In unpaved areas where 48'' raw water pipe was installed, per progress photos, the wet native material has been reused, why? Were these considered to be in wetland areas?

Summary of 5c: No pipe was installed in wetlands, and AM would address any settlement they noticed.

AM: No pipe was installed in wetlands.

WSP: There are photographic evidence that in unpaved areas, wet native soils were used as backfilling material for the pipe trenches, were these instances temporary backfilling, until the pipe was pressure tested and then the backfilled material was replaced with suitable material and compacted?

AM: There were instances, especially in ROW, where there was temporary backfill and AM went back for final backfill and compaction. When things were being final backfilled, there was compaction and documentation.

WSP: In unpaved areas, have customers notified of trench settlements or issues?

AM: In unpaved areas, AM is sure it's happened. AM would go out and flag anything they noticed and address it. They noticed issues a couple of times during installation, wherein AM would add more fill and compact.

d. What soil was used as general backfill, per Inspection reports in some case GAB was mixed with some brown soil. Was it directed by a field inspector? Per WSSC Water below is the requirement.

3. The top two-and-one-half (2 1/2) feet of all trench backfill beneath the pavement layer shall be compacted Graded Aggregate Subbase (GASB) to 95% of the maximum dry density per AASHTO Designation T-99. Prior to and during compaction, moisture of fill material shall be maintained within 2% of optimum. The fill shall be placed and compacted in horizontal layers not to exceed 8" in thickness (loose). GASB shall conform to the requirements of the latest edition MSHA Standard Specifications for Construction and Materials manual. Flowable fill material may also be used when approved by the Department.
4. Suitable trench backfill below the top two-and-one-half (2 1/2) feet down to five (5) feet deep shall be placed in horizontal layers not to exceed 8 inches (loose) and compacted to at least 92% of maximum dry density per AASHTO Designation T-99. Moisture content shall be maintained within 2% optimum.
5. Trench backfill below five (5) feet deep shall be placed and compacted in layers not to exceed 1 foot in thickness (loose).

AM: On this job, this was governed by PG County's standard details and not WSSC Water. It was an addendum to the contract AM used PG County's detail. Their specifications requirement is a little different. Ultimately, everything was installed and tested to that standard.

e. On February 7, 2024, there is an incident report (Unknown Individual but surely from WSSC Water) questioning that the material used was not what the proctor test was provided for? No backfilling for the first 4ft? How often was this happening, and how was the issue reported addressed?

AM: AM not sure what report this is. It may have been sent over as an FYI. In the scheme of this job, there were multiple issues. It may have been responded to and addressed, but Allen Myers Construction Manager can't speak to it.

f. Did anyone representing WSSC Water perform any compaction tests during the life of the project separate from AM's subcontractor?

AM: Discussed previously in this interview; towards the end of the project, WSSC Water had someone independently tested compaction of the backfilled trenches.

g. What was the actual frequency of compaction tests (lift/per length)

2. Field Density Compaction Tests: Perform tests following ASTM D1556, ASTM D6938, or ASTM D2937 at minimum rate of 1 test for every 100 feet of fill for each lift along main trench and at every lateral trench (WHC, SHC, etc.), structure and valve box in Type I areas. If less than 100 feet of pipe is placed in a day, conduct at least 1 test per lift.

AM: The criteria in place was by lifts, and for how many tests were required per 100 feet -- if you do less than 100 feet, you still owe them a test. Backfill specifications became an issue at the end of the job. Spurred on because of Allentown project, which received a lot of complaints during active roadway construction. WSSC Water sent memo (not corrective action) reminding AM of these specifications. AM did not receive this memo from this job but received for the other job they had with WSSC Water. WSSC Water did audit of compaction reports in job. AM Third party was verifying 12" lifts as opposed to 8". WSSC Water's specifications is outdated – technology available to contractor could do 12" or 18" lifts and AM provided product and equipment information, certifications, and documentation to show how they were able to achieve compaction with 12" lifts. WSSC Water knew they were doing 12" and AM had been providing this info. It wasn't an issue until it became an issue. AM had to change process on back end AM had a meeting with the WSSC Water general manager and there was no flexibility on compaction. Specification is what the specification is and that is what AM started doing.

WSP: Was there a Quality Control personnel besides AM's superintendent and Geotech Inspector onsite, from AM's side?

AM: Not 8 hours a day, 40 hrs. per week. But they would come by and verify AM was in accordance with specifications. AM would tell them when to be onsite. They received results on site and so there was never instances where a trench was closed up and completed without approved compaction

h. How often AM was providing the compaction test reports to WSSC Water?

AM: reports would be compiled once a week. Can't verify every single week was submitted. They were uploaded to eBuilder each week.

i. Predominantly per DIRs and compaction reports AM has used excavator bucket for compaction, in some cases specifically for Basecourse there is picture of roller drum. Excerpt from 02315.

c. Use of backhoe buckets is not permitted for gravel compaction.

Discussed previously in interview. No bucket to compress earth; there's a vibratory plate compactor attached to the backhoe's bucket to compact earth.

j. Any circumstances that you had to perform a temporary backfilling?

Discussed previously in interview; yes

k. Was hot mix asphalt used for temporary patches throughout?

AM: Hot mix predominantly; cold patch in small areas if they were going to be immediately removed. Not a lot of durability there. AM's typical process was they would excavate a given length of trench, establish subgrade and bedding, place the pipe, and then they would start the backfill

process, where they would steel plate the trench during the operation. Then, they would do temp pavement restoration, and then open road back up to travel. Job wouldn't be permanently restored until testing, which due to nature of design would be at the end. AM would monitor for settlement. There was a detail to do cut back and remove material and put approx. 8-inch of asphalt. Re-milling would be done by WSSC Water later to re-establish the driving surface.

6. Safety Incident:
   a. What happened to the safety incident that caused the pole to fall and roller to turn over?

      Discussed previously in interview.

   b. Two incidents reported by damaging communication cables 12/5/2022 and 01/04/2022 occurred. Why was it not test pitted? Did Miss-Utility mark the underground utilities prior to the excavation? What was the precautionary approach later in the project?

Summary of 6b: AM can only test pit what they know or reasonably believe to be there. AM requested plumbing cards. Minor design changes required due to unexpected utilities.

AM: AM can only test pit what they know or reasonably believe to be there. Early in the job, within pump station end of project, some were unmarked and unflagged and not on the plans. Hit a couple of sewer house connections on Bond Mill that were unknown. Resulted in change order – drawings showed 14 sewer house connections. Verified that and had reason to believe there were more due to pattern of connection. WSSC Water provided AM access to system showing cards of who has sewer house connections and where. Paid in change order for AM to go between connections to verify sewer house connections. There were quite a few there, and some weren't identified.

WSP: Plumbing cards provided with specification package?

AM: No. had access after AM flagged this. AM had reason to believe there was more there than what was shown. They pressed upon WSSC Water importance due to lay schedule. However, in some instances there is limited fall between the sewer lateral tie-in and house, so they cannot move the SHC, and so would have to change the water pipe alignment, which is not ideal. Especially if they already had the pipe laid up to the sewer house connection and would have to undo work. WSSC Water provided plumbing cards. If WSSC Water knows about it, why isn't it on plans? Understandable though, happens in construction. Some instances of no conflict, some had to do adjustments to gain clearance. Over length of pipe, AM found things no one knew about. AM doesn't believe they had to redesign pipeline for it.

WSP: In one location, you had Did AM have to add two new MHs and relocate a sewer line, which was part of a change order for the 48-inch pipe installation.?

AM: WSSC Water has own team and may have done it themselves. Earlier on in the job, not on Bond Mill, there was a conflict with a SHC on Supplee Lane. It did involve AM to modify MH or add new doghouse MH to avoid conflict. This wasn't on plans – it was a SHC that tied into a baseball field concession stand bathroom that was 800' off main line. AM didn't know it was there. WSSC Water didn't know it was there. Found it, couldn't change the 48-inch, so had to make some changes. It was a change order that was ultimately resolved.

   c. Reports are available that SHC connections were damaged too. For how long were the residents out of service?

      AM: AM not aware of any property damage. Typically, they have material on hand, and so if they struck something inadvertently, it's just a couple fittings and pipe that can be fixed in real time. The crew will work late to get it done.

7. Schedule Review:
    a. There is a letter from WSSC Water stating that AM demobilized from the site 8/12/2022 through 11/7/2022? Why did AM had to leave the site?

Summary of 7a: AM had float built up and the crew had security clearance that was required for an emergency project.

AM: AM had baseline schedule in place and for first 4-6 months were putting pipe faster than scheduled. AM had built 1-2 months of positive float. When they hit rock, it consumed this float and they went negative. Two things – (1) weren't making a lot of progress and (2) crew had security clearance and they had an emergency where for 1-1.5 months the crew was away. In that time, drillers came in for relief holes. They were going to change some work from AM to a second resource to make some of the time up. AM was gone for around 80 days, and they kept WSSC Water in the loop. The other project went longer than initially planned. AM had float at disposal and planned things on back end with concurrent crews to do things at that time. What they did was to protect schedule but couldn't help the rock. AM did not charge WSSC Water for that time, which was clearly identified in PCO-15 submission.

WSP: Could AM have mobilized crew downstream of rock?

AM: No; this was a lay schedule job. It's a puzzle piece that has to be installed linearly. Part of the contract requirement to AM was AM has to sign off on lay schedule. They wanted contractor input on ways to redesign. AM wanted them to install break pieces in design, since as designed there was no ability to jump around on job. AM proposed 4-5 locations of sleeves on job for multiple reasons but overall would have given flexibility to jump around to a different section during a delay in design or material delivery (if you hit a delay or issue in section 1, you could jump to section 2 or 3, for example).

    b. On October 6, 2022, WSSC Water notified AM to perform the work or LDs will be charged, what was the hold up?
    c. For how long PG County's restricted work hours from 9-4pm was in place? Per a meeting AM requested that the work hours to be from 7-3:30PM.
    d. Per Schedule updates culvert work did not commence as planned. What was the problem?
    e. Did AM complete the work at Elementary School intersection during summer break?

AM: WSSC Water specifications said this had to be done during summer break. AM got delayed, which impacted the summer schedule for construction. AM flagged that with WSSC Water – should AM wait for the following summer if behind schedule, or should AM wait if they were ahead of schedule? AM asked about putting a break point with sleeves in, which would be at no cost since WSSC Water was paying Core and Main by LF cost. If AM had ability to relocate crew or add second crew, it would have been beneficial. Former Chief engineer said that was specifically why he asked AM to review it. In summary, they should have been able to jump ahead but couldn't due to WSSC Water's restriction.

    f. All available float was absorbed by the rock impacts, since it was raw water pipe, wasn't it possible to work on other sections of the pipe?
    g. Answered above, due to lay schedule restrictions WSSC did not agree to skip the rock area.
8. Delays are about 26months, but from the schedule update 42 it is hard to tell how many days the impact of each PCO were. Can AM roughly indicate if PCOs drove the project schedule significantly?

PCO 01: Gas conflict to revise pipe profile

PCO 04: Cut and regrade Vault G

PCO 08: Supplee Lane SHC relocation

PCO 11: Conflict with BGE Gas in BGE ROW

PCO 26: Waiting on WSSC Water direction, tree removal, SHC adjustment

PCO 29: SHC at Stat. 103+95 (Force Account)
Adj.Lay.Schedule: Awaiting approval to adjust 48in lay schedule

Summary of 8: AM did not receive feedback on schedule updates.

AM: There was no review of the schedule except for completion date of the project. AM provided schedule update on a monthly basis (or every 2 months during periods involving rock, where progress slowed down). AM submitted full schedule, critical path, and updates. The impact of Rock conditions was that a key driver affecting the schedule. For individual activities, number of days crew spent on the additional work were added to the project's completion date. After the construction had past the rock zone, AM would present multiple versions of schedule at start of delay and updated at end of delay and would give WSSC Water that in a schedule narrative.
WSP: WSSC Water did not provide review response sheets to schedule updates?

AM: On other projects, they would typically get approval of schedule or revision request for projects like this, which would help flush out delays. Never happened here. Got approval on baseline, AM submitted monthly updates. Only comment AM started getting, which was end of job, about the end date: they were 50% done with end date and WSSC Water would say contract completion date is in a month what is the plan.

9. Traffic Control Plan review and DPIE Inspection:
   a. Has there been periodic traffic control inspector onsite?
   b. Did AM have to coordinate with any jurisdiction before any lane closures/ MOT setup?

AM: There was a DPIE inspector that would come out and do spot checks, not very often. They also had a preconstruction meeting with DPIE. Never reported an issue that AM is aware of. Certain areas required certain elements and controls, but AM kept access to driveways. Third party contractor did set up, maintain, and tear down. There was a certified traffic control (traffic control subcontractor).

10. Temporary Patching to Permanent Patching timeline: Community made complaints about the temporary patching.
    a. Quality Control Measures: Can you describe the quality control measures you have in place for temporary patches? How do you ensure they meet the required standards?

Summary of 10a: Residents on Bond Mill were complaining, and the WSSC Water chief engineer had meeting with AM and WSSC Water sent a deficiency letter. A lot of areas on the deficiency letter were out of work area (other side of road). WSSC Water mentioned settlement as an issue in the letter; AM countered that it is temp not perm patch, so they anticipate a certain level of settlement. WSSC Water wanted AM to re-excavate the entire trench line and do 8-inch lifts. AM identified certain areas to redo. AM was comfortable with pipeline and decided to do permanent patch out of sequence and ahead of schedule to resolve the issue.

AM: Potholes were found throughout the job; AM would notice area and repair. AM would do their own flags and checks. Residents on Bond Mill were complaining, and the WSSC Water chief engineer had meeting with AM and WSSC Water sent a deficiency letter. A lot of areas on the deficiency letter were out of project's work area (other side of road).

WSP: What were they sending in deficiency letter? What type of issues?

AM: It was regarding the timeframe for transitioning an area from temporarily to permanently patches. AM replied that this (timeframe) was not applicable to this contract because of the nature of the linear design. AM stated this was fleshed out at the beginning of the job. WSSC Water mentioned areas of settlement; AM countered that it was temporary not permanent patch, so certain level of settlement would be anticipated. At permanent stage, (procedures) such as recompacting, milling, installing asphalt, etc. would be held to (follow) the specifications. This wasn't an issue until the end of the project when

this (issued) got brought up the ladder (with the leadership). Understand why this is an issue, because it is appeasing the community, which AM supports. WSSC Water asked how they can verify compaction won't be issue? AM said compaction reports, things to specifications, etc., and AM was comfortable with their work they gave additional year of maintenance bond.

WSP: Were cutbacks performed for perm patch?

AM: Yes.

WSP: On some jobs, they were instructed not to do them.

AM: AM's contract requested it, and that operation was under tremendous amount of atypical scrutiny, so it was done to letter of law with a lot of eyes on it.

WSP: What was the depth of temp asphalt patches? Entire trench Width?

AM: On temporary patching, say had 10' wide trench, we saw cut to give kneed edges. Temp asphalt was laid in at depth of 4"on avg, laid edge to edge, then rolled.

WSP: Because of these community complaints, did AM have to do permanent patch to address community's concerns?

AM: This (the roadway condition) was the number one focus of the community meeting. WSSC Water declined to discuss other topics until AM addressed the roadway condition concerns, given the community complaints. WSSC Water requested AM to re-excavate the entire trench line and do 8-inch lifts. Then they wanted them to redo temporary patch and reroll. AM also said no, but they identified certain areas to redo. AM was comfortable with pipeline and decided to do permanent patching out of sequence and ahead of schedule in order to resolve the issue, which was what AM did.

WSP: Did AM receive any direct complaints from the community?

AM: Never got direct complaints from residents; they came from WSSC Water

b. How often did AM use steel plates to cover a trench? For how long would a steel plate have remained over a trench? Due to Rock Issue did you leave any trenches with steel plates for extended periods?

AM: Daily. They were only used for open excavation up to putting temp asphalt. It was a function of how fast they were installing pipes AM would excavate 40ft-60ft trench for pipe, start setting pipe that day, and once got one pipe stick ahead, they could backfill the previous. An area could sit open for up to 3 days, and then they would leapfrog to the next area to backfill.

c. How was a pothole in a temporary patch addressed, and how soon?

d. What is the typical timeline for replacing temporary patches with permanent ones? Specifications calls after 7days. What challenges were you facing under this project regarding the pavement transition?

AM: Intent of the job wasn't to do permanent patch until after pressure tests were completed, since it would require the dig up the trench (and permanent patch) if there a detected leak was found (during pressure tests). The first trench on Bond Mill was first day of temporary patch and it was there until the end of project. WSSC Water approved this. This is standard operating procedure on a pipeline installation like this. AM had a different project where there were multiple vaults which allowed for segmentally testing. Once get assurance pipeline was fine (with the pressure testing), then could permanently seal it up.

e. Can you provide details on specific complaints received about temporary patching on Bond Mill Rd? How were these complaints addressed?

AM: No community complaints that AM was aware of until the end of the project. On 10/31/2024, AM had a meeting with the WSSC Water general manager. WSSC Water had forwarded complaints to AM on behalf of residents. AM also met with (former) new chief engineer to discuss the pavement concerns. Some of the issues brought up were on the opposite side of road, which were not part of AM's work. AM worked on Bond Mill Rd for a couple years, and had established relationships with residents. AM would go above and beyond to make residents happy. No complaints were communicated directly to AM. There is always room for improvement, but AM stayed on top of this well. It was 25 MPH road, and people were driving 50 MPH, so car would respond to exposed edge differently than if they were going legal speed limit. AM still paid mind to keep things patched well. AM provided additional year of maintenance bond for resurfacing.

WSP: Was the meeting with the general manager specific to this community, or did it combine with Allentown and other projects?

AM: It was specific to the Patuxent 48-inch project, but AM was aware of issues with other WSSC Water projects. That's likely why it got the attention it got.

11. General Question:
    a. Did AM perform any Micro-tunnelling or HDD on this project?

AM: Micro tunneling or HDD were not used in project.

12. Lessons Learned: What lessons have been learned from this project, and you would like to suggest for improvements for future projects with WSSC Water? Process, contract, communication, specification, plan etc.

AM:

- Lay schedule jobs are incredibly restrictive. There was a push by one of WSSC Water's vendors to do it that way for WSSC Water. Especially for neighborhoods and streetscapes, it becomes more of a restriction than a benefit
- An issue was WSSC Water purchasing material (both big and small diameter pipe). Understood that WSSC Water does this for cost savings; however, it bound the job up when the pipe was delivered and stored on BGE property.
- There should have been more breakpoints of MHs or vaults, to give contractor the option to move around or test portions. It would have helped protect the job and schedule.
- Open communication and feedback, so WSSC Water and AM can work together to solve problems
    - There was not enough feedback. The contractor has to make decisions in the field, but they want communication and a partner on the other side to make decisions that are cost saving, even if other side isn't paying. Communication is good to decrease cost for the contractor.
    - AM made efforts that cost more to help maintain ending date. If WSSC Water said they don't want acceleration and this can afford to be delayed by a year, then both parties could be satisfied.
- AM was at WSSC Water's mercy and direction too many times where they should not have been. Material was an issue; AM got 72 hours' notice they didn't have some essential materials.

- WSP: There were Progress meeting in the field – are there meeting notes?

- AM: There were weekly progress meetings. WSSC Water provided the agenda. They never provided meeting minutes, and AM started flagging that the agenda was a copy and paste of the meeting before. There were changes in contract managers. There was an agenda, but nothing got documented. There would be some emails covering the topics but nothing formal.

A.6

Interview Summary With Elected Officials

Overview

Four elected officials were interviewed for the BF1582E91 48in Patuxent Raw Water Main Replacement Project (herein Bond Mill Rd Project). The elected officials interviewed included:

- Delegate Mary Lehman
- Senator Jim Rosapepe
- Council Member Tom Dernoga
- Delegate Ben Barnes

The communications and public involvement specialists conducted a combination of in-person and virtual interviews, each lasting approximately 45 minutes, to gather feedback from these officials.

After presenting the project background and outlining the scope of the audit, the team invited feedback on the following topics:

1. The elected official's experience with the project
2. Feedback received from constituents
3. Recommendations for improving planning, communication, or community outreach for future projects.

The perspectives and feedback collected were synthesized to provide a comprehensive understanding of concerns and recommendations from the elected officials. Additionally, the project team reached out to Delegate Peña-Melnyk but was unable to coordinate a meeting with their office.

Feedback

The Bond Mill Rd Project was described by Elected officials as disruptive and frustrating for community residents at the beginning of the project process. Elected officials noted that a shift toward more proactive communication from WSSC Water, combined with improved contractor oversight, likely influenced by new leadership, ultimately resulted in better outcomes for the community There were three key areas of concern: 1) Community Experience, 2) Project Planning, Management, and Execution, and 3) Community Outreach and Communication.

Community Experience

Elected officials reported that both their offices and constituents had numerous questions and concerns regarding the project delays and temporary construction conditions. The major delay attributed to rock was widely viewed as implausible and suggested a lack of professional due diligence by WSSC Water and its contractors. Many officials also expressed frustration about the timing of notifications regarding these delays, feeling that they should have been informed of issues much sooner.

Another significant concern arose when the contractor left the project site to work elsewhere without notifying the community. The site was left with equipment, materials, and debris, and the lack of communication led residents to believe that another community was being prioritized, which raised equity concerns.

Temporary patching during construction was also problematic. Elected officials received reports from constituents about vehicle damage caused by the contractor's uneven patching methods. However, this concern was limited to the construction phase, as the roadway was substantially improved after completion with full repaving and striping.

Officials also noted that the community did not feel adequately compensated for the disruption to their daily lives. Requests for additional amenities such as direct compensation, a dog park, a paved path near the reservoir, and charging for reservoir use to fund these improvements were made but not fulfilled by WSSC Water.

Project Planning, Management, and Execution

Based on feedback from their constituents, elected officials noted that the community expressed dissatisfaction throughout the Bond Mill Rd Project due to several unforeseen challenges and a perceived lack of clear backup plans. There was concern about insufficient oversight from WSSC Water during project construction, which contributed to frustration among residents due to garbage and other materials left on-site. Additionally, abrupt staff changes within the project team created disjointed communication with the community, further impacting trust and transparency in the process. Officials also noted that Bond Mill Road serves as a primary commuting route for the West Laurel community, and the project's construction phases should have been planned with this in mind.

Additionally, the project timelines that were publicly shared about the project were not met because of the various delays. The elected officials noted that this impacted their constituents' view of the overall project management.

Community Outreach and Communication

Community outreach and communication were noted as areas with room for improvement by elected officials. While many acknowledged that WSSC Water was accessible to the community and distributed mailers and flyers to impacted residents, there was a consensus that more proactive and consistent communication would better serve residents' needs. Additional frustration arose from the perception among residents that the project was primarily intended to support future development and new residents, rather than addressing the needs of existing, long-time community members. Early engagement and clear project framing were identified as important strategies to help build broader community support for future projects.

Recommendations

To address the concerns raised throughout the Bond Mill Rd Project, several recommendations have been identified to improve future project planning, communication, and community engagement. These recommendations are intended to foster greater transparency, enhance collaboration with elected officials and community members, and ensure that project management processes are responsive and inclusive. Implementing these strategies can help build trust, minimize disruptions, and better align project outcomes with community expectations. These recommendations are as follows:

- Increase transparency and communicate with the public sooner when project related issues arise. Ensure that project-related issues are communicated clearly and that all information is presented in a way that is easy for the community to understand.
- Provide advance notice and opportunities for input to elected officials before public meetings, especially to Council Members as they are engaging with their constituents regularly and have an idea of what project messaging will be successful for their constituents.
    - For major projects, it is recommended to schedule review meetings with elected officials to review outreach materials that will be shown to the public. For smaller projects, elected officials' offices can be made aware of projects via email.
- Establish regular communication protocols with elected officials and community leaders to inform all stakeholders of projects as early as possible.

A.7

Interview Summary With Community Representatives

Overview

Three key community stakeholders were interviewed for the BF1582E91 48in Patuxent Raw Water Main Replacement Project (herein Bond Mill Rd Project). These stakeholders included the president of the civic association, a member of the project task force, and an actively involved resident living along Bond Mill Rd.

The communications and public involvement specialists conducted virtual interviews, each lasting approximately 45 minutes, to gather feedback from the identified stakeholders.

After presenting the project background and outlining the scope of the audit, the team invited feedback on the following topics:

1. The stakeholders' overall experience with the project,
2. Feedback on the community engagement of the project, and
3. Recommendations for improving planning, communication, or community outreach for future projects.

Additionally, the communications and public involvement specialist circulated a Comment Form to allow community members not being interviewed to share their feedback as well. The comment form had 14 responses from community members impacted by the Bond Mill Rd Project.

The perspectives and feedback collected were synthesized to provide a comprehensive understanding of concerns and recommendations from the stakeholders and respondents to the comment form.

Feedback

Community members described the Bond Mill Road Project as disruptive and frustrating while it was underway. However, many acknowledged that the completed project represented a major improvement and appreciated WSSC Water's efforts in the final months to incorporate their feedback. There were three key areas of concern: 1) Community Experience, 2) Project Planning, Management, and Execution, and 3) Community Outreach and Communication.

Community Experience

As previously noted, many community members shared a sense of frustration during the project. Frustration stemmed from major project delays, a lack of transparency, increased

traffic congestion near the school, and what felt like a lack of communication from the WSSC Water Project Team. Despite these challenges, many community members did express general satisfaction from the final project outcome such as the permanent pavement, new pavement signing and markings, sidewalk improvements, and pedestrian safety improvements. Community members on the West Laurel Civic Association Board and community members on the project taskforce, especially appreciated being included in the final stages of the project to provide feedback.

From the perspective of community members, there were numerous questions and concerns about the project delays and the temporary construction conditions. Many expressed that the major delay attributed to rock was implausible and reflected a lack of professional due diligence by WSSC Water and its contractors. Community members have noted that the area around Bond Mill, known locally as "Rocky Bridge," suggests that subsurface conditions may indeed be rocky. They emphasized that WSSC Water and its contractors should have conducted thorough pre-construction surveys and coordinated with other utility agencies with underground infrastructure in the area, to either avoid the rock or address it effectively and timely. Community members were also frustrated by the timing of notifications regarding these delays, believing they should have been informed about issues much sooner. Another significant concern arose when the contractor left the project site to work elsewhere without notifying the community. The site was left with equipment, materials, and debris, and the lack of communication led community members to believe that another community was being prioritized, which raised equity concerns. It should be noted that during interviews conducted with the WSSC Water Project Team, the team mentioned that all equipment and materials were removed, and the site was adequately returned to pre-construction condition.

Additionally, community members expressed frustration with the temporary patching and roadway conditions during construction, citing vehicle damage caused by the site conditions. While the final repaving and stripping significantly improved the roadway, the disruption during construction was a major concern.

Project Planning, Management, and Execution

Community members noted that they observed what they described as poor contractor performance, limited oversight from WSSC Water, and inadequate temporary repairs that disrupted daily routines and created safety concerns. Additionally, based on the presence of an elementary school, community members did not feel there was sufficient planning for the disturbance this would cause on school operations.

Community members expressed concern that the publicly shared timelines for the project were not met due to various delays. This has affected public perception, with elected officials noting that their constituents now question the effectiveness of the project's overall management.

Community Outreach and Communication

Communication about the project was inconsistent, particularly regarding delays and their underlying causes, which left many community members feeling uninformed. However, community engagement improved notably following leadership changes at WSSC Water, with more effective meetings and direct outreach. The formation of a task force and enhanced coordination among agencies were welcomed as constructive developments. Still, some community members expressed concern that communication relied too heavily on the civic association, failing to reach individuals while directly impacted maybe outside the ambit of the civic association. Additional issues such as incorrect contact information on project signage and lack of notification about water shutoffs further contributed to frustration and a sense of being overlooked.

Recommendations

To ensure more effective project delivery and foster stronger community relationships, a series of recommendations have been developed based on recent feedback and observed challenges. These recommendations aim to improve communication, broaden outreach, enhance oversight, and strengthen collaboration with local agencies. By implementing these strategies, agencies and project teams can better engage community members, respond to concerns, and build trust throughout the project lifecycle. These recommendations include:

- To strengthen community trust and project outcomes, early and ongoing communication should be prioritized. This includes attending community meetings

from the outset and providing regular public updates, with transparent explanations for delays and changes.

- Outreach efforts must extend beyond civic associations to include direct engagement with community members, schools, and other stakeholders. Notifications should be delivered through diverse channels such as mailers, door hangers, and digital alerts, especially for urgent or emergency updates.
- Establishing and maintaining task forces throughout the project lifecycle can help ensure consistent community involvement and provide a structured way for community members to stay informed and engaged.
- Contractor oversight should be improved by selecting certified and experienced teams, closely monitoring performance and compliance, and clearly communicating metrics related to safety, risk, and stormwater management.
- It is also essential to document and respond to community input, actively demonstrating how feedback informs decision-making and showing community members that their voices are being heard.
- Continued coordination with local agencies like DPWT will support additional improvements and help address safety concerns effectively. WSSC Water observed that road conditions prior to the pipeline replacement were already below standard, which contributed to heightened community criticism during the project. To prevent similar issues in the future, all agencies - including WSSC Water- should collaborate to ensure consistent upkeep, state of good repair, and coordinated infrastructure improvements, so that the community does not bear the burden of inadequate conditions.

A.8

Interview Summary With WSSC Compaction QA Team

Overview & Summary:

Individuals from the Compaction QA Team at WSSC Water were interviewed on 30 September 2025 for the BF1582E91 Patuxent Raw Water Main Replacement Project, the BT6289A17 South Osborne Road Water Main Replacement Project, and the BT6824A19 Allentown Road Water Main Replacement Project.

The Compaction QA Team was created after project managers at WSSC Water experienced poor compliance of compaction testing and settlement regulations and consequently received customer complaints regarding the state of roadways in the vicinity of construction projects. As such, a team of six compaction inspectors who are certified nuclear gauge inspectors was put together to perform random compliance checks on WSSC Water projects. The Compaction QA Team performs these compliance checks on WSSC Water projects, highlights any noncompliance to WSSC Water management (contract manager, depot manager), and if the issue fails to be resolved, writes incident reports to document the situation. Overall, the goal of the Compaction QA Team is to advocate for proper compaction to be prioritized during construction due to the essential nature of it for mitigating future settlement issues.

The Compaction QA Team predominantly discussed how backfilling and compaction was not to WSSC Water specifications for the Bond Mill Road, Allentown Road, and South Osborne Road projects. Moreover, despite the Compaction QA Team alerting the contract and project manager of improper compaction requiring rework, which escalated to incident reports (and a field order for the Patuxent project) after continually failing to be addressed, WSSC Water decided to leave the backfill as is and permanently mill and pave Bond Mill Road, South Osborne Road, and Allentown, given community pushback for the duration of construction on the projects. Proper compaction was not achieved and rework was not performed per spec 2315, which requires that the contractor "re-excavate and recompact failed test areas, at 25' intervals, the entire trench depth and entire 100' length until retests meet the above referenced standards. Rework shall be performed under the supervision of the Engineer. A failed test is defined as any area where settlement occurs above the WSSC settlement limitations specified herein or if the contractor fails to submit proper compaction reports demonstrating full compliance with this specification." The Compaction QA Team believe lack of proper testing and proper documentation invokes re-work throughout these projects, as outlined by the specification. The bullets below go into more detail on these topics for each project.

Patuxent Raw Water Main Replacement Project:

- <u>Violations of the WSSC Water Specification 02135:</u>
    - Lifts were 12-inches or greater; WSSC Spec indicates the maximum lift permissible is 8-inches
    - Compaction was being done starting from five feet below ground, as opposed to starting one foot above the top of pipe.
    - Compaction was not being performed at structures.
    - Only one proctor was used, indicating only one type of soil was used for backfill for the entire length of project, which is unlikely.
    - The top foot of compaction was not compacted to 100%.

    - No failing tests were reported, which is not directly against the specification but was identified as suspicious.
    - There were instances where 30-inches of GAB was not backfilled into the trench.
- Response to Incident Reports: No incident reports on Bond Mill Road were addressed for the duration of construction. The incident reports were not addressed by the contractor, and the WSSC Water inspector did not enforce the changes that were needed for compaction to meet the specification.
    - There was settlement outside of the tolerances allowed by WSSC Water specification, and rework, as mandated by the specification, was not performed.
- WSSC Water Compaction Spot Tests: For the Patuxent project, the Compaction QA Team had done approximately 90 compaction reports, which all passed when compared to the contractor's proctor (the Compaction QA Team does not perform proctor tests). However, this does not verify full compliance; for example, the contractor was identified as failing to compact to the depth called for by the specification and used improper lift heights.
- Prince George's County Specification: The contractor claimed to be following the Prince George's County specification for backfill and compaction as their reason for not meeting WSSC Water specifications; however, the Compaction QA Team stated they were not meeting the Prince George's County specification, either.
- Settlement & Field Order: All incident reports for this project were produced before the field order. Once the new pipeline construction lead became more involved, the field order was created, and the Compaction QA Team noted it seems the WSSC Water contract manager and inspector became aware of the magnitude of the issue.
    - From photos taken of the settlement, there are up to 4-inches of settlement in the roadway, exceeding the 0.5-inch maximum allowed per the spec. Additionally, there was one area in particular where settlement occurred and was repaired five times on a short run of shallow pipe (48-inches deep), wherein the settlement reached 12-inches.
    - It was noted that the QA Team tested settlement by putting a pipe across the trench to find the depth of settlement, and in some cases the depression was so severe that noticeable settlement was more than a baseball height.
- GAB: The Compaction QA Team noted that there were instances where the contractor was not purchasing or placing the required 30-inches of GAB.
- Third Party Compaction Report & Review: When the Compaction QA Team performed a review of the 319 compaction reports on eBuilder, there was not a single report that was spot checked that met the WSSC Water spec. It was clear that nobody had looked at the reports as they were submitted, which is a task that falls into the purview of the contract manager.
    - Additionally, the numbers were all similar, as opposed to the expected range of values, and no failures were provided in the reports. This is not against spec, but it does lead the Compaction QA Team to be suspicious of falsified information by the third party compaction team.
    - An issue highlighted was that the reports are not uploaded to eBuilder in a timely manner, and the reports are not reviewed by anyone once uploaded. This means the

contractor is paid for their work, later it could be discovered that the compaction is not to spec, but since the contractor has already been paid, they refuse to redo the backfill and compaction.

- Proctor: The same proctor was used for the duration of construction; a new proctor should have been performed.
- Importance of Compaction: The Compaction QA Team emphasized the importance of implementing proper procedures for the Patuxent Raw Water Main project, given the 48-inch raw water line is a main feed to the plant and so issues or failure could shut it down and consequently leave Prince George's County without water for weeks at a time. Compaction issues, which were brought to WSSC Water and the contractor's attention, were not addressed, which could lead to pipe failure.
- Compaction Methodology: Compaction reports do not typically put the tool or machinery used for compaction; this may be present in the Daily Inspection Reports. The tools used are not so important, as long as the compaction passes testing and meets specifications.
- Milling Existing Roadway: Allen Myers requested that they mill Bond Mill Road to create a smoother driving surface. In other words, as opposed to bringing the settled areas of pavement up to the existing roadway by redoing patches (as per the spec), they would mill off the top layer of roadway to bring existing roadway down to settled elevations.
    - This was approved by the chief engineer on Bond Mill Road. This was around July 2024. The Compaction QA Team does not recommend this is done.
    - Final Asphalt placement accommodated for the possible change in roadway elevations caused by milling existing roadway.
- Temporary Patches: The Compaction QA Team noted that temporary patches would settle and not be repaired in a timely manner, sometimes for months.
- Infrastructure Outside of WSSC Water Purview: To appease community complaints, WSSC Water replaced aging infrastructure, such as curbs and gutters in areas their trench did not disturb, and pressure washed the sidewalk, curb, and gutter. They estimate this was costly to WSSC Water.
- Contractor Extended Warranty: For the project, the contractor agreed to extend their warranty by a year. WSSC Water was likely pressured by community pushback to wrap up the construction as soon as they could. As such, instead of having Allen Myers re-compact the backfill, they decided to extend their warranty by a year.
    - The Compaction QA Team believes that this sets a bad precedent for projects moving forward, as it tells contractors they can do improper work and pocket the money obtained if they finish a project early. It does not incentivize the contractor to do the compaction properly the first time around.
    - Additionally, if there are issues, the contractor has to pay to excavate, re-backfill, and re-compact; however, WSSC Water will pay for the re-paving needed of the roadway.
- Influence of Compaction QA Team: The Compaction QA Team puts together incident reports and sends them to the project and contract managers; however, the Compaction QA Team does not work with the contractor directly. As such, they forward their findings and it is up to the project team to notify the contractor of issues.

- It was stated that incident reports were forwarded to the Contract Manager and were out of the Compaction QA Team's hands.

General Experiences of the Compaction QA Team:

In general, the Compaction QA Team has identified pushback and noncompliance from within WSSC Water, contractors hired for construction, and from third party compaction testers. Recent updates to the QA specification have alleviated this, as some common issues are explicitly addressed in the updated spec, but the sentiment that proper backfill and compaction is not a priority appears to be widespread from discussion with the Compaction QA Team:

- WSSC Water:
  - It was noted that there are instances where the WSSC Water inspector or personnel will agree with the contractor that backfill and compaction does not need to be redone, despite compaction not being to specification, in the interest of time or efforts that would be required to redo backfill and compaction.
  - Additionally, there are instances they believe WSSC Water personnel are deliberately not informing the Compaction QA Team that compaction is occurring for their project as to avoid random compaction checks.
  - Moreover, the Compaction QA Team has noted there are some WSSC Water Project Teams who have refused to comply with compaction specs and incident reports, including the use of intimidation and harassment, leading to high turnover of staff on the Compaction QA Team.
- Contractors: Upon receiving field orders, deficiency letters, and feedback that compaction does not meet WSSC specifications, it was noted that contractors might reply that they have already been paid for the work, which indicates to them that WSSC Water approved of what was done and they do not have a legal requirement to re-do it.
- Third party compaction testers: The Compaction QA Team has noted that some third party testers appear to falsify passing compaction tests. In one instance, the Compaction QA Team was onsite performing a random check, and all twelve of the third party and all twelve WSSC Water's compaction tests failed that day. Upon finding the third party's tests on eBuilder, the Compaction QA Team noticed that all twelve were listed as passing. Additionally, some behaviors were found to be suspicious, such as refusing to produce compaction reports for the Compaction QA Team to review and refusing to provide their certification card.

Appendix B
Review Logs

B.1
Document Review Log

Phase	Review Category Code	Review Categories	WSP Remarks on Files	Source	Document Sufficient For Review?	WSP Review Notes
00 Project Management	00.01	Contract_SOW	Available	E-builder	Review based Current Information	
01 Planning	01.01	Planning Alternatives	Surge report, system information, preliminary alignment, and WTP expansion record drawings available	E-builder	Review based Current Information	No original record of SUE time and method was found.
02 Design	02.01	Design Packages and Comment Logs	Available and properly documented in E-builder	E-builder	Review based Current Information	WSP summaized the design activities and deliverables in the report.
	02.02	Permitting Packages & Comment Logs	Available and properly documented in E-builder.	E-builder	Review based Current Information	WSP summaized the permitting timeline and extention in the report.
03 Procurement	03.01	Bid Packages		WSSC Water Supplier Portal	Review based Current Information	
	03.02	Bid Tabs/Commission Package		WSSC Water Website	Review based Current Information	
	03.03	Construction Awards	Available and properly documented in E-builder	E-builder	Review based Current Information	
04 Public	04.01	Community Complaints	No community complaints found from eBuilder or from WSSC Water comm team, WSP summarized from Daily Inspection Reports and Insident Reports.	WSSC Water Communication Team	Review based Current Information	Community complaints were not tracking. WSP created a Community complaints log in report and appendix.
	04.02	Public meeting	Document shared by WSSC Water Community team; Additional emails related to outreach were copied for corespondence folder	WSSC Water Communication Team/E-builder/WSSC Websites	Review based Current Information	WSP created a community oureach meeting log in report and appendix.
	04.03	Misc	No outreach logs found from eBuilder or from Communication Team.		Review based Current Information	WSP created a community oureach meeting log in report and appendix.
05 Construction	05.01	Contract and NTP	Available and properly documented in E-builder	E-builder	Sufficient	
	05.02	Permits	Available and properly documented in E-builder	E-builder	Review based Current	
	05.03	Correspondence		E-builder		
	05.03.01	CustomerNotificationLetter	Information were saved till 2021. No recent shutdown notification letter available.	E-builder	Review based Current Information	
	05.03.02	ShutDownRelated	8 shutdown request from 2021 saved in the folder. No other shutdown information available.	E-builder	Review based Current Information	WSP created a shutdown summary log in the appendix.
	05.03.03	Meetings	Only some meeting minutes in 2021 were saved in the relevant folder. Other meeting minutes from 2024 were found under E-Mails folder.	E-builder	Review based Current Information	
	05.03.04	EmergencyContactList	No document found	E-builder	Information Not Available	WSP requested but WSSC Water didn't have this information as personnel change.
	05.03.05	Claims	No document found, assume no claims	E-builder	NA	
	05.03.06	EmailsCorrespondence	Most of the correspondence can be found in the Email folder. Not all WSSC Water initial emails were saved.	E-builder	Review based Current Information	Contractor use the E-builder email address to document the correspondence.WSP created a combined Email correspondence file for review.
	05.04	Submittal	Have Construction Submittal Reviews 1-4, 6-34, 36, 38-44, 53, 56-72 (missing #s 5, 35, 37, 45-52, 54-55). Missing any after 19 August 2022.	E-builder	Review based Current Information	No Submittal Log available. WSP created a submittal log for audit review.
	05.05	MaterialFurnishedbyCommissions		E-builder	Review based Current Information	Project use Lay Schedule and WSSC Water provided the 48" Pipe materials
	05.06	Schedules		E-builder		
	05.06.01	BaselineSchedule	Yes, PDF and P6	E-builder	Yes	
	05.06.02	CPM	Have CPM schedule updates from 4/3/2021 to 12/10/2024 in PDF. Have a version of the schedule in P6. Missing CPM 39 narrative (11/4/2025) and the most current schedule in P6. WSSC Water noted via email that CPM 21 was not submitted, 24 was internal, and 29 is missing.	E-builder	Review based Current Information	Contractor use P6 on schedule update. CPM report detailed changes through periods.
	05.07	Reports		E-builder		
	05.07.01	Daily Inspection Reports	Have all DIRs from E-builder and WSSC Water provided via email.	E-builder	Review based Current Information	Project use E-builder Process Function and E-builder Actual Costs Function to submit DIR. WSP combined all DIRs as one pdf for review.

Phase	Review Category Code	Review Categories	WSP Remarks on Files	Source	Document Sufficient For Review?	WSP Review Notes
	05.07.02	QualityAssurance		E-builder		
	05.07.02.01	QACompaction	Have QA compaction reports # 1-153, 157 - 217, 223 - 226, 228 - 308, 312 - 380, 382-398 (06/07/2021 - 12/06/2024). WSSC Water noted via email that #381 is missing.	E-builder	Review based Current Information	
	05.07.02.02	QA_Misc		E-builder		
	05.07.03	ESC_Inspection	113 ESC inspection reports saved (2/04/2021 to 12/31/2024).	E-builder	Review based Current Information	
	05.07.04	Testing		E-builder	Review based Current Information	Not all the testing were documented/submitted for review. See report discussion
	05.07.05	SafetyIncident		E-builder	Review based Current Information	
	05.07.06	Overtime	8 overtime documents on eBuilder (from September and November 2024).	E-builder	Review based Current Information	
	05.08	Videos_Photos		E-builder		
	05.08.01	PreConstruction	Available	E-builder		
	05.08.02	Progress	Available	E-builder		
	05.09	RFIs	Exported Form History for all RFI responses. 27 RFI entries in Form History.	E-builder	Yes	Project Use E-builder Form Function for all RFI reviews, with responses in E-builder
	05.10	FieldOrders	Two field orders present, both identified as Field Order 001, but cover different topics.	E-builder	Review based Current Information	
	05.11	Work orders	WO saved in different folders, including in Shutdown request, as well as Work Order folders. Have four work orders (9/19/[no year], 7/21/2021, 11/16/2021, 11/19/2021) and a modification to the 7/21/2021 WO on 7/30/2021.	E-builder	Review based Current Information	
	05.12	Potential Change Orders	Have most PCOs via E-builder (1, 3-6, 8-13, 15, 16, 18, 20-31, 34-40) and from email (16, 30, 39, 38, 40, 21, 31, 34, 35, 36 on 8/12/2025) (14, 17 on 8/29/2025). Missing PCOs 2, 7, 19, 32, 33.	E-builder	Review based Current Information	
	05.13	Change Orders	Have CO # 1-7	E-builder	Review based Current Information	
	05.14	Estimate and Cost		E-builder		
	05.14.01	Invoicing		E-builder	Review based Current Information	Project Use E-builder Actual Costs Function for invoices
	05.14.02	Cost Breakdown	Cost breakdown/pay estimates (in cost breakdown spreadsheets) 1-19 (3/2/2021 - 9/12/2022)	E-builder	Review based Current Information	
	05.14.03	Estimate	Contractor signed estimates/subcontractor requisition for payment: 1-13, 20 (missing #s 14-19) Contractor signed estimates/invoices: 14-19, 21-45 (missing #s 1-13, 20) PCD processed estimates/standard purchase orders: 1-13, 16-49 (missing #s 14, 15) Disbursements processed estimates: 1-49 (missing # 7)	E-builder	Review based Current Information	
	05.15	CompletionDoc_PunchList	Certificate of substantial completion, certificate of final acceptance, and punch list present.	E-builder	Review based Current Information	
	05.16	As-builts	Available	E-builder	Sufficient	
	05.17	FinalResurfacing		E-mail	Sufficient	
06 Interagency/External Coordination	06.01	Design		E-builder		
	06.01.01	Permitting		E-builder	Review based Current Information	
	06.01.02	Utilities		E-builder	Review based Current Information	No information related to utility coordination available for review
	06.02	Construction		E-builder		
	06.02.01	Permitting/Agencies		E-builder	Review based Current Information	
	06.02.02	Utilities		E-builder		Limited related to utility coordination during consruction available for review

B.2
Utility Impact Log

TYPE	Incident / Conflict	Operational Impact	Cost Impact	Schedule Impact	Source / Reference	Information Available in Contract Drawing or Blue Book	Information was Made Available through RFI or Other Means
Communication	Telephone Cable Cut @ Sta. 6+50 (Apr 2021) – Unmarked landline telephone cable severed during trenching.	No operational impact – the line was an old service to a building and was inactive (no customers lost service). WSSC's telecom crew was notified; they replaced the cable as a precaution later.	None	None	Daily Report (DIR 44)	None	None
Communication	Verizon Telecom Wire Down (Sept 22 2023) – Crew knocked down a Verizon phone/Internet drop cable running from a pole to a house at 6716 Park Hall Rd.	Service outage for one residence's phone/Internet. The incident was immediately reported. The homeowner and Verizon were notified, and Verizon techs installed a temporary line over the weekend.	None	None	Daily Report (DIR 517)	None	None
Gas	3" Gas Main @ Sta. 49+20 (Mar 2021) – Test pit revealed an existing 3" BGE gas line with the proposed 48" pipe elevation.	Work stopped in this area; pipeline profile redesigned to lower the 48" main and avoid the gas line.	$73,620 increase from the original contract value.	6 days added to original schedule.	RFI 0004 (Gas conflict discovery); CO #1 (PCO 01). CO #1 combined PCO 01 and PCO 04. PCO 01 was related to the utility conflict only.	The contract drawings indicated the presence of a gas main at that location in both the plan and profile views, with elevations based on test hole data from TH13. However, during construction, the actual field conditions were found to differ from the elevations reported in the test hole data.	Information was available in the specification documents.
Gas	Unmarked 6" Gas Main in BGE ROW (Sept 2021) – discovered an unknown 6" gas main within BGE's easement that intersected the trench path between Sta. 111+00 and 119+00 (approx.)	Work was halted at that location. Coordinated with BGE: their crew lowered and rerouted a segment of the 6" gas main to clear the 48" pipeline. The gas line remained in service until the relocation was performed.	$18,949 increase from the original contract value.	2 days added to the original schedule.	RFI 017, CO #2 (PCO 11 – 6" gas conflict)	The gas line utility was not shown in the plan and profile views of the drawing set. According to the contractor, this utility was installed within 12 to 18 months prior to construction, after the design had already been finalized.	
Sewer	4" Sewer Lateral @ 16601 Supplee Ln (Aug 2021) – an unmapped sewer house connection was hit and broken when installing the 48" main across Supplee Lane. Sewage overflowed/backed up.	The crew set up bypass pumping to handle sewage, and WSSC designed a new route for the lateral. Approximately 150' of new 4" sewer pipe and 3 manholes were constructed to reconnect the house's sewer below the 48" water main. Sewer service was restored via the new lateral within a few days.	$192,550 increase from the original contract value.	25 days added to the original schedule.	RFI 016 & CO #2 (PCO 08 – Supplee Ln lateral).	SHC was unmapped for 16601 Supplee Ln in both the plan and profile views of the contract drawing or subsequent revisions. In the drawing set, the abbreviation "SHC" is used; however, it is not defined in the abbreviations section of drawing page G2.	A series of plumbing cards, together with the as-built drawing for Brooklyn Bridge Road, was provided to the contractor in response to RFI-2. However, the documents did not include 16601 Supplee Lane. WSCC acknowledged that the records provided might not accurately reflect field conditions, noting that the SHC may have been renewed and that updates may not yet be reflected in the eGIS mapping system. RFI-2 primarily sought clarification on seven SHC connections that had been identified in earlier project documentation for potential conflict
Sewer	4" Sewer Lateral @ 15834 Bradford Dr (Oct 24 2023) – An existing sewer lateral was directly in the trench and was broken by the excavator during pipe laying.	Sewage service disruption to one home. The crew quickly installed a temporary PVC bypass to restore flow within a couple of hours. Because the lateral lay almost on top of the 48" main, WSSC later had the contractor encase the new lateral in concrete for permanent protection under the water main.	$15,376 increase from the original contract value.	None recorded. 9.5 hours of labor charged for work according to the PCO #23.	Daily Report (DIR 544), CO #5, PCO #23	None	None
Sewer	4" Sewer Lateral @ 15611 Bond Mill (Aug 2024) – SHC was relocated to provide enough clearance.	WSSC issued a force-account directive, and the contractor immediately deepened this sewer service. About 40' of new sewer pipe was laid at a lower elevation, tying it into a different manhole to achieve clearance. Two large trees were removed for access. Sewer flow from the house was maintained via pump-around until the new lateral was in place.	$98,639 increase from the original contract value.	23 days added to the original schedule.	Damage Report (DIR 779) &, CO#5, PCO #26	The SHC at 15611 Bond Mill Road was not depicted in the plan view of the drawing set. While the profile view suggested the presence of an SHC, it was not clearly labeled. Records indicated that the SHC was connected to manhole 103U, with the plumbing card documenting the lateral at a depth of 13 feet, consistent with the profile view. However, during construction, the SHC was found at a higher elevation than recorded, resulting in a direct conflict with the proposed pipeline.	The plumbing card was made available during RFI-2 response. CCTV investigation confirmed the existence of SHC, and the mark-up confirmed that. However, the vertical condition was different in the field than it was recorded.
Water	Water Service (WHC) Break @ 16310 Bond Mill (Jun 2021) – A water house connection was accidentally crimped.	No service outage, and the service line was fully repaired by the next day.	None	None	Damage Report (DIR 81)	None	None
Water	Water Service (WHC) @ 15817 Bond Mill (Oct 4 2023) – Struck a water house connection serving one home.	Water to the home was shut off for ~1 hour. The crew spliced the service line and had water back on by 1:50 PM the same day.	None	None	Daily Report (DIR 527) – WHC hit & repaired.	None	None

TYPE	Incident / Conflict	Operational Impact	Cost Impact	Schedule Impact	Source / Reference	Information Available in Contract Drawing or Blue Book	Information was Made Available through RFI or Other Means
Water	Storm Drain & 6" Water Main @ Sta. 128+40 (Sept 2024) – At the tie-in near the WTP, the new 48" line conflicted with an existing storm drain culvert and an unknown 6" water main	The 48" pipe alignment was slightly adjusted (minor reroute/lower) to clear the concrete storm drain. The 6" water main (a plant utility line) was relocated a few feet away from the 48" line. The small main was shut off briefly during off-peak hours to install the new segment, with no customer impact.	$20,557 related cost.	None recorded.	CO #6	None	None
Water	Mismarked WHC; Existing WHC crossing was marked at Stat. 99+23, but was not shown at this location on the contract plans. Because of the existence of the mark out, Allan Myers was legally obligated to follow damage prevention laws by hand digging withing 3' of the marks. After spending the entire day excavating to below the 48" pipeline subgrade, it was determined that this marking was erroneous and the anticipated WHC (as depicted by the mark out) did not exist. Allan Myers noted that there was a WHC shown on the plans at Stat. 99+36, but was not reflected on the ground via markings. Allan Myers followed the required procedures based upon the drawings showing a WHC in this area. This utility was	Because of the existence of the erroneous marking, Allan Myers was obligated to locate the utility before resuming mechanized excavation. Contractor sought recovery for the entire day of costs (including of all labor, equipment, support, and materials) involved in this matter.	$10,167 in PCO vs. $7,691 in pay request No. 49 related cost.	1 Day Delay	CO #5, PCO #24, Pay request No. 49	None	None

B.3

Cost Audit Document: Change Order and Cost Log

Scope Order Log

Project	48in Patuxent Watermain Rplmnt
Project #	BF1582E91
Client	WSSC Water
Contractor	Allan Myers
Insp Firm	
Original Contract Bid Price [1]	$8,393,777.00
Updated Contract PO	$8,471,658.94
Total Price of Change Orders [2]	$1,093,280.05
Revised Contract Price [2]	$9,564,938.99
Original Date of Substantial Completion [3]	3/10/2023
Revised Date of Substantial Completion [3]	7/5/2023

$77,881.94

* Original Bid Amount changed from $8,393,777 on Pay No. 42 to $84,471,658.94 to account for contingency items equaling $77,881.94 as part of the Pay Estimate No. 43 during the month of September 2024.

* Note that the latest Pay Est. No 49 shows work performed from 1-May-25 and 30-May-25.

CO#	Description/ Reason	Change Order Issuance date	Time Impact (days) [4]	New Substantial Completion Date listed on CO	New Substantial Completion Date based on CO, calculated by WSP	Cost Impact (USD) [5]	New Contract Price listed on CO (USD)	Related IDR, RFI, PCO (Date, Number)	Potential Savings to be Realized	WSP's Remarks
1	PCO 01: Gas Conflict to revise Pipe profile, work described as part of RFI 004. **(Cost adjustment = $73,620.00 and contract time extension of 6 calendar days.)** [6] PCO 04: Cut and re-grade at Vault G. **(Cost adjustment = $83,085.00.)** **Total time extension = 6 calendars days (4 shifts)**	9/21/2021	6	4/19/2023	3/16/2023	$156,705.00	$8,550,482.00	PCO 01 PCO 04	**$8,474.00** **$7,714.00**	For PCO 01, Contractor added 10% OH to direct costs, and an additional 10% profit to direct costs plus OH. PCO 04 includes 15% OH/profit for all labor, equip., materials and subcontractor work. Contract states that 15% is allowed for labor and materials, and 5% for equipment.
2	PCO 05: Chemical feed lines from existing WSSC Water chemical building to the new 48: raw water line not shown on the original drawings; modifications included (5) double containment PVC piping (360 LF each), a new manhole and cost associated with drilling and connection to new 48" raw water line. **(Cost adjustment = $227,995.00 and a contract time extension of 25 calendar days.)** PCO 08: existing sewer in conflict with new 48" raw water line alignment was not shown on original drawings. Work associated with RFI 16 and includes installation of 3 new manholes and over 150 LF of pipe. **(Cost adjustment = $192,550.00 and contract time extension of 25 calendar days.)** PCO 09: Relocation of Receiving Vault H due to conflicts with other utilities associated with responses to RFIs 13 and 14. **(Cost adjustment = $13,644.00 and no contract time extension.)** PCO 11: conflict with an existing 6" gas main and new 48" raw water line, which was not shown on original drawings. Work associated design revisions submitted as part of response to RFI 17. **(Cost adjustment = $18,949.00 and contract time extension of 2 calendar days.)** PCO 12: Test pitting as required to locate existing sewer house connections that may conflict with the 48" raw water line. Sewer connections were not shown on original drawings. **(Cost adjustment = $60,750.00.)** PCO 13: 8" water main relocation previously removed as part of CO #1 now required. **(Cost adjustment = $20,587.00 and contract time extension of 2 calendar days.)** [6] **Total time extension = 65 calendars days**	11/16/2021	65	6/23/2023	5/20/2023	$534,475.00	$9,084,957.00	PCO 05 PCO 08 PCO 09 PCO 11 PCO 12 PCO 13	**$8,891.00** **$10,429.00** **$1,153.00** **$1,091.00** **$240.00** **$2,130.00**	PCO 5, 8, 9 and 11 includes 15% OH/profit for all labor, equip., materials and subcontractor work. Contract states that 15% is allowed for labor and materials, and 5% for equipment. Cost listed in PCO 12 differs from what is shown on CO #2. (PCO cost = $51,698.62 vs CO cost = $60,750). PCO 12 also includes 15% mark-up for labor and subcontractors. Contract states that 15% is allowed for labor and materials, and 5% for equipment. PCO 13 was work previously required as part of original drawings but removed with CO #1. Contractor added 10% OH to direct costs, and an additional 10% profit to direct costs plus OH.
4	PCO 6: Added 6 new corrosion control test stations and new insulation joints. Work associated with Contractor's interpretation of WSSC Water's response to RFI 012. **(Cost adjustment = $44,458.00 and contract time extension of 7 days.)** PCO 16: Global supply chain issues required Contractor to extend their lease agreement with BG&E to store excess materials. Includes the labor and equipment costs associated with handling material within BGE ROW and BGE Leased Lot. **(Cost adjustment = $49,556.00 and contract time extension of 17 days.)** PCO 20: Original drawing did not ID/OD of existing 42" steel pipe. Contractor state industry standard for steel pipe is OD, when ID/OD not provided, although WSSC Water intended to reflect ID. Cost covers the price difference of new 42"x36" tee and two new 43" couplings. **(Cost adjustment = $18,328.31.)** PCO 21: cost associated with repairs and cleanups due to unmarked WHC not shown on original drawings. **(Cost adjustment = $16,501.28 and contract time extension of 4 days.)** Contingency Item #1: Test pit in paved area (non-arterial state road) via direction of WSSC Water to ascertain the presence of rock within trench line. **(Cost adjustment = $8,631.90.)** Contingency Item #3: Test pit in paved area at beginning of project **(Cost adjustment = $475.00.)** Contingency Item #4: Gravel backfill below subgrade due to ground water; Contractor directed to use 57 stones for bedding. **(Cost adjustment = $28,757.04 and contract time extension of 5 days.)** Contingency Item #7: Crusher run material to be used where native soil is determined to be unsuitable. **(Cost adjustment = $40,018.00.)**	9/30/2024	33	7/5/2023	6/22/2023	$206,725.53	$9,291,682.53	PCO 6 PCO 16 PCO 20 PCO 21	**$2,284.00** **$0.00** **$1,392.85** **$0.00**	PCO 06 includes 15% OH/profit for all labor, equip., materials and subcontractor work. Contract states that 15% is allowed for labor and materials, and 5% for equipment. Cost listed in PCO 16 differs from what is shown on CO #4. (PCO cost = $44,340 vs CO cost = $49,556). Contractor's fee provided in PCO 16 was calculated correctly per the General Conditions. Cost listed in PCO 20 differs from what is shown on CO #4. (PCO cost = $22,962 vs CO cost = $18,321.31.) Contractor added 10% OH to direct costs, and an additional 10% profit to direct costs plus OH, as opposed to 15% to labor and materials. Cost listed in PCO 21 differs from what is shown on CO #4. (PCO cost = $21,010 vs CO cost = $$16,501.28). Contractor's fee provided in PCO 21 was calculated correctly per the General Conditions.
5	PCO 18: Energized AC Ground Mats in BGW ROW and installation of test leads via thermite welds to connect anodes to casing, work associated with RFI 021. Cathodic protectic work. **(Cost adjustment = $63,016.00)** PCO 22: Dewatering Cleanup of Leaking Valves. **(Cost adjustment = $18,173.00.)** PCO 23: SHC Conflict 15626 Bond Mill Road **(Cost adjustment = $7,691.00.)** PCO 24: Mis-Marked WHC 15627 Bond Mill Road (PCO 23). **(Cost adjustment = $5,084.00.)** PCO 26: Force Account T&M / SHC 15611 Bond Mill. **(Cost adjustment = $95,793.00 and a contract time extension of 23 calendar days.)** PCO 27: Pipe Modifications / Field Cuts as needed to correct alignment issues with the project's approved pipe laying schedule. **(Cost adjustment = $30,929.00 and contract time extension of 6 calendar days.)** PCO 28: BGE Lease Agreement Extension. Cost includes a 15% mark-up. **(Cost adjustment = $5,227.00.)** PCO 29: Force Account T&M - 15617 Bond Mill Road, cost associated with a conflicting SHC discovered at Sta. 103+95. **(Cost adjustment = $11,051.00 and contract time extension of 3 calendar days.)** PCO 30: Additional Test Pitting of Unidentified Pipe. **(Cost adjustment = $2,120.00.)**	10/30/2024	45	8/19/2023	8/6/2023	$239,084.00	$9,530,766.53	PCO 18 PCO 22 PCO 23 PCO 24 PCO 26 PCO 27 PCO 28 PCO 29 PCO 30	**$0.00** **$0.00** **$0.00** **$0.00** **$0.00** **$46.00** **$0.00** **$0.00** **$0.00**	Mark-ups to all PCOs except for PCO 27 were applied correctly per the General Conditions of the Contract. For PCO 27, Contractor added 10% OH to direct costs for labor, materials and subs, and an additional 10% profit to direct costs plus OH. Cost listed in PCO 22 differs from what is shown on Pay Request No. 49. (PCO cost = $20,712 vs CO cost = $18,173.) Cost listed in PCO 23 differs from what is shown on Pay Request No. 49. (PCO cost = $15,376 vs CO cost = $7,691.) Cost listed in PCO 24 differs from what is shown on Pay Request No. 49. (PCO cost = $10,167 vs CO cost = $5,084.) Cost listed in PCO 26 differs from what is shown on Pay Request No. 49. (PCO cost = $98,639 vs CO cost = $95,793.)
6	PCO 31: Storm drain at Sta. 128+40 **(Cost adjustment = $4,001.00)** PCO 34: 6" WM at Sta. 128+50. **(Cost adjustment = $3,733.00.)** PCO 35: Storm drain at Sta. 1+28 **(Cost adjustment = $20,557.00.)** PCO 36: 30in TR Flex Restraint Joint. **(Cost adjustment = $911.00)** Material Furnished by WSS for Emergency Replacement. **(Cost adjustment = -$12,913.54.)**	12/31/2024	6	8/25/2023	8/12/2023	$16,288.46	$9,547,054.99	PCO 31 PCO 34 PCO 35 PCO 36	-- -- -- --	PCO #31, #34, #35 and #36 and breakdowns of costs were not included in the documents from eBuilder. Cost adjustment for each PCO taken from Pay Request No. 49.
7	PCO 38: Fitment Issues experienced at the 30" and 36" tie-in located at the south end of the Project. Required field modifications and work to be performed over 40 additional MHs. **(Cost adjustment = $7,475)** PCO 39-1: 42in Tie-in/Out of Roundness. Work performed over 15 total MHs between 5 crew members at the end of shift to reshape existing 42" steel water main for its original oblong shape to allow for installation of new coupling. **(Cost adjustment = $3,729)** PCO 40: Repair of Existing Damage to 36" PCCP. Work performed over 36 total MHs between 9 crew members. **(Cost adjustment = $6,680).**	3/21/2025	7	9/1/2023	8/19/2023	$17,884.00	$9,564,938.99	PCO 38 PCO 39-1 PCO 40	**$0.00** **$0.00** **$0.00**	Mark-ups to all PCOs were applied correctly per the General Conditions of the Contract.

[1] Original bid price taken from signed agreement between Garney Companies and WSSC Water.
[2] Sum of all change orders listed on Pay Request No. 49 (period from 1-May-25 to 31-May-25).
[3] Original bid price taken form signed agreement between Allan Myers and WSSC Water.
[4] Calendar days.
[5] Each PCO includes 15% mark-up to all labor and subcontractor work. Per Article 14.1.3.2 of the General Conditions in the signed agreement between Allan Myers and WSSC Water, OH&P shall be 15% for labor and materials, and 5% for subcontractor work.
[6] Contractor applied 10% OH to direct costs, and then additional 10% profit to direct costs plus 10% OH.

B.3

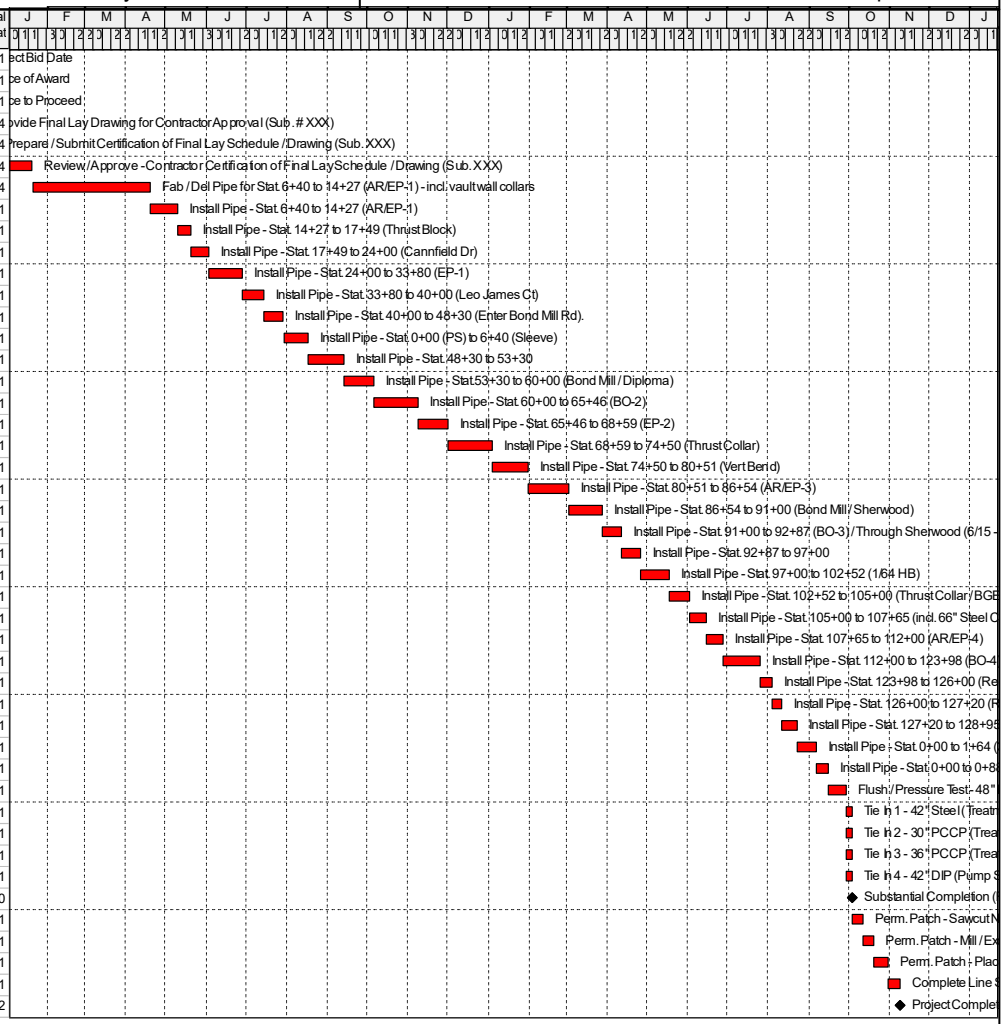
Cost Audit Document: PCO Log

PCO No.	Type	Status	RFI No.	WSSC Water CO No.	OPEN / UNSUBMITTED / TRACKING	WSP Notes	Date PCO to WSSC Water	Submitted Amount	Current Status
01	Change in Condition	Resolved	04	01	Revised Profile Btwn. 46+50 - 50+25 to Avoid BGE 3" Gas Main at 49+20	48" WM crossing two utilities at the same locations. Design Gas test pit was not at the exact crossing, and found higher than design anticipated elevation, causing conflict.	4/20/2021	$73,620.00	CO-1 executed by Myers on 9/15/21. Billed on September 2021 invoice
02	Added Scope	Dropped			Culvert Geopolymer - Use Milliken Product (WSSC Water Preference) - see RFQ- 1 / Also Potential Extended Warranty		2/12/2021	$1,080.00	1 / Also Potential Extended Warranty 4/14/21 2/12/21 $ 1,080.00 0.0 Pricing submitted to WSSC Water on 2/12/21 for extended warranty. No response provided. Work completed. Assumed it is not being requested. Dropped.
03	Change in Condition	Denied			Rock at Access Vault G (El. 269')				Denied by WSSC Water due to General Provision clausing excluding damages for rock
04	Change in Condition	Resolved		01	Elevation Issues at Access Vault G	*Design drawing S-1 elevation of vault was shown 5' lower than the actual surveyed elevation. *Appears during coordination Contractor and WSSC Water on issue a formal change order in advance of the work may have caused some delayed. See email) *Final As-built plan wasn't redlined for this elevation changed.	7/7/2021	$87,420.00	CO-1 executed by Myers on 9/15/21. Billed on September 2021 invoice
05	Added Scope	Resolved	NA	02	Chemical Feed Lines at Pump Station (see CSR-44)	Chemical feed lines from existing WSSC Water chemical building to the new 48: raw water line not shown on the original drawings; modifications included (5) double containment PVC piping (360 LF each), a new manhole and cost associated with drilling and connection to new 48" raw water line.	10/14/21	$227,995.00	
06	Added Scope	Resolved	12	04	Added Test Stations / Small Diameter Lines	Added 6 new corrosion control test stations and new insulation joints for 8" & 12" Water line	8/24/21	$44,458.00	
07	Change in Condition	Merged	13	02	12" WM Relocation and Electrical Vault, merged with PCO 09				PCO 07 dropped and merged into PCO 09 due to overlapping nature of produced redline revision.
08	Added Scope	Resolved	16	02	16601 Supplee Lane - Sewer House Connection Repair	Existing sewer in conflict with new 48" raw water line alignment was not shown on original drawings. Work includes installation of 3 new manholes and over 150 LF of pipe.	9/27/2021	$192,550.00	
09	Change in Condition	Resolved	13/14	02	Receiving Vault H Concerns / 12" WM Relocation and Electrical Vault (prev. PCO 07). - PCO 07 and PCO 09 combined (RFI 13/14).		10/22/2021	$13,644.00	
10	Added Scope	Denied			Canusa Wrap Purchase on Behalf of WSSC Water	Heat shrink materials necessary to complete six hundred fifty (650) joint applications serve as a substitute to the Polyken tape wrap material that WSSC Water would otherwise be providing to the project via its Anacostia warehouse		$148,032.00	Per 10/14/21 progress meeting, WSSC Water declined to enact this option / proposal
11	Change in Condition	Resolved	17	02	Unanticipated 6" Gas Main within BGE ROW	Conflict with an existing 6" gas main and new 48" raw water line, which was not shown on original drawings.	10/22/2021	$18,949.00	
12	Pricing Agreement Cont. item #1	Resolved		02	Test Pitting for SHC / Restructured Pricing (Contingent Item #1 Use)	Test pitting as required to locate existing sewer house connections that may conflict with the 48" raw water line. Sewer connections were not shown on original drawings.	10/14/2021	$86,400.00	
13	Change in Condition	Resolved		02	8" WM Relocation at Stat. 48+80 (Offset to Credit in PCO 01)	Original contract work removed as part of CO #1 now required	11/1/2021	$20,587.00	
14	Cannot find					Cannot find record			
15	Change in Condition				Rock - Bond Mill Road (~Stat. 57+00 to 70+00)	Rock was discovered in locations as well as to be far harder in composition and density than (1) what was identified in the WSCC-provided boring logs (decomposed vs. granite / gneiss) / ("rippable" vs "non-rippable") or (2) what could have been identified via a reasonable pre-bid site investigation. Contractor estimated additional 1,132 CY of rock was removed increasing the total rock quantity to over 3,950 CY	10/9/2023	$ 1,219,613.00	
15-Ext.	Change in Condition				Rock - Bond Mill Road (~Stat. 57+00 to 70+00) / Time Asssessment and Extended Conditions	Burden rate updated		$ 1,273,466.00	
16 Rev. 1	Change in Condition	Resolved		04	Rehandling of C&M Pipe in BGE ROW through June 2024 (Rev. 2/1/24)	Global supply chain issues required Contractor to extend their lease agreement with BG&E to store excess materials	8/15/2023	$49,556.00	
17	Cannot find								
18	Change in Condition		021		Energized Ground / Potential Cathodic Issues		10/1/2024	$63,016	Awaiting RFP / Scope of Work to evaluate and price.
19	Cannot find								
20	Change in Condition	Resolved		04	Discrepancy with OD of 42" Tee at Tie In w/ New 36" WM	Orginal drawing did not ID/OD of existing 42" steel pipe. Contractor state industry standard for steel pipe is OD, when ID/OD not provided, although WSSC Water intended to reflect ID. Cost covers the price difference of new 42"x36" tee and two new 43" couplings.			
21-Rev. 1	Added Scope	Resolved		04	Repair of WHC at Stat. 89+67.5 (Revised 2/12/24)	cost associated with repairs and cleanups due to unmarked WHC not shown on original drawings.	1/19/2024	$21,010.00	
22-Rev.1	Change in Condition				Leaking Water Main / Added Dewatering (Rev LB Rated on 8/7/24)	Contractor claimed the cost to dewatering efforts resulting from the leaking WSSC Water water line (between 3/11 – 3/14) , contractor claimed witnessed the existing small diameter main leaking into the trench around 12:45 pm starting 3/11. WSSC Water had maintenance crew to do the repair.	3/23/2024	$20,712.00	
23-Rev.1	Change in Condition				Discovered SHC at Stat. 99+16 / Down time and Encasement (Rev. LB Rate on 8/7/24)	Contractor found wood shoring for an existing sewer trench that was not marked, found condition limited clearance, fragile pipe, undesirable joint location. WSSC Water agreed with the suggestion to encase the transite pipe lateral in concrete over the width of the ditch to reinforce the lateral line.	7/1/2024	$15,376.00	
24-Rev.1	Change in Condition				Unable to Locate WHC at Stat. 99+23 (Rev. LF Rate on 8/7/24)	Contractor claimed for hand digging trench for "in field" water marking showing within 48" main trench line, and a WHC found 30 feet up station.	7/1/2024	$10,167.00	
25	Added Scope				Intermediate Hydrostatic Testing Through Bond Mill Road			$92,444.00	

PCO No.	Type	Status	RFI No.	WSSC Water CO No.	OPEN / UNSUBMITTED / TRACKING	WSP Notes	Date PCO to WSSC Water	Submitted Amount	Current Status
26-Rev.2	Change in Condition				SHC at Stat. 105+00 / Force Account	a conflicting sewer house connection was discovered at Stat. 105+00, contractor conduct the 4" SHC relocation under force account	8/20/2024	$98,639.00	
27	Added Scope				Field Cut / Modify Existing DIP for Lay Drawing per WSSC Water Direction		8/9/2024	$30,929.00	
28-Rev.1	Change in Condition				Additional BGE Rental Yard Lease Costs (ref. PCO 16-1)		8/30/2024	$5,227.00	
29	Force Account				SHC at Stat. 103+95 / Force Account Submission		8/27/2024	$11,051.00	
30	Added Scope				Directive to Test Pit "new" Utility within WWTP Facility		9/11/2024	$2,120.00	
31				06	Storm drain at Sta. 128+40			$4,001.00	
32	Cannot find			06					
33	Cannot find			06					
34				06	6" WM at Sta. 128+50			$3,733.00	
35				06				$20,557.00	
36				06				$911.00	
37					Purchase / Delivery of Added Gripper Rings at 36"x36"	Due to alignment issues, two new gripper rings were required.		$5,020.00	
38				07	Fitment Issues / Added Time at Tie-In of 30in and 36in Tie-Ins	Fitment issues when tying in 30" and 36" water mains at south end of the		$7,475.00	
39-Rev.1				07	42in Tie-In Issues / Out of Roundness of Pipe (Rev. 12/27/24)	Existing 42" steel pipe at tie out has oval shape. Construction crew reshaped existing pipe, but leaking is a concern if it is to return to its oval shape. Note the email refers to this as PCO 038, but the description matches the PCO 39 document.		$3,729.00	
40				07	Repair of Existing Damage to 36in PCCP	Existing damage to 36in PCCP line was addressed, 4 hours per crew.		$6,680.00	

B.4
Schedule: Baseline Longest Path

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float
MS1000	Project Bid Date	0	0	0%	07-Dec-20		11
MS1010	Notice of Award	0	0	0%	07-Dec-20		11
MS1020	Notice to Proceed	0	0	0%	07-Dec-20		11
AMD0010	Provide Final Lay Drawing for Contractor Approval (Sub. # XXX)	7	7	0%	07-Dec-20	13-Dec-20	14
ADM0010	Prepare / Submit Certification of Final Lay Schedule / Drawing (Sub. XX	7	7	0%	14-Dec-20	20-Dec-20	14
ADM0011	Review / Approve - Contractor Certification of Final Lay Schedule / Drav	30	30	0%	21-Dec-20	19-Jan-21	14
OWN0020	Fab / Del Pipe for Stat 6+40 to 14+27 (AR/EP-1) - incl. vault wall collars	90	90	0%	20-Jan-21	19-Apr-21	14
PIPE0020	Install Pipe - Stat 6+40 to 14+27 (AR/EP-1)	14	14	0%	20-Apr-21	10-May-21	11
PIPE0030	Install Pipe - Stat. 14+27 to 17+49 (Thrust Block)	8	8	0%	10-May-21	20-May-21	11
PIPE0040	Install Pipe - Stat. 17+49 to 24+00 (Cannfield Dr)	8	8	0%	20-May-21	03-Jun-21	11
PIPE0050	Install Pipe - Stat. 24+00 to 33+80 (EP-1)	16	16	0%	03-Jun-21	28-Jun-21	11
PIPE0060	Install Pipe - Stat. 33+80 to 40+00 (Leo James Ct)	12	12	0%	28-Jun-21	14-Jul-21	11
PIPE0070	Install Pipe - Stat. 40+00 to 48+30 (Enter Bond Mill Rd).	10	10	0%	14-Jul-21	29-Jul-21	11
PIPE0080	Install Pipe - Stat. 0+00 (PS) to 6+40 (Sleeve)	12	12	0%	30-Jul-21	17-Aug-21	11
PIPE0090	Install Pipe - Stat. 48+30 to 53+30	17	17	0%	17-Aug-21	13-Sep-21	11
PIPE0100	Install Pipe - Stat.53+30 to 60+00 (Bond Mill / Diploma)	17	17	0%	13-Sep-21	06-Oct-21	11
PIPE0110	Install Pipe - Stat. 60+00 to 65+46 (BO-2)	18	18	0%	06-Oct-21	08-Nov-21	11
PIPE0120	Install Pipe - Stat. 65+46 to 68+59 (EP-2)	12	12	0%	08-Nov-21	01-Dec-21	11
PIPE0130	Install Pipe - Stat. 68+59 to 74+50 (Thrust Collar)	19	19	0%	01-Dec-21	04-Jan-22	11
PIPE0140	Install Pipe - Stat. 74+50 to 80+51 (Vert Bend)	15	15	0%	04-Jan-22	31-Jan-22	11
PIPE0150	Install Pipe - Stat. 80+51 to 86+54 (AR/EP-3)	19	19	0%	31-Jan-22	03-Mar-22	11
PIPE0160	Install Pipe - Stat. 86+54 to 91+00 (Bond Mill / Sherwood)	15	15	0%	03-Mar-22	28-Mar-22	11
PIPE0170	Install Pipe - Stat. 91+00 to 92+87 (BO-3) / Through Sherwood (6/15 - 8/	9	9	0%	28-Mar-22	11-Apr-22	11
PIPE0180	Install Pipe - Stat. 92+87 to 97+00	10	10	0%	12-Apr-22	26-Apr-22	11
PIPE0190	Install Pipe - Stat. 97+00 to 102+52 (1/64 HB)	15	15	0%	26-Apr-22	18-May-22	11
PIPE0200	Install Pipe - Stat. 102+52 to 105+00 (Thrust Collar / BGE ROW)	10	10	0%	18-May-22	02-Jun-22	11
PIPE0210	Install Pipe - Stat. 105+00 to 107+65 (incl. 66" Steel Casing)	7	7	0%	02-Jun-22	15-Jun-22	11
PIPE0220	Install Pipe - Stat. 107+65 to 112+00 (AR/EP-4)	9	9	0%	15-Jun-22	27-Jun-22	11
PIPE0230	Install Pipe - Stat. 112+00 to 123+98 (BO-4)	19	19	0%	28-Jun-22	26-Jul-22	11
PIPE0240	Install Pipe - Stat. 123+98 to 126+00 (Rec. Vault G)	7	7	0%	26-Jul-22	04-Aug-22	11
PIPE0250	Install Pipe - Stat. 126+00 to 127+20 (Reducer)	4	4	0%	04-Aug-22	11-Aug-22	11
PIPE0260	Install Pipe - Stat. 127+20 to 128+95 (36x36 Tee)	8	8	0%	11-Aug-22	23-Aug-22	11
PIPE0270	Install Pipe - Stat. 0+00 to 1+64 (36x36 Tee)	8	8	0%	23-Aug-22	06-Sep-22	11
PIPE0280	Install Pipe - Stat. 0+00 to 0+88 (30x30 Tee)	7	7	0%	06-Sep-22	15-Sep-22	11
PIPE1000	Flush / Pressure Test - 48" Pipeline	10	10	0%	15-Sep-22	29-Sep-22	11
PIPE1010	Tie In 1 - 42" Steel (Treatment Plant)	3	3	0%	29-Sep-22	04-Oct-22	11
PIPE1020	Tie In 2 - 30" PCCP (Treatment Plant)	3	3	0%	29-Sep-22	04-Oct-22	11
PIPE1030	Tie In 3 - 36" PCCP (Treatment Plant)	3	3	0%	29-Sep-22	04-Oct-22	11
PIPE1040	Tie In 4 - 42" DIP (Pump Station)	3	3	0%	29-Sep-22	04-Oct-22	11
MS5000	Substantial Completion (Required by March 10, 2023)	0	0	0%		04-Oct-22	20
REST1000	Perm. Patch - Sawcut Neatline (Sub: Mattiola)	5	5	0%	04-Oct-22	12-Oct-22	11
REST0110	Perm. Patch - Mill / Excavate Full Depth	5	5	0%	12-Oct-22	20-Oct-22	11
REST0120	Perm. Patch - Place Asphalt	5	5	0%	20-Oct-22	31-Oct-22	11
REST0130	Complete Line Striping (Sub: XXX)	5	5	0%	31-Oct-22	09-Nov-22	11
MS9999	Project Complete	0	0	0%		09-Nov-22	122

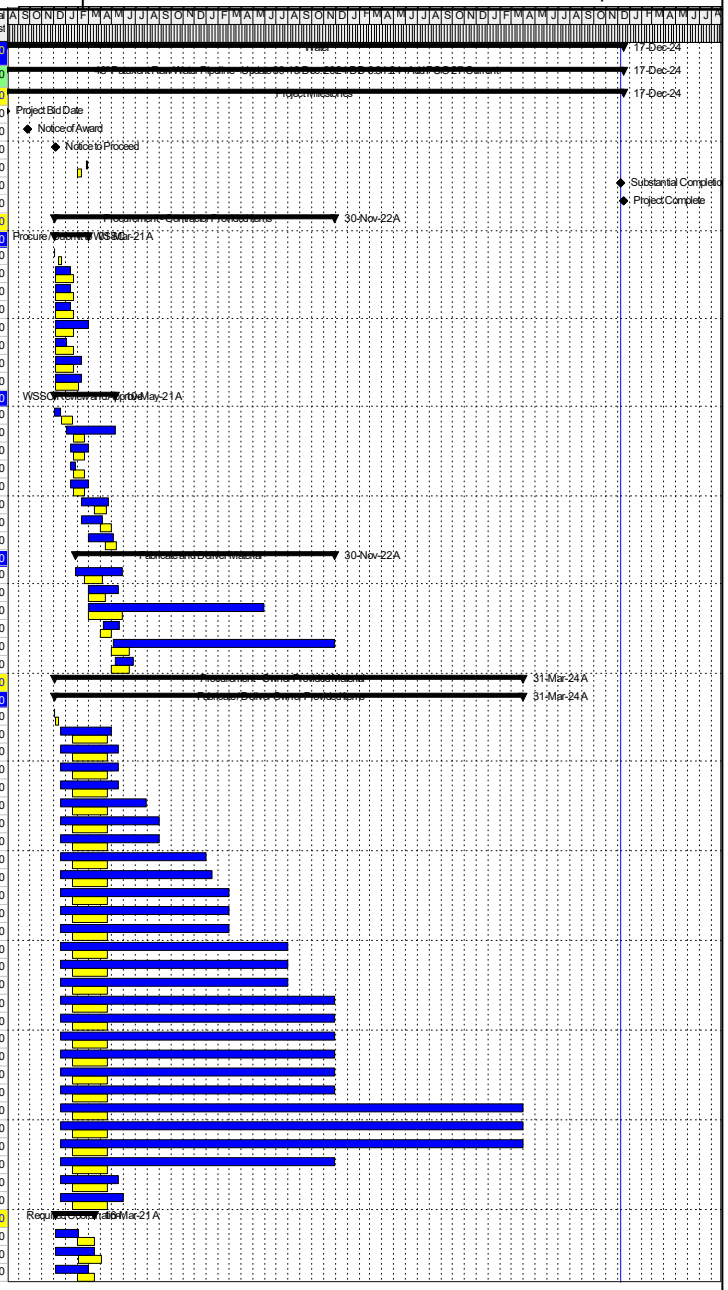


Actual Work | Critical Remaining W... | Remaining Work | Milestone

TASK filter: Critical.

B.4
Schedule: Baseline Comparison With Current Schedule

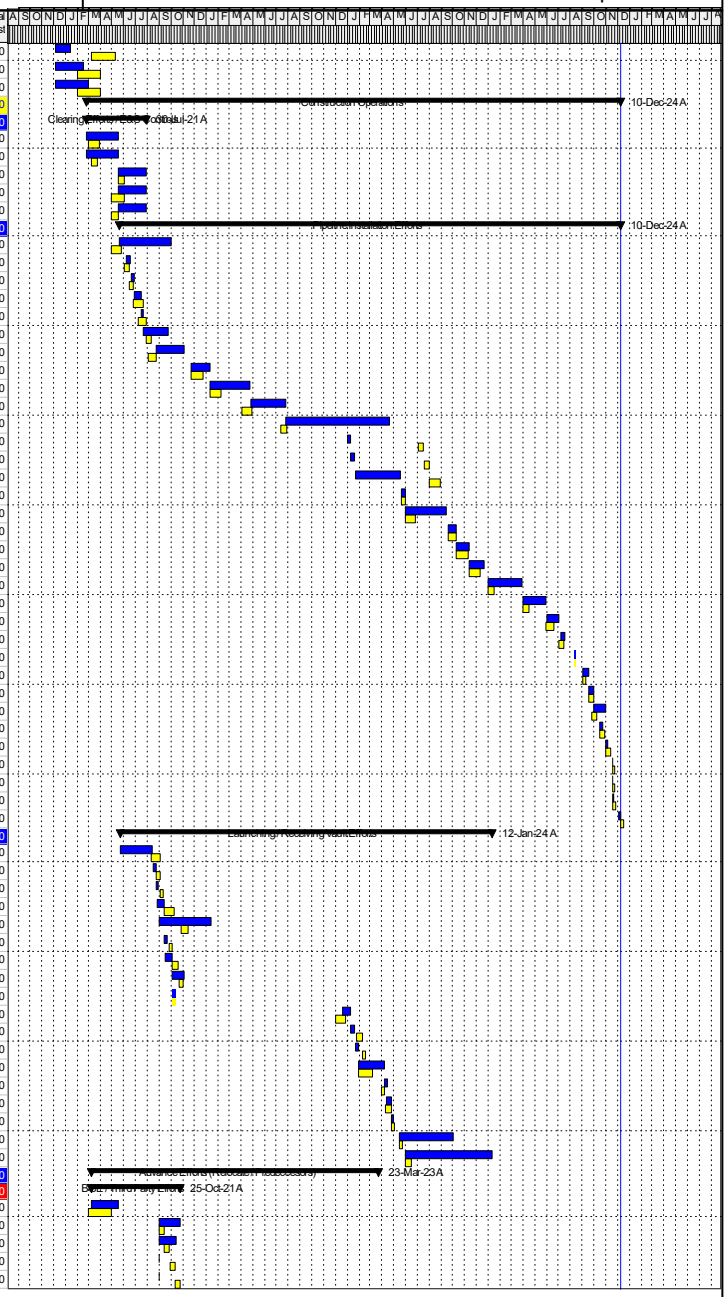
Activity ID	Activity Name	Actual Duration	BL Duration	Duration % Complete	BL Start	Actual Start	BL Project Finish	Actual Finish	Finish	Variance - BL Duration	Variance - BL Finish Date	Total Float	Budgeted Total Cost
Water		1595	1473	99.52%	07-Dec-20	30-Jul-20	18-Dec-24		17-Dec-24	-129	1	-581	$0.00
48" Patuxent Raw Water Pipeline - Update 39-10 Dec. 2024		1595	1473	99.52%	07-Dec-20	30-Jul-20	18-Dec-24		17-Dec-24	-129	1	-581	$0.00
Project Milestones		1594	1471	100%	07-Dec-20	30-Jul-20	17-Dec-24		17-Dec-24	-130	0	-581	$0.00
MS1000	Project Bid Date	0	0	100%	07-Dec-20	30-Jul-20				0	130		$0.00
MS1010	Notice of Award	0	0	100%	07-Dec-20	24-Sep-20				0	74		$0.00
MS1020	Notice to Proceed	0	0	100%	07-Dec-20	07-Dec-20				0	0		$0.00
MS1030	Mobilization / Start of Field Operations	1	10	100%	01-Feb-21	25-Feb-21	10-Feb-21	26-Feb-21	26-Feb-21 A	9	-15		$0.00
MS5000	Substantial Completion (Required by June 2, 2023)	0	0	100%			27-Nov-24	10-Dec-24	10-Dec-24 A	0	-13		$0.00
MS9999	Project Complete	0	0	0%			17-Dec-24		17-Dec-24	0	0	-581	$0.00
Procurement - Contractor Provided Items		726	189	100%	07-Dec-20	04-Dec-20	14-Jun-21	30-Nov-22	30-Nov-22 A	-537	-534		$0.00
Procure / Submit to WSSC		87	60	100%	07-Dec-20	04-Dec-20	04-Feb-21	01-Mar-21	01-Mar-21 A	-27	-24		$0.00
ADM0010	Prepare / Submit Certification of Final Lay Schedule / Drawing (Sub. CSI	0	7	100%	14-Dec-20	04-Dec-20	20-Dec-20	04-Dec-20	04-Dec-20 A	7	17		$0.00
ADM0030	Procure / Submit - Precast Shop Drawings (Sub. CSR-12)	38	45	100%	07-Dec-20	07-Dec-20	20-Jan-21	14-Jan-21	14-Jan-21 A	7	7		$0.00
ADM0040	Procure / Submit - Large Diameter Valves (Sub. CSR-10)	38	45	100%	07-Dec-20	07-Dec-20	20-Jan-21	14-Jan-21	14-Jan-21 A	7	7		$0.00
ADM0020	Procure / Submit - Contractor Pipe Elements (Sub. CSR-10)	38	45	100%	07-Dec-20	07-Dec-20	20-Jan-21	14-Jan-21	14-Jan-21 A	7	7		$0.00
ADM0050	Procure / Submit - Fabricated Metals Shop Drawings (CSR-21))	84	45	100%	07-Dec-20	07-Dec-20	20-Jan-21	01-Mar-21	01-Mar-21 A	-39	-39		$0.00
ADM0060	Procure / Submit - Culvert Rehab. Materials (Sub. CSR-07)	28	45	100%	07-Dec-20	07-Dec-20	20-Jan-21	04-Jan-21	04-Jan-21 A	17	17		$0.00
ADM0070	Prepare / Submit - Launch / Rec. Vault Rebar Shop Drawings (CSR-15)	66	45	100%	07-Dec-20	07-Dec-20	20-Jan-21	11-Feb-21	11-Feb-21 A	-21	-21		$0.00
ADM0080	Prepare / Submit - Launch / Rec. Vault SOE Working Drawings (CSR-1	66	60	100%	07-Dec-20	07-Dec-20	04-Feb-21	11-Feb-21	11-Feb-21 A	-6	-6		$0.00
WSSC Review and Approve		157	144	100%	21-Dec-20	04-Dec-20	13-May-21	10-May-21	10-May-21 A	-13	4		$0.00
ADM0011	Review / Approve - Contractor Certification of Final Lay Schedule / Drawi	14	30	100%	21-Dec-20	04-Dec-20	19-Jan-21	18-Dec-20	18-Dec-20 A	16	33		$0.00
ADM0061	Review / Approve - Culvert Rehab Materials (Sub. CSR-07/20)	126	30	100%	21-Jan-21	04-Jan-21	19-Feb-21	10-May-21	10-May-21 A	-96	-79		$0.00
ADM0021	Review / Approve - Contractor Pipe Elements (Sub. CSR-10/18)	46	30	100%	21-Jan-21	14-Jan-21	19-Feb-21	01-Mar-21	01-Mar-21 A	-16	-9		$0.00
ADM0031	Review / Approve - Precast Shop Drawings (Sub. CSR-12)	12	30	100%	21-Jan-21	14-Jan-21	19-Feb-21	26-Jan-21	26-Jan-21 A	18	25		$0.00
ADM0041	Review / Approve - Large Diameter Valves (Sub. CSR-10/18)	46	30	100%	21-Jan-21	14-Jan-21	19-Feb-21	01-Mar-21	01-Mar-21 A	-16	-9		$0.00
ADM0071	Review / Approve - Launch / Rec. Vault Rebar Shop Drawings (CSR-15	68	30	100%	17-Mar-21	12-Feb-21	15-Apr-21	21-Apr-21	21-Apr-21 A	-38	-5		$0.00
ADM0081	Review / Approve - Launch / Rec. Vault SOE Working Drawings (CSR-1	54	30	100%	01-Apr-21	12-Feb-21	30-Apr-21	07-Apr-21	07-Apr-21 A	-24	24		$0.00
ADM0051	Review / Approve - Fabricated Metals Shop Drawings (CSR-21 /34)	65	30	100%	14-Apr-21	01-Mar-21	13-May-21	05-May-21	05-May-21 A	-35	9		$0.00
Fabricate and Deliver Material		672	114	100%	20-Feb-21	27-Jan-21	14-Jun-21	30-Nov-22	30-Nov-22 A	-558	-534		$0.00
ADM0032	Fabricate / Deliver - Precast Structures (Sub. CSR-12)	121	45	100%	20-Feb-21	27-Jan-21	05-Apr-21	28-May-21	28-May-21 A	-76	-52		$0.00
ADM0022	Fabricate / Deliver - Pipe and Elements (Sub. CSR-10/18)	77	45	100%	28-Feb-21	02-Mar-21	14-Apr-21	18-May-21	18-May-21 A	-32	-34		$0.00
ADM0042	Fabricate / Deliver - Large Diameter Valves (Sub. CSR-10/18)	455	90	100%	28-Feb-21	02-Mar-21	29-May-21	31-May-22	31-May-22 A	-365	-367		$0.00
ADM0082	Fabricate / Deliver - Vault SOE Components (CSR-16)	43	30	100%	31-Mar-21	08-Apr-21	30-Apr-21	21-May-21	21-May-21 A	-13	-21		$0.00
ADM0072	Fabricate / Deliver - Vault Metals (CSR-21 / 34)	573	45	100%	30-Apr-21	06-May-21	14-Jun-21	30-Nov-22	30-Nov-22 A	-528	-534		$0.00
ADM0062	Fabricate / Deliver - Culvert Rehab Materials (Sub. CSR-07/20)	45	45	100%	30-Apr-21	11-May-21	14-Jun-21	25-Jun-21	25-Jun-21 A	0	-11		$0.00
Procurement - Owner Provided Material		1215	134	100%	07-Dec-20	03-Dec-20	19-Apr-21	31-Mar-24	31-Mar-24 A	-1081	-1077		$0.00
Fabricate / Deliver Owner Provided Items		1215	134	100%	07-Dec-20	03-Dec-20	19-Apr-21	31-Mar-24	31-Mar-24 A	-1081	-1077		$0.00
AMD0010	Provide Final Lay Drawing for Contractor Approval (Sub. CSR-02)	0	7	100%	07-Dec-20	03-Dec-20	13-Dec-20	03-Dec-20	03-Dec-20 A	7	11		$0.00
OWN0020	Fab / Del Pipe for Stat. 6+40 to 14+27 (AR/EP-1) - incl. vault wall collars	133	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	30-Apr-21	30-Apr-21 A	-43	-10		$0.00
OWN0030	Fab / Del Pipe for Stat. 14+27 to 17+49 (Thrust Collar)	151	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	18-May-21	18-May-21 A	-61	-28		$0.00
OWN0040	Fab / Del Pipe for Stat. 17+49 to 24+00 (Cannfield Dr)	151	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	18-May-21	18-May-21 A	-61	-28		$0.00
OWN0060	Fab / Del Pipe for Stat. 33+80 to 40+00	151	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	18-May-21	18-May-21 A	-61	-28		$0.00
OWN0080	Fab / Del Pipe for Stat. 0+00 (PS) to 6+40 (Sleeve)	224	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	30-Jul-21	30-Jul-21 A	-134	-101		$0.00
OWN0090	Fab / Del Pipe for Stat. 48+30 to 53+30	257	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	01-Sep-21	01-Sep-21 A	-167	-134		$0.00
OWN0100	Fab / Del Pipe for Stat. 53+30 to 60+00 (Bond Mill/Diploma)	257	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	01-Sep-21	01-Sep-21 A	-167	-134		$0.00
OWN0110	Fab / Del Pipe for Stat. 60+00 to 65+46 (BO-2)	378	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	31-Dec-21	31-Dec-21 A	-288	-255		$0.00
OWN0120	Fab / Del Pipe for Stat. 65+46 to 68+59 (EP-2)	395	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	17-Jan-22	17-Jan-22 A	-305	-272		$0.00
OWN0130	Fab / Del Pipe for Stat. 68+59 to 74+50 (Thrust Collar)	437	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	28-Feb-22	28-Feb-22 A	-347	-314		$0.00
OWN0140	Fab / Del Pipe for Stat. 74+50 to 80+51 (VB)	437	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	28-Feb-22	28-Feb-22 A	-347	-314		$0.00
OWN0150	Fab / Del Pipe for Stat. 80+51 to 86+54 (AR/EP-3)	437	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	28-Feb-22	28-Feb-22 A	-347	-314		$0.00
OWN0160	Fab / Del Pipe for Stat. 86+54 to 91+00 (Bond Mill / Sherwood)	591	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	01-Aug-22	01-Aug-22 A	-501	-468		$0.00
OWN0180	Fab / Del Pipe for Stat. 92+87 to 97+00	591	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	01-Aug-22	01-Aug-22 A	-501	-468		$0.00
OWN0190	Fab / Del Pipe for Stat. 97+00 to 102+52 (HB)	591	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	01-Aug-22	01-Aug-22 A	-501	-468		$0.00
OWN0200	Fab / Del Pipe for Stat. 102+52 to 105+00 (TC/BGE ROW)	712	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	30-Nov-22	30-Nov-22 A	-622	-589		$0.00
OWN0210	Fab / Del Pipe for 105+00 to 107+65	712	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	30-Nov-22	30-Nov-22 A	-622	-589		$0.00
OWN0220	Fab / Del Pipe for 107+65 to 112+00 (AR/EP-4)	712	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	30-Nov-22	30-Nov-22 A	-622	-589		$0.00
OWN0230	Fab / Del Pipe for 112+00 to 123+98 (BO-4)	712	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	30-Nov-22	30-Nov-22 A	-622	-589		$0.00
OWN0240	Fab / Del Pipe for 123+98 to 126+00 (Rec. Vault G)	712	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	30-Nov-22	30-Nov-22 A	-622	-589		$0.00
OWN0250	Fab / Del Pipe for 126+00 to 127+20 (Reducer)	712	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	30-Nov-22	30-Nov-22 A	-622	-589		$0.00
OWN0260	Fab / Del Pipe for 127+20 to 128+95 (36x36 Tee)	1200	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	31-Mar-24	31-Mar-24 A	-1110	-1077		$0.00
OWN0270	Fab / Del Pipe for 0+00 (36x36 Tee) to 1+64 (42x36 Tee)	1200	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	31-Mar-24	31-Mar-24 A	-1110	-1077		$0.00
OWN0280	Fab / Del Pipe for 0+00 (36x30 Tee) to 0+88 (30x30 Tee)	1200	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	31-Mar-24	31-Mar-24 A	-1110	-1077		$0.00
OWN0170	Fab / Del Pipe for Stat. 91+00 to 92+87 (BO-3) / Through Sherwood	712	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	30-Nov-22	30-Nov-22 A	-622	-589		$0.00
OWN0050	Fab / Del Pipe for Stat. 24+00 to 33+80 (EP-1)	151	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	18-May-21	18-May-21 A	-61	-28		$0.00
OWN0070	Fab / Del Pipe for Stat. 40+00 to 48+30 (Enter Bond Mill)	165	90	100%	20-Jan-21	18-Dec-20	19-Apr-21	01-Jun-21	01-Jun-21 A	-75	-42		$0.00
Required Coordination		99	98	100%	31-Jan-21	07-Dec-20	09-May-21	16-Mar-21	16-Mar-21 A	-1	54		$0.00
CORD0010	Coordination Meeting - E&S Meeting	59	45	100%	31-Jan-21	07-Dec-20	16-Mar-21	04-Feb-21	04-Feb-21 A	-14	41		$0.00
CORD0050	Coordination Meeting - Culvert Rehab Precon Meeting	99	60	100%	03-Feb-21	07-Dec-20	03-Apr-21	16-Mar-21	16-Mar-21 A	-39	19		$0.00
CORD0020	Coordination Meeting - Arborist (Tree removal / Protect) Precon Meeting	84	45	100%	31-Jan-21	07-Dec-20	16-Mar-21	01-Mar-21	01-Mar-21 A	-39	16		$0.00



Project Baseline Bar
Actual Work
Remaining Work
Critical Remainin...

TASK filter: All Activities

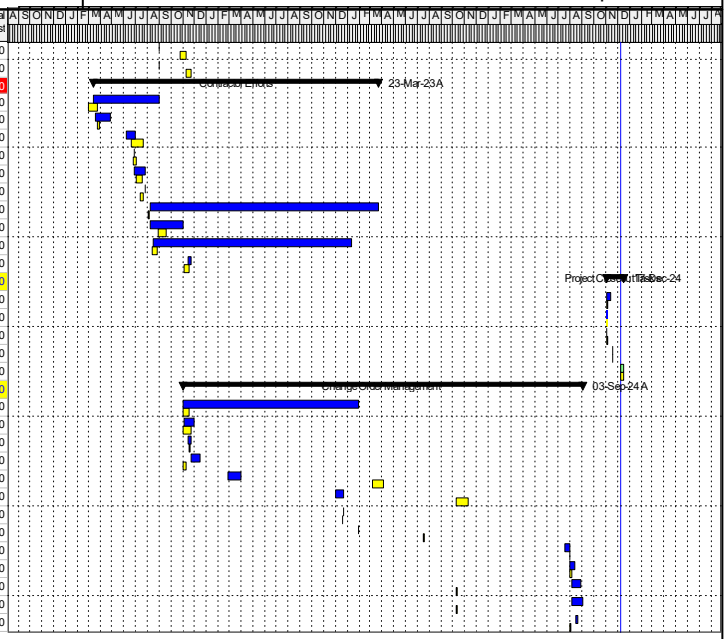
Activity ID	Activity Name	Actual Duration	BL Duration	Duration % Complete	BL Start	Actual Start	BL Project Finish	Actual Finish	Finish	Variance - BL Duration	Variance - BL Finish Date	Total Float	Budgeted Total Cost
CORD0060	Coordinate - BGE Gas Relocations	39	60	100%	10-Mar-21	07-Dec-20	09-May-21	15-Jan-21	15-Jan-21 A	21	114		$0.00
CORD0030	Coordinate - BGE Pole Bracing	72	60	100%	31-Jan-21	07-Dec-20	31-Mar-21	17-Feb-21	17-Feb-21 A	-12	43		$0.00
CORD0040	Coordinate - PG County (MOT, Road Hours, etc.)	85	60	100%	31-Jan-21	07-Dec-20	31-Mar-21	02-Mar-21	02-Mar-21 A	-25	30		$0.00
Construction Operations		1385	1390	100%	28-Feb-21	25-Feb-21	18-Dec-24	10-Dec-24	10-Dec-24 A	5	8		$0.00
Clearing Efforts / E&S Controls		101	61	100%	01-Mar-21	25-Feb-21	02-Jun-21	30-Jul-21	30-Jul-21 A	-40	-39		$0.00
CLEAR00	Clear and Grub - Stat. 0+00 to 48+30 (Sub: Empire)	52	20	100%	01-Mar-21	25-Feb-21	30-Mar-21	18-May-21	18-May-21 A	-32	-31		$0.00
ESC0010	ESC / TPF - 0+00 to 48+30 - Cleared Area (Sub: MESS)	52	10	100%	08-Mar-21	25-Feb-21	24-Mar-21	18-May-21	18-May-21 A	-42	-36		$0.00
ESC0030	ESC / TPF - 105+00 to 128+95 - Cleared Area (Sub: MESS)	49	10	100%	17-May-21	18-May-21	01-Jun-21	30-Jul-21	30-Jul-21 A	-39	-39		$0.00
CLEAR00	Clear and Grub - Stat. 105+00 to 126+00 (Sub: Empire)	48	20	100%	30-Apr-21	19-May-21	02-Jun-21	30-Jul-21	30-Jul-21 A	-28	-39		$0.00
ESC0020	ESC / TPF - 48+30 to 105+00 (Sub: MESS)	48	10	100%	30-Apr-21	19-May-21	17-May-21	30-Jul-21	30-Jul-21 A	-38	-49		$0.00
Pipeline Installation Efforts		814	831	100%	30-Apr-21	20-May-21	18-Dec-24	10-Dec-24	10-Dec-24 A	18	5		$0.00
PIPE0020	Install Pipe - Stat. 6+40 to 14+27 (AR/EP-1)	89	14	100%	30-Apr-21	20-May-21	24-May-21	01-Oct-21	01-Oct-21 A	-75	-88		$0.00
PIPE0030	Install Pipe - Stat. 14+27 to 17+49 (Thrust Block)	7	8	100%	02-Jun-21	08-Jun-21	14-Jun-21	18-Jun-21	18-Jun-21 A	1	-3		$0.00
PIPE0040	Install Pipe - Stat. 17+49 to 24+00 (Cannfield Dr)	5	8	100%	14-Jun-21	21-Jun-21	25-Jun-21	28-Jun-21	28-Jun-21 A	3	-1		$0.00
PIPE0050	Install Pipe - Stat. 24+00 to 33+80 (EP-1)	14	16	100%	25-Jun-21	28-Jun-21	20-Jul-21	16-Jul-21	16-Jul-21 A	2	2		$0.00
PIPE0060	Install Pipe - Stat. 33+80 to 40+00 (Leo James Ct)	2	12	100%	08-Jul-21	16-Jul-21	28-Jul-21	21-Jul-21	21-Jul-21 A	10	4		$0.00
PIPE0070	Install Pipe - Stat. 40+00 to 48+30 (Enter Bond Mill Rd).	44	10	100%	28-Jul-21	21-Jul-21	10-Aug-21	24-Sep-21	24-Sep-21 A	-34	-29		$0.00
PIPE0080	Install Pipe - Stat. 0+00 (PS) to 6+40 (Sleeve)	47	12	100%	04-Aug-21	25-Aug-21	23-Aug-21	05-Nov-21	05-Nov-21 A	-35	-48		$0.00
PIPE0090	Install Pipe - Stat. 48+30 to 53+30	27	17	100%	23-Nov-21	23-Nov-21	23-Dec-21	10-Jan-22	10-Jan-22 A	-10	-9		$0.00
PIPE0100	Install Pipe - Stat.53+30 to 60+00 (Bond Mill / Diploma)	63	17	100%	10-Jan-22	11-Jan-22	08-Feb-22	25-Apr-22	25-Apr-22 A	-46	-46		$0.00
PIPE0110	Install Pipe - Stat. 60+00 to 65+46 (BO-2)	61	18	100%	04-Apr-22	26-Apr-22	29-Apr-22	27-Jul-22	27-Jul-22 A	-43	-57		$0.00
PIPE0120	Install Pipe - Stat. 65+46 to 68+59 (EP-2)	163	12	100%	13-Jul-22	27-Jul-22	28-Jul-22	21-Apr-23	21-Apr-23 A	-151	-161		$0.00
PIPE0210	Install Pipe - Stat. 105+00 to 107+65 (incl. 66" Steel Casing)	3	7	100%	05-Jul-23	03-Jan-23	18-Jul-23	09-Jan-23	09-Jan-23 A	4	118		$0.00
PIPE0220	Install Pipe - Stat. 107+65 to 112+00 (AR/EP-4)	6	9	100%	19-Jul-23	10-Jan-23	01-Aug-23	20-Jan-23	20-Jan-23 A	3	122		$0.00
PIPE0230	Install Pipe - Stat. 112+00 to 123+98 (BO-4)	73	19	100%	01-Aug-23	23-Jan-23	29-Aug-23	19-May-23	19-May-23 A	-54	67		$0.00
PIPE0240	Install Pipe - Stat. 123+98 to 126+00 (Rec. Vault G)	7	7	100%	22-May-23	22-May-23	31-May-23	31-May-23	31-May-23 A	0	0		$0.00
PIPE0130	Install Pipe - Stat. 68+59 to 74+50 (Thrust Collar)	71	19	100%	31-May-23	01-Jun-23	27-Jun-23	15-Sep-23	15-Sep-23 A	-52	-53		$0.00
PIPE0140	Install Pipe - Stat. 74+50 to 80+51 (Vert Bend)	14	15	100%	19-Sep-23	19-Sep-23	11-Oct-23	10-Oct-23	10-Oct-23 A	1	1		$0.00
PIPE0150	Install Pipe - Stat. 80+51 to 86+54 (AR/EP-3)	19	19	100%	10-Oct-23	11-Oct-23	09-Nov-23	14-Nov-23	14-Nov-23 A	0	-1		$0.00
PIPE0160	Install Pipe - Stat. 86+54 to 91+00 (Bond Mill / Sherwood)	23	15	100%	14-Nov-23	14-Nov-23	11-Dec-23	22-Dec-23	22-Dec-23 A	-8	-8		$0.00
PIPE0170	Install Pipe - Stat. 91+00 to 92+87 (BO-3) / Through Sherwood (6/15 - 8.	54	8	100%	02-Jan-24	02-Jan-24	16-Jan-24	29-Mar-24	29-Mar-24 A	-46	-46		$0.00
PIPE0180	Install Pipe - Stat. 92+87 to 97+00	39	9	100%	01-Apr-24	01-Apr-24	15-Apr-24	31-May-24	31-May-24 A	-30	-30		$0.00
PIPE0190	Install Pipe - Stat. 97+00 to 102+52 (1/64 HB)	20	12	100%	31-May-24	03-Jun-24	20-Jun-24	03-Jul-24	03-Jul-24 A	-8	-9		$0.00
PIPE0200	Install Pipe - Stat. 102+52 to 104+80 (Thrust Collar / SHC Stop 48in at S	7	9	100%	02-Jul-24	08-Jul-24	16-Jul-24	17-Jul-24	17-Jul-24 A	2	-1		$0.00
PIPE0205	Install Pipe - Stat. 104+80 to 105+00 (SHC Stop 48in to BGE ROW)	2	1	100%	14-Aug-24	14-Aug-24	14-Aug-24	15-Aug-24	15-Aug-24 A	-1	-1		$0.00
PIPE0250	Install Pipe - Stat. 126+00 to 127+20 (Reducer)	9	4	100%	03-Sep-24	03-Sep-24	09-Sep-24	17-Sep-24	17-Sep-24 A	-5	-5		$0.00
PIPE0260	Install Pipe - Stat. 127+20 to 128+95 (36x36 Tee)	9	11	100%	17-Sep-24	17-Sep-24	02-Oct-24	30-Sep-24	30-Sep-24 A	2	2		$0.00
PIPE0270	Install Pipe - Stat. 0+00 to 1+64 (36x36 Tee)	23	9	100%	25-Sep-24	01-Oct-24	08-Oct-24	01-Nov-24	01-Nov-24 A	-14	-18		$0.00
PIPE0280	Install Pipe - Stat. 0+00 to 0+88 (30x30 Tee)	5	7	100%	17-Oct-24	17-Oct-24	28-Oct-24	24-Oct-24	24-Oct-24 A	2	2		$0.00
PIPE1000	Flush / Pressure Test - 48" Pipeline	4	9	100%	01-Nov-24	01-Nov-24	14-Nov-24	06-Nov-24	06-Nov-24 A	5	5		$0.00
PIPE1030	Tie In 3 - 36" PCCP (Treatment Plant)	1	5	100%	18-Nov-24	18-Nov-24	25-Nov-24	19-Nov-24	19-Nov-24 A	4	4		$0.00
PIPE1020	Tie In 2 - 30" PCCP (Treatment Plant)	1	5	100%	18-Nov-24	18-Nov-24	25-Nov-24	19-Nov-24	19-Nov-24 A	4	4		$0.00
PIPE1010	Tie In 1 - 42" Steel (Treatment Plant)	3	5	100%	20-Nov-24	20-Nov-24	26-Nov-24	22-Nov-24	22-Nov-24 A	2	2		$0.00
PIPE1040	Tie In 4 - 42" DIP (Pump Station)	3	5	100%	10-Dec-24	04-Dec-24	18-Dec-24	10-Dec-24	10-Dec-24 A	2	5		$0.00
Launching / Receiving Vault Efforts		964	673	100%	11-Aug-21	24-May-21	15-Jun-23	12-Jan-24	12-Jan-24 A	-291	-212		$0.00
VAULT011	Launching Vault G - Excavate / Install SOE	56	15	100%	11-Aug-21	24-May-21	02-Sep-21	13-Aug-21	13-Aug-21 A	-41	13		$0.00
VAULT012	Launching Vault G - F/R/P Base Slab	4	10	100%	23-Aug-21	16-Aug-21	03-Sep-21	23-Aug-21	23-Aug-21 A	6	11		$0.00
VAULT013	Launching Vault G - Cure Base Slab	7	7	100%	03-Sep-21	23-Aug-21	10-Sep-21	30-Aug-21	30-Aug-21 A	0	12		$0.00
VAULT014	Launching Vault G - F/R/P Walls	10	20	100%	13-Sep-21	27-Aug-21	08-Oct-21	13-Sep-21	13-Sep-21 A	10	20		$0.00
VAULT018	Launching Vault G - Install Metals / Vault Guts	80	10	100%	26-Oct-21	01-Sep-21	16-Nov-21	14-Jan-22	14-Jan-22 A	-70	-34		$0.00
VAULT015	Launching Vault G - Cure Walls	7	7	100%	27-Sep-21	14-Sep-21	04-Oct-21	21-Sep-21	21-Sep-21 A	0	13		$0.00
VAULT016	Launching Vault G - F/R/P Roof Slab	11	10	100%	04-Oct-21	17-Sep-21	19-Oct-21	04-Oct-21	04-Oct-21 A	-1	10		$0.00
VAULT019	Launching Vault G - Remove SOE / Backfill	18	5	100%	21-Oct-21	05-Oct-21	01-Nov-21	04-Nov-21	04-Nov-21 A	-13	-2		$0.00
VAULT017	Launching Vault G - Cure Roof Slab	7	7	100%	04-Oct-21	05-Oct-21	11-Oct-21	12-Oct-21	12-Oct-21 A	0	-1		$0.00
VAULT050	Receiving Vault H - Excavate / Install SOE	13	15	100%	01-Dec-22	19-Dec-22	28-Dec-22	10-Jan-23	10-Jan-23 A	2	-7		$0.00
VAULT051	Receiving Vault H - F/R/P Base Slab	5	10	100%	24-Jan-23	11-Jan-23	09-Feb-23	20-Jan-23	20-Jan-23 A	5	12		$0.00
VAULT052	Receiving Vault H - Cure Base Slab	7	7	100%	09-Feb-23	23-Jan-23	16-Feb-23	30-Jan-23	30-Jan-23 A	0	17		$0.00
VAULT053	Receiving Vault H - F/R/P Walls	41	20	100%	31-Jan-23	31-Jan-23	07-Mar-23	07-Apr-23	07-Apr-23 A	-21	-21		$0.00
VAULT054	Receiving Vault H - Cure Walls	7	7	100%	31-Mar-23	07-Apr-23	07-Apr-23	14-Apr-23	14-Apr-23 A	0	-7		$0.00
VAULT055	Receiving Vault H - F/R/P Roof Slab	5	10	100%	10-Apr-23	14-Apr-23	25-Apr-23	25-Apr-23	25-Apr-23 A	5	0		$0.00
VAULT056	Receiving Vault H - Cure Roof Slab	5	7	100%	25-Apr-23	25-Apr-23	02-May-23	30-Apr-23	30-Apr-23 A	2	2		$0.00
VAULT058	Receiving Vault H - Remove SOE / Backfill	93	5	100%	16-May-23	16-May-23	24-May-23	02-Oct-23	02-Oct-23 A	-88	-88		$0.00
VAULT057	Receiving Vault H - Install Metals / Vault Guts	140	10	100%	31-May-23	01-Jun-23	15-Jun-23	12-Jan-24	12-Jan-24 A	-130	-131		$0.00
Advance Efforts (Relocate / Predeccesors)		745	268	100%	28-Feb-21	09-Mar-21	22-Nov-21	23-Mar-23	23-Mar-23 A	-477	-486		$0.00
BGE / Third Party Efforts		230	268	100%	28-Feb-21	09-Mar-21	22-Nov-21	25-Oct-21	25-Oct-21 A	38	29		$0.00
BGE10	BGE - Brace / Support Utility Poles (BGE Contractor)	69	60	100%	28-Feb-21	09-Mar-21	28-Apr-21	17-May-21	17-May-21 A	-9	-18		$0.00
BGE10	Relocate GHC (BGE Contractor) - Stat. 48+30 to 53+30 (2 EA)	54	14	100%	31-Aug-21	01-Sep-21	13-Sep-21	25-Oct-21	25-Oct-21 A	-40	-41		$0.00
BGE10	Relocate GHC (BGE Contractor) - Stat.53+30 to 60+60 (2 EA)	44	14	100%	14-Sep-21	01-Sep-21	27-Sep-21	15-Oct-21	15-Oct-21 A	-30	-17		$0.00
BGE10	Relocate GHC (BGE Contractor) - Stat.74+50 to 80+51 (4 EA)	0	14	100%	28-Sep-21	01-Sep-21	11-Oct-21	01-Sep-21	01-Sep-21 A	14	41		$0.00
BGE10	Relocate GHC (BGE Contractor) - Stat. 80+51 to 86+54 (4 EA)	0	14	100%	12-Oct-21	01-Sep-21	25-Oct-21	01-Sep-21	01-Sep-21 A	14	55		$0.00



Project Baseline Bar | Actual Work | Remaining Work | Critical Remainin...

TASK filter: All Activities

Activity ID	Activity Name	Actual Duration	BL Duration	Duration % Complete	BL Start	Actual Start	BL Project Finish	Actual Finish	Finish	Variance - BL Duration	Variance - BL Finish Date	Total Float	Budgeted Total Cost
BGE10!	Relocate GHC (BGE Contractor) - Stat. 97+00 to 102+52 (1 EA)	0	14	100%	26-Oct-21	01-Sep-21	08-Nov-21	01-Sep-21	01-Sep-21 A	14	69		$0.00
BGE10(	Relocate GHC (BGE Contractor) - Stat. 105+00 to 107+65 (1 EA)	0	14	100%	09-Nov-21	01-Sep-21	22-Nov-21	01-Sep-21	01-Sep-21 A	14	83		$0.00
Contractor Efforts		739	262	100%	01-Mar-21	15-Mar-21	17-Nov-21	23-Mar-23	23-Mar-23 A	-477	-491		$0.00
TPIT00'	Test Pit - BGE House Connections (14 each)	113	15	100%	01-Mar-21	15-Mar-21	24-Mar-21	31-Aug-21	31-Aug-21 A	-98	-106		$0.00
TPIT00:	Test Pit - Pump Station Tie In Area	23	5	100%	24-Mar-21	20-Mar-21	30-Mar-21	26-Apr-21	26-Apr-21 A	-18	-16		$0.00
RELO1(	Relocate 8" Water - Approx. Stat. 53+30 to 60+00 (550 LF)	23	30	100%	21-Jun-21	07-Jun-21	21-Jul-21	30-Jun-21	30-Jun-21 A	7	22		$0.00
REHAB	Install Stream Diversion (Sub: Granite)	0	5	100%	25-Jun-21	28-Jun-21	02-Jul-21	28-Jun-21	28-Jun-21 A	5	4		$0.00
REHAB	Complete Culvert Rehabilitation (Sub: Granite)	17	10	100%	02-Jul-21	29-Jun-21	19-Jul-21	26-Jul-21	26-Jul-21 A	-7	-4		$0.00
REHAB	Remove Stream Diversion (Sub: Granite)	0	5	100%	12-Jul-21	26-Jul-21	20-Jul-21	26-Jul-21	26-Jul-21 A	5	-4		$0.00
TPIT00:	Test Pit - WWTP Tie In Area	360	5	100%	02-Aug-21	09-Aug-21	06-Aug-21	23-Mar-23	23-Mar-23 A	-355	-360		$0.00
RELO1(	Relocate 12" Water - Approx. Stat. 126+00 to 127+20 (129 LF)	84	21	100%	28-Aug-21	09-Aug-21	17-Sep-21	01-Nov-21	01-Nov-21 A	-63	-44		$0.00
RELO1(	Relocate 8" Water - Approx. Stat. 97+00 to 102+52 (37 LF)	515	14	100%	14-Aug-21	16-Aug-21	27-Aug-21	13-Jan-23	13-Jan-23 A	-501	-503		$0.00
RELO1(	Relocate 8" Water - Approx. Stat 48+30 to 53+30 (56 LF)	6	14	100%	03-Nov-21	16-Nov-21	17-Nov-21	22-Nov-21	22-Nov-21 A	8	-4		$0.00
Project Closeout Tasks		11	28	84.63%	04-Nov-24	04-Nov-24	17-Dec-24		17-Dec-24	0	0	-360	$0.00
REST0120	Perm. Patch - Place Asphalt	6	3	100%	04-Nov-24	04-Nov-24	07-Nov-24	13-Nov-24	13-Nov-24 A	-3	-3		$0.00
REST0110	Perm. Patch - Mill / Excavate Full Depth	3	3	100%	04-Nov-24	04-Nov-24	07-Nov-24	07-Nov-24	07-Nov-24 A	0	0		$0.00
REST1000	Perm. Patch - Sawcut Neatline (Sub: Mattiola)	0	1	100%	04-Nov-24	04-Nov-24	05-Nov-24	04-Nov-24	04-Nov-24 A	1	1		$0.00
REST0130	Complete Line Striping (Sub: XXX)	1	1	100%	19-Nov-24	19-Nov-24	20-Nov-24	20-Nov-24	20-Nov-24 A	0	0		$0.00
REST0140	Complete New Plantings (Sub: Empire)	0	4	0%	10-Dec-24		17-Dec-24		17-Dec-24	0	0	-360	$0.00
Change Order Management		1038	1009	100%	01-Nov-21	01-Nov-21	05-Aug-24	03-Sep-24	03-Sep-24 A	-29	-29		$0.00
PCO 04	PCO 04 - Cut and Regrade Vault G	275	9	100%	01-Nov-21	01-Nov-21	17-Nov-21	31-Jan-23	31-Jan-23 A	-266	-266		$0.00
PCO 12	PCO 12 - Test Pit (Vac) Unknown SHC on Bond Mill Rd.	12	11	100%	01-Nov-21	05-Nov-21	23-Nov-21	01-Dec-21	01-Dec-21 A	-1	-4		$0.00
PCO 13	PCO 13 - Relocate 8" WM at Stat. 48+80	6	2	100%	17-Nov-21	16-Nov-21	19-Nov-21	22-Nov-21	22-Nov-21 A	-4	-2		$0.00
PCO 01	PCO 01 - Gas Conflict to Revise Pipe Profile Stat. 46+50	12	4	100%	01-Nov-21	23-Nov-21	08-Nov-21	14-Dec-21	14-Dec-21 A	-8	-18		$0.00
PCO 08	PCO 08 - Supplee Lane SHC Relocation	21	18	100%	08-Mar-23	25-Feb-22	04-Apr-23	31-Mar-22	31-Mar-22 A	-3	228		$0.00
PCO 05	PCO 05 - Chemical Injection Lines at Pump Station	14	18	100%	11-Oct-23	01-Dec-22	09-Nov-23	23-Dec-22	23-Dec-22 A	4	201		$0.00
PCO 09	PCO 09 - Vault H Revisions	0	1	100%	19-Dec-22	23-Dec-22	20-Dec-22	23-Dec-22	23-Dec-22 A	1	-3		$0.00
PCO 11	PCO 11 - Conflict with BGE Gas in BGE ROW	0	2	100%	18-Jul-23	31-Jan-23	19-Jul-23	31-Jan-23	31-Jan-23 A	2	107		$0.00
PCO 26-1	PCO 26 - Waiting on WSSC Direction / Complete Tree Removal at 1561	10	1	100%	31-Jul-24	18-Jul-24	31-Jul-24	31-Jul-24	31-Jul-24 A	-9	0		$0.00
PCO 26-2	PCO 26 - Complete SHC Adjustment at 15611 Bond Mill Road	8	3	100%	31-Jul-24	31-Jul-24	05-Aug-24	13-Aug-24	13-Aug-24 A	-5	-5		$0.00
Adj Lay Sched	Await Approval to Adjust 48in Lay Schedule (see D. Longchamps email d	17	1	100%	11-Oct-23	06-Aug-24	12-Oct-23	29-Aug-24	29-Aug-24 A	-16	-198		$0.00
Await Marks	Await Utility Markings Inside WSSC WWTP Property	19	1	100%	11-Oct-23	06-Aug-24	12-Oct-23	03-Sep-24	03-Sep-24 A	-18	-200		$0.00
PCO 29	PCO 29 - SHC at Stat. 103+95 / Force Account	1	1	100%	31-Jul-24	16-Aug-24	01-Aug-24	19-Aug-24	19-Aug-24 A	0	-12		$0.00



B.5
Construction Process:
Construction Review Log

Date	Type of Report	Issue	Short Description & Resolution
4/23/2021	ESC Report	Steep slope left unprotected (no silt fence) after clearing	The contractor had no sediment controls on a newly cleared steep slope by the raw water pump station. Inspector advised putting a temporary silt fence (in a U-shape at the slope's base) or other stabilization by close of business that day Resolution: Addressed by 4/27/2021
4/27/2021	ESC Report	Inadequate controls at new storage yard; unstabilized clearing	An inspection found newly disturbed areas without required ESC measures: the contractor was advised to stabilize the clearing along Bond Mill Rd with woodchips or mulch, install perimeter silt fence near the new pipe storage yard, and provide temporary stabilization for disturbed areas located in work area that remain inactive. Resolution: Unknown
4/29/2021	DIR	MESS broke phone cable	MESS broke a phone cable near 6+50. The line was not marked. Inspector notified the Utility Maintenance Group. Utility Services came to the treatment building, verified it was a phone line to the building, and said it was not in service so it was not urgent. Resolution: Phone line was not in service; Allen Myers said they would replace the entire line
5/13/2021	ESC Report	Install SCE at storage area	Inspector observed no stabilized construction entrances at the Bond Mill Road access and storage area, so advised to install stone entrance pads. Inspector also advised to continue to use woodchips to stabilize disturbed area at clearing operation on Bond Mill. Resolution: SCE installed on 05/21/2021
5/20/2021	Compaction Report	12" lifts used for backfilling from start of project on 5/20/2021 until 3/19/2024 (Compaction Report #1 to #319), at which point 8" lifts began being used. WSSC Water Spec requires 8" lifts or smaller.	WSSC Water met with the contractor. Resolution: N/A
5/21/2021	ESC Report	Install silt fence to close off work area	The inspector found that an active work area off Bond Mill Road was not entirely enclosed by silt fence. He directed the contractor to install additional silt fencing to close the gap in the perimeter. Resolution: Additional silt fence installed on 05/25/2021
5/25/2021	Compaction Report	Compaction report #3 states Modified Proctor was used.	Compaction report #3 states Modified Proctor was used. Resolution: N/A
6/7/2021	ESC Report	Drainage back up on property	Resident complained that the super silt fence was causing water to back up on his backyard. Resolution: The day after the resident's complaint, the ESC Inspector was onsite and advised Allen Myers to fix the problem by moving sediment control to provide positive drainage flow.
6/15/2021	DIR	Contractor crimped WHC	While excavating, crew crimped a WHC. No substantial damage; customer had water service and no leaks. Contractor replaced the crimped section of copper the following day (repair performed in DIR 82) Resolution: Contractor replaced the crimped section of copper the following day (repair performed in DIR 82).
6/18/2021	ESC Report	Repair damaged silt fence; Stabilize disturbed areas	The inspector noted two sections of super silt fence were cut/down along Brooklyn Bridge Road and that a steep area by the pump station had unstabilized soil. Corrective measures noted as required to be completed by 6/21/2021 Resolution: Unknown
7/5/2021	Compaction Report	Inspector felt serious pain and went to hospital	No compaction report available, inspector went to the hospital Resolution: Unknown
7/19/2021	ESC Report	Silt fence down; SCE required	Inspector noted sections of silt fence were down along Brooklyn Bridge Road and by the ballfield, and the Phase II area lacked a stabilized entrance Resolution: Addressed by 8/10/2021

Date	Type of Report	Issue	Short Description & Resolution
8/5/2021	Damage	Broken sewer house connection, 4in	Damage occurred while installing 48 inch DIP on 7-27-21. Prince George's County Parks personnel informed inspector of sewer backup. Resolution: 48" water main was already backfilled once damage was identified; SHC was relocated
8/5/2021	DIR	Sewer back up	On 8/5/2021, Prince George's County Parks notified inspector that the sewer was backed up at 16601 Supplee Lane. The broken sewer house connections was approximately in the middle of the 48" pipe. Resolution: Allen Myers and WSSC Water met onsite throughout August-September 2021. Meeting minutes attached to DIRs mention the damaged SHC (RFI-16). WTB to relocate SHC.
8/10/2021	ESC Report	Sediment track-out on roads	The inspector observed mud and sediment tracked onto Rocky Gorge Road and Supplee Lane, and noted that some entrance silt fences needed maintenance. He instructed the contractor to sweep the paved roads and to install/repair the silt fencing at those site entrances. Resolution: Addressed by 8/30/2021
8/25/2021	ESC Report	Additional silt fence required	Inspector advised contractor to add an additional silt fence along the concrete swale and remove woodchips and debris from the swale by 8/27/2021. Resolution: Unknown
9/7/2021	ESC Report	Damaged silt fence	Inspector advised contractor to repair damage to silt fence along the R/W off Brooklyn Bridge by 9/8/2021. Resolution: Unknown
10/1/2021	Compaction Report	Pipes reinstalled	Contractor removed and reinstalled two pipes installed over the last two days Resolution: Unknown
10/5/2021	ESC Report	Runoff controls not maintained on steep slope & entrance	The contractor had removed a section of super silt fence on a steep slope to lay pipe and had not replaced it promptly, and the stabilized construction entrance had excessive mud. Inspector advised contractor to reinstall or protect the slope by end-of-week and to add stone (“top dress”) to the tracking pad at the Bond Mill Road entrance by Oct 8, 2021 Resolution: Addressed by 10/20/2021
10/20/2021	ESC Report	Silt fence and earth berm required	Inspector advised contractor to re-establish earth berm and install a silt fence check across the R/W at a steep slope area by 10/22/2021. Resolution: Unknown
11/1/2021	ESC Report	Silt fence repair, soil removal from silt fence, and silt fence check required	Inspector advised contractor to remove soil off super silt fence and check for undermining at the large spoil pile near the ball fields and to repair the silt fence at the chain link fence and install silt fence check across the work area at the top of slope at Sta 7+50 by 11/3/2021. Resolution: Addressed by the inspection on 11/18/2022
11/10/2021	ESC Report	Reinstallation of silt fence and SCE required	Inspector advised contractor to close off open silt fence areas at steep sloped area, reinstall silt fence or stabilize with matting to protect stone sale area at the old bioretention area, and reinstall SCE or close off area with silt fence by 11/11/2021. Resolution: Addressed by the inspection on 11/18/2022
12/18/2021	ESC Report	Damaged silt fence	Inspector advised contractor to repair silt fence by 12/30/2021. Resolution: Addressed by the inspection on 1/10/2022
1/25/2022	ESC Report	SCE adjustment and gutter buddies required	Inspector advised contractor to top dress SCE and keep road to dam swept at the storage yard at the ball field, as well as to install gutter buddies in storm drain inlets and remove any slurry from the curb line where saw cutting the road by 1/28/2022.. Resolution: Unknown
2/7/2022	ESC Report	SCE and gutter buddies required, silt fence damaged, and dirt on road	Inspector advised contractor to install SCE near the ball fields, remove an area of dirt on the road at the water pump station, fix silt fence at the BGE power line, and use gutter buddies to protect storm drains by 2/11/2022 Resolution: Gutter buddies and SCE addressed by inspection on 2/28/2022

Date	Type of Report	Issue	Short Description & Resolution
2/21/2022	Compaction Report	16" lifts used for compaction	Compaction report noted 16" lifts Resolution: N/A
2/28/2022	ESC Report	Silt fence required	Inspector followed up on request from 2/7/2022 to install silt fence at the BGE power lines. Inspector requested this is addressed by 3/2/2022 Resolution: Unknown
4/1/2022	ESC Report	Pileup of dirt on road, stabilize disturbed areas, repair damaged super silt fence, and top dress SCE	Inspector advised contractor to remove a small pile of dirt on road and remove sediment buildup/stabilize at the water pump station, as well as to stabilize the disturbed area after removal of the large spoil pile by 4/8/2022. Additionally, he advised to regrade and stabilize the WSSC Water R/W along Brooklyn Bridge Rd near Supplee Park Playground by 4/13/2022 and to repair damaged super silt fence and top dress the SCE at the BGE Power lines off Bond Mill Rd. Resolution: Unknown
4/12/2022	ESC Report	Dirt on paved area, sediment in roadway, silt fence damaged, and un-stabilized area	Inspector advised contractor to remove dirt from paved area at the pump station, repair silt fence and remove sediment from roadway near the pretreatment facility, reinstall silt fence and remove sediment buildup near Supplee Park, and re-stabilize area along WSSC Water R/W on Brooklyn Bridge Rd and in front of pretreatment building by 4/13/2022. Resolution: Addressed by the inspection on 4/13/2022
4/13/2022	ESC Report	Undermined areas at silt fence checks, reinstallation and repair of silt fences	Inspector advised contractor to fill undermined areas at silt fence checks in areas of steep slopes, reinstall silt fence and install a silt fence check at work area near Supplee Park, and to repair the super silt fence at the BGE Power line R/W by 4/14/2022. Resolution: Addressed by the inspection on 4/20/2022
4/19/2022	Compaction Report	12" lifts used for compaction	Report #160 Standard Proctor (ASTM D-698), 12" lifts, compacted at every 12" lift utilizing HO-PAC compactor Resolution: N/A
5/5/2022	ESC Report	Areas requiring re-stabilization	Inspector advised contractor to re-stabilize areas along WSSC Water R/W on Brooklyn Bridge Rd and in front of Pretreatment Building by 5/14/2022. Resolution: Addressed by the inspection on 5/19/2022
5/19/2022	ESC Report	Sediment on pavement, stabilize steep slope, sediment controls required at disturbed area	Inspector advised contractor to remove sediment from pavement and silt fence at the water pump station, replace the sediment filter bag when full, stabilize steep slope with matting and use stakes to hold the matting to the ground, and provide sediment controls or daily stabilization to disturbed areas along the edge of Bond Mill by 5/25/2022 Resolution: Unknown
5/26/2022	ESC Report	Violation notice - super silt fence and sediment buildup	Inspector advised Mess Environmental to replace damaged super silt fence, regrade all rutted/washout areas and stabilize with matting, and add three new super silt fence checks and repair existing checks. Additionally, he advised that the sediment from the swale is removed near the large spoil pile at the entrance of Rocky Gorge Dam and to remove sediment on pavement at water pump station. Resolution: Mess Environmental was on site the next day and addressed these issues.
5/27/2022	ESC Report	Sediment buildup, regarding required	Inspector advised contractor to remove sediment build up and regrade super silt fence and stabilize disturbed areas near Water Pump Station by 5/31/2022 Resolution: Unknown
6/3/2022	ESC Report	Sediment buildup	Inspector advised crew to remove sediment buildup on SSF and regrade and stabilize with heavy duty matting, as well as to keep an eye on sediment controls after rain events. This was noted as needed to be completed by 6/7/2022. Resolution: Area had been regraded but not stabilized by 6/24/2022

Date	Type of Report	Issue	Short Description & Resolution
6/24/2022	ESC Report	Violation notice - super silt fence and sediment buildup	Inspector advised contractor to reinstall SCE at both storage yards (at ball field and Bond Mill Rd), seed bare areas at R/W near Dam entrance and spoil yard, sweep paved areas, stabilize disturbed areas at the storage yard near Bond Mill Rd, and reinstall silt fence check across Brooklyn Bridge Rd R/W near Supplee Park. This was identified as needing to be addressed by 6/29/2022. Resolution: Unknown
7/7/2022	ESC Report	Fix super silt fence; stabilize disturbed areas; remove sediment in swales	Inspector advised that the settlement at large spoil pile near Ball Field is removed and the super silt fence there is fixed. Additionally, he advised the seed/mulch is stabilized at disturbed areas near the spoil pile/ball field and Brooklyn Bridge Rd, as well as the contractor reinstalling silt fence across R/W near Brooklyn Bridge Rd/Supplee Park and to continue to monitor sediment controls after rain events. This should be addressed by 7/8/2022 Resolution: Fixed by the inspection on 7/18/2022
7/11/2022	DIR	Geotech gauge was damaged	Geotech placed gauge outside of safe zone, and a dump truck ran over and cracked it. Contractor shut down the road to traffic and backed up the construction crew to be 300' away from gauge. Geotech called supervisor from BOTA Consulting and MDE. MDE wrote BOTA a citation. Gauge needed to be taken in for repairs before use again. Resolution: Area was evacuated and MDE wrote BOTA Consulting a citation
12/5/2022	Damage	Allan Myers struck a communications conduit	Contractor hit an unmarked pvc conduit and pulled wire from nearby communications box. Contractor repaired conduit and reconnected wire. Resolution: Contractor repaired conduit and reconnected wire
12/5/2022	Damage	Contractor struck communications line	While excavating crew struck an unmarked communications line Resolution: Crew repaired line. Unclear if line was active or not. Damage report attached to DIR.
1/4/2023	Damage	Allan Myers struck a Verizon line	Contractor hit an unmarked Verizon FiOS line and pulled wire from nearby communications box. Verizon was onsite to facilitate repairs. Resolution: Verizon repaired damaged line
1/11/2023	ESC Report	Undermined silt fence	Inspector advised contractor to repair a small section of under mined silt fence on EBA Engineering side of work area. Inspecter noted corrective measures needed to be complied by 1/13/2023. Resolution: Unknown
1/12/2023	DIR	Resident concerned trees will fall and damage house	Resident emailed WSSC Water Contract Manager that she is concerned the excavation will impact the trees on her property and cause them to fall and damage her house. Resolution: Contract Manager had Inspectors assess the situation and an arborist assess. It was determined there would be no issue due to the distance of the trench to the trees (proposed trench line was 20-25' from trees). The Contract Manager noted resident was mean to the inspectors and not satisfied. As such. a WSSC Water Customer Advocate reached out to her, reiterated the trees will not be impacted, and advised her that she can put in a claim if she desired still. He also offered to have a structural engineer look at the foundation, as she brought up the rat issue. After speaking, the resident chased the Customer Advocate off her property, shouting and swearing.
4/12/2023	ESC Report	General maintenance: perimeter control, sweeping, and re-stabilizing disturbed areas	Inspector advised contractor to inspect perimeter sediment controls, Bond Mill Rd, storage yard, and pretreatment building, as well as to sweep paved areas and re-stabilize disturbed areas at the pretreatment building. Inspecter noted corrective measures needed to be complied by 4/14/2023. Resolution: Inspection on 4/25/2023 found that corrective measures have not been addressed. Addressed by 5/19/2023 inspection.

Date	Type of Report	Issue	Short Description & Resolution
4/22/2023	DIR	Resident concerned rats in house came from construction site	Resident called the Contract Manager, who then replied with this email. From email, resident had rats in her house that she said appeared when construction was nearby. The Contract Manager mentioned that other residents had deer in their yard that weren't there before construction. Resident claimed the machinery from construction was causing cracks in her foundation that let rats in. Construction was a couple hundred feet from her dwelling when she began seeing rats, so WSSC Water believes this is not the issue. Resolution: Via email the resident was recommended an ultrasonic pest control device. WSSC Water checked for trash the contractor left that may contribute to pests, but there was no trash from contractor.
4/25/2023	ESC Report	Previous ESC fixes not done (down silt fence, unstabilized soil)	A routine inspection found the site still out of compliance – issues flagged two weeks prior were not addressed. The ballfield storage yard silt fence was still down and a swale by the dam gate was filled with sediment; also, bare soil at the Pretreatment Building needed re-seeding. Inspector advised the contractor to repair the silt fence, clean the swale, and stabilize all disturbed areas by April 28, 2023 Resolution: Corrections noted to be done by 04/28/2023. Addressed by 5/19/2023 inspection.
4/27/2023	ESC Report	Partial compliance; one silt fence still down	Two days after the 4/25 report, the inspector noted that some issues had been addressed, but one section of perimeter silt fence was still down at the dam storage yard. The contractor was given until 04/28/2023 to fix the remaining fence. Resolution: Fixed by the inspection on 5/1/2023
7/10/2023	Compaction Report	Compaction Report #228 does not have a narrative attached to it.	Compaction Report #228 does not have a narrative attached to it. Resolution: N/A
7/17/2023	ESC Report	Sediment on road, sidewalk, and stone check; damaged silt fence; temporary stabilization required	Inspector advised contractor to repair a down silt fence and remove sediment from a stone check at entrance to BGE R/W off Bond Mill, install a surge stone check at swale area, remove sediment from the roadway and sidewalk aready, temporarily stabilize on BGE R/W by 7/21/2023. Resolution: Unknown
8/7/2023	ESC Report	Silt fence damaged, earth berm and new gutter buddies required	Inspector advised contractor to repair a silt fence, add an earth berm, replace gutter buddies, stabilize an area if area is inactive for more than 7 days, and continue to keep paved & sidewalk areas broom swept by 8/8/2023. Resolution: Fixed by the inspection on 8/8/2023
9/22/2023	DIR	Contractor hit communication wire	Contractor hit communication wire/Verizon above from pole going to house at 6716 Park Hill Rd while dumping the CR-6 Resolution: Notified Verizon immediately. Inspector spoke to home owner who also immediately contacted Verizon. Verizon said they would fix it the next day.
10/4/2023	DIR	Contractor hit and damaged WHC.	Around 12:50pm, contractor hit and damaged WHC. Resolution: Contractor did repair and restored water to property by 1:50pm. Inspector checked with customer that customer had full pression.
10/24/2023	DIR	Contractor hit and damaged SHC.	Around 11am, contractor hit and damaged SHC. Resolution: Contractor temporarily reinstated SHC around 1pm or 11pm (DIR says both). Inspector informed the Contract Manager to let him know that the existing SHC was in the way of W M installation.
11/4/2023	DIR	Mailbox Damaged	Around noon the contractor hit the mailbox for a house. Resolution: Ben informed the home owner. Contractor immediately made repairs. Inspector also spoke with the homeowner to make sure they were satisfied, and home owner was happy for the prompt response.

Date	Type of Report	Issue	Short Description & Resolution
11/15/2023	ESC Report	Remove silt fence and sediment controls	Inspector advised contractor to stabilize disturbed area for SHC, remove silt fence at high side of Brooklyn Bridge Rd, remove silt fence discussed and marked on field walk, remove sediment controls at Pretreatment Facility, and stabilize disturbed areas by 11/16/2023. Resolution: Addressed by the inspection on 12/1/2023
12/7/2023	DIR	Truck hit tree and damaged truck.	Truck hit tree and damaged truck. No injuries. Resolution: Unknown
12/14/2023	DIR	Contractor hit and damaged WHC	Allen Myers pulled a WHC that was not marked but could possibly be abandoned. Resolution: Contractor began to repair the 8" W M. Contractor had to do an emergency shutdown and closed valves 014, 044, 045 to make repairs. Repairs were made and valves were reopened. Inspector called the Radio Room to open and close W/O 3309908 and provided them with Miss Utility Ticket 23850284-23814147. Crew left by 7:30pm.
12/18/2023	ESC Report	Damaged silt fence and super silt fence	Inspector advised contractor to repair super silt fence, silt fence, and keep paved areas in broom swept condition by 12/20/2023. Resolution: Fixed by the inspection on 1/5/2024
12/20/2023	Compaction Report	Broken 1" copper pipe of lateral water service line noted as repaired in Compaction Report #308.	Compaction report #308 mentions BOTA representative observed repairs to a broken 1" copper pipe of lateral water service line that was damaged previously during the 48" trench excavation. Resolution: Water lateral was repaired.
2/7/2024	Incident	WSSC Water inspector noticed Allan Myers' was not completing compaction testing per the specifications	Allan Myers was not starting compaction testing until a depth of 4 feet. WSSC Water specs stipulate that compaction testing should be conducted at one (1) foot above the pipe. Resolution: Field order issued by WSSC Water contract manager to Allan Myers
2/7/2024	Compaction Report	Compaction Report #316 does not have a narrative attached to it.	N/A Resolution: N/A
3/11/2024	DIR	Water leak was identified	Around 12:30pm, a water leak was identified at V045 (intersection of Bond Mill Rd and Sherwood Ave). Resolution: Inspector used valve key to seal the valve, which slowed the water but did not stop it. Inspector called the Radio Room and put in WO 3337209. Allen Myers sealed the trench and went home. WSSC Water crew arrived by 4:35pm and Miss Utility arrived at 5:25pm to mark utilities. WSSC Water did an emergency shutdown and made repairs. Water service restored at 1am.
4/4/2024	ESC Report	Damaged silt fence, sediment buildup in silt fence, top dress SCE required	Inspector advised contractor to repair damaged silt fence, top dress SCE, and remove sediment off silt fence. Resolution: Silt fence repaired by 4/17/2024; SCE addressed 4/18/2023
4/15/2024	DIR	Sewer backup led a homeowner to call a plumber, and the plumber's snake became stuck around the 48" water main trench line	Around 12:30pm, a sewer backup led a homeowner to call a plumber, and the plumber's snake became stuck around the 48" water main trench line. Resolution: An emergency crew went onsite the following day (4/16/2024) to excavate and conduct repairs. WSSC Water personnel came onsite to determine liability. Subcontractor Aves came back the following day (4/17/2024) to finish sewer repairs (Pipe ID 17038048S).
4/17/2024	ESC Report	Improper dewatering; SCE dressing required	Contractor was not pumping into bag per dewatering spec; SCE not addressed from 4/4/2024. Resolution: Fixed by the inspection on 4/18/2024
4/25/2024	Compaction Report	BOTA representative observed the replacement of 16 LF of 8-inch PVC sewer pipe at station 92+87	BOTA representative observed the replacement of 16 LF of 8-inch PVC sewer pipe at station 92+87. DIR notes the sewer collapsed on 4/17/2024. Resolution: Sewer line was repaired.
4/26/2024	Compaction Report	For Compaction Report #323, the moisture % for 4 of 21 tests were more than 2% higher than the proctor (Test #s 10, 11, 14, and 15).	Tests had 7.1 to 8.2% moisture content, compared to the 5% of the proctor. All tests had greater than 95% compaction. Resolution: N/A

Date	Type of Report	Issue	Short Description & Resolution
4/29/2024	Compaction Report	For Compaction Report #323, the moisture % for one of the 21 tests was more than 2% higher than the proctor	Test # 2 had a proctor moisture of 12.7% and field of 4.5%, which is greater than 2% lower than the proctor. Resolution: N/A
5/3/2024	ESC Report	Damaged silt fence	Inspector advised contractor to repair the silt fence near Ball Field storage area by 5/8/2024 Resolution: Fixed by the inspection on 5/10/2024
7/15/2024	DIR	Contractor hit and damaged WHC	Around 9:50am, contractor hit and damaged WHC. Resolution: Contractor did repair and reinstated water to house by 1:50pm. Customer was notified and checked once flow was reinstated to ensure full pression.
7/18/2024	Damage	Contractor struck SHC	Contractor hit the sewer house connection for 15611 Bond Mill Rd. SHC was marked on the field but depth wasn't known. Contractor determined SHC was in conflict with proposed line. Resolution: Contractor made temporary repairs the same day.
8/2/2024	DIR	Contractor cracked the crown of a sewer main	While excavating the SHC, around 9am, contractor cracked the crown of a sewer main (Sewer ID 17042113S). The sewer main was 5 feet higher than indicated by the shots taken by transient and grade pole the day before. Resolution: Inspector informed the Contract Manager. They agreed to connect to tie in to the DS MH 103U, which was done the next work day on 8/5/2024 (DIR 781) and on 8/12/2024 (DIR 787)
8/6/2024	DIR	Contractor hit and damaged WHC	Contractor broke WHC while removing roots from it around 11:45am. WHC was only 2' below finished grade at property line. Resolution: Contractor made repairs within 1 hr. and water was restored by 12:45pm. Around 1pm, the trench caved in before trench box was installed, breaking the WHC again. Water was restored by 1:20pm. Resident was informed and was okay with this.
8/6/2024	Compaction Report	Lift thickness of 12-inches used for top mat #57 stone in Compaction Report #364 and #366 (8/6/2024, 8/12/2024).	Lift thickness of 12-inches used for top mat #57 stone in Compaction Report #364 and #366 (8/6/2024, 8/12/2024). Lift layers above top mat #57 stone, which were for on site soil and GAB, are 8-inches. This compaction is for a sewer line being replaced, not the 48" water main. Resolution: N/A
8/22/2024	Damage	Tesla struck by automatic traffic control device	Around 1:25pm, vehicle was hit by the automatic flagging device arm and scratched the car. Driver notified inspector, foreman, and flagging company RFS. Driver called police to make a report and waited an hour for them to show. Police did not show. Driver left at 2:30. Resolution: Manager at RFS provided the driver with his phone number to put in a claim
8/30/2024	ESC Report	Persistent ESC maintenance failures (controls not fixed)	The perimeter silt fence at the dam storage yard had never been repaired and the stone tracking pad at the Bond Mill Road entrance was worn thin. Inspector told contractor to fix the sediment fence and replenish the stabilized entrance by Sept 3, 2024 Resolution: Unknown
9/6/2024	Compaction Report	Lift thickness of 12-inches used for top mat #57 stone and for on site soil in Compaction Report #372.	Lift thickness of 12-inches used for top mat #57 stone and for on site soil in Compaction Report #372. Resolution: N/A
9/7/2024	Compaction Report	Lift thickness of 12-inches used for top mat #8 stone in Compaction Report #373 (9/7/2024) to #386 (10/14/2024)	Lift thickness of 12-inches used for top mat #8 stone in Compaction Report #373 (9/7/2024) to #386 (10/14/2024). Lift layers above top mat #8 stone, which were for on site soil, are 8-inches. Resolution: N/A
9/18/2024	ESC Report	Super silt fence not entrenched	Inspector advised contractor to entrench super silt fence checks per WSSC Water standard detail by 9/19/2024 Resolution: Unknown
9/19/2024	DIR	Contractor damaged cable/wire	Contractor smashed a cable/wire with trench box. Resolution: WSSC Water security recommended the contractor splice it back with waterproof connectors. Line was repaired on 10/2/2024 (DIR 835)

Date	Type of Report	Issue	Short Description & Resolution
9/26/2024	ESC Report	Sediment buildup on pavement; Super silt fence not entrenched	Inspector advised contractor to remove sediment from pavement and remove sediment buildup from silt fence, as well as to entrench super silt fence (reiterating the request on 9/18/2024) by 10/1/2024 Resolution: Unknown
9/27/2024	ESC Report	Sediment buildup on pavement	Inspector advised contractor to remove sediment on pavement by 9/30/2024. Resolution: Unknown
10/14/2024	DIR	Contractor struck the 30" PCCP Raw Water Main that feeds the Patuxent Filtration Plant	Around 1:30pm, contractor found an 18" wash water bypass abandoned since 1970s. While excavating to remove this line, the contractor struck the 30" PCCP Raw Water Main that feeds the Patuxent Filtration Plant. Resolution: Immediately shut down the 30" and 36" raw water mains, and the nearby 42" to perform repairs. Inspector called the Radio Room. Crew shut down valves and performed repair, finishing around 1am.
11/4/2024	DIR	Curb damage	Resident informed inspector that the crew damaged his curb with their heavy machinery. Resolution: Inspector and Dave Brode were unsure if the construction damaged his curb, but they offered to fix it. The customer was satisfied.
11/5/2024	Damage	Subcontractor struck an over head power line and broke off the BG&E pole.	Allan Myers subcontractor, YMH Trucking, left dump truck bed up and struck an overhead power line. Power pole came down and four homes were without power. Line was live and BG&E came out and repaired line overnight. Resolution: BG&E came out and repaired electric line and pole.
11/5/2024	Injury	Allan Myers laborer rolled roller and broke his ankle	Allan Myers laborer was operating a roller and parking it out of the way. Roller flipped over and the roof of the roller landed on his ankle. When the WSSC Water inspector arrived on scene, the laborer left foot was bleeding and he was taken to the hospital in an ambulance. Resolution: Laborer was taken to hospital
12/6/2024	ESC Report	Reinstall existing sediment controls	Inspector advised contractor to reinstall existing sediment controls (SSF and small berm) at Rocky Gorge Pump Station by end of day, reinstall sediment controls removed to install new water main at the vaults near the back wash basin, repair damaged silt fence & remove dirt buildup at ball fields storage yard, and stabilize disturbed areas. These are to be corrected by 10/10/2024 Resolution: Fixed by the inspection on 12/31/2024
12/18/2024	ESC Report	Reinstall existing sediment controls; repair silt fence	Sediment controls had not been replaced sediment controls at vault area (as advised on 12/6/2024), and inspector advised contractor to stabilize disturbed areas near trench boxes, and repair silt fence when the extra water main pipes are relocated to the old storage area near the boat ramp. These are to be corrected same day (12/18/2024) Resolution: Fixed by the inspection on 12/31/2024
1/30/2025	ESC Report	Site perimeter measures required and stabilizing disturbed areas	Inspector advised contractor to maintain the perimeter sediment controls until the site is vegetated, stabilize disturbed areas along driveway to Patuxent Plant backwash basins, and close off storage area near the basketball court at Supplee park. He noted these should be addressed by 2/6/2025 Resolution: All addressed by 2/5/2025 except for disturbed area near the wash basins still required stabilization
2/5/2025	ESC Report	Stabilizing disturbed areas	Inspector advised the crew to repair holes in perimeter super silt fence near the ball field and to stabilize the disturbed area along the driveway and back wash basins by 2/8/2025 Resolution: Unknown
4/16/2025	ESC Report	Site restoration incomplete; multiple ESC measures substandard	Final grading/seeding had not been done at the dam site, park, or along the BGE right-of-way, and several silt fences needed repair. Inspector told contractor to finish all permanent stabilization and fix the sediment controls by April 18 Resolution: Fixed by the inspection on 5/9/2025

Date	Type of Report	Issue	Short Description & Resolution
6/6/2025	ESC Report	Silt fence removed early; minor erosion	Inspector noted that someone had removed a silt fence in front of 15611 Bond Mill Rd, causing a small rutted area to form. Resolution: Unknown

B.5
Construction Process: Submittal Log

Submittal Number	Subject	Specification Section	Status	Contractor's Remarks	Response Delayed?	WSP Remarks
1	00001-01 TEST	1	For Information Only	TEST	Yes	
2	01110-01 Water main Lay Schedule	1110	Approved As Noted	The attached layout drawing is based upon a design developed by WSSC Water (and its designers) and was further detailed by a third party entity (fabricator/fabricator representative). We have reviewed the drawing in our capacity as a contractor and have not identified any obvious errors in the drawing. We are not a design professional, and accordingly make no representations that the design is in accordance with applicable requirements. Additionally, this drawing has not been reviewed against in-field survey data, so we cannot confirm all deflections or components account for known obstructions or easements	No	
3	02510-01 Test Submittal	2510	Revise and Resubmit	Example	No	No resubmittal found.
4	01330-01 Submittal Package	1330	Revise and Resubmit	Not Provided	Yes	Resubmittal provided.
6	13110-01 Cathodic Protection	13110	Approved	None.	Yes	
7	02954-01 Geopolymer Lining Technical Data	2954	Revise and Resubmit	None.	Yes	Resubmittal provided.
8	01330-03 Initial Critical Path Method Schedule	1330	Approved	None.	No	
9	02445-01 Open Cut Steel Casing Components	2445	Approved	None.	No	
10	02510-02 Pipe, Fittings, Valves and Accessories	2510	Revise and Resubmit	None.	No	Resubmittal provided.
11	05500-01 Access Hatches and Vent Boxes	5500	Revise and Resubmit	None.	No	Resubmittal provided. For an alternate option.
12	03400-01 Precast Concrete Structures and Accessories	3400	Approved As Noted	None.	No	
13	03400-02 Revised Precast AR/EP Vaults	3400	Approved As Noted	*This resubmittal is to correct the elevation of the 48" pipe penetrations within precast AR/EP Vaults 1–4, to align with the elevations shown in the contract drawings.* Recognizing Gillespie Precast is a pre-approved WSSC Water precast vault manufacturer, we respectfully ask WSSC Water to expedite review and approval of this item so the project remains on schedule	No	
14	01330-04 Submittal Package #2 – Schedule of Values Breakdown	1330	Approved	Not Provided	No	

Submittal Number	Subject	Specification Section	Status	Contractor's Remarks	Response Delayed?	WSP Remarks
15	03300-01 Cast in Place Structure – Reinforcing Shop Drawings	3300	Revise and Resubmit	None	No	
16	02315-01 Support of Excavation Shop Drawings	2315	Revise and Resubmit	None	No	
17	02315-02 Borrow Materials	2315	Approved	None	No	
18	02510-03 Pipe, Fittings, Valves and Accessories	2510	Approved	*Considering the previous comments were minor and recognizing the long lead times for these materials (primarily valves), we respectfully ask for an expedited review of this submittal.*	No	
19	05500-02 Access Hatches and Vent Boxes	5500	Revise and Resubmit	*We will adhere to the engineer's comments regarding the brass hinges.* Considering the minor nature of comments and long lead times for these materials, we respectfully request an expedited review.	No	
20	02954-02 Geopolymer Lining Technical Data	2954	Revise and Resubmit	*Note: as stated in the design calculation submittal, the submitted design can be signed and sealed by Brierley's MD-registered engineer once approved by the owner.* Should any questions arise, Myers and Granite Inliner are available to discuss any concerns	Yes	Resubmittal provided.
21	05500-03 Vault Metal Fabrications	5500	Revise and Resubmit	Not Provided	No	Resubmittal provided.
22	01330-05 CPM Schedule Update 01 – Feb 2021	1330	Approved	None	No	
23	03300-02 Mix #3 Concrete	3300	Revise and Resubmit	*Use* – Non-reinforced concrete items.	No	Resubmittal provided.
24	03300-03 Mix #6 Concrete	3300	Revise and Resubmit	*Use* – Structurally reinforced concrete items.	No	Resubmittal provided.
25	03300-04 CIP Formwork for Launching and Receiving Vaults	3300	Revise and Resubmit	Not Provided	No	Resubmittal provided.
26	03300-05 Cast in Place Structure – Reinforcing Shop	3300	Approved	Resubmission of CSR-15 (CIP Structure Rebar Shop Drawings)	No	
27	05500-04 Access Hatches – Alternate	5500	Approved As Noted	*The supplier (Core & Main) proposes an alternate four-leaf access hatch (instead of two-leaf) for aesthetics and ease of operation.* Please expedite this review to one week and return a response by Monday, March 22, 2021	No	
28	02315-03 Support of Excavation	2315	Approved	Resubmission of CSR-16 (02315-01 Support of Excavation Shop Drawings)	No	
29	03300-06 Mix #3 Concrete	3300	Approved	Mix 3 concrete items (per WSSC Water note): Concrete-encased existing 8" sewer (C-7 & C-14); Vent Box concrete pad (W/2.0a); CP concrete test station pad (C/4.0)	No	
30	03300-07 Mix #6 Concrete – Revision 1	3300	Approved	Concrete thrust collars (C-21, C-22); Receiving Vault (Structural Drawings); Launching Vault (Structural Drawings)	No	
31	02950-01 HMA Mix Design	2950	Approved	DPW&T STD. 300.18	No	

Submittal Number	Subject	Specification Section	Status	Contractor's Remarks	Response Delayed?	WSP Remarks
32	03300-08 CIP Formwork for Launching and Receiving Vaults – Revision 1	3300	Approved As Noted	None	No	
33	01330-06 CPM Update 02 – March 2021	1330	For Information Only	None	No	
34	05500-05 Vault Metal Fabrications – Revision 1	5500	Approved	Vertical pickets detailed / ladder shops added	Yes	
36	02954-03 Geopolymer Lining Revision #2	2954	Approved	(Approved via county email.) Agree with the approval comments above. *Due to upcoming stream restriction deadlines, we request expedited review and approval of this submission.*	No	After three revisions.
38	SP-01330-07 CPM Update 03 – April 2021	N/A – Using Special Provisions	For Information Only	None	No	
39	02315-04 Pipe Embedment Zone – Borrow Aggregates	2315	Rejected	None	No	
40	01330-08 CPM Update 04 – May 2021	1330	Not Provided	None	No	
41	02315-05 Native Material Backfill	2315	Approved	WSSC Water's comments acknowledged. *(Approval noted; lab proctors with sieve analysis required when material changes.)*	No	
42	01330-09 Subcontractor/Vendor Baseline Participation Plan	1330	For Information Only	Taylor Creek (d/b/a Rhodes Flagging) and J&M Sweeping included in DBE plan to replace Priority and Machado	Yes	
43	01330- CPM Update 05 – June 2021	1330	For Information Only	None	No	
44	02530-01 PCO Request for Chemical Feed Conduit and Flexible Chemical Feed Hoses (Rev. 1 – 6/1/21)	2530	For Information Only	Based on the attached plan revision and detail, please provide a PCO for installing the chemical feed conduit and hoses. Please ask questions if you need clarifications.	Yes	
				ALLAN MYERS REMARKS: Per an email (7/26/21) from Will Sigafoose to April Wilt, see the attached list of questions to further define the scope. We've attached a Word document in case the reviewer wants to answer directly in the file		
53	02954-04 Culvert Rehabilitation Closeout	2954	Approved	*(Post-construction culvert work accepted.)* Attached: pre-construction and post-construction culvert survey videos; two concrete compressive strength test reports	No	
56	01330-11 CPM Update 06 – July 2021	1330	For Information Only	None	No	
57	01330-12 CPM Update 07 – August 2021	1330	For Information Only	None	No	

Submittal Number	Subject	Specification Section	Status	Contractor's Remarks	Response Delayed?	WSP Remarks
58	02315-06 Borrow Aggregates for Pipe Embedment Zone	2315	Approved As Noted	Per Addendum #2 Q&A 3, contractor must follow PG County Standard 300.18 for trench backfill (calls for #57 stone to spring line). As discussed on June 14, 2021, the Pritec coating applicator advised *avoiding large, angular aggregate (like #57 stone) around the pipe* to prevent coating damage.	No	
				Noting this concern, we propose using select borrow material with finer gradations and smoother edges (#8 and #10 stone) in the pipe embedment zone. This change meets specs and is at no additional cost to the Commission		
59	01330-13 CPM Update 08 –	1330	For Information Only	Not Provided	No	
60	02510-04 Lay Schedule Revisions	2510	For Information Only	Not Provided	Yes	
61	SP-01330-14 CPM Update 09 – October 2021	N/A – Using Special Provisions	For Information Only	Not Provided	No	
62	01110-02 Construction	1110	Approved As Noted	None.	Yes	
63	SP-01330-15 CPM Update 10 – November 2021	N/A – Using Special Provisions	For Information Only	*Note: it's a two-part schedule: (a) Update 10 (Nov 2021) – adds Change Orders 1 & 2; (b) Update 10-1 (Nov 2021) – progress only.*	Yes	
64	SP-01330-16 CPM Update 11 – December 2021	N/A – Using Special Provisions	For Information Only	CPM schedule update reflective of progress through December 2021	No	
65	SP-01330-17 CPM Update 12 – January 2022	N/A – Using Special Provisions	For Information Only	CPM schedule update reflective of progress through January 2022	No	
66	SP-01330-18 CPM Update 13 – February 2022	N/A – Using Special Provisions	For Information Only	CPM schedule update reflective of progress through February 2022	Yes	
67	SP-01330-19 CPM Update 14 – March 2022	N/A – Using Special Provisions	For Information Only	CPM schedule update reflective of progress through March 2022	Yes	
68	SP-01330-20 CPM Update 15 – April 2022	N/A – Using Special Provisions	For Information Only	CPM schedule update reflective of progress through April 2022	Yes	
69	01330-21 CPM Update 16 – May 2022	1330	For Information Only	CPM schedule update reflective of progress through May 2022	No	
70	01330-22 CPM Update 17 – June 2022	1330	Approved	CPM schedule update reflective of progress through June 2022	Yes	
71	SP-01330-23 CPM Schedule Update 18 – July 2022	N/A – Using Special Provisions	For Information Only	CPM 18 schedule update reflective of progress through July 2022	Yes	

Submittal Number	Subject	Specification Section	Status	Contractor's Remarks	Response Delayed?	WSP Remarks
72	SP-01330-24 CPM Schedule 19 – August 2022	N/A – Using Special Provisions	For Information Only	CPM schedule update reflective of progress through August 2022	No	

B.5
Construction Process: Shutdown Log

Shutdown Event Date	Shutdown Type	Station	Patuxent WF Shutdown & 30" PCCP Adapters Reset By New	DIR	WO Date	WO Number	Work Order Request	Customer Notification Date	Customer Notification	Simulation Document	Notified Shutdown Time	Actual Shutdown Time	Affected Customers	Water Segments	FH
8/2/2021	Planned	Near 60+00	30"x30" TEE.	#118	7/21/2021		V#033,055,113,052,051,105,104,76	7/30/2021	Customer Notification was handed out for the shutdown on Monday 8-2-21 on Bond Mill Road; Additional notification to provide water station on 7/31/21 at the community center from 10am-1pm	Yes	9am-5pm	9am-4pm	63	18	5
11/18/2021	Planned	Bond Mill Road and Brooklyn Bridge Road	To facilitate the relocation of the 8 inch Water main that will be in conflict with that 48" Pipe installed at the intersection of Bondmill Road and Brooklyn Bridge Road, discussed on 11/15/2021; Around 2:30 PM the contractor was ready to have the water turned back on and proceeded to open valves 013, 099, 034, 098, 035, 118, 036, 033, 055, 113, -76 221NE06, and 005 2221NE07. The water main was fully charged by 3 pm, the radio room was notified.	#199	11/16/2021		V#13,099,034,098,035,118,036,033,055,113,076,005	11/16/2021	Shutdown notices were handed out to the following customers as they will be affected by the upcoming shutdown	Yes	9am-5pm	9am-3pm	70	41	15
11/22/2021	Planned	Bond Mill Road and Brooklyn Bridge Road	To facilitate the relocation of the 8 inch Water main that will be in conflict with the 48" Pipe, install at the intersection of Bondmill Road and Brooklyn Bridge Road, discussed on 11/15/2021; Around 12:30 PM the contractor was ready to have the water turned back on, and proceeded to open valves 013, 099, 034, 098, 035, 118, 036, 033, 055, 113, -76 221NE06, and 005 2221NE07. The water main was fully charged by 3 pm, the radio room was notified.	#203	11/19/2021		V#13,099,034,098,035,118,036,033,055,113,076,005	11/19/2021	Shutdown notices were handed out to the following customers as they will be affected by the upcoming shutdown	Yes	9am-5pm	9am-5pm	70	41	15
10/6/2023	Emergency	79+15.19 - 79+72.19	Emergency Shutdown. Contractor crimped the 1" copper using a crimping tool to shutdown the water service to a property on Bond Mill Road. No valves were closed. We notified the costumer about the emergency shutdown to his property. Contractor made repairs using (2) 1"-inch compression couplings. Around 1:50 P.M the water service was restored to the property, and we checked with the costumer to ensure he has full pression.	#527			NA			No	NA	12:50PM-1:50PM	1		
12/14/2023	Emergency	89+35.12 - 89+54.12	Contractor pulled a WHC that was not marked in front of a residence on Bond Mill Rd but could possibly be abandoned; Around 4:30pm Allen Myers and the WSSC Water inspector began closing the following valves to begin the emergency shutdown V014, V044, V045 220NE06 to allow contractor to make the repairs. Road was closed from Sherwood Ave thru Bradford Dr on Bond Mill Rd. Around 5:00p.m all valves were closed, and the existing main was successfully drained. Contractor made repairs around 5:10p.m. We began to open valves V045, V044 and finally V014 restoring the water service to homeowners. Allen Myers then ran and reconnected about 22' L.F of type K 3/4" copper.The Inspector called the Radio Room to open and close W/O 3309908	#587	12/14/2023	3309908	V014, V044, V045			No	NA	4:30PM - 7:30PM	UNK	UNK	UNK
3/11/2024	Emergency	92+27.12	A water leak was noticed coming from V045 at the intersection of Bond Mill Rd and Sherwood Ave; WSSC Water called the Radio Room and put a ticket in for valve repair WO 3337209; Contractor left the jobsite around 4:00p.m. WSSC Water crew arrived onsite around 4:35p.m and called Miss U to come and mark the existing utilities, Miss U came around 5:25p.m and marked the utilities. WSSC Water started to excavate to make repairs at the 8-Inch tapping sleeve. WSSC Water did an emergency shutdown. Around 5:30pm WSSC Water began closing the following valves to begin the emergency shutdown V010, V014, V044 220NE06 to allow them to make the repairs. One lane was closed at intersection of Sherwood Ave & Bond Mill Rd. Around 6:00p.m all valves were closed, and existing main was successfully drained. Contractor made repairs around 11:30p.m. they did backfill and began to open valves V010, V014 and finally V044 restoring the water service to homeowners around 1:00a.m.	#657	3/11/2024	3337209	V010, V014, V044 220NE06			No	NA	2024/03/11 5:30PM to 2024/03/12 1AM	UNK	UNK	UNK
5/21/2024	Planned	98+00	Scheduled shutdown for the 8-inch water main tie-in on Bond Mill Rd & Bounds Ave W/O 3364355. Around 9:40a.m all valves were closed, Contractor finished relocating and hooking to the existing water main and WSSC Water began to open valves V044, V041, V042, V70 and finally V071 restoring water service to homeowners around 3:15p.m.	#718	UNK	3364355	V044, V041, V042, V070, V071 220NE06	5/17/2024	No documentation of WO or Customer notification, except discussed in DIR #718.	UNK	UNK	9AM-3:15PM	UNK	UNK	UNK
7/15/2024	Emergency	102+72.6 - 103+10.6	Around 9:50 A.M contractor Allan Myers hit and struck a Water House Connection that was marked for a residence on Bond Mill Rd. Contractor crimped the 1-inch copper using a crimping tool to shut down the water service to the property. No valves were closed. We notified the costumer about the emergency shutdown to his property. Contractor made repairs using approximately 9' ft of type K copper and (2) 1-inch compression couplings. Around 1:50 P.M the water service was restored to the property, and we checked with the customer to ensure he has full pression.	#763				UNK	UNK			13:00			
10/11/2024	Planned	128+59	36-inch Horizontal Valve Vault Prep Work At Reclaimed Water Basin Sta. 128+59, valve to close, no customer impact.	#841			154	UNK	UNK						
10/13/2024	Emergency	WM Installation At Reclaimed Water Basin Sta. 0+66.5 - 0+82.6	During excavation to remove an abandoned 18" washwater bypass, the contractor struck the existing 30" PCCP raw water main feeding the Patuxent Filtration Plant, requiring shutdown of the 30", 36", and 42" raw water mains. Crews began isolating valves at 1:45p.m., fully drained the system by 4:00p.m., and removed a 16-ft section of the damaged 30" line. After a delay to obtain correct adapters, repairs resumed at 9:00 p.m. with installation of a 10'-11" section of 30" DIP and two solid sleeves. The new section was in place by 11:00p.m., bolts tightened by 11:40p.m., and valves reopened to restore flow to the filtration plant by 12:30a.m. No leaks were observed, and the site was secured and cleaned before demobilization at 1:00a.m.	#846			V7, V11, the 30" and 36" raw water valves, the 12" valve in the reclaimed water basin, and the 42" valve to take all three raw water lines out of service	UNK	UNK	UNK	UNK	UNK	UNK	UNK
10/24/2024	Emergency	Residence on Bond Mill Rd	At 3:00p.m., a WSSC Water crew arrived to repair a water main break on Bond Mill Rd (unrelated to the 48" raw water line). The crew chief distributed emergency shutdown notices to affected customers and provided bottled water to the residence affected. By 3:50p.m., valves at Brooklyn Bridge Rd and Diploma Dr were closed. Repairs were made, and the system was refilled by 5:00p.m. with no leaks observed. Water service was restored to all customers by 5:07p.m..	#855	10/24/2024	3407357 - 3407458	V033 221NE06		DIR discussed emergency shutdown notices, but no documentation was located.						
10/30/2024	Planned	128+59	36-inch Horizontal Valve Vault Prep Work At Reclaimed Water Basin Sta. 128+59, valve to open, no customer impact.	#841			154	NA	NA	NA	NA	NA	NA	NA	NA
11/18/2024	Planned	Patuxent Filtration plant	Working on the existing 30-inch PCCP Raw Water Line, assume no customer impact, Shutdown at plant	#887											
12/2/2024	Planned	Patuxent Filtration plant	Patuxent WF Shutdown & 30" PCCP Adapters Reset By New 30"x30" TEE.	#891											
12/9/2024	Planned	128+59	3 Cathodic Protection Installed On The 42" Worked At Rocky Gore Facility, valve to close then open, no customer impact.	#841			154	NA	NA	NA	NA	NA	NA	NA	NA

B.6
Pavement Summary Log

Location of Deficient Pavement Provided by WSSC Water	Approximate Stations Encompassing Deficiencies, Based on Address	Length to Repave (ft)	Date of Initial Temporary Paving	Date of Re-Paving	Time Between Initial Paving and Deficiency Letter Paving (Days)	Date WSSC Water Informed Allen Myers	Method WSSC Water Informed Allen Myers	Issue	Date of Allen Myers Response	Allen Myers Response	Notes
15713 - 15715 Bond Mill Rd	90+75 - 92+00	105	6/1/2024	11/4/2024	156	10/22/2024	Deficiency Letter, via email	Settlement in temporary pavement	10/22/2024	AM stated pavement will be fixed by 11/22/2024	
15807 - 15813 Bond Mill Rd	83+00 - 86+00	90	11/3/2023	11/4/2024	367	10/22/2024	Deficiency Letter, via email	Settlement in temporary pavement	10/22/2024	AM stated pavement will be fixed by 11/22/2024	
15815 - 15817 Bond Mill Rd	80+00 - 82+50	77	10/19/2023	11/4/2024	382	10/22/2024	Deficiency Letter, via email	Settlement in temporary pavement	10/22/2024	AM stated pavement will be fixed by 11/22/2024	
15909 Bond Mill Rd	74+00 - 75+00	30	10/5/2023	11/4/2024	396	10/22/2024	Deficiency Letter, via email	Settlement in temporary pavement	10/22/2024	AM stated pavement will be fixed by 11/22/2024	
Corner of Orem Dr. - 16101 Bond Mill Rd	68+00 - 69+00	107	6/9/2023	11/4/2024	514	10/22/2024	Deficiency Letter, via email	Settlement in temporary pavement	10/22/2024	AM stated pavement will be fixed by 11/22/2024	
16110 Bond Mill Rd	65+00 - 66+00	3	6/9/2023	11/4/2024	514	10/22/2024	Deficiency Letter, via email	Settlement in temporary pavement	10/22/2024	AM stated pavement will be fixed by 11/22/2024	
16110 Bond Mill Rd	65+00 - 66+00	20	6/9/2023	11/4/2024	514	10/22/2024	Deficiency Letter, via email	Settlement in temporary pavement	10/22/2024	AM stated pavement will be fixed by 11/22/2024	
16409 Bond Mill Rd	53+00 - 54+00	165	UNK	11/4/2024	-	10/22/2024	Deficiency Letter, via email	Settlement in temporary pavement	10/22/2024	AM stated pavement will be fixed by 11/22/2024	
16421 Bond Mill Rd	50+00 - 47+00	117	UNK	11/4/2024	-	10/22/2024	Deficiency Letter, via email	Settlement in temporary pavement	10/22/2024	AM stated pavement will be fixed by 11/22/2024	
16421 Bond Mill Road	50+00 - 47+00	UNK	UNK	UNK	-	10/21/2022	email	Settlement in temporary pavement	10/21/2022	AM planned to drive the site the following week to assess.	Email had photo attached showing settlement.
16421 Bond Mill Road	50+00 - 47+00	UNK	UNK	UNK	-	10/21/2022	email	Settlement in temporary pavement	10/21/2022	AM planned to drive the site the following week to assess.	Email had photo attached showing settlement.

Project	Date	Event
48" Patuxent	10/21/2022	WSSC Water Contract Manager emailed Allen Myers that in the community meeting the night before there were complaints of the temporary paving c Bond Mill Rd and Brooklyn Bridge Rd. He attached a list of locations with pavement issues.
48" Patuxent	10/21/2022	Allen Myers planned to drive site the following week and assess if they need to address immediately or if it can wait until crews are mobilized back to the site.
48" Patuxent	4/17/2023	A WSSC Water individual sent an email to WSSC Water personnel to reiterate that the compaction reports are required for the entire trench per the spec, driven by lack of compaction reports for ongoing projects on deep sewer work.
48" Patuxent	2/22/2024	Compaction QA Incident Report is submitted because compaction testing isn't beginning 1' above top of pipe (which would be 15' below surface), but rather only 5' below surface. Allan Myers asserted it is unsafe for compaction testing personnel to descend beyond the 5-foot depth mark. This deviat from WSSC Water Spec 02315 Earthwork for Pipeline Construction.
48" Patuxent	2/23/2024	A WSSC Water individual sent an email to WSSC Water personnel with the incident report from the day before, WSSC Water's spec for earthwork, and an email from the previous year (4/17/2023) in order to reiterate the proper spec that should be used for the project. He states that the soil not being compaction tested properly has led to pavement settlement issues.
48" Patuxent	2/26/2024	A field order is created to advise Allen Myer to follow WSSC Water's Standard Spec 2315 for compaction testing.
48" Patuxent	5/8/2024	In a meeting, WSSC Water told Allen Myers that the documentation of compaction reports and field reports is not up to WSSC Water standards, reiterating the field order sent 2/26/2024. Additionally, the meeting minutes note settlements have been observed along Bond Mill Rd, so Allan Myers to monitor the entire 48" trench line to address settlements as soon as possible.
48" Patuxent	5/13/2024	WSSC Water sends Allen Myers a **deficiency letter** via email regarding improper soil compaction and finished grade settlement. The letter states Alle Myers did not comply with WSSC Water standard specs or with finished grade settlement limitations. The letter mentions the field order from 2/26/2(that was created to notify Allen Myers of compaction non-compliance, and Allen Myers has increased the quantity and depth of tests since then, but s compaction reports continue to be deficient. WSSC Water requests Allen Myers remove and replace all trench backfills with deficient soil compaction reports and/or finished grade settlement exceeding 0.005 foot and no cost to WSSC Water.
48" Patuxent	5/28/2024	Allen Myers replies to the finished grade settlement **deficiency letter** stating they do not agree to remove or replace any trench backfill material for two reasons. (1) Allen Myers claims they were provided with and told to abide by Prince George's County backfill requirements, and so refuse to re-backf using WSSC Water's specs, since their work was in accordance with contract requirements and passed the tests by 3rd party firm BOTA. They stat the field order was not signed by Allen Myers and they were not aware of it. (2) Allen Myers claims Standard Spec 021315 Part 1.3 C regarding finish grade settlement is not applicable yet as they have not done any permanent roadway restoration. Allen Myers continues that WSSC designed this project to be a long, linear replacement, such that permanent restoration cannot be done until the entire pipe is installed and tested. As such, years of temporary pavement are expected to have some settlement, and no settlement has exceeded the 2.5" max settlement per Prince George's County regulations.
48" Patuxent	6/14/2024	Email from WSSC Water Contract Manager to Allen Myers. He attached excel list of locations the WSSC Water inspector identified as needing attention due to roadway settlement.
48" Patuxent	7/3/2024	Allen Myers replies to the email from the Contract Manager, stating Allen Myers has milled the roadway and so the areas the inspector identified as needing attention have been addressed.
48" Patuxent	10/22/2024	WSSC Water sends Allen Myers a **deficiency letter** via email regarding areas where WSSC Water finds temporary patches to be unacceptable.
48" Patuxent	10/22/2024	Allen Myers replies to the temporary patch **deficiency letter**, stating they will address the concerns within 30 days (by 11/22/2024). They also state some areas identified are outside of the trench repair limits.
48" Patuxent	10/24/2024	Allen Myers notifies WSSC Water that they plan to permanently pave the areas identified on November 4, 2024 to address the problem identified in th temporary patch **deficiency letter**.

B.7
Community Communications Log

Date	Source	Issue Category	Complaint	Action
4/26/2021	DIR 45	Neutral Discussion with Resident	WSSC Water staff met with community members to discuss preferences for firewood placement by the contractor.	No further action (discussion only).
4/29/2021	DIR 44	Neutral Discussion with Resident	Resident requested the contractor leave large logs (over 6" diameter) and pine trees on the resident's property as a barrier after clearing.	Advised that this arrangement required a direct agreement with the contractor (WSSC Water not involved).
6/7/2021	DIR 74, DIR 75	Flooding on Property	Resident complained that a silt fence was causing water to back up in his backyard.	An erosion-control inspector visited the next day and instructed the contractor to adjust the silt fence to restore proper drainage flow.
6/14/2021	DIR 803	Neutral Discussion with Resident	Resident could not access a shed because a silt fence was blocking the path.	The silt fence was adjusted to allow access to the shed.
6/15/2021	DIR 81	WHC Damage	During excavation, the crew crimped a home's water service line (no significant damage; the customer's water stayed on and no leaks occurred).	The contractor replaced the crimped section of the copper service line the next day.
6/23/2021	DIR 87	Utility Discovered	An unmarked gas valve was uncovered during digging at the site (no damage was done to the valve).	The gas utility (BGE) was notified, and they provided a valve cover. No further issues.
8/11/2021	DIR 157	Sewer House Connection	A sewer backup was reported to a public restroom. Inspectors found a broken house sewer connection in the trench for the 48" pipe.	A damage report was filed. WSSC Water and the contractor met in Aug–Sep 2021 (see DIR 133, 137, 154) and planned to relocate the sewer connection as a resolution.
4/22/2022	Email	Pests	A resident claimed that nearby construction caused rats to enter the resident's house (Noticed them when work began, and believed construction vibrations caused foundation cracks that let rats in).	WSSC Water personnel investigated: they found no contractor debris that would attract pests and suggested the resident use an ultrasonic pest repellent device.
6/2/2022	DIR 346	Neutral Discussion with Resident	WSSC Water personnel informed a homeowner that the crew would need to remove and temporarily relocate the homeowner's mailbox for construction.	The homeowner agreed as long as the mailbox would be put back after the work. (Mailbox was removed and later reinstalled once work at that spot was completed.)
7/11/2022	DIR 368	Misc. Damage	A geotechnical gauge (used by the Geotech subconsultant) was mistakenly placed outside the designated safe zone, and a dump truck ran over it, cracking the device.	The Contractor superintendent immediately halted work and moved the crew 300' away from the gauge. The Geotech firm and state inspectors (MDE) were notified; MDE issued a citation. The damaged gauge was removed for repairs.
12/5/2022	DIR 390	Communication Cable Damage	The crew struck an unmarked communications line during excavation.	The site inspector notified the relevant WSSC Water plant supervisor. The crew repaired the line on the spot, and the plant supervisor was satisfied with the repair (a damage report was filed for documentation).
12/19/2022	Email	Pavement	A local official (on behalf of the community) reported complaints of sunken patches on Bond Mill Road and Brooklyn Bridge Road, and a missing crosswalk that hadn't been repainted after construction.	The contractor responded by repaving the sunken areas on 12/20/2022 and installing a temporary crosswalk. *(The email chain did not show a direct reply to the official about meeting arrangements, just the actions taken.)*
1/4/2023	DIR 395	Communication Cable Damage	A homeowner reported losing phone and internet service. It was discovered that the crew had accidentally cut a Verizon FiOS line in the BGE right-of-way the day before.	Verizon was notified and arrived around midday. They ran a temporary cable to restore the home's service (the cable was left above ground and a permanent fix was scheduled for later). A damage report was filed.
1/12/2023	Email	Property/House Damage	A resident was concerned that the excavation work might destabilize trees on the resident's property, causing them to fall onto the house.	WSSC Water inspectors (and a WSSC Water arborist) assessed the site and determined the trench (20–25' from the trees) wouldn't affect them. WSSC Water explained this to the resident and even offered to have a structural engineer examine the resident's foundation.
1/23/2023	Email	Property/House Damage	The community association president emailed WSSC Water asking the project manager to attend a meeting (scheduled 2/16/2023), noting residents' concerns about (1) unusually high water bills, (2) houses shaking (cracks and leaks they attributed to the pipeline work), and (3) a port-a-potty placed on someone's lawn.	The WSSC Water contract manager agreed to attend the community meeting and did so. In a follow-up email, WSSC Water reported that the contractor had hit unexpected rock underground and now anticipated project completion by mid-January 2024 (adjusting expectations given the delay).
3/15/2023	Email	Pavement	A resident requested that "popcorn" asphalt (a specific texture) be used for repaving Bond Mill Road and asked to see the original project contract and any change orders.	WSSC's contract manager replied that the project was using standard, approved road repair materials and that he could not provide cost details from the contract while the project was ongoing.
9/22/2023	DIR 517	Communication Cable Damage	While dumping gravel (CR-6), the contractor hit and knocked down an overhead Verizon wire running from a pole to a house.	Verizon was notified immediately. The WSSC Water inspector spoke with the homeowner (who had already called Verizon). Verizon stated they would repair the line the next day.

Date	Source	Issue Category	Complaint	Action
10/4/2023	DIR 527	WHC Damage	Around 12:50 pm, the contractor accidentally hit and damaged a home's water service connection (water house connection).	The contractor repaired the service line and restored water to the home by about 1:50 pm. The inspector checked with the customer afterward to ensure their water pressure was back to normal.
10/11/2023	DIR 533	Utility Discovered	The contractor discovered a gas service line only 1" below the asphalt surface (far shallower than BGE's 30" minimum depth requirement).	The contractor called BGE. A BGE crew arrived within minutes. BGE said they would return on Friday to assess and determine how to address the shallow service line.
10/24/2023	DIR 544	Sewer House Connection	Contractor hit and damaged a sewer house connection.	The contractor temporarily reinstated flow in the sewer line by early afternoon (around 1 pm). The inspector informed WSSC Water management, noting that the existing sewer connection was directly in the path of the new 48" water main installation.
11/4/2023	DIR 562	Property/House Damage	Contractor accidentally knocked over a homeowner's mailbox with equipment.	The contractor's superintendent informed the homeowner immediately. The crew promptly repaired the mailbox. The inspector later checked with the homeowner, who was pleased with the quick response and repair.
12/7/2023	DIR 581	Misc. Damage	A construction truck accidentally hit a tree, causing damage to the truck. No one was injured.	No action was necessary beyond documenting the incident (the tree impact did not pose a safety issue to the public, and no further damage occurred).
12/14/2023	DIR 587	WHC Damage	The contractor pulled out a water service line (which was unmarked and possibly abandoned), inadvertently causing damage to an 8" water main.	The crew performed an emergency shutdown and closed valves 014, 044, and 045 to make the repair. The 8" water main was fixed and the valves were reopened. (The inspector notified the central control room and logged the incident with the appropriate utility ticket.)
3/11/2024	DIR 657	Leak	Around 12:30 pm, a leak was noticed at valve V045 (near Bond Mill Rd & Sherwood Ave). Water was seeping from the valve area.	The inspector used a valve key to partially close V045, which reduced the water flow but didn't stop it completely. The inspector notified WSSC's dispatch, and an emergency crew arrived later. The crew sealed the trench, performed a shutdown, and repaired the leak. Water service was restored by ~1 am.
3/13/2024	DIR 658, DIR 661	Neutral Discussion with Resident	A community member requested that the crew refrain from working on the road on 3/15/2024 because they were hosting a wedding and needed space for guest parking.	The contractor's superintendent agreed (it was forecasted to rain that day as well) and canceled the planned road work and traffic control for 3/15. The crew instead worked off the road (on a different task) that day to accommodate the request.
4/15/2024	DIR 687-689	Misc. Damage	Around 12:30 pm, a homeowner's sewer line backed up. The homeowner's plumber ran a snake, which got stuck roughly where the new 48" water main trench was located.	An emergency crew was dispatched the next day (4/16/2024) to excavate the area and remove the stuck snake, then repair the sewer line. WSSC Water personnel were on site to evaluate responsibility. A subcontractor returned on 4/17/2024 to complete the sewer repairs.
4/30/2024	DIR 700	Pavement	The inspector conveyed community complaints about potholes and sunken areas along Bond Mill Road where the pipeline was installed.	The contractor immediately filled in a settled area, compacted it with a roller, and applied seed and straw (for erosion control). On 5/3/2024 (see DIR 703), they applied cold patch to potholes along the trench line, and on 5/6/2024 (DIR 705) they performed temporary paving over those areas.
6/25/2024	DIR 747	Trash	The inspector noted community complaints that trash was piling up around Diplomat Drive and Orem Drive near the construction area on Bond Mill Road. Residents felt the area was being neglected.	The contractor cleaned up the accumulated trash and moved construction equipment that wasn't in use to the designated laydown yard (by the ballpark) on 6/28/2024.
6/25/2024	Email	Pavement	The (former) West Laurel Civic Association president emailed WSSC Water after a community meeting. The email mentioned a presentation that highlighted cracked sidewalks along Bond Mill Road, suggesting that WSSC Water replace these sections to "make it up" to the residents for the prolonged construction disruption.	WSSC Water replied that while the sidewalk issues were not caused by the 48" pipeline project, they would discuss potential repairs with Prince George's County Public Works and the county permitting agency. (They acknowledged the community's concerns about uneven pavement but did not commit to fixes in the email.)
7/15/2024	DIR 763	WHC Damage	Around 9:50 am, the contractor hit and damaged another home's water service connection (WHC) during excavation.	The contractor repaired the water service line and had water restored to the house by about 1:50 pm. The resident was notified and the flow/pressure were checked to ensure everything was back to normal.
7/19/2024	DIR 767	Neutral Discussion with Resident	A homeowner granted permission for the removal of a tree on their property to facilitate the work (the tree was outside the jurisdiction of Maryland's roadside tree laws).	No action needed from WSSC Water beyond documentation, since the homeowner's permission was obtained (work could proceed with tree removal as agreed).

Date	Source	Issue Category	Complaint	Action
7/31/2024	DIR 777	Neutral Discussion with Resident	Another homeowner gave permission for the removal of a tree on their property (also outside of roadside tree regulations) for the project.	No action needed beyond noting the permission, as the tree removal was approved by the homeowner.
8/2/2024	DIR 779	Sewer House Connection	Around 9 am, while exposing a sewer house connection, the contractor cracked the crown of an existing sewer main. (The sewer main was found to be about 5 feet higher than where the plans indicated it should be.)	The inspector informed the WSSC Water project manager. It was decided to reroute the sewer flow: the crew connected the affected sewer line into a nearby manhole. This tie-in was completed on the next work days (8/5/2024 and 8/12/2024).
8/6/2024	DIR 782	WHC Damage	The contractor broke a shallow water service line around 11:45 am (the line was only ~2' below ground). It was repaired, but around 1 pm the unsupported trench collapsed, breaking the same line again.	The contractor quickly repaired the service line twice in the same afternoon, restoring water by 12:45 pm initially and again by 1:20 pm after the collapse. The resident was kept informed and was understanding of the situation.
8/16/2024	DIR 792	Sewer House Connection	Around noon, the contractor hit and damaged a sewer house connection that had been incorrectly marked both in the field and on the utility plans.	The contractor made a temporary repair to the sewer connection to restore service. (A permanent fix would be scheduled as needed.)
8/22/2024	DIR 797	Misc. Damage	At about 1:25 pm, a passing vehicle (a Tesla car) was struck by the arm of an automatic flagger device at the construction site, scratching the car. The driver reported that they waited ~1 hour for police, who never arrived.	The traffic control subcontractor's manager provided the driver with contact information to file an insurance claim for the damage. The incident was documented in a damage report. *(Police were called by the driver but did not show up before the driver departed.)*
8/29/2024	DIR 803	Pavement	Resident reported family member was hurt by a sinkhole while riding a motorcycle on Bond Mill Road (suspected it was project-related).	The inspector investigated and confirmed the sinkhole was not related to the pipeline project's trench. He informed the resident that Bond Mill Road was scheduled for milling and resurfacing soon, which would resolve such road issues. The resident was satisfied with this response.
9/19/2024	DIR 823	Communication Cable Damage	The contractor accidentally crushed a cable/utility wire with a trench box during installation.	WSSC's security personnel recommended that the contractor splice the cable back together using waterproof connectors. The line was successfully repaired on 10/2/2024 (as noted in DIR 835).
10/11/2024	Email	Misc. Damage	A frustrated resident emailed his state senators (copying other officials) complaining that the local delegation had "abdicated" their duty to address the community's concerns about the project. He argued if it were a private project, officials would pay more attention. He mentioned he wrote a letter to the editor about these issues.	WSSC Water staff provided the resident with a copy of approved Change Order #3 (to address one of his concerns about project changes). Internally, WSSC Water decided to send project updates to the local delegate, senator, and councilmember, and to schedule a community meeting for mid-November to early December 2024 to address ongoing complaints.
10/14/2024	DIR 846	Pipe Damage	Around 1:30 pm, the crew found an 18" wash-water bypass line (abandoned since the 1970s). While excavating to remove this old line, they accidentally struck a 30" PCCP raw water main that feeds the Patuxent water filtration plant.	The team immediately shut down the 30" and 36" raw water mains, as well as a nearby 42" main, to stop the flow. Repairs were made to the 30" main, and water service was restored. (The work, including shutting valves and fixing the pipe, was completed by around 1 am.)
10/23/2024	DIR 854	Misc. Damage	At approximately 11 am, there was a water main break near the project site, unrelated to the 48" pipeline construction.	The inspector notified WSSC Water's central dispatch to arrange repairs. A WSSC Water crew repaired the broken main the following day (as recorded in DIR 855).
11/4/2024	DIR 865	Property/House Damage	A resident informed the inspector that the construction crew's heavy machinery had damaged the curb in front of his property.	The inspector and WSSC Water staff weren't certain the damage was caused by the project, but they offered to repair the curb to maintain good community relations. The homeowner accepted this offer and was satisfied with the solution.
11/5/2024	DIR 866	Power Line Damage	A subcontractor's dump truck, with its bed left raised, hit an overhead power line. The collision brought down a utility pole and caused a power outage for four homes.	The inspector immediately called the power company (BGE) and warned bystanders to stay at least 35 feet away from the live wires. BGE crews arrived and worked through the night to restore power and replace the pole.
11/8/2024	DIR 869	Pavement	A resident complained that a paving crew had blocked his driveway.	A WSSC Water customer advocate reached out to the resident after the incident to discuss his concerns and apologize for the inconvenience. (The duration of the blockage was unclear, but the outreach was intended to ensure the resident's concerns were heard.)

Date	Source	Issue Category	Complaint	Action
1/9/2025	DIR 915	Pavement	A resident expressed concern about construction equipment being stored on a yard where children could potentially play on it. He also had a list of demands: he wanted to review the roadwork permits and plans, insisted stormwater regulations be enforced, and asked that driveways be fixed up to the property lines along Bond Mill Road.	The inspector assured the resident that the equipment would be removed once restoration was completed. He also explained that issues like permits, stormwater law enforcement, and driveway extensions were beyond his authorization and would have to be addressed by the appropriate departments.
2/25/2025	Presentation to Education, Energy, and Environment Committee	Misc. Damage	A community member testified in favor of Maryland Senate Bill 654, calling for an audit of the 48" pipeline project. He cited major issues: significant cost increases and change orders, over two years of delays, poor engineering decisions, difficulty contacting WSSC Water due to staff turnover, and a lack of consideration for the community.	The testimony highlighted the need for oversight. As a result, a legislative audit of the project was proposed (Senate Bill 654 was introduced to mandate an audit of the project).
4/5/2025	Email	Traffic	The former West Laurel Civic Association president emailed WSSC Water summarizing community complaints from a recent meeting, including confusion over road markings (drivers unintentionally driving in a bike/parking lane due to unclear signage).	WSSC Water replied that they had placed additional signage and adjusted roadway markings to clearly indicate where driving was not permitted. (Emails between WSSC Water and county officials (DPIE) regarding permits for the updated signage were also noted in the thread.)
4/10/2025	DIR 946	Pavement	The inspector received recurring complaints about the condition of a staging area near a community building on Brooklyn Bridge Road (used for the project). Residents wanted to know when this area would be fully restored.	The inspector emailed the contractor, instructing them to proceed with restoration of the staging area.
4/16/2025	DIR 948	Trash	The project's laydown yard (near a baseball field at Rocky Gorge) was the site of illegal dumping: 28 car tires were found abandoned there.	The inspector filed a police report for the illegal dumping. WSSC Water arranged for the removal and proper disposal of the tires the following week.
4/21/2025	Email	Pavement	A resident sent a series of emails (copying a state delegate, WSSC Water staff, and a county official) listing several complaints: (1) a contractor had thrown a neighbor's trash bins into a ditch (later the bins were retrieved), (2) the road paving was subpar, (3) debris was left around, and he asked when power-washing of sidewalks would occur. He later added that a water main break occurred due to "poor engineering and planning," and complained that some manholes were left causing bumps after repaving.	WSSC Water personnel replied with explanations and fixes: They assured him that permanent pavement would be laid within 30 days for the water main break patch. They added extra signage and agreed to notify the community before any sidewalk power-washing. They also adjusted the manhole covers to be flush with the new pavement, addressing the bumpiness.
4/22/2025	DIR 950	Trash	A resident left a letter (and later spoke in person) asking if WSSC Water could extend a fence near the crosswalk between Diplomat Drive and Orem Drive to prevent ongoing illegal dumping in that area.	The inspector explained that WSSC Water cannot install a fence on property it does not own. The resident understood and thanked the team for the work already done on Bond Mill Road, expressing satisfaction with their response.
5/30/2025	Email	Pavement	A resident emailed a community leader (who forwarded it to WSSC) about a pothole near her house that formed after a water main break repair on Bond Mill Road. She said that whenever large vehicles drove over it, her whole house would shake.	Within a few hours of her email, a WSSC Water crew arrived and filled the pothole. The repair stopped the shaking issue, which resolved the resident's concern.

Summary of Community Meetings

Project	Date	Time	Location Held	Host	Attendees	Summary	Source
48" Patuxent	4/14/2011	7:30PM	West Laurel Community Building	WLCA	WLCA Board, representative for Rep. Donna Edwards' office, WSSC Water, WR&A, AMT Inc.	WR&A, West Laurel Civic Association (WLCA), Representative Donna Edwards office, and WSSC Water discussed the purpose of the Patuxent raw water pipeline project, alternative alignments, and community impact.	Meeting Minutes
48" Patuxent	5/19/2011	7:30PM	West Laurel Community Building	WLCA	WSSC Water, WR&A, WLCA, Community	WSSC Water gave presentation and held community discussion on Patuxent raw water pipeline project to receive community input on the alignment. BGE refused to grant longitudinal R/W and as such the leading alignment alternative was along Bond Mill Rd. The projected start date was Spring 2011 and completion was Winter 2015.	Meeting Minutes
48" Patuxent	6/20/2011	11:00 AM	WSSC Water Headquarters	WSSC Water	WSSC Water, WR&A, Elected Officials, Community	The community and elected officials pushed for BGE and SHA to allow for longitudinal occupancy of their ROWs for the water main. BGE and SHA stated they should have more information on the feasibility of this in the next month.	Meeting Minutes
48" Patuxent	7/27/2011	11:00 AM	WSSC Water Headquarters	WSSC Water	WSSC Water, WR&A, BG&E, SHA, WLCA	BGE and SHA stated they cannot allow longitudinal occupation of their ROWs for the water line. The WLCA expressed concerns regarding the project for public safety around the school, repaving, availability of sidewalks, and communications from WSSC Water regarding community impacts and schedule.	Meeting Minutes
48" Patuxent	12/9/2011	10:30 AM	WSSC Water Headquarters	WSSC Water	WSSC Water, WR&A, Elected Officials, WLCA	The pipeline's preliminary alignment was discussed; questions ensued if the additional line would pose issue to the stream nearby, the life cycle of the existing three lines, if the alignment can be just outside of the BGE R/W, if the alignment could cut across WSSC Water property to minimize traffic impacts, and if tunneling methods could be implemented.	Meeting Minutes
48" Patuxent	9/18/2018	-	West Laurel Community Building	WLCA	Community, WSSC Water, WLCA	WSSC Water gave a presentation and led a community discussion on the project. The presentation showed the proposed alignment along Bond Mill and Brooklyn Bridge Rd, and indicates that design was anticipated to finish in Fall 2018, construction to start in Summer 2019, and construction would complete in Fall 2021. WLCA President referred to this meeting in an email from 2021. WSSC Water personnel led community discussion on the project at the WLCA general meeting. Community members were told the project would be done in short sections (except for final paving) and that paving would be done curb to curb from Brooklyn Bridge Rd to Rt 198 (even though the pipe does not extend this far); WSSC Water project outreach manager noted that the mill and overlay is not planned to extend more than 25' past the trench.	PowerPoint on WSSC Water Website
48" Patuxent	5/20/2021	7:30 PM	Virtual, via Zoom	WLCA	Community, WSSC Water, WLCA	WSSC Water gave a presentation on community impacts to expect during construction. Anticipated start of construction was Summer/Fall 2021 and completion was Fall 2023.	PowerPoint on WSSC Water Website
48" Patuxent	10/20/2022	7:30 PM	West Laurel Community Building	WLCA	Community, WSSC Water, WLCA	WLCA held a community meeting that WSSC Water personnel planned to attend to provide project updates. Presentation and meeting minutes not available.	Email
48" Patuxent	2/16/2023	7:30 PM	Location not stated	WLCA	Community, WSSC Water, WLCA	WLCA held a community meeting that WSSC Water personnel planned to attend to provide project updates. Presentation and meeting minutes not available.	Email
48" Patuxent	6/24/2024	7:00 PM	14501 Sweitzer Lane; Hybrid with virtual (Teams) option	WSSC Water	Community, WSSC Water	WSSC Water gave a presentation on an updated timeline for the project which discusses the rock encountered in August of 2023. Permanent asphalt was planned t be installed in October 2024, and the final paving and striping was planned to occur in Spring of 2025.	PowerPoint on WSSC Water Website
48" Patuxent	11/21/2024	11:00 AM	Location not stated	WSSC Water	Elected Officials, WSSC Water	WSSC Water held a meeting for elected officials, as well as a meeting with the Director of Prince George's County Department of Public Works and Transportation and the Director of Prince George's County Department of Permitting, Inspections, and Enforcement to get their feedback before the upcoming community meeting. Not stated when WSSC Water scheduled to meet with the Directors.	Email

Project	Date	Time	Location Held	Host	Attendees	Summary	Source
48" Patuxent	12/2/2024	6:30 PM	West Laurel Community Building; Hybrid with virtual option	WLCA	Community, WSSC Water, WLCA	WLCA held a community meeting that WSSC Water personnel planned to attend to provide project updates. Presentation and meeting minutes not available.	Email
48" Patuxent	3/7/2025	3:00 PM	Online, via Teams	WSSC Water West Laurel Task Force	Councilmembers, WLCA President, WSSC Water staff	Attendee discussed that Department of Permitting, Inspections, and Enforcement and WSSC Water will perform a joint inspection of storm drain inlets on 4/2, the striping plan has been updated by the Department of Public Works and Transportation, final paving was planned for April 21, a community meeting was planned for April 16, the contractor will plant trees, WLCA requested that the Prince George's County Police install a speed camera along Bond Mill Rd, WSSC Water is evaluating the request to waive the watershed fee for West Laurel residents affected by construction, WLCA and WSSC will look into installing a walking path and dog park with Maryland National Capital Park and Planning Committee, there is an upcoming event called the National Night Out on 8/5 and the Bond Mill Spring Carnival in May/June which WSSC Water will attend, and the next meeting is scheduled for April 4 at 3:00PM.	Action Items of Meeting Minutes
48" Patuxent	4/16/2025	6:30 PM	Online, via Teams	WSSC Water	Community, WSSC Water, WLCA, DPIE, DPW&T, Elected Officials	The Task Force was introduced to incorporate community requests, which included storm drain inspections, a recreational area, speed cameras, the watershed fee to be waived, updated striping and signage, tree planting, and concrete restoration. Paving and striping was planned to begin April 21, 2025 and be completed in June 2025.	PowerPoint on WSSC Water Website
48" Patuxent	6/27/2025	3:00 PM	Online, via Teams	WSSC Water West Laurel Task Force	Councilmember Thomas Dergona & Michelle Garcia, WLCA President, WSC Water staff	WSSC Water provided updates on the items pertinent to the Task Force: power washing on the sidewalks and gutter was complete, striping was paused due to the water main break on 5/20/2025 but will continue the following week, the requested raised crosswalks would require approval from Department of Public Works and Transportation if pursued and may impact schedule/budget, trees were planted according to the contract, Department of Public Works and Transportation is not moving forward with adding a speed camera due to lack of funding, WSSC Water does not have legal authority to issue a watershed fee waiver but will invite the WSSC Water CFO and GCO to the next task force meeting for further discussion, the Maryland National Capital Park and Planning Committee rejected WSSC Water's proposal to install a dog park, and there is an upcoming event called the National Night Out on 8/5.	Meeting Minutes

B.8
Compaction QA Incident Log

Serial No.	Date	Location	Incident Report-Compaction Inspection & Testing (INCRP) # Description	Compaction Inspection Report and Testing (CIRT) # Description	BOTA # Description	Daily Inspection Report (DIR) # Description	WSP Remarks
			WSSC Water - Compaction QA Team		BOTA Consulting Engineers, Inc.	WSSC Water - Inspector	
1	12/6/2021	DIR - Approx. STA 48+96.8	**#61** Noted: No WSSC Inspector onsite.Geotech inspector was late. Insuffecient tests/lift. 100ft of pipe installed. It also mentions 10 pipes - we assume 10 section of pipes- it recommends replacement of backfilled material, and advises recompaction. Mentions the address as (15404-1541 Bond Mill Road.) Approx. STA 125+00 Noted max.DD=145.3, OMC 5.5% and Material GAB. Moisture test result 4%.	No CIRT avalailable	**# 122** Noted: 2x lifts of 12 upto SG was tested for compaction. Material CR6, Max.Dry Density (DD)=149.9. OMC=6.7% and 95% Compaction. Then they added another sheet stating part 2. Noted the followings: Max. DD=128.1, OMC=10.8%, Material Orange silty gravel. 4xlifts of 12in upto SG. Address STA 49+05 to 49+25.	**#216** Notes no backfilling activity on that day (12/06/2021). **WSP Comment:** INCRP stated that there was no WSSC field inspector present, DIR has been created on Jan 4, 2022 for December 6, 2021. more than a month later. It is very much possible that the DIR's description of events is not acurate.	**INCRP#61 Inconsistencies:** - Incorrect Location: The report references an incident at STA 125+00, whereas the actual work occurred at STA 49+96.8. If another crew was operating at STA 125+00, this should be clarified. Proctor Test Data: The report does not specify where the proctor test data were collected. These values conflict with BOTA's proctor data. It's unclear whether the team conducted their own onsite proctor test. Pipe Length/ Backfilled: The report states that the contractor installed 9 pipes—presumably 10 sticks at 18 ft each—totaling 180 ft of backfill. However, the report incorrectly notes only 100 ft. Material Description: The inspector identifies the material as GAB, but BOTA's report includes photos showing silty orange material, which is clearly not GAB. Testing Information: The report only provides a moisture test value and omits compaction test results. Missing Documentation: No CIRT 1307 was found for the reported date to verify of a density was conducted or not. No photographs were available to WSP's audit. **BOTA #122 Inconsistencies:** In nearly all BOTA reports for this project, the backfill lift size is consistently noted as 12 inches, which contradicts the applicable specifications and standard details for backfilling and compaction. For the same station and pipe length, BOTA submitted a two-part compaction test report: The first part tested only two layers of 12-inch lifts near the subgrade (SG). The second part included four tests for the same trench up to SG, also using 12-inch lifts. It's unclear whether the first part failed, although the report indicates a 95% passing rate. Additionally, both reports are dated 12/06/21, yet the Daily Inspection Report (DIR) notes no backfilling activity on that date at STA 49+05 to 49+25 as indicated in BOTA report. There are further inconsistencies: The second part report references different Proctor data and different material than the first, which identified the material as CR6. It is unknown whether BOTA performed a Proctor Test onsite. The reported trench length is 25 feet, while INCRP indicates it should be 100 feet.

Serial No.	Date	Location	Incident Report-Compaction Inspection & Testing (INCRP) # Description	Compaction Inspection Report and Testing (CIRT) # Description	BOTA # Description	Daily Inspection Report (DIR) # Description	WSP Remarks
2	12/7/2021	DIR - STA 48+96.8?	**#62** Noted: Construction Activity at 6000-6004 WINDHAM RD, No WSSC Inspector Onsite, Protoctor data as Max. DD=145.3, OMC=5.5%, Tested Moisture= 5.1, Geotech Inspector was late, 3 section of pipe installed, trench was backfilled to SG without taking any compaction test, recommeded removal/replacement of the backfilling and recompaction. Noted material as GAB.	No CIRT avalailable	None available for that date.	No DIR available, however there is a DIR that in the subject states "WSSC DIR for 12/07/21" but the description states for December 6th, and it was created on Jan 4, 2022. WSP cannot verify what is correct in this DIR#217.	**INCRP#62 Inconsistencies:** - Incorrect Location: The report references an incident at a location where no work is scoped under B158291. We don't know which particular location INCRP#62 is for. Proctor Test Data: The report does not specify where the proctor test data were collected. Testing Information: The report only provides a moisture test value and does not show compaction test results, if any. Missing Documentation: No CIRT 1308 was found for the reported date to verify if a density test was conducted or not. No photographs were available to WSP's audit.
3	12/8/2021	DIR - STA 48+96.8	none available	**#1318 -** Notes: No WSSC Inspector onsite, Proctor data as Max DD= 145.3, OMC=5.5%, performed 6x density compaction tests, two attempts shows failed compaction %.	**#123** stated no backfilling on that date, and they did not perform any compaction testing. However, BOTA mentions installation of 25ft pipe in the ground with no backfilling.	**#218,** Created on Jan 4, 2022 for December 8th. Noted that subbase/bedding was prepared for the ARV vault at STA 48+96.8. It notes that Geotech was onsite and tested the subabse for compaction.	**CIRT #1318:** No mention of backfill material, compaction method. Again address does not correspond with the project location, no reference for the Proctor Data they used, It is also unclear that 2 attepts that failed initially, passed because of additional compaction or it was just a device error. No mention of lift sizes, no mention of wet density, or if the calculations were check for any field errors. **BOTA #123**: they did not perform any comapction testing beside inspector's DIR that they checked the subbase for the vault. **DIR#218:** Writing a DIR at least one month after the actual work can be very prone to errors. **No INCRP available.**
4	2/9/2022	DIR - STA 58+49	none available	**#1541**- Noted: WSSC Inspector onsite. Geotech Inspector onsite, proctor data as Max.DD=149.9, OMC=5.5%. Performed two tests with passing compaction range.	**#151**- Notes: 16in lifts, 20LF pipe installed, Modifed Proctor was provided, work location STA 57+93 to 58+13,	**#264 and 265**- Mentions Backfillin Operation at STA 58+49, Compaction was referenced, but they also noted alignment issue without explaining the issue.	**No INCRP** available even though BOTA explicitly stated that backfill lfits were 12in. **CIRT#1541**- tested two lifs for compaction without noting lifts's thickness, and at what depth those 2 tests were taken. The wet density of backfill material has not been noted. No mention what equipment was used for compaction. Exact activity STA is not noted either. **BOTA#151:** Did not comply with 8in lift requirement, they show testing of 4 lifts thru SG with a passing compaction percentage, and then retested the same trench 2 lifts to SG, it is unkonwn that the top 2 lifts failed that needed retest or why it was retested? BOTA also mentionsProctor data for two different material CR6 and Orange Silty Sand, where did they get proctor tests for the material, why is it in contracdiction with CIRT's proctor data. **DIR #264 and 265:** in the subject they say DIR for (02/09/22 and 02/08/22) but in description they are called for Febraury 4th, 2022. It is worth nothing that these DIRs were created on Feb 24. 2022. almost 22 days after the actual work.

Serial No.	Date	Location	Incident Report-Compaction Inspection & Testing (INCRP) # Description	Compaction Inspection Report and Testing (CIRT) # Description	BOTA # Description	Daily Inspection Report (DIR) # Description	WSP Remarks
5	3/8/2022	DIR - STA 59+50 to 59+70	none available	**#1652** - Noted: The address as 16306 Bond Mill Rd, Proctor data as Max. DD=149.9, OMC=5.5%, Performed 3x compaction tests, 1 failed, and was retested.	**#155:** Noted: 16in lifts, 20LF backfilling activity, STA 58+53 to STA 58+73, Refrence Modified Proctor data as max.DD= 119.3 with OMC 12.7% and max.DD=149.9 with OMC=6.7.	**#285:** Notes work location as STA 59+50 to 59+70, mentions backfilling activity occurred. It also mentions that the Contrcator used native excavated soils as backfill.	**No INCRP** available even though BOTA explicitly stated that backfill lifts were 16in. **CIRT#1541**- tested 3x lifts for compaction without noting lifts' thickness, and at what depth those 2 tests were taken. The wet density of backfill material has not been noted. No mention what equipment was used for compaction. No mention of exact activity STA. No mention of what material had been used as backfill, why their Proctor data is different than BOTA. **BOTA#151**: Did not comply with 8in lift requirement, they show testing of 4 lifts thru SG with a passing compaction percentage and then retested the same trench 2 lifts to SG with different material (CR6), it is unknown that the top 2 lifts failed that needed retest, and if the material was excavated. or why it was retested? BOTA also mentions Proctor data for two different materials, CR6 and Orange Silty Sand, where did they get proctor tests for the material, why is it in contradiction with CIRT's proctor data. **DIR #285:** there is a statement that the inspector left at 11am. No mention if someone else was covering the project.
6	4/13/2022	DIR - STA 58+80.5 to 59+20.5	none available	**#1770-** Only notes Proctor Data similar to #1652, no testing has been performed. WSSC inspector and Geotech Tech onsite.	None available for that date.	**#316-** States that there was backfilling activity for an 8in sewer main. As well as backilling with native soil for 48 in WM. No mention of any compaction tests.	Even there was backfilling operation, neither WSSC's compaction inspector nor BOTA performed and issued a compaction test report at this location 58+80.50 to 59+20.5, or at least it not availble to WSP.
7	4/14/2022	DIR - STA 59+20.5 to 59+36	**#87:** Notes that WSSC and Geotech Inspectors were onsite. Backfill Material as GAB, Proctor data as Max. DD=149.9 and OMC=5.5%. Next page it notes that Geotech was not onsite, it recommends removal and replacement of backfilled material, compact and test for compaction.	No CIRT avalailable	None available for that date.	**#317:** No indication of any backfilling at this date, Contractor coverved the trench with steel plates. DIR was cretaed on 04/19, five days later.	**INCRP #87**: On the first page states Geotech inspector was onsite, but on the second page it states no Geotech inspector onsite. The proctor data has not changed once since 2021? Same data as previous reports. No compaction test has been performed, as DIR#317 no bacfilling activity on that day. How is the inspector requesting replacement of backfilled material if there was not any backfilling. no mention of compaction method, no mention of exact work stations.

Serial No.	Date	Location	Incident Report-Compaction Inspection & Testing (INCRP) # Description	Compaction Inspection Report and Testing (CIRT) # Description	BOTA # Description	Daily Inspection Report (DIR) # Description	WSP Remarks
8	**5/5/2022**	DIR - Bond Mill Rd - MK85	none available	**#1847:** Notes the same proctor data, noted WSSC inspector and Geotech Inspector onsite. Tested two lifts of backfill, both passed.	**#168-** Notes work at STA 60+46 to 60+66, noted Brown Silty Sand and CR6. Notes 12in lifts. Tested 4x lifts in total. It appears that two last lifts were CR6 for subbase. Proctor data listed: CR6- max.dd=149.9 , OMC=6.7. Brown Silty Sand - max. dd=119.3 and OMC=12.7.	**#333**- noted backfilling operation on 05/05/22 without providing exact work location.	**No INCRP** available even though BOTA explicitly stated that backfill lifts were 12in. **CIRT#1847**- tested 2x lifts for compaction without noting lifts' thickness, and at what depth those 2 tests were taken. The wet density of backfill material has not been noted. No mention what equipment was used for compaction. No mention of exact activity STA. No mention of what material had been used as backfill, why their Proctor data is different than BOTA. **BOTA#168**: Did not comply with 8in lift requirement, they show testing of 4 lifts upto SG with a passing compaction percentage and tested 2 lifts to SG with different material (CR6), BOTA also mentions Proctor data for two different materials, CR6 and Brown Silty Sand, where did they get proctor tests for the material, why is it in contradiction with CIRT's proctor data. Per the plans C-9 at this station the depth of backfill is ~ 10ft but BOTA tested only 4x 12in lifts. **DIR #333**:5 days reports have been lumped into one DIR.
9	6/7/2022	DIR - STA 61+90 to 62+10	none available	**#1981**: Notes the same proctor data, noted WSSC inspector and Geotech Inspector onsite. Tested two lifts of backfill, both passed.	**#182:** Notes backfilling location at STA 61+86 to 62+06, 12in backfill lifts, 4 tests under SG and two tests on SG elevations. CR6 for SG loaction and Brown Silty Sand with Gravel for lower depths. All tests are noted as passed.	**#350** - Notes work location as 61+90 to 62+10. material used for backfilling was noted as native soils. Mentions that backfill was tested in lifts.	**No INCRP** available even though BOTA explicitly stated that backfill lifts were 12in. **CIRT#1981**- tested 2x lifts for compaction without noting lifts' thickness, and at what depth those 2 tests were taken. The wet density of backfill material has not been noted. No mention what equipment was used for compaction. No mention of exact activity STA. No mention of what material had been used as backfill, why their Proctor data is different than BOTA. **BOTA#182**: Did not comply with 8in lift requirement, they show testing of 4 lifts upto SG with a passing compaction percentage and tested 1 lift at SG with different material (CR6) but test at SG was repeated, BOTA also mentions Proctor data for two different materials, CR6 and Brown Silty Sand, where did they get proctor tests for the material, why is it in contradiction with CIRT's proctor data. Per the plans C-9 at this station the depth of backfill is ~ 10ft but BOTA tested only 4x 12in lifts. **DIR #350:**Work stations are different than BOTA's report.

WSP has access to an additional five CIRTs and three INCRPs. The recurrence of discrepancies across nine specific occasions provides substantial evidence that backfilling, compaction, and testing at BF1582E91 have not been performed in accordance with WSSC specifications. Furthermore, WSSC's QA reports reveal significant inconsistencies, as outlined above.

As a result, we focused our detailed review on the incidents listed above. However, a cursory examination of the remaining INCRPs and CIRTs indicates that similar inconsistencies are widespread.