

## December 2017 Monthly Report

### BJCJSTP Rehabilitation and Restoration Project

#### Background

The Binghamton-Johnson City Joint Sewage Treatment Plant (BJCJSTP) processes 18 million gallons per day with the capability of processing up to 60 million gallons per day (MGD) of wet weather flow. This plant is jointly owned by the City of Binghamton and the Village of Johnson City and managed by the Binghamton-Johnson City Joint Sewage Board (BJCJSB).

The BJCJSTP has suffered several catastrophic events since 2006. In 2006, the BJCJSTP was flooded by a 500 year flood that affected many of the processes in operation. In May of 2011, a concrete structure suffered structural failure, and in September 2011, the BJCJSTP suffered another 500 year flood that critically damaged equipment and rendered the secondary treatment fundamentally inoperable. The secondary process system is still largely inoperable today. A Consent Order was negotiated between the City of Binghamton, the Village of Johnson City, the BJCJSB and the NYSDEC to develop a plan to restore treatment operations at the BJCJSTP. The Consent Order requires the BJCJSTP to restore secondary treatment functionality and be able to fully treat 35 MGD of wet weather flow by August 1, 2018. To achieve this level of treatment, the reconstruction and testing of the Secondary Treatment Process must be completed as necessary to achieve treatment of 35 MGD. To comply with the Consent Order, the Sewage Treatment Plant must then be fully operable by May, 1, 2019, including the remainder of the secondary treatment process. There are also several interim milestones included in the Consent Order. The Consent Order has been amended to extend several interim milestones, and DEC has been made aware of the likely finish of the Phase 1 Milestone after the August 1, 2018.

The project is being constructed in accordance with Wicks Law, which requires that the project be bid as multiple prime contracts. More specifically, Wicks Law requires that the bulk of the construction work, consisting of the secondary treatment biological filtration filters (BAF), be divided into a General Civil Construction Contract, an Electrical Contract, an HVAC Contract and a Plumbing Contract. The following projects are either nearing completion, in construction, or in the planning stage.

Contract No.	Description	Status
Contract No. 1	Compost Facility Demolition	Complete
Contract No. 2	FEMA Mechanical	Substantial Completion Date July 2016. Anticipated Completion Date February 2018.
Contract No. 3	BAF Facility Demolition	Complete
Contract No. 4	MCC HH Emergency Replacement	Substantial Completion December 2016. Anticipated Final Completion December 2017.

Contract No. 5	BAF Restoration and Rehabilitation Civil Contract	Notice to Proceed (NTP) Issued May 27, 2016. Projected Phase 1 Substantial Completion October 2018. Projected Phase 2 Substantial Completion May 2019.
Contract No. 6	BAF Electrical	NTP Issued May 27, 2016. Projected Phase 1 Substantial Completion October 2018. Projected Phase 2 Substantial Completion May 2019.
Contract No. 7	BAF HVAC	NTP Issued May 27, 2016. Projected Phase 1 Substantial Completion October 2018.
Contract No. 8	BAF Plumbing	NTP Issued May 27, 2016. Projected Phase 1 Substantial Completion October 2018.
Contract No. 9	Secant Pile Contract	Project Final Completion achieved on October 2017.
Contract No. 10	Solids Handling Renovation Civil Contract	NTP issued July 20, 2017. Substantial Completion #1 – April 15, 2018; Substantial Completion #2 – November 12, 2018; Substantial Completion #3 – February 20, 2019; Final Completion - July 10, 2019.
Contract No. 11	Solids Handling Electrical	See Contract #10 Completion Dates
Contract No. 12	Solids Handling HVAC	See Contract #10 Completion Dates
Contract No. 13	Solids Handling Plumbing	See Contract #10 Completion Dates
Floodwall	Floodwall and New Diversion Structure	Currently in Construction. Anticipated Completion Date April 2018.

### **Contract Descriptions**

#### **Contract No. 1 - Compost Facility Demolition**

Demolition of the upper portion of the compost facility was performed to accommodate the construction of the new Administration Building to house the plant staff as well as provide the new control room to operate the new facilities. Demolition of the lower portion of the Compost Building cleared the way for the construction of a new maintenance facility.

**Contract Status: 100% Complete – Contract Closed**

#### **Contract No. 2 - FEMA Mechanical**

The FEMA Mechanical Project replaces valves, equipment and other miscellaneous items damaged in the 2011 flood. It includes equipment in both the East and West Primary Sludge Pumping Stations, valves and equipment located in the Head House, and equipment associated with Sludge



Thickener Pumping Station Nos. 1 and 2. The cost of the work associated with this contract is being reimbursed by FEMA due to the flood of 2011.

**Status:** Blue Heron has completed all of the work not deleted by change. The elutriate pumps were deleted from the scope of work and will be performed under Contract #5. Blue heron will complete the repairs of the defective mag meter for the centrifuges. This will allow us to process the final change order and begin preparing the final closeout documents.

**Contract Status: 99% Complete**

### **Contract No. 3 - BAF Facility Demolition**

The BAF Demolition Contract removed the existing structures and utilities that conflict with the new construction work included in the BAF Rehabilitation and Restoration Project. Demolition efforts included selective demolition in the existing process tanks (C-Filters, N-Filters, and DN-Filters) and buildings and mechanical equipment and piping to ready the site for new construction.

**Contract Status: 100% Complete – Contact Closed**

### **Contract No. 4 - MCC - HH Emergency Replacement**

Contract 4 replaced the original existing Motor Control Center (MCC) in the Head House (HH). The MCC is 50 years old, and is identified as MCC-HH. The contract was bid as an emergency contract because the electrical system in the Head House was both critical to keeping the BJCJSTP in service, and because the original MCC was extremely unreliable due to the age and deteriorated condition of the gear. MCC HH Emergency replacement also replaced the existing raw sewage pump drives of the existing 50 year old equipment including new electrical feeders from the HH to the Johnson City Grit House No. 1, a new feeder from the HH to the Thickened Sludge Pump Station No. 1, and various other panel boards. The emergency work also included replacement of the existing raw sewage variable frequency drives that were located in the existing MCC HH. The new drives installed are more reliable, more efficient, and will provide better performance of the existing raw sewage pumps.

**Status:** All work on the MCC HH project has been completed. Close out and archiving should be completed by the end of December 2017.

**Contract Status: 100% Complete**

### **Contract No. 5 - BAF Restoration and Rehabilitation Civil Contract**

When combined with the other BAF contracts (Nos. 6, 7 & 8), Contract No. 5, the General Civil contract, is intended to provide a functioning automated plant using a BIOSTYR system that can be modified to fit current plant configurations. It is also intended to provide functioning automated headworks and primary clarification processes upstream of the BIOSTYR system and solid handling processes downstream of the BIOSTYR system.



Major components of the work under Contract No. 5 include new coarse screens and ancillary equipment, new piping and valves for the influent pumps, new metering equipment, new fine screens and grit removal with ancillary equipment, a new primary distribution box, new mechanical equipment for primary clarifiers 1-10, new chemical equipment for primary treatment, new chemical storage building, modification of the primary clarifier structural components to replace the aged and deteriorated mechanical equipment, new secondary influent pumps for the new BAF system, a new BAF backwash tank, new CNBAF and DN-BAF facilities, a new methanol system that will feed the DN-BAF cells, new Ultra Violet Light disinfection system to replace the existing chlorine disinfection system, new sludge thickening equipment and systems, a new administration building, new odor control equipment, two new 2MW electric generators, and a new plant outfall to the river.

**Status:**

The recent weather in December and continuing into January has had a major impact on the construction concrete activities for the project. The extreme cold weather is making it extremely difficult to be productive with the concrete and other outdoor activities. Continued extreme weather will have a significant impact to the concrete work throughout the site if it continues as it has been.

The shotcrete continued in the BAF Backwash Tank area with the shotcrete being completed on the north end of the upper level last month. The remaining shotcrete is on the south end of the upper level of CN Cells 9-14. KHM should be able to complete the shotcrete work within two weeks when weather permits them to resume work. We are anticipating that the upper level shotcrete to be completed in January 2018. PC has completed the work for the BAF Backwash Tank roof deck, with placements being made from north to south. Construction work for the walls for C-N Cells 9-1 continued this month, and will continue for several months.

The contractor has completed the concrete work for the slab for the new Headworks. PC is nearing completion on the walls for the BAF Backwash Treatment Facility and passed their water leak test. They are now able to complete the backfill up to the middle level of the structure this month. They should complete the lower level walls for the Headworks and the walls for the BAF Backwash Treatment Facility in January. PC had an obligation to remove and relocate an electrical ductbank along the west end of the excavation. PC discovered that the ductbank was constructed of asbestos containing material, and a permit was required to allow the ductbank to be removed. The removal and relocation of the ductbank is now complete.

Concrete work for the distribution box resumed last month when PC began having one of their subcontractors drill replacement dowels into the existing concrete slab that currently supports the tower crane at the Headworks. Quality control problems have put the dowel installation rework in question. GHD is currently reviewing the recommendations by Stopen Engineering and will provide comment on the status of the distribution box. If the distribution box slab is determined to be unsalvageable, the impact to the Phase 1 and Phase 2 Milestones would be significant.

The Courtyard work area has been turned over to Matco to install their ductbanks for the courtyard electrical equipment. Installing this equipment is critical to allow us to decommission the severely compromised courtyard substation. Due to the poor condition of the courtyard switchgear, the



Owner has rented a backup generator to provide power to the plant. We have extended the generator rental six months via change order. We will be maintaining the emergency generator until the new generators are operational.

The temporary disinfection facilities provided by PC continue to be used. The system is capable of meeting the permit requirements. These temporary disinfection facilities have allowed us to take chlorine tank #3 out of service. The flow through Chlorine Tank #2 has been diverted over a new broad crest weir in the Northwest corner of Chlorine Tank #2. The existing 84" outfall has been permanently removed from service. A 36" short term temporary outfall is being supplemented with an additional 24" short term temporary outfall. The combined lines are meeting the 35 MGD limits imposed by the Consent Order. PC is developing a plan to do a long term temporary pipe to the new 72" outfall. PC has not completed installing the long term temporary outfall, and their failure to timely do so has impacted Streeter on their floodwall work.

The contractor completed installing and testing the 4 month bypass system in the existing Regulator vault. The heavy rains on Sunday October 29<sup>th</sup> identified some issues with the pump operations, which have been addressed by PC. PC continued demolition of the coarse screen building and equipment as well as the influent flume for the existing Binghamton raw sewage pumps. They have removed large amounts of debris that collected in the Headhouse influent flume, and are well underway on the pipe installation for the raw sewage pumps. One of the two new coarse screening units is being used by the contractor during this interim period for service within the Regulator vault. The manufacturer will refurbish and re-certify the unit before it is installed in the Screening facility for permanent service. The other coarse screen will be installed in the rebuilt coarse screen building. PC has stated that they will be complete with their bypass pump operation dependent work by the end of January 2018.

The re-construction of Primary Settling tanks #7-10 is progressing well with the concrete coatings being installed. The work is weather dependent and should be completed within two months. The initial leakage test was started and it has been determined that there are significant existing leaking expansion joints. GHD has reviewed the leaks and determined that the specified water stop will work to repair the leaks in the expansion joints.

The reinforcing steel issues pertaining to the CN Cells 1-8 areas have been resolved and the construction of the concrete walls, beams, and columns continued this month. It is critical that the work in the CN Cells be expedited because they are now on or near the critical path for the project. They share a similar length of construction duration with the DN Cells and the Headworks. Work on the west end of the DN Cells began, and the condition of the slab is different than could be anticipated during the design phase. The dowels that were installed by PC were not properly installed and will be reinstalled at PC's expense. The contractor is alleging that the DN Cells are now potentially on the critical path and not the Headworks. This is a concern because the Contractor may allege that the CN and DN cells have extended the contractual completion dates. We disagree with their assertion on the critical path and believe that it is still the Headworks facility that will control the completion date of the contract.

Construction work in the area of the new UV treatment facility continued this month with the concrete work for the walls on the east end of the UV Facility. PC did not meet their required



completion date for the flood protection by November 18, 2017. They have expressed a commitment to expediting the exterior walls with the intent of providing flood protection of the plant in the northwest corner of the plant, but they have not appeared ready to execute the exterior walls in the new UV reactor basin.

Yard piping and utility replacement construction activities are continuing around the site. The new gas line to the plant is installed, and a gas regulator was installed at the existing Headhouse to allow NYSEG to install the new gas meter. The new gas supply was turned on to the plant on January 2, 2018.

Construction of the new Chemical Building is well underway. The coatings for the concrete walls are being installed, and PC is planning to set the chemical storage tanks this month. As soon as they set the chemical storage tanks they will complete the final elements of the roofing system. The plan is for the equipment and conduit installation to begin in January.

The new Pump Station #4 passed the leakage test and PC has completed backfill around the pump station. The caisson installation has begun, and should be completed in January. The depth to the bedrock appears to be about 8 feet deeper than PC stated that the geotechnical report reflects. We are not in agreement with their interpretation of the geotechnical report. After the caissons are installed, the concrete work can begin for the slab in the Blower Building. Completion of the slab for the Blower Building is essential for achieving flood protection for the plant.

Recasting for the new generator equipment pads and the new equipment slabs are now complete. The west end of the structure has been opened and the new generator and transformers have been installed through the west end of the building. PC can now close the west end with specified louvers. The electrical feed from the new generators to the transformers will not fit as originally designed by GHD. We have received a response to most of the issues with the change, but we still are waiting on a design for the conduit supports for the large conduits running between the generator equipment and the existing switchgear. For further discussion of this issue see Contract #6.

Kruger equipment submittals are complete and the final detailed reviews are in progress. Bi-weekly telephone conference calls with the Kruger, PC, GHD, and the CM have proven helpful in progressing the work. The casting of nozzle decks is complete and has progressed satisfactorily. PC has stored the nozzle decks near the site. Much of the Kruger supplied equipment is in storage locally or in appropriate storage facilities at Kruger's direction. We have received the preliminary BAF Operations and Maintenance manuals as well as the startup and testing plan from Kruger. Installation of the precast slabs is scheduled to begin in early 2018.

The work for the interior of the Administration Building is progressing. PC has made a concerted effort to have the new Administration Building ready for occupancy in February 2018. The wall painting continued in December. The remaining interior finishes continued in December, including ceramic tile, electrical, plumbing, etc. The metal ductwork, plumbing and electrical items are nearing completion. The HVAC system is scheduled for testing in the middle of January. As soon as the permanent HVAC system is installed and properly tested, the concrete slab in the Administration Building can be tested to confirm an acceptable moisture level. The green roof got



delayed in December, and is now slated to be installed in January. Much of the Sewage Treatment staff is operating out of an off-site temporary facility, with core maintenance and system operators remaining on site.

PC has installed the permanent 72" effluent outfall pipe and structure; however, it is not yet in service. Streeter installed a temporary heavy stone swale at the end of the 72" outfall in compliance with the USACE permit requirements. PC failed to complete the new 72" outfall system by November 18, 2017 to provide the required flood protection from Susquehanna River. A short term temporary outfall has been installed by the Floodwall contractor and PC was required to install a long term temporary outfall by November 18, 2017. We have notified PC that they are liable for all damages incurred by the City due to their failure to complete the flood protection work by November 18, 2017. The long-term temporary outfall is scheduled to be completed by January 17, 2018.

**Contract Status: 42% Complete**

### **Contract No. 6- BAF Electrical**

The BAF Electrical contract supports the BAF General Civil Contract and includes all electrical and instrumentation associated with the BAF contracts. The components include installation of the new UV disinfection system, installation of the new generators, installation of the electrical feed throughout the plant, as well as installation of the instrumentation and SCADA System throughout the plant.

**Status:** The manholes and the associated duct bank work for the new dual primary service are nearly complete. The first of the new feeds to the plant has been connected and were energized in late August. The second feeder has been reinstalled by MATCO. The ductbank was removed to clear the construction area for the support of excavation for the Solids Handling Building. Installation of the major conduits for the generators has begun now that we have a modified design by GHD. The modified design layout for the conduit includes a new conduit support system that we received the design layout for in late December. MATCO is actively installing the conduit for the new Generators in the new Generator Building where they can.

Conduit installation of circuits, alarms and communication at the administration building is progressing. We still need a final resolution for the temporary telephone and internet systems for an early occupancy of the new Administration Building. MATCO is mobilizing crews to begin work in the Chemical Storage Building, East Odor Control Building, and the Headhouse this month. MATCO is preparing for installation of the conduit and wiring in the Generator Building for the new NYSEG feeds, and the electrical conduit and wire for the courtyard switchgear. We are looking at options for the installation of the conduit in other locations to advance the electrical work to avoid overly congested work areas at the end of construction. PC has opened up additional areas for MATCO work in the Chemical Building, the northwest electrical building, and is planning to expedite work for the east portion of the DN Cell electrical building.

The new Courtyard substation was delivered and put into storage locally pending completion of the new concrete ductbanks in the courtyard in January. The Courtyard is a utility congested area



with major underground piping and extensive electrical ductbanks. PC finally completed backfill for the pipework in the courtyard early this month. MATCO expected to be working in earnest next month with the installation of new ductbanks and the beginning of installation activities associated with the new substation equipment.

**Contract Status: 44% Complete**

### **Contract No. 7-BAF HVAC**

The BAF HVAC contract supports the BAF General Civil Contract and includes installation of all HVAC Systems in all STP facilities as well as revisions to the odor control systems throughout the plant. The odor control improvements are intended to alleviate the odors that have been prevalent in the past in and around the plant.

**Status:** Contract No. 7 was awarded on May 27, 2016 in compliance with the DEC milestones in the Consent Order. The contractor continued working on ductwork installation in the Maintenance Building, the East Scrubber Building, the Headhouse and the Chemical Storage Building. J&K has provided supporting information for the development of the CPM Schedule. They are coordinating with PC Construction and the other prime contractors. They have acknowledged they can meet the required milestones of the Consent Order. J&K continued installing the HVAC equipment in the new Administration Building this month. Installation of the ductwork is nearing completion in support of PC's push to have the building ready for move in by early February 2018. J&K continued rough-in HVAC Systems at various other work areas around the site.

**Contract Status: 44% Complete**

### **Contract No. 8- BAF Plumbing**

The BAF Plumbing contract supports the BAF General Civil Contract and includes installation of plumbing systems for the new and existing facilities included in Contract No. 5.

**Status:** Contract No. 8 Notice to Proceed was issued in compliance with the May 27, 2016 milestone for issuing the NTP in the Consent Order. The contractor continues working on plumbing pipe installations in the new Administration Building, the Maintenance Building and the East Scrubber Building. They are coordinating with PC Construction and the other prime contractors and they have confirmed that they can meet the required milestones of the Consent Order. Rough-in at the new Administration Building is nearing completion, and setting of the plumbing fixtures has begun. Danforth is on schedule to support the January occupancy of the building.

**Contract Status: 50% Complete**

### **Contract No. 9 - Secant Pile Contract**

The Secant Pile contract includes installation of the secant piles that support the excavation for the new BAF Backwash tank as well as supporting the new CN Cells 9-14. Construction also includes



excavation to the final grade for the BAF backwash tank. This project was bid separately from Contracts 5-8. In doing so, a minimum of four months on the critical path schedule was saved.

**Status:** The installation of the secant pile wall is complete. The contractor has completed the wales and struts and they have completed the excavation to the required elevation for work to begin under Contract 5. One of the two items from the punch list for this project was completed this month. The surfacing of the columns has been completed and the leaks in the secant piles are being sealed as they become known. To accelerate the project, PC Construction progressed with the placement of the concrete floor of the backwash tank while Welliver addressed the punch list items.

Close out documents have been prepared and are being submitted to close out this project.

**Contract Status: 100% Complete**

### **Contract No. 10 -Solids Handling Renovation Civil**

Contracts No. 10 is intended to renovate and improve the solids handling systems including the existing digester control building, existing digesters, solids dewatering systems, and all ancillary equipment. As part of the improvement to the solids handling process, the following components will be constructed or installed. The new structures include a new Solids Handling Building, a new Gas Conditioning Building, and new Sludge Loading Facility. The new equipment being installed includes new centrifuges, new mechanical thickeners, new gas processing equipment, new microturbines, and new scum screening equipment. The scope was further developed during the design processes to include sludge blend tanks. Additionally, the contract renovates the existing laboratory facilities at the STP. The contract was bid as a multi-prime contract consistent with NY State Construction contract requirements.

**Status:** Bids were received on March 16, 2017. The contracts were awarded on May 4, 2017. The NTP's were issued on July 20, 2017. Pre-construction meetings were held on August 2, 2017. Quandel has completed installing the support of excavation for a new building on the south side of the Digester Building and for the new Solids Handling Building. The concrete slab for the Digester area is complete, and abatement of asbestos on the wall of the existing digester has begun. The abatement should be completed in January. Concrete work has been impacted by weather.

They completed the removal of the asbestos containing material in the electrical ductbank, but have now encountered asbestos containing material in the coating on the outside of the existing digester building. This will need to be remediated after the slab is placed for the building. Demolition of the materials in the Digester Control Building is ongoing. Excavation is complete for both the Digester complex and the Solids Handling Building. Quandel got off to a late start but appears to be accelerating their work progress. Quandel has stated they have no difficulties meeting the required milestones in their contract.

**Contract Status: 11% Complete**

### **Contract 11 Solids Handling Building Electrical**

The Solids Handling Electrical contract supports the Solids Handling General Civil Contract and includes installation of electrical for the new and existing facilities included in Contract No. 10.

**Status:** Bids were received on March 16, 2017. The contracts were awarded on May 4, 2017. The NTP's were issued on July 20, 2017. Pre-construction meetings were held on August 2, 2017. The electrical contractor is MATCO, as it is on the BAF Contract No. 6. MATCO continues to support the General Civil Contractor's schedule. We have negotiated a change in the conduit material from PVC coated rigid material to aluminum as we did on Contract No. 6. The credit being recommended is about \$200K. A change order will be prepared to capture this credit.

**Contract Status: 4% Complete**

### **Contract 12 –Solids Handling HVAC**

The Solids Handling HVAC contract supports the Solids Handling General Civil Contract and includes installation of HVAC systems for the new and existing facilities included in Contract No. 10.

**Status:** Bids were received on March 16, 2017. The contracts were awarded on May 4, 2017. The NTP's were issued on July 20, 2017. Pre-construction meetings were held on August 2, 2017. The HVAC contractor is J&K Plumbing, as it is on the BAF Contract No. 7. J&K continues to support the General Civil Contractor's schedule.

**Contract Status: 5% Complete**

### **Contract 13 – Solids Handling Plumbing**

The Solids Handling Plumbing contract supports the Solids Handling General Civil Contract and includes installation of plumbing systems for the new and existing facilities included in Contract No. 10.

**Status:** Bids were received on March 16, 2017. GHD has evaluated the bids and recommended awarding the contracts. The contracts were awarded on May 4, 2017. The NTP's were issued on July 20, 2017. Pre-construction meetings were held on August 2, 2017. The plumbing contractor is JW Danforth, as it is on the BAF Contract No. 8. Danforth continues to support the General Civil Contractor's schedule.

**Contract Status: 10% Complete**

### **Floodwall**

The new floodwall being constructed at the STP is intended to protect the plant to an elevation 1.5 feet above the 2011 flood level. The floodwall includes concrete walls on the east and north sides of the STP. The project also includes two new pump stations to pump up stream out of the plant



during the storm events. The new floodwall system works in conjunction with new floodwall features included in Contract No.5 BAF General Civil Construction. The floodwall systems are being funded by a FEMA recovery grant.

**Status:** Construction has resumed with the concrete work on the west end of the floodwall. The concrete work for the floodwall footing west of the previously removed 84" pipe was completed in December. The short term temporary outfall is working well, and PC is attempting to get their long term temporary outfall installed in January. Construction of the Vestal sewer line relocation was completed last month. The remaining concrete floodwall should be complete by February 2018.

The concrete work for Pump Stations No 1 and 2 are complete. The contractor has continued installing the pump and pipework for the two pump stations. The contractor is anticipating that they will be complete with the floodwall by February 2017 and will complete the work associated with Manhole #3 on the 54" trunk sewer line from Binghamton east of the floodwall during the spring of 2018. The concrete base has been completed and the precast concrete riser pieces are installed. Streeter is now able to install the 54" overflow and also install the Binghamton University Line.

PC Construction's raw sewage bypass pumping effort was put into service during the last full week of October. Streeter will not be able to complete the gate installation until after the bypass pump operation is complete. The completion of the gate installation in the sampling manhole will occur approximately 2 months after manhole #3 is completed. PC Construction is projecting completion of the raw sewage bypass pumping by January 31, 2018.

Rehabilitation of Digester No. 3 is nearing completion. The repairs have been completed and the coatings have been applied. Scaffolding has been removed from inside the digester and we are nearing the leakage test of the digester. Streeter began water blasting to remove the old coatings in Digesters No. 1 & 2. More material has been coming off than anticipated by the Design Engineer. It has been agreed that the best course of action would be to have Streeter complete the removal of the coatings and have Quandel coat the inside of Digesters No. 1 & 2. The concrete repairs for Digester No. 3 overran the quantities include in Streeter's proposal. A change order will be needed to pay for the extra concrete repairs. We are negotiating with Streeter to determine the final concrete repair costs for the change order. We are currently projecting the Contractor to complete the floodwall concrete work and pump station work in February of 2018.

**Contract Status: 84% Complete**

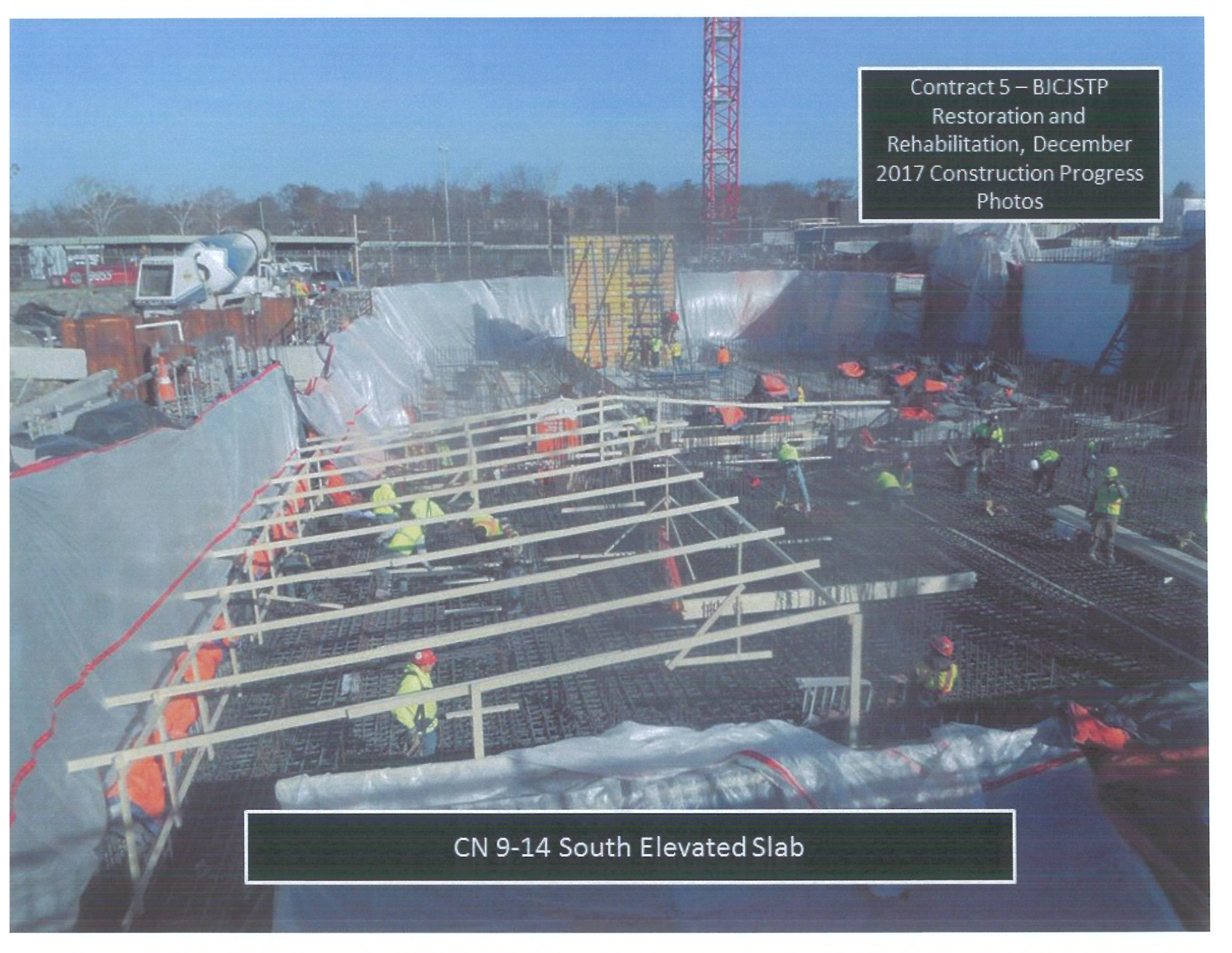
#### NOTES:

1. SWPPP measures continue to be maintained by all contracts. Any deficiencies noted during daily or weekly inspections are promptly remedied. Additional truck trap entrances have been now been installed at the new entrances. In early December, we will be installing asphalt millings from the truck traps to the undisturbed asphalt pavement inside the plant to reduce tracking mud off site.

2. Weekly meetings are held for each contract to discuss the progress of the work and identify and resolve issues and problems. Meetings between contractors on the various contracts are held as necessary to facilitate any concerns and coordinate work between all contracts.
3. Contracts 5-8 are continuing the submittal process for all equipment and materials. They are being reviewed and processed as they are submitted.
4. Contracts 10-13 are continuing their submittals for all process equipment. They are being processed as they are submitted. Contract 10 has submitted their CPM schedule and it is compliant with the contract requirements.




Contract 5 – BICJSTP  
Restoration and  
Rehabilitation, December  
2017 Construction Progress  
Photos



CN 9-14 South Elevated Slab

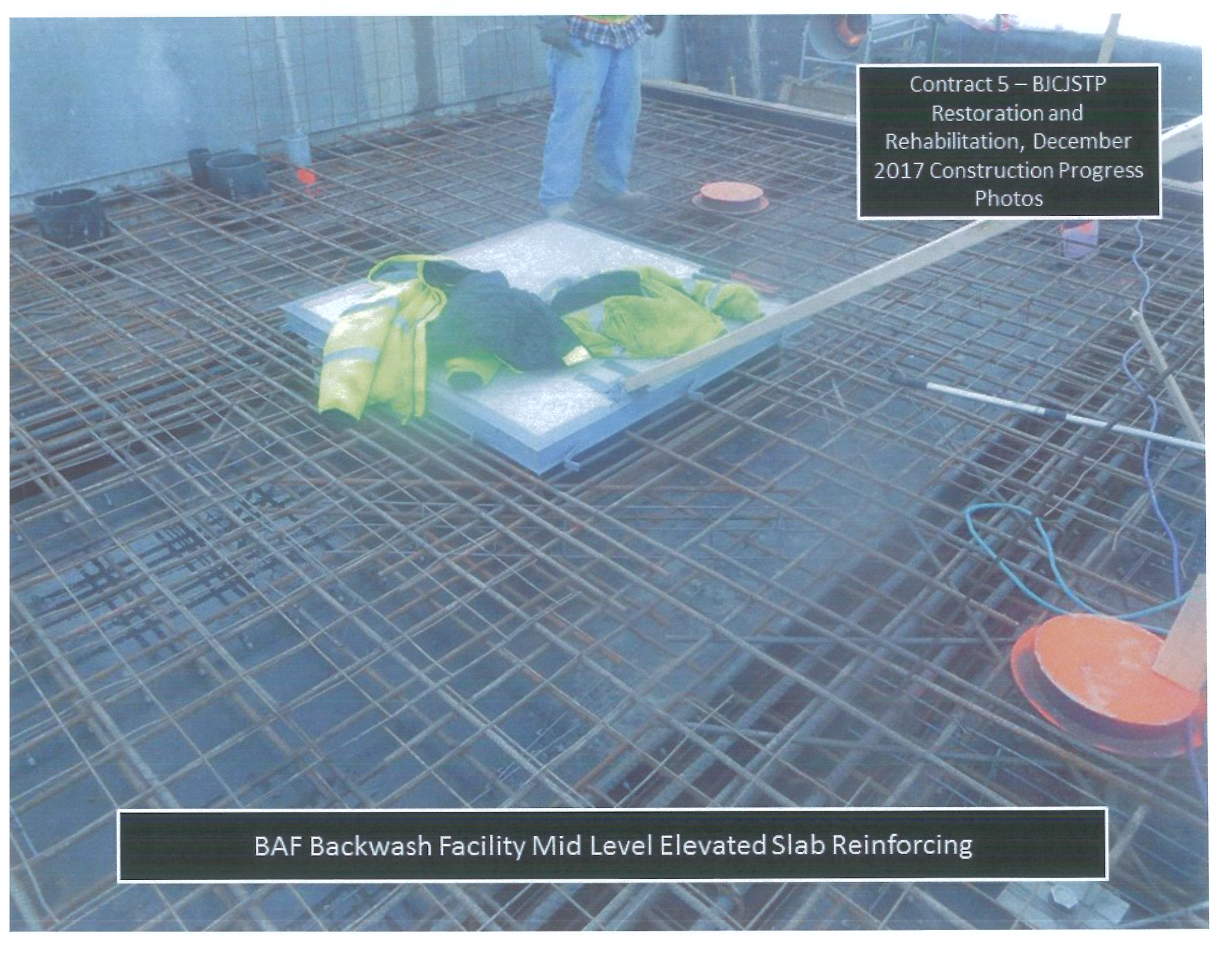




Contract 5 – BJCJSTP  
Restoration and  
Rehabilitation, December  
2017 Construction Progress  
Photos

Headworks SW Base Slab Reinforcing





Contract 5 – BICJSTP  
Restoration and  
Rehabilitation, December  
2017 Construction Progress  
Photos

BAF Backwash Facility Mid Level Elevated Slab Reinforcing



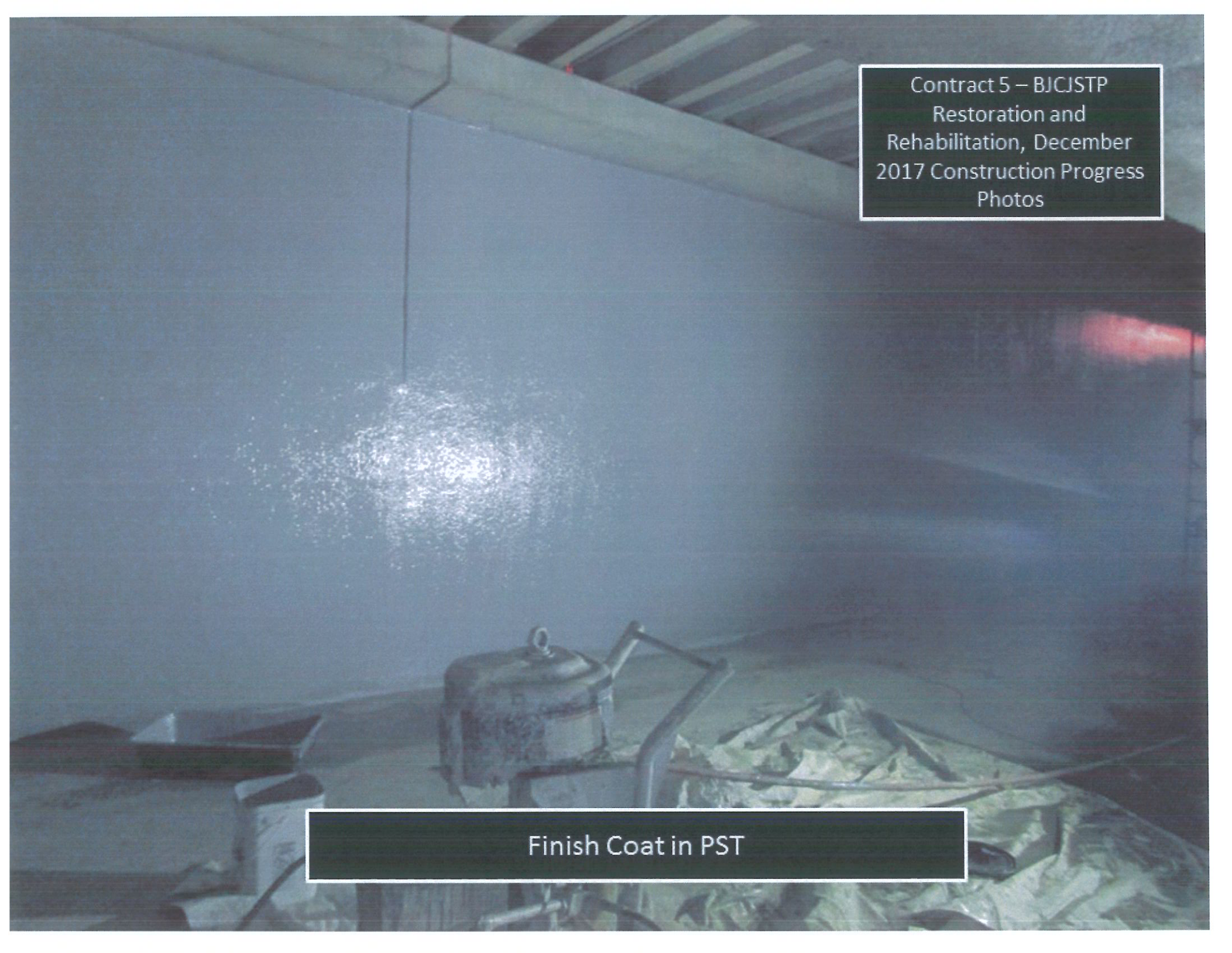
Contract 5 – BICJSTP  
Restoration and  
Rehabilitation, December  
2017 Construction Progress  
Photos

NW Electrical Building Brick Installation





Contract 5 – BJCJSTP  
Restoration and  
Rehabilitation, December  
2017 Construction Progress  
Photos



Finish Coat in PST



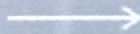
Contract 5 – BJCJSTP  
Restoration and  
Rehabilitation, December  
2017 Construction Progress  
Photos

Installation of Tile in Office of Administration Building

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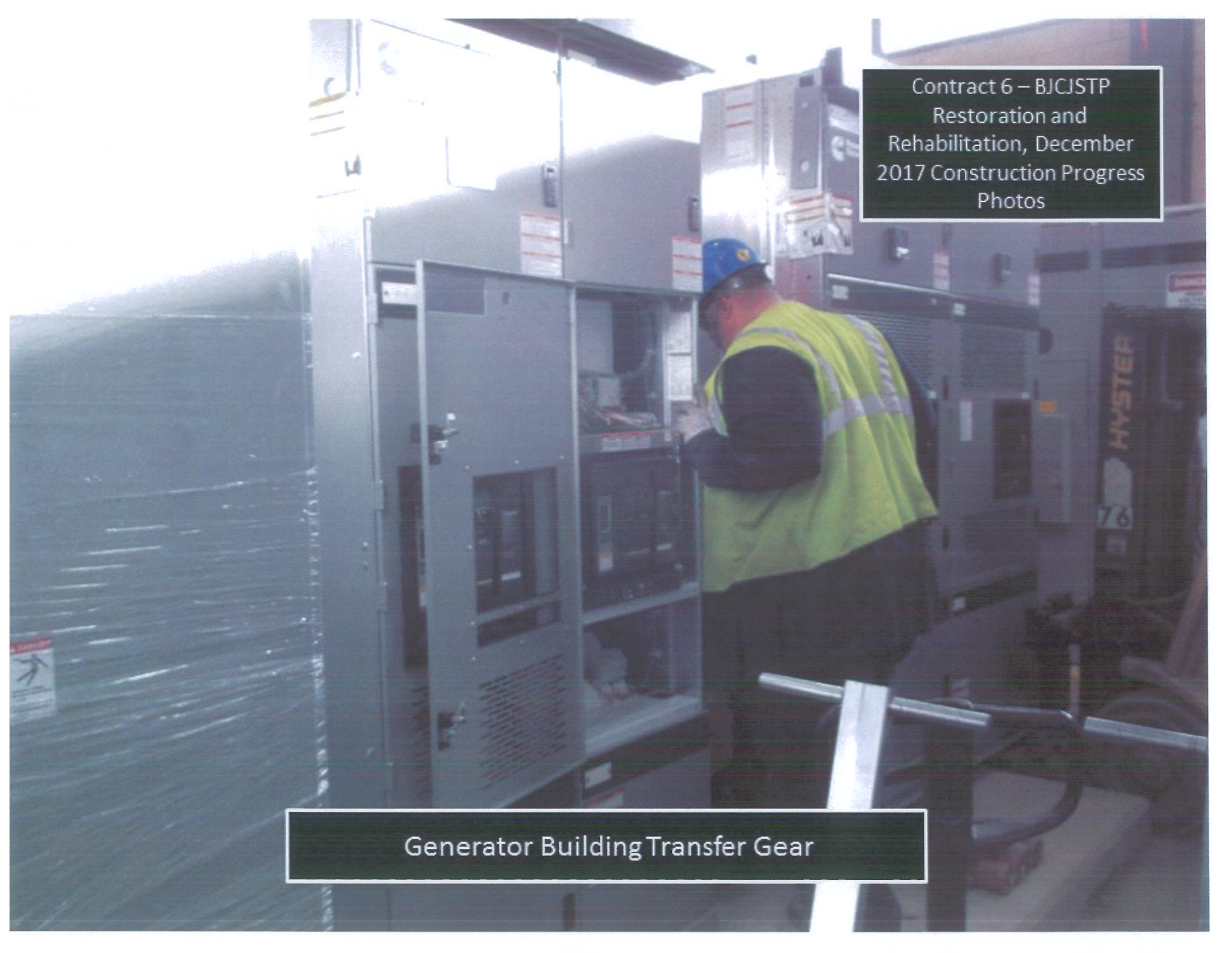
Contract 6 – BICJSTP  
Restoration and  
Rehabilitation, December  
2017 Construction Progress  
Photos



Generator Building Transformer



Contract 6 – BJCJSTP  
Restoration and  
Rehabilitation, December  
2017 Construction Progress  
Photos

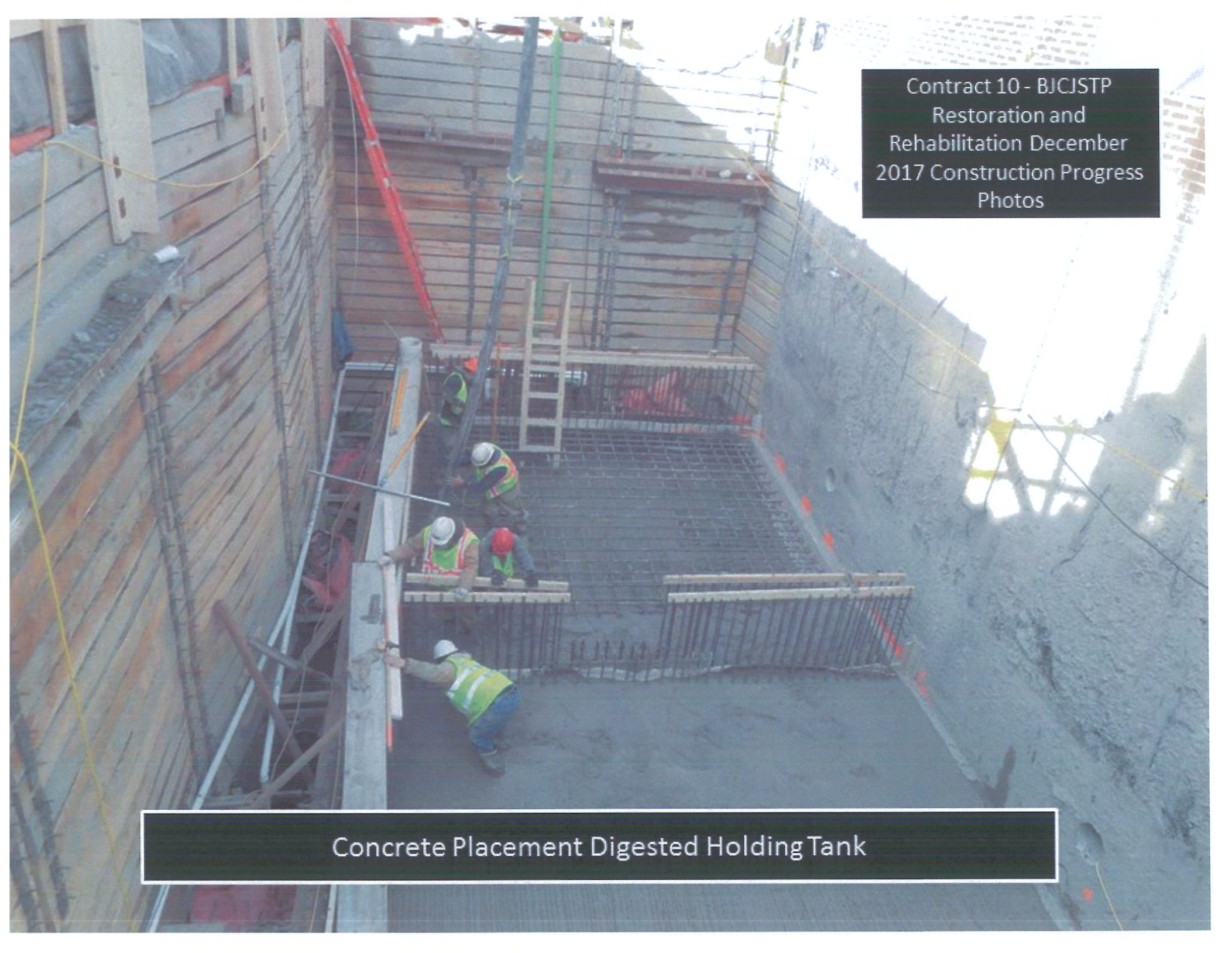
A construction worker wearing a blue hard hat and a high-visibility yellow safety vest is working on a large, open metal cabinet. The cabinet is part of a larger piece of equipment, likely a generator transfer gear. The worker is focused on the internal components of the cabinet. The background shows other similar cabinets and a metal structure, possibly a forklift, in a dimly lit industrial setting.

Generator Building Transfer Gear



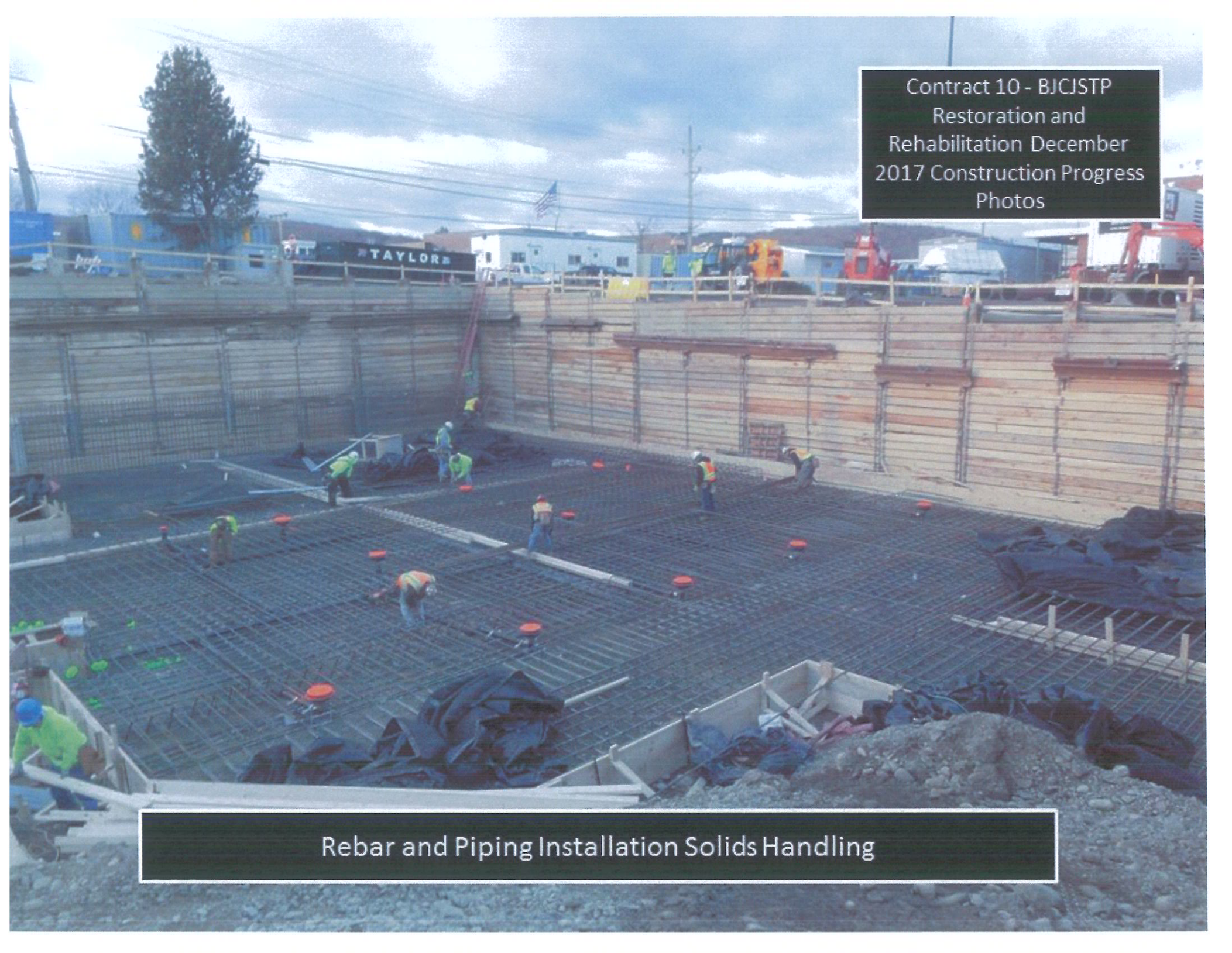
Contract 10 - BJCISTP  
Restoration and  
Rehabilitation December  
2017 Construction Progress  
Photos

Concrete Placement Digested Holding Tank





Contract 10 - BJCISTP  
Restoration and  
Rehabilitation December  
2017 Construction Progress  
Photos



Rebar and Piping Installation Solids Handling



Contract FW – BJCJSTP Flood  
Wall, December 2017  
Construction Progress  
Photos



Concrete Placement Base Footing Section 5