

**RESOLUTION DIRECTING WORK TO JACOBS FOR THE
H6 H7 CSO LTCP PHASE 3 PROJECT**

MOTIONED BY: Friedrich
SECONDED BY: Marotta

WHEREAS, the North Hudson Sewerage Authority (hereinafter "Authority") is a public body, duly formed under the Sewerage Authorities law, constituting Chapter 138 of the Laws of New Jersey of 1946, as amended (Chapter 14A of Title 40 of the New Jersey Statutes Annotated) and possesses the powers set forth therein; and

WHEREAS, JACOBS has been selected under resolution 22-127 to provide engineering services for various capital projects required throughout its service area that must be performed in order to maximize the performance of its waste water treatment facility, the capacity of its combined sewer system and/or to comply with its New Jersey Pollution Discharge Elimination System (NJPDES) permit; and

WHEREAS, JACOBS has submitted a proposal (Exhibit "A") to provide Engineering Services During Construction for the H6 H7 CSO LTCP Phase 3 Project; and

WHEREAS, the Facilities Review Board has considered this request and proposal and recommends the approval of the full Board.

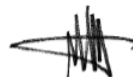
NOW THEREFORE, BE IT RESOLVED that the Authority, as recommended by the Facilities Review Board, directs JACOBS to provide professional engineering services during construction for the Construction for the H6 H7 CSO LTCP Phase 3 Project not to exceed \$2,295,300.00.

DATED: SEPTEMBER 21, 2023

RECORD OF COMMISSIONERS' VOTE

	YES	NO	ABSENT
Commissioner Kappock			x
Commissioner Marotta	x		
Commissioner Gardiner	x		
Commissioner Friedrich	x		
Commissioner Guzman	x		
Commissioner Velazquez	x		
Commissioner Barrera	x		
Commissioner Zucconi	x		
Commissioner Assadourian	x		

**THIS IS TO CERTIFY THAT THIS RESOLUTION WAS DULY ADOPTED BY THE
NORTH HUDSON BOARD OF COMMISSIONERS ON SEPTEMBER 21, 2023.**



SECRETARY

Mr. Donald Conger, P.E.
Authority Engineer
North Hudson Sewerage Authority
1600 Adams Street
Hoboken, New Jersey 07030

Via email

September 5, 2023

**Subject: Proposal for H6/H7 CSO Long Term Control Plan, Phase 3
Engineering Services During Construction**

Dear Mr. Conger:

Jacobs Engineering Group Inc. (Jacobs) is pleased to provide this proposal to the North Hudson Sewerage Authority (Authority) to undertake the engineering services during construction for H6/H7 CSO Long Term Control Plan, Phase 3 (Project). The engineering services Jacobs will provide are in accordance with the Request for Proposal released on August 9, 2023, and due September 6, 2023.

Project Understanding

The North Hudson Sewerage Authority (NHTA) has developed a CSO Long Term Control Plan (LTCP) to alleviate flooding and reduce CSOs. The H6/H7 LTCP Phase 3 Project includes installation of approximately 11,225 linear feet of storm sewer system in the H6/H7 Drainage Basin. The sewer system will be pile supported and pipe diameter range from 12 to 48 inches. The project is anticipated to be awarded in September with the duration anticipated to be approximately 29 months (Contract Final Completion February 2026).

Key Success Factors that the Jacobs team offers the Authority

- **Vast amount of experience performing Construction Phase Services and Resident Engineering for the Authority** - Jacobs has acted as the CM and Resident Engineer on various projects both within the Authority's WWTPs and collection systems. These projects encompass critical pump station and conveyance projects, including but not limited to H1 Wet Weather Pump Station, H5 Wet Weather Pumping Station, and the Boulevard East Project which is currently under construction. Jacobs has a unique understanding where construction stumbling blocks may be encountered and how to mitigate them.

Scope of Work

Engineering services to be performed by Jacobs under this proposal will include the tasks listed below from the Request for Proposal:

- Bid Phase Services
 - Task 1: Bid Support
- Construction Phase Services
 - Task 2: Construction Administration
 - Task 3: Construction Inspection / Observation Services
 - Task 4: Authority's Agent During Construction

Jacob’s project team prepared the scope of services with a knowledge and understanding of the Authority’s objectives, the requirements of the project, and the design of project. The Scope of Work in the request for proposal will be executed as written and included as **Attachment 1**.

Cost Estimate for Engineering Services

Jacobs proposes to provide Engineering Services in accordance with the Request for Proposal. Services will be provided on a Not to Exceed Time and Material basis in accordance with the terms of our most recent On Call Services agreement with the Authority. We have calculated our fees based on the level of effort we estimate it will take to administer the work, with the construction work being performed by a competent contractor who will complete the work in accordance with the times noted in the Contract Documents. Our fee for Engineering Services for the Project is shown in **Table 1** below.

Note that for Construction Inspection, we have estimated 10,000 hours (approximately average two and a half full time field personnel) for two years of construction as opposed to the 13,000 hours stated in the RFP.

We have determined that 10,000 hours is sufficient as we plan to have our Resident Engineer Dave Missig dedicated full time with additional field support by Siying Wang when the Contractor has more than one crew working. Based on the area and limitations on roadway closures that will be allowed by Hoboken, we envision these durations to be limited. Sophia Palumbo will be the geotechnical inspector during pile installations as required. Based on this planning and the construction phases that we envision shown on the next page we believe that 10,000 hours will be sufficient for the 24 months of construction duration.

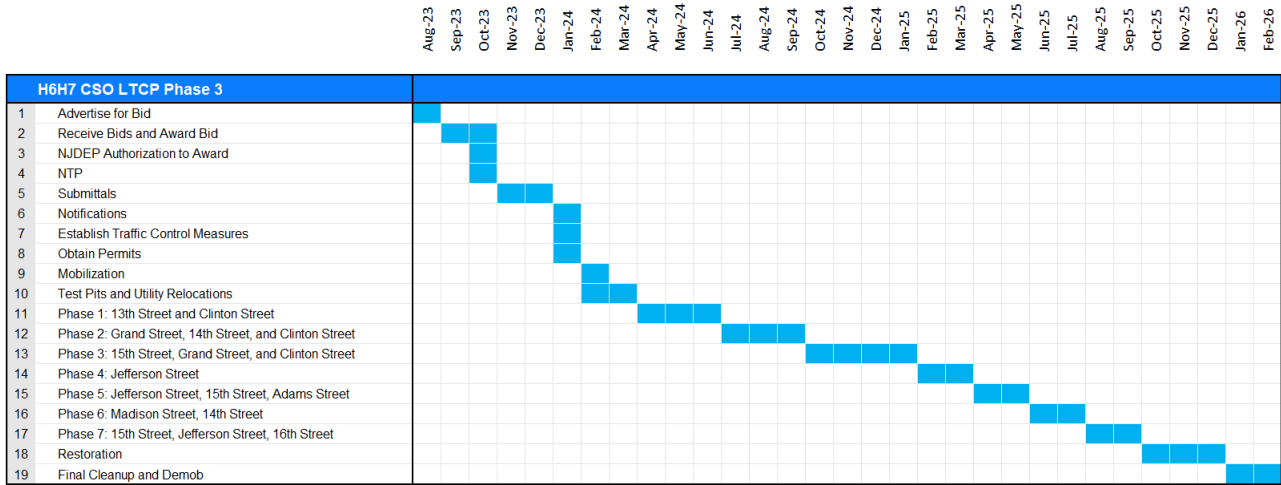
TABLE 1
Tabulation of Engineering Costs and Hours

Phase	Task Description	Project Executive / Construction Manager		Project Manager		Project Engineer		Resident Engineer		Field Engineer		Geotechnical Engineer		Engineer		HSE Manager / Environmental Engineer		Total Proposed Hours	Total Proposed Cost
		Rate:	\$300	Rate:	\$260	Rate:	\$140	Rate:	\$190	Rate:	\$110	Rate:	\$130	Rate:	\$150	Rate:	\$240		
		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost				
Bid Phase Services																			
1	Bid Services - Labor	30	\$9,000	70	\$18,200	80	\$11,200	20	\$3,800	0	\$0	0	\$0	0	\$0	0	\$0	200	\$42,200
	Bid Services - Other Direct Costs and Printing																		\$500
Construction Phase Services																			
2	Construction Administration	200	\$60,000	420	\$109,200	440	\$61,600	0	\$0	0	\$0	0	\$0	600	\$90,000	40	\$9,600	1,700	\$330,400
3	Construction Inspection / Observation Services	0	\$0	0	\$0	0	\$0	4,500	\$855,000	3,500	\$385,000	2,000	\$260,000	0	\$0	0	\$0	10,000	\$1,500,000
4	Authority's Agent During Construction	80	\$24,000	500	\$130,000	480	\$67,200	0	\$0	0	\$0	0	\$0	640	\$96,000	0	\$0	1,700	\$317,200
	Other Direct Costs																		\$5,000
Design Engineer Professional Services																			
	Mott MacDonald																		\$100,000
Total Bid Price																			\$2,295,300

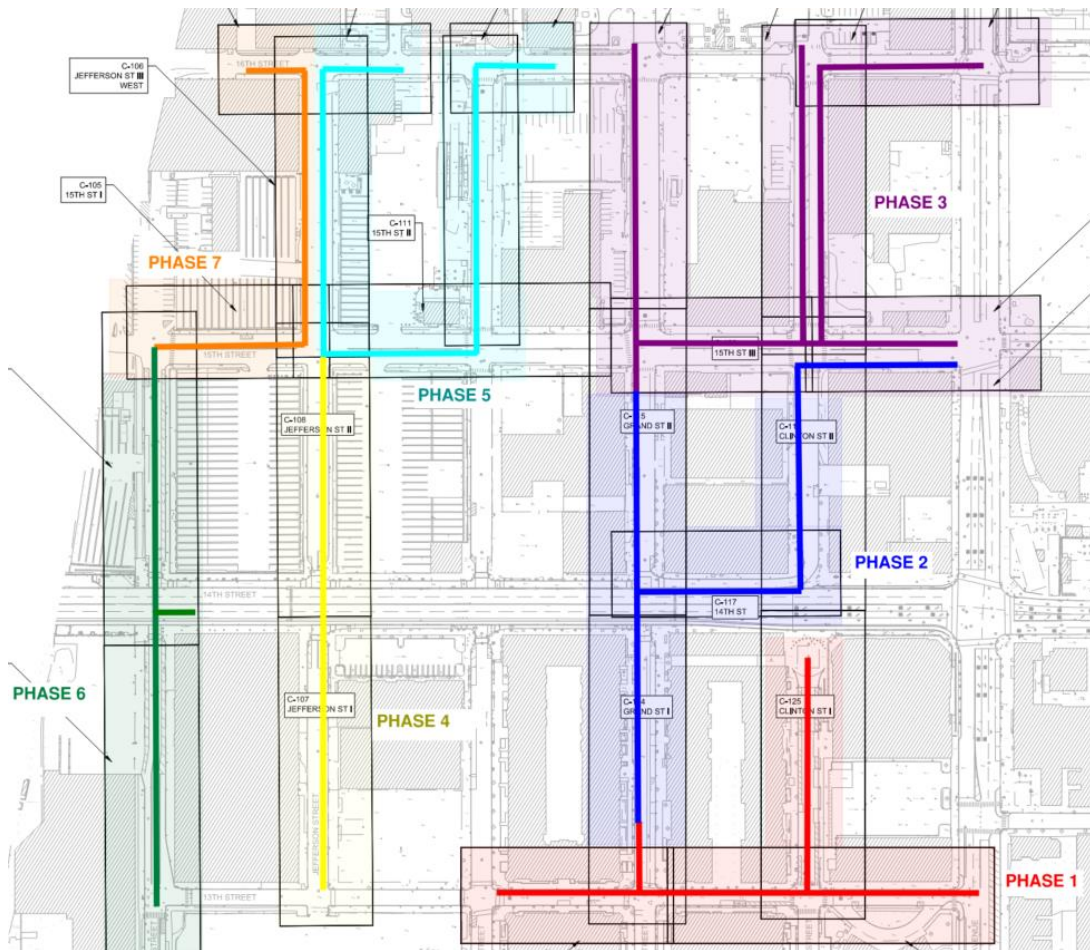
Note. Mott MacDonald Engineering Services per the RFP includes assistance with submittal and RFI reviews.

Project Schedule

Jacobs anticipates that the time required to complete the Project will be approximately 29 months. The field work for construction activities is approximately 23 months. Below is a detailed schedule of the major tasks.



Note that this schedule anticipates seven major project phases which can be performed sequentially. The project map below defines these phases schematically and installs systems downstream to upstream beginning with the largest pipe sections in Phase 1. Each sewer system in each phase is generally independent of the other phases which supports this construction sequence. The contractor will of course develop their own construction phasing. In addition, it is assumed that the contractor will have a pile installation crew installing piles ahead of the actual pipeline work within each phase.



Personnel Assigned to the Project

We are proposing an experienced and efficient project team to provide Engineering Services During Construction. All team members have demonstrated experience in sewer construction projects. Team members include staff familiar to the Authority, who have provided on-site services during construction for the Authority's capital improvements projects at the H1 Wet Weather Pump Station, the H5 Wet Weather Pump Station, and the Boulevard East Sewer Installation Project.

Our proposed project team will be led by **Shivani Patel, PE** as the Project Director – Shivani was the project director of various projects, the most recent being the of the H6/H7 CSO LTCP Project design. **Ken Bienkowski, PE** will be the Project Manager – Ken has provided technical oversight for the Sterling Avenue Improvements Project and is currently involved and providing technical oversight on the Boulevard East Sewer Installation Project. **Dave Missig** will be the Resident Engineer. In addition, Shivani, Ken, and Dave will be supported by other Field, Management, and Technical personnel which are listed and detailed in **Attachment 2**.

Relevant Experience of the Firm and Proposed Team

Jacobs is a leader in wastewater, stormwater and CSO engineering and construction services in the United States and abroad. We have partnered with the Authority for over 30 years on programs and projects. **This team has recent experience working on the Authority's Boulevard East Sewer Installation Project and will provide the Authority with the knowledge and leadership to execute the construction phase for this project.** As the industry's No. 1 Ranked Sewer/Wastewater Treatment firm (Engineering News-Record, 2023), Jacobs has worked with municipal, national, and industrial clients worldwide to provide comprehensive high-quality engineering services for wastewater treatment facilities, collection systems, and pumping stations. With our combined staff of over 55,000 people worldwide, Jacobs delivers a full range of services that satisfy client needs for progressive engineering, design, consulting, program management, and construction management. The Jacobs team has provided engineering services for the Authority for more than 30 years and brings a wealth of knowledge about the Authority's system as well as broad world-class treatment and conveyance system experience. Under the General Engineering Services Contract, we were responsible for assisting the Authority in achieving and maintaining permit compliance at its two WWTPs, acting as the Authority's agent with the New Jersey Department of Environmental Protection (NJDEP), EPA, and other agencies, and assisting the Authority in securing financial bonds. This experience and knowledge with the Authority's organization, standards, wastewater and CSO facilities, and tools provides a team that will successfully assist the Authority in this project. **Attachment 2** provides a detailed description of Jacobs experience in general and particularly our project team.

Jacobs looks forward to providing continuing service to the North Hudson Sewerage Authority, and we thank you for your consideration of this proposal. If you have any questions or require additional information regarding this proposal, please contact me at 862.242.7067.

Sincerely,

Jacobs Engineering Group



Shivani Patel, PE
Project Director

c.c.: Don Conger, NHSA

Attachments:

Attachment 1—Scope of Work

Attachment 2—Experience and Project Team

Scope of Work

The engineer responsibilities shall be by the Services During Construction Engineer (SDC Engineer) unless specifically identified as the responsibility of the Design Engineer, as identified within Table 1 or otherwise specified. The SDC Engineer shall provide the following scope of service for the project.

Bid Phase Services

The SDC Engineer will perform services during bidding as described below.

Task 1 – Bid Support Services

- Prepare Bid Package for advertising.
 - Reproduce the Bid Documents and forward the documents to the Authority's Purchasing Agent for distribution. The Engineer will also coordinate the posting of electronic copies of the Bid Document with the Purchasing Agent. Engineer will also provide copies of Contract Documents for use by the Authority and the Authority's Operations Firm.
- Advertise for Bids.
 - Notify the following State agencies of the advertisement: NJDEP Municipal Finance and Construction Element, NJDEP Office of Equal Opportunity and Public Contract Assistance, and the New Jersey Department of the Treasury Office of Equal Opportunity and Public Contract Assistance.
- Prepare and administer pre-bid meeting and site walk-through.
- Address any pre-bid phase request for information by bidders.
- Issue contract clarifications and/or addenda.
 - Seek and gain approval by NJDEP for all project addenda prior to issuance to Plan Holders.
- Attend bid opening.
- Tabulation & analysis of bid results.
 - Present the bid report to the Authority Board at two separate meetings.
- Furnishing recommendations on the award of construction contracts.
- Assistance in the preparation of formal contract documents for the award of contracts.
- Prepare and submit all bid correspondence to the NJDEP Municipal Finance and Construction Element seeking their authorization to award the project.
- Prepare a notice to the State Comptroller in accordance with NJSA 52:15C-10 advising them of a contract award.

Construction Phase Services

The SDC Engineer will perform services during construction as described below.

Task 2 - Construction Administration

- . Prepare and distribute all necessary paperwork required for execution of the Contract

between the Contractor and the Authority.

- Provide five paper copies of the Contract for execution.
- Schedule and conduct a pre-construction conference with the Authority, Contractor, NJDEP, and key stakeholders.
- Prepare minutes of the pre-construction conference and distribute same.
- Prepare and issue a Notice to Proceed to the Contractor.
- Provide general communication with owner and Contractor throughout the duration of construction regarding such issues as progress, submittal status, construction issues and their resolution.
- Provide communication and correspondence with the NJDEP.
- Maintain project files as required for periodic inspection by the NJDEP.
- Conduct pre-construction meeting, establish agenda, issue notice to proceed.
- Review and approve Progress Schedule, Schedule of Submittals, Schedule of Values required to be submitted by the contractor.
- Review shop drawings and other submittals as required to evaluate that the proposed materials and equipment conform to the contract documents.
 - Provide technical review of shop drawings, diagrams, illustrations, catalog data, schedules and samples, the results of tests and inspections, and other data which the Contractor is required to submit. Submitted material will be reviewed for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Such review is not intended as an approval of the submittals if they deviate from the Contract Documents or contain errors, omissions, and inconsistencies, nor is it intended to relieve the Contractor of his full responsibility for Contract performance, nor is the review intended to ensure or guarantee lack of inconsistencies, errors, and/or omissions between the submittals and the Contract requirements.
 - Shop drawing and RFI work will be performed with the assistance of the Design Engineer utilizing the Allowance item.
 - Review the Contractor's Health and Safety plan.
- Establish baselines and benchmarks for locating work.
- Review laboratory, shop and mill test reports of materials and equipment.
- Prepare monthly progress reports.
 - Submit a monthly progress report prepared in accordance with the Authority's format outlining all pertinent activities during the month, including but not limited to work performed, milestones, problems, pending change orders and claims, and time delays. The monthly progress report will contain a financial summary of the Construction contract as well as a financial summary of the Engineer's contract with the Authority. Submit the monthly progress report to the Authority one week prior to the Board meeting.
- Prepare record drawings at the completion of the project.
- Note that revising the O&M Manual to reflect actual operating problems and experience is not required since this project does not involve an O&M Manual.
- Review, certify and process the Contractor's payment requests on a monthly basis.

Prepare a payment application cover letter, engineer's summary payment certificate, Authority payment voucher and submit with recommendations and supporting documentation to the Authority for processing.

- Be present at the Authority's Facility Committee meetings on an as needed basis to discuss problems with the project, present construction change orders and answer questions from the Authority on the project.
- Provide Construction Management supervision and control of the resident inspection team to ensure quality control and assist with all problems.
- Provide technical interpretations of the Contract Documents and evaluate requested deviations from the approved design or specifications per the Division of Work responsibilities for the Engineer and Design Engineer.
- Administer the Contractor's soil classification program that will be utilized to test excavated materials to determine their final disposal. The analytical testing results will be reviewed by the Engineer's Licensed Site Remediation Professional (LSRP) in accordance with applicable Federal, State and Local regulations.
- Respond to all Contractor Requests for Information (RFI's) and provide written responses to the Contractor.
- Prepare and administer all necessary Field Orders.
- Prepare and administer all necessary Work Change Directives.
- Assist in negotiating, with the Contractor, the scope and cost of a reasonable and customary number of change orders. Prepare such change orders as may be required and submit them to the Authority for approval. Following approval by the Authority and the Contractor, administer same with the Contractor. Submit all change orders to the NJDEP Municipal Finance and Construction Element for their review and approval.
- Administer all allowance items in the Contract.
- Meet with representatives of the Authority and appropriate regulatory agencies when requested and necessary for consultation or conferences in regards to construction of the project.
- Prepare routine letters, memorandums, reports, change orders and miscellaneous paperwork as directed by the Authority for signature by the Authority.
- Respond to public complaints, including contacting complainants, determining solutions, prepare letters, etc. in accordance with the Authority's policies and procedures, which requires timely action by the Engineer.
- Make a final review of the construction to determine if the Work has been completed in conformance with the intent of the Contract Documents. Facilitate a final inspection of the Work by the Contractor, Authority, NJDEP and other appropriate regulatory agencies so they may make the final observation of the construction.
- Upon final acceptance of the Work, prepare and submit a Certification to the New Jersey State Department of Environmental Protection certifying that the project has been completed in accordance with the intent of the Contract Documents. Engineer will use NJDEP form WQM-005 to certify the work.
- Assist in negotiating final payment for construction and submit a final letter report upon which final settlement and termination of the Construction Contract can be based. Document proceedings of all final settlement negotiations and record basis for final

payment.

- Prior to recommending release of Final Payment, ensure the Contractor has furnished all administrative items required by the Contract Documents, and verify there are no outstanding liens, or claims.
- Prepare and submit all required close-out documentation required for each permit which has been, or will be, necessary for the project. These include but are not limited to local construction permits.
- Engineer will provide the Authority with a complete electronic file in PDF format of all documents that they prepared on behalf of the Authority that is included in this RFP.

Task 3 – Construction Inspection / Observation Services

- Provide full time construction inspection/observation services during periods when the contractor is on site to monitor the contractor's progress and compliance with the contract drawings and specifications, including the contractor's environmental protection and restoration measures.
- Conduct a weekly construction meeting with the Contractor and owner to discuss scheduled activities.
- Prepare daily inspection reports.
- Maintain project records, diaries, daily inspection reports/pictures and documents.
- Review monthly and payment requests including the final payment requests.
- Participate in the review and evaluation of potential change orders, including detailed review of cost proposals.
- Participate in the resolution of issues involving unforeseen field conditions.
- Witness testing and startup of equipment and systems.
- Coordinate vendor training.
- Prepare punch-list of remaining work items.
- Evaluate substantial and final completion and issue certificates of substantial or final completion as appropriate.
- Coordinate with the Contractor and City of Hoboken regarding street closures and maintenance of traffic control and pedestrian flow.
- Respond to public complaints, including contacting complainants, determining solutions; prepare letters, etc. in accordance with the Authority's policies, which requires timely action by the Engineer.

Task 4 - Authority's Agent During Construction

- Aid the NHTSA's General Contractor to obtain construction permits from the City of Hoboken.
- Act as Authority's Agent with regard to the Contractor's compliance with the contract documents.
- Oversight of the Contractor's compliance with NJDEP's program for Socially and Economically Disadvantaged individuals and generate, review, and submit all required forms to NJDEP for this program.

- Act as Authority's Agent with regard to the Authority's and Contractor's compliance with New Jersey Department of Treasury Office of Equal Opportunity and Public Contract Assistance requirements. Engineer will generate, review and submit all required forms to the NJDEP for this program.
- Obtain and keep on file all records related to the NJDEP's program for Socially and Economically Disadvantaged individuals and the New Jersey Department of the Treasury Office of Equal Opportunity and Public Contract Assistance requirements.
- Obtain and keep on file all Certified Payroll records obtained from the Contractor.
- Obtain and keep on file the Initial Project Workforce Report and the Monthly Manning Reports.
- Submit two paper copies of the Contractor's complete payment application and two additional paper copies of the Engineer's invoice to provide Services During Construction to the Authority's designated representative on a monthly basis.
- Administer the Build America, Buy America Act (BABA) provisions of the contract documents.
- One year after the final acceptance of the Work, prepare, execute and submit to the Authority and NJDEP a Certificate of Performance on NJDEP form CCS-006.
- Administer the permits and approvals obtained for the project; including, but not limited to: NJDEP Flood Hazard Area Permit, HEP – Soil Erosion and Sediment Control certificate, and Construction Permits.

Experience and Project Team

Jacobs, has served municipal, state, federal, and private-sector clients in water, wastewater, environmental, transportation, industrial, and related fields. We intend to keep making a difference—achieving and exceeding your expectations and those of the community. We are proud of our commitment to be the best in setting exemplary standards in client satisfaction, social responsibility, technical innovation, leadership, and stakeholder consensus and involvement.

Qualifications and Experience

As the industry's No. 1 Ranked Sewer/Wastewater Treatment firm (Engineering News-Record, 2023), Jacobs has worked with municipal, national, and industrial clients worldwide for over 70 years to provide comprehensive high-quality engineering services for wastewater treatment facilities, collection systems, and pumping stations.

Jacobs is a leader in wastewater services in the United States and abroad. We understand the issues the Authority faces with the ever-increasing demands to provide quality service to its communities, renewal of aging infrastructure, and environmental and regulatory requirements. With our unparalleled expertise in wastewater treatment and infrastructure engineering, we progress projects from concept to construction, from initial objective to full operation.

Jacobs Has a Proven Record of Delivering Quality Service to the Authority

The Jacobs team has provided engineering services for the Authority for more than 30 years and brings a wealth of knowledge about the Authority's system as well as broad world-class treatment, conveyance system, and construction experience. As part of the General Engineering Services Contract, which Jacobs had the honor to work on for 20 years, we were responsible for assisting the Authority in achieving and maintaining permit compliance at its two WWTPs, acting as the Authority's agent with the NJDEP, EPA, and other agencies, and assisting the Authority in securing financial bonds. Jacobs has regularly assisted the Authority in securing and maintaining SRF loans for capital improvement projects via the NJEIT using our experience with agency representatives and demonstrated abilities to secure funding. In addition, we have worked closely with the Authority in the development of its capital plan. Jacobs has the background and knowledge required to help the Authority plan for and implement improvements efficiently and successfully.

Representative Relevant Project Experience

North Hudson Sewerage Authority H6/H7 CSO Long Term Control Plan Project Design Phase 1- December 2019.

The design of the H6/H7 CSO Long Term Control Plan project is the first element and first phase of the Authority's LTCPs for the Adams Street service area. The comprehensive H6/H7 CSO Long Term Control Plan Project includes new storm sewers, stormwater pretreatment, stormwater storage tank system, stormwater pumping station, and force main to the existing Adams Street Wastewater Treatment Plant outfall on the Hudson River. The stormwater storage tank system and Northwest Resiliency Park are being developed by the North Hudson Sewerage Authority and the City of Hoboken.



Conceptual Design, Northwest Resiliency Park

The proposed stormwater pretreatment system, stormwater storage tank system, and pumping station will be located on the former Henkel Soap/BASF Brownfield Site, which is a capped contaminated site and subject to an alternate use limitation (AUL) due to previous contamination. The site is approximately 6.1 acres of property located between Adams and Madison Streets, east to west, and 12th to 13th Streets, south to north.

The City has constructed a one (1) million gallon underground stormwater storage tank on the project site. Stormwater flows from the new stormwater collection system will be conveyed to the tank by gravity through two

(2) hydrodynamic separators adjacent to the tank. The flow from the tank will be conveyed by gravity to the new stormwater pumping station. The pumping station will be designed to discharge a peak flow rate of approximately 30-mgd at full build out, with the initial capacity being designed for 7.5 million gallons per day. The pump station will house five (5) submersible wet pit pumps. The pumps will discharge to a high level 30-inch diameter force main that connects to the existing 48-inch diameter Adams Street Wastewater Treatment plant outfall. The stormwater force main will be a dedicated force main interconnected with the Adams Street WWTP effluent pipe.

The H6/H7 CSO LTCP – Phase 1 design was completed by Jacobs and Mott MacDonald. The Phase 1 construction scope of work includes; all of the project elements located on the NWRP site: hydrodynamic separators, pump station wet well, pump station control building, and underground utilities. The work also includes construction of the stormwater collection system and stormwater force main “stub-outs” into 13th Street for ease of connection to the future phases of work.

Adams Street WWTP PURAC Improvements Designs and Services During Construction - Phases I, II and III (2014 - Present) The PURAC Flo-filter process at the North Hudson Sewerage Authority’s Adams Street WWTP is a 25-year old secondary and tertiary treatment process consisting of dissolved air flotation (DAF) followed by sand filtration. A number of components reached the end of their useful life and the process has had a number of failures. JACOBS completed a facilities assessment in 2013 and developed a conceptual design of upgrades along with a multi-year capital improvement plan for phased completion of system upgrades. In 2014, JACOBS completed Phase 1 of design upgrades for a new instrumentation and control (I&C) system, which was identified as the priority in design to provide for positive process control of the new mechanical equipment being installed with the upgrades in later phases. In 2015 JACOBS completed Phase 2 of design upgrades for adding clearwell access to improve sand removal and protect new underdrains that are being installed in Phase 3; the design also included float sludge piping and trough spray nozzles. Phase 3 design was completed in 2017 for all remaining mechanical, electrical, I&C and structural replacements and improvements in the PURAC facility. Upgrades for the 10 filter cells include new filter media, underdrains, troughs, air dispersion system, float sludge skimmers and new common systems such as air scour blowers, compressors, sludge pumps, booster pumps for spray systems. To better facilitate operations, additional I&C was added for optimized valve controls on 86 valves for all mechanical processes, structural concrete treatment to retard chloride degradation, and a structural platform to improve access for valve maintenance. JACOBS developed an innovative design and pre-procurement strategy for key process equipment (DAF/Flo-filter, air scour blowers and influent slide gates) needed at the start of construction to accelerate the construction schedule, which required splitting the construction documents into four contracts. JACOBS participated in close coordination between the Authority and the New Jersey Department of Environmental Protection for meeting low-interest state loan requirements. JACOBS also provided design engineering assistance to the Authority during construction of Phases 1 and 2. Jacobs is presently performing services during construction for Phase 3; work will conclude in 2022.



Adams Street WWTP PURAC Filter Cells

H5 Wet Weather Pump Station (Design 2014, SDC 2015-2016).

Jacobs completed the design of the H5 Wet Weather Pumping Station and then provided services during construction. This stormwater management improvement project consisted of the construction of a 40 mgd pump station for the H5 drainage basin to pump excess wet weather flow to the Hudson River during major storm events that coincide with high tide. The project included a below-grade pump station that intercepts flows from the H5 outfall and pumps the flow back into the existing H5 outfall at the intersection of 11th Street and Sinatra Drive North.

Additionally, a below-grade electrical vault was constructed to house the electrical and instrumentation and controls equipment that service the pump station. Lastly, an emergency generator was installed should there be power outage when the pump station is online.



H5 Wet Weather Pumping Station

H1 Screening and Wet Weather Pump Station Design and Services During Construction (2008 to 2011).

Jacobs completed the design work and bidding phase of the project and provided construction oversight. The H1 CSO Screening and Wet Weather Pump Station was placed into successful initial operation in October 2011. The pump station was designed to relieve street flooding in the southwestern portion of Hoboken associated with intense storm events occurring at high tide in the Hudson River. The wet-weather pump station operates during storm events that coincide with high tide, screening and conveying excess combined sewer overflow that would otherwise be trapped in the collection system during these conditions, causing street flooding. JACOBS worked closely with important project stakeholders, such as; New Jersey Transit, Port Authority, and the Hudson County Engineer's Office to coordinate acceptable locations for the CSO screens, pump station and electrical support facilities. JACOBS performed the permitting services for this project to obtain permits for, or from the following: Waterfront Development, Treatment Works Approval, Soil Erosion and Sediment Control, and U.S. Army Corps of Engineers signoff. The design maximizes the use of existing outfalls and easements to convey the combined storm flow to the river. The project was honored with a 2012 ACEC NJ Engineering Excellence Distinguished Award and a National Recognition Award in the 2012 ACEC Engineering Excellence Awards (EEA) competition.



Completed H1 WWPS Electrical and Controls Building

JACOBS worked closely with important project stakeholders, such as; New Jersey Transit, Port Authority, and the Hudson County Engineer's Office to coordinate acceptable locations for the CSO screens, pump station and electrical support facilities. JACOBS performed the permitting services for this project to obtain permits for, or from the following: Waterfront Development, Treatment Works Approval, Soil Erosion and Sediment Control, and U.S. Army Corps of Engineers signoff. The design maximizes the use of existing outfalls and easements to convey the combined storm flow to the river. The project was honored with a 2012 ACEC NJ Engineering Excellence Distinguished Award and a National Recognition Award in the 2012 ACEC Engineering Excellence Awards (EEA) competition.

NHSA WWTP Services During Construction (2007 to 2017)

Our former Parsippany, NJ office; newly relocated to Morristown, has provided Engineering Services for bidding and services during construction for many of the Authority's projects at its WWTPs. Here is a listing of some of the more recent projects in the past twelve years:

- Adams Street WWTP Ultraviolet (UV) Disinfection System Replacement (2009-2012)
- Combined Sewer WWTP and Pump Station Improvements Project (2008 to 2013) - including replacement of three PURAC recycle pumps and isolation valves at the Adams Street WWTP.
- River Road WWTP Emergency Trickling Filter Media Replacement Project (2008 to 2009)
- 2008 WWTP Improvements Project (2007 to 2009)
- Adams Street WWTP Alternative Energy Project (2004 to 2010).
- Adams Street WWTP Mechanical Bar Screen Replacement (2004 to 2006)
- Adams Street Sludge Pump Replacement (2007 to 2008)
- Adams Street WWTP Pump Controls Replacement Project (2004 to 2008)
- Adams Street WWTP Improvements Liquid Treatment Processes Project (2006 to 2011)
- River Road WWTP Mechanical Bar Screen Replacement and Outfall Pier Improvements (2007 to 2009).
- River Road WWTP Improvements to Liquid Treatment Processes Project (2006 to 2011)

Proposed Project Team

Jacobs delivers local team experienced with providing services to the Authority, supported by industry experts to deliver exceptional services during construction. Jacobs is proposing a project team with a proven track record of success in delivering projects for the Authority – a team that is poised to meet any project challenges that may arise. We are offering a seasoned project team which, because of its experience on similar projects, is able to anticipate issues and potential problems before they occur. Our team members have learned through experience how to solicit the resources they need to solve any given problem, thus protecting the project’s cost, schedule, and quality. Our staff has worked on numerous projects for the Authority. We have expert knowledge of the CSO wet weather pumping stations, collection system, WWTPs, and solids/floatables facilities. More importantly, our staff knows the way the Authority plans and executes projects and knows the Authority’s expectations of their consultants.

Management Staff

Shivani Patel, PE - Project Director

Shivani will serve as the project director for this contract to ensure that our project team has the necessary resources that will be needed. Shivani is an experienced project director and wastewater engineer with over 22 years of experience that includes program and project management, design (conceptual through final), services during construction, and post-construction services for numerous wastewater treatment facilities. Shivani has been project manager on upgrades and modifications to numerous pump stations and WWTPs. Additionally, Shivani has provided resident engineering services on major construction projects. Shivani’s experience with the Authority includes Program Manager, H6/H7 CSO LTCP Project, H1 and H5 Wet Weather Pump Stations; On-Call Services Coordination; Park Avenue & 11th Street Siphon Assessments and Design; W1234 Solids/Floatables Design; H6/H7 LTCP Project; and, all three phases of the PURAC replacement designs.

Ken Bienkowski, PE - Project Manager

Ken offers strong management and leadership experience and will serve as the project manager for this contract, responsible for regular communications with the NHSA and overseeing the efforts of our project team delivering the work. Ken is a Project Manager with over 20 years of experience in the planning, design, and construction of a diverse spectrum of water and wastewater infrastructure improvement projects and has worked on many projects with NJ American Water, Hartford MDC, and Middlesex Water Company.

Lynda Tollner, PE, PMP - Construction Manager

Lynda has over 30 years of experience in project management and construction management and has recently worked in Construction Management Services for a Water Business Group on a NYC DEP Main Sewage Pump project. Lynda will provide Construction Management supervision and control of the resident inspection team to ensure quality control and assist with all problems.

Field Staff

Dave Missig - Resident Engineer

Dave will serve as the resident engineer for this contract and will provide inspection tasks to ensure work is in conformance with the contract documents. Dave has over 20 years of experience in Construction / Construction Management. Dave was the Resident Engineer for NHSA’s H1 WWPS, H5 WWPS, and several of NHSA’s Solids/Floatables facilities.

Siyng Wang – Field Engineer

Shivangi will assist Dave and also provide supplementary field presence. Siyng has experience in inspections of pipeline installations and has also provided inspection for the NHSA Boulevard East Project.

Sophia Palumbo – Geotechnical Engineer

Due to the significant pile foundation construction work required, Sophia will serve as the geotechnical engineer and geotechnical inspector as required for the pile foundation installations.

Supporting Staff

Stewart Fisksen - Project Engineer

Stewart will serve as the Project Engineer and provide assistance to Ken in the construction administration and acting as the Authority's agent. Stewart was the Project Manager for the Sterling Avenue drainage project and is currently the Project Manager for the Boulevard East Project.

Kelly Herlihy – Health and Safety Manager

Kelly will serve as the Health and Safety Manager and will provide general health and safety oversight for the project as well as review the Contractors Health and Safety Plan.

Sam Nauss, PE– Senior Geotechnical Engineer

Sam is the Geotechnical Lead in the New York / Jersey region and will review submittals, perform technical oversight of geotechnical work, and assist in overseeing the pile installation work. Sam has over 30 years of experience in establishing soil investigation programs, analyzing geotechnical data, designing shallow and deep foundations, and supervising subsurface soils investigation work.

Ted Toskos, LSRP – Environmental Specialist

Ted will assist with any environmental review and oversight as well as administering the Contractor's soil classification program that will be used to test excavate materials to determine final disposal.