24-033

RESOLUTION DIRECTING WORK TO KLEINFELDER FOR THE ADAMS ST WWTP FORCE MAIN AND SIPHON REPAIRS PROJECT

MOTIONED BY: Friedrich
SECONDED BY: Guzman

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, Kleinfelder has been selected under resolution 23-155 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, the Adams St WWTP Force Main and Siphon Repairs project will consists of the installation of a new precast doghouse valve chamber and installation of two (2) 14-inch insertion valves on the existing Port Imperial force mains, as well as excavation of 3 access pits for blockage removals and repairs on the existing 12" siphon pipe at the Adams Street Plant. The contractor will also install a 24" gate valve and activate the Park Avenue Siphon Access Chamber in Weehawken. The work also consists of installation of helical piles, a cast-in-place reinforced concrete base slab, rerouting conflicting utilities, excavation and disposal of excavated material, pavement restoration, and all other associated work; and

WHEREAS, Kleinfelder has submitted a proposal (Exhibit "A") to provide Engineering Services During Construction for the Adams St WWTP Force Main and Siphon Repairs Project; and

WHEREAS, the Chief Financial Officer has certified that funding is available through the Authority's Fiscal Year 2024-2025 Captial Budget.

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 Kleinfelder to provide professional engineering services during construction for the Construction for the Adams St WWTP Force Main and Siphon Repairs Project not to exceed $169,580.00.

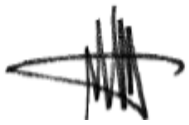
24-033

DATED: MARCH 21, 2024

RECORD OF COMMISSIONERS' VOTE

	YES	NO	ABSENT
Commissioner Gardiner	x		
Commissioner Kappock	x		
Commissioner Marotta	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 MARCH 21, 2024.



SECRETARY

KLEINFELDER
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NORTH SEWERAGE AUTHORITY HUDSON

Request for Proposal:
Engineering Services During Construction
Adams Street WWTP Influent Force Main and Siphon Repairs

March 5, 2024

March 5, 2024

Mr. Don Conger, PE
dconger@nhudsonsa.com
Authority Engineer
North Hudson Sewerage Authority
1600 Adams Street
Hoboken, NJ 07030

SUBJECT: Request for Proposal: Engineering Services During Construction
Adams Street WWTP Influent Force Main and Siphon Repairs

Mr. Conger:

In response to your Request for Proposal (RFP), Kleinfelder is pleased to present our proposal for engineering services during construction for the above-referenced project.

Kleinfelder routinely completes Engineering Services During Construction (ESDC) for communities faced with similar with challenges as the Authority with aging pipes, wet-weather and capacity issues and Combined Sewer Overflows (CSOs). We recently completed the design and construction administration for upgrades at the Logan Township Municipal Utilities Authority (LTMUA) 2.0-MGD Water Reclamation Facility that included the installation of over 9,000 feet of a new 20-inch force main. Additionally, for the Springfield Water and Sewer Commission, we designed, rehabilitated, and installed multiple large-diameter valve chambers as part of the $21M Main Interceptor Rehabilitation project.

Through our current work on two ESDC projects with the Authority, we have gained the experience and understanding of your expectations, and we are confident that our team will help to deliver you a successful project.

PROJECT UNDERSTANDING

The North Hudson Sewerage Authority (Authority) will be rehabilitating one existing 12-inch siphon and installing new insertion valves on two 14-inch force mains. The siphon repair work consists of excavating three access pits to inspect the pipe, remove blockages, and repair the pipe. The force main insertion valve work consists of constructing a new valve chamber on helical piles and installing the insertion valves. This project also includes installing a 24-inch gate valve and activating the Park Avenue Siphon Chamber. In addition, the work includes re-routing conflicting utilities, excavation and disposal of excavated material, pavement and lawn restoration, traffic control and all other associated work.

The Authority's Services During Construction Engineer (Engineer) will administer the services during construction for a General Contractor to construct the work in the construction documents as prepared by the Design Engineer (Mott MacDonald).

The Design Engineers construction cost estimate for the project is $600,000, and the anticipated construction duration of the project is 150 calendar days. Field construction work is

anticipated to take 120 calendar days. The project is being funded by the Authority. Bids for the construction of the project are being received on February 28, 2024.

RESPONSE TO REQUEST FOR PROPOSAL

A. Scope of Services

Construction Phase Services

The construction phase services are as important as all the prior phases. Our philosophy is to provide all relevant information to successfully bid a project. When you provide an adequate level of detail, it eliminates uncertainty, which in turn minimizes risk during construction. Our resident engineers and construction administrators observe the contractor's activities for conformance with the intent of the contract documents. We keep records of quality control and construction progress, constantly tracking budgets and schedules. Our team understands that timely responses to requests for information and shop drawings help lead to a project free of changes and delays.

Task 1 – Contract Execution and Pre-Construction Meeting

1.1 Prepare and distribute all necessary paperwork required for execution of the Contract between the Contractor and the Authority. Provide three (3) paper copies of the Contract for execution. Compile final signed contract documents, and distribute to the Contractor and Authority. Also provide an electronic PDF of the final contract.

1.2 Schedule and conduct a pre-construction conference with the Authority, Contractor, town officials, and other key stakeholders. ***We have assumed that the meeting will be held in-person at the Authority's office in Hoboken****.*

1.3 Prepare minutes of the pre-construction conference and distribute same.

1.4 Prepare and issue a Notice to Proceed to the Contractor.

Task 2 – Resident Engineering/Inspection

The Resident Engineer serves as the Owner's point of contact for field construction related matters; and is expected to maintain constant communication with our Project Manager as well as the Owner's representatives in the field. The Resident Engineer will advise, report and document on quality and conformance and will maintain orderly files and records at the job site of all construction related information, progress, and quality observations.

The Engineer will provide a full-time Resident Engineer/Inspector to perform the services described below. ***We have included 750 hours for the Resident Engineer to cover the anticipated 17 weeks (120 calendar days duration) of field construction, with time included for field reconnaissance to be performed prior to work commencing and time for final inspection and closeout activities after the work has been completed.***

2.1 Observe the on-site construction work when the Contractor's field activities are in progress to ensure that the work is being completed in accordance with the Contract Documents. This includes but is not limited to the removal of excavated materials, bypass pumping, installation of lining system, removal and replacement of pipe, and roadway reconstruction.

2.2 Coordinate with the Contractor and local police for maintenance of traffic control and pedestrian flow for work outside of the plant. Coordinate with the Authority for work on the Adams Street WWTP site.

2.3 Maintain project records, diaries, daily inspection reports/pictures and documents.

2.4 Conduct inspections of the work and develop punch lists.

2.5 Witness and record the results of all functional and performance tests.

2.6 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 3 – Authority's Agent During Construction

The Engineer will perform the following:

3.1 Aid the NHSA's General Contractor to obtain construction permits.

3.2 Act as Authority's Agent with regard to the Contractor's compliance with the contract documents.

Task 4 – Construction Administration

Contract administration services will include observing the construction and advising the Authority as to the progress and quality of the work being performed by the contractor, reviewing and acting upon various submittals; issuing instructions and clarifications to the contractor; preparing and reviewing change orders; reviewing quantities for payment requisitions; and reviewing work including the necessary documentation for substantial completion and final acceptance of the work.

The Engineer will provide administration of the Contract and represent the Authority in observing the Contractor's compliance with the Contract Documents. The Engineer will perform the following:

4.1 Review the Contractor's Health and Safety plan.

4.2 Coordinate with the various utility companies.

4.3 Meet with the Contractor's representatives and the Authority to assist in implementing the construction progress. Engineer will act as initial interpreter of the requirements of the Contract Documents and judge the acceptability of the work and make decisions on all claims of the Authority and Contractor relating to the acceptability of the work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the work.

Conduct every other week progress meetings with the Contractor to review and record the progress of the work, and to resolve any problems with the project. Conduct additional meetings as necessary to resolve conflicts or specific problems. Our Project Manager will chair all meetings and submit minutes of meetings to all attendees. ***We have assumed participation in ten (10) virtual meetings.***

4.4 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. ***We have assumed review and certification of five (5) payment requests.***

4.5 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. ***We have assumed preparation of five (5) monthly progress reports.***

4.6 Be present at the Authority's Facility Service 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.

4.7 Provide Construction Management supervision and control of the resident inspection team to ensure quality control and assist with all problems.

4.8 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.

4.9 Maintain project records, diaries, and documents.

4.10 Respond to all Contractor Requests for Information (RFI's) and provide written responses to the Contractor.

The Design Engineer will be available to respond to questions utilizing the Allowance item detailed in Task 5 below.

4.11 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.

The Design Engineer will be available to respond to questions utilizing the Allowance item detailed in Task 5 below.

4.12 Prepare and administer all necessary Field Orders.

4.13 Prepare and administer all necessary Work Change Directives.

4.14 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.

4.15 Administer all allowance items in the Contract.

4.16 Meet with representatives of the Authority and appropriate regulatory agencies when requested and necessary for consultation or conferences regarding construction of the project.

4.17 Recommend the acceptability of the work and issue a Certificate of Substantial Completion along with a punch-list upon the Contractor achieving the project milestones.

4.18 Prepare routine letters, memorandum, reports, change orders and miscellaneous paperwork as directed by the Authority for signature by the Authority.

4.19 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.

4.20 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.

4.21 Review As-built drawings provided by the Contractor of changes to the work.

Prepare a final set of record drawings in electronic format based on Contractor's As-built drawings.

4.22 Provide appropriate technical assistance during start-up, functional testing, and performance testing. Verify operation of individual valves, common equipment and individual systems and subsystems.

4.23 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.

4.24 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.

4.25 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.

4.26 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. ***Note, if provided by the Design Engineer, we will also provide updated CAD-related files in AutoCAD format for the Record Drawings.***

Design Engineer Professional Services

Task 5 – Design Engineer Services Allowance

The Design Engineer services allowance includes providing support and answering questions as required for submittal reviews responding to RFIs.

B. Fee Summary

The not-to-exceed fee for the above scope of services is summarized below. The fee is based on our on-call hourly billing rates and includes all labor, overhead, profit, and direct expenses related to this assignment.

Phase	Task Description	Proposed Hours	Proposed Cost
Construction Phase Services			
Task 1	Contract Execution and Pre-Construction Meeting	40	$6,600
Task 2	Resident Engineering/Inspection	750	$105,000
Task 3	Authority's Agent During Construction	80	$13,880
Task 4	Construction Administration	150	$25,500
	Other Direct Costs	N/A	$8,600
Design Engineer Professional Services			
Task 5	Design Engineer Services Allowance		$10,000
	Total Proposed Cost		**$169,580**

C. Detailed Project Schedule

We have attached an anticipated project schedule (Attachment 1) showing projected milestones and durations for the planned construction. The anticipated construction duration of the project is 150 calendar days (22 weeks). Field construction work is anticipated to take 120 calendar days (17 weeks). Bids for the construction are being received on February 28, 2024.

Kleinfelder is prepared to provide the staffing and services starting in mid-March and continuing through the planned completion of the project.

D. Project Team

Kleinfelder's project team includes team members who are experienced in construction phase services for sanitary sewer rehabilitation work. Note billing category listed in parentheses. We have attached detailed staff resumes in Attachment 2.

- **Resident Engineer – Reinaldo Aponte (Senior Inspector)**
  Mr. Aponte has over 29 years of experience working out of our Princeton, NJ office. He has broad experience in the civil and environmental consulting field working on projects related to construction observation and site remediation. ***He is currently working with the City of Newark providing construction oversight for water treatment and infrastructure improvement projects.*** He has also performed construction observations for remedial excavations, in-situ stabilization, and excavation oversight of underground tanks. Other responsibilities include overseeing subsurface geophysical surveys for utility verification prior to ground disturbance activities. ***Ray will be available full-time for this project.***

- **Project Manager – Jordan Nappi, PE (Project Professional)**
  Ms. Nappi is a project engineer with over five years' experience working out of our Princeton, NJ office. She has broad experience in the field of civil and environmental consulting in providing planning, design and construction support for water and wastewater infrastructure projects. ***Note that Ms. Nappi resides in northern New Jersey in proximity to the planned work and has worked closely with Felipe in leading two ESDC projects for the Authority, the Collection System Improvements Contract 1 project and the 37th Street and 55th Street Combined Sewer Repairs.***

- **Program Manager – Neil Kulikauskas, PE (Senior Program Manager)**
  Mr. Kulikauskas has over 25 years of experience managing and leading water and wastewater projects in the Northeast. He is responsible for the overall execution and coordination of individual engineering assignments and regular communications with the Authority. He will ensure that we maintain the highest levels of quality and service to Authority, specifically confirming that the appropriate staff has the availability to deliver on Authority projects. Mr. Kulikauskas serves as the Program Manager for numerous water and wastewater clients throughout New England and New Jersey. Neil will be available to respond to specific requests attend all meetings with Authority officials. ***Neil will support Jordan and the Kleinfelder team in all aspects of the work.***

- **Resident Project Representative – Al Sessa (Senior Construction Manager)**
  Mr. Sessa is a construction manager with over 37 years of experience in all phases of water and wastewater engineering including environmental and civil engineering. His experience and capabilities in design, construction inspection and project management encompass numerous water, wastewater, and stormwater projects. Mr. Sessa has also been involved in numerous capital projects from proposal phase to project closeout. He has extensive experience in dealing with contractors and subcontractors. ***Mr. Sessa will be available to provide support as required to our construction administration and field inspection staff.***

E. Relevant Experience of the Firm

Kleinfelder routinely completes Engineering Services During Construction for communities faced with similar with challenges as the Authority with aging pipes, wet-weather and capacity issues and Combined Sewer Overflows (CSOs). We have included select project experience with similar recent work in Attachment 3.

- ***Logan Township Municipal Utilities Authority*** – Kleinfelder is completing construction administration and inspection services at the Water Reclamation Facility that includes a new effluent pump station and 9,000 feet of new 20-inch force main via horizontal directional drilling and open-cut.

- ***Rockaway Valley Regional Sewer Authority*** – We are performing construction administration and resident project representative services for the Monroe Street Pumping Station Project and Jersey City Trunk Sewer Rehabilitation project, which have a combined estimated construction cost of $4.8 million.

- ***The Hartford Metropolitan District Commission (CT)*** – Kleinfelder has performed construction administration and inspection for the MDC since 2009; including several linear water, wastewater, and stormwater projects in urban areas. Most notably was the completion of a $27.5M Franklin Avenue sewer separation project that included the construction of new stormwater drainage systems.

- ***Springfield Water and Sewer Commission (MA)*** – Serving as the on-call engineer, Kleinfelder has led numerous large-scale urban infrastructure improvement projects from design through construction. Most notable was the $21M Main Interceptor Rehabilitation project that included 6,700 feet of lining, 2,400 feet of new 8-inch to 48-inch pipe as well as various water mains, drainage and CSO structures.

Thank you again for the opportunity to submit a proposal on this important project. We value the opportunity to develop a partnership with the Authority to help accomplish your goals. We look forward to your decision.

Sincerely,

KLEINFELDER

Neil Kulikauskas
Senior Program Manger

Jordan Nappi, PE
Project Manager

cc: Fredric Pocci, PE fpocci@nhudsonsa.com
Belissa Vega bvega@nhudsonsa.com

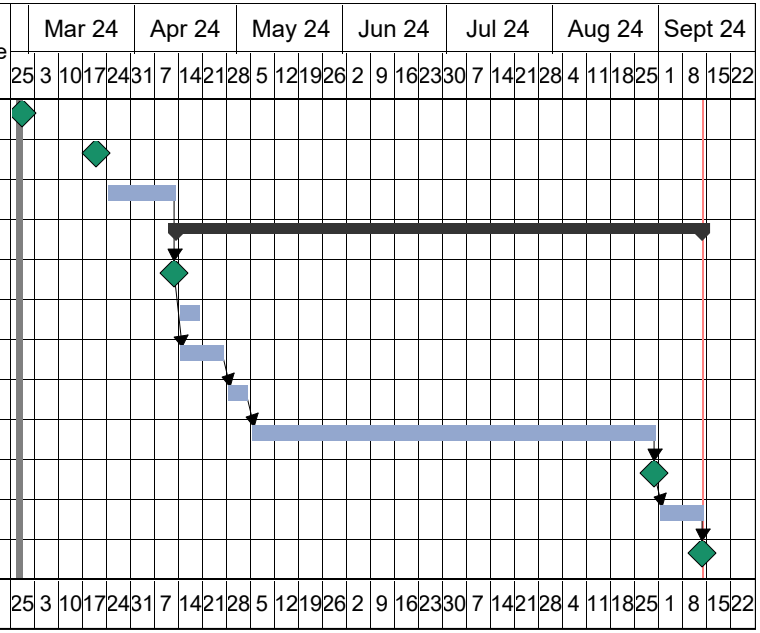
Attachments:

1 – Project Schedule
2 – Resumes
3 – Firm Experience

Attachment 1: Project Schedule

Adams Street WWTP Influent Force Main and Siphon Repairs
ESDC
Anticipated Project Schedule

	Activity Name	Duration (Work Days)	Start Date	Finish Date
1	Receive Bids	0.00	2/28/24	2/28/24
2	NHSA Monthly Board Meeting	0.00	3/21/24	3/21/24
3	Award and Contract Execution	15.00	3/25/24	4/12/24
4	Contract Duration (150 days, 22 weeks)	**110.00**	**4/12/24**	**9/13/24**
5	Issue NTP to Contractor	0.00	4/12/24	4/12/24
6	Pre-Construction Meeting (w/o 4/15/2024)	5.00	4/15/24	4/19/24
7	Contractor Submittals, Approvals, Permits (2 weeks)	10.00	4/15/24	4/26/24
8	Mobilization	5.00	4/29/24	5/3/24
9	Contract Work (17 weeks)	85.00	5/6/24	8/30/24
10	Substantial Completion	0.00	8/30/24	8/30/24
11	Punch List and Close-out (2 weeks)	10.00	9/2/24	9/13/24
12	Contractor Final Completion	0.00	9/13/24	9/13/24



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March 5, 2024

Attachment 2: Resumes

REINALDO APONTE

Resident Engineer

Mr. Aponte has over 29 years of broad experience in the civil and environmental consulting field working on projects related to construction observation and site remediation. He has also performed construction observations for remedial excavations, In-Situ stabilization, and excavation oversight of underground tanks. Other responsibilities include overseeing subsurface geophysical surveys for utility verification prior to ground disturbance activities.

Years of Experience
33 years

Education
Associates, Cultural Studies, Community College of Philadelphia, Pennsylvania, 2000

Bachelors, Environmental Science, University of Phoenix, 2018

Certifications

40-Hour HAZWOPER, No. 754782182, OSHA

8-Hour HAZWOPER Refresher, No. N/A, OSHA

SELECT PROJECT EXPERIENCE

Pequannock WTP Phase 1A Process, City of Newark, NJ
Serving as resident engineer for construction observation and construction administration services for various upgrades at the Pequannock Water Treatment Plant (PWTP), located in West Milford, NJ, which currently produces only 35 MGD of potable water rather than the 80 MGD for which it was designed. Targeted improvements include optimizing coagulation, adding coagulant flash mixing, correcting filter integrity problems, enhancing filter performance, changing filter flow control, and optimizing filter backwash.

Former Hoboken MGP Site, Hoboken, NJ
As Construction Oversight Engineer (COE), Mr. Aponte managed the primary contractor and subcontractors to complete the excavation and load out of impacted soils and managed the restoration of excavated areas and the reinstatement of site utilities and structures. Mr. Aponte acted as the primary site contact and ensured contractor's compliance with site documents (specifications, federal, state, and local permits) and participated in weekly project review meetings and provided frequent updates for Public Affairs/Community Outreach.

Trenton Public Schools Improvements, Trenton, NJ
Resident engineer for the implementation and oversight during the successful completion renovation and re-habilitation of thirteen schools. His experience and expertise has been fully used to successfully complete very sensitive and lengthy asbestos hazard abatement projects in accordance with NJ SCC and NJ EDA design and construction phases.

PSEG - Gloucester-Camden Linear, Public Service Electric and Gas Company (PSE&G), Camden, NJ
Resident engineer for linear construction project located predominantly along Market Street in Gloucester Township and Camden City, Camden County Site). Work included radiological soil screening and environmental services to assist in the monitoring of affected soils under Licensed Site Remediation Professional (LSRP) oversight for a Linear Construction Project (LCP) being managed by contractors retained by PSE&G at the Site. The Site is an area that spans two cities within the PSE&G easement. Historically, the superfund site was deconstructed and material from the facility was spread as fill throughout the cities of Gloucester and Camden. project includes the augering/hand clearing of locations to install new utility poles adjacent to existing utility line transmission. with necessary notifications, support of soil management, and reporting. The following sections provide a breakdown of the professional services proposed to assist PSE&G in their management of impacted soil at the site

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JORDAN NAPPI, PE

Project Manager

Ms. Nappi has over 5 years of experience in the field of civil and environmental consulting in wastewater treatment plant retrofit/upgrades and improvement projects. Her experience extends to include site and civil design for sewer mains and water mains, stormwater management, and water distribution system hydraulic modeling. Ms. Nappi provides strong environmental and construction permitting, and administrative support.

Years of Experience

5

Education

Bachelors, Civil Engineering, Clemson University, South Carolina, 2019

Registrations/Certifications

Professional Engineer (PE), No. 24GE05975700, NJ

Professional Affiliations

Engineers Without Borders - New York Professional Chapter, Member

Professional Women in Construction (PWC), New Jersey Chapter, Member

American Water Works Association (AWWA), New Jersey, Member

SELECT PROJECT EXPERIENCE

I&I Source Reduction - Years 1-3, Lehigh County Authority, Allentown, PA, From 4/6/2020 To Present

Ms. Nappi is part of the design team that prepared the design drawings, construction specifications and design memorandum for each year of the total 4-year Inflow and Infiltration (I&I) Source Reduction program which includes over 200 sewer pipes in Allentown, to be rehabilitated with actions such as heavy cleaning, full length CIPP, sectional CIPP and joint testing and grouting. For the Years 1, 2 and 3 projects which have been completed, Ms. Nappi has provided construction administration services and performed periodic field inspections. Ms. Nappi's responsibilities include management and review of submittals and RFIs, reviewing Contractor's payment applications, reviewing and negotiating change orders, monitoring construction schedule, participating in monthly progress meeting, reviewing pre- and post- CIPP and joint grout sealing CCTV inspection videos, reviewing and approving CIPP samples testing results, and preparing a Closeout Memorandum for each project year. Ms. Nappi has performed field inspections witnessing bypass system set up and operation, and full length CIPP installations.

Bioretention Basin Inspections, Princeton Self Storage, Rocky Hill, NJ

Ms. Nappi performed the annual engineer's field inspection for the bioretention basin at Princeton Self Storage that was installed in 2017. Responsibilities included the walk-through inspection, completion of inspection reports and preparation of the technical memorandum.

Montgomery Manhole Rehabilitation, Montgomery Township, Montgomery, NJ

Ms. Nappi assisted in the design of the Montgomery Manhole Rehabilitation project which consisted of the replacement of manhole covers and the relining of approximately 20 leaking manholes. The manhole covers were replaced with watertight locking frames and covers, and the manholes were relined by concrete spray or cured-in-place epoxy. Ms. Nappi's responsibilities included initial manhole investigations, production of the design drawings, and field inspections during construction.

Philadelphia Water Department Northeast Pollution Control Plant Stormwater Design - CA Services, Whitman, Requardt & Associates, Philadelphia, PA

Following assisting in the design of the stormwater system for the Northeast Pollution Control Plant in Philadelphia, PA, Ms. Nappi has been performing construction administration services for the project, including site and civil submittal reviews, RFI reviews and preparing Engineering Directives.

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Jordan Nappi, continued

Philadelphia Water Department Northeast Pollution Control Plant Stormwater Design, Whitman, Requardt & Associates, Philadelphia, PA

Ms. Nappi assisted the stormwater design team in the design of the stormwater system for the Northeast Pollution Control Plant in Philadelphia, PA. Ms., Nappi's responsibilities included the creation of existing and proposed stormwater HydroCAD model, creation of existing and proposed stormwater figures in AutoCAD, preparation of the Stormwater Report, assisting in the design of the bioretention basin, and civil design drawings updates including site plans, yard piping plans, and profiles.

Facility Improvements 2018, Madison Chatham Joint Meeting, Chatham, NJ

Ms. Nappi was part of the Construction Administration team providing Construction Management Services to Madison Chatham Joint Meeting for the Facility Improvements 2018 project which included the replacement of the mechanical screen, new mixing equipment at the oxidation tank, new effluent filtering building, new belt filter press, and raw water pumps. Ms. Nappi's responsibilities included submittal and RFI reviews, management of the submittal and RFI logs, payment application review, project management assistance and on-site construction observation.

Process and Operational Upgrades at the Pequannock Water Treatment Plant, City of Newark, West Milford, NJ

Ms. Nappi has performed part-time construction observation and inspection during the on-going construction at the Pequannock Water Treatment Plant. Responsibilities include holding daily project meetings with Contactor and Owner, over-seeing daily construction, management and review of submittals and RFIs, reviewing Contractor's payment applications, reviewing and negotiating change orders and monitoring construction schedule.

Long Hill Township WWTP Phosphorus Removal - CA Services, New Jersey American Water, Long Hill, NJ

Ms. Nappi provided construction administration services and part-time construction observation for the Long Hill Township Phosphorus Removal project, which included the demolition of the existing abandoned lime slurry system and installation of new chemical storage tanks and coagulant feed system. Ms. Nappi's responsibilities included management and review of submittals and RFIs, reviewing Contractor's payment applications, reviewing and negotiating change orders, monitoring construction schedule, construction observation and field inspection of construction activities, maintenance of as-builts and production of record drawings.

Coventry Square Water Main Rehabilitation, New Jersey American Water, Lakewood, NJ

Following the design to rehabilitate approximately 11,000 linear feet of 6-inch and 8-inch water main in the Coventry Square development utilizing trenchless technology, Ms. Nappi provided construction administration and performed on-site field inspections during the construction of the project. Over a one-year period, Ms. Nappi's project responsibilities included attending pre-construction meeting, management and reviews of submittal, review of the temporary water supply bypass plans, review of Contractor's payment applications, and preparation of change order recommendation. Ms. Nappi's on-site field inspections included inspection of temporary water supply bypass system, CIPP installations, lateral service cut out operations, water main pipe and valve installations, hydrant installation and disinfection and testing.

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NEIL KULIKAUSKAS, PE

Program Manager; Project Manager

Mr. Kulikauskas is a civil and environmental engineer with extensive management experience helping to lead programs with public and private sector water and wastewater clients throughout the Northeast. He carries a diverse background on various types of projects, thoroughly involved in all aspects ranging from feasibility planning and contract administration to technical design and throughout all aspects of construction. His experience covers wastewater treatment plant upgrades, sanitary sewer system design and rehabilitation, pump station design and rehabilitation, hydraulic modeling, drainage systems analysis and design, CSO removal, stormwater management, water distribution system analysis and design.

Years of Experience

27

Education

Bachelors, Civil Engineering, University of Connecticut, Connecticut, 1997

Masters, Environmental Engineering, University of New Haven, Connecticut, 2008

Registrations/Certifications

Professional Engineer (PE)-Civil, No. PEN.0023174, CT

Professional Engineer (PE)-Civil, No. 48483, MA

Confined Space Entry, OSHA

Professional Affiliations

American Society of Civil Engineers

Connecticut Society of Civil Engineers

Water Environment Federation

New England Water Environment Association

Connecticut Association of Water Pollution Control Authorities

Connecticut Water Pollution Abatement Association

SELECT PROJECT EXPERIENCE

Wastewater Treatment Plant (WWTP) Nutrient Upgrades, City of Pittsfield, MA
Program manager for development of the WWTP Facilities Plan to layout improvement/upgrade plans balancing repair and replacement needs of aging equipment and process upgrade requirements for regulatory compliance. The final design team developed construction documents for $65 million of Nutrient Removal Upgrade for City's 17 MGD WWTP, to achieve compliance with the City's NPDES permit and EPA Administrative Order that contains stringent limits for Total Phosphorus Limit (0.1 mg/l) as well as nitrogen loading requirements. The WWTP Upgrade consists of a new Ballasted Flocculation process (CoMag), Nitrogen Removal Upgrade, Secondary Clarifiers Upgrade, Solid Handling Upgrade and other ancillary plant-wide improvements. Upon completion of the WWTP Upgrade, the CoMag Ballasted Flocculation process will be the largest installation in the United States. Mr. Kuilkauskas is also the Project Manager and Client Manager for the design and construction of the Nutrient Removal Upgrade project.

Naugatuck Wastewater OPM for Contract Operations and ICIs, Naugatuck, CT
Program Manager for Owner Project Manager (OPM) for oversight and evaluation of the Borough's contract operations for the treatment plant, sewage sludge incinerator, and collection system. This annual contract included reviewing operational data and performing annual audit and evaluation of the contract operator. This work included design and construction review and oversight for the planned ICIs that are part of the new contract operations service agreement for the Wastewater Treatment Facility (WWTF) and lease agreement for the Sewage Sludge Incinerator (SSI). The agreement for ICIs that includes an estimated capital improvement cost of $12.5M at the WWTF (completed over 24 months) and $9.0M at the SSI (completed over 13 months).

Water and Wastewater Due Diligence, Private Water Company
Program manager for one of Connecticut's largest private water suppliers in performing due diligence activities for their potential wastewater system acquisitions. Mr. Kulikauskas works closely with the Engineering and Corporate staff to perform investigations, evaluations and provide recommendations on the condition and value of potential wastewater system assets.

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Neil Kulikauskas, continued

Wastewater Treatment Plant (WWTP) Phase 2 Upgrades, Easthampton, MA
As part of a plant upgrade and expansion, Mr. Kulikauskas was responsible for the bid procurement and construction administration portions of the project. His duties entailed coordinating with DEP, issuing clarifications, reviewing shop drawings, reviewing and processing payment requests and performing site visits.

Nutrient Removal and Denitrification, Water Pollution Control Facility, Litchfield, CT
As part of a plant upgrade and improvement project, Mr. Kulikauskas was responsible for converting the existing secondary treatment tanks to allow for biological nutrient removal and denitrification. He modeled the biological processes of the existing facility using BioWin32 software. Based on the model he designed the conversion of the existing secondary treatment process to include nitrification and denitrification processes. In addition to the modifications to the existing piping and tanks, the design also included specifying aeration and pumping equipment. Design plans and construction specifications were prepared in connection with this expanded secondary treatment system.

Wasteater Treatment Plant (WWTP) Aeration Upgrades, City of Pittsfield, MA
Mr. Kulikauskas was project manager for the fast-track design of the conversion from mechanical aerators to a diffused fine-bubble system at the Pittsfield WWTP. The project included new high-speed blowers, an 800-kw generator, and a new building to house the blowers and control equipment. The project received 100% federal stimulus funding for construction.

Naugatuck Wastewater Facilities Planning and SSES, Borough of Naugatuck, CT
Program manager for condition and capacity evaluations of the wastewater collection system and the Naugatuck Wastewater Treatment Facility (WWTF). An Inflow and Infiltration (I/I) evaluation followed by a sewer system elimination survey (SSES) in the collection system were completed to determine the optimum locations for capital projects aimed at reducing I/I in the collection system to alleviate conditions at the WWTF. Process evaluations at the WWTF included a biological process model of the secondary treatment system for biological phosphorus removal.

Northern Interceptor Sewer Rehabilitation Preliminary Design, Metropolitan District Commission, East Hartford, CT
Mr. Kulikauskas serves as principal-in-charge for preliminary design of the rehabilitation of 9,000 feet of 24-inch to 30-inch vitrified clay and reinforced concrete gravity sewer interceptor in East Hartford. Northern Interceptor is one of two primary influent lines into the East Hartford Wastewater Treatment Facility and dates to the early 1900's. The interceptor includes a crossing of Interstate 84, State Route 44, two force main discharges, and multiple segments along easements. Tasks include field investigations, including CCTV under bypass, manhole inspections, alternatives analysis and recommendations.

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Years of Experience
43

Education
Bachelors, Civil Engineering, New Jersey Institute of Technology, New Jersey, 1978

Registrations/Certifications
Confined Space Entry, OSHA

ALPHONSE SESSA

Construction Administration

Mr. Sessa is a construction manager with 43 years of experience in all phases of water and wastewater engineering including environmental and civil engineering. His experience and capabilities in design, construction inspection and project management encompasses numerous water/wastewater projects. Responsibilities have included marketing and business development; proposal preparation; the mentoring and coordination of internal staff; and preparation of various governmental permits. Mr. Sessa has also been involved in numerous capital projects from proposal phase to project closeout. He has extensive experience in dealing with contractors and subcontractors, as well as in the preparation of wastewater management plans and infiltration/inflow studies.

SELECT PROJECT EXPERIENCE

Sussex County Municipal Utilities Authority, Paulinskill Basin Project, Frankford Township, NJ
Responsible for the construction management of this project, which is made up of three separate but connected contracts with three separate contractors. These contracts are as follows:

1. Contract PRC-101: Water Reclamation Project
2. Contract PRC-102: Water Recharge Fields Project
3. Contract PRC-103: Wastewater Transmission Facilities Project

Charles A. Manganaro Consulting Engineers
Performed the field inspection on the Passaic Valley Sewerage Commissioners Rehabilitation of the Main Intercepting Sewer and Various Manholes. Project is located in cities of Paterson, Passaic, Clifton, Newark, and Belleville. Project involves slip lining, cured-in-place lining, and manhole rehabilitation.

Rostan Solutions, LLC
Assisted on Hurricane Sandy Disaster Cleanup and acted as Truck Hauler Monitor.

Roberts Engineering Group
Assisted on the design and construction management on various water/wastewater projects mainly consisting of projects receiving NJEIT funding. Coordinated with the NJDEP regarding the requirements for the funded projects. Performed water and sewer reviews on development projects for municipalities within Monmouth and Mercer Counties.

TYLIN Medina
Assisted firm in securing water/wastewater projects including marketing, business development, proposal preparation, project management, invoicing and collections, and QA/QC on numerous civil engineering projects. Responsible for managing and mentoring staff toward the performance of water/wastewater projects. Project Manager on the Passaic Valley Water Commission Water Storage Improvements Feasibility Study ($750,000 Study).

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Alphonse Sessa, continued

Hatch Mott MacDonald

Responsible for the preparation of contract plans, specifications and bidding reports, and the review of TV inspection video of sanitary sewers all as part of I/I studies for Joint Meeting of Essex and Union Counties and the Passaic Valley Sewerage Commissioners. Served as resident engineer and field inspector on several sewer rehabilitation projects. Coordinated field personnel. Computed progress pay estimates and change orders. Evaluated contract claims. Dealt extensively with various municipal officials, government agencies and contractors. Obtained extensive experience in the preparation of infiltration/inflow studies.

Attachment 3:
Firm Experience

LTMUA FACILITY IMPROVEMENTS AND EFFLUENT FORCE MAIN REPLACEMENT PROJECT

Horizontal directional drilling in progress.

Headworks screening and grit removal facilities.

Client

Logan Township Municipal Utilities Authority
Logan Township, NJ

Kleinfelder has served as the LTMUA's design consultant since 2012 and has provided a wide variety of services during this time. Design services at the LTMUA's 2.0 mgd Water Reclamation Facility (WRF) under the Facility Improvements and Effluent Force Main Replacement Project included an evaluation of options to replace the WRF's screening and grit removal facilities which had developed several mechanical issues. Based on our evaluation we provided design of a new center flow mechanical screening system and a hydraulically induced vortex grit removal system, and a new building to house the grit dewatering equipment. Other design services included the following:

- Selection and design of replacement pumps at the final effluent pumping station.
- Design and permitting services for over 9,000 feet of 20-inch HDPE force main which included jack and bore construction at railroad and highway crossings, and horizontal directional drilling (HDD) at wetlands and stream crossings.
- Replacement of Pump Station No. 12 including a new wet well with a grinder and submersible pumps; an above-grade building to house the valves, pump controls and emergency generator; and a flow meter chamber.

Construction administration and inspection services were also provided for this project, which was completed in 2023.

ROCKAWAY VALLEY REGIONAL SEWERAGE AUTHORITY ON-CALL WASTEWATER CONSULTING

Client
Rockaway Valley Regional Sewerage Authority, NJ

Kleinfelder has provided a wide range of engineering, permitting and regulatory support services to Rockaway Valley Regional Sewerage Authority (RVRSA) and its 12 MGD wastewater treatment plant for over 20 years. This experience includes NJPDES permitting support, wastewater management planning, anti-degradation studies, local limits development, copper water effects ratio studies, and discharge monitoring report support.

Diverse Services

In recent years, Kleinfelder has provided a diverse range of engineering services which have included:

- Annual On-Call engineering services
- Development of a 5-Year Planning Report which addresses the current status of the WWTP and interceptor system and presents a recommended five-year Capital Improvement Plan.
- Annual inspection of RVRSA's WWTP and meter chambers.
- Evaluation of effluent filtration alternatives.
- Design services related to replacement of the Bioxide storage and feed system.
- Evaluation of phosphorus removal costs.
- WWTP re-rating study considering both the hydraulic and treatment capacity of each major plant component.
- Comprehensive Facility Planning Study.
- Design of improvements to rehabilitate the existing final clarifiers.
- ***Construction administration and resident project representative services for the Monroe Street Pumping Station Project and Jersey City Trunk Sewer Rehabilitation project, which have a combined estimated construction cost of$4.8 million.***

METROPOLITAN DISTRICT COMMISSION (MDC) ENGINEERING SERVICES ON-CALL

Client
The Metropolitan District Commission
Hartford, CT

Northern Interceptor Project: Routing bypass force main under Connecticut Boulevard.

1. Northern Interceptor Sewer Rehabilitation, East Hartford, CT

Construction Cost: $2.0M **Change Orders:** NA

Kleinfelder managed the alternative delivery of the successful rehabilitation of the Northern Interceptor sewer in East Hartford, CT. An accelerated design and construction schedule necessitated an innovative approach to restore this critical 115-year-old failing asset. Working together with the owner and on-call contractor, Kleinfelder performed field investigations and partial design services to advance to construction as quickly as possible while mitigating major risk factors. Design, permitting and contingency planning for the bypass, cured-in-place pipe lining and possible open-cut replacement were in place prior to breaking ground. Working closely with the on-call contractor in the capacity of Construction Manager, Kleinfelder coordinated with the owners, Town of East Hartford, CTDOT, East Hartford Water Pollution Control Facility (WPCF) and other local stakeholders.

The project involved two significant (10+ MGD) sewer bypasses, utilizing up to four 12-inch pumps and two 18-inch HDPE discharge pipes, to accommodate cleaning and lining of the pipe. Root masses encompassing the full diameter of the pipe required delicate removal to minimize the potential for pipe collapse. Two major risk factors included the proximity to the East Hartford WPCF and crossing under I-84 and contingences were implemented to mitigate both. Ultimately, 3,000 feet of 30-inch sewer was successfully lined using both steam and water cure meeting both the owner’s and DOT’s tight schedule, all while coming in under budget ($2M).

METROPOLITAN DISTRICT COMMISSION (MDC) ENGINEERING SERVICES ON-CALL

2. Franklin Avenue Combined Sewer Separation Package D Contract 5, Hartford, CT

Construction Cost

Initial Construction Bid: $27,500,000
Change Orders: $7,700,000 (multiple changes to scope and rock claim)
Total Construction Cost: $35,200,000

The Hartford MDC included a complete separation of sanitary and stormwater systems in the Franklin Avenue area, including disconnecting all private clean water sources. The Kleinfelder team conducted intensive combined surface and subsurface investigations including manhole and catch basin inspections, CCTV pipe inspection, field survey, geotechnical borings, environmental sampling, utility company research, and house- to-house inspections. The detailed MH inspections supported MDC's CMOM program. To clarify subsurface utility locations, the team used pipe locators, ground-penetrating radar, and vacuum excavation. They performed a hydraulic model of the collection system and analysis of the existing catch basins. Kleinfelder evaluated green stormwater strategies such as rain gardens, green roofs, and grass swales.

The construction included the separation of existing storm drain and sanitary sewer systems in congested City Streets in the City of Hartford with significant rock removal and construction dewatering. The project included the rehabilitation of 10,923 feet of existing 8-inch to 33-inch storm drain and sewer pipe; the installation of 4,411 feet of new 10- inch to 30-inch storm drain pipe, grates and structures; the installation of 8,550 feet of new 8-inch to 24-inch sanitary sewer pipe, gates and structures; the relocation of 7,323 feet of existing 6-inch to 12-inch water mains; the exterior and interior disconnection of 236 buildings; tree removal and surface improvements along with road reconstruction.

3. Large Diameter Sewer Rehabilitation Phase 2 Inspection, Hartford, CT

Kleinfelder is providing inspection services with up to three inspectors working under the direction of the Districts' Construction Manager for the ongoing, phased rehabilitation of large diameter sewers through trenchless methods. This second phase of work includes 20,000 LF of CIPP rehabilitation of pipe diameters from 24-inch up to 60-inch and over 1,000 vertical feet of monolithic cementitious lining of manholes. Work is in densely populated urbanized areas with large bypass requirements and challenging traffic control. Kleinfelder's responsibilities include continuous overnight oversight of lining crews during extended multi-day CIPP curing events. As the District's on-site representative, Kleinfelder is responsible for addressing resident concerns, mitigating traffic disturbances, ensuring quality work and electronically documenting activities daily.

4. Lateral Lining Inspection, West Hartford, CT

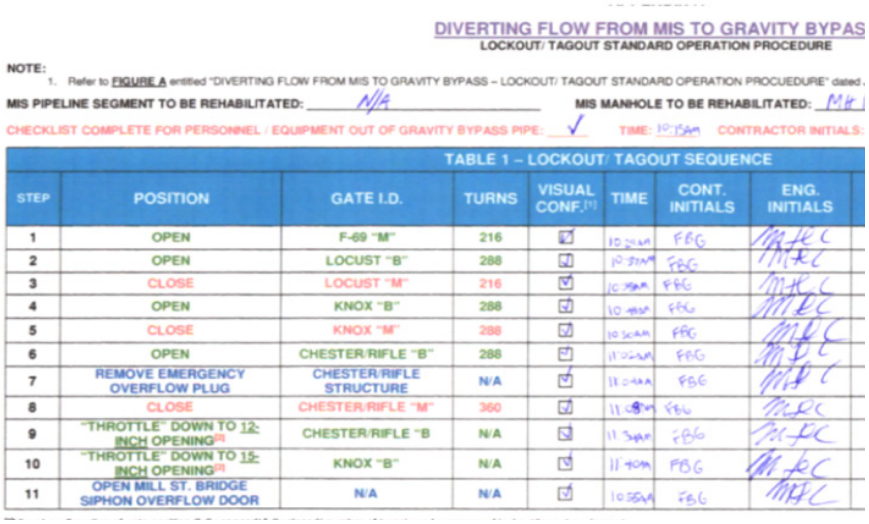
Kleinfelder provided inspection services working under the direction of the Districts' Construction Manager for the lining of lateral sewer connections throughout the District's member city's and towns. Kleinfelder inspected the trenchless rehabilitation of over 1,400 lateral connections. This work includes managing multiple crews across several active task orders under the on-call sanitary sewer repair contract. As the District's on-site representative, Kleinfelder is responsible for addressing resident concerns, mitigating traffic disturbances, ensuring quality work and electronically documenting activities daily.

5. Lining Inspection, Wethersfield, CT

Kleinfelder is providing inspection services working under the direction of the Districts' Construction Manager for sewer main and lateral lining in Wethersfield, CT.

SPRINGFIELD WATER AND SEWER COMMISSION ON-CALL SERVICES

Client
Springfield Water and Sewer Commission
Springfield, MA



DIVERTING FLOW FROM MIS TO GRAVITY BYPAS
LOCKOUT/ TAGOUT STANDARD OPERATION PROCEDURE

NOTE:
1. Refer to FIGURE A entitled "DIVERTING FLOW FROM MIS TO GRAVITY BYPASS – LOCKOUT/ TAGOUT STANDARD OPERATION PROCUEDURE" dated

MIS PIPELINE SEGMENT TO BE REHABILITATED: N/A MIS MANHOLE TO BE REHABILITATED: MH

CHECKLIST COMPLETE FOR PERSONNEL / EQUIPMENT OUT OF GRAVITY BYPASS PIPE: ✓ TIME: 10:15AM CONTRACTOR INITIALS:

TABLE 1 – LOCKOUT/ TAGOUT SEQUENCE

STEP	POSITION	GATE I.D.	TURNS	VISUAL CONF.[1]	TIME	CONT. INITIALS	ENG. INITIALS
1	OPEN	F-69 "M"	216	☑	10:20AM	FBG	MHC
2	OPEN	LOCUST "B"	288	☑	10:31AM	FBG	MHC
3	CLOSE	LOCUST "M"	216	☑	10:40AM	FBG	MHC
4	OPEN	KNOX "B"	288	☑	10:48AM	FBG	MHC
5	CLOSE	KNOX "M"	288	☑	10:56AM	FBG	MHC
6	OPEN	CHESTER/RIFLE "B"	288	☑	11:02AM	FBG	MHC
7	REMOVE EMERGENCY OVERFLOW PLUG	CHESTER/RIFLE STRUCTURE	N/A	☑	11:04AM	FBG	MHC
8	CLOSE	CHESTER/RIFLE "M"	360	☑	11:08AM	FBG	MHC
9	"THROTTLE" DOWN TO 12-INCH OPENING[2]	CHESTER/RIFLE "B	N/A	☑	11:34AM	FBG	MHC
10	"THROTTLE" DOWN TO 15-INCH OPENING[2]	KNOX "B"	N/A	☑	11:40AM	FBG	MHC
11	OPEN MILL ST. BRIDGE SIPHON OVERFLOW DOOR	N/A	N/A	☑	10:35AM	FBG	MHC

The lockout/tagout Standard Operating Procedure developed by Kleinfelder and implemented daily by the Resident Engineer was a critical tool in the successful implementation of a complex 48-inch gravity bypass used during the lining of the MIS.

Main Interceptor Rehabilitation and Outfalls

Construction Contract Value: $21,101,329
Project Duration: March 2015 - May 2019

Our team completed design, bidding and ESDC of this complex project intended to address structural failures identified in the Main Intercepting Sewer (MIS), one of the SWSC's most critical infrastructure assets, serving over 70% of the City's customers. The highest risk to the project during construction was the flow bypass. The average dry weather flow was approximately 20 MGD with wet weather flows approaching 120 MGD. Kleinfelder found an adjacent, abandoned and decommissioned 48-inch sewer pipe and designed a rehabilitation of that pipe and flow diversion provisions and sequencing such that this abandoned pipe could be used as the flow diversion, eliminating the need for a costly, pumped bypass system. The flow diversion was only suitable for dry weather flows, and therefore, as a risk mitigation measure, the Kleinfelder team designed flow bypass provisions to protect against wet weather events, which included work limitations, sequencing, weather monitoring, and emergency overflow provisions. **The resident engineer was critical to the successful operation of this bypass through the use of a lockout/tagout form for multiple gates in the bypass system. The resident engineer would walk through the lockout/ tagout form each day with the construction superintendent to make sure proper procedures were being followed.**

The remaining work was equally complex and included:

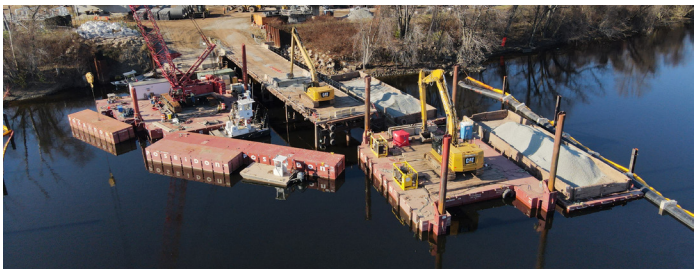
- CIPP lining of 6,700 linear feet of 48- to 84-inch diameter pipe
- 6 special structures including modifications to existing vault structures

SPRINGFIELD WATER AND SEWER COMMISSION ON-CALL SERVICES

- Rehabilitation of 11 manholes
- Installation of 1,100 linear feet of 48-inch reinforced concrete pipe, 500 linear feet of 48-inch fiberglass reinforced pipe, 780 linear feet of 8- to 30-inch PVC pipe
- Installation of two new water mains over the Mill River through existing bridge abutments and penetrations
- Installation of two large CSO outfall cast in place structures, one that included a cast in place flood control gate structure
- Temporary coffer dam systems during the construction of the CSO outfalls

Kleinfelder provided Construction Administration services, including review of contractor submittals, requests for information, construction change management, payment requisition reviews, State Revolving Fund (SRF) loan administration and discipline lead site observations. Kleinfelder also provided a full-time, on-site, Resident Engineer whose duties included:

- Coordination with permitting agencies such as the USACOE (Environmental Permitting and Flood Protection), MADEP, Amtrak, and Natural Heritage. Our Resident Engineer served as the Qualified Permit Compliance Officer as required by the various Environmental Permitting agencies when working within the resource areas
- Observed the replacement of two failing 10-inch to 12-inch water mains which existing either hung below a bridge crossing the Mill River or installed within the prestressed bridge decking of a second bridge
- Observed the installation of two coffer dams within the Connecticut River
- Observed the installation of deep foundation elements such as helical piles and friction H-piles in the Connecticut River, used to support two CSO headwalls
- Observed the installation of three different types of trenchless pipeline rehabilitation including sliplining, CIPP, and spray on geopolymer lining, all done on pipes greater than 66-inch diameter
- Monitored weather and river conditions as they were related to flow bypasses
- Served as the principle point of contact with the community
- Monitored work progress and reported on schedule and progress
- Tracked unit quantities for completed work and reviewed and commented on pay requisitions
- Kept daily field logs of the work and prepared daily and weekly construction progress reports
- Responded to Requests for Information
- Coordinated specialty resident inspection during cast-in-place concrete reinforcing and concrete pours
- Served as the key point of contact between the Contractor, the Project Construction Administration Team, and the Project Owner
- Ensured QA/QC activities, required in the Contract Documents were performed including compaction testing, concrete cylinder testing, CIPP Flat Plat testing, water pipe hydrostatic testing, manhole vacuum testing, and gravity sewer pipe low pressure air testing
- Assisted in project closeout activities such as punch list development, review of requests for substantial and final completion, and preparation of a final balancing change order and final pay requisitions



KLF's Resident Engineer's also served as Environmental Compliance Monitors for the in-river work occurring in the Connecticut River.

York Street Pump Station and River Crossing

Construction Contract Value: $124,277,522
Project Duration: September 2018 - Ongoing in June 2023

The Kleinfelder Team is currently providing Engineering Services During Construction for a 62 MGD combined sewer pump station and the Connecticut River Crossing pipeline project which is Phase 2 of the SWSC's Long-Term CSO Control Plan.

Elements of the project include construction of a new 62 MGD combined sewer pump station including architectural and structural design of the building, retrofit of the existing 30 MGD flood control pump station, multiple dredged pipeline crossings of the Connecticut River approximately 1,100 feet long, including two 42-inch HDPE force mains

SPRINGFIELD WATER AND SEWER COMMISSION ON-CALL SERVICES

and a 72-inch PCCP sewer siphon. During the final design of the pump station the Commission elected to transition the project from a design-bid-build delivery method, to an alternative Construction Manager At Risk (CMAR) delivery under MGL ch149A, one of the first such “horizontal” projects in the Commonwealth of Massachusetts. Design of the crossings required coordination with an active Amtrak rail corridor and permitting through USACE, MassDEP and Conservation Commission permitting efforts. Construction began in June 2019 and is projected to continue through August 2023.

Kleinfelder provided Construction Administration services, including review of contractor submittals, requests for information, construction change management, payment requisition reviews, State Revolving Fund (SRF) loan administration and discipline lead site observations.

Kleinfelder also provided multiple full-time Resident Engineers and Construction Inspectors for the duration of the construction of this project.

In addition to the standard on site observation responsibilities, Kleinfelder’s Resident Engineers also served as Environmental Compliance Monitors, responsible for overseeing the compliance of the contractor’s day to day work activities occurring within the Connecticut River with the multitude of project environmental permits.

Locust Transfer and Flow Optimization Project:

Construction Contract Value: $24,950,000
Project Duration: June 2022 - Ongoing in June 2023
Kleinfelder is providing Engineering Services During Construction (ESDC) for the Locust Transfer and Flow Optimization project which is Phase 3 of the SWSC’s Long-Term CSO Control Plan. Phase 3 aims to complete the system redundancy work that began under the York Street Pump Station and River Crossing project (Phase 2). The Locust Transfer project involves the construction of pipeline infrastructure to connect the new Phase 2 river crossings to the Main Intercepting Sewer (MIS), a 66-inch reinforced concrete pipe (RCP) and prestressed concrete cylinder pipe (PCCP) pipeline that convey the majority of the City of Springfield's wastewater flows to the Springfield Regional Wastewater Treatment Facility across the Connecticut River.

There are several individual flow transfer and optimization improvements that comprise this proposed Phase 3 project including:

- Installing approximately 430 LF of a new 72-inch glass fiber reinforced plastic (GRP) sewer referred to as the MIS Transfer Pipeline.
- Rehabilitating 1,100 LF of the existing MIS pipeline down to the MIS Diversion.
- Constructing the MIS Diversion piping, fittings, and valves on a pressurized portion of the existing MIS to connect to the new MIS Transfer Pipeline. This connection will be competed while flows are bypassed via gravity flow transfers/diversions.
- Rehabilitating the 48-inch brick Old Town Brook Sewer with a 30-inch GRP slipline with localized excavations to reconnect laterals.
- Other water and sewer infrastructure improvements.

Kleinfelder is providing Construction Administration services, including review of contractor submittals, requests for information, construction change management, payment requisition reviews, State Revolving Fund (SRF) loan administration and discipline lead site observations. Kleinfelder is also providing full-time Resident Engineers and Construction Inspectors for the duration of the construction of this project.

FY2022/2023 Sanitary Sewer Infrastructure Improvements Projects

Construction Contract Value: $1,774,137 and $3,573,316 respectively
Project Duration: November 2021 - Ongoing in June 2023
Kleinfelder has been providing ESDC services for the Commission’s annual Sanitary Sewer Infrastructure Improvements project since 2022. Each year, the Commission reviews the Prioritized Infrastructure Improvements Recommendation (PIIR) list (prepared by Kleinfelder as part of the Annual CMOM Pipeline Cleaning and Assessment Program) which serves

as the Capital Improvement plan for their non-CSO infrastructure. Depending on the construction funding available each Fiscal Year, they select ~1-10 separate sewer replacement/rehabilitation sites to move forward to construction. The scope of work for these projects typically consists of the trenchless rehabilitation or dig-and-replacement of sanitary sewer piping ranging in size from 8-inches to 54-inches. These projects also typically include the replacement/installation of new ductile iron water distribution mains.

Kleinfelder provides Construction Administration services, including review of contractor submittals, requests for information, construction change management, and payment requisition reviews. Kleinfelder also provides a full-time Resident Engineer for the duration of the construction of these projects.