



LEXINGTON

RFP-38-2024
Hazen and Sawyer
Hazen and Sawyer PSC
Supplier Response

Event Information

Number: RFP-38-2024
Title: East Hickman Pump Station Expansion and Rehabilitation Design
Type: Request For Proposal
Issue Date: 5/22/2024
Deadline: 6/18/2024 02:00 PM (ET)

Contact Information

Contact: Brian Marcum
Address: Central Purchasing
Government Center Building
200 East Main Street
Lexington, KY 40507
Phone: (859) 2583320
Fax: (859) 2583322
Email: brianm@lexingtonky.gov

Hazen and Sawyer Information

Address: 230 Lexington Green
Suite 520
Lexington, KY 40503

Phone: (859) 286-1264 x81904

Email: jlakers@hazenandsawyer.com

ONLY ONLINE BIDS WILL BE ACCEPTED! By submitting your response, you certify that you are authorized to represent and bind your company and that you agree to all bid terms and conditions as stated in the attached bid/RFP/RFQ/Quote/Auction documents.

Tiffany Nation for Jon Schubarth

Signature

Submitted at 6/17/2024 02:57:00 PM (ET)

tnation@hazenandsawyer.com

Email

Response Attachments

East Hickman PS Expansion and Rehabilitation - Hazen and Sawyer (final).pdf

Hazen and Sawyer proposal



East Hickman Pump Station Expansion and Rehabilitation Design

RFP No. 38-2024 | June 18, 2024



Hazen and Sawyer
230 Lexington Green Circle, Suite 520
Lexington, KY 40503 • 859.219.1126

June 18, 2024

Mr. Todd Slatin, Director
Division of Central Purchasing
Lexington-Fayette Urban County Government (LFUCG)
200 East Main Street, 3rd Floor
Lexington, KY, 40507

Re: East Hickman Pump Station Expansion and Rehabilitation (RFP #38-2024)

Dear Mr. Slatin:

Hazen and Sawyer (Hazen) is pleased to submit our Proposal for engineering services related to the expansion and rehabilitation of the East Hickman Pump Station. The following demonstrates what makes our team unique.

- **Local and Familiar Project Team:** The Hazen team will be led by Kurt Zehnder, our local Project Manager. Kurt has worked with DWQ for over ten years; in fact, most of our team members have worked with DWQ in some capacity for numerous years. To provide the best service and local expertise for this project we have elected to team up with Stantec. A local and familiar team means transparent and informed decision making and responsive service for the Division of Water Quality (DWQ).
- **Unparalleled DWQ Experience:** Hazen has served as a trusted advisor to DWQ for over 15 years, providing both design and program management services. During this time, Hazen has gained an understanding of DWQ's expectations and dedication to the community. Again, our project team includes Stantec, another long-term partner of DWQ. Stantec will lead modeling efforts for this project and provide support disciplines of electrical, instrumentation & controls, and structural engineering.
- **Proven Technical Ability:** Hazen's ability to conduct effective field investigations, perform pump testing and modeling, and develop and design successful pumping and odor control solutions are highlighted in this proposal. Our technical expertise means the best workable solutions to achieve your goals for this project.
- **Commitment to DWQ:** Hazen's team has worked with DWQ on both pump station and odor control needs. In combination with our local team and national resources, our team will work closely with DWQ staff to optimize the pump station expansion and rehabilitation to address the known concerns and issues.

We very much appreciate the opportunity to present our Proposal to LFUCG for this project. As you review it, we hope that you will agree that our team's extensive experience makes us uniquely qualified to continue to serve DWQ with this critical project.

Very truly yours,

Jonathan E. Schubarth, PE
Vice President

1013-350

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- Current Workforce Analysis Form
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- Notice of Requirement for Affirmative Action to ensure Equal Employment Opportunities and DBE Contract Participation
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Section 1: Approach and Proposed Fee



Section No. 1

Approach and Proposed Fee

The East Hickman Pump Station (EH PS) is a critical component of the Lexington-Fayette Urban County Government (LFUCG), Division of Water Quality's (DWQ) sewer conveyance infrastructure. Since the station began operation in 2021 it has experienced numerous operational challenges and disruptions. These have included but are not limited to early wear and control issues with the dry weather pumps, limited use of the wet weather storage tank (WWST), and challenges with the mechanical screens. The soon-to-be-completed East Hickman Force Main (EH FM) is anticipated to exacerbate existing issues with the pumps and cause increased odor issues along the force main route. Our team, led by Hazen with discipline support from Stantec, is well-equipped to address these existing and impending challenges through close coordination with DWQ to deliver an improved EH PS that will serve the needs of DWQ and the community for years to come.

Our team, managed by **Kurt Zehnder, PE**, has extensive experience with the EH PS and is prepared to hit the ground running on the design and improvements of the EH PS pumps. As part of our role in the RMP program, Kurt, Tyler Bridges, Jon Schubarth, and Daniel Honeycutt recently completed a draft technical memorandum (TM) outlining the existing challenges and providing potential improvements to the pumps in consideration of the soon-to-be operational EH FM. Through this previous work, our core team has already met with city staff including Dallas Taylor and Chris Dove, visited the pump station site multiple times, and worked with pump vendors on solutions to existing challenges. The team has already worked through and considered: New pumps, changing impellers on the existing pumps, new pumps of differing sizes, control modifications, and several other modifications. This previous work will allow us to arrive at our first meeting with DWQ fully informed of existing issues and ready to discuss the solutions desired by DWQ staff.

Similar to the pump improvements, our core process team of Kurt, Tyler, and Daniel (with support from Ryan Mckenna) is ready to immediately move forward on the odor control design. Again, through our previous work on the RMP program, our team has already considered multiple solutions to the impending odor control needs of the new EH FM. As mentioned in the RFP, our previous work indicated that a superoxygenation system, such as those provided by ECO2 offers both the highest level of service and the most cost-effective solution to the odor control challenges of the EH FM. The advantages of this type of system over traditional chemical odor control are primarily driven by the relatively low cost of liquid oxygen used and the high treatment capacity of the system. This is particularly well suited to the challenges of the new 36-inch EH FM as it



Inspection photo showing pitting on the existing dry weather pump impeller likely caused by vortices.



ECO2 superoxygenation system. Offers a high level of odor control in a compact footprint with relatively low yearly operations costs.



Collaboration between DWQ staff and the design team will be critical to project success. At a minimum we will have monthly progress meetings and milestone review meetings to ensure the design is progressing as desired by DWQ.

is nearly six miles long and often has low flow resulting long travel times, which directly contributes to increase hydrosulfide production and associate odor issues along the force main at air release valves (ARV) and at the force main discharge manhole. Our team is prepared to immediately move forward with the design of this type of system.

Through previous onsite meetings at EH PS, our team understands the frustration of DWQ staff with the existing mechanical screens. Our design of the new open channel grinders will be one that prioritizes ease of operation and maintenance. Through prior experience we understand the potential permitting challenges that open channels grinders can sometimes present for KDOW. We are prepared to work with KDOW for permitting of the system that best serves DWQ.

The following is our approach to move forward with this project immediately:

1. Meet with DWQ staff to review findings of previously completed TMs for pump improvements and odor control and discuss DWQ preferences moving forward.
2. Consider a physical model study of the dry weather pump station intakes to develop improvements to the pump intakes. This could facilitate the following notable improvements to pump operation:
 - Eliminate previously suspected vortices causing pitting on the dry weather pump impellers. This would be accomplished by implementing lab proven inlet improvements such as vortex suppression cones under the pump intake.
 - These vortex suppression improvements could also enable a lower operating level in the wet well, which would provide a wider operating band to reduce short pump cycle times.
 - Complete modeling of the EH FM to verify pump operating conditions for all flow scenarios.
3. Work with pump manufacturers to verify the pump solution desired by DWQ.
4. Work with ECO2 or other odor control suppliers to move forward with final design of odor control system best suited to serve the EH FM and the surrounding public.
5. Work with open channel grinder vendors and coordinate with DWQ to determine the appropriate solution to meet the needs at EH PS.
 - Once this is determine coordination will begin with the Kentucky Division of Water (KDOW) to ensure the proposed open channel grinders meet the 10 State Standards for clogging protection.

We look forward to continuing to work with DWQ on this important project. Our previous work and existing knowledge base of the specific challenges at the EH PS enable our team to hit the ground running saving DWQ both time and money.



A physical model provides detailed insights to improve operations and mitigate troublesome pump intakes.



Our team is prepared to hit the ground running and meet or exceed the proposed schedule.



Fee Proposal

Design, Services During Bidding, Services During Construction, Resident Observation East Hickman Pump Station Pump Replacement / Force Main Odor Control / Open Channel Grinder Retrofit

Task 1: KIA Support Services and Other Services**	\$22,224**
Task 2: Preliminary Design *	\$9,529*
Task 3: Final Design *	\$116,002*
Task 4: Easement Acquisition *	NA
Task 5: Services During Bidding*	\$9,321*
Task 6: Services During Construction* (assume 52-week duration)	\$48,815*
Task 7: Resident Observation* (assume 52-week duration)	\$106,450*
Total	\$312,341

* Task meets or exceeds limitation of the RD fee curve.

** Per USDA fee guide, Task 1 KIA Support and Other Services are not included in the RD Fee Curve.
(Other Services = Record Drawings, Startup, O&M Manuals, Conformed Drawings)

Hourly Rates / Unit Costs

Project Manager	\$250/hour
Project Design Consultant	\$195/hour
Design Consultant Technician / CAD	\$145/hour
Survey Crew (two person crew)	\$185/hour
Clerical	\$100/hour
Resident Project Representative (Weekly Rate inclusive of all expenses: travel and subsistence)	\$100/hour (\$4,000/week)

Assumptions/Exclusions:

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Per USDA Fee Guide, Task 1, 'KIA Support Services & other' are not included in RD Fee Curve. 2. Assumes no hydraulic modeling included. 3. Assumes no physical model included. 4. Assumes no easements included. 5. Special Inspections not included. | <ol style="list-style-type: none"> 6. Assumes no field surveys. 7. Assumes 9 meetings during design. 8. Assumes one bidding contract. 9. Assumes no geotech or environmental surveys. 10. Assumes 15 shop drawing reviews. 11. Assumes no detailed comparison of odor control or grinder equipment. |
|--|---|

Section 2: Past Performance on Similar Projects for LFUCG/DWQ



Section No. 2

Past Performance on Similar Projects for LFUCG/DWQ

Our team of Hazen and Stantec has a long working relationship with DWQ. Both firms have been part of the RMP program for the past 10+ years with Hazen filling the role of Program Manager, while Stantec has served as DWQ modeling and CAP consultant and also as design engineering on several RMP projects. In addition to our RMP work we have also completed several other projects for DWQ in recent years.

The experience of our team through the RMP program will be invaluable as we approach the design of these EH PS improvements. Hazen’s role of Program Manager gives us a deep understanding of DWQ design preferences and procedures. It also provides us additional insight into the current conditions and need of the EH PS as discussed in section 1 of this proposal. Similarly, Stantec’s experience as a hydraulic modeling consultant is critical to this project as the EH FM is a complicated hydraulic system. It is relatively long at nearly 6 miles, receives flow from several other pump stations, and has widely varied flows both now and in the future. Stantec already understands these challenges and is ready to develop a reliable hydraulic model to ensure proper selection of new pumps.

Our partner for this project Stantec has maintained a local office in Lexington since 1964 and has been serving LFUCG’s DWQ (and predecessor Divisions) continuously for over three decades. During that time, they have worked across all groups within the Division. They have been a mainstay helping DWQ throughout the tenure of the Consent Decree. In 2008, they embarked on the largest sanitary sewer system assessment ever undertaken by LFUCG and delivered over \$100k under budget.

DWQ Familiarity

Hazen is proud to serve as Program Manager of the Remedial Measures Plan (RMP) program for the past 11 years. Over this time, we have developed a strong working relationship with DWQ staff and gained a deep understanding of DWQ practices and preferences.

In 2011, Hazen and Stantec partnered to assist in the development of your RMP. This working relationship has continued with Hazen responsible for Program Management of RMP and Stantec serving as your hydraulic modeling consultant and Capacity Assurance Program Manager since 2012. **Together, Hazen and Stantec offer an unmatched working relationship with DWQ.**



Stantec’s experience as a hydraulic modeling consultant to LFUCG is critical to this project.

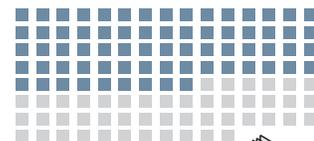
RMP Program Accomplishments



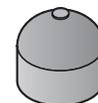
78 of 111
SSOs abated



> 1 Billion Gallons
of wastewater stored and kept out of the creeks of Lexington



69 of 116 capital projects completed



> 73 Million Gallons of WWST constructed



Remedial Measures Plan and Program Management Services

Lexington, KY

Hazen has served as an extension of LFUCG staff since the inception of the RMP program over a decade ago, and today remains **fully committed to assisting DWQ to ensure Consent Decree compliance.**

Remedial Measures Plans

The RMP identified 82 separate projects to eliminate 111 recurring SSOs by 2026 at a cost of \$591 million. Three separate RMP reports (one for each watershed group) were submitted to USEPA and KDOW in 2011 and 2012. The largest projects were two separate 44 million gallon (MG) storage facilities at LFUCG's two largest wastewater treatment plants. Six other smaller storage facilities are proposed throughout the system, along with trunk sewer capacity increases and system rehabilitation projects.

Program Management

As RMP Program Manager, Hazen assists with RMP implementation by:

- Performing conceptual designs of the most complex wet weather storage projects and developing scopes of work for design consultants
- Procurement of design engineers
- Preparation and maintenance of standard specifications and general notes to provide consistency among projects
- Serve as Project Managers for the individual projects being designed and constructed under the program
- Developing and studying alternate sites for proposed wet weather storage facilities
- Quality control and peer reviews of RMP projects to ensure consistency and compliance with RMP reports and LFUCG's Consent Decree
- Prepare quarterly and annual reports for submission to USEPA and KDOW

Key Team Members

Jon Schubarth
Project Manager

Kurt Zehnder
Assistant Project Manager

Tyler Bridges
Individual Project Manager

Daniel Honeycutt
Reporting

Project Profile

Design Completion:
Ongoing through December 2025

Construction Completion:
Ongoing through December 2026

Project Cost: \$591M

Reference

Bob Peterson, PE
RMP Program Manager
LFUCG Division of Water Quality
(859) 425-2438
rpeterson@lexingtonky.gov

System Capacity Assurance Program Manager

Lexington, KY

Stantec has served as LFUCG's System Capacity Assurance Program (SCAP) Manager since 2012. In this role, they are responsible for providing hydraulic modeling support and model maintenance for LFUCG's wastewater conveyance and transmission system. Stantec has evaluated multiple scenarios relating to the East Hickman pump station and wet weather storage facilities at a macro level for over a decade. More recently, Stantec has also overseen the collection of and analyzed flow data to characterize performance of the new pump station.

Specific accomplishments include:

- Completed technical reviews on over 1,400 sewer capacity requests for proposed development activities in Fayette County since the July 3, 2013 program launch.
- Developed hydraulic model simulation request and reporting protocols to support effective communication/documentation of model results to LFUCG's Remedial Measures Program (RMP) Team.
- Completed over 450 hydraulic modeling requests to support DWQ and RMP project planning and design efforts.
- Supported annual temporary flow monitoring efforts (2014 – 2023) by identifying rainfall/flow monitoring needs and analyzed collected data to assess available hydraulic capacity in LFUCG's wastewater collection and transmission systems.
- Performed annual updates/recalibration to the hydraulic model based on annual flow monitoring data and completed capital improvements in the sewer system.
- Assisted LFUCG and the RMP Team by performing sewer modeling to evaluate potential capital improvements for non-Consent Decree SSOs and problem areas.
- Provided technical support regarding inflow and infiltration removal and capacity-related issues as requested by LFUCG.
- Led the SCAP Task Force meetings with Urban County Council members, LFUCG Divisions/Departments, and community stakeholders to review and evaluate pro-posed program elements.
- Prepared a SCAP Task Force Recommendations report that was approved by the Urban County Council.
- Developed a web-based portal (CTIMS) for managing and tracking capacity allocations that includes a public-facing component to foster transparency within the SCAP.



West Hickman WWTP Process Optimization Model

Lexington, KY

Hazen and Sawyer provided an updated BioWin Model for the West Hickman WWTP to optimize phosphorus removal for LFUCG. This project involves a comprehensive review of historical plant data, on-site visits, and supplemental sampling. The biological process model will be updated using this data, ensuring accurate treatment performance. The project included detailed simulations to identify and address phosphorus excursions, providing practical optimization solutions. Key tasks encompassed project management, data analysis, and technical reporting. As the PM we manage daily activities, developing a Project Management Plan, and ensured quality control through regular reviews. Additionally, we coordinated with LFUCG through meetings and workshops. Our goal is to enhance phosphorus removal efficiency and ensure compliance with environmental standards, delivering clear, actionable recommendations through detailed reports and technical memoranda.

Key Team Members

Alyssa Mayer
Project Manager

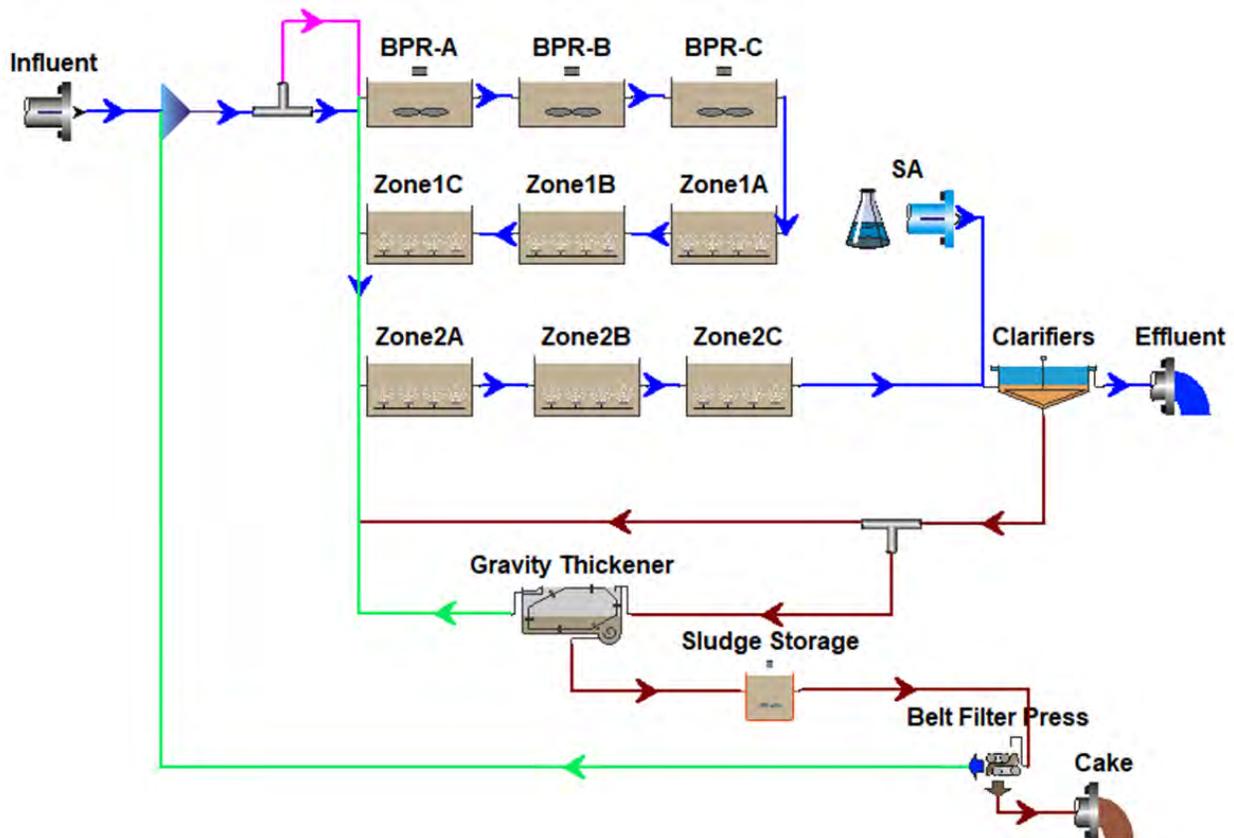
Dan Miklos
Operations

Project Profile

Total Project Fee: \$92,805

Reference

Tiffany Rank, PE
Plant Engineering Manager
LFUCG Division of Water Quality
859.425.2406
tiffanyr@lexingtonky.gov



BioWin process model of the West Hickman WWTP.

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West Hickman WWTP

Lexington, KY

The LFUCG has selected Hazen to complete several investigation and design/implementation projects at their West Hickman Wastewater Treatment Plant (WH WWTP).

Influent Pump Station Temporary Replacement

The existing influent pumping facilities at the plant consist of three pumping complexes which have been experiencing numerous, increasing outages. Under Hazen's Program Management contract, new headworks and influent pumping facilities are currently being constructed and once completed, the existing influent pumping facilities will be taken off line. In the meantime, LFUCG needs to keep the existing influent pumping facilities maintained and in service. Hazen was selected to evaluate and document the current influent pumping capacities, provide recommendations for influent pumping improvements, and direct implementation of our recommendations until the new headworks and influent pumping facilities are complete.

Final Clarifiers #7 and #8 Structural Repairs

This project involved structural repairs to two clarifiers at WH WWTP which previously failed during a high ground water event. The project included rock anchor pull testing of existing rock anchors, and a new passive structural floor design for both final clarifier #7 and #8. Project include bidding, construction administration, and RPR services. The project was completed on time and under budget.



Key Team Members

Kurt Zehnder
Project Manager

Reference

Charles Martin, PE
Director
LFUCG Division of Water Quality
859.425.2455
chmartin@lexingtonky.gov

Key Team Members

Jon Schubarth
Project Manager

Kurt Zehnder
Project Manager/Construction Manager

Project Profile

Study: December 2017 - June 2018

Design: May 2018 - August 2018

Construction: April 2019 - June 2020

Total Project Fee: \$179k
Initial Construction Cost: \$1.6M

Reference

Tiffany Rank, PE
Plant Engineering Manager
LFUCG Division of Water Quality
859.425.2406
tiffanyr@lexingtonky.gov

Section 3: Past Performance on Projects Similar in Scope or Complexity

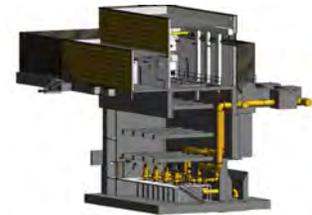


Section No. 3

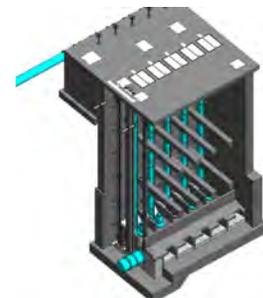
Past Performance on Projects Similar in Scope/Complexity

While proud of our experience with LFUCG our team has extensive experience on other pump station and odor control systems. Our experience is not simply completing projects, but rather delivering projects on time and on budget to meet the needs of our clients.

Through our work on the RMP program, we understand DWQ’s commitment to on time and on budget delivery of projects and our team commits to delivering on this project just as we have on many others. Hazen has completed hundreds of pump station projects throughout the country ranging in size up to more than 1 billion gallons per day. The table below highlights some of our most relevant pump station experience.



REVIT model of Cowan Pump Station in Nashville, TN



REVIT model of Bellevue Pump Station in Memphis, TN

Project Name	Location/Client	Capacity	Completed On-Time & on Budget
Cane Run Pump Station	Georgetown, KY	6.4 mgd	✓
Westover Pump Station	Miamisburg, OH	2.7 mgd	*
Sinking Creek Pump Station	Johnson City, TN	9 mgd	✓
Rolesville Booster Pump Station	Raleigh, NC	5 mgd	✓
Banklick Constructed Wetland Pump Station	SD1 of NKY, KY	5.6 mgd	✓
Cowan Pump Station	Nashville, TN	32 mgd	*
West Kingsport Pump Station	Kingsport, TN	2 mgd	✓
Sweetwater Pump Station	Brewster, OH	4.5 mgd	✓
Bellevue Pump Station	Memphis, TN	21 mgd	✓
Dover Pump Station Upgrades	North Olmsted, OH	7.2 mgd	✓
Lakeview Pump Station Surge Improvements	SD1 of NKY, KY	22 mgd	*

* Projects not shown as completed on time and on budget are either ongoing, a result of scope changes, and/or construction delays.

Pump Station Odor Control Experience

Hazen has vast experience with the design of pump station and force main odor control systems. Through our experience we understand what solutions work and we treat all odor related designs with a comprehensive approach which includes identification, prioritization, evaluations, and implementation for odor related concerns.

Project	Master Planning		Dispersion Modeling		Training/ Start-up	Trouble-shooting	Optimization
	Planning	Sampling	Modeling	Design			
Lift Station No. 45, Orlando, FL		●	●	●			
Beaver Ruin PS, Gwinnett County, GA				●	●		
Suwanee Creek PS, Gwinnett County, GA		●		●	●	●	
Willeo Creek PS, Cobb County Water System, GA		●		●	●	●	●
Riverside Road PS, Fulton County, GA		●	●	●	●	●	
Brooks Road PS, Gwinnett County, GA		●		●	●	●	
Difficult Run PS, Fairfax, VA		●		●	●	●	●
Beaver Creek Pump Station, Cary, NC				●	●	●	
City of Miami Beach PS 28 Improvements, FL		●		●	●		
City of Tampa San Carlos PS	●	●		●	●		
Town of Leesburg Cattail Branch PS Upgrades, VA	●	●		●	●		

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Georgetown/Scott County South Sewer Extension Cane Run Pump Station

Georgetown, KY

Cane Run Pump Station (CRPS) is part of the Georgetown/Scott Co. South Sewer Extension (SSE) project, designed to provide sanitary sewer service over 500 residential units, eliminate three existing pump stations, and eliminate two privately-owned package wastewater treatment plants.

The SSE project involves expansion of the sanitary sewer collection system from the existing Georgetown Municipal Water and Sewer Service area along US-25 to KY-1963. The SSE project will provide sanitary sewer service to approximately 10 properties (+530 residential/commercial units) on which several currently discharge to two privately-owned package wastewater treatment plants.

The new 6.4-mgd sanitary (future expandable to 9-mgd) CRPS is a submersible, fourplex, divided wet well pump station, with an aboveground building that includes an electrical room, storage room, and 750-kW standby generator. Per the owner's request, the valve vault has a stair well incorporated into the station's non-confined space entry.

Project Team

Jon Schubarth
Project Director

Kurt Zehnder
Project Manager

Tyler Bridges
QA/QC Review

Project Profile

Project Duration: Project
Completion in 2023

Cost: \$19.6M

Reference

Chase Azevedo, PE
General Manager
Georgetown Municipal Water and
Sewer Service (GMWSS)
1000 W. Main St.
Georgetown, KY 40324
(502) 863-7816
cazevedo@gmwss.com

Pearl Road Storage Tank/ Jennings Road Pump Station

Cleveland, OH

The PJPS project functions as a bridge between two separate sewer systems to address numerous interwoven hydraulic issues. The project is primarily located in one of Cleveland's industrial zones and is comprised of a complete upgrade/rebuild of the existing 3.6 mgd Jennings Road Pump Station and a new 1.1-million-gallon storage tank equipped with a 6 mgd submersible dewatering pump station. The project also includes several sewer regulator/diversion structures and 1,100 feet of new gravity sewer and/or force main.

Due to the project's complexity and schedule requirements, special consideration was applied to appropriate construction sequencing to minimize disruption to the community and maintain operations during construction.

This project yields several relevant comparisons to the East Hickman Pump Station in the complexity associated with instrumentation and controls to manage duty pump low flow scenarios with significant variations in flow during wet weather for both the duty pumps and wet weather pumps to divert flow to a new storage facility.

Metropolitan Council Odor Consulting Services Master Contract

Minneapolis, MN

Hazen provides ongoing odor consultancy technical support, sampling, and design services to the Metropolitan Council Environmental Services (MCES) in Minneapolis, MN. This work spans from inside Met Council treatment plants to their collections system. Notable portions of work include:

- L32 Lift Station Odor Control Improvements
- M130A Odor Investigations
- MEI Airflow Evaluation
- St. Croix Valley WWTP Odor Evaluation
- L73 Lift Station Odor Control Evaluation and Improvements
- M130 Odor Control Design

Hazen provides analysis of existing data and reports presenting to MCES the best options for odor remediation.



This is a Stantec project reference for the Northeast Ohio Regional Sewer District.

Key Team Members

Brad Sauder
Doug Reed



Key Team Members

Ryan Mckenna
Task Lead

Richard Pope
Technical Advisor

Project Profile

Project Duration: 2021 - Ongoing

Hazen's Engineering Project Fees:

L32: \$279,975

M130A: \$54,797

MEI: \$84,942

St. Croix: \$88,436

L73: \$177,443

Reference

Jeff Schwartz, PE
MCES
390 Roberts St. N
St. Paul, MN 55101
651.602.1176
jeffrey.schwartz@metc.state.mn.us

Sioux City Facility and Collection System Odor Control Study

Sioux City, IA

Hazen provided odor control sampling, dispersion modeling, and comprehensive odor data analysis for the City of Sioux City, IA as part of larger improvements throughout their wastewater treatment plant (WWTP) and collections system. The odor control sampling included two weeks of data collection with continuous and grab sample collections at the WWTP and three key lift stations in the collection system. This sampling utilized liquid- and vapor-phase sampling for odor causing compounds, sulfur speciation, and hazardous compounds. Incorporating the field data into an odor dispersion model provided a greater understanding of the onsite and offsite impacts from individual odor sources at the WWTP and in the collections system. The resultant impacts were compiled for an odor control workshop discussion with the City identifying the assorted odor control needs at each location in the main WWTP as well as in the collections system.



Key Team Members

Richard Pope
Technical Advisor

Ryan McKenna
Odor Control Lead

Daniel Honeycutt
Project Engineer

Patrick Moore
Cost Estimating

Rich Van Dyke
HVAC

Mero Street Sanitary Pump Station Frankfort, KY

The Mero Street Sanitary Pump Station, constructed in 1951, is a triplex pump station with a 6.2 mgd capacity. The pump station, constructed before the USACE flood protection measures completed in the 70's, is on the river side of the levee wall and must be shut down once river levels inundate the pump station, making it one of the most critical facilities for reducing combined sewer overflows as part of Frankfort's Long Term Control Plan.

The city selected Hazen to design a new sanitary pump station outside of the levee wall with a design capacity of 7.2 mgd and upgrade the existing flood pump station to meet its 120 mgd capacity.

The project includes connecting the new sanitary pump station to the existing force main and constructing a new force main to outfall further downstream for redundancy. The location of the pump station adds many unique requirements to this project. The proximity to the levee and location of the adjacent roadway and hotel adds architectural and spatial constraints to the project that must be met to the satisfaction of all stakeholders. To reduce construction costs on the flood pump station, Hazen commissioned a scale model allowing the physical footprint of the wet well to be maintained and ensuring that improvements to the pump station will operate successfully into the future.



Key Team Members

Kurt Zehnder
Project Manager

Tyler Bridges
Design Lead

Daniel Honeycutt
Design Engineer

Jon Schubarth
Project Director

Project Profile

Project Duration: 2023 - Ongoing

Construction Cost: \$26.5M
(estimated)

Reference

Michael Hesse, PE
Project Engineer
Frankfort Sewer Department
502.352.2012
mhesse@frankfort.ky.gov



West Kingsport Pump Station and Force Main

Kingsport, TN

The West Kingsport and Pendragon pump stations were constructed in the early 1960s. The West Kingsport PS has a capacity of 1,400 gpm (2 mgd) at 50 feet of total dynamic head (TDH), and includes three shaft driven centrifugal pumps. Each pump station required updates to address increasing upstream flows, wet weather impacts and aging infrastructure.

The City selected Hazen to evaluate and design improvements for each pump station. During the evaluation phase, Hazen determined that the Pendragon pump station could be eliminated by installing a slightly deeper sewer system downstream. A new 18-inch gravity sewer will replace the existing force main and gravity sewer downstream and will connect to existing gravity sewer that is tributary to the West Kingsport pump station.

Hazen also determined the existing West Kingsport pump station can be repurposed to result in savings of over \$600,000 when compared to design and construction of a new station. Pump station improvements included increasing the capacity to 4,200 gpm (6 mgd), replacing aged comminutors with new open channel grinders, adding a hoist system inside the pump station, and architectural improvements to improve aesthetics of the pump station that sits adjacent to a busy city street, frequented community greenway, and the South Fork Holston River.

The new JWC Environmental Channel Monster's installed for the project were one of the innovative solutions that allowed the existing pump station to be repurposed instead of demolished.

In addition to preparing the pump station rehabilitation design, Hazen analyzed the point of discharge from the pump station force main. The force main currently discharges to a gravity sewer that can be stressed during wet weather. Hazen determined that the force main could be rerouted downstream to discharge directly into the wetwell of the Kingsport PS to relieve possible wet weather issues.

Project Team

Rich Tomko
Design Lead

Patrick Moore
Cost Estimating

Project Profile

Project Duration: 2019-2020

Cost: \$6.2M

Reference

Niki Ensor
Water/Wastewater Facilities
Manager
City of Kingsport
423.224.2487
ensor@kingsporttn.gov

Hazen's open-minded approach to evaluating improvement alternatives led to a savings of over a half a million dollars in capital cost and eliminated a pumping station altogether. The solution reduced the number of pumping stations in the Kingsport collection system and eliminated required maintenance if the Pendragon pump station remained in operation.

Section 4: Project Manager Experience and Capability



Section No. 4

Project Manager Experience and Capability

Meet Your Project Manager

“Over the course of my career, I have delivered many large-scale sanitary pump stations, several with wet weather (WWS) storage facilities associated with them throughout Kentucky and Ohio. This work includes design and/or project management for several triplex and 4-plex, sanitary pump stations with WWS facilities for LFUCG (TB WWS P1, WR WWS, WH7 WWS, EH WWS P1, WH WWTP WWS P1 and 2, and UCR WWS) and several other PS facilities as listed in the included table. I would love to bring my historical continuity and knowledge to another project at DWQ.”

Kurt Zehnder



What are the main risks or challenges to this project?

“The biggest risks to this project are identifying the correct odor control equipment and proper pumping capacities for this facility and its new 6-mile-long, 36-inch force main. Working with operations to ensure the EH WWS tank is utilized during wet weather events and not conveying 20+ mgd flows to the WH WWTP during a rain event is critical to the EH and WH sewersheds. Another important project risk includes maintaining a tight evaluation and design schedule to ensure bidding and construction timelines are identified to align with the funding schedule. All these risks are alleviated with selection of the Hazen team.”

What makes our team the right team for LFUCG-DWQ?

“This Hazen team is the perfect match to deliver a complete project on time and on budget. With our historical knowledge of LFUCG’s collection and pumping system, hydraulic model, design standards, and working relationships with operational staff, the Hazen team will be ready to meet within weeks of the issued award to finalize pump selections, capacities, and operational scenarios. With this team there is no need for ‘data dumps’, or ‘bringing the team up to speed’, as we are already aware of the concerns at this facility and the alternatives behind the possible solutions. Selecting our team gives DWQ the best chance at a successful project with an expedited design getting the project to advertisement and full access to the grant funds.”

What is exciting about this project?

“Working with DWQ’s operations staff to make sure that pump station designs and operations are functional and user friendly. This project lets me, and my team fix any problems and issues with this station and in design of Phase 2, ensure LFUCG-DWQ gets a flagship pump station and wet weather storage facility that operates as intended with adequate controls preferred by their staff. I’m excited to work with the DWQ staff I’ve worked alongside for most of my career to improve and be proud of this facility.”

How does your experience make you the ideal project manager for the EHPS project?

“I have consistently demonstrated exceptional proficiency in managing design activities for large-scale pump station projects over my 20-year career. My extensive experience spans various complex infrastructure projects, overseeing all phases of design, from finalized planning and conceptualization to detailed engineering and final implementation. For instance, I recently led the successful design and construction of a similar pump station facility with odor control for GMWSS, a project that parallels the EH PS initiative in both scope and technical demands. My approach to project management includes rigorous adherence to timelines, meticulous resource allocation, and proactive risk management, which collectively guarantee the smooth progression and successful completion of the project.

How does your knowledge of codes and regulatory requirements contribute to your success of this project?

“My deep understanding of the applicable codes, standards, and regulatory requirements pertinent to pump station design allows this project to move forward without interruption. I’m always staying updated of the latest industry standards, including those set forth by the American Water Works Association (AWWA), 10 State Standards, and Kentucky Division of Water (KDOW). My projects consistently meet or exceed these stringent requirements showing Hazen’s commitment to compliance and quality.

What is your funding experience with KIA-SRF and Cleaner Water Grants?

“I have had extensive experience with KIA-SRF over the past 20 years. I have a great working relationship with my colleagues at the state KIA office and will text or call any of them for answers or guidance on any issues that arise. I have been navigating the complexities of federal, state, and local funding sources for years and each one is a little different. KIA-SRF is managing this grant with very similar requirements to their traditional loan program and we have already completed a project with this grant funding in the last year. With DWQ taking the lead on this grant administration, the Hazen team and I will be here to support any additional needs that arise. This familiarity with the grant funding requirements enables me to develop accurate budgets, and ensure compliance with all financial regulations.

Why is communication important?

“Effective communication is one of the most important attributes of a project manager. I excel in communication by clearly articulating project goals, timelines, and technical details to all team members. My proactive communication style ensures that potential issues are addressed promptly, and critical information is relayed efficiently. My leadership in project meetings fosters a collaborative environment where team members are encouraged to share insights and feedback, enhancing the overall project outcome. It’s important to have the ability to respond swiftly to inquiries and provide comprehensive updates instilling confidence and maintaining project momentum, crucial for the timely and successful delivery of the EH PS Project.

Below is a table summarizing select projects from Kurt’s extensive pump station experience.

Pump Station	Capacity	Additional Information
South Sewer Extension, Contract 1 GMWSS	6.4 mgd	New pump station 4 plex, divided wet well, odor control
Willow Sanitary and Stormwater Pump Stations, Frankfort, KY	2,000 gpm	Triplex sanitary pump station
Mero Flood Pump Station and Sanitary Pump Station, Frankfort, KY	120 mgd (Flood), 7.2 mgd (Sanitary)	New triplex station
Wastewater Pumping Station and Force Main, LORCO, Lorain County, OH	5 mgd	Odor control
WWTP Upgrade, Corbin, KY	9 mgd	Expansion/upgrade of Pump Station No. 1
Seward Pump Station No. 1, Fairfield, OH	900 gpm	Duplex pump station with chopper sewage pumps
Wet Weather Flow Storage and Pumping Facilities, Lawrenceburg, KY	2.5 mgd	Duplex submersible pumping station, WWS Tank
Town Branch Wet Weather Flow Storage and Pumping Facilities, LFUCG	56 mgd	Four-plex submersible pumping station, WWS Tank
U.S. 127 & KY Hwy 70 Collector Sewer Extension, Liberty, KY	180 gpm, 250 gpm	Duplex pump stations
Phase I Collector Sewer Project, LORCO, Lorain County, Ohio	100 gpm - 2,300 gpm	15 pumping stations
Morgan County Wellness Center and KY 7 Corridor Sanitary Sewer Extension, West Liberty, KY	200 gpm	Submersible duplex pump station, Grinder
Wastewater System Improvements (Contract B), West Liberty, KY	1,600 gpm	Primary influent triplex pumping station

Section 5: Project Team Experience and Capability



Section No. 5

Project Team Experience and Capability

Hazen is a leading national water and wastewater engineering firm. Since 1951, we have worked with major utilities providing a full suite of capabilities and services to our clients.

For the past 15 years, Hazen has worked alongside Lexington-Fayette Urban County Government (LFUCG) Division of Water Quality (DWQ) on the implementation of the Remedial Measures Program (RMP). During this time, Hazen has gained an understanding of DWQ's dedication to the community. Our core project team will leverage our national expertise in pump stations and odor control to develop effective improvements to the East Hickman Pump Station. Our project team also includes **Stantec**, another long term partner of DWQ. Stantec will lead modeling efforts for this project and also provide support disciplines of electrical, instrumentation & controls, and structural engineering.

With over 1,800 employees in 70+ offices, Hazen and Sawyer (Hazen) is one of the foremost consultants in the nation focusing exclusively on **all things water**[®]. Our staff are dedicated to solving the most complex issues faced by utilities across the US.

We have no barriers to sharing resources and expertise across the firm. This culture of open collaboration across our offices allows us to offer clients local responsiveness backed by industry leading experts. We do this readily on every project to provide our clients with high-quality, cost-effective technical services. This offers DWQ ready access to our nationally recognized technical expertise to address your key project challenges.

Why Hazen

Since 2008, Hazen has worked with DWQ on the RMP program and we will continue to apply our dedication and responsive technical expertise to address the needs of the East Hickman Pump Station.



Hazen's Local Office

230 Lexington Green Circle, Suite 520
Lexington, KY 40503
Contact: **Jon Schubarth**
jschubarth@hazenandsawyer.com
859-219-1126

Since 1951

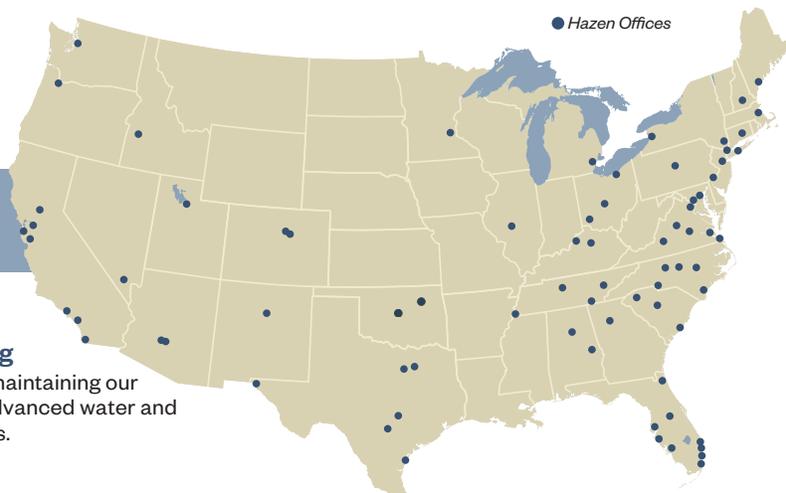
Hazen and Sawyer has been focused on **all aspects of water**.

We have grown to
1,800+ staff members

**A Top
ENR
Firm**

in Water Engineering

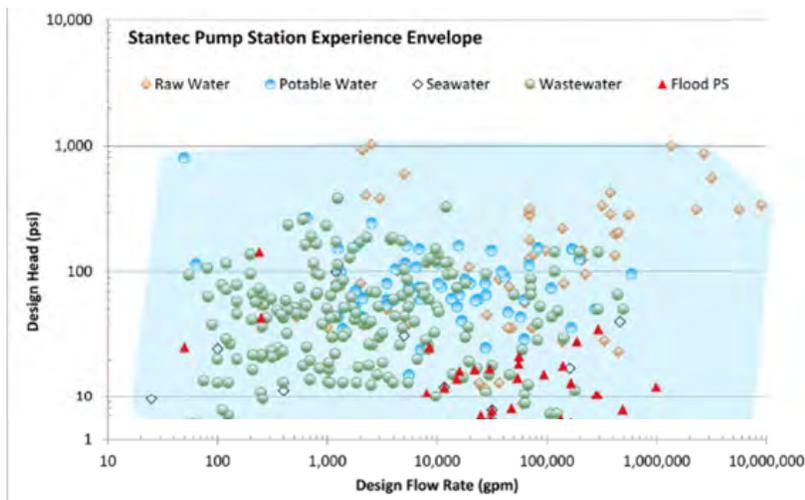
Hazen is committed to maintaining our position as a leader in advanced water and wastewater technologies.



Subconsultant Information

Stantec is a multi-disciplinary consulting firm with a proven track record of providing quality wastewater and stormwater services to LFUCG for over 30 years. Globally, Stantec unites 30,000 employees working in over 400 locations across 6 continents and is the #1 Sewer/Waste Design Firm in the world (ENR Magazine, 2023). Locally, they employ over 300 professionals in their Lexington office at 3052 Beaumont Centre Circle. Stantec has maintained an office in Lexington since 1966.

As a publicly-traded company with ISO:9001 certification for their rigorous 10-point Project Management Framework, Stantec’s clients are assured that Stantec’s accounting and business practices adhere to strict government regulations, ethical conduct and reporting standards.



Stantec has successfully designed innovative, yet economical pump stations for over 50 years and provided planning, design, and construction engineering for more than 2,000 pumping stations in a broad range of capacities as illustrated by the experience envelope to the left.

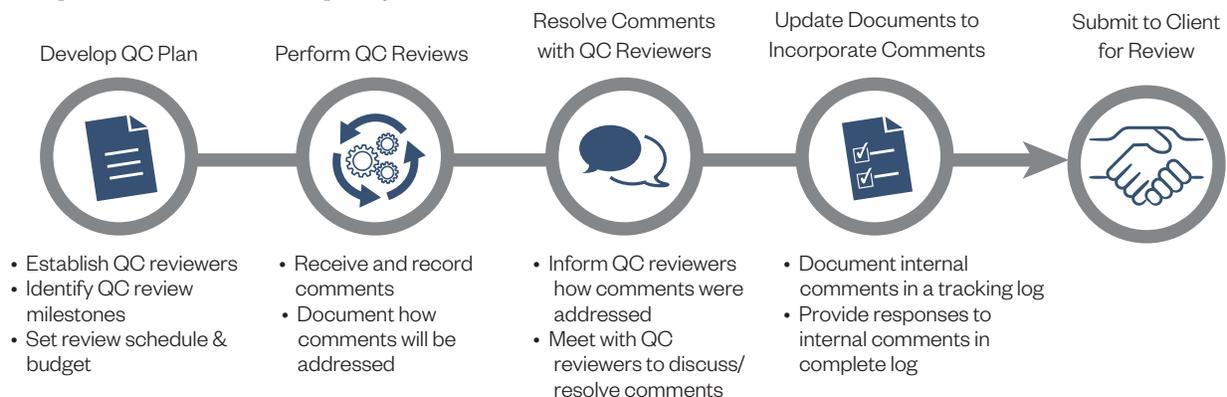
Hazen’s QA/QC Procedures

Commitment to Quality

An effective quality control procedure is absolutely critical for a successful project. Hazen’s commitment to quality is defined by our people and fostered through our formalized QA/QC process. This process is reinforced through our training programs for technical competency and QA/QC compliance, and ingrained in our culture to do the right thing when issues arise on a project.

Hazen’s Quality Assurance and Quality Control Approach

Our team has a clear understanding of DWQ’s expectations for a high quality product. We present below our own internal QA/QC process with fundamental synergies that will benefit project development and completion, and document quality.



Hazen's Team

Our team foundation is built to provide the horsepower and timely delivery to have no issues with the project schedule. Our team offers experts in pump station design, odor control, hydraulic modeling, and instrumentation and controls to deliver a high quality design.

Combining this technical foundation with our team's unmatched familiarity with DWQ we offer the right combination of insider knowledge and technical capability to delivery this project in line with DWQ desires and within the schedule. Key team members include:

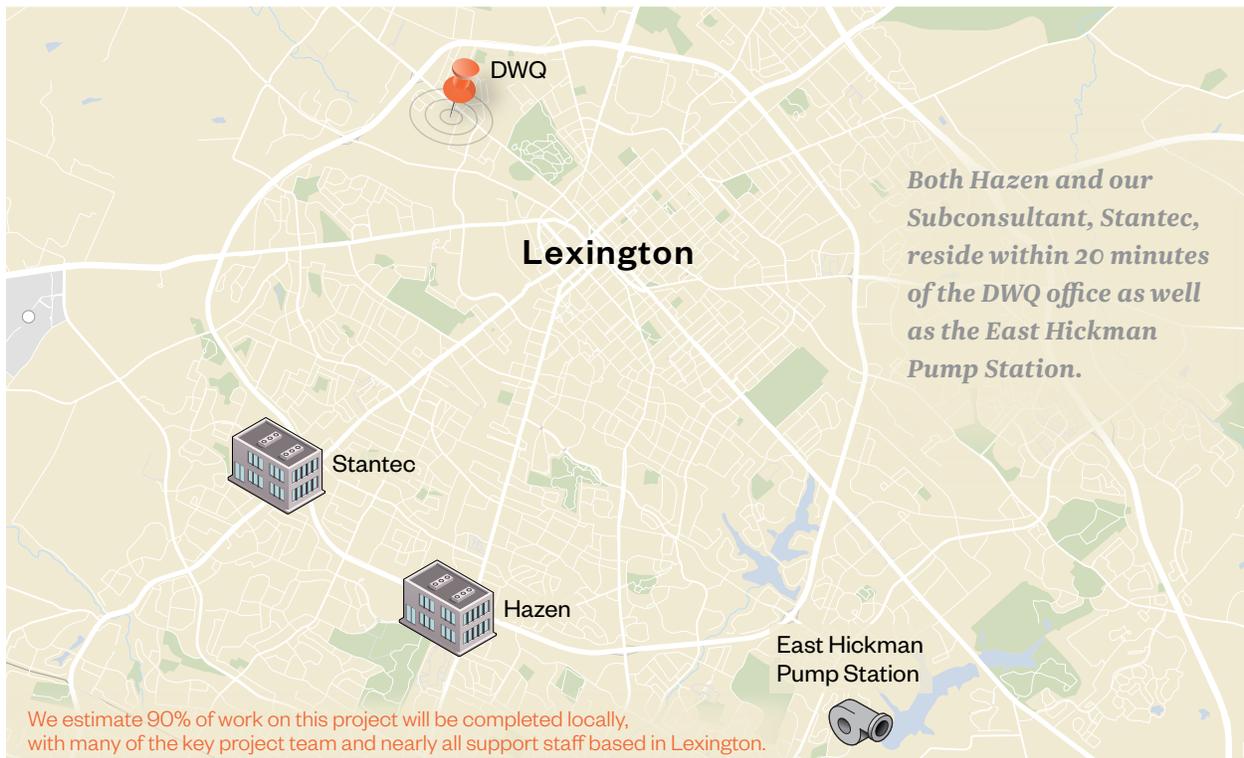
- **Kurt Zehnder** - Familiar Project Manager with a proven track record of design and construction delivery for DWQ.
- **Tyler Bridges** - Seasoned design lead with recent, relevant project experience and familiarity with DWQ.
- **Ryan Mckenna** - Provides national odor control expertise to ensure the right solution is employed for EH PS.
- **Bret Lavey** - DWQ's modeling leader with over 10 years experience modeling DWQ's wastewater system.
- **Joe Sauder** - Brings over 30 years of I&C experience to ensure the pump controls are improved to optimize operations.
- **A Deep Bench** - The resources and capacity of two firms with strong local presences and industry leading national expertise.



East Hickman Pump Station site.



Pulled existing damaged dry weather pump.

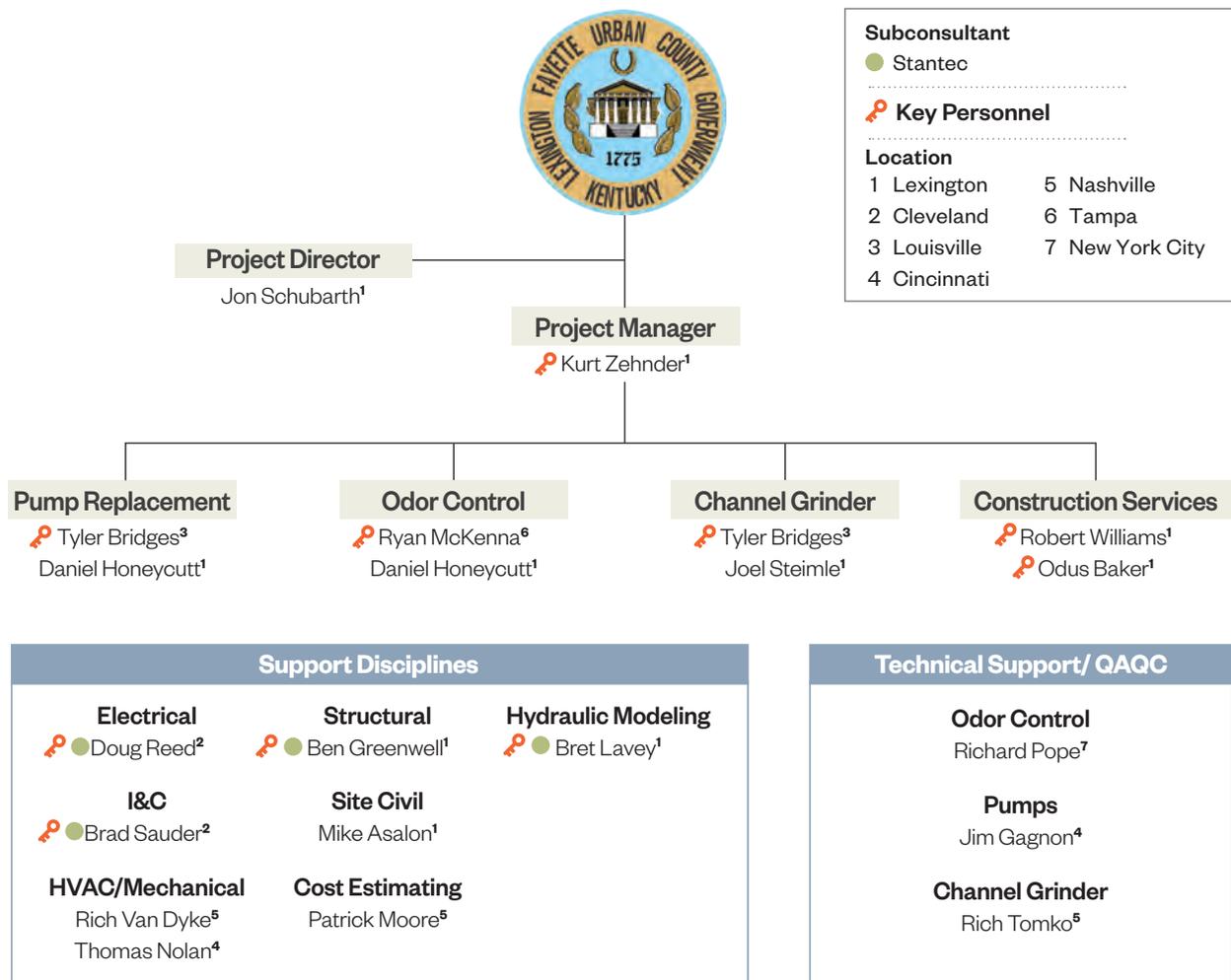


The Hazen/Stantec team proposed for this project is comprised of key local personnel familiar to RMP staff, supported by national experts.

The Hazen/Stantec team will work closely and collaboratively with DWQ, just as we have both done for many years on the RMP program. Our team will be lead by Kurt Zehnder, who is the same Project Manager currently leading Hazen’s work on the RMP program. Kurt has an excellent working relationship with DWQ staff and possess an intimate knowledge of DWQ procedures and preferences. The team working alongside Kurt includes many individuals actively involved in the RMP program and significant DWQ experience through other projects. Our team is prepared to hit the ground running and deliver the improvements to the East Hickman Pump Station desired by DWQ.

One page resumes for our key team members follow.

Organization Chart





Tyler Bridges
Pump Replacement and
Channel Grinder Lead

How do we select pumps to optimize the East Hickman PS for current and future flows?

“Since startup the EH PS has been plagued by pump operating issues. At startup the pump station was geared toward peak flows and not well equipped for the lowest dry weather flows. Pump selection needs to consider the wide operating flows of the EH PS and select pumps equipped to handle low flow periods just as well as peak flows. The wet well operating volume, diameter of the EH FM, and the pump operating capabilities will all factor into this decision. In addition, this will present an opportunity through increased controls to better utilize the WWS.



Ryan McKenna
Odor Control Lead

What are the challenges to odor control along the entire six-mile route of the East Hickman Force Main?

“The extended length and frequent low-flow periods of the EH FM result in long detention times. This creates an anaerobic environment primed for the generation of H₂S and associated odor and corrosion issues. Preventing the formation of H₂S within the force main through the use of chemicals or dissolved oxygen offers the best solution to mitigate odor and corrosion issues at air release valves along the force main route. However, due to the very long detention time in the force main, a significant amount of treatment would be required. Our experience shows that for long, larger diameter force mains, superoxygenation systems like ECO₂ surpass traditional chemical treatment options and offer the most effective and affordable treatment over the long term.



Bret Lavey
Hydraulic Modeling Lead

How can a reliable model of the East Hickman Force Main inform both the pump selection and odor control design?

“I’ve been maintaining the system-wide model for Lexington for over a decade now. In that time I’ve evaluated the various alternatives for East Hickman over a dozen times. While we employ more sophisticated tools (e.g., AFT Fathom, CFD modeling, etc.) for evaluating the hydraulics and pump cycling through a complex pump station, the system-wide PC-SWMM model provides great insight at a macro-level to overall system hydraulics. This will allow our team to quickly estimate cycle times for each pump/proposed pump through system. Each alternative can be quickly dropped in the existing model with a goal of meeting overall capacity needs while providing better run times during normal day conditions. Similarly, this understanding will offer predictive velocities and cycle-times through the proposed forcemain to identify alternatives that will mitigate against stale water in the forcemain exacerbating the odor concerns.



Brad Sauder
I&C Lead

Control issues with the East Hickman Pump Station have been an issue since start-up. How have you used improved controls to enhance pump station operation on previous projects?

Based on prior projects, there are several controls improvements worth exploring.

- 1) Reducing pump cycling during low flows could be achieved through VFDs, two smaller pumps (two pump sizes), or discharge valve modulation.
- 2) Reduction of nuisance alarms, seal failures, motor thermal failures, bearing failures may be corrected through improved wiring, installation, and grounding methods. We’ve also employed alarm time delays to allow for short term variations in measurements, implementation of Out-Of-Service programming or use HMI alarm management tools, implementation controls that take into account varying suction head to the pumps, and limiting the pump restart frequency.
- 3) Improvement of alarm reset and response procedures may be achieved by allowing for automatic reset when possible, but requiring local reset of alarms when needed to confirm acceptable pump operation, such as bearing temperature or vibration alarms.
- 4) Addressing potential issues as associated with proper redundant PLC / hot-standby operation might be addressed through the reliance on stocked spare parts and fast-response service contracts, rather than redundant PLCs.
- 5) Providing efficient use of the Wet Weather storage tank will be achieved by fully taking advantage of information and interlocks communicated from related facilities, as well as interlocks within the pump station.



Kurt Zehnder, PE

Senior Associate

Mr. Zehnder has 21 years of experience in planning, evaluation, and design of wastewater projects including sanitary pump stations, wet weather storage facilities, and wastewater collection sewers. Almost all of these projects had funding administered by Kurt and his team.

Education

BSCE, University of Kentucky, 2003

Certification/License

Professional Engineer: KY, OH

Areas of Expertise

- Wastewater pumping station planning and design
- Gravity collection systems and force mains planning and design
- Wet weather storage tanks
- KIA-SRF Funding Administration

Experience

- 21 total years
- 7 years with Hazen

Professional Activities

KY/TN American Water Works Association

KY/TN Water Environment Association

Kentucky Society for Professional Engineers

Remedial Measures Plan (RMP), LFUCG, Lexington, KY

Project Manager. Project alternatives, construction schedules, QA/QC reviews, Design Alternative Optimization workshops, and technical specification creation. Manage construction projects for DWQ (RMP) from design, bidding, construction, & closeout. Duties include program deadlines, capacity requirements, and funding administration.

WH WWTP Influent Pump Station Temporary Pump Replacement, LFUCG, Lexington, KY

Project Manager. Design services & construction services include sizing & selection of temporary pumps to supplement the influent PS.

WH WWTP Final Clarifiers #7 & #8 Rehabilitation, LFUCG, Lexington, KY

Project Manager. Includes structural repairs to two clarifiers, rock anchor pull testing of existing rock anchors, and a new passive structural floor design and rehab for both final clarifiers #7 and #8.

WH WWTP Process Optimization Model, LFUCG, Lexington, KY

Project Director. BioWin Model to help optimize phosphorus removal at the WWTP including reviewing plant data, sampling, & modeling; data analysis, technical reporting, and coordination with LFUCG staff.

South Sewer Extension, Contract 1, GMWSS, Georgetown / Scott County, KY

Project Manager. Design for a new 6.4 mgd divided wet well, fourplex submersible pump station with dual 12-inch & 18-inch force mains to serve a mobile home park and the the south side of Georgetown.

Mero Flood Pump Station and Sanitary Pump Station, Frankfort, KY

Project Manager. Renewal of Mero Flood PS (120 mgd), new pumps, electrical room, relocated new triplex, sanitary PS (3.6 mgd), electrical building, mechanical bar screen, standby generator, & green roof to the protected side of the levee.



Tyler Bridges, PE

Associate

Mr. Bridges has spent much of his 13 year career focused on pump stations and hydraulics. He has completed studies, design, and construction on a variety of pumping projects ranging up to 1,900 mgd in capacity.

Education

MEES, University of Florida, 2013

BSCE, University of Kentucky, 2010

Certification/License

Professional Engineer: KY

Areas of Expertise

- Planning, and design for pump stations and WWTPs
- Hydraulic modeling
- Sanitary sewer design and construction
- Sanitary sewer rehabilitation

Experience

- 13 total years
- 4 years with Hazen

Professional Activities

American Water Works Association

National Society of Professional Engineers

- Kentucky Society of Professional Engineers

Remedial Measures Plan (RMP) Implementation Services, LFUCG, Lexington, KY

Project Manager. Manage projects through design, bidding, construction, and closeout. In addition to PM duties, he has completed several preliminary engineering reports (PER)/ technical memorandum (TM) outlining upcoming projects. Notably, Tyler has managed design and construction for the East Hickman Force Main project and developed TMs for East Hickman Pump Station Phase 2 improvements and East Hick Pump Station Odor Control.

Mero Flood Pump Station Renewal, Frankfort Sewer Department, Frankfort, KY

Tyler led the design of the complete rehabilitation of a 121 mgd flood pump station and the design of a relocated 7 mgd sanitary pump station. The hydraulic design of the flood pump station included working with a specialty subconsultant to develop a physical model of the pump intakes to ensure the proper hydraulic function of the new 28,000 gpm flood pumps.

Experience Prior to Hazen

West Frankfort Pump Station Design, Frankfort Sewer Department, Frankfort, KY

Project Engineer. Design of a new 7.2-mgd pump station to replace an existing undersized pump station on the same site. The design included site work, odor control, an open channel grinder, and demolition of the existing pump station.

Upper Cane Run Wet Weather Storage, LFUCG, Lexington, KY

Project Manager - Design of 2 MG above ground concrete storage tank, 8.5-mgd wet weather pump station, diversion structure with screening, and other associated site improvements. Conveyance piping for the project included a 24-inch forcemain and 27-inch gravity sewer to convey flow to and from the storage tank located approximately 1,000 LF from the pump facilities.



Ryan McKenna, PE

Senior Associate

Mr. McKenna's experience is focused on odor control projects in all phases – from field sampling and alternative evaluations through detailed design, construction, and optimization. He is a nationally-recognized odor control expert, a co-author of the WEF Manual of Practice 25: Odor Emissions and Control for Collection Systems and Water Resource Recovery Facilities (Second Edition), and has worked on over 100 odor control projects nationally and internationally.

Education

ME, University of Florida, 2006,
Environmental Engineering

BS, University of Florida, 2005,
Environmental Engineering

Certification/License

Professional Engineer: FL

Areas of Expertise

- Odor Control
- Project Management

Experience

- 19 total years
- 7 year with Hazen

Professional Activities

Water Environment Federation

Florida Water Environment
Association

WEF Air Quality and Odor Control
Committee

FWEA Air Quality Committee

Lift Station Odor Control Improvements, Sioux City, IA

As part of a project to improve odor control within the City's collection system, Mr. McKenna served as Hazen's Odor Control Lead for the field sampling, alternatives evaluation, and preliminary design of liquid and vapor phase treatment upgrades at the Floyd, Riverside, and York Pump Stations. Detailed design of the innovative solutions, including superoxygenation and hydroxyl radical fog technologies is on-going, and is expected to provide significant – and cost-effective – odor and corrosion benefits to the City and the surrounding communities.

Lift Station 32, Metropolitan Council Environmental Services (MCES), MN

Mr. McKenna served as Hazen's Odor Control Lead for the design of odor control system improvements at the MCES L32 lift station. Work included as part of this task included field sampling, atmospheric dispersion modeling, and the design of a packaged biofilter system. Additionally, the existing dry media system was optimized to include an additional polishing layer for removal of reduced sulfur compounds (RSCs) in addition to hydrogen sulfide (H₂S).

Comprehensive Odor and Corrosion Study, City of Gainesville, GA

A comprehensive odor study was conducted to evaluate the effectiveness of the existing odor control strategies and where additional odor control measures are needed. A broad spectrum of liquid and vapor phase parameters were sampled at 21 locations throughout the collection system, and modeling was performed in conjunction with GDWR's SewerGEMS Hydraulic model, to evaluate treatment alternatives, including superoxygenation, and to develop an Odor and Corrosion Control Program Implementation Plan.



Robert Williams, PE

Senior Associate

Mr. Williams has managed the conceptual design, detailed design, and construction execution phases of large industrial projects in both the industrial and public sectors. He has over 25 years of experience in the design and construction of wastewater infrastructure projects.

Education

BS, Civil Engineering, Virginia Polytechnic Institute & State University, Blacksburg VA, 1998

Certification/License

Professional Engineer: KY, IN, OH, VA, FL

Areas of Expertise

- Large project development and construction management
- Cost estimation and project controls of capital projects and programs
- Design-build and alternative project delivery
- Wastewater Treatment Plant Construction

Experience

- 26 total years
- 1 year with Hazen

Professional Activities

Kentucky Society of Professional Engineers

Lower Town Branch Pump Station , W. Rogers Co, Lexington KY

General Superintendent for the General Contractor during construction of the Lower Town Branch Pump Station. The Lower Town Branch Pump Station was construction on the Property owned by the Federal Bureau of Prisons. The approximately 30' deep "Tee-Shaped" concrete wetwell required extensive blasting in high strength limestone bedrock. A high ground water table and run-off from the existing Bureau of Prison's Wastewater Treatment Facility increased the complexity for dewatering operations. The submersible pump station includes an activated carbon odor control system, a completely enclosed building, electrical switch gear, and a back-up power system.

West Hickman Wastewater Treatment Plant Influent Pump Station Improvements, HDR Engineering, Inc., Lexington, KY

Contract administrator and construction specialist for the engineering, bidding, and construction of new influent pumps at the West Hickman WWTP. The existing screw pumps were demolished and replaced with VFD controlled submersible pumps. The project included several piping challenges to fit the new discharge piping within the orientation and footprint of the existing station. Controls and multiple pumps sizes were necessary for operation in both peak and diurnal conditions.

Hays Boulevard Owner's Engineer, HDR Engineering, Lexington KY

Lead Contract Administrator acting on behalf of the Owner (LFUCG) for the construction of Hays Boulevard. The project required coordination amongst the Three (3) developers of the Polo Club Community and their consultants. The main responsibilities of the Owner Engineers were to verify the LFUCG exaction tax credits were properly applied to only the roadway and drainage improvements in LFUCG Right-of-Way and to verify compliance with all LFUCG Manuals and Standards.



Odus Baker

Senior Field Coordinator

Mr. Baker responsibilities include field inspections of sanitary sewer, storm sewer, detention basins, erosion control, and storm water facilities with 15 years of experience.

Education

BS, Landscape Architecture,
University of Kentucky, 2009

Weapon System Technology,
Community College of the Air
Force, A.S. Aircraft, 1993

Certification/License

Kentucky Erosion Prevention and
Sediment Control Program

Areas of Expertise

- RPR for construction of wastewater treatment plant, pump stations, gravity, and force main sanitary sewers
- Construction and administration

Experience

- 15 total years
- 1 year with Hazen

Remedial Measures Plan (RMP) Implementation Services, LFUCG, Lexington, KY

Field Coordinator for implementation of LFUCG's RMP-related programs which are mandated by its USEPA Consent Decree. Services include field evaluations, standard operating procedures, training, specifications, and procurement/construction administration.

South Sewer Extension Contract 2, Georgetown/Scott County, KY

Field Representative on the project that consists of 41,000 LF of 8-inches to 27-inches gravity PVC, 129 precast manholes, 12,000 LF of 12-inches to 18-inches force main, service connections to 500 residential units, 50,000 LF of 6-inches sanitary lateral pipe, a new 6-mgd pump station including electrical, mechanical, instrumentation and a 750KW generator.

Experience Prior to Hazen

LFUCG, Lexington, KY

Responsibilities were to observe, document, and report to design Engineers and Owners of the proper construction, installation, and backfilling of sanitary sewer as per approved construction drawings and RMP specifications. Responsibilities also include preparing daily field reports, quantifying the amount of rock removal, and confirming the quantities with contractor for each pay request.

- West Hickman Trunk B Sanitary Sewer Replacement.
- West Hickman Trunk C Sanitary Sewer Replacement.
- West Hickman Trunk D Sanitary Sewer Replacement.
- East Lake Trunk Sanitary Sewer Replacement.
- Century Hill Trunk Sanitary Sewer Replacement.
- Idle Hour Trunk Sanitary Sewer Replacement.
- Woodhill Trunk Sanitary Sewer Replacement.



Douglas Reed PE

Electrical Lead
36 years of experience · Cleveland, Ohio



Doug has over 35 years of experience in the design, construction administration, and project management of power, control, and instrumentation systems for water/wastewater facility projects. His designs have included low- and medium-voltage power distribution and standby engine-generator systems, low- and medium-voltage variable-frequency drives, lighting, solid state power system monitoring and protection, implementation of SCADA control systems, medium-voltage induction and synchronous motor and controls, and related electrical work. Doug has managed several large electrical standby generator installation projects and low/medium voltage unit substation replacements on existing facilities while maintaining continuous operation.

EDUCATION

BS, Electrical Engineering, Ohio University, Athens, Ohio, USA, 1987

REGISTRATIONS

Professional Engineer #22237, Commonwealth of Kentucky, Awarded 12/10/2001, expires 06/30/2024

PROJECT EXPERIENCE

Western Regional Wastewater Treatment Plant | Sanitation District #1 | Kentucky

Doug provided electrical design services for the Electrical facilities of the new 35-mgd activated sludge wastewater treatment plant. The electrical design consisted of two incoming 12.47KV utility lines to main distribution draw-out circuit breaker switchgear in the Blower Building. Power is distributed through the plant to unit substations, which feed MCCs located in the various facilities. Other work includes medium voltage (4.16KV) starters for the Aeration Blowers, PLC controls, security cameras and low-mast site lighting to minimize impacts to neighbors of the facility.

Patterson Road and Marathon Blvd. Wastewater Pump Stations | Gwinnett County, GA

Doug provided electrical design and construction administration services for the Patterson Road and Marathon Blvd wastewater pump stations in Gwinnett County, Georgia utilizing 400 and 500-HP submersible pumps respectively. Designs included 480 volt substations and solid state motor starters as well as level controls and remote telemetry.

Westerly Storage Tunnel and Dewatering Pump Station | Northeast Ohio Regional Sewer District | Cleveland, Ohio

Doug provided QA/QC reviews and electrical subject matter expertise during design and construction of a new 36-MGD, 200-foot-deep tunnel dewatering pump station. The facility is designed to dewater the approximately 9,000-foot-long, 25-foot-diameter WST within 24 hours and is comprised of a 46-foot-diameter wet well shaft, five 9-MGD Flygt pumps, and a support building. Electrical facilities include a new 4.16 kV utility service from Cleveland Public Power and a standby generator to provide standby power for the non-pumping portion of the facility.

Lima CSO Storage Tank and Dewatering Pump Station | City of Lima, Ohio

Doug led electrical engineering for a CSO storage tank project comprised of a 13-MG underground storage tank with 18 individual flushing bays using hydraulically actuated flushing gates and a 30-MGD submersible pump station for tank dewatering. The project included power distribution and controls to operate the pumps to dewater the tank after a CSO event has passed.

Easterly Tunnel Dewatering Pump Station | Northeast Ohio Regional Sewer District | Cleveland, Ohio

Doug supervised electrical design of a 160-MGD deep tunnel dewatering pump station. The project included seven large dewatering pumps, varying between 450 and 1600 horsepower designed to operate at 4.16 kV. The main switchgear and solid state reduced-voltage starters are in a dedicated electrical room above grade, while the pumps and motors are located approximately 250 feet below grade. The pump station is also designed for full automation and can be remotely controlled at the nearby wastewater treatment plant receiving the flows.

Low Service and Transfer Pumps Replacement | Kentucky American Water | Lexington, KY

Doug performed the electrical design for replacement of raw water pumps at Kentucky American Water's KRS1 treatment plant. The project included replacement of one 15 MGD, 1250 HP pump at the low service station on the Kentucky River, and another 18.1 MGD, 1250 HP pump at the transfer station at the plant to convey flows to the Jacobson Reservoir. Project included direct coordination with vendors for early procurement of the pumps, motors, and VFDs. The project is being implemented to provide greater flexibility and controls over the raw water pumping scheme for better energy efficiency.



Benjamin (Ben) Greenwell PE

Structural Lead
18 years of experience · Lexington, Kentucky

Ben has over 18 years of experience as a structural engineer, with design, analysis, and inspection work for steel and concrete structures. He brings an attention to detail in structural steel and concrete design; knowledge of the interworking between design and construction; and inspection field experience to his role. Currently, Ben leads a team of thirteen (13) structural engineers and EIT's in the southeast (seven in Lexington) that specialize in the design of hydraulic structures for various water/wastewater related projects. Ben has previous experience working in the telecommunications tower industry before joining Stantec, analyzing communication towers and designing reinforcement for towers and concrete foundations. Since joining the Stantec team, Ben has worked on a variety of hydraulic structures projects for a variety of clients, including for American Water, local municipalities, TVA, USACE, and others. Project experience includes dams and levees, water treatment plants, wastewater treatment plants, pipeline river crossings, booster pump stations, and other various steel and concrete structures.

EDUCATION

MS, Civil Engineering, University of Kentucky, Lexington, Kentucky, United States, 2005

BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, United States, 2004

REGISTRATIONS

Professional Engineer #26767, Commonwealth of Kentucky, 2009-Present

PROJECT EXPERIENCE

Santee Cooper Cross and Winyah Generating Station - ELG Project | Santee Cooper | South Carolina

Served as a senior structural engineer for the design of pile foundation systems for several large diameter tanks and over a dozen pump stations above liquefiable soil. Tanks included an 80 ft diameter 1.4M gallon equalizer tanks and a 70 ft diameter clarifier tanks to be used in the water treatment process to meet Effluent Limitation Guidelines (ELG) per EPA's new regulatory rule for coal fired power plants. Piles included both H-piles and concrete precast piles.

South Fork of Little River Flood Control Structure | Hopkinsville, Kentucky

Served as structural design lead and structural EOR for the design a flood control structure on the South Fork of the Little River in Hopkinsville, KY. Structural components of the design include a 40 foot wide arch culvert through the earthen embankment dam, and a 138 foot wide labyrinth spillway for passing floodwaters.

Muldraugh Water Treatment Plant Improvements | Hardin County Water District

Provided structural design and construction assistance for structural repairs and upgrades to an eighty-year-old water treatment plant. Designed several foundation improvements, concrete repairs, and structural assessments, including a retrofitted high service pump station facility. Reviewed shop drawings and contractor submittals.

Kentucky American Water KRS1 Gravity Thickener Tanks | Kentucky American Water | Lexington, Kentucky

Served as structural team lead and Engineer of Record for the design of two 70 ft diameter gravity thickener tanks and associated structures for Kentucky American Water Kentucky River Station 1 water treatment plant expansion. Project includes three new flow/control/splitter vaults and two new pump stations – one underground and one above ground in a new custom-design building.

Kentucky American Water KRS2 UV Disinfection System Addition | Kentucky American Water | Owenton, Kentucky

Served as structural team lead and Engineer of Record for the design of a 34 ft tall support structure for a 5-ton under running bridge crane with telescoping beam, for use in the installation of UV treatment equipment and associated piping for Kentucky American Water Kentucky River Station 2 water treatment plant upgrades.

North Owen County Booster Station & Hydro Tank Foundation | Kentucky American Water | Owen County, Kentucky

Provided design for calculations and construction drawings for a booster pump station foundation and a hydro pneumatic tank foundation.

Low Service and Transfer Pump Station Replacement | Kentucky American Water | Lexington, Kentucky

Provided design for replacement of two 1250 HP raw water pumps. Project included oversight and structural evaluation of vibration analyses performed by a sub-consultant for the new variable frequency drive pumps.



Bret Lavey PE, ENV SP

Project Manager
20 years of experience · Lexington, Kentucky

With more than 20 years of experience in the field, Bret is a proven leader in the management, design and analysis of water/wastewater and civil engineering projects. His experience includes municipal infrastructure, treatment facilities, pump stations, capital planning projects, watershed and floodplain studies, dam and levee analyses, and water quality/stream enhancement improvement projects. He has experience in a variety of commercial hydrologic and hydraulic models, including work on more than 4,000 stream miles of hydrologic and hydraulic analyses and over 2,500 miles of hydraulic modeling of water/wastewater systems. Since the onset of the Consent Decree in 2008, Bret has worked continuously with the Division of Water Quality on CD-related projects. For over ten years, Bret has led the system-wide modeling efforts for Lexington's wastewater system, including hydraulic evaluation for all RMP projects.

EDUCATION

BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, US, 2005

REGISTRATIONS

Professional Engineer #27348, Commonwealth of Kentucky

PROJECT EXPERIENCE

Sanitary Sewer Assessments and Remedial Measures Plans | Lexington-Fayette Urban County Government | Lexington, Kentucky

Bret was responsible for field oversight, coordination, and QA/QC for flow monitoring, rainfall monitoring for 39 gages, 24,250 manhole inspections, smoke testing for 5M LF, groundwater monitoring, 129 dye water flooding tests, night flow isolation at 425 locations, sewer cleaning and televising for 1.2M LF, raising 2,000 buried manholes, and bypass pumping. He also developed GIS compatible assessment tools and reporting functions to assist in deliverable production. Additional activities included tracking deliverables and map changes, database management, and evaluating the sanitary sewer collector system. Bret also served as lead engineer on a three-firm team that developed a \$600M remedial measures plan to address sanitary sewer overflows as part of a consent decree, and developed, modeled, and provided various cost alternatives.

Capacity Assurance Program (CAP) | Lexington Fayette Urban County Government | Lexington, Kentucky |

Since 2012, Bret has been responsible for maintaining the citywide hydraulic models using a commercial version of SWMM and performing the hydraulic modeling for all capital projects as part of Lexington's wastewater consent decree program.

Kentucky American Water Booster Station Designs | Kentucky American Water | Central Kentucky

Project Manager for the analysis and design of four new pump stations for KAW, up to 7,000 gpm. Projects included the Jacobson Booster, Cox Street Booster, North Owen Booster, and Georgetown Rest Area Booster.

Kentucky American Water KRS1 Solids Improvements | Kentucky American Water | Lexington, Kentucky |

Project Manager for the evaluation of near-, mid-, and long-term improvements for KAW's 40 MGD Kentucky River Station I (KRS1) WTP, culminating in a solids masterplan for future removal of the lagoon system and new mechanical dewatering facilities. Project included design and construction oversight for near-term (GeoTube dewatering system) and mid-term improvements (new gravity thickeners and additional wash water holding capacity), along with a new, custom-build sludge pump station building and supernatant pump station vault.

Winyah and Cross Generating Station Wastewater Treatment Plants – ELG Projects | South Carolina

Project Technical Lead and Engineer of Record for two \$150M treatment plants to comply with the EPA's Effluent Limitations Guidelines (ELG) Rule. Project components were similar for both plants, consisting of about 4MG of equalization storage, two clarifiers, sludge tanks, reaction tanks, biological reactors, ultrafiltration, filter presses, leachate pump station, and several other structures. Cross station also included lamella clarifiers for advanced treatment of Unit 2 water and Winyah including a new, custom-built treatment building to house the UF, presses, lab, offices, and chemical feed processes.

Orange Coastal Storm Risk Management Project | USACE – Galveston District | Orange, Texas

Bret managed the task order for preliminary design of seven new flood pump stations as part of the overall coastal resiliency project consisting of two new sector gates, pump stations ranging in capacity from 200- to 2000-cfs, and 27 miles of new levee and floodwall along the Texas Coast.



Brad Sauder PE

I&C Lead
31 years of experience · Cleveland, Ohio



Brad has 30+ years of experience in instrumentation and controls (I&C) with Stantec's instrumentation and electrical groups. His expertise includes design and construction administration management for control, instrumentation, and power distribution systems at water and wastewater facilities. Additionally, he is well-versed in the development of control schematics, process control descriptions, process instrumentation diagrams, network design, and security and access control design, as well as in instrumentation and grounding. Brad's project experience has made him adept at interdisciplinary coordination.

EDUCATION

BS, Electrical Engineering, Ohio Northern University, Ada, Ohio, United States, 1992

REGISTRATIONS

Professional Engineer #22522, Commonwealth of Kentucky, Expires 6/30/2018

PROJECT EXPERIENCE

Kentucky River and Richmond Road Facilities | Kentucky American Water Company | Various Locations, Kentucky

Brad completed the design for the two facilities that are rated for flows of 40 MGD and 25 MGD respectively. The design involved the rehabilitation and expansion of the chlorine gas feed systems at each facility. Brad also led the I&C efforts for installation of new UV facilities at each plant and various solids handling/pumping facilities at the KRS1 plant.

Eastern Regional WWTP | GRW Engineers, Inc. (Sanitation District No. 1) | Northern Kentucky

Brad completed the design for the Sanitation District No. 1 Eastern Regional Wastewater Treatment Plant. The work includes design of instrumentation and controls for the oxidation ditches, RAS/WAS pump station, clarifiers, sludge processing system and UV system and coordination with the design for the screen and grit removal systems and the influent pump station. The work also involves collaboration on the design of the plant-wide control system architecture.

M-4 Booster Pump Station | Montgomery County Sanitation Engineering Department | Montgomery County, Ohio

Brad completed the design for the Montgomery County Sanitation Engineering Department M-4 Booster Pump Station, Montgomery County, Ohio. The new 15 mgd pump station includes four VFD driven split case horizontal pumps. Work involved the design of instrumentation and controls for the facility. The control system includes GE Fanuc 90-70 PLCs and radio communications to a central facility.

Easterly Wastewater Treatment Plant | Northeast Ohio Regional Sewer District | Cleveland, Ohio

Brad's support services included instrumentation and controls for the new Collinwood Wet Weather Pumping Station, Primary Effluent Archimedes Screw Pumping Station, combustible gas detection and alarming system, and modifications to the existing facility to upgrade existing non-explosion-proof facilities to meet current NFPA 820 requirements for explosive atmospheres.

Brandtford Pump Station | City of Dayton, Ohio

Brad completed the design for the upgrade of the Brandtford Pump Station including power distribution revisions, the addition of variable frequency drives for each pump, and the expansion of the PLC controls.

Superior Stones Canal CSO Improvements (SSC) | Northeast Ohio Regional Sewer District | Cleveland, Ohio

Brad managed I&C development for the Superior Avenue and Stones Levee pump stations. The Superior Avenue location consisted of 3.5-MGD dry weather pump station and an 8-MGD wet weather pump station. The PLC-based process control system utilizes CompactLogix PLCs and cellular communications for remote monitoring. | Cost: \$18.2M

Easterly Tunnel Dewatering Pump Station (ETDPS) | Northeast Ohio Regional Sewer District | Cleveland, Ohio

Project elements included seven pumps ranging from 10 to 40 MGD each. The pump station flow controls were closely interlocked with the operating conditions at the Easterly WWTF. The process control system included redundant ControlLogix PLCs with device level ring to PLC and RIO enclosures, as well as networks to valve actuators, motor protection units, and power monitoring. The installation also included fiber optic installation to the Easterly WWTF. The network design at the pump station served to extend the Easterly process control system, security, building management, and voice communication networks to the facility.

Appendix A: Forms



AMERICAN RESCUE PLAN ACT

AMENDMENT 1 — CERTIFICATION OF COMPLIANCE FOR EXPENDITURES USING FEDERAL FUNDS, INCLUDING THE AMERICAN RESCUE PLAN ACT

The Lexington-Fayette Urban County Government (“LFUCG”) may use Federal funding to pay for the goods and/or services that are the subject matter of this bid. That Federal funding may include funds received by LFUCG under the American Rescue Plan Act of 2021. Expenditures using Federal funds require evidence of the contractor’s compliance with Federal law. Therefore, by the signature below of an authorized company representative, you certify that the information below is understood, agreed, and correct. Any misrepresentations may result in the termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims.

The bidder (hereafter “bidder,” or “contractor”) agrees and understands that in addition to all conditions stated within the attached bid documents, the following conditions will also apply to any Agreement entered between bidder and LFUCG, if LFUCG uses Federal funds, including but not limited to funding received by LFUCG under the American Rescue Plan Act (“ARPA”), toward payment of goods and/or services referenced in this bid. The bidder also agrees and understands that if there is a conflict between the terms included elsewhere in this Request for Proposal and the terms of this Amendment 1, then the terms of Amendment 1 shall control. The bidder further certifies that it can and will comply with these conditions, if this bid is accepted and an Agreement is executed:

1. Any Agreement executed as a result of acceptance of this bid may be governed in accordance with 2 CFR Part 200 and all other applicable Federal law and regulations and guidance issued by the U.S. Department of the Treasury.
2. Pursuant to 24 CFR § 85.43, any Agreement executed as a result of acceptance of this bid can be terminated if the contractor fails to comply with any term of the award. This Agreement may be terminated for convenience in accordance with 24 CFR § 85.44 upon written notice by LFUCG. Either party may terminate this Agreement with thirty (30) days written notice to the other party, in which case the Agreement shall terminate on the thirtieth day. In the event of termination, the contractor shall be entitled to that portion of total compensation due under this Agreement as the services rendered bears to the services required. However, if LFUCG suspects a breach of the terms of the Agreement and/or that the contractor is violating the terms of any applicable law governing the use of Federal funds, LFUCG may suspend the contractor’s ability to receive payment by giving thirty (30) days’ advance written notice. Further, either party may terminate this Agreement for cause shown with thirty (30) days written notice, which shall explain the party’s cause for the termination. If the parties do not reach a settlement before the end of the 30 days, then the Agreement shall terminate on the thirtieth day. In the event of a breach, LFUCG reserves the right to pursue any and all applicable legal, equitable, and/or administrative remedies against the contractor.
3. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:
 - (1) Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and

applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part, and the contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance.

Provided, however, that in the event a contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

4. If fulfillment of the contract requires the contractor to employ mechanic's or laborers, the contractor further agrees that it can and will comply with the following:

- (1) *Overtime requirements: No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such a workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such a workweek.*

- (2) *Violation: liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.*
- (3) *Withholding for unpaid wages and liquidated damages. LFUCG shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.*
- (4) *Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower-tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.*

5. The contractor shall comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

6. The contractor shall report each violation to LFUCG and understands and agrees that LFUCG will, in turn, report each violation as required to assure notification to the Treasury Department and the appropriate Environmental Protection Agency Regional Office.

7. The contractor shall include these requirements in numerical paragraphs 5 and 6 in each subcontract exceeding \$100,000 financed in whole or in part with Federal funding.

8. The contractor shall comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 et seq.

9. The contractor shall report each violation to LFUCG and understands and agrees that LFUCG will, in turn, report each violation as required to assure notification to the Treasury Department and the appropriate Environmental Protection Agency Regional Office.

10. The contractor shall include these requirements in numerical paragraphs 8 and 9 in each subcontract exceeding \$100,000 financed in whole or in part with Federal funds.

11. The contractor shall comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 et seq.

12. The contractor shall report each violation to LFUCG and understands and agrees that LFUCG will, in turn, report each violation as required to assure notification to the Treasury Department and the appropriate Environmental Protection Agency regional office.

13. The contractor shall include these requirements in numerical paragraphs 11 and 12 in each subcontract exceeding \$100,000 financed in whole or in part with American Rescue Plan Act funds.

14. The contractor shall include this language in any subcontract it executes to fulfill the terms of this bid: “the sub-grantee, contractor, subcontractor, successor, transferee, and assignee shall comply with Title VI of the Civil Rights Act of 1964, which prohibits recipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of the Treasury’s Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this contract (or agreement). Title VI also includes protection to persons with ‘Limited English Proficiency’ in any program or activity receiving federal financial assistance, 42 U.S.C. § 2000d et seq., as implemented by the Department of the Treasury’s Title VI regulations, 31 CFR Part 22, and herein incorporated by reference and made a part of this contract or agreement.”

15. *Contractors who apply or bid for an award of \$100,000 or more shall file the required certification that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency. Each tier certifies to the tier above that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier, up to the recipient. The required certification is included here:*

- a. The undersigned certifies, to the best of his or her knowledge and belief, that:
 - (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.
 - (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.
- b. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

16. The contractor acknowledges and certifies that it has not been debarred or suspended and further acknowledges and agrees that it must comply with regulations regarding debarred or suspended entities in accordance with 24 CFR § 570.489(l). Funds may not be provided to excluded or disqualified persons.

17. The contractor agrees and certifies that to the greatest extent practicable, it will prefer the purchase, acquisition, and use of all applicable goods, products or materials produced in the United States, in

conformity with 2 CFR 200.322 and/or section 70914 of Public Law No. 117-58, §§ 70901-52, also known as the Infrastructure Investment and Jobs Act, whichever is applicable.

18. The contractor agrees and certifies that all activities performed pursuant to any Agreement entered as a result of the contractor's bid, and all goods and services procured under that Agreement, shall comply with 2 C.F.R. § 200.216 (Prohibition on certain telecommunications and video surveillance services and equipment) and 2 C.F.R. 200 § 200..323 (Procurement of recovered materials), to the extent either section is applicable.

19. If this bid involves construction work for a project totaling \$10 million or more, then the contractor further agrees that all laborers and mechanics, etc., employed in the construction of the public facility project assisted with funds provided under this Agreement, whether employed by contractor, or contractor's contractors, or subcontractors, shall be paid wages complying with the Davis-Bacon Act (40 U.S.C. 3141-3144). Contractor agrees that all of contractor's contractors and subcontractors will pay laborers and mechanics the prevailing wage as determined by the Secretary of Labor and that said laborers and mechanics will be paid not less than once a week. The contractor agrees to comply with the Copeland Anti- Kick Back Act (18 U.S.C. § 874) and its implementing regulations of the U.S. Department of Labor at 29 CFR part 3 and part 5. The contractor further agrees to comply with the applicable provisions of the Contract Work Hours and Safety Standards Act (40 U.S.C. Section 327-333), and the applicable provisions of the Fair Labor Standards Act of 1938, as amended (29 U.S.C. et seq.). Contractor further agrees that it will report all suspected or reported violations of any of the laws identified in this paragraph to LFUCG.



Signature

June 17, 2024

Date

THIS AFFIRMATIVE ACTION PROGRAM IS EFFECTIVE FROM 8/1/2022 - 7/31/2023.

Affirmative Action Program

Hazen Sawyer
Cincinnati

Hazen Sawyer

Cincinnati - August 1, 2022

PROGRAM SUMMARY

We are pleased to provide you with your 2022 Affirmative Action Program Summary. Below is a summary of the analyses that are included in the Program. We look forward to discussing the Program and these analyses in greater detail during our implementation call. If you have any questions about the results, please feel free to contact us.

2022 STATISTICS AT A GLANCE

	Workforce	Applicants	New Hires	Promotions	Terminations
Total	141	759	19	45	20
Female	42	291	4	20	6
Female %	29.79%	38.34%	21.05%	44.44%	30.00%
Minority	12	224	6	5	5
Minority %	8.51%	29.51%	31.58%	11.11%	25.00%
Black	3	100	3	2	4
Black %	2.13%	13.18%	15.79%	4.44%	20.00%
Hispanic	5	30	3	2	1
Hispanic %	3.55%	3.95%	15.79%	4.44%	5.00%
Asian	2	67	0	0	0
Asian %	1.42%	8.83%	0.00%	0.00%	0.00%
American Indian or Alaskan Native	0	0	0	0	0
American Indian or Alaskan Native %	0.00%	0.00%	0.00%	0.00%	0.00%
Native Hawaiian/Other Pacific	0	3	0	0	0
Native Hawaiian/Other Pacific %	0.00%	0.40%	0.00%	0.00%	0.00%
Two or More Races	2	24	0	1	0
Two or More Races %	1.42%	3.16%	0.00%	2.22%	0.00%
Unknown Race	0	144	0	0	0
Unknown Race %	0.00%	18.97%	0.00%	0.00%	0.00%
Unknown Gender	0	33	0	0	0
Unknown Gender %	0.00%	4.35%	0.00%	0.00%	0.00%
Individual with Disability	3	0	0	0	0
Individual with Disability %	2.13%	0.00%	0.00%	0.00%	0.00%
Protected Veterans	0	0	0	0	0
Protected Veterans %	0.00%	0.00%	0.00%	0.00%	0.00%

2022 GOALS

Job Group Code - Name	Female*	Minority*	Disability
102 - Vice Presidents			Yes
201 - Sr. Associates And Consultants			Yes
202 - Associates			Yes
203 - Sr. Engineers			Yes
204 - Engineers			Yes
205 - Designers			Yes
208 - Proposal Professionals			Yes
209 - Sr. Field Coordinator			Yes
210 - Field Coordinator	Yes		Yes
211 - Administrative Professionals			
301 - Sr. Technicians			Yes
302 - Technicians			
501 - Admin Support			Yes

* Goal results are based on the application of the Exact Binomial test.

Note: Affirmative Action Program numerical placement goals have been established pursuant to 41 C.F.R. § 60-2.16 and § 741.45 and do not represent rigid and inflexible quotas, nor do they provide for preferential treatment on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or veteran status.

SUMMARY OF 2021 GOAL ACHIEVEMENT

Job Group Code - Name	Female	Minority
201 - Sr. Associates And Consultants	Achieved	
210 - Field Coordinator	Not Achieved	

ADVERSE IMPACT RESULTS

PROMOTIONS

Job Group Code - Name	Favored group	Impacted group
204 - Engineers	Female	Male

TERMINATIONS

Job Group Code - Name	Favored group	Impacted group
205 - Designers	Non-Min	Min

Note: Adverse Impact results are based on the application of the Chi-Square test

STATEMENT OF PRIVILEGE

Copies of this Affirmative Action Program and all related appendices, documents and support data are made available on loan to the United States Government upon the request of said Government on the condition that the Government hold them totally confidential and not release copies to any person whatsoever. This Affirmative Action Program and its appendices and other supporting documents contain confidential information which may reveal, directly or indirectly, the Company's plans for business or geographical expansion or contraction. The Company considers this Affirmative Action Program, all portions thereof and all supporting material to be its private and confidential property and to be on loan to the Government only under specified conditions, including non-reproduction and non-distribution and to be exempt from disclosure under the Freedom of Information Act upon the grounds, inter alia, that such material constitutes: (1) personnel files, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy and are exempt from disclosure under 5 U.S.C. §552(b)(6); (2) confidential, commercial or financial information which is exempt from disclosure under 5 U.S.C. §522(b)(4); (3) investigatory records compiled for law enforcement purposes, the production of which would constitute an unwarranted invasion of personal privacy and are exempt from disclosure under 5 U.S.C. §552(b)(7); and (4) matters specifically exempted from disclosure by statute and are exempt from disclosure under 5 U.S.C. §522(b)(3). The Company will submit further detailed documentation supporting this claim of privilege if necessary.

NON-ADMISSION STATEMENT

It is understood that this Affirmative Action Program, or any part thereof, does not constitute an admission by the Company of any violation of Executive Order 11246, as amended, Section 503 of the Rehabilitation Act of 1973, as amended, the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, Title VII of the Civil Rights Act of 1964, or any federal, state or local law and has been developed to reaffirm the Company's policy of providing equal employment opportunity for all persons without regard to race, national origin, religion, age, color, sex, sexual orientation, gender identity, disability, or protected veteran status, or any other characteristic protected by local, state, or federal laws, rules, or regulations. Goals have been established, where appropriate, to endeavor to meet affirmative action obligations. This program is not intended to and will not be used to discriminate against any applicant or employee because of race, national origin, religion, age, color, sex, sexual orientation, gender identity, disability, or protected veteran status, or any other characteristic protected by local, state, or federal laws, rules, or regulations.

SEX DISCRIMINATION POLICY

In accordance with our policy of equal employment opportunity, we have adopted the following policy prohibiting sex discrimination and sexual harassment in the workplace. In addition to continued adherence to the goals enunciated in our Affirmative Action and Equal Employment Opportunity Policy, we will also continue to do the following, as applicable:

I. RECRUITMENT AND ADVERTISEMENT

- A. Recruit men and women for all positions, except where sex is a bona fide occupational qualification, without regard to the candidate's sex.
- B. Ensure that "help-wanted" advertising does not express a sex preference for any job, unless sex is a bona fide occupational qualification for that job.
- C. Refrain from placing advertisements in newspapers or other media which are labeled "Males" or "Females," or otherwise segregated by sex, unless sex is a bona fide occupational qualification.

II. JOB POLICIES AND PRACTICES

- A. Review personnel policies to avoid discrimination on the basis of sex.
- B. Consider employees and applicants of both sexes for assignment, transfer or promotion to all positions for which they are qualified, except where sex is a bona fide occupational qualification.
- C. Administer employment opportunities, wages, hours, conditions of employment, pensions, recreation programs and employee benefits without regard to sex.
- D. Consider married and unmarried men and women equally in all personnel actions, including the administration of wages and benefits, without regard to the number of dependents which an individual may support or maintain. Retirement age and retirement benefits will be equal for both sexes.
- E. Provide appropriate facilities, e.g., rest rooms and locker areas, for employees and applicants of both sexes.
- F. Refrain from reliance upon state laws which conflict with and are superseded by Title VII of the Civil Rights Act of 1964, as amended, or Executive Order 11246.
- G. Provide leaves of absence to employees without regard to an employee's sex. No employee will be discriminated against because of pregnancy. Following childbirth, and upon signifying her intent to return within a reasonable time, the Company will reinstate such employee to her original job or to a position of like status and pay without loss of service credits, unless the employee would not otherwise have been employed at the time of reinstatement.

III. SENIORITY

Consider employees' seniority and administer any seniority system without regard to employees' sex.

IV. DISCRIMINATORY WAGES

Determine wage schedules without regard to sex. There will be equal pay for equal work.

V. SEXUAL HARASSMENT

The EEO Coordinator shall notify all supervisors and managers that they are prohibited from engaging in, tolerating or otherwise promoting unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature by employees or supervisors, when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, (2) submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting such individual or (3) such conduct has the purpose or effect of substantially interfering with an individual's work performance or creating an intimidating, hostile or offensive working environment.

The EEO Coordinator shall take reasonable steps to prevent sexual harassment from occurring, including, but not limited to, expressing strong disapproval of such conduct, developing appropriate sanctions, informing employees of their right to raise the issue of sexual harassment under Title VII and the procedure to do so and generally developing training programs to sensitize managers, supervisors and employees to the nature of this problem. The Company maintains a policy prohibiting sexual harassment.

VI. DEFINITION

The terms "because of sex," "on the basis of sex" and "regardless of sex" include, but are not limited to, because of or on the basis of pregnancy, childbirth or related medical conditions. Women affected by pregnancy, childbirth or related medical or physical conditions shall be treated for all employment-related purposes, including the receipt of benefits under fringe benefit programs, the same as other persons who are not so affected but are similarly able or unable to work.

VII. LEAVE OF ABSENCE DUE TO MATERNITY

Leaves of absence due to maternity are considered under our policy.

RELIGIOUS AND NATIONAL ORIGIN DISCRIMINATION POLICY

In accordance with its policy of equal employment opportunity, the Company has adopted the following policy prohibiting discrimination on the basis of religion and national origin and supporting affirmative action to ensure all individuals are employed and treated during employment without regard to their religion or national origin.

I. SCOPE OF THIS POLICY

This policy applies to all terms and conditions of employment, including, but not limited to, hiring, upgrading, demotion, transfer, recruitment, recruitment advertising, layoff or recall from layoff, wage and benefit administration and selection for training.

II. OUTREACH AND POSITIVE RECRUITMENT

To determine whether members of all religious and ethnic groups are receiving fair consideration for job opportunities, the Company will consider reviewing its employment practices. As deemed appropriate, special attention will be directed toward executive and middle-management levels, where employment problems relating to religion and national origin are statistically most likely to occur. Based upon the findings of any such reviews, we will undertake appropriate outreach and positive recruitment activities, such as those listed below, to remedy any existing deficiencies. The scope of our efforts, of course, will depend upon all circumstances including the nature and extent of any deficiencies and our size and resources. The Company will consider the following actions:

- A. Explaining to all employees the Company's obligation to provide equal employment opportunity, without regard to religion or national origin, in such a manner as to foster understanding, acceptance and support among other executives, management staff, supervisors and all other employees and encouraging such persons to take all actions necessary to aid the Company in meeting our obligation;
- B. Developing reasonable monitoring procedures to ensure that our obligation to provide equal employment opportunity without regard to religion or national origin is being fully implemented;
- C. Informing periodically all employees of our commitment to equal employment opportunity for all persons without regard to religion or national origin; and
- D. Enlisting the assistance and support of recruitment sources (including employment agencies, college placement directors and business associates) in referring applicants without regard to religion or national origin.

III. ACCOMMODATIONS TO RELIGIOUS OBSERVANCE AND PRACTICE

The Company will endeavor to make a reasonable accommodation to the religious observances and practices of any employee or prospective employee, unless such an accommodation will impose an undue hardship on the conduct of our business. Generally, we will try to make reasonable accommodations to the religious observances and practices of any employee or prospective employee who regularly observes Friday evening and Saturday, or some other day of the week, as the Sabbath or who observes certain religious holidays during the year and is conscientiously opposed to performing work or engaging in similar activity on such days, when such accommodations can be made without undue hardship on the conduct of our business. In determining the extent of the hardship imposed, we may consider: (a) business necessity; (b) financial costs and expenses and (c) resulting personnel problems.

**EXECUTIVE ORDER 11246
AFFIRMATIVE ACTION PROGRAM**

AFFIRMATIVE ACTION PROGRAM FOR WOMEN AND MINORITIES DESIGNATION OF RESPONSIBILITY FOR IMPLEMENTATION

I. EXECUTIVE MANAGEMENT RESPONSIBILITY

As the representative of executive management, the EEO Coordinator has primary responsibility and accountability for implementing, directing and monitoring its Affirmative Action Programs (“AAPs” or “Programs”). The EEO Coordinator’s responsibilities may include:

- A. Implementing the affirmative action programs set forth in these Programs, including the development of policy statements and related internal and external communication procedures to disseminate those policy statements.
- B. Developing and supervising the presentation of our equal employment opportunity policy during the supervisory training and new employee orientation programs, which may include question-and-answer sessions for supervisors and employees answering their questions about the AAPs.
- C. Designing and implementing an audit and reporting system that will accomplish the following:
 - 1. Measure the effectiveness of our affirmative action programs.
 - 2. Indicate when remedial action is needed.
 - 3. Determine the degree to which our goals and objectives have been attained.
- D. Advising management and supervisory personnel on developments in the laws and regulations governing equal employment opportunity.
- E. Serving as liaison between the Company and all enforcement agencies.
- F. Identifying and implementing action-oriented programs to address any potential problem areas that may exist.
- G. Conferring with community organizations representing women and minorities.
- H. Potentially auditing our on-the-job training, hiring and promotion patterns periodically to remove impediments to attainment of the Company’s goals and objectives.
- I. Considering rating supervisory employees based, in part, upon their efforts and success in furthering the goal of equal employment opportunity and informing supervisory employees of this evaluation practice.
- J. Discussing periodically the Company’s commitment to equal employment opportunity with managers, supervisors and employees. During these discussions, the EEO Coordinator will stress the importance of affirmative action and nondiscrimination.
- K. Reviewing the qualifications of all employees to ensure minorities, women, protected veterans, and individuals with a disability are given full opportunities for transfers, promotions and training.
- L. Providing access to career counseling for all employees.

- M. Conducting periodic audits to ensure the Company is in compliance with federal and state laws and regulations requiring:
 - 1. Proper display of posters explaining the Company's obligation to engage in nondiscriminatory employment practices.
 - 2. Integration of all facilities which we maintain for the use and benefit of our employees.
 - 3. Maintenance of comparable facilities, including locker rooms and rest rooms, for all employees.
 - 4. Providing full opportunity for advancement and encouraging minority and female employees to participate in educational, training, recreational and social activities sponsored by the Company.
- N. Counseling supervisors and managers to take actions necessary to prevent harassment of employees placed through affirmative action efforts and to eliminate the cause of such complaints. Further, the EEO Coordinator will counsel supervisors and managers not to tolerate discriminatory treatment of any employee by another employee or supervisor and to report all complaints or incidents to the EEO Coordinator.
- O. Establishing an internal complaint system that will enable employees to discuss complaints with the EEO Coordinator whenever they feel that they are being discriminated against on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.
- P. Serving as liaison between the Company and community organizations representing minorities and women.
- Q. Developing expertise and knowledge of equal employment opportunity guidelines and regulations to advise and update top management and supervisory personnel concerning developments affecting our equal employment opportunity program.

II. THE RESPONSIBILITIES OF SUPERVISORS AND MANAGERS

All supervisors and managers have the obligation as part of their general management objectives to support our equal employment opportunity policy and affirmative action program on a day to day basis. Specifically, they should endeavor to:

- A. Respond to inquiries about our Affirmative Action and Equal Employment Opportunity Policy, after consulting with our EEO Coordinator.
- B. Assist our EEO Coordinator during the investigation of allegations of discrimination.
- C. Participate in recruitment and accommodation efforts designed to enable disabled individuals, disabled veterans and others to secure employment and to advance to positions for which they are qualified.
- D. Ensure that all federal and state posters explaining the laws prohibiting discrimination are properly displayed.
- E. Participate in the development and implementation of affirmative action programs.

AFFIRMATIVE ACTION PROGRAM FOR WOMEN AND MINORITIES IDENTIFICATION OF PROBLEM AREAS

The EEO Coordinator will, on an annual basis, as applicable, analyze the Company's processes to identify potential problem areas in the total employment process, which may include review of the following areas:

- A. Composition of the workforce by protected group status.
- B. Composition of applicant flow by protected group status.
- C. Overall employee selection process including position specifications, application forms, interviewing procedures, test administration, test validity, referral procedures, final selection process and other employee selection procedures.
- D. New hires, promotions, terminations, etc.
- E. Compensation systems to determine whether there are gender-, race- or ethnicity-based disparities.
- F. Utilization of training, recreation and social events and other programs that are sponsored by the Company.
- G. Technical aspects of compliance with laws prohibiting discrimination in employment and promoting affirmative action programs, e.g., retention of applications, notifications to subcontractors, etc.
- H. Whether there is "underutilization" of minorities or women in specific job groups.
- I. Whether there is "under-representation" or "concentration" of minorities or women in specific departments.
- J. Whether lateral or vertical movement of employees who are members of protected groups occurs at a lesser rate than that of employees who are members of non-protected groups.
- K. Whether the selection process eliminates a significantly higher percentage of employees who are members of protected groups than employees who are members of non-protected groups.
- L. Ensure that our employment application and other pre-employment evaluation forms or procedures comply with federal and state law.
- M. Determine whether job qualifications are accurate in relation to actual functions and duties of the particular job.
- N. Whether de facto segregation by protected characteristic exists in job titles or job groups.
- O. Whether supervisory employees are supporting our affirmative action and equal employment opportunity programs and policies.
- P. Whether minorities or women are significantly underrepresented in training or career improvement programs.
- Q. Whether we have in place adequate procedures for evaluating the effectiveness of the programs set forth in these Programs.

- R. Whether subcontractors and vendors are notified of their responsibility to assist the Company in attaining the goals and objectives set forth in this Program.
- S. Whether the Equal Opportunity clause is included in purchase orders and other contracts covered by Executive Order 11246.
- T. Whether required equal employment opportunity posters are on display.

If the EEO Coordinator's review indicates that the above-listed topics are areas of concern or that other impediments block the entry into or advancement within our workforce of minorities or women, the Company will consider corrective action, as outlined in the Action-Oriented Programs section hereof.

AFFIRMATIVE ACTION PROGRAM FOR WOMEN AND MINORITIES ACTION-ORIENTED PROGRAMS

The Company intends to meet the goals set forth in this Program and to continue implementation of its equal employment opportunity policies through action-oriented programs. Described below are the types of actions the Company may consider.

I. DISSEMINATION OF EQUAL EMPLOYMENT OPPORTUNITY POLICY

A. INTERNAL DISSEMINATION

The Company will consider taking the following actions to disseminate its Affirmative Action and Equal Employment Opportunity Policy, as appropriate, on a regular and continuing basis:

1. Including the Affirmative Action and Equal Employment Opportunity Policy statement in its policy manual and employee handbook.
2. Meeting with supervisory personnel to explain the intent of the Affirmative Action and Equal Employment Opportunity Policy and their individual responsibilities for its implementation. We conduct supervisory training for management about equal employment opportunity, affirmative action and sexual harassment on an on-going basis.
3. Discussing our equal employment opportunity policy during any orientation programs we hold, at which time all new employees (and if applicable, transferred and promoted employees) will be advised of our commitment to affirmative action and equal employment opportunity.
4. Posting the Affirmative Action and Equal Employment Opportunity Policy, along with all required state and federal informational posters on our bulletin boards and updating such posters as required.
5. When pictures of employees are included in Company announcements to employees or the public, we include pictures of minority and non-minority men and women employees, as appropriate.

B. EXTERNAL DISSEMINATION

Our equal employment opportunity policy will be disseminated externally, as considered appropriate, as follows:

1. Recruiting sources, when utilized, will be advised of the Company's policy. Thereafter, such recruiting sources may be notified of our continuing commitment to equal employment opportunity.
2. The equal opportunity clause will be included in purchase orders, leases, contracts, etc., covered by Executive Order 11246, as amended.
3. When we advertise for prospective employees, the advertisement will include language that communicates we are an equal opportunity employer. We also will direct all advertisers not to place help-wanted advertisements in race- or sex-segregated columns.
4. Prospective employees are informed that the Company is an equal opportunity employer that maintains an affirmative action program through the notices we post in areas accessible to applicants and employees and our application for employment.

5. Our primary subcontractors, vendors and suppliers will be sent written notification of our Affirmative Action and Equal Employment Opportunity Policy.
6. In the event that employees are featured in help-wanted, product or consumer advertising, employee handbooks or manuals or similar publications, minority and non-minority men and women will be pictured and included.

II. RECRUITMENT AND HIRING

- A. Contacting community agencies and educational institutions and seeking referrals of qualified individuals to increase the flow of minority and female applicants.
- B. When meetings are held with representatives of recruiting sources, including presentations by minority, female, disabled, older or veteran employees, we will provide explanations about the job duties and responsibilities of our current and future job openings, as well as explanations of our employee selection process, and distribute our recruiting literature.
- C. As appropriate, placing a reasonable proportion of our help-wanted advertising in media directed to minorities or women.
- D. Considering periodically evaluating and analyzing job requirements using job-performance criteria. Special attention will be given to academic, experience and skill requirements to ensure that such specifications are consistent and free from bias on account of race, color, religion, age, disability, protected veteran status, sex, sexual orientation, gender identity or national origin. Where requirements screen out a disproportionate number of candidates from protected groups, the continued use thereof will be evaluated and "validation" will be considered. We have conducted an analysis upon all selection procedures. See the "Impact Ratio Analysis" divider tab.
- E. Selecting and training personnel involved in recruiting, screening, selection, promotion, disciplinary and related processes to eliminate bias in all personnel actions. The Company periodically presents EEO training for managers.

III. ADVANCEMENT IN EMPLOYMENT

With regard to our promotion and transfer procedures, we will consider the following:

- A. Posting or otherwise announcing appropriate promotion and transfer opportunities.
- B. Developing and implementing formal employee evaluation programs.
- C. Assuring that job qualifications are based on job-related criteria.

IV. SEPARATION FROM EMPLOYMENT

When minorities, women or other persons placed through affirmative action efforts or protected by law have experienced adverse personnel decisions, such as termination, we will consider:

- A. Sending an exit interview form to or conducting exit interviews with employees who resign to ascertain the reasons for their voluntary termination and to try to identify “voluntary resignations” that have been caused by unlawful conduct by employees or supervisors.
- B. Determining reasons for such adverse decisions, including involuntary terminations, and establishing whether persons not in the protected group with similar work histories and violations of work rules have also been terminated.
- C. Attempting to counsel employees about unsatisfactory job performance at least 90 days prior to involuntary termination to provide an opportunity to correct their performance, as practicable.

V. COMPANY SUPPORT OF COMMUNITY ACTION PROGRAMS

In addition to the employment-related good faith efforts the Company engages in, we also undertake additional efforts to support the community.

AFFIRMATIVE ACTION PROGRAM FOR WOMEN AND MINORITIES INTERNAL AUDIT AND REPORTING SYSTEM

The Company will develop and implement an audit and reporting system that periodically measures the effectiveness of its total affirmative action program. This may include the following:

- A. Monitoring records of all personnel activity, including referrals, placements, transfers, promotions, terminations, and compensation, at all levels to ensure the nondiscrimination policy is carried out;
- B. Requiring internal reporting on a scheduled basis as to the degree to which equal employment opportunity and organizational objectives are attained;
- C. Reviewing report results with all levels of management; and
- D. Advising top management of program effectiveness and submitting recommendations to improve unsatisfactory performance.

WORKFORCE ANALYSIS

Hazen Sawyer - Cincinnati - August 1, 2022

AAP WAGE CODES

The Company has included in the Workforce Analysis "AAP Wage Codes" in place of actual salaries. The AAP Wage Codes are not part of the Company's compensation system. Rather, the AAP Wage Codes are utilized exclusively in the Affirmative Action Plan to protect the confidentiality of the salaries. We have set forth below the range that corresponds to each AAP Wage Code.

AAP WAGE CODE	RANGE
5	\$100,000.00 & UP
4	\$75,000.00 - \$99,999.99
3	\$50,000.00 - \$74,999.99
2	\$30,000.00 - \$49,999.99
1	\$0.00 - \$29,999.99

The employees in each department in the Workforce Analysis are listed in descending wage order.

Note: Wage Code refers to average salary for the job title.

Hazen Sawyer - Cincinnati - August 1, 2022

WORKFORCE ANALYSIS – 8/1/2022

DEPARTMENT - 400 Cincinnati, OH

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Associate Vice President	102	1.2	5	1	1	0	1	0	0	0	0	0	0	0
Vice President (Corporate) ¹	N/A	1.2	5	1	1	0	1	0	0	0	0	0	0	0
Vice President	102	1.2	5	2	2	0	2	0	0	0	0	0	0	0
Senior Associate	201	2	5	11	11	0	11	0	0	0	0	0	0	0
Associate	202	2	5	9	7	2	8	1	0	1	0	0	0	0
Associate (Raleigh) ¹	N/A	2	5	2	2	0	1	1	0	0	1	0	0	0
Senior Field Coordinator	209	2	5	2	2	0	2	0	0	0	0	0	0	0
Senior Principal Engineer	203	2	5	5	4	1	5	0	0	0	0	0	0	0
Principal Accountant	211	2	5	1	0	1	1	0	0	0	0	0	0	0
Principal Engineer	203	2	4	6	6	0	6	0	0	0	0	0	0	0
Principal Designer	205	2	4	1	1	0	1	0	0	0	0	0	0	0
Assistant Engineer II (Hollywood) ¹	N/A	2	4	1	1	0	1	0	0	0	0	0	0	0
Principal Architect	203	2	4	1	1	0	1	0	0	0	0	0	0	0
Principal CAD/BIM Designer	205	2	4	2	2	0	1	1	0	1	0	0	0	0
Principal Proposal Coordinator	208	2	4	2	0	2	1	1	0	0	1	0	0	0
Assistant Engineer II	205	2	4	6	2	4	5	1	1	0	0	0	0	0
Assistant Engineer II (New York) ¹	N/A	2	4	1	1	0	1	0	0	0	0	0	0	0

Hazen Sawyer - Cincinnati - August 1, 2022

WORKFORCE ANALYSIS – 8/1/2022

DEPARTMENT - 400 Cincinnati, OH

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Assistant Engineer	205	2	4	4	3	1	3	1	1	0	0	0	0	0
Senior Designer	205	2	4	1	1	0	1	0	0	0	0	0	0	0
Assistant Engineer (Raleigh) ¹	N/A	2	4	1	1	0	1	0	0	0	0	0	0	0
Senior Administrator	211	2	4	1	0	1	1	0	0	0	0	0	0	0
Administrator	501	5	3	1	0	1	1	0	0	0	0	0	0	0
Designer	205	2	3	1	1	0	1	0	0	0	0	0	0	0
Principal Graphic Designer (Corporate) ¹	N/A	2	3	1	1	0	1	0	0	0	0	0	0	0
Technician	302	3	2	1	1	0	1	0	0	0	0	0	0	0
Total				58	45	13	53	5	2	2	1	0	0	0

DEPARTMENT - 410 Detroit, MI - Department reports to Vice President in the 420 Lexington, KY department

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Senior Associate	201	2	5	1	1	0	1	0	0	0	0	0	0	0
Associate	202	2	5	2	1	1	2	0	0	0	0	0	0	0
Assistant Engineer II	205	2	4	3	2	1	2	1	0	0	0	0	0	1
Assistant Engineer	205	2	3	1	0	1	1	0	0	0	0	0	0	0
Field Coordinator	210	2	3	1	1	0	1	0	0	0	0	0	0	0
Total				8	5	3	7	1	0	0	0	0	0	1

Hazen Sawyer - Cincinnati - August 1, 2022

WORKFORCE ANALYSIS – 8/1/2022

DEPARTMENT - 420 Lexington, KY

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Vice President	102	1.2	5	1	1	0	1	0	0	0	0	0	0	0
Associate	202	2	5	2	2	0	2	0	0	0	0	0	0	0
Senior Principal Engineer	203	2	5	1	1	0	1	0	0	0	0	0	0	0
Senior Field Coordinator	209	2	4	1	1	0	1	0	0	0	0	0	0	0
Assistant Engineer	205	2	3	1	1	0	1	0	0	0	0	0	0	0
Assistant Engineer II	205	2	3	1	0	1	0	1	0	1	0	0	0	0
Field Coordinator	210	2	3	2	2	0	2	0	0	0	0	0	0	0
Senior Techician	301	3	3	1	0	1	1	0	0	0	0	0	0	0
Technician	302	3	2	1	1	0	1	0	0	0	0	0	0	0
Total				11	9	2	10	1	0	1	0	0	0	0

DEPARTMENT - 440 Nashville, TN

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Vice President	102	1.2	5	1	1	0	1	0	0	0	0	0	0	0
Associate Vice President	102	1.2	5	1	0	1	1	0	0	0	0	0	0	0
Senior Associate	201	2	5	3	3	0	3	0	0	0	0	0	0	0
Senior Principal Designer	205	2	5	1	1	0	1	0	0	0	0	0	0	0
Associate	202	2	5	4	3	1	3	1	1	0	0	0	0	0
Principal CAD/BIM Designer	205	2	4	1	1	0	0	1	0	1	0	0	0	0

Hazen Sawyer - Cincinnati - August 1, 2022

WORKFORCE ANALYSIS – 8/1/2022

DEPARTMENT - 440 Nashville, TN

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Principal Engineer	203	2	4	2	2	0	2	0	0	0	0	0	0	0
Senior Field Inspector	209	2	4	1	1	0	1	0	0	0	0	0	0	0
Assistant Engineer II	205	2	4	2	0	2	2	0	0	0	0	0	0	0
Assistant Engineer I	205	2	4	1	1	0	1	0	0	0	0	0	0	0
Technician	302	3	2	1	0	1	1	0	0	0	0	0	0	0
Total				18	13	5	16	2	1	1	0	0	0	0

DEPARTMENT - 442 Knoxville, TN - Department reports to Vice President in the 420 Lexington, KY department

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Associate	202	2	5	1	1	0	1	0	0	0	0	0	0	0
Principal Engineer	203	2	4	1	1	0	1	0	0	0	0	0	0	0
Field Coordinator	210	2	4	1	1	0	1	0	0	0	0	0	0	0
Field Inspector	210	2	4	1	1	0	1	0	0	0	0	0	0	0
Total				4	4	0	4	0						

DEPARTMENT - 460 Columbus, OH

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Vice President	102	1.2	5	1	1	0	1	0	0	0	0	0	0	0
Associate Vice President	102	1.2	5	1	1	0	1	0	0	0	0	0	0	0
Senior Associate	201	2	5	1	0	1	1	0	0	0	0	0	0	0

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DEPARTMENT - 460 Columbus, OH

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Associate	202	2	5	2	2	0	2	0	0	0	0	0	0	0
Senior Principal Engineer	203	2	5	1	1	0	1	0	0	0	0	0	0	0
Engineer	204	2	4	1	1	0	1	0	0	0	0	0	0	0
Principal Engineer	203	2	4	2	1	1	1	1	0	0	1	0	0	0
Assistant Engineer II	205	2	4	5	1	4	4	1	0	0	0	0	0	1
Senior Principal Designer	205	2	4	1	1	0	1	0	0	0	0	0	0	0
Senior Administrator	211	2	4	2	0	2	2	0	0	0	0	0	0	0
Technician	302	3	2	1	0	1	0	1	0	1	0	0	0	0
Total				18	9	9	15	3	0	1	1	0	0	1

DEPARTMENT - 470 Louisville, KY - Department reports to Vice President in the 420 Lexington, KY department

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Associate	202	2	5	2	2	0	2	0	0	0	0	0	0	0
Senior Principal Engineer	203	2	5	2	2	0	2	0	0	0	0	0	0	0
Senior Principal CAD/BIM Designer	205	2	4	1	0	1	1	0	0	0	0	0	0	0
Principal Engineer	203	2	4	1	0	1	1	0	0	0	0	0	0	0
Principal Designer	205	2	4	2	1	1	2	0	0	0	0	0	0	0
Senior Principal Designer	205	2	4	1	1	0	1	0	0	0	0	0	0	0
Assistant Engineer	205	2	4	1	1	0	1	0	0	0	0	0	0	0

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DEPARTMENT - 470 Louisville, KY - Department reports to Vice President in the 420 Lexington, KY department

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Proposal Coordinator	208	2	3	1	0	1	1	0	0	0	0	0	0	0
Administrator	501	5	3	1	0	1	1	0	0	0	0	0	0	0
CAD/BIM Designer	205	2	3	1	1	0	1	0	0	0	0	0	0	0
Total				13	8	5	13	0						

DEPARTMENT - 480 Cleveland, OH - Department reports to Vice President in the 420 Lexington, KY department

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Senior Associate	201	2	5	1	1	0	1	0	0	0	0	0	0	0
Associate	202	2	5	2	1	1	2	0	0	0	0	0	0	0
Senior Principal Engineer	203	2	5	1	1	0	1	0	0	0	0	0	0	0
Principal Engineer	203	2	4	2	0	2	2	0	0	0	0	0	0	0
Engineer	204	2	4	1	1	0	1	0	0	0	0	0	0	0
Assistant Engineer II	205	2	4	1	0	1	1	0	0	0	0	0	0	0
Total				8	4	4	8	0						

DEPARTMENT - 490 Twin Cities, MN - Department reports to Vice President in the 420 Lexington, KY department

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Associate	202	2	5	1	1	0	1	0	0	0	0	0	0	0
Senior Principal Engineer	203	2	5	1	0	1	1	0	0	0	0	0	0	0

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DEPARTMENT - 490 Twin Cities, MN - Department reports to Vice President in the 420 Lexington, KY department

Job Title	Job Group	EEO-1	Wage Code	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Assistant Engineer	205	2	4	1	1	0	1	0	0	0	0	0	0	0
Total				3	2	1	3	0	0	0	0	0	0	0

1. Employee is excluded from this AAP due to reporting structure. Employee is included in the AAP named in parentheses.

JOB GROUP ANALYSIS

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JOB GROUP ANALYSIS - 8/1/2022

JOB GROUP 102 - Vice Presidents

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Associate Vice President	3	2	1	3	0	0	0	0	0	0	0
Vice President	5	5	0	5	0	0	0	0	0	0	0
Total	8	7	1	8	0						

JOB GROUP 201 - Sr. Associates And Consultants

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Senior Associate	17	16	1	17	0	0	0	0	0	0	0
Total	17	16	1	17	0						

JOB GROUP 202 - Associates

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Associate	25	20	5	23	2	1	1	0	0	0	0
Total	25	20	5	23	2	1	1	0	0	0	0

JOB GROUP 203 - Sr. Engineers

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Principal Architect	1	1	0	1	0	0	0	0	0	0	0
Principal Engineer	14	10	4	13	1	0	0	1	0	0	0
Senior Principal Engineer	11	9	2	11	0	0	0	0	0	0	0
Total	26	20	6	25	1	0	0	1	0	0	0

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JOB GROUP ANALYSIS - 8/1/2022

JOB GROUP 204 - Engineers

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Engineer	2	2	0	2	0	0	0	0	0	0	0
Total	2	2	0	2	0						

JOB GROUP 205 - Designers

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Assistant Engineer	8	6	2	7	1	1	0	0	0	0	0
Assistant Engineer I	1	1	0	1	0	0	0	0	0	0	0
Assistant Engineer II	18	5	13	14	4	1	1	0	0	0	2
CAD/BIM Designer	1	1	0	1	0	0	0	0	0	0	0
Designer	1	1	0	1	0	0	0	0	0	0	0
Principal CAD/BIM Designer	3	3	0	1	2	0	2	0	0	0	0
Principal Designer	3	2	1	3	0	0	0	0	0	0	0
Senior Designer	1	1	0	1	0	0	0	0	0	0	0
Senior Principal CAD/BIM Designer	1	0	1	1	0	0	0	0	0	0	0
Senior Principal Designer	3	3	0	3	0	0	0	0	0	0	0
Total	40	23	17	33	7	2	3	0	0	0	2

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JOB GROUP ANALYSIS - 8/1/2022

JOB GROUP 208 - Proposal Professionals

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Principal Proposal Coordinator	2	0	2	1	1	0	0	1	0	0	0
Proposal Coordinator	1	0	1	1	0	0	0	0	0	0	0
Total	3	0	3	2	1	0	0	1	0	0	0

JOB GROUP 209 - Sr. Field Coordinator

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Senior Field Coordinator	3	3	0	3	0	0	0	0	0	0	0
Senior Field Inspector	1	1	0	1	0	0	0	0	0	0	0
Total	4	4	0	4	0						

JOB GROUP 210 - Field Coordinator

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Field Coordinator	4	4	0	4	0	0	0	0	0	0	0
Field Inspector	1	1	0	1	0	0	0	0	0	0	0
Total	5	5	0	5	0						

JOB GROUP 211 - Administrative Professionals

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Principal Accountant	1	0	1	1	0	0	0	0	0	0	0
Senior Administrator	3	0	3	3	0	0	0	0	0	0	0
Total	4	0	4	4	0						

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JOB GROUP ANALYSIS - 8/1/2022

JOB GROUP 301 - Sr. Technicians

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Senior Techician	1	0	1	1	0	0	0	0	0	0	0
Total	1	0	1	1	0	0	0	0	0	0	0

JOB GROUP 302 - Technicians

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Technician	4	2	2	3	1	0	1	0	0	0	0
Total	4	2	2	3	1	0	1	0	0	0	0

JOB GROUP 501 - Admin Support

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Administrator	2	0	2	2	0	0	0	0	0	0	0
Total	2	0	2	2	0	0	0	0	0	0	0

JOB GROUP ANALYSIS - 8/1/2022

Excluded Employees

Job Title	Total	Male	Female	White	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two Or More
Assistant Engineer (Raleigh) ¹	1	1	0	1	0	0	0	0	0	0	0
Assistant Engineer II (Hollywood) ¹	1	1	0	1	0	0	0	0	0	0	0
Assistant Engineer II (New York) ¹	1	1	0	1	0	0	0	0	0	0	0
Associate (Raleigh) ¹	2	2	0	1	1	0	0	1	0	0	0
Principal Graphic Designer (Corporate) ¹	1	1	0	1	0	0	0	0	0	0	0
Vice President (Corporate) ¹	1	1	0	1	0	0	0	0	0	0	0

1. Employee is excluded from this AAP due to reporting structure. Employee is included in the AAP named in parentheses.

AVAILABILITY ANALYSIS

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AVAILABILITY ANALYSIS - 8/1/2022

JOB GROUP 102 - Vice Presidents

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	34.74%	26.04%	7.18%	10.12%	6.33%	0.46%	0.11%	1.83%	100.00%	34.74%	26.04%	7.18%	10.12%	6.33%	0.46%	0.11%	1.83%
Internal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	34.74%	26.04%	7.18%	10.12%	6.33%	0.46%	0.11%	1.83%

JOB GROUP 201 - Sr. Associates And Consultants

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	13.91%	25.23%	4.36%	8.03%	10.53%	0.26%	0.09%	1.96%	5.00%	0.70%	1.26%	0.22%	0.40%	0.53%	0.01%	0.00%	0.10%
Internal	20.00%	8.00%	4.00%	4.00%	0.00%	0.00%	0.00%	0.00%	95.00%	19.00%	7.60%	3.80%	3.80%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	19.70%	8.86%	4.02%	4.20%	0.53%	0.01%	0.00%	0.10%

JOB GROUP 202 - Associates

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	13.91%	25.23%	4.36%	8.03%	10.53%	0.26%	0.09%	1.96%	20.00%	2.78%	5.05%	0.87%	1.61%	2.11%	0.05%	0.02%	0.39%
Internal	23.08%	3.85%	0.00%	0.00%	3.85%	0.00%	0.00%	0.00%	80.00%	18.46%	3.08%	0.00%	0.00%	3.08%	0.00%	0.00%	0.00%
Final Availability									100.00%	21.24%	8.12%	0.87%	1.61%	5.18%	0.05%	0.02%	0.39%

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AVAILABILITY ANALYSIS - 8/1/2022

JOB GROUP 203 - Sr. Engineers

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	13.48%	10.14%	2.49%	3.78%	2.50%	0.00%	0.00%	1.38%	25.00%	3.37%	2.54%	0.62%	0.94%	0.62%	0.00%	0.00%	0.34%
Internal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	75.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	3.37%	2.54%	0.62%	0.94%	0.62%	0.00%	0.00%	0.34%

JOB GROUP 204 - Engineers

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	12.96%	10.09%	2.41%	3.82%	2.56%	0.00%	0.00%	1.30%	100.00%	12.96%	10.09%	2.41%	3.82%	2.56%	0.00%	0.00%	1.30%
Internal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	12.96%	10.09%	2.41%	3.82%	2.56%	0.00%	0.00%	1.30%

JOB GROUP 205 - Designers

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	20.12%	10.77%	2.92%	3.91%	2.57%	0.03%	0.00%	1.34%	100.00%	20.12%	10.77%	2.92%	3.91%	2.57%	0.03%	0.00%	1.34%
Internal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	20.12%	10.77%	2.92%	3.91%	2.57%	0.03%	0.00%	1.34%

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AVAILABILITY ANALYSIS - 8/1/2022

JOB GROUP 208 - Proposal Professionals

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	59.68%	22.34%	10.47%	5.15%	4.00%	0.00%	0.00%	2.72%	95.00%	56.70%	21.22%	9.95%	4.89%	3.80%	0.00%	0.00%	2.58%
Internal	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	61.70%	21.22%	9.95%	4.89%	3.80%	0.00%	0.00%	2.58%

JOB GROUP 209 - Sr. Field Coordinator

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	56.06%	37.24%	25.55%	2.01%	6.00%	0.05%	0.00%	3.62%	40.00%	22.42%	14.90%	10.22%	0.80%	2.40%	0.02%	0.00%	1.45%
Internal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	60.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	22.42%	14.90%	10.22%	0.80%	2.40%	0.02%	0.00%	1.45%

JOB GROUP 210 - Field Coordinator

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	56.06%	37.24%	25.55%	2.01%	6.00%	0.05%	0.00%	3.62%	100.00%	56.06%	37.24%	25.55%	2.01%	6.00%	0.05%	0.00%	3.62%
Internal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	56.06%	37.24%	25.55%	2.01%	6.00%	0.05%	0.00%	3.62%

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AVAILABILITY ANALYSIS - 8/1/2022

JOB GROUP 211 - Administrative Professionals

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	54.59%	34.18%	23.40%	2.31%	5.27%	0.09%	0.00%	3.09%	100.00%	54.59%	34.18%	23.40%	2.31%	5.27%	0.09%	0.00%	3.09%
Internal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	54.59%	34.18%	23.40%	2.31%	5.27%	0.09%	0.00%	3.09%

JOB GROUP 301 - Sr. Technicians

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0.00%	3.19%	100.00%	18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0.00%	3.19%
Internal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0.00%	3.19%

JOB GROUP 302 - Technicians

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0.00%	3.19%	100.00%	18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0.00%	3.19%
Internal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0.00%	3.19%

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AVAILABILITY ANALYSIS - 8/1/2022

JOB GROUP 501 - Admin Support

Factor	Raw Availability								Weight	Weighted Availability							
	Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Two Or More		Female	Minority	Black	Hispanic	Asian	Am Ind.	NHOPI	Balance
External	75.65%	47.69%	40.70%	2.75%	1.66%	0.09%	0.04%	2.44%	100.00%	75.65%	47.69%	40.70%	2.75%	1.66%	0.09%	0.04%	2.44%
Internal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Final Availability									100.00%	75.65%	47.69%	40.70%	2.75%	1.66%	0.09%	0.04%	2.44%

UTILIZATION ANALYSIS SUMMARY

Hazen Sawyer - Cincinnati - August 1, 2022

UTILIZATION ANALYSIS SUMMARY - 8/1/2022

Job Group Code - Name		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
202 - Vice Presidents	Workforce Numbers	8	1	0	0	0	0	0	0	0
	Workforce Percentages	-	12.50%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	34.74%	26.04%	7.18%	10.12%	6.33%	0.46%	0.11%	1.83%
201 - Sr. Associates And Consultants	Workforce Numbers	17	1	0	0	0	0	0	0	0
	Workforce Percentages	-	5.88%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	19.70%	8.86%	4.02%	4.20%	0.53%	0.01%	0.00%	0.10%
202 - Associates	Workforce Numbers	25	5	2	1	1	0	0	0	0
	Workforce Percentages	-	20.0%	8.00%	4.00%	4.00%	0%	0%	0%	0%
	Availability Percentages	-	21.24%	8.12%	0.87%	1.61%	5.18%	0.05%	0.02%	0.39%
203 - Sr. Engineers	Workforce Numbers	26	6	1	0	0	1	0	0	0
	Workforce Percentages	-	23.08%	3.85%	0%	0%	3.85%	0%	0%	0%
	Availability Percentages	-	3.37%	2.54%	0.62%	0.94%	0.62%	0%	0%	0.34%
204 - Engineers	Workforce Numbers	2	0	0	0	0	0	0	0	0
	Workforce Percentages	-	0%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	12.96%	10.09%	2.41%	3.82%	2.56%	0%	0%	1.30%
205 - Designers	Workforce Numbers	40	17	7	2	3	0	0	0	2
	Workforce Percentages	-	42.50%	17.50%	5.00%	7.50%	0%	0%	0%	5.00%
	Availability Percentages	-	20.12%	10.77%	2.92%	3.91%	2.57%	0.03%	0%	1.34%
208 - Proposal Professionals	Workforce Numbers	3	3	1	0	0	1	0	0	0
	Workforce Percentages	-	100%	33.33%	0%	0%	33.33%	0%	0%	0%
	Availability Percentages	-	61.70%	21.22%	9.95%	4.89%	3.80%	0%	0%	2.58%

Hazen Sawyer - Cincinnati - August 1, 2022

UTILIZATION ANALYSIS SUMMARY - 8/1/2022

Job Group Code - Name		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
209 - Sr. Field Coordinator	Workforce Numbers	4	0	0	0	0	0	0	0	0
	Workforce Percentages	-	0%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	22.42%	14.90%	10.22%	0.80%	2.40%	0.02%	0%	1.45%
210 - Field Coordinator	Workforce Numbers	5	0	0	0	0	0	0	0	0
	Workforce Percentages	-	0%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	56.06%	37.24%	25.55%	2.01%	6.00%	0.05%	0%	3.62%
211 - Administrative Professionals	Workforce Numbers	4	4	0	0	0	0	0	0	0
	Workforce Percentages	-	100%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	54.59%	34.18%	23.40%	2.31%	5.27%	0.09%	0%	3.09%
301 - Sr. Technicians	Workforce Numbers	1	1	0	0	0	0	0	0	0
	Workforce Percentages	-	100%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0%	3.19%
302 - Technicians	Workforce Numbers	4	2	1	0	1	0	0	0	0
	Workforce Percentages	-	50.0%	25.00%	0%	25.00%	0%	0%	0%	0%
	Availability Percentages	-	18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0%	3.19%
501 - Admin Support	Workforce Numbers	2	2	0	0	0	0	0	0	0
	Workforce Percentages	-	100%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	75.65%	47.69%	40.70%	2.75%	1.66%	0.09%	0.04%	2.44%

Exact Binomial Test is in effect

Hazen Sawyer - Cincinnati - August 1, 2022

EXACT BINOMIAL TEST - 8/1/2022

Job Group Code – Name	Female	Minority
102 - Vice Presidents	1.09	1.55
201 - Sr. Associates And Consultants	1.22	0.85
202 - Associates	0.00	0.00
203 - Sr. Engineers	-3.73	-0.69
204 - Engineers	0.00	0.00
205 - Designers	-3.24	-1.30
208 - Proposal Professionals	-1.06	-0.66
209 - Sr. Field Coordinator	0.55	0.00
210 - Field Coordinator	2.40	1.39
211 - Administrative Professionals	-1.51	1.02
301 - Sr. Technicians	-1.34	0.00
302 - Technicians	-1.43	0.00
501 - Admin Support	0.00	0.67

Note: These results are represented in standard deviations calculated using the Exact Binomial method.

Hazen Sawyer - Cincinnati - August 1, 2022

GOALS - 8/1/2022

Job Group Code - Name	Female	Minority
102 - Vice Presidents	-	-
201 - Sr. Associates And Consultants	-	-
202 - Associates	-	-
203 - Sr. Engineers	-	-
204 - Engineers	-	-
205 - Designers	-	-
208 - Proposal Professionals	-	-
209 - Sr. Field Coordinator	-	-
210 - Field Coordinator	56.06%	-
211 - Administrative Professionals	-	-
301 - Sr. Technicians	-	-
302 - Technicians	-	-
501 - Admin Support	-	-

Note: Affirmative Action Program numerical placement goals have been established pursuant to 41 C.F.R. § 60-2.16 and do not represent rigid and inflexible quotas, nor do they provide for preferential treatment on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or veteran status.

Exact Binomial Test is in effect

**EXTERNAL RECRUITMENT AREA
BACK-UP DATA**

REASONABLE RECRUITMENT AREA RATIONALE

The Company selected geographic recruitment areas for each job group based upon the Company's recruiting practices and from where it generally obtains minorities and women with requisite skills. The specific occupational census titles were selected for each job group because of their correlation to specific job titles which make up each job group.

Hazen Sawyer - Cincinnati - August 1, 2022

EXTERNAL AVAILABILITY - 8/1/2022

JOB GROUP 102 - Vice Presidents

Labor Area: US Total										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 0440 - Other managers										
100.00%	Population	3,849,055	1,337,295	1,002,155	276,475	389,560	243,680	17,750	4,410	70,280
	Percentage		34.74%	26.04%	7.18%	10.12%	6.33%	0.46%	0.11%	1.83%
Final External Availability			34.74%	26.04%	7.18%	10.12%	6.33%	0.46%	0.11%	1.83%

JOB GROUP 201 - Sr. Associates And Consultants

Labor Area: US Total										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 1360 - Civil engineers										
100.00%	Population	352,770	49,075	89,000	15,385	28,330	37,145	920	310	6,910
	Percentage		13.91%	25.23%	4.36%	8.03%	10.53%	0.26%	0.09%	1.96%
Final External Availability			13.91%	25.23%	4.36%	8.03%	10.53%	0.26%	0.09%	1.96%

JOB GROUP 202 - Associates

Labor Area: US Total										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 1360 - Civil engineers										
100.00%	Population	352,770	49,075	89,000	15,385	28,330	37,145	920	310	6,910
	Percentage		13.91%	25.23%	4.36%	8.03%	10.53%	0.26%	0.09%	1.96%
Final External Availability			13.91%	25.23%	4.36%	8.03%	10.53%	0.26%	0.09%	1.96%

Hazen Sawyer - Cincinnati - August 1, 2022

EXTERNAL AVAILABILITY - 8/1/2022

JOB GROUP 203 - Sr. Engineers

Labor Area: Cincinnati (Metro)										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 1305 - Architects, surveyors, and cartographers										
3.85%	Population	10,000	2,654	1,148	445	277	98	0	0	329
	Percentage		26.54%	11.48%	4.45%	2.77%	0.98%	0%	0%	3.29%
Census Occupational Title: 1360 - Civil engineers										
96.15%	Population	10,000	1,296	1,009	241	382	256	0	0	130
	Percentage		12.96%	10.09%	2.41%	3.82%	2.56%	0%	0%	1.30%
Final External Availability			13.48%	10.14%	2.49%	3.78%	2.50%	0.00%	0.00%	1.38%

JOB GROUP 204 - Engineers

Labor Area: Cincinnati (Metro)										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 1360 - Civil engineers										
100.00%	Population	10,000	1,296	1,009	241	382	256	0	0	130
	Percentage		12.96%	10.09%	2.41%	3.82%	2.56%	0%	0%	1.30%
Final External Availability			12.96%	10.09%	2.41%	3.82%	2.56%	0.00%	0.00%	1.30%

Hazen Sawyer - Cincinnati - August 1, 2022

EXTERNAL AVAILABILITY - 8/1/2022

JOB GROUP 205 - Designers

Labor Area: Cincinnati (Metro)										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 1360 - Civil engineers										
83.75%	Population	10,000	1,296	1,009	241	382	256	0	0	130
	Percentage		12.96%	10.09%	2.41%	3.82%	2.56%	0%	0%	1.30%
Census Occupational Title: 2600 - Art and design workers										
16.25%	Population	10,000	5,705	1,426	553	435	262	21	0	155
	Percentage		57.05%	14.26%	5.53%	4.35%	2.62%	0.21%	0%	1.55%
Final External Availability			20.12%	10.77%	2.92%	3.91%	2.57%	0.03%	0.00%	1.34%

JOB GROUP 208 - Proposal Professionals

Labor Area: Cincinnati (Metro)										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 0735 - Market research analysts and marketing specialists										
100.00%	Population	10,000	5,968	2,234	1,047	515	400	0	0	272
	Percentage		59.68%	22.34%	10.47%	5.15%	4.00%	0%	0%	2.72%
Final External Availability			59.68%	22.34%	10.47%	5.15%	4.00%	0.00%	0.00%	2.72%

Hazen Sawyer - Cincinnati - August 1, 2022

EXTERNAL AVAILABILITY - 8/1/2022

JOB GROUP 209 - Sr. Field Coordinator

Labor Area: Cincinnati (Metro)										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 0750 - Business operations specialists, all other										
100.00%	Population	10,000	5,606	3,724	2,555	201	600	5	0	362
	Percentage		56.06%	37.24%	25.55%	2.01%	6.00%	0.05%	0%	3.62%
Final External Availability			56.06%	37.24%	25.55%	2.01%	6.00%	0.05%	0.00%	3.62%

JOB GROUP 210 - Field Coordinator

Labor Area: Cincinnati (Metro)										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 0750 - Business operations specialists, all other										
100.00%	Population	10,000	5,606	3,724	2,555	201	600	5	0	362
	Percentage		56.06%	37.24%	25.55%	2.01%	6.00%	0.05%	0%	3.62%
Final External Availability			56.06%	37.24%	25.55%	2.01%	6.00%	0.05%	0.00%	3.62%

Hazen Sawyer - Cincinnati - August 1, 2022

EXTERNAL AVAILABILITY - 8/1/2022

JOB GROUP 211 - Administrative Professionals

Labor Area: Cincinnati (Metro)										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 0750 - Business operations specialists, all other										
75.00%	Population	10,000	5,606	3,724	2,555	201	600	5	0	362
	Percentage		56.06%	37.24%	25.55%	2.01%	6.00%	0.05%	0%	3.62%
Census Occupational Title: 0800 - Accountants and auditors										
25.00%	Population	10,000	5,017	2,498	1,694	322	309	21	0	151
	Percentage		50.17%	24.98%	16.94%	3.22%	3.09%	0.21%	0%	1.51%
Final External Availability			54.59%	34.18%	23.40%	2.31%	5.27%	0.09%	0.00%	3.09%

JOB GROUP 301 - Sr. Technicians

Labor Area: Cincinnati (Metro)										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 1541 - Drafters, engineering technicians, and mapping technicians										
100.00%	Population	10,000	1,808	2,997	1,919	286	469	4	0	319
	Percentage		18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0%	3.19%
Final External Availability			18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0.00%	3.19%

Hazen Sawyer - Cincinnati - August 1, 2022

EXTERNAL AVAILABILITY - 8/1/2022

JOB GROUP 302 - Technicians

Labor Area: Cincinnati (Metro)										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 1541 - Drafters, engineering technicians, and mapping technicians										
100.00%	Population	10,000	1,808	2,997	1,919	286	469	4	0	319
	Percentage		18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0%	3.19%
Final External Availability			18.08%	29.97%	19.19%	2.86%	4.69%	0.04%	0.00%	3.19%

JOB GROUP 501 - Admin Support

Labor Area: Cincinnati (Metro)										
Component Weight		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
Census Occupational Title: 5810 - Other office and administrative support workers										
100.00%	Population	10,000	7,565	4,769	4,070	275	166	9	4	244
	Percentage		75.65%	47.69%	40.70%	2.75%	1.66%	0.09%	0.04%	2.44%
Final External Availability			75.65%	47.69%	40.70%	2.75%	1.66%	0.09%	0.04%	2.44%

INTERNAL FEEDER GROUP BACK- UP DATA

INTERNAL “FEEDER POOL” RATIONALE

The Company identified pools of promotable, transferable and trainable employees based upon the personnel transactions which occurred during the prior affirmative action plan year, as well as the Company’s assessment of prospective promotion and transfer patterns. The Company placed weight on these pools based upon the past and anticipated frequency of promotion and transfer activity from the pools and from where it generally obtains minorities and women with requisite skills.

Hazen Sawyer - Cincinnati - August 1, 2022

INTERNAL AVAILABILITY - 8/1/2022

JOB GROUP 102 - Vice Presidents

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
	Final Internal Availability		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

JOB GROUP 201 - Sr. Associates And Consultants

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
202 - Associates	100.00%	Population	25	5	2	1	1	0	0	0
		Percentage	-	20.0%	8.00%	4.00%	4.00%	0%	0%	0%
	Final Internal Availability		20.00%	8.00%	4.00%	4.00%	0.00%	0.00%	0.00%	0.00%

JOB GROUP 202 - Associates

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
203 - Sr. Engineers	100.00%	Population	26	6	1	0	0	1	0	0
		Percentage	-	23.08%	3.85%	0%	0%	3.85%	0%	0%
	Final Internal Availability		23.08%	3.85%	0.00%	0.00%	3.85%	0.00%	0.00%	0.00%

JOB GROUP 203 - Sr. Engineers

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
204 - Engineers	100.00%	Population	2	0	0	0	0	0	0	0
		Percentage	-	0%	0%	0%	0%	0%	0%	0%
	Final Internal Availability		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Hazen Sawyer - Cincinnati - August 1, 2022

INTERNAL AVAILABILITY - 8/1/2022

JOB GROUP 204 - Engineers

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
	Final Internal Availability		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

JOB GROUP 205 - Designers

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
	Final Internal Availability		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

JOB GROUP 208 - Proposal Professionals

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
501 - Admin Support	100.00%	Population	2	2	0	0	0	0	0	0
		Percentage	-	100%	0%	0%	0%	0%	0%	0%
	Final Internal Availability		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

JOB GROUP 209 - Sr. Field Coordinator

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
210 - Field Coordinator	100.00%	Population	5	0	0	0	0	0	0	0
		Percentage	-	0%	0%	0%	0%	0%	0%	0%
	Final Internal Availability		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Hazen Sawyer - Cincinnati - August 1, 2022

INTERNAL AVAILABILITY - 8/1/2022

JOB GROUP 210 - Field Coordinator

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
	Final Internal Availability		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

JOB GROUP 211 - Administrative Professionals

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
	Final Internal Availability		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

JOB GROUP 301 - Sr. Technicians

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
	Final Internal Availability		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

JOB GROUP 302 - Technicians

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
	Final Internal Availability		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

JOB GROUP 501 - Admin Support

Feeder Group	Component Weight	Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
	Final Internal Availability		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

NARRATIVE DISCUSSION

NARRATIVE DISCUSSION OF ACHIEVEMENT OF PRIOR YEAR'S GOALS

The following describes the 2021 - 2022 Affirmative Action Plan goals for Hazen Sawyer - Cincinnati and the good faith efforts we have made in those job groups where goals were established. We established two (2) goals at the beginning of the plan year running from 8/1/2021 to 7/31/2022.

201 - Sr. Associates And Consultants	Total Incumbents: 16
Female Goal:	20.99%
Placement Rate:	40.00%
Through our good faith efforts, we achieved our Female goal in this Job Group by attaining a placement rate (40.00%) that exceeded the goal established at the beginning of the plan year (20.99%).	

210 - Field Coordinator	Total Incumbents: 3
Female Goal:	68.11%
Placement Rate:	0.00%
The Company established a placement rate goal of 68.11% for Females at the beginning of the plan year. As placement opportunities became available, we [describe good faith efforts undertaken, such as: posted job openings internally, offered educational assistance programs, encouraged employee referrals, listed positions with diversity recruitment sources and state job services, placed advertisements in area newspapers containing EEO / AA language and ensured equal access to advancement opportunities from other Job Groups] . Despite these good faith efforts, we were unable to attract a sufficient number of qualified Female candidates to achieve our goal.	

PRIOR YEAR'S REPORTS

UTILIZATION ANALYSIS SUMMARY

Hazen Sawyer - Cincinnati - August 1, 2022

UTILIZATION ANALYSIS SUMMARY - 8/1/2021

Job Group Code - Name		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
101 - Executives	Workforce Numbers	4	0	0	0	0	0	0	0	0
	Workforce Percentages	-	0%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	29.20%	19.00%	5.85%	7.34%	4.01%	0.43%	0.11%	1.25%
102 - Vice Presidents	Workforce Numbers	2	1	0	0	0	0	0	0	0
	Workforce Percentages	-	50.0%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	29.20%	19.00%	5.85%	7.34%	4.01%	0.43%	0.11%	1.25%
201 - Sr. Associates And Consultants	Workforce Numbers	16	0	0	0	0	0	0	0	0
	Workforce Percentages	-	0%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	20.99%	1.10%	0.22%	0.27%	0.51%	0.01%	0.01%	0.07%
202 - Associates	Workforce Numbers	28	6	0	0	0	0	0	0	0
	Workforce Percentages	-	21.43%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	22.54%	4.39%	0.89%	1.09%	2.06%	0.05%	0.02%	0.27%
203 - Sr. Engineers	Workforce Numbers	12	3	0	0	0	0	0	0	0
	Workforce Percentages	-	25.00%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	32.88%	10.92%	4.64%	1.88%	2.55%	0.03%	0%	1.78%
204 - Engineers	Workforce Numbers	44	18	5	2	1	1	0	0	1
	Workforce Percentages	-	40.91%	11.36%	4.55%	2.27%	2.27%	0%	0%	2.27%
	Availability Percentages	-	9.10%	9.54%	4.87%	0.76%	3.35%	0.11%	0%	0.29%
205 - Designers	Workforce Numbers	12	3	2	0	2	0	0	0	0
	Workforce Percentages	-	25.00%	16.67%	0%	16.67%	0%	0%	0%	0%
	Availability Percentages	-	52.79%	8.98%	4.67%	1.15%	1.80%	0.13%	0%	1.12%

Hazen Sawyer - Cincinnati - August 1, 2022

UTILIZATION ANALYSIS SUMMARY - 8/1/2021

Job Group Code - Name		Total	Female	Minority	Black	Hispanic	Asian	Am. Ind.	NHOPI	Balance
208 - Proposal Professionals	Workforce Numbers	2	2	1	0	0	1	0	0	0
	Workforce Percentages	-	100%	50.0%	0%	0%	50.0%	0%	0%	0%
	Availability Percentages	-	60.38%	14.62%	6.92%	2.44%	4.11%	0.64%	0%	0.37%
209 - Sr. Field Coordinator	Workforce Numbers	6	0	0	0	0	0	0	0	0
	Workforce Percentages	-	0%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	27.24%	7.79%	5.76%	0.14%	1.38%	0.10%	0%	0.36%
210 - Field Coordinator	Workforce Numbers	3	0	0	0	0	0	0	0	0
	Workforce Percentages	-	0%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	68.11%	19.48%	14.40%	0.36%	3.45%	0.25%	0%	0.91%
211 - Administrative Professionals	Workforce Numbers	3	2	1	1	0	0	0	0	0
	Workforce Percentages	-	66.67%	33.33%	33.33%	0%	0%	0%	0%	0%
	Availability Percentages	-	65.50%	18.87%	14.11%	1.26%	2.51%	0.17%	0%	0.78%
301 - Sr. Technicians	Workforce Numbers	1	1	0	0	0	0	0	0	0
	Workforce Percentages	-	100%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	21.06%	17.99%	13.46%	1.93%	1.06%	0%	0%	1.31%
302 - Technicians	Workforce Numbers	1	1	1	1	0	0	0	0	0
	Workforce Percentages	-	100%	100%	100%	0%	0%	0%	0%	0%
	Availability Percentages	-	21.06%	17.99%	13.46%	1.93%	1.06%	0%	0%	1.31%
501 - Admin Support	Workforce Numbers	4	4	0	0	0	0	0	0	0
	Workforce Percentages	-	100%	0%	0%	0%	0%	0%	0%	0%
	Availability Percentages	-	77.02%	25.36%	20.91%	1.93%	1.20%	0.38%	0%	0.92%

Exact Binomial Test is in effect

EXACT BINOMIAL TEST - 8/1/2021

Job Group Code – Name	Female	Minority
101 - Executives	0.98	0.00
102 - Vice Presidents	-0.68	0.00
201 - Sr. Associates And Consultants	2.14	0.00
202 - Associates	0.00	0.48
203 - Sr. Engineers	0.30	0.48
204 - Engineers	-5.63	-0.51
205 - Designers	1.75	-1.05
208 - Proposal Professionals	-0.64	-1.10
209 - Sr. Field Coordinator	1.28	0.00
210 - Field Coordinator	2.14	0.00
211 - Administrative Professionals	0.00	-0.73
301 - Sr. Technicians	-1.25	0.00
302 - Technicians	-1.25	-1.34
501 - Admin Support	-0.55	0.56

Note: These results are represented in standard deviations calculated using the Exact Binomial method.

Hazen Sawyer - Cincinnati - August 1, 2022

GOALS - 8/1/2021

Job Group Code - Name	Female	Minority
101 - Executives	-	-
102 - Vice Presidents	-	-
201 - Sr. Associates And Consultants	20.99%	-
202 - Associates	-	-
203 - Sr. Engineers	-	-
204 - Engineers	-	-
205 - Designers	-	-
208 - Proposal Professionals	-	-
209 - Sr. Field Coordinator	-	-
210 - Field Coordinator	68.11%	-
211 - Administrative Professionals	-	-
301 - Sr. Technicians	-	-
302 - Technicians	-	-
501 - Admin Support	-	-

Note: Affirmative Action Program numerical placement goals have been established pursuant to 41 C.F.R. § 60-2.16 and do not represent rigid and inflexible quotas, nor do they provide for preferential treatment on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or veteran status.

Exact Binomial Test is in effect

PERSONNEL ACTIVITY REPORTS

Hazen Sawyer - Cincinnati - August 1, 2022

APPLICANT FLOW – 8/1/2021 – 7/31/2022

Job Group	Total	Male	Female	White	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two or More	Unknown Race	Unknown Gender
101	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0
103	272	87	175	155	58	7	4	0	1	8	39	10
201	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0
203	2	2	0	2	0	0	0	0	0	0	0	0
204	261	187	59	121	13	16	41	0	0	10	60	15
205	167	137	24	85	18	6	18	0	2	5	33	6
208	10	5	5	5	4	0	1	0	0	0	0	0
209	11	10	0	5	1	1	1	0	0	0	3	1
210	2	1	1	2	0	0	0	0	0	0	0	0
211	1	0	1	0	0	0	1	0	0	0	0	0
301	0	0	0	0	0	0	0	0	0	0	0	0
302	0	0	0	0	0	0	0	0	0	0	0	0
501	33	6	26	16	6	0	1	0	0	1	9	1

Hazen Sawyer - Cincinnati - August 1, 2022

NEW HIRES – 8/1/2021 – 7/31/2022

Job Group	Total	Male	Female	White	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two or More
101	0	0	0	0	0	0	0	0	0	0
102	1	1	0	1	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0
201	1	1	0	1	0	0	0	0	0	0
202	1	1	0	0	1	0	0	0	0	0
203	1	1	0	1	0	0	0	0	0	0
204	2	2	0	1	1	0	0	0	0	0
205	6	6	0	4	0	2	0	0	0	0
208	0	0	0	0	0	0	0	0	0	0
209	0	0	0	0	0	0	0	0	0	0
210	2	2	0	2	0	0	0	0	0	0
211	2	0	2	2	0	0	0	0	0	0
301	0	0	0	0	0	0	0	0	0	0
302	3	1	2	1	1	1	0	0	0	0
501	0	0	0	0	0	0	0	0	0	0

Hazen Sawyer - Cincinnati - August 1, 2022

PROMOTIONS FROM – 8/1/2021 – 7/31/2022

Job Group	Total	Male	Female	White	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two or More
101	0	0	0	0	0	0	0	0	0	0
102	1	1	0	1	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0
201	1	1	0	1	0	0	0	0	0	0
202	4	2	2	4	0	0	0	0	0	0
203	3	3	0	3	0	0	0	0	0	0
204	29	13	16	25	2	1	0	0	0	1
205	5	4	1	4	0	1	0	0	0	0
208	0	0	0	0	0	0	0	0	0	0
209	0	0	0	0	0	0	0	0	0	0
210	0	0	0	0	0	0	0	0	0	0
211	1	1	0	1	0	0	0	0	0	0
301	0	0	0	0	0	0	0	0	0	0
302	0	0	0	0	0	0	0	0	0	0
501	1	0	1	1	0	0	0	0	0	0

Note: Promotions From represent any promotions within the Program, regardless of the job group promoted to. The Program uses this data to calculate the promotion rates contained in Impact Ratio Analysis.

Hazen Sawyer - Cincinnati - August 1, 2022

PROMOTIONS TO – 8/1/2021 – 7/31/2022

Job Group	Total	Male	Female	White	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two or More
101	1	1	0	1	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0
201	4	2	2	4	0	0	0	0	0	0
202	4	3	1	3	0	1	0	0	0	0
203	1	1	0	1	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0
205	24	10	14	20	2	1	0	0	0	1
208	0	0	0	0	0	0	0	0	0	0
209	0	0	0	0	0	0	0	0	0	0
210	0	0	0	0	0	0	0	0	0	0
211	1	0	1	1	0	0	0	0	0	0
301	0	0	0	0	0	0	0	0	0	0
302	0	0	0	0	0	0	0	0	0	0
501	0	0	0	0	0	0	0	0	0	0

Note: Promotions To represent only those promotions within the Program that resulted in a change to job group. The Program uses this data to calculate the promotion rates contained in the Placement Analysis.

Hazen Sawyer - Cincinnati - August 1, 2022

TERMINATIONS – 8/1/2021 – 7/31/2022

Job Group	Total	Male	Female	White	Black	Hispanic	Asian	Am. Ind.	NHOPI	Two or More
101	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0
201	3	2	1	3	0	0	0	0	0	0
202	4	4	0	4	0	0	0	0	0	0
203	1	1	0	1	0	0	0	0	0	0
204	2	2	0	2	0	0	0	0	0	0
205	3	1	2	1	1	1	0	0	0	0
208	0	0	0	0	0	0	0	0	0	0
209	1	1	0	1	0	0	0	0	0	0
210	0	0	0	0	0	0	0	0	0	0
211	1	1	0	0	1	0	0	0	0	0
301	0	0	0	0	0	0	0	0	0	0
302	3	2	1	1	2	0	0	0	0	0
501	2	0	2	2	0	0	0	0	0	0

PLACEMENT ANALYSIS
(8/1/2021 – 7/31/2022)

Hazen Sawyer - Cincinnati - August 1, 2022

PLACEMENT ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 101 - Executives - TOTAL PLACEMENTS: 1

	Minority	Non Minority	Female	Male
New Hires	0	0	0	0
Promotions To	0	1	0	1
Totals	0	1	0	1
Percentage	0.00%	100.00%	0.00%	100.00%

JOB GROUP 102 - Vice Presidents - TOTAL PLACEMENTS: 1

	Minority	Non Minority	Female	Male
New Hires	0	1	0	1
Promotions To	0	0	0	0
Totals	0	1	0	1
Percentage	0.00%	100.00%	0.00%	100.00%

JOB GROUP 201 - Sr. Associates And Consultants - TOTAL PLACEMENTS: 5

	Minority	Non Minority	Female	Male
New Hires	0	1	0	1
Promotions To	0	4	2	2
Totals	0	5	2	3
Percentage	0.00%	100.00%	40.00%	60.00%

JOB GROUP 202 - Associates - TOTAL PLACEMENTS: 5

	Minority	Non Minority	Female	Male
New Hires	1	0	0	1
Promotions To	1	3	1	3
Totals	2	3	1	4
Percentage	40.00%	60.00%	20.00%	80.00%

Hazen Sawyer - Cincinnati - August 1, 2022

PLACEMENT ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 203 - Sr. Engineers - TOTAL PLACEMENTS: 2

	Minority	Non Minority	Female	Male
New Hires	0	1	0	1
Promotions To	0	1	0	1
Totals	0	2	0	2
Percentage	0.00%	100.00%	0.00%	100.00%

JOB GROUP 204 - Engineers - TOTAL PLACEMENTS: 2

	Minority	Non Minority	Female	Male
New Hires	1	1	0	2
Promotions To	0	0	0	0
Totals	1	1	0	2
Percentage	50.00%	50.00%	0.00%	100.00%

JOB GROUP 205 - Designers - TOTAL PLACEMENTS: 30

	Minority	Non Minority	Female	Male
New Hires	2	4	0	6
Promotions To	4	20	14	10
Totals	6	24	14	16
Percentage	20.00%	80.00%	46.67%	53.33%

JOB GROUP 208 - Proposal Professionals - TOTAL PLACEMENTS: 0

	Minority	Non Minority	Female	Male
New Hires	0	0	0	0
Promotions To	0	0	0	0
Totals	0	0	0	0
Percentage	0.00%	0.00%	0.00%	0.00%

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PLACEMENT ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 209 - Sr. Field Coordinator - TOTAL PLACEMENTS: 0

	Minority	Non Minority	Female	Male
New Hires	0	0	0	0
Promotions To	0	0	0	0
Totals	0	0	0	0
Percentage	0.00%	0.00%	0.00%	0.00%

JOB GROUP 210 - Field Coordinator - TOTAL PLACEMENTS: 2

	Minority	Non Minority	Female	Male
New Hires	0	2	0	2
Promotions To	0	0	0	0
Totals	0	2	0	2
Percentage	0.00%	100.00%	0.00%	100.00%

JOB GROUP 211 - Administrative Professionals - TOTAL PLACEMENTS: 3

	Minority	Non Minority	Female	Male
New Hires	0	2	2	0
Promotions To	0	1	1	0
Totals	0	3	3	0
Percentage	0.00%	100.00%	100.00%	0.00%

JOB GROUP 301 - Sr. Technicians - TOTAL PLACEMENTS: 0

	Minority	Non Minority	Female	Male
New Hires	0	0	0	0
Promotions To	0	0	0	0
Totals	0	0	0	0
Percentage	0.00%	0.00%	0.00%	0.00%

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PLACEMENT ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 302 - Technicians - TOTAL PLACEMENTS: 3

	Minority	Non Minority	Female	Male
New Hires	2	1	2	1
Promotions To	0	0	0	0
Totals	2	1	2	1
Percentage	66.67%	33.33%	66.67%	33.33%

JOB GROUP 501 - Admin Support - TOTAL PLACEMENTS: 0

	Minority	Non Minority	Female	Male
New Hires	0	0	0	0
Promotions To	0	0	0	0
Totals	0	0	0	0
Percentage	0.00%	0.00%	0.00%	0.00%

IMPACT RATIO ANALYSIS
(8/1/2021 – 7/31/2022)

IMPACT RATIO ANALYSIS KEY

An asterisk (*) indicates that the incumbency data includes employees placed into the job group during the plan year.

Two asterisks (**) indicate that the applicant flow data is incomplete.

Shortfall=Difference between the expected and actual protected group selections

Hazen Sawyer - Cincinnati - August 1, 2022

MOST FAVORED GROUP ANALYSIS – 8/1/2021 – 7/31/2022

HIRES/APPLICANTS

Job Group	Rate for White	Rate for Black	Rate for Hispanic	Rate for Asian	Rate for Am. Ind.	Rate for NHOPI
101	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
102	1/1** 1.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
103	0/155 0.00	0/58 0.00	0/7 0.00	0/4 0.00	0/0 0.00	0/1 0.00
201	1/1** 1.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
202	0/0 0.00	1/1** 1.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
203	1/2 0.50	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
204	1/121 0.01	1/13 0.08	0/16 0.00	0/41 0.00	0/0 0.00	0/0 0.00
205	4/85 0.05	0/18 0.00	2/6 0.33	0/18 0.00	0/0 0.00	0/2 0.00
208	0/5 0.00	0/4 0.00	0/0 0.00	0/1 0.00	0/0 0.00	0/0 0.00
209	0/5 0.00	0/1 0.00	0/1 0.00	0/1 0.00	0/0 0.00	0/0 0.00
210	2/2 1.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
211	2/2** 1.00	0/0 0.00	0/0 0.00	0/1 0.00	0/0 0.00	0/0 0.00
301	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00

MOST FAVORED GROUP ANALYSIS – 8/1/2021 – 7/31/2022

Job Group	Rate for White	Rate for Black	Rate for Hispanic	Rate for Asian	Rate for Am. Ind.	Rate for NHOPI
302	1/1**	1/1**	1/1**	0/0	0/0	0/0
	1.00	1.00	1.00	0.00	0.00	0.00
501	0/16	0/6	0/0	0/1	0/0	0/0
	0.00	0.00	0.00	0.00	0.00	0.00

Hazen Sawyer - Cincinnati - August 1, 2022

MOST FAVORED GROUP ANALYSIS – 8/1/2021 – 7/31/2022

PROMOTIONS/PRIOR YEAR INCUMBENTS

Job Group	Rate for White	Rate for Black	Rate for Hispanic	Rate for Asian	Rate for Am. Ind.	Rate for NHOPI
101	0/4 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
102	1/2 0.50	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
103	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
201	1/16 0.06	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
202	4/28 0.14	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
203	3/12 0.25	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
204	25/39 0.64	2/2 1.00	1/1 1.00	0/1 0.00	0/0 0.00	0/0 0.00
205	4/10 0.40	0/0 0.00	1/2 0.50	0/0 0.00	0/0 0.00	0/0 0.00
208	0/1 0.00	0/0 0.00	0/0 0.00	0/1 0.00	0/0 0.00	0/0 0.00
209	0/6 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
210	0/3 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
211	1/2 0.50	0/1 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00

MOST FAVORED GROUP ANALYSIS – 8/1/2021 – 7/31/2022

Job Group	Rate for White	Rate for Black	Rate for Hispanic	Rate for Asian	Rate for Am. Ind.	Rate for NHOPI
301	0/1 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
302	0/0 0.00	0/1 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
501	1/4 0.25	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00

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MOST FAVORED GROUP ANALYSIS – 8/1/2021 – 7/31/2022

TERMINATIONS/PRIOR YEAR INCUMBENTS

Job Group	Rate for White	Rate for Black	Rate for Hispanic	Rate for Asian	Rate for Am. Ind.	Rate for NHOPI
101	0/4 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
102	0/2 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
103	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
201	3/16 0.19	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
202	4/28 0.14	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
203	1/12 0.08	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
204	2/39 0.05	0/2 0.00	0/1 0.00	0/1 0.00	0/0 0.00	0/0 0.00
205	1/10 0.10	1/2* 0.50	1/2 0.50	0/0 0.00	0/0 0.00	0/0 0.00
208	0/1 0.00	0/0 0.00	0/0 0.00	0/1 0.00	0/0 0.00	0/0 0.00
209	1/6 0.17	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
210	0/3 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
211	0/2 0.00	1/1 1.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00

MOST FAVORED GROUP ANALYSIS – 8/1/2021 – 7/31/2022

Job Group	Rate for White	Rate for Black	Rate for Hispanic	Rate for Asian	Rate for Am. Ind.	Rate for NHOPI
301	0/1 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
302	1/1* 1.00	2/2* 1.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00
501	2/4 0.50	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00	0/0 0.00

IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

SUMMARY OF STATISTICALLY SIGNIFICANT AREAS - HIRES

No areas identified.

IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

SUMMARY OF STATISTICALLY SIGNIFICANT AREAS - PROMOTIONS

Job Group	Female	Male	80%	Std Dev	Short fall
204	16/18 0.89	13/26 0.50	1.78	-2.68	4

IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

SUMMARY OF STATISTICALLY SIGNIFICANT AREAS - TERMINATIONS

Job Group	Min	Non-Min	80%	Std Dev	Short fall
205	2/2 1.00	1/10 0.10	10.00	2.68	1

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 101

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/0	0/0	0.00	0.00	0
0.00	0.00			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/0	0/4	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/0	0/4	0.00	0.00	0
0.00	0.00			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	0/0	0.00	0.00	0
0.00	0.00			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	0/4	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	0/4	0.00	0.00	0
0.00	0.00			

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 102

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/0	1/1**	0.00	0.00	0
0.00	1.00			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/1	1/1	0.00	1.41	0
0.00	1.00			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/1	0/1	0.00	0.00	0
0.00	0.00			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	1/1**	0.00	0.00	0
0.00	1.00			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	1/2	0.00	0.00	0
0.00	0.50			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	0/2	0.00	0.00	0
0.00	0.00			

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 201

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/0	1/1**	0.00	0.00	0
0.00	1.00			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/0	1/16	0.00	0.00	0
0.00	0.06			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
1/2*	2/19*	4.75	1.52	0
0.50	0.11			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	1/1**	0.00	0.00	0
0.00	1.00			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	1/16	0.00	0.00	0
0.00	0.06			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	3/16	0.00	0.00	0
0.00	0.19			

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 202

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/0	1/1**	0.00	0.00	0
0.00	1.00			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
2/6	2/22	3.67	-1.50	1
0.33	0.09			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/6	4/22	0.00	-1.13	0
0.00	0.18			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
1/1**	0/0	0.00	0.00	0
1.00	0.00			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	4/28	0.00	0.00	0
0.00	0.14			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	4/28	0.00	0.00	0
0.00	0.14			

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 203

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/0	1/2	0.00	0.00	0
0.00	0.50			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/3	3/9	0.00	1.15	0
0.00	0.33			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/3	1/9	0.00	-0.60	0
0.00	0.11			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	1/2	0.00	0.00	0
0.00	0.50			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	3/12	0.00	0.00	0
0.00	0.25			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	1/12	0.00	0.00	0
0.00	0.08			

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 204

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/59 0.00	2/187 0.01	0.00	0.80	0

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
16/18 0.89	13/26 0.50	1.78	-2.68	4

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/18 0.00	2/26 0.08	0.00	-1.20	0

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
1/80 0.01	1/121 0.01	1.51	-0.30	0

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
4/5 0.80	25/39 0.64	1.25	-0.71	0

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/5 0.00	2/39 0.05	0.00	-0.52	0

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 205

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/24 0.00	6/137 0.04	0.00	1.04	0

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
1/3 0.33	4/9 0.44	0.75	0.34	0

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
2/3 0.67	1/9 0.11	6.00	1.92	1

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
2/49 0.04	4/85 0.05	0.87	0.17	0

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
1/2 0.50	4/10 0.40	1.25	-0.26	0

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
2/2 1.00	1/10 0.10	10.00	2.68	1

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 208

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/5	0/5	0.00	0.00	0
0.00	0.00			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/2	0/0	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/2	0/0	0.00	0.00	0
0.00	0.00			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
0/5	0/5	0.00	0.00	0
0.00	0.00			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/1	0/1	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/1	0/1	0.00	0.00	0
0.00	0.00			

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 209

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/0	0/10	0.00	0.00	0
0.00	0.00			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/0	0/6	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/0	1/6	0.00	0.00	0
0.00	0.17			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
0/3	0/5	0.00	0.00	0
0.00	0.00			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	0/6	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	1/6	0.00	0.00	0
0.00	0.17			

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 210

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/1	2/2**	0.00	1.73	0
0.00	1.00			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/0	0/3	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/0	0/3	0.00	0.00	0
0.00	0.00			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	2/2	0.00	0.00	0
0.00	1.00			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	0/3	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	0/3	0.00	0.00	0
0.00	0.00			

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 211

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
2/2**	0/0	0.00	0.00	0
1.00	0.00			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/2	1/1	0.00	1.73	0
0.00	1.00			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/2	1/1	0.00	-1.73	0
0.00	1.00			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
0/1	2/2**	0.00	1.73	0
0.00	1.00			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/1	1/2	0.00	0.87	0
0.00	0.50			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
1/1	0/2	0.00	1.73	0
1.00	0.00			

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 301

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/0	0/0	0.00	0.00	0
0.00	0.00			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/1	0/0	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/1	0/0	0.00	0.00	0
0.00	0.00			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	0/0	0.00	0.00	0
0.00	0.00			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	0/1	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	0/1	0.00	0.00	0
0.00	0.00			

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 302

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
2/2**	1/1**	1.00	0.00	0
1.00	1.00			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
0/1	0/0	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
1/1	2/2*	1.00	0.00	0
1.00	1.00			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
2/2**	1/1**	1.00	0.00	0
1.00	1.00			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/1	0/0	0.00	0.00	0
0.00	0.00			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
2/3*	1/1*	0.67	-0.67	0
0.67	1.00			

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IMPACT RATIO ANALYSIS – 8/1/2021 – 7/31/2022

JOB GROUP 501

Hires/Applicants				
Female	Male	80%	Std Dev	Shortfall
0/26	0/6	0.00	0.00	0
0.00	0.00			

Promotions/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
1/4	0/0	0.00	0.00	0
0.25	0.00			

Terminations/Prior Year Incumbents				
Female	Male	80%	Std Dev	Shortfall
2/4	0/0	0.00	0.00	0
0.50	0.00			

Hires/Applicants				
Min	Non-Min	80%	Std Dev	Shortfall
0/8	0/16	0.00	0.00	0
0.00	0.00			

Promotions/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	1/4	0.00	0.00	0
0.00	0.25			

Terminations/Prior Year Incumbents				
Min	Non-Min	80%	Std Dev	Shortfall
0/0	2/4	0.00	0.00	0
0.00	0.50			

Note: Shaded areas represent job groups with adverse impact, a difference in selection rates of at least 1.96 standard deviations. Standard deviations are calculated using the Chi-Square method.

**SECTION 503 OF THE
REHABILITATION ACT
AFFIRMATIVE ACTION PROGRAM**

AFFIRMATIVE ACTION PROGRAM FOR INDIVIDUALS WITH DISABILITIES

I. POLICY STATEMENT

Pursuant to our obligations under Section 503 of the Rehabilitation Act of 1973, the Company maintains and posts an Affirmative Action and Equal Employment Opportunity Policy Statement. The policy statement indicates the top U.S. executive's support for the Company's affirmative action program, provides for an audit and reporting system, and assigns overall responsibility for the implementation of affirmative action activities to the EEO Coordinator.

In addition, the policy statement proclaims that the Company will take steps to assure it recruits, hires, trains and promotes persons in all job titles and ensure that all other personnel actions are administered without regard to disability status, including ensuring that all employment decisions are based only on valid job requirements.

The policy statement also states that employees and applicants shall not be subjected to harassment, intimidation, threats, coercion or discrimination because they have engaged in or may engage in any of the following activities: (1) filing a complaint; (2) assisting or participating in an investigation, compliance evaluation, hearing, or any other activity related to the administration of the affirmative action provisions of section 503 or any other Federal, state or local law requiring equal opportunity for individuals with disabilities; (3) opposing any act or practice made unlawful by section 503 or its implementing regulations in this part or any other Federal, state or local law requiring equal employment opportunity for individuals with disabilities; or, (4) exercising any other right protected by section 503 or its implementing regulations.

II. REVIEW OF PERSONNEL PROCESSES

The Company will take steps to ensure its personnel processes provide for careful, thorough, and systematic consideration of the job qualifications of applicants and employees who are known individuals with a disability for job vacancies filled either by hiring or promotion and for all training opportunities offered or available. Furthermore, the Company will take appropriate steps to ensure its personnel processes do not stereotype individuals with a disability in a manner that limits their access to all jobs for which they are qualified. Finally, the Company will periodically review such processes and make any necessary modifications to ensure these obligations are carried out.

The Company has designed a procedure that facilitates a review of the implementation of its personnel processes. The Company most recently assessed its personnel processes in conjunction with the implementation of this Affirmative Action Program ("AAP"). The Company will reassess its personnel processes in conjunction with its next annual AAP cycle.

III. PHYSICAL AND MENTAL QUALIFICATIONS

The Company periodically reviews of all physical and mental job qualification standards to ensure that, to the extent qualification standards tend to screen out qualified individuals with a disability, they are job-related for the position in question and consistent with business necessity. In fact, the Company reviews the physical and mental job qualification standards each time a job opening is posted prior to recruiting for or promoting into a position.

Whenever the Company applies physical or mental qualification standards in the selection of applicants or employees for employment or other change in employment status, such as promotion, demotion or training, to the extent that qualification standards tend to screen out qualified individuals with a disability, the standards shall be related to the specific job or jobs for which the individual is being considered and consistent with business necessity.

IV. REASONABLE ACCOMMODATION

The Company will make reasonable accommodation to the known physical or mental limitations of an otherwise qualified individual with a disability unless doing so would impose an undue hardship on the operation of its business. If an employee who is known to be an individual with a disability is having difficulty performing his or her job, and it is reasonable to conclude that the performance problem may be related to the known disability, the Company shall confidentially notify the employee of the performance problem and inquire whether the problem is related to the employee's disability. If the employee responds affirmatively, the Company shall confidentially inquire whether the employee is in need of a reasonable accommodation.

V. HARASSMENT

The Company has developed and implemented procedures to ensure employees are not harassed because of their status as an individual with a disability.

VI. EXTERNAL DISSEMINATION

The Company will undertake appropriate outreach and positive recruitment activities reasonably designed to effectively recruit individuals with a disability. These activities may include:

- A. Enlisting the assistance and support of the following persons and organizations in recruiting and developing on-the-job training opportunities for individuals with disabilities, to fulfill the Company's commitment to provide meaningful employment opportunities for such individuals:
 1. The State Vocational Rehabilitation Service Agency (SVRA), State mental health agency, or State developmental disability agency in the area of the contractor's establishment;
 2. The Employment One-Stop Career Center (One-Stop) or American Job Center nearest the contractor's establishment;
 3. The Department of Veterans Affairs Regional Office nearest the contractor's establishment;
 4. Entities funded by the Department of Labor that provide recruitment or training services for individuals with disabilities, such as the services currently provided through the Employer Assistance and Resource Network (EARN);
 5. Local Employment Network (EN) organizations (other than the contractor, if the contractor is an EN) listed in the Social Security Administration's Ticket to Work Employment Network Directory;
 6. Local disability groups, organizations, or Centers for Independent Living (CIL) near the contractor's establishment;
 7. Placement or career offices of educational institutions that specialize in the placement of individuals with disabilities; and
 8. Private recruitment sources, such as professional organizations or employment placement services that specialize in the placement of individuals with disabilities.

- B. Considering taking the actions listed below, as appropriate, to fulfill its commitment to provide meaningful employment opportunities to individuals with a disability:
 - 1. Holding formal briefing sessions with representatives from recruiting sources. Such briefing sessions may include facility tours, clear and concise explanations of current and future job openings, position descriptions, worker specifications, explanations of the Company's selection process, and recruiting literature.
 - 2. Incorporating special efforts to reach students who are individuals with disabilities.
 - 3. Participating in work-study programs for students, trainees, or interns with disabilities. Such programs may be found through outreach to State and local schools and universities, and through EARN.
 - 4. Making individuals with disabilities available for participation in career days, youth motivation programs, and related activities in their communities.
 - 5. Taking other positive steps deemed necessary to attract qualified individuals with disabilities not currently in the work force who have requisite skills and can be recruited through affirmative action measures. These individuals may be located through State and local agencies supported by the U.S. Department of Education's Rehabilitation Services Administration (RSA), local Ticket-to-Work Employment Networks, or local chapters of groups or organizations that provide services for individuals with disabilities.
 - 6. Considering applicants who are known to have disabilities for all available positions for which they may be qualified when the position(s) applied for is unavailable.
- C. The Company will send written notification of the policy related to its affirmative action efforts to subcontractors, including subcontracting vendors and suppliers, requesting appropriate action on their part.
- D. On an annual basis, the Company will review the outreach and recruitment efforts it has taken over the previous twelve months to evaluate its effectiveness in identifying and recruiting qualified individuals with a disability. If the Company concludes the totality of its efforts were not effective in identifying and recruiting qualified individuals with a disability, it shall identify and implement alternative efforts.
- E. The Company will document its outreach and recruitment activities and will retain this documentation for three (3) years.

VII. INTERNAL DISSEMINATION

In order to assure greater employee cooperation and participation in its efforts, the Company has communicated its policy to all employees and applicable union officials. Moreover, the Company may undertake, as appropriate, the following additional efforts to disseminate its policy internally:

- A. Inform all employees and prospective employees of its commitment to engage in affirmative action to increase employment opportunities for individuals with disabilities. The contractor should periodically schedule special meetings with all employees to discuss policy and explain individual employee responsibilities;
- B. Publicize it in the Company newspaper, magazine, annual report and other media;
- C. Conduct special meetings with executive, management and supervisory personnel to explain the intent of the policy and individual responsibility for effective implementation, making clear the chief executive officer's support for the affirmative action policy;

- D. Discuss the policy thoroughly in both employee orientation and management training programs;
- E. Include articles on accomplishments of individuals with disabilities in Company publications; and
- F. When employees are featured in employee handbooks or similar publications for employees, include individuals with disabilities.

VIII. AUDIT AND REPORTING SYSTEMS

The EEO Coordinator has oversight responsibility for implementation of the AAP for individuals with a disability and an audit and reporting system that will measure the effectiveness of the program, indicate any need for remedial action, determine the degree to which our objectives are being met, determine whether known qualified individuals with a disability had the opportunity to participate in educational, training, recreational, and social activities, and measure our compliance with the program's obligations. Documentation of the Company's compliance with the program's obligation is included throughout this AAP.

The Company will be kept apprised of progress through reports as deemed appropriate.

IX. RESPONSIBILITY FOR IMPLEMENTATION

The EEO Coordinator has been assigned responsibility for implementing the Company's affirmative action activities under this part. The EEO Coordinator's identity appears on external and internal communications regarding the Company's affirmative action program. The EEO Coordinator has been given necessary senior management support and staff to manage and implement this affirmative action program.

X. TRAINING

The Company trains all personnel involved in the recruitment, screening, selection, promotion, disciplinary and related processes to ensure that the commitments in its affirmative action program are implemented.

XI. DATA COLLECTION

On an annual basis, the Company collects the following information pertaining to applicants and hires:

- A. The number of applicants who self-identified as individuals with a disability;
- B. The total number of job openings and the total number of jobs filled;
- C. The total number of applicants for all jobs;
- D. The number of applicants hired who self-identified as individuals with a disability; and
- E. The total number of applicants hired.

INDIVIDUALS WITH A DISABILITY DATA COLLECTION SUMMARY

	2019	2020	2021
Total # of Job Openings¹	44	51	49
Total # of Jobs Filled²	39	40	66
Total # of Applicants	903	1368	759
Total # of Disabled Applicants	23	51	0
Total # of Hires	18	23	19
Total # of Disabled Hires	0	1	0

1. Refers to the number of individual positions advertised as open in a job vacancy announcement or requisition.

2. Refers to all jobs the company filled by any means, be it through a competitive process or non-competitively.

DISABILITY UTILIZATION ANALYSIS SUMMARY

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DISABILITY UTILIZATION ANALYSIS SUMMARY – 8/1/2022

Job Group Code - Name	Total Employees	Individuals with a Disability
102 - Vice Presidents	Workforce Numbers	8
	Workforce Percentages	-
	Availability Percentages (7% Fixed)	-
201 - Sr. Associates And Consultants	Workforce Numbers	17
	Workforce Percentages	-
	Availability Percentages (7% Fixed)	-
202 - Associates	Workforce Numbers	25
	Workforce Percentages	-
	Availability Percentages (7% Fixed)	-
203 - Sr. Engineers	Workforce Numbers	26
	Workforce Percentages	-
	Availability Percentages (7% Fixed)	-
204 - Engineers	Workforce Numbers	2
	Workforce Percentages	-
	Availability Percentages (7% Fixed)	-
205 - Designers	Workforce Numbers	40
	Workforce Percentages	-
	Availability Percentages (7% Fixed)	-
208 - Proposal Professionals	Workforce Numbers	3
	Workforce Percentages	-
	Availability Percentages (7% Fixed)	-
209 - Sr. Field Coordinator	Workforce Numbers	4
	Workforce Percentages	-
	Availability Percentages (7% Fixed)	-

DISABILITY UTILIZATION ANALYSIS SUMMARY – 8/1/2022

Job Group Code - Name		Total Employees	Individuals with a Disability
210 - Field Coordinator	Workforce Numbers	5	0
	Workforce Percentages	-	0.00
	Availability Percentages (7% Fixed)	-	7.00
211 - Administrative Professionals	Workforce Numbers	4	1
	Workforce Percentages	-	25.00
	Availability Percentages (7% Fixed)	-	7.00
301 - Sr. Technicians	Workforce Numbers	1	0
	Workforce Percentages	-	0.00
	Availability Percentages (7% Fixed)	-	7.00
302 - Technicians	Workforce Numbers	4	1
	Workforce Percentages	-	25.00
	Availability Percentages (7% Fixed)	-	7.00
501 - Admin Support	Workforce Numbers	2	0
	Workforce Percentages	-	0.00
	Availability Percentages (7% Fixed)	-	7.00

Note: Areas shaded in blue represent job groups with underutilization resulting in the establishment of a placement rate goal. Any Difference Rule is in effect

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DISABILITY GOALS – 8/1/2022

Job Group Code - Name	Individuals with Disabilities
102 - Vice Presidents	7.00%
201 - Sr. Associates And Consultants	7.00%
202 - Associates	7.00%
203 - Sr. Engineers	7.00%
204 - Engineers	7.00%
205 - Designers	7.00%
208 - Proposal Professionals	7.00%
209 - Sr. Field Coordinator	7.00%
210 - Field Coordinator	7.00%
211 - Administrative Professionals	-
301 - Sr. Technicians	7.00%
302 - Technicians	-
501 - Admin Support	7.00%

Note: Affirmative Action Program numerical placement goals have been established pursuant to 41 C.F.R. § 60-2.16 and do not represent rigid and inflexible quotas, nor do they provide for preferential treatment on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or veteran status.

Any Difference Rule is in effect

**VEVRAA SECTION 4212
AFFIRMATIVE ACTION PROGRAM**

AFFIRMATIVE ACTION PROGRAM FOR PROTECTED VETERANS

I. POLICY STATEMENT

Pursuant to our obligations under the Vietnam Era Veterans' Readjustment Assistance Act of 1974, the Company maintains and posts an Affirmative Action and Equal Employment Opportunity Policy Statement. The policy statement indicates the top U.S. executive's support for the Company's affirmative action program, provides for an audit and reporting system, and assigns overall responsibility for the implementation of affirmative action activities to the EEO Coordinator.

In addition, the policy statement proclaims that the Company will take steps to assure it recruits, hires, trains and promotes persons in all job titles and ensure that all other personnel actions are administered without regard to protected veteran status, including ensuring that all employment decisions are based only on valid job requirements.

The policy statement also states that employees and applicants shall not be subjected to harassment, intimidation, threats, coercion or discrimination because they have engaged in or may engage in any of the following activities: (1) filing a complaint; (2) assisting or participating in an investigation, compliance evaluation, hearing, or any other activity related to the administration of the affirmative action provisions of VEVRAA or any other Federal, state or local law requiring equal employment opportunity for protected veterans; (3) opposing any act or practice made unlawful by VEVRAA or its implementing regulations in this part or any other Federal, state or local law requiring equal opportunity for protected veterans; or (4) exercising any other right protected by VEVRAA or its implementing regulations in this part.

II. REVIEW OF PERSONNEL PROCESSES

The Company will take steps to ensure its personnel processes provide for careful, thorough, and systematic consideration of the job qualifications of applicants and employees who are known protected veterans for job vacancies filled either by hiring or promotion and for all training opportunities offered or available. The Company will also take steps to ensure that when a protected veteran is considered for employment opportunities, it relies only on that portion of the individual's military record, including his or her discharge papers, relevant to the requirements of the opportunity in issue. Furthermore, the Company will take appropriate steps to ensure its personnel processes do not stereotype protected veterans in a manner that limits their access to all jobs for which they are qualified. Finally, the Company will periodically review such processes and make any necessary modifications to ensure that these obligations are carried out.

The Company has designed a procedure that facilitates a review of the implementation of its personnel processes. The Company most recently assessed its personnel processes in conjunction with the implementation of this Affirmative Action Program ("AAP"). The Company will reassess its personnel processes in conjunction with its next annual AAP cycle.

III. PHYSICAL AND MENTAL QUALIFICATIONS

The Company has developed a schedule for the periodic review of all physical and mental job qualification standards to ensure that, to the extent qualification standards tend to screen out qualified disabled veterans, they are job-related for the position in question and consistent with business necessity. In fact, the Company reviews the physical and mental job qualification standards each time a job opening is posted prior to recruiting for or promoting into a position.

Whenever the Company applies physical or mental qualification standards in the selection of applicants or employees for employment or other change in employment status, such as promotion, demotion or training, to the extent that qualification standards tend to screen out qualified disabled veterans, the standards shall be related to the specific job or jobs for which the individual is being considered and consistent with business necessity.

IV. REASONABLE ACCOMMODATION

The Company will make reasonable accommodation to the known physical or mental limitations of an otherwise qualified disabled veteran unless doing so would impose an undue hardship on the operation of its business. If an employee who is known to be a disabled veteran is having difficulty performing his or her job, and it is reasonable to conclude that the performance problem may be related to the known disability, the Company will confidentially notify the employee of the performance problem and inquire whether the problem is related to the employee's disability. If the employee responds affirmatively, the Company will confidentially inquire whether the employee is in need of a reasonable accommodation.

V. HARASSMENT

The Company has developed and implemented procedures to ensure employees are not harassed because of their status as a protected veteran.

VI. EXTERNAL DISSEMINATION

The Company will undertake appropriate outreach and positive recruitment activities that are reasonably designed to effectively recruit protected veterans. These activities may include:

- A. Enlisting the assistance and support of the following persons and organizations in recruiting and developing on-the-job training opportunities for protected veterans to fulfill the Company's commitment to provide meaningful employment opportunities for such veterans:
 1. The Local Veterans' Employment Representative in the local employment service office (i.e., the One-Stop) nearest the Company's establishment;
 2. The Department of Veterans Affairs Regional Office nearest the Company's establishment;
 3. The veterans' counselors and coordinators ("Vet-Reps") on college campuses;
 4. The service officers of the national veterans' groups active in the area of the contractor's establishment;
 5. Local veterans' groups and veterans' service centers near the Company's establishment;
 6. The Department of Defense Transition Assistance Program (TAP) or any subsequent program that, in whole or in part, might replace TAP; and
 7. Any organization listed in the Employer Resources section of the National Resource Directory or any future service that replaces or complements it.
- B. Considering taking the actions listed below, as appropriate, to fulfill its commitment to provide meaningful employment opportunities to protected veterans:
 1. Holding formal briefing sessions with representatives from recruiting sources. Such briefings may include facility tours, clear and concise explanations of current and future job openings, position descriptions, worker specifications, explanations of the Company's selection process, and recruiting literature.
 2. Incorporating special efforts to reach students who are protected veterans.
 3. Participating in work-study programs with Department of Veterans Affairs rehabilitation facilities that specialize in training or educating disabled veterans.

4. Making protected veterans available for participation in career days, youth motivation programs, and related activities in their communities.
 5. Taking other positive steps deemed necessary to attract qualified protected veterans not currently in the work force who have requisite skills and can be recruited through affirmative action measures. These persons may be located through the local chapters of organizations of and for any of the classifications of protected veterans.
 6. Considering applicants who are known protected veterans for all available positions for which they may be qualified when the position(s) applied for is unavailable.
 7. Listing job openings with the National Resource Directory's Veterans Job Bank or any future service that replaces or complements it.
- C. The Company will also send written notification of the policy related to its affirmative action efforts to subcontractors, including subcontracting vendors and suppliers, requesting appropriate action on their part.
- D. On an annual basis, the Company will review the outreach and recruitment efforts it has taken over the previous twelve months to evaluate its effectiveness in identifying and recruiting qualified protected veterans. If the Company concludes the totality of its efforts were not effective in identifying and recruiting qualified protected veterans, it shall identify and implement alternative efforts.
- E. The Company will document its outreach and recruitment activities and will retain this documentation for three (3) years.

VII. INTERNAL DISSEMINATION

In order to assure greater employee cooperation and participation in its efforts, the Company has communicated its policy to all employees and applicable union officials. Moreover, the Company may undertake, as appropriate, the following additional efforts to disseminate its policy internally:

- A. Inform all employees and prospective employees of its commitment to engage in affirmative action to increase employment opportunities for protected veterans;
- B. Publicize it in the Company newspaper, magazine, annual report and other media;
- C. Conduct special meetings with executive, management and supervisory personnel to explain the intent of the policy and individual responsibility for effective implementation, making clear the chief executive officer's support for the affirmative action policy;
- D. Discuss the policy thoroughly in both employee orientation and management training programs; or
- E. When employees are featured in employee handbooks or similar publications for employees, include disabled veterans.

VIII. AUDIT AND REPORTING SYSTEMS

The EEO Coordinator has oversight responsibility for implementation of the AAP for protected veterans and an audit and reporting system that will measure the effectiveness of the program, indicate any need for remedial action, determine the degree to which our objectives are being met, determine whether known qualified protected veterans had the opportunity to participate in educational, training, recreational, and social activities, and measure our compliance with the program's obligations. Documentation of the Company's compliance with the program's obligation is included throughout this AAP.

The Company will be kept apprised of progress through reports as deemed appropriate.

IX. RESPONSIBILITY FOR IMPLEMENTATION

The EEO Coordinator has been assigned responsibility for implementing the Company's affirmative action activities under this part. The EEO Coordinator's identity appears on external and internal communications regarding the Company's affirmative action program. The EEO Coordinator has been given necessary senior management support and staff to manage and implement this affirmative action program.

X. TRAINING

The Company trains all personnel involved in the recruitment, screening, selection, promotion, disciplinary and related processes to ensure that the commitments in its affirmative action program are implemented.

XI. DATA COLLECTION

On an annual basis, the Company collects the following information pertaining to applicants and hires:

- A. The number of applicants who self-identified as protected veterans;
- B. The total number of job openings and the total number of jobs filled;
- C. The total number of applicants for all jobs;
- D. The number of protected veteran applicants hired; and
- E. The total number of applicants hired.

XII. BENCHMARKS FOR HIRING

The Company has established a hiring benchmark for protected veterans equaling the national percentage of veterans in the civilian labor force, as published and updated annually on the OFCCP website.

PROTECTED VETERAN DATA COLLECTION SUMMARY

	2019	2020	2021
Total # of Job Openings¹	44	51	49
Total # of Jobs Filled²	39	40	66
Total # of Applicants	903	1368	759
Total # of Veteran Applicants	10	27	0
Total # of Hires	18	23	19
Total # of Veteran Hires	1	0	0

1. Refers to the number of individual positions advertised as open in a job vacancy announcement or requisition.

2. Refers to all jobs the company filled by any means, be it through a competitive process or non-competitively.

WORKFORCE ANALYSIS FORM

Name of Organization: Hazen and Sawyer

Categories	Total	White (Not Hispanic or Latino)		Hispanic or Latino		Black or African- American (Not Hispanic or Latino)		Native Hawaiian and Other Pacific Islander (Not Hispanic or Latino)		Asian (Not Hispanic or Latino)		American Indian or Alaskan Native (not Hispanic or Latino)		Two or more races (Not Hispanic or Latino)		Total	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Administrators	81	2	51	2	13		7				3				3	4	77
Professionals	1761	955	379	94	59	52	21		1	96	66	2	1	23	12	1222	539
Superintendents																	
Supervisors																	
Foremen																	
Technicians	89	29	31	7	3	2	1		1	6	3			3	3	48	41
Protective																	
Para-																	
Office/Clerical																	
Skilled Craft																	
Service/Maintena																	
Total:	1931	986	461	103	75	54	29		2	102	72	2	1	26	18	1273	658

Prepared by: *Glenys Herrera* Date: 6 / 17 / 2024

(Name and Title)

Revised 2015-Dec-15

AFFIDAVIT

Comes the Affiant, Jonathan Schubarth, and after being first duly sworn, states under penalty of perjury as follows:

1. His/her name is Jonathan Schubarth and he/she is the individual submitting the proposal or is the authorized representative of Hazen and Sawyer, DPC, the entity submitting the proposal (hereinafter referred to as "Proposer").

2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.

3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.

4. Proposer has authorized the Division of Procurement to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.

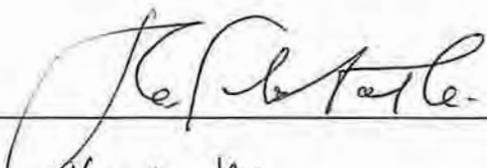
5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.

6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

Continued on next page

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

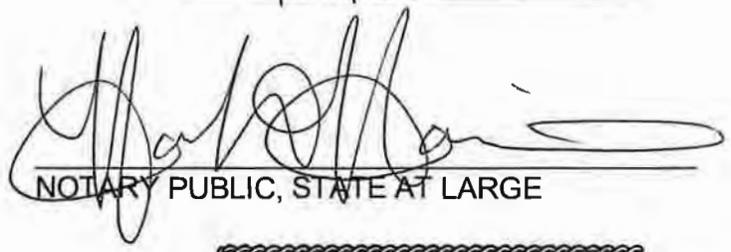


STATE OF Kentucky

COUNTY OF Franklin

The foregoing instrument was subscribed, sworn to and acknowledged before me
by Jonathan Schubarth on this the 13 day
of June, 2024

My Commission expires: 07/13/2027


NOTARY PUBLIC, STATE AT LARGE

EQUAL OPPORTUNITY AGREEMENT

Standard Title VI Assurance

The Lexington Fayette-Urban County Government, (hereinafter referred to as the "Recipient") hereby agrees that as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78Stat.252, 42 U.S.C. 2000d-4 (hereinafter referred to as the "Act"), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, (49 CFR, Part 21) Nondiscrimination in Federally Assisted Program of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") and other pertinent directives, no person in the United States shall, on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the U.S. Department of Transportation, including the Federal Highway Administration, and hereby gives assurance that will promptly take any necessary measures to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.



Signature

Hazen and Sawyer

Name of Business

**DIRECTOR, DIVISION OF PROCUREMENT
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
200 EAST MAIN STREET
LEXINGTON, KENTUCKY 40507**

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITIES AND DBE CONTRACT PARTICIPATION

Notice of requirement for Affirmative Action to ensure Equal Employment Opportunities and Disadvantaged Business Enterprises (DBE) Contract participation. Disadvantaged Business Enterprises (DBE) consists of Minority-Owned Business Enterprises (MBE) and Woman-Owned Business Enterprises (WBE).

The Lexington-Fayette Urban County Government has set a goal that not less than ten percent (10%) of the total value of this Contract be subcontracted to Disadvantaged Business Enterprises, which is made up of MBEs and WBEs. The Lexington Fayette Urban County Government also has set a goal that not less than three percent (3%) of the total value of this Contract be subcontracted to Veteran-owned Small Businesses. The goal for the utilization of Disadvantaged Business Enterprises as well Veteran –owned Small Businesses as subcontractors is a recommended goal. Contractor(s) who fail to meet such goal will be expected to provide written explanations to the Director of the Division of Purchasing of efforts they have made to accomplish the recommended goal, and the extent to which they are successful in accomplishing the recommended goal will be a consideration in the procurement process. Depending on the funding source, other DBE goals may apply.

For assistance in locating Disadvantaged Business Enterprises Subcontractors contact:

Sherita Miller, MPA, Division of Procurement
Lexington-Fayette Urban County Government
200 East Main Street, 3rd Floor, Room 338
Lexington, Kentucky 40507
smiller@lexingtonky.gov

Firm Submitting Proposal: Hazen and Sawyer

Complete Address: 230 Lexington Green Circle, Suite 520, Lexington, KY 40503
Street City Zip

Contact Name: Jon Schubarth Title: Vice President

Telephone Number: 859.219.1126 Fax Number: 859.219.1134

Email address: jschubarth@hazenandsawyer.com



LFUCG MWDBE PARTICIPATION FORM

Bid/RFP/Quote Reference # 38-2024

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Procurement for approval immediately. **Failure to submit a completed form may cause rejection of the bid.**

MWDBE Company, Name, Address, Phone, Email	MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1. None				
2.				
3.				
4.				

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Hazen and Sawyer
Company

June 17, 2024
Date

Jon Schubarth 
Company Representative

Vice President
Title



MWDBE QUOTE SUMMARY FORM
Bid/RFP/Quote Reference # 38-2024

The undersigned acknowledges that the minority and/or veteran subcontractors listed on this form did submit a quote to participate on this project. Failure to submit this form may cause rejection of the bid.

Company Name Hazen and Sawyer	Contact Person Jon Schubarth
Address/Phone/Email 230 Lexington Greene Circle, Suite 520 Lexington, KY 40503 859.219.1126 jschubarth@hazenandsawyer.com	Bid Package / Bid Date East Hickman Pump Station Expansion and Rehabilitation Design LFUCG RFP #38-2024 Bid Date: June 18, 2024

MWDBE Company Address	Contact Person	Contact Information (work phone, Email, cell)	Date Contacted	Services to be performed	Method of Communication (email, phone meeting, ad, event etc)	Total dollars \$\$ Do Not Leave Blank (Attach Documentation)	MBE * AA HA AS NA Female	Veteran
Abbey Jones Consulting	Jami Salsbury	863.232.6125	6/7/2024	Task 7	Email	\$301,600 (\$5,800/week)	DBE Female	No

(MBE designation / AA=African American / HA= Hispanic American/AS = Asian American/Pacific Islander/ NA= Native American)

The undersigned acknowledges that all information is accurate. Any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Hazen and Sawyer

Company

June 17, 2024

Date

Jon Schubarth


Company Representative

Vice President

Title

Williams, Robert

From: Jami Salisbury <jami.salisbury@abbie-jones.com>
Sent: Monday, June 10, 2024 4:42 PM
To: Williams, Robert
Subject: Re: Resident Project Representative (RPR)
Attachments: Jami Salisbury 2024 AJC Corporate Resume.pdf

You don't often get email from jami.salisbury@abbie-jones.com. [Learn why this is important](#)

Robert -

I am attaching my resume and three(3) references for your cursory review. I am a Water Resources and Environmental Engineer with the credentials and experience you're seeking for the Hickman Creek Lift Station and Rehab job. I have been working for Abbie since May of 2023 following a one(1)-year contract with American Electric Power as a Field Engineer. Prior to that, I worked eight years providing City Engineering for small cities in Greenup County, Kentucky.

As you know, Abbie Jones Consulting is an award-winning small business as well as a Certified MBE. Since joining her firm, we have done little else than force mains, lift stations and site designs for clients such as the University of Kentucky, Louisville Distillery, Henry County, Carrollton Utilities, Washington County and LFUCG. In short, we have credentials, project experience and depth of bench to complete this Residential Representative work.

I completed an estimate this morning and arrived at a value of **\$5800 per week for all expenses** or about **\$145 per hour**. Hazen and Sawyer is a firm I admire and I can safely report it would be my honor to work with you toward project success, but I also realize you're in a bid situation. I hope this email isn't received as chippy or intrusive and appreciate your response.

Respectfully,

Jami L Salisbury
AJC - 863.232.6125

On Sun, Jun 9, 2024 at 9:27 PM Williams, Robert <RWilliams@hazenandsawyer.com> wrote:

Hello Jami –

Thanks for your interest in providing Subconsultant Services to Hazen and Sawyer on this Project. The RFP for LFUCG RFP #38-2024 is attached. All bid documents are available on LFUCG's website at: [Current bids, quotes and RFPs | City of Lexington \(lexingtonky.gov\)](#). If selected by Hazen and Sawyer to perform services on this Project, all client terms and conditions noted in the RFP and our LFUCG Client Agreement will be subrogated to the Subconsultant, pursuant to the "Hazen Standard Subcontract Agreement" attached. No revisions, omissions, or amendments to the "Hazen Standard Subcontract Agreement" will be accepted.

We are soliciting quotes from qualified Subconsultants to provide services to include all of “**Task 7 – Resident Observation.**” For the purposes of development of your proposal to Hazen and Sawyer, assume these services will commence on or about November 1, 2025 and that the Project will be completed on or about November 1, 2026 (12 months/52 weeks). As part of your proposal to Hazen and Sawyer, please **provide the following in a .pdf document via email by 5:00 PM EDT on Wednesday, June 12, 2024:**

1. Firm Qualification and Experience (1-3 pages)

- Provide summary of past performance providing “Resident Observation” services on similar projects for LFUCG/DWQ
- Describe knowledge and experience with DWQ’s Standards and Manuals
- Provide record of compliance with LFUCG providing similar services on past projects
- Provide a minimum of Three (3) project profiles over the last Five (5) years including project name, total construction cost, date the project was substantially completed, project description wherein “Resident Observation” services were provided by the firm. It is preferable that the Project listed be those completed by the proposed “Resident Representative”
- If you do not have sufficient LFUCG past experience, provide documentation requested above for similar projects with other public utilities (LFUCG experience strongly preferred).

2. Resident Representative (1-2 page)

- Provide detailed resume including summary of educational experience, certifications, training, qualifications, and project experience for the proposed Resident Representative.
- Provide names and contact information for a minimum of Three (3) past clients on similar projects of Resident Representative.
- In providing the name and resume for the Resident Representative, the Subconsultant agrees to provide the person whose resume is submitted for the entire construction duration. No substitutions to this staff member will be permitted without written approval of Hazen and Sawyer and LFUCG.

3. Proposed Fee and Equipment (1 Page)

- Provide weekly fee to include all incidentals and travel costs (loaded rate) for 40 hours of on-site “resident observation” services per week (\$/Week). No increases in this rate will be approved for the duration of construction. Include any periodic performance or other employee raises, any increases in labor cost due to inflation, and any increases in costs due to employee benefits or insurance coverage changes.
- Proposed weekly fee to include resident representative’s laptop w/mobile hotspot, internet access and MS Office 365™ software, all required PPE, cell phone, and travel to/from and on jobsite via firm’s provided vehicle or resident representative’s personal vehicle.

- Proposed weekly fee to include min. 10 hour OSHA Construction Safety Certification (Resident Representative must obtain and keep current during construction period)
- Subconsultant must provide hard copies or virtual access to all LFUCG/DWQ Standards and Manuals by Resident Representative at all times during construction.

Let us know if you have any questions.

Thanks
Rob

Robert H. Williams, PE

Senior Associate | Hazen and Sawyer

230 Lexington Green Circle - Suite 520, Lexington KY 40503
(859) 219-1126 (main) | (859) 286-1276 (direct) | 606-371-2141 (cell)
rwilliams@hazenandsawyer.com | hazenandsawyer.com

Licensed in KY, OH, IN, VA, FL

From: Jami Salisbury <jami.salisbury@abbie-jones.com>
Sent: Friday, June 7, 2024 6:01 PM
To: Williams, Robert <RWilliams@hazenandsawyer.com>; Abbie Jones <abbie@abbie-jones.com>
Subject: Resident Project Representative (RPR)

You don't often get email from jami.salisbury@abbie-jones.com. [Learn why this is important](#)

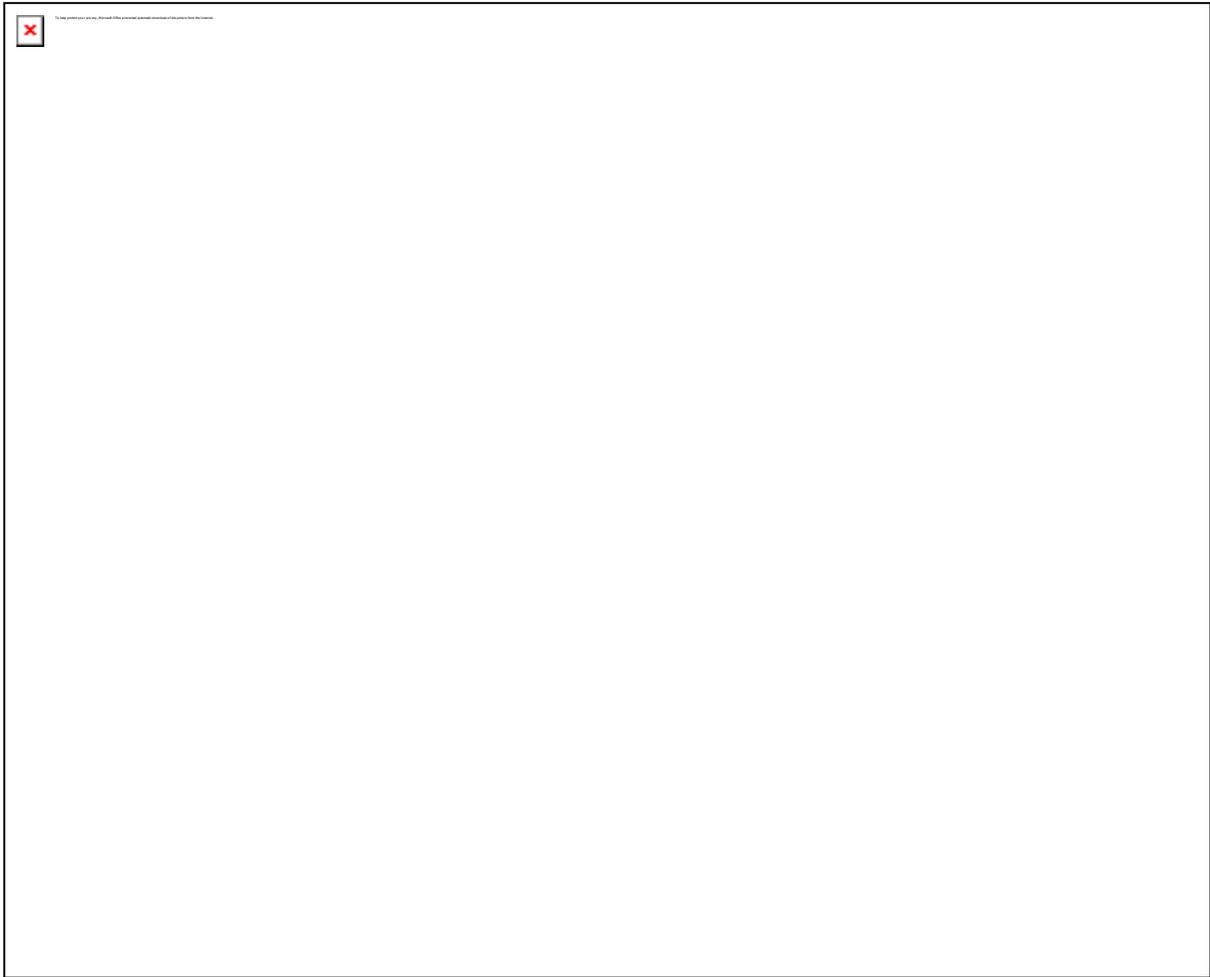
Caution! External email – think before you click

Robert - Abbie Jones Consulting would love to assist on this project (identified below in blue). Please let us know the specifics of the project so we may prepare our proposal (due June 14th, 2024) - Jami L Salisbury

"Hazen & Sawyer is considering submitting a Proposal to the Lexington-Fayette-Urban-County Division of Water Quality for East Hickman Pump Station Expansion and **Rehabilitation Design (LFUCG RFP #38-2024)**. Hazen & Sawyer is seeking MBE-certified subconsultants for the following services related to that Proposal: **Resident Project Representative (RPR)**

Interested firms should contact **Robert H. Williams, P.E.** (contact info. below) to receive a copy of the RFP no later than **June 10, 2024.** "

Respectfully,



Jami L Salisbury, EIT-KY, CQM-ACOE

Introduction

Jami Salisbury, Construction and Project Manager with Abbie Jones Consulting, is working toward licensure. Her experience as a Municipal Engineer with the Cities of Greenup and Worthington (2011-2019) as well as her proxy positions on the Water and Transportation Councils provided her with broad experience in navigating the Kentucky Infrastructure Authority as well as the MS4/NPDES programs. MS4 stands for Municipal Separate Storm Sewer System and refers to the system that is used to collect and transport stormwater within a community (e.g., pipes, drains, ditches, etc.). Under Jami's five-year direction, the City of Greenup upgraded its performance from Grade C to Grade A for program operation. Jami is a Water Resources and Environmental Engineer who is most proud to have been the first female Resident Engineer for American Electric Power.

Recent Experience

Turpin Farms LTD Drainage and Dam Assessment, Owsley County, KY (2023-present)

Drainage Assessment and Design for the purpose of assessment, classification, infrastructure modification and compliance for Dam 1270 in Owsley County, Kentucky - Project Engineer/Drainage Design

American Electric Power Mountaineer/Amos/Mitchell Power Plant Wet to Dry Ash Conversion and Site Modifications (2021-2022)

– three different project areas which included the dry bottom ash conversion, ultrafiltration installation to mitigate the discharge limits into the Ohio River and residuals pond closures, reroutes, and repurposing. This involved the installation of a drag chain conveyor for the wet bottom ash removal, installation of membrane filtration and the closure and repurposing of the bottom ash ponds - Resident Engineer

Graves County High Hazard Dam Closures (2020) - Drainage Assessment and Design for the purpose of assessment, classification, stormwater infrastructure, modification, and compliance for Dams 820 and 614 in Graves County, Kentucky - Project Engineer/Drainage Design

City of Portsmouth - FEMA Decennial Flood System Recertification (2012) - Comprehensive review and evaluation of the flood system's design, operation, and maintenance. Complete Drainage Assessment of Storm Infrastructure (hydraulics) sufficiency in design (hydrology). Project Manager and Project Engineer

Municipal Project Management/Engineer and Construction (2011-2019)

City of Greenup - 3-MGD Water Treatment Plant

City of Worthington – Combined Sewage Overflow Elimination

City of Worthington – Water Treatment Plant Replacement

City of Worthington – Sewage Collection and Transmission System Replacement

City of Greenup – Administration of MS4 Program (2012-2019)

City of Worthington – WWTP Remediation (Surge Tank)

City of Vanceburg – Sidewalk and Bridge Replacement 2017)

City of Ashland - CDBG

Project Management/Engineer and Construction Sewage Florida-(1987-2005)

Design/Permit 100 Wastewater Treatment Plants

Royal Crest Estates - 2000 LF Gravity with Lift Station and Forcemain (Bartow)

Dundee Estates-1000 LF Gravity (Dundee)

Lake Wales Country Club - WWTP and >3000 LF of Gravity/FM (Lake Wales)

Wagon Wheel WWTP - Phosphorous/ Nitrate Removal and Re-permit (Torrey)

Torrey Oaks Country Club and Golf Course - 3000 LF Gravity (Torrey)

Citrusuco North America Citrus Processing and Treatment of Industrial Waste

Mid-State Energy (all Citgos throughout Central Florida)-Lake Wales, Florida



EDUCATION

- ▶ University of Kentucky, B.S. Mining Eng 2008

REGISTRATIONS OR CERTIFICATIONS

- ▶ KY EIT 2011 General Engineering
- ▶ KY PE 2019 Civil Water Resources
- ▶ ACOE-CQM -2022

PREVIOUS EMPLOYMENT *

- ▶ American Electric Power, 2021-2022
- ▶ FEMA, 2021 Disaster Cleanups
- ▶ US Department of Commerce, 2020
- ▶ Howerton Engineering 2011-2019
- ▶ American Electric Power 2009-2011
- ▶ So Cross Engineering 1987-2005

CONTACT INFORMATION

- ▶ E: jami.salisbury@abbie-jones.com
- ▶ C: 606.232.6125



1 Riverside Plaza
Columbus, Ohio 43215

May 31, 2022

To whom it may concern,

My name is Carolyn Busack and I am the project manager for the Mountaineer CCR/ELG project. This project includes converting the bottom ash disposal from a wet to dry system by installing a conveyance system under the boiler, closing and repurposing two bottom ash ponds and installing an ultrafiltration water treatment system.

I highly recommend Jami Salisbury who has served as the project's field engineer since October 2021. Jami's work ethic, positive attitude, team mentality and attention to detail has been instrumental to the project running smoothly. Examples of tasks she performed is creating requests for information (RFIs) and engineering change notices (ECNs) between the labor contractors, construction, AE, AEP engineering, OEM, etc. She is also assisting in tracking documents that need updated and lessons learned. Her input has been valuable in updating management during the weekly and monthly stakeholder meetings.

I strongly recommend Jami Salisbury as an excellent and professional worker. I am willing to provide more information if needed.

Sincerely,

A handwritten signature in cursive script that reads 'Carolyn B. Miyazaki'.

Carolyn Busack

Project Manager

Letter of Recommendation

To whom it may concern,

My name is Jacob Pearson and I am a Project Engineer with American Electric Power Company. I highly recommend Jami Salisbury who was our Mountaineer Field Engineer for the Coal Combustion Residual (CCR) elimination and the associated Effluent Limitation Guidelines (ELG) projects. Jami has good work ethics and exemplary skills. In addition, she is a family-oriented person who looks out for colleagues.

As the Field Engineer, Jami was responsible for three different project areas which included the dry bottom ash conversion, ultrafiltration installation and to bottom ash pond repurpose projects. This involved the installation of a drag chain conveyor for the wet bottom ash removal, installation of membrane filtration and the closure and repurposing of the bottom ash ponds.

Jami was a team player and proactively sought understand emerging issues and the impact on the project, mobilize the responsible stakeholders and get the issues resolved. Additionally, as compared to other projects, the CCR/ELG had significantly more request for information (RFI's), engineering change notices (ECN) and project schedule request (PSCR's) than previous projects. Jami has been agile and intentional on addressing the needs in with competing priorities. Her quick and constant communication accelerated progress throughout the project. This was also key in communicating project activity status at the weekly and monthly project meetings with senior stakeholders. One of the immediate examples of the value was the cable tray which was designed to run through a wall in the ultrafiltration building, however there was a wall in which was not shown in the 3-D scans. Upon the discovery of this discrepancy, Jami worked with our design engineers to modify the design to a workable solution.

In conclusion, I strongly recommend Jami as an excellent and professional engineer. I am willing to provide more information if needed.

Please do not hesitate to contact me if you should require any further information.

Sincerely,

Jacob Pearson

Phone: 419-699-4959

Email: jjpearson82@yahoo.com

2379 Walborn Drive, Hilliard, 43026

September 16, 2022

Donzelle D. Mitchell
4366 Camberry Court
Dublin, OH
43016

To whom it may concern:

RE: Applicant Letter of Recommendation – Jami Salisbury

I am writing to personally recommend Jami Salisbury for employment. I personally served as Jami's Manager and Supervisor from October of 2021 through September of 2022. During the time I have supervised Jami, she worked as an Oversight Field Engineer (FE) on one of our major capital environmental retrofit projects Mountaineer Plant Coal Combustion Residual (CCR) Rule and the Steam Effluent Limitations Guidelines (ELG) projects to support our fossil generating fleet. Jami assisted in transforming this FE role into a more noteworthy position and role at this site.

In this role, Jami was responsible for being the AEP on-site representative responsible for engineering oversight and observation. She became a key point of contact when interfacing with the Engineer of Record (EOR) and resolving technical issues in the field for several areas such as Bottom Ash Conversion and grinder reinforcement. These issues are commonly resolved using an Engineering Change Notice (ECN) and Request for Information (RFI) processes for change and clarification in which Jami maintained care, custody and control of. As the Field Engineer, Jami was in constant communication with Site Construction Manager, Project Engineering (PE), Project Manager (PM) and other key stakeholders to inform them of design/construction issues, pending constraints and other pertinent facts as necessary for the PE/PM to act and properly inform Management. When there were findings of issues with the quality of the design or install of a component in areas such as water treatment, pond repurposing, permitting, Jami would conduct quality assessments and communicate these findings back to the AEP Quality Control Manager to assure design requirements are being met as well as assist in originating and resolving issues through documentation in the Corrective/Preventative Action Record (CPAR) database.

In my time working with Jami, she has been and shown to be an exemplary employee who models the desired behaviors of an experienced engineering resource. She is a leader, compassionate about the quality of work she delivers and has the character traits that warrant a role higher than field engineering. Jami is more than capable of solving complex problems with little oversight or direction. She is knowledgeable in multiple Engineering disciplines that utilizes codes and standards. Jami has assisted me in becoming a catalyst for developing standard work and procedures for the Field Engineering group. For some of the newer FEs, she has served as a mentor with a positive influence in the young employee's development by providing coaching and guidance toward performance. Jami has modeled herself in parallel with AEP's CORE belief in Zero Harm and ensuring that Culture is the foundation a person should model themselves after. Anytime there has been an issue to come up, Jami has demonstrated to myself and the Team her ability to adapt and achieve.

Jami has shown dedication and commitment to not only completing her projects, but to also improving her working environment. She has been a tremendous co-worker and an asset to our organization. When you look at character traits for someone you would want in your company to lead you forward with a willingness to take on complex multi-discipline projects, look no further than Ms. Jami Salisbury. Jami will be a valuable asset to any organization that she joins.

Jami has the drive and determination to be an asset to your establishment. It is for these reasons and belief that Jami is well equipped to grow from any future challenges in which she will

encounter; therefore, I offer my recommendation. If you have any questions regarding this recommendation, please do not hesitate to contact me.

Sincerely,

Donzelle D. Mitchell

Donzelle D. Mitchell
Engineering Services-Field Services/Field Engineering Supervisor
American Electric Power
Phone: 614 716-1785
Cell: 614-284-2250
Email: ddmitchell2@aep.co-m

LFUCG STATEMENT OF GOOD FAITH EFFORTS

Bid/RFP/Quote # 38-2024

By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE and Veteran-Owned business enterprises on the project and can supply the appropriate documentation.

Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.

Included documentation of advertising in the above publications with the bidders good faith efforts package

Attended LFUCG Procurement Economic Inclusion Outreach event

Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned Businesses of subcontracting opportunities

Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses

Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).

Contacted organizations that work with MWDBE companies for assistance in finding certified MWDBE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.

Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.

Followed up initial solicitations by contacting MWDBEs and Veteran-Owned businesses to determine their level of interest.

Provided the interested MWDBE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.

Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items

into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce

X Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.

X Included documentation of quotations received from interested MWDBE firms and Veteran-Owned businesses which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.

X Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.

 Made an effort to offer assistance to or refer interested MWDBE firms and Veteran-Owned businesses to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal

X Made efforts to expand the search for MWBE firms and Veteran-Owned businesses beyond the usual geographic boundaries.

 Other--any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE and Veteran participation.

NOTE: Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement which is subject to approval by the MBE Liaison. Documentation of Good Faith Efforts must be submitted with the Bid, if the participation Goal is not met.

The undersigned acknowledges that all information is accurate. Any misrepresentations may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Hazen and Sawyer
Company
June 17, 2024
Date

Jon Schubarth 
Company Representative
Vice President
Title

June 14, 2024

Mr. Todd Slatin, Director
Division of Procurement
Lexington-Fayette Urban County Government
200 E. Main St.
Lexington KY 40507

**Re: RFP #38-2024 East Hickman Pump Station Expansion and Rehabilitation Design
Supplemental Statement of Good Faith Efforts for DBE Contract Participation**

Dear Mr. Slatin:

Hazen and Sawyer (“Hazen”) is an equal opportunity employer. Beyond enforcing our anti-harassment and anti-discrimination policies, Hazen is making an active effort to become an industry model of a diverse, welcoming work environment.

For the above referenced Request for Proposal (“RFP”), Hazen identified “Task 7 – Resident Observation” as a potential service which could be subcontracted to a disadvantaged subconsultant. Hazen sent an initial solicitation email on June 7, 2024, to approximately 80 LFUCG-certified disadvantaged businesses. In developing this list of solicited firms, we included any entity with the terms “engineering,” “engineering - consulting,” or “staffing” noted in the “Business Product or Service” description provided in “LFUCG Certified List_May 2024” list.

Of the 80 or so disadvantaged businesses who we initially contacted, approximately Six (6) responded that they were interested in soliciting proposals. Hazen followed up with each of those businesses and provided a more detailed description of the “Task 7 – Resident Observation” request for services to be provided. Only One (1) firm submitted an actual proposal to Hazen – Abbey Jones Consulting. Their proposed price (\$5800/Week) far exceeds the Project Budget as well as Hazen’s typical cost to provide these services to LFUCG.

If selected for this Project, Hazen will endeavor to find opportunities to subcontract services to disadvantaged businesses. Since “Task 7 – Resident Representative” occurs in the final phase of the Project, there is ample time available to work with LFUCG to potentially redefine and repackage these services to make it more attractive to potential minority subconsultants.

Sincerely,



Jon Schubarth, PE
Vice President

Mr. Todd Slatin, Director
LFUCG

GENERAL PROVISIONS

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, *29 U.S.C. 650 et. seq.*, as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
3. Addenda: All addenda and IonWave Q&A, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.
6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".
7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.

9. Additional Information: While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
11. Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:
 - (a) Failure to perform the contract according to its terms, conditions and specifications;
 - (b) Failure to make delivery within the time specified or according

- to a delivery schedule fixed by the contract;
- (c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
 - (d) Failure to diligently advance the work under a contract for construction services;
 - (e) The filing of a bankruptcy petition by or against the contractor; or
 - (f) Actions that endanger the health, safety or welfare of the LFUCG or its citizens.

B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

13. **Assignment of Contract:** The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
14. **No Waiver:** No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
15. **Authority to do Business:** The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must

be signed by a duly authorized officer, agent or employee of the Respondent.

16. **Governing Law:** This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
17. **Ability to Meet Obligations:** Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.
20. Contractor [or Vendor or Vendor's Employees] will not appropriate or make use of the Lexington-Fayette Urban County Government (LFUCG) name or any of its trade or service marks or property (including but not limited to any logo or seal), in any promotion, endorsement, advertisement, testimonial or similar use without the prior written consent of the government. If such consent is granted LFUCG reserves the unilateral right, in its sole discretion, to immediately terminate and revoke such use for any reason whatsoever. Contractor agrees that it shall cease and desist from any unauthorized use immediately upon being notified by LFUCG.

Jon Schubarth
Signature



June 17, 2024

Date

Hazen

Hazen and Sawyer
230 Lexington Green Circle, Suite 520 • Lexington, KY 40503