



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS

ANGELA METTLEN GRANT FUNDING LEAD



EDUCATION

- MS, BioScience/Bio-engineering, Clemson University

CERTIFICATIONS

- NCDEQ CDBG - Infrastructure Program Environmental Document Preparation
- NASSCO Trained

YEARS OF EXPERIENCE

Total: 32
With Firm: 18

PERCENT OF TIME ASSIGNED TO
PROJECT: 60%

OVERVIEW

Angela is Ardurra's Director of Strategic Funding and Regulatory Affairs. She has 32 years of experience in regulatory compliance and funding for engineering and public works programs. She has a proven track record of evaluating and optimizing municipal utility systems, helping local governments identify infrastructure needs, developing prioritized capital improvement plans and identifying appropriate and eligible funding mechanisms to support these plans. She has identified, procured, and administered more than \$3B in infrastructure funding for clients throughout the Southeast U.S.

PROJECT EXPERIENCE

CMOM Program Development and Implementations, City of Eden, NC: Ardurra assisted the City of Eden in addressing extensive sanitary sewer overflows by negotiating the scope of an EPA Consent Decree, developing a CMOM Program, and implementing a phased SERP to evaluate and rehabilitate the system. This included advanced condition assessment, GIS-driven asset management, financial modeling, and has resulted in over \$30M in improvements, ensuring regulatory compliance and system optimization. Angie has led the funding and regulatory efforts for this program since 2011, and has helped the City secure millions in funding over that time.

OJRSA CMOM Program Development and Implementation, Oconee Joint Regional Sewer Authority (OJRSA), Oconee County, SC: Angie has provided regulatory and funding assistance for the development of OJRSA's CMOM program to address wet weather capacity issues and reduce sanitary sewer overflows. This program is being implemented in a phased approach including evaluation, development of a Preliminary Engineering Report, gap analysis, planning and evaluations, funding support, and project implementations.

Water and Sewer Systems Capacity and Management Program Evaluation, Town of Swansea, SC: Angie has provided regulatory and funding expertise for the comprehensive evaluation of the Town of Swansea's water distribution and sewer collection systems, funded through SCIIIP, to assess long-term solutions and regionalization feasibility. The project includes system assessments, condition evaluations, capital improvement planning, operational and financial analyses, and recommendations for sustainable utility management.

CMOM Program Development and Consent Order Management, City of Lancaster, SC: Angie provided regulatory and funding assistance and expertise for Ardurra's efforts as a trusted advisor to the City of Lancaster for over a decade, helping them address an EPA Consent Order through the development and implementation of a comprehensive CMOM program. The team's efforts included negotiations with EPA, evaluations, planning, designing, and overseeing improvements to over the City's sewer system, reducing SSOs, and secured over \$25M in funding to support these critical projects.

Consent Order Management, Augusta Utilities Department, Augusta, GA: Angie provided regulatory and funding assistance for Ardurra to address the City of Augusta's sanitary sewer overflows and compliance with a Consent Decree requiring corrective actions to its formerly combined sewer system. Ardurra's team quickly mobilized to perform smoke testing, CCTV inspections, and condition assessments across 82,000 LF of sewer, identifying 112 separation projects and delivering cost-effective solutions to reduce overflows and improve system performance within an expedited schedule.

Tega Cay Consent Order Program, Blue Granite Water Company (formerly Carolina Water Service; Utilities, Inc), Tega Cay, SC: The Tega Cay Water System faced 76 sanitary sewer overflows since 2005 and a 2011 Consent Order from SCDES (formerly SCDHEC). Angie led the team's regulatory and funding expertise for Ardurra to address these issues. Our team provided a PER, managed fast-track construction of EQ storage, and utilized advanced inspection technologies to evaluate 160,000 LF of gravity mains, pump stations, and WWTPs, ensuring compliance with aggressive deadlines and supporting long-term rehabilitation through a web-based GIS system.



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS

VIVEK SAI, PE, PMP ASSET MANAGEMENT



EDUCATION

- MS, Chemical Engineering, University of South Florida
- BS, Chemical Engineering, Shivaji University

CERTIFICATIONS

- PE Florida #69088
- PMP #2598535
- NASSCO's PACP/MACP/LACP certified

YEARS OF EXPERIENCE

Total: 20
With Firm: 1

PERCENT OF TIME ASSIGNED TO
PROJECT: 60%

OVERVIEW

Mr. Sai is an experienced engineer with 20 years of work in environmental engineering, conveyance asset management, and strategies for utility operations, asset assessment, and infrastructure renewal. He has a strong background in designing, implementing, and managing projects, with skills in GIS platforms, utility infrastructure planning, sewer evaluation studies, and condition assessments. Mr. Sai has worked on a variety of municipal projects, including evaluating, modeling, and designing treatment facilities, pump stations, and pipeline systems. He has also developed and improved water and wastewater hydraulic models using different software tools. His experience includes GIS application development, utility infrastructure projects, database management, construction services, and asset management tasks like building asset inventories, prioritizing risks, analyzing condition data, and planning long-term repairs and replacements. With expertise in databases, information systems, and asset management practices, he helps clients make the most of their existing systems.

PROJECT EXPERIENCE

Collection System Asset Management Program, Jefferson County, AL: Project Engineer. As part of the Asset Management Program, Mr. Sai contributed to various aspects of the collection system, including planning, evaluation, flow monitoring coordination, rehabilitation design, pipe upsizing, construction administration and management, CIP support, budgeting, scheduling, and overflow reporting. He developed automated tools to streamline sewer rehabilitation efforts and improve staff efficiency. These tools and datasets include asset management platforms, SSES data, capacity assurance programs, asset inventory and condition data, rehabilitation and replacement strategies, cleaning and maintenance methods, system performance data, SSO and backup records, TVI, manhole inspections, and standardized methods for condition evaluation and asset life estimation. Mr. Sai played a key role to implement and customize its Cityworks (CMMS) software. He developed workflows, created custom work order and service request templates, utilized APIs, conducted analytical assessments, and resolved issues using SQL query tools. He also leveraged the system's work orders, asset management, and GIS features to build dashboards and visualization tools to track KPIs. This effort enabled JCESD to optimize its operations and maintenance (O&M) program and integrate data with Power BI for advanced visualizations and analysis. Additionally, Mr. Sai developed workflows to support the successful implementation of the asset management program and construction management processes.

Sarasota County Capacity, Management, O&M Program Plan, Sarasota County, FL: Project Engineer. The CMOM program focused on evaluating and improving all aspects of the County's sewer collection system assets, including gravity sewers, force mains, and lift stations. This program enabled the County to achieve several short- and long-term goals, including regulatory compliance, wastewater spill (SSO) evaluation and reduction, information management and software integration, CMMS and GIS integration, environmental water quality improvement, capacity assessment and assurance, system inspection, maintenance and rehabilitation, staff safety and training, asset management, communication and customer service, budgeting, and emergency response and preparedness. As part of the 5-year program, Mr. Sai supported the integration of GIS with the County's CMMS system, Maximo. He created custom work orders for SSO data collection and CCTV inspections and developed several KPIs along with a Power BI dashboard to visualize system-wide SSOs, helping the County effectively monitor and improve their sewer system performance.

Downstream Augmentation System Analysis Model, Tampa Bay Water, FL: Project Engineer. Involved in assessing supply reliability improvement from the implementation of Downstream Augmentation (DA) in Tampa Bay Water's existing supply system. The project focused on assessing various options for applying reclaimed water downstream of Enhanced Surface Water System (ESWS) withdrawal points and using that application as credit to allow increased use of surface water for potable production. This project involved the creation of the Downstream Augmentation System Analysis Model for application for assessing DA system alternatives.



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS

HUGO SOTO, PSM HYDROGEOLOGIST & GEOTECHNICAL/GROUNDWATER



EDUCATION

- MS, Geotechnical Engineering, Utah State University
- BS, Civil Engineering, Utah State University

CERTIFICATIONS

- PE Florida #36440

YEARS OF EXPERIENCE

Total: 42

With Firm: 15

PERCENT OF TIME ASSIGNED TO
PROJECT: 60%

OVERVIEW

Mr. Soto has more than 40 years of experience providing geotechnical engineering, construction materials testing, inspection, and consulting services. Geotechnical services include geotechnical design, analyses, and recommendations related to the design and construction of foundations as well as geotechnical exploration programs. He is well-versed in performing analysis and evaluation of field and laboratory data, in-situ soil testing, in-place permeability testing, and geophysical explorations.

PROJECT EXPERIENCE

East Flagami Flood Improvements RAR/NW 38th Court to NW 42nd Avenue and NW 1st Street to NW 7th Street, Miami, FL: Principal Engineer/QA/QC Reviewer. The project consists of utility improvements along the project corridor including the proposed construction of one stormwater well system for storm run-off in the proposed area. Provided subsurface exploration and geotechnical engineering services for the utility improvements project. Geotechnical engineering report included site location and exploration plans, boring logs with field and laboratory data, stratification based on visual soil (and rock) classification, groundwater levels observed during drilling, subsurface exploration procedures, description of subsurface conditions, exfiltration test results, geotechnical engineering recommendations for pipe backfill, and geotechnical foundation recommendations for the proposed pump station. Four Reasonable Assurance Reports (RARs) included current geologic conditions and recommendations for well depth casing that would be sufficient to restrict buoyancy from a class G-III aquifer into a Class G-II aquifer system.

Venetian Water and Sewer Main Crossing, Miami Beach, FL: Principal Engineer/QA/QC Reviewer. The proposed project involved the design of a subaqueous water pipeline crossing of the Biscayne Bay along the Venetian Causeway between the spoil islands located between Rivo Alto Island and Belle Island. Terracon performed subsurface exploration and geotechnical engineering services that included the advancement of test borings to depths ranging from approximately 35 to 55 feet below existing site grades. Laboratory testing was performed on the soil samples obtained from the site during the field exploration. Information and geotechnical engineering recommendations were provided relative to subsurface soil (and rock) conditions, groundwater conditions, and soil and rock parameters.

Codrington Drive Roadway and Drainage Improvements, Lauderdale-by-the-Sea, FL: Principal Engineer/QA/QC Reviewer. The project consisted of roadway and drainage improvements for 1,400 linear feet of Codrington Drive. Terracon previously completed geotechnical engineering in 2021 that addressed the roadway and drainage improvements for the 1,400 linear foot section along Codrington Drive. It was proposed to construct an outfall pipe to be installed perpendicular to Codrington Drive connecting the drainage on to the adjacent canal. The new section would be excavated to replace an existing outfall with a new 30" RCP outfall pipe. The section is approximately 180 feet and is located at the east end of Codrington Drive. Terracon performed subsurface exploration and provided geotechnical recommendations concerning earthwork and the design and construction of the proposed outfall pipe that will be installed.

FKAA Snake Creek HDD-Snake Creek, FL: Principal Engineer/QA/QC Review. The project consists of the construction of an underground pipeline that will traverse the Snake Creek Channel along the US Hwy 1. The new pipeline would be installed using HDD methods. Subsurface exploration (advancement of test borings), laboratory testing, and geotechnical engineering services were performed by Terracon. The firm provided information and geotechnical engineering recommendations relative to subsurface soil conditions, groundwater conditions, and soil parameters.



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS

MARK MITCHELL, PSM SUBSURFACE UTILITIES ENGINEERING



EDUCATION

- AA. Arts, St Petersburg College

CERTIFICATIONS

- OHS Construction Induction Training Certificate
- OSHA Confined Space Entry
- Rail Industry Safety Induction (RISI)
- CSX Certified Safety Facilitator
- OSHA 40-Hour Safety Training

YEARS OF EXPERIENCE

Total: 26
With Firm: 12

PERCENT OF TIME ASSIGNED TO
PROJECT: 65%

OVERVIEW

Mr. Mitchell is the firm's Director of SUE responsible for oversight of the day-to-day operations of all SUE projects, along with utility records research, conflict analysis, and determining if additional utility investigation is needed for assigned projects. His experience includes creating DTMs, topos, TIN models, PNCs, and test hole summary spreadsheets. Mark serves as a liaison between the design team, utility agencies, and owners on behalf of clients to provide utility coordination, documentation, inter-coordination, and maintenance of files of all activities for each utility agency..

PROJECT EXPERIENCE

JKV Stormwater Master Plan, Pompano Beach, FL: SUE. The Ardurra Team assisted the client in the development of an Ardurra Team Life project consisting of a senior residential facility, formal and semi-formal gardens, and surface parking. The Ardurra Team provided full services to the client including civil engineering, survey/SUE, planning, landscape architecture, and CEI. The Ardurra Team assisted the client with the preparation of a topographic and boundary survey, tree survey, existing utility map, and conceptual development of an overall Stormwater Master Plan for the property. Additional Ardurra Team services included the estimated engineering design for Phase I projects, engineering for coordination and deliverable review, stormwater modeling, permitting, water distribution, and wastewater collection plan delivering a safe, functional space for the community to thrive.

Abbott Avenue Drainage Improvements Final Design, Phase II, Surfside, FL: SUE. The Ardurra Team assisted the client in developing the final phase of a Keith Access project that included services for the Abbott Avenue Stormwater Drainage Design – Phase II. The Ardurra Team provided survey, SUE, civil engineering, FDOT coordination, bidding assistance, and construction program management services to the client. The Ardurra Team oversaw structural engineering, mechanical and electrical engineering, and geotechnical engineering services provided by subconsultants. The Ardurra Team assisted the client in milling, resurfacing, restriping, preparation of construction documents, construction observation, final inspections, and final certification.

Drainage Improvements at US1 and NE 14th Street, Pompano Beach, FL: SUE. The Ardurra Team, under its continuing contract with the City, is providing civil engineering, surveying, and subsurface utility engineering for this US1 and NE 14th Street Drainage Improvement project. This comprehensive drainage improvement project aims to significantly enhance the stormwater management system in the City of Pompano Beach. The project involves the installation of new storm drainage infrastructure and the cutting of swales to optimize drainage functionality and mitigate flooding risks.

Fort Lauderdale International Airport (FLL) Stormwater Improvements, Ravenswood Interconnection, Fort Lauderdale, FL: SUE. The Ardurra Team is assisting the client with an Ardurra Team Access project under this continuing services contract for airport utilities and pavement projects. The project encompasses a comprehensive scope of tasks aimed at enhancing the existing drainage infrastructure by connecting the Northern and Ravenswood Drainage Basins at FLL Airport to alleviate flooding happening on the north side of the airport. The Ardurra Team provides civil engineering, SUE, and survey services to the client. The Ardurra Team is assisting the client with all necessary engineering design services and utility coordination to facilitate the required stormwater improvements at the Ravenswood Interconnection.



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS

KELLI SCHUELER, K PLA, LEED AP LANDSCAPE ARCHITECT



EDUCATION

- BS, Landscape Architecture, Oklahoma State University

CERTIFICATIONS

- Professional Landscape Architect # LA6667565, FL, 2021
- LEED Accredited Professional

YEARS OF EXPERIENCE

Total: 21
With Firm: 8

PERCENT OF TIME ASSIGNED TO
PROJECT: 60%

OVERVIEW

Ms. Schueler is an experienced landscape architect and dedicated project manager, Kelli Schueler provides planning, design, and project management services for a wide variety of project types through all phases of the development process. Her knowledge of the local environment, innovative technologies, and sustainable best practices is combined with a creative, detail-oriented approach that ensures efficient and accurate implementation. While her experience spans a broad range of project types, she is most inspired by opportunities to create special moments within the urban environment—where hardscape and architectural elements are thoughtfully integrated with green space to form impactful places of respite and connection.

PROJECT EXPERIENCE

FLL Airport Stormwater Improvements - Ravenswood, Fort Lauderdale, FL: Landscape Architect. The Ardurra Team is assisting the client with an Ardurra Team Water project under this continuing services contract for airport utilities and pavement projects. The project encompasses a comprehensive scope of tasks aimed at enhancing the existing drainage infrastructure by connecting the Northern and Ravenswood Drainage Basins at FLL Airport to alleviate flooding happening on the north side of the airport. The Ardurra Team provides civil engineering, SUE, and survey services to the client. The Ardurra Team is assisting the client with all necessary engineering design services and utility coordination to facilitate the required stormwater improvements at the Ravenswood Interconnection.

Broward College NC Landscape Drainage Project, Coconut Creek, FL: Landscape Architect. The Ardurra Team provided surveying, civil engineering, permitting, landscape architectural, construction management, and construction inspection services to address existing drainage issues and to provide more seating in the arrival area. The area was regraded, and the plaza was designed, to provide an improved gathering space for the west entrance. This project is being used as a model for future improvements throughout the campus. Schematic and construction plans were developed to address drainage and seating requirements and to beautify the area.

Hillsboro Shores Drainage Improvements, Pompano Beach, FL: Landscape Architect. Keith assisted the Client in the development of an Ardurra Team Water project in a high-end neighborhood where groundwater is very close to the surface and the existing drainage system was incorrect and inefficient. The Ardurra Team provided civil engineering, landscape architecture, and survey services to fulfill the City's directive to add drainage structures, replace existing drainage structures, and reconstruct roadside swales without disturbing improvements the homeowners constructed in the City's right-of-way. Engineering plans were created to improve drainage systems while minimizing impacts and topographic surveying. Arborist services, public outreach, preliminary civil design, design development, and construction administration were a part of the creative solution.

Pinnacle At Peacefield - Hollywood, Hollywood, FL: Landscape Architect. The Ardurra Team provided project coordination and a due diligence report including stormwater management design criteria, floodplain regulation and limitations, sanitary sewer service ability, water distribution service availability, traffic considerations, existing private utility systems availability, zoning regulation compliance, off-street parking analysis, and concept site plan layout assessment and recommendations for this residential development. The project consists of three, three-story buildings along Adams Street, each operating as its own urban village for seniors with amenities such as a community meeting room, cyber café, fitness/wellness facility, and an outdoor patio.



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS



FERNANDO MIRALLES-WILHELM, PHD, PE, BCEE, D.WRE., PMP, F.ASCE RESILIENCY & SLR

OVERVIEW

Dr. Miralles is a civil and environmental engineer with over 35 years of experience in the field of stormwater, water, and wastewater infrastructure planning and assessments. He is expert in modeling water systems and incorporating climate change and sea level rise impacts on related infrastructure, stormwater management, and water quality control. He has consulted internationally with USAID, IDB, and the World Bank on topics dealing with water system modeling, climate change, sustainability, and water infrastructure resilience. He has also been a member of the faculty at MIT, Northeastern University, the U Miami, FIU, and the University of Maryland. He served as Principal Investigator in over \$300M in projects funded by US and international agencies. He has conducted and/or directed water system modeling and climate change projects in over thirty countries in the Americas, Africa and Asia.

PROJECT EXPERIENCE

Drainage Infrastructure Verification & GIS Updates, Phases 1-9, City of Coral Gables, FL: QA/QC Reviewer for a project that entails data collection, field verification, GIS digitization of Assets, QA/QC, and the creation and update of a GIS Web-viewer. Data collection efforts include collecting, compiling and analyzing pertinent drainage infrastructure data. Field verification activities include locating drainage assets using a GPS Trimble Unit to geolocate the observed infrastructure (manholes, catch basins, outfalls, infiltration trenches, drainage wells, and others.) and capturing relevant data. Horizontal coordinates and elevations of assets, including rim, invert and bottom of structures are obtained, if accessible. The project also includes a visual asset condition assessment performed and noted, including photographic record of the assets. The GIS digitization phase includes the post-processing of the field verified infrastructure data and the update of the City's drainage geodatabase including point and line features. Standardized formatting, database schema, and symbology (based on the Client's GIS standards) were developed and utilized. Additionally, a GIS Web Viewer was created and updated to allow the City's staff to easily obtain information related to the drainage infrastructure without the need of using a GIS ESRI license.

Stormwater Master Plan, City of Doral, FL: Project Manager for SWMP based on a comprehensive program of data collection and management, hydrologic and water quality modeling, to achieve distinct levels of service for water quality, pollutant reduction and flood protection. The scope of work tasks was focused on collection of existing information from entities other than the City, and their graphical representation in maps that can be used for stormwater master planning purposes, basin, and sub-basin delineation within the City of Doral. This allowed for an organizational framework to identify and propose solutions to stormwater management problems and prioritization of identified stormwater management problems, which in turn allows prioritization of expenditures and the development of a CIP for SWMP improvements in the City.

Stormwater Management Master Planning for the MDAD, Miami-Dade County, FL: Project Manager responsible for planning the improvements of the stormwater management systems at the MIA, Opa-Locka General Aviation Airport and Kendall-Tamiami Executive Airport. The SWMP included comprehensive evaluations of hydrology, hydraulics, water quality, Best Management Practices (BMPs), and facility planning in phases to allow cost-effective implementation of the CIP while aircraft operations continued and increased to serve growing air traffic demands. Aircraft had to be balanced vs. the environmental requirement of passenger safety issues regulated by FAA, EPA, SFWMD, and Miami-Dade DERM.

Sunrise Harbor Drainage Assessment, Coral Gables, FL: Technical Advisor. Project scope of services included performing hydraulic/hydrologic stormwater modeling to analyze existing and future land use conditions, evaluate future scenarios, and identify and develop potential capital improvement projects. A Basis of Design Report (BODR) was prepared for the upgrade of the stormwater and right-of-way within the area. Proposed solutions for flood mitigation & water quality treatment alternatives.

EDUCATION

- PhD, Water Resources, Massachusetts Institute of Technology (MIT)
- MS, Mechanical and Aerospace Engineering, University of California
- BS, Mechanical Engineering, Universidad Simon Bolivar

CERTIFICATIONS

- Professional Engineer, FL #56549
- Project Management Professional (PMP)

YEARS OF EXPERIENCE

Total: 35
With Firm: 9

PERCENT OF TIME ASSIGNED TO
PROJECT: 40%



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS



TOWSIF BHUIYAN, PLA, LEED AP MODELING

Mr. Bhuiyan is a hydraulic engineer with experience in hydrologic and hydraulic analyses and modeling, such as HEC-RAS; GIS applications, such as ArcGIS; and CFD modeling, including ANSYS FLUENT, TecPlot. He has advanced knowledge of surface water hydrology and hydraulics and an in depth understanding of environmental assessment and regulatory compliance requirements.

PROJECT EXPERIENCE

SFWMD Flow Data Improvement at Coastal Spillways and Other District Structures FY20 Staff Augmentation, West Palm Beach, FL: Providing hydraulic and hydrologic modeling and engineering services. His responsibilities include: flow rating development and improvement of coastal, stormwater treatment areas and other structures; development and application of hydraulic and CFD modeling to analysis and design of existing and new hydraulic structures; hydraulic analysis to assess the risk, performance or conveyance capacity of specific structures or District-wide canal system; and Summarize and report significant work through technical reports.

SFWMD S65A Complex and C-38 Canal System 2D Hydrodynamic Model Study, West Palm Beach, FL: This study utilizes HEC-RAS 2D model to evaluate discharge capacity at the S65A and auxiliary structures and identifying modification required to the tieback levee. It will help stakeholder, USACE and the SFWMD to manage their Kissimmee River Restoration project. More than 40 square miles of river-floodplain ecosystem was restored, including nearly 20,000 acres of wetlands and 44 miles of historic river channel. Responsibilities include Preparation of data using ArcGIS, SFWMD applications and other tools for model setup; Development of HEC-RAS 2D model and result analysis; and Summarizing results in presentation and report.

SFWMD C-4 Canal Conveyance Capacity Study, West Palm Beach, FL: This canal conveyance study is comprised of a hydraulic analysis effort that will evaluate the capacity of canal C-4. The watershed of C-4 is located in Miami-Dade County. It provides flood control to approximately 83.3 square miles. Responsibilities included: Development of HEC-RAS model to evaluate the hydraulic performance of the original design corresponding to C&SF Project design flood; Development of the HEC-RAS models to analyze existing canal performance under current design storm flows and operating rules; and Results analysis, preparation of presentation and report.

EDUCATION

- PhD Student, Civil Engineering, Washington State University, On-Going
- MS, Environmental Engineering, Washington State University
- MS, Physics, Jahangirnagar University
- BS, Physics, Jahangirnagar University

CERTIFICATIONS

- Professional Landscape Architect # LA6667565, FL, 2021
- LEED Accredited Professional

YEARS OF EXPERIENCE

Total: 7 | With Firm: 4

PERCENT OF TIME ASSIGNED TO PROJECT: 50%



VERONICA PAREDES PUBLIC OUTREACH

Ms. Paredes has 18 years of experience in illustration concept development, public engagement and public outreach. She routinely leads and coordinates public and stakeholder outreach activities for public infrastructure programs in South Florida. She has served as Public Information Officer on several projects from preliminary planning and design, through construction and closeout. She has led and several public involvement efforts for FDOT, ranging from the design and preparation of direct-mail brochures, fact sheets, newsletters, presentations, publications, workshop presentation graphics, and signage.

PROJECT EXPERIENCE

Ms. Paredes served as Public Engagement Lead for the following projects:

- County Road 721 Roadway Improvements Brighton Seminole Indian Reservation, Glades County, Seminole Tribe of FL
- PD&E Study for SR 5/US 1/Overseas Highway Seven Mile Bridge over the Moser Channel, Monroe County, FDOT District 6
- I-95 Managed Lanes Project Development and Environment Study from south of Linton Boulevard/CR 782 to north of 6th Avenue South, Palm Beach County, FDOT District 4
- Long Key Bridge over Long Key Channel Project Development and Environment Study, Monroe County, FDOT District 6
- County Road 721 Roadway Improvements Brighton Seminole Indian Reservation, Glades County, Seminole Tribe of FL:
- PD&E Study for SR 5/US 1/Overseas Highway Seven Mile Bridge over the Moser Channel, Monroe County, FDOT District 6
- I-95 Managed Lanes Project Development and Environment Study from south of Linton Boulevard/CR 782 to north of 6th Avenue South, Palm Beach County, FDOT District 4
- Long Key Bridge over Long Key Channel Project Development and Environment Study, Monroe County, FDOT District 6
- SR A1A over Sebastian Inlet Bridge Replacement PD&E Study, Indian River County, FDOT District 4

EDUCATION

- BS, Interior Design, Florida International University, 2010
- AA, Interior Design, Miami Dade College, 2010

YEARS OF EXPERIENCE

Total: 18 | With Firm: 1

PERCENT OF TIME ASSIGNED TO PROJECT: 60%



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS



NICHOLAS J. FERNANDEZ, PE ENGINEERING DESIGN

Mr. Fernandez specializes in stormwater infrastructure planning, asset management, design and construction management. He has a proven track record of successfully designing, implementing, and managing comprehensive stormwater projects with to include risk management, design, permitting and regulatory compliance, CEI, utility coordination, and QA/QC.

PROJECT EXPERIENCE

Stormwater Verification and Condition Assessment Program, City of Coral Gables, FL: Program Manager/Technical Lead. Responsible for program oversight and technical advisement for a multi-year stormwater verification and condition assessment program which included data collection, field verification, GIS digitization of Assets, QA/QC, and the creation and update of a GIS Web-viewer. Data collection efforts included collecting, compiling and analyzing pertinent drainage infrastructure data. Created a GIS Web Viewer to allow the City's staff to easily obtain information related to the drainage infrastructure without the need of using a GIS ESRI license. Finally, the program included CEI services for CCTV of drainage infrastructure to confirm connectivity of the system.

\$1.9B USEPA Consent Decree (CD) Miami-Dade County Program, Design & Construction Management and Support Services , Miami-Dade County, FL: Project Manager responsible for providing direction to a staff of design professionals engaged by the County through a series of Professional Services Agreements. Managed projects from conception to closure including design, permitting, procurement, construction, and certification. Developed working with WASD the current \$72M Trenchless technology blanket contract, among many other items.

Mr. Fernandez served as Project Manager for the following projects:

- Stormwater Verification and Condition Assessment Program, City of Coral Gables, FL
- County-wide Cleaning and Televising of Large Diameter Sewers, Miami-Dade County, FL
- Annual Report for Individual NPDES Permits for Municipal Separate Storm Sewer Systems, City of Coral Gables, FL
- Citywide Stormwater System Improvements, City of Coral Gables, FL
- Sunrise Harbor Drainage Assessment, Coral Gables, FL
- CEI Services for Stormwater Improvement at NW 89th PL and NW 24th Ter, Miami, FL

EDUCATION

- BS, Civil Engineering, Florida International University, 2012

CERTIFICATIONS

- Professional Engineer, FL #56549
- Project Management Professional (PMP)

YEARS OF EXPERIENCE

Total: 11 | With Firm: 11

PERCENT OF TIME ASSIGNED TO PROJECT: 80%



RICARDO MARISTANY, PE ENGINEERING DESIGN

Mr. Maristany has 15 years of experience in planning, design, and construction phase services for municipal public works projects including stormwater, water and wastewater, roadway, and aviation facilities. He has managed single contracts valued in excess of \$100M in construction for infrastructure programs in South Florida, including the Miami Dade WASD Consumer Line Relocation Program. He is expert in program analysis, project prioritization and grouping, scheduling and staffing, stakeholder coordination, value engineering, and ensuring contract compliance throughout the project lifecycle.

PROJECT EXPERIENCE

Mr. Maristany served as Project Manager and Engineer of Record for the following projects:

- SFWMD Construction Management for C-44 Stormwater Treatment Area, Martin County, FL
- City of Doral, Basin H-5 Drainage Improvements Project
- SFWMD L31-E Levee Restoration Project Miami FL
- SFWMD G-93 Structural Refurbishment & New Control Room Building, Coral Gables, FL
- Replacement and Upsizing of Water Transmission and Distribution Mains along 41st Street, and Fire Flow Project 9, Miami Beach, FL
- Subaqueous Water Mains Under Collins Canal at 22nd Street and 23rd Street, Miami Beach, FL
- Miami-Dade WASD Consumer Line Relocation Program, Miami, FL
- City of Coral Gables City-Wide Assessment of Pump Station Telemetry System, Coral Gables, FL
- MDWASD Pump Station Improvement Program (PSIP), Miami, FL
- Ocean Outfall Legislation Projects, Miami-Dade Water & Sewer Department, FL
- Pump Station 1 Rehabilitation and Hardening, Engineering and Design Services, Miami Beach, FL

EDUCATION

- BS, Civil Engineering, University of Miami

CERTIFICATIONS

- Professional Engineer, FL #76068
- OSHA 30-hour Construction Safety
- FDOT CTQP Q/C Manager
- FDOT MOT
- Advanced Certified Diver

YEARS OF EXPERIENCE

Total: 15 | With Firm: 8

PERCENT OF TIME ASSIGNED TO PROJECT: 80%



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS



PAOLA DAVALOS, PE, ENV SP ENGINEERING DESIGN

Ms. Davalos has 11 years of experience coordinating, managing, permitting and overseeing construction of stormwater, water, and wastewater and infrastructure projects in South Florida. She has managed the design and construction of pump stations, gravity mains, force mains, septic to sewer conversion projects, neighborhood stormwater improvement projects and planning studies for expansions and upgrades of water, reuse, wastewater and stormwater systems. She has led utilities design for community improvement projects including \$100M MDC Underline Phase 3-9, \$300M South Corridor Rapid Transit Project, and \$300 M Broward County FLL Terminal 5 Expansion.

EDUCATION

- BS, Environmental Engineering, Florida International University, 2014

CERTIFICATIONS

- Professional Engineer, FL #92515
- Envision Sustainability Professional (ENV SP)
- Lean Enterprise Institute - Practicing Lean Fundamentals in an Office Environment

YEARS OF EXPERIENCE

Total: 11 | With Firm: 11

PERCENT OF TIME ASSIGNED TO PROJECT: 80%

PROJECT EXPERIENCE

DB21-DTPW-01 – Underline Phase 3-9, Miami-Dade County, FL: Drainage project manager for 10-mile multimodal transportation corridor and urban world class trail responsible for design of stormwater management improvements for the project in order to comply with municipal, county, state and federal flood prevention and stormwater quality/quantity criteria, consisting of solid pipes, exfiltration trenches, drainage structures, drain basins, inline drains, grates/frames, injection wells, PRBs, rain gardens, bioretention systems, etc.

Engineering Design Services Related to Drainage, Water, and Sewer for new Terminal 5 in BCAD/FLL Airport, Broward County, FL: Utilities Project Manager responsible for design of landside and airside drainage, potable water and fire protection and collection and transmission sewer expansions including 25 curb inlets interconnected via 18-inch and 24-inch solid pipe discharging to approximately 1,200 LF of exfiltration trench, as well as extensive regulatory compliance and permitting coordination. Additionally, the design of 12-inch DIP water main loop, gravity main and force main improvements.

Stormwater Verification and Condition Assessment Program, City of Coral Gables, FL: Project Manager responsible for technical review, data collection, field verification, GIS digitization of assets, QA/QC, and GIS Web-viewer creation. Field verification included geolocating 3,300 manholes, 7,400 catch basins, and other assets using GPS. Assets' horizontal coordinates, elevations, and condition were recorded. GIS digitization updated the City's drainage geodatabase with standardized formatting and symbology.

Sunrise Harbor Drainage Assessment, City of Coral Gables, FL: Project Manager for stormwater management solutions including stormwater modeling, and conceptual design considering current and future conditions, including climate change impacts.

ANA DVORAK, MS, ENV SP ENGINEERING DESIGN

Ms. Dvorak has 8 years of planning, design, and simulation and evaluation of stormwater, water, wastewater and reclaimed water treatment facilities. She has prepared design for distribution and collection systems; pump stations; water resources management; water quality analysis; stormwater infrastructure design; and processes control & instrumentation and SCADA systems. She has developed environmental resources management systems and environmental impact assessment studies.

PROJECT EXPERIENCE

Ms. Dvorak served as Project Manager and/or Senior Engineer for the following projects:

- City of Miami Beach, W-2 Water Booster Pump Station Rehabilitation, Engineering and Design Services, Miami Beach, FL
- Water, Wastewater, and Reclaimed Water Planning and Geological Services for Un-Sewered Commercial and Industrial Areas, Miami-Dade County, FL
- City of Coral Gables City-Wide Assessment of Pump Station Telemetry System, Coral Gables, FL
- Pump Station 1 Rehabilitation and Hardening, Engineering and Design Services, Miami Beach, FL
- City of Miami Beach, W-2 Water Booster Pump Station Rehabilitation, Engineering and Design Services, Miami Beach, FL
- Water, Wastewater, and Reclaimed Water Planning and Geological Services for Un-Sewered Commercial and Industrial Areas, Miami-Dade County, FL
- City of Coral Gables City-Wide Assessment of Pump Station Telemetry System, Coral Gables, FPump Station 1 Rehabilitation and Hardening, Engineering and Design Services, Miami Beach, FL
- PS-0062 Replacement, Gravity Main Extension and Force Main Installation, City of Miami, FL
- Broward County Water and Wastewater Services (BCWWS) Regional Transmission Master Plan, Broward County, FL
- er Distribution System Assessment and Optimization, Opa-Locka, FL



EDUCATION

- MS, Civil Engineering, University of Miami
- BS, Chemical Engineering, Simón Bolívar University

CERTIFICATIONS

- Envision Sustainability Professional (ENV SP)

YEARS OF EXPERIENCE

Total: 8 | With Firm: 8

PERCENT OF TIME ASSIGNED TO PROJECT: 80%



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS



STEVE SOMMERFELDT, PE, CFM ENGINEERING DESIGN

Mr. Sommerfeldt has served as Project Manager and Project Engineer on various stormwater and water resource projects for municipal government clients throughout Florida since 2001. His key expertise includes stormwater retrofits and master planning efforts, including drainage infrastructure inventory and evaluation, hydrologic/hydraulic modeling, floodplain analysis, construction plans preparation, and construction oversight.

EDUCATION

- BS, Civil Engineering, University of Central Florida

CERTIFICATIONS

- Professional Engineer, FL#64074
- Qualified Stormwater Management Inspector, Florida #22365
- Certified Floodplain Manager, Florida,
- US-12-06219

YEARS OF EXPERIENCE

Total: 24 | With Firm: 24

PERCENT OF TIME ASSIGNED TO PROJECT: 80%

PROJECT EXPERIENCE

WFWMD Watershed Management Program, Jumper Creek Watershed (N487), Sumter County, FL: Completed a flood protection LOS analysis, a surface water resource assessment (pollutant loading model), and a BMP alternatives analysis for the Jumper Creek Watershed. Services included hydrologic and hydraulic modeling, pollutant loading analysis, GIS spatial analysis, LOS analysis, and BMP alternatives analysis.

SWFWMD Watershed Management Program, Anclote East WMP Update (N489), Pasco County, FL: QA/QC Officer. Watershed maintenance update and an alternative analysis for a 14.1 square mile portion of the Anclote East Watershed in south Pasco County. Services include topographic data review, GIS/GWIS data development, HydroNetwork mapping, ICPR model development and validation, floodplain analysis and mapping, and alternatives analysis for flood improvement BMPs.

SWFWMD Watershed Management Program, Cardinal Lane, Citrus County, FL: QA/QC Officer. Assessed the LOS, develop a surface water resources assessment, and evaluate best management practices (BMPs) for the 2012 Cardinal Lane WMP. The Cardinal Lane WMP encompasses an area of approximately 56.8 square miles in the southwest portion of Citrus County. It is a predominantly closed watershed that is bound by the Homosassa River Watershed to the north, the Center Ridge Watershed to the east, and the Chassahowitzka River Watershed to the south.

Swann Lake Pump Station Study Phase 1, Orange County Public Works, FL: Project Manager responsible for coordinating internal work progress, coordinating with client, presenting project information to client, budgeting, scheduling, and providing QA/QC of deliverables. Mr. Sommerfeldt developed a comprehensive drainage and flood level of service evaluation of the study area, including floodplain delineation and stormwater pump station evaluation. Services for this project include topographic data evaluation and updates, infrastructure assessment, watershed evaluation, H&H model development, model calibration and validation, GIS/GWIS data development, HydroNetwork mapping, floodplain analysis and mapping, flood level-of-service assessment, and alternatives analysis.



STEVE WILLIAMS, PE ENGINEERING DESIGN

Mr. Williams has been engaged in civil and transportation engineering design and construction in South Florida since 1970. He has served as the record engineer for stormwater, utility, transportation, utility, roadway, and land development project spanning municipal, residential, mixed-use, and commercial. Steve's expertise covers roadway and site engineering design and analysis including paving, grading, drainage, water, and sanitary sewer systems. Throughout his career, Steve has served as a general municipal civil engineering consultant to cities such as Oakland Park, Miramar, Plantation, Fort Lauderdale, Sunrise, Pompano Beach, and Tamarac.

PROJECT EXPERIENCE

Parkland Stormwater Master Plan, Parkland, FL: Principal-in-Charge. Led comprehensive SWMP which involved input from the public, City Officials, and staff, and included projected costs alternative funding mechanisms for each phase; review of existing permits for the water management districts that serve the City, as well as Broward County, SFWMD, North Springs Improvement District, and Pinetree Water Control District.

Abbott Ave Drainage Improvements Final Design - Phase II, Surfside, FL: Principal-in-Charge. Project included survey, SUE, civil engineering, FDOT coordination, bidding assistance, and construction program management services to the Client. Project included milling, resurfacing, restriping, preparation of construction documents, construction observation, final inspections, and final certification.

Zone 2 Drainage Study, Plantation, FL: Civil Engineer. Provided engineering services including evaluation of the existing stormwater system and development of CIP. Used H&H modeling to evaluate the overall existing stormwater system, identify potential areas at risk of flooding and evaluate future upgrades. Final report considered studies and models, data, permit conditions, and recently completed and ongoing projects.

EDUCATION

- BS, Civil Engineering, University of Florida, 1977

CERTIFICATIONS

- PE Florida #32090

YEARS OF EXPERIENCE

Total: 48 | With Firm: 11

PERCENT OF TIME ASSIGNED TO PROJECT: 80%



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS



CHRISTOPHER TILMAN, PE, BCEE ENGINEERING DESIGN

Mr. Tilman is a civil engineer with more than 27 years of experience in several civil engineering disciplines, including stormwater planning and design. Mr. Tilman is very familiar with the requirements of Broward County for stormwater design and permitting and has extensive experience with ICPR4 modeling software. Chris also led the stormwater master plan for the City of Sebastian in Florida.

PROJECT EXPERIENCE

Stormwater Master Plan (2023), City of Sebastian, FL: Project manager for development of a stormwater master plan to address long-standing drainage issues. Prepared a GIS map for the entire City stormwater system, conducting field inspections and surveys of more than 800 seawalls and 4,200 stormwater culverts, inlets and associated structures, hydraulic/hydrologic modeling of stormwater runoff flows and pollutant loading, identifying and prioritizing capital projects, grant funding analysis and application preparation, and preparation of a master plan, including a comprehensive operations plan for the City's system.

Dimick Road and Potter Road Improvements (2021), City of Boynton Beach, FL: Engineer of record responsible for the preparation of the engineering drawings, specifications, and SFWMD ERP permitting and FDOT ROW permitting for flood damage reduction improvements in an older 10-ac neighborhood. Work includes analysis of historical rainfall and tidal elevation data, widening three existing residential streets, adding curbing, modifying driveways, relocating and modifying water, wastewater, gas, power, and CATV utility services, retrofitting and redesigning an inlet-and-pipe collection system to optimize flow through three existing outfalls, analysis and design of coastal structures, performing an alternatives analysis for various design options, and 2-D hydraulic and hydrologic modeling to simulate inline valve operations in all outfalls and tidal influences from the Lake Worth Lagoon.

Pinellas County Resource Recovery Facility NPDES Permitting Support Services, Pinellas County Department of Solid Waste, St. Petersburg, FL: Project Manager and Engineer of Record for the preparation of a year-long surface and groundwater predictive mathematical model to analyze the surface water levels, gradient controls and other issues contributing to NPDES discharge events at the 705-acre site. The model includes hourly calculations of surface inflow, horizontal and vertical infiltration in ponds, open channel flows, circular and box culvert flows, weir flows, pump operations and groundwater flows in 14 subbasins.

ALBERTO HERNANDEZ CONSTRUCTION ENGINEERING INSPECTION

Mr. Hernandez has been an integral member of the Ardurra team. His experience, intellect and professionalism has allowed him to succeed in challenging projects from milling and resurfacing to full roadway reconstruction. His dedication is evident in the vast training and varied certifications he has pursued while ensuring that his project responsibilities were not jeopardized. Mr. Hernandez is a strategic and results-driven individual with a diverse skill set. He is a consummate professional adept at assessing and addressing the needs and challenges for projects of all sizes and complexity levels.

PROJECT EXPERIENCE

Alberto served as Senior Inspector for the following projects:

- Loch Lomond North Drainage Improvement Project, Town of Miami-Lakes, FL
- Commerce Way Drainage Improvement Project, Town of Miami-Lakes, FL
- FDOT D4, SR 858/Hallandale Beach Blvd. Reconstruction, Broward County, FL
- FDOT D4, I-595 Transit Mobility Hub, Broward County, FL
- Royal Oaks 6th Addition Drainage Improvement Project, Town of Miami-Lakes, FL
- West Lakes Gardens Drainage Improvements, Miami Lakes, FL
- Commerce Way Drainage Improvement Project, Town of Miami-Lakes, FL
- FDOT D4, SR 858/Hallandale Beach Blvd. Reconstruction, Broward County, FL:
- FDOT D4, I-595 Transit Mobility Hub, Broward County, FL
- Royal Oaks 6th Addition Drainage Improvement Project, Town of Miami-Lakes, FL
- West Lakes Gardens Drainage Improvements, Miami Lakes, FL
- FDOT D4, SR 858/Hallandale Beach Blvd. Reconstruction, Broward County, FL
- FDOT D6, Krome Ave. North, Miami-Dade County, FL
- Miami River Greenway, Miami, FL

EDUCATION

- MS, Engineering Management, Troy University, 1997
- BS, Civil Engineering, Auburn University, 2000
- BS, Environmental Science, Auburn University, 1994

CERTIFICATIONS

- Professional Engineer – AL, FL, GA
- Board Certified Environmental Engineer
- Construction Documents Technologist

YEARS OF EXPERIENCE

Total: 27 | With Firm: 25

PERCENT OF TIME ASSIGNED TO PROJECT: 80%



EDUCATION

- BS, Civil Engineering, University of Central Florida

CERTIFICATIONS

- CTQP TIN # H65500159
- FDOT Concrete Field Inspector Specification
- Earthwork Construction
- Asphalt Paving Technician
- Concrete Field Technician
- Drilled Shaft Inspection
- Pile Driving Inspection
- Final Estimates Level 1 & 2
- QC Manager

YEARS OF EXPERIENCE

Total: 30 | With Firm: 2

PERCENT OF TIME ASSIGNED TO PROJECT: 75%



ORGANIZATIONAL PROFILE & PROJECT TEAM QUALIFICATIONS



JON WEYMOUTH, PSM CONSTRUCTION ENGINEERING INSPECTION

Mr. Weymouth has more than 30 years of experience in the planning, design, permitting, and construction of transportation, utility, and civil and environmental engineering projects throughout Florida. For the last ten years he has supervised engineering and technical personnel on large infrastructure programs for municipalities, airports, and transportation authorities. He proactively coordinates with all stakeholders, permitting authorities, and local, state, and federal agencies to ensure support the program's schedule and budget constraints.

PROJECT EXPERIENCE

Abbott Avenue Drainage Improvements Final Design Phase II, Surfside, FL: Construction Manager. Ardurra provided survey, SUE, civil engineering, FDOT coordination, bidding assistance, and construction program management services to the Client. Ardurra oversaw structural engineering, mechanical and electrical engineering, and geotechnical engineering services provided by subconsultants. The Ardurra Team assisted in milling, resurfacing, restriping, preparation of construction documents, construction observation, final inspections, and final certification.

JKV Stormwater Master Plan, Pompano Beach, FL: Construction Manager. Ardurra assisted the Client in the development of a senior residential facility, formal and semi-formal gardens, and surface parking. Ardurra provided full services to the Client including civil engineering, survey/SUE, planning, landscape architecture, and CEI. The Ardurra Team assisted with the preparation of a topographic and boundary survey, tree survey, existing utility map, and conceptual development of an overall Stormwater Master Plan for the property. Additional Ardurra services included the estimated engineering design for Phase I projects, engineering for coordination and deliverable review, stormwater modeling, permitting, water distribution, and wastewater collection plan delivering a safe, functional space for the community to thrive.

Arts & Cultural Center, Hollywood, FL: Construction Manager. Ardurra assisted the Client with the redevelopment of a 5,400-SF education space for dance, music, visual arts, and new media, galleries, administrative offices, and an outdoor courtyard. Ardurra provided full services to the Client including survey and mapping, civil engineering including paving, grading and drainage, water distribution and sanitary sewer plans, stormwater prevention, hardscape and paving, landscape and irrigation design, and construction observation. The Ardurra Team assisted with the site plan and development of all onsite improvements. This was the first project in the City's plan to modernize and increase capacity for arts programming at the site. Future expansion will include construction of a new performing arts studio and renovation of gallery spaces.

EDUCATION

- BS Arts, Architectural Engineering, University of Miami 1990

CERTIFICATIONS

- PE Florida #52802
- Qualified Florida Construction Stormwater Management Inspector
- SFRTA Contractor Safety Training
- Temporary Traffic Control Certification, Intermediate
- Temporary Traffic Control Certification, Advanced
- OSHA 10-Hour Safety Training
- CTQP Quality Control Manager

YEARS OF EXPERIENCE

Total: 35 | With Firm: 14

PERCENT OF TIME ASSIGNED TO PROJECT: 75%



WILL KUEHNE, PE, CFM, ENV SP DIGITAL TRANSFORMATION & CMMS

William J. Kuehne focuses on smart water projects and has provided extensive engineering support for a multitude of projects. William is a strong leader, who builds teams with a variety of perspectives, leading to robust and resilient outcomes. His innovative and interdisciplinary approach to engineering combines computer science, business acumen, stakeholder engagement, and traditional engineering. His engineering contributions keep projects on time and on budget. His attention to detail and strong time management deliver reliable and responsible results.

PROJECT EXPERIENCE

GIS-Asset & Data Management. General Engineering Services for Disaster Mitigation for Wastewater Facilities Induced by Hurricane Harvey, Houston, TX: Performed wastewater modeling analysis and Capacity Analysis Reports for a variety of meter basins using custom ArcGIS and EPASWMM software. Calibrated individually or as part of a team Alameda Sims, Southwest, Greenridge, and Chocolate Bayou sewer sheds using Innovyze ICM software. Participated in or individually created master planning scenarios in of a variety of sewer sheds using ICM software and created master planning models as required by the city. Created unconstrained models of a variety of sewer sheds using ICM software, and created master planning models as required by the city. Created algorithmic procedures to automate master planning processes using SQL and Ruby. Throughout this work I have created SQL and Python tools tailored for the City of Houston to meet future modeling needs.

- Development of Advanced Water and Wastewater Infrastructure Analytics, Houston, TX: Developed semi-automated and automated methods to propagate master planning scenarios for wastewater collection systems.
- Malcolm's Method Hydrograph Method for Detention Volume Sizing: Utilized MathCAD to create a sheet to provide Malcolm's Method Detention Sizing in a very clear and concise method showing all calculations.
- City of Houston, General Engineering Services for Disaster Mitigation for Wastewater Facilities Induced by Hurricane Harvey, TX: Performed Capacity Analysis Reports or a variety of meter basins using custom ArcGIS and EPASWMM

EDUCATION

- BS, Integrated Degree in Engineering Arts & Science, Lehigh University
- BS, Civil Engineering, Lehigh University
- MBA, General, Quantic School of Business and Technology

CERTIFICATIONS

- PE Texas #142357
- Certified Floodplain Manager, No. 3521-18N
- Envision Sustainability Professional #45246

YEARS OF EXPERIENCE

Total: 13 | With Firm: 11

PERCENT OF TIME ASSIGNED TO PROJECT: 40%



Approach to the Scope of Work

// A poorly executed program can lead to inconclusive results and ineffective repairs. Many of our South Florida clients select Ardurra to re-align their efforts using a focused standardized program that achieves the intended results while maximizing the value to City investments. //



APPROACH TO THE SCOPE OF WORK

PROGRAM MANAGEMENT COMMUNICATIONS

Communications is the single most important factor in achieving project success for:

- On time schedule compliance
- Completed costs within budget
- Compliance with all regulatory requirements
- Constructed work meets owner expectations
- All issues resolved at construction completion
- Stakeholders and communications with the DPU and various City Departments - Communications, CMED as well as HOAs and adjacent municipalities to name a few



KICK-OFF WORKSHOP & SEMI-ANNUAL WORK PLANNING

At the outset and prior to the initiation of work, our Program Manager (PM), Rares Petrica, and technical leadership will meet with you as part of a 'kick-off' program initiation meeting. A draft Program Management Plan (PMP) will be provided for review prior to meeting and updated as a result. Steps include:

- Goals, purpose, and objectives of program
- Schedule and resource projections
- Basis of planning/design criteria
- Quality management requirements
- Issues, challenges and risks

This same group will meet with you again on a semi-annual basis to ensure continued progress and make necessary adjustments to address changing conditions. This will also result in formal updates of the PMP.

WEEKLY - INFORMAL UPDATES

Continual communications require an open culture of trust and direct engagement on important issues. Every week ends or begins with a verbal discussion with you and our PM along with a written two-week lookahead. Two-week look ahead provides:

- Work completed over the previous week
- Activities anticipated in the next two weeks
- Identification of issues and responsible party
- Potential schedule, budget or change impacts
- Schedule or cost recovery strategy if needed

MONTHLY - FORMAL MEETINGS AND PROGRESS REPORTING

You will be provided with a formal updated project report on a monthly basis that will also be used as the basis for onsite review meetings. This report includes:

- Gantt Chart based schedule update and identification of any potential impacts
- Project cost to budget updates and projections with identification of any potential issues
- Invoicing aligned with contracted Work Breakdown Structure and narrative description of corresponding work completed

PROGRAM / PROJECT TRACKING DASHBOARDS

We will develop Project Management Plans (PMPs) based on PMI standards and collaborate with stakeholders to design custom dashboards and workflows that align with program goals. Our expertise in data visualization and process automation ensures stakeholders gain clear, actionable insights from complex datasets, supporting effective decision-making throughout the capital program lifecycle.

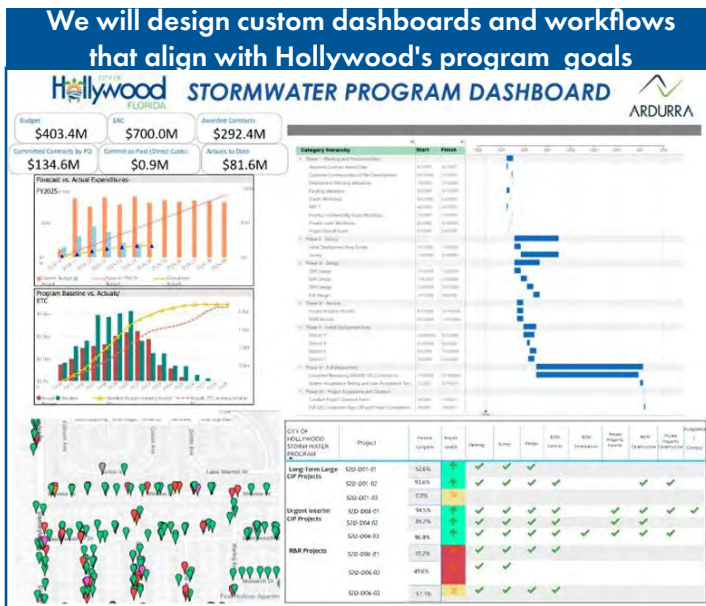


To provide up to date insights on program performance, we leverage data visualization and analysis tools such as PowerBI or Tableau. These provide you web based access from anywhere on such issues as cost, schedule and status from a high level all the way to individual tasks. These are customized for each program specifics with the ability to connect data sets with your

- **GIS and Asset Management Database**
- **Computerized Maintenance Management Systems (CMMS)**
- **Construction/Project Management Platforms**



APPROACH TO THE SCOPE OF WORK



QUARTERLY - EXECUTIVE BRIEFINGS

We recommend conducting briefings with your executive/management leadership and interested elected officials on a quarterly or semi-annual basis. During these we would provide a graphics heavy executive briefing along with an in-person presentation on the status and progress of the program. We find this effective at preventing unanticipated changes through addressing any questions or concerns of senior leadership in a proactive manner

DECISION GATE WORKSHOPS

For all key project milestones, we will facilitate formal review meetings with you and your key staff in capital projects, operations and maintenance. Review materials will be provided prior to meetings and outcomes documented in decision log. Through this effort projects continue to progress without rework or changes that would pose potential delays.



COLLABORATIVE COMMUNICATION TOOLS

A digital means of sharing project information with team members (PM, Engineers, Owner, Contractor, Reviewers, etc.) will be provided. This provides the real time and one-stop shop access to all information as it is developed, delivered, reviewed, and revised. Whether this be Microsoft Teams, SharePoint, ProjectWise, Autodesk Construction Cloud, or other systems; we have established systems and standard methodologies in place.

Benefits and Outcomes



PROJECTS PRIORITIZATION, PACKAGING, DELIVERY AND TRACKING

PROJECT TRACKING SHEET

A Project Tracking Sheet is established at the outset of a needs identification from the CIP, Engineering or O&M. As the project is developed and implemented this tracking sheet is the primary "management tool" to see through planning, engineering, procurement, construction and commissioning.

- Project needs, purpose and priority
- Quantitative project definition
- Budget cost and schedule
- Delivery and procurement process
- Easement requirements
- Permitting and utility coordination
- Risks and issues for resolution
- Stakeholders



BUSINESS CASE EVALUATION

Our approach to defining projects leverages current innovations with business case decision making. This aligns life-cycle costs, emerging technologies, regulatory environment, and operability. For this comprehensive decision making we typically perform facilitated workshops, open ideas development and quantitative rankings based on risks and competing priorities.

- Detailed life cycle cost analysis
- Emerging technologies and innovation
- Risk mitigation return on investment (ROI)
- End of useful life replacement or upgrade

ALTERNATIVE PROJECT DELIVERY ANALYSES

Our approach supports the evaluation of risks, benefits and challenges of alternative delivery on individual projects. This is built on Ardurra's depth of work in design - build, progressive design-build, and CMAR. This includes making effective use of on-call construction contract vehicles. Our recommendations for CIP, repair, rehabilitation and renewal projects will leverage cost and schedule savings of each method.

- Understanding benefits and challenges for the range of delivery scenarios.



APPROACH TO THE SCOPE OF WORK

- Cost estimating and construction market insights on costs impacts.
- Valuable decision-making tools for agile procurement and delivery.

PROJECT DELIVERY PLAN

A Project Delivery Plan (PDP) is built on and coordinated with the Project Tracking Sheet, which will ensure that all parties with responsible actions are informed of the purpose, objectives, budget, schedule, and procedures. A dynamic PDP provides a common understanding of the unique methods of delivery for each project. This document will provide an ongoing guide for work, reporting and communications. This is critical to work as a single team with a common goal.

- Purpose and objectives of work
- Communications and roles
- Procedural requirements
- Design and performance criteria
- Standards of work
- Quality requirements
- Milestone events w/ activities

COST ESTIMATING

Our team brings extensive experience in cost estimating, bid analysis, and value engineering across all phases of utility construction. Leveraging deep knowledge of local market trends and industry standards, including guidance from the Association for the Advancement of Cost Engineering (AACE) International, we deliver accurate estimates and effective cost management tailored to each project's scope.

Estimate Delivery.

Our cost professionals develop and validate estimates using proven models, internal data, and professional judgment. We follow the Association for the Advancement of Cost Engineering (AACE) International Practice 18R-97 and its five-class system to align estimate detail with project development phases.

Our team leverages historical data and regional expertise to improve estimate accuracy, particularly for South Florida conditions. Our estimates incorporate market surveys and pricing databases that reflect contractor availability, labor and material costs, risk factors, and other local variables.

Basis of Estimate (BOE). The Basis of Estimate (BOE) outlines the assumptions, scope, methodology, and source documents used to develop a cost estimate. Our team uses a standardized template aligned with the Association for the Advancement of Cost Engineering (AACE) International's recommended practices.

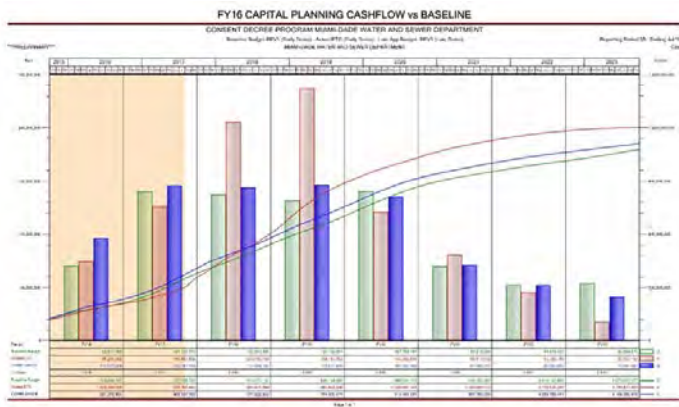
The BOE defines the estimate's purpose, pricing basis, allowances, exclusions, and risks serving as both a communication tool and a project record. It supports scope clarity, cost tracking, dispute resolution, and estimate validation throughout the project lifecycle.

Estimating - C:\Users\jacob\OneDrive\Documents\Estimating - 10-20-2024												
File	Edit	View	Database	Takeoff	Printing	Reports	Utilities	Windows	Help			
Takeoff Quantity: 1,000.00 Takeoff Price: 1,000.00 Takeoff Amount: 1,000.00												
Summary Grid												
Update Dates	Group	Phase	Description	Takeoff Quantity	Labor Productivity	Labor Quantity	Labor Price	Labor Amount	Material Quantity	Material Price	Material Amount	Vendor Name
03-11-13.0			Structural Cast-in-Place Concrete			5.90		2,830			620	
03-11-13.0.1			Forms in Place, Footings			2.90		1,513				
03-11-13.0.2			C.P. concrete forms, footing, continuous wall, etc.	250.00	4.00	1,000.00	4.00	4,000.00				
03-11-13.0.3			Forms in Place, Slab On Grade			2.90		1,513				
03-11-13.0.4			C.P. concrete forms, slab on grade, edge, etc.	225.00	4.00	900.00	4.00	3,600.00		0.56	56	
03-15-05.0			Concrete Forming Accessories			35.19		2,291			675	
03-15-05.0.1			Expense tags, etc.			35.19		2,291				
03-22-00.0			Rebar and Grid Reinforcing			22.23		4,004			1,562	
03-22-00.0.1			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.2			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.3			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.4			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.5			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.6			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.7			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.8			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.9			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.10			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.11			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.12			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.13			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.14			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.15			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.16			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.17			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.18			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.19			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.20			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.21			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.22			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.23			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.24			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.25			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.26			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.27			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.28			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.29			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.30			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.31			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.32			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.33			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.34			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.35			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.36			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.37			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.38			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.39			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.40			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.41			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.42			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.43			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.44			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.45			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.46			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.47			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.48			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.49			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.50			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.51			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.52			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.53			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.54			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.55			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.56			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.57			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.58			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.59			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.60			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.61			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.62			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.63			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.64			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.65			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.66			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.67			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.68			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.69			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.70			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.71			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.72			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.73			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.74			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.75			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.76			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.77			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.78			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.79			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.80			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.81			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.82			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.83			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.84			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.85			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.86			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.87			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.88			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.89			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.90			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.91			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.92			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.93			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.94			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.95			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.96			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.97			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.0.98			Rebar and Grid Reinforcing, 1/2" x 12"			22.23		4,004				
03-22-00.0.99			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.00		4.41	441	
03-22-00.1			Rebar and Grid Reinforcing			22.23		4,004			1,562	
03-22-00.1.1			Expense tag, purchase, handling, etc.	1,000.00	4.00	4,000.00	4.00	16,000.				



APPROACH TO THE SCOPE OF WORK

Change Review & Negotiation . Our team has extensive experience in reviewing and negotiating construction change orders across major programs. For each scope change, we develop detailed cost estimates including direct costs (labor, materials, equipment) and indirect costs (extended overhead, impacts) to match the rigor of final design estimates. Upon receiving contractor proposals, we prepare a reconciliation summary, support negotiations, and document outcomes for stakeholder and audit review. Our approach has consistently achieved 15–30% cost savings on change order requests.

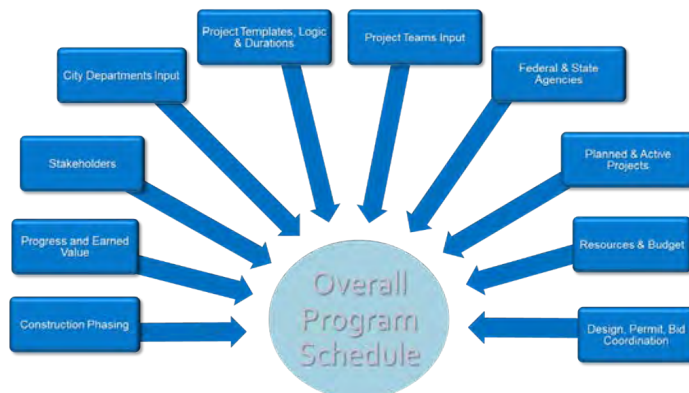


SCHEDULING

Schedule Management. Establishing a realistic program schedule is critical to project success and begins with a well-defined scope and Work Breakdown Structure (WBS) to break work into measurable, time-phased elements. Input from all stakeholders ensures the schedule reflects project requirements and expectations.

Our scheduling team prepares logic-driven CPM schedules using Primavera P6 or Microsoft Project, tailored to each project and clearly presenting activity relationships for effective tracking.

As projects are prioritized, we develop detailed schedules with milestones for planning, design (30%, 60%, 95%, 100%), bidding, construction, and closeout. We also recommend including owner-controlled contingencies to account for delays from permitting, weather, or funding approvals—providing the flexibility to stay on track and meet key milestones



Schedule Monitoring & Control. After establishing the baseline schedule, our focus shifts to regular updates and proactive control of schedule changes. The Master Schedule is updated monthly to track progress, identify deviations, and assess risks to on-time completion. Contractor schedules are reviewed for compliance with baseline and contract requirements.

- Key monitoring elements include:
- Baseline adherence and realistic durations
- Review of contractor schedules and progress updates
- Deviation analysis and risk identification
- Performance tracking against milestones
- Claims mitigation and schedule recovery

If delays occur, our team promptly alerts project stakeholders and develops a Schedule Recovery Plan to identify the cause, corrective actions, and resources needed to restore the timeline.

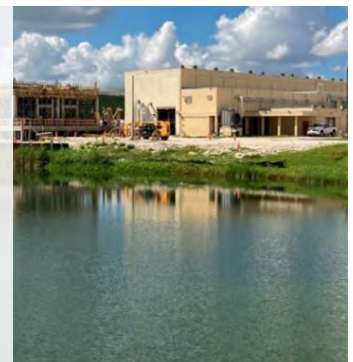
Scheduling Specifications. Our team supports the development of clear, effective scheduling specifications based on extensive experience in preparing, reviewing, and analyzing construction schedules and delay claims. Specifications must define the required work breakdown structure, coding, activity durations, and inclusion of all key activities—such as permitting, procurement, inspections, owner decisions, and closeout tasks.

Contractor schedules are reviewed monthly against the approved baseline. Deviations are analyzed, and recovery schedules may be required to realign with project milestones. Our team also evaluates delay claims through time impact analyses using actual project records, including resource logs, photos, and payment data.

•Schedule Summary (WBS, WBS dictionary, Scope Statement Compliance)
•Administrative Checks / Schedule Management Plan Compliance
•Thorough System Checks (CPM Settings, Project Calendars, etc.)
•Activities Checks (Owner Activities / Shutdown / Procurement etc.)
•Activity Code Check (Responsibility, Phase, Area, etc)
•Relationship Checks (Open Ends, Circular Logic, Redundancy, etc.)
•Constraint Checks (Contractual Milestones / Owner Requirements)
•Expense Checks / Schedule Of Values Compliance
•Resource Checks (Material, Equipment, Labor, or Supplies)
•Notebook Checks
•User-Defined Field Checks
•DCMA 14 Point Metric Checks

PROJECT PROOF

On the Miami-Dade Water and Sewer Department's Consent Decree Program, our baseline budget of \$2.1B and the 15-year schedule have not deviated since initiating work in 2014.





APPROACH TO THE SCOPE OF WORK

PROGRAM MOBILIZATION & ALIGNMENT

Getting off to the right start is crucial, and at Ardurra, we place a strong emphasis on launching the program with purpose, clarity, and full team alignment. We begin with a comprehensive kickoff meeting that brings together City staff, field contractors, and Ardurra's management team to set expectations, confirm priorities, and establish an open and collaborative working relationship from day one.

OUR COMMITMENT AT KICKOFF

- Understand the City's vision and goals
- Establish mutual expectations and success metrics
- Lay out the structure of communication and coordination

This session sets the tone for the program, with the goal of building trust, ensuring transparency, and charting a shared path forward.

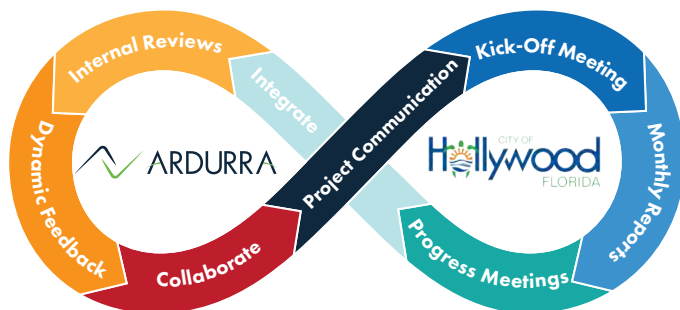
Living Program Management Plan (PMP). We will prepare and present a comprehensive Program Management Plan (PMP) that's not just a static document—but a living framework that evolves with the program. This plan includes:

- A detailed Work Breakdown Structure (WBS)
- Roles and responsibilities matrix
- Communication protocols and decision-making hierarchy
- Health, safety, risk, and quality management procedures
- KPI tracking mechanisms

We'll also introduce foundational plans such as:

- Program Controls Plan
- Health & Safety Plan
- Risk Management Plan
- Document Control Plan

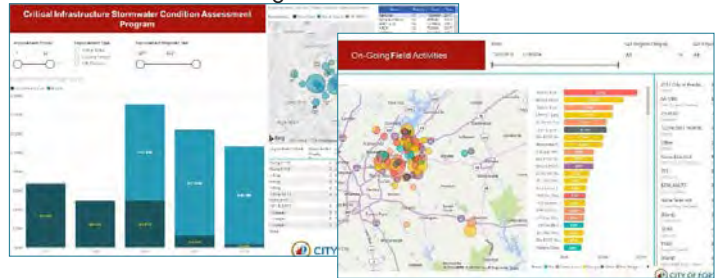
All team members, including City personnel and contractors, will have access to the PMP and participate in its ongoing refinement.



Digital Program Controls and Dashboards. To keep the City in the driver's seat, our team proposes to use web-based tools such as SharePoint for storage of program related information upon coordination with the City regarding data storage and transfer protocols.

- CIP schedules and milestone tracking
- Permit status and inspection readiness
- Budget vs. actual performance
- Outreach activity logs and stakeholder input
- Project locations and progress (GIS-linked)

Everything we do is centered around clear, real-time visibility for informed decision-making.



Data Management - Document Control & Reporting Throughout the Program. Once the program is on the way, organization is everything. Our document management systems are built to reduce risk, improve efficiency, and support informed decisions at every level.

Centralized Digital Repository Using SharePoint or a City-preferred platform, we will:

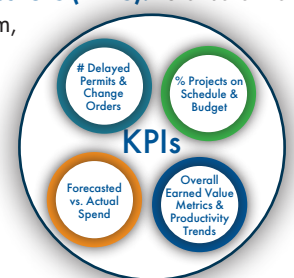
- Maintain organized directories by project phase, location, and discipline
- Implement naming conventions and document lifecycle controls
- Provide real-time access and version control to all stakeholders
- Secured access for city staff and personnel

Standard Operating Procedures (SOPs). To reduce confusion and avoid delays, we'll define:

- Clear submittal and RFI workflows with deadlines and escalation triggers
- Roles and responsibilities for uploads, reviews, and approvals
- Logs and tracking tools for permit documents, pay apps, and inspections
- Roll out new standard design and specification to be utilized for all developments for conformity

Monitoring Key Performance Indicators (KPIs). To ensure the City always has a pulse on the program, we track:

- Percent of projects on schedule and on budget
- Forecasted vs. actual spend
- Number of delayed permits and change orders
- Overall earned value metrics and productivity trends



These metrics will be displayed in a live dashboard and discussed at routine status meetings with City leadership.

Custom Reporting and Dashboards We don't believe in one-size-fits-all. Ardurra will tailor monthly and quarterly reports to meet the City's specific needs. Reporting will include:

- CIP progress dashboards by neighborhood and project type
- KPIs such as % of inspections complete, schedule adherence, and permit approvals
- Outreach activity summaries and complaint resolution status
- Earned value metrics and projected cost-to-complete

Large quantities of data are difficult and time-consuming to review and generate insights to support data-driven decision making.



APPROACH TO THE SCOPE OF WORK

To expedite the review process, our team has the capability to produce a Power Business Intelligence (BI) solution for the City to facilitate rapid and complete understanding of available data through powerful visualizations and dashboards.

The PowerBI modules can pull data from the City's decision support systems and display results in clear, easy to read, dashboards. Depending on an end-user's need the dashboards can be modified to support the data-driven decision-making processes at all levels of the organization with a standardized data set.

DATA COLLECTION, MODELING & PRIORITIZATION

Ardurra will deploy a phased, structured approach to data collection, modeling, and prioritization to support the successful execution of the City's stormwater CIP. This approach balances speed and accuracy to deliver actionable insights for both short-term and long-term project planning.

PHASE 1

Gather What Exists. We begin by compiling available documentation, including:

- As-builts and GIS records
- LiDAR and hydrologic data
- Analyzing the City's ROCKSOLID system for resident flooding complaints
- City archive records and O&M schedules
- ERP permits, FEMA flood maps, FDOT drainage files

We will coordinate with Broward County, SFWMD, FDOT, and FEMA to ensure we're leveraging the most complete and current information. This collaboration also keeps key stakeholders aligned and informed.

Our partner, Arcadis, developed the City's Water Master Plan, which is expected to be formally adopted by the Commission within the next two months. With firsthand knowledge of all recommended water projects across the City's distribution system over the next 20 years, Arcadis brings a deep understanding that will be instrumental in coordinating drainage improvements. This insight allows for the design of stormwater systems with maximum efficiency—minimizing costly utility conflicts and potential relocations.

Additionally, our team will align planned water main replacements with proposed drainage installations, enabling a single construction mobilization and reducing overall disruption. This coordinated approach will streamline construction timelines, lower costs, and significantly reduce impacts to the community by avoiding multiple periods of road closures and utility interruptions.



PHASE 2

Field Verification - Precision Starts at the Desktop. Keith will lead the field verification effort, ensuring the collection of high-quality and accurate data. The project will begin with a meticulous desktop review of preliminary GIS data provided by the city. We will cross-reference this information with detailed as-built drawings to verify the accuracy and completeness of the drainage structure locations. This step will ensure that field inspections will be targeted and efficient, saving time and resources from the outset.

Smart Data, Smarter Tools - With verified data in hand, we will configure custom forms within the ArcGIS Field Maps app, tailored to City's specific data schema. Enhanced with intuitive symbology, this app will enable field crews to easily identify structure types and inspection statuses, bringing clarity and consistency to every step of the process.

Real-Time Field Intelligence - Equipped with mobile devices (from tablets to cell phones), the field teams will hit the ground running. Using the ArcGIS Field Maps app, we can:

- Log results in real time
- Update the location of drainage structures
- Update infrastructure information such as Pipe material and Pipe diameter
- Capture and upload geotagged photos directly to the GIS database

This seamless integration of mobile technology will ensure that every data point is accurate, timely, and actionable.

Data That Drives Decisions - Back at the office, the collected data will be imported into ArcGIS Pro for post-processing. The team will conduct rigorous quality control, validate field inputs, and implement a systematic numbering convention based on geographic zones—creating a clean, organized, and future-ready dataset.

The Result: A Smarter, More Resilient Infrastructure - The finalized GIS dataset will equip the Team with a robust tool for proactive decision-making, strategic planning, and enhancing infrastructure resilience. By integrating advanced GIS technology and expert fieldwork into the City's asset management platform, this initiative will set a new benchmark for managing critical infrastructure in the digital era.

Keith has provided such efforts for Broward County and Port Everglades, enhancing their maintenance and planning efforts to support cost controls and program management.



APPROACH TO THE SCOPE OF WORK

DELIVERY METHOD & RISK MANAGEMENT

Every neighborhood, outfall, and pump station is different—so our delivery methods must be equally flexible. We don't believe in a one-size-fits-all model. Instead, we help the City choose the best method for each project based on risk, complexity, and timing.

Tailored Delivery Recommendations: Together with City staff, we evaluate:

- Design-Bid-Build for straightforward or standard infrastructure
- Design-Build for time-sensitive or complex sites
- CMAR for high-risk or community-sensitive projects

Comprehensive Risk Management: Risk management isn't a checklist—it's a mindset woven into every step. We will maintain a dynamic, program-wide Risk Register to actively monitor and manage potential issues throughout the project lifecycle. High-risk projects—such as those involving complex permitting, major utility conflicts, or challenging soil conditions—will be identified early. For each identified risk, we will assign a mitigation lead, define resolution strategies, and establish clear timelines to reduce uncertainty and avoid downstream delays.

To support the City in managing stormwater infrastructure programs, we have developed a preliminary **RISK IDENTIFICATION MATRIX** - REFER TO THE FOLLOWING PAGE. This matrix is tailored to highlight potential risks and corresponding mitigation actions for Interim, Renewal & Replacement (R&R), and Neighborhood CIP projects.

'WISE' ENGINEERING - VALUE BASED PROJECT DEVELOPMENT

Water Infrastructure Strategic Evaluation (WISE) is Ardurra's approach during the preliminary assessment phase of any project. Our protocol ensures each individual project is carefully analyzed to determine the most cost-effective approach to complete the project.

- Data collection, field assessment & hydraulic analysis
- O&M records understanding of needs
- Prioritization by stakeholder criteria & Owner preferences
- Compare outcomes of potential projects for:
 - O&M asset upgrades/repairs
 - Rehab of existing infrastructure
 - Capacity upgrades and expansions
 - Interconnected off-site capacity
 - New or replacement facilities
- Explore & execute Joint Project Agreements with surrounding municipalities and agencies — Cities of Hallandale Beach and Dania Beach, SFWMD, and CBWCD to name a few

The 'WISE' engineering approach was implemented in the MDWASD Pump Station Improvement Program — saving the County \$37M and we were able to complete additional projects with the existing contract capacity! We will apply all lessons learned and our WISE Engineering to these new projects.

Our team partner, Arcadis, developed the initial service line inventory for the City as part of the Lead & Copper Rule compliance efforts. Through extensive as-built reviews, field investigations, and predictive modeling, Arcadis identified and cataloged all service lines citywide, ensuring compliance with EPA regulations. Although no lead service lines were found, the inventory revealed a significant number of galvanized lines requiring replacement by October 2037, to meet federal mandates. Arcadis leveraged advanced data analytics and predictive modeling techniques to pinpoint the locations of these galvanized service lines with precision, enabling efficient planning and prioritization.

To maximize efficiency and minimize community disruption, Arcadis recommends integrating galvanized line replacements into current or future stormwater or sewer projects to ensure a coordinated effort, reduce mobilization costs, minimize utility conflicts, and prevent repeated road closures. Additionally, Arcadis' predictive modeling provides critical insights into prioritizing replacement efforts based on risk factors such as pipe age, material condition, and proximity to critical infrastructure. By aligning these replacements with broader capital improvement projects, the City can realize significant cost savings while addressing long-term regulatory requirements effectively.

Constructability Review and Mitigation Planning. We facilitate early design reviews to anticipate challenges and:

- Flag utility conflicts before 30% design
- Build in permitting lead times
- Recommend field-proven construction alternatives (e.g., trenchless methods, tidal valve details)

The result? Fewer surprises in the field, fewer change orders, and a smoother path to construction.

Quality Control (QA/QC) Management Plan. For all aspects under this program, our goal will be to provide the City with high-quality, on-time deliverables that can be relied on. Our team will use planned processes and activities that ensure the effective operation, planning and control of our processes. We recognize that quality is a continuous improvement process updated through a constant feedback process to incorporate successful techniques and lessons learned from our project execution practices. All subconsultants will also be provided with our QA/QC requirements to ensure their submittals are in accordance with the expectations and requirements of Program.





APPROACH TO THE SCOPE OF WORK

RISK IDENTIFICATION MATRIX				
ID	ISSUE/RISK	CONSEQUENCES	MITIGATION ACTIONS	RISK TYPE
1	Utility Conflict	Delay in design and/or construction	- Confirm utility coordination during design - Coordinate early with utility owners - Assign SUE staff	Coordination
2	Poor Soil Conditions	Construction change orders, redesign	- Analyze geotechnical data - Recommend site-specific construction methods	Technical
3	Easement Delays	Project delay	- Identify/obtain early easements - Use legal/outreach tools - Verify legal limits and encroachments	Regulatory
4	Permitting Delays	Project delay	- Early permit needs ID - Assign experienced staff - Coordinate with agencies	Regulatory
5	Schedule or Cost Overruns	Budget overruns	- Track schedule/cost - Build contingencies - Forecast and monitor trends	Financial
6	Public Complaints/Concerns	Project delay	- Implement Community Awareness Plan - Elevate/resolve concerns - Conduct outreach meetings	Public Relations
7	Accidents/Injuries	Delay / Litigation risk	- Site-specific safety plans - Training - Zero-tolerance culture	Health & Safety
8	Staffing Issues	Missed milestones, resource conflicts	- Allocate sufficient staff - Include specialty services - Scale as needed	Operational
9	Weather-Related Delays	Schedule disruption, site flooding	- Schedule weather buffers - Use erosion BMPs - Secure sites	Environmental
10	Material Shortages/Lead Times	Schedule impacts, added costs	- Pre-order materials - Maintain vendor flexibility - Identify alternatives	Procurement
11	Scope Creep / Changes	Cost and schedule increases	- Enforce formal change process - Document scope clearly - Approve before proceeding	Management
12	Inter agency Coordination Failures	Delays in permits or utilities	- Assign central POC - Regular coordination meetings - Track timelines closely	Coordination
13	Environmental / Contamination Issues	Redesign, costs, regulatory penalties	- Perform early site assessments - Include remediation plans - Coordinate with DEP/EPA	Environmental
14	Temporary Drainage During Construction	Flooding, erosion, site washouts	- Design interim drainage - Maintain positive grading - Adjust BMPs with weather updates	Environmental



APPROACH TO THE SCOPE OF WORK

DESIGN, PERMITTING & EXECUTION

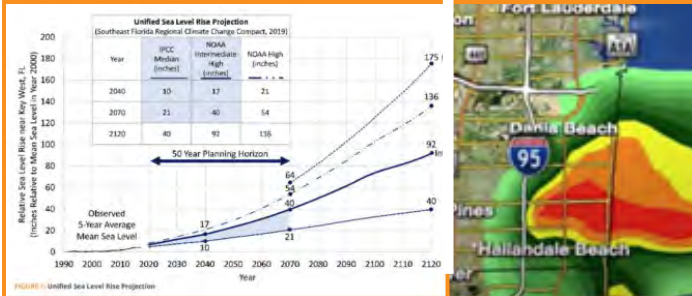
We begin each project by aligning with the City's goals, priorities, and constraints during the scoping phase. This early coordination ensures a clear understanding of expectations related to scope, budget, and schedule. Where beneficial, we recommend bundling interim and R&R projects to streamline procurement and accelerate delivery.

RESILIENT DESIGN FOR A CHANGING CLIMATE

Ardurra incorporates Sea Level Rise (SLR) and climate adaptation into every phase of planning and design. Using regional SLR projections and tools like the USACE SLC Calculator, we assess future conditions and design resilient, future-ready infrastructure.

We account for:

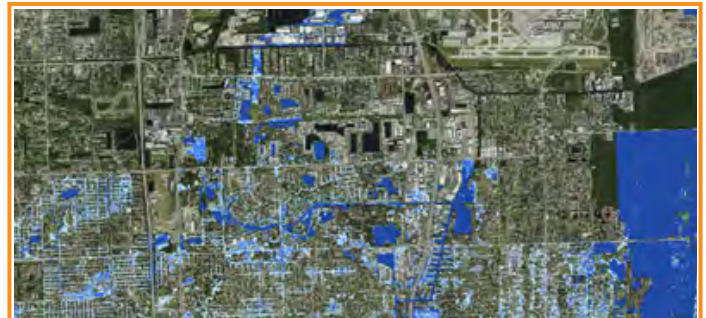
- SLR tidal impacts and storm surge projection analysis
- High intensity rainfall
- Flood vulnerability and hydrologic/hydraulic modeling
- Infrastructure capacity and chokepoints
- Infrastructure hardening for saltwater and tidal impacts



HYDROLOGIC & HYDRAULIC AND MODELING VALIDATION, MONITORING, AND FORECASTING

We will refine the City's SWMP model (originally developed by CDM), integrating new data to simulate system performance under a range of storm events and future climate scenarios.

Our modeling supports pipe sizing, system optimization, and validates design performance—ensuring every CIP is both effective and defensible. Our team will run multiple scenarios to test system resilience and evaluate proposed improvements. We focus not only on current issues, but how the system will perform in 10, 30, and 50 years.



Having developed the City of Hollywood's Water Master Plan, Arcadis is uniquely positioned to support the City's stormwater initiatives. Our integrated understanding of water and stormwater systems enables us to apply advanced modeling, GIS integration, and predictive analytics to design resilient, future-ready infrastructure.

TOOLS INCLUDE

Integrated Hydrologic & Hydraulic Modeling. We use advanced modeling tools that incorporate real-time data and predictive analytics to simulate stormwater system performance under various conditions—rainfall, tides, and groundwater fluctuations. This allows for optimized design and proactive flood mitigation strategies.

PROJECT PROOF

Miami-Dade County Flood Mitigation Program — Applied predictive modeling to evaluate flood-prone areas, optimize drainage improvements, and enhance community resilience.

Nexus Live: Real-Time Monitoring & Forecasting

Arcadis' proprietary Nexus Live platform centralizes data from flow sensors, rainfall gauges, pump stations, and GIS systems into a single dashboard, enabling:

- Real-time monitoring of system performance
- Predictive analytics to forecast flood risk
- Proactive decision-making (pump capacity and efficiency, diversion strategies)
- Emergency response support and CIP planning



PROJECT PROOF

Portsmouth, VA Stormwater Optimization — Nexus Live enabled dynamic modeling of storm impacts, operational response adjustments, and visualization of flood-prone areas. The result: faster response times, reduced flooding, and smarter resource deployment.



APPROACH TO THE SCOPE OF WORK

GIS Integration & Asset Management. We integrate stormwater infrastructure with GIS and asset management systems to provide a holistic view for prioritization, condition assessments, and investment planning.

PROJECT PROOF

New York City DEP Asset Management Program — Leveraged GIS and predictive modeling to support stormwater upgrade planning and reduce system vulnerabilities.

Predictive Infrastructure Planning. We use predictive analytics to align stormwater upgrades with long-term city planning, minimizing utility conflicts and avoiding costly relocations—an approach directly applicable to Hollywood’s integrated infrastructure goals.

PROJECT PROOF

Portsmouth, VA: Real-Time Modeling for Proactive Flood Management — Deployed Nexus Live to simulate storm impacts using live rainfall data and forecasted weather patterns. The platform enabled real-time monitoring, dynamic flood risk assessment, and operational decision-making—such as preemptive pump activation and flow diversion to reduce system stress.

Key Benefits:

- Modeling tidal impacts and stormwater flows to identify network bottlenecks
- Real-time system adjustments (optimizing detention basin levels)
- Faster response times and reduced flood damage.
- Enhanced resource efficiency during storm events.

Nexus Live also integrated with GIS and asset management systems, allowing Portsmouth to archive event data, generate visualizations of vulnerable areas, and inform future capital improvement planning—capabilities directly transferable to the City.

PRELIMINARY ENGINEERING & ALTERNATIVES ANALYSIS

We work closely with the City to evaluate and refine alternatives based on performance, community input, and cost. Project schedules and budgets are adjusted in coordination with staff to reflect the preferred direction.

Geotechnical Investigation. Our partner, Terracon, performs subsurface investigations in accordance with County and City requirements. These borings provide critical information on groundwater elevation, percolation, and soil conditions to support constructability and design.



Utility Coordination. To minimize conflicts and delays, we identify and resolve utility issues early using Sunshine 811 data and direct coordination with utility owners. A tracking matrix will document outreach, utility contacts, and identified conflicts through final design.

We coordinate directly with City Operations for any required shutdowns, bypass plans, or utility relocations. Notifications and staging plans are developed well in advance:

- **1 month for smaller projects**
- **6 months for large pump stations or trunk main work**

Design Development Milestones. We progress through the 30%, 60%, 90%, and 100% design stages—incorporating feedback, constructability reviews, and Envision sustainability criteria at each milestone. Whether the City prefers a 30–90–100 or 30–60–90–100 structure, our team is flexible.



APPROACH TO THE SCOPE OF WORK

RISK-BASED PRIORITIZATION

We will perform as risk-based evaluation of the Urgent Interim Projects based on:

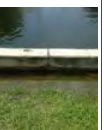
- Flood risk and vulnerability
- Ease of implementation
- Environmental and community considerations
- Constructability and permitting complexity
- Timeline feasibility

The objective is to identify “low-hanging fruit” and early-win projects that can be advanced quickly, maximizing impact and improving long-term program efficiency. Our team is fully prepared to manage the program workload. With seven dedicated design teams and strong local expertise, we intend—pending funding availability—to bundle the design and construction of the Urgent Interim CIP projects to maximize efficiency. We are ready to begin immediately, targeting design and permitting for the first five CIPs and the Annual Stormwater Contract within 6 to 9 months of NTP. With our available capacity, we anticipate delivering five CIP projects every six months and completing construction of all Urgent Interim CIP projects within three years.

	First 6 Months	12 Months	18 Months	24 Months	30 Months
NOTICE TO PROCEED ISSUED	Design & permitting of 5 CIPs	Construction of 5 CIPs	Construction of 6-10 CIPs	Construction of 11-15 CIPs	Construction of 16-20 CIPs
	Advertise & procure Annual SW Construction Permit	Design & permitting of 6-10 Urgent CIPs	Design & permitting of 11-15 Urgent CIPs	Design & permitting of 16-20 Urgent CIPs	Design & permitting of 20 Long Term CIPs
	1. D1 SW08/SW07 and Discharge Pipe Improvements (Moffett Area) 2. D1 HBCG Stormwater Pipe and Swale Improvements (East Johnson Grant Hayes) 3. D1 Arthur St and W Lake Park Entry Dr Backflow Valves (Hollywood Lakes North) 4. D2 Cody Street Stormwater Improvements 5. D2 Fletcher-Mayo Street Exfiltration Systems	6. D2 Royal Poinciana Exfiltration Systems 7. D2 Taylor Polk Street Improvements 8. D3 Highland Gardens Exfiltration Systems (Washington St) 9. D3 Rainbow Drive Stormwater Swale (Hospital Area) 10. D3 Park & Johnson (Hospital Access) Stormwater Improvements	11. D3 Johnson St & N Park Rd Drainage Improvements 12. D3 Harding Pond Stormwater Pipe Outfall to Rotary Park (Liberty St) 13. D3 Pierce Street Detention Pond and Stormwater Pipe (Northcentral) 14. D3 N 26th Ave and Harding Stormwater Improvements 15. D4 CS-22 Structure Backflow Prevention Modification	16. Driftwood Neighborhood Exfiltration Systems 17. D5 Boulevard Heights Neighborhood Exfiltration Systems 18. D6 S 62nd Ave City Gateway Entry Exfiltration Systems (Beverly Park) 19. City Integration Project (Seawall, Sunset Park and others) 20. Potential Land Acquisition	21. Other Urgent projects identified as needed or funded with grants and implementation of long term CIPs
	Implementation of Annual SW Construction Contract		Execution of R&R Projects & Long Term Interim Projects		

STORMWATER TOOL KIT

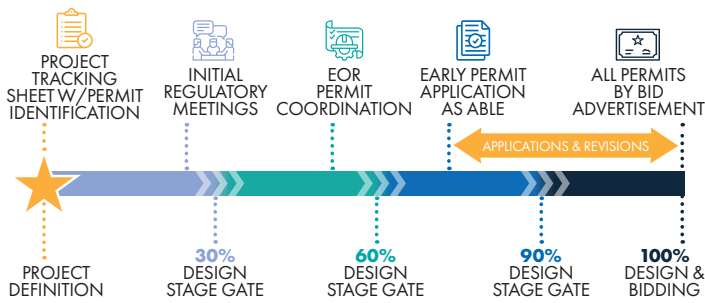
Our experts employ a stormwater toolkit approach to each stormwater design. We know areas throughout the city are different, in terms of elevations, proximity to waterways, and availability of green space and retention areas. Engineering BMPS that work in one area, may not work in another.

Neighborhood Condition											
	Bioswales	Exfiltration	Upsize Infrastructure	New Infrastructure	Tidal Control Valves	Seawall Repairs & Upgrades	Outfall Installation/Replacement	Drainage Wells	Pumping Stations	Stormwater Preserves	Pervious Pavements
Coastal low lying projects, elevation 3' NAVD or less											
Inland neighborhoods with undersized/no infrastructure 3'-5.5' NAVD											
Inland neighborhood projects with under-sized/no infrastructure 5.5' and above											



APPROACH TO THE SCOPE OF WORK

Permitting Strategy. We take a proactive approach to permitting, initiating early contact with SFWMD, FDOT, and local authorities. Following the 90% "Permit Dry Run" review, we submit full sealed packages, complete with tracking matrices to manage agency responses. Our Program Manager leads this process to ensure timely submittals and approvals.



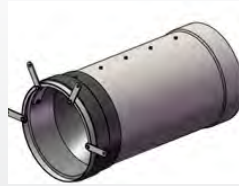
Constructability & Value Engineering. We design for real-world conditions—particularly in coastal areas where high groundwater, tidal backflow, and access limitations are common. Our team selects materials and construction techniques to maximize durability and minimize installation risks.



Best Practices Include

- HP pipe in lieu of RCP to reduce joint failure risk & ease installation
- Tidal valves installed inside structures, prioritized by rim elevation
- Use of drainage wells, where permitted
- Trenchless methods (pipe bursting, slip lining) to avoid surface restoration
- Designs that enable wet-condition installation & dewatering support
- Swale establishment and incorporation within neighborhoods and secondary means of flood attenuation and water quality treatment
- Exfiltration trenches, where the topography allows. Typically, minimum ground elevation of 5.5' NAVD or above, and not connected to pumping systems

SPECIALIZED EXPERTISE



Tidal Valve Installations. With over 200 tidal valves installed (12"–72"), we have the experience to assess, locate, and install valves based on rim elevation and hydraulic performance. Valves are placed inside structures for ease of access and maintenance longevity.



Seawall Replacement. Ardurra has delivered over 7,500 LF of seawalls across South Florida. We implement cantilevered sheet pile systems (min. Elev. 5.0' NAVD), integrate tidal valves, and coordinate permitting for environmentally sensitive areas. Our construction approach includes pre-surveys, noise/vibration monitoring, and stakeholder notifications.



Pump Station Design. Our pump station solutions are built for longevity and performance, featuring:

- Optimized force main routing
- Tremie-poured wet wells for vibration control
- Energy dissipators to protect downstream structures
- SCADA and backup power integration
- SOPs and vendor-supported maintenance protocols

PROCUREMENT & BID MANAGEMENT



Procurement processes represent the transition and handoff of project delivery steps between owner, engineer and contractor. We understand our role as program manager is critical in communicating and facilitating these responsibly changes to mitigate risks of potential scope gaps and schedule delays. For Stormwater Master Plan (SWMP) Neighborhood Projects, we implement a procurement strategy grounded in fairness and funding compliance. Our services include:

- **Procurement Method Selection** – Recommending the most suitable approach (DBB, DB, Progressive DB, CMAR) based on project scope and risk.
- **Grant Compliance** – Ensuring required federal, state, and local language is included in all documents.
- **Bid Package Development** – Preparing clear, complete, and defensible bid documents to avoid delays or protests.



APPROACH TO THE SCOPE OF WORK

- **Bid Review & Evaluation** – Analyzing line items for consistency, identifying unbalanced bids, and recommending awards.
- **EOR Participation** – Supporting pre-bid meetings, issuing addenda, and verifying bidder qualifications.
- **Evaluation & Scoring** – Applying structured criteria that consider lifecycle costs, responsiveness, and compliance.

Ardurra will assist with RFQ development for the first seven SWMP neighborhoods. Our team has prepared City of Fort Lauderdale SWMP bid packages for the—supporting over \$220 million in capital projects, with 6 of 8 neighborhoods constructed—and will tailor each solicitation to reflect local conditions, priorities, and funding constraints.

ANNUAL STORMWATER CONSTRUCTION SERVICES CONTRACT

To expedite projects below the CCNA threshold—including Interim and R&R CIPs—we recommend developing an Annual Stormwater Construction Services Contract. Ardurra brings 10+ years of experience creating and managing similar contracts, including for the City of Fort Lauderdale.

Where no contract exists, we will draft a scalable, CIP-aligned framework that supports flexible implementation and cost control.

Key Features Include

- **Unit Price Schedule** – ~200 line items based on FDOT standards and customized for City infrastructure.
- **CIP-Focused Work Items** – Covering tidal valve installations, seawall outfalls, pipe bursting, manatee grates, PRBs, dewatering, and emergency bypass pumping.
- **Contingency Provisions** – Reimbursement for utility conflicts, specialized methods, permit/testing fees, and unanticipated restoration.
- **Rotational Contractor Pool** – Prequalify 5–7 firms to ensure rapid response, workload balance, and cost competitiveness.

This contract model provides a proven, adaptable tool for rapid infrastructure delivery, while maintaining quality and budgetary control.

CONSTRUCTION MANAGEMENT & CEI

The Ardurra team will provide full-service CEI support for complex utility and stormwater projects across South Florida. Our experienced local team—led by Ricardo Escobar, PE, CGG, ENV SP—is fully equipped to meet all requirements of this solicitation.

We will deliver daily on-site inspection services to verify compliance with contract documents, approved submittals, permits, and project schedules. Our inspectors are OSHA-certified, CTQP-qualified, and experienced with large-scale public infrastructure.

Our CEI scope includes daily field reporting, QA/QC coordination, pay quantity tracking, construction schedule monitoring, and review of RFIs, change orders, and claims. We support equipment startup, punch list development, closeout inspections, and invoice validation.

Ardurra will prepare comprehensive daily and weekly reports covering work progress, safety, staffing, materials, and non-compliance issues. For grant-funded projects, we manage wage verification, audit documentation, and reimbursement tracking.

Closeout support includes final walkthroughs, as-built drawings, GIS updates, and O&M manual preparation. We also conduct post-construction warranty inspections and resolution tracking.

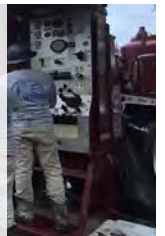
Ardurra's Recent CEI Experience in Proximity to Hollywood

- **City of Fort Lauderdale** – Inflow/Infiltration Reduction
- **Miami-Dade WASD** – Consent Decree & 24" Force Main Projects
- **City of Doral** – NW 89th Place & NW 114th/82nd St Drainage
- **Town of Miami Lakes** – West Lakes Improvements
- **Town of Surfside** – 96th Street Park (LEED Gold)

Ardurra's CEI team is experienced, responsive, and committed to ensuring quality, safety, and accountability from groundbreaking through project closeout.

PROJECT PROOF

The City of North Miami Beach has undertaken a massive \$150M CIP to improve aging infrastructure. Ardurra serves as Program & Construction Management for 25+ projects, including major upgrades to a 41 mgd water treatment plant, undersized water and out of compliance pump stations.



PUBLIC OUTREACH, STAKEHOLDER ENGAGEMENT & ENGINEERING REPRESENTATION

Effective communication is fundamental to successful project delivery. Ardurra integrates proven and innovative outreach strategies to keep City staff, stakeholders, and the public informed, engaged, and confident throughout the program lifecycle.



Program Communications & Outreach Plan. We will implement a tailored Communications Plan at project kickoff, focused on transparency, responsiveness, and public engagement. Proven through successful work with nearby municipalities including Miami-Dade WASD, Coral Gables, Ft Lauderdale, North Bay Village, and Surfside our approach keeps stakeholders informed and builds trust.

Key components Include

- Designated City and community points of contact
- Real-time dashboards and project portals
- Public notices, newsletters, and Commission-ready reports
- A mix of in-person, virtual, and digital communication channels
- Develop and implement a response action plan to HOAs and resident ROCKSOLID complaints

This multi-platform strategy ensures consistent, accessible updates across all project phases.



APPROACH TO THE SCOPE OF WORK

ENGINEERING REPRESENTATION – ON-SITE PRESENCE

Matthew Brooks, PE will serve as the City's on-site engineer and primary technical liaison, providing day-to-day leadership for implementation of the Stormwater Master Plan (SWMP). He will coordinate field activities, lead milestone reviews, maintain documentation and compliance tracking, and serve as the direct point of contact for staff, contractors, residents, and permitting agencies. His presence ensures real-time responsiveness and continuous alignment with City goals.



UTILITY COORDINATION & DEVELOPMENT REVIEW

Mr. Brooks will also oversee utility coordination, identifying and resolving potential conflicts with water, sewer, electric, and telecom providers to prevent service disruptions and delays. In parallel, he will review private development plans to confirm stormwater capacity, assess infrastructure impacts, align improvements with future CIP priorities, and update the SWMP model and GIS database to reflect new private infrastructure. His on-site role ensures effective coordination, issue resolution, and seamless integration of public and private stormwater improvements.



Interactive Portal Developed for the City of Coral Gables SSES Management

PROJECT PROOF

Ardurra's Public Outreach Lead, Silvia Beltre, is currently working on FDOT District 6's Seven Mile Bridge project. She coordinated a unique level of public engagement, working with local volunteers to move and preserve important soft corals.



Arcadis is actively assisting the City to secure SRF financing for several water infrastructure projects. As such, we developed a collaborative relationship with the City Finance Dept. This partnership will be a key component of our strategic funding approach, enabling us to streamline the funding process and maximize efficiency and impact of available financial resources.

STRATEGIC FUNDING

We recognize that funding is often the linchpin for successful program execution, especially for infrastructure as critical and expansive as stormwater improvements, where funding has not historically been as prevalent. Our team doesn't just track funding opportunities—we actively pursue, tailor, and align them with the City's evolving program goals. This isn't a generic process; it's a long-term strategy crafted with your capital project budgets, your timeline for each project, and the overall benefits to your community in mind.

Today, local governments face a complex array of competing priorities and issues – from replacing infrastructure that has reached the end of its useful life, supporting economic development and increasing resiliency to complying with more stringent regulatory requirements and balancing affordability concerns for their communities. These complexities make having a qualified consultant partner that can not only complete the engineering design but can also help secure the “best fit” funding a necessity.

Ardurra is that partner for Hollywood. We have become a trusted funding advisor for communities across the country, which was highlighted through our assistance in pre-positioning clients in advance of the American Rescue Plan Act (ARPA) and the Infrastructure Investment and Jobs Act (IIJA). This allowed our clients to be prepared and take full advantage of these unprecedented funding opportunities as they came to fruition. We are now using this same proactive approach with strategic positioning so that clients can take advantage of special appropriations through EDA and EPA along with other recovery funds related to recent declared disasters.

Funding Strategy & Alignment. Being able to put the City in the best position to take advantage of funding opportunities doesn't just happen, it takes developing a comprehensive and cohesive strategy. Working closely with the City, we will develop a Strategic Funding Plan that doesn't just list potential sources—it connects each capital need with realistic, high-probability funding opportunities. Our plan will include:

- A tailored funding matrix linking specific CIPs with viable grant or loan programs
- Timelines built around City milestones and application cycles
- Built-in tracking of match requirements, reporting deadlines, and eligibility criteria

Targeted Programs & Experience. This isn't theory. Ardurra has helped municipalities secure and manage a wide range of funds for stormwater-related projects, including:

- FDEP Resilient Florida Grant Program Funds
- FEMA Disaster Recovery & HMGP Resources
- HUD CDBG-DR/MIT
- HUD CDBG Infrastructure Program Funds
- SRF & WIFIA Financing
- Economic Development Admin Grants
- EPA Section 319 Grants



APPROACH TO THE SCOPE OF WORK



Ardurra's Funding Team is led by our Director of Strategic Funding and Regulatory Affairs, Angie Mettlen, and is supported by regional funding experts.

\$3B

in funding in last decade

Ardurra has helped communities in the Southeast to secure \$3B in funding in the last 10 years.



We help our clients to administer and manage these funds, giving us a unique understanding of state and federal funding compliance and reporting requirements — from start to finish.

80

Years of combined funding experience

We have more than 80 years of combined funding experience for public infrastructure — which includes all current grants, low interest loans, and funding available to our South FL clients.

Ardurra's Project Manager, Rares Petrica, secured \$40M in grants and \$180M in WIFIA loans for the City of Fort Lauderdale's Stormwater Program, demonstrating our ability to manage complex funding strategies.



While the list of funding programs with which we have experience is expansive, there are other, smaller niche funding programs that may fit specific projects. We don't forget about these sources! Sometimes they are the funding 'gap fillers' that allow a project to move forward.

We also constantly look for new funding programs. If a new program is identified, the deep understanding our funding experts have on how to evaluate funding opportunities will allow us to quickly advise the City on the appropriateness of the program for their specific project. You do not get that type of expertise with just any consultant.

Grant Application Development. Our grant packages are not "cut-and-paste." We customize every application to reflect the City's unique infrastructure needs and strengths. Services include:

- Drafting compelling technical justifications and narratives that clearly align with funding agency priorities
- Developing detailed budgets that maximize funding
- Creating supporting visuals like vulnerability maps and benefit-cost analyses
- Coordinating outreach materials and community support letters
- Ensuring alignment with resilience, environmental, and equity goals

Post-Award Compliance and Reporting. Securing the funds is just the beginning of the process. Once funding is awarded, effectively managing those funds and the agency requirements is where the rubber meets the road and where we can provide significant value to the City.

Because we have a wealth of experience with major state and federal funding programs, our team is particularly well-suited to help you and our internal project teams navigate the intricacies of programmatic requirements through the life of a project.. This includes continuing to partner with City staff to:

- Prepare reimbursement requests backed by clean, audit-ready documentation
- Track all eligible expenses in real-time
- Maintain compliance with reporting and wage verification requirements
- Support agency visits and performance reviews
- We also maintain a live grant dashboard for ongoing transparency and coordination across departments

Our partner, Arcadis, is actively assisting the City in securing State Revolving Fund (SRF) financing for several water infrastructure projects. Over the past year, we have developed a strong and collaborative relationship with the City's Finance Department. This partnership will be a key component of our strategic funding approach, enabling us to streamline the funding process and maximize the efficiency and impact of available financial resources.



APPROACH TO THE SCOPE OF WORK

ASSET MANAGEMENT & LONG-TERM STRATEGY

A successful stormwater program doesn't end at construction completion — it extends into long-term asset management, maintenance, and strategic planning. Ardurra supports the City in strengthening its GIS systems, condition assessments, and policies to ensure a resilient, data-driven foundation for the future.

GIS, Cityworks Integration & Condition Assessment.

We will assist the City in collecting, validating, and cataloging field inspection data into its GIS database and integrating it with Cityworks. Our past work with Coral Gables produced easy-to-use GIS layers that improved utility coordination, reduced conflicts, and supported advanced modeling.

Our quality-controlled process ensures data is delivered in a format aligned with City standards and ready for future analysis.

Condition Scoring & Risk Rating. We evaluate field inspections (structure and CCTV) using standardized 1–5 condition scoring and combine this with consequence-of-failure (CoF) ratings to generate a risk score for each asset.

Our deliverables will:

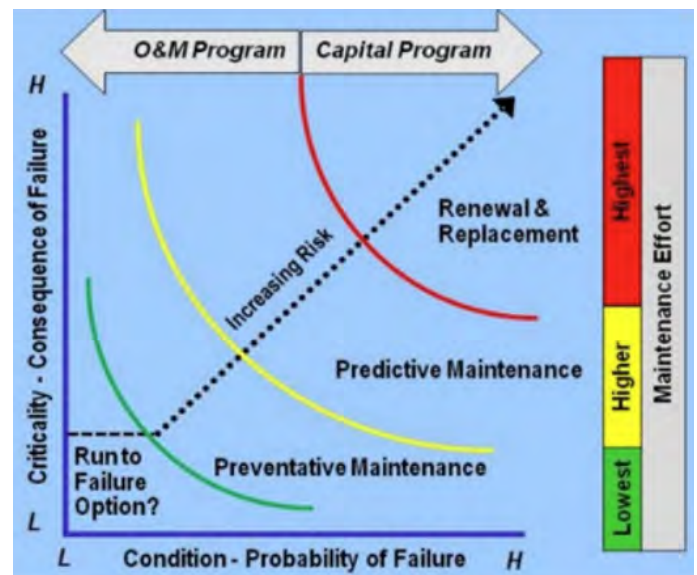
- Provide rehabilitation recommendations for each pipe and structure
- Identify urgent repair needs vs. long-term planning priorities
- Enable risk-based capital investment planning

Table 2.5: Condition Assessment Scoring Guide				
Grade	Condition	Description	Response	Residual Life (i.e. Estimated % Asset Design Life Remaining)
6	Not Rated	Asset has been properly decommissioned, no longer exists (or should be removed from inaccurate plans), has not been condition rated (or assigned an extrapolated condition), or is unable to be rated due to accessibility issues.	Response will vary subject to circumstances. E.G. An abandoned asset may experience infiltration, leaks, collapses, etc. and pose a real danger that should be both monitored and managed.	NA
5	Very Good	Sound physical condition, insignificant deterioration. Asset likely to perform adequately without major work. No or insignificant loss of hydraulic capacity. No immediate action required. Maintain standard programmed condition assessment.	No immediate action required. Maintain standard programmed condition assessment.	95% to 100%
4	Good	Acceptable physical condition, minor deterioration/minor defects evident, minor loss of hydraulic performance, minimal short-term failure risk but potential for deterioration in long-term. Only minor work required (if any). No immediate action required. Maintain standard programmed condition assessment.	No immediate action required other than possible clearing. Maintain standard programmed condition assessment.	85% to 95%
3	Fair	Moderate to significant deterioration evident, moderate loss of hydraulic performance, failure unlikely within next 2 years but further deterioration likely and major replacement likely within next 10 years. Minor components or isolated sections of the asset need replacement or repair now but asset still functions safely at adequate level of service. Work required but asset is still serviceable.	Take action as appropriate to address defects and if necessary, clearing, silt removal, root cutting. Monitor with programmed condition assessment for rehabilitation and/or renewal in medium term.	70% to 85%
2	Poor	Serious deterioration and significant defects evident. Significant loss of hydraulic performance. Failure likely in short-term. Likely need to replace most or all of asset within 2 years. No immediate risk to health or safety but works required within 2 years to ensure asset remains safe. Substantial work required in short-term, asset barely serviceable.	Take immediate action as appropriate to address the defects. Immediately undertake risk assessment and further investigate options. Schedule appropriate action – rehabilitation or renewal in short term.	50% to 70%
1	Very Poor	Failed or failure imminent. Immediate need to replace most or all of asset. Health and safety hazards exist which present a possible risk to public safety, or asset cannot be serviceable without risk to personnel. Major work or replacement required urgently. Take immediate action as appropriate to address the defects.	Take immediate action as appropriate to address the defects. Immediately undertake risk assessment and further investigate options. Schedule appropriate action – immediate rehabilitation or renewal.	0% to 50%

Rehabilitation & Repair Recommendations. Using a structured decision-making framework, we'll recommend the most appropriate repair method based on:

- Type and severity of failure
- Feasibility and cost
- Life extension potential
- Utility conflicts and restoration costs

When trenchless methods are viable, we prioritize them to reduce surface disruption, minimize environmental impacts, and control costs. These solutions are particularly effective for avoiding pavement cuts and utility relocations in dense urban areas.



Enhancing 'Soft Assets' — Policies, Standards & O&M Planning

At the City's request, we'll assist in developing or updating policies and maintenance programs that align with stormwater goals and regulatory needs.

Our Support Includes:

- Ordinance and design standard updates
- Maintenance protocols for inspection, cleaning, and repairs
- Incentive programs for green infrastructure
- Integration of stormwater goals into zoning and land use codes
- Public outreach campaigns promoting runoff reduction
- Resiliency planning for SLR, tidal, and rainfall extremes
- Regional collaboration with peer municipalities and agencies

Ardurra's asset management support ensures your investments are protected, your infrastructure is resilient, and your long-term planning is guided by data, risk, and results.



APPROACH TO THE SCOPE OF WORK

Septic to Sewer. We are ready to support the City to implement the Septic to Sewer Program with a proven, results-driven approach. Ardurra and our partners have decades of experience delivering septic-to-sewer conversions across Miami-Dade and Broward Counties, including projects in urban, coastal, and high water table areas. We provide end-to-end support, including:

- **Program Planning** – Prioritization based on environmental risk, infrastructure readiness, and cost efficiency
- **Community Outreach** – Public engagement, homeowner coordination, and funding education
- **Design and Engineering** – Gravity, low-pressure, and force main systems designed to address shallow cover and groundwater constraints
- **Permitting** – Coordination with DOH, FDEP, and Broward County agencies
- **Funding Support** – Assistance with SRF, state grants, and federal infrastructure funds
- **Construction Oversight** – CEI services to ensure quality, schedule, and compliance.

Our team has successfully addressed groundwater and constructability challenges in recent efforts for Miami Beach, North Bay Village, and Miami-Dade WASD, and we are ready to bring that expertise to support Hollywood's infrastructure and public health goals.

PROJECT PROOF

Ardurra developed a citywide septic to sewer conversion plan for the City of Coral Gables. The plan emphasizes the importance of a reliable wastewater collection and treatment system for sustainable growth, economic development, and natural resource health, and includes a prioritization framework, upgrade recommendations, hydraulic modeling, Class V cost estimating and public involvement. Ardurra served as prime consultant, providing data collection and GIS analysis, nutrient & pathogens impacts, planning, hydraulic modeling, and public outreach.



BLUE/GREEN INFRASTRUCTURE

ENHANCEMENT OF STORMWATER SOFT ASSETS: POLICIES, STANDARDS, AND O&M PLANS

At the request of the City, our team may provide assistance in identifying and/or drafting stormwater policies, standards, or ordinances that the City may want to adopt (or update) to implement the desired stormwater infrastructure upgrades. This may include:

Stormwater Management Ordinances. Revision/Update of ordinances that establish requirements for managing stormwater runoff from both new developments and existing infrastructure. These ordinances could include standards for stormwater infrastructure design, such as requiring the implementation of green infrastructure practices like rain gardens, and bioswales.

Maintenance Standards. Establishing maintenance standards ensures that stormwater infrastructure is regularly inspected, cleaned, and repaired as needed. This helps prevent deterioration and ensures the continued effectiveness of the infrastructure.

Green Infrastructure Incentives. Offering incentives such as grants, rebates, or tax credits can encourage property owners to implement green infrastructure practices on their properties. This decentralized approach can help augment citywide stormwater management efforts.

Land Use Planning & Zoning Regulations. Integrating stormwater management considerations into land use planning and zoning regulations can help mitigate the impacts of development on stormwater runoff.

Public Education & Outreach. Educating residents and businesses about the importance of stormwater management and providing guidance on best practices for mitigating runoff can help foster a culture of responsibility and cooperation within the community.

Integration with Climate Adaptation Strategies. Given the increasing frequency and intensity of extreme weather events associated with climate change, it is beneficial to integrate stormwater management policies with broader climate adaptation strategies. This may involve planning for increased precipitation, sea-level rise, and other climate-related impacts on stormwater infrastructure.

Collaboration with Regional Partners. Stormwater management often transcends municipal boundaries, so collaborating with neighboring jurisdictions and regional agencies can be essential for addressing shared challenges and leveraging resources more effectively.

By adopting, implementing and/or updating these types of standards, policies and regulations, the City may better manage stormwater runoff, improve the resilience of its infrastructure, and protect the environment and public health for current and future generations.

Additionally, we proposed to work with the City in the review and enhancement of its stormwater O&M plans, standard operating procedures, and update of the CIP Program.



APPROACH TO THE SCOPE OF WORK

ARDURRA'S CURRENT WORKLOAD - AMPLE RESOURCES TO LEAD THE HOLLYWOOD PROGRAM

Ardurra maintains the capacity, structure, and personnel to effectively manage multiple projects of varying scope and complexity without compromising performance. **Our team employs a proven Project Management Plan (PMP) that drives efficiency and ensures all projects—whether managed concurrently or independently—are completed on time and within budget**

At the onset of each engagement, we develop a detailed Work Plan to align staffing and resources with the specific needs of the project. Schedule management and coordination are prioritized both internally among project managers and externally with our clients. Our PMP ensures that specialized team members are allocated strategically, allowing them to balance multiple responsibilities while consistently delivering high-quality, professional results.

To ensure continuous alignment of resources, our Project Manager, Rares Petrica, PE, works closely with task managers to proactively identify and address any potential impacts to scope, budget, or schedule. In addition, our team conducts monthly Staff Manpower Projections to evaluate staffing needs across active and upcoming projects. This tool enables us to anticipate workforce adjustments and respond quickly to any resourcing demands.

Ardurra's history as program managers on multi-million-dollar initiatives has refined our ability to manage several high-priority efforts simultaneously, while maintaining the agility to support new assignments as they arise. With 550 professionals across Florida and 1,800 nationwide, we are well-positioned to support the City's needs at any scale.

Our proposed team—including key personnel and subconsultants—is fully available and ready to dedicate the time, focus, and technical expertise required for this engagement. This RFQ's services align with Ardurra's core business lines, and additional resources can be mobilized immediately if needed to maintain responsiveness and efficiency.

The table on the following page presents a snapshot of Ardurra's current and projected workload, highlighting our available capacity and readiness to serve as Program Manager for the City's Stormwater Program.

Ardurra's Current & Projected Workload

PROJECT	CLIENT	STATUS OF COMPLETION	END DATE
I/I Program Management	City of Fort Lauderdale	12%	3/1/2029
Flood Protection Level of Service Study	South Florida Water Management District	14%	6/1/2029
CEI Services for L28 Levee Reconstruction	South Florida Water Management District	35%	12/1/2026
Multiple Drainage Improvements Projects CEI	Town of Miami Lakes	88%	12/1/2025
Bulkhead Replacement Program	Port Everglades	22%	7/1/2027
BCWWS NRWTP Thickener Building Drainage	BCWWS	65%	9/1/2026
FLL Terminal 5 Drainage & Utilities	Broward County Aviation Department	74%	8/1/2026
Consumer Line Relocation Program - Phase II	Miami Dade Water & Sewer Department	88%	12/1/2025
Basin U-35S Drainage Improvements	Village of Pinecrest	85%	8/1/2025
I/I Program Management - Phase II	City of North Miami	94%	10/1/2025
Cairo Lane and 127th Street Improvements	City of Opa-Locka	75%	7/1/2026
Muss Park Stormwater Pump Station	City of Miami Beach	60%	12/1/2025
Pump Station W2	City of Miami Beach	80%	1/1/2026
Sunset Island FM Replacement	City of Miami Beach	94%	9/1/2025
City of Miami 8th St Roadway and Drainage Improvements	City of Miami Beach	10%	6/1/2027
Campana Drainage Improvement	City of Coral Gables	94%	12/1/2025
Malva Court Drainage Improvements	City of Coral Gables	63%	11/1/2025
Pump Station A5	City of Fort Lauderdale	10%	6/1/2026
Underline Phases 3-9 Drainage Project	Miami Dade Department of Transportation & Public Works	90%	10/1/2025
SCADA Master Plan	Seminole Tribe of Florida	95%	12/1/2025
Basin D3-1 Drainage Improvement	City of Doral	90%	12/2/2025
NPDES Permit	City of Coral Gables	25%	7/1/2025
Drainage GIS Updates	Bay Harbor Islands	4%	12/1/2025
NMB Water CIP PMCM	City of North Miami Beach	94%	12/5/2025



Knowledge of Site & Local Conditions

// Based upon our local industry leading Program Management experience and lessons learned, we have retained the services of proven local teaming partners with recent experience working with City of Hollywood utilities and those of similar low-lying communities to support our team. //



KNOWLEDGE OF SITE & LOCAL CONDITIONS

Ardurra, Arcadis, and Keith bring a fully integrated, locally based team with extensive knowledge of the City's infrastructure, flood-prone areas, coastal resiliency challenges, permitting requirements, and community priorities. With deep roots in South Florida, we understand the City's stormwater challenges — from aging infrastructure and tidal influence to high groundwater and limited outfall capacity — and we know how to deliver solutions efficiently, collaboratively, and with lasting value.

REGIONAL EXPERTISE WITH PROVEN LEADERSHIP

Ardurra's South Florida operations include 150+ professionals experienced in stormwater planning, modeling, resiliency, design, permitting, and CEI. The Ardurra team has provided similar services to numerous local clients including: Central Broward Water Control District, Broward County, Miami-Dade County, the Cities of Fort Lauderdale, Miami, Coral Gables, Hallandale Beach, Doral, Miami Beach, North Miami, and Opa Locka; the Towns of Surfside and Miami Lakes; South Florida Water Management District; Fish & Wildlife Commission; Seminole Tribe of Florida, Fort Lauderdale-Hollywood International Airport, and FDOT.

CLIMATE RESILIENCY & HARDENING

Ardurra brings extensive experience in climate resiliency and hardening of municipal infrastructure in South Florida. We have served as Program Managers for the South Florida Water Management District's Flood Protection Level of Service Program, since its inception. As such, we have worked closely with state and federal agencies and municipalities to identify coastal drainage systems vulnerabilities and develop hardening adaptation strategies to protect cities and counties against sea level rise and storm surges. This experience ensures that the City takes full advantage of current and future plans to future proof its infrastructure in a cost-effective manner.

WE UNDERSTAND LOCAL CHALLENGES

Our team understands the unique conditions that shape Hollywood's stormwater needs, including:

- Flat terrain and limited outfall capacity
- Tidal backflow and high groundwater
- Susceptibility to hurricanes and storm surges
- Dense utility corridors requiring close coordination
- Construction sensitivities in high-visibility and residential areas

We prioritize early field verification, strategic phasing, and proactive public communication to minimize disruptions and ensure community support.

LEADERSHIP WITH LOCAL KNOW HOW!

Leading our team is Rares Petrica, PE, with 20+ years of stormwater program experience, including as Program Manager for Fort Lauderdale's \$200M Stormwater Master Plan and CIP Program. His work designing eight neighborhood drainage projects, developing annual construction contracts, and managing seawall replacements, mirrors Hollywood's needs. He has overseen the implementation of more than \$230M in stormwater infrastructure, bringing proven, program-level leadership.

The Ardurra Team has completed 26 projects for the City of Hollywood — from condition assessment of water system assets, hydraulic modeling, and waster system master plans to rehabilitation design for water, wastewater, and roadway infrastructure. We understand the City's stormwater challenges — from aging infrastructure and tidal influence to high groundwater and limited outfall capacity.

REGULATORY COORDINATION

Our team maintains strong, active relationships with all key permitting and regulatory agencies to streamline project approvals and minimize delays. These include:

- City Public Utilities & Engineering Departments
- Broward County Environmental Protection and Growth Management Department
- South Florida Water Management District and local drainage districts such as Central Broward Water Control District
- FDEP including SRF coordination
- FDOT and U.S. Army Corps of Engineers
- Franchise utilities such as FPL, AT&T, Comcast, and TECO
- Hollywood Community Redevelopment Agency
- Neighboring jurisdictions and stakeholders including Hallandale Beach, Dania Beach, Fort Lauderdale, Town of Davie, Seminole Tribe of Florida, and Fort Lauderdale-Hollywood International Airport, for joint project agreements and multi-agency utility coordination

Our team regularly secures approvals from these agencies and coordinates permitting strategies to keep projects on schedule.

Critical to the success of implementing the City's stormwater program will be our intimate knowledge of the evolving regulatory environment. The passage of Senate Bill 7040 in 2024 has major implications for stormwater management in the City and throughout Florida with significantly heightened scrutiny of operation, maintenance, inspection, and performance, especially as it pertains to water quality criteria.

The Ardurra-led team brings decades of experience in pollutant load modeling to ensure that projects, particularly those modifying existing BMPs, will not degrade receiving water quality, and we will develop sound, defensible, and properly-costed operation and maintenance and inspection plans to ensure the long-term sustainability of proposed improvements, overcome new hurdles in the ERP application process, and support the City in meeting new operation-phase obligations throughout the lifetime of both proposed and existing stormwater infrastructure.

A STRATEGY FOR RESULTS

By combining technical depth, regional experience, and trusted City partnerships, we offer a streamlined and effective delivery approach focused on:

- Aligning water, stormwater, and roadway projects
- Accelerating permitting and maximizing funding
- Delivering community-sensitive, resilient designs
- Acting as a responsive extension of City staff

Together, Ardurra, Arcadis, and Keith offer the experience, local knowledge, and commitment needed to successfully support the City's stormwater program.



KNOWLEDGE OF SITE & LOCAL CONDITIONS

PROVEN EXPERIENCE WITH THE CITY OF HOLLYWOOD

The Ardurra team has successfully delivered 26 projects for the City. We have worked alongside City staff; understand City processes, procedures, and procurement; and have prepared design and construction documents and performed CEI services in accordance with City design standards and guidelines. We understand the complex nature of stormwater management with low-lying areas and their susceptibility to high tide and regular rain flooding. We are cognizant of the balance that must be achieved between the permitting requirements, restricted positive outfalls, budget limitations, and existing historical drainage patterns. Our team has professional acumen to fully investigate the existing conditions and propose creative solutions that will resolve and simplify the feasible alternatives.

Arcadis — 20 Years of Service to the City

Arcadis has been a trusted partner to the City for more than two decades. With strong working relationships across City departments, team members **Leah Richter** and **Jose Custodio** bring intimate knowledge of City processes and staff expectations. Arcadis developed the City's **Water Master Plan** and is **actively assisting with SRF financing**. This insight allows us to align drainage improvements with future water and roadway upgrades, reducing conflicts and maximizing funding efficiency.

Keith — Local Delivery and On Call Experience

Keith, a Broward-based firm, has delivered multiple projects in Hollywood under on-call contracts.

THE ARDURRA TEAM'S CITY OF HOLLYWOOD PROJECT EXPERIENCE

PROJECT NAME	DATE(S)	PERMITTING	AGENCY COORDINATION	MODELING	DESIGN	PROGRAM MGMT	CM/CEI	PUBLIC OUTREACH
Water System Master Plan through 2045	2021-2025	✓	✓	✓	✓	✓	✓	✓
Lead and Copper Rule Revision Compliance	2023-2024	✓	✓	✓	✓	✓	✓	✓
AWIA Risk & Resiliency Assessment, Emergency Planning	2022-Ongoing	✓	✓	✓	✓	✓	✓	✓
4-Log Disinfection Upgrades and SRF Funding Support	2020-2024	✓	✓	✓	✓	✓	✓	✓
Design and CM for High Service Pump Stations	2017-2021	✓	✓	✓	✓	✓	✓	✓
Pilot Testing and BODR Development for MS/RO Facilities	2022	✓	✓	✓	✓	✓	✓	✓
Water Treatment Plant Filter Upgrades Evaluation	2021-2023	✓	✓	✓	✓	✓	✓	✓
Aeration Pump Station Rehabilitation	2021-2025	✓	✓	✓	✓	✓	✓	✓
Water Treatment Plant - Maintenance Package A	2024-Ongoing	✓	✓	✓	✓	✓	✓	✓
Hydraulic Modeling and System Calibration Updates	Ongoing	✓	✓	✓	✓	✓	✓	✓
Condition Assessment of all Water Facilities Assets	2021-2023	✓	✓	✓	✓	✓	✓	✓
Condition Assessment of all Linear Assets - Water	2021-2023	✓	✓	✓	✓	✓	✓	✓
Spiractors Treatment and Admin Building Structural Repairs	2023-Ongoing	✓	✓	✓	✓	✓	✓	✓
Wastewater Treatment Plant Switchgears Replacement	2025-Ongoing	✓	✓	✓	✓	✓	✓	✓
Telemetry Assessment - Wastewater Pump Stations	2025-Ongoing	✓	✓	✓	✓	✓	✓	✓
Wastewater Treatment Plant Emergency Response Plan	2025-Ongoing	✓	✓	✓	✓	✓	✓	✓
Miscellaneous On-Call Services Task Order	201-Ongoing	✓	✓	✓	✓	✓	✓	✓
SR-7 Art Installation	2025-Ongoing	✓	✓	✓	✓	✓	✓	✓
Architecture and Engineering Services	2021-2025	✓	✓	✓	✓	✓	✓	✓
North Beach Undergrounding & WM Improvement	2024-2025	✓	✓	✓	✓	✓	✓	✓
Park Boundary Survey Services	2023-2024	✓	✓	✓	✓	✓	✓	✓
Washington Street Maintenance Map	2020	✓	✓	✓	✓	✓	✓	✓
Pinnacle 441	2020-2024	✓	✓	✓	✓	✓	✓	✓
FLL Noise Monitoring Towers 12 & 13	2019-2020	✓	✓	✓	✓	✓	✓	✓
Sewage Lift Stations, Geotechnical	2011	✓	✓	✓	✓	✓	✓	✓
Hollywood CRA Streetscapes	2010	✓	✓	✓	✓	✓	✓	✓



References - Vendor Reference Forms

// Past performance isn't just why clients choose Ardurra—it's why they choose us again. Our consistent delivery on complex infrastructure projects that directly impact City residents and businesses alike, has earned us the trust of our municipal clients across Florida and beyond. //



REFERENCES - VENDOR REFERENCE FORMS

We are proud of the reputation we have earned as leading provider of engineering and CEI services in South Florida. We encourage you to ask our clients, who can attest to our unwavering commitment to clients service and best in class deliverables. [Refer to Required Forms section for Form 4 Vendor Reference Forms.](#)

CLIENT & YEARS OF SERVICE	DESCRIPTION OF WORK	REVIEW	CLIENT CONTACT & COMMENTS
MIAMI DADE COUNTY WASD 9 Years- Ongoing 	Ardurra provided program management and construction management services for the \$215M Pump Station Improvement Program. Other work for department includes 500+ projects totaling \$400M in construction including I/I, condition assessments, GIS, O&M, WWTP, pump stations, and pipelines and engineering services for the \$1.9B USEPA Consent Decree program.	EXCELLENT in Every Category	ROLANDO ROQUE, PE Program Manager for Flood Protection Level of Service Program (e) roquer@miamidade.gov (t) 786-552-8129 <i>"Through its strategic engineering and I/I initiatives, Ardurra helped MDC avoid substantial penalties and saved up to \$37M. The staff provided quality engineering services in a professional manner, within schedule and budget and at a competitive rate. We are highly pleased with their services."</i>
CITY OF CORAL GABLES 8 Years-Ongoing 	Ardurra has been the City's engineering consultant for a large number of projects including drainage, sewer, SSES, I/I, pump stations, roadway, GIS, NPDES, parking lots, canal maintenance, traffic calming, SCADA, CEI, and septic-to-sewer conversion master plan.	EXCELLENT in Every Category	JOSE OLIVO, PE Deputy Public Works Director (e) jolivo@coralgables.com (t) 305-460-5000 <i>"Ardurra's staff has proven to be technically qualified to perform engineering services for the City. We consider the company proficient in water, wastewater, stormwater and GIS. In addition, their honesty, attentiveness and responsiveness are among the best engineering firms in South Florida. Without any reservation, we recommend the firm to any client."</i>
SEMINOLE TRIBE OF FLORIDA 5 Years-Ongoing 	Ardurra provided SCADA services, telemetry improvements, master planning, GIS, public outreach, design, CEI, and inspections for roadway improvements, LCRR program, drainage, forcemains, water mains, water/wastewater lift stations, and infrastructure hardening.	EXCELLENT in Every Category	EMRAN RAHAMAN Public Works Director (e) emranrahaman@semttribe.com (t) 954-347-9163 <i>"Ardurra provided outstanding engineering services for this progressive design build project with an expedited schedule (design, permitting and construction) in 12 months. Their staff met and exceeded our expectations and we would recommend them."</i>
CITY OF FORT LAUDERDALE 7 Years-Ongoing 	Program Management and Construction Management for the City's Infiltration and Inflow Reduction Program which encompasses the SSES, smoke testing, night flow studies, of over 186 basins and pump stations. In addition, assisted the City during procurement and performed CEI services to manage repairs on the sewer system.	EXCELLENT in Every Category	BRANDY LEIGHTON, PE Division Manager (e) bleighton@fortlauderdale.gov (t) 954-828-5326 <i>"Ardurra's staff is technically qualified to perform engineering, program management, and construction management services for the City. The firm has demonstrated proficiency and responsiveness in supporting the City's infiltration and inflow reduction efforts. We are satisfied with the quality of their services and would recommend them for similar work."</i>
SOUTH FLORIDA WATER MANAGEMENT DISTRICT 24 Years-Ongoing 	Ardurra provides staff augmentation for the SFWMD Flood Protection Level of Service Program. Principal, Level 5 and Level 4 Engineers/Modelers provide services to manage projects/contracts, participate as a member of the FPLOS technical team to analyze and interpret study results and to develop and recommend solutions to address FPLOS issues, coordinating with partners or stakeholders as required by a project, and to perform technical work and provide technical and management support as required by various FPLOS projects.	EXCELLENT in Every Category	HONGYING ZHAO, PHD, PE Program Manager for the Flood Protection Level of Service Program (e) hzhao@sfwmd.gov (t) 561-682-6860 <i>"Ardurra is a reliable firm that has successfully completed several projects for the District throughout the years. Their staff is professional, and highly capable and we recommend their services."</i>



Sub-Consultant Information

// Our Team has years of experience assisting municipalities in establishing alternative funding sources for CIP projects and developing & implementing grants successfully. Additionally, we are well versed with establishing stormwater policies, ordinances, design criteria, and conducting rate studies to support // stormwater utilities.



SUB CONSULTANT INFORMATION

Ardurra has crafted a local team to meet the very specific needs of the City's stormwater program. We have worked with each team firm extensively and can attest to their unwavering commitment to client service, high quality deliverables, and ability to thrive in a collaborative and cohesive team that is laser focused on meeting our clients goals and exceeding expectations! We are true believers that local firms provide the most value to our neighbor agencies and bring unparalleled knowledge of local conditions, permitting processes, as well as the local consultant and general contractor environment. Team firms and their anticipated percentage of involvement are highlighted below.

FIRM & % PARTICIPATION	ROLE & % INVOLVEMENT	OVERVIEW & CAPABILITIES	BENEFIT TO THE CITY OF HOLLYWOOD
KEITH & ASSOCIATES, INC. 	• Civil Engineering • Survey • CEI • Landscape Participation 20%	Established in Broward County 50+ years ago, Keith is a leader in engineering design and survey for local municipalities. Keith has worked alongside Hollywood staff to deliver multiple projects including the SR-7 Art Installation, North Beach Undergrounding and Watermain, and Park Boundary Survey. Keith has led multiple stormwater and drainage programs in South FL, and understands the complexities of stormwater management in low-lying areas. Keith has successfully implemented LiDAR information for initial topographic investigation and determine key problem low areas and applied either ICPR or the EPA SWMM software models to analyze many projects similar to those in Hollywood.	✓ Hollywood design and CEI experience ✓ Experts in LiDAR and modeling
ARCADIS US, INC. 	• Civil Engineering • Rate Studies • Ecological Participation 15%	Arcadis is a global leader in stormwater management and climate resilience and has been at the forefront of helping communities implement climate and sea level rise adaptation strategies. Arcadis brings to the team extensive expertise in the areas of condition assessment and risk-based prioritization, linear assets repair and rehabilitation, environmental engineering, stormwater and green infrastructure, resiliency, and asset management. Arcadis has been a trusted partner to the City for 20+ years, most recently developing the Water Master Plan and assisting with SRF financing.	✓ Hollywood master plan, design, funding support, and CEI experience ✓ Experts risk based prioritization, rate studies, asset management
PROGRAM CONTROLS, INC. (CBE & MBE) 	• Program Controls • Cost Estimates • Scheduling Participation 3%	Based in nearby Davie, PCI is a Broward County CBE and FL MBE and is one of the few firms in South FL with a complete focus on all controls aspects of construction projects. For 20+ years, PCI has been responsible for project controls services for large water programs in South FL including Miami Dade County's \$2B Consent Decree, \$5B WASD-Managed CIP, \$400M South and Central District Treatment Plants, \$300M Prospect Lake Water Plant, and Fort Lauderdale's \$100M I/I Reduction Program.	✓ Experts in program controls - estimating, scheduling, cost control, claims ✓ Established and led project controls for \$100M to \$5B design & construction programs
TERRACON, INC. 	• Geotechnical • Hydrogeology Participation 3%	With offices in Miami, Fort Lauderdale, and Port St Lucie, Terracon has a strong presence in South FL, offering specialized geotechnical, environmental, hydrogeology, and materials testing to local municipalities and consultants. Their local offices and lab facilities have extensive experience with these services for local clients in low lying areas and complex soil conditions, bringing three decades of pertinent local experience to the project team. Terracon has furnished geotechnical services to the City for roadway and street scape projects and sewage lift stations.	✓ Experts in geotechnical and environmental in South FL ✓ 30 years of pertinent experience with local soils ✓ 3 projects completed for City



SUB CONSULTANT INFORMATION



THE ARDURRA TEAM HAS **1,200 PROFESSIONAL & TECHNICAL STAFF** ACROSS FLORIDA TO PROVIDE ADDITIONAL SUPPORT AS NEEDED.

For this contract, our work will be managed out of our Fort Lauderdale office, just minutes from City offices and subject facilities. Support will be provided from our Headquarter offices in Miami.

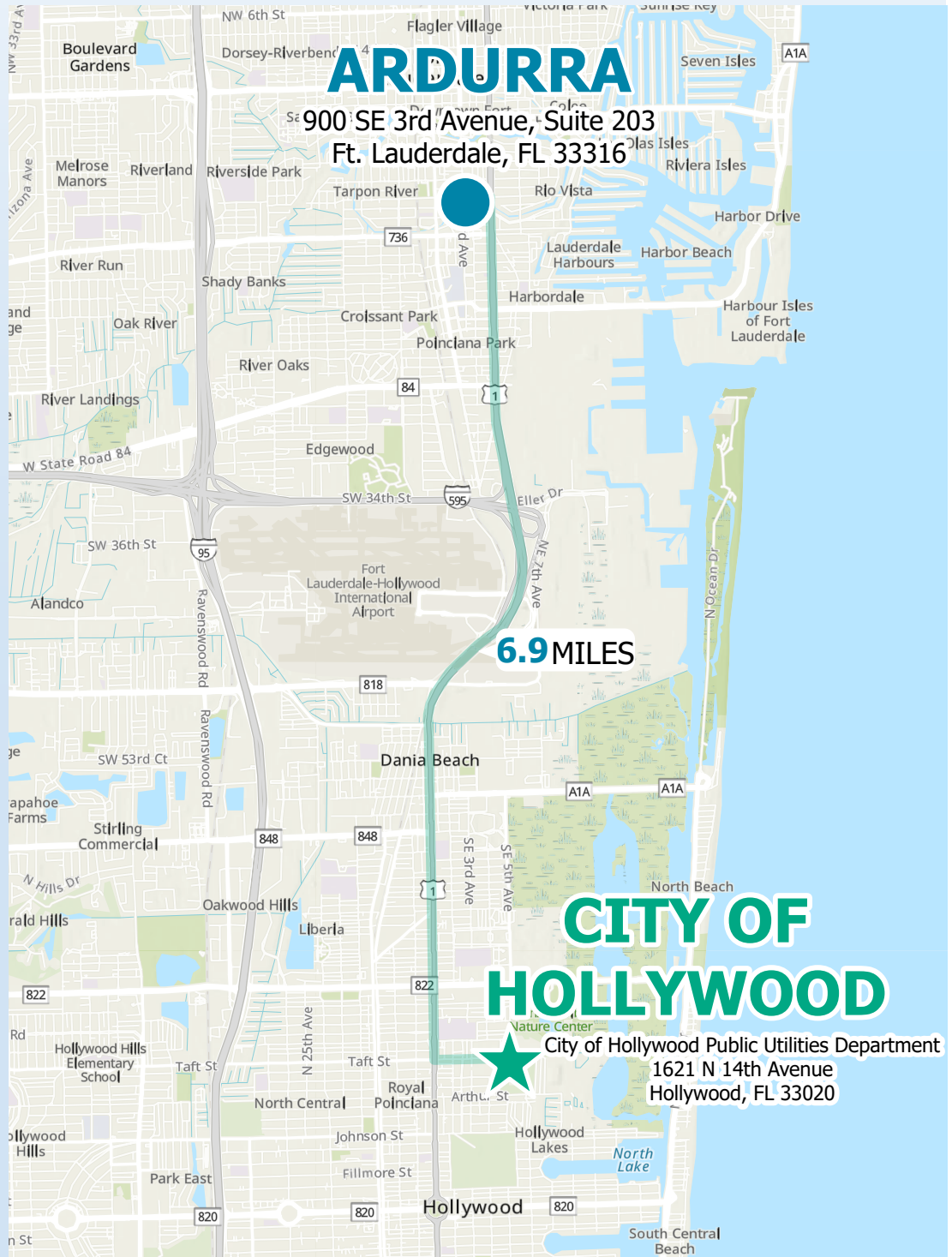
All of Ardurra's team partners have local offices, and are within minutes of City offices and facilities.

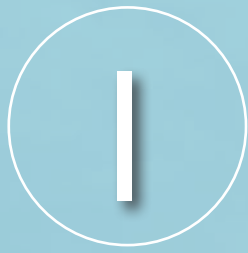
Keith -Pompano Beach

Arcadis -Plantation

PCI - Davie

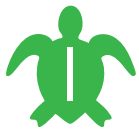
Terracon - Ft Lauderdale





Financial Resources

// The following narrative demonstrates Ardurra's financial strength, long-standing stability, and capacity to successfully support the City's Stormwater Program. **//**



FINANCIAL RESOURCES

Ardurra has provided quality engineering services to clients for more than 47 years with annual revenues exceeding \$280 million. Our financial performance from our core markets over the last five years was the strongest it has ever been. Our steady growth can be attributed to the loyal and satisfied clients we have served throughout the region, coupled with strategic acquisitions. Ardurra has no prior or current bankruptcy proceedings.

Ardurra maintains excellent financial health and is consistently recognized by key industry benchmarks, including— Engineering News Record's Top 500 Design Firms; Zweig White's Best Firms to Work.



July 7, 2025

City of Hollywood
1621 N. 14th Ave
Hollywood, FL 33020

To Whom it May Concern,

I am writing on behalf of Ardurra Group, Inc. to affirm the financial health and stability of our organization.

I confirm that Ardurra Group, Inc. has never filed for bankruptcy and has no history of bankruptcy proceedings or similar financial restructuring events at any point in its history.

If you require further details, please do not hesitate to contact me directly.

Sincerely,
Ardurra Group, Inc.

Randal Dumas
Chief Financial Officer



J

Legal Proceedings & Performance

// Ardurra brings the expertise, foresight, and discipline required to manage complex infrastructure projects with precision—delivering on time, within budget, and with lasting value for the City of Hollywood.

//



LITIGATION INFORMATION

Provide a letter on your firm's letterhead indicating if your firm has paid liquidated damages and/or if your firm has been terminated for default.

Ardurra Group, Inc. has not paid liquidated damages and has not been terminated for default. Please refer to letter at the end of the Required Forms section.

Provide a list of legal proceedings against your firm in the last five years. This shall include legal proceedings for the entire company.

Ardurra Group, Inc. its affiliated entities, and their officers and directors have no prior or ongoing criminal or civil litigation, investigations, arbitration, or administrative proceedings that would affect the successful delivery of this contract or that would materially affect the consolidated financial position of the company. There have been various actions against Ardurra Group, Inc. arising out of the ordinary conduct of its business, most of which are unrelated to the performance of its professional services (such as slip-and-fall claims). The below list is in response to the City's request for construction related lawsuits filed by or against Ardurra Group, Inc. in the last 5) years:

- **Bowen and Kron Enterprises Inc. and Vapor Industries, LLC vs. Ardurra Group, Inc.** Docket: Nueces County, 214th District Court, Case No. 20222DCV-0498-F. Date: February 2022. Summary: Allegations by contractor for City of Corpus Cristi, TX for cost overruns. Status: Resolved without Ardurra's involvement
- **City of San Diego vs. The 5125 Company, 2GS, LLC dba Earthworks Enterprise, Ardurra Group, Inc. dba LNV and fka LNV, LLC and fka LV, Inc., and Robert Viera, PE.** Docket: 229th Judicial District, Duval County, TX, Cause No. DC-22-157. Date: Nov 2022. Summary: Claim alleging defects in construction of drainage improvement project. Ardurra denies any allegation of fault. Status: Settled
- **Willow Bend Homeowners Association of Manatee County, Inc. a Florida non-for-profit corporation vs. CWES XV LLC, et al.** Docket: Circuit Court of the 12th Judicial Circuit, Manatee County, Case No.: 2024-CA-001501. Date: Jul 2024 Summary: HOA alleges design and construction defects. Ardurra only provided environmental monitoring and none of the allegations from the HOA relate to Ardurra's scope of services. Status: Parties working on dismissal of Ardurra as unrelated to the underlying matter.
- **Holiday Builders, Inc. vs. Ardurra Group, Inc., and Florida Engineering, LLC.** Docket: Circuit Court of the 20th Judicial Circuit, Lee County, Case No. 24-CA-007179. Date: Jul 2024. Summary: Builder alleges damages in development of single family home due to survey provided by Ardurra. Status: Matter ongoing. Ardurra denies responsibility for damages asserted.
- **City of Parma v. Ardurra Group, Inc.** Docket: District Court for the Third Judicial District, State of Idaho, County of Canyon, Case No. CV14-25-03983. Date: Apr 2025. Summary: Idaho matter involving claims regarding design of a wastewater treatment plant. Status: Matter ongoing; Ardurra denies all allegations.

- 1 Arbitrations: List all construction arbitration demands filed by or against your firm in the last five years, and identify the nature of the claim, the amount in dispute, the parties, and the ultimate resolution of the proceeding.

Ardurra Group, Inc. has not been involved in construction arbitration in the last five years.

- 2 Lawsuits: List all construction related lawsuits (other than labor or personal injury litigation) filed by or against your firm in the last five years, and identify the nature of the claim, the amount in dispute, the parties, and the ultimate resolution of the lawsuit

See letter on the following page.

- 3 Other Proceedings: Identify any lawsuits, administrative proceedings, or hearings initiated by the National Labor Relations Board or similar state agency in the past five years concerning any labor practices by your firm. Identify the nature of any proceeding and its ultimate resolution. Identify any lawsuits, administrative proceedings, or hearings initiated by the Occupational Safety and Health Administration concerning the project safety practices of your company in the last five years. Identify the nature of any proceeding and its ultimate resolution.

Ardurra Group, Inc. has not been involved in any lawsuits, administration proceedings, or hearings initiated by the National Labor Relations Board or a similar state agency.

- 4 Bankruptcies: Has your firm or its parents or any subsidiaries ever had a Bankruptcy Petition filed in its name, voluntarily or involuntarily?

No.

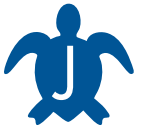
- 5 Has a contract to which you were a party even been terminated by the other party?

No contracts have been terminated for cause.



Required Forms

// Ardurra's office location in Fort Lauderdale—anchored by our Miami headquarters and supported by the nearby offices of our team partners, offer unmatched accessibility, responsiveness, and local knowledge to efficiently serve the City of Hollywood. //



REQUIRED FORMS

FORM 2

ACKNOWLEDGMENT AND SIGNATURE PAGE

This form must be completed and submitted by the date and the time of bid opening.

Legal Company Name (include d/b/a if applicable): Ardurra Group, Inc.

If Corporation - Date Incorporated/Organized: 1977 Federal Tax Identification Number: 59-1782900

State Incorporated/Organized: FL

Company Operating Address: 1000 NW 57th Ct. Suite 800

City: Miami State: FL Zip Code: 33126

Remittance Address (if different from ordering address): 900 SE Avenue, Suite 203

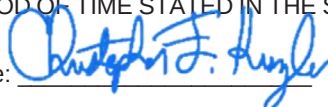
City: Fort Lauderdale State: FL Zip Code: 33316

Company Contact Person: Christopher Kuzler, PE Email Address: ckuzler@ardurra.com

Phone Number (include area code): 813.880.8881 Fax Number (include area code): N/A

Company's Internet Web Address: www.ardurra.com

IT IS HEREBY CERTIFIED AND AFFIRMED THAT THE BIDDER/PROPOSER CERTIFIES ACCEPTANCE OF THE TERMS, CONDITIONS, SPECIFICATIONS, ATTACHMENTS AND ANY ADDENDA. THE BIDDER/PROPOSER SHALL ACCEPT ANY AWARDS MADE AS A RESULT OF THIS SOLICITATION. BIDDER/PROPOSER FURTHER AGREES THAT PRICES QUOTED WILL REMAIN FIXED FOR THE PERIOD OF TIME STATED IN THE SOLICITATION.

Bidder/Proposer's Authorized Representative's Signature:  Date: July 9, 2025

Type or Print Name: Christopher Kuzler, PE

THE EXECUTION OF THIS FORM CONSTITUTES THE UNEQUIVOCAL OFFER OF BIDDER/PROPOSER TO BE BOUND BY THE TERMS OF ITS PROPOSAL. FAILURE TO SIGN THIS SOLICITATION WHERE INDICATED BY AN AUTHORIZED REPRESENTATIVE SHALL RENDER THE BID/PROPOSAL NON-RESPONSIVE. THE CITY MAY, HOWEVER, IN ITS SOLE DISCRETION, ACCEPT ANY BID/PROPOSAL THAT INCLUDES AN EXECUTED DOCUMENT WHICH UNEQUIVOCALLY BINDS THE BIDDER/PROPOSER TO THE TERMS OF ITS OFFER.

FORM 4

VENDOR REFERENCE FORM

City of Hollywood

Solicitation #:

RFQ-320-25-JJ Stormwater Project Management

Reference for:

Ardurra Group, Inc.

Organization/Firm Name providing reference:

Miami-Dade Water and Sewer Department

Organization/Firm Contact

Title:

Name:

Rolando Roque, PE

Planning & Modeling Division Chief

Email:

roquer@miamidade.gov

Phone: 786-552-8129

Name of Referenced Project:

Pump Station Improvement Program,

Contract No:

Date Services were provided:

Design, CM & Support Services

Project

\$26.5M Engineering

2014-2021

Amount:

\$215M Construction Cost

Referenced Vendor's role in Project:

☒ Prime Vendor

☐ Subcontractor/
Subconsultant

Would you use the Vendor again?

☒ Yes

☐ No. Please specify in additional comments

Description of services provided by Vendor (provide additional sheet if necessary):

Construction Management & Inspection (CEI) Services, Program Management, Planning & Engineering, Design Management, Permitting & Procurement Support, and Construction Engineering. Purpose of the program was to upgrade the Wastewater Collection and Transmission System (WCTS) including the rehabilitation of 118 sewage pump station basins. Projects included over 153 pump stations and force mains, plus an Infiltration and Inflow (I/I) reduction program in over 50 basins.

Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
Vendor's Quality of Service				
a. Responsive	☐	☐	☒	☐
b. Accuracy	☐	☐	☒	☐
c. Deliverables	☐	☐	☒	☐
Vendor's Organization:				
a. Staff expertise	☐	☐	☒	☐
b. Professionalism	☐	☐	☒	☐
c. Staff turnover	☐	☐	☒	☐
Timeliness/Cost Control of:				
a. Project	☐	☐	☒	☐
b. Deliverables	☐	☐	☒	☐

Additional Comments (provide additional sheet if necessary):

Through its strategic engineering and I/I initiatives, Ardurra helped MDC avoid substantial penalties and saved up to \$37M. The staff provided quality engineering services in a professional manner, within schedule and budget and at a competitive rate. We are highly pleased with their services.

******THIS SECTION FOR CITY USE ONLY******

Verified via:	Email:	☐	Verbal:	☐	Mail:	☐
Verified by:	Name:				Title:	
	Department:				Date:	

FORM 4

VENDOR REFERENCE FORM

City of Hollywood

Solicitation #:

RFQ-320-25-JJ Stormwater Project Management

Reference for:

Ardurra Group, Inc.

Organization/Firm Name providing reference:

City of Coral Gables

Organization/Firm Contact

Name:

Jose Olivo, PE

Email:

jolivo@coralgables.com

Name of Referenced Project:

Civil & Environmental Engineering

Date Services were provided:

Services, Multiple Projects

2016-ongoing

Title:

Deputy Public Works Director

Phone:

305-460-5000

Contract No:

Contracts RFQ 2015-0904 & 2019015

Project

Amount:

\$5.5M

Referenced Vendor's role in Project:

☒ Prime Vendor

☐ Subcontractor/
Subconsultant

Would you use the Vendor again?

☒ Yes

☐ No. Please specify in additional comments

Description of services provided by Vendor (provide additional sheet if necessary):

Ardurra has been the City's engineering consultant for a large number of projects including drainage, sewer, SSES, I/I, pump stations, roadway, GIS, NPDES, parking lots, canal maintenance, traffic calming, SCADA, Construction Engineering and Inspections (CEI) septic-to-sewer conversion master plan.

Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
Vendor's Quality of Service				
a. Responsive	☐	☐	☒	☐
b. Accuracy	☐	☐	☒	☐
c. Deliverables	☐	☐	☒	☐
Vendor's Organization:				
a. Staff expertise	☐	☐	☒	☐
b. Professionalism	☐	☐	☒	☐
c. Staff turnover	☐	☐	☒	☐
Timeliness/Cost Control of:				
a. Project	☐	☐	☒	☐
b. Deliverables	☐	☐	☒	☐

Additional Comments (provide additional sheet if necessary):

Ardurra's staff has proven to be technically qualified to perform engineering services for the City. We consider the company proficient in water, wastewater, stormwater and GIS. In addition, their honesty, attentiveness and responsiveness are among the best engineering firms in South Florida. Without any reservation, we recommend the firm to any client.

******THIS SECTION FOR CITY USE ONLY******

Verified via:	Email:	☐	Verbal:	☐	Mail:	☐
Verified by:	Name:				Title:	
	Department:				Date:	

FORM 4

VENDOR REFERENCE FORM

City of Hollywood

Solicitation #:

RFQ-320-25-JJ Stormwater Project Management

Reference for:

Ardurra Group, Inc.

Organization/Firm Name providing reference:

Seminole Tribe of Florida

Organization/Firm Contact

Name:

Emran Rahaman

Email:

emranrahaman@seminoletribe.com

Name of Referenced Project:

Brighton Reservation CR-721 Im-

Date Services were provided:

provements Design Build
Engineering - 1/2024-1/2025
Construction - 6/2024-1/2025

Title:

Public Works Director

Phone:

954-347-9163

Contract No:

RFQ-139-2023 / Project STOF.04.93

Project

\$4M - Engineering

Amount:

\$40M Construction Cost

Referenced Vendor's role in Project:

☒ Prime Vendor

☐ Subcontractor/
Subconsultant

Would you use the Vendor again?

☒ Yes

☐ No. Please specify in additional comments

Description of services provided by Vendor (provide additional sheet if necessary):

Provided SCADA services, telemetry improvements & master planning, Engineer of Record and Lead Designer for roadway improvements, lead and copper rule compliance assistance, drainage, public outreach, design of forcemain, water mains, water/wastewater lift stations, infrastructure hardening, inspections, CEI and GIS, among many others.

Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
Vendor's Quality of Service				
a. Responsive	☐	☐	☒	☐
b. Accuracy	☐	☐	☒	☐
c. Deliverables	☐	☐	☒	☐
Vendor's Organization:				
a. Staff expertise	☐	☐	☒	☐
b. Professionalism	☐	☐	☒	☐
c. Staff turnover	☐	☐	☒	☐
Timeliness/Cost Control of:				
a. Project	☐	☐	☒	☐
b. Deliverables	☐	☐	☒	☐

Additional Comments (provide additional sheet if necessary):

Ardurra provided outstanding engineering services for this progressive design build project with an expedited schedule (design, permitting and construction) in 12 months. Their staff met and exceeded our expectations and we would recommend them.

******THIS SECTION FOR CITY USE ONLY******

Verified via:	Email:	☐	Verbal:	☐	Mail:	☐
Verified by:	Name:				Title:	
	Department:				Date:	

FORM 4

VENDOR REFERENCE FORM

City of Hollywood

Solicitation #:

RFQ-320-25-JJ Stormwater Project Management

Reference for:

Ardurra Group, Inc.

Organization/Firm Name providing reference:

City of Fort Lauderdale

Organization/Firm Contact

Title:

Name:

Brandy Leighton, PE

Division Manager

Email:

bleighton@fortlauderdale.gov

Phone: 954-828-5326

Name of Referenced Project:

City Wide I&I Reduction Program

Contract No: Event No. 147

Date Services were provided:

3/2024 - Ongoing

Project

Amount: \$21.5M

Referenced Vendor's role in Project:

☒ Prime Vendor

☐ Subcontractor/
Subconsultant

Would you use the Vendor again?

☒ Yes

☐ No. Please specify in additional comments

Description of services provided by Vendor (provide additional sheet if necessary):

Program Management and Construction Management for the City's Infiltration and Inflow Reduction Program which encompasses the SSES, smoke testing, night flow studies, of over 186 basins and pump stations. In addition, assisted the City during procurement and performed CEI services to manage repairs on the sewer system.

Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
Vendor's Quality of Service				
a. Responsive	☐	☐	☒	☐
b. Accuracy	☐	☐	☒	☐
c. Deliverables	☐	☐	☒	☐
Vendor's Organization:				
a. Staff expertise	☐	☐	☒	☐
b. Professionalism	☐	☐	☒	☐
c. Staff turnover	☐	☐	☒	☐
Timeliness/Cost Control of:				
a. Project	☐	☐	☒	☐
b. Deliverables	☐	☐	☒	☐

Additional Comments (provide additional sheet if necessary):

Ardurra's staff is technically qualified to perform engineering, program management, and construction management services for the City. The firm has demonstrated proficiency and responsiveness in supporting the City's infiltration and inflow reduction efforts. We are satisfied with the quality of their services and would recommend them for similar work.

******THIS SECTION FOR CITY USE ONLY******

Verified via:	Email:	☐	Verbal:	☐	Mail:	☐
Verified by:	Name:				Title:	
	Department:				Date:	

FORM 4

VENDOR REFERENCE FORM

City of Hollywood

Solicitation #:

RFQ-320-25-JJ Stormwater Project Management

Reference for:

Ardurra Group, Inc.

Organization/Firm Name providing reference:

South Florida Water Management District

Organization/Firm Contact

Name:

Hongying Zhao, PhD, PE

Email:

hzhao@sfwmd.gov

Name of Referenced Project:

Engineering Services for Gravity Control Structures Canal-Levee Refurbishment & Low Hazard Impoundment Projects

Date Services were provided:

Current WO - 6/1/25-ongoing
Previous WO - 5/1/19- 5/31/25

Referenced Vendor's role in Project:

☒ Prime Vendor

Would you use the Vendor again?

☒ Yes

Title: Principal Engineer; Program Manager for FPLOS Program

Phone: 561-682-6860

Contract No: 4600005085

Project Amount: \$671,630.00 current WO

\$1,556,506.59 previous WO

☐ Subcontractor/
Subconsultant

☐ No. Please specify in additional comments

Description of services provided by Vendor (provide additional sheet if necessary):

Ardurra provides staff augmentation for the SFWMD Flood Protection Level of Service Program. Principal, Level 5 and Level 4 Engineers/Modelers provide services to manage projects/contracts, participate as a member of the FPLOS technical team to analyze and interpret study results and to develop and recommend solutions to address FPLOS issues, coordinating with partners or stakeholders as required by a project, and to perform technical work and provide technical and management support as required by various FPLOS projects.

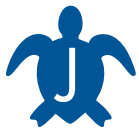
Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
Vendor's Quality of Service				
a. Responsive	☐	☐	☒	☐
b. Accuracy	☐	☐	☒	☐
c. Deliverables	☐	☐	☒	☐
Vendor's Organization:				
a. Staff expertise	☐	☐	☒	☐
b. Professionalism	☐	☐	☒	☐
c. Staff turnover	☐	☐	☒	☐
Timeliness/Cost Control of:				
a. Project	☐	☐	☒	☐
b. Deliverables	☐	☐	☒	☐

Additional Comments (provide additional sheet if necessary):

Ardurra is a reliable firm that has successfully completed several projects for the District throughout the years. Their staff is professional, and highly capable and we recommend their services.

******THIS SECTION FOR CITY USE ONLY******

Verified via:	Email:	☐	Verbal:	☐	Mail:	☐
Verified by:	Name:				Title:	
	Department:				Date:	



REQUIRED FORMS

FORM 5

HOLD HARMLESS AND INDEMNITY CLAUSE

Ardurra Group, Inc.

(Company Name and Authorized Signature, Print Name)

, the contractor, shall indemnify, defend and hold harmless the City of Hollywood, its elected and appointed officials, employees and agents for any and all suits, actions, legal or administrative proceedings, claims, damage, liabilities, interest, attorney's fees, costs of any kind whether arising prior to the start of activities or following the completion or acceptance and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part by reason of any act, error or omission, fault or negligence whether active or passive by the contractor, or anyone acting under its direction, control, or on its behalf in connection with or incident to its performance of the contract.

Signature

Christopher Kuzler, PE

Printed Name

Ardurra Group, Inc.

Name of Company

Managing Principal, Director

Title



REQUIRED FORMS

FORM 6

NON-COLLUSION AFFIDAVIT

STATE OF: Florida

COUNTY OF: Hillsborough, being first duly sworn, deposes and says that:

- (1) He/she is Christopher Kuzler, PE of Ardurra Group, Inc., the Proposer that has submitted the attached Proposal.
- (2) He/she has been fully informed regarding the preparation and contents of the attached Proposal and of all pertinent circumstances regarding such Proposal;
- (3) Such Proposal is genuine and is not a collusion or sham Proposal;
- (4) Neither the said Proposer nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Proposer, firm or person to submit a collusive or sham Proposal in connection with the contractor for which the attached Proposal has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Proposer, firm or person to fix the price or prices, profit or cost element of the Proposal price or the Proposal price of any other Proposer, or to secure an advantage against the City of Hollywood or any person interested in the proposed Contract; and
- (5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Proposer or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Signature

Christopher Kuzler, PE

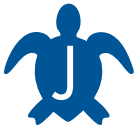
Printed Name

Ardurra Group, Inc

Name of Company

Managing Principal, Director

Title



REQUIRED FORMS

FORM 7

SWORN STATEMENT PURSUANT TO SECTION 287.133 (3) (a) FLORIDA STATUTES ON PUBLIC ENTITY CRIMES

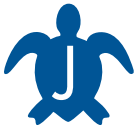
THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS

1. This form statement is submitted to the City of Hollywood by Christopher Kuzler, PE, Managing Principal for Ardurra Group, Inc.
(Print individual's name and title) (Print name of entity submitting sworn statement)
whose business address is
900 SE 3rd Avenue, Suite 203, Fort Lauderdale FL 33316

and if applicable its Federal Employer Identification Number (FEIN) is 59-1782900. If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement.

-
2. I understand that "public entity crime," as defined in paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid, proposal, reply, or contract for goods or services, any lease for real property, or any contract for the construction or repair of a public building or public work, involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misinterpretation.
3. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in an federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
4. I understand that "Affiliate," as defined in paragraph 287.133(1)(a), Florida Statutes, means:
1. A predecessor or successor of a person convicted of a public entity crime, or
 2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5 I understand that "person," as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or any entity organized under the laws of any state or of the



REQUIRED FORMS

United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)

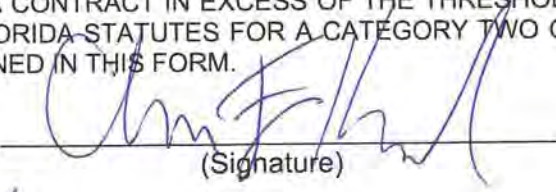
☒ Neither the entity submitting sworn statement, nor any of its officers, director, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

☐ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

☐ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime, but the Final Order entered by the Hearing Officer in a subsequent proceeding before a Hearing Officer of the State of the State of Florida,

Division of Administrative Hearings, determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (attach a copy of the Final Order).

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THAT PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017 FLORIDA STATUTES FOR A CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.


(Signature)

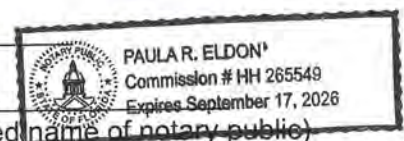
Sworn to and subscribed before me this 24th day of June, 2025.

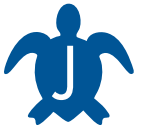
Personally known ☒

Or produced identification _____ Notary Public-State of Florida

(Type of identification) my commission expires 9/17/26

Paula R. Eldon
(Printed, typed or stamped commissioned name of notary public)





REQUIRED FORMS

FORM 8

CERTIFICATIONS REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

The applicant certifies that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal court, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction, violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause or default.

Applicant Name and Address:

Ardurra Group, Inc.

900 SE 3rd Avenue, Suite 203

Fort Lauderdale FL 33316

Application Number and/or Project Name:

City of Hollywood Stormwater Program Management, RFQ-320-25-JJ

Applicant IRS/Vendor Number: 59-1782900

Signature

Christopher Kuzler, PE

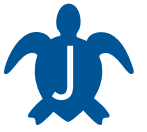
Printed Name

Ardurra Group, Inc.

Name of Company

Managing Principal, Director

Title



REQUIRED FORMS

FORM 9

DRUG-FREE WORKPLACE PROGRAM

IDENTICAL TIE PROPOSALS - Preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids which are equal with respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie proposals will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employee that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program (if such is available in the employee's community) by, any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of these requirements.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Signature

Christopher Kuzler, PE

Printed Name

Ardurra Group, Inc.

Name of Company

Managing Principal, Director

Title



REQUIRED FORMS

FORM 10

SOLICITATION, GIVING, AND ACCEPTANCE OF GIFTS POLICY

Florida Statute 112.313 prohibits the solicitation or acceptance of Gifts. “No Public officer, employee of an agency, local government attorney, or candidate for nomination or election shall solicit or accept anything of value to the recipient, including a gift, loan, reward, promise of future employment, favor, or service, based upon any understanding that the vote, official action, or judgment of the public officer, employee, local government attorney, or candidate would be influenced thereby.” The term “public officer” includes “any person elected or appointed to hold office in any agency, including any person serving on an advisory body.”

The City of Hollywood/Hollywood CRA policy prohibits all public officers, elected or appointed, all employees, and their families from accepting any gifts of any value, either directly or indirectly, from any contractor, vendor, consultant, or business with whom the City/CRA does business.

The State of Florida definition of “gifts” includes the following:

- Real property or its use,
- Tangible or intangible personal property, or its use,
- A preferential rate or terms on a debt, loan, goods, or services,
- Forgiveness of indebtedness,
- Transportation, lodging, or parking,
- Food or beverage,
- Membership dues,
- Entrance fees, admission fees, or tickets to events, performances, or facilities,
- Plants, flowers or floral arrangements
- Services provided by persons pursuant to a professional license or certificate.
- Other personal services for which a fee is normally charged by the person providing the services.
- Any other similar service or thing having an attributable value not already provided for in this section.

Any contractor, vendor, consultant, or business found to have given a gift to a public officer or employee, or his/her family, will be subject to dismissal or revocation of contract.

As the person authorized to sign the statement, I certify that this firm will comply fully with this policy.

Signature

Christopher Kuzler, PE

Printed Name

Ardurra Group, Inc.

Name of Company

Managing Principal, Director

Title



Print or type.
See *Specific Instructions* on page 3.

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Social security number

				-								
--	--	--	--	---	--	--	--	--	--	--	--	--

or

Employer identification number

5	9	-	1	7	8	2	9	0	0
---	---	---	---	---	---	---	---	---	---

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

**Signature of
U.S. person**

Date 01/07/2025

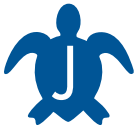
Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification.

New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they



REQUIRED FORMS



ARDURRA-01

KSUTTON

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
12/30/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Ames & Gough 8300 Greensboro Drive Suite 980 McLean, VA 22102	CONTACT NAME: PHONE (A/C, No, Ext): (703) 827-2277 FAX (A/C, No): (703) 827-2279 E-MAIL ADDRESS: admin@amesgough.com														
INSURED Ardurra Group, Inc. 1000 N.W. 57th Court, Suite 800 Miami, FL 33126	<table><tr><td>INSURER(S) AFFORDING COVERAGE</td><td>NAIC #</td></tr><tr><td>INSURER A: Charter Oak Fire Insurance Company A++ (XV)</td><td>25615</td></tr><tr><td>INSURER B: Phoenix Insurance Company A++, XV</td><td>25623</td></tr><tr><td>INSURER C: Travelers Property Casualty Company of America, A++, XV</td><td>25674</td></tr><tr><td>INSURER D: National Fire & Marine Insurance Company A++ X</td><td>20079</td></tr><tr><td>INSURER E:</td><td></td></tr><tr><td>INSURER F:</td><td></td></tr></table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: Charter Oak Fire Insurance Company A++ (XV)	25615	INSURER B: Phoenix Insurance Company A++, XV	25623	INSURER C: Travelers Property Casualty Company of America, A++, XV	25674	INSURER D: National Fire & Marine Insurance Company A++ X	20079	INSURER E:		INSURER F:	
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INSURER E:															
INSURER F:															

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR ☒ Contractual Liab. GEN'L AGGREGATE LIMIT APPLIES PER: ☒ POLICY ☒ PROJECT ☐ LOC ☐ OTHER:			630-5X487435	1/1/2025	1/1/2026	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 15,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
B	AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY			810-5X558309	1/1/2025	1/1/2026	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
C	☒ UMBRELLA LIAB ☒ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☒ RETENTION \$ 10,000			CUP-5X642114	1/1/2025	1/1/2026	EACH OCCURRENCE \$ 15,000,000 AGGREGATE \$ 15,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	UB-5X489557	1/1/2025	1/1/2026	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
D	Professional Liab.			42-EPP-306878-07	1/1/2025	1/1/2026	Per Claim/Aggregate 10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
National Fire & Marine Insurance Company is the writing company for Berkshire Hathaway Specialty Insurance Company. Berkshire Hathaway Specialty Insurance Company has an AM Best Rating of A++ in the Financial Size category of XV. The AMB# is 000864, and the NAIC# is 22276.

Pollution Liability coverage is provided and included within the Professional Liability policy noted above. It shares the limits of the Professional Liability policy.

CERTIFICATE HOLDER**CANCELLATION**

EVIDENCE OF COVERAGE	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

ACORD 25 (2016/03)

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REQUIRED FORMS



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Detail by Entity Name

Florida Profit Corporation
ARDURRA GROUP, INC.

Filing Information

Document Number	555540
FEI/EIN Number	59-1782900
Date Filed	12/19/1977
State	FL
Status	ACTIVE
Last Event	AMENDMENT
Event Date Filed	02/06/2019
Event Effective Date	NONE

Principal Address

1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Changed: 05/02/2024

Mailing Address

1000 N.W. 57th Court, Ste 800
Miami, FL 33126

Changed: 05/03/2024

Registered Agent Name & Address

REGISTERED AGENTS INC
7901 4TH STREET NORTH, SUITE 300
ST. PETERSBURG, FL 33702

Name Changed: 01/24/2025

Address Changed: 01/24/2025

Officer/Director Detail

Name & Address

Title CFO, Treasurer



REQUIRED FORMS

Dumas, Randal
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title VP

Penna, Lisa
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title Director, President, CEO

Aguilar, ERNESTO
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title VP

Jackson, Paul Richard
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title Authorized Representative

Vaith, Kartik
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title Assistant Vice President

Smith, Alexandra
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title VP

Kasner, Carmen
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title Authorized Representative

Kuzler, Christopher
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title VP

Smith, Kenneth Scott
1000 N.W. 57th Court, Suite 800
Miami, FL 33126



REQUIRED FORMS

Title VP

Fulghum, Jr., William C.
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title VP

Sommerfeldt, Steven
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title Secretary

Walters, Brent
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title Authorized Representative

Cahill, Catherine
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title Authorized Representative

Maristany, Agustin
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

Title Authorized Representative

Marsden, Jennifer
1000 N.W. 57th Court, Suite 800
Miami, FL 33126

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Report Year	Filed Date
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2025	01/17/2025
2025	03/17/2025

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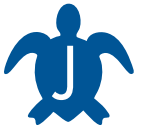
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REQUIRED FORMS



JUNE 26, 2025

SUBJECT: RFQ-320-25-JJ, City of Hollywood Stormwater Program Management

Ardurra Group, Inc. (Ardurra) has delivered more than \$50 billion in multi-disciplinary engineering and construction management services to municipal and government agency clients. We are consistently recognized by industry performance indicators including Engineering News Record as a Top 100 Engineering Firm.

Ardurra Group, Inc. has not paid liquidated damages and has not been terminated for default.

Very truly yours,

Brent Walters
Chief Legal Officer
Ardurra Group, Inc.

1000 NW 57th Ct, Ste 800 Miami, FL 33126 786.228.5666 www.ardurra.com



1000 NW 59th Ct. Suite 800
Miami, FL 33126

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