Chase Spence, DBIA, CQM-C

PROJECT EXECUTIVE

CAREER SUMMARY

MEB Experience: 19 years
Industry Experience: 21 years

EDUCATION

Virginia Polytechnic Institute & State University, BS, 2006, Civil Engineering

CERTIFICATIONS

DBIA Design-Build Professional

USACE Construction Quality Management for Contractors Certification

TRAINING

First-Aid/CPR/AED

OSHA-40

Primavera Expedition

Zurich Quality Management

PROFESSIONAL AFFILIATIONS

Design-Build Institute of America (DBIA), Member

BIO

Chase started his career as a Contractor Quality Control Systems Manager and Project Engineer and has advanced to Project Executive. He was responsible for the implementation of the quality control program for commercial and industrial projects. His typical project overviews and areas of responsibility included the implementation of the three phases of control, review of material and equipment to be utilized, satisfactory testing and compliance of systems needed for the completion of the project, and the certification of conformance to the contract requirements and documentation of same.

RELEVANT EXPERIENCE

HRSD NANSEMOND TREATMENT PLANT SWIFT FACILITY // Suffolk, VA // $130,863,966
As part of the SWIFT FSIP, HRSD is closing its Boat Harbor Treatment Plant (BHTP) in Newport News, VA. A new pumping and equalization facility will be constructed near BHTP. Screened and de-gritted wastewater will be pumped through a new transmission force main to Nansemond Treatment Plant (NTP). Construction of multiple capital improvement projects are underway at NTP. Once complete, wastewater will be highly treated prior to entering the Nansemond SWIFT Facility. This advanced water treatment process will produce SWIFT Water, which will meet drinking water quality standards and match the characteristics of the Potomac Aquifer.The project will design, construct, and commission upgrades to the NTP to produce SWIFT Water, provide SWIFT Water to any of 19 recharge wells, and return well backflush water from any of the 19 wells to the NTP.

HRSD NANSEMOND TREATMENT PLANT ADVANCED NUTRIENT REDUCTION IMPROVEMENTS - PHASE 2 // Suffolk, VA // $88,543,325
This large design-build project increases the capacity of the existing Nansemond Treatment Plant to accept the future Boat Harbor Treatment Plant flow and provide further nutrient reduction prior to flow passing to the future SWIFT treatment facility. The scope includes the addition of two new aeration tanks, two new secondary clarifiers with a common RAS pump station, a new chlorine contact tank, modifications to existing tankage, new blowers, additional chemical storage and feed, utility piping, and sitework throughout the back-half of the Nansemond Treatment Plant.

HRSD NANSEMOND TREATMENT PLANT NUTRIENT REDUCTION IMPROVEMENTS - PHASE 1 // Suffolk, VA // $45,299,808
Design-Assist project delivering a sidestream treatment Struvite Recovery Facility utilizing Ostara Nutrient Recovery Technology. Three Ostara Pearl 500 nutrient recovery reactors were installed with the ability to produce more than one million pounds of "Crystal Green" fertilizer annually. From the wastewater centrate, this new technology recovered 85% of the phosphorous and 40% of the ammonia from the liquid it processed and turned it into an environmentally friendly, commercial fertilizer. Several additions to the project included a Gravity Belt Thickener, and emergency replacement of 48" and 54" clarifier effluent piping. 65 MGD

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PROJECT EXECUTIVE

HRSD SURRY TO SMITHFIELD HYDRAULIC IMPROVEMENTS & INTERCEPTOR FORCE MAIN // Surry, VA // $49,472,082
This design-build project consists of 18 miles of 6"-10" HDPE force main from Surry County to Smithfield, roughly four miles of 4" HDPE force main installed down Rolfe Highway in Surry County from Marina Drive to an existing connection in the Town of Surry, three new pump stations and one upgrade to an existing pump station, construction of a 280,000-gallon wet weather storage tank, approximately nine jack and bores, and approximately 16 horizontal directional drills. HRSD Nansemond Treatment Plant Grease Handling Facilities // Suffolk, VA //
$9,331,984
Two new aeration tank modifications to existing aeration tanks, modifications to the existing Anaerabie-Anoxic-Aeration tanks and air header. Three retrofitted secondary clarifiers. Blower Building modifications. Two new blowers, new diesel generator and associated switch gear equipment and all structural, architectural mechanical, electrical and instrumentation work. 65 MGD

HRSD ATLANTIC TREATMENT PLANT PRIMARY CLARIFIER INFLUENT CHANNEL SCUM SYSTEM // Virginia Beach, VA // $891,206
This facility is designed to process an annual average flow of 54 MGD. The facility is designed for a peak day hydraulic flow of 135 MGD. Current typical average daily flows range from 25-34 MGD. In the event of a power failure, the facility is equipped with emergency diesel generators to supply full electric service to the plant Includes the renovation of aeration lines in channels and additions of a new blower.

NORFOLK MOORES BRIDGES WATER TREATMENT PLANT BASINS 7 & 8 IMPROVEMENTS // Norfolk, VA // $3,696,148
Installation of turbine low lift pump and motor and associated variable frequency drive, piping, valves, electrical, controls and appurtenances; replacement of two existing variable frequency drives; piping modifications within the four finished water reservoirs; miscellaneous ventilation system improvements in the low lift pump motor room and replacement (at City's option) of three existing constant speed vertical turbine low lift pumps motors and associated electrical and controls.

HRSD BETHEL-POQUOSON WYTHE CREEK ROAD FORCE MAIN REPLACEMENT - PHASE 2 // Poquoson, VA // $2,895,778
Installation of approximately 3,700' of 20" FM, 975' of 4" HDPE, abandonment of existing 20" FM, milling and paving

HRSD BRIDGE STREET PUMP STATION // Hampton, VA // $11,506,573
Replacement of a wastewater pump station including gravity sewer, force main, a 70' x 90' x 30' deep excavation, with appropriate sheet piling, whaler supports, and dewatering with the capacity 18,100 GPM. The project included the demolition of the existing pump station, existing pile foundation, temporary by-pass pumping, line stops and flow diversions, 350' of 18" stainless steel PVC, seven manholes, 400' of 30" ductile iron, and 50' of 42" ductile iron. The 16.5 MGD pump station replacement was completed in the residential neighborhood adjacent to a yacht club, with limited laydown areas and tight site conditions.

HRSD NANSEMOND TREATMENT PLANT BULK RESIDUAL MATERIAL STORAGE // Suffolk, VA // $483,839
Site work, earthwork activities including demolition of existing structures, pipes, ductbanks; excavations for structures, pipelines, ductbanks and other plant facilities; installation of grading, erosion and sediment control provision; and other similar site work and site improvements. 65 MGD

MOORES BRIDGES WATER TREATMENT PLANT LOW LIFT PUMP STATION IMPROVEMENTS // Norfolk, VA // $2,180,394
Installation of turbine low lift pump and motor and associated variable frequency drive, piping, valves, electrical, controls and appurtenances; replacement of two existing variable frequency drives; piping modifications within the four finished water reservoirs; miscellaneous ventilation system improvements in the low lift pump motor room and replacement (at City's option) of three existing constant speed vertical turbine low lift pumps motors and associated electrical and controls.

G. ROBERT HOUSE, JR. WATER TREATMENT PLANT EXPANSION - PHASE 3A // Suffolk, VA // $11,768,516
Replacement of existing raw water pumps. Demolition of existing rapid mixers, flocculation equipment, clarifier mechanisms, and process piping. Installation of new in-line mechanical mixers and flow metering/flow control

piping. Installation of new packaged flocculation and plate settler clarification units and associated micropile supported foundation with one of the existing clarifier basins. Filtration systems modifications, including associated piping and valve improvements. Installation of new high service (finished water pumping discharge flow meters. Replacement of existing chemical metering pumps. Structural, architectural, mechanical, and electrical related improvements to the existing Filter Building and other facilities. Modifications to the existing instrumentation and control systems. Sitework, including civil, site electrical, and yard piping improvements.

G. ROBERT HOUSE, JR. SURFACE WATER TREATMENT FACILITIES IMPROVEMENTS // Suffolk, VA // $9,610,016
Modifications to an existing water treatment facility to include replacement of the raw water pumps, demo of rapid mixers, flocculation equipment, clarifier mechanisms, and process piping. Installation of new mixers, multiple pumps, and process piping up to 30" in diameter. Installation of new flocculation and clarification equipment. Filtration System modifications including piping and valves. Structural improvements and modifications to existing control systems, and yard piping improvements.

HRSD HAMPTON TRUNK SEWER DIVISION A REPLACEMENT & BOAT HARBOR EAST-WEST RAW INFLUENT CHAMBER REHABILITATION // Newport News, VA // $4,830,547
Rehabilitation of roughly 1,320 LF of existing sanitary sewer, installation of roughly 1,092 LF of gravity sewer and manholes, installation of 147 LF of 36" sanitary sewer force main piping and rehabilitation of nine manholes.

CHESAPEAKE LAKE GASTON ADMINISTRATIVE BUILDING & WATER TREATMENT PLANT // Chesapeake, VA // $29,185,800
Construction of a new, 8 MGD Water Treatment Facility, allowing the City to meet current and future regulations. The plant included a 12,500 SF Administration Building; Water Treatment Building; Effluent Aeration Building; Generator/Switchgear Building and surge tank area. General laboratory features consisted of fume hoods, process sample taps, storage cabinets, stainless steel sinks, laboratory counter top, and eyewash station. Additional specialized equipment in this facility included a control room, two DR-6000's, a PH meter, DO meter, and autotitrator.

CHARLOTTE MCALPINE CREEK WASTEWATER MANAGEMENT FACILITY NUTRIENT HARVESTING - PRECONSTRUCTION PHASE // Pineville, NC // $44,525,688
Design-Build construction of a new nutrient harvesting facility designed to recover phosphorus from treated wastewater effluent, supporting long-term sustainability initiatives while enhancing effluent discharge quality, reducing chemical usage, and enabling the beneficial reuse of recovered byproducts such as struvite. The project includes site development, installation of civil infrastructure, erection of a pre-engineered metal process building, and installation of specialized process equipment. This encompasses mechanical piping and full integration into the existing plant infrastructure, including influent and effluent piping, power supply, data and communications systems, and chemical delivery systems. The primary objective of the project is to recover phosphorus in solid form, thereby mitigating scaling in downstream systems, decreasing chemical consumption, and improving overall nutrient removal to meet or exceed regulatory effluent standards.

MOORES BRIDGES WATER TREATMENT PLANT SLUDGE COLLECTION IMPROVEMENTS & REPAIRS // Norfolk, VA // $2,420,962
Replacement of sludge collection equipment in seven basins, modifications to plumbing drains in the Chemical Building, carbon feed system upgrade, concrete repair, coating repairs, and electrical modifications.

NORFOLK MOORES BRIDGES WATER TREATMENT PLANT HIGH SERVICE PUMP STATION & CHEMICAL BUILDING // Norfolk, VA // $1,666,181
Modifications at the HS Trim PS (relocation of a VFD and ventilation upgrades; modifications at Chemical Building (new water supply piping, new electrical feeder, new chemical hopper dust collectors, new ventilation and heating, polymer feeder; modifications related to Solids Transfer Station No. 3 (new solids pumps, new electrical feeder and panel, new solids transfer line); and associated civil, mechanical, electrical and controls.

HRSD NANSEMOND TREATMENT PLANT INFLUENT SCREEN REPLACEMENT // Suffolk, VA // $1,194,448
Removal and replacement of three existing influent screens, screenings handling equipment, influent bypass gate, and various electrical upgrades. 65 MGD

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PROJECT EXECUTIVE

STAFFORD ROCKY PEN RUN WATER TREATMENT FACILITY // Fredericksburg, VA // $26,238,273
New facility consisting of a Water Treatment Building containing outdoor chemical areas, chemical pump rooms, process areas, membrane filtration area, solids handling area, maintenance room, lab, administration area, electrical room and two generators. There are two trains of rapid mixers, three trains of sludge blanket clarifiers, two membrane wetwells, four membrane feed pumps, centrifuge, sludge feed pumps, several chemical systems, and three trains of low and high service finished water pumps. Site work includes electrical, yard piping, a 2.5MG pre-cast finished water tank, paving, and permanent E&S controls.

LANGLEY AIR FORCE BASE REPAIR SEWER FORCE MAINS // Hampton, VA // $2,594,606
The project consists of the replacement of an existing 10" force main to include: 8,000 LF of 12", 600 LF of 10" by open trench method, 2,000 LF of 12" and 1200 LF of 10" by directional drilling, eleven pump station connections, pipe abandonment, asphalt surface replacement, and site restoration.

TAPPAHANNOCK EMERGENCY FORCE MAIN REPLACEMENT // Tappahannock, VA // $197,000
Emergency repair of approximately 400' of 8" force main in a tidal marsh.

HRSD NANSEMOND TREATMENT PLANT STRUVITE RECOVERY FACILITY IMPROVEMENTS // Suffolk, VA // $462,158
The project consists of the demolition of the existing struvite dryer equipment, pouring of new equipment pads, installation of larger dryer equipment, replacement of a PLC, construction of a prefabricated office, and installation of all piping, appurtenances, electrical, instrumentation, and control elements.

OCEAN BEACH CLUB TOWER ADDITION // Virginia Beach, VA // $25,954,451
Design-Assist. 20-story, 127,396 SF reinforced concrete structure on concrete piles with a standing seam roof. The complex project is a twin addition to the existing tower, which is similar in size and scope, and was fully-occupied for the entirety of construction. Sensitivity to construction activity included not only the connection to the existing building, but also significant work on the ground level, both inside and outside. It was critical not to disrupt the activities of the guests in the existing tower or ground floor amenities, such as the lobby, pools, restaurants, and bars. Construction operations were maintained in a densely developed section of the Oceanfront, with minimal construction laydown and storage areas available. The high-rise is enclosed in a glass curtainwall system and comprised of one-, two-, and three-bedroom apartments, as well as luxury duplex penthouse suites.

meb.