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| **ARCHITECT - ENGINEER QUALIFICATIONS** | | | |
| **PART I - CONTRACT-SPECIFIC QUALIFICATIONS** | | | |
| **A. CONTRACT INFORMATION** | | | |
| 1. TITLE AND LOCATION *(City and State)*   **IIJA $25M AE Design River Services MATOC for SB** | Variety of A-E services primarily for Civil Works projects located within LRD geographical boundaries | | | |
| 2. PUBLIC NOTICE DATE  June 08, 2022 | | 3. SOLICITATION OR PROJECT NUMBER  W912QR22R0059 | SMALL BUSINESS | |
| **B. ARCHITECT-ENGINEER POINT OF CONTACT** | | | |
| 4. NAME AND TITLE  Kris D. Prasad, JV Partner | | | |
| 5. NAME OF FIRM  Kenall-Halff JV-2, LLC | UEI #CLHNBD1KSMT3 | | | |
| 6. TELEPHONE NUMBER  832-251-8200 | 7. FAX NUMBER  832-251-8201 | | 8. E-MAIL ADDRESS  [kris.prasad@kenallinc.com](mailto:kris.prasad@kenallinc.com) |
| **C. PROPOSED TEAM**  *(Complete this section for the prime contractor and all key subcontractors.)* | | | |

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|  | *(Check)* | | | 9. FIRM NAME | 10. ADDRESS | 11. ROLE IN THIS CONTRACT |
| PRIME | J-V PARTNER | SUBCONTRACTOR |
| a. | X |  |  | Kenall-Halff JV, LLC (Kenall-Halff)  Check if branch office  SMALL BUSINESS (WOSB) | 8101 Westglen Drive  Houston, TX 77063 | JV – Program/Project Management,  architectural, mechanical, electrical,  civil, structural, H&H modeling and  analysis, and geotechnical  engineering, environmental impact  studies, historical cultural resources,  landscape architecture,  archaeology, land surveying, life  cycle-cost analysis, CADD/BIM |
| b. |  | X |  | Kenall, Inc. (Kenall)  Check if branch office  SMALL BUSINESS (WOSB) | 8101 Westglen Drive  Houston, TX 77063 | Program/Project Management, Civil, Structural, H&H Modeling and Analysis, and Geotechnical Engineering, CADD/BIM |
| Kenall  Check if branch office | 5210 Storey Street  Harahan, LA 70123 | Civil, Structural, and Geotechnical Engineering, Construction Inspection & Testing Services |
| c. |  | X |  | Halff Associates, Inc.  (Halff)  Check if branch office | 1201 N Bowser Rd  Richardson, TX 75081 | JV Partner - Program/Project  Management, Architectural,  Mechanical, Electrical, Civil,  Structural, H&H Modeling and  Analysis, Geological, Environmental  Impact Studies, Historical Cultural  Resources, Landscape Architecture,  Archaeology, Land Surveying, Life  Cycle-Cost Analysis, Water  Resources Engineering, CADD/BIM |
| d. |  |  | X | BHDG Architects (BHDG)  Check if branch office  SMALL BUSINESS (WOSB) | 2413 North Main Street  Fort Worth, TX 76164 | Architectural and Interior Design Services |
| e. |  |  | X | Construction Cost Management, Inc. (CCM)  Check if branch office  SMALL BUSINESS (WOSB) | 2413 North Main Street  Fort Worth, TX 76164 | Cost Estimating Services |
| f. |  |  | X | Gannett Fleming  Check if branch office | 207 Senate Avenue  Camp Hill, PA 17011 | Mechanical, Electrical and Geotechnical Engineering Services |
| Gannett Fleming  Check if branch office | 7133 Rutherford Road, Rutherford Plaza Building, Suite 300  Baltimore, MD 21244 |
| Gannett Fleming  Check if branch office | 2251 Douglas Boulevard, Suite 200  Roseville, CA 95661 |
| g. |  |  | X | Hana Engineers and Consultants, LLC (Hana)  Check if branch office  SMALL BUSINESS (8a) | 7501 Boulder View Drive, Suite 620  Richmond, VA 23225 | Geotechnical Engineering and Environmental Services |
| h. |  |  | X | HNTB Corporation (HNTB)  Check if branch office | 715 Kirk Drive  Kansas City, MO 64105 | Landscape Architectural Services |
| i. |  |  | X | Jensen Hughes, Inc. (Jensen Hughes)  Check if branch office | 8000 Regency Parkway  Suite 580  Cary, NC 27518 | Fire Protection Engineering and Life Safety Design Services |
| j. |  |  | X | Metro CD  Check if branch office  SMALL BUSINESS (8a) | 1650 NE Grand, Suite 100  Lee Summit, MO 64086 | MEP Services |
| k. |  |  | X | Strategic Value Solutions, Inc. (SVS)  Check if branch office  SMALL BUSINESS (WOSB) | 1650 NE Grand, Suite 100  Lee Summit, MO 64086 | Value Engineering Services |
| l. |  |  | X | Terracon Consultants, Inc.(Terracon)  Check if branch office | 13050 Eastgate Park Way, Suite 101  Louisville, KY 40223 | Geotechnical Engineering and Testing Services, Environmental Studies/Surveys and Abatement Design (asbestos and lead) |

ORGANIZATIONAL CHART

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **Srujan Chikyala, PE** | | | **Project Manager** | | a. TOTAL: 13  b. WITH CURRENT FIRM: 13 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | Houston, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  MS, Civil Engineering  BS, Civil Engineering | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Civil): TX #122374 (2015) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Srujan has extensive experience working with USACE, USDA-NRCS, NAVFAC Southeast, IBWC, and USFWS. He has successfully managed numerous design projects including dams, levees and flood control erosion protection, bridges, canals, stormwater drainage, retention, detention, water quality, grading, earthwork, utilities, pavement, and military facilities for various federal clients. Expertise with AutoCAD, Civil-3D, InRoads, GEOPAK, MicroStation, HEC-1, XPSWMM, HEC-HMS, HECGeoHMS, HEC-GeoRAS, HEC-FDA, ArcGIS, CADBIM policies. Extensive experience in conducting engineering studies and designs for new construction, partial and full renovations.  **Training:** Federal Project Management*.* **Membership:** SAME, ACEC, ASCE. **Publications:** Swell-shrink and strength behaviors of lime and cement stabilized expansive organic clays, Applied Clay Science; Effects of Organics on Stabilized Expansive Subgrade Soils, GeoShanghai International Conference, 2010 (Best Paper Award); Mitigating the effects of organics in stabilized soils: Technical Report No. FHWA/TX-09/0-5540-1. | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - AE Services for SRM and CTC Projects, Fort Polk, LA | | | | PROFESSIONAL SERVICES: 2017-2019 CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Project Manager** for the development of D-B RFP and D-B-B RFPs including design of access trails, culvert repairs, crosswalk improvements, roads, and repairs for wash racks. Cost: $5.5M  ***Specialized Experience Area(s)***  Civil Information Modeling (CIM);  UFC 3-201-01, MII Cost Estimates, Specs Intact, USACE CADBIM Policies and Procedures, Design-Build RFP Preparation, Full Design  Documents | * Managed seven (7) staff and two specialty subcontractors * Managed project planning/execution; coordinated with USACE design   manager and Fort Polk installation personnel   * Prepared DQCP, led design charrette and design review meetings, prepared confirmation notices, directed subcontractors for surveying and   cost estimating, prepared design analysis, developed UFC 3-201-01,  CIM plans and specs deliverables using USACE CADBIM   * Reviewed MII cost estimates * Conducted QC reviews using Bluebeam sessions; responded to RFIs * Established the schedule & completed the project on-time & in budget * Compiled full design documents, prepared the general drawings and   specifications using Specs Intact   * Compiled RFP and prepared general documentation of Design-Build   RFP by following the Design-Build template methodology | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| US Fish & Wildlife – Trinity River Champions Lake Spillway Replacement | Liberty, TX | | | | PROFESSIONAL SERVICES: 2019 -2020  CONSTRUCTION: **2021** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Project Manager** for the replacement/reconstruction of the existing Spillway. The primary purpose of this D-B project was to produce design-build construction documents, specifications, and a cost estimate to repair the levee/spill way and associated appurtenances. Cost: $3.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01,  Full Design Documents | * Managed a team of five personnel and conducted design charrette in developing CIM H&H models and design deliverables including plans and specs * Coordinated with the USFWS, USACE, TxDOT and County personnel * Acquired drill rig access for water borings, and oversaw the field investigations * Conducted QC reviews using Bluebeam sessions on UFC 3-201-01 * compliant Specs and Plans * Established the schedule and completed the project on-time and within budget. Responded to RFIs * Compiled full design documents, prepared the general drawings and specifications | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - A-E services for Maintenance at Dams 44, 45, 48, and 50, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2018-2020 CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Project Manager** for the development of four design packages for the maintenance of Dams and bring the dams into compliance with the State of Texas Dam Safety Laws & Guidelines, USACE and applicable federal regulations. Cost: $3.5M  ***Specialized Experience Area(s)***  CIM, USACE CADBIM policies and procedures, Full design documents, MII Cost Estimates, Specs Intact | * Managed 9 staff in developing 4 D-B-B RFP packages for the maintenance of Dams and bring the dams into compliance with the State of Texas Dam Safety Laws & Guidelines, USACE and applicable federal regulations * Managed project planning/execution; coordinated with USACE design manager, Fort Hood DPW personnel, and stakeholders * Prepared DQCP, led design charrette and design review meetings, prepared confirmation notices, directed subcontractors for surveying and cost estimating, prepared design analysis, developed UFC 3-201-01 deliverables including CIM plans and specs * Responded to DrChecks design review comments and performed QA reviews of MII cost estimates * Compiled full UFC 3-201-01 (Civil, Structural) design documents, prepared the general drawings and specifications * Responded to bidder inquiries and construction RFIs | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - Various Drainage Repairs at RGAAF, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2017-2018  CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Project Manager** for the design to mitigate drainage issues on RGAAF at Fort Hood, TX. Cost:$4.9M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01, USACE CADBIM policies and procedures,  D-B RFP design, MII Cost Estimates, Specs Intact | * Managed 7 staff in developing a D-B RFP package to mitigate drainage issues on RGAAF at Fort Hood, TX. * Managed project planning/execution; coordinated with USACE design manager, Fort Hood DPW personnel, and stakeholders * Prepared DQCP, led design charrette and design review meetings, prepared confirmation notices, directed subcontractors for surveying and cost estimating, prepared design analysis, compiled D-B RFP deliverables, and reviewed MII cost estimates * Conducted QC reviews using Bluebeam sessions on UFC 3-201-01   compliant Specs and Plans   * Established the schedule and completed the project on-time and within budget * Responded to DrChecks comments and RFIs | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| IBWC - Sunland Park Levee Forensic Investigation, El Paso County, TX and Dona Ana County, NM | | | | PROFESSIONAL SERVICES: 2016  CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Project Manager** for the investigation of the two levee segments of Rio Grande an 8.45-mile segment in El Paso County, TX and a 3.38-mile segment in Dona Ana County, NM. Cost:$10M  ***Specialized Experience Area(s)***  CIM, Full design documents | * Managed 7 staff in providing Forensic Engineering services that included identifying causes of the levee failure; developing corrective action alternatives; and upon selection of the best alternative, providing the design for the repair of levee and its associated structures * Managed project planning/execution; coordinated with IBWC design manager, and its stakeholders * Led design charrette and review meetings, directed subcontractors for drilling and surveying, prepared design analysis, compiled design deliverables, and reviewed cost estimates * Established the schedule and completed the project on-time and within budget | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **Levi Hein, PE, CFM** | | | **Project Manager** | | a. TOTAL: 16  b. WITH CURRENT FIRM: 16 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | Houston, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  BS, Civil Engineering (2004) | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Civil): TX #109956 (2011)  Certified Floodplain Manager (CFM): TX #11835-10N (2010) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Since joining Halff in 2006, Levi has obtained training or has hands-on experience using HEC-HMS, HEC-RAS. He has formal training with the GIS-based H&H software and has experience with ArcView applications. Levi has technical design experience including streambank stabilization, erosion mitigation and stream restoration, levees and dams, flood control channels and detention basins, erosion and sediment control, stormwater designs, and local drainage problems. His work includes many innovative and cost-effective solutions to standard problems. Levi has also gained experience in grading and paving design, utility relocation coordination and boundary survey preparation. **Training**: TxDOT Roadway Hydraulic Design; TxDOT Bridge Hydraulic Design; and TxDOT Riverine Hydraulic Design. **Organizations**: American Society of Civil Engineer and Texas Floodplain Management Association | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - Lower Colorado River (CR) Flood Control Project, Wharton, TX | | | | PROFESSIONAL SERVICES: 2021 CONSTRUCTION: **2024 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Project Manager** for the basin-wide hydrologic and hydraulic study for the Colorado River to determine impacts and benefits of operational plan changes to existing reservoirs. Cost: $30.5M  ***Specialized Experience Area(s)***  Civil Information Modeling (CIM);  UFC 3-201-01, MII Cost Estimates, Specs Intact, USACE CADBIM Policies and Procedures, Full Design  Documents | * Managed multi-disciplinary practices to produce solicitation documents using MicroStation CADD software and HEC-RAS (unsteady) hydraulic modeling * Prepared DQCP, led design charrette and design review meetings, prepared confirmation notices, directed subcontractors for surveying and \cost estimating, prepared design analysis, developed UFC 3-201-01, CIM plans and specs deliverables using USACE CADBIM * Established the schedule & completed the project on-time & in budget * Conducted QC reviews * Ensured that the design was prepared in conformation with CivilWorks Planning Document, Lower CR Basin, Phase 1, TX, Interim Feasibility Report and Integrated Environmental Assessment, Volume III, Wharton | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| City of Lewisville - Timber Creek Streambank Stabilization Phase 2, Lewisville, TX | | | | PROFESSIONAL SERVICES: 2020  CONSTRUCTION: **2021** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Project Manager** for the 700 lf of streambank stabilization along Timber Creek including tieback gabion walls, gabion mattress, rock riprap, and turf reinforcement mat. Cost: $2.6M  ***Specialized Experience Area(s)***  CIM, Full Design Documents | * Managed project planning/execution, coordinated with the client, managed the analysis and design of 700 linear feet of streambank stabilization along Timber Creek with tieback gabion walls, gabion mattress, rock riprap, and turf reinforcement mat * Led the development of detailed analysis, design, cost estimation and preparation of construction plans, drainage easements, specifications, bid documents and permitting with USACE | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| City of Southlake - Patterson’s Pond Erosion Repairs - Southlake, TX | | | | PROFESSIONAL SERVICES: 2019 CONSTRUCTION: **2019** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Project Manager** for the vegetated segmental block downstream of the concrete spillway. Cost: $214.8K  ***Specialized Experience Area(s)***  CIM, Full design documents | * Oversaw hydraulic and scour analysis, counter-measure design downstream of the existing spillway.   Led the development of detailed analysis, design, cost estimation and preparation of construction plans, specs, and bid documents.   * Coordinated with USACE to address Section 404 permit requirements and flowage easements associated with the project. | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| City of Wharton – Wharton Levee Sump Study, Wharton, TX | | | | PROFESSIONAL SERVICES: 2020  CONSTRUCTION: **N/A** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Project Manager** for the for plans, specifications, and other supporting documents necessary for construction of Colorado River Levee Segments 1-4, covering more than 11,820 lf of levee from the Rust property west of Wharton, Texas to U.S. Highway Business 59 (Richmond Road), five interior sump areas, and Hughes Street relief storm sewer system for Caney Creek. Fee:$42.8K  ***Specialized Experience Area(s)***  CIM, Value Engineering, H&H Engineering | * Oversaw the sump design hydraulic analysis for Flood Damage Reduction Project on Colorado River in Wharton, TX * Oversaw the value engineering design services for the current design and evaluation of phased/partial construction of the Levee Segment 2, Vineyard Sump, and Harrison Sump facilities * Managed multi-disciplinary final deliverable for the preliminary engineering report that documented the analysis, methodology, results, cost estimation, and recommendations for phase sump and levee construction * Presented recommendations at both a neighborhood public meeting and a city council workshop | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Brazos River Authority (BRA) - Morris Sheppard Dam Breach Inundation, Granbury, TX | | | | PROFESSIONAL SERVICES: 2018  CONSTRUCTION: **N/A** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Project Manager** for the development of GIS-based flood inundation maps along the Brazos River mainstem resulting from a Morris Sheppard Dam Breach scenario. Fee:$120K  ***Specialized Experience Area(s)***  H&H Engineering | * Managed project planning/execution, coordinated with the client, managed the development of inundation mapping for the Morris Sheppard Dam breach scenarios (design flood and sunny-day breach) at Possum Kingdom Lake in accordance with TCEQ * Led the development of downstream reservoir guidelines for Lake Granbury’s DeCordova Bend Dam to determine impacts on lake level elevations and downstream flows | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | 13. ROLE IN THIS CONTRACT | | | 14. YEARS EXPERIENCE |
| **Rajesh Tolikonda, PE** | | **Civil Engineer Designer** | | | a. TOTAL: 11  b. WITH CURRENT FIRM: 10 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | Houston, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  MS, Civil Engineering  BS, Civil Engineering | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Civil): TX, #130945 (2018), LA and OK  USACE CQM | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Provides 11 years of experience leading civil engineering on various engineering projects that included military facilities, utilities, drainage structures, dams, levees, roadways, bridges, and other flood control structures for various federal clients including USACE, USDA-NRCS, NAVFAC Southeast, USFS, USFWS & IBWC. Expertise with AutoCAD, Civil-3D, InRoads, GEOPAK, MicroStation, HEC-1, XPSWMM, HEC-HMS, HECGeoHMS, HEC-GeoRAS, HEC-FDA and ArcGIS. Extensive experience in conducting engineering studies and designs for new construction and renovation of military facilities, utility infrastructure, landscaping, fire protection, and site drainage. **Training:** Federal Project Management*.* **Membership:** SAME, ACEC, ASCE. | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| AE Services for SRM and CTC Projects, Fort Polk, LA | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer Designer** for EISA compliant stormwater drainage for roads, buildings, parking lots, and utility improvements. Led design of wash racks, installation of domestic, fire water, and sewage utilities for building renovations including site restoration. Cost: $5.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Civil), MII Cost Estimates, Specs Intact, USACE CADBIM Policies and Procedures, Design-Build RFP Preparation, Full Design Documents | | * Developed an EISA Section 438 compliant stormwater drainage design using AutoCAD Civil 3D to eliminate ponding and redirect storm water and runoff from the roof and redeveloped parking lots * Designed UFC 3-201-01 compliant pumpstation, roadway, drainage slopes and ditches * Designed culvert repairs and drainage improvements, headwalls, wing walls, and apron with placement of Type 3 object markers in accordance with the Manual on Uni-form Traffic Control Devices (MUTCD) * Designed UFC compliant utility service improvements for domestic and fire water service, sewage, and other dry utilities to accommodate building renovations * Developed Civil 3D with ArcGIS site restoration plans and specs including flatwork and landscaping improvements * Participated in design charrette and provided civil improvements information | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| US Fish & Wildlife – Trinity River Champions Lake Spillway Replacement | Liberty, TX | | | | PROFESSIONAL SERVICES: 2019-2020  CONSTRUCTION: **2021** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer Designer** Led the design for the replacement/reconstruction of the existing Spillway. The primary purpose of this D-B project was to produce design-build construction documents, specifications, and a cost estimate to repair the levee/spill way and associated appurtenances. Rebuilding and armoring of the levee and associated spillway provided safe access for both the public and the utility companies that need to access their infrastructure. Cost: $3.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Civil), Full Design Documents | | * Designed spillway with use of CIM in accordance with federal, local, state standards * Performed erosion control calculations and developed seepage mitigation measure including installation of sheet piles * Evaluated 44 CFR §65.10 compliant existing flood conditions of the park area, performed levee inspection and levee certification for 100-yr flood event * Designed UFC 3-201-01 compliant spillway liner Articulated Concrete Blocks and drive sheet Piles to –19.50 ft elevation with the top of the sheet piles even with the elevation of the spillway. * Designed spillway requirements to control seepage from the upstream to downstream and maintain ‘Normal Pool” at the upstream end * Developed AutoCAD plans and specifications, and cost estimates * Responded to construction RFIs and involved in progress meetings | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District – A-E services for D-B-B Fort Hood – Repair North Fort Hood Drainage, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer** **Designer** Developed the civil design package to correct the drainage at NFH Cantonment by preventing the roads and airstrips overtopping and inundation during the 25-yr storm event and alleviating other general flooding issues associated with five areas in Fort Hood, TX. Cost: $5.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Civil), CADBIM, Full Design Documents Specs Intact (Civil), MII Cost Estimates | | * Conducted site visits, attended design charrette and design review meetings * Developed CADBIM (civil) design repair drawings using MicroStation V8i * Evaluated the existing flood conditions for the area, performed UFC 3-201-01 (Civil) complaint interior drainage analysis, delineation of drainage areas using ArcGIS, creation of rater files using LiDAR data, evaluated channel stability, stream restoration near US-36 * Responded to DrChecks design review comments and performed QA reviews of MII cost estimates | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District – Dallas Floodway System AT&SF Bridge Demolition, Dallas, TX | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2021** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer** **Designer** Developed the civil design package D-B-B package for modifying the existing AT&SF Railroad Bridge by demolishing portions of the bridge, while maintaining the Santa Fe Trestle Trail features. Cost: $2.8M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Civil), CADBIM, Full Design Documents, Specs Intact (Civil), MII Cost Estimates | | * Conducted site visits, attended design charrette and design review meetings * Developed CADBIM design repair drawings using MicroStation V8i * Coordinated with USACE, City of Dallas, local utility providers, and other stakeholders * Reviewed existing LiDAR data, and MII cost estimates * Held QC reviews using Bluebeam sessions * Responded to DrChecks design review comments and performed QA reviews of MII cost estimates * Prepared UFC 3-201-01 (Civil) complaint full design documents | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| IBWC - Sunland Park Levee Forensic Investigation, El Paso County, TX and Dona Ana County, NM | | | | PROFESSIONAL SERVICES: 2016  CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer** **Designer** for the investigation of the two levee segments of Rio Grande an 8.45-mile segment in El Paso County, TX and a 3.38-mile segment in Dona Ana County, NM. Cost:$10M  ***Specialized Experience Area(s)***  CIM, Full design documents | | * Analyzed rainfall events based on the available weather data and corelated with the flood event and erosion damage and associated amenities to protect work areas from future erosion * Performed modelling and simulation studies including the evaluation by using the research analysis, predesign site assessment, site identification surveys, USACE, IBWC, BOR design concepts, manuals, standards and reports * Designed appropriate grading and drainage filters to have a positive drainage with reduced impact on erosion of the levee slopes * Analyzed and designed access roads and the levee embankment crest roads to handle the maintenance and recreational traffic loading | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | 13. ROLE IN THIS CONTRACT | | | 14. YEARS EXPERIENCE |
| **Rob Wright, PE** | | **Civil Engineer Designer** | | | a. TOTAL: 27  b. WITH CURRENT FIRM: 10 |
| 15. FIRM NAME AND LOCATION *(City and State)*: SmithGroup | Madison, WI | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  BS, Civil Engineering (1995) | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Civil): WI # 34561-6 (2001), OH, ND, MN, IL, Hawaii | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Rob Wright is a principal and civil engineer with over 27 years of experience in the waterfront, coastal, heavy-civil, and municipal project areas. His experience includes engineering design and project management on a variety of diverse, multi-disciplinary, and complex coastal and waterfront projects. The projects include feasibility studies, inspections, civil and waterfront engineering design, construction document preparation, stormwater management and modeling, contract administration, field assessments and client coordination. Rob also works routinely with State and Federal Agencies on complex water quality permitting as part of the waterfront projects. Rob is a trusted technical resource to the waterfront practice and plays a key role in leading our large scale coastal protection and marina rehabilitation projects. His unique experience also includes serving as the appointed engineer for the Village of Mt. Horeb, Wisconsin. | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Port of Washburn Improvements, Washburn, WI | | | | PROFESSIONAL SERVICES: 2009-2020 CONSTRUCTION: **2010-2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer Designer** for redefining and upgrading the waterfront of the City of Washburn Harbor. The project scope consisted of rehabilitation of 575 feet of failing bulkhead wall, which included replacement of the upper portion of the 120 year old timber crib with a new concrete vertical wall, renovated the fuel dock and 150 ton travel lift dock by replacing the vertical steel wall system with a replacement system capable of withstanding the harsh weather conditions and loads imposed by the travel lift.  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Extensive client and team coordination throughout the project that was critical in redefining and upgrading the waterfront of the City of Washburn Harbor * Reviewed the master plan that provided a roadmap for improvements to be implemented over the next 20 years and included recommendations for revitalization of the City Dock bulkhead wall, public marina improvements, development of a waterfront park, enhanced beach area with public amenities, fish cleaning and boat wash-down facilities, a public boat launch, and improved circulation, parking, and boat storage * Designed and engineered a replacement of the existing launch ramp and boat handling facility, and restored another 515 linear feet of timber wall along the northern wall of the City Dock * Developed Design using AutoCAD | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Lakewalk and Shoreline Protection Project, Euclid, OH | | | | PROFESSIONAL SERVICES: 2009-2022 CONSTRUCTION: **2019-2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer Designer** for Waterfront master plan and implementation of a two-mile-long public access trail along the Lake Erie shoreline. The plan included a combination of offshore breakwaters to address erosion, provides bluff stabilization and re-vegetation, and creates public beaches and waterfront access for the community.  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Extensive client and team coordination throughout the project that was critical in preparing Waterfront master plan of a two-mile-long public access trail along the Lake Erie shoreline * Reviewed the master plan as part of a significant public engagement process that brought together over 80 private landowners, the City of Euclid, and permitting entities * Led overall Civil design for this project * Assisted the team in obtaining necessary environmental permits * Developed Design using AutoCAD | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Caesar Creek State Park Marina, Warren County, OH | | | | PROFESSIONAL SERVICES: 2014 CONSTRUCTION: **2016** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer Designer** for the design of a new marina and waterfront park. Work included construction document preparation, permitting, market analysis and public/private partnership formation. The team worked with the Ohio Department of Natural Resources to accommodate the needs of the park users as well as meet engineering needs required for the breakwaters and marina facility.  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Extensive client and team coordination throughout the design process that was critical in designing a new marina and waterfront park * Reviewed the Master plan * Performed hydraulic analysis and led the overall design of this project * Assisted the team in obtaining necessary environmental permits * Developed Design using AutoCAD | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Bradstreet’s Landing Pier and Shoreline Restoration, Rocky River, OH | | | | PROFESSIONAL SERVICES: 2018 CONSTRUCTION: **2019** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer Designer** for the improvements to Bradstreet Landing Park on Lake Erie. The plan improved the park by expanding access and use, enhancing water quality and habitat, and creating a nice destination for residents.  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Extensive client and team coordination in preparing Master plan and providing design for improvements to Bradstreet Landing Park on Lake Erie * Reviewed the Master plan and led Civil design for this project * Assisted the team in obtaining necessary environmental permits * Developed Design using AutoCAD | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Edgewater Marina Rehabilitation, Cleveland, OH | | | | PROFESSIONAL SERVICES: 2014 CONSTRUCTION: **2015** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer Designer** for the complete redesign and replacement of a marina destroyed by Hurricane Sandy on Lake Erie. Scope included new floating docks and anchoring, utilities, circulation promenade and fencing..  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Extensive client and team coordination throughout the design process that was critical in Edgewater Marina Rehabilitation * Led the Civil redesign and replacement of a marina destroyed by Hurricane Sandy on Lake Erie * Design included an analysis of extreme storm events and numerical modeling to determine design parameters for the proposed marina replacement * Developed Design using AutoCAD | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **Sam Sahai, PE** | | | **Civil Engineer Checker** | | a. TOTAL: 45  b. WITH CURRENT FIRM: 18 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | Houston, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  MS, Civil Engineering | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Civil): FL #53819 (1999), KY #10058, LA #25522, MS #20462, NC #38457, SC #19275, VA #37158, AL #12621, AR #9648, TN | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Sam has 45 years of experience providing civil and structural engineering services in the Southeast region for various clients including USACE, USDA-NRCS, NAVFAC Southeast, USFS, USFWS & IBWC. He has vast experience with civil and structural inspections and design of municipal infrastructure, port infrastructure, and industrial facilities. Expertise with AutoCAD, Civil-3D, InRoads, GEOPAK, MicroStation, HEC-1, XPSWMM, HEC-HMS, HECGeoHMS, HEC-GeoRAS, HEC-FDA and ArcGIS. He is also proficient in seismic evaluations and seismic rehabilitation as per ASCE 31 and 41, respectively. During the design phases of projects, he provides detailed review services to check that the project’s engineering recommendations are incorporated into the plans and specifications for the projects.**Training:** Federal Project Management*.* **Membership:** SAME, ACEC, ASCE. | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District – AE Services for SRM and CTC Projects, Fort Polk, LA | | | | PROFESSIONAL SERVICES: 2017-2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer Checker** for the development of D-B RFP and D-B-B RFPs including design of access trails, culvert repairs, crosswalk improvements, roads, and repairs for wash racks. Cost: $5.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Civil), Specs Intact, MII Cost Estimates, USACE CADBIM Policies and Procedures, Design-Build RFP Preparation, Full design documents | * Provided QA/QC Check of all analyses, designs, quantities, plans, specifications, estimates, reports, and other deliverables * Reviewed an EISA Section 438 compliant design for stormwater drainage using AutoCAD Civil 3D to eliminate ponding and redirect storm water and runoff from the roof and redeveloped parking lots * Reviewed the design of UFC compliant utility service improvements for domestic and fire water service, sewage, and other dry utilities to accommodate building renovations * Reviewed site restoration USACE CADBIM plans and specs including flatwork and landscaping improvements. * Participated in design charrette and all design review meetings * Reviewed UFC 3-201-01 complaint pumpstation design * Responded to Dr Checks design review comments and performed QA reviews of MII cost estimates | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District – A-E services for D-B-B Fort Hood – Repair North Fort Hood Drainage, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer Checker** for the development of the civil design package to correct the drainage at NFH Cantonment by preventing the roads and airstrips overtopping and inundation during the 25-yr storm event and alleviating other general flooding issues associated with five areas in Fort Hood, TX. Cost: $5.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Civil), MII Cost Estimates, Specs Intact, USACE CADBIM Policies and Procedures, Full design documents | * Provided QAQC Check of all analyses, designs, quantities, plans, specifications, estimates, reports, and other deliverables * Evaluated the existing flood conditions for the area, performed interior drainage analysis, delineation of drainage areas using ArcGIS, creation of rater files using LiDAR data, evaluated channel stability, stream restoration near US-36 * Participated in design charrette and all design review meetings * Responded to DrChecks design review comments and performed QA reviews of MII cost estimates * Reviewed the UFC 3-201-01 (Civil) complaint full design documents | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - A-E services for Maintenance at Dams 44, 45, 48, and 50, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2018-2020  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer Checker** for the development of four civil design packages for the maintenance of Dams and bring the dams into compliance with the State of Texas Dam Safety Laws & Guidelines, USACE and applicable federal regulations. Cost: $3.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Civil), MII Cost Estimates, Specs Intact, Full Design Documents | * Provided QAQC Check of all analyses, designs, quantities, plans, specifications, estimates, reports, and other deliverables * Reviewed UFC 3-201-01 (Civil) complaint design of the new access road with flex base that provides all-weather functionality across the embankment. Reviewed CIM storm drainage and SWPPP. * Reviewed the USACE Nationwide Permits that required to authorize minor activities in the Waters of US so that repairs could be authorized by NWP 3. * Responded to Dr Checks design review comments and performed QA reviews of MII cost estimates * Reviewed the Specifications in Specs Intact | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - Various Drainage Repairs at RGAAF, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2017-2018  CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer Checker** for the civil design to mitigate drainage issues on RGAAF at Fort Hood, TX. Cost:$4.9M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Civil), D-B RFP design, MII cost estimates, Specs Intact | * Provided QAQC Check of all analyses, designs, quantities, and draft/final/corrected final RFP deliverables * Relocated utility vaults and utility access holes to meet grade requirements along with correction to drainage failures to ensure compliance with UFC 3-260-01 * Reviewed civil design in AutoCAD * Responded to DrChecks design review comments and performed QA reviews of MII cost estimates * Reviewed the UFC 3-201-01 (Civil) complaint D-B RFP documents | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| IBWC - Sunland Park Levee Forensic Investigation, El Paso County, TX and Dona Ana County, NM | | | | PROFESSIONAL SERVICES: 2016  CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Civil Engineer** **Checker** for the investigation of the two levee segments of Rio Grande an 8.45-mile segment in El Paso County, TX and a 3.38-mile segment in Dona Ana County, NM. Cost:$10M  ***Specialized Experience Area(s)***  CIM, Full design documents | * Reviewed rainfall events based on the available weather data and corelated with the flood event and erosion damage and associated amenities to protect work areas from future erosion * Reviewed modelling and simulation studies including the evaluation by using the research analysis, predesign site assessment, site identification surveys, USACE, IBWC, BOR design concepts, manuals, standards and reports * Performed design review of UFC 3-201-01 (Civil) complaint grading and drainage filters to have a positive drainage with reduced impact on erosion of the levee slopes * Performed design review of access roads and the levee embankment crest roads to handle the maintenance and recreational traffic loading | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **Matthew O’Donnell, PE** | | | **Structural Engineer Designer** | | a. TOTAL: 35  b. WITH CURRENT FIRM: 23 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Gannett Fleming, Inc. | Columbus, OH | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  BS, Civil Engineering (1987) | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Structural): OH #PE.55646 (1991) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Matthew has 35 years of experience with alignment and alternatives analysis studies, structure-type studies, hydraulic and scour analyses, load ratings, final design and review, and environmental documents. His work spans 150+ projects (200+ bridges, including 80+ rehabs/reconstructions and 88 H&H analyses)*.* **Membership:** ACEC, ASCE. | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Homer Road over the North Fork of the Licking River and Frampton Road over Wakatomika Creek Bridge Replacements, Licking County, OH | | | | PROFESSIONAL SERVICES: 2016-2017  CONSTRUCTION: **2017** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Structural Engineer Designer** for preliminary and final bridge and roadway design services, and construction plan preparation for two bridge replacements over waterways. Cost: $1M  ***Specialized Experience Area(s)***  Full design documents | * Reviewed the hydraulic analyses * Developed the preliminary bridge layouts, and the final bridge designs and plans. The existing Homer Rd. Bridge over the North Fork of the Licking River was a 2-span, 84'-long steel beam bridge that was replaced with an 85’-long composite prestressed concrete box beam bridge on integral abutments with spill-through slopes. The existing Frampton Rd. Bridge over Wakatomika Creek was a 76’-long steel pony truss bridge that was replaced with a 100’-long composite prestressed concrete box beam bridge on integral abutments with spill-through slopes. * Recommended a prestressed concrete box beam superstructure on concrete substructures for the replacement type | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| MAH-80-0.97, I-80 Widening over the Meaner Reservoir, Mahoning County, OH | | | | PROFESSIONAL SERVICES: 2008  CONSTRUCTION: **2009** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Structural Engineer Designer** for the preliminary design of the widening and rehabilitation of three dual bridges on I 80 that cross over local roads. The project involved widening of a 4.5-mile section of I-80 to three lanes in each direction, including the replacement/ widening/ rehabilitation of six mainline concrete slab bridges by replacing the concrete decks with wider slabs, widening and patching the cap-and-column piers, and widening and patching the stub abutments. Cost: $95M  ***Specialized Experience Area(s)***  Full design documents | * Performed the preliminary substructure, bearing, and expansion joint designs and developing the site plan for the 2,500-foot-long, twin, prestressed-concrete I-beam bridges over Meander Creek Reservoir * Performed the preliminary design and developed the site plan for a dual, curved bridge widening, including the horizontal and vertical bridge geometries and the preliminary design of the foundations * Performed the preliminary designs of two other dual bridge widenings * Estimated construction costs for an alternatives study of the reservoir bridges * Prepared the final designs and plan details for the six concrete slab bridge widenings, including six pier designs using the RC-PIER computer program; and estimated final construction costs | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| PRE-35-17.74 over Twin Creek, Bridge Replacement, Preble County, OH | | | | PROFESSIONAL SERVICES: 2009-2010  CONSTRUCTION: **2010** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Structural Engineer Designer** for the design of a bridge replacement on US 35 over Twin Creek. The project involved replacing a 244'-long, three-span, closed-spandrel concrete arch bridge using part-width or accelerated construction methods. Cost: $1.8M  ***Specialized Experience Area(s)***  CIM, Full design documents | * Led the preliminary engineering study that involved hydraulic analyses of the existing bridge and two replacement alternatives using HEC-RAS; analyzing the proposed alternatives to determine the most cost-effective replacement concept, taking into consideration the accelerated construction costs and road user delay costs incurred by a 17-mile traffic detour versus the temporary shoring costs and unique construction challenges necessitated by implementing part-width construction; and developing preliminary design plans for the selected alternative * Established the proposed roadway alignment * Developed new roadway profiles for the two bridge alternatives * Established the geometries of the bridge replacement alternatives * Developed the preliminary designs for three-span composite prestressed-concrete box-beam and three-span composite steel beam bridge alternatives * Estimated construction costs, including the road user delay costs and accelerated construction costs * Final design involved designing and preparing detailed plans for a three-span, composite prestressed-concrete box-beam bridge * Coordinated with the preparation of the roadway and bridge construction plans; estimating construction costs and assisting with the overall project management and coordination | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| FRA-CR18-0027 (Central College Road) over Big Walnut Creek 51340, Franklin County, OH | | | | PROFESSIONAL SERVICES: 2009-2010  CONSTRUCTION: **2010** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Structural Engineer Designer** for the design of the rehabilitation of a 203-foot-long, four-span, prestressed-concrete box-beam bridge. The project also involved rehabilitation and patching of the existing stone abutments and pier. Cost: $925K  ***Specialized Experience Area(s)***  Full design documents | * Provided design for replacing the existing prestressed box beam and concrete slab superstructures with new, prestressed-concrete box beams and a composite concrete deck. The new superstructure was supported on new, capped-pile abutments, existing wall-type stone abutments, and a T-type (hammerhead) concrete pier * Developed the final design and plan details for the entire superstructure, a combination vehicular and bicycle railing, and substructures * Coordinated with the preparation of the bridge and roadway plans; estimated construction costs, and assisted with the overall project management and coordination | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Northwest Industrial Connector and MAR-309-1398 over Rock Swale Ditch, Marion County, OH | | | | PROFESSIONAL SERVICES: 2005-2010  CONSTRUCTION: **2010** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Structural Engineer Designer** for the preparation of bridge construction plans for a new roadway to allow semi-trucks to get from various industrial properties located west of the city of Marion to U.S. Route 23. Cost: $4.9M  ***Specialized Experience Area(s)***  Full design documents | * Reviewed hydraulic analyses of the existing channels and sizing the proposed culvert structures at two waterway crossings using HEC-RAS; evaluating floodplain impacts for the preferred alternative * Prepared the preliminary layouts and designs for the construction of 2 three-sided, precast-concrete culverts and a prestressed box-beam bridge widening * Prepared the preliminary the preliminary layouts for two conceptual bridge alternatives for a railroad overpass; and estimated preliminary construction costs * Prepared the culvert designs and detailed plans; * Designed the prestressed-concrete box beams, elastomeric bearings, and abutments for the bridge widening * Prepared detailed plans for the railroad overpass bridge that comprised a 321-foot-long, three-span continuous, steel plate girder superstructure supported by integral, capped-pile abutments and T-type (hammerhead) concrete piers * Coordinated with the preparation of plans; and estimated construction costs | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **Rukshan Wijeratne, PE** | | | **Structural Engineer Checker** | | a. TOTAL:22  b. WITH CURRENT FIRM: 7 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | Houston, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  MBA, Business Management  BS, Structural Engineering | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Structural): TX, # 102708 (2009) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Mr. Wijeratne’s Structural Engineering and Design experience includes military, institutional, commercial, medical and industrial projects. He specializes in high wind zone, seismic and blast design at military facilities. Proficient in International Building Code (IBC 2018), & ASCE 7-16 and material codes AISC/LRFD, ACI 318-14, ACI-530-05, NDS-05. He is also an experienced designer of connections for high-rise structures and renovation/restoration of historic buildings at military installations (Fort Sam Houston, JBSA-Randolph AFB, RRAD, Barksdale AFB, Laughlin AFB and Fort Hood). **Training:** SEAoT, SECB | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - Renovation of Buildings 16, 44, 615, 2002, and 2006, Fort Sam Houston, TX | | | | PROFESSIONAL SERVICES: 2017-2022  CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Structural Engineer Checker** Led QA/QC of five (5) separate 100% structural plans and specs to renovate five historical buildings (total 100,400 SF renovation area) that range from 100-130 years old to provide functional administrative office space with a 25-year usable life. Cost: $31M  ***Specialized Experience Area(s)***  UFC 3-201-01 (Structural), MII Cost Estimates, Specs Intact (Structural), USACE CADBIM Policies and Procedures, Full design documents | * Conducted site investigations to assess the condition of the facilities * Reviewed UFC 3-201-01 (Structural) compliant demolition plans for interior shear walls, load bearing walls, exterior doors and wood frame, and stairs. Reviewed load analysis and structural steel calculations on the beams * For B2006, reviewed UFC 3-201-01 (Structural) compliant design, replacement of deteriorated ground floor slab plus full renovation of the two balconies. For B44, reviewed design, two elevator/stair shafts on the east and west sides of the building. For B2002, reviewed design, new passenger elevator. * Performed QA/QC of all design deliverables * Attended charrette, design review meetings, responded to DrChecks comments, bidder inquiries and construction RFIs | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District – Dallas Floodway System AT&SF Bridge Demolition, Dallas, TX | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2021** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Structural Engineer** **Checker** for modifying the existing AT&SF Railroad Bridge by demolishing portions of the bridge, while maintaining the Santa Fe Trestle Trail features. Cost: $2.8M  ***Specialized Experience Area(s)***  UFC 3-201-01 (Structural), MII Cost Estimates, Specs Intact (Structural), USACE CADBIM Policies and Procedures, Full design documents | * Reviewed UFC 3-201-01 (Structural) compliant section details for the steel trestle bridge, piers, stringer beams and footings. Considered details carefully as slight deviation would increase the timeline of the project; cost increase due to change orders. The structural demolition plan showed the plan view of all the bridges that were to be demolished * Developed CADBIM design repair drawings using MicroStation V8i * Coordinated with USACE, City of Dallas, local utility providers, and other stakeholders * Reviewed existing LiDAR data, and MII cost estimates * Held QC reviews using Bluebeam sessions * Responded to DrChecks design review comments and performed QA reviews of MII cost estimates * Prepared Civil Full design documents | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - Repair Fire Protection, Install Security Fences and Repairs of Buildings at Red River Army Depot, Texarkana, TX | | | | PROFESSIONAL SERVICES: 2021  CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Structural Engineer Checker** Led QA/QC of structural designs for DB and DBB RFP packages for three fence projects. Designs completed in compliance with AT/ FP , DoD ABA and UFAS, UFC, and EISA standards. Cost: $16.5M  ***Specialized Experience Area(s)***  UFC 3-201-01 (Structural), MII Cost Estimates, Specs Intact (Structural), USACE CADBIM Policies and Procedures, Full design documents | * Attended the design charrette and conducted site investigations to assess the condition of the project sites * Reviewed UFC 3-201-01 complaint structural assessment of the wind and seismic lateral loading on security lighting posts for the fence projects and anchoring necessary to handle the seismic and wind loads * Utilized DrChecks to respond to design comments, attended design review meetings * Performed QA review of MII developed cost estimates | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - Repair Building B499 Randolph Air Force Base, TX | | | | PROFESSIONAL SERVICES: 2019  CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Structural Engineer Checker** Performed QA/QC of structural design package to renovate the entire 3rd floor (12,800 SF), of A-Wing at B499, HQ Air Force Personnel Center to provide open storage cubicle areas, a new secured area, command suite, SCIF facility & support spaces. Cost:$3.6M  ***Specialized Experience Area(s)***  UFC 3-201-01 (Structural), MII Cost Estimates, Specs Intact (Structural), USACE CADBIM Policies and Procedures, Full design documents | * Reviewed structural calculations to add 2500lbs in the non-secure area * Reviewed UFC 3-201-01 (Structural) complaint load analysis and structural steel calculations on the beams where as-builts were not provided. Used Revit for BIM modelling when structural analysis and calculations were performed * Responded to DrChecks design review comments * Performed QA reviews of MII cost estimates | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| IBWC - Sunland Park Levee Forensic Investigation, El Paso County, TX and Dona Ana County, NM | | | | PROFESSIONAL SERVICES: 2016  CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Structural Engineer** **Checker** for the investigation of the two levee segments of Rio Grande an 8.45-mile segment in El Paso County, TX and a 3.38-mile segment in Dona Ana County, NM. Cost:$10M  ***Specialized Experience Area(s)***  Full design documents | * Reviewed UFC 3-201-01 (Structural) compliant maintenance and recreational traffic loading on the access roads and the levee embankment crest roads * Reviewed structural reports on all water control structures and floodwalls within the study area. | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **John Ferencak, PE, LEED AP** | | | **Mechanical Engineer Designer** | | a. TOTAL: 24  b. WITH CURRENT FIRM: 6 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | San Antonio, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  BS, Mechanical Engineering (1998)  MS, Mechanical Engineering (2004) | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Mechanical): TX, #91775 (2003) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  John has 23 years of industry experience in numerous commercial, industrial, healthcare and government projects including USACE & GSA. His areas of expertise include air conditioning, and heating systems, ventilation systems, energy monitoring and control systems, piping systems, plumbing systems, cost estimating, energy auditing and life cycle cost analysis. **Training**: TxDOT- 17.2.1: Mechanical Engineering, TxDOT- 17.3.1: Plumbing Engineering. **Organizations**: ASHRAE, Texas Society of Professional Engineers | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| City of Dallas - Mill Creek-Peaks Branch-State Thomas Drainage Relief Project, Dallas, TX | | | | PROFESSIONAL SERVICES: 2022 CONSTRUCTION: **2023 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Mechanical Engineer Designer** for the design and construction of a 25,000 lf, 30-foot diameter, 100-foot deep tunnel to provide drainage relief for the Mill Creek and Peaks Branch drainage basins. Cost: $250M  ***Specialized Experience Area(s)***  Construction Phase Services, Fulldesign documents, USACE Coordination, Cost Estimating | * Oversaw the design for the heat load calculations for sizing of the HVAC equipment (low pressure systems) * Aided in the air distribution design of the vertical buildings * Managed the plumbing design of administrative facilities * Designed roof drainage outside to the building * Stamped/sealed mechanical and plumbing designs as the EOR | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| GSA- United States Federal Courthouse, San Antonio, TX | | | | PROFESSIONAL SERVICES: 2020  CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Mechanical Engineer Designer** for a new 6.4-acre federal courthouse built as a design-build project. Scope included preparation of construction documents, preliminary design concepts through final design review for the building. Cost: $142M  ***Specialized Experience Area(s)***  Design Charette, CPS services, Complex Mechanical design | * Assisted in designing mechanical hydronic systems that included a 900-ton central plant utilizing variable screw chillers piped in a variable primary arrangement. Project achieved 26% energy savings over EISA 2007 requirements. * Designed a smoke control system to meet life safety requirements for the atrium. * Designed facility according to LEEDv4 (Gold), GSA PBS-100, US Courts Design Guide, and US Marshals Service Publication 64. | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USAF- JBSA 502nd, Lackland AFB - Repair and Replace HVAC Components, B1160, San Antonio, TX | | | | PROFESSIONAL SERVICES: 2018 CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Mechanical Engineer** for the replacement of the HVAC and installation of new life safety systems for the air traffic control tower. Cost: $125K  ***Specialized Experience Area(s)***  Complex Mechanical design | * Oversaw the project and any oversights that involved the replacement of the existing chilled water air handlers with a VAV DX air handler * The existing stairwell was upgraded to meet current code for life safety which included a stair pressurization and fire alarm upgrades in compliance with UFC 3-600-01 * Designed HVAC in accordance with UFC 3-441-01 | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District- Corpus Christi Army Depot, Building 8 North Repairs, Phase E-H, Corpus Christi, TX | | | | PROFESSIONAL SERVICES: 2021  CONSTRUCTION: **2026 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Mechanical Engineer Designer** for the repair to the Building 8 North facility which included electrical, plumbing, lighting, communication, HVAC, fire suppression, elevator, mechanical, roof, structural, floor, ACP, and abatement of ACM and lead based paint. Cost: $48.9M  ***Specialized Experience Area(s)*** Design Charette; CIM; MII estimates; USACE CADBIM | * Conducted field survey to validate scope of work, design documents and engineering analysis for the upgrade of plumbing, HVAC, and other mechanical systems including central chill water plant, steam piping upgrades, decentralized boiler systems, VAV air handler systems and industrial ventilation * Performed HVAC loads and energy modeling in Trane Trace 700 * Designed HVAC and plumbing system Design are in accordance with UFC 3-441-01 and UFC 3-420-01 | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| TxDOT- DHQ Laboratory Renovation, San Antonio, TX | | | | PROFESSIONAL SERVICES: 2020  CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Mechanical Engineer** **Designer** for the renovation of a 15,000 sq ft laboratory for the San Antonio district headquarters of TxDOT. The laboratory functions included a sub-base material testing and asphalt lab. Cost: $2.4M  ***Specialized Experience Area(s)*** Design Charette; Complex Mechanical design, CADBIM | * Directed mechanical preconstruction engineering, design studies, and construction plans and specifications for mechanical, power systems, and controls for new Border Patrol Station * Designed key spaces that had HVAC systems within the buildings that included smoke purge and detention grade equipment and plumbing systems that included standard sewer, water, and vent * Stamped/sealed mechanical designs as the EOR | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **Dave Branson, PE, LEED AP BD+C** | | | **Mechanical Engineer Checker** | | a. TOTAL: 45  b. WITH CURRENT FIRM: 5 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | Houston, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  BS, Mechanical Engineering (1985) | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Mechanical): TX #61431 (1987)  LEED AP BD +C USGBC #10054321  LPST Corrective Action Project Manager, TX (CAPM00164) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Dave Branson has served as Project Engineer of Record on more than 40 LEED Silver certified projects. Specialist in LEED and ASHRAE 90.1 HVAC and Energy Analysis applications. He is an accomplished Engineer and Project Manager specializing in integrated building systems, indoor air quality and photocatalytic oxidation including HVAC, DDC Controls & plumbing systems. **Organizations**: SAME, American Society of Heating, Refrigerating, and ASHRAE. Served as a voting member on standard committee ASHRAE 90.1., Fellow ASHRAE | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District **-** Red River Army Depot (RRAD) – Install Security Fences and Repair Buildings, Texarkana, TX | | | | PROFESSIONAL SERVICES: 2021 CONSTRUCTION: **2023 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Mechanical Engineer Checker** forthe preparation of full construction plans and specs for 27 facility projects including major renovations to a warehouse and a fire station, including 23 DBB RFPs/ 4 Workplans. Designs completed in compliance with AT/ FP , DoD ABA and UFAS, UFC, and EISA standards. Cost**:** $16.5M  ***Specialized Experience Area(s)*** Specs Intact; MII estimates; USACE CADBIM, Full Design Documents | * Conducted site investigations to assess the condition of the project sites. * Reviewed ASHRAE 90.1 compliant design of MEP system upgrades to reduce heating and cooling lifecycle costs for Fire Station #1 * Reviewed design of insulation system, upgraded lighting using high efficiency LEDs, and upgraded the existing HVAC to accommodate the storage of temperature sensitive HazMat equipment and medical supplies * Utilized DrChecks to respond to design comments, attended design charrette and review meetings. | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District **-** A-E Services for multiple SRM & CTC Projects, Fort Polk, LA | | | | PROFESSIONAL SERVICES: 2017-2019 CONSTRUCTION: **2020 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Mechanical Engineer Checker** for the preparation of D-B-B RFP submittal for two separate packages for repairs to the North and South Wash Racks. Design included replacement of the 16-inch supply water lines, water cannons, two (2) electrical switch gears, control panels, lighting system, four 480V pumps, wiring and conduit, latrines, addition of two (2) hand wash stations, and control booth. Cost: $5.5M  ***Specialized Experience Area(s)*** Specs Intact; MII estimates; USACE CADBIM, Full Design Documents | * Conducted site investigations to assess the condition of the project sites * Reviewed design of pump station with 480V pumps, control room, control panels, electrical switch gears, high mast lighting system, 16-inch water supply lines, drain lines, 18-inch wash rack concrete slab, water cannons, hand wash stations, latrines, and landscaping. * Reviewed design of vehicle wash facility with two 200 HP wash pump station, 2160 G.P.M., and 235 Total Dynamic Head (T.D.H). Designed Post wash facility with two 25 HP wash pump station, 360 G.P.M., and 165 T.D.H. * Designed sufficient water pressure and volume to each wash station per UFC 4-214-03 guidance. * Utilized DrChecks to respond to design comments * Attended design charrette and review meetings | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District **-** Design of Tactical Equipment Maintenance Facility (TEMF) Renovations at Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2019 CONSTRUCTION**: 2022 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Mechanical Engineer Checker** for developing four (4) separate 100% plans and specifications packages for each battalion TEMF. Building renovations totaling required to rearrange the functional areas and capacities for doors, power/data upgrades, overhead cranes, and maintenance pits. Size: 88,000 SF. Cost: $22M  ***Specialized Experience Area(s)*** Specs Intact; MII estimates; USACE CADBIM, Full Design Documents | * Attended the design charrette and conducted site investigations to assess the condition of the project sites * Reviewed design of HVAC systems as per recent ASHRAE 90.1 requirements * Reviewed design of a dedicated Outside Air System for the interior space ventilation requirements * Reviewed design of vehicle exhaust systems for the repair and maintenance areas with manual controls | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District **-** Repair Building B499 Randolph Air Force Base, TX | | | | PROFESSIONAL SERVICES: 2019 CONSTRUCTION**: 2022 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Mechanical Engineer Checker** for developing a D-B-B RFP to renovate the entire 3rd floor of B499, HQ, at Air Force Personnel Center, to provide open storage cubicle areas, a new SCIF, a command suite, as well as additional support spaces. Size: 17,573 SF. Cost: $3.8M  ***Specialized Experience Area(s)*** Specs Intact; MII estimates; USACE CADBIM, Full Design Documents | * Reviewed design of HVAC systems as per ASHRAE 90.1 requirements. * Rerouted and designed HVAC utilities that do not specifically serve the secure area per ICD/ICS 705 Version 1.5. * Reviewed design of duct penetrations to the open storage and secure areas greater than 96 in2 with security bars per DODM 5200.01-Volume 3-Enclosure 3 and ICD/ICS 705 Version 1.5. * Attended design charrette and design review meetings * Performed overall QC of design deliverables * Responded to DrChecks comments and RFIs | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - AE Services for Design-Build Repair Building 6426, Hangar 3, for 11th Bomb Squadron, Barksdale AFB, LA | | | | PROFESSIONAL SERVICES: 2018 CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Mechanical Engineer Checker** for a 35% DB package ready to advertise (RTA) conceptual design and design analyses for renovations of a Hangar in conformance to UFC 4-211-01. Size: 28,000 SF. Cost: $6.6M  ***Specialized Experience Area(s)*** Specs Intact; MII estimates; USACE CADBIM, D-B RFP | * Reviewed design of HVAC system, ventilation, louvers and fans, and new air vents at restrooms * Reviewed Analyses / Studies / Life Cycle Costing as part of the design * Attended design charrette, VE study and design review meetings * Performed overall QC of design deliverables * Responded to DrChecks comments and RFIs | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **Phillip Applebaum, PE** | | | **Electrical Engineer Designer** | | a. TOTAL: 39  b. WITH CURRENT FIRM: 24 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | Richardson, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  BS, Electrical Engineering (1984) | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Electrical): TX #68404 (1990) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Phillip has managed and engineered the development of plans and specifications for MEP projects involving education and other institutional facilities. His discipline specific experience in all types of electrical distribution, including 5 and 15 KV systems, as well as functional, efficient, and decorative lighting design also makes him a key contributor of the project design. He is also experienced in specialty systems including computer room power and distribution, life safety systems, emergency power systems, and lighting control. His experience in managing multidiscipline projects that have significant MEP design due to existing conditions have made him a vital asset for those facilities that are required to remain in operation while construction is in progress. His discipline specific experience in all types of electrical distribution, including 5 and 15 KV systems, as well as functional, efficient, and decorative lighting design also makes him a key contributor in the aesthetic design of projects. Philip is also experienced in specialty systems including computer room power and distribution, life safety systems, emergency power systems, and lighting control. **Organizations**: Illuminating Engineering Society (IES); National Society of Professional Engineers (NSPE); Texas Society of Professional Engineers | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| City of Dallas - Mill Creek-Peaks Branch-State Thomas Drainage Relief Project, Dallas, TX | | | | PROFESSIONAL SERVICES: 2022 CONSTRUCTION: **2023 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Electrical Engineer Designer** for the design and construction of a 25,000 lf, 30-foot diameter, 100-foot deep tunnel to provide drainage relief for the Mill Creek and Peaks Branch drainage basins. Cost: $250M  ***Specialized Experience Area(s)***  Construction Phase Services, Fulldesign documents, USACE Coordination, Cost Estimating | * Led the global MEP design and provided overall QC on the electrical design * Coordinated efforts to facilitate a complete electrical design up to 100% design complete * Design oversight on electrical components including specifications on grounding systems, internal and external lighting systems, and special systems including fire alarms, access control, and CCTV * Performed the calculations for the associated fault current for each of the electrical panels | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Dallas Water Utilities - Roof and HVAC Equipment Replacement and Major Repairs, Dallas, TX | | | | PROFESSIONAL SERVICES: 2019 CONSTRUCTION: **2019** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Electrical Engineer Designer** for the replacement of roofing, HVAC equipment at various DWU facilities including 77 roof replacement designs and 461 HVAC system component replacements at 3 water treatment plants, 2 wastewater treatment plants, 3 service stations, and 12 pump stations. Cost: $3.6M  ***Specialized Experience Area(s)*** Major Electrical Upgrades | * Prepared the replacement documents for electrical systems * Verified existing condition assessments and assisted in solicitation for contracts and contract administration during construction. * Assisted in the analysis of one of Dallas’s critical pump stations that conveys treated water to other ground storage reservoirs via an 84-inch transmission main and pumps directly into the Pleasant Grove and East High-pressure zones. The station consists of nine pumps, four of which are two-speed, and has a total capacity of 400 mgd. | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| UT Dallas - Central Energy Plant (CEP) Electrical Upgrades, Richardson, TX | | | | PROFESSIONAL SERVICES: 2017  CONSTRUCTION: **N/A** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Electrical Engineer Designer** for the electrical design upgrades for the Central Energy Plant. Fee: $313K  ***Specialized Experience Area(s)***  Major Electrical Upgrades | * Provided electrical design that included new main campus main-tie-main distribution 12.47KV switchgear re-feeding existing campus loads and a new Energy Plant distribution main-tie-main 12.47KV switchgear dedicated to the CEP. This distribution gear provided multiple dedicated feeders to service all loads within the CEP including transformers serving 5KV chillers and a 480V main-tie-main distribution serving the central plant motor control centers. * Electrical Engineer of Record | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Toyota Manufacturing Plant Expansion for Kautex, San Antonio, TX | | | | PROFESSIONAL SERVICES: 2021  CONSTRUCTION: **N/A** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE | | | | |
| **Electrical Engineer Designer** for the electrical design for the expansion of an existing building. Fee: $56.5K  ***Specialized Experience Area(s)***  Major Electrical Upgrades | * Provided electrical design and engineered construction documents for the building expansion defining electrical distribution, connections for power and lighting systems, conduit raceways for telephone/data systems, security systems, and fire alarm. This included MV distribution to a new 3,000kVA transformer which feeds two independent 1,600 Amp Switchboards. * Electrical Engineer of Record | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Texas Department of Criminal Justice (TDCJ), Electrical Infrastructure Upgrade, Huntsville Unit, TX | | | | PROFESSIONAL SERVICES: 2017  CONSTRUCTION: **2017** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE | | | | |
| **Electrical Engineer Designer** for the upgrade to the electrical infrastructure within the entire complex. Fee: $575.3K  ***Specialized Experience Area(s)***  Major Electrical Upgrades | * Responsible for the preparation of engineering services to TDCJ for upgrade of electrical infrastructure for the complex including upgrades to unit substations, medium voltage and low voltage feeders, distribution panel and branch circuit panel upgrades, and repairs to equipment * Designed security lighting upgrades and installed in critical locations throughout the corrections campus. | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **Maged Rifat, PE** | | | **Electrical Engineer Checker** | | a. TOTAL: 47  b. WITH CURRENT FIRM: 5 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | Houston, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  BS, Electrical Engineering | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Electrical): TX #42314 (1977) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Maged Rifaat has more than 47 years of experience in providing electrical design for facilities, municipal water and wastewater system, construction, and inspection services and disaster management and response for various clients including USACE, City, County and various local entities. He has provided technical expertise in researching, developing, redesigning, and implementing various automation enhancements to streamline wastewater collection, treatment and maintenance activities, resulting in significant cost savings in energy usages, chemical consumptions, and communication services. His field of expertise includes the following: electrical load analysis; riser and one-line diagrams; lighting and power layout; short circuit current and voltage drop calculations panel schedules and specifications; power generation and transmission; high, medium and low voltage distributing system. | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District **-** Red River Army Depot (RRAD) – Install Security Fences and Repair Buildings, Texarkana, TX | | | | PROFESSIONAL SERVICES: 2021 CONSTRUCTION: **2023 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Electrical Engineer Checker** forthe preparation of full construction plans and specs for 27 facility projects including major renovations to a warehouse and a fire station, including 23 DBB RFPs/ 4 Workplans. Designs completed in compliance with AT/ FP , DoD ABA and UFAS, UFC, and EISA standards. Cost**:** $16.5M  ***Specialized Experience Area(s)*** Specs Intact; MII estimates; USACE CADBIM, Full Design Documents | * Conducted site investigations to assess the condition of the project sites. * Reviewed electrical design that included automatic cantilever rolling gate openers and UFC 3- 350-01 compliant security lighting at the vehicle and pedestrian gates. Gates con- formed to ADA criteria with CAC readers, intercoms, cameras, and keypads * Utilized DrChecks to respond to design comments, attended design charrette and review meetings. | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District **-** A-E Services for multiple SRM & CTC Projects, Fort Polk, LA | | | | PROFESSIONAL SERVICES: 2021 CONSTRUCTION: **2023 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Electrical Engineer Checker** for the preparation of D-B-B RFP submittal for two separate packages for repairs to the North and South Wash Racks. Design included replacement of the 16-inch supply water lines, water cannons, two (2) electrical switch gears, control panels, lighting system, four 480V pumps, wiring and conduit, latrines, addition of two (2) hand wash stations, and control booth. Cost: $5.5M  ***Specialized Experience Area(s)*** Specs Intact; MII estimates; USACE CADBIM, Full Design Documents | * Conducted site investigations to assess the condition of the project sites * Designed the control room with a control panel, a mini-power zone (480V-240/120V with a 60A panel), a heater fed by a disconnect switch, general receptacles, and a light fixture. * Designed exterior electrical distribution system with a service transformer, primary feeder, secondary feeder, and 3-phase service. Designed ASHRAE 90.1 2013, UFC 3-530-01and FAA complaint lighting for the control room and exterior high mast LED lighting. * Utilized DrChecks to respond to design comments, attended design charrette and review meetings | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District **-** Design of Tactical Equipment Maintenance Facility (TEMF) Renovations at Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2019 CONSTRUCTION**: 2022 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Electrical Engineer Checker** for developing four (4) separate 100% plans and specifications packages for each battalion TEMF. Building renovations totaling required to rearrange the functional areas and capacities for doors, power/data upgrades, overhead cranes, and maintenance pits. Size: 88,000 SF. Cost: $22M  ***Specialized Experience Area(s)*** Specs Intact; MII estimates; USACE CADBIM, Full Design Documents | * Attended the design charrette and conducted site investigations to assess the condition of the project sites * Reviewed design of automatic receptacle control in accordance with ASHRAE 90.1-2013 and automatic lighting control in accordance with ASHRAE 90.1-2013/UFC 3-530-01. Design included energy conservation and energy monitoring via sub-metering as required by ASHRAE 90.1 and 189.1. * Reviewed design for upgrading interior lighting control system for all areas with LED lights with energy-controlled sensors * Reviewed design QC of the new telecommunications room and premise distribution system in compliant with UFC-3-580-01 standards | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District **-** Repair Building B499 Randolph Air Force Base, TX | | | | PROFESSIONAL SERVICES: 2019 CONSTRUCTION**: 2022 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Electrical Engineer Checker** fordeveloping a D-B-B RFP to renovate the entire 3rd floor of B499, HQ, at Air Force Personnel Center, to provide open storage cubicle areas, a new SCIF, a command suite, as well as additional support spaces. Size: 17,573 SF. Cost: $3.8M  ***Specialized Experience Area(s)*** Specs Intact; MII estimates; USACE CADBIM, Full Design Documents | * Reviewed design of electrical wiring to support communication wiring and system/program set up per DODM 5200.01-Volume 3-Enclosure 3 * Verified and modified the existing electrical service/transformer to support new requirements. Electrical conductors were sized to handle project loads and then terminated into required electrical transmission equipment * Performed design QC of LED replacements for interior and exterior lights * Designed occupancy sensor-controlled surge protectors for cubicles to secure non-critical loads when workstations are unoccupied * Attended design charrette and design review meetings * Performed overall QC of design deliverables * Responded to DrChecks comments and RFIs | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - AE Services for Design-Build Repair Building 6426, Hangar 3, for 11th Bomb Squadron, Barksdale AFB, LA | | | | PROFESSIONAL SERVICES: 2018 CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Electrical Engineer Checker** for a 35% DB package ready to advertise (RTA) conceptual design and design analyses for renovations of a Hangar in conformance to UFC 4-211-01. Size: 28,000 SF. Cost: $6.6M  ***Specialized Experience Area(s)*** Specs Intact; MII estimates; USACE CADBIM, D-B RFP | * Reviewed design of new electrical service and new LED lighting and controls * Attended design charrette, VE study and design review meetings * Performed overall QC of design deliverables * Responded to DrChecks comments and RFIs | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | 13. ROLE IN THIS CONTRACT | | | 14. YEARS EXPERIENCE |
| **Kris D. Prasad, PE** | | **Geotechnical Engineer Designer** | | | a. TOTAL: 29  b. WITH CURRENT FIRM: 20 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | Houston, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  MS, Civil Engineering  BS, Civil Engineering | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Civil): TX #91952 (2003); LA #34186 (2008) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Professional experience includes 800+ projects with a value of over $500M for various clients including USACE, NAVFAC, IBWC, USDA-NRCS, USFWS, state and local agencies. Provided engineering and design services on horizontal structures such as airfield, levees, dams, channels, drainage structures, pump stations, public utilities, road and bridge projects, water and sewage line, buildings and military facilities, residential subdivision underground utilities, and pavement designs. Proficient in geotechnical softwares including but not limited to GeoStudio Suite (SEEP/W, SLOPE/W, SIGMA/W), Ensoft (APILE, LPILE, SHAFT, GROUP), PCASE, FLAC, PLAXIS, Bentley (gINT, HoleBASE, OpenGround). **Training:** Federal Project Management*.* **Membership:** SAME, ACEC, ASCE. | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| AE Services for SRM and CTC Projects, Fort Polk, LA | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Geotechnical Engineer Designer** for EISA compliant stormwater drainage for roads, buildings, parking lots, and utility improvements. Led design of wash racks, installation of domestic, fire water, and sewage utilities for building renovations including site restoration. Cost: $5.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Geotechnical), MII Cost Estimates, Specs Intact, USACE CADBIM Policies and Procedures, Design-Build RFP Preparation, Full Design Documents | | * Conducted pre-design site assessment by performing a site walk to document current conditions * Oversaw subsurface field investigation including EM 1110-1-1804 compliant soil borings up to 40 ft. using buggy & track mounted rigs * Assigned laboratory tests to determine the soil characteristics * Performed PCASE analysis and provided pavement design recommendations for new pavement with heavy equipment trailer with Abrams Tank * Performed Creek Stability analysis using SLOPE/W * Designed UFC 3-201-01 (Geotechnical) foundation for box culverts, retaining walls, slope riprap and roadway * Provided erosion control recommendations * Provided geotechnical design recommendations including lateral earth pressures, soil bearing pressure and uplift pressure for culvert foundation, foundation design for wash racks, groundwater control, pavement and trail design, and construction recommendations | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| US Fish & Wildlife – Trinity River Champions Lake Spillway Replacement | Liberty, TX | | | | PROFESSIONAL SERVICES: 2019-2020  CONSTRUCTION: **2021** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Geotechnical Engineer Designer** for the replacement/ reconstruction of the existing Spillway. The primary purpose of this D-B project was to produce design-build construction documents, specifications, and a cost estimate to repair the levee/spill way and associated appurtenances. Rebuilding and armoring of the levee and associated spillway provided safe access for both the public and the utility companies that need to access their infrastructure. Cost: $3.5M  ***Specialized Experience Area(s)***  UFC 3-201-01, Full Design Documents | | * Conducted pre-design site assessment by performing a site walk to document current conditions * Coordinated with the USFWS, USACE, TxDOT and County personnel * Acquired drill rig access for water borings, * Oversaw the field investigations, assigned lab testing, and analyzed the tests results for the design development of the existing dam with eroded rock fill spillway and reduce seepage through the voids of the filled rocks * Performed slope stability, seepage, settlement, erosion and seismic analysis of structures for the new spillway and existing levee * Provided UFC 3-201-01 (Geotechnical) compliant foundation design parameters for new spillway and intake structures * Utilized PLAXIS, SLOPE/W, SEEP/W, and gINT softwares | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District – A-E services for D-B-B Fort Hood – Repair North Fort Hood Drainage, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Geotechnical Engineer** **Designer** to correct the drainage at NFH Cantonment by preventing the roads and airstrips overtopping and inundation during the 25-yr storm event and alleviating other general flooding issues associated with five areas in Fort Hood, TX. Cost: $5.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Geotechnical), MII Cost Estimates, Specs Intact, USACE CADBIM Policies and Procedures, Full Design Documents | | * Conducted pre-design site assessment by performing a site walk to document current conditions * Led EM 1110-1-1804 compliant 25 soil borings drilled up to 25 feet using track mounted rigs * Assigned EM1110-2-1906 compliant and ASTM standards laboratory tests to determine moisture content, Atterberg limits, complete sieve analysis, soil classification, and triaxial test * Analyzed slope stability for the open channels for the conditions * Developed and analyzed a two-dimensional numerical model slope stability using the SLOPE/W module within GeoStudio * Provided UFC 3-201-01 (Geotechnical) compliant recommendations for erosion analysis, bedding for box culverts and reinforced concrete pipes, coefficient of earth pressures, rip-rap recommendations for outfalls, pavement design (PCASE), and construction recommendations | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - A-E Services for Dam 42 Repairs, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2017-2019  CONSTRUCTION: **2019** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Geotechnical Engineer** **Designer** for the repairs to rehabilitate Dam 42 to ensure the design and repairs bring the dam into compliance with the State, USACE and applicable federal regulations. Cost: $1.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Geotechnical), MII Cost Estimates, Specs Intact, USACE CADBIM Policies and Procedures, Full Design Documents | | * Reviewed the results of the USACE field and lab investigation * Performed engineering analysis which included seepage and stability analysis of the proposed embankment modifications and emergency spillway erodibility by using SEEP/W and SLOPE/W * Performed PCASE analysis and provided pavement design recommendations for new access road leading to the outfall with a landing area adjacent to the spillway outfall * Provided geotechnical parameters for bearing capacity, equivalent fluid pressures, and subgrade modulus * Provided recommendation for design alternative methods to restrict access and penetrations of embankment by incorporating Jersey barrier along downstream with accounting stability and seepage analysis required for the dam | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| IBWC - Sunland Park Levee Forensic Investigation, El Paso County, TX and Dona Ana County, NM | | | | PROFESSIONAL SERVICES: 2016  CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Geotechnical Engineer** **Designer** for the investigation of the two levee segments of Rio Grande an 8.45-mile segment in El Paso County, TX and a 3.38-mile segment in Dona Ana County, NM. Cost:$10M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Geotechnical), Full design documents | | * Conducted pre-design site assessment by performing a site walk to document current conditions * Performed forensic analysis of the levee by reviewing all the contract documents, QC data, and inquiring the personnel involved * Oversaw subsurface field investigation including EM 1110-1-1804 compliant soil borings (252) up to a depth of 80 ft. 130 soil borings were drilled on top of a levee and 122 borings drilled on the river side slope of the levee using buggy & track mounted rigs * Assigned laboratory tests to determine the soil characteristics * Performed UFC 3-201-01 (Geotechnical) complaint slope stability and seepage analysis, scour analysis, and provided erosion control measures, geophysical analysis, and provided engineering recommendations * Evaluated levee erosion and amount of soil loss for six factors: length of slope, slope gradient, ground cover, soil type, management, and rainfall * Utilized LPILE, SHAFT, GROUP, gINT softwares | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | 13. ROLE IN THIS CONTRACT | | | 14. YEARS EXPERIENCE |
| **Voss Lakshman, PE** | | **Geotechnical Engineer Checker** | | | a. TOTAL: 24  b. WITH CURRENT FIRM: 15 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV, LLC | Houston, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  MS, Civil Engineering  BS, Civil Engineering | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Civil): TX #90452 (2002) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Voss Lakshman has more than 24 years of professional experience in the areas of quality control, geotechnical engineering, foundation design, environmental engineering and construction management and inspection. His experience engineering includes structural foundation design of various structures from dams, brides, high-rise buildings, school buildings and facilities, and petrochemical plants to individual homes, roads, warehouses and retaining walls. He has vast knowledge of Corps of Engineers standards and specification, AASHTO and ASTM test methods, specifications, and practices. **Membership:** ACEC, ASCE. | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| AE Services for SRM and CTC Projects, Fort Polk, LA | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Geotechnical Engineer Checker** for EISA compliant stormwater drainage for roads, buildings, parking lots, and utility improvements. Led design of wash racks, installation of domestic, fire water, and sewage utilities for building renovations including site restoration. Cost: $5.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Geotechnical), MII Cost Estimates, Specs Intact, USACE CADBIM Policies and Procedures, Design-Build RFP Preparation, Full Design Documents | | * Reviewed laboratory tests to determine the soil characteristics * Reviewed PCASE analysis and provided pavement design recommendations for new pavement with heavy equipment trailer with Abrams Tank * Reviewed Creek Stability analysis using SLOPE/W * Reviewed UFC 3-201-01 (Geotechnical) complaint design for the foundation for box culverts, retaining walls, slope riprap and roadway * Reviewed erosion control recommendations * Reviewed geotechnical design recommendations including lateral earth pressures, soil bearing pressure and uplift pressure for culvert foundation, foundation design for wash racks, groundwater control, pavement and trail design, and construction recommendations | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| US Fish & Wildlife – Trinity River Champions Lake Spillway Replacement | Liberty, TX | | | | PROFESSIONAL SERVICES: 2019-2020  CONSTRUCTION: **2021** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Geotechnical Engineer Checker** for the replacement/ reconstruction of the existing Spillway. The primary purpose of this D-B project was to produce design-build construction documents, specifications, and a cost estimate to repair the levee/spill way and associated appurtenances. Rebuilding and armoring of the levee and associated spillway provided safe access for both the public and the utility companies that need to access their infrastructure. Cost: $3.5M  ***Specialized Experience Area(s)***  UFC 3-201-01 (Geotechnical), Full Design Documents | | * Reviewed laboratory test results including moisture content, Atterberg limits, complete sieve analysis, soil classification, triaxial testing, consolidation testing and permeability testing * Reviewed the tests results for the design development of the existing dam with eroded rock fill spillway and reduce seepage through the voids of the filled rocks * Reviewed UFC 3-201-01 (Geotechnical) complaint earth embankment and foundation recommendations for seepage analysis, seepage management for rockfill dam and levees with soil, slope stability analysis, and breach analysis * Reviewed gINT boring log fence diagrams * Reviewed UFC 3-201-01 (Geotechnical) complaint foundation design parameters for new spillway and intake structures * Reviewed UFC 3-201-01 (Geotechnical) complaint design for the spillway road which consisted of articulated concrete block erosion control mat | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District – A-E services for D-B-B Fort Hood – Repair North Fort Hood Drainage, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Geotechnical Engineer** **Checker** to correct the drainage at NFH Cantonment by preventing the roads and airstrips overtopping and inundation during the 25-yr storm event and alleviating other general flooding issues associated with five areas in Fort Hood, TX. Cost: $5.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Geotechnical), MII Cost Estimates, Specs Intact, USACE CADBIM Policies and Procedures, Full Design Documents | | * Reviewed EM1110-2-1906 compliant and ASTM standards laboratory tests to determine moisture content, Atterberg limits, complete sieve analysis, soil classification, and triaxial test * Reviewed slope stability for the open channels for the conditions * Reviewed and analyzed a two-dimensional numerical model slope stability using the SLOPE/W module within GeoStudio * Reviewed UFC 3-201-01 (Geotechnical) complaint recommendations for erosion analysis, bedding for box culverts and reinforced concrete pipes, coefficient of earth pressures, rip-rap recommendations for outfalls, pavement design (PCASE), and construction recommendations | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - A-E Services for Dam 42 Repairs, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2017-2019  CONSTRUCTION: **2019** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Geotechnical Engineer** **Checker** for the repairs to rehabilitate Dam 42 to ensure the design and repairs bring the dam into compliance with the State, USACE and applicable federal regulations. Cost: $1.5M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Geotechnical), MII Cost Estimates, Specs Intact, USACE CADBIM Policies and Procedures, Full Design Documents | | * Reviewed the results of the USACE field and lab investigation * Reviewed engineering analysis which included seepage and stability analysis of the proposed embankment modifications and emergency spillway erodibility by using SEEP/W and SLOPE/W * Reviewed PCASE analysis and provided pavement design recommendations for new access road leading to the outfall with a landing area adjacent to the spillway outfall * Reviewed geotechnical parameters for bearing capacity, equivalent fluid pressures, and subgrade modulus * Reviewed UFC 3-201-01 (Geotechnical) complaint recommendation for design alternative methods to restrict access and penetrations of embankment by incorporating Jersey barrier along downstream with accounting stability and seepage analysis required for the dam | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| IBWC - Sunland Park Levee Forensic Investigation, El Paso County, TX and Dona Ana County, NM | | | | PROFESSIONAL SERVICES: 2016  CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Geotechnical Engineer** **Checker** for the investigation of the two levee segments of Rio Grande an 8.45-mile segment in El Paso County, TX and a 3.38-mile segment in Dona Ana County, NM. Cost:$10M  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Geotechnical), Full design documents | | * Reviewed the existing as-builts before performing levee safety inspection and development of the risk assessment documentation * Reviewed forensic analysis of the levee by reviewing all the contract documents, QC data, and inquiring the personnel involved * Reviewed laboratory tests to determine the soil characteristics * Reviewed UFC 3-201-01 (Geotechnical) complaint slope stability and seepage analysis, scour analysis, and provided erosion control measures, geophysical analysis, and provided engineering recommendations * Reviewed geological site characterization and fault mapping for Canutillo Levees * Reviewed comparative analysis with historically failed earthen embankments due to dispersive soils | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | 13. ROLE IN THIS CONTRACT | | | 14. YEARS EXPERIENCE |
| **Chris Streb, PE** | | **Environmental Engineer Designer** | | | a. TOTAL: 27  b. WITH CURRENT FIRM: 21 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Biohabitats, Inc. | Baltimore, MD | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  MS, Biological Resources Engineering  BS, Civil Engineering | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Civil): MD #26960 (2003) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Chris has 27 years of diversified engineering experience in regenerative design including ecological planning, green infrastructure design, stream restoration, and sustainable technologies. His projects have ranged from green infrastructure planning for the New York City to designing patented floating wetland technology for the Baltimore Inner Harbor. Well versed in all aspects and scales of watershed restoration, his experience includes physical and biological assessments, hydrologic and hydraulic analyses, site evaluation and data synthesis, concept development, permitting, de-sign and construction documents, cost estimating, construction procurement and monitoring. His experience in the design of stormwater practices includes micro-bioretention systems, organic sand filters, and cisterns. He has engineered facilities for wastewater treatment which have incorporated anaerobic digesters, trickling filters, and wetland cells. Chris has been one of the creative leaders within Biohabitats, integrating engineering and a passion for the natural world to design ecological systems that yield functions and services that support communities, biodiversity, and life. **Trianing:** Rosgen Levels I-II, Biomimicry Specialist | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| H2OHIO Sandusky Bay Restoration Initiative Nutrient Reduction Wetlands, Vickery (Sandusky and Erie Counties), OH | | | | PROFESSIONAL SERVICES: 2020-2022  CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Environmental Engineer Designer** for Sandusky Bay Initiative to restore the ecological functionality of the Bay and improve water quality. The Initiative aims to restore coastal wetlands to enhance nutrient uptake, reduce algal blooms with a focus on Planktothrix (HAB). Fee: $810k  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Performed base line investigation * Designed grades for establishment of coastal wetlands * Determined design functions * Developed Civil Engineering Modeling concept plans for each of the nature-based shoreline and restoration sites * Designed invasive management plans and native planting plans * Designed habitat restoration and green infrastructure * Participated in public engagement process * Developed cost and budgeting information | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Cuyahoga Green Bulkheads at Irishtown Bend, Cleveland, OH | | | | PROFESSIONAL SERVICES: 2017-2021  CONSTRUCTION: **2021** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Environmental Engineer Designer** for the design of larval fish habitat along 5.6 miles of steel sheet pile on the Cuyahoga River navigation channel. Fee: $800K  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Assessed the stream and watershed conditions. * Developed a design to restore stability, ecological function, and safe access. * Led workshops and charrettes with stakeholders. * Designed and installed porotypes. | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Miquon School Stream Restoration, Conshohocken, PA | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Environmental Engineer Designer** for the stream restoration design for a creek adjacent to a school. Cost: $130K  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Assessed the stream and watershed conditions. * Developed a design to restore stability, ecological function, and safe access. * Coordinated clearances and permits, including threatened and endangered species, historic structures, erosion & sediment control, and a joint Department of Environmental Protection/U.S. Army Corps of Engineers waterways permit. | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Allegheny Arboretum Confluence Discovery Park Master Plan at Indiana University of Pennsylvania, Indiana, PA | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Environmental Engineer Designer** and Project Manager for assessing ecological conditions and regeneration of ecological functions of this former industrial site. Size: 354 acres | Fee: $49K  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Performed field inspection and site assessment. * Identified recommendations for ecological improvement. * Designed management plan for plant communities. * Identified key animal indicator species and their habitat requirements. * Developed an ecosystem service valuation including carbon storage, stormwater runoff reduction, and air pollution removal. * Quantified projected restoration benefits and their change as plant communities mature. | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Lardner’s Point Park Living Shoreline, Philadelphia, PA | | | | PROFESSIONAL SERVICES: 2017-2018  CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Environmental Engineer Designer** for this project that converts an industrial riverfront into an ecologically rich and sustainable greenway park.  Size: 4 acres | Cost: $1.4M  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Assessed the site conditions * Developed schematic design recommendation * Prepared final design and construction package for a park along the greenway corridor and trail network * Designed habitat enhancement and restoration components, including meadow creation, riparian woodland plantings, wetland enhancement and invasive species management * Designed a ‘living shoreline’ of native riparian and marsh plants to provide stabilization, habitat, and localized water quality improvement | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | 13. ROLE IN THIS CONTRACT | | | 14. YEARS EXPERIENCE |
| **Michael Lighthiser, PE, LEED AP** | | **Environmental Engineer Checker** | | | a. TOTAL: 27  b. WITH CURRENT FIRM: 21 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Biohabitats, Inc. | Denver, CO | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  MSc, Environmental Water Resources, Civil and Environmental Engineering  BS, Civil Engineering | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Civil): KY, # 22713 (2002); IN, PE10403242 (2003); OH, E67166 (2002); CA, 61790 (2001); CO, PE-38750 (2004) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Mike has 27 years of water resources engineer specializing in the restoration of natural systems for institutional, commercial, and public sector projects. He specializes in stream and wetland restoration. Proficient in H&H, and geomorphology of large rivers, creeks, fens, salt marshes, coastal lagoons, and shorelines. He is also an experienced in both steady and unsteady one-dimensional flow, sedimentation and erosion, and rainfall/runoff relationship, morphological surveys of streams, tidal inlets, and tidal channels; topographical surveys of marshes and shorelines; measurements of water level and velocity; bathymetric surveys; and wave-data collections. As one of the firm’s seniors and most experienced engineers, he regularly serves as design reviewer. **Trianing:** EPA SWMM, Rosgen Level I-II | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| H2OHIO Sandusky Bay Restoration Initiative Nutrient Reduction Wetlands, Vickery (Sandusky and Erie Counties), OH | | | | PROFESSIONAL SERVICES: 2020-2022  CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Environmental Engineer Checker** for Sandusky Bay Initiative to restore the ecological functionality of the Bay and improve water quality. The Initiative aims to restore coastal wetlands to enhance nutrient uptake, reduce algal blooms with a focus on Planktothrix (HAB). Fee: $810k  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Reviewed base line investigation * Reviewed grades designed for establishment of coastal wetlands * Reviewed design functions * Reviewed Civil Engineering Modeling concept plans for each of the nature-based shoreline and restoration sites * Reviewed invasive management plans and native planting plans * Reviewed habitat restoration and green infrastructure plans * Participated in public engagement process * Reviewed cost and budgeting information | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Detroit District – Knowlton Creek Run-off and Sediment Control Design for the Spirit Mountain Recreation Area Authority, Duluth, MN | | | | PROFESSIONAL SERVICES: 2009-2012  CONSTRUCTION: **2012** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Environmental Engineer Checker** oversaw the design process and plans, specifications, and ECIFP. Fee: $180K  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Civil), Full Design Documents, MII Cost Estimates for Ecological Restoration | | * Assessed sites * Reviewed UFC 3-201-01 compliant plans designed to reduce the quantity of run-off and to reduce the peak flows * Reviewed designed infiltration scenarios * Provided hydrographs and flows for the revised discharge * Contributed to hydraulic modeling of the storm sewer system * Performed overall QA/QC of the ecological design deliverables | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Philadelphia District – Wissahickon Feasibility Study, Philadelphia, PA | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Environmental Engineer Checker**, as a subconsultant, evaluated cost and restoration benefits for the 40 project restoration alternatives under consideration. Fee: $250K  ***Specialized Experience Area(s)***  CIM, UFC 3-201-01 (Civil), Full Design Documents, MII Cost Estimates for Ecological Restoration | | * Assessed restoration sites * Wrote and edited chapters of the feasibility stud * Reviewed restoration alternatives * Reviewed estimated construction costs for the alternatives * Reviewed UFC 3-201-01 compliant plans and specifications * Performed overall QA/QC of the ecological design deliverables | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Springbrook Garden Park Wetland Restoration, Mentor, OH | | | | PROFESSIONAL SERVICES: 2019-2020  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Environmental Engineer Checker** in charge of the engineering for a stream and wetland restoration and creation of new floodplain. Size: 1,175lf, 2.75 acres | Fee: $399K  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Performed design review of the integrated stream and wetland complex * Oversaw hydrologic and hydraulic modeling with Civil Engineering Modeling * Performed overall QA/QC of all restoration design deliverables * Consulted during construction to ensure compliance | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Marcourt Farms Chagrin River Restoration Design-Build, Village of Hunting Valley, OH | | | | PROFESSIONAL SERVICES: 2018-2019  CONSTRUCTION: **2019** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Environmental Engineer Checker** for engineering of stream stabilization and adjacent ecological restoration, including riparian habitat and floodplain connectivity. Size: 500lf, 1 acre | Cost: $385K  ***Specialized Experience Area(s)***  CIM, Full Design Documents | | * Oversaw design development * Provided technical oversight of the restoration design * Assisted with floodplain permitting - USACE Buffalo District - NWP27 * Performed overall QA/QC of all restoration design-build plan set * Oversaw memo for securing an Ohio EPA Section 319 grant * Consulted during construction to ensure compliance | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **Eric Babcock, PE** | | | **Fire Protection Engineering  Designer** | | a. TOTAL: 23  b. WITH CURRENT FIRM: 20 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Jensen Hughes, Inc. | Cary, NC | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  BS, Fire Protection Engineering (2000) | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Fire Protection): NC (048044); CA (FP1610); MD (32353); NJ (24GE050811400), NY (083801), VA (41615), KY (43764)  NCEES 16-883-72 | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Eric Babcock is a registered Professional Engineer experienced in the management of projects for the design, review, inspection, and commissioning of fire protection systems, including fire sprinkler, fire alarm, and life safety systems for government buildings. He provides oversight for the development of full building code analyses for use by all engineering disciplines, architects, and interior designers. **Membership:**Professional Member, Society of Fire Protection Engineers (SFPE); Member, National Fire Protection Association (NFPA); Member, Salamander Honorary Fire Protection Engineering Society **Training:** SprinkCAD Fire Protection Design/Calculation Seminar, October 2003; Fundamentals of Engineering, State of Delaware, Fall 2000; FM-200 Fire Suppression Systems, KIDDE Fire Systems Training Program; ADS Series, FM-200 Fire Suppression Systems, KIDDE Fire Systems Training Program **Publications:** Babcock, E., "NFPA 99: A Fire and Life Safety Perspective," Consulting Specifying Engineer, June 2016; Babcock, E., "Building Codes, Performance Based Design and Life Safety Systems," Pratt Institute Center for Continuing & Professional Studies, 2011; Babcock, E., "WTC 7 Tower Talk of SFPE Seminar," Consulting Specifying Engineer, November 2002 | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Maintain/Repair/Add HH60 Hangar B751 Maintenance Hangar, Patrick AFB, FL | | | | PROFESSIONAL SERVICES: 2018-2020 CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Fire Protection Engineer Designer.** Provided code consulting and design of the fire suppression system, water supply system, and fire alarm/mass notification system for the complete renovation of a 25,000-SF hangar bay with associated shops and support areas.Cost: $15M  ***Specialized Experience Area(s)***  USACE CADBIM; UFC 3-600-01 | * Acting Fire Protection Engineer of Record for Design * Designed UFC 3-600-01compliant Fire Suppression System (High-expansion Foam) * Designed UFC compliant fire life safety systems, mass notification system * Designed water supply lines * Provided upgrades to existing fire pump installation supplying hangar | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USAG, Humphreys East School, USAG Camp Humphreys, South Korea | | | | PROFESSIONAL SERVICES: 2022 CONSTRUCTION: **Ongoing** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Fire Protection Engineer Designer.** Provided fire protection, life safety and accessibility code reviews for the project. The project includes the design and construction of a new $57M Humphreys East School per DoDEA Education Facilities specifications. Cost: $57M  ***Specialized Experience Area(s)***  UFC 3-600-01; Use of USACE CADBIM Policies and Procedures | * Provided Fire Life Safety Services in compliance with UFC 3-600-01 * Provided on-site design charrette participation and report development * Performed building code and life safety code analysis and developed the Fire Protection/Life Safety Design Analysis and Life Safety Plan in accordance with the applicable UFCs and in conformance to the installation guidance document * Provided design and review services for the fire suppression and fire alarm / mass notification system including water-based sprinkler system. Produced deliverables in AutoCAD and Autodesk REVIT (BIM) | | | |

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| **c.** | (1) TITLE AND LOCATION *(City and State):* | | (2) YEAR COMPLETED |
| USACE, NASIC Building 828 Fire Protection Systems Replacement, Wright-Patterson AFB, OH | | PROFESSIONAL SERVICES: 2018-2022 CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | |
| **Fire Protection Engineer Designer.** Provided fire protection and life safety services for the design of fire protection systems and construction administration services.  ***Specialized Experience Area(s)***  UFC 3-600-01; Use of USACE CADBIM Policies and Procedures | * Acting Fire Protection Engineer of Record for Design * Designed UFC 3-600-01compliant replacement Fire Protection Systems * Participated in the design charrette and final documentation * Drawings developed using 3D BIM | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | (2) YEAR COMPLETED |
| P-707 Bachelor Enlisted Quarters, MCB Camp Lejeune, NC | | PROFESSIONAL SERVICES: 2020-2022 CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | |
| **Fire Protection Engineer Designer.** Provided code consulting and design of the fire alarm and fire sprinkler systems for the D/B of a new 75,487-SF three story BEQ. The complex shall contain 165 Marine Corps 2+0 rooms along with support spaces. Maximum occupancy shall be 330 enlisted military personnel. The facility shall be designed around enclosed interior corridors. Each Marine Corps 2+0 room shall include a double occupancy living/sleeping area, two individual closets, shared toilet with a shower compartment, and a sink service area. Cost:N/A  ***Specialized Experience Area(s)***  UFC 3-600-01, Use of USACE CADBIM Policies and Procedures | * Providing code consulting and design of the fire alarm and fire sprinkler systems for the D/B of a new 75,487-SF three story BEQ * Developed the code analysis and the Code Plans * Designed UFC 3-600-01compliant fire protection engineering for the water-based fire suppression systems and a fire alarm/mass notification system, performed a hydrant flow test to validate available water supply * Assisted in the development of the Cost Estimate for the Design Charrette Report and performed the 100% design submittal review. Deliverables were produced in AutoCAD and Autodesk REVIT (BIM) | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | (2) YEAR COMPLETED |
| Naval Operations Support Center (NOSC) Miscellaneous Repairs & Renovations, Chattanooga, TN | | PROFESSIONAL SERVICES: 2015-2016 CONSTRUCTION: **2017** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | |
| **Fire Protection Engineer Designer.** This project consisted of the Architecture, Interior Design, ATFP, and MEP design for a renovation of an existing 40,000 SF secure Naval Reserve. The spaces renovated included training, administrative, educational, assembly, storage spaces, and secure entry and reception spaces. Cost: N/A  ***Specialized Experience Area(s)***  UFC 3-600-01, USACE CADBIM | * Provided UFC 3-600-01compliant fire protection design narrative, the building code and life safety analysis, and design documents for the fire alarm and suppression systems in accordance with the applicable codes and standards for vehicle maintenance facilities, a correctional facility and an assembly facility that houses fire pumps and water storage tanks * Participated in the design charrette and final documentation * Drawings developed using 3D BIM. | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **James Waite, PE** | | | **Fire Protection Engineering  Checker** | | a. TOTAL: 16  b. WITH CURRENT FIRM: 5 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Jensen Hughes, Inc. | Cary, NC | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  BS, Fire Protection Engineering (2006) | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  PE (Fire Protection): NC 044586 (2016)  NICET #118943  Water-Based Systems Layout-Level III (2011) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Jimmy is a Fire Protection Engineer specializing in water-based fire protection systems. He also has experience with active fire protection systems including fire alarm systems and clean agent systems. Through his contracting background he has experience working with Authority Having Jurisdiction (AHJ) to gain permits and working to find solutions to permit complex projects. Member, Society of Fire Protection Engineers (SFPE) | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Maintain/Repair/Add HH60 Hangar B751 Maintenance Hangar, Patrick AFB, FL | | | | PROFESSIONAL SERVICES: 2018-2020 CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Fire Protection Engineer Checker.** Provided code consulting and design QC of the fire suppression system, water supply system, and fire alarm/mass notification system for the complete renovation of a 25,000-SF hangar bay with associated shops and support areas.Cost: $15M  ***Specialized Experience Area(s)***  USACE CADBIM; UFC 3-600-01 | * Reviewed UFC 3-600-01compliant Fire Suppression System (High-expansion Foam) * Reviewed UFC compliant fire life safety systems, mass notification system * Reviewed water supply lines * Reviewed upgrades to existing fire pump installation supplying hangar | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| P-707 Bachelor Enlisted Quarters, MCB Camp Lejeune, NC | | | | PROFESSIONAL SERVICES: 2020-2022 CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Fire Protection Engineer Checker.** Provided code consulting and design QC of the fire alarm and fire sprinkler systems for the D/B of a new 75,487-SF three story BEQ. The complex shall contain 165 Marine Corps 2+0 rooms along with support spaces. Maximum occupancy shall be 330 enlisted military personnel. The facility shall be designed around enclosed interior corridors. Each Marine Corps 2+0 room shall include a double occupancy living/sleeping area, two individual closets, shared toilet with a shower compartment, and a sink service area. Cost:N/A  ***Specialized Experience Area(s)***  UFC 3-600-01, Use of USACE CADBIM Policies and Procedures | * Performed design QC of the fire alarm and fire sprinkler systems for the D/B of a new 75,487-SF three story BEQ * Reviewed the code analysis and the Code Plans * Reviewed UFC 3-600-01compliant fire protection engineering for the water-based fire suppression systems and a fire alarm/mass notification system, performed a hydrant flow test to validate available water supply * Reviewed Cost Estimate for the Design Charrette Report and the 100% design submittal | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| P-707 Bachelor Enlisted Quarters, MCB Camp Lejeune, NC | | | | PROFESSIONAL SERVICES: 2018 CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Fire Protection Engineer Checker.** Provided fire protection construction administration services for fire protection including site inspections and shop drawings reviews for the design and construction of a multi-story 70,000 SF hangar/warehouse facility. The building included a hangar bay with shops and office spaces, and a warehouse area for storage of goods associated with the program. The project also included the construction of an open sided hazardous storage area, an open sided vehicle storage area, and a Motor-T automotive shop. Cost:N/A  ***Specialized Experience Area(s)***  UFC 3-600-01, Use of USACE CADBIM Policies and Procedures | * Performed design QC of the fire alarm and fire sprinkler systems for the design and construction of a multi-story 70,000 SF hangar/warehouse facility Reviewed the code analysis and the Code Plans * Reviewed the design of complete fire sprinkler protection, a low-level, low- expansion Aqueous Film Forming Foam (AFFF) system, fire alarm/mass notification and detection system, fire pump and water storage tanks * Reviewed Cost Estimate for the Design Charrette Report and the 100% design submittal | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| P-240 Triton Mission Control Facility, NAS Whidbey Island, Oak Harbor, WA | | | | PROFESSIONAL SERVICES: 2018 CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Fire Protection Engineer Checker.** Design-Build $26 million project to demolish the existing Building 240 at NASWI and construct a new 28,115 SF, one-story Triton Mission Control Facility. Cost:$26M  ***Specialized Experience Area(s)***  UFC 3-600-01, Use of USACE CADBIM Policies and Procedures | * Performed design QC of the fire alarm and fire sprinkler systems for this Design-Build $26 million project * Reviewed the design of complete wet pipe fire sprinkler system utilizing multiple risers and shielding, with a combination of fire alarm/mass notification and detection systems throughout the facility with multiple panels connected via fiber cabling for a design build Mega MACC Seed Project | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Repair Freight Terminal, Building 977 Renovation, Travis AFB, CA | | | | PROFESSIONAL SERVICES: 2019 CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Fire Protection Engineer Checker** for fire protection engineering services for the renovation of Building 977. Cost:N/A  ***Specialized Experience Area(s)***  UFC 3-600-01, Use of USACE CADBIM Policies and Procedures | * Performed design QC of the fire alarm/mass notification system; schematic design of a wet pipe sprinkler system; design of a carbon monoxide detection system for gas-fired radiant heaters; an egress analysis; and a fire protection narrative | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | 13. ROLE IN THIS CONTRACT | | | 14. YEARS EXPERIENCE |
| **Keith Kothmann, CPE, CCC, CCI** | | **Cost Engineer** | | | a. TOTAL: 45  b. WITH CURRENT FIRM: 40 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Construction Cost Management, Inc. | Fort Worth, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  Electrical Engineering Studies  BS, Engineering  CE PRIMAVERA P3 (1996) | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  Certified Professional Estimator (ASPE #1187166) – National – Membership obtained 1985  Certified Construction Consultant (ACI #6950) – National – Membership 1985  Certified Construction Inspector (ACI #6950) – National – Membership 1985  Scheduling Certification – 2000. | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Keith specializes in providing cost estimates for government and DoD, historic restoration, heavy civil, complex MEP projects, POL fuel facilities, National Park Service as well as many other unique project types. His expertise includes the use of MCACES MII, SUCCESS, PACES, Timberline, and other cost estimating programs as well as MS Project and Primavera for scheduling. His professional services include preparing conceptual/planning estimates, project schedules, schematic estimates, design development estimates, detailed preconstruction estimates, and life cycle costs. Projects range in all sizes up to approximately $500 million.  **Awards**: National Award Winner 2018 ASPE, Pentagon; National Award Winner 2021 ASPE, Trans-Canyon Waterline | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District – A-E services for D-B-B Fort Hood – Repair North Fort Hood Drainage | Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2020 CONSTRUCTION: **2021** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Cost Engineer** for the repair of North Fort Hood Drainage. Scope included alleviating overtopping of roadways by floodwaters, removing sediment buildup, repairing erosion, stabilizing all disturbed areas, alleviating flooding of infrastructure, installing culverts/headwalls/inlets, increasing ditch capacities, creating trapezoidal channels, placing/or removing concrete, installing Fort Hood Stormwater BMPs & correcting any failures identified during site investigations. Cost:$5.5M  ***Specialized Experience Area(s)***  MII Cost Estimates | | * Led the development of MII cost estimates for this project which needed correction of all drainage failures for Areas A, C, E, and Longhorn and Shorthorn Airstrips * Attended design charrette and all design review meetings. * Provided cost estimates and schedules for charrette, 35%, 65%, 95%, and 100% design submittals. | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District – Fort Hood Dams, 44, 45, 48 and 50, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2019 CONSTRUCTION: **2021** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Cost Engineer** for project that included drainage improvements for Dams 44, 45, 48, and 50, including earthwork, storm drainage, paving, and related improvements. ACC $3M MPT: 3.1.2, 3.1.3., 3.1.6. Cost:$9.5M  ***Specialized Experience Area(s)***  MII Cost Estimates | | * Led the development of MII cost estimates for project that included drainage improvements for Dams 44, 45, 48, and 50, including earthwork, storm drainage, paving, and related improvements. * Attended design charrette and all design review meetings. * Provided cost estimates and schedules for charrette, 35%, 65%, 95%, and 100% design submittals. | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District – Sabine Pass to Galveston Bay, Port Arthur and Vicinity Coastal Storm Risk Management, (CSRM) | | | | PROFESSIONAL SERVICES: 2019 CONSTRUCTION: **N/A** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Cost Engineer** for this iconic project. The project starts at the northern end of the Taylors Bayou Turning Basin, where steel sheet pile floodwall meets concrete piles. The existing Port Arthur and Vicinity Hurricane Flood Protection Project consists of concrete piles, both cantilever and braced cantilevered. The floodwall was located adjacent to the Taylors Bayou Turning Basin which was to be dredged for maintenance and deepening. A portion of the floodwall section failed in August 2017 due to erosion of the flood-side foundation materials. Cost: N/A  ***Specialized Experience Area(s)***  MII Cost Estimates, Value Engineering | | * Led the development of MII cost estimates and Value Engineering services for this project * Provided cost estimates including removal of the floodwall as needed and a new floodwall section to be designed and constructed. This project accounted for future deepening of Taylors Bayou Turning Basin based on the Sabine-Neches Waterway Channel Improvement Feasibility study. This included erosion and scour protection, impact barriers, resiliency features, utilities and structures * Attended design charrette and all design review meetings * Led the VE Study * Provided cost estimates and schedules for charrette, 35%, 65%, 95%, and 100% design submittals. | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE South Texas Levee / Border Wall– Rio Grande Valley Floodwall | | | | PROFESSIONAL SERVICES: 2019 CONSTRUCTION: **2021** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Cost Engineer** for the first 3-mile section of the US/Mexico border wall to be constructed, therefore the VE ideas generated from this meeting could possibly be used on the entire wall from the Gulf of Mexico to the Pacific Ocean, thereby generating a much greater impact than just for the immediate scope. Scope included a new concrete floodwall / levee with a new border wall constructed on top with related security improvements adjacent to the wall. Cost: $36 million. MPT: 3.1.3  ***Specialized Experience Area(s)***  MII Cost Estimates, Value Engineering | | * Led the development of MII cost estimates for this project that consisted of approximate 3-mile section of United States and Mexico Border * Attended design charrette and all design review meetings. * Participated in the VE Study * Provided cost estimates and schedules for charrette, 35%, 65%, 95%, and 100% design submittals. | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - Various Drainage Repairs at RGAAF, Fort Hood, TX | | | | PROFESSIONAL SERVICES: 2017-2018  CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Cost Engineer** for the development of D-B RFP to mitigate drainage issues on RGAAF at Fort Hood, TX. Cost:$4.9M  ***Specialized Experience Area(s)***  UFC 3-201-01, D-B RFP design | | * Led the development of MII cost estimates for this project that consisted of development of D-B RFP to mitigate drainage issues on RGAAF at Fort Hood, TX * Attended design charrette and all design review meetings. * Provided cost estimates and schedules for draft, final and corrected final D-B RFP deliverables | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **Dale Rhoads, AIA** | | | **Architect Designer** | | a. TOTAL: 38  b. WITH CURRENT FIRM: 10 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | McAllen, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  AAS, Architectural Technology (1985) | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  Registered Professional Architect: TX #20504 (2008)  Registered Accessibility Specialist: TX #1257 (2010) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Dale joined Halff in 2011, bringing more than 25 years of architectural and related project experience. His experience includes education, government, corporate, medical, and criminal justice projects. Dale is an expert in building systems and the production of construction documents, Dale is responsible for the coordination of architectural detailing, the incorporation of structural and MEP building systems into significant new construction and renovation projects. He has been involved in numerous USACE projects in the SWD. | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Dallas Water Utilities - Stormwater Operations Center, Dallas, TX | | | | PROFESSIONAL SERVICES: 2020 CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Architect Designer** for the confirmation of programming and building concept development for a Flood Control Operations Center to include administration offices, conference training center, staff facilities, and mechanical and electrical warehouse facilities for the City of Dallas’ Dallas Water Utilities. Cost: $11.5M  ***Specialized Experience Area(s)***  CADBIM, Fulldesign documents | * Led the final design documentation of the project, including architectural BIM modeling and coordination. * Coordinated with all disciplines through completion of the design documents. * As a Construction Administration Architect, oversaw the building construction as owner’s representative, shop drawing review, RFI resolution, and general contractor coordination | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Dallas Water Utilities- Meter Services Facility, Dallas, TX | | | | PROFESSIONAL SERVICES: 2019  CONSTRUCTION: **2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Architect Designer** for a new 37,900 sf facility intended to house the former Meter Operations and Meter Reading Division functions for Dallas’ municipal water distribution system. Cost: $11.5M  ***Specialized Experience Area(s)***  CADBIM, Fulldesign documents | * Designed a new building to house the administrative, meeting and shops/operations functions of these two entities. Meeting areas included training rooms employing up-to-date technology, conferencing and break areas, a ‘bull pen’ for use as a home base by field personnel, and an exercise area. The shops included large and small meter test bench apparatus a meter rebuilding shop, meter storage areas and a ‘plug shop’ * Provided design for a three-ton bridge crane and significant water flow infrastructure and utilities at the test benches. | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - Air and Marine Operations Center,  March Air Reserve Base, Riverside, CA | | | | PROFESSIONAL SERVICES: 2017 CONSTRUCTION: **2018** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Architect Designer** for the plans, specifications, design analyses; cost estimates, schedules; DBB and DB requests for multidisciplinary engineering for a new construction facility. Cost: $10.9M  ***Specialized Experience Area(s)*** CADBIM, Specs Intact, MII Cost Estimates, Value Engineering | * Led schematic and final design documentation of the project, including all architectural BIM modeling and coordination * Coordinated with all disciplines through completion of the design documents * Participated in USACE on-site design review meetings at intermittent milestones * Coordinated with, structural, mechanical, civil and electrical and incorporated value engineering study recommendations into final design | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District- Brown Field Border Patrol Station, Dulzura, CA | | | | PROFESSIONAL SERVICES: 2020  CONSTRUCTION: **2022 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Architect Designer** for the ancillary support facilities and structures consisting of a vehicle maintenance facility, covered structure for 64 ATVs, vehicle wash facility and fuel station, kennel facility, a pump house facility and storage tanks for domestic water and fire services, a heliport, and an on-site wastewater treatment system. Cost: $33.5M  ***Specialized Experience Area(s)*** CIM, CADBIM, Specs Intact, MII Cost Estimates, Full Design | * Oversaw schematic and final design documentation of the project, including all architectural BIM modeling and coordination * Prepared building designs to optimize a 50,000-sf admin building with room for expansion, maintenance building, heliport, kennels * Prepared final architectural design and specifications including coordination of finishes of the facilities * Participated in USACE on-site design review meetings at intermittent milestones. Incorporated the results of the value engineering study into the final design and construction documents | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Perot Development - Logistics Center 9, 10, & 11, DFW Airport, TX | | | | PROFESSIONAL SERVICES: 2019  CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Architect Designer** for a campus of five new speculative office/warehouse distribution center buildings, totaling 2.35M SF. Facility designed for logistics and/or freight forwarding, with multiple office locations and configuration possibilities per building. Cost: $59.5M  ***Specialized Experience Area(s)*** CIM, CADBIM, Full Design | * Led the overall design of the warehouse buildings. * Oversaw all phases of building design and documentation of the warehouse buildings within the project, including architectural BIM modeling and coordination. * Coordinated with all disciplines through completion of the design documents. * Provided construction administration services including shop drawing review, RFI resolution, and general contractor coordination. | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | | 13. ROLE IN THIS CONTRACT | | 14. YEARS EXPERIENCE |
| **Alan LaFon, RPA, AIA, NCARB, LEED AP** | | | **Architect Checker** | | a. TOTAL: 38  b. WITH CURRENT FIRM: 5 |
| 15. FIRM NAME AND LOCATION *(City and State)*: Kenall-Halff JV-2, LLC | Richards, TX | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  M. Arch., Architecture (1986)  B. Arch., Architecture (1983) | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  Registered Professional Architect (RPA): TX, #22920, 2011; OK & 2 other states; AIA; NCARB; LEED AP | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Provides over 38 years of experience in the design and project management of multi-discipline projects for NAVFAC, USACE, DOE, DoD, CBC, GSA and National Guard construction projects. Skilled in facilitation of charrettes, building design and coordination of all disciplines for a successfully executed project. Skilled in providing sustainable solutions to meet LEED standards. **Training**: TxDOT – 16.1.1: Architecture, TxDOT- 16.2.1: Building and Facilities Architecture. **Organizations**: AIA, NCARB | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| UTRWD- Lake Ralph Hall Utilization & Master Plan, Ladonia, TX | | | | PROFESSIONAL SERVICES: 2020 CONSTRUCTION: **2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Architect Checker** for the staff coordination, law enforcement interviews, understanding of environmental impacts, GIS data management, graphics and maps. Fee: $431.8K  ***Specialized Experience Area(s)***  GIS, Environmental | * Provided planning services to define the shoreline types, areas for demolition and preservation, habitat for wildlife and fisheries, and recreational areas for public use once the lake is fully impounded. * Oversaw the shoreline utilization plan evaluated areas for shoreline management and lake operations for UTRWD staff as well as law enforcement including Texas Parks & Wildlife and the County Sheriff | | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Dallas Water Utilities- Meter Services Facility, Dallas, TX | | | | PROFESSIONAL SERVICES: 2022  CONSTRUCTION: **Ongoing** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Architect Checker** for the surveying, civil engineering, architecture, structural, and MEP engineering of the site re-development of the Plant. Fee: $311.6K  ***Specialized Experience Area(s)***  CADBIM, Fulldesign documents | * Led the preparation of a project programing, concept design and master plan report for the site re-development of the Overholser Water Treatment Plant. * Reviewed programming of the building construction that will be considered and decommissioning and demolition of the existing water treatment equipment included in the master plan | | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District - Corpus Christi Army Depot, Building 8 North Repairs, Phase E-H, Corpus Christi, TX | | | | PROFESSIONAL SERVICES: 2021 CONSTRUCTION: **2026 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Architect Checker** for the repair to the facility which included a multi-disciplinary team of MEP, elevator, mechanical, roof, structural, floor, ACP, and abatement of ACM and lead based paint. Cost: $48.9M  ***Specialized Experience Area(s)***  USACE CADBIM; MCASES MII; Facilitation of VE studies; Full Design Documents | * Reviewed overall architectural design for the repair of Building 8 at Corpus Christi, TX * Ensured comments were addressed properly in the contract documents and that the project was in full compliance with the technical requirements. * Ensured project progress was satisfactory and that the project was delivered on schedule. * Ensured compliance with UFCs and utilized AutoCAD with A/E/C CAD standards and used SpecsIntact format. | | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| USACE Fort Worth District- Buildings 9403-9416 H Barracks at McGregor Base Camp, El Paso, TX | | | | PROFESSIONAL SERVICES: 2022  CONSTRUCTION: **2024 (est.)** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Architect Checker** for the renovation of 15 buildings “H Barracks” configuration into a “U-shaped Barrack” configuration, totaling 128,835 SF. The design included new electrical, plumbing, lighting, communication, HVAC, and fire suppression system as well as all new interior and exterior finishes. Cost: $40M  ***Specialized Experience Area(s)*** CIM, MII estimates; USACE CADBIM, Specs Intact, Full Design Documents | * Oversaw schematic and final design documentation of the project, including all architectural BIM modeling and coordination. * Reviewed building designs to optimize a 50,000-sf admin building with room for expansion, maintenance building, heliport, kennels. * Reviewed final architectural design and specifications including coordination of finishes of the facilities. * Participated in USACE on-site design review meetings at intermittent milestones. Incorporated the results of the value engineering study into the final design and construction documents. | | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| TxDOT Pharr- Regional Headquarters Renovations; Pharr, TX | | | | PROFESSIONAL SERVICES: 2019  CONSTRUCTION: **2019** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Architect Checker** for the converted existing administrative and warehouse space into newly remodeled office spaces. Cost: $2.5M  ***Specialized Experience Area(s)***  CIM, Fulldesign documents | * Oversaw the asbestos abatement throughout the facility, new floor finishes, paint and new ceilings throughout the existing facility. * QA/QC the design of new energy-efficient electrical and mechanical systems since outdated ones were gutted * Designed and oversaw existing toilet rooms with new fixtures and finishes, new low voltage wiring for Network and VOIP systems and security systems. | | | |

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| E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT | | | | | |
| **12. NAME** | | 13. ROLE IN THIS CONTRACT | | | 14. YEARS EXPERIENCE |
| **Jason Stangland, PLA, LEED AP** | | **Landscape Architect** | | | a. TOTAL: 23  b. WITH CURRENT FIRM: 17 |
| 15. FIRM NAME AND LOCATION *(City and State)*: SmithGroup | Madison, WI | | | | | |
| 16. EDUCATION*(Degree and Specialization)*  BS, Landscape Architecture | | | | 17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*  Landscape Architect: WI #477 (2003) | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS*(Publications, Organizations, Training, Awards, etc.):*  Jason Stangland is a principal landscape architect with SmithGroup with over 18 years’ experience and expertise in urban design, planning and waterfront development. For the past 10 years Jason has been working to strategically position communities to rebuild and enhance their waterfronts as catalytic economic and social reinvestments for the communities they serve. He has worked with municipalities throughout the Great Lakes and Mississippi River basin to holistically integrate ecological, economic, and cultural amenities that help reimagine underutilized waterfront properties. As part of these projects, Jason helps identify and secure funding resources for clients and municipalities through a variety of federal, state, and local grant programs. | | | | | |
| 19. RELEVANT PROJECTS | | | | | |
| **a.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Port of Washburn Improvements, Washburn, WI | | | | PROFESSIONAL SERVICES: 2009-2020 CONSTRUCTION: **2010-2020** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Landscape Architect** for redefining and upgrading the waterfront of the City of Washburn Harbor. The project scope consisted of rehabilitation of 575 feet of failing bulkhead wall, which included replacement of the upper portion of the 120 year old timber crib with a new concrete vertical wall, renovated the fuel dock and 150 ton travel lift dock by replacing the vertical steel wall system with a replacement system capable of withstanding the harsh weather conditions and loads imposed by the travel lift, designed and engineered a replacement of the existing launch ramp and boat handling facility, and restored another 515 linear feet of timber wall along the northern wall of the City Dock.  ***Specialized Experience Area(s)***  Full Design Documents | | * Extensive client and team coordination throughout the project that was critical in redefining and upgrading the waterfront of the City of Washburn Harbor * Prepared the master plan that provided a roadmap for improvements to be implemented over the next 20 years and included recommendations for revitalization of the City Dock bulkhead wall, public marina improvements, development of a waterfront park, enhanced beach area with public amenities, fish cleaning and boat wash-down facilities, a public boat launch, and improved circulation, parking, and boat storage * Developed 3D Modeling visualization using Sketchup | | |
| **b.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Lakewalk and Shoreline Protection Project, Euclid, OH | | | | PROFESSIONAL SERVICES: 2009-2022 CONSTRUCTION: **2019-2022** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Landscape Architect** for Waterfront master plan and implementation of a two-mile-long public access trail along the Lake Erie shoreline. The plan included a combination of offshore breakwaters to address erosion, provides bluff stabilization and re-vegetation, and creates public beaches and waterfront access for the community.  ***Specialized Experience Area(s)***  Full Design Documents | | * Extensive client and team coordination throughout the project that was critical in preparing Waterfront master plan of a two-mile-long public access trail along the Lake Erie shoreline * Prepared the master plan as part of a significant public engagement process that brought together over 80 private landowners, the City of Euclid, and permitting entities * Obtained necessary environmental permits * Developed 3D Modeling visualization using Sketchup | | |
| **c.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Caesar Creek State Park Marina, Warren County, OH | | | | PROFESSIONAL SERVICES: 2014 CONSTRUCTION: **2016** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Landscape Architect** for the design of a new marina and waterfront park. Work included construction document preparation, permitting, market analysis and public/private partnership formation. The team worked with the Ohio Department of Natural Resources to accommodate the needs of the park users as well as meet engineering needs required for the breakwaters and marina facility.  ***Specialized Experience Area(s)***  Full Design Documents | | * Extensive client and team coordination throughout the design process that was critical in designing a new marina and waterfront park * Led the preparation of Master plan and design for this project * Assisted the team in obtaining necessary environmental permits * Developed Design using AutoCAD * Developed 3D Modeling visualization using Sketchup | | |
| **d.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Bradstreet’s Landing Pier and Shoreline Restoration, Rocky River, OH | | | | PROFESSIONAL SERVICES: 2018 CONSTRUCTION: **2019** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Landscape Architect** for the improvements to Bradstreet Landing Park on Lake Erie. The plan improved the park by expanding access and use, enhancing water quality and habitat, and creating a nice destination for residents.  ***Specialized Experience Area(s)***  Full Design Documents | | * Extensive client and team coordination in preparing Master plan and providing design for improvements to Bradstreet Landing Park on Lake Erie * Led the preparation of Master plan and design for this project * Assisted the team in obtaining necessary environmental permits * Developed Design using AutoCAD * Developed 3D Modeling visualization using Sketchup | | |
| **e.** | (1) TITLE AND LOCATION *(City and State):* | | | | (2) YEAR COMPLETED |
| Edgewater Marina Rehabilitation, Cleveland, OH | | | | PROFESSIONAL SERVICES: 2014 CONSTRUCTION: **2015** |
| (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE  Check if project performed with current firm. | | | | |
| **Landscape Architect** for the complete redesign and replacement of a marina destroyed by Hurricane Sandy on Lake Erie. Scope included new floating docks and anchoring, utilities, circulation promenade and fencing..  ***Specialized Experience Area(s)***  Full Design Documents | | * Extensive client and team coordination throughout the design process that was critical in Edgewater Marina Rehabilitation * Led the redesign and replacement of a marina destroyed by Hurricane Sandy on Lake Erie * Design included an analysis of extreme storm events and numerical modeling to determine design parameters for the proposed marina replacement * Developed Design using AutoCAD * Developed 3D Modeling visualization using Sketchup | | |