

AVILES

Statement of Qualifications



West Park Tollway

Construction Materials Testing and Inspection and Geotechnical Engineering

FBISD Almeta Crawford High School



Big Creek Slope Stabilization



AVILES

Company Profile

Aviles Engineering Corporation (AEC) has been providing Geotechnical Engineering and Construction Materials Testing and Inspection Services for over 42 years in the greater Houston area and the State of Texas. AEC's professional staff includes over 60+ employees with broad and varied cumulative experience.

AEC's Geotechnical Engineering department is headed by Shou Ting Hu, P.E. and has four (4) licensed geotechnical engineers, one (1) engineer in training, two (2) geologists, four (4) laboratory technicians, and three (3) field technicians. As one of the most experienced geotechnical groups in the region, AEC has completed over 500 geotechnical projects in the past 5 years.

AEC's Construction Materials Testing and Inspection department is headed by Ronald E. Ortwerth, P.E., and Shane Resson, P.E. and has six (6) professional engineers providing support for 35+ ACI, TxDOT and NICET Certified Technicians with extensive experience in construction materials testing and inspection. AEC's Materials Group has completed testing and inspection services on over 400 projects in the past 5 years.

AEC has an elite laboratory accredited for technical competence in accordance with ISO17025 in construction materials testing and geotechnical testing by the American Association for Laboratory Accreditation (A2LA) and is one of only a few firms in the region that is also accredited by the AASHTO Accreditation Program (AAP) for Testing of Construction Materials in accordance with AASHTO R18. AEC's laboratory is inspected on normal tours by AMRL and CCRL. In addition, AEC is also an approved testing laboratory with TxDOT and provides Independent Assurance on TxDOT projects. These qualifications allow AEC to offer a large scope of services to our clients.

AEC is certified as a Minority/Disadvantaged Business Enterprise (M/DBE) with the City of Houston, HUB with the State of Texas, METRO Small Business Enterprise (SBE), and City of Houston Special Inspector Certification.

Aviles Engineering Corporation (AEC) is a civil engineering firm founded in 1981 in Houston. AEC is one of the most experienced geotechnical and construction materials testing firms in the greater Houston area.

Aviles Engineering Certifications:

State of Texas Historically Underutilized Business (HUB)
City of Houston Minority / Disadvantaged Business Enterprise (M/DBE)
Hire Houston First City Business and Local Business
METRO Small Business Enterprise (SBE)
Port of Houston Small Business Enterprise (SBE)
City of Houston Special Inspector Certification

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Principal

Shou Ting Hu, M.S., P.E.

Mr. Hu is an accomplished geotechnical/civil engineer with 39 years of experience. His geotechnical background includes site investigation, In-situ testing including CPT/VST and geophysical methods, soil laboratory testing, foundation analyses for buildings/bridges/industrial structures, retaining wall design, wharf structures, settlement analysis, building repair and renovation, deep foundation excavation support system design, slope stability analysis, soft soil improvements, erosion evaluation and control, seepage analysis, pavement (including heavy duty) design and subgrade stabilization, shoring and tunneling, groundwater numerical modeling, and project management. Mr. Hu's clients include TxDOT, HCTRA, HCED, HCFCD, Fort Bend County, and many other municipalities in the greater Houston area.



Executive Vice President

Ronald E. Ortwerth, P.E.

Mr. Ortwerth has more than 47 years of experience in Construction Materials Consulting, Engineering and Management of various types of Materials Testing and Inspection Programs on state, county and city tollway, highway and roadway projects throughout the state of Texas. His experience includes management of IA – Independent Assurance, OVT – Owners Verification Testing and Quality Assurance Testing on numerous TxDOT, HCTRA, FBGPTRA and FBTRA projects. Mr. Ortwerth managed the materials testing services that delivered quality services to the CEI, IE, Project Management Team and Owners for each of various types of projects. He has extensive experience in construction materials consultation, engineering, testing and inspection utilizing a wide variety of specifications and testing procedures including TxDOT, ACI, ASTM, various counties and cities. Mr. Ortwerth has significant experience in construction of and testing on excavation, embankment, fill and backfill of utility, construction of MSE Walls, soil stabilization including lime, lime flyash, lime cement and cement treatment of subgrade soils, cement, cement flyash and lime treatment of various types of base, asphalt base and surface courses, pavement concrete, installation of dry and slurry drilled shafts, installation of tie-backs and retention systems, waterproofing, reinforcing steel, large mat placements, high strength and normal strength concrete, fabrication of structural concrete members, fabrication and erection of structural steel, curtain wall inspections and roofing testing and inspection. He also has extensive experience in estimating construction materials testing and inspection services using TxDOT Guide Schedule for Sampling and Testing. Mr. Ortwerth manages the quality procedures in Aviles' on-site and main laboratories that are inspected on normal tours of outside inspection agencies including TxDOT, AAP through AMRL and CCRL and A2LA.



Vice President / Construction Materials Manager

Shane Ressman, P.E.

Mr. Ressman has 26 years of experience in Engineering Consulting and Management in Construction Materials Testing and Inspection Services in the Greater Houston Area. His exemplary work managing construction materials testing and inspection services on large major projects include Rehab. of Runways and Taxiways including 15R-33L, 9-27, WA, WB, NA, RA, & NB @ GBIAH Airport, Luce Bayou Interbasin Transfer Projects 301, 302, 303, 304, 305 & Canal Maint. Facility, Port of Houston: Wharves 2, 4, 5 & 6 (Bayport), Wharves 1 & 3, CY 1&2 N, Freight St. Rd. (Barbours Cut), NHCRWA Segments 25A, 25B, 28B, 28D and 28F, and the NE Water Purification Plant Expansion (City of Houston Project Advisor / Tech. Consultant). Mr. Ressman managed multiple project managers and field / laboratory technicians providing a cohesive team that delivered quality services to the Project Management Team and Owner for each of these projects. Mr. Ressman has extensive experience in materials consultation, testing and inspection of excavation, fill and backfill, soil stabilization, reinforcing steel, large mat placements, high / normal strength concrete, shotcrete, aggregates, sprayed applied fire resistive materials, post tension, fabrication / erection of structural steel, and concrete, asphalt, and roller compacted pavements.



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Tollway and Other Major Roadway Project Experience

Construction Materials Testing and Inspection Projects

- TxDOT Galveston County, I-45 from 0.452 miles south of FM 518 to FM517
 - TxDOT Harris County, I-45 from south of Bay Area Blvd to south of FM 518
 - TxDOT Austin County, IH-10 from 0.85 miles West of FM 3538 to SH 36
 - TxDOT Galveston County, I-45 north of FM 517 to south of FM 1764
 - TxDOT Chambers County, IH-10 and FM 3180 Overpass
 - TxDOT Liberty County, US-59 from south end of Cleveland Bypass to Fostoria Road
 - TxDOT Chambers County, FM 2354 Widening
 - TxDOT Galveston & Harris Counties, SH 146 from Red Bluff to north of SH 96
 - TxDOT Chambers County, SH 73 from FM 1663, east to Jefferson County Line
 - TxDOT Harris County, Clinton Drive
 - TxDOT Brazoria County, CR 101 Widening from CR 90 to FM 1128
 - TxDOT Galveston County, I-45 from south of FM 1764 to north of FM 519
 - TxDOT Harris County, Red Bluff Road from Kirby Blvd to SH 146
 - TxDOT Harbor Bridge Independent Assurance
 - HCTRA Southeast Widening of Sam Houston Tollway from 0.4 mile west of Wayside to 0.28 mile east of Beamer Road
 - HCTRA East Sam Houston Tollway, IH-10 E to SH 225, the Ship Channel Bridge Program Twin Bridges over the Houston Ship Channel
 - HCTRA Lorraine Street Underpass, Pump Station, Utility Relocations and Associated Drainage Features—Hardy Toll Road Downtown Connector Project
 - HCTRA Eight (8) Toll Ramp Plazas—SE Widening of Sam Houston Tollway
 - Fort Bend Grand Parkway Toll Road - Segment D, Sections 5, 6 & 7, Fort Bend County, TX
 - Fort Bend County Reconstruction of West Bellfort Road from SH99 to Harlem Road, Segment A & B
 - Fort Bend County - Mason Rd. Segment 2 & 3: Oyster Creek to Farmer Road
 - Fort Bend Parkway Toll Road - Toll Conversion Project from Hwy 6 to Sam Houston Parkway
 - Westpark Tollway Extension - Section 1E2 Through 1E5
 - Construction of Toll Facilities - SH 99 Segment 1 - 2
 - HCTRA - Hardy Toll Road - SH99 Grand Parkway Interchange
 - HCTRA - Tomball Tollway Main Lanes, North of Canyon Gate Pointe Dr. to South of Willow Creek
 - HCTRA - Westpark Tollway Phase 1
 - HCTRA - Sam Houston Tollway - Slope Rehabilitation, NE Corner of Fellows Road Overpass
 - HCTRA - Heavy Highway and Bridge Maintenance for Roadways System-Wide
 - TxDOT SH 99 Grand Parkway Segments F and G Independent Assurance
 - TxDOT SH 183 Managed Lanes Project (Midtown Express) Dallas, TX
 - Sugar Land - Lexington Blvd. & Oxbow Drive Roundabout
 - TxDOT SH 130, SH 45 Southeast, US 79, SH183, Austin, TX
 - HCFCD - Sims Bayou, South Post Oak Bridges
 - Midtown Pedestrian/Transit Master Plan, Gray Street Pedestrian Enhancement Program (Brazos to Main)
 - COH - 2012 Intersection Redesign
 - W. Little York Paving (TC Jester to Alabonson-Deep Forest)
 - HCTRA - Beltway 8 Southwest Widening Project and System-wide Maintenance Contract
 - TxDOT Indefinite Delivery Concrete Batch Plant Control, Houston District
 - Houston Light Rail Projects - Southeast, North, East and Downtown Corridors for Houston Rapid Transit (HRT) Joint Venture
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Tollway and Other Major Roadway Project Experience

Geotechnical Projects

- TxDOT RW NB-07 for IH 35 at Williams Drive, Georgetown
 - TxDOT US 59 Loop Section 4 PS&E, Laredo District
 - TxDOT Bridge Replacement on SH 124 over Hillebrandt Bayou, Jefferson County
 - TxDOT High Mast Illumination along IH-10 from Eastlake to Horizon, El Paso
 - TxDOT SH 123 Pavement Rehabilitation, Seguin
 - TxDOT Improvements of SH 136, Amarillo
 - TxDOT Work Authorization 3—Brooks SRA OSSSF
 - TxDOT Pavement Design for Loop 410 from IH 37 to US 87, San Antonio
 - TxDOT Improvements of Loop 363 from Range Road to Airport Road, Temple
 - TxDOT Greenhouse Underpass at US 290, Houston
 - TxDOT SB-NB and WB-EB Connectors between IH 610 and SH 35, Houston
 - TxDOT FM 455 Replacement Bridges
 - TxDOT SH 35 from north of Old Spanish Trail to Griggs Road, Houston
 - TxDOT Work Authorization #1 SH 151
 - TxDOT SH 146 Replacement Bridge over UPRR and SH 3
 - TxDOT State Loop 360 from north of Lake Austin (Colorado River) to 0.45 miles north of RM 2222, Austin
 - TxDOT Work Authorization 1—SH 105
 - TxDOT US 59 Loop PS&E, Laredo District
 - TxDOT US 281 from south of SH 186 to 0.34 mile north of FM 470, Hidalgo County
 - TxDOT Reconstruction of FM 1488 from FM 1774 to west of FM 149
 - TxDOT IH-35 from Holley Street to Oltorf Street
 - TxDOT Detention Ponds 4B, 4C, and 5A
 - TxDOT US 77 in Kingsville
 - TxDOT IH-20 in Odessa
 - TxDOT Mobility 35 Austin
 - TxDOT Rehabilitation IH-35 Frontage Roads from FM 3352 to FM 462, Frio County
 - TxDOT FM 1488 from FM 1774 to West of FM 149, Montgomery County, Texas
 - Fort Bend Park Way Extension, Phase 1, Section 2
 - TxDOT Improvements of US 290 from W. 34th Street to West Little York, Houston, Texas
 - TxDOT Improvements of US 290 from Telge Road to Mueschke Road, Houston, Texas
 - West Bellfort Improvements from SH 99 to Harlem Road
 - TxDOT State Highway 290E Improvements, Austin, Texas
 - TxDOT Preliminary Design for Loop 1604 from SH 471 to SH 16, San Antonio, Texas
 - TxDOT US 87 Improvements from US 54 to Omaha Street, Dalhart, Texas
 - TxDOT Improvements of State Highway 71 from west of Colorado River to west of Gills Branch, Bastrop, Texas
 - TxDOT FM 2738 Replacement Bridge over Walnut Creek, Johnson County
 - TxDOT FM 1097 Improvements from IH-45 to SH-75, Montgomery County
 - TxDOT FM 2854 Improvements from west of Loop 336 to IH-45, Conroe, Texas
 - HCTRA Grand Parkway Segment E, Sections 2 and 3 from south of Morton Road to north of Cypress Creek
 - HCTRA Westpark Toll Road, Section 5 and 11
 - HCTRA Widening of Aldine-Mail Route Grade Separation
 - HCTRA Widening of Sam Houston Tollway Section 2
 - HCTRA Erosion Control along Buffalo Bayou at West Sam Houston Tollway
 - HCED Scott Street from North Sam Houston Tollway to South of Alameda Genoa Road
 - HCED Fallbrook Drive Segment A from Old Bammel N. Houston Road to Antoine Drive
 - COH Bertner Road Extension
 - COH Midtown Redevelopment Improvements
 - COH Monroe Road Extension
 - METRO Fannin/Main Street alignment from Fannin South to UH Downtown
 - METRO University Corridor
 - METRO East End Corridor
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