

February 29, 2024

Arizona Department of Transportation

Engineering Consultant Section
205 S. 17th Avenue, Mail Drop 361E
Phoenix, Arizona 85007

Speedie & Associates, LLC - A UES Company

3331 E. Wood Street
Phoenix, AZ 85040
602.997.6391

Re: Contract No. 2024-017 / On-Call Services for Pavement Coring Investigations and Limited Geotechnical Investigations

Dear Members of the Selection Committee:

Speedie and Associates, LLC- A UES Company (S&A) is pleased to submit this Statement of Qualifications expressing our interest in being selected to provide coring and geotechnical services for the above referenced project. We are an Arizona Corporation and are pre-qualified with ADOT. S&A is not a certified DBE consultant and plans to perform any work assigned under this contract in-house. Our proposed key staff will be committed to the extent necessary to meet ADOT's quality and schedule expectations for the duration of the contract. The Project Principal/Contract Project Manager is responsible for this contract is Donald L. Cornelison, P.E., Civil AZ Registration #23216.

In summary, please consider the following key points regarding Speedie's qualifications during the selection process for this contract:

- **A Trusted Team:** We are proud of the experience of our team members. Our Project Principal/Contract Project Manager, Donald L. Cornelison, P.E., has provided engineering services to ADOT for over 35 years. In addition, Project Engineer Todd B. Hanke, P.E., has 23 years of pavement/geotechnical experience. Our additional engineers, Daniel Stratulat, P.E., has seven years of geotechnical/materials testing experience, Jack Stransky, P.E., has six years of geotechnical experience, and Ryan Bainum has ten years of geotechnical experience. As a client, you can rely on familiar faces and consistent service throughout your project.
- **ADOT Experience:** We currently participate in the ADOT Contracts, "On-Call Bituminous Testing, 2021- 003" and "On-Call Referee Testing of Asphaltic Concrete, 2021-002". We have completed numerous other projects on-time and within budget and are very familiar with ADOT's standards and procedures. We also understand the needs and expectations of ADOT.
- **Accredited Laboratories:** S&A's Phoenix laboratory is AASHTO accredited and participates in the AASHTO re:source, CCRL, and ADOT Proficiency Sample Programs and Systems of Evaluations.
- **Longevity in the Marketplace:** S&A was established in 1980 and celebrates 44 years as a firm. Our team and firm's tenure not only offers stability, but also has developed an atmosphere of customer service that has become a pillar of our firm's philosophy, and culture.
- **Focused Customer Service:** We maintain a rigorous in-house quality control/quality assurance system to ensure the highest level of service with the assistance of a custom-designed database system and a qualified, local staff.

For this contract, our preferred Regions of service in order of priority are Region 2, Region 3, Region 1.

S&A has demonstrated competence and an ability to provide the required services in a timely manner in the past and welcomes the opportunity to demonstrate our continuing commitment to ADOT for the future provision of these services.

Respectfully,

SPEEDIE & ASSOCIATES, LLC - A UES Company



Donald L. Cornelison, P.E.
Senior Vice President, Laboratory Services Division Manager

**Engineering Consultants Section
SOQ Proposal Certifications Form**

Contract #: 2024-017

Consultant Name: Speedie & Associates, LLC

Please read the fifteen (15) statements below. The statements are to ensure Consultants are aware and in agreement with Federal, State and ECS guidelines related to the award of this contract. Consultants shall submit the specific Certification form attached to each RFQ advertised, as revisions to the form may occur from time to time. Failure to sign and submit the certification form specified in the RFQ with the SOQ proposal will result in the SOQ proposal being rejected.

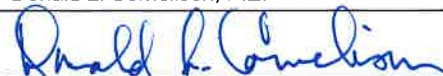
Submission of the SOQ by the Consultant certifies that to the best of its knowledge:

1.	The Consultant and its subconsultants have not engaged in collusion with respect to the contract under consideration.
2.	The Consultant, its principals and subconsultants have not been suspended or debarred from doing business with any government entity.
3.	The Consultant shall have the proper Arizona license(s) and registration(s) for services to be performed under this contract. Furthermore, the Consultant shall ensure that all subconsultants have the proper Arizona license(s) and registration(s) for services to be performed under this contract.
4.	The Consultant's signature on any SOQ proposal, negotiation document or contract constitutes that a responsible officer of the Consultant has read and understands its contents and is empowered any duly authorized on behalf of the Consultant to do so.
5.	The Consultant's Project Team members are employed by the Consultant on the date of submittal.
6.	All information and statements written in the proposal are true and accurate and that ADOT reserves the right to investigate, as deemed appropriate, to verify information contained in proposals.
7.	Key members of the Project Team, including subconsultants, are currently licensed to provide the required services as requested in the RFQ package.
8.	All members of the Project Team who are former ADOT employees did not have or provide information that gives the Consultant a competitive advantage; and either (1) concluded their employment with ADOT at least 12 months before the date of the SOQ or (2) have not made any material decisions about this project while employed by ADOT.
9.	Work, equating at least 51% of the contract value, shall be completed by the Consultant unless otherwise specified in the SOQ or contract.
10.	No Federally appropriated funds have been paid or shall be paid, by or on behalf of the Consultant for the purpose of lobbying.
11.	The Consultant understands that it is required to have a compliant accounting system, in accordance with Generally Accepted Accounting Principles (GAAP), Federal Acquisition Regulation (FAR) of Title 48, Code of Federal Regulations (CFR)-Part 31, applicable Cost Accounting Standards (CAS), and ADOT Advance Agreement Guideline.
12.	If project is funded with Federal Aid funds, the Consultant affirmatively ensures that in any subcontract entered into pursuant to this advertisement, Disadvantaged Business Enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award, in accordance with Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations.
13.	The Consultant shall utilize all Project Team members, subconsultants and DBE firms, if applicable, submitted in the SOQ, and shall not add other Project Team members or subconsultants, unless the Consultant has received prior written approval from ADOT.
14.	The Consultant shall either meet its DBE goal commitment and any other DBE commitments or make Good Faith Efforts to meet the DBE goal commitments as stated in its SOQ proposal or Cost Proposal and shall report on a timely basis its DBE utilization as detailed in the contract.
15.	If selected, the Consultant is committed to satisfactorily carry out the Consultant's commitments as detailed in the contract and its SOQ proposal.

I hereby certify that I have read and agree to adhere to the fifteen (15) statements above and/or that the statements are true to the best of my knowledge as a condition of award of this contract.

Print Name: Donald L. Cornelison, P.E.

Title: Senior Vice President, Laboratory Services Division Manager

Signature: 

Date: February 29, 2024

**ARIZONA DEPARTMENT OF TRANSPORTATION
ENGINEERING CONSULTANTS SECTION
PARTICIPATION IN BOYCOTT OF ISRAEL - CONSULTANT CERTIFICATION FORM
ADOT ECS Contract No.: 2024-017**

This Certification is required in response to legislation enacted to prohibit the State from contracting with companies currently engaged in a boycott of Israel. To ensure compliance with A.R.S. §35-393, this form must be completed and returned with any response to a solicitation (SOQ), Contract Cost Proposals, and Contract Time Extensions. The Consultant understands that this response will become public record and may be subject to public inspection.

Please note that if any of the following apply to this Solicitation, Contract, or Contractor, then the Offeror shall select the "Exempt Solicitation, Contract, or Contractor" option below:

- The Solicitation or Contract has an estimated value of less than \$100,000;
- Contractor is a sole proprietorship;
- Contractor has fewer than ten (10) employees; OR
- Contractor is a non-profit organization.

Pursuant to A.R.S. §35-393.01, public entities are prohibited from entering into contracts "unless the contract includes a written certification that the company is not currently engaged in, and agrees for the duration of the contract to not engage in, a boycott of goods or services from Israel."

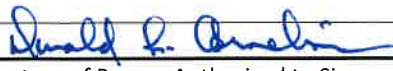
Under A.R.S. §35-393:

1. "Boycott" means engaging in a refusal to deal, terminating business activities or performing other actions that are intended to limit commercial relations with entities doing business in Israel or in territories controlled by Israel, if those actions are taken either:
 - (a) Based in part on the fact that the entity does business in Israel or in territories controlled by Israel.
 - (b) In a manner that discriminates on the basis of nationality, national origin or religion and that is not based on a valid business reason.
2. "Company" means an organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, limited liability company or other entity or business association, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate, that engages in for-profit activity and that has ten or more full-time employees.
- ...
5. "Public entity" means this State, a political subdivision of this State or an agency, board, commission or department of this State or a political subdivision of this State.

The certification below does not include boycotts prohibited by 50 United States Code Section 4842 or a regulation issued pursuant to that section. See A.R.S. §35-393.03.

In compliance with A.R.S. §§35-393 *et seq.*, all offerors must select one of the following:

- ☒ The Company submitting this Offer **does not** participate in, and agrees not to participate in during the term of the contract, a boycott of Israel in accordance with A.R.S. §§35-393 *et seq.* I understand that my entire response will become public record in accordance with A.A.C. R2-7-C317.
- ☐ The Company submitting this Offer **does** participate in a boycott of Israel as described in A.R.S. §§35-393 *et seq.*
- ☐ **Exempt Solicitation, Contract, or Contractor.**
Indicate which of the following statements applies to this Contract:
- ☐ Solicitation or Contract has an estimated value of less than \$100,000;
 - ☐ Contractor is a sole proprietorship;
 - ☐ Contractor has fewer than ten (10) employees; and/or
 - ☐ Contractor is a non-profit organization.

Speedie & Associates, LLC				
Company Name			Signature of Person Authorized to Sign	
3331 E. Wood Street			Donald L. Cornelison, P.E.	
Address			Printed Name	
Phoenix	AZ	85040	Senior VP/ Laboratory Services Division Manager Feb.29, 2024	
City	State	Zip	Title	Date

FORCED LABOR OF ETHNIC UYGHURS BAN Certification Form

Forced Labor of Ethnic Uyghurs Ban

Please note that if any of the following apply to the Consultant, then the Offeror shall select the "Exempt Consultant" option below:

- Consultant is a sole proprietorship;
- Consultant has fewer than ten (10) employees; OR
- Consultant is a non-profit organization.

Pursuant to A.R.S. § 35-394, the State of Arizona prohibits a public entity from entering into or renewing a contract with a company unless the contract includes written certification that the company does not use the forced labor, or any goods or services produced by the forced labor, or use any consultants, subconsultants, or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

Under A.R.S. §35-394:

1. "Company" means an organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, limited liability company or other entity or business association, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate, that engages in for-profit activity and that has ten or more full-time employees.
 - (a) Based in part on the fact that the entity does business in Israel or in territories controlled by Israel.
 - (b) In a manner that discriminates on the basis of nationality, national origin or religion and that is not based on a valid business reason.
2. "Public entity" means this State, a political subdivision of this State or an agency, board, commission or department of this State or a political subdivision of this State.

In compliance with A.R.S. §§ 35-394 et seq., all offerors must select **one** of the following:

☒	The Company submitting this Offer does not use, and agrees not to use during the term of the contract, any of the following: • Forced labor of ethnic Uyghurs in the People's Republic of China; • Any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or • Any Consultants, Subconsultants, or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.
☐	The Company submitting this Offer does participate in use of Forced Uyghurs Labor as described in A.R.S. § 35-394.
☐	Exempt Consultant. Indicate which of the following statements applies to this Consultant (may be more than one): ☐ Consultant is a sole proprietorship; ☐ Consultant has fewer than ten (10) employees; and/or ☐ Consultant is a non-profit organization.

Speedie & Associates, LLC

Company Name

3331 E. Wood Street

Address

Phoenix

AZ

85040

City

State

Zip



Signature of Person Authorized to Sign

Donald L. Cornelison, P.E.

Printed Name

Senior VP/ Laboratory Services Division Manager

Title

1. CONTRACT UNDERSTANDING AND APPROACH

a) CONTRACT UNDERSTANDING

Speedie & Associates, LLC - A UES Company (S&A) understands this project consists of supporting the Arizona Department of Transportation (ADOT) in evaluation of ADOT maintained roadway pavements. The primary role of S&A will be to perform pavement coring investigations and limited geotechnical investigations in order to evaluate the general pavement and subgrade conditions at locations specified by ADOT. All coordination and field work will be completed in accordance with the guidelines set forth in the provided Scope of Work (SOW), and as necessary, the guidelines from the ADOT Geotechnical Project Development Manual (GPDM) Version 2.0, or most recent version. Depending on the site and findings, the work may, at the discretion of the Department, include preparation of data reports, geotechnical memorandums, and laboratory testing of soil samples.

TASKS INVOLVED WITH THIS PROJECT

S&A understands that, while on the surface this project may appear relatively straightforward, there are a number of unique challenges to completing this scope of work. There are a number of tasks and steps which will need to be followed to ensure a successful project. The primary need will be clear and frequent communication between S&A and ADOT when assigned a project associated with this contract. It is understood that the project will consist of conducting pavement coring and possible soil sampling on active roadways. This will require close coordination with ADOT in ensuring that the work will be completed safely, while minimizing the impact to the public. Once assigned a project, S&A will begin by coordinating with the ADOT representative to determine the ideal location to advance the pavement cores. The pavement core locations will be completed in either the right or left wheel path, or the shoulder as required by the project. Once the project limits and sample locations have been defined, S&A will coordinate with a local approved traffic control company to develop the proposed traffic control plan. We anticipate that a significant portion of this work will occur in remote locations with two lane roads. This will make it even more critical to have clearly defined traffic control plan to address these challenges. S&A will then submit for a right-of-way permit, with the proposed traffic control plan.

Once approval has been provided for both the right-of-way permit and the core locations, we will arrange to complete the field investigation portion of the project. As the investigation may require sampling of the subgrade to depths of up to 5 feet, we will call and arrange for public utility location through Arizona 811 (Bluestake).

The field investigation will be completed by one of the staff identified in this statement of qualifications. We have included personnel from both our Tucson and Phoenix area offices to allow for flexibility and additional regional coverage. Our selected staff is experienced in pavement engineering and evaluations. The field investigation will be completed by the approved staff with the appropriate equipment to complete the job. This will include providing a coring rig (with generator and water), along with additional equipment to sample and evaluate shallow (up to 5 feet) subsoils below the pavement. This equipment may include hand augers, soil samplers, and dynamic cone penetrometer (DCP). While in the field, photo documentation of the core location, the extracted core, and general roadway conditions will be completed and transmitted to ADOT upon return to the office.

Core diameter may range from 6-inch to 12-inch depending on the goal of the project and the need for additional testing. While in the field our engineer will record the pavement section thickness, document the condition of the core, such as signs of delamination, number of asphalt lifts, or other signs of distress, and when requested will log the subgrade profile, classifying the soils using the USCS classification, noting the moisture content, and documenting the general consistency of the soils. When specific roadway conditions dictate, a DCP will help in estimating the approximate CBR of the soils. Samples of the aggregate base (if present) and underlying subgrade will be obtained for further testing in the laboratory, when required by the project scope.

Upon completion of the field work, each core hole will be patched with asphalt cold patch and the area will be cleaned of any remaining debris, restoring the pavement surface to a suitable condition for public safety.

All cores and associated soil samples will be returned to the local office (Phoenix or Tucson). Laboratory testing for classification of the soils will be conducted, if requested by the ADOT project manager. Laboratory testing may include grain size analysis, atterberg limits, R-value, proctor, moisture content, dry density, corrosion testing (pH, resistivity, sulfates, chlorides), and/or swell testing. All testing will be completed following ADOT, AASHTO, or ASTM standards. Upon completion of all field and laboratory work, a draft summary report presenting the findings will be provided to ADOT for review. After review of the draft report, we will update and finalize the report with the agreed upon comment resolutions.

SPECIAL ISSUES THAT MAY BE ENCOUNTERED

The most challenging part of this project will be obtaining access and providing traffic control at the prospective sites. It is likely that many of these sample locations will be along rural highways, which may be only two lanes. In addition, some of these remote locations may have complex horizontal and vertical curves, which result in 'blind' areas for drivers. We will not start work until ALL access and safety issues are satisfied.

This will typically involve detailing the proposed core locations, making site observations, coordinating with an approved traffic control company, and most importantly communicating with ADOT to work out conflicts and to determine means, methods, and schedule that will be acceptable. Depending on the road configuration, requested sample locations, and potential utility conflicts, adjustments may be required to the core locations to ensure safe sample retrieval. Regarding critical milestones: based upon a project's specific schedule, Mr. Hanke will prepare a detailed work plan to address ADOT's project requirements, which will include the above items as part of submitting for right-of-way access. We have found that prompt and complete communication with the appropriate ADOT staff has been the key to coordination of these challenges. Therefore, establishing that clear channel of communication will be our first goal upon award of this contract.

TECHNICAL AND INSTITUTIONAL ELEMENTS

Working successfully on a technical project such as this requires a thorough understanding of the specific areas, protocols, and methods that are unique to ADOT's needs and requirements. We have selected a team that has extensive experience in pavement materials, pavement engineering, and geotechnical field investigations. The team from S&A that has been identified for this project has experience in both the private and public sector and understands the difference between pavements designed for highways versus pavements designed for private parking lots. Our wide range of experience includes an expert on pavement materials and an expert on pavement engineering. This gives our team a wide range of capabilities to service this project, as we understand pavement performance as well as geotechnical properties of soils. In fact, our in-house expertise has been used on a number of projects, including high performance test tracks, race tracks, and airfields. Being able to understand how a pavement performs under these unique and challenging conditions lends itself to a better understanding of the performance of pavements along highways. We are well versed in the different methods for testing and evaluation of pavements. As an example, we performed falling-weight deflectometer (FWD) testing for a runway rehabilitation project to provide a more advanced and technical evaluation of the pavement. We also have experience in measurement and evaluation of pavement texture, friction, and profile (IRI). Our familiarity with the specific methods required for this project, along with our understanding of ADOT's needs and goals for their projects, has prepared S&A to provide timely, high-quality services for this contract.

b) PROPOSED APPROACH

S&A's approach to providing the required geotechnical/coring services will generally consist of the following steps:

PLAN & METHOD OF APPROACH:

1. Requests for service will be directed to Donald Cornelison, PE, who will assign all required resources to appropriate personnel.
2. Communicate with ADOT's representatives to obtain project details, explore project needs, and determine needs and expectations of the ADOT.
3. When requested, assign local Engineer to conduct a preliminary site visit and/or meet with ADOT representative(s) to determine project scope.
4. Establish budget and schedule within allotted time based on an understanding of project scope. This may require obtaining budgets from sub-contractors (such as traffic control, specialty core equipment, etc.), obtaining permits from Federal, State, County, and Flood Control as needed and/or sub-consultants if a particular task warrants this.
5. Based upon schedule, a detailed work plan will be prepared specifically to address ADOT's project requirements. Location may determine project complexity. Process may include review of plans, as-built data, and cross sections to determine sample locations and access plans. In addition, we understand that issues such as archaeological, biological, or right of entry permits may also be required.
6. Assign staff and personnel, as required, to conduct field investigations within the allotted time and budget allowed.
7. During the execution of the work, progress will be evaluated on a weekly basis, as necessary, reported to an ADOT representative via written and/or verbal communications summarizing basic findings.
8. When required, sufficient laboratory tests will be conducted to properly classify the soils encountered and to provide data for engineering design.
9. Data will be analyzed from field and laboratory testing and a draft report presenting all data obtained, together with our conclusions and recommendations, will be issued.
10. Once ADOT has reviewed the draft report, we will issue a final report with agreed upon comment resolutions.
11. S&A's project delivery/work plan is an outline for project success based on 44 years of experience. We recognize that each task will have unique needs thus adjustments and fine tuning of the work plan will be made in conjunction with the ADOT's representative to accommodate and accomplish each project's specific requirements.

Tools: Depending on project location and scope, this process may include review of proposed site plans and/or as-builts to determine core locations and access plans. S&A has, in-house, all necessary electronic communication, Boring Log software and CADD software programs, including AutoCAD, to complete these tasks in a very timely manner. All geotechnical, laboratory testing, exploration, geological and geophysics tasks will be clearly outlined and submitted to ADOT for approval.

Mr. Hanke will monitor the geotechnical team and provide QA/QC on submittals as needed. Mr. Hanke also provides support and acts as a point of contact for any ADOT representatives. The Speedie team will be further supported by a number of departmental administrative personnel, including an administrative assistant, CAD operator, and data entry personnel.

2. PROJECT TEAM

a) CONTRACT PROJECT MANAGER SR.

DONALD L. CORNELISON, P.E. / PRINCIPAL & PROJECT MANAGER

(30 years with S&A, 48 years in profession)

Due to the specific technical nature of this project, Mr. Cornelison will serve as Project Principal and Contract Project Manager. As Project Principal, Don will ensure adequate personnel and other resources are available for this contract and will handle contractual matters and ensure that work is completed in an accurate, timely manner. As Contract Manager, Don will be responsible for actively managing the work. Don has 48 years of experience in all areas of construction materials testing and has had responsibility for direction of referee testing and quality assurance programs for various agencies, including the BIA, FHWA, and FAA. He has served in this position for several previous ADOT referee-testing and materials testing contracts, with both S&A and other firms.

PROFESSIONAL REGISTRATION/CERTIFICATION

Registered Professional Engineer (Civil) AZ #23216; UT #12001; CO #28673; NV #10181

PROFESSIONAL/TECHNICAL EXPERTISE

Mr. Cornelison offers 48 years of experience in Civil Engineering. Mr. Cornelison is a Senior Vice President and Principal of the firm and as Project Manager for this contract, he will be responsible for directing the operations of the central materials testing laboratory and provision of overall services. Don will devote sufficient time to this project to fully meet the technical requirements and specified timeframes. His experience, as directly applicable to this contract, includes an extensive background in testing of asphalt binder, asphalt-rubber binder (crumb rubber asphalt), and asphalt-rubber mix dating back to the early 1980's. His experience with asphalt mix designs and asphalt mix testing dates from 1976.

Over the last 15 years, he has been extensively involved in the development of ADOT specifications and test methods, including the mix design method for asphalt mixes containing RAP, Ariz 833 and revisions to the conventional and asphalt-rubber mix design methods, Ariz 815 and Ariz 832 respectively. Don has also provided forensic evaluations of asphalt and concrete pavements placed on hundreds of state, county, municipal, and private projects.

CREDENTIALS

Arizona Rock Products Association (ARPA)
Associated General Contractors (AGC)
Arizona Technical Testing Institutes (ATTI) – Technical Advisory Board
Association of Asphalt Paving Technologists (AAPT) – Lifetime Member
American Concrete Institute (ACI)
American Society for Testing and Materials (ASTM)
ADOT Materials Subcommittee – Industry Vice Chairman

SIMILAR ON-CALL/AS-NEEDED EXPERIENCE

- ADOT On-Call Statewide Referee Testing of Asphaltic Concrete, 2021-2024
- ADOT On-Call Supplemental Laboratory Testing of Bituminous Materials, 2021- 2024
- City of Phoenix, Soils & Materials Annual On-Call Services Contract, 2023-2024

b. PROJECT ENGINEER

TODD B. HANKE, P.E. / PRINCIPAL & PROJECT MANAGER

(16 years with S&A, 23 years in profession)

Geotechnical and pavement investigations require a knowledgeable, experienced, and qualified team to gather the information necessary from the analysis of the pavement condition and the underlying soil's physical properties in relation to the project requirements and thus recommend earthwork and pavement design solutions. The S&A Geotechnical team, under the leadership of Mr. Hanke, brings a wealth of experience in working on pavements and building foundations designs. Our team's extensive on-call and as-needed contract experience, along with recent successful projects of a similar nature, uniquely position us to confidently tackle tasks of any complexity that may arise under this contract.

Mr. Hanke is a geotechnical engineering specialist providing consulting engineering services for clients in the private sector and for state, county, and municipal agencies.

He is directly responsible for managing the company wide geotechnical department operations with the aid of a professional staff of 17 engineers/geologists plus support personnel.

Mr. Hanke personally conducts investigations and analyses for projects, directs and guides geotechnical engineers and technicians in compiling and analyzing data, provides principal supervision on all investigations, authors and reviews geotechnical reports, provides technical guidance and support to the professional staff and prepares and reviews soil, foundation reports and pavement engineering reports and specifications. Mr. Hanke prides himself on working closely with project stakeholders in providing sound, economical design solutions for foundations and site development.

PROFESSIONAL REGISTRATION/CERTIFICATION

Registered Professional Engineer (Civil) AZ #43813; LA #42453; NM #28296

PROFESSIONAL/TECHNICAL EXPERTISE

Mr. Hanke has over 20 years of geotechnical and pavement engineering experience in both public and private development sectors, including pavement evaluations and engineering, utilities, and building foundation design. Mr. Hanke provides support for all of the Geotechnical work presented herein. He will monitor the geotechnical team, coordinate administration functions and provide QA/QC of submittals. He has extensive experience in geotechnical and pavement analysis procedures, including advanced testing such as falling-weight deflectometer (FWD), Rolling Dynamic Deflectometer (RDD), geotechnical soil borings, pavement smoothness, pavement friction/texture, and ground penetrating radar (GPR). This wide range of experience allows Mr. Hanke to determine the best approach for any given project.

CREDENTIALS

B.S., Geological Engineering, University of Wisconsin, 1999
B.S., Geology and Geophysics, University of Wisconsin, 1999

PUBLICATIONS

"Running Deflection Testing in Tandem Optimized an Airport Runway Assessment" (ASCE)

"Comparison of Pavement Evaluation and Performance of Two Runways with Rolling Dynamic Deflectometer (RDD) and Heavy Weight Deflectometer (HWD)"

"Implementation Support for Second Strategic Highway Research Program (SHRP2) Renewal R06E Real-Time Smoothness Measurements on Portland Cement Concrete Pavements During Construction" (FHWA)

SIMILAR ON-CALL/AS-NEEDED EXPERIENCE

- City of Chandler, On-Call Pre-Qualified List for Geotechnical Engineering and Related Services, 2021 -2024
- Coconino County On-Call Geotechnical Services, 2019-2024
- City of Glendale On-Call Consulting Services - Geotechnical, 2023-2024
- City of Goodyear On-Call Geotechnical, Environmental, Construction Materials Testing, 2021-2024
- City of Phoenix On-Call Soils & Materials Testing, 2023-2024

C. ENGINEER

DANIEL STRATULAT, P.E. / ENGINEER

(7 years with S&A, 7 years in profession)

Mr. Stratulat will serve as an engineer/key personnel on this contract. Daniel joined Speedie & Associates in 2017 and is the Geotechnical Project manager for the Tucson office. On each project, Daniel works closely with S&A's senior engineering staff and is involved in all phases of the project. He performs field explorations to identify soil properties and evaluate suitability for foundations, reviews boring logs and laboratory data, and assists in analysis and reporting. Mr. Stratulat works on all sizes and types of projects spanning vertical construction to infrastructure. He is attentive to the overall schedule and budgetary parameters of a project and works to meet the needs of the client.

PROFESSIONAL/TECHNICAL EXPERTISE

Mr. Stratulat has 7 years' experience in the fields of geotechnical, construction materials testing and inspection. He is experienced in working with public and private agencies as related to pavements, new structures, additions and expansions, water, wastewater, commercial, and institutional projects.

PROFESSIONAL REGISTRATION/CERTIFICATION

Registered Professional Engineer (Civil) AZ #76776

CREDENTIALS

B.S., Civil Engineering, University of Arizona, 2018
ACI Concrete Field-Testing Technician
UL Qualified Firestop Inspector

SIMILAR ON-CALL/AS-NEEDED EXPERIENCE

- City of Sierra Vista On-Call Professionals Materials Testing Services, 2021-2024

JACK STRANSKY, P.E. / ENGINEER

(5 years with S&A, 6 years in profession)

Mr. Stransky is taking on the role of engineer/key person for this contract. Jack joined Speedie & Associates in 2019 and works as a Staff Engineer in the geotechnical department in the Phoenix office. Jack closely collaborates with S&A's senior engineering team, participating in all phases of a geotechnical investigation. His tasks include project preparation, field exploration, and classification of soils for foundations or roadways, reviewing of laboratory test results and preparing engineering recommendations for the specific projects assigned to him. Mr. Stransky has worked on a wide range of projects, throughout the state of Arizona, including vertical construction and infrastructure. He's mindful of project schedules and budgets, always aiming to meet client needs.

PROFESSIONAL/TECHNICAL EXPERTISE

Mr. Stransky has 6 years' experience of geotechnical engineering. He is experienced in working with public and private agencies as it relates to new structures, private development, public right-of-way projects, and roadway improvement projects.

PROFESSIONAL REGISTRATION/CERTIFICATION

Registered Professional Engineer (Civil) AZ #78593

CREDENTIALS

B.S., Civil Engineering, Arizona State University, 2019

SIMILAR ON-CALL/AS-NEEDED EXPERIENCE

- City of Chandler, On-Call Pre-Qualified List for Geotechnical Engineering and Related Services, 2021 -2024
- City of Glendale On-Call Consulting Services - Geotechnical, 2023-2024
- City of Goodyear On-Call Geotechnical, Environmental, Construction Materials Testing, 2021-2024
- City of Phoenix On-Call Soils & Materials Testing, 2023-2024

RYAN BAINUM/ ENGINEER

(6 years with S&A, 10 years in profession)

Mr. Bainum is taking on the role of engineer/key person for this contract. Ryan joined Speedie & Associates in 2018 and works as a Staff Engineer in the geotechnical department, , Ryan has been a key person for S&A and works closely with the geotechnical department, participating in all phases of the various projects. His primary responsibility is coordinating the field work for challenging projects, such as working in the public right-of-way or on an airfield. Once access has been coordinated, he works closely with the key stakeholders prior to and during the field investigation portion to ensure a successful project. Mr. Bainum has extensive experience working in the field and understands the nuances of each project and the importance of conducting these investigations. His attention to detail and ability to observe the conditions in the field has helped to ensure many successful projects.

PROFESSIONAL/TECHNICAL EXPERTISE

Mr. Bainum has 10 years' experience of geotechnical engineering. He is experienced in working with public and private agencies as related to new structures, roadways, airfields, additions and expansions, commercial, and institutional projects

CREDENTIALS

B.S.E., Engineering, Arizona State University, 2016

SIMILAR ON-CALL/AS-NEEDED EXPERIENCE

- City of Chandler, On-Call Pre-Qualified List for Geotechnical Engineering and Related Services, 2021 -2024
- City of Glendale On-Call Consulting Services - Geotechnical, 2023-2024
- City of Goodyear On-Call Geotechnical, Environmental, Construction Materials Testing, 2021-2024
- City of Phoenix On-Call Soils & Materials Testing, 2023-2024

TEAM SUMMARY

S&A's key project personnel have extensive project experience that has resulted in a thorough knowledge of applicable ADOT and related standards. The team's involvement with ongoing ADOT projects, as well as continuous interaction with governmental agencies and the professional community, results in a timely understanding of any revisions or proposed changes to existing standards. The firm also maintains an up-to-date reference library including all relevant state and federal test procedures, specifications and standards.

c) MATRIX OF KEY MEMBERS

S&A has one of the largest fully accredited testing laboratories in the State of Arizona. Complementary to this, we also have an extensive and highly trained materials testing field and laboratory personnel roster. These groups will support our identified key individuals to ensure the success of each assigned task.

We currently maintain a Phoenix-based field staff of over 65 technicians and inspectors, within our overall staff of 170 employees. Our technician staff participates in ADOT training and certification programs administered by the Arizona Technical Testing Institute (ATTI).

In addition, they also receive training and/or certification through the Asphalt Institute (AI), American Concrete Institute (ACI), International Code Council (ICC), American Welding Society (AWS), and several other discipline-specific programs.

The matrix below showcases the qualifications of the key individuals designated to ADOT Contract #2024-017. The key staff members fill the indicated roles on the similar projects shown.

Name / Role	ADOT Qualified Asphaltic Concrete Mix Design Engineer	P.E. #	% committed to this project	1-10 Country Club and Kino TIs	City of Phoenix, Soils & Materials Annual On-Call Services Contract, 2023-2024	City of Scottsdale On-Call Materials Testing, 2019-2024
Key Team Members						
Donald L. Cornelison, P.E., Project Principal/ Contract Project Manager	*	AZ #23216	15%	5%	5%	5%
Todd B. Hanke, P.E., Project Principal/ Project Engineer		AZ #43813	20%	10%	10%	10%
Daniel Stratulat, P.E. /Engineer		AZ #76776	30%	10%		
Jack Stransky, P.E. /Engineer		AZ #78593	30%	10%	10%	10%
Ryan Bainum/Engineer			30%	10%	10%	10%
All Staff Located at our Phoenix Office - 3331 E. Wood Street, Phoenix, AZ 85040 Daniel Straulat, PE is located at Tucson Office - 3125 E 47th St, Tucson, AZ 85713						
Horrocks, Sean Nugent, Principal Innovative Projects, seann@horrocks.com, 602.454.1800, Contract Value: not to exceed \$400,000						
City of Phoenix, Robert Duvall, Materials Supervisor, robert.duvall@phoenix.gov, 602.495.2050, Contract Value: not to exceed \$1,200,000						
City of Scottsdale, Mya Trivison, Capital Project Management, mtrivison@scottsaleaz.gov, 480.312.7250, Contract Value: not to exceed \$500,000						

3. FIRM CAPABILITY

a) RELEVANT EXPERIENCE

S&A has demonstrated its reliability and expertise on a wide range of assignments on Private, City, County, and State projects. S&A also has successfully completed numerous projects (geotechnical, field materials testing, binder testing, & referee) for ADOT over the years and currently has two Consultant projects ongoing. S&A also provides on-call geotechnical, field, referee, and laboratory services for several counties and local municipalities. The testing for these agencies was successfully completed and reported within the specified time frames relative to each project. These are just a few examples of on-call testing projects carried out by our firm in a timely and cost-efficient manner.

For this contract, S&A can perform all pavement investigations and geotechnical engineering tasks listed under the scope of work in-house, including soil sampling up to a maximum depth of 5 feet below the pavement.

ADOT ON-CALL REFEREE TESTING OF ASPHALTIC CONCRETE, STATEWIDE, AZ

1. **PROJECT DESCRIPTION:** S&A provides professional engineering services on an as-needed basis for referee testing of field-produced asphaltic concrete. These testing services will specifically cater to projects within the state highway system governed by the Department's End-Product Asphaltic Concrete specifications.
2. **ROLE OF FIRM:** Prime - Geotechnical, Inspections,
3. **KEY STAFF:** Don Cornelison, P.E.
4. **CONTRACT AMOUNT:** \$100,000
5. **PROJECT OWNER:** ADOT, Dharminder Sharma PE, LEED AP, Bituminous Engineer, dsharma@azdot.gov, 602-712-7231

CHANDLER AIRPORT RUNWAY 4R-22L EVALUATION, CHANDLER, AZ

1. **PROJECT DESCRIPTION:** This project involves the structural evaluation of Runway 4R-22L at Chandler Regional Airport. The 4,870-foot runway, with 75-foot width and 10-foot paved shoulders, was thoroughly assessed to determine the current structural section and load capacity using a combination of traditional pavement cores, soil borings, and falling weight deflectometer (FWD) testing. The use of the FWD allowed for a more detailed analysis of the pavement structure to help optimize the rehabilitation strategy for the pavement.
2. **ROLE OF FIRM:** Subconsultant - Geotechnical
3. **KEY STAFF:** Don Cornelison, P.E., Todd Hanke, P.E., Jack Stransky, P.E.
4. **CONTRACT AMOUNT:** \$19,000 to date.
5. **PROJECT OWNER:** Dibble Engineering, Duane Dana, Senior Project Manager, Duane.Dana@Dibblecorp.com, 602-957-1155

NISSAN HIGH SPEED OVAL, STANFIELD, AZ

1. **PROJECT DESCRIPTION:** S&A conducted a comprehensive assessment of the high speed oval test track pavement embankments. This evaluation was done to assist with the rehabilitation of the parabolic curves. A combination of coring, auger borings, field density testing, and asphalt and soil laboratory testing were employed for data collection, providing insights into the reason of the premature failure of the pavement and to aid in making recommendations for a new surface. This unique project required additional analysis to accommodate the high stresses in the pavement caused by the high speed driving on the banked corners.

2. **ROLE OF FIRM:** Subconsultant - Geotechnical
3. **KEY STAFF:** Don Cornelison, P.E., Todd B. Hanke, P.E., Ryan Bainum
4. **CONTRACT AMOUNT:** \$19,480
5. **PROJECT OWNER:** Horrocks Engineers Russell Moore, Project Engineer, russellm@horrocks.com, 602-454-1800

SMITH ROAD PAVEMENT REHAB, TEMPE, AZ

1. **PROJECT DESCRIPTION:** This project consists of the rehabilitation of approximately 2,500 lineal feet of a residential collector roadway in the City of Tempe. S&A conducted pavement coring, documented the general condition of the pavement, pavement thickness, aggregate base thickness, and general subgrade properties to aid in rehabilitation recommendations of the roadway. Additional testing included using a DCP to determine the relative stiffness of the soil and obtaining samples of the subgrade for classification testing and moisture content. The findings from this investigation were used to determine if a mill and overlay or partial reconstruction would need to occur.
2. **ROLE OF FIRM:** Subconsultant - Geotechnical, Inspections
3. **KEY STAFF:** Don Cornelison, P.E., Todd Hanke, P.E., Jack Stransky, P.E.
4. **CONTRACT AMOUNT:** \$3,200
5. **PROJECT OWNER:** Achen-Gardner, Abigail Goode, Project Manager, AGoode@achen.com, 480-940-1300

SPEED VEGAS PAVEMENT EVALUATION, LAS VEGAS, AZ

1. **PROJECT DESCRIPTION:** S&A was specifically requested to assist in the evaluation of the early onset pavement distress observed in a high performance race track. S&A performed a site visit, coring, and laboratory testing to aid in determination of the cause of distress in the pavement, which was showing signs of failure only a year after being paved. Extensive physical testing of the asphalt cores was conducted to determine if the early failures were related to a materials issue or a placement issue. Based on the findings from the investigation, S&A provided recommendations for repair of the track surface, in consideration for the high speed use of the facility.
2. **ROLE OF FIRM:** Subconsultant - Geotechnical
3. **KEY STAFF:** ,Todd Hanke, P.E.
4. **CONTRACT AMOUNT:** \$12,800
5. **PROJECT OWNER:** SpeedVegas, Paul Ripa, Director of Operations, pRipa@speedvegas.com, 702-405-7223

b) RECENT, RELEVANT EXPERIENCE OF SUBCONSULTANTS

As previously indicated, S&A can perform the pavement investigations and geotechnical engineering listed in the Scope of Work. For the majority of this project, we anticipate the ability to self-perform all geotechnical coring and sampling using our purpose built coring rig setup. The only outside services we anticipate requiring would be for traffic control and possibly drilling services, should a project justify the need for traditional auger drilling instead of hand based equipment. Any such subconsultants will be selected as each assignment is issued to give the ADOT the best team available to meet the budget and schedule constraints.

c) COMPANY BACKGROUND & RESOURCES

S&A was established in 1980 to provide materials, geotechnical, and environmental engineering services to clients who require superior service and timely results. Over the 44 years we have been in business, we have provided services to all levels of the construction industry, including material suppliers, material users, architects, engineers, engineering and building contractors, developers, governmental agencies, and other testing laboratories. We are fully committed to ensuring the quality and efficiency of all work performed for this project.

In July of 2022, S&A was acquired by Universal Engineering Sciences (UES). This merger has increased S&A's capabilities, financial resources, and staff. As a result, we have the ability to bring in other resources from UES on an as needed basis. This project will not significantly impact the current and anticipated workload of the Phoenix or Tucson branches where the work will take place. The expected workload will fall well within our capacity and ability to complete the work in an accurate and timely manner.

S&A has and will maintain adequate staff to perform the required work. No "staffing-up" or work from subconsultants will be necessary. Our technical staff includes 17 full time engineers and geologist, including 1 PhD. While only a small number of key individuals are included in this submittal, as they will be performing the field activities, these individuals will also be supported by our accredited laboratory, and other engineers on an as needed basis. No additional engineers or geologists will be used on this project without prior authorization from ADOT.

From a physical resources standpoint, Speedie has a full in-house laboratory (one of the largest in the State of Arizona) that is AASHTO accredited, ADOT approved and furnished with the necessary equipment to perform the indicated materials testing relevant to this contract. To assure the quality of our procedures and equipment we participate in proficiency sample and/or quality assurance programs administered by the Cement and Concrete Reference Laboratory (CCRL), AASHTO resource, the U.S. Army Corps of Engineers, and the Arizona Department of Transportation (ADOT).

d) INTERNAL QUALITY CONTROL MEASURES

The company exercises quality control by careful supervision and checking of work. Generally, the overall quality control process involves the following activities; individuals participating in each phase are shown in parentheses:

- Establish and define the project scope, (Project Engineer, Client).
- Communicate the scope to the Project Team (Project Engineer, and staff). Clarify the scope if needed based on staff input.
- Prepare the schedule and the manpower estimate, and establish project "milestones" (Project Engineer).
- Perform Quality Control, checking against the schedule throughout the project (Project Engineer, staff); perform Quality Control Assessment at "Milestones" (Project Engineer).
- Monitor and verify the effectiveness of the Quality Control methods being utilized (Project Manager, Project Engineer).
- Follow up with external sources of feedback on the effectiveness of overall process - determine if the desired results were achieved (Project Manager, Project Engineer).
- Incorporate improvements in the process whenever appropriate and share findings at management meetings.

For this ADOT contract, specific Quality Control procedures include: Use of our custom database and shared schedule software to track each project from start to finish, ensuring that timeframes are being met and that the scheduled sequence of tasks is occurring as intended.

Performing of three levels of data review: First, the Project Engineer checks his work in the field by performing any necessary observations and calculations and verifying that all information is captured and accurate. Second, the Project Engineer uses customized geotechnical report templates to double-check the accuracy of all data entry and resulting calculations and to flag any out-of-range or suspect information. Third, the Project Manager performs a thorough review of the final reports, checking for accuracy of results, any anomalies in the data, and the completeness of the report.

The Project Manager maintains a record of any discrepancies discovered in the procedures and/or test results, and reviews them with applicable personnel in follow-up meetings. At these meetings, measures to prevent reoccurrence of the noted deficiencies are agreed on, and the Project Manager prepares a report detailing these measures which is submitted to the Speedie's Quality Assurance Manager will verify that calibrations and verifications for any equipment used for engineering and testing services are current and that the policies of our Quality System are adhered to with regards to procedures, reporting protocols, and training.

DONALD L. CORNELISON, P.E.

Senior Vice President - Laboratory Services Division Manager
(30 years with S&A / 48 years cumulative)

PROFESSIONAL REGISTRATION/CERTIFICATION
Registered Professional Engineer (Civil) - AZ #23216,
CO #28673, NV #010181, UT #12001

ROLE & RESPONSIBILITY

Due to the specific technical nature of this project, Mr. Cornelison will serve as Project Principal and Contract Project Manager. As Project Principal, Don will ensure adequate personnel and other resources are available for this contract and will handle contractual matters and ensure that work is completed in an accurate, timely manner. As Contract Manager, Don will be responsible for actively managing the work. He is responsible for overall supervision, scheduling, and review of testing performed in our materials laboratory for the subject project. Don has 48 years of experience in all areas of construction materials testing and has had responsibility for direction of referee testing and quality assurance programs for various agencies, including the BIA, FHWA, and FAA. He has served in this position for several previous ADOT referee-testing and materials testing contracts, with both S&A and other firms.

PROFESSIONAL EXPERIENCE SUMMARY

Mr. Cornelison offers 48 years of experience in Civil Engineering. Mr. Cornelison is a Senior Vice President and Principal of the firm and as Project Manager for this contract, he will be responsible for directing the operations of the central materials testing laboratory and provision of overall services. Don will devote sufficient time to this project to fully meet the technical requirements and specified timeframes. His experience, as directly applicable to this contract, includes an extensive background in testing of asphalt binder, asphalt-rubber binder (crumb rubber asphalt), and asphalt-rubber mix dating back to the early 1980's. His experience with asphalt mix designs and asphalt mix testing dates from 1976. Over the last 15 years, he has been extensively involved in the development of ADOT specifications and test methods, including the mix design method for asphalt mixes containing RAP, Ariz 833 and revisions to the conventional and asphalt-rubber mix design methods, Ariz 815 and Ariz 832 respectively. Don has also provided forensic evaluations of asphalt and concrete pavements placed on hundreds of state, county, municipal, and private projects.

CREDENTIALS

Arizona Rock Products Association (ARPA)
Associated General Contractors (AGC)
Arizona Technical Testing Institutes (ATTI) – Technical Advisory Board
Association of Asphalt Paving Technologists (AAPT) – Lifetime Member
American Concrete Institute (ACI)
American Society for Testing and Materials (ASTM)
ADOT Materials Subcommittee – Industry Vice Chairman

ON-CALL EXPERIENCE

- ADOT On-Call Statewide Referee Testing of Asphalt Concrete, 2021-2024
- ADOT On-Call Supplemental Laboratory Testing of Bituminous Materials, 2021-2024
- City of Phoenix, Soils & Materials Annual On-Call Services Contract, 2023-2024

SELECT PROJECT EXPERIENCE

Phoenix International Raceway Modernization, Avondale, AZ
Significant improvements to entire facility; including the grandstands. Fan facilities, infrastructure, and the track itself. S&A provided geotechnical and inspection services, along with QA testing of all construction materials, including the special modified asphalt surface course for the race track and the modified PG 82-22 asphalt binder.

R14 Confidential Test Track Facility, Wittmann, AZ,
Project consists of renovation and reconstruction of numerous test roads for a large automotive test facility for new vehicles. S&A provided field and laboratory testing for numerous specialty test roads and facilities. Services included testing of 26 lots of specialty asphalt mixtures in multiple lifts utilizing modified binders and special aggregates. The project specifications had stringent requirements for mixture properties on each sample and each lot of asphalt concrete; including asphalt content, percent passing on six individual sieve sizes, air voids, voids filled, VMA, stability and flow. Compaction was verified using pavement cores on each lot with in-place air void limits of 2.5% to 7.0%. More than 290 samples of asphalt were tested for the project in Speedie's Phoenix laboratory.

Lower Buckeye Road Improvements, Maricopa County
Project consists of a ½-mile of roadway widening and storm drain to meet MCDOT Roadway Design Manual (RDM). S&A provided geotechnical investigation, laboratory testing, and pavement design for widening project in MCDOT right of way.

Camelback Road Reconstruction, Glendale, AZ
Project consists of complete reconstruction of Camelback Road between 43rd Avenue and 51st Avenue. S&A provides complete acceptance testing of concrete, soils, aggregate base, and asphalt paving on all construction materials in the City of Glendale right of way.

TODD B. HANKE, P.E.

Vice President - Geotechnical Division Manager
(16 years with S&A / 23 years cumulative)

PROFESSIONAL REGISTRATION/CERTIFICATION

Registered Professional Engineer (Civil) - AZ #43813,
LA #42453; NM #28296

ROLE & RESPONSIBILITY

Geotechnical and pavement investigations require a knowledgeable, experienced, and qualified team to gather the information necessary from the analysis pavement condition and the underlying of the soil's physical properties in relation to the project requirements and thus recommend earthwork and pavement design solutions. The S&A Geotechnical team, under the leadership of Mr. Hanke, brings a wealth of experience in working on pavements and building foundations designs. Our team's extensive on-call and as-needed contract experience, along with recent successful projects of a similar nature, uniquely position us to confidently tackle tasks of any complexity that may arise under this contract. Mr. Hanke is a geotechnical engineering specialist providing consulting engineering services for clients in the private sector and for state, county, and municipal agencies.

He is directly responsible for managing the company wide geotechnical department operations with the aid of a professional staff of 17 engineers/ geologists plus support personnel. Mr. Hanke personally conducts investigations and analyses for projects, directs and guides geotechnical engineers and technicians in compiling and analyzing data, provides principal supervision on all investigations, authors and reviews geotechnical reports, provides technical guidance and support to the professional staff and prepares and reviews soil, foundation reports and pavement engineering reports and specifications. Mr. Hanke prides himself on working closely with project stakeholders in providing sound, economical design solutions for foundations and site development.

PROFESSIONAL EXPERIENCE SUMMARY

Mr. Hanke has over 23 years of geotechnical and pavement engineering experience in both public and private development sectors, including pavement evaluations and engineering, utilities, and building foundation design. Mr. Hanke provides support for all of the Geotechnical work presented herein. He will monitor the geotechnical team, coordinate administration functions and provide QA/QC of submittals. He has extensive experience in geotechnical and pavement analysis procedures, including advanced testing such as falling-weight deflectometer (FWD), Rolling Dynamic Deflectometer (RDD), geotechnical soil borings, pavement smoothness, pavement friction/texture, and ground penetrating radar (GPR). This wide range of experience allows Mr. Hanke to determine the best approach for any given project.

CREDENTIALS

B.S., Geological Engineering, University of Wisconsin, 1999
B.S., Geology and Geophysics, University of Wisconsin, 1999

ADDITIONAL TRAINING

Airport Pavement Management Training Level I and II – Colorado State University

Asphalt Institute Pavement Airport Pavement Training

PUBLICATIONS

"Running Deflection Testing in Tandem Optimized an Airport Runway Assessment" (ASCE)

"Comparison of Pavement Evaluation and Performance of Two Runways with Rolling Dynamic Deflectometer (RDD) and Heavy Weight Deflectometer (HWD)"

"Implementation Support for Second Strategic Highway Research Program (SHRP2) Renewal R06E Real-Time Smoothness Measurements on Portland Cement Concrete Pavements During Construction" (FHWA)

ON-CALL EXPERIENCE

- City of Chandler, On-Call Pre-Qualified List for Geotechnical Engineering and Related Services, 2021 -2024
- Coconino County On-Call Geotechnical Services, 2019-2024
- City of Glendale On-Call Consulting Services - Geotechnical, 2023-2024
- City of Goodyear On-Call Geotechnical, Environmental, Construction Materials Testing, 2021-2024
- City of Phoenix On-Call Soils & Materials Testing, 2023-2024

SELECT PROJECT EXPERIENCE

Chandler Airport Runway Reconstruction, Chandler, AZ

This project included a geotechnical investigation to aid in rehabilitation of the existing 5,000 foot runway. The investigation consisted of a combination of pavement cores, pavement borings, and deflection testing using the Falling Weight Deflectometer. Mr. Hanke acted as project manager for the project and was responsible for coordinating the field work and conducting the analysis of the field data. The FWD data was used to optimize the pavement rehabilitation strategy by focusing in on areas where the pavement was not currently structurally sound. Analysis was completed using FAA computer programs BAKFAA and FAARFIELD. Recommendations included a mill and overlay with partial reconstruction.

City of Flagstaff Asphalt Remediation and Replacement, Flagstaff, AZ

The project consisted of evaluation of four different roads for the City of Flagstaff. Services included conducting a geotechnical investigation, pavement cores, soil sampling, laboratory testing, and providing an engineering report with recommendations for rehabilitation of the pavement based field observations of the pavement. Rehabilitation options included alternate approaches such as full depth reclamation, geogrid, and cold-in-place recycling. Mr. Hanke was responsible for project oversight, analysis, and recommendations. The pavement design and analysis was completed following local agency procedures.

McLaws Road Repaving, Joseph City, AZ

Services included evaluation of approximately 1-mile of roadway to provide rehabilitation or reconstruction recommendations. The project also included the addition of paved shoulder and re-grading along sections of the roadway that prone to flooding. Speedie & Associates conducted a geotechnical including conducting pavement cores and laboratory testing to evaluate the condition of the existing road and subgrade. Speedie & Associates provided engineering recommendations for rehabilitation and reconstruction of the roadway to meet the anticipated traffic volumes, using local guidelines and materials. Options were provided for full reconstruction, milling and overlay, pulverization and replacement, and full depth reclamation.

Hollywood Road Pavement Design, Safford, AZ

Evaluation of approximately 3,600 lineal feet of roadway to determine the recommendations for pavement reconstruction of rehabilitation. Services included conducting a geotechnical investigation, soil borings, laboratory testing, and providing an engineering report with recommendations for reconstruction of the roadway. Mr. Hanke was responsible for project oversight, analysis, and recommendations. The pavement design was completed following local agency guidelines and alternative options including full-depth reclamation were provided to save the owner on construction costs.

Deer Valley Airport Pavement Reconstruction, Phoenix, AZ

This project included a geotechnical pavement design investigation and analysis for the rehabilitation of airfield pavement, meeting the requirements of the FAA and City of Phoenix Aviation Department's standards on an expedited basis. The project was unique in that it encompassed sizeable portions of the existing airport ramps on both the north and south sides of the airport. Evaluating these areas uncovered several different existing pavement conditions requiring specialized recommendations for each of the different areas. In addition, the designs had to take into account the various types of aircraft that used the ramps. Speedie & Associates worked with the design team and the owner to come up with rehabilitation methods that could be area specific and would allow for a cost and time savings when the project went to construction.

ADDITIONAL EXPERIENCE WITH ANOTHER FIRM**SR 202 South Mountain Freeway Pavement Design, Phoenix, AZ**

This ADOT design-build-maintain (DBM) project is one of the largest freeway projects in Arizona and is the first time that a DBM delivery method was used in Arizona. The total estimated project cost is on the order of \$1.7 billion dollars. The project consists of a 22-mile freeway expansion, including two major traffic interchange at I-10. This project's unique alternative delivery method (DBM) required careful consideration during the design process as the developer is responsible for the highway for 30 years. Mr. Hanke acted as lead project manager for the project. During the pursuit and design phase, Mr. Hanke conducted review of the geotechnical data, provided alternate pavement recommendations for cost estimating, and assisted in the development and evaluation of alternative technical concepts (ATCs). Mr. Hanke also participated and led technical work group (TWG) meetings with the owner, contractor, and designer to ensure a there was agreement with the proposed design approach. Pavement design and analysis was completed using ADOT and AASHTO '93 design procedures. During the construction phase of the project, Mr. Hanke continued to provide technical assistance by responding to RFIs and review of materials submittals for the roadway.

Central 70 Pavement Design, Denver, Colorado. This \$1.2 billion dollar project included the reconstruction of 10 miles of I-70 on the east side of Denver. The project included adding new express lanes, replacement of the old viaduct, roadway widening, and construction of a new 4-acre park over the interstate. Mr. Hanke acted as project manager for the pavement design on the project, working with the Contractor/Developer, Kiewit Meridiam Partners. Mr. Hanke coordinated with the geotechnical engineer to determine the ideal scope for the field investigation, reviewed the results of the geotechnical investigation, and provided pavement designs, which met CDOT requirements based on the anticipated traffic. Mr. Hanke evaluated the structural performance of the existing pavement to aid in rehabilitation recommendations and reuse of shoulder pavement for MOT. Pavement design and analysis was completed using CDOT design procedures and Pavement ME. During the construction phase of the project, Mr. Hanke continued to provide technical assistance and respond to RFIs related to subgrade and pavement materials.

DANIEL STRATULAT, P.E.

Geotechnical Project Manager

(7 years with S&A / 7 years cumulative)

PROFESSIONAL REGISTRATION/CERTIFICATION

Registered Professional Engineer (Civil) - AZ #76776

ROLE & RESPONSIBILITY

Mr. Stratulat will serve as an engineer/key personnel on this contract. Daniel joined Speedie & Associates in 2017 and is the Geotechnical Project manager for the Tucson office. On each project, Daniel works closely with S&A's senior engineering staff and is involved in all phases of the project. He performs field explorations to identify soil properties and evaluate suitability for foundations, reviews boring logs and laboratory data, and assists in analysis and reporting. Mr. Stratulat works on all sizes and types of projects spanning vertical construction to infrastructure. He is attentive to the overall schedule and budgetary parameters of a project and works to meet the needs of the client.

PROFESSIONAL EXPERIENCE SUMMARY

Mr. Stratulat has 7 years' experience in the fields of geotechnical, construction materials testing and inspection. He is experienced in working with public and private agencies as related to pavements, new structures, additions and expansions, water, wastewater, commercial, and institutional projects.

CREDENTIALS

B.S., Civil Engineering, University of Arizona, 2018
ACI Concrete Field-Testing Technician
UL Qualified Firestop Inspector

ON-CALL EXPERIENCE

- City of Sierra Vista On-Call Professionals Materials Testing Services, 2021-2024

SELECT PROJECT EXPERIENCE

La Cholla Airpark Pavement Eval, Tucson, AZ

S&A conducted a pavement assessment at the airpark, which involved visual observations of surface conditions and limited core testing. The assessment focused on determining the past pavement structure and obtaining samples of shallow subgrade soils. Visual inspections and the extraction of a limited number of pavement cores, S&A identified key factors that influenced the pavement's overall condition.

Davis Monthan TAB - CBP Ramp Expansion, Tucson, AZ

Pavement Design for an 80,000 square-foot expansion to the current Tucson Air Branch (TAB) of the U.S. Department of Homeland Security Customs and Border Protection (CBP) helicopter parking ramp. The evaluation and design will be carried out in accordance with UFC and UFGS requirements.

Hollywood Road Pavement Design, Safford, AZ

Evaluation of approximately 3,600 lineal feet of roadway to determine the recommendations for pavement reconstruction of rehabilitation. Services included conducting a geotechnical investigation, soil borings, laboratory testing, and providing an engineering report with recommendations for reconstruction of the roadway.

Attesa Raceway - First Phase, Casa Grande, AZ

The project site encompasses 280 acres of a proposed 2,500-acre master planned community. This phase will include a partial improvement to Bianco Road, an arterial street, a racetrack, parking structures, and a clubhouse.

Pilot Drive Reconstruction, Oro Valley, AZ

This project involved replacing around 700 feet of old asphalt pavement and adding two new connections to the existing runway.

Civano Animal Hospital, Tucson, AZ

A 9,593 SF single story building with a concrete slab-on-grade floor, and shallow spread footings. Structural loads are expected to be light to moderate. The project will also include retaining walls on the order of 3 feet high on shallow spread footings and a paved parking area.

True Hope Chapel Addition, Safford, AZ

A 4,830 SF addition will be attached to the south side of an existing building. The addition will be a one-story building with wood-frame exterior walls, concrete slab-on-grade floor, and shallow spread footings. Structural loads are expected to be light to moderate. The project will include a new paved parking area.

JACK STRANSKY, P.E.

Staff Engineer

(5 years with S&A / 6 years cumulative)

PROFESSIONAL REGISTRATION/CERTIFICATION

Registered Professional Engineer (Civil) - AZ #78593

ROLE & RESPONSIBILITY

Mr. Stransky is taking on the role of engineer/key person for this contract. Jack joined Speedie & Associates in 2019 and works as a Staff Engineer in the geotechnical department in the Phoenix office. Jack closely collaborates with S&A's senior engineering team, participating in all phases of a geotechnical investigation. His tasks include project preparation, field exploration, and classification of soils for foundations or roadways, reviewing of laboratory test results and preparing engineering recommendations for the specific projects assigned to him. Mr. Stransky has worked on a wide range of projects, throughout the state of Arizona, including vertical construction and infrastructure. He's mindful of project schedules and budgets, always aiming to meet client needs.

PROFESSIONAL EXPERIENCE SUMMARY

Mr. Stransky has 6 years' experience of geotechnical engineering. He is experienced in working with public and private agencies as it relates to new structures, private development, public right-of-way projects, and roadway improvement projects.

CREDENTIALS

B.S., Civil Engineering, Arizona State University, 2019

ON-CALL EXPERIENCE

- City of Chandler, On-Call Pre-Qualified List for Geotechnical Engineering and Related Services, 2021 -2024
- City of Glendale On-Call Consulting Services - Geotechnical, 2023-2024
- City of Goodyear On-Call Geotechnical, Environmental, Construction Materials Testing, 2021-2024
- City of Phoenix On-Call Soils & Materials Testing, 2023-2024

SELECT PROJECT EXPERIENCE

Chandler Airport Runway 4R-22L Evaluation, Chandler, AZ

This project involves the structural evaluation of Runway 4R-22L at Chandler Regional Airport. The 4,870-foot runway, with 75-foot width and 10-foot paved shoulders, were thoroughly assessed to determine the current structural section and load capacity using a combination of traditional pavement cores, soil borings, and falling weight deflectometer (FWD) testing. The use of the FWD allowed for a more detailed analysis of the pavement structure to help optimize the rehabilitation strategy for the pavement.

Smith Road Pavement Rehab, Tempe, AZ

This project consists of the rehabilitation of approximately 2,500 lineal feet of a residential collector roadway in the City of Tempe. S&A conducted pavement coring, documented the general condition of the pavement, pavement thickness, aggregate base thickness, and general subgrade properties to aid in rehabilitation recommendations of the roadway. Additional testing included using a DCP to determine the relative stiffness of the soil and obtaining samples of the subgrade for classification testing and moisture content. The findings from this investigation were used to determine if a mill and overlay or partial reconstruction would need to occur.

Papago Military Reservation Pavement Evaluation, Phoenix, AZ

An assessment of the pavement at the Papago Military Reservation was conducted, focusing on three distinct parking lots requiring evaluation. Potential rehabilitation options included full or partial depth reconstruction, seal coats, and crack seals. The ultimate recommendations hinged upon the nature of distress observed, expected loading conditions, and the current state of the pavement structure.

HPC VDA Geotechnical Investigation, Cantil, CA

This project aimed to evaluate the Vehicle Dynamics Area (VDA) soils for potential expansion. The VDA surface International Roughness Index (IRI) was deteriorating more rapidly than anticipated. The initial theory was that the soils were swelling, causing movement of the pavement.

Alta Climbing & Fitness Pavement Evaluation, Gilbert, AZ

This project focused on a constrained pavement evaluation, assessing the thickness and density of the pavement.

RYAN BAINUM

Staff Engineer

(6 years with S&A / 10 years cumulative)

ROLE & RESPONSIBILITY

Mr. Bainum is taking on the role of engineer/key person for this contract. Ryan joined Speedie & Associates in 2018 and works as a Staff Engineer in the geotechnical department, , Ryan has been a key person for S&A and works closely with the geotechnical department, participating in all phases of the various projects. His primary responsibility is coordinating the field work for challenging projects, such as working in the public right-of-way or on an airfield. Once access has been coordinated, he works closely with the key stakeholders prior to and during the field investigation portion to ensure a successful project. Mr. Bainum has extensive experience working in the field and understands the nuances of each project and the importance of conducting these investigations. His attention to detail and ability to observe the conditions in the field has helped to ensure many successful projects.

PROFESSIONAL EXPERIENCE SUMMARY

Mr. Bainum has 10 years' experience of geotechnical engineering. He is experienced in working with public and private agencies as related to new structures, roadways, airfields, additions and expansions, commercial, and institutional projects

CREDENTIALS

B.S.E., Engineering, Arizona State University, 2016

ON-CALL EXPERIENCE

- City of Chandler, On-Call Pre-Qualified List for Geotechnical Engineering and Related Services, 2021 -2024
- City of Glendale On-Call Consulting Services - Geotechnical, 2023-2024
- City of Goodyear On-Call Geotechnical, Environmental, Construction Materials Testing, 2021-2024
- City of Phoenix On-Call Soils & Materials Testing, 2023-2024

SELECT PROJECT EXPERIENCE

Nissan High Speed Oval, Stanfield, AZ

S&A conducted a comprehensive assessment of the high speed oval test track pavement embankments. This evaluation was done to assist with the rehabilitation of the parabolic curves. A combination of coring, auger borings, field density testing, and asphalt and soil laboratory testing were employed for data collection, providing insights into the reason of the premature failure of the pavement and to aid in making recommendations for a new surface. This unique project required additional analysis to accommodate the high stresses in the pavement caused by the high speed driving on the banked corners. rehabilitation strategy for the pavement.

Mesa National Guard Pavement Evaluation, Tempe, AZ

This project involved the evaluation of the pavement at the Mesa Guard facility. Potential rehab options included full or partial depth reconstruction, seal coats, and crack seals. The final recommendations included the types of distress, anticipated loading, and the existing pavement structure.

Chandler Airport Hangar Area Pavement Rehab, Chandler, AZ

The project involved the Hangar area located between Taxiway F and the Terminal West apron, covering approximately 550,000 sqft of pavement. The information gathered from this investigation was used to evaluate the existing pavement and subgrade conditions, leading to recommendations for the rehabilitation and/or reconstruction of the apron pavements to meet FAA standards.

GEU South Apron Reconstruction Phase 2, Glendale, AZ

This project was an evaluation of the south apron pavements to aid in rehabilitation and/or reconstruction. The area was approximately 1,600 x 700 feet in size (72,000 square yards). The project was partially funded by an FAA grant.

Ford APG Pavement Evaluation Wittman, AZ

S&A conducted a limited subsoil investigation and asphalt pavement investigation of the Ford Arizona Proving Grounds (APG). Our staff engineers carefully logged the borings in detail and collected samples for laboratory testing. Approximately twenty (20) borings were drilled through the existing pavement.

From: ADOT Business Engagement and Compliance Office <AZUTRACS-Support@azdot.gov>
Sent: Wednesday, February 28, 2024 11:59 AM
To: Donald Cornelison <dcornelison@speedie.net>
Cc: ContractorCompliance@azdot.gov
Subject: Bidders List for Speedie & Associates

This Message Is From an External Sender

This message came from outside your organization.

Speedie & Associates, AZUTRACS Number: [11078](#) has submitted a Bidder/Proposer list for **2024-017** on 02/28/2024 at 11:59 AM MST (UTC - 07:00).

Speedie & Associates submitted a blank bidders/proposers list. This means that they did not list any firms that they reached out to or were contacted by during the preparation of this bid/proposal. NOTE: Subbing out work is encouraged, where applicable. Under some circumstances, no subbing opportunities are available.



Engineering Consultants Section

Katie Hobbs, Governor
Jennifer Toth, Director
Greg Byres, Deputy Director for Transportation/State Engineer
Steve Boschen, Division Director
Korina Lopez, Group Manager

Date: February 15, 2024

TO: ALL INTERESTED PARTIES

SUBJECT: AMENDMENT NUMBER 01

REFERENCE: REQUEST FOR QUALIFICATIONS
CONTRACT NUMBER 2024-017
On-Call Services for Pavement Coring and Limited Geotechnical Investigations

The following question has been asked in reference to the above Request for Qualifications package:

1. RFQ says the total page limit is 12 pages, but with your required forms, the evaluation criteria starts on page 5. So this means we only have 8 pages to address everything in the evaluation criteria section?

Answer: Yes, the correct total page limit amount is **12** pages leaving 8 pages to address the evaluation criteria section.

April R Conti-Farris

April R Conti-Farris
Contract Specialist
Engineering Consultants Section

AN OFFEROR MUST ACKNOWLEDGE RECEIPT OF THIS AMENDMENT BY SIGNING BELOW AND INCLUDING ALL PAGES OF THIS AMENDMENT IN THE SOQ SUBMITTAL. FAILURE TO DO SO SHALL RESULT IN REJECTION OF THE PROPOSAL.

Speedie & Associates, LLC

CONSULTANT NAME

SIGNATURE

* This amendment is not included in the total page count in the Statement of Qualification submittal.



Engineering Consultants Section

Katie Hobbs, Governor
Jennifer Toth, Director
Greg Byres, Deputy Director for Transportation/State Engineer
Steve Boschen, Division Director
Korina Lopez, Group Manager

Date: February 21, 2024

TO: ALL INTERESTED PARTIES

SUBJECT: AMENDMENT NUMBER 02

REFERENCE: REQUEST FOR QUALIFICATIONS
CONTRACT NUMBER 2024-017
On-Call Services for Pavement Coring and Limited Geotechnical Investigations

The following questions have been asked in reference to the above Request for Qualifications package:

1. In reference to the RFQ 2024-017 I would like you to confirm the following:
Page 27 - SCOPE OF WORK - under Objective-... "The depth not to exceed is 5 feet"?

Answer: Yes

Thank you,

April R. Conti-Farris
April R Conti-Farris
Contract Specialist
Engineering Consultants Section

AN OFFEROR MUST ACKNOWLEDGE RECEIPT OF THIS AMENDMENT BY SIGNING BELOW AND INCLUDING ALL PAGES OF THIS AMENDMENT IN THE SOQ SUBMITTAL. FAILURE TO DO SO SHALL RESULT IN REJECTION OF THE PROPOSAL.

Speedie & Associates, LLC

CONSULTANT NAME

SIGNATURE

* This amendment is not included in the total page count in the Statement of Qualification submittal.

CONSULTANT INFORMATION PAGES (CIP)

CONTRACT NO.: 2024-017

CONTACT PERSON: Donald L. Cornelison, P.E.

E-MAIL ADDRESS: dcornelison@speedie.net

TITLE: Senior Vice President, Laboratory Services Division Manager

CONSULTANT FIRM: Speedie & Associates, LLC

ADDRESS: 3331 E. Wood Street

CITY, STATE ZIP: Phoenix, AZ 85040

TELEPHONE: 602.997.6391

FAX NUMBER: 602.943.5508

DUNS #: 046594800

ADOT CERTIFIED DBE FIRM? (YES/NO)

NO

SUBCONSULTANT(S):	TYPE OF WORK	ADOT CERTIFIED DBE FIRM (YES/NO)
N/A		

NOTE: This page is not evaluated by the Selection Panel but is used by Engineering Consultants Section for administrative purposes.

SUBCONSULTANT(S) TABLE:

SUBCONSULTANT FIRM NAME:	N/A
CONTACT PERSON:	
E-MAIL ADDRESS:	
TITLE:	
ADDRESS:	
CITY, STATE ZIP:	
TELEPHONE:	
FAX NUMBER:	
DUNS #:	

SUBCONSULTANT FIRM NAME:	N/A
CONTACT PERSON:	
E-MAIL ADDRESS:	
TITLE:	
ADDRESS:	
CITY, STATE ZIP:	
TELEPHONE:	
FAX NUMBER:	
DUNS #:	

NOTE: Each Subconsultant listed in the SOQ must be included in the Subconsultant Table of the CIP. Add additional Subconsultant Table pages as necessary. The CIP is not evaluated by the Selection Panel but is used by Engineering Consultants Section for administrative purposes.

DBE GOAL ASSURANCE/DECLARATION

This Contract is Race Neutral (No DBE Goal-DBE use encouraged).

By signing below, and in order to submit an SOQ proposal and be considered to be awarded for this contract, in addition to all other pre-award requirement, the consultant/Proposer certifies that they will meet the established DBE goal or will make good faith efforts to meet the goal for the contract and that arrangements with certified DBEs have been made prior to SOQ and/or Cost Proposal submission. The proposer will meet the established DBE goal or will make good faith efforts to meet the goal on each Task Order assignment associated with the contract and that arrangements with certified DBEs have been made prior to SOQ and/or Task Order proposal submission.



Signature

2.29.24

Date

Donald L. Cornelison, P.E.

Printed Name

Senior Vice President

Title

SOQ SUBMITTAL CHECKLIST

Place a check mark on the left side of the table indicating compliance with the following:

☒	Required Page Limit Met
☒	One PDF Document no larger than 15 MB
☒	All Amendments Included
☒	Introduction Letter (Including all required elements/statements)
☒	SOQ Proposal Formatted According to Requirements Listed in Part C and any applicable amendments
☒	Correct SOQ Certification List Signed and Dated by a Principal or Officer of the Firm
☒	Completed Consultant Information Page (Including listing DBE firms, if applicable)
☒	Supplemental Services Disclosure Form (REQUIRED for Supplemental Services Contract)
☒	All Subconsultants & Proposed Work Type (Including listing DBE firms, if applicable)
☒	Any Additional Required Documents (Specific Requirements in RFQ such as Resumes, etc.)
☒	Commenting or User Rights Feature Enabled in SOQ PDF Document
☒	DBE Goal Assurance/Goal Declaration completed

NOTE: This page is not evaluated by the Selection Panel but is used by Engineering Consultants Section for administrative purposes.