EC-22-83

CITY OF ALBUQUERQUE

Albuquerque, New Mexico

Office of the Mayor

Mayor Timothy M. Keller

INTER-OFFICE MEMORANDUM **DATE: April 18, 2022**

TO: Isaac Benton, President, City Council

FROM: Timothy M. Keller, Mayor

SUBJECT: Mayor's Recommendation of Airfield Engineering Consultants for On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

The Selection Advisory Committee corresponded via email on February 16, 2022 to consider the following project.

Project: Project No: 7700.94; Airfield Engineering Consultants for On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

Agency: Department of Municipal Development

Project Description: To provide on-call engineering design and construction services to the Aviation Department for various airfield projects at the Albuquerque International Sunport and the Double Eagle II Airport. Projects that may be included for Federal funding include: terminal perimeter concrete reconstruction, RWY 08-26 edge light replacement, TWY B reconstruction, perimeter road rehab, RWY 03-21 edge lights replacement, RWY 12-30 pavement rehabilitation, East RON apron construction, RWY08/RWY12 Realignment, RWY 17-35 and TWY B pavement and lighting rehabilitation, RWY 04-22, TWY A, TWY C pavement and lighting rehabilitation.

The Committee made the following recommendation:

Bohannan Huston
Garver
Molzen Corbin

The Cover Analysis, Score-Sheet Compilation and Minutes of the SAC Meeting are attached.

Therefore, in accordance with Section 14-7-2-1 et seq, ROA 1994, the following is my consultant selection recommendation concerning the procurement of professional services for the above listed project:

Bohannan Huston
Garver
Molzen Corbin

Mayor's Recommendation of Bohannan Huston, Garver, and Molzen Corbin for Project No: 7700.94; Airfield Engineering Consultants for On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport.

This recommendation is being forwarded for Council consideration and action.

Approved:

Sarita Nair Date
Chief Administrative Officer

Approved as to Legal Form:

DocuSigned by:
Lauren Keefe 4/19/2022 | 2:30 PM MDT
1A21D96D32C74EE...
Esteban A. Aguilar, Jr. Date
City Attorney

DS

Recommended:

DocuSigned by:
PM 4/19/2022 | 1:27 PM PDT
1E693402E75A41F...
Patrick Montoya, Director Date
Department of Municipal Development

MIM
Attachments:

Cover Analysis
Composite SAC Evaluation Form
Minutes of the SAC Meeting

Cover Analysis

1. What is it?

Provide on-call airfield engineering design and construction services to the Aviation Department for various airfield projects at the Albuquerque International Sunport and the Double Eagle II Airport

2. What will this project do?

This project will allow the Aviation Department to design and construct various airfield projects at the Albuquerque International Sunport and the Double Eagle II Airport

3. Why is this project needed?

This project is needed because the Aviation Department has a frequent need for design services on various FAA and airport capital funded projects and this will allow expeditious implementation of these projects.

4. How much will it cost and what is the funding source?

The cost for this project is to be negotiated on a project by project basis and will be a combination of aviation fund 613 and Federal Aviation Administration Grant funding.

5. What will happen if the project is not approved?

Should this not be approved, the department will not be able to provide timely implementation of airfield projects.

Composite Selection Advisory Committee Evaluation Form

Project No's: 7700.94; Airfield Engineering On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

DATE: 4/18/22

Evaluation Criteria	Maximum Points	Firm Name Bohanan Huston	Firm Name Garver	Firm Name Molzen Corbin
I. General Information 1. Provide Name and Address of Respondent and, if firm, when firm was established. 2. Provide number of employees, technical discipline and registration. 3. Indicate where the services are to be performed.	25	24	20	24
II. Project Team Members 1. Provide organization plan for management of the project. 2. Identify all consultants to be used on the project. 3. Provide qualifications of project team members shown in organization plan, including registration and membership in professional organizations. 4. Provide any unique knowledge of key team members relevant to the project.	75	65	57	70
III. Respondent Experience 1. Describe previous projects of a similar nature, including client contact (with phone numbers), year services provided, construction cost (if applicable), and a narrative description of how they relate to this project. 2. Provide examples of the Project Manager's City experience within the past five (5) years that serve to demonstrate the the Project Manager's knowledge of City procedures.	150	115	102	136
IV. Technical Approach 1. Describe respondent's understanding of the project scope. 2. Describe how respondent plans to perform the services required by the project scope. 3. Describe specialized problem solving required in any phase of the project.	125	104	115	121
V. Cost Control 1. Describe cost control and cost estimating techniques to be used for this project. 2. Provide comparisons of bid award amount to final cost estimate for projects designed by the respondent during the past two (2) years. The consultant may provide justification for any discrepancies that may exist with this information.	75	56	59	64
VI. Quality and Content of Proposal 1. Evaluator's rating of overall quality of proposal.	50	45	44	40
Total Possible Points	500	500	500	500
Total Points (Before Point Deductions)		409	397	455
Minus High and Low Scores Total		162	163	177
Total Points (Minus High and Low Scores)		247	234	278
Minus Point Deductions (If Applicable)		0	0	0
Sub-Total (All Applicable Deductions Applied)		247	234	278
Plus Tie Breaker Points (If Applicable)		0	0	0
SAC TOTAL SCORES		**247**	**234**	**278**
Plus Interview Scores		0	0	0
FINAL SCORES		**247**	**234**	**278**

Minutes of the Meeting
of the
Selection Advisory Committee
February 16, 2022

via Email

Airfield Engineering Consultants for On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

Project No: 7700.94

Present:

Jane Lucero, PM, Aviation Department
John MacKenzie, PE, Department of Municipal Development
Rhonda Methvin, PE, Aviation Department
Eric Michalski, PM, PE, Department of Municipal Development
Dustin Danflous, Aviation Department

Staff:

Myrna Marquez, Administrator, Selection Advisory Committee

Six proposals were received in response to the Request for Proposals.

Project Description:

To provide on-call engineering design and construction services to the Aviation Department for various airfield projects at the Albuquerque International Sunport and the Double Eagle II Airport. Projects that may be included for Federal funding include: terminal perimeter concrete reconstruction, RWY 08-26 edge light replacement, TWY B reconstruction, perimeter road rehab, RWY 03-21 edge lights replacement, RWY 12-30 pavement rehabilitation, East RON apron construction, RWY08/RWY12 Realignment, RWY 17-35 and TWY B pavement and lighting rehabilitation, RWY 04-22, TWY A, TWY C pavement and lighting rehabilitation.

Estimated Compensation $ 3,000,000.00

The Administrator contacted the SAC Committee and RFP respondents on January 27, 2022 and advised them that this meeting would take place via email. She reminded the SAC Committee to have their scores and comments emailed to her by 11:00am on February 16, 2022.

The Administrator collected the Committee members' scores and she deleted the high score and low score and then totaled the proposal scores. The Committee and respondents were advised of the final scores and the Administrator asked the Committee if there was a motion for interviews. Ms. Jane Lucero made a motion to conduct two interviews with the second and third

scoring respondents since the intention was to award two firms and the top scoring firm clearly surpassed the second and third ranked firms. Ms. Rhonda Methvin seconded the motion which passed.

There being no further business before the Committee, the Administrator adjourned the email meeting by emailing everyone at 1:20pm on 2/16/2022 that interviews would be held via Zoom after discussion with the SAC Committee.

On April 12, 2022 the Administrator received an email from one of the responding firms if any progress had been towards scheduling and conducting interviews and ultimately the award of this project. Since the Administrator had not received any emails from the SAC Committee to move forward with the interview process, the Administrator sent an email to the SAC Committee to follow-up and quickly learned that two members of the SAC Committee were no longer working for the City of Albuquerque. The Administrator was quickly put in contact with the Director of Aviation and learned that the project would be reassigned to a different project manager and that the top three firms would be awarded therefore interviews were not necessary. The Administrator contacted the remaining SAC Committee, the new project manager, and the RFP respondents and made them all aware of the Aviation Director's instruction.

Myrna Márquez

Myrna Marquez, Administrator
Selection Advisory Committee

cc: City Clerk

Airfield Engineering On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

Project No: 7700.94 | January 26, 2022

Submitted by:

Bohannan Huston

in partnership with:

RS&H

Bohannan Huston

7500 Jefferson St. NE
Albuquerque, NM
87109-4335

www.bhinc.com

voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

January 26, 2022

City of Albuquerque
One Civic Plaza NW, 7th Floor, Room 7057
Albuquerque, NM 87102

Re: Airfield Engineering On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport | Project No: 7700.94

Dear Members of the Selection Committee:

Bohannan Huston, Inc., (BHI) has been providing the City of Albuquerque reliable engineering services for decades. As one of your most-trusted engineering consultants, our team has served you through numerous on-call contracts and has been your partner on many projects that have improved the quality of life for our community. For this airfield engineering on-call, we have developed a team whose strength is a unique combination of established local presence and nationally recognized expertise. BHI offers community knowledge and key interpersonal relationships, and RS&H offers wide-ranging expertise and robust capacity.

Local Presence and Commitment: BHI was founded in Albuquerque in 1959 and has demonstrated commitment to serving our city and our state through projects which improve the lives of residents. BHI's Albuquerque headquarters staffs 170 employees who live, work, and play in the Albuquerque Metro area. The people working on this on-call have a personal stake in the community and will take pride in delivering quality projects.

National Expertise: RS&H's national reputation as a leading aviation consultant reflects its dedication to designing the best solutions for airports. For more than 70 years, RS&H has successfully met all challenges regardless of the size, location, or nature of projects, from incorporating the unique character of a community into a terminal design, to satisfying the engineering and environmental requirements for runway improvements, to addressing the future through detailed planning. RS&H's proven success in designing aviation systems has provided a cornerstone of progress for communities throughout the US.

We Know Airports: Our BHI aviation staff has been designing airports throughout New Mexico for more than 30 years, and we have developed a strong reputation as one of the state's top airport consultants. We understand the issues facing the Sunport and Double Eagle Airport, and we have familiarized ourselves with the projects identified in your masterplan. We understand how the current economy and industry challenges can impact construction costs and schedules, and we know how to account for these in our design solutions. We have experience working through technical challenges unique to our area, such as how to deal with the alkali-silica reaction (ASR) problem prevalent in New Mexico and how to develop construction phasing/sequencing to match local contractor methodologies. Our partner RS&H brings the big picture view of the national aviation industry; their perspective will inform innovative technologies in our designs, as well as an understanding of how to best capture funding from the federal bi-partisan Infrastructure Bill.

Our team has worked together on previous projects, and because of our strong working relationship, we have an integrated, cohesive team the City can depend upon for delivering top quality services with integrity and ingenuity. We are eager to partner with you. If you have any questions, please feel free to contact me by phone at 505.823.1000 or via email at athomas@bhinc.com.

Sincerely,

Albert M. Thomas, PE
Senior Vice President

Engineering ▲
Spatial Data ▲
Advanced Technologies ▲

I. GENERAL INFORMATION

1. Firm Information

Name, Address, Phone	*Date Established*	*DUNS*
Bohannan Huston, Inc. 7500 Jefferson St. NE | Albuquerque, NM 87109 | 505.823.1000	July 20, 1959	061273777
RS&H 4835 LBJ Freeway, Suite 800 | Dallas, TX 75244 | 469.857.7727	February 14, 1941	613387281

2. Firm Employee Information

Through this contract, the City of Albuquerque will have access to BHI's local staff of over 215 and to RS&H's staff of 1,421, 267 of which are focused on aviation. BHI is a local engineering firm that is a trusted consultant to the City and that has staff dedicated to Aviation services. Several of our staff members each have over 30 years of experience in New Mexico Aviation projects. RS&H has a New Mexico presence and also brings to the team national expertise from work on small, medium, and large-scale airport projects. Key team members who will work directly with your Project Manager for this contract are listed below, including their registration numbers and primary contract roles. Our key project leaders have a wealth of experience with airports across the state, as well as regional and national experience that can help facilitate what is needed for your projects, including policies, processes, and preferences.

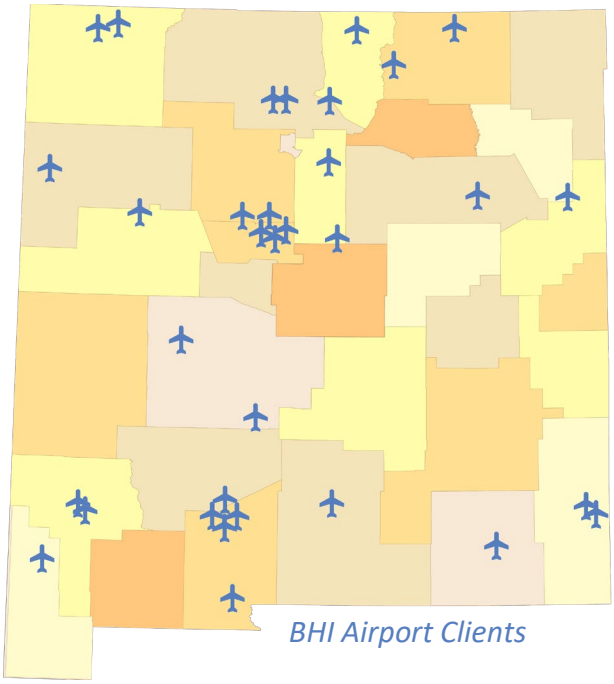
Principal	*Role*	*Registration & Number*
Albert M. Thomas, PE	Principal-in-Charge and Project Manager	NM PE #11476
Elaine Pickering, PE	Deputy Project Manager	NM PE #25713
Steve Creamer, PE	Deputy Project Manager	NM PE #21791

3. Where Services Are to be Performed

All services the BHI team will provide for this contract will be performed out of our Albuquerque office. RS&H members will provide some services by the staff that is located in Albuquerque and some of the services from their regional office in Dallas. For some specific assignments RS&H staff will be co-located in BHI's Albuquerque office. This will facilitate collaboration and will provide you better access to the staff working on your projects. Our geotechnical subconsultant Terracon will provide geotechnical services out of their Albuquerque office.

II. PROJECT TEAM MEMBERS

1. Organization Plan for Management



BHI Airport Clients

On the following page is an organization chart that illustrates the capacity and expertise BHI and RS&H offer the City to provide airfield engineering services. We understand the need for rapid response to your on-call task orders, and we are motivated to continue providing timely responses, as well as creative problem solving and real-time solutions, to the challenges you face. We have placed one of our most experienced project leaders, Albert (Bert) M. Thomas, PE, in the role of Principal-in-Charge and Project Manager. The City and the City's Project Manager are very familiar with Bert, and he understands the City's operations and requirements based on successfully managing five City on-call contracts over the past 5 years. Bert will be joined by Deputy Project Managers Elaine Pickering, PE, and Steve Creamer, PE, whose combination of local knowledge and regional expertise will enable them to provide well-informed, comprehensive, tailored solutions that meet the needs of the Sunport and Double Eagle II airports. We know airports. As you can see from the New Mexico map above, BHI has significant experience working for airport clients around the state, and, as indicated in the map below, our teaming partner RS&H has significant experience working for airport clients across the nation.

2. Sub Consultants

Teaming Partner

BHI has partnered with two consulting firms with whom we have strong and trusted working relationships. We will leverage our previous relationships with these partners to bring you a cohesive team to meet your project needs and successfully deliver your projects from conception to completion.

RS&H Airport Clients

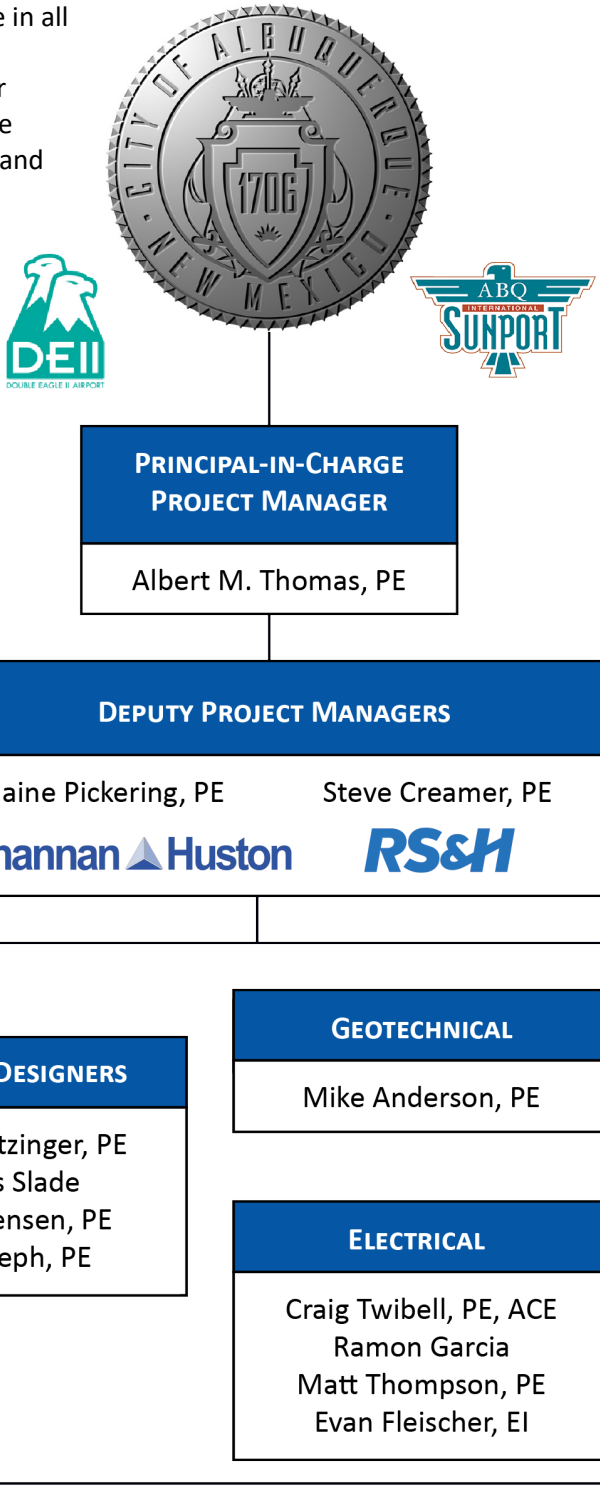
RS&H is an employee-owned corporation providing fully integrated engineering, planning, architecture, and consulting services.

As a leader in aviation, RS&H has provided professional consultant services for over 80 years and currently serves more than 200 airports nationwide. RS&H has extensive experience with airport clients and the FAA in preparing studies and reports, plans, and specifications, construction administration, and other associated project activities at commercial, regional, and general aviation airports nationwide.

Terracon is our geotechnical subconsultant. Terracon has worked with BHI on many projects and has an Albuquerque office. Terracon has also worked with RS&H on many projects throughout the United States. Terracon Consultants, Inc., is a 100 percent employee-owned consulting engineering firm. The firm has evolved into a successful multi-discipline firm specializing in geotechnical engineering, environmental services, and materials testing with 3,500 employees in 150 offices and 40 states nationwide.

3. Team Member Qualifications

Our well-trained professionals offer detailed knowledge in all aspects of the engineering field and bring a range of experience levels, as highlighted in the table below. Our senior staff members bring decades of knowledge to the table, and their expertise is complemented by younger and newer personnel who bring fresh perspectives and innovative ideas to our project work. Bringing individuals with differing experience levels together on our project teams provides the City with the best of both worlds: tried-and-true + fresh-and-new! We look forward to coordinating with City Project Managers and Technical Staff to help us all develop the best solutions to your aviation project needs.



Name	Specialization	Yrs. Exp.	Edu	Registration	Professional Memberships
Albert M. Thomas	PIC/PM	35	BS	PE NM	ITE, ACEC, ARTBA, ASCE, AGC
Elaine Pickering	Aviation	27	BS	PE NM	NMSPE, NMAMA
Steve Creamer	Aviation	26	BS	PE NM	ACC, AAAE, ASCE, USACE,OSHA
Mark Huntzinger	Aviation	46	MS, BS	PE NM	ASCE, SW AAAE, NMAMA
Dumas Slade	Aviation	46		FAA pilot	ASTM, EAA, NMAMA
Phil Jurgensen	Aviation	7	BS	PE NM	ASCE-NM & TX
Elliot Neph	Aviation	14	BS	PE NM	NCEES
Alan Benham	Survey	27	BS	PS, PE, CFedS	IRWA
Barry Phillips	Survey	34	BS	PS	NMPS, IRWA
Dennis Sandin	Mapping	32	BS	RPP	NMGIC, ASPRS, GITA
Mike Anderson	Geotechnical	30	BS, MBA	PE NM	ASCE, ACEC, ASFE, APWA, NAOIP
David Full	Environmental	38	MURP	AICP	ACRP, ACI-NA, AICP, IAAE, NAEP
Julie Barrow	Environmental	13	BS, MS	-	-
Craig Twibell	Electrical	20	BS	PE TX, ACE	IES, ACE, AAAE
Ramon Garcia	Electrical	7	BS	-	-
Matt Thompson	Electrical	30	BS	PE NM	IEEE, ASHRAE, WEF
Evan Fleischer	Electrical	9	BS	EI NM	ISA

4. Unique Knowledge of Key Team Members

Our senior team leaders bring substantial knowledge of working on state and regional airports, as well as with the City on on-call projects. Bert's experience is described in detail in Section III.2. Below we highlight the fields of specialization and the unique knowledge relevant to this contract of Elaine, Steve, and our other key technical team members who will be working with you on this contract.

Deputy Project Manager

Elaine Pickering, PE, brings over 27 years of experience in municipal, commercial, industrial, and residential land development civil engineering, which complements aviation engineering so necessary at today's airports. Since joining BHI, she has been immersed in all things aviation. She has been instrumental in supporting BHI's municipal airport clients for the preparation of FAA grant application packages. In addition to NM Aviation projects, as a licensed engineer across five states, she has worked on a variety of projects across the country, from 1-acre fast food sites to 200-acre distribution centers, and most things in between. Her clients have included architects, individuals, large developers, cities, and multi-national corporations.

Fields of specialization:

- planning/design of new hangars, taxiways, and drainage facilities
- lighting replacement
- pavement evaluation
- conceptual layouts, including ALPs

Deputy Project Manager

Steve Creamer, PE, brings a "big picture" mentality that focuses on the interconnectedness of projects and project components, like customer experience, operational impacts, regulations, and project budgets, that must work together to achieve shared goals. He values the City's desire to ensure the safety of airport infrastructure and the efficient and stress-free use of facilities. While project designers delve into the design details, Steve maintains focus on overall intent – safety and ease of use. He brings a unique ability to listen and to strategically ask thoughtful questions that help the design team, as well as airport stakeholders, consider options and effects in context of the airport objectives. He will help compose ideas and solutions to address short and long-term infrastructure needs.

Fields of specialization:

- master planning
- project management
- terminal and apron expansion
- terminal modification
- pavement repair

Aviation Designer

Mark Huntzinger, PE, has more than 46 years of civil engineering experience. For the past 10 years, he has specialized in planning and engineering at airports ranging from large commercial service to general aviation airports, completing over 50 airport development projects. His experience in NM local government gives him insight on owner's perspectives on purchasing, budgeting, and process.

Fields of specialization:

- runway, taxiway, and apron construction
- pavement maintenance
- airport visual aids and lighting systems
- FAA processes and standards

Aviation Designer

Dumas Slade brings over 46 years of experience and has specialized in airport design and construction for the last 35 years. He has been instrumental in solving a wide variety of airport design and construction issues. Having worked on some 200 airport projects, he can readily provide appropriate, site-specific solutions to a vast array of airport projects and has a thorough understanding of project constructability and construction phasing.

Fields of specialization:

- airport plans and facility assessment
- airport design
- aviation construction management
- aviation construction inspection
- quality control

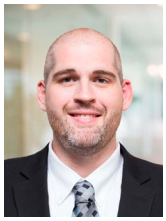
Aviation Designer

Phillip Jurgensen, PE, is a native New Mexican and lives and works in Albuquerque. He will be a design engineer for the on-call engineering contract responsible for continuously coordinating with BHI and the City's staff. Phillip has experience working for airports big and small, all over the United States. Assignments have been similar in nature to those anticipated in this contract and include the Amarillo Taxiway P4 and J Reconstruction Project, Austin Terminal Apron Expansion, and Spokane International Airport Taxiway C Improvements to name a few. Phillip serves as an Airfield Civil Engineer for RS&H's Aviation Practice and leads RS&H's project efforts in New Mexico.

Fields of specialization

- preparation of construction documents for aviation projects
- FAA/ stakeholder/subconsultant coordination
- airfield electrical services
- pavement evaluation and management

Aviation Designer



Elliot Neph, PE, brings 14 years of experience on a variety of aviation engineering projects. He will utilize his concentrated aviation engineering experience, including sound knowledge and implementation of FAA Advisory Circulars and solid FAA Southwest Region ADO working relationships developed from the completion of numerous airport improvement projects throughout the FAA Southwest Region.
Elliot has managed many aviation projects requiring extensive coordination with airport staff, state and federal agencies, airport tenants, air traffic control, airline operators, and other stakeholders. His efforts earned him the title of RS&H's 2020 Aviation Project Manager of the Year.

Fields of specialization:

- coordination with airport staff, government agencies, tenants, and other stakeholders
- implementation of FAA Advisory Circulars
- pavement management
- taxiway reconstruction

Electrical Aviation

Craig Twibel serves as the Airfield Electrical Discipline Leader for RS&H's Aviation Practice. He has more than 20 years of experience with a variety of airfield electrical and NAVAID projects, as well as extensive knowledge of low to medium voltage power distribution and communication systems for buildings and transportation related projects. Craig is a licensed professional engineer in multiple states.

Fields of specialization:

- airfield lighting
- taxiway signage and marking
- airfield electrical improvements
- lighting replacement
- taxiway rehabilitation design

Geotechnical

Mike Anderson, PE, has more than 30 years of geotechnical and construction materials testing experience. He has provided geotechnical services at several airports within New Mexico and specifically provided geotechnical investigation at Albuquerque International Sunport and Double Eagle II Airport. He is familiar with work at the two airports and potential coordination, safety, and geotechnical issues associated with airport projects.

Fields of specialization:

- new buildings, hangars, retaining walls
- embankment slopes
- utilities
- drainage structures
- aircraft and non-aircraft pavements

III. RESPONDENT EXPERIENCE

At the Sunport and Double Eagle II, our team has done surveying and geotechnical work. At airports in New Mexico, our team members have accomplished planning, design, and construction phase services for multiple FAA, State, and locally funded project. We know NM Airports. RS&H has national airport planning and engineering experience at airports. Our team has experience ranging from large hub to small rural airports. Skilled, experienced, adaptable – the BHI Team provides you with a fully integrated team to perform any task.

1. Previous Similar Projects

1) Doña Aña County International Jetport

RECONSTRUCT RUNWAY 10-28

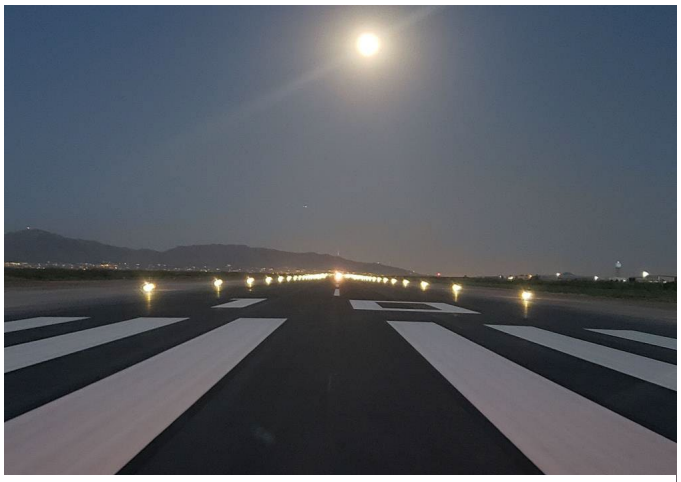
Contact: Bill Provance, (575) 644-2358
2016-2022 | Construction Cost: $6,496,186

This project was the full depth reconstruction of the only runway at DNA International Jetport with from 20,000-pound single wheel to 95,000-pound dual wheel pavement strength. The project included new LED runway lights and signs and vault modifications (new regulators, lightning protection, and new controls), as well as replacing the PAPI and REILs with LED units. It also included:

Doña Ana County Jetport - Reconstruct Runway 10-28 - excavation and compaction of the subgrade

- Modification and construction of taxiway geometry to the current FAA Taxiway Design Group (TDG) standards.
- Conversion of the parallel taxiway to a temporary runway and re-conversion back to the taxiway.
- FAA Flight Check of the installed lights, PAPI, and REILS.
- Design geotechnical soils investigation (performed by Terracon).

Relevance to Scope of CABQ Airfield On-Call:
RWY 08-26 edge light replacement, TWY B reconstruction, RWY 03-21 edge lights replacement, RWY 12-30 pavement rehabilitation, East RON apron construction, RWY08/RWY12 realignment, RWY 17-35 and TWY B pavement and lighting rehabilitation, RWY 04-22, TWY A, TWY C pavement and lighting.



Doña Ana County Jetport Taxiway A

TAXIWAY A LIGHTING REPLACEMENT

Contact: Bill Provance, (575) 589-1232
2021-2022 | Construction Cost: $285,530

This project included the replacement of the taxiway edge lights and signs with new LED lights and signs, new cable, electrical home run cable replacement, installation of counterpoise, and replacement

of direct bury cable and stake mounted lights with conduit and base mounted lights. The project includes all new electrical cable, including the "home run" circuit, resulting in a completely new taxiway electrical system.

Relevance to Scope of CABQ Airfield On-Call: RWY 08-26 edge light replacement, RWY 03-21 edge lights replacement, RWY08/RWY12 Realignment, RWY 17-35 and TWY B lighting rehabilitation, RWY 04-22, TWY A, TWY C lighting rehabilitation.

2) Grant County / Silver City Airport

Rehabilitate Runway 8-26

Contact: Rebekah Wenger, (575) 388-4554
2015-2017| Construction cost: $2,089,486

This project included an evaluation to determine the best method of extending the pavement life of the only paved runway at the airport. As there was no evidence of subgrade failure, rehabilitation techniques were evaluated.

A 2-inch pavement mill and inlay was selected, and the construction was compressed into a short timeframe to minimize the impact to the air carrier operations. The design geotechnical soils investigation was performed by Terracon.

Relevance to Scope of CABQ Airfield On-Call: TWY B reconstruction, RWY 12-30 pavement rehabilitation, East RON apron construction, RWY08/RWY12 Realignment, RWY 17-35 and TWY B pavement rehabilitation, RWY 04-22, TWY A, TWY C pavement rehabilitation.

Apron and Taxiway Reconstruction/ Rehabilitation Design & Construction

Contact: Rebekah Wenger, (575) 388-4554
2019-2022 | Construction cost: $2,005,000

Due to funding limitations, the project included the evaluation of methods to repair, rehabilitate, or replace commercial service and general aviation aprons, along with an evaluation of all taxiways. The taxiway evaluation included mitigating four taxiways which had direct connections from an apron to the runway, and one taxiway with an acute angle off of the runway. Also included was bringing the taxiway geometry to the current Taxiway Design Group (TDG) standards. The ultimate construction contract included segments of full depth reconstruction, pavement additions to existing turns, pavement mill and inlay, and seal coat

Grant County Reconstruct/Rehabilitate Apron - Concrete Fueling Apron

rehabilitation. The "direct connect" taxiways were mitigated by closing four taxiway segments to ensure there was a turn between the runway and taxiway. The acute angle taxiway was closed. The design geotechnical soils investigation was performed by Terracon.

Relevance to Scope of CABQ Airfield On-Call: TWY B reconstruction, RWY 12-30 pavement rehabilitation, East RON apron construction, RWY08/RWY12 Realignment, RWY 17-35 and TWY B pavement rehabilitation, RWY 04-22, TWY A, TWY C pavement rehabilitation.

3) Dallas-Fort Worth, TX

EXPEDITED RUNWAY REHABILITATION

Contact: Khaled Naja, (972) 574-8888
2019-2022 | Construction cost: $130,388,211

The project was an extensive improvement to Runway 18R-36L, one of the airport's primary runways. Improvements included reconstruction of the keel section and lighting rehabilitation with LED and automatic FOD detection (AFOD) system infrastructure.

In addition to the runway rehabilitation, multiple adjacent ongoing and future projects required coordination during design and construction. RS&H also designed future electrical vault upgrades so no rework would be required within the runway rehabilitation project limits. Each of these adjacent projects required extensive coordination with stakeholders.

Aerial view of Dallas-Fort Worth

Relevance to Scope of CABQ Airfield On-Call: RWY 08-26 edge light replacement, RWY 03-21 edge lights replacement, RWY 17-35 and TWY B lighting rehabilitation, RWY 04-22, TWY A, TWY C lighting rehabilitation.

4) Spokane International Airport, WA

SPOKANE TAXIWAY C IMPROVEMENTS

Contact: Lisa Corcoran, (509)455-6406
2017-2019 | Construction cost: $16,953,641

Taxiway C improvements addressed shoulder settlement. An extensive pavement evaluation was performed, and full depth removal and replacement was recommended. New 30-foot-wide shoulders and modifications to the intersection geometry were performed to bring the intersections to standards with new taxiway edge lights and new underdrain.

Airfield electrical improvements included new LED taxiway edge lights, guidance sign replacement, and new taxiway lighting cables. Airfield lighting vault improvements included new constant current regulators (CCRs), and the Airfield Lighting Control and Monitoring System (ALCMS) was updated to reflect the runway designation. The project required extensive coordination with the contractor, airport staff, and Air Traffic Control Tower (ATCT) during construction.

Relevance to Scope of CABQ Airfield On-Call: RWY 08-26 edge light replacement, RWY 03-21 edge lights replacement, RWY 17-35 and TWY B lighting rehabilitation, RWY 04-22, TWY A, TWY C lighting rehabilitation.

Above & below: Spokane Taxiway C Improvements

2. Project Managers' City Experience

Albert M. Thomas, PE: Principal-in-Charge / Project Manager

Bert has been serving the City of Albuquerque for over 25 years, working closely with your staff on projects ranging in size and complexity from small intersection upgrades to large corridor improvements. He has also been the manager on several award-winning and high-profile projects in the Albuquerque area. **Bert is seen as the City's go-to person for BHI's recent Citywide On-Call Contracts.**

Bert's Fields of Specialization:

- *Client Coordination and Communication*
- *Expedited Project Scoping and Delivery*
- *Project Oversight and Technical Guidance*
- *Federal Coordination and Permitting*
- *Public Meetings and Coordination*
- *On-Call Contract Management*

In addition to his work directly for the City, Bert has also been involved in many aviation projects around the state for other clients. This includes many projects similar to the scope of work being requested as part of this contract. Since project funding could come through the state, his reputation and relationship with NMDOT as one of the state's top engineering consultants makes him a valuable asset for managing these City projects.

IV. TECHNICAL APPROACH

1. Understanding of Project Scope

Our team has reviewed the Master Plans for the Sunport and Double Eagle Airport, which has helped our understanding of the projects slated for this on-call contract. The scope of work for each project will be further developed following meetings with the Project Manager and airport staff. Construction phasing, safety, construction access, evaluating the impact on the airport operations, and coordinating with the airport staff and Air Traffic Control Towers are all required elements of the projects.

Albuquerque International Sunport Projects

Terminal Perimeter Concrete Reconstruction – This project involves reconstruction of concrete apron around the terminal. Alkali silica reactivity (ASR) has been an issue at the Sunport in the past and has caused the apron pavements to fracture and to fail, thereby requiring reconstruction.

Runways 3-21 and 8-26 Edge Light Replacement – This project involves replacing the existing High Intensity Runway Lighting (HIRL) systems with LED high intensity lights and airfield guidance signs, resulting in a lowering of electrical demand and operational costs. Improvements to and within the electrical vault and to the Airfield Lighting Control and Monitoring System will also be required to accomplish the project.

TWY B Reconstruction – Taxiway B is a partial parallel taxiway north of Taxiway A. This taxiway is currently primarily asphalt construction, serving air carrier and GA aircraft and is in the poorest condition on the airfield. The aircraft load has degraded the pavement beyond reasonable repair, and reconstruction is required for a serviceable taxiway.

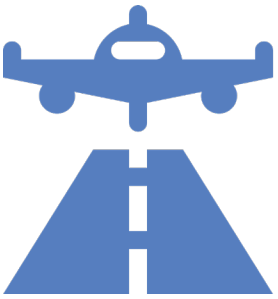
Perimeter Road Rehabilitation – The perimeter road is primarily asphalt and is in need of rehabilitation.

RWY 08/RWY 12 Realignment – The FAA continues to identify the RW 8/RW 12 intersection as a Hot Spot. The 2020 Master Plan and the SRM Runway 12-30 Final Report recommend relocating the Runway 12 threshold, constructing a new RW 12 exit taxiway, and removing pavements to eliminate this Runway Safety Action Team (RSAT) identified Hot Spot.

RWY 12-30 Pavement Rehabilitation – Runway 12-30 is concrete construction with grooving and serves air carrier and GA aircraft. The runway pavement has begun to show wear and tear and requires rehabilitation/maintenance. Evaluation of the runway is needed to determine the repair/rehabilitation methods.

East RON Apron Construction – The 2020 Master Plan identifies an area east of the terminal apron for the Remain Over Night (RON) apron. As a new construction, concrete pavement is recommended.

Double Eagle II Airport Projects



RWY 17-35 and TWY B Pavement and Lighting Rehabilitation and RWY 04-22, TWY A, TWY C Pavement and Lighting Rehabilitation – These projects are similar with pavement rehabilitation and lighting replacement/rehabilitation components. All the pavements are hot mix asphalt, with the runways having a Porous Friction Course (PFC) surfacing for increased friction and pavement surface moisture run-off. The lighting systems are medium intensity systems with Runways 17 and 35 having Runway End Identifier Lights (REILs) installed. Exact methodologies will be determined during the investigative phase of projects to determine the preferred solution.

2. Plan to Perform Services

BHI recognizes this is a significant list of 10 projects to be accomplished by the City of Albuquerque and the Aviation Department over the next 5 years. For this reason, we have assembled a strong team to combine the best resources, particularly that of BHI and RS&H, to fulfill the City's needs. BHI will provide the project management and oversight of all projects through our local leadership. We will support the Project Management with Deputy Managers and task specific engineers to ensure sufficient resources are assigned to each project, guaranteeing timely delivery of designs. The BHI and RS&H team will work as a single unit, bringing the City a unique combination of local staffing, knowledge of local conditions, contractors, and city process, national understanding of the Aviation industry, and an unmatched depth of aviation professionals. In fact, our combined team totals more than 260 engineers, architects, designers, and supporting staff who focus solely on aviation projects.

BHI's plan to perform services will be tailored to each task order and project as it becomes identified. BHI uses a defined Project Management Methodology to ensure the success of our projects. The following is a brief sequence of the steps anticipated to manage this on-call contract:

Evaluate Task Assignments

- PIC evaluates each assigned work order and assigns BHI team members
- Works closely with City Staff to define and understand scope

Work Order Initiation

- Work begins with initial meeting with City, BHI PM, and technical experts
- Define expectations of task, deliverables, and design criteria and discuss concerns
- Draft scope and schedule and proposed fee

Kickoff Meeting

- Upon acceptance of proposal, meeting with BHI staff and City PM takes place
- Outline goals, expectations, schedules, deliverables, resources, design criteria, and budget

Project Delivery

- Execute scope of services as defined in kickoff meeting, including incorporating all necessary quality control checks to confirm an accurate deliverable

Monthly Invoices

- Invoices will show all task orders authorized along with percentage complete and remaining budget. A progress report will be completed and a City Pay Request will be submitted

Additionally, BHI is familiar with City, state, and federal agency processes including:

FAA Processes – BHI understands the FAA's grant funding cycle and processes and will work with you to ensure your projects are ready to be bid to meet these schedules.

All projects start with a scoping meeting to determine the work to be accomplished, to develop a project specific work plan, and to start the discussion on work phasing, airfield closures, and construction safety. Coordination with airport operations, FAA, tenants, the Air Traffic Control Towers, and others occurs throughout the project process.

Albuquerque International Sunport Projects

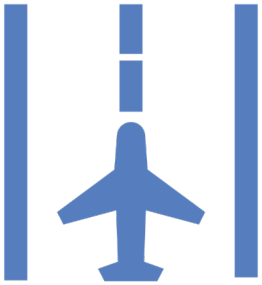
Runways 3-21 and 8-26 Edge Light Replacement – We recommend the project be a complete replacement of the lights, signs, cables, and regulators so the lighting system is completely new.

The electrical vault and the controls for each runway will be examined, and recommendations will be made for upgrades as needed. The Airport Lighting Control and Monitoring System in the Air Traffic Control Tower will be examined for upgrade as needed.

Our team has designed and constructed a new runway and taxiway lighting system at multiple airports and has many lessons learned that can be applied to projects with airfield electrical components.

TWY B Reconstruction – The design and construction are straightforward and could be prepared to allow bid options for asphalt or concrete pavement; however, given the amount of C130 traffic and other heavy aircraft in the fleet mix PCC pavement would likely be the best option.

RWY 08/RWY 12 Realignment – The Runway 8 work is complex. Required items included removing and replacing markings, edge and threshold lights, airfield guidance sign, touchdown lights, runway distance to go markers, VASIs with PAPIs, modifications to the MALSR, and development of new Instrument Approach Procedures. Some of these items will require a Reimbursable Agreement with the FAA to have the FAA actions accomplished—including flight checks.



The Runway 12 threshold displacement is similar but less complex, as there are no visual aids or instrument approach procedures to change. Combined with the Runway 12 work is the removal of segment of Taxiway E and the removal of Taxiway G1 and construction of a new taxiway to the new Runway 12 threshold.

RWY 12-30 Pavement Rehabilitation – The project to rehabilitate this runway should be combined with the Runway 12 realignment described above. The rehabilitation starts with an evaluation of the existing pavement condition to determine the extent of damage.

East RON Apron Construction – Recommended is a concrete apron of approximately 25,000 square yards for dual wheel aircraft weighing up to 260,000-pounds/dual tandem wheel aircraft weighing up to 360,000-pounds.

Double Eagle II Airport Projects

Runway 17-35 and TWY B Pavement and Lighting Rehabilitation and Runway 04-22, Taxiway A, Taxiway C Pavement and Lighting Rehabilitation – Both runways 17-35 and 4-22 have a Porous Friction Course (PFC) surface treatment. Currently, the FAA no longer supports the installation of new PFC.

The pavement rehabilitation requires a pavement evaluation to determine the construction required. Our recommendation is to request an FAA Modification of Standards (MOS) to allow reapplication of a PFC. If the MOS is not approved, the PFC should be removed, and the runway grooved to provide the friction and surface moisture drainage characteristics.

The taxiways should be brought up to the 2012 intersection/curve geometry standards, and the taxiways that provide direct access directly from an apron to a runway should be addressed. Bringing the taxiways to current FAA pavement fillet requirements would involve construction of additional full depth pavement on the inside of the existing pavement curves.

Replacing the lights with LED lights will result in operational cost savings. As part of the rehabilitation/replacement, the lights, signs, cable, and constant current regulator should all be replaced to have a completely new electrical lighting system. Connection of the new electrical circuits to the Airport Lighting Control and Monitoring System in the ATCT will be examined for upgrade as needed.

3. Specialized Problem Solving

The BHI team has the staffing and resources to accomplish any engineering-related task that may be necessary for this on-call contract. Our partnership with RS&H ensures a strong local presence with the backing of an international aviation powerhouse. **Our breadth of resources and local office allow us to respond to the City's requests on the same day if needed.** Because of our unique range of services, we can provide specialized expertise to meet all engineering assignments. Some of the distinctive areas that set us apart from other consultant firms include:

- **Integrated and Cohesive Team – BHI's and RS&H's partnership provides the City with an integrated and cohesive team which will ensure projects are completed on time, on budget, and in a way that exceeds expectations.** Our firms already have a working relationship from partnering in other regions. Furthermore, our team includes a local PIC/PM, deputy PM, and aviation designers.
- **Ability to manage multiple assignments simultaneously** – As a result of our diverse staff and depth of local resources, **we are readily available and fully capable of managing multiple tasks that may arise through an on-call contract at any given time.**
- **Informed and innovative solutions** – **We pride ourselves on thinking through all of the relevant project issues and taking extra steps to ensure responsible decision making.** This enables BHI to develop thorough, yet innovative approaches to projects, as well as to provide the City with a technically sound project that does more than just meet the minimum requirements of the job—it creates sustainable solutions.
- **Understanding of the funding process** – Our team routinely works with the FAA Southwest Region, NMDOT Aviation Division, and local governments to deliver FAA and NMAD grant-funded projects. **We understand the grant cycle process** and will work with you throughout the process from grant initiation to closeout.
- **Knowledge of the Albuquerque Area** – BHI has contributed to the quality of life of Albuquerque citizens since 1959. **A majority of our staff have been working for decades as employees of BHI, and we take pride in the projects we have completed for the community.** This direct knowledge of the Albuquerque area allows us to better serve you. As airport customers, we want to partner with you to improve both Albuquerque airports for the benefit of the city, airlines, private pilots, and customers for years to come.

Working on active, operational airports comes with a long list of challenges and issues to address and to monitor. Below are some of the issues we foresee addressing in the scoped projects:

Albuquerque International Sunport Projects

Runways 3-21 and 8-26 Edge Light Replacement – The construction will require closing the runways for the light replacement and cable pulling as this work is within the safety area. The lighting construction could be specified to occur at night to minimize the impact to the runways. If the lighting project is not included with other runway work, and duct/conduit space is available, we can specify the installation of the new cable while the existing lighting system remains operational, so lighting is available throughout the construction period. The switch to the new lights would involve removing and replacing individual lights with the LED lights on the new cable while the old cable stays connected to provide continuity during the changeover.

TWY B Reconstruction – Coordination with Kirtland AFB will be required, as Taxiway B has three entrances to the base's western aprons. Coordination with the connections at Taxiway A that are within the Taxiway Safety Area will require coordination with Kirtland AFB and the Sunport for construction phasing and safety plan development.

RWY 08/RWY 12 Realignment – While the Master Plan indicated a 600-foot displacement on both Runways 8 and 12, consideration should be given to the displacement being set so the existing runway light spacing can be maintained. Construction will require closure/displacement of the runways.

RWY 12-30 Pavement Rehabilitation – The runway will need to be closed during this work, as the concrete repairs require a cure time before the repairs can support traffic.

East RON Apron Construction – The location east of the terminal apron needs to be coordinated with the ultimate use of the City of Albuquerque's Aviation Center of Excellence lease areas.

Double Eagle II Airport Projects

RWY 17-35 and TWY B Pavement and Lighting Rehabilitation and **RWY 04-22, TWY A, TWY C Pavement and Lighting Rehabilitation** – Combining the pavement rehabilitation with the lighting rehabilitation/replacement into one project will minimize the time of closure of the individual runways and taxiways.

Phasing of the taxiway work to ensure the aprons and runways can be accessed during each construction phase is required.

Specialized Problem Solving for Current Construction Pricing Variability

We know the current economy – in particular shortages in material, labor, and contractors, along with increased inflation – will impact contractor bids. To help mitigate these issues, we will prepare estimates for cost and construction schedules taking that into account. Additionally, we will plan to include alternate bid schedules to keep construction within budget and to allow projects to move forward.

V. COST CONTROL

1. Cost Control

A. Cost Control of the Design Process: Our team understands the importance of cost control throughout the project lifecycle, and we work to control costs every step of the way, beginning with design. For any task under an on-call, we begin by working hand-in-hand with the City to establish a thorough understanding of the needs and to develop an accurately defined scope of work for the project. Our experts in each discipline outline the activities and develop the work hours and expenditures required to complete the necessary deliverables for the project.

B. Cost Control of the Construction Cost: We are devoted to ensuring estimates of probable construction costs meet both the project scope and the City's budget. These budgets include all costs necessary to design and to

construct the project. A construction cost estimate is prepared at the onset of the project and revised at key milestones. The design team also performs informal value engineering reviews to look for opportunities to reduce construction costs. Any potential cost-saving methods will be reviewed with City staff prior to implementation. Because we have construction engineering staff in house, we also have a senior staff member provide a constructability review to identify where potential issues could impact the ease of construction and therefore the cost.

C. Cost Estimating Techniques: Estimating probable project construction costs is dependent on three main factors: 1) an accurate tabulation of all items and quantities to be incorporated into the final constructed product, 2) an understanding of market conditions and materials in the construction industry, and 3) the use of current bid prices from broad-based information sources.

2. Comparisons of Bid Awards

Name of Project	MM/YYYY Bid	No. of Bids	Final Cost Estimate	Bid Award Amount
Laredo International Airport Cargo Apron Phase 14 Construction	**07/2021**	**1**	**$14,933,429**	**$14,833,171**
Laredo International Airport Taxiways G1 and G2 Construction	**06/2021**	**2**	**$8,557,455**	**$8,219,272**
Doña Ana County International Jetport Apron Pavement Rehabilitation	**06/2021**	**2**	**$242,525**	**$205,907**
Doña Ana County International Jetport Taxiway A Lighting Replacement	**06/2021**	**3**	**$365,050**	**$285,530**
Doña Ana County International Jetport Reconstruct Taxilane E, Phase 1	**06/2021**	**2**	**$392,750**	**$273,964**
Easterwood Field Airport, TX Taxiway A Realignment Phase 1	**06/2021**	**3**	**$5,633,396**	**$5,251,880**
Amarillo International Airport Taxiways P4 and J Reconstruction	**07/2020**	**3**	**$10,345,978**	**$8,743,955**
Grant County-Silver City Airport Rehabilitate/Reconstruct Taxiways and Apron	**05/2020**	**1**	**$2,041,745**	**$2,154,770**
Colorado Springs Municipal Airport Runway 17R-35L Rehab	**04/2020**	**3**	**$18,626,834**	**$16,145,265**
Henry County, TX RW 10-28 Rehab	**03/2020**	**1**	**$1,645,343**	**$1,654,838**

VI. CERTIFICATIONS

Included on the following pages are the forms listed below.

Pay Equity Worksheet PE10-249

Agreement and Insurance Certification

Liability Coverage Certificate

New Mexico Resident Bidder's Certificate

Pay Equity Reporting Form

City of Albuquerque
www.cabq.gov

Bernalillo County
www.bernco.gov

Water Authority
www.abcwua.org

Company Details

Company Name	Bohannan Huston, Inc.
Phone	15054536215
Email Address	nsimutis@bhinc.com

Mailing Address	7500 Jefferson St NE Albuquerque, NM 87109
NM Employees?	yes

Job Category		No. Females	No. Males	Gap (Abs. %)
1.1	Exec/Senior Level Officials/Mgrs	2	16	3.02%
1.2	First/Mid Level Officials/Mgrs	2	11	9.41%
2	Professionals	35	49	8.19%
3	Technicians	10	48	14.57%
4	Sales Workers	0	0	N/A
5	Office and Admin. Support	20	1	4.47%
6	Craft Workers (Skilled)	0	0	N/A
7	Operatives (Semi-Skilled)	0	0	N/A
8	Laborers (Unskilled)	0	0	N/A
9	Service Workers	0	0	N/A
	Overall Total	69	125	9.30%

Total # of Females (all categories)	69	Total # of Males (all categories)	125
Total # Female Only Job Categories	0	Total # Male Only Job Categories	0
Total # Part Time Females	9	Total # Part Time Males	5
Female % Workforce	35.57%	Male % of Workforce	64.43%
Total # Employees	194	Total # Non-Binary Employees	0

Must be signed by a representative of the company. Signature certifies that all employees working in New Mexico are included, the data is for one year ending when the form is signed, and any challenges to your information may require you to get third party verification at your own expense.

Nancy L. Simutis, HR Director	Nancy L. Simutis	Mar 18, 2021
Name and Title	Signature	Date Submitted

*** All Pay Equity Reporting Forms are reviewed by the Gender Pay Equity Initiative within two business days of submission. A copy of the reviewed form will be emailed to you for inclusion with your bid or proposal. If the Overall Total Pay Gap on your form is 0%, the Gender Pay Equity Initiative will certify your Pay Equity Reporting Form. A Certified Pay Equity Reporting Form may allow you to obtain a 5% preference. Please keep in mind that a Pay Equity Reporting Form - whether certified or uncertified - must be submitted with all bids and proposals. Please contact the Gender Pay Equity Initiative with any questions: oei@cabq.gov or (505) 768-3512.**

☐ **Certified - This form has been certified** _____ Pay Equity Representative

☑ **Uncertified - You do not meet the criteria**

City of Albuquerque Capital Implementation Program

Agreement and Insurance Certification

We have reviewed the standard agreement for Engineering orArchitectural or Landscape Architectural Services that are required for the project listed below, and hereby certify that we will, if selected for the project, enter into this standard agreement for this project and meet all insurance requirements listed therein.

This Certification is intended for the use of the City of Albuquerque only, in conjunction with the award of the Engineering or Architectural or Landscape Architectural Services Agreement for Project:

Project Name Airfield Engineering On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

Project Number 7700.94

Date 1/25/2022 Firm Name Bohannan Huston, Inc. (BHI)

Signature _____

Title Senior Vice President

STATE OF NEW MEXICO)

) ss

COUNTY OF BERNALILLO)

(No notary stamp per RFP instructions. See copy of liability insurance coverage on next page.)

The above Certification was subscribed before me, the undersigned authority, by:

_____

who swore upon oath that this Certification was signed of free act and deed, on this

_____ day of _____ , 20 _____

_____

(Notary Public)

My commision expires: _____

BOHAHUS-01 CMONTOYA

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 7/23/2021

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

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

PRODUCER License # 0757776 HUB International Insurance Services (SOW) 6565 Americas Parkway Suite 720 Albuquerque, NM 87110	CONTACT NAME: Tammie Jojola PHONE (A/C, No, Ext): (505) 262-9457 FAX (A/C, No): E-MAIL ADDRESS: Tammie.Jojola@hubinternational.com
INSURED Bohannan Huston, Inc. 7500 Jefferson St. NE Albuquerque, NM 87109-4335	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Hartford Casualty Insurance Company — 29424 INSURER B : Hartford Ins Co of the Midwest — 37478 INSURER C : New Mexico Mutual Casualty Company — 40627 INSURER D : WCF National Insurance Company — 40517 INSURER E : Continental Casualty Company — 20443 INSURER F :

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

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC X OTHER: $0	X	X	34UUOL5067	8/1/2021	8/1/2022	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY SCHEDULED AUTOS HIRED AUTOS ONLY NON-OWNED AUTOS ONLY	X	X	34UENOL5066	8/1/2021	8/1/2022	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 10,000			34XHUOL5068	8/1/2021	8/1/2022	EACH OCCURRENCE AGGREGATE	$ 10,000,000 $ 10,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	70912	8/1/2021	8/1/2022	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
D	CO Work Comp			3483893	8/1/2021	8/1/2022	Per Statute	1,000,000
E	Prof/Poll Liability			AEH288359977	8/1/2021	8/1/2022	$4M Agg/100,000 ded	2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

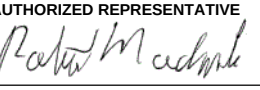
CERTIFICATE HOLDER

Proof of Coverage

CANCELLATION

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

AUTHORIZED REPRESENTATIVE



STATE OF NEW MEXICO

TAXATION AND REVENUE DEPARTMENT

RESIDENT BUSINESS CERTIFICATE

Issued to: **BOHANNAN-HUSTON, INC.**

DBA: **BOHANNAN-HUSTON, INC.**
7500 JEFFERSON ST NE
ALBUQUERQUE, NM 87109-4338

Expires: **28-Oct-2023**

Certificate Number:

L1058291376

Stephanie Schardin Clarke
Cabinet Secretary

THIS CERTIFICATE IS NOT TRANSFERABLE

CITY OF ALBUQUERQUE

Airfield Engineering On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

Project No. 7700.94 | January 26, 2022

MOLZENCORBIN

January 26, 2022

Ms. Myrna Marquez, Administrator and Chair
Selection Advisory Committee Office
Capital Implementation Program Division Office
One Civic Plaza, 7th Floor, Room 7057
Albuquerque/Bernalillo County Government Center
Albuquerque, NM 87102

RE: Project 7700.94, Airfield Engineering On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

Dear Ms. Marquez and Members of the Selection Committee:

The projects in this request for proposal are important on several fronts: the Terminal Perimeter Concrete Reconstruction will remove some of the worst pavements that exist on the Sunport airfield – concrete pavement severely affected by Alkali-Silica Reactivity; the four runway edge light projects will replace airfield lighting fixtures with LED technology, providing a significant savings in power costs along with replacing aged equipment; the taxiway and roadway pavement reconstruction and rehabilitation projects at both airports will eliminate aging asphalt pavements with new surfaces suitable for the traffic; the East Remain Overnight (RON) Apron project will add aircraft parking capacity at the Terminal and will ease congestion along Taxiway A adjacent to the Terminal Ramp; and the Runway 8 and 12 Realignment project will mitigate penetrations of critical approach and protected FAA regulated surfaces. Our proposed project manager, Mr. Mike Provine, PE, brings unparalleled longevity of service and institutional knowledge to this contract, resulting in the following benefits for the City:

- **Experienced Team with Unmatched Knowledge.** In addition to over three decades of support for the City of Albuquerque Aviation Department, our core project team members have worked together recently with the Aviation Department on the design, specifications, and construction administration of projects very similar or related to the projects listed in the Request for Proposal, including the Taxiway E Reconstruction and Air Cargo Apron Extension that are very similar to the RON Apron and Taxiway B reconstruction projects. We have prepared the pavement evaluation at Double Eagle II Airport and designed the airfield lighting systems on Runway 04-22 and Runway 17-35. We prepared conceptual layouts for the Runways 8 and 12 Realignment under the Sunport Master Plan Update and understand the airspace issues present with the existing geometry.
- **Maximum Value for the Money.** We can hit the ground running with no ramp-up time and very little disruption to the City staff. These projects require time-sensitive scheduling to not only capture possible supplemental funding, but also to meet aggressive deadlines. As illustrated by our past performance, Molzen Corbin can deliver solutions quickly and efficiently.
- **Highly Responsive Service.** With our corporate headquarters located adjacent to the Albuquerque International Sunport, we not only provide highly-responsive services to the City's Aviation Department, but deliver high-quality projects at local rates. Our Project Manager, Mr. Mike Provine, PE, has shown that he can be at the Aviation Department offices within 10 minutes of any request—truly on-call service. The City will continue to receive the exemplary customer service to which they have become accustomed under this contract.

We hope that the following submittal demonstrates the benefits of selecting the Molzen Corbin team. If you have any questions, please feel free to call our proposed Project Manager, Mike Provine, PE, at (505) 242-5700. We look forward to working with you.

Sincerely,
MOLZEN CORBIN

Kevin W. Eades, PE
Executive Vice President

Mike Provine, PE
Vice President and Senior Civil Engineer

Table of Contents

Required Forms

Section 1: General Information

About Molzen Corbin

Molzen Corbin is a nationally-ranked firm with deep roots in this State. **In 1954, founding partner Mr. Al Corbin began working on the Albuquerque Sunport** when it was still part of Kirtland Air Force Base. Our aviation specialists apply decades of technical expertise, institutional knowledge, and project experience to develop solutions tailored to the needs of each client. We serve airports of all sizes, from the Albuquerque International Sunport to the Angel Fire Airport, as seen in Figure 1 at right.

Name, Address, Telephone Number and Date When Firm Was Established

Molzen Corbin was established in 1960. Our corporate offices are located at 2701 Miles Road SE, Albuquerque, New Mexico, 87106, (505) 242-5700. Our DUNS number is 069413250.

Employees, Technical Disciplines and Registration Data

Molzen Corbin offers a staff of 88 professionals and support personnel. For discipline and registration data of project team members, please see the résumés on pages 2 and 3.

In-House Staffing Breakdown

Architecture Dept	8
Civil Engineering Dept	21
Water Resources Engineering Dept	15
Electrical Engineering Dept	4
Mechanical Engineering Dept	1
CAD/Design Technicians	12
Construction Observers	10
Surveyors	3
Grants Specialist	1
Computer Specialists	1
Administrative/Clerical	12
Total Molzen Corbin Staff	**88**

Subcontractor Staffing Breakdown

Geo-Test, Inc.	30
Coffman & Associates	24
Total Available Staff	**54**

Where Services are to Be Performed

Molzen Corbin's in-house staff will perform all work from our Albuquerque offices located **less than one mile from the Albuquerque Aviation Department.** Our subconsultants will provide work from:

- Geotechnical — Geo-Test, Inc., 8528 Calle Alameda, NE, Albuquerque, NM
- Airport Environmental/Planning — Coffman Associates, 237 NW Blue Parkway, Suite 100, Lee's Summit, MO

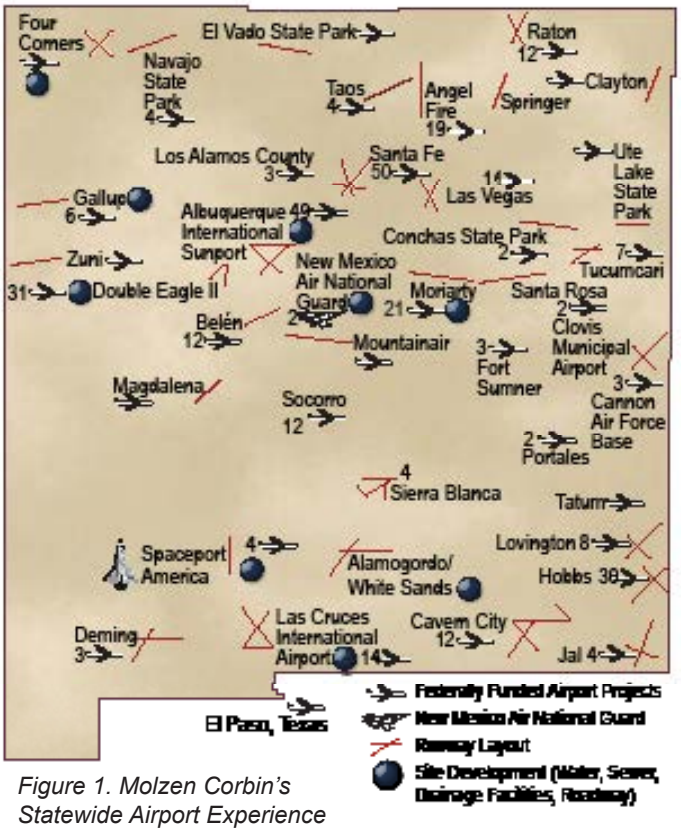


Figure 1. Molzen Corbin's Statewide Airport Experience

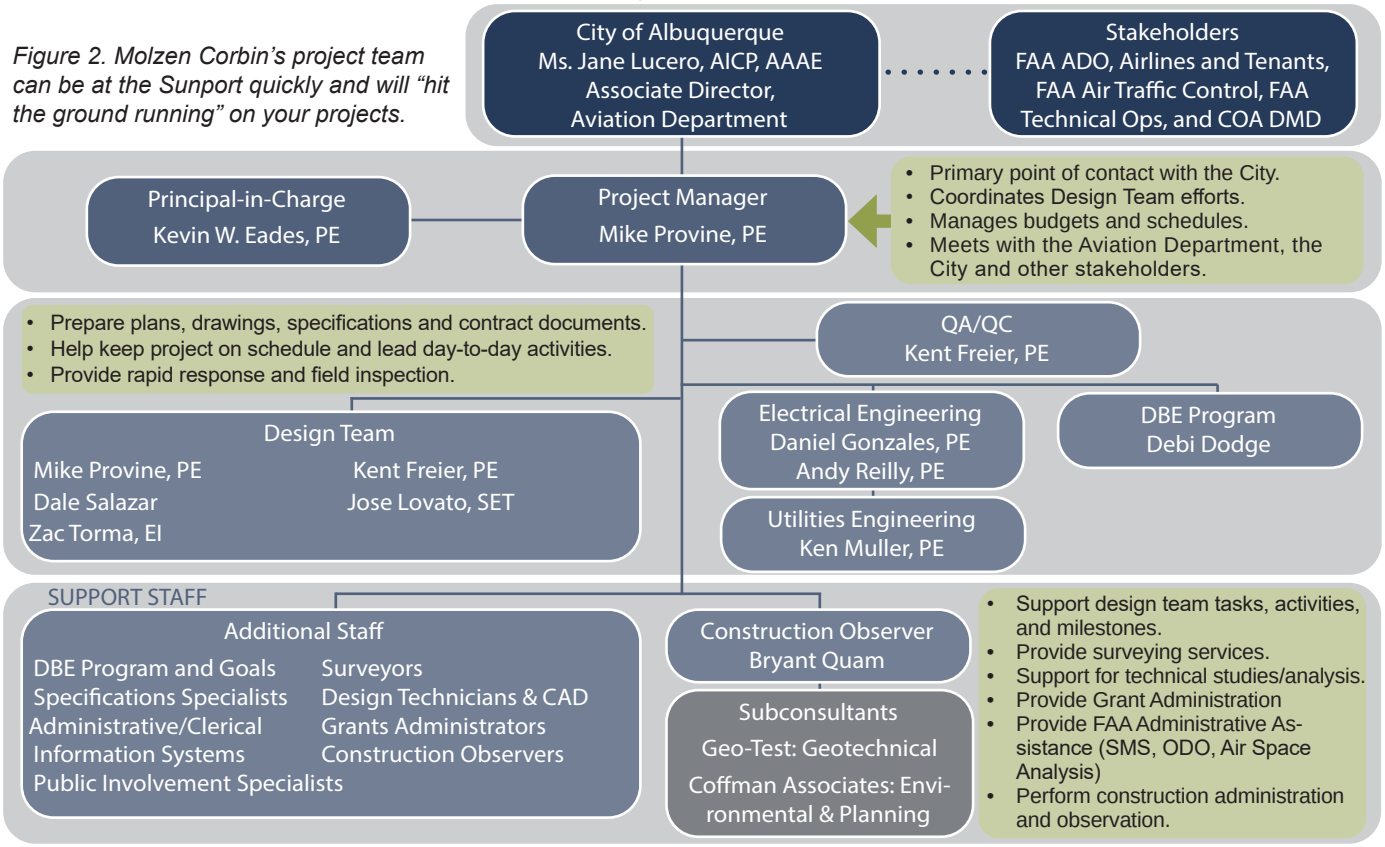
Our partnership with the City of Albuquerque Aviation Department spans five decades, providing unmatched support to the International Sunport and the Double Eagle II Airport.

Section 2: Project Team Members

Organization Plan for Management of the Project

The responsibilities, organization, and lines of communication of our project team are depicted in Figure 2 below. Our core project team members have worked together on the design and specifications for Sunport airfield projects since 2004. The résumé of our proposed project manager, Mr. Mike Provine, PE, is provided below. Résumés of additional team members follow on pages 2 and 3.

Figure 2. Molzen Corbin's project team can be at the Sunport quickly and will "hit the ground running" on your projects.



Qualifications of Project Team Members

Mike Provine, PE, CM: Project Manager and Design Team Lead

Registration: NM PE #10997
Education: BS, Civil Engineering, New Mexico State University (NMSU)
Memberships: NMAMA, AAAE, ASCE

Mr. Provine has **served as Project Manager for projects under Molzen Corbin's On-Call Contract with the City's Aviation Department for over 32 years, and offers unparalleled familiarity with your airfield facilities, long-term goals, and short-term needs. Albuquerque International Sunport Experience:** Runway (RW) 8 and 12 Decouple; RW 8-26 Rehabilitation; Taxiway (TW) F6 Construction; Airfield Lighting Upgrade with LED lights; Albuquerque Aviation On-Call Engineering Services; RW 8-26 and 12-30 Reconstruction; TW E Reconstruction; TW A Reconstruction; TW A, B, and C Reconstruction; Air Cargo Freight Apron Extension; Terminal Apron Reconstruction; Sunport III Hangar Construction; Spirit Drive Construction; Sunport Boulevard Pavement Rehabilitation (Rehab); Access Road D Construction; Clark Carr/University Boulevard Intersection Improvements; Part 150 Noise Study; Sunport Drainage Master Plan; Master Plan Update (3); GA Apron Reconstruction; Photovoltaic Array Installations (3), and ACE Site Plan for Subdivision.

Kent Freier, PE, CM, CFM: QA/QC and Design Engineer

Registration: NM PE #8182, NM CFM# 13-00337
Education: BS, Civil Engineering, Texas Tech
Memberships: ASCE, AAAE, NM Flood Plain Manager's Association

Throughout his **44-year career,** Mr. Freier has helped airports across the State design and fund projects to promote economic development and is a recognized leader in airport engineering in New Mexico. He has worked with the Aviation Department for over 35 years. **Albuquerque Aviation Department Experience:** RW 8-26 Reconstruction, Site Grading/Drainage for Rental Car Facility site, Sunport Drainage Masterplan, and Sunport Boulevard. Double Eagle II RW 4-22, TW A Reconstruction and new LED edge light systems, RW 17-35 Reconstruction, TW B Reconstruction, New TW C Construction, Midfield Development Taxilanes and Aprons, New PFOZ Signing and Marking, and Drainage Masterplan. QA/QC on TW A Reconstruction, TW E Reconstruction, RW 12-30 Reconstruction, and Terminal Apron Reconstruction.

Key Project Team Members		
Team Member		**Qualifications**
Kevin W. Eades, PE: Principal-in-Charge Registration: NM PE #14481 | Education: BS, Civil Engineering, NMSU | Memberships: ASCE; ACEC; NMSU Academy of Civil, Ag., and Geological Engineering		**28 years** of experience and Molzen Corbin's executive vice president. Extensive experience managing contracts, coordinating projects and master plans, and working with communities across New Mexico. Strong project management and client relations experience and is especially talented in working with clients on a one-to-one basis to ensure that their organizational needs are met.
Dale Salazar, CET, ATSSA: Senior Design Technician Registration: Traffic Control Supervisor, ATSSA; Transportation Engineering Technology Design Level I – NICET | Education: AS, Drafting/CAD Management, Muir College		**32 years** of experience. Lead design technician on more than 23 projects for Albuquerque's Aviation Department, including layout and geometry for each of the proposed projects. **Sunport Experience:** TW E Reconstruction, RW 8 and 12 Decouple, GA Apron Reconstruction, Terminal Apron Reconstruction, FIS Improvements, Airfield Lighting Upgrade, Airfield Signage/Marking Plan, TW A Reconstruction, and ACE Site Plan for Subdivision.
Jose Lovato, SET: Senior Engineering Specialist Registration: NICET SET Level IV, No. 91686 | Education: Architectural Courses, UNM; Surveying and Computer Courses, CNM		**48 years** of experience. **Sunport Experience:** Spirit Drive and GA Apron Parking Lot, Sunport RW 8-26 Reconstruction, TW A and E Reconstruction, and Long-Term Parking Solar Photovoltaic Array.
Zac Torma, EI: Civil Engineering Registration: NM EI #71516 | Education: B.S. in Civil Engineering, University of New Mexico		**Four years** of experience. He performs drainage analysis, grading and drainage design, and pavement design. In 2020, delivered Pavement Condition Index for DEII Airport Pavements. **Sunport Experience:** Pavement Condition Index for Sunport Shoulder Pavement Repair.
Daniel Gonzales, PE: Electrical Engineering Registration: NM PE #19969 | Education: BS, Electrical Engineering Technology NMSU		**18 years** of experience. **Sunport Experience:** Airfield Lighting Upgrade, Runway 8 and 12 Decouple, Taxiway E Reconstruction, FIS Improvements, and 1 MW Solar Photovoltaic Canopies for Long-Term Parking Lot.
Andy Reilly, PE: Electrical Engineering Registration: NM PE #26915 | Education: BS, Electrical Engineering Pennsylvania State University		**16 years** of experience in design of instrumentation and controls (I&C), renewable energy, power, specifications, pre-design analysis and reports, cost estimates, and construction coordination. **Sunport Experience:** Sunport Power Systems Study & Emergency Power System
Ken Muller, PE: Water Resources Engineering Registration: NM PE #12548 | Education: BS, Civil Engineering, California Polytechnic Univ. | Memberships: Water Environment Fed.		**48 years of experience**, including the waterline relocation in the air cargo apron extension and design of water production, fire protection, storage, distribution, and water treatment facilities for the DEII and the ACE Infrastructure Development.
Debi Dodge: DBE Program Administrator		Technical department administrator with **30 years** of experience in project administration and funding. Has provided DBE compliance service for Albuquerque's Aviation Department for over 15 years. Has worked closely with COA DMD Contract Services on boilerplate and construction document preparation for over 15 projects.
Bryant Quam: Construction Observer		More than **25 years** of field experience. **Sunport Experience:** GA Apron Reconstruction; TW A Reconstruction, Phases A, B and C; Terminal Apron Reconstruction Phase III (2016); South GA Apron Reconstruction, Runway 8-26 Rehab, and Runway 8 and 12 Decouple.
Subconsultants	**Tim Byres, SET, Geo-Test, Inc.: Geotechnical** Registration: NICET IV | Memberships: American Concrete Institute	Geo-Test has been part of the Molzen Corbin team for 32 years, working with us on virtually all of our airport projects. Mr. Byres has **over 25 years of professional experience**, and has provided geotechnical engineering services at airports around the state, including Albuquerque International Sunport and DEII Airport.
	Matt Quick, PE, Coffman Associates: Airport Environmental and Airport Planning Registration: MO PE #019816; AZ PE #14452 | Education: BS, Civil Engineering, Iowa State University | Memberships: Airports Council International, International Consultants Council, AAAE	**19 years of experience** in all elements of airport planning, in particular special airport studies regarding rules and regulations, rates and charges, safety area improvements, and wildlife hazard management. Coffman's COA Aviation Department experience includes the **DEII Airport ATCT EA, the DEII Airport Environmental Assessment, the DEII eALP, the DEII RW 17-35 Closure EA, three Sunport Master Plan updates, Sunport eALP**, and the Orion Center Complex.

Unique Knowledge of Key Team Members

Molzen Corbin's longevity of service to Albuquerque's Aviation Department has resulted in an unparalleled knowledge of your facilities. This unique knowledge is illustrated in Figure 3 below.

Team Member	Unique Qualifications	Benefit to the Aviation Department
Mike Provine, PE	• Project Manager for Aviation Department for over 32 years • Unparalleled familiarity with facilities, history, and goals • Understands Sunport airfield and operations constraints • Knows Sunport airfield geometry and geometry issues • Understands COA and FAA process and requirements for Contract Documents	• No learning curve for Sunport work • Experience in the Proposed Projects • Continuity of team leadership • Works as an extension of Sunport Staff • Can meet tight funding/bidding schedules
Kent Freier, PE	• Worked with Aviation for over 35 years • 15 successful projects for the Aviation Department	• Institutional knowledge will result in effective QA during design • Extensive knowledge and experience in Airport Drainage
Dale Salazar	• Has been lead design tech on Sunport projects for 21 years • Has worked with Aviation Department on layout for proposed projects • Has prepared all updates to airfield signage and marking plans	• Will develop drawings and details accurately from knowledge of airfield • Efficient filing of FAA phasing documents • Experience will minimize airfield system disruption
Geo-Test, Inc.	• Worked on Sunport geotech/materials testing for over 34 years • Complete familiarity with FAA design and testing criteria • Meets FAA certification requirements	• Understands pavement and soil limitations at Sunport • Extensive experience working with FAA specifications

Figure 3. There is no learning curve with the Molzen Corbin Airport Team.

Section 3: Respondent Experience

Molzen Corbin is one New Mexico's first Aviation Engineering firms, and our experience with the City of Albuquerque Aviation Department spans five decades. Figure 4 below illustrates our unparalleled airfield experience at the Albuquerque International Sunport.

Leadership in Airport Development and On-Call Services

In addition to the projects listed in the Request for Proposals (RFP), this contract requires a team that is ready to assist the Aviation Department with a wide variety of projects. Molzen Corbin has a long history of successfully providing on-call services to airports and municipalities across the State, including the Aviation Department. Figure 5 (at right) illustrates our Statewide on-call experience.

Previous Projects of a Similar Nature

Our project team assisted in the preparation and submittal of analysis and funding documents to the FAA as an engineering subconsultant on the recent Sunport Master Plan Update. The projects included in this

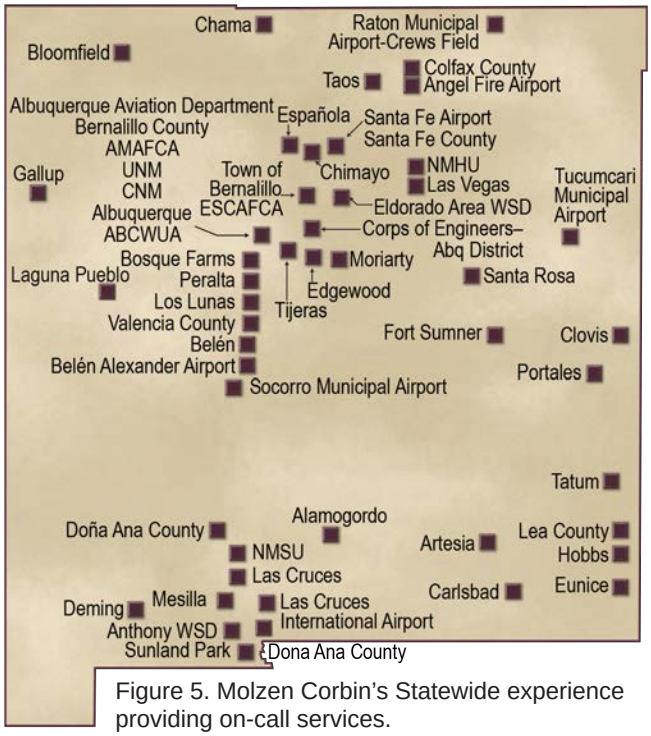


Figure 5. Molzen Corbin's Statewide experience providing on-call services.

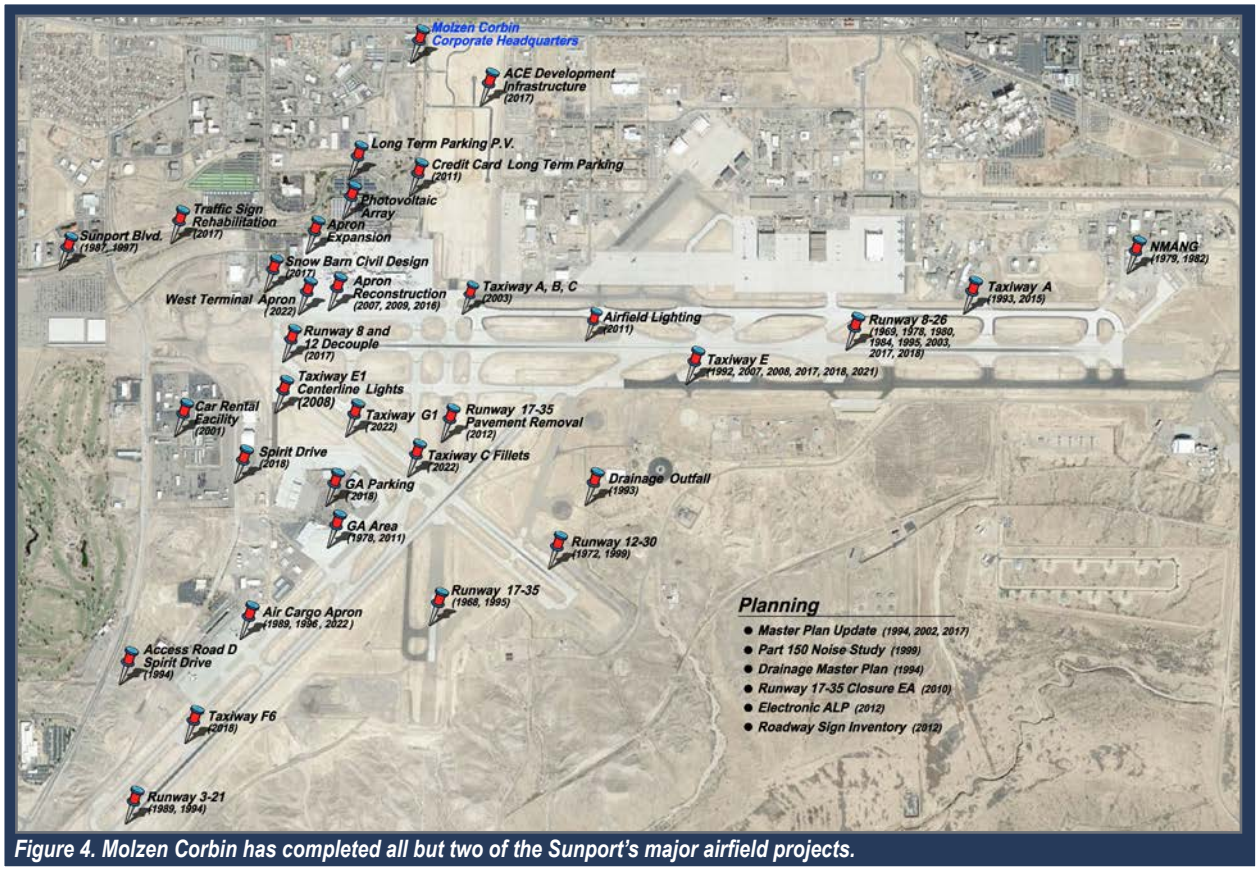


Figure 4. Molzen Corbin has completed all but two of the Sunport's major airfield projects.

RFP are all discussed and analyzed in the master planning process, including extensive evaluations for the mitigation of the Sunport hot spots and approach surface issues.

Our project team members are the same team members who have served the Aviation Department on their successful airfield projects for the past 18 years, and some since 1989. Our experience at the Sunport has allowed our team to complete successful projects with tight and expedited project schedules such as the U.S. Customs and Border Protection Federal Inspection Station (FIS) improvements completed with the successful processing of passengers from the new international air service by Volaris Airlines on November 17, 2018.

Our team has demonstrated our ability to work with the Aviation Department, the City, and Federal agencies on fast track projects, such as the FIS Improvements and the Taxiway F6 Construction at the Sunport and Taxiways A1 and B1 Realignment project at the Double Eagle II Airport. We have the experience in preparing engineering services agreements with the Municipal Development Division and in submitting FAA required funding and construction submittals, as well as the experience on the Sunport airfield, to allow us to hit the ground running.

Federal Inspection Station (FIS) Improvements

Client Contact: Mr. Peter Pierotti, Acting Deputy Aviation Director, (505) 244-7784; **Year Services Provided:** 2018; **Construction Cost:** $700,000 est.; **Team:** Provine (Project Manager), Salazar (Design), Gonzales (Electrical), Geo-Test (Geotechnical)

Expansion of the FIS was necessary for the Sunport to accept an international flight proposed by Volaris Airlines. Design and construction of the improvements was accomplished in approximately 100 days. Fast track design and construction processes allowed the Aviation Department to provide the prerequisite improvements to the Sunport Port of Entry that included expansion of the facility by 2,600 square feet; extension of electrical, plumbing, and communications/data utilities to the new space; modification of the existing FIS facility; pavement markings for the new aircraft gate; and security enhancement provisions. Molzen Corbin worked closely from design through construction with the Aviation Department, US Customs and Border Protection, City Planning and Building Safety, and the general contractor to successfully complete the project on time.

Molzen Corbin worked to fast track design and construction improvements to the FIS necessary for the new international air service by Volaris Airlines

Sunport Taxiway F6 Construction

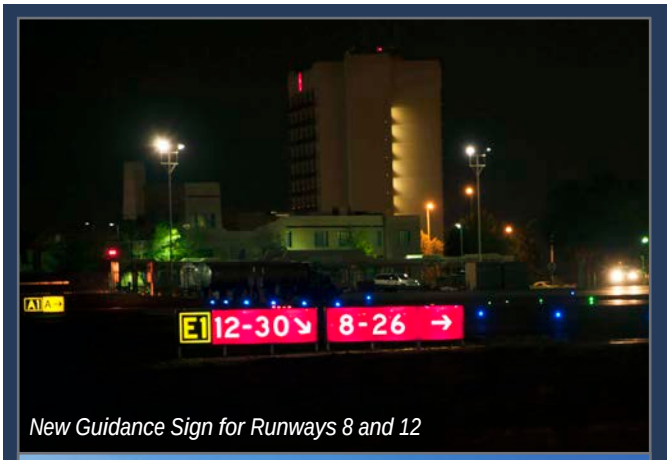
Client Contact: Ms. Jane Lucero, AAE, Associate Director of Aviation, (505) 244-7858; **Year Services Provided:** 2018; **Construction Cost:** $3,000,000 est. **Team:** Provine (Project Manager/Design Engineer), Salazar (Design), Gonzales (Electrical), Freier (QA), Geo-Test (Geotechnical)

Taxiway F6 will be a new connector for Runway 21 aircraft exits to Taxiway F. The project was designed and bid earlier this year with construction completed in the spring of 2019. The new taxiway will be an improvement to airfield operations efficiency by eliminating 2/3 mile of taxi distance for aircraft landing on Runway 21, decreasing fuel costs, improving runway landing efficiencies, and limiting passenger time on the aircraft traveling to the terminal gates.

Sunport Runway 8 and 12 Decouple

Client Contact: Ms. Jane Lucero, AAE, Associate Director of Aviation, (505) 244-7858; **Year Services Provided:** 2017-2018; **Construction Cost:** $416,200 **Team:** Provine (Project Manager/Design Engineer), Salazar (Design), Gonzales (Electrical), Freier (QA), Quam (Observation), Geo-Test (Geotechnical)

Runway 8 and Runway 12 converge at the northwest corner of the Sunport airfield and were accessible by the common entry point off of Taxiways E1 and A1. Lapses in situational awareness by pilots caused several runway incursions at this location, which brought a priority rating by FAA to mitigate this issue through the designation as Hot Spot No. 1 at the Sunport. The hot spot was mitigated by realigning Taxiway E1 and eliminating that entrance to



New Guidance Sign for Runways 8 and 12

Runway 8 and 12 Decouple

Runway 12. The project was designed and an FAA grant captured in the summer of 2017 with construction completed in the spring of 2018. Construction phasing was critical because the project required the closing of both Runway 8-26 and Runway 12-30 simultaneously, leaving only one runway available at the Sunport. The Runway 8-26 closure was concurrent with the Runway 8-26 Rehabilitation project.

Runway 8-26 Rehabilitation

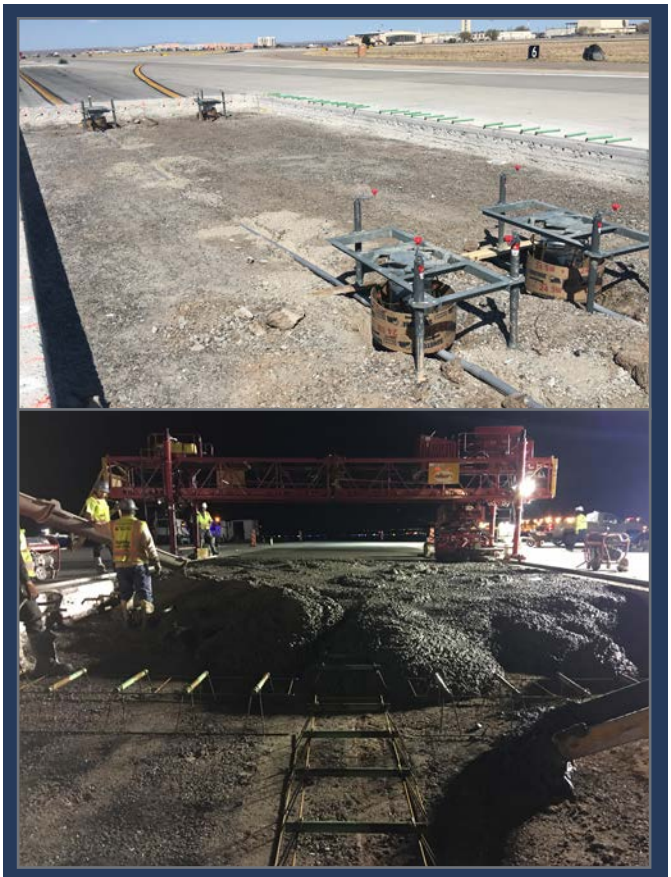
Client Contact: Ms. Jane Lucero, AAE, Associate Director of Aviation, (505) 244-7858; **Year Services Provided:** 2017-2018; **Construction Cost:** $4,563,000 **Team:** Provine (Project Manager), Boyd (Design Engineer), Salazar (Design), Quam (Observation), Geo-Test (Geotechnical)

Runway 8-26 is the primary commercial service runway at the Sunport. Reconstructed in 1996, the concrete pavement was in serious need of rehabilitation necessary to repair spalls, longitudinal cracking, and joint seal deterioration. The project was designed, and an FAA grant was captured during the same schedule as the Runway 8 and 12 Decouple project. A closure of the runway was necessary to accomplish the rehabilitation work which included removing and replacing 177 panels of the runway concrete pavement. Close coordination with the Aviation Department, FAA Air Traffic, the airlines and Kirtland Air Force Base minimized impact to airfield operations. The closure of the runway was coordinated with the closure of Runway 12-30 required in the Runway 8 and 12 Decouple project.

Sunport Sustainable Master Plan Update

Client Contact: Ms. Jane Lucero, AAE, Associate Director of Aviation, (505) 244-7858; **Year Services Provided:** 2016-2018; **Construction Cost:** N/A **Team:** Provine (Lead Civil), Boyd (Civil), Salazar (Layouts/Quantities), Quam (PCI)

Molzen Corbin has worked as an engineering sub-consultant on three Sunport master plan updates with Coffman Associates, including the most recent update that is in the City approval process. The experience on the master plan updates provides the design team with the knowledge on the operational needs, geometry and alignment criteria, and operations constraints that exist at the Sunport. The projects included in the RFP were all discussed and alternates analyzed during the master planning process. Mitigation of the hot spots analyzed in the Master Plan Update has been identified by FAA as a high priority that may receive supplemental funding. A very quick turn around on the project design will be necessary if this funding is to be captured. Molzen Corbin's experience with the geometry and alignment of the hot spot mitigations will be critical, condensing the design schedule to allow the City to meet the funding deadlines.



Runway 8-26 Rehabilitation

Project Manager's Experience with the City Within the Past Five Years

Mr. Provine, PE, has developed a strong working relationship with the City through his more than 32 years of direct experience providing services and delivering projects for the Albuquerque Aviation Department. Most of those projects entailed tight funding, design, and construction schedules. Examples of his experience with the City over the last five years include the following:

- Served as Project Manager and Lead Civil Engineer on over 20 projects with the Aviation Department since 2017. Figure 6 below is a partial listing of his experience with the Aviation Department.
- As Project Manager, he was successful in meeting the accelerated fast track project schedule for procedures, including the FAA, DRB, and DRC reviews, as well as the City's Contract Document Review Process.
- Served as the engineering lead on the Sunport Sustainable Master Plan Update and the Double Eagle II Airport Master Plan Update as a subconsultant.
- Served as Project Manager on mitigations of Hot Spots No. 1, 2, and 3, The Runway 8 and 12 Decouple, T/W G1, and Taxiway C Fillets.
- He has strong working relationships with City staff and is experienced in coordinating and resolving project challenges and issues with the funding agencies and stakeholders.
- He assisted the Aviation Department in updating CIPs, ODOs, FAA grant applications, and project reports. He also participates in monthly update teleconferences with the Aviation Department and FAA.
- He has managed and developed complex construction project phasing with the Aviation Department for both the Runway 8-26 Rehabilitation and the Runway 8 and 12 Decouple process minimizing disruption to the airlines.

Figure 6. Recent support for the Aviation Department.

Aviation Department Project	Pavement Rehab/Reconst.	Airfield Electrical and Signage	Airport Drainage	Complex Construction Phasing	Impact to Airfield Operations	FAA Grant Administration	Project Cost
DEII Taxiway A1 and B1 Relocation	•	•	•	•	•	•	$1,351,965
DEII Perimeter Fence						•	$846,209
DEII Airport Pavement Evaluation	•		•				$75,000 (report)
Interim Federal Inspection Station		•		•	•		$691,673
West Terminal Apron Reconstruction	•	•		•	•	•	$7,818,124 (bid)
Air Cargo Apron Extension	•	•	•	•	•		$11,443,220 (bid)
Taxiway G1 Relocation Taxiway C Fillets	•	•		•	•	•	$2,760,453 (bid)
Taxiway F6 Construction	•	•	•	•	•	•	$1,699,048
Taxiway E Ph A & B Reconstruction	•	•	•	•	•	•	$21,080,650 (2 projects)
Runway 8 and 12 De-Couple	•	•		•	•		$431,535
Runway 8-26 Rehabilitation	•			•	•	•	$4,000,000
							$52,197,877

Molzen Corbin designed and oversaw construction of the ACE project located within the Sunport property. The ACE project is envisioned as an emerging business hub, promoting collaboration between the R&D community and the global marketplace.

Section 4: Technical Approach

Respondent's Understanding of the Project Scope

Molzen Corbin's project team has worked successfully with the City on very similar projects to those listed in the RFP over the past several decades, and the personnel we have listed on our team are the people working on those projects.

The project slisted in this RFP are eligable for FAA funding. Our project manager, Mike Provine, recently prepared the environmental documentation under separate contracts that were submitted to the FAA for the Terminal Perimeter Concrete Reconstruction, the Runway 08- 26 Edge Lighting Rehab, and the East RON Apron. We have also included these projects in the Aviation Department's Disadvantaged Business Enterprise program, another pre-requisite to qualify for FAA funding. We have an excellent relationship with the FAA program manager and the Aviation Department, participating in monthly update conference calls on FAA funded projects in progress. We have always approached our FAA- and City-funded projects using a team approach and with the same Molzen Corbin team.

Other FAA requirements for Airport Improvement Projects include developing and submitting for approval the Construction Safety and Phasing Plan (CSPP), which outlines phasing requirements for the project and airfield safety requirements mandated by FAA for the construction. This document must submit the design for FAA review and approval. The airfield projects will require modification to the Airfield Guidance Sign Plan. The Airport Layout Plan will need to be modified and submitted to FAA as well.

We have prepared CSPP and ALP updates for the airfield projects that we have worked on with the Aviation Department. We are completely familiar with the FAA's electronic submittal process from our work experience at the Sunport. Environmental clearance, DBE project goals, and the plans and specifications must be completed and the project ready for bid advertisement by May 1, typically.

Hitting the appropriate construction season is important, especially at the Sunport. The most advantageous times to construct at the Sunport when runway closures are necessary are after the summer traffic decreases in the fall, temperatures and wind moderate, and after Balloon Fiesta. Weather patterns become more tranquil and will accommodate the runway closures. Traffic during Balloon Fiesta is typically higher and many times during the Fiesta, balloon traffic crosses the approach to Runway 8 or floats over the west end of Runway 8, requiring use of Runway 3-21. Runway closures during this period should be avoided.

Other key elements to working with FAA funding are knowing the reimbursement request process and having the experience with the Aviation Department to submit the reimbursement requests along with the contractor pay requests so time is minimized for reimbursement. This is an important cash flow element with pay requests totaling in the hundreds of thousands of dollars. There are also special payment criteria for asphalt and concrete pavement constructed with FAA funding. Molzen Corbin has prepared a standard spreadsheet to allow our team to correctly evaluate the pavement acceptance tests and to apply payment factors as specified by FAA.

Terminal Perimeter Concrete Reconstruction

A pavement condition survey was performed under the most recent Master Plan Update project. The resulting Pavement Condition Index (PCI) for the concrete paving adjacent to the terminal was 52 and one of the lowest PCIs calculated on the Sunport airfield pavement. The pavement is located between the aircraft parking apron and the terminal and within the drive areas under the terminal and was constructed with the terminal expansion in the late 1980's. The existing concrete pavement has severe Alkali-Silica Reactivity (ASR) damage, and many areas are bowing and spalling from the expansion caused by the ASR and producing debris that can severely damage aircraft. The pavements are isolated from the adjacent aircraft parking apron by an asphalt expansion joint that has absorbed much of the ASR expansion from the perimeter concrete. Design of the expansion joint replacement will be an important part of the reconstruction project.

Runway 08-26 Edge Light Replacement

Runway 08-26 edge lights were installed in 1996 with fixture and component replacements made by the Aviation Department on an as-needed basis. The existing fixtures are quartz-halogen, and replacement with LED fixtures considerably reduces power costs. Replacement of the lighting regulators should also be made to accommodate the LED technology. The lighting circuits should also be tested and the wire replaced if significant degradation is evident.

Taxiway B Reconstruction

Taxiway B is a bypass taxiway paralleling Taxiway A. It was constructed in 1993 and is the last asphalt concrete pavement section remaining on the airfield. The PCI calculated in 2018 for the pavement condition was a 54, which falls in the poor range, and with FAA criteria, should be reconstructed. Taxiway B allows air traffic controllers to pass east-bound and west-bound traffic without interruption and is a major access route to the aircraft aprons at KAFB. Providing satisfactory access to the KAFB is a requirement of the 1962 agreement established between the City and the U.S. Air Force. The existing pavement condition clearly points to pavement reconstruction, however, there has been hesitancy by FAA in funding the project in the past. The preliminary engineering report for the project will need to provide documentation supporting the taxiway's reconstruction.

Perimeter Road Rehabilitation

The perimeter road allows vehicle traffic, including airfield maintenance and operations, fuel trucks, and police, access to the perimeter of the airfield. Portions of the road are failing. One section west of the end of Runway 8 is located above the old Yale Landfill, and the road has settled with landfill consolidation. Use by fuel trucks is questionable due to the undulating pavement surface. Other areas need resurfacing. The project can be phased depending on the availability of funding. The section above the landfill will be expensive if trash removal and haul is necessary. Limiting moisture penetration into the landfill material with some method of stabilizing the pavement subgrade may be an alternative. The roadway work could affect the use of Runway 8-26 due to the proximity off the end of the runway, so taking the opportunity to combine the project schedules into one closure would be beneficial.

Runway 03-21 Edge Light Replacement

Runway 03-21 is a primary commercial service runway at the Sunport and is used in conjunction with Runway 08-26 for near simultaneous landings as aircraft depart Runway 08. This project is very similar to the Runway 08-26 edge light replacement. The existing edge lights were installed on this runway in 1995 with fixture and component replacements made by the Aviation Department on an as needed basis. Replacing existing fixtures with FAA approval of LED would save considerably on the power costs. The lighting circuits should also be tested as with the Runway 8-26 circuits.

Runway 12-30 Pavement Rehabilitation

Runway 12-30, which supports the general aviation and military flying community, was reconstructed in its current configuration and pavement section in 1998. The concrete pavement has corner breaks, mid-slab cracking ,and joint spalls throughout. This project will rehab the pavement. Re-sealing of the concrete joints should also be included to maintain the moisture barrier between the surface and the subgrade.

East Remain Overnight (RON) Apron

The Sunport serves as an attractive place for airlines to complete routes at the end of the day and to start routes in the morning due to the airport's location and favorable fee structure. The portion of the terminal apron currently used for RON parking is adjacent to Taxiway A and is a tight fit. The East RON apron was programmed to be constructed with development of the ACE development projects, serving both the tenant and the commercial airlines. Several layouts have been generated showing concepts for a "shared" apron. Figure 8 illustrates a conceptual layout for the East RON Apron. Environmental clearance has been approved by FAA on the apron development. Layout will be important considering the airfield access to the development area north of the apron is an important asset in attracting tenants to this area.

Runway 08 and Runway 12 Realignment

The Runway 8 and 12 Realignment project is the most complex of the projects included in the request for pro- posals. The convergent geometry of the west

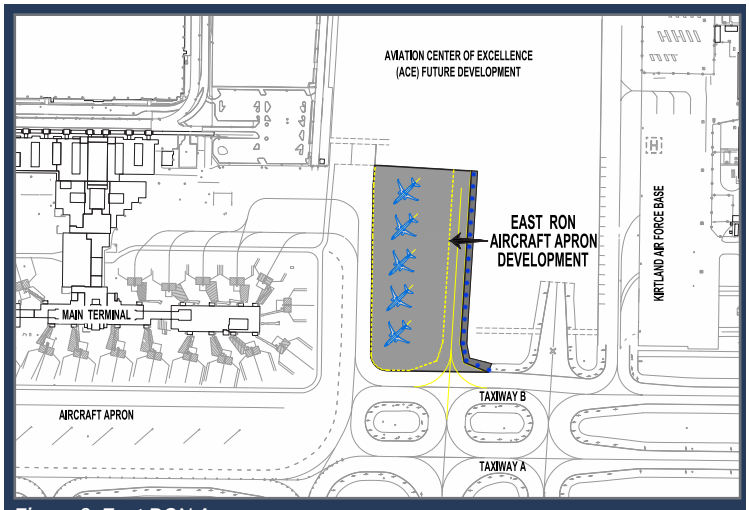


Figure 8. East RON Apron

end of the airfield that includes the approach end of Runway 8 and Runway 12, and the holding positions for taxiways A1, A2 and E1, cause incompatibilities with several FAA mandated protected surfaces. Each runway end has a defined approach surface which is designed to protect the use of the runway in both visual and instrument conditions. The approach surface typically has a trapezoidal shape that extends away from the runway along the centerline and at a specific slope, expressed in horizontal to vertical ratio. The specific size, slope, and starting point of the approach surface depends upon the visibility minimums and the type of procedure associated with the runway end. Aircraft holding at Taxiway A1, A2 and E1 can penetrate the Approach Surfacem and the instrument approach to Runway 8 can be negatively impacted. FAA has recently indicated that the current conditions are no longer acceptable with their standards.

Additionally, each runway has a runway protection zone (RPZ), which is a surface located on the ground and is required to be free of incompatible land use. RPZs provide a buffer for aircraft that have overrun or land off of the runway pavement area. The Runway 8 RPZ west of the runway end has several incompatible land uses that the Aviation Department must seek opportunities to clear.

When approach surfaces are entirely clear of obstacles, instrument approach procedures can provide the optimum visibility and cloud ceiling minimums. When obstacles penetrate the approach surface, mitigation measures may include:

- Higher visibility minimums;
- Higher than normal glide path angles;
- Non-standard threshold crossing heights; and
- Final approach offset.

The recent Sunport Master Plan Update studied the situation on the west end of the airfield and developed several alternatives to address the surface penetra- tions and RPZ land use incompatibilities. One alternative satisfactorily resolves FAA's concerns while maintaining efficient operational characteristics of the airfield. This alternative is shown in Figure 9.

The Runway 8 threshold shift will require FAA to relocate the instrument landing system equipment, including the glideslope antenna and the approach lighting system for Runway 8. Molzen Corbin has worked with FAA on several relocation projects at the Sunport (Runway 8 MALSR and VASI relocation and Airfield Electrical Circuit modifications under the runway 8-26 Reconstruction).

In order to resolve the runway 12 approach surface penetrations by aircraft holding at Taxi way A1 and to accommodate the relocated ILS glideslope, the Runway 12 threshold would need to be shifted to the southeast approximately 600 feet. Up to 200 feet of runway length could be added to the southeast end of the runway.

Runway 17-35 Pavement and Lighting Rehabilitation

During a recent improvement project at Double Eagle II Airport (AEG) involving modifications to the ends of the runway, high moisture contents were found under the asphalt pavement. Several areas failed under the load from the construction equipment and required patching. Edge drains were installed adjacent to the failure locations as a measure to lower the subsurface moisture content, which has adversely affected the pavement strength.

Molzen Corbin has submitted a draft engineering report analyzing the current pavement conditions on Runways 17-35 and 04-22 and the primary taxiways. The porous friction course on both runway surfaces is raveling and is a constant maintenance issue with the loose rock accumulating on the pavement surface. The report recommends rehabilitation of the Runway 17-35 pavement surface. Subsurface edge drains should also be considered in the project to help evacuate the moisture in the base course and subgrade under the pavements.

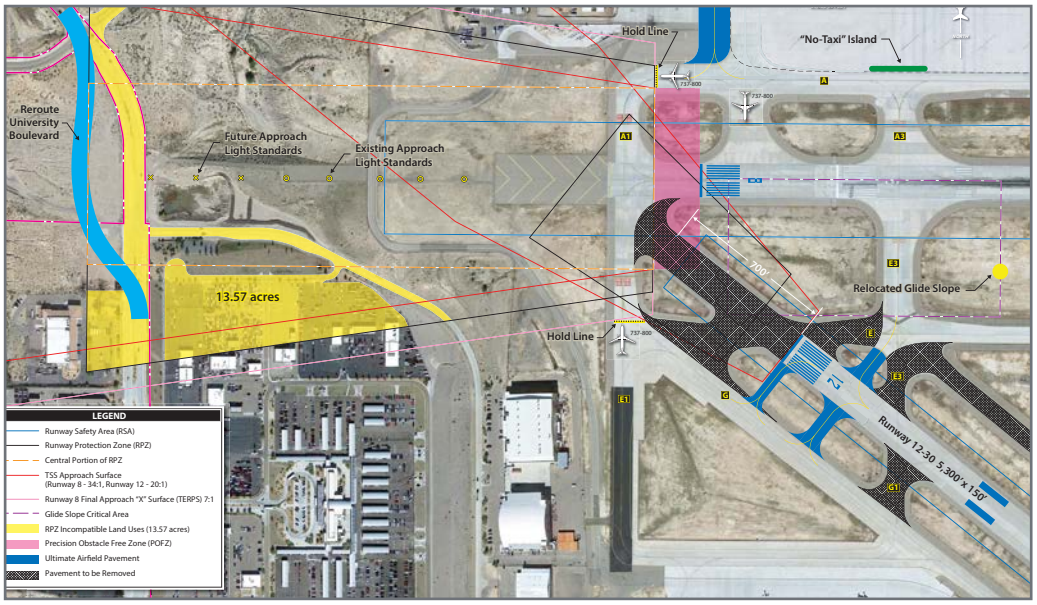


Figure 9. Runway 8 and 12 Realignment

The existing runway edge lighting at AEG are quartz-halogen fixtures installed in the mid-1990's. It is recommended that these fixtures be replaced with LED fixtures. Similar to the ABQ edge light projects discussed, replacement of the airfield guidance signs should also be a part of this project.

Runway 04-22, Taxiway A, and Taxiway C Pavement and Lighting Rehabilitation

The recent pavement evaluation performed at AEG indicates that the Runway 04-22 and adjoining taxiways A and C are in better condition than Runway 17-35 and Taxiway B. Subsurface moisture contents are not as high; however, the pavement surface, which was constructed in 1998, is in need of rehabilitation. The porous friction course on the runway is deteriorating and should be removed with an overlay placed for a new surface course. The project design should investigate the current condition of the pavement cracking and conditions prior to rehabilitation methods being selected.

Plan to Perform the Services

Most recently, the FAA's funding philosophy is to fund design and construction separately. That is, a project designed under a "design only" grant one year will be funded for construction in the following year. "Design" also includes the environmental documentation and clearances, preparation of the construction phasing and safety plan, and subsequent airspace analysis, as well as the actual design of the project improvements.

The basic service plan will follow the design approach that we have used successfully with the Aviation Department and City for over 30 years. This process will be virtually identical to the process recently used on the West Terminal Apron Reconstruction and Taxiway E Reconstruction.

Preliminary Design Report (PDR)

This phase has become increasingly important to the FAA. **All projects will undergo a technical review by FAA personnel in Fort Worth at the FAA regional office.** The PDR phase will be key in developing the technical basis for design, protected air space review, aircraft fleet mixes, and pavement designs.

The PDR will recommend a project cost budget to be used in the ODO submitted to the FAA. The estimate will incorporate the recommendations made in the PDR and will also be used by the Aviation Department to program the City's funding requirement. Items that Molzen Corbin includes in a typical airfield improvement PDR include the following:

- Preparation of the DBE project goals and submission to FAA for approval.
- Alternative pavement rehabilitation/reconstruction techniques with analyses of cost and construction time constraints.
- Aircraft fleet mix and pavement elasticity analysis to determine the optimal pavement section.
- Analysis of drainage impacts and needed improvements.
- Consideration of future phases and adjacent improvements that will be affected by or should be included in the project due to proximity and funding.
- Construction phasing and impact of airfield closures.
- Project cost estimate and budget analysis.
- Identification of airfield safety risks.

Preliminary Design

Preliminary Design will include:

- Preparation of preliminary drawings, details, construction phasing, and specifications.
- Submittal to the FAA of any requests for Deviations of Standards to accommodate local conditions or special construction details.
- Preparation of a drainage report — COA, FAA, and Sunport Drainage Masterplan guidelines (Molzen Corbin prepared the original drainage masterplan and subsequent updates for the Sunport).
- Preparation of the ALP update and Guidance Sign Plan for submittal to FAA for preliminary review.
- Submittal of design drawings and specifications to the City at a 60 percent completion level for review and comment.

One of the most important aspects of preliminary design is the update to the project cost estimate. Periodic review of the estimate versus the budget ensures that the scope is within the funding expectations developed in the PDR. Construction cost trends are watched carefully during the design process. Recent spikes in the cost of construction materials and labor must be analyzed.

Final Design

Final Design will consist of:

- Preparation of final construction contract documents.
- Preparation of the Contract Documents boilerplate using the City standards and required FAA language. Coordinate, submit, and review with Municipal Development Department Legal staff.
- Preparation of the project construction quality assurance plan (CQAP) and the CSPP.
- Submission of final design to the City and funding agency for review with revisions as necessary.
- Submit Final Engineer's Estimate to the Aviation Department for review and concurrence.

The preparation of the construction contract documents involves three basic steps: preparation of technical specifications, preparation of contract documents, and completion of construction drawings.

The technical specifications will be based on the FAA Standards for Specifying Construction of Airport, Advisory Circular AC 150-5370-10H, and tailored to the City Standard Specifications for Public Works Construction. **Any special specifications that are needed for an FAA-funded project must be reviewed and approved by FAA as a Deviation of Standards.** This has been done on several of the Sunport airfield projects, including the Taxiway A Reconstruction where existing large aggregate (1 ½" – 2 ½" dia.) in the existing pavement section was blended into the subgrade to improve the bearing capacity.

The backbone of the contract documents is the standard City of Albuquerque boilerplate. FAA requirements for DBE, Civil Rights, wage rates, airport safety, Buy American, and other Federal contract provisions must be incorporated into the Contract Documents without conflicts between the two standards. Additionally, special requirements that are unique to the Sunport, such as access control, construction personnel badging, construction phasing and work hours, and increased limits of liability must also be included in the contract documents without conflict with other provisions. **Molzen Corbin has prepared Contract Documents in this manner on at least 44 projects for the Aviation Department over the past 32 years.** Our Project Manager, Mr. Mike Provine, PE, has been responsible for the preparation and coordination of the contract documents on all of these projects.

Construction Phase Services

Construction phase services will include the same services that Molzen Corbin has performed on all of the Aviation Department's airfield projects:

- Preparation of the advertisement for bids following the City and FAA processes and requirements.
- Management of the contract documents distribution to bidders.
- Facilitation of pre-bid conference.
- Coordination, review, and response by addenda of request for information.
- Review of bids, preparation of bid tabulations, recommendation of award and assistance, and coordination of FAA grant applications.
- Assistance with construction contract execution.
- Hosting of the pre-construction conference.
- Facilitation of weekly construction coordination meetings.
- Review of pay requests, shop drawing and submittal review, and response to request for information.
- Preparation of FAA reimbursement requests.
- Preparation of change orders as necessary.
- Site visits and specialty inspections.
- Preparation of record drawings and the Final Engineer's Reports (required for FAA grant closure).

Molzen Corbin also has provided construction observation and materials acceptance testing on virtually all of our Aviation Department airfield projects in accordance with FAA grant requirements. Our observers are trained and experienced in monitoring construction quality and using FAA technical specifications to assure that the intent of the design is not compromised. In particular, Mr. Bryant Quam, our proposed construction observer, has experience working on the Sunport airfield, engaging with Sunport Operations and Airfield staff, understanding security and access rules, and working with the Sunport's existing lighting and pavement infrastructure.

Geo-Test, Inc. has been working with us at the Sunport since 1988. Their personnel are trained in performing the FAA quality acceptance testing duties required with the funding. Their personnel are experienced in working on active airfields and understand the safety requirements that must be followed with active airfield work. **The same team used on the recent Runway 8-26 Rehabilitation and Taxiway A Reconstruction projects is proposed for this project.**

Quality Control and Assurance

Quality Control (QC) as practiced at Molzen Corbin is a preventative system, not a detection system. A prevention system allows for inspection concurrent with production.

Quality expectations will be made clear to Team members at the project kickoff meeting. At 60% and 90% design stage, plans will move through a three-level quality assurance program:

- Level I: The design Team will review each plan for quality, accuracy and adherence to design standards.
- Level II: Plans will be reviewed by Mr. Kent Freier, PE. Any plan not meeting quality standards will be returned to the project Team for rework.
- Level III: Plans that pass Level I and II will undergo a final, in-depth quality review for accuracy, adherence to design standards, readability, and overall quality. Any plan not meeting our strict quality standards will be reworked and re-reviewed.

This system minimizes error, allows for immediate adjustment of faulty premises, and enables the effective adoption of process improvements. The benefits of this system are cost savings to the City and improved (shortened) schedules.

Our Project Manager regularly meets with the FAA and Aviation Department to ensure that projects are advancing and to resolve any issues that develop. These meetings occur monthly.

Additionally, Molzen Corbin's senior staff conducts quarterly interviews with our clients and funding agencies to see how we are performing. This is done in an informal arena without our project manager's presence, allowing for a candid discussion of strengths and opportunities for improvement. We have been conducting these reviews with the Aviation Department for the past several years.

Specialized Problem Solving

Molzen Corbin's unparalleled experience and knowledge of the Sunport uniquely enables us to anticipate and resolve project challenges. Figure 11 below shows anticipated challenges and how Molzen Corbin will mitigate these challenges.

Challenge	Molzen Corbin Mitigation
FAA Policy Changes	A recent change in FAA funding policy requires that projects affecting commercial service airports include a Safety Management System (SMS) analysis prior to the project proceeding past final design. All of the projects that Molzen Corbin has led on the Sunport airfield have prioritized airfield safety and the success of these projects attest to the coordination with Aviation Department operations staff, FAA Air Traffic Control staff, and airfield users. The new FAA mandates will require a formalized process, with the preparation of a safety risk assessment and the development of risk management procedures with an implementation plan. This may be a schedule challenge. To solve this challenge, the FAA reviewing staff must be included in the project development throughout design so that review time is minimized. In recent projects, FAA has accepted the CPSPs prepared by Molzen Corbin to satisfy their risk management procedures.
Minimize Airfield Operations Impact	Minimizing airfield operations impacts from construction projects always is a challenge. In the past, the challenge has been successfully met by including the airfield operations staff along with the FAA ATCT liaisons in the project development. Two of the projects included in this RFP will limit availability of runways and taxiways for aircraft operations during construction. The construction durations must be limited and phased to accommodate the demand for the runways and taxiways. Time of year for construction becomes very important due to the strong winds and density of altitude of the spring which dictate the use of the runways. Coordination of runway and taxiway closures with other projects and other airfield maintenance tasks, such as rubber removal and re-marking, must be an element of the design. The disruption caused by airfield projects presents an opportunity for the Aviation Department to step back and review other needs that could be incorporated into a project. If the disruption and impact of a project is going to be made, other improvements that may be needed down the road, in the same proximity to the proposed project, should be considered. For example, if a portion of the airfield is going to be closed, include all of the improvements that will be needed in that area during that disruption (e.g., markings, rubber removal, pavement maintenance, electrical, and drainage). In the long run it may minimize disruption. During the 1994 Taxiway A Reconstruction preliminary design, the need for a second, partial parallel taxiway on the north side of runway 8-26 became apparent. A lease with the Air Force was necessary to accomplish the Taxiway A work, so the decision was made to include the construction of Taxiway B in the project. The lease with the Air Force was modified to show the additional area while maintaining the original lease and design schedules. The construction schedule became longer with the addition of Taxiway B, but in the long run the total project schedule impact was smaller, including the real estate transaction schedule, design schedule, and construction schedule, than if the addition of Taxiway B was accomplished separately.
Access Control and Badging Requirements	The process for procuring access badges for the Aviation Department facilities is driven by the ever-changing requirements of the Transportation Security Administration. The Molzen Corbin team currently has access badges. We are aware of the restrictions and responsibilities that come with working at the City's airports. The cost of applying for an access badge is currently $305 per employee and can take from four weeks or longer to complete. That is significant, and while the Aviation Department may not see the charge directly, the impact on overhead will be reflected in rates. Molzen Corbin has essentially maintained the same, continually-badged team over the years, eliminating the lead time and costs of acquiring access to the facilities. Molzen Corbin has developed specific provisions for the Aviation contract documents that ensure bidders are informed of access control requirements and costs. This language is updated with every project to capture the latest requirements and changes to the access control system. We cover this important item in every pre-bid conference that we hold for the Aviation Department projects so that the bidders understand the costs, both in time and money, associated with the access control requirements.
Accurate Cost Estimates	Molzen Corbin has over 32 years of cost data from projects with the Aviation Department, having designed most of the small- to mid-sized civil improvements at the Sunport in that time period. Our experience and project database enables us to produce accurate project costs at the conceptual, preliminary, and final stages. This allows the Aviation Department to develop their budgets appropriately, without requiring fund transfers in the middle of projects. Molzen Corbin has assisted the Aviation Department with updating the Aviation Department CIP required by FAA for funding programming. We also assisted in preparing the FAA-required annual ODO documentation for several of the proposed projects. Each of these documents is based on the development of accurate project cost estimates.
Continuous **Improvement**	We measure our performance with the Aviation Department. Our senior management conducts periodic reviews, with our clients and with funding agencies to receive first-hand feedback about our customer service and performance. This is done without our project manager's presence, allowing for a candid discussion of strengths and opportunities for improvement. The Molzen Corbin team does not need to overcome a learning curve or spend extensive time studying your systems; we have the knowledge now to successfully and efficiently complete these projects that will meet the Aviation Department's needs and FAA criteria at the Sunport.

Figure 11. Molzen Corbin knows the challenges presented by these projects and has strategies in place to minimize any impacts.

Section 5: Cost Control

Cost Control of the Design Process

Molzen Corbin has extensive experience providing cost-effective services to the Albuquerque Sunport and the Double Eagle II Airport. Our staff understands the City's contracting process and your project budgets, and we know that overruns on task orders are a serious concern. Our project management system allows us to draw from our experience with the Aviation Department to develop a complete scope of work and a fair fee proposal.

We have sustained a strong track record on task order projects. Once the scope and fee are established, we are committed to producing the project design, regardless of internal costs. We believe that our successful history with the Aviation Department is a testament to our project management and cost control processes.

Molzen Corbin uses cost accounting software that enables detailed tracking of hours and expenses. Once a task order is issued, the project manager monitors the job costs on a monthly basis, tracking our percent complete based on our estimate of how much of the work is actually completed, versus actual percent complete based on expenses incurred over the total fee. If the project manager sees that the work completed is lagging behind the actual expenses, then more resources are assigned so that we can finish on time and on budget.

Audits typically occur only after a project has been completed. Molzen Corbin has always provided assistance, supporting documentation, and our knowledge of the project for audits, many times several years after the close-out has occurred. This is provided promptly and at no cost, because our project management and documentation system allows for quick and efficient access to our project archives.

Cost Control of the Construction Cost

Molzen Corbin begins a project with a conceptual cost estimate based on the initial scoping meeting with the Aviation Department. After a task order is initiated and the scope is defined, a detailed project cost estimate is developed including not just the design and construction costs, but other project costs such as landfill excavation permit costs. The cost estimate is updated as needed as the project develops. In the past several years, the price of cement, oil and other construction commodities have required close observation so that the Aviation Department can determine budget impacts before bids are received.

Our project manager is local and involved in all aspects of the project development and design and serves in a "hands-on" role during the construction phase. Because the project manager is responsible for the original estimate, he knows how quantities were defined and can most effectively manage individual line items to ensure that the final project cost remains within budget.

Molzen Corbin's philosophy is to deliver projects within budget, both in design and in construction. We prefer to give funds back to the funding agency, rather than asking for a change order to increase the project budget.

Cost Estimating Techniques

Most engineering firms use databases (*e.g.*,COA average unit price list, NMDOT average unit price list) and publications (*e.g.,* Means and Dodge) to assist in cost estimating. Molzen Corbin uses all of these useful tools as well.

However, Molzen Corbin is unique in that we have decades of real-world data from projects of all sizes at the Sunport. Our archived bid tabulations represent actual costs, not generalized or averaged data. The key to accurate estimating for Sunport projects is knowing what "atypical" requirements will affect construction costs. These requirements follow.

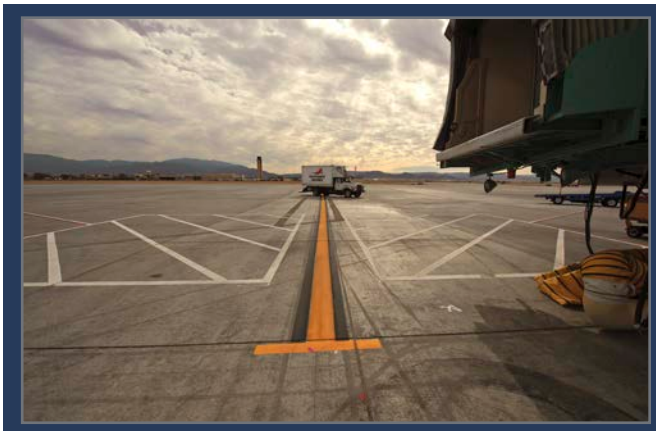
- **Badging Requirements:** Applying for a badge to work within the Sunport costs $305. Additionally, attendance at a one-hour training class is required to obtain a badge and to drive within the fence. An applicant cannot work at the Airport until the badge itself has been granted. The badging process can take 4 to 6 weeks to complete.
- **Air Traffic:** Operational continuity is essential, which means that construction crews might have to vacate a construction area each day in order to accommodate air traffic.
- **Gate Access:** All contractor employees must be searched before entry, or the contractor must establish a specific gate and provide a guard to

enable entry. There is a wait at the gate typically which affects effective work time.

- **Coordination Meetings:** Weekly meetings might be necessary to coordinate construction activities with the Air Traffic Control, airlines, tenants, and Aviation Department staff. Special phasing may result from needs of the tenants and the FAA.

All of these issues affect "normal" construction costs because they add to a contractor's cost burden. Molzen Corbin knows this very well and adjusts cost estimates accordingly.

Another advantage that the Molzen Corbin team offers to the City in cost estimating is that our staff serves as Aviation Department "historians." **Mr. Mike Provine, PE, and Mr. Kent Freier, PE, have each worked with the Aviation Department for well over 28 years and their knowledge of past projects or activities enables accurate cost estimating.** For example, our project team is very aware of landfill sites on Sunport property. We know when a project will occur in the landfill areas, and additional costs might result. Our staff can then communicate these costs to the City. Our staff knows the existing pavement sections, the design reasons behind those sections, and how to accommodate those original designs in projects that may arise in this contract.



Molzen Corbin has a rich historical knowledge of work for the Aviation Department that translates to cost-saving, accurate, and efficient support for the City of Albuquerque.

Our staff has also built strong relationships with many of the stakeholders involved in Aviation Department projects. These include the FAA, Airport Administration, Airport Operations, Airport Finance, Airport Maintenance, COA Planning and Environmental Health, Airline Managers, tenants, and neighboring KAFB Civil Engineering. Further, we understand how these stakeholders' requirements might affect construction costs.

The relocation of the Paseo del Volcan (now renamed Atrisco Vista) at the DE II Airport exemplifies the benefits of Molzen Corbin's experience in developing accurate cost estimates. When the City ordered the entrance into the Airport be realigned and straightened to remove an unsafe series of curves, our staff immediately met with FAA for this emergency project. The proposed road alignment passed between two approach lighting towers operated by FAA. Because of our on-site meeting with the appropriate staff, we were able to get the alignment approved and the project completed without impact to the FAA.

We also monitor construction pricing from other projects to stay current on trends and spikes over the past 18 months that have become common in the industry. For example, oil prices not only affect the cost of concrete and asphalt paving, but also affect transportation, equipment operation, and PVC conduit. Long lead on many materials also impacts the cost.

Molzen Corbin will not use outside cost estimating consultants in this contract. We firmly believe that we have a much better handle on construction costs, and factors affecting construction costs at the Sunport, due to our history at the airport and our intimate knowledge of factors affecting those costs.

Comparison of Bid Award to Cost Estimate

Please see Figure 12 below.

Project	Month and Year Bid	No. of Bids	Final Cost Estimate	Bid Award Amount
Double Eagle II Airport Perimeter and Security Fence	May 2020	2	$596,009	$481,338
Sunport Taxiway E Phase B Reconstruction	May 2020	3	$9,719,153	$9,927,624
Sunport Spirit Dr. and GA Parking	Oct 2020	5	$5,303,708	$4,597,871
Santa Fe Taxiway G Construction	July 2020	3	$2,260,137	$2,121,360
Sunport Emergency Power	Oct 2021	3	$1,675,354	$1,499,045

Figure 12. Molzen Corbin is accustomed to delivering high-quality projects within strict budget constraints.

City of Albuquerque Capital Implementation Program

Agreement and Insurance Certification

We have reviewed the standard agreement for Engineering orArchitectural or Landscape Architectural Services that are required for the project listed below, and hereby certify that we will, if selected for the project, enter into this standard agreement for this project and meet all insurance requirements listed therein.

This Certification is intended for the use of the City of Albuquerque only, in conjunction with the award of the Engineering or Architectural or Landscape Architectural Services Agreement for Project:

Project Name Airfield Engineering On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

Project Number 7700.94

Date 01/26/2022 Firm Name MOLZEN CORBIN

Signature K. W. E+

Title Chief Executive Officer

STATE OF NEW MEXICO)

) ss

COUNTY OF BERNALILLO)

As per the RFP, we have included a copy of our general professional and liability insurance coverage in lieu of a notary stamp.

The above Certification was subscribed before me, the undersigned authority, by:

_____

who swore upon oath that this Certification was signed of free act and deed, on this

_____ day of _____ , 20 _____

_____

(Notary Public)

My commision expires: _____

MOLZ&AS-01 MDEAN

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 1/26/2022

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

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

PRODUCER	CONTACT NAME: Eloise Hughes	
Professional Liability Insurers, Inc. 6101 Moon Street NE Suite 1000 Albuquerque, NM 87111	PHONE (A/C, No, Ext): (505) 822-8114	FAX (A/C, No): (505) 822-0341
	E-MAIL ADDRESS: ehughes@cressinsurance.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Donegal Insurance Company	13692
INSURED	INSURER B : NM Premier Insurance Co	13675
Molzen-Corbin & Associates Inc 2701 Miles Road SE Albuquerque, NM 87106	INSURER C : AXA Insurance Company	33022
	INSURER D :	
	INSURER E :	
	INSURER F :	

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

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	X COMMERCIAL GENERAL LIABILITY								
	CLAIMS-MADE X OCCUR			BSD9257861	12/31/2021	12/31/2022	EACH OCCURRENCE	$	1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$	500,000
							MED EXP (Any one person)	$	10,000
							PERSONAL & ADV INJURY	$	1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$	2,000,000
	POLICY X PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$	2,000,000
	OTHER:							$	
A	AUTOMOBILE LIABILITY								
	X ANY AUTO						COMBINED SINGLE LIMIT (Ea accident)	$	1,000,000
	OWNED AUTOS ONLY / SCHEDULED AUTOS			CA9257861	12/31/2021	12/31/2022	BODILY INJURY (Per person)	$	
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						BODILY INJURY (Per accident)	$	
							PROPERTY DAMAGE (Per accident)	$	
								$	
A	X UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	$	4,000,000
	EXCESS LIAB CLAIMS-MADE			CXL9257861	12/31/2021	12/31/2022	AGGREGATE	$	4,000,000
	DED X RETENTION $ 10,000							$	
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						X PER STATUTE / OTH-ER		
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH) N/A			64411.114	1/1/2022	1/1/2023	E.L. EACH ACCIDENT	$	1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$	1,000,000
							E.L. DISEASE - POLICY LIMIT	$	1,000,000
C	Professional Liab			DPR9987461	12/31/2021	12/31/2022	Each Claim		2,000,000
C	Professional Liab			DPR9987461	12/31/2021	12/31/2022	Aggregate		6,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Proposal Purposes

CANCELLATION

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

AUTHORIZED REPRESENTATIVE

James Lyons

Pay Equity Reporting Form

City of Albuquerque www.cabq.gov | Bernalillo County www.bernco.gov | Water Authority www.abcwua.org

Company Details

Company Name	Molzen-Corbin & Associates, Inc.
Phone	(505) 242-5700
Email Address	rrobeda@molzencorbin.com

Mailing Address	2701 Miles Road SE Albuquerque, NM 87106
NM Employees?	yes

Job Category		No. Females	No. Males	Gap (Abs. %)
1.1	Exec/Senior Level Officials/Mgrs	0	10	N/A
1.2	First/Mid Level Officials/Mgrs	0	0	N/A
2	Professionals	7	22	25.83%
3	Technicians	7	23	15.51%
4	Sales Workers	0	0	N/A
5	Office and Admin. Support	12	4	22.38%
6	Craft Workers (Skilled)	0	0	N/A
7	Operatives (Semi-Skilled)	0	0	N/A
8	Laborers (Unskilled)	0	0	N/A
9	Service Workers	0	0	N/A
	Overall Total	26	59	20.97%

Total # of Females (all categories)	26	Total # of Males (all categories)	59
Total # Female Only Job Categories	0	Total # Male Only Job Categories	1
Total # Part Time Females	9	Total # Part Time Males	14
Female % Workforce	30.59%	Male % of Workforce	69.41%
Total # Employees	85	Total # Non-Binary Employees	0

Must be signed by a representative of the company. Signature certifies that all employees working in New Mexico are included, the data is for one year ending when the form is signed, and any challenges to your information may require you to get third party verification at your own expense.

Robert P Robeda, Chief Administrative Officer	*Robert P Robeda*	May 17, 2021
Name and Title	Signature	Date Submitted

All Pay Equity Reporting Forms are reviewed by the Gender Pay Equity Initiative within two business days of submission. A copy of the reviewed form will be emailed to you for inclusion with your bid or proposal. If the Overall Total Pay Gap on your form is 0%, the Gender Pay Equity Initiative will certify your Pay Equity Reporting Form. A Certified Pay Equity Reporting Form may allow you to obtain a 5% preference. Please keep in mind that a Pay Equity Reporting Form - whether certified or uncertified - must be submitted with all bids and proposals. Please contact the Gender Pay Equity Initiative with any questions: oei@cabq.gov or (505) 768-3512.

☐ **Certified - Overall Gap is 0%**

Gender Pay Equity Representative

☑ **Uncertified - Overall Gap is more than 0%**

GARVER

TRADE SECRET

STATEMENT OF QUALIFICATIONS FOR THE

Airfield Engineering On-Call Services

For the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

January 26, 2022

GARVER

January 26, 2022

Jane Lucero, AICP, A.A.E., Associate Director of Planning and Operations
1 Civic Plaza NW
City-County Building — 7th Floor
Albuquerque, NM 87102

RE: Statement of Qualifications for Airfield Engineering On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

Colin Bible, PE
Project Manager

One Denver Technology Center
5251 DTC Parkway, Suite 420
Greenwood Village, CO 80111
(720) 744-4557
CMBible@GarverUSA.com

Rich History. Award-Winning Culture.

900+
Employees

60+
Years of Aviation Experience

#106
ENR Top 500 Ranking

#18
ENR Top 25 Aviation Firms

Dear Mrs. Lucero and Selection Committee:

The Garver Team is excited for the opportunity to provide airfield engineering on-call services for the Albuquerque International Sunport (ABQ) and Double Eagle II Airport (AEG). Garver has assembled a team of aviation experts and local partners to provide ABQ and AEG with the expertise to complete your projects on schedule and within budget. This statement of qualifications will detail how Garver's national aviation experience, proven team structure, and customized approach will successfully deliver well-coordinated, quality projects for ABQ and AEG on time and under budget.

National Aviation Experience. While Garver is new to working with the Albuquerque Aviation Department, we are definitely not new to working on airfield projects at hub and reliever airports. Unlike a lot of other large, aviation-focused firms, Garver has built our reputation on airfield infrastructure projects, and our team of experts is specifically experienced in projects in an active airfield environment. Although we've built our experience across the nation, the FAA's Southwest Region is our home and where we have the deepest history. **Overall, Garver has experience working at 30 commercial service as well as 15 reliever airports in the FAA's Southwest Region.** We're confident that no other firm will bring the technical expertise that the Garver Team can provide.

Proven Team Structure. Garver believes in a simple structure for building a successful team, putting the right experts in the right roles to be successful, and this starts with selecting the right project manager. I have spent my entire career working on airfield infrastructure projects. I have the capacity and availability to lead the Garver Team, tailoring our work plan to maintain project delivery efficiencies, offer clear lines of communication, and provide seamless coordination with concurrent airfield projects. Additionally, with our team, you can rest assured that your project won't be used to offset the low workload of a regional team. I will be supported by specific, dedicated Aviation Design Center team members who we have intentionally selected to work on your projects because of their expertise in airfield design. This specific team has completed $500 million in improvements on nearly 250 projects and have already been engaged to help develop technical solutions found in this proposal.

Customized Approach. Our team has studied the upcoming project list as well as the ABQ Master Plan and believe that we have identified the critical project elements

and understand the long-range vision for your facilities. We believe that there are opportunities to create efficiencies towards future projects with our forward-looking approach (**page 9**). Additionally, we've developed a clear communication plan for NAVAID coordination (**page 11**) and have highlighted how we will help the City meet the sustainable vision you have set in the "Sustainable Airport Master Plan" (**page 10**).

Additionally, we've already discussed these projects with City staff, our local teaming partners, and contractors with ABQ experience to make sure we understand constructability challenges that need to be considered.

Whether it is FAA coordination, NAVAID coordination, funding coordination, or operational considerations, Garver understands how to serve your airport and community. We have thoroughly reviewed City procedures, reviewed project challenges, and discussed the local material challenges with local suppliers and subconsultants. We ask that you select Garver for this contract and look forward to partnering with the City of Albuquerque. Please feel free to contact me at (972) 510-4264 or CMBible@GarverUSA.com if you have any questions. Thank you for your consideration.

Sincerely,
GARVER

Colin Bible, PE
Project Manager
New Mexico PE #27529

General Information

General Information

Firm Info

Address
One Denver
Technology Center
5251 DTC Parkway,
Suite 420
Greenwood Village, CO
80111

Phone Number
(303) 721-6932

Year Established
1919

Number of Employees
968 (Total)
125 (Aviation Team)

Technical Disciplines
Civil Engineering,
Planning, Architecture,
and Environmental
Services

New Mexico Registration
5667062

DUNS
08-132-0609

Garver is a multi-disciplined engineering, planning, architectural, and environmental services firm committed to quality practices, progressive methods, and personal relationships. Our Aviation Team has extensive experience in all aspects of airport planning, design, and construction administration and includes over 100 personnel located in 23 of our 34 regional offices.

Throughout this proposal, you will find that Garver has successfully completed numerous projects similar to those anticipated at your airports. We provide client support throughout each project, from developing grant applications for project funding to project planning, design, bidding, construction observation, and project closeout. We are proud to be consistently ranked as one of the top 125 design consultant firms and one of the top 25 aviation firms in the United States by *Engineering News-Record.*

We know how important it is to have a consultant who listens and is quick to respond to your questions and needs. With Garver, you will benefit from our "small-firm" approach—personal attention and accessibility—supported by the resources of a large, regional staff. Garver works hard to tailor projects to fit our clients' goals through creative design and scheduling, and we excel at finding the right solutions to meet the needs of each client. Our clients' trust is the cornerstone of our business.

Offices Where Services Are to Be Performed

Your project manager, Colin Bible, PE, is based out of our office in **Denver, Colorado**. Colin is well-positioned to serve as your project manager, as he can be on site at short notice and is committed to providing outstanding service to the City of Albuquerque. Our surveying, SUE, and geotechnical services will be provided by our partners based in **Albuquerque, NM.** Additionally, any utility work will be handled by Garver's Utilities Project Manager in **Albuquerque, NM.**

Garver maintains an integrated team of engineers in our Aviation Design Center based in **Fayetteville, Arkansas**, dedicated solely to aviation projects, and we intend to use this team to streamline our ability to provide responsive customer service and consistent, high-quality designs. These engineers are housed under one roof for increased coordination and efficiency, allowing them to provide expertise on complex projects with multiple constraints and accelerated schedules. This provides our team with the depth to deliver large, complex projects on time and within budget and the flexibility to deliver smaller and less complex projects in a more cost-efficient manner. In the last five years alone, they have delivered over $500 million in design at commercial service airports.

Project Information

Project Information

Figure 1 provides an organizational chart of the Garver Team that will be working with ABQ and AEG. We have also provided resumes with more detailed information about our key personnel's experience and expertise. The Garver Team is organized to provide the expertise and responsive services required to fulfill each aspect of the scope of work for this contract. Our Team will initiate, oversee, and complete your airfield projects while following the procedures, guidelines, and criteria dictated by your airports and the FAA.

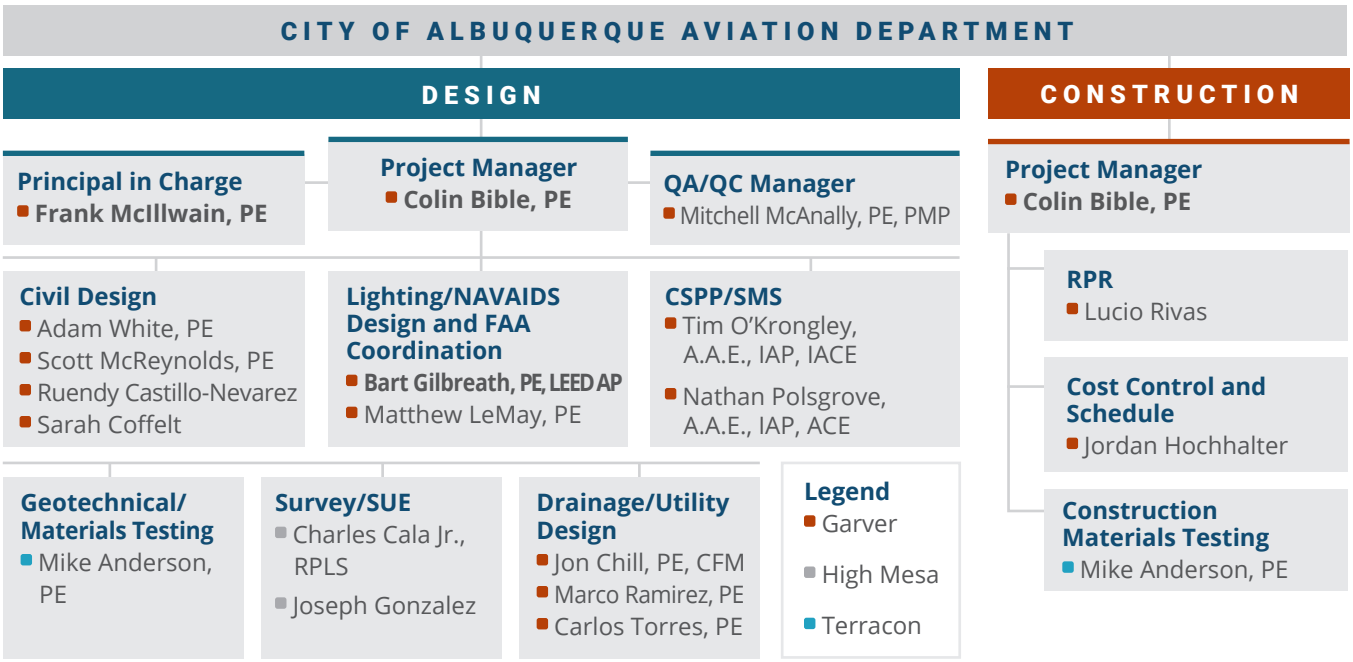


Figure 1: The Garver Team's Organizational Chart (see resumes on page 3 for bolded personnel)

TEAMING PARTNERS

Survey/ SUE

High Mesa Consulting Group (HMCG) is an Albuquerque based New Mexico Corporation founded in 1977 offering services that include civil, surveying and subsurface utility consultation. HMCG is organized to serve its clients with sound, up-to-date engineering, surveying and subsurface utility consultation principles and practices.

FIRM INFO

- 19 Employees
- 2 PEs, 1 RPLS
- DUNS: 84-560-7357

Geotechnical/ Materials Testing

Terracon is a consulting engineering firm providing quality services to clients, specializing in environmental, facilities, geotechnical, and materials testing services. Terracon has experience working on projects with the City of Albuquerque, including an ABQ Rapid Transit (ART) project and an I-25 interchange improvement project.

FIRM INFO

- Over 5,000 employees
- Worked with Garver on over 400 projects
- DUNS: 02-827-8740

Colin Bible, PE | Project Manager

Colin Bible is a senior project manager and Garver Aviation leader with 16 years of experience. Having spent his entire career working on airports and exclusively dedicated to airfield improvement projects, Colin has designed projects at more than 70 airports, including airfield pavement rehabilitations, new runways and taxiways, runway and taxiway extensions, apron construction, hangar taxiways and aprons, airfield drainage improvements, perimeter fencing, airport roads, and utility relocations. He has a comprehensive understanding of the FAA Advisory Circulars for airfield design. Colin has also designed and provided construction management services for airport improvements projects, which strengthens his designs.

Education
Bachelor of Science in Civil Engineering

Registration
Professional Engineer, NM, 27529

EXPERIENCE

- **El Paso International Airport Five Node Intersection Remediation** *(El Paso, TX)*
- **Dallas Love Field Crossfield Taxiway Replacement** *(Dallas, TX)*
- **Denver International Airport Taxiway EE Construction** *(Denver, CO)*
- **Meacham International Airport Midfield Taxiway Redevelopment** *(Fort Worth, TX)*

Frank McIllwain, PE | Principal in Charge

Frank McIllwain is a senior vice president and director of Garver's Aviation Team with 24 years of engineering experience. His project experience includes runway rehabilitations and extensions, taxiway extensions, holding bay construction, public street and utility relocation, localizer and approach lighting system relocation, approach analysis, multi-agency review, runway safety areas, and capital improvement plan implementation. He is an expert on FAA guidelines and requirements associated with the FAA's funding programs, including coordination with multiple branches of the FAA in the Southwest Region.

Education
Bachelor of Science in Civil Engineering

Registration
Professional Engineer, TX, 93229

EXPERIENCE

- **Dallas Fort Worth International Airport On-Call Services** *(DFW Airport, TX)*
- **Dallas Love Field Crossfield Taxiway Replacement** *(Dallas, TX)*
- **George Bush Intercontinental Airport Rehab of Taxiways RA, RB, SA, and SB** *(Houston, TX)*
- **Abilene Regional Airport Runway 17L-35R Rehabilitation** *(Abilene, TX)*

Bart Gilbreath, PE, LEED AP | Lighting/NAVAIDs Design and FAA Coordination

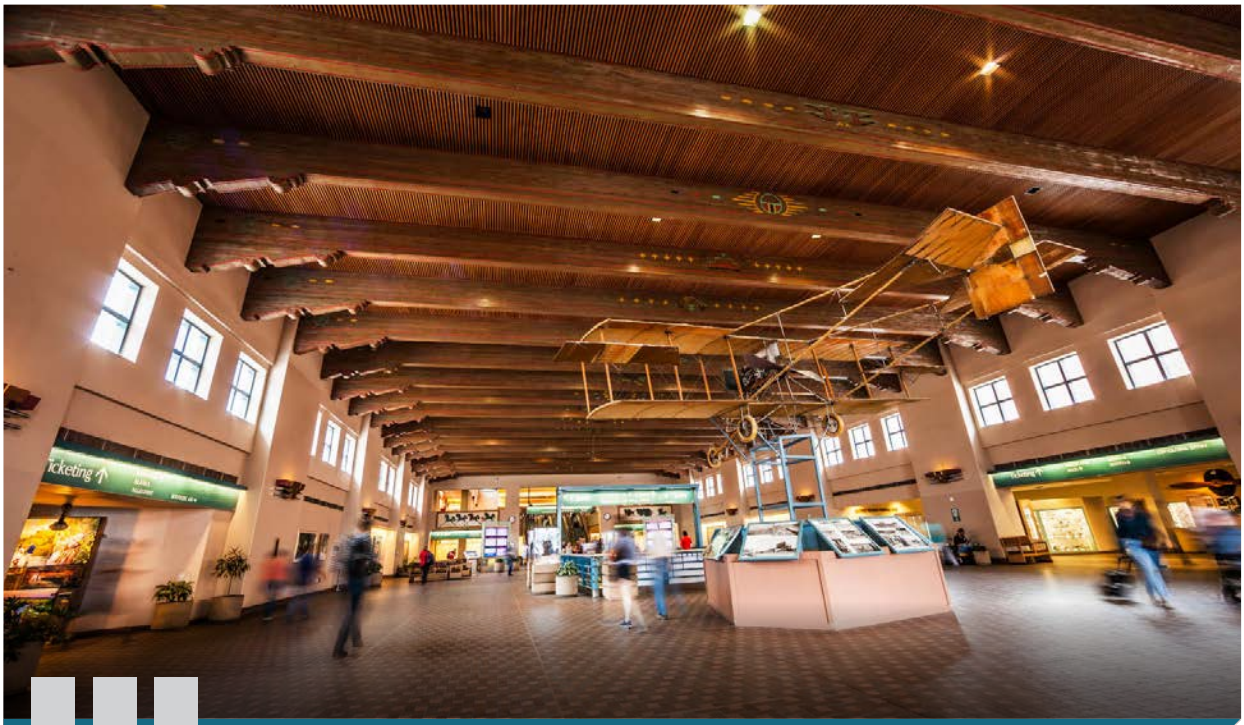
Bart Gilbreath is a senior project manager at Garver with over 17 years of experience who believes that exceptional engineering is critical for a successful outcome and depends upon the quality of the relationships developed with all parties throughout the process. Bart Gilbreath will cultivate those relationships on your projects. Bart has successfully led the electrical work on over 350 airports projects across Garver's footprint by focusing on effective communication and in-depth involvement in each project from conception to design through construction and closeout allows Bart to foster the various stakeholder relationships.

Education
Master of Science in Electrical Engineering

Registration
Professional Engineer, NM, 27127

EXPERIENCE

- **El Paso International Airport Taxiway K1 and K2 Reconstruction** *(El Paso, TX)*
- **Dallas Love Field Taxiway B Rehabilitation** *(Dallas, TX)*
- **Northwest Arkansas National Airport Taxiway B Reconstruction** *(Bentonville, AR)*
- **Wichita Dwight D. Eisenhower National Airport On-Call Electrical Services** *(Wichita, KS)*



Respondent Experience

III Respondent Experience

As aviation experts, we understand the FAA's Advisory Circulars on pavement, drainage, and electrical design, and we know that hiring local experts will help our team adapt to the local environment. However, there are many times in the design process where the design has off-site factors that can impact the larger community. In order to make sure we're a good partner to the City, we've reviewed the City of Albuquerque's Development Process Manual (DPM). **Based on that review, we understand the infrastructure design development workflow as well as the permitting process and believe we understand how to incorporate the FAA's requirements into the City's requirements.**

Experience at Commercial Service Airports

Aviation is a main business line of Garver, representing nearly a quarter of our total business. Garver's Aviation Team has extensive experience working with commercial service and air carrier airports across the country to execute projects in accordance with FAA standards. We have recently completed airport improvement projects at some of the busiest medium-hub airports in the United States, including major improvement projects at Dallas Love Field, Austin-Bergstrom International Airport, Louis Armstrong New Orleans International Airport, and Kansas City International Airport, among others. Our team recognizes that ABQ is vital to the economy and development of Albuquerque, and we will partner with the City to complete your projects in a way that best serves the airport's needs.

FAA Southwest Region Experience

The Garver Team has strong relationships with FAA personnel in the FAA Southwest Region. Within the past five years, we have received nearly 600 contracts in the FAA Southwest Region, and Garver has provided planning, design, environmental, surveying, and/or construction observation services to multiple airports across the FAA Southwest Region for almost 30 years, encompassing over 1,000 individual projects. **We have worked at over 33% of the airports in the region**, performing pavement management studies, landside and airside pavement improvement projects, design of new or renovated airport facilities, airfield lighting and controls, land acquisition assistance, FAA and state grant administration, field assistance, and more.

Figure 2: Garver's FAA Southwest Region Experience

Our team has successfully completed numerous projects similar to those anticipated at ABQ/AEG, including several projects at medium-hub airports similar to ABQ. For each project, Garver's planners, engineers, and architects consider the social, economic, and sustainability impacts to improve the quality of life in your community. The following pages include examples and descriptions of similar work Garver has performed for neighboring states. We recognize that our reputation is not based on what we say about ourselves, but on what our clients and peers say about us. We encourage you to contact any of our clients whose information is provided in the following pages.

El Paso International Airport

El Paso, TX

Five Node Intersection Remediation

Years 2021 - 2025 (estimated) **Cost** $25,000,000 (estimated)

Contact Person

Terry Sharpe, CM
Assistant Director of Development
El Paso International Airport
915-212-7302
SharpeTJ@elpasotexas.gov

Key Personnel

Colin Bible, PE
Senior Project Manager

- Senior project manager responsible for overseeing the preliminary report, design, plan production, and contract specifications.

Frank McIllwain, PE
Principal in Charge

- Principal in charge responsible for providing oversight for the design.

The five node intersection is an operationally complex area of the airport. While the obvious issue is the hot spot where Taxiways G, H, and J and Runway 08R intersect, there are a variety of other challenges that will be corrected. In addition to eliminating the five node intersection geometry, we identified the following additional challenges to consider in the analysis:

1. Conflict with Runway 08R-26L departure surface.
2. Cargo traffic intermixing with commercial service traffic.
3. Vehicle Service Road (VSR) inside Taxiway Object Free Area (TOFA).
4. Direct access to Runway 04 from apron.
5. Visual concerns with pilots operating on Runway 08R-26L.

By designating the departure surface with Pattern B Holding Position Markings, the ATCT has the ability to clearly direct aircraft to hold during key operations on 8R-26L. A long-range ultimate layout creates a situation where the entire fleet, with the exception of the MD-11, could taxi along the full length of Taxiway J and be clear of the departure surface. The proposed geometry allows for a full length taxi to Runway 04 without entering the SIDA area of the terminal apron. By removing the cargo fleet from the terminal apron, more space is available to allow for the ADG III TOFA required for the commercial fleet to remain free and clear of the VSR. This allows for fewer operational challenges when utilizing the VSR on the terminal ramp. Additionally, if ADG IV aircraft become a part of the commercial fleet in the future, this geometry allows spacing for the commercial service apron to be expanded to the north to accommodate this width.

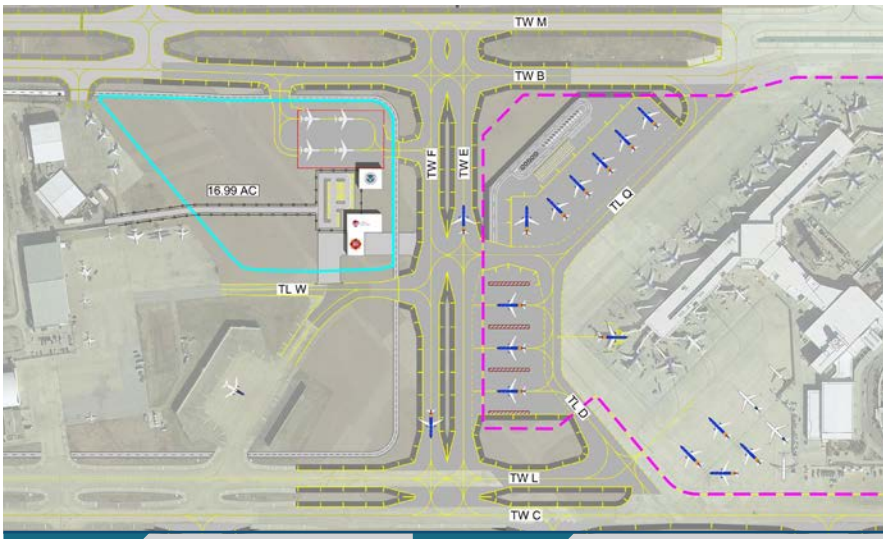
Relevance to Proposed Projects

- Garver worked with airport staff to develop **an alternative layout for this area that solved the near- and long-term challenges and improved operational efficiency.** This layout was added to the Airport Layout Plan, and a plan was developed to phase this project over multiple years to meet funding availability and minimize operational impacts.

Dallas Love Field Airport

Dallas, TX

Crossfield Taxiway Replacement



Years 2020 - 2024 (estimated) **Cost** $41 million (estimated)

Contact Person
Anthony Andrews, PE, PMP
Senior Program Manager
City of Dallas
214-671-1899
anthony.andrews@dallascityhall.com

Key Personnel

Colin Bible, PE
Quality Control Manager

- Quality control manager responsible for reviewing design submittals.

Frank McIllwain, PE
Principal in Charge

- Principal in charge responsible for providing oversight for the design.

This project aims to replace the existing midfield taxiways at Dallas Love Field with two dual crossfield taxiways that will be aligned perpendicular to Runways 13R-31L and 13L-31R. Dallas Love Field requested for Garver to provide engineering design services to overhaul their taxiway system between their two runways to provide a more efficient layout for aircraft movements and increase developable, on-airport property. The proposed taxiway layouts will provide dual parallel taxiways that will connect to the parallel taxiway systems for Runway 13L-31R and Runway 13R-31L. Seven alternatives were presented in multiple virtual stakeholder meetings with aviation department, airlines, air traffic control tower, and airport operations.

The seven alternative configurations focused on placing the backbone of the dual taxiway system to enhance terminal area movements to each runway end, provide a new centralized deicing facility, and provide developable property to locate a new ARFF station that can meet the less than three-minute response time requirements to each runway. The airport was also able to capture an additional 14 acres of on-airport property that could be marketed for future commercial use.

The impacts of COVID-19 presented many challenges but also provided new opportunities for project implementation. We conducted virtual stakeholder meetings to communicate the seven different taxiway alternatives and received positive engagement from all stakeholders. We also developed a portal that allowed all stakeholders to select and review each alternative to better understand the positive and negative impacts to the airfield.

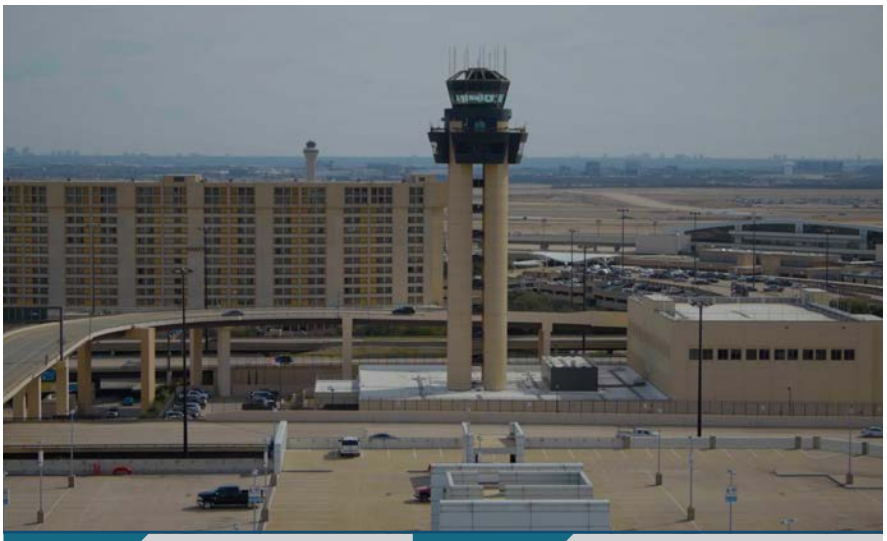
Relevance to Proposed Projects

- DAL's crossfield taxiway program is the **catalyst to begin redevelopment of the airfield and provide the foundation for future airfield operational enhancements.** Planning for this program required consideration for projects that would occur **over the next 5 to 10 years.**

Dallas Fort Worth International Airport

DFW Airport, TX

On-Call Assignments



Years	2019 - 2022 (estimated)	Cost	$75 million (estimated)

Contact Person

Kim Worley, Contract Administrator
Dallas Fort Worth International Airport
kworley1@dfwairport.com
972-574-8888

Key Personnel

Frank McIllwain, PE
Principal in Charge

- Principal in charge responsible for providing oversight for the design of various airside and landside improvements.

Garver is the prime consultant providing on-call design and design management services on a variety of airport improvement projects requiring multi-disciplined teams. Our design services include coordination with several DFW teams including Design, Code, and Construction (DCC), Energy, Transportation, and Asset Management (ETAM), Environmental Affairs, Planning, Operations, and Commercial Development. Garver's assignments under this on-call contract include the following projects:

- Airfield Pavement Remediation
- Runway 17L-35R Rehabilitation
- Runway 17L-35R Storm Drains
- AOA Slope Failure Taxiway EL
- Terminal D Arrivals and Departure Level Expansion Joint Rehabilitation
- 31st, 32nd, 33rd Streets and Southwest Construction Road Rehabilitation
- Terminal A Flyover Bridge Replacement
- Terminal D Airfield Ramp Joint Rehabilitation
- Curbside Reallocation for Terminals A, B, C, D, E
- Southeast Quadrant Sanitary Sewer Improvements
- Hardening of Assets
- Stormwater Protection Improvements
- Landside Storm Sewer Rehabilitation
- Grand Hyatt Roof and Expansion Joint Rehabilitation
- Terminal D Uninterrupted Power Supply Replacement
- East-West Connector Environmental Assessment

Relevance to Proposed Projects

- This on-call involved a wide array of projects both inside and outside of the AOA fence. While these projects were diverse, the common feature was a large and varied group of stakeholders. **Garver's team led the coordination process on all of these projects and delivered consistent, well-executed projects.**

George Bush Intercontinental Airport

Houston, TX

Rehabilitation of Taxiways RA, RB, SA, and SB

Years 2019 - 2023 (estimated) **Cost** $70 million

Contact Person
Devon Tiner, Interim AD for Design Infrastructure
281-233-1942
devon.tiner@houstontx.gov

Key Personnel
Frank McIllwain, PE
Principal in Charge

- Principal in Charge for design and construction management services for various types of rehabilitation.

Garver is providing design and construction administration services for the PCC Reconstruction and Rehabilitation of Taxiways RA, RB, SA, and SB at George Bush Intercontinental Airport. Design includes PCC pavement analysis for rehabilitation and reconstruction, drainage, marking, lighting and signage, and close coordination with IAH and United staff on construction phasing.

Relevance to Proposed Projects

- Garver worked closely with the Houston Airport System and its stakeholders to develop a set of construction documents that **prioritizes the needs of the operations of IAH primary stakeholders while providing safe, efficient work areas for construction to take place.**

Fort Worth Meacham International Airport

Fort Worth, TX

Midfield Taxiway Redevelopment

Years 2018 - 2022 (estimated) **Cost** $10.4 million

Contact Person
Dakota Shaw
Airport Supervisor
214-671-1294
Dakota.Shaw@fortworthtexas.gov

Key Personnel
Colin Bible, PE
Senior Project Manager

- Senior project manager responsible for leading design to turn an old crosswind runway into a new development area.

The existing midfield included a decommissioned cross-wind runway and deteriorating taxilanes. Garver was tasked to realign two taxilanes and prepare the area for future development, including designing stormwater infrastructure for a fully developed site with over 20 additional hangars and aprons. Garver designed the layout of the site so that the taxiway realignment offered the maximum potential for future lease space while reducing several existing taxilane hot spots.

Relevance to Proposed Projects

- This project impacted **over 40 tenants**, so with help from tenant coordination meetings, **Garver created a phasing plan that maintained all tenants' access to the runway.**

IV Technical Approach

IV Technical Approach

A Long-Range Vision

The Garver Team understands that each project listed in your RFQ is only a portion of a robust program of improvements scheduled over the next five years. Given this fact, a comprehensive program approach is paramount for increasing the success of each project and reducing conflicts during construction. As shown in **Figure 3**, we have taken a long-range vision approach to your airfield improvement needs and recognize that many of these projects are interrelated. By treating each project as a way to advance towards the larger goal, we believe we can reduce operational impacts, save money, and ultimately provide a safer facility. We believe that by taking a program approach, we can put ABQ in the best position to minimize rework and maintain maximum operational flexibility during construction of concurrent projects. Along with these benefits, taking a multi-project program approach helps:

1. Identify locations where economies of scale can reduce overall program costs.
2. Allow design to accommodate both current and ultimate use which saves cost and minimizes operational impacts.
3. Reconfigure electrical circuits for ultimate taxiway alignments and optimize regulator efficiency.

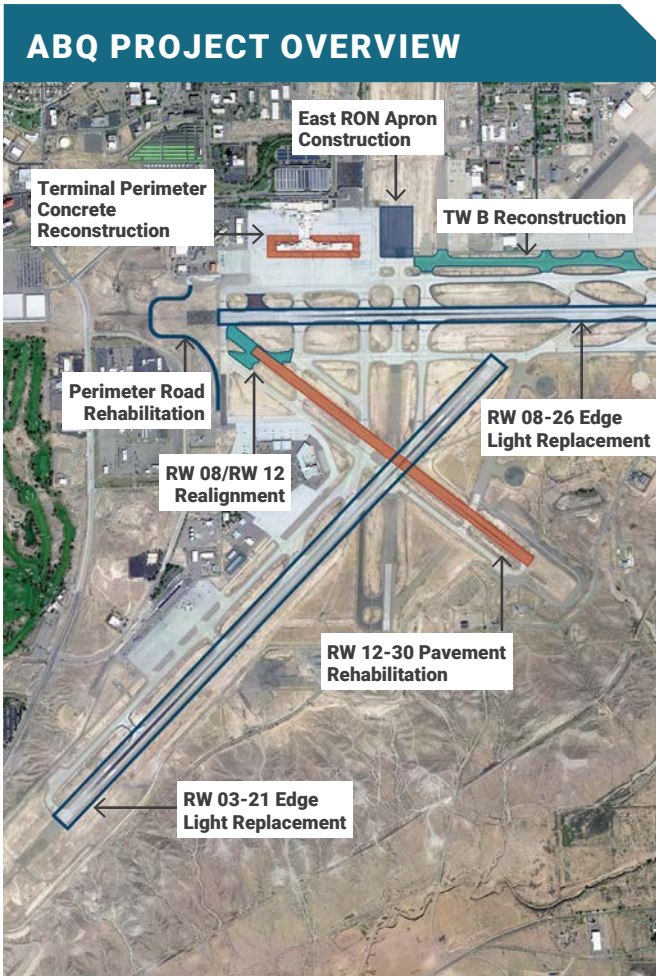


Figure 3: Albuquerque International Sunport Project Overview

ABQ Runway 08 and Runway 12 Realignment

The Garver Team understands the importance of the Runway 08 and Runway 12 realignment project for the elimination of an FAA Hot Spot at ABQ. Given the project's effect on two of the three runways at ABQ, it is critical to understand all challenges associated with the project to minimize the project's impact on the airport's short- and long-term operations. The Garver Team understands these challenges and has developed an approach to mitigate each of them. As shown in **Figure 4** on the following page, we have reviewed each element in depth and developed preliminary action plans to mitigate each one. In addition, Garver has reviewed ABQ's Master Development Plan and identified additional project elements to assist in the overall implementation of ABQ's long-range goals and green initiatives.

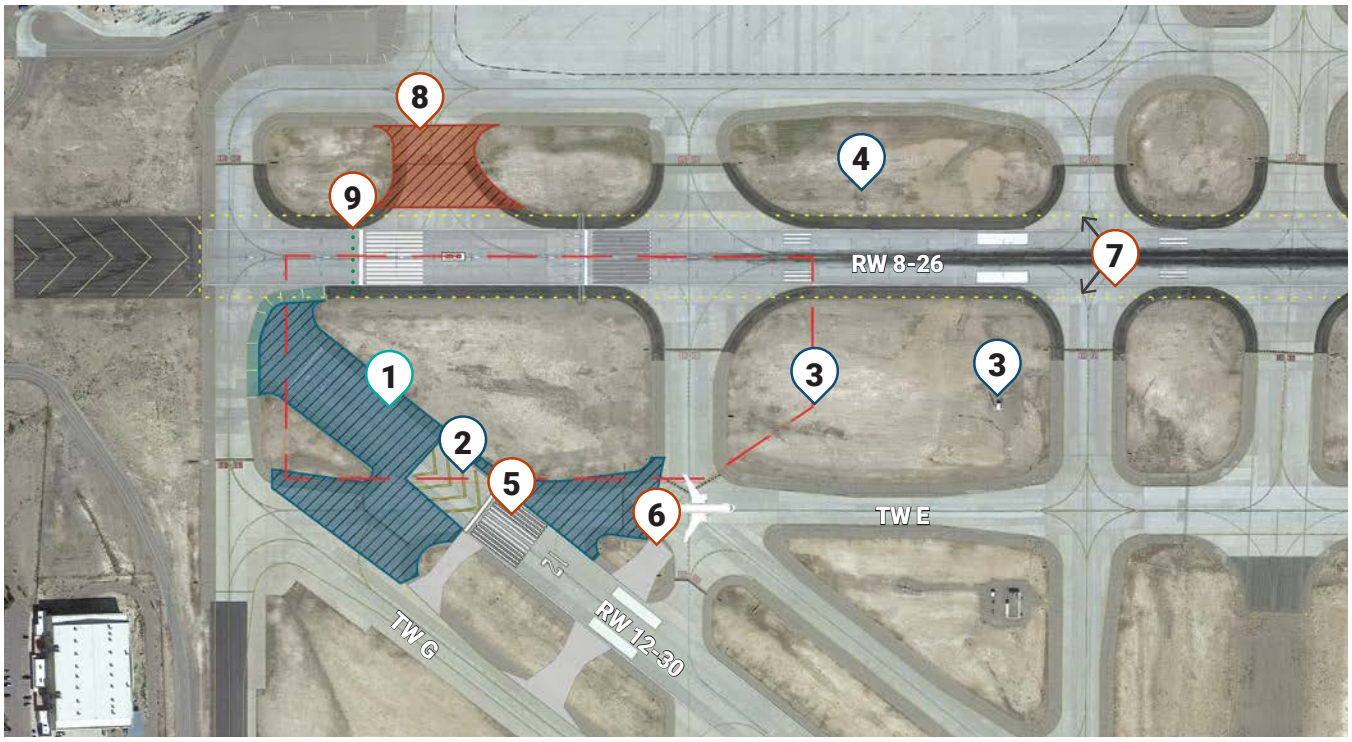


Figure 4: ABQ Runway 08 and Runway 12 Realignment Preliminary Action Plan

Green Initiatives

1. Recycle existing concrete pavement planned for removal for use as a P-219 Recycled Crushed Aggregate Base Course for new proposed shoulder pavements and new Glideslope Access Road.

Mitigate Operational Impacts

2. Given expected Runway 12 traffic and per the requirements of a B-III runway, consider leaving 200 feet of existing runway pavement behind the Runway 12 threshold and predesignating it as a blast pad.

3. Advanced coordination and Reimbursable Agreement Development with FAA NAVAIDS Division for Glideslope Antenna, equipment building, VASI, and RVR relocation will be required. The Garver Team has experience in these relocations and will assist the airport in ensuring items are fully coordinated between FAA NAVAIDS division, the local SSC, and the contractor.

4. As part of VASI relocation, coordinate possible upgrade of antiquated VASI equipment to a new LED PAPI system.

Long-Range Goals

5. Review opportunity to acquire GPS approach to Runway 12 as part of runway shift.

6. Review planned location of ultimate Runway 12-30 crossing taxiway to make sure Group V aircraft utilizing Taxiway E do not penetrate the Glideslope Critical Area, necessitating an ILS holding position marking on Taxiway E.

7. **Design Runway 08-26 Edge Lighting Improvements project to make sure light spacing requirements are met for both the existing and ultimate Runway 08 threshold locations**, eliminating the costly need for re-spacing all runway lights once the Runway 08 threshold is relocated.

8. The removal of Taxiway A2 is part of the long-range master plan at ABQ. Consider removing the taxiway as part of the Runway 08 relocation while the runway is closed for the project to increase efficiency with the demolition of the taxiway.

9. Coordinate final threshold location with existing in-pavement NAVAID infrastructure. Proper threshold siting will allow for the reuse of critical in-pavement infrastructure for the current MALS-R and possible ultimate ALS-F and touchdown zone lighting systems.

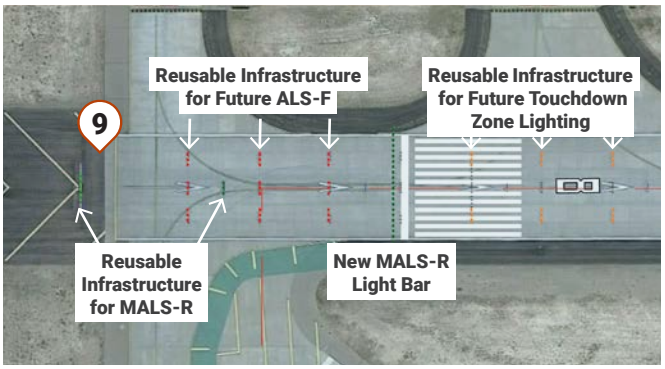


Figure 5: ABQ Runway 08 and Runway 12 Realignment Preliminary Action Plan

Scheduling

Performing a complex project like the Runway 08 and Runway 12 realignment requires tactical advanced coordination and scheduling. We have experience performing similar projects that required coordination between multiple FAA Divisions in the FAA Southwest Region, including two such projects in 2021. **Each "track" is with a different FAA division, but interrelated, so it is important to clearly understand the work-flow to efficiently deliver this type of project.** By bringing this experience to your project, the Garver Team has developed an overall program schedule (**Figure 6**) to coordinate all project elements with the necessary FAA divisions.

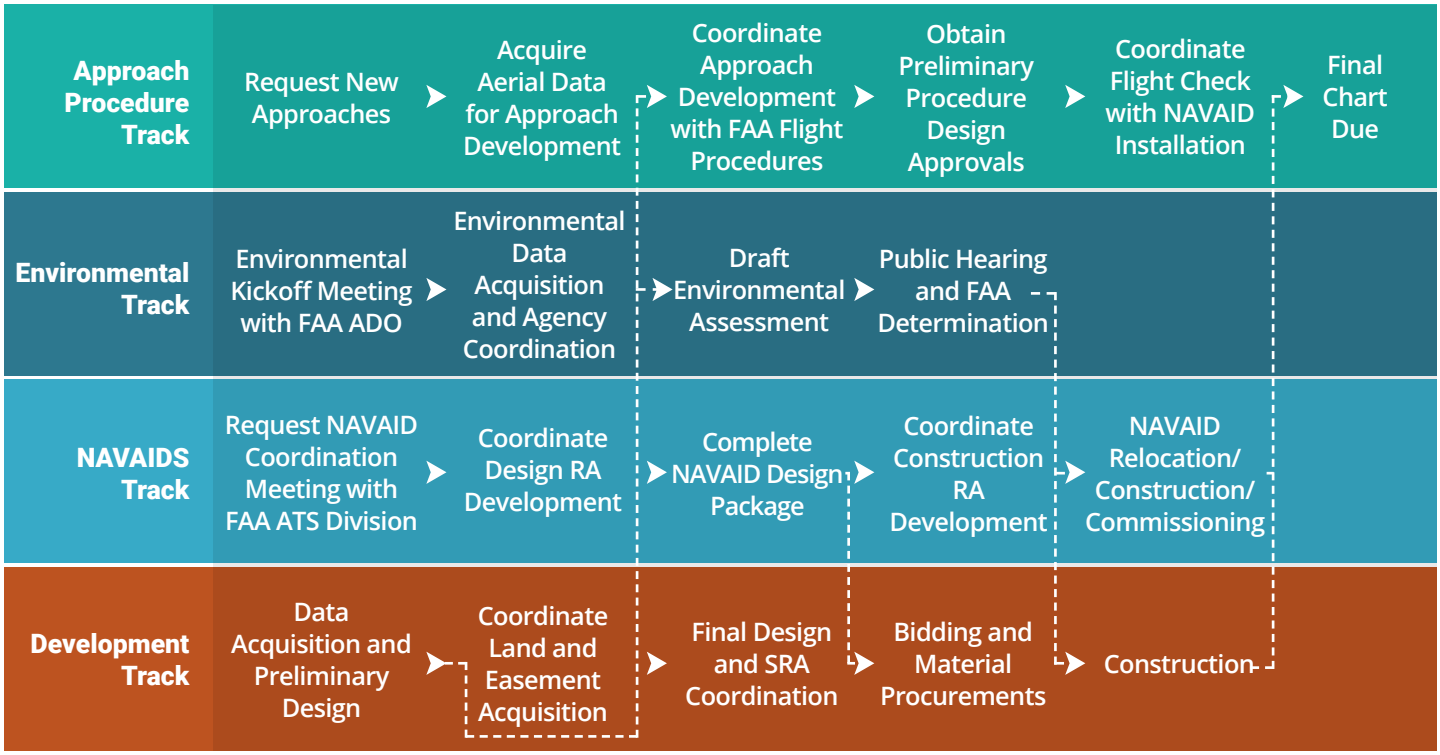


Figure 6: ABQ Runway 08 and Runway 12 Program Coordination

Quality Control Procedures

Every facet of our organization is intentionally designed to produce a quality project. This starts with our Quality Control Policy, which guides the development of our formal Quality Control Plan (QCP) for each project. The QCP includes internal procedures, scheduled milestones, anticipated problem areas, and check-off lists. Our project managers personally administer QCPs for each project assigned to Garver, and team members sign the QCP to acknowledge their responsibilities, all of which leads to quality work on our projects. The QCP also includes our change management policy, which includes information on administering change orders, details each lead designer's responsibilities regarding change orders, and limits when design changes should be made after approval by the client.

ABQ East RON Apron Construction

Expansion of the terminal apron to the east is key to the management and movements of Remain Overnight (RON) aircraft. The following are key design elements that Garver has identified for the success of this project:

RON Apron Geometry

The RON apron must be designed to protect Taxiway Object Free Area (TOFA) clearance for aircraft accessing the area and aircraft accessing the north side of the terminal. As shown in **Figure 7**, coordination with airlines regarding RON fleet will be necessary to properly site the RON parking to protect all OFAs.

During design of the RON layout, Garver will coordinate with all airlines expected to utilize the RON facility to determine each airline's standards for wingtip clearance, envelope protection, and fleet and GSE requirements

Taxiway A4 Direct Access Demolition

The construction of a RON access taxilane on the east side of the RON parking will create an incompatible direct access condition to Runway 08-26. It is recommended that the demolition of this taxiway as shown in **Figure 7** be completed as part of the RON expansion project.

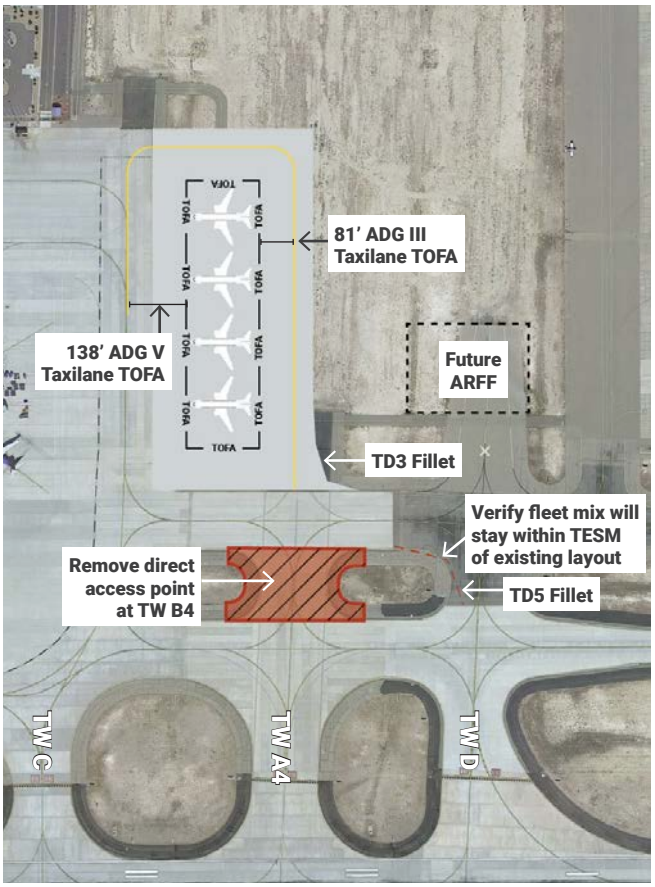


Figure 7: ABQ East RON Apron Construction

ABQ Taxiway B Reconstruction

Taxiway B is showing signs of significant deterioration, and reconstruction of the pavement section is necessary. The Garver Team has reviewed the project and identified the following factors that will define success for the project:

Coordination with Kirtland AFB Operations

Taxiway B is the primary access point for Kirtland AFB to the ABQ airfield. The Garver Team will work with stakeholders from ABQ and Kirtland AFB to coordinate design fleet, access during construction, and potential geometry updates for more efficient use.

Figure 8: ABQ Taxiway B Reconstruction

Taxiway A/Taxiway B Crossover Taxiways

As shown in **Figure 8**, the Taxiway B Reconstruction limits will extend into the Taxiway A TOFA at Crossover Taxiway locations. The Garver Team will review opportunities for accelerated construction or night closures to perform this work with minimal impact to Taxiway A traffic.

Taxiway D Geometry Evaluation

With the possible removal of Taxiway A4 as part of the East RON project, the Taxiway D/Taxiway B intersection will become a vital crossover movement for traffic arriving on Runway 26 to the terminal. As shown in **Figure 7**, the Garver Team will utilize AviPlan software to analyze aircraft turning movements at this intersection to make sure aircraft can safely navigate the turn when accessing the terminal.

The following projects were also identified in the public advertisements as possible projects to be completed at ABQ. Garver has reviewed each project and summarized critical design elements for each below:

ABQ Runway 12-30 Rehabilitation

Ultimate Runway Width

Based on the recent ABQ Master Plan Update, Runway 12-30 is planned to be reduced from its current 150-foot width to an ultimate width of 100 feet. While that conversation may not happen as part of the proposed pavement rehabilitation project, Garver will perform the rehabilitation design to minimize pavement repairs on pavement areas that will ultimately be converted to runway shoulders. Repairs in these areas will be focused on FOD reduction, preserving rehabilitation funding for the ultimate 100-foot runway extents.

ABQ Runway 03-21 Edge Light Replacement

Construction Phasing

To minimize impact to airport operations, Garver recommends completing the proposed Runway 03-21 lighting rehabilitation in three phases as described below:

- *Phase A — Runway 12-30 Intersection.* Work in this area will require closure of Runway 12-30. Given the limited access to Runway 30, it is recommended to include the Taxiway G/Runway 03-21 intersection in this phase as well. Since more traffic will be utilizing Runway 12-30 during the Runway 03-21 shutdown, it is recommended this work be completed during off-peak hours.

- *Phase B — Taxiway E Intersection.* Work in the vicinity of the Runway 21 end will conflict with the Taxiway E TOFA. Given the distance from the Taxiway E centerline to the Runway 21 threshold, NOTAMs may be issued with wingspan limitations for Taxiway E while work on the Runway 21 threshold lights take place.

- *Phase C – Remaining Runway 03-21 Work.* Work within the remaining portions of Runway 03-21 will be completed during a runway closure. Garver will coordinate with the Owner during design to determine the best time frames for full closure.

Lighting Technology

The FAA recently approved the use of LED HIRLs for AIP projects. While approved for AIP use, Garver recommends coordinating the installation with airport users to make sure heat sensing imaging equipment, if utilized by cargo operators, will not be affected by the installation of LED fixtures.

Conductor Recycling

Garver recommends requiring the contractor to recycle all copper conductors replaced as part of the project. Conductors would be placed in an airport recycle bin, and proceeds from recycling would be credited to the project.

ABQ Terminal Perimeter Concrete Reconstruction

Coordination with Ground Handling Operators

Most ground handling operators utilize the area between the aircraft parking envelope and terminal building for the parking and staging of Ground Support Equipment (GSE). Garver will coordinate with ABQ and ground handling operators during design to determine an appropriate phasing plan that provides temporary GSE staging locations during construction.

Utility Coordination

Most terminal facility utilities, passenger boarding bridge utilities, and roof drains are found near the perimeter of the terminal building. During design, Garver will review record documents and airport records to site all known utility locations. If necessary, Garver will coordinate with HMCG, our subsurface utility exploration (SUE) subconsultant, to verify utility locations and depths during design.

ABQ Perimeter Road Rehabilitation

Landfill Mediation

We understand that a portion of the perimeter road around the Runway 08 end is sitting over an abandoned landfill. Settlement associated with the landfill is causing accelerated deterioration in the perimeter road above. To determine the best solution to mediate future settlement, Garver has teamed with Terracon, a local geotechnical firm, to perform borings in the area to provide a range of engineering solutions to help “bridge” the area to reduce long-term maintenance of the perimeter road.

AEG Pavement and Lighting Rehabilitation

Runway 17-35, Taxiway B, Runway 04-22, Taxiway A, and Taxiway C. Garver reviewed pavement condition and distress data for each pavement element at AEG proposed for rehabilitation. Based on Garver's extensive rehabilitation experience and available data, we recommend the following approach for each planned project:

Airfield Location: RUNWAY 17-35

Last Inspected: November 2016
PCI at Time of Inspection: 86
Projected PCI (2022): 75
Last Major Rehabilitation: 2012 (Seal Coat)
Notable Distresses (2016): Low to Medium Cracking, Medium High Raveling

GARVER RECOMMENDATION: Based on work history data, Runway 17-35 received a Porous Friction Course overlay in 2004. Porous Friction Courses are prone to loss of asphalt binder, aggregate displacement, and FOD generation. Garver will evaluate the current level of surface raveling and provide a recommendation of a multi-coat slurry seal application if raveling remains low to medium, or an overlay if raveling is medium to high.

Airfield Location: RUNWAY 04-22

Last Inspected: November 2016
PCI at Time of Inspection: 100
Projected PCI (2022): 92
Last Major Rehabilitation: 2010 (Reconstruction)
Notable Distresses (2016): Low Cracking

GARVER RECOMMENDATION: Based on work history data, Runway 04-22 was completely reconstructed in 2010. The pavement is expected to be in good condition, with only minor crack filling and a seal coat treatment required. Garver will evaluate friction as part of the seal coat application to make sure FAA friction standards are being met.

Airfield Location: TAXIWAY A

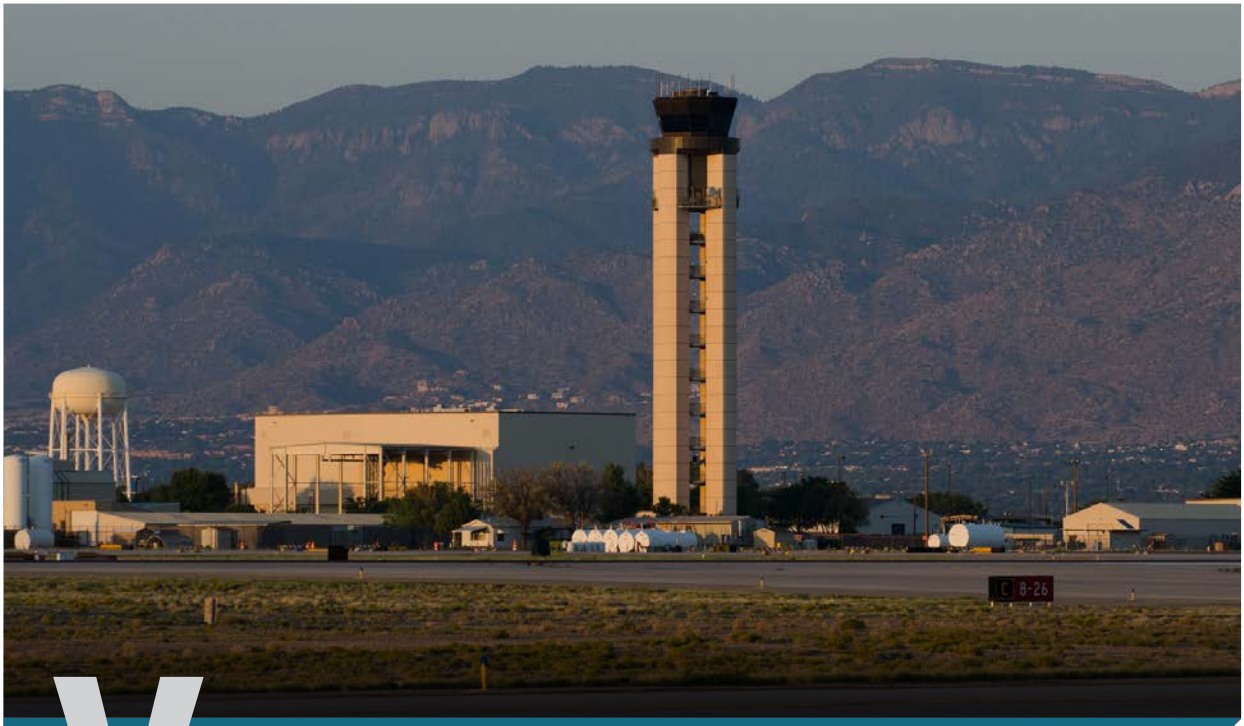
Last Inspected: November 2016
PCI at Time of Inspection: 84
Projected PCI (2022): 74
Last Major Rehabilitation: 2010 (Reconstruction)
Notable Distresses (2016): Low Cracking, Low to Medium Weathering

GARVER RECOMMENDATION: Based on work history data, Taxiway A was completely reconstructed in 2010. The pavement is expected to be in good condition, with only minor cracking and surface weathering expected. While the pavement has deteriorated faster than its associated runway (Runway 04-22), it is expected that a higher concentrated seal coat with crack filling would provide an effective rehabilitation of the pavement.

Airfield Location: TAXIWAYS B/C

Last Inspected: November 2016
PCI at Time of Inspection: TW B (85); TW C (88)
Projected PCI (2022): TW B (71); TW C (75)
Last Major Rehabilitation: 2012 (Seal Coat)
Notable Distresses (2016): Low to Medium Cracking

GARVER RECOMMENDATION: Based on work history data, Taxiway B and Taxiway C were overlaid in 2005 and received surface seal coats in 2012. During design, Garver will evaluate the current level of surface weathering and provide a recommendation of either another surface seal coat with a higher concentration or slurry seal with crack sealing for each taxiway.



V Cost Control

V Cost Control

Cost Control and Design Process

As a client-oriented firm, Garver is well versed at designing projects to meet even the most stringent budgets. Garver has developed a reputation for delivering on-time and under budget design that is supported by a unique organizational structure and proven processes. Our team of experts are picked specifically for projects to apply unique skills effectively and efficiently to a process. Additionally, we have regularly scheduled internal meetings as well as external meetings to confirm we are on-track with our customer's expectations.

Cost Control of the Construction Cost

Garver consistently meets design deadlines within the amount contracted for design phase services. We work diligently with contractors, airport staff, and FAA officials to minimize cost increases during construction. Our record of successfully completing projects on time and without major cost escalations is due to realistic project budgeting as well as our ability to mitigate obstacles. We know that many variables can impact the final construction cost of a project, and we use a rigorous, time-tested method for controlling costs during the design and construction phases. The Garver Team will remain involved throughout the construction phase to make sure your improvements are constructed efficiently and effectively.

OVER THE PAST 5 YEARS,
COST ESTIMATES ON GARVER AVIATION PROJECTS HAVE AVERAGED WITHIN **3%**
OF THE FINAL CONTRACT AMOUNT.

Cost Estimating Techniques

For the projects anticipated at ABQ/AEG, Project Manager Colin Bible, PE will be responsible for cost control and will lead the design development, including the preparation of the cost estimate. He will work closely with the QA/QC Manager Mitchell McAnally, PE, PMP, to make certain the estimate is accurate, complete, and realistic, and he will monitor the cost throughout project execution using weekly cost and variance analysis reports to satisfy design objectives and meet specific project requirements. **Figure 9** demonstrates our history of providing accurate cost estimates on projects designed within the past two years.

Name of Project	Month and Year of Bid	Number of Bids	Final Cost Estimate	Bid Award Amount
Meacham International Airport Midfield Taxiway Redevelopment Stage 2	Mar. 2021	2	$3,712,798	$3,699,645
Dallas Airport System Exterior Lighting Improvements	Nov. 2020	4	$1,763,000	$1,539,438
Monroe Regional Airport Airfield Drainage Improvements	Jan. 2020	3	$2,852,120	$2,810,045

Figure 9: Example of Garver's Cost Performance on Recent Projects

City of Albuquerque Capital Implementation Program

Agreement and Insurance Certification

We have reviewed the standard agreement for Engineering orArchitectural or Landscape Architectural Services that are required for the project listed below, and hereby certify that we will, if selected for the project, enter into this standard agreement for this project and meet all insurance requirements listed therein.

This Certification is intended for the use of the City of Albuquerque only, in conjunction with the award of the Engineering or Architectural or Landscape Architectural Services Agreement for Project:

Project Name Airfield Engineering On-Call Services for the Aviation Department at the Albuquerque International Sunport and Double Eagle II Airport

Project Number 7700.94

Date January 19th, 2022 Firm Name Garver, LLC

Signature Colin Bible

Title Senior Project Manager

STATE OF NEW MEXICO)

) ss

COUNTY OF BERNALILLO)

The above Certification was subscribed before me, the undersigned authority, by:

Colin Bible

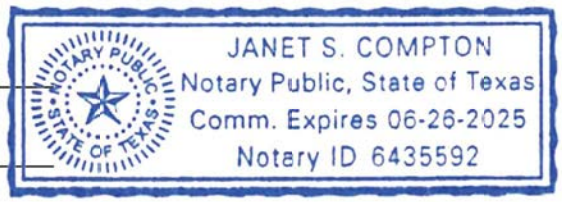
who swore upon oath that this Certification was signed of free act and deed, on this

19th day of January , 20 22

Janet Compton

(Notary Public)

My commision expires: 06/26/2025



Pay Equity Reporting Form

City of Albuquerque
www.cabq.gov

Bernalillo County
www.bernco.gov

Water Authority
www.abcwua.org

Company Details

Company Name	Garver, LLC
Phone	720-744-4557
Email Address	CMBible@GarverUSA.com

Mailing Address	One Denver Technology Center 5251 DTC Parkway, Suite 420 Greenwood Village, CO 80111
NM Employees?	yes

Job Category		No. Females	No. Males	Gap (Abs. %)
1.1	Exec/Senior Level Officials/Mgrs	0	0	N/A
1.2	First/Mid Level Officials/Mgrs	0	0	N/A
2	Professionals	0	1	N/A
3	Technicians	0	0	N/A
4	Sales Workers	0	0	N/A
5	Office and Admin. Support	0	0	N/A
6	Craft Workers (Skilled)	0	1	N/A
7	Operatives (Semi-Skilled)	0	0	N/A
8	Laborers (Unskilled)	0	0	N/A
9	Service Workers	0	0	N/A
	Overall Total	0	2	N/A

Total # of Females (all categories)	0	Total # of Males (all categories)	2
Total # Female Only Job Categories	0	Total # Male Only Job Categories	2
Total # Part Time Females	0	Total # Part Time Males	1
Female % Workforce	0.00%	Male % of Workforce	100.00%
Total # Employees	2	Total # Non-Binary Employees	0

Must be signed by a representative of the company. Signature certifies that all employees working in New Mexico are included, the data is for one year ending when the form is signed, and any challenges to your information may require you to get third party verification at your own expense.

Colin Bible, PE, Senior Project Manager — Name and Title

Colin Bible — Signature

Jan 18, 2022 — Date Submitted

All Pay Equity Reporting Forms are reviewed by the Gender Pay Equity Initiative within two business days of submission. A copy of the reviewed form will be emailed to you for inclusion with your bid or proposal. If the Overall Total Pay Gap on your form is 0%, the Gender Pay Equity Initiative will certify your Pay Equity Reporting Form. A Certified Pay Equity Reporting Form may allow you to obtain a 5% preference. Please keep in mind that a Pay Equity Reporting Form - whether certified or uncertified - must be submitted with all bids and proposals. Please contact the Gender Pay Equity Initiative with any questions: oei@cabq.gov or (505) 768-3512.

☐ **Certified - Overall Gap is 0%**

Gender Pay Equity Representative

☑ **Uncertified - Overall Gap is more than 0%**

Company ID: 522