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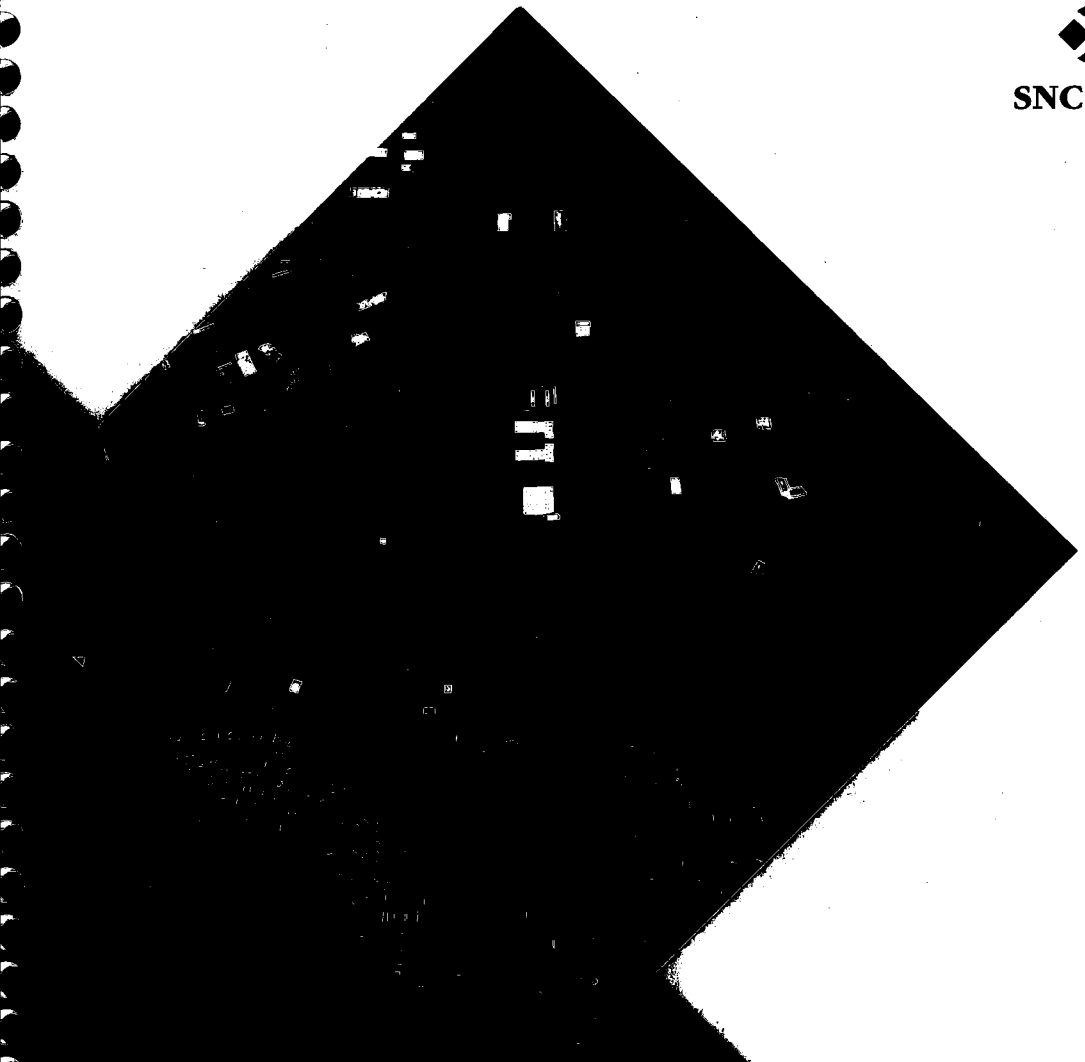

CARSON CITY AIRPORT AUTHORITY

STATEMENT OF INTEREST AND QUALIFICATIONS FOR

Airport Architectural/ Engineering Services

JUNE 15, 2018

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Mr. Kenneth G. Moen, A.A.E.
Carson City Airport
2600 E. College Parkway #6
Carson City, NV 89706

Re: Statement of Interest and Qualifications for Airport Architectural/Engineering Services for the Carson City Airport

Dear Mr. Moen,

Atkins has served the Carson City Airport Authority as your airport consultant since 2002, partnering with the airport to deliver engineering, planning, environmental, and construction management services on numerous projects. We are eager to continue this partnership and offer you a team of aviation professionals committed to seeing the Carson City Airport—the third busiest general aviation (GA) airport in Nevada—to provide an important hub for business, pleasure, and emergency response operations.

Our project manager Brian Fitzgerald, PE, is intimately familiar with the airport's needs and has provided professional services at the Carson City Airport for the past 12 years. Combined with Atkins' wealth of experience in providing services for airport projects, Atkins is exceptionally qualified to meet your needs. Our Reno staff members provide the preparation of airport capital improvement programs (ACIPs), Federal Aviation Administration (FAA) grants applications, and other general aviation services as well as aviation planning, environmental services, design, and construction management. We also have the ability to draw upon the experience and resources from our national aviation services group as needed. Atkins has the required expertise and staff to perform these services, and we offer you the following:

- **A skilled project manager** with 12 years of extensive civil engineering experience working on FAA-funded projects. Brian Fitzgerald, PE has worked on projects at more than 16 different airports and serves as the airport engineer at six GA airports including the Carson City Airport.
- **The ability to provide all necessary services** for your airport projects, including but not limited to preparation of the ACIP, FAA grant applications, National Environmental Policy Act (NEPA) clearance, disadvantaged business enterprise (DBE) program, airport planning, airport design, and construction management.
- **More than 16 years of directly applicable experience with the Carson City Airport.**
- **The availability of the Atkins national aviation services group** for consultation on complex aviation issues that may arise.
- **The availability to begin work immediately** upon notice to proceed.

There will be a seamless transition into the next 5 years when choosing Atkins as the consultant for the architectural/engineering services contracts now in place. We will service the Carson City Airport from our office in Reno. This proximity allows us to respond quickly to your needs as project issues develop. We look forward to continuing to work with you on your next airport projects, and we hope to hear a favorable response. If you need additional information, please contact Brian Fitzgerald at brian.d.fitzgerald@atkinsglobal.com or 775.789.9841.

Sincerely,

Benedikt Goebel

Benedikt Goebel, PE
Principal-in-Charge

1.0 Capability to Perform the Aspects of the Project and Recent Experience

Capability

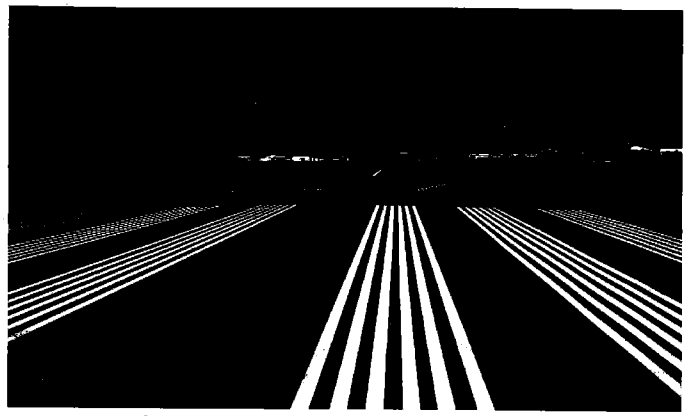
Since 2002, Atkins has enjoyed being the airport consultant for the Carson City Airport Authority. Having been involved with numerous projects at the Carson City Airport, we would be proud to continue our success with the Authority for another 5 years.

Our proposed team includes some of Atkins' top aviation design and construction management professionals. Led by Benedikt Goebel, PE, principal-in-charge, and Brian Fitzgerald, PE, project manager, we have assembled a team with unsurpassed credentials in airport consulting. Our subconsultant, Eastern Sierra Engineering, (ESE) will provide geotechnical engineering during design and materials testing during construction.

Mr. Fitzgerald will be supported by a staff of three aviation professionals and can draw upon our national resources when needed. Atkins' national aviation group have completed projects at air carrier and GA airports throughout the U.S. With full-time professional staff members who handle all aspects of airport development—including planning, environmental, design, and construction management—Atkins has developed subspecialities in many areas such as airfield geometrics, airfield pavement, airfield electrical improvements, airport drainage, navigational aids (NAVAIDs), project management, and scheduling.

The experience of our local personnel, combined with our ability to draw upon our national aviation resources and the expertise of more than 3,200 employees in 70 offices nationwide, establishes Atkins as a local engineering organization with the knowledge, skills, and ability to provide exceptional engineering and planning services.

Having been the airport engineering consultant for the Carson City Airport during the past 16 years, Atkins thoroughly understands the needs and objectives for your airport. Until November 2016, Jim Clague, PE represented Atkins as the airport consultant with assistance from Brian Fitzgerald. Mr. Clague is now employed by Atkins as a quality assurance/quality control advisor and will assist Mr. Fitzgerald with his duties as the airport engineering consultant.



Runway 27 after GSB-88 Seal

Some of the duties to be completed as airport engineer include the following:

ACIP

The ACIP for each airport is prepared on a yearly basis and provides the projects to be performed during the next 5 years. We coordinate with the Airport Manager to determine the preferred projects and their priorities over that 5-year period. A spreadsheet is prepared that lists the projects along with the associated preliminary cost estimates. Additionally, a color-coded exhibit is prepared indicating the location of each project within the airport. The summary sheet and exhibit is used for ACIP presentations, particularly during the annual one-on-one session with the FAA and the airport, which is typically held in November/December each year. Revisions are made to the ACIP based on comments received during the review meeting with the FAA. The information on the ACIP is then prepared on current FAA forms and submitted to the Phoenix Airports District Office to obtain program funding for the projects. Additionally, the ACIP is also sent to the Nevada Department of Transportation (NDOT) aviation planning division for their information and potential funding from the Nevada Aviation Trust Fund.

FAA grant applications. The pre-application and application for federal assistance are prepared for the project(s) approved by the FAA through the ACIP process. The grant application is prepared on a standard federal form and includes a narrative and financial summary. The narratives in the grant applications provide information about the airport and explain the need for each project including the condition of the existing facility, safety elements, and the proposed improvements.

The pre-application for construction projects is based on a detailed cost estimate and is submitted to the FAA in December prior to the proposed year of construction. The application for construction projects is based on the lowest responsive bid as well as the agreed upon engineering fees and is typically submitted prior to June of the construction year.

Nevada Aviation Trust Fund. The Nevada Aviation Trust Fund was established in 2001 to assist Nevada GA airports with the matching funds associated with an FAA grant. The procedure to request funds entails writing a letter to the NDOT aviation planning division along with a copy of the FAA grant offer. The request is considered at the Nevada Airports Technical Advisory Committee (NATAC) meeting held twice a year. NATAC decides the amount to be allocated to each airport from the Nevada Aviation Trust Fund and makes a recommendation to NDOT for the disbursement of available funds. Atkins assists the airport with the request letter and provides coordination with NDOT to help ensure that Carson City Airport receives its fair share of the funds.

Grant history

Table 1.1 on the following page provides a history of FAA grants received by the Carson City Airport since 2003 after Aktins became the airport consultant, followed by **Figure 1.1** pavement maintenance schedule on page 4. Since 2003, a total of $33,667,846 has been received from the FAA and the Sponsor's share has been $1,367,856, of which $21,428 has been received from the Nevada Aviation Trust Fund.

FAA coordination. Atkins serves as a liaison between the FAA and the airport. We work closely with the Airport Manager to ensure that the airport receives up-to-date information regarding FAA regulations and available grants. We also regularly communicate with the FAA to confirm the status of any grants and any upcoming changes in regulations.

DBE program. Atkins has prepared the DBE program for the Carson City Airport. This program establishes a goal of DBE participation to be used during airport improvement projects over 3 years and is required under the grant assurances for the airport to be eligible for FAA funding. The current DBE program is valid until October 2018, so Atkins will prepare the 2019-2021 DBE program for the Authority's approval at the August meeting.

General engineering. Atkins will obtain information, prepare preliminary cost estimates, prepare legal descriptions for lease parcels, review tenant improvement plans, and perform other miscellaneous engineering assignments at the direction of the Airport Manager or the Authority.

Pavement maintenance management program

In 2013, the NDOT performed pavement evaluations at all of the aviation department GA airports throughout Nevada that are eligible to receive funding from the FAA and is updating the evaluations for publication later in 2018. NDOT provides a separate report for these GA airports that includes the condition of the airfield pavements and the pavement condition index (PCI) along with a general recommendation for any pavement rehabilitation. This report satisfies the requirements of the FAA grant assurance; however, it doesn't specify the necessary work or the schedule. We use the report to confirm the ACIP pavement projects and coordinate with the Airport Manager to determine the preferred method of rehabilitation for the pavements at the Carson City Airport. We have scheduled each of the rehabilitation projects and have included them in the ACIP accordingly. Page 4 provides a 20-year maintenance schedule.

Rehabilitation options for pavements range anywhere from simple pavement maintenance such as a fog seal to pavement overlay. The purpose of pavement maintenance is to extend the useful life of the existing pavement at a reasonable cost. As indicated in the PCI **Figure 1.2** on the next page, pavement maintenance should be performed when the PCI falls between 55 and 70.

A PCI between 55 and 70 is considered to be the critical area for pavements because the condition of the pavement rapidly deteriorates when the PCI falls below 55 and usually requires reconstruction, which can be as much as six to ten times the cost of pavement maintenance. The purpose of performing pavement maintenance is to maintain a PCI of 70 or higher.

Figure 1.2. A PCI index between 55 and 70 shows how quickly pavement can deteriorate and the costs associated with reconstruction.

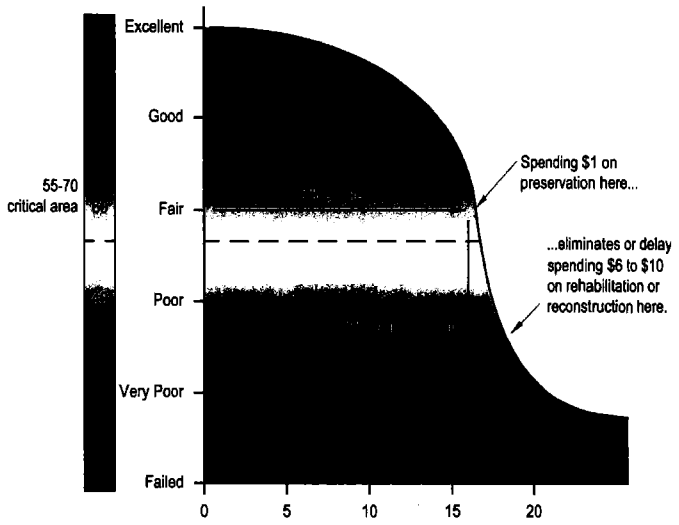


Table 1. Carson City Airport grant history since 2002.

AIP No.	YEAR	PROJECT NAME	FAA GRANT OFFER	FAA SHARE	AUTHORITY SHARE	PROJECT COST
3-32-0004-11	2003	Seal & Stripe Taxiway A and Aprons	$300,000	$286,774	$19,118	$305,892
3-32-0004-12	2005	Environmental Assessment and Benefit Cost Analysis	$375,000	$375,000	$25,000	$400,000
3-32-0004-13	2006	Land Acquisition - Beehive, Serpa, and Sheldon	$5,000,000	$5,000,000	$263,158	$5,263,158
3-32-0004-14	2007	Land Acquisition - Serpa Phase 2	$5,000,000	$5,000,000	$263,158	$5,263,158
3-32-0004-15	2008	Hill Removal - Design & Construction	$2,850,000	$2,795,908	$147,153	$2,943,061
3-32-0004-16	2008	Runway/Taxiway Design	$332,500	$332,434	$17,497	$349,931
3-32-0004-17	2009	AWOS* - Design & Construction	$174,121	$173,111	$9,111	$182,222
3-32-0004-18	2009	Rehabilitate and Realign Runway 9-27 and Taxiway A Construction	$9,600,332	$9,724,947	$0	$9,724,947
3-32-0004-19	2010	North Apron Environmental Assessment	$34,200	$34,200	$1,800	$36,000
3-32-0004-20	2010	Runway 9 Connector and Taxiway D East - Construction	$1,694,338	$1,667,741	$87,776	$1,755,517
3-32-0004-21	2011	Taxiway D West - Design & Construction	$1,270,429	$1,265,575	$66,609	$1,332,184
3-32-0004-22	2012	North Apron Environmental Assessment Phase 2	$70,313	$45,767	$3,051	$48,818
3-32-0004-23	2012	Rehabilitate Taxiways B & C - Design & Construction	$136,875	$136,875	$9,125	$146,000
3-32-0004-24	2012	Main Apron Design	$257,813	$257,813	$17,188	$275,000
3-32-0004-25	2013	Main Apron Reconstruction Phase 1	$1,387,500	$1,379,397	$91,960	$1,471,357
3-32-0004-26	2013	Main Apron Reconstruction Phase 2	$1,005,872	$998,498	$66,567	$1,065,065
3-32-0004-27	2014	Main Apron Reconstruction Phase 3/Runway Restripe	$1,084,674	$1,057,868	$70,525	$1,128,393
3-32-0004-28	2014	Obstruction Lights - Not Submitted				
3-32-0004-29	2015	North Apron Design	$150,000	$150,000	$10,000	$160,000
3-32-0004-30	2016	North Apron Reconstruction	$2,573,438	$2,573,438	$171,562	$2,745,000
3-32-0004-31	2017	Airport Master Plan Update	$412,500	$412,500	$27,500	$440,000
		TOTAL	$33,709,905	$33,667,846	$1,367,856	$35,035,702

*Airport Weather Observation System (AWOS)

Figure 1.1 Atkins 20-year maintenance schedule.

CARSON CITY AIRPORT

20-YEAR PAVEMENT MAINTENANCE SCHEDULE

Sealcoat and Stripe the Existing Pavement

6/6/2018

	PROJECT NAME			COSTS		
PROJECT YEAR	[redacted]	Terminal Parking Lot - Not Eligible for Federal Funding	East Perimeter Road	PAVEMENT MAINTENANCE TOTALS	FAA SHARE 93.75%	SPONSOR'S SHARE 6.25%
2018 PROJECT COST	[redacted]	$ [redacted]	$ 52,000			
2019	[redacted]	$ [redacted]	$ -	$ -	$ -	$ -
2020	[redacted]	$ [redacted]	$ -	$ 284,000	$ 266,000	$ 18,000
2021	[redacted]	$ [redacted]	$ -	$ 241,000	$ 226,000	$ 15,000
2022	[redacted]	$ [redacted]	$ -	$ 161,000	$ 151,000	$ 10,000
2023	[redacted]	$ [redacted]	Const.	$ -	$ -	$ -
2024	[redacted]	$ [redacted]	$ -	$ 723,000	$ 678,000	$ 45,000
2025	[redacted]	Reconst	$ -	$ 301,000	$ 282,000	$ 19,000
2026	[redacted]	$ [redacted]	$ -	$ 181,000	$ 170,000	$ 11,000
2027	[redacted]	$ [redacted]	$ -	$ -	$ -	$ -
2028	[redacted]	$ [redacted]	$ 70,000	$ 70,000	$ 66,000	$ 4,000
2029	[redacted]	$ [redacted]	$ -	$ 839,000	$ 787,000	$ 52,000
2030	[redacted]	$ [redacted]	$ -	$ 87,000	$ 82,000	$ 5,000
2031	[redacted]	$ [redacted]	$ -	$ 204,000	$ 191,000	$ 13,000
2032	[redacted]	$ [redacted]	$ -	$ -	$ -	$ -
2033	[redacted]	$ [redacted]	$ 81,000	$ 81,000	$ 76,000	$ 5,000
2034	[redacted]	$ [redacted]	$ -	$ -	$ -	$ -
2035	[redacted]	$ [redacted]	$ -	$ 467,000	$ 438,000	$ 29,000
2036	[redacted]	$ [redacted]	$ -	$ 237,000	$ 222,000	$ 15,000
2037	[redacted]	$ [redacted]	$ -	$ -	$ -	$ -
2038	[redacted]	$ [redacted]	$ 94,000	$ 772,000	$ 724,000	$ 48,000

*The 2018 Pavement Maintenance project cost has been increased by 3% per year to determine the project cost in future years.

**The cost for maintenance and reconstruction of the Terminal Parking Lot is not eligible for federal funding. The FAA and Sponsor shares have been adjusted accordingly.

Pavement Maintenance includes crack sealing, sealcoating the pavement with a product such as GSB-88 and then striping.

M&F refers to a mill and fill which includes milling the upper 2-inches of pavement and then providing a 2-inch overlay and striping.

Reconst refers to the total reconstruction of the existing pavement which includes removal of the existing pavement, earthwork, aggregate base course, paving, and striping.

Rehabilitation of the West Perimeter Road in 2018 includes reconstruction of the southerly portion from the Main Apron to the Drainage Channel. The remainder of the road will receive a 2-inch AC overlay.

It has been assumed that a sealcoat will have a 5 year life, a mill & fill will last approximately 15 years, and reconstruction of the pavement will have a 20 year life.

The totals only include the cost of pavement maintenance per year. The totals do not include the cost of rehabilitation, reconstruction or a mill & fill.

P#49755.JR.18

Design, bidding, and construction management services. Atkins provides airport and aviation related design services, bidding services, construction management, materials testing, and inspection as required for your capital improvement projects.

Carson City Airport

As indicated in the request for qualifications, the airport is seeking the services of an airport consultant to perform the previously described services as well as the specific projects shown in **Figure 1.3** below at the Carson City Airport. The following are descriptions for each project.

2018 Airport Master Plan Update

The previous Airport Master Plan Update (AMPU) was prepared in March 2001 and with the final phase of reconstruction of the North Apron in 2016, the major projects identified in the 2001 AMPU have been completed. The objective of the AMPU is to provide the community and public officials with proper guidance for future development which will satisfy aviation demands and be wholly compatible with the environment. Additionally, this study has the specific objective of re-examining the recommended direction from the previous master plan while incorporating subsequent changes when conditions and circumstances may have invalidated previous recommendations. Still valid concepts may be retained, while new concepts will be developed for those alternatives no longer valid or considered to be unacceptable or unworkable.

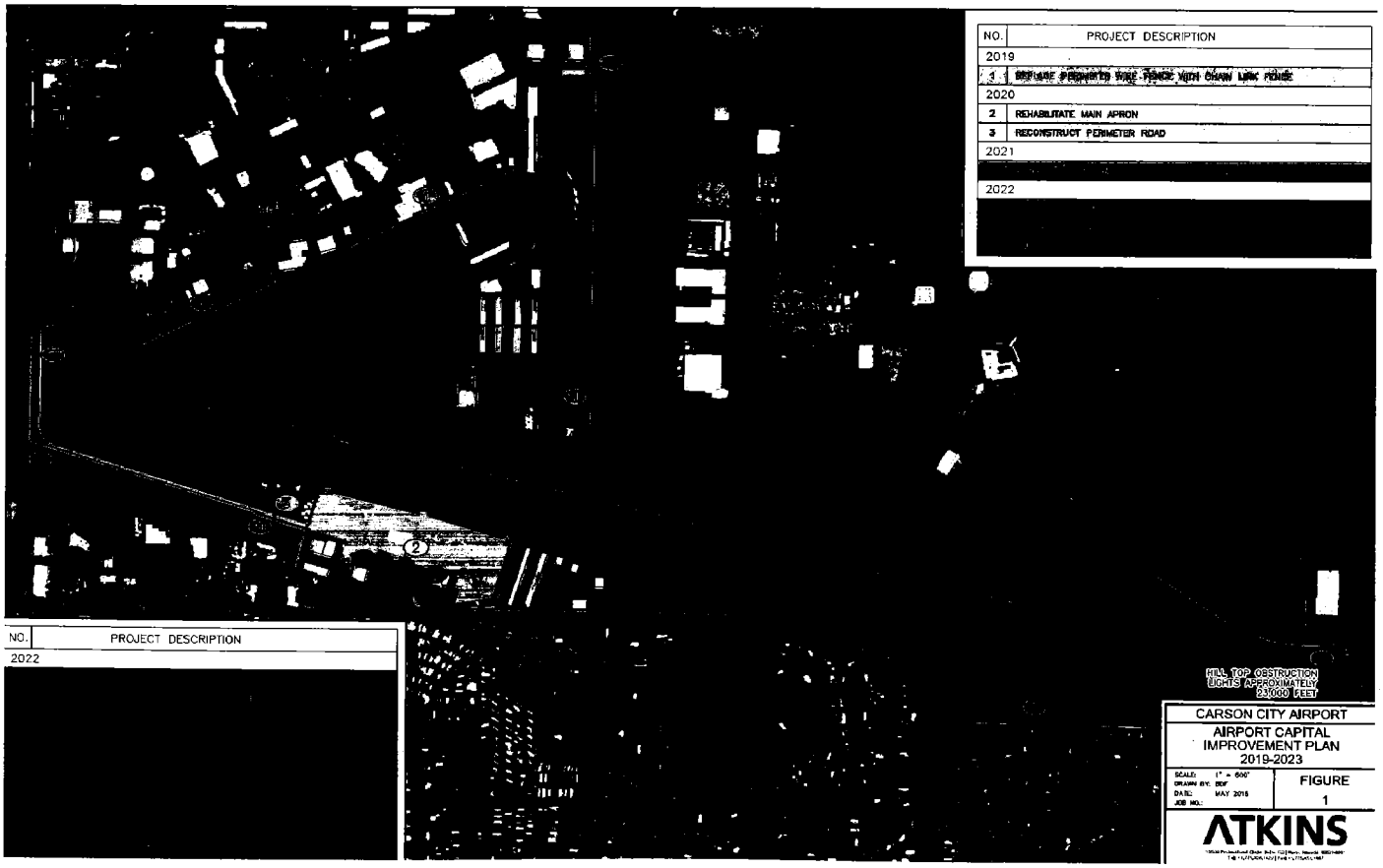
2018 Rehabilitate Taxiways A, B, C, D; Taxilanes E, F; and Access Road

Taxiway A was constructed in 2009/2010; Taxiway D was constructed in 2011/2012; and Taxiways B and C Taxilanes E, F, and the Access Road received crack and slurry seal in 2012. The purpose of this project is to prolong the useful life of the existing pavement (approximately 111,000 square yards) by providing maintenance to retain a PCI of 70 or greater for these pavements. This project includes crack sealing for the existing sawcut control joints, providing an application of GSB-88, and then striping the pavement.

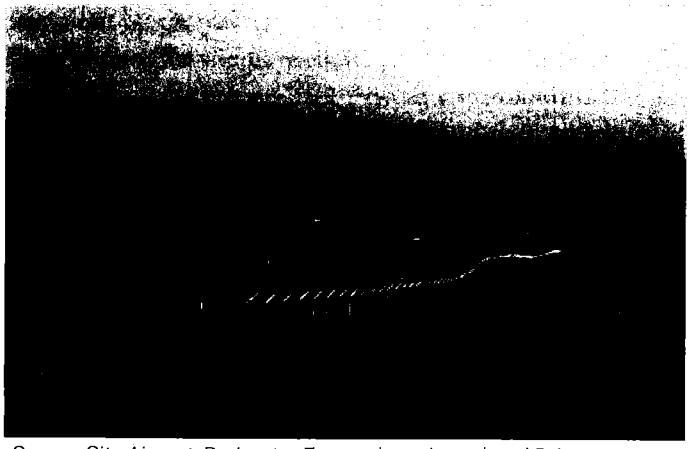
2019 Project – Replace Perimeter Wire Fence with Chain Link Fence

The airport is completely enclosed with a perimeter fence; however, approximately 40 percent of it is wire fence that does not provide the safety/security that is required for an airport such as Carson City Airport. The proposed chain

Figure 1.3. Carson City Airport ACIP projects (2019–2023)



link fence will be 6-feet high with 1-foot extensions having three-strand barbed wire. Possible alternatives to ward off potential animals jumping the fence could be to increase the height of the fence to 8 feet on the eastern edge of the airport.



Carson City Airport, Perimeter Fence along Arrowhead Drive

2019 Project – Replace Perimeter Wire Fence with Chain Link Fence

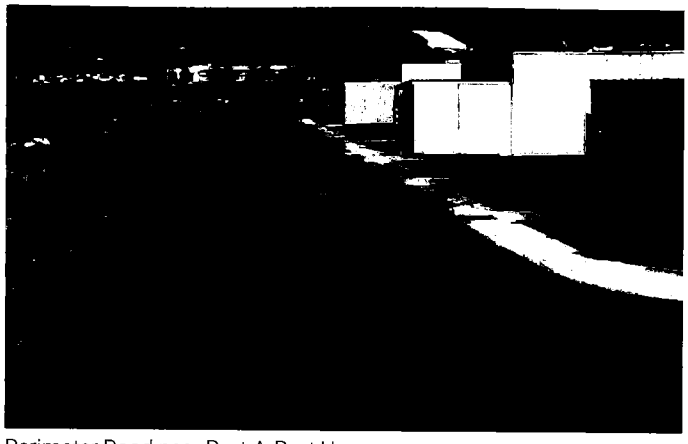
The airport is completely enclosed with a perimeter fence, however approximately 40-percent of its wire fence does not provide the safety/security that is required for an airport such as the Carson City Airport. The chain link fence will be 6-feet high with 1-foot extensions having three strands of barbed wire.

2020 Project – Rehabilitate Main Apron

The main apron was reconstructed in 2013 and 2014. The purpose of this project is to prolong the useful life of approximately 57,540 square yards of the existing pavement by providing maintenance to retain a PCI of 70 or greater for this pavement. This project includes crack sealing for the existing sawcut control joints, providing an application of GSB-88, and then striping the pavement.

2020 Project – Reconstruct Perimeter Road

This project provides for the rehabilitation of the perimeter road by paving an asphalt concrete overlay on the westerly portion of the road and reconstructing the easterly portion of the road adjacent to the Port-A-Port hangars. The westerly portion of the existing pavement is approximately 2,300 by 30 feet and is in fair condition. A 2-inch overlay would effectively prolong the useful life of that portion of the roadway. The easterly 700 feet adjacent to the Port-A-Port hangars is in very poor condition and will require reconstruction. In addition, it will be necessary to replace an existing 15-inch storm



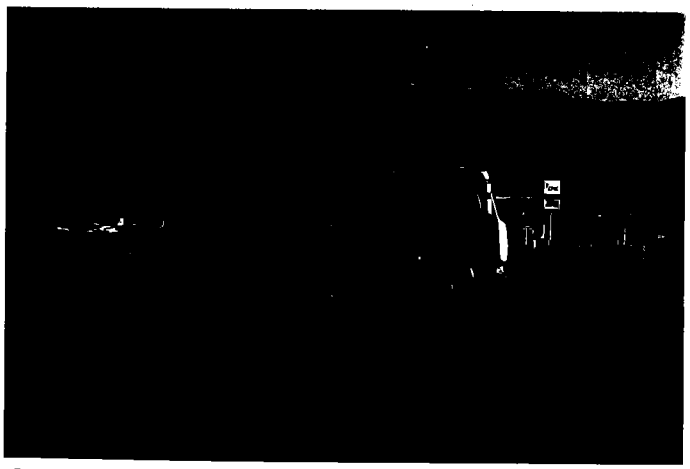
Perimeter Road near Port-A-Port Hangars

drain pipe with an 18-inch pipe within this portion of the road to properly drain the Main Apron.

The FAA has indicated that 700 feet of the Westerly portion of the perimeter road from just above the turn to the north apron is ineligible for federal funds and if included in the project, it will be the sponsors' responsibility to fund the improvements. This is due to the road being within the runway protection zone, which the AIP Handbook recommends against. However, since it is an existing perimeter road, the FAA will allow it to remain in place and will fund the eligible portion of the project.

2021 Project – Rehabilitate Runway 9-27

Runway 9-27 was reconstructed in 2009 and was sealed and striped in 2014. The purpose of this project is to prolong the useful life of approximately 55,850 square yards of the existing pavement by providing maintenance to retain a PCI of 70 or greater for this pavement. This project includes crack sealing for the existing sawcut control joints, providing an application of GSB-88, and then striping the pavement.



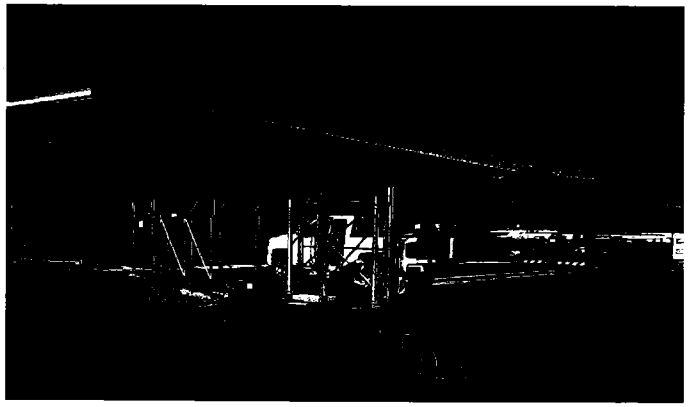
Carson City Airport, Runway Rehabilitation with GSB-88

2022 Project – Rehabilitate North Apron

The North Apron was reconstructed in 2016 and it is anticipated that it will require maintenance in 2022. The purpose of this project is to prolong the useful life of approximately 39,920 square yards of the existing pavement by providing maintenance to retain a PCI of 70 or greater for the pavement. This project includes crack sealing for the existing sawcut control joints, providing an application of GSB-88 and then striping the pavement.

2022 Project – Replace Automatic Gates and Operators

Four access points at the airport are secured by automatic gates operated with gate cards. Gates 2 and 3 were replaced in 2017, and Gates 1 and 4 are more than 20 years old and require frequent maintenance to keep them operational. These gates will be replaced with new counter-balanced cantilever gates that will be operated with keypads and proximity gate cards.



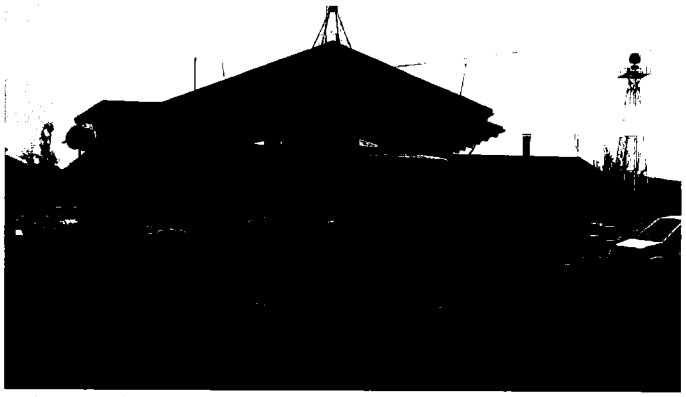
Automatic Cantilevered Gate at the Carson City Airport

2022 Project – Emergency Generator

An emergency generator at the airport is necessary to keep the airfield lighting system operational during power outages. Although power outages in Carson City are infrequent, there have been incidents where the airport has been affected for long durations. These incidents were due to severe storms, in which case it is essential to keep the lighting system operational for emergency purposes.

2023 Project – Bidirectional Tractor

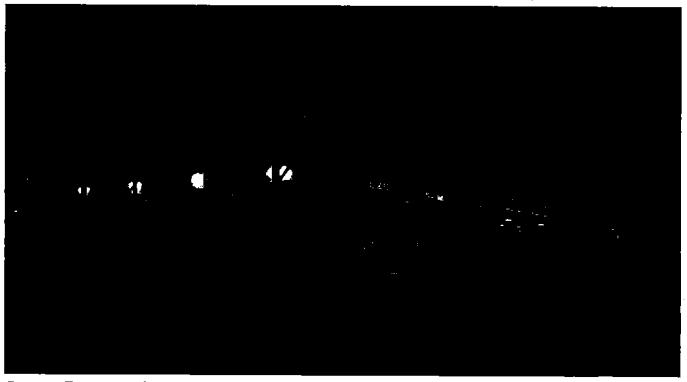
The airport needs to purchase a new bidirectional tractor with a snow blower attachment and a rotary broom attachment to replace the existing snow plow. Atkins has assisted several airports in acquiring equipment, including the Truckee Tahoe Airport.



Bidirectional Tractor at the Truckee Tahoe Airport

2023 Project – Snow Removal Equipment Storage Building

The airport stores their snow removal equipment outside. A two-bay snow removal equipment storage building is required to properly store the snow removal equipment and prevent premature deterioration. Atkins has designed several of these buildings, and recently has performed construction management services on the Reno-Tahoe International Airport snow removal equipment building.



Snow Removal Equipment Building at the Reno-Tahoe International Airport

2023 Project – East Perimeter Road

The purpose of this project is to provide interior vehicular access to the easterly portion of the airport without traversing active aviation pavements, such as taxiways. Currently, interior access to the easterly portion of the airport from the terminal is to drive on Taxiway A, exit onto a dirt road around the east end of the runway, and enter another dirt road to continue east toward Bowers Lane. Continuing west requires driving onto Taxiway D to its intersection with Taxiway B. This new road will remove the vehicular traffic from the taxiways.

2023 Project – Hangar Row Taxilanes with Utilities

In an effort to assist with the airport development, the airport wishes to construct taxilanes within the "center triangle" of undeveloped land located at the

center portion of the airport. Construction of taxilanes will encourage developers to lease airport property to construct hangars and other aviation-related facilities. The location of the taxilanes will be in accordance with the Development Master Plan for the Center Triangle Area prepared by Atkins in 2008.

2023 Project – North Apron Shade Canopy

A 40 by 300-foot shade canopy will be erected on the North Apron over the existing tie-downs. The purpose of the project is to provide protection from the elements for the aircraft using the tie-downs. The construction of the canopy will include overhead light fixtures and electrical outlets that can be used by the pilots to heat the engine blocks of the aircraft during cold weather.

2023 Project – Taxiway C Storm Drain

The existing storm drain pipes at the downstream end of the drainage channel adjacent to Taxiway C will be replaced. The existing pipes do not have adequate capacity for the flow resulting from a 5-year storm and will be replaced with a new 48-inch reinforced concrete pipe (RCP) having sufficient capacity for a 10-year storm as recommended by the FAA. The 48-inch RCP will connect to the existing downstream manhole, cross under Taxiway C, and connect to the existing drainage channel with a 48-inch flared end section.

Carson City Airport, Taxiway D Storm Drain

2023 Project – Obstruction Lighting - Construction

This project provides for the installation of two obstruction lights on two separate hills on Bureau of Land Management (BLM) property and located in the approach path of Runway 27. The work includes installing a solar-powered obstruction light on a 10-foot steel pole with concrete foundations at both locations. Due to the location of the hills, it will be necessary to transport the men, equipment, and materials via helicopter to perform the work. The BLM performed an environmental assessment for this project and issued a finding of no significant impact in January 2015. The BLM also issued a right-of-way permit in February 2015. A category exclusion for this project was issued by the FAA in April 2015, and documentation will be resubmitted to both agencies in June of 2022 if required The airport is awaiting direction from the FAA Flight Procedures to see if the need and use of these lights will help with lowering approach minimums.

2023 Project – Airport Layout Plan Update with Narrative and update Exhibit A Property Map

This planning project will be addressed in the separate statement of qualifications for planning and environmental services proposed by Atkins.

Recent experience

Atkins offers substantial, recent experience on similar projects as demonstrated in the project descriptions contained in this section. The knowledge gained through the planning, design, and construction/implementation of these projects serves to demonstrate our excellent qualifications for performing future Carson City Airport projects.

Atkins provided planning, environmental clearance, design, bidding services, and construction management for the following projects that are similar to the projects proposed to be constructed at the Carson City Airport. Detailed descriptions of the Atkins projects are as follows.

Carson City Airport, Carson City, Nevada

Atkins has provided engineering services at the Carson City Airport since 2002 and some of the projects prior to 2015 included a slurry seal of Taxiway B and C; the realignment and reconstruction of Runway 9-27, which included the relocation/reconstruction of the self-serve fueling station; the realignment and reconstruction of Taxiway A; the construction of Taxiway D; and the installation of an AWOS. Projects that have occurred within the past 3 years include the following:

North Apron Reconstruction

The work included the reconstruction of the existing asphalt pavement and constructing miscellaneous drainage improvements. The construction included earthwork, pulverizing the existing pavement, providing

approximately 37,870 square yards of an 10.5-inch soil-cement base course for the apron, approximately 3,460 square yards of a 6-inch soil-cement base course for the north entrance road, approximately 38,610 square yards of 4-inch asphalt concrete, 2,490 square yards of a high-stability asphalt concrete for jet parking, saw cut control joints, 24-inch concrete encased slotted drain pipe, new drainage inlets, new storm drain pipe, installation of tie-down anchors, pavement striping, installation of apron lighting, the replacement of the perimeter fence with 6-foot chain link fence and constructing barbed wire extensions on top, installation of barbed wire extensions on the existing fence, and the replacement of the automatic gate.

Year: 2016–2017
Engineer's estimate: $2,982,480
Award amount: $2,352,352
Final construction cost: $2,289,384

Carson City Airport, North Apron

Main Apron Reconstruction

The reconstruction of the main apron was performed in three separate phases over 2 years under three separate contracts. The work included earthwork, 6-inch aggregate base course, 4 inches of asphalt concrete, saw cut control joints, 24-inch concrete encased slotted drain pipe, RCP drainage culverts, drainage channels, installation of tie-down anchors, and pavement striping. Also included during the third phase was the construction of an 80 by 160-foot concrete pad for jet parking.

Year: 2013–2014
Engineer's estimate: $3,854,254
Award amount: $3,218,216
Final construction cost: $3,269,496

Carson City Airport, Main Apron Reconstruction

Fallon Municipal Airport, Fallon, Nevada

Atkins has provided airport consulting services at the Fallon Municipal Airport since 2005 and some of the projects prior to 2015 included a slurry seal of the airport pavements, the reconstruction of Runway 3-21, and the relocation and reconstruction of Taxiway A with medium intensity taxiway lighting (MITL). Projects that have occurred within the past three years include the following:

Rehabilitate Runway 13-31 Phase 1

The work included the construction of asphalt concrete pavement for Runway 13-31 at its intersection with Runway 3-21 and Taxiway A. The asphalt concrete pavement for this portion of the runway was constructed with 4 inches of aggregate base, 3 inches of asphalt concrete, sawcut control joints, and striping.

Year: 2015
Engineer's estimate: $114,535
Award amount: $134,122
Final construction cost: $134,114

Rehabilitate Runway 13-31 Phase 2

The second phase of this project provided for the reconstruction of the existing dirt runway on both sides of its intersection with Runway 3-21 and Taxiway A. The work included earthwork, an 8-inch minimum thickness of subbase, placing 4 inches of aggregate base, installing retro-reflective markers, and applying dust palliative to the graded areas. Earthwork included importing suitable soils from borrow sites located on the airport. Four inches of P-208S aggregate base was placed over a minimum thickness of 8-inch subbase to provide a stable all-weather surface.

Year: 2016
Engineer's estimate: $585,656
Award amount: $531,000
Final construction cost: $484,383

Fallon Municipal Airport, Rehabilitate Runway 13-31 Phase 2

Jackpot Airport, Elko County, Nevada

Atkins has provided airport consulting services at the Jackpot Airport since 2010 and one of the projects prior to 2015 included a sealcoat of the airport pavements with GSB-88. Projects that have occurred within the past 3 years include the following:

Rehabilitate Runway 15-33

This project removed a very wide sawcut concrete joints in the runway pavement and replaced them with a pavement patch. The work included the removal of a 4-foot-wide strip of pavement centered on the longitudinal and transverse saw cut control joints, recompacting the aggregate base, placement of a 3-inch thick pavement patch, the application of GSB-88 on the entire runway, and pavement marking.

Year: 2017–2018
Engineer's Estimate: $383,212
Award amount: $432,000
Final construction cost: $432,000

Electrical Improvements

The work included the installation of new medium-intensity runway lighting for Runway 15-33, new Runway end identifier lights, new Runway 15 precision approach path indicator system, replacement of the existing segmented circles and lighted wind cones including new conduit and cables, a new home run duct bank, and electrical vault modifications. Also included as a change order was the replacement of the taxiway edgelighting for Taxiway B as well as the sealcoat and striping of the runway ends.

Year: 2015–2016
Engineer's estimate: $822,275
Award amount: $580,390
Final construction cost: $651,960

Nye County Airports, Nye County, Nevada

Atkins has provided airport consulting services for Nye County, including the Tonopah (TPH) and Beatty (BTY) Airports since 2004. Some of the projects at TPH prior to 2015 included the construction of a lighted helipad, replacing the segmented circle, replacing a recision approach path indicator, replacing access gates, a slurry seal of the airport pavements, and the construction of Taxiway B. Projects that have occurred within the past 3 years include the following:

TPH Rehabilitate Runway 15-33

The work included the reconstruction of the pavement for Runway 15-33, a portion of the connectors to the runway, and the relocation of approximately 250 linear feet of the existing chain link perimeter fence. The pavement for the existing runway (7,158 by 80-foot), a small maintenance road (345 by 22-foot), and short portions of the four existing taxiway connectors (approximately 40 feet wide) was pulverized in place and reused for the aggregate base. The runway (7,158 by 75 feet), and the connectors was reconstructed with 6 inches of aggregate base, 3 inches of asphalt concrete, sawcut control joints, striping, and raising and/or lowering of the existing runway/taxiway edge lights.

Year: 2016
Engineer's estimate: $2,579,065
Award amount: $2,283,168
Final construction cost: $2,268,171

Tonopah Airport Helipad

BTY Runway 34 Taxiway Turnaround

The work included the construction of a new taxiway turnaround at the Runway 34 end. Project elements of the project included 4,230 square yards of 3-inch asphalt concrete, sawcut control joints, striping, retroreflective markers, lighted hold signs and direction signs, and 254 linear feet of new storm drain pipe.

Year: 2017
Engineer's estimate: $480,253
Award amount: $527,032
Final construction cost: $514,980

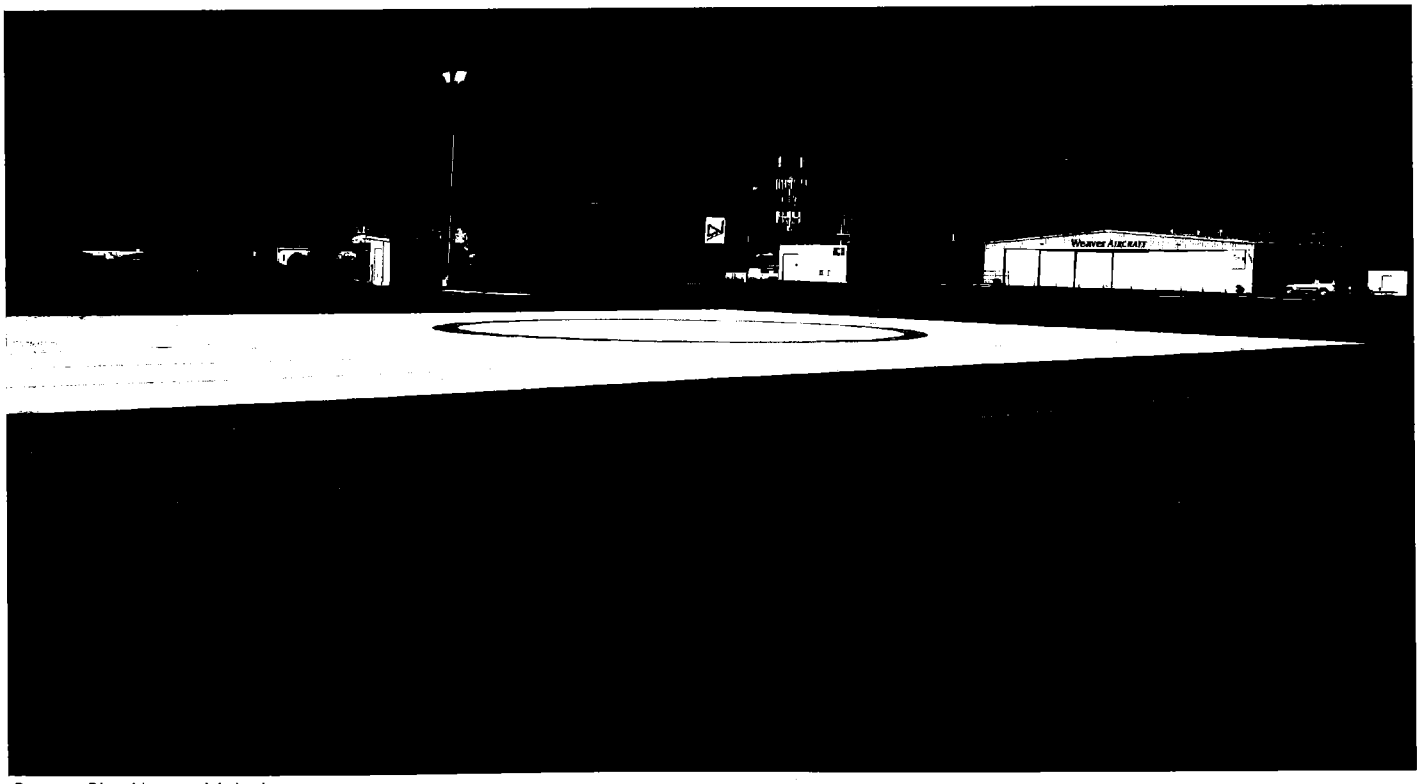
Capability to provide environmental impact statements

Generally, the FAA only requires an environmental impact statements (EIS) for entirely new airports. It is not anticipated that an EIS is required for any projects at the Carson City Airport. However, Atkins can provide that service if required.

Engineering services provided during an EIS include design to a 30-50 percent level which Atkins has performed on other projects. The project design needs to be completed to that level to determine the environmental consequences of the project.

Atkins is submitting a separate statement of qualifications for the planning and environmental services that addresses our firm's ability to provide environmental documentation for any EIS.

Atkins can provide airport consulting for both assignments and the interface between planning, environmental and engineering services will be seamless and efficient. Atkins has more than 90 aviation-focused personnel nationwide that can cover multiple scope items simultaneously.



Carson City Airport, Main Apron

P#49755.JR.18

2.0 Key Personnel's Professional Qualifications, Experience, and Availability

Atkins has considerable experience with FAA-funded projects. We are committed to providing quality designs using FAA standards and preparing the ACIPs and grant applications for FAA funding at the airports for which we provide consulting services.

We are committed to client service and being responsive to our clients' needs, especially as it relates to schedules, budgets, and quality. It is this commitment to service that has resulted in our ability to successfully cultivate and maintain our long-term clients.

Atkins can provide all architectural/engineering services for the Carson City Airport. We are confident in our commitment to provide the airport with superior staff having the experience, ability, and understanding of the issues to successfully complete assigned projects. Additionally, we can draw from our other offices to obtain the expertise and manpower to complete any and all assignments.

The Atkins team is the best-suited team for the airport's needs because:

- Our team has intimate knowledge of the Carson City Airport
- We have established relationships with airport staff
- We have an excellent relationship with FAA staff
- We have an experienced project manager
- Our project manager has an intimate knowledge of the Carson City Airport and its requirements
- Our team has a proven record of successfully completing numerous aviation projects for the Carson City Airport

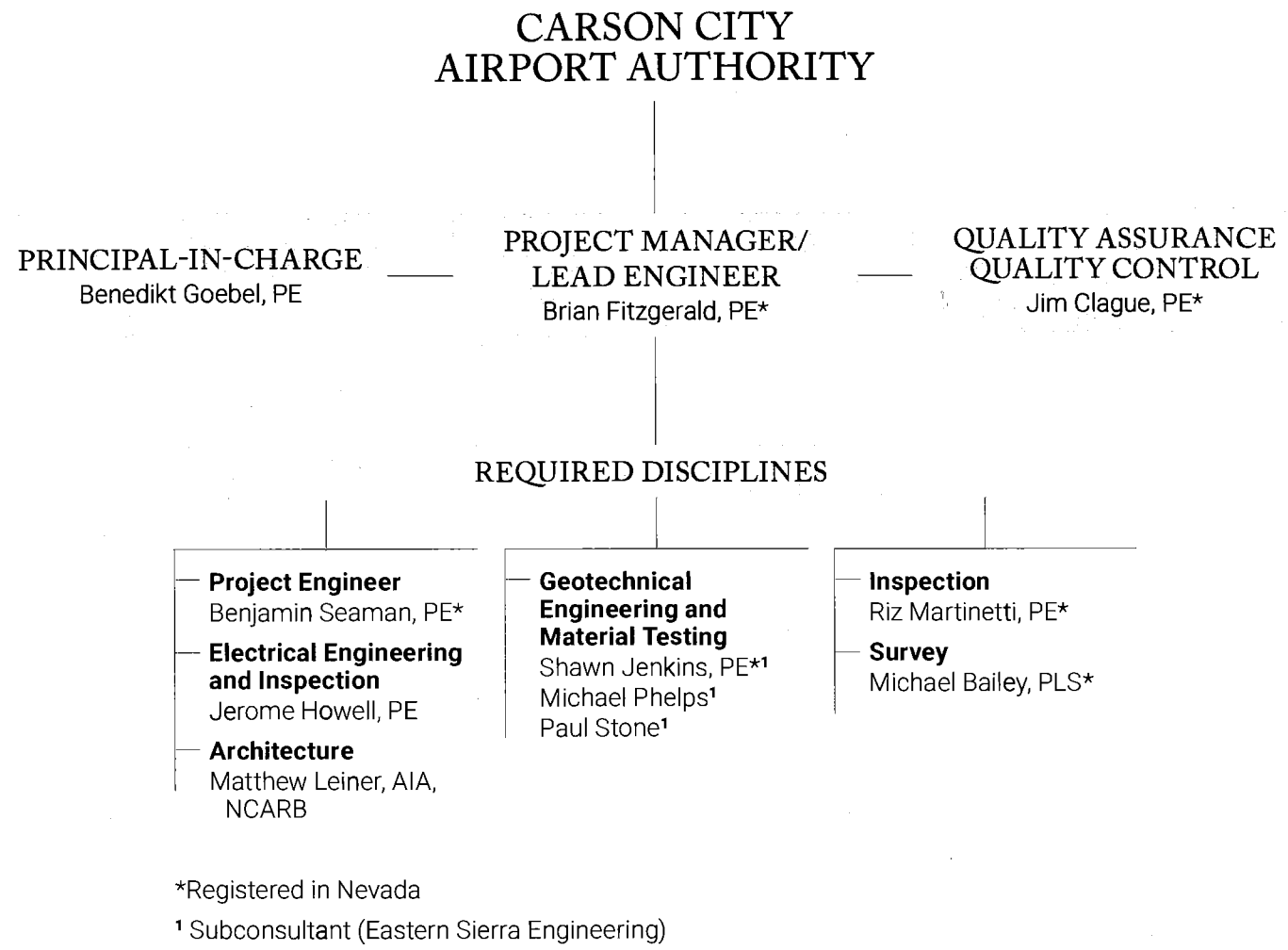
Atkins' high volume of repeat business is a reflection of our sincere commitment to client service. Our professional experts work together to provide complete services to clients from project initiation to project closeout. Using proven communications strategies, our staff members seek to clearly understand all client objectives and goals to achieve success on every project. The strong rapport and strategic partnerships we form with clients result in maximum efficiency, productivity, and long-term benefits during project assignments and, as needed, into the future.

As a project manager, Mr. Fitzgerald has overseen numerous airport projects and has assisted clients with each project phase. Most of his airport projects were funded by the FAA through the Airport Improvement Program. For those projects, Mr. Fitzgerald prepared grant applications and provided the planning, environmental documentation, design, bidding, and construction management services. Mr. Fitzgerald has forged strong relationships with FAA personnel in the Phoenix Airports District Office and coordinates with the FAA and the airport sponsors to meet all grant assurances at the airports for which he serves.

Organizational chart

An organization chart is included in **Figure 2.1** and professional resumes for each team member are provided on the following pages.

Figure 2.1. Organization Chart



*Registered in Nevada

[1] Subconsultant (Eastern Sierra Engineering)

P#49755.JR.18

Brian Fitzgerald, PE

Project Manager/Lead Engineer

- 100% available
- 12 years of experience and compliance with FAA regulations, policies, and procedures

Education

- B.S., Civil Engineering, University of Nevada
- B.Arch., Architecture, Kansas State University

Registrations

- Professional Engineer
  - Nevada 21114, 2011
  - Arizona 53721, 2012
  - California 76226, 2010

Brian Fitzgerald has 12 years of experience in project management and engineering services, CADD, bidding services, construction/inspection, and preparing ACIP and grant applications. He currently provides services for six GA airports and assists the execution of FAA grant applications and outlay reports. Mr. Fitzgerald's Carson City Airport project experience includes:

Carson City Airport, North Apron, Carson City, NV. Project engineer responsible for developing the design and implementation of FAA requirements, bidding, and construction administration for a portion of the north aircraft apron project. Elements include the reconstruction of approximately 41,330 square yards of existing pavement and constructing 832 linear feet of various drainage improvements. Additional project elements include tenant meetings to update schedules, coordinate closures, and working closely with the Carson City Airport Authority to minimize design and construction costs.

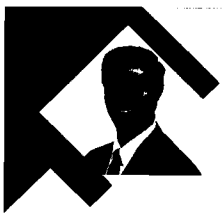
Carson City Airport, Main Apron Phase 1, Phase 2, Phase 3, Carson City, NV. Project engineer responsible for developing the design and implementation of FAA requirements, bidding, and construction administration for a portion of the main aircraft apron. Project elements include the reconstruction of approximately 26,831, 15,100, and 17,100 square yards respectively of existing pavement and constructing 1,089, 1,336, and 715 linear feet of various drainage improvements. Additional project elements include tenant meetings to update schedules, coordinate closures, and working closely with the Carson City Airport Authority to minimize design and construction costs.

Carson City Airport, Runway 9 Connector, Taxiway D East and West, Carson City, NV. Project engineer responsible for developing the design and implementation of FAA requirements, bidding, and construction administration for a runway connector and parallel taxiway. Project elements include designing the 50-foot-wide Runway 9 Connector, the 50-foot-wide Taxiway D and associated taxiway connectors, and new drainage channels to supplement existing facilities. Additional project elements include phasing the project over multiple weeks to reduce the need to close portions of the airport for construction, and working closely with the Carson City Airport Authority to minimize design and construction costs.

Carson City Airport, Runway 9-27 Realignment, Carson City, NV. Project engineer responsible for developing the design and implementation of FAA requirements, bidding, and construction administration for the realignment of the airport runway and associated taxiways. Project elements include designing the 6,100- by 75-foot Runway 9-27, 50-foot-wide Taxiways A and D, 50-foot-wide taxiway connectors, matching existing geometry of the North and Main Aprons with various taxilanes, and new drainage channels to supplement existing facilities. Additional project elements include phasing the project over multiple years to reduce the need to close portions of the airport for construction, hosting pilot and community progress meetings, and working closely with the Carson City Airport Authority to minimize design and construction costs.

Carson City Airport, Hill Removal, Carson City, NV. Engineer responsible for assisting with this project that involves design, bidding, and construction administration for the removal of a hill obstruction for the future realignment of the airport runway. Project elements include removal of existing structures and relocating soil to the east of Runway 27 using methods of excavation and blasting.

Carson City Airport, Hangar Master Plan and ALP, Carson City, NV. Engineer responsible for assisting with developing a master plan for the center triangle hangar development that includes preliminary site design, utility layouts, drainage studies, and cost estimates. Assisted with the update to the ALP. Atkins is the airport engineer.



Benedikt Goebel, PE

Principal-in-Charge

- 50% available
- 8 years experience and compliance with FAA regulations, policies, and procedures

Education

- M.B.A., Business Administration, DePaul University College of Commerce
- B.S., Electrical Engineering, Missouri University of Science and Technology

Registrations

- Professional Engineer:
  - Arkansas 14816, 2011
  - Florida 73443, 2011
  - Idaho 147443, 2011
  - Illinois 062-058316, 2005
  - Iowa 21012, 2012
  - Louisiana 0037960, 2013
  - Michigan 6201057995, 2011
  - Missouri 2011002275, 2011
  - Ohio 76121, 2011
  - Texas 107988, 2011
  - Virginia 49740, 2011

Benedikt Goebel brings 18 years of experience in electrical engineering design, construction, and project management for aerospace/NASA facilities, power cogeneration, utilities, data centers, and institutional facilities. For the past 8 years, he has focused on the design of commercial aviation electrical systems, including airfield lighting supporting visual flight rules; Categories I, II and III; NAVAIDs (instrument landing system facilities [localizer, glideslope, distance measuring equipment]); surface movement guidance and control systems; runway status lighting; FAA facilities (airport surveillance radar, remote transit receive, fiber-optic transmission system); airfield lighting vaults; airfield lighting control and communications systems; aircraft hangars; and other specialty projects. His recent experience includes:

Dallas-Fort Worth International Airport, Design and Design Management Services, Dallas, TX. Senior electrical engineer. Atkins is providing on-call design and design management services at the Dallas-Fort Worth International Airport. The 5-year indefinite delivery contract includes design and engineering management and related services for various type of structures and facilities including airfield, civil engineering, and commercial site development projects.

Louis Armstrong New Orleans International Airport, New North Terminal Development, New Orleans, LA. Served as project director, FAA design liaison, senior project manager, senior electrical engineer, and engineer-of-record to perform an analysis of system performance issues, design, and technical leadership. He managed a full-service architectural and mechanical, electrical, and plumbing design team on all FAA facility relocations, serving as the main contact for all FAA design-related activities and planning. He has contributed to the following projects:

- NAVAIDs Infrastructure, Fiber Communications Loop, Airport Surveillance Radar, and Radios Systems Relocation
- Airfield Electrical Rehabilitation Program
- Airfield Electrical Vault Design and Construction

Matthew Leiner, AIA, NCARB

Architect

› 50% Availability
› 20 years experience and compliance with FAA regulations, policies, and procedures

Education

› B.Arch., Architecture, Boston Architectural Center,
› B.S., Design, University of Florida

Registrations

› Registered Architect
  • Florida AR0009397, 1982
  • Louisiana 8016, 2014
  • Minnesota 53070, 2015
  • Missouri 2006035992, 2008
  • Nebraska A-4631, 2015
  • Tennessee 105502, 2016
  • Texas 19889, 2006

Certifications

› National Council of Architectural Registration Boards (NCARB), Certificate 115671, 2006
›

Matthew Leiner has 36 years of architecture experience with particular expertise in airport building/terminal design projects, marketing, project management, design, specifications, construction management, and client relations. Mr. Leiner manages architecture projects with a special focus on aviation architecture and terminal planning; he also oversees the provision of architectural services for civil, environmental, and transportation projects. Mr. Leiner's project experience includes:

Louis Armstrong New Orleans International Airport, New North Terminal Development, New Orleans, LA. Project architect. Responsible for planning and architectural construction documents as well as architectural construction phase services. Project involves technical design of airside, landside and site utility elements, including coordination of design with various airfield facilities including airfield geometry, pavement designs, aircraft services, aircraft standing parking arrangements, aircraft hydrant fueling, site utilities, airfield drainage and ground lighting systems, special airport systems and interfaces with passenger terminal building, and overall airfield civil works.

Reno-Tahoe International Airport Aircraft Rescue Firefighting Facility, Reno, NV. This project for the Reno-Tahoe Airport Authority consisted of providing site selection, station programming, and planning services for development of the new aircraft rescue and firefighting facility (ARFF), to be constructed in accordance with the FAA's requirements. As part of the relocation and renovation process, three sites were evaluated using a set of recommended criteria that included emergency vehicle response times and requirements of the Americans with Disabilities Act. Additional facilities included new airside roadways with access to the ARFF, parking areas to accommodate employee vehicles and handicapped stalls, landside visitor parking, and chain-link security fencing (per 14 CFR 107.14).

Benjamin Seaman, PE

Project Engineer

› 50% availability
› 14 years experience and compliance with FAA regulations, policies, and procedures

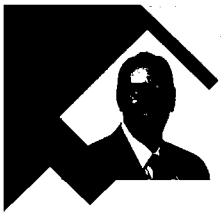
Education
› B.S., Civil Engineering, Utah State University

Registrations
› Professional Engineer
- Nevada 20916, 2010
- Utah 5340064-2202, 2012

Benjamin Seaman has 14 years of civil engineering experience including airport and roadway design. His experience includes completing field surveys, preparing and coordinating production of construction plans and specifications, supervising and conducting field inspections, and providing construction administration services. Mr. Seaman's project experience includes:

Henderson Executive Airport, Runway Safety Area Improvements, Henderson, NV. Project engineer responsible for plan production coordination including pavement grading plans, utility relocation plans, and pavement marking. Atkins is modifying the existing runway blast pads to runway stopways.

McCarran International Airport, Taxiways E and H Reconstruction, Las Vegas, NV. Project engineer responsible for plan production coordination, communication/power duct banks and pull boxes, and pavement grading plans. Atkins is providing design services for the demolition and replacement of approximately 183,000 square yards of deteriorated asphalt pavement with new portland cement concrete (PCC) pavement for Taxiways E and H.



Jim Clague, PE

Quality Assurance/Quality Control

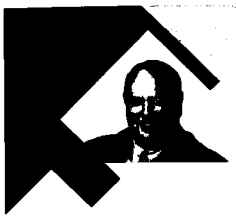
› 100% availability
› 30 years experience and compliance with FAA regulations, policies, and procedures

Education
› B.S., Civil Engineering, California State University at Chico

Registrations
› Professional Engineer
- Arizona 25107, 1991
- California 37966, 1984
- Nevada 08096, 1988

Mr. Clague has provided planning, design, and construction management for airport, roadway, and drainage projects for more than 30 years. As an airport consultant, most of his airport projects were funded by the FAA through the Airport Improvement Program. Mr. Clague will assist Atkins as an advisor performing both quality assurance and quality control to lend his expertise to each project and ensure that Atkins provides the Carson City Airport with the services necessary for project completion. Mr. Clague's airport experience includes projects at the following:

› BTY, Nevada, 2004–2016
› Bryant Field, Bridgeport, California, 2005–2011
› Carson City Airport, Nevada, 1998–2016
› Fallon Municipal Airport, Nevada, 2005–2016
› Gabbs Airport, Nevada, 2004–2016
› Gila Bend Municipal Airport, Arizona, 2009–2010
› Hayden Field, Jackpot, Nevada, 2010–2016
› Lee Vining Airport, California, 2005–2011
› Silver Springs Airport, Nevada, 2001–2012
› TPH, Nevada 2004–2016
› Truckee Tahoe Airport, California 1997–2013



Michael Bailey, PLS

Survey

› 100% available
› 20 years of experience and compliance with FAA regulations, policies, and procedures

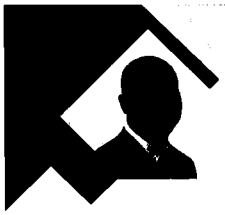
Registrations

› Professional Land Surveyor
  • California 4736, 1978
  • Nevada 013284, 1998

Michael Bailey manages projects that involve high-accuracy GPS surveys, construction staking for large building and highway projects, and control surveys for extensive aerial mapping projects. Mr. Bailey's project experience includes:

Carson City Airport, GPS Surveys, Carson City, NV. Survey manager responsible for a wide variety of projects that have included high-accuracy GPS surveys in conformance with FAA/National Geodetic Survey (NGS) requirements. Mr. Bailey was in charge of construction staking and quality control surveys for several runway and taxiway projects that required static GPS and high-accuracy digital leveling.

Reno-Stead Airport, GPS Surveys, Reno, NV. Survey manager responsible for a wide variety of projects that included high-accuracy GPS surveys in conformance with FAA/NGS requirements. Mr. Bailey was in charge of construction staking and quality control surveys for a number of runway and taxiway projects that required static GPS procedures and high-accuracy digital leveling. These projects have included submittals to FAA and working closely with FAA staff.



Jerome Howell, PE

Electrical Engineering and Inspection

› 50% available
› 12 years of experience and compliance with FAA regulations, policies, and procedures

Education

› B.S., Civil Engineering, North Carolina State University

Registrations

› Professional Engineer
  • North Carolina 039138, 2012
  • South Carolina 32756, 2015
  • Florida 81748, 2016

Jerome Howell has 12 years of experience as an airfield lighting engineer serving as both design engineer and construction inspector for various aviation projects. Mr. Howell coordinates with clients and contractors while working on design and construction management teams. His project experience includes:

Hayden Field, Installation of Medium-Intensity Runway Lighting, Runway and End Identifier Lighting, and Segmented Circle with Lighted Wind Cone, Jackpot, NV. Served as a design engineer for the airfield electrical rehabilitation program. As a standalone program, project tasks included airfield electrical systems forensic analysis, rehabilitation program concept development, associated cost estimates, reconstruction planning and the redesign of existing airfield lighting, signage and infrastructure systems.

Terminal Apron Expansion, Charleston International Airport, Charleston, SC. Served as project manager for this project. The existing terminal apron was expanded to accommodate a future expansion of Concourse B.

Christopher "Riz" Martinetti, PE

Inspection

› 100% available
› 10 years of experience and compliance with FAA regulations, policies, and procedures

Riz Martinetti has 10 years of experience in public works and private construction including construction inspection and design. He performs inspection of earthwork mass excavation projects, underground utility installation, aggregate structural sections for roadways and structures, inspection of concrete flatwork, retaining wall aggregate marinating plants, mobile asphalt plants, and asphalt pavement inspection. Mr. Martinetti's project experience includes:

Reno-Tahoe International Airport, 2016 Landside Pavement Repair, Reno Tahoe Airport Authority, Reno, NV. Senior field representative responsible for inspecting activities for the rehabilitation and maintenance of more than 28,000 square yards of pavement surface and associated traffic markings and installation of more than 25,000 square yards of Type II microsurfacing.

Reno Stead Airport Runway 8-26 Safety Area Improvements, Edge Lighting and NAVAIDs Infrastructure Installation, Reno Tahoe Airport Authority, Stead, NV. Provided construction inspection services for the excavation of more than 350,000 cubic yards of site soil, placement of 3 million square yards of imported aggregate for erosion control, installation of 10,000 linear feet of high voltage cable and associated underground infrastructure, and stormwater pollution prevention plan compliance.

Education

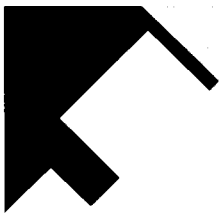
› M.S., Civil and Environmental Engineering, University of Nevada
› B.S., Environmental Engineering, University of Nevada

Registrations

› Professional Engineer
  • Nevada 24411 2017

Certifications

› Occupational Safety and Health Administration, 30 Hour, (34-602000014)
› Fundamentals of Engineering 0T5045



Shawn Jenkins, PE

Geotechnical Engineering

EASTERN SIERRA ENGINEERING

› 50% available
› 12 years of experience and compliance with FAA regulations, policies, and procedures

Shawn Jenkins has 30 years of engineering field experience and is the principal civil design engineer and office manager for ESE's Reno and Zephyr Cove, Nevada operations. He manages projects, client interaction, business development, and quality assurance for the design of airfeld projects. Mr. Jenkins' project experience includes:

Carson City Airport, Reconstruction of the North Apron, Carson City, NV. ESE provided geotechnical engineering services that included subsurface soils investigations by coring the existing apron structure to a depth of 10 feet. They performed laboratory testing and engineering analysis to develop recommendations for site grading and flexible pavement structural sections. Mr. Jenkins served as the project manager.

Carson City Airport, Reconstruction of the Main Apron Phases 1, 2, 3, Carson City, NV. ESE provided geotechnical engineering services that included subsurface soils investigations by coring the existing apron structure to a depth of 10 feet. They performed laboratory testing and engineering analysis to develop recommendations for site grading and flexible pavement structural sections. Additionally, they developed the structural section for the concrete parking pad for larger aircraft. Mr. Jenkins served as the project manager.

Education

› B.S. Civil Engineering, University of Nevada Reno
› M.S. Civil Engineering, University of Nevada Reno

Registrations

› Professional Engineer
  • Nevada 10194, 1993
  • California C-050232, 1993
  • Montana 14718PE, 2001
  • Utah 4996476-2202, 2001
  • Idaho 10367, 2001

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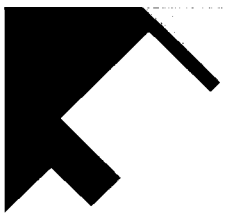


Michael Phelps

Material Testing

EASTERN SIERRA ENGINEERING

› 50% available
› 20 years of experience and compliance with FAA regulations, policies, and procedures

Education

› B.S. Geological Engineering, University of Nevada Reno
› B.S. Managerial Economics, University of California at Davis

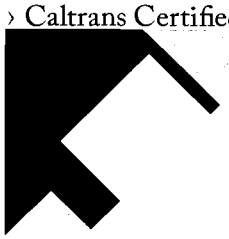
Certifications

› NAQTC Certified in Sampling & Density, NV 000271
› NAQTC Certified in Aggregate, NV 0010271
› ACI Concrete Field Testing, Technician, Grade 1
› Troxler Nuclear Gauge Certified
› Caltrans Certified

Michael Phelps has more than 25 years of experience conducting geotechnical engineering investigations that involved exploration drilling and soil sampling, laboratory testing and analysis, and report preparation. He manages construction, inspection, and testing for road and utilities, erosion control, dams, mining facilities, commercial, and residential projects. Mr. Phelp's project experience includes:

Carson City Airport, Realignment of Runway 9-27 and Taxiway A, Carson City, NV. Mr. Phelps provided the geotechnical investigation, which included pavement design for the realignment of Runway 9-27 and Taxiway A. The investigation included 20 borings drilled to an approximate depth of 10 feet and an additional 10 cores to verify existing structural section thickness. The pavement design was performed in accordance with FAA Advisory Circular requirements.

Tonopah Airport, Runway 15-33 Reconstruction, Tonopah, NV. ESE provided geotechnical, pavement design, and quality control services during construction. Subsurface soils were investigated by drilling 14 borings. ESE performed laboratory testing and engineering analysis to develop recommendations for site grading and flexible pavement structural section thickness



Paul Stone

Material Testing

EASTERN SIERRA ENGINEERING

› 50% available
› 20 years of experience and compliance with FAA regulations, policies, and procedures

Education

› B.S. Geology, California State University Northridge

Certifications

› NAQTC Certified in Sampling & Density, NV 001495
› Troxler Nuclear Gauge Certified
› Caltrans Certified
› ACI Concrete Field Testing Technician, Grade 1
› Radiation Safety Officer Certified

Paul Stone has more than 25 years of experience performing quality control and acceptance testing/inspection on transportation projects ranging from $500,000 to $4 million. He assists with project/lab testing, report preparation, and inspection of acceptable construction practices. Mr. Stone's project experience includes:

Mammoth Yosemite Airport, Mammoth, CA. Mr. Stone was responsible for materials testing services for the $1.3 million project that consisted of the reconstruction of GA aircraft parking apron A3 (20,000 square yards) and portion of GA aircraft parking apron A2 (850 square yards) including grading, drainage, paving, marking, floodlighting, and tie downs.

Beatty Airport Beacon and Tower Replacement, Beatty, CA. Mr. Stone provided construction observation and testing services for the construction work associated with the beacon and tower replacement. Testing included in-place density and concrete testing and materials testing services for the project, which involved the reconstruction, construction, overlay, and extension of existing runways and taxiways. All inspection and testing was done per FAA standards. ESE used its portable laboratory to conduct remote on-site testing required for the project.

3.0 Capability to Meet Schedules or Deadlines

Atkins proposes a project team that has the expertise and availability to perform all projects at the Carson City Airport. Atkins makes the commitment that all key personnel on our proposed project team will be dedicated to meeting the airport's needs. All Atkins project managers and staff realize that on-time delivery is a key element in meeting our commitments to clients. Because of our resources and qualified personnel, Atkins can overcome unforeseen delays by assigning additional staff. We take great pride in our history of providing quality, timely services for our clients and are confident that we have the available staff to meet your needs for this contract.

We have evaluated the projects and availability of key individual staff members on our team. Based on an analysis of our other commitments, Atkins can provide sufficient personnel and resources to complete all assignments. Should the need arise, Mr. Fitzgerald can obtain additional personnel from other offices to ensure the airport's complete satisfaction. Our team members are committed to providing quality professional services and will be available, as needed, for the duration of this assignment.

Successful History of Meeting Deadlines at the Carson City Airport

Atkins has served as the airport consultant since 2002 and we are well aware of the deadlines to submit grant applications to the FAA for federal funding. Atkins has never missed a deadline for the Carson City Airport.

Having worked with the personnel in the Phoenix Airports District Office (ADO) for the past four years, and the San Francisco ADO prior to that, Mr. Fitzgerald is extremely familiar with FAA schedules. For instance, they currently require that projects be on an approved ALP and have NEPA clearance by the end of the December prior to the year of the grant to design and/or construct the project. Additional deadlines must be met for construction projects where the design must be completed early enough so that bids are received by May so that grant applications based on the lowest responsible bid can be submitted. We are cognizant of these requirements and have never missed a deadline.

4.0 Quality of Previous Projects in the Past 3 Years and the Capability to Complete Projects Without Having Major Cost Escalations or Overruns

We develop detailed fee proposals with reasonable schedules for our planning and design services. We will prepare the design of a project on time so that the airport can meet the established grant cycles. We have the ability to bring personnel from other Atkins offices to assist with the design when necessary to meet a tight schedule. Our detailed fee proposals identify the necessary manpower to complete a design so that an adequate budget is established, even when assistance from other offices is required.

Our construction management services are based on the construction period established for the contractor. We determine the necessary services that Atkins will provide for the length of time that the construction will require. Our goal is to ensure that the contractor properly performs the work in a safe manner within the period of time established by the construction contract for the bid amount.

To best describe the quality of our projects is to identify the construction costs for our projects including any change orders. The following chart is a visual representation of all airport construction projects managed by the Atkins Reno office at GA airports since 2002. The purpose of this pie chart is to illustrate our ability to effectively manage construction projects and highlight the fact that our detailed project designs result in minimal changes to the construction contract. Additionally, most of the change orders associated with these projects were related to an increased scope of work to maximize the use of the available FAA funds.

$49,249,029
98.32%
Award amount

$843,032
1.68%
Change orders

Below is the construction costs related to the Carson City Airport projects.. The majority of the cost associated with change orders was related to the hill removal project ($239,492) and the relocation and reconstruction of Runway 9-27 and Taxiway A ($294,286). In both cases, the change orders were related to additional work requested by the airport or the FAA and not related to design errors.

$19,754,560
97%
Award amount

$553,548
3%
Change orders

The only construction project in the past three years at the Carson City Airport was the Reconstruction of the North Apron that was awarded in the amount of $2,352,352 and was completed for $2,289,384 or a reduction of $62,968 due to material changes.

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5.0 Qualifications and Experience of Subconsultants

Atkins has selected ESE to continue to provide geotechnical engineering and material testing services. ESE has been our geotechnical subconsultant at the Carson City Airport since 2004. ESE has broad experience providing professional services for airports throughout Nevada and California. With an office in south Reno, ESE along with Atkins, can facilitate quick responses to the Carson City Airport at any time during the execution of a project.

ESE has been providing engineering, geotechnical and material testing services since 1996 and has worked on Atkins airport client projects including the following:

- Geotechnical investigation, pavement design, and quality assurance testing at the Carson City Airport:
  - Hill Removal
  - Runway 9-27 Taxiway A Realignment
  - Runway 9 Connector and Taxiway D East
  - Taxiway D West
  - Main Apron Reconstruction Phases 1, 2, & 3
  - North Apron Reconstruction
- Geotechnical investigation, pavement design, and quality assurance testing at the Tonopah Airport:
  - Runway 15-33 Reconstruction
- Geotechnical investigation, pavement design, and quality assurance testing at the Beatty Airport:
  - Regrade Runway Safety Area
  - Runway 15 Taxiway Turnaround

6.0 Branch Office Capability

Although the Reno office is considered an Atkins branch office we will be plan, design, manage, and communicate with the Authority from this office for the extent of this on-call assignment.

Atkins, a world-wide company that opened its doors in 1938, offers a wide variety of engineering, design, and project management capabilities. With 150 office locations and just over 18,000 employees worldwide, Atkins has the expertise needed to successfully engineer projects at the Carson City Airport.

With ever increasing modern technology such as Skype for Business (instant messaging and screen share), Mr. Fitzgerald can reach out to any Atkins employee as if they were sitting next to each other in the Reno office. Collaboration with other aviation engineers and project managers happens in real time and often encapsulates branch offices as a home office.

7.0 Ability to Furnish Qualified Inspectors for Construction Inspection

The Reno office has a dedicated inspector in Riz Martinetti for all projects at the Carson City Airport. In addition, the Reno office has an entire group of inspectors that do work for the Reno-Tahoe international Airport Authority, which can be used on the Carson City Airport as each project arises and dictates specialized inspection backgrounds. Atkins has qualified inspectors that follow FAA specifications and can ensure the contractor constructs the projects to the intent of the plans. Atkins can also draw upon our subconsultant ESE for augmentation if the need arises for additional inspection or specialized geotechnical inspections.

8.0 Understanding of Potential Challenges and the Sponsor's Special Concerns

No two airports are the same, and the Carson City Airport offers its own unique challenges to overcome. Having been the airport consultant since 2002, Atkins understands the challenges for each and every project that has been proposed. We are aware of the various problems associated with each project and consequently can help ensure the probability of success. We have worked with various airport managers and Authority members throughout our tenure at the Carson City Airport and have quickly responded to every request.

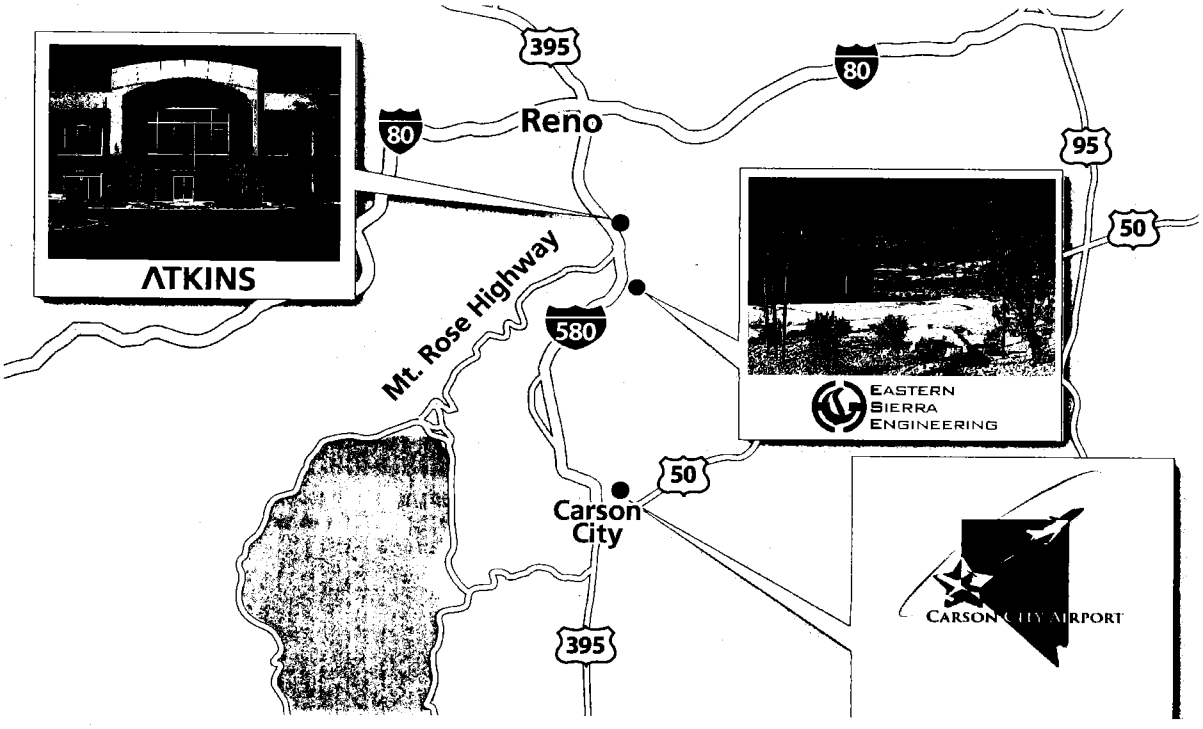
A near-term challenge is the proposed upgraded perimeter fence project. There are several places where the construction effort is straight forward, mostly level, and easily accessible. However, the fence along Taxiway C adjoining the industrial area is neither level nor easily accessible for the construction equipment. Additional effort is required in the placement of this portion of the fence and this higher cost will be reflected in the engineer's estimate for budgetary purposes.

9.0 Degree of Interest and Familiarity with and Proximity to the Geographic Location

The Atkins Reno office is located at 10509 Professional Circle, only 25 miles/30 minutes away from the Carson City Airport as shown in **Figure 9.1** below. This proximity allows Atkins to respond quickly to your needs, particularly during construction projects when an immediate response by the project manager and/or project engineer on site can easily resolve a construction problem.

In addition to our close proximity to the airport, having an office in northern Nevada allows Atkins the ability to provide other benefits to the Carson City Airport. For instance, we are familiar with local issues associated with the northern Nevada counties. We know the methods and materials used throughout the area. Our team is familiar with the local weather patterns and how they affect the construction season. We have worked with every major contractor in the area and have developed close, professional relationships with the project managers.

Figure 9.1 Proximity to Airport.



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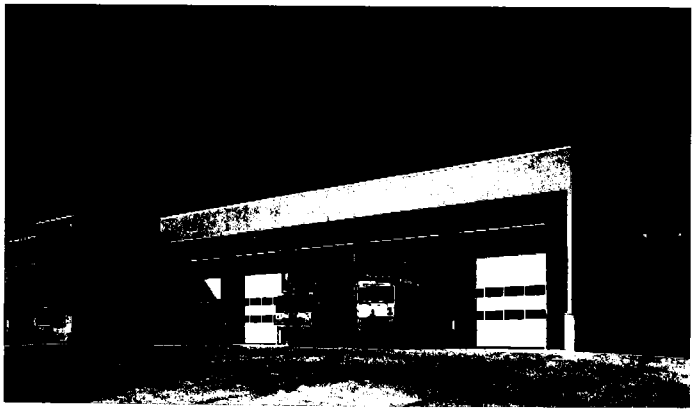
10.0 Capability to Incorporate and Blend Aesthetics and Architectural Concepts with the Project Design

This item is related to the construction of structures and/or buildings. Incorporating the themes of the airport and the surrounding community is important when designing a structure and its interaction to the public in general. The project involving the construction of a snow removal equipment storage building has its own challenges. Once a suitable site has been selected by the Airport Authority, the environmental review and documentation will be performed. It is anticipated that a categorical exclusion can be issued by the FAA, but if the building will be located on undisturbed soil, it may be necessary to perform an environmental assessment.

Atkins' architectural team members have designed numerous airport buildings from electrical vaults, Aircraft Rescue and Fire Fighting Facility (ARFF) stations, to terminal buildings. In fact, our architectural team designed the ARFF at Reno. For the Snow Removal Equipment Building at Carson City, we can take the elements found in previous projects and blend them with themes at the Carson City Airport to deliver a vibrant building,



Atkins provided the planning, design, and construction management for the ARFF at the Reno-Tahoe International Airport.

11.0 DBE Participation

As indicated earlier, Atkins has prepared the previous DBE programs for the Carson City Airport and is currently preparing the 2019–2021 DBE program for submittal to the FAA. DBE programs are updated every 3 years and the goal established in the program is based on the percentage of available DBE firms that could be involved in some aspect of the proposed projects during that particular time period.

The current overall goal at the Carson City Airport has been determined to be 5.45 percent of DBE participation during the projects performed from 2016 through 2018. This goal can be achieved through any aspect of a project, be it planning, environmental, design, or construction. Additionally, it is an overall goal during 2016 through 2018 and does not apply to any specific service or any specific project. Applying a specific percentage to any project can only be done through a disparity study, which has not been performed at the Carson City Airport. Therefore, specific DBE goals are not established for any project at the Carson City Airport, but the use of DBE firms is always encouraged so that the overall goal is met.

Atkins does not qualify as a DBE firm, nor does our subconsultant ESE. Consequently, the DBE goal at the Carson City Airport will need to be met through planning, environmental, or construction services. During the assignment as the engineering consultant, we will prepare the environmental documentation to obtain a categorical exclusion for a project and there may be instances when we require assistance from an environmental specialist.

Our environmental subconsultant, BEC Environmental, is a woman owned business and is qualified as a DBE firm. We have provided the qualifications of BEC Environmental in our statement of qualifications for planning and environmental services. It is not anticipated that their assistance during the categorical exclusion process will meet the entire goal, but their participation shows that Atkins has made a good faith effort.

12.0 Capability to Conduct a Value Engineering Study

The Federal Acquisition Regulations, Part 52.248, defines value engineering as an organized effort to analyze the functions of systems, equipment, facilities, services, and supplies for the purpose of achieving essential functions at the lowest life-cycle cost consistent with required performance, quality, and safety.

For most pavement projects that have a simple and straight forward scope, a short analysis confirms that standard materials and methods are readily available and that they are the best choices for the project.

The more complex projects in size and scope, such as terminal buildings, usually require a value engineering analysis within the first 30 percent of the design phase. The objective is to reduce the cost of the project by up to 5 percent or more if possible.

The only project proposed at the Carson City Airport that may require a value engineering study is the snow removal equipment storage building. Atkins has performed these studies at other airports and will perform one for the Carson City Airport if required.

13.0 References

Nye County Public Works
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tdahl@co.nye.nv.us
Atkins has served as the airport engineer since 2004

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Robert Erquiaga Legal and Administrative Director
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775.423.3040
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Atkins has served as airport engineer since 2006.

Hayden Field, Jackpot Airport
Shawn Burt, Supervisor Public Works
Elko County Public Works, Town of Jackpot
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Atkins has served as airport engineer since 2010.