



UTAH ANNUAL AWARDS FOR EXCELLENCE IN CONCRETE PAVEMENT

2020

Eligibility Requirements:

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Winners will be honored at ACPA Utah’s annual Workshop and invited to present their project in a special session of the workshop.

Project Name: SR-190 to NB I-215 (Knudsen's)

Project Location: 6200 S 3000 E, Holladay, UT 84121

Please Indicate The Correct Project Category:

***Hover over the product category for a description**

- [Divided Highway \(Urban\)](#)
- [Divided Highways \(Rural\)](#)
- [State Roads](#)
- [County Roads](#)
- [Municipal Streets & Intersections \(<30,000 SY\)](#)
- [Municipal Streets & Intersections \(>30,000 SY\)](#)
- [Urban Arterials & Collectors](#)
- [Commercial Service & Military Airports](#)
- [Reliever & General Aviation Airports](#)
- [Concrete Pavement Restoration \(CPR\)](#)
- [Concrete Overlays \(Airports\)](#)
- [Concrete Overlays \(Highways\)](#)

- [Concrete Overlays \(Streets and Roads\)](#)
- [Industrial Paving](#)
- [Roller Compacted Concrete \(Industrial\)](#)
- [Roller Compacted Concrete \(Special Application\)](#)

General Contact Information

Concrete Paving Contractor	
Concrete Contractor's Representative:	Brody Robinson
Company:	Acme Construction
Title:	Project Manager
Address:	170 S 1200 W
City, State, Zip:	North Salt Lake, UT 84054
Phone Number:	(801) 280-1232
Email Address:	brody@acmeutah.com

Design Engineer	
Engineer's Representative:	Aaron Rasmussen
Company:	Avenue Consultants
Title:	Design Engineer
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City, State, Zip:	Taylorsville, UT 84123
Phone Number:	(801) 207-7660
Email Address:	arasmussen@avenueconsultants.com

Project Owner	
Owner Representative:	Chris Memmott
Company:	Utah Department of Transportation
Title:	Project Manager
Address:	4501 S Constitution Blvd
City, State, Zip:	Taylorsville, UT 84129
Phone Number:	(801) 830-9313
Email Address:	cmemmott@utah.gov

*Contact Person	
Contact Person:	Paul Franzen
Company:	Acme Construction
Title:	President
Address:	170 S 1200 W
City, State, Zip:	North Salt Lake, UT 84054
Phone Number:	(801) 280-1232
Email Address:	paul@acmeutah.com

- * Notification of the results and plaque proofs will be sent to the contact person listed above.
- * All contact info is mandatory.

Executive Summary

Use the executive summary to provide a brief overview of your project. The summary should emphasize the highlights of your project, drawing the attention of judges to what's most important or noteworthy. Specific project details or technical explanations should be reserved for the various scored sections of the submittal. While this section is not scored, completion is mandatory for award consideration.

This project consisted of widening and reconstructing the I-215 on ramp in concrete pavement. It was completed in several phases in order to provide access to motorists at all times. Completing the road in multiple phases presented several challenges that need to be considered so that the road smoothness requirements were still met. Joint layouts had to be modified so that they still landed outside of the travel lanes but provided enough space during each phase that motorist had room to enter the highway at a high rate of speed. The project was complete ahead of schedule and under budget.

Project Scope (20pts)

Project Item	Total
Project Cost	\$1,586,200
Concrete Paving, Repair, or RCC Cost	\$179,170
Project Length	1ml
Total Square Yards of Paving	2,945yd2
Total Lane Miles	ml
Number of Intersections/Interchanges Within Project	1
Number of Bridges Along the Route	0
Number of Businesses Along the Route	0
Phases or Paving Segments Employed	

Work zone traffic volume that was managed during construction (vehicles/day, trucks/day)?
15,000 vehicles/day

How was this traffic managed during construction (lane reductions, staging, phases, etc.)?
Phasing, and the installation of a temporary on ramp.

Utility Work Required

Sewer:

Yes

No

Water:

Yes

No

Telephone:

Yes

No

Cable:

Yes

No

Gas:

Yes

No

*Click on gray box for drop-down menu

*Subgrade Type:

None/Clay

*Subgrade Stabilization Required:

Other

*Subbase Type:

Dense-Graded Gravel or Crushed Stone

Subbase Thickness:

12 in.

*Pavement Type:

Jointed Plain

Pavement Thickness:

10 in.

Dowels Joints:

Yes

No

Joint Spacing:

12 ft.

*Shoulder Type:

None

*Curb: No

*Surface Texture Type: Longitudinal Tining

Sustainability Considerations (10pts)

Describe what (if any) specific considerations were taken with regard to sustainability, including economic and environmental factors. This could be in the mixture, the use of energy-saving equipment or processes, recycling, environmental protective measures, streetscape or decorative measures, etc: The existing material the was onsite was utilized close by to build a new access road at the old mill golf course. Additonal seeding was also applied to eliminate future erosion.

Innovation(10pts)

Describe any unique or innovative designs elements, materials employed, testing procedures, equipment solutions, or processes used on the project: The project approach was modified strategically to allow access at all times to the I-215 on ramp.

Describe any unique problems encountered on the project and solutions that were used to overcome them: High levels of rain and water runoff presented a lot of challenges. The project team developed a water diversion strategy that allowed us to keep the paving area dry during construction.

Safety (5pts)

Were your crew and workers required to wear personal protective equipment (PPE)?
(Must be evident in pictures submitted with the project submittal):

Yes

No

Was an internal traffic control plan developed and employed?

Yes

No

Describe any temporary traffic control measures used to keep the work site safe from public traffic: Signage, barriers, lane closures, and construction of a temporary road to get motorists further away from the active work zone.

What other steps were taken to ensure safety for your crew and other jobsite workers? Daily safety meetings were held and traffic control checks were completely continually.

Public Relations (5pts)

Describe what (if any) specific steps were taken to ensure that those affected by the project were informed before, during, and after the project regarding the project status, potential delays, etc: The public ws informed of each phase of the project via flyers, VMS boards, emails, and a public relations specialist.

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Project Schedule (5pts)

	START DATE (MM/DD/YYYY)		COMPLETION DATE (MM/DD/YYYY)	
	Scheduled	Actual	Scheduled	Actual
SCHEDULE FOR ENTIRE PROJECT				
SCHEDULE FOR PAVING				

Were completion time incentives offered?

Yes No

If yes, were they earned?

Yes No If Yes, Amount Earned \$

Were liquidated damages for late completion specified for the project?

Yes

If Yes, Amount Assessed \$

No

Please elaborate on any noteworthy details of the project schedule (including # of working days, unusual schedule challenges, weather issues, etc.):

Concrete Materials (5pts)

How was the mixture supplied? Stationary Ready-Mix Plant

Mixture Type: Cement Only Mix

Cement Type Used:

Fly Ash Used: No

Slay Cement Used: Yes No

Admixtures Employed:

Was the combined aggregate gradation optimized (i.e, using Shilstone)? Yes No

Please elaborate on any noteworthy details of the concrete materials:

Paving Process(10pts)

Describe each step of the concrete paving process. Please be specific in responding to each process listed below and discuss in detail the steps taken to ensure quality.

Base Preparation:

Stringline or Stringless Grade/Elevation Control:

Concrete batching and hauling:

Placement method(s):

Paving (slipform, fixed-form, RCC):

Finishing techniques:

Curing operations:

Sawing operations:

Additional / special steps taken during construction::

Quality Control and Testing (15pts)

Did you use control charts to monitor the materials during your paving operations?

Yes

No

If yes, what factors were monitored?

Did you monitor thickness results on the project?

Yes

No

If yes, what method was employed?

	Required	Average Achieved	Standard Deviation
Thickness	in.	in.	in.

*What strength measurement method was employed on the concrete? None

	Required	Average Achieved	Standard Deviation
Strength	psi	psi	psi

Were incentives earned on strength?

Yes No

Were disincentives earned on strength?

Yes No

Did you use a maturity testing on the concrete?

Yes No

If yes, for what did you use the testing? Opening To Traffic

Did you monitor air content of the concrete mixture on the project?

Yes No

If yes, what method was employed?

	Required	Average Achieved	Standard Deviation
Air Content	%	%	%

Did you use a real-time smoothness measuring system?

Yes No

If yes, what method was employed?

Did you measure/verify dowel alignment after paving? No

If yes, what method was employed?

Please describe results achieved:

Did you measure/verify tiebar location after paving?No

If yes, what method was employed?

Please describe results achieved:

For RCC only, did you perform density testing?

Yes No

If yes, what method was employed?

	Required	Average Achieved	Standard Deviation
Density	%	%	%

Please elaborate on any noteworthy or unusual details of the QA/QC testing for the project including other tests that were employed (unit weight, concrete temperature, etc.):

Smoothness (15pts)

Describe the smoothness measurement methods and results.

Smoothness Measurement Device:

Smoothness Specification Criteria (Straightedge, Maximum Profile Index, Blanking Band (0.0-in, 0.1-in, 0.2-in), Must Grind Areas, Incentive Programs, IRI, etc.):

Were corrective measures taken to bring pavement within specified smoothness tolerances?

Yes No

If yes, average smoothness after corrective measures:

Was an incentive offered for smoothness?

Yes No

If yes, what percentage of the total available incentive was achieved?

Please elaborate on any aspects of the work environment that made achieving smoothness results difficult (i.e. a challenging grade, bridges, intersections, etc.):



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Project Name: Highland Drive Improvements

Project Location: 7000 S Highland Dr, Cottonwood Heights, UT 84121

Please Indicate The Correct Project Category:

***Hover over the product category for a description**

- [Divided Highway \(Urban\)](#)
- [Divided Highways \(Rural\)](#)
- [State Roads](#)
- [County Roads](#)
- [Municipal Streets & Intersections \(<30,000 SY\)](#)
- [Municipal Streets & Intersections \(>30,000 SY\)](#)
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- [Roller Compacted Concrete \(Industrial\)](#)
- [Roller Compacted Concrete \(Special Application\)](#)

General Contact Information

Concrete Paving Contractor	
Concrete Contractor's Representative:	Christian Cano
Company:	Acme Construction
Title:	Project Manager
Address:	170 S 1200 W
City, State, Zip:	North Salt Lake, UT 84054
Phone Number:	(801) 280-1232
Email Address:	christian@acmeutah.com

Design Engineer	
Engineer's Representative:	Jodi Pearson
Company:	Kimley-Horn
Title:	Design Engineer
Address:	215 South State Street, Ste 400
City, State, Zip:	Salt Lake City, UT 84111
Phone Number:	(385) 212-3176
Email Address:	jodi.pearson@kimley-horn.com

Project Owner	
Owner Representative:	Leo Florence
Company:	Utah Department of Transportation
Title:	Resident Engineer
Address:	4501 S Constitution Blvd
City, State, Zip:	Taylorsville, UT 84129
Phone Number:	(801) 634-5754
Email Address:	lflorence@pec.us.com

*Contact Person	
Contact Person:	Paul Franzen
Company:	Acme Construction
Title:	President
Address:	170 S 1200 W
City, State, Zip:	North Salt Lake, UT 84054
Phone Number:	(801) 280-1232
Email Address:	paul@acmeutah.com

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Executive Summary

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The overall scope of the project was to improve movement along Highland Dr from 7200 S to the I-215 westbound on-ramp, a one mile long stretch. This meant specific improvements at the intersections of Highland Dr and Fort Union Blvd, Highland Dr and La Cresta Dr, and Highland Dr and I-215 WB on-ramp. This is a major thoroughfare connection areas of Cottonwood Heights, Sandy, and Midvale to the rest of the valley via I-215.

Project Scope (20pts)

Project Item	Total
Project Cost	\$1,962,940
Concrete Paving, Repair, or RCC Cost	\$68,038
Project Length	ml
Total Square Yards of Paving	1,115yd ²
Total Lane Miles	ml
Number of Intersections/Interchanges Within Project	1
Number of Bridges Along the Route	0
Number of Businesses Along the Route	27
Phases or Paving Segments Employed	

Work zone traffic volume that was managed during construction (vehicles/day, trucks/day)?
20,000

How was this traffic managed during construction (lane reductions, staging, phases, etc.)?
On-ramp had to remain open during duration of paving operations. Traffic was shifted to the east as pavement section was expanded to the west.

Utility Work Required

Sewer: Yes No

Water: Yes No

Telephone: Yes No

Cable: Yes No

Gas: Yes No

*Click on gray box for drop-down menu

*Subgrade Type: None/Clay

*Subgrade Stabilization Required: None

*Subbase Type: Asphalt

Subbase Thickness: 14 in.

*Pavement Type: Jointed Plain

Pavement Thickness: 10 in.

Dowels Joints: Yes No

Joint Spacing: 12 ft.

*Shoulder Type: Tied Concrete

***Curb:** Yes, Separately Paved

***Surface Texture Type:** Longitudinal Tining

Sustainability Considerations (10pts)

Describe what (if any) specific considerations were taken with regard to sustainability, including economic and environmental factors. This could be in the mixture, the use of energy-saving equipment or processes, recycling, environmental protective measures, streetscape or decorative measures, etc: On-ramp widening was next to a vegetated slope separating Highland Dr NB traffic, I-215 EB on-ramp and I-215 WB on-ramp. Special care was taken to minimize disturbance of this area. Once paving was complete this area was graded, restored, and protected with hydromulch and seed. Stamped, colored concrete was placed at park strips at pedestrian crossings.

Innovation(10pts)

Describe any unique or innovative designs elements, materials employed, testing procedures, equipment solutions, or processes used on the project: Due to limited room and access, to the high volume of traffic using the on-ramp, and the fact that pours had to be made in a direction contrary to traffic a temporary access was used for Acme Construction's equipment and crews as well as concrete trucks.

Describe any unique problems encountered on the project and solutions that were used to overcome them: There was a project happening concurrently immediately north of this project on Highland Dr. This required careful communication and coordination with the GC over that project.

Safety (5pts)

Were your crew and workers required to wear personal protective equipment (PPE)?
(Must be evident in pictures submitted with the project submittal):

Yes

No

Was an internal traffic control plan developed and employed?

Yes

No

Describe any temporary traffic control measures used to keep the work site safe from public traffic: Signage, VMS Boards, Barricades, Barrier, Temporay Crash Cushion Truck.

What other steps were taken to ensure safety for your crew and other jobsite workers? Every worker wore a hardhat and vest light for night work. When possible work on the on-ramp was performed during non-peak hours.

Public Relations (5pts)

Describe what (if any) specific steps were taken to ensure that those affected by the project were informed before, during, and after the project regarding the project status, potential delays, etc: Acme Construction worked in close coordination with Cottonwood Heights City, UDOT, PEC, and Kimley Horn in order to keep the public informed. A 24/7 hotline was made available from the beginning of the project. Message boards were used throughout the duration of the project to keep the public informed of work hour, detours, possible delays, etc. A weekley emial was sent out every thursday with a summary of planned specific activities, work locations, number of crews, and traffic control operation for the upcoming week. Personal and phone contact was kept with business owners on a nearly daily basis in order to keep them informed about project progress.

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Project Schedule (5pts)

	START DATE (MM/DD/YYYY)		COMPLETION DATE (MM/DD/YYYY)	
	Scheduled	Actual	Scheduled	Actual
SCHEDULE FOR ENTIRE PROJECT				

**SCHEDULE
FOR PAVING**

Were completion time incentives offered?

Yes

No

If yes, were they earned?

Yes

If Yes, Amount Earned \$

No

Were liquidated damages for late completion specified for the project?

Yes

If Yes, Amount Assessed \$

No

Please elaborate on any noteworthy details of the project schedule (including # of working days, unusual schedule challenges, weather issues, etc.):

Concrete Materials (5pts)

How was the mixture supplied? Stationary Ready-Mix Plan

Mixture Type: Cement Only Mix

Cement Type Used:

Fly Ash Used: No

Slay Cement Used: Yes No

Admixtures Employed:

Was the combined aggregate gradation optimized (i.e, using Shilstone)? Yes No

Please elaborate on any noteworthy details of the concrete materials:

Paving Process(10pts)

Describe each step of the concrete paving process. Please be specific in responding to each process listed below and discuss in detail the steps taken to ensure quality.

Base Preparation:

Stringline or Stringless Grade/Elevation Control:

Concrete batching and hauling:

Placement method(s):

Paving (slipform, fixed-form, RCC):

Finishing techniques:

Curing operations:

Sawing operations:

Additional / special steps taken during construction::

Quality Control and Testing (15pts)

Did you use control charts to monitor the materials during your paving operations?

Yes

No

If yes, what factors were monitored?

Did you monitor thickness results on the project?

Yes

No

If yes, what method was employed?

	Required	Average Achieved	Standard Deviation
Thickness	in.	in.	in.

*What strength measurement method was employed on the concrete? None

	Required	Average Achieved	Standard Deviation
Strength	psi	psi	psi

Were incentives earned on strength?

Yes

No

Were disincentives earned on strength?

Yes

No

Did you use a maturity testing on the concrete?

Yes

No

If yes, for what did you use the testing? Opening To Traffic

Did you monitor air content of the concrete mixture on the project?

Yes

No

If yes, what method was employed?

	Required	Average Achieved	Standard Deviation
Air Content	%	%	%

Did you use a real-time smoothness measuring system?

Yes

No

If yes, what method was employed?

Did you measure/verify dowel alignment after paving? No

If yes, what method was employed?

Please describe results achieved:

Did you measure/verify tiebar location after paving? No

If yes, what method was employed?

Please describe results achieved:

For RCC only, did you perform density testing?

Yes

No

If yes, what method was employed?

	Required	Average Achieved	Standard Deviation
Density	%	%	%

Please elaborate on any noteworthy or unusual details of the QA/QC testing for the project including other tests that were employed (unit weight, concrete temperature, etc.):

Smoothness (15pts)

Describe the smoothness measurement methods and results.

Smoothness Measurement Device:

Smoothness Specification Criteria (Straightedge, Maximum Profile Index, Blanking Band (0.0-in, 0.1-in, 0.2-in), Must Grind Areas, Incentive Programs, IRI, etc.):

Were corrective measures taken to bring pavement within specified smoothness tolerances?

Yes

No

If yes, average smoothness after corrective measures:

Was an incentive offered for smoothness?

Yes

No

If yes, what percentage of the total available incentive was achieved?

Please elaborate on any aspects of the work environment that made achieving smoothness results difficult (i.e. a challenging grade, bridges, intersections, etc.):



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Project Name: SR-68 & I-215 Reconstruct

Project Location: I-215 North Salt Lake

Please Indicate The Correct Project Category:

***Hover over the product category for a description**

- [Divided Highway \(Urban\)](#)
- [Divided Highways \(Rural\)](#)
- [State Roads](#)
- [County Roads](#)
- [Municipal Streets & Intersections \(<30,000 SY\)](#)
- [Municipal Streets & Intersections \(>30,000 SY\)](#)
- [Urban Arterials & Collectors](#)
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- [Concrete Overlays \(Streets and Roads\)](#)
- [Industrial Paving](#)
- [Roller Compacted Concrete \(Industrial\)](#)
- [Roller Compacted Concrete \(Special Application\)](#)

General Contact Information

Concrete Paving Contractor	
Concrete Contractor's Representative:	Thiago Bezerra
Company:	Sundt Construction
Title:	Project Manager
Address:	1245 Brickyard Rd, Ste. 160
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Phone Number:	(801) 960-5184
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Design Engineer	
Engineer's Representative:	Brad Humphry
Company:	Stanley Consultants
Title:	Sr. Project Manager
Address:	6975 Union Park Ave Suite 300
City, State, Zip:	Cottonwood Heights-UT 84047
Phone Number:	(801) 757-0770
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Project Owner	
Owner Representative:	Brett Slater
Company:	UDOT
Title:	Project Manager
Address:	166 Southwell St
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Phone Number:	(801) 643-8864
Email Address:	brettslater@utah.gov

*Contact Person	
Contact Person:	Thiago Bezerra
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Title:	Project Manager
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City, State, Zip:	Salt Lake City-UT 84106
Phone Number:	(801) 960-5184
Email Address:	jtbezerra@sundt.com

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Project Scope (20pts)

Project Item	Total
Project Cost	\$27,000,000
Concrete Paving, Repair, or RCC Cost	\$3,500,000
Project Length	5ml
Total Square Yards of Paving	78,000yd2
Total Lane Miles	14ml
Number of Intersections/Interchanges Within Project	3
Number of Bridges Along the Route	5
Number of Businesses Along the Route	7
Phases or Paving Segments Employed	18

Work zone traffic volume that was managed during construction (vehicles/day, trucks/day)?

Exceptional considerations were taken to maintain business access across the corridor while the contractor shared this very busy road with 40,000 motorists each day

How was this traffic managed during construction (lane reductions, staging, phases, etc.)?

Due to restrictive and limited lane closure specs, the TCM had to be very elaborate and unique to each section of roadway on this 3 in 1 project. Lane splits, reduced paver track grade, over barrier bapver extentions, 20,000 LF temp barreir, etc. where some of the approaches to help manager traffic on the project. Lane closures took place primarely at night an weekends. Diverging Diamond Interchanges are very efficient with helping reduce congested intersections, while minimizing collision opportunities, and providing Optimized Mobility for traffic flow between freeways and arterial roadways. But there isn't anything standard when it comes to constructing a DDI, especially when heavy traffic flows are required to be maintained throughout the project during construction. Building and reconfiguring the existing interchange

to a DDI under live traffic was a challenge and required a coordinated effort between local municipalities, UDOT and the Sundt team. Carefully planned construction phasing which supported UDOT's design vision were implemented to help traffic moving. Temporary widenings allowed traffic lanes to remain open longer than the contract required. Several Value Engineering proposals helped preserve existing infrastructure reducing project cost and duration. Construction phasing was carefully planned to reduce impact to the traveling public, and heavily coordinated amongst local municipalities, TOC and other stakeholders. Through creative detailed construction phasing, the project maintained efficient traffic flow throughout the duration of the project. Owner representative allowed alternative Traffic Control options including short term closures where the work could be expedited by the contractor, the project team worked nights, weekends, numerous 24/7 shifts which helped maximize production and reduce traffic impacts. On a portion of I-215 an opportunity was identified to lessen traffic restrictions by extending closure hours. With an open mind, the CEM took the proposal to the UDOT for further evaluation. With the appropriate data and analysis, it was determined that extending the lane closure period would have no impact to the traveling public as volumes were minimal during the suggested period. This collaborative move explored a simple opportunity that with minimum effort significantly benefited the project with zero impact to the public.

Utility Work Required

Sewer: Yes No

Water: Yes No

Telephone: Yes No

Cable: Yes No

Gas: Yes No

*Click on gray box for drop-down menu

***Subgrade Type:** None/Clay

***Subgrade Stabilization Required:** Other

*Subbase Type: Dense-Graded Gravel or Crushed Stone

Subbase Thickness: 9 in.

*Pavement Type: Jointed Plain

Pavement Thickness: 11 in.

Dowels Joints: Yes No

Joint Spacing: 15 ft.

*Shoulder Type: Tied Concrete

*Curb: No

*Surface Texture Type: Longitudinal Tining

Sustainability Considerations (10pts)

Describe what (if any) specific considerations were taken with regard to sustainability, including economic and environmental factors. This could be in the mixture, the use of energy-saving equipment or processes, recycling, environmental protective measures, streetscape or decorative measures, etc: 100% of the old concrete pavement roadway was recycled and repurposed, that is over 22,000 CY of concrete that was partially used as subgrade stabilization within the project and a larger majority was crushed and turned into commercial roadbase on other project. Additionally, several sections of the existing subbase was tested and deemed suitable to be kept in place. Reusing existing materials help the project reduce the amount of mined aggregates needed, which also reduced the carbon footprint from equipment fuel use the project and supplier would have originally generated. The project developed a CO2 water treatment process that treated the concrete washout water generated during the PCCP operations. After lab analysis results, the DWQ approved the unprecedented process to be used on the project and open the door for it's implementation on future projects in the state.

Innovation(10pts)

Describe any unique or innovative designs elements, materials employed, testing procedures, equipment solutions, or processes used on the project: The project used a unique High Strength Geotextile (HSG) to be placed under the new bridge embankment, the HSG is designed to help distribute the load and stabilize the area. The fabric was layed in 17 feet wide sections perpendicular to the roadway alignment, and then stiched together, acting a a very large hamnoch for the newly placed bridge embankment. The project also piloted two new pavemnt marking products, one designed to improve motorists visibility by 75% under wet conditions, and a second that have drastically improved roadway safety per FHWA staties and will help support UDOT's vision for autoniomous vehicles on estate roads.

Describe any unique problems encountered on the project and solutions that were used to overcome them: Due to the existing soft ground conditions of the area, and anticipated settlement of the new embankment, standing nine feet tall above the new embankment, 18,000 CY of surcharge material was temporarily placed over the fill, with an anticipated Settlement Period duration of 100 to 140 days. Several schedule critical activities dependent on the completion of the settlement, and needed to start before winter, including the new bridge. However, none of those critical activities could start until after completion of the settlement period. As the settlement continued beyond the anticipated maximum 140 days, the team recognized the project would be facing severe schedule and financial impacts. Cold temperatures would prevent final asphalt pavement from being placed, weather protection for the bridge would escalate costs and serious safety risks associated with the traveling public through the winter. Subsequently, the financial impacts would amount over several hundred-thousands of dollars and a schedule impact pushing the project into a second construction season. However, recognizing the magnitude of the issues at hand the project team were quick to respond working diligently to find adequate solutions aimed to minimize those impacts. The project was re-phased to accommodate bridge construction under more adequate conditions, as much possible the cold sensitive work was done ahead, inefficient activities were paused, MOT plans were redesigned to maximize safety for the traveling public and maintenance through the winter. When the settlement finally stopped it had reached 179 days, valuable time was lost, but the project team already had a plan in place to immediately resume construction and charge towards project completion. Cost and time for these impacts were fairly negotiated, where all parties made significant compromises with the project's best interest in mind as the focus of every decision. This issue had the potential to cripple any project and cause long lasting strains to any working relationship, but it did not, because partnering was not a onetime thing to fulfill a requirement, partnering worked on this project because everyone involved chose to make it a priority guiding every discussion, every decision, every step taken along the way. Because of the daily lived partnering efforts, we have delivered the owner a quality project that we are all very proud of, but equally important are the working relationships built that will be carried on to help many more projects to come.

Safety (5pts)

Were your crew and workers required to wear personal protective equipment (PPE)?
(Must be evident in pictures submitted with the project submittal):

Yes

No

Was an internal traffic control plan developed and employed?

Yes

No

Describe any temporary traffic control measures used to keep the work site safe from public traffic: Over 20,000 LF of temporary barrier was placed to provide positive separation between the traveling public and construction workers and equipment. To improve motorists safety, MOT plans were designed with longer than needed tapers, softer curves, and length of need.

What other steps were taken to ensure safety for your crew and other jobsite workers? A "Relentless Housekeeping" program was also successfully implemented. During shifts, crews dedicated time towards housekeeping and maintaining an organized and hazard free work zone. Some of the items of focus included, clean & definable access and egress, organizing materials and storage, trash management, work in progress controlled and managed, proper condition of tool and equipment. Clean work zones promoted safety and productive work environments which exemplified pride in who we are and the work. The project pioneered "Sundt Construction Analytics", a safety app developed to improve safety. All project members used the app to provide live feedback through the data matrix entered. The data generated by the app helped recognize positive behaviors, as well as identify hazardous trends. Information generated was periodically reviewed and used to enhance safety on the project. Weekly safety training by industry safety professionals provided the project employees with training on hazard recognition and avoidance, best practices, safe behavior, etc. Some of our presenters included, shoring/underground, rigging, equipment, utility companies, etc. all providing valuable information on their areas of expertise to improve project safety awareness. As a result of these efforts, safety became an intrinsic part of the project's culture. Although no safety policy violations contributed to project incidents, best practice procedures were implemented to prevent similar incidents. Our EMR was .44 and UDOT safety Insp. was a 95% Avg rating.

Public Relations (5pts)

Describe what (if any) specific steps were taken to ensure that those affected by the project were informed before, during, and after the project regarding the project status, potential

delays, etc: The project periodically kept the local community and travelers with face-to-face visits, calls, website notices and VMS boards. Most of the communications took place on a weekly basis, but more frequent when major activities were taking place, such as traffic switches. Now complete, the SR-68 & I-215 Reconstruct Project offers the residents and businesses of North Salt Lake a new and drastically improved transportation system, which promotes further growth and development of this vital community. The hard-working men and women of this project worked day, night, weekends and sometimes even 24/7, under harsh conditions to bring this project to life. Today the SR-68 & I-215 project is keeping North Salt Lake and Davis County moving.



UTAH ANNUAL AWARDS FOR EXCELLENCE IN CONCRETE PAVEMENT

2020

Eligibility Requirements:

Projects are only eligible for the awards program if they are submitted to Utah ACPA on or prior to the submission deadline of Friday, November 22, 2019 and all sections of the submittal form are completed. (Note: submitters may elect to denote any sections as “not applicable”). Projects must be completed in the calendar year of 2019.

Please click in the gray boxes to fill in your answer, they will expand to fit your content. When you are finished please save this document and send it back to alarsen@dustinengineers.com or info@utahacpa.com. Pictures are not required but they may be sent to the same addresses.

Winners will be honored at ACPA Utah’s annual Workshop and invited to present their project in a special session of the workshop.

Project Name: Market Street Reconstruction

Project Location: 3550 South Market Street, West Valley City, UT 84119

Please Indicate The Correct Project Category:

***Hover over the product category for a description**

- [Divided Highway \(Urban\)](#)
- [Divided Highways \(Rural\)](#)
- [State Roads](#)
- [County Roads](#)
- [Municipal Streets & Intersections \(<30,000 SY\)](#)
- [Municipal Streets & Intersections \(>30,000 SY\)](#)
- [Urban Arterials & Collectors](#)
- [Commercial Service & Military Airports](#)
- [Reliever & General Aviation Airports](#)
- [Concrete Pavement Restoration \(CPR\)](#)
- [Concrete Overlays \(Airports\)](#)
- [Concrete Overlays \(Highways\)](#)

- [Concrete Overlays \(Streets and Roads\)](#)
- [Industrial Paving](#)
- [Roller Compacted Concrete \(Industrial\)](#)
- [Roller Compacted Concrete \(Special Application\)](#)

General Contact Information

Concrete Paving Contractor	
Concrete Contractor's Representative:	Elias Else, P.E.
Company:	Acme Construction
Title:	Project Engineer
Address:	170 S 1200 W
City, State, Zip:	North Salt Lake, UT 84054
Phone Number:	(801) 280-1232
Email Address:	eli@acmeutah.com

Design Engineer	
Engineer's Representative:	Coby Wilson, P.E.
Company:	West Valley City
Title:	Assistant City Engineer
Address:	3600 South Constitution Blvd
City, State, Zip:	West Valley City, UT 84119
Phone Number:	(801) 963-3204
Email Address:	coby.wilson@wvc-ut.gov

Project Owner	
Owner Representative:	Coby Wilson, P.E.
Company:	West Valley City
Title:	Assistant City Engineer
Address:	3600 South Constitution Blvd
City, State, Zip:	West Valley City, UT 84119
Phone Number:	(801) 963-3204
Email Address:	coby.wilson@wvc-ut.gov

*Contact Person	
Contact Person:	Paul Franzen
Company:	Acme Construction
Title:	President
Address:	170 S 1200 W
City, State, Zip:	North Salt Lake, UT 84054
Phone Number:	(801) 280-1232
Email Address:	paul@acmeutah.com

- * Notification of the results and plaque proofs will be sent to the contact person listed above.
- * All contact info is mandatory.

Executive Summary

Use the executive summary to provide a brief overview of your project. The summary should emphasize the highlights of your project, drawing the attention of judges to what's most important or noteworthy. Specific project details or technical explanations should be reserved for the various scored sections of the submittal. While this section is not scored, completion is mandatory for award consideration.

Reconstruction of an existing asphalt road with portland cement concrete pavement, approximately 2,400 SY, striping, signage, sidewalks, and adjusting utilities to grade.

Project Scope (20pts)

Project Item	Total
Project Cost	\$437,000
Concrete Paving, Repair, or RCC Cost	\$240,000
Project Length	.16ml
Total Square Yards of Paving	2,805yd2
Total Lane Miles	.26ml
Number of Intersections/Interchanges Within Project	3
Number of Bridges Along the Route	0
Number of Businesses Along the Route	4
Phases or Paving Segments Employed	10

Work zone traffic volume that was managed during construction (vehicles/day, trucks/day)?

0

How was this traffic managed during construction (lane reductions, staging, phases, etc.)?

Road was closed due to commercial projects directly on both sides of the road being constructed simultaneously with the road.

Utility Work Required

Sewer:

Yes

No

Water: Yes No

Telephone: Yes No

Cable: Yes No

Gas: Yes No

*Click on gray box for drop-down menu

*Subgrade Type: None/Clay

*Subgrade Stabilization Required: None

*Subbase Type: Dense-Graded Gravel or Crushed Stone

Subbase Thickness: 6 in.

*Pavement Type: Jointed Plain

Pavement Thickness: 8 in.

Dowels Joints: Yes No

Joint Spacing: 12 ft.

*Shoulder Type: Tied Concrete

*Curb: Yes, Separately Paved

***Surface Texture Type:** Burlap Drag

Sustainability Considerations (10pts)

Describe what (if any) specific considerations were taken with regard to sustainability, including economic and environmental factors. This could be in the mixture, the use of energy-saving equipment or processes, recycling, environmental protective measures, streetscape or decorative measures, etc: Recycled roadbase was utilized for the subbase for the entire road. Four colored crosswalks were installed, with one being installed in conjunction with a multi-colored speed table. A large concrete washout bin was utilized to minimize concrete washout spillage.

Innovation(10pts)

Describe any unique or innovative designs elements, materials employed, testing procedures, equipment solutions, or processes used on the project: Four colored crosswalks were installed, with one being installed in conjunction with a multi-colored speed table.

Describe any unique problems encountered on the project and solutions that were used to overcome them: The new road was designed lower than the old road. With this design, we encountered issues with lowering manholes and storm drain boxes. We overcame these issues by sawcutting the boxes down and also with removing precast manhole cones and replacing them with 12" manhole risers to lower the structure to below the finish grade of the road and then raised the castings to finish grade with precast grade rings.

Safety (5pts)

Were your crew and workers required to wear personal protective equipment (PPE)?
(Must be evident in pictures submitted with the project submittal):

Yes

No

Was an internal traffic control plan developed and employed?

Yes

No

Describe any temporary traffic control measures used to keep the work site safe from public traffic: Temporary fence was installed along the trax station to detour pedestrians around

and away from the construction zone. The road was closed to vehicular traffic for the duration of the project.

What other steps were taken to ensure safety for your crew and other jobsite workers? The UTA worker safety class was attended by the people who worked on the project including the general contractor, subcontractors, and the owner. The general contractor also conducted toolbox safety talks every week about specific safety precautions unique to this jobsite.

Public Relations (5pts)

Describe what (if any) specific steps were taken to ensure that those affected by the project were informed before, during, and after the project regarding the project status, potential delays, etc: All project status information was relayed to the owner for the owner to notify interested parties.

The sections above must be completed to be considered for an award for the Utah ACPA Awards. If any portion of the application is not applicable to your project, you may leave that section blank. If you would like to be considered for the National ACPA Awards, please continue to complete the remaining categories below. The categories below are not required for the Utah ACPA Awards.

Project Schedule (5pts)

	START DATE (MM/DD/YYYY)		COMPLETION DATE (MM/DD/YYYY)	
	Scheduled	Actual	Scheduled	Actual
SCHEDULE FOR ENTIRE PROJECT	15July2019	29July2019	13Sept2019	10Oct2019
SCHEDULE FOR PAVING	26Aug2019	23Sept2019	06Sept2019	04Oct2019

Were completion time incentives offered?

Yes

No

If yes, were they earned?

Yes

If Yes, Amount Earned \$N/A

No

Were liquidated damages for late completion specified for the project?

Yes

If Yes, Amount Assessed \$\$2,500/Day

No

Please elaborate on any noteworthy details of the project schedule (including # of working days, unusual schedule challenges, weather issues, etc.):

Concrete Materials (5pts)

How was the mixture supplied? Stationary Ready-Mix Plant

Mixture Type: Binary (W/Fly Ash)

Cement Type Used:II-IV

Fly Ash Used: Yes, Type F

Slay Cement Used: Yes

No

Admixtures Employed: yes

Was the combined aggregate gradation optimized (i.e, using Shilstone)? Yes

No

Please elaborate on any noteworthy details of the concrete materials:

Paving Process(10pts)

Describe each step of the concrete paving process. Please be specific in responding to each process listed below and discuss in detail the steps taken to ensure quality.

Base Preparation:

The base for the new road was placed with a CAT 140 M3 Motor Grader and compacted with a 66" Dynapac Roller.

Stringline or Stringless Grade/Elevation Control:

Grades were controlled with 2"x8" lumber forms

Concrete batching and hauling:

Concrete was batched and hauled by Jack B Parson in front-end discharge ready mix trucks.

Placement method(s):

Concrete was placed with a roller tube screed

Paving (slipform, fixed-form, RCC):

Fixed-Form

Finishing techniques:

The concrete has a burlap drag finish.

Curing operations:

The concrete was cured with a surface-applied liquid curing compound

Sawing operations:

Sawing operations were conducted within 24 hours of placement with walk behind saws.

Additional / special steps taken during construction::

Quality Control and Testing (15pts)

Did you use control charts to monitor the materials during your paving operations?

Yes

No

If yes, what factors were monitored? Compressive Strength

Did you monitor thickness results on the project?

Yes No

If yes, what method was employed? Coring

	Required	Average Achieved	Standard Deviation
Thickness	8 in.	8.25 in.	in.

*What strength measurement method was employed on the concrete? Compressive

	Required	Average Achieved	Standard Deviation
Strength	4000 psi	5126 psi	587 psi

Were incentives earned on strength?

Yes No

Were disincentives earned on strength?

Yes No

Did you use a maturity testing on the concrete?

Yes No

If yes, for what did you use the testing? Other

Did you monitor air content of the concrete mixture on the project?

Yes No

If yes, what method was employed? Air pot

	Required	Average Achieved	Standard Deviation
Air Content	5-7 %	6 %	%

Did you use a real-time smoothness measuring system?

Yes No

If yes, what method was employed?

Did you measure/verify dowel alignment after paving? No

If yes, what method was employed?

Please describe results achieved:

Did you measure/verify tiebar location after paving?No

If yes, what method was employed?

Please describe results achieved:

For RCC only, did you perform density testing?

Yes

No

If yes, what method was employed?

	Required	Average Achieved	Standard Deviation
Density	%	%	%

Please elaborate on any noteworthy or unusual details of the QA/QC testing for the project including other tests that were employed (unit weight, concrete temperature, etc.):

Smoothness (15pts)

Describe the smoothness measurement methods and results.

Smoothness Measurement Device: Inertial Profilometer

Smoothness Specification Criteria (Straightedge, Maximum Profile Index, Blanking Band (0.0-in, 0.1-in, 0.2-in), Must Grind Areas, Incentive Programs, IRI, etc.): Must Grind Areas to be less than 0.4 Inches/25 feet

Were corrective measures taken to bring pavement within specified smoothness tolerances?

Yes

No

If yes, average smoothness after corrective measures:Less than 0.4 Inches/25 feet

Was an incentive offered for smoothness?

Yes

No

If yes, what percentage of the total available incentive was achieved?N/A

Please elaborate on any aspects of the work environment that made achieving smoothness results difficult (i.e. a challenging grade, bridges, intersections, etc.): Smoothness results were difficult to be achieved because the majority of the curb and gutter was installed by multiple contractors prior to the PCCP being installed. Another aspect of the project that made it difficult to achieve smoothness was the fact that the entire project was 'cut up' due to the aesthetics of the project including the colored concrete speed table, colored concrete crosswalks, and multiple intersections.



UTAH ANNUAL AWARDS FOR EXCELLENCE IN CONCRETE PAVEMENT

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Projects must be completed in the calendar year of 2019.

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Winners will be honored at ACPA Utah’s annual Workshop and invited to present their project in a special session of the workshop.

Project Name: 900 South Reconstruction - 950 East to 1300 East

Project Location: 950 East 900 South, Salt Lake City, UT

Please Indicate The Correct Project Category:

***Hover over the product category for a description**

- [Divided Highway \(Urban\)](#)
- [Divided Highways \(Rural\)](#)
- [State Roads](#)
- [County Roads](#)
- [Municipal Streets & Intersections \(<30,000 SY\)](#)
- [Municipal Streets & Intersections \(>30,000 SY\)](#)
- [Urban Arterials & Collectors](#)
- [Commercial Service & Military Airports](#)
- [Reliever & General Aviation Airports](#)
- [Concrete Pavement Restoration \(CPR\)](#)
- [Concrete Overlays \(Airports\)](#)
- [Concrete Overlays \(Highways\)](#)

- [Concrete Overlays \(Streets and Roads\)](#)
- [Industrial Paving](#)
- [Roller Compacted Concrete \(Industrial\)](#)
- [Roller Compacted Concrete \(Special Application\)](#)

General Contact Information

Concrete Paving Contractor	
Concrete Contractor's Representative:	Kelly Smith
Company:	Jordan Valley Construction
Title:	Project Manager
Address:	4300 Farm Rd
City, State, Zip:	West Jordan, UT 84088
Phone Number:	801-575-7100
Email Address:	kelly@jordanvalleyconstruction.com

Design Engineer	
Engineer's Representative:	Eric Casperson
Company:	Salt Lake City Corporation
Title:	Project Engineer
Address:	349 South 200 East
City, State, Zip:	Salt Lake City, UT 84111
Phone Number:	801-535-7995
Email Address:	eric.casperson@slcgov.com

Project Owner	
Owner Representative:	John M. Coyle
Company:	Salt Lake City Corporation
Title:	Right of Way Manager
Address:	349 South 200 East
City, State, Zip:	Salt Lake City, UT 84111
Phone Number:	801-535-6241 or 801-870-3617
Email Address:	john.coyle@slcgov.com

*Contact Person	
Contact Person:	John M. Coyle
Company:	Salt Lake City Corporation
Title:	Right of Way Manager
Address:	349 South 200 East
City, State, Zip:	Salt Lake City, UT 84111
Phone Number:	801-535-6241 or 801-870-3617
Email Address:	john.coyle@slcgov.com

- * Notification of the results and plaque proofs will be sent to the contact person listed above.
- * All contact info is mandatory.

Executive Summary

Use the executive summary to provide a brief overview of your project. The summary should emphasize the highlights of your project, drawing the attention of judges to what's most important or noteworthy. Specific project details or technical explanations should be reserved for the various scored sections of the submittal. While this section is not scored, completion is mandatory for award consideration.

The asphalt of 900 South was in very poor condition due to the traffic going between East High School, the University of Utah, and the business district of 9th and 9th. Salt Lake City had decided to reconstruct the roadway to help repair the poor condition of the roadway. The 5-way intersection of 1100 East 900 South presented a problem to motorists especially those coming from the south. The stop bar and crosswalk, which was a long ways from the intersection, did not allow those vehicles to fully participate at the intersection. Gilmer Avenue, came in at an angle from the south east into the intersection which made it difficult to navigate the intersection. A roundabout was suggested as a possible solution to the 5-way intersection. Other ideas were considered, but after much public outreach and numerous community meetings, the roundabout was voted as being the idea most preferred. A "pop-up" was built to test the roundabout and other ideas at the 900 South 1100 East intersection. This allowed the residents to get a feel of the way a roundabout could be. These were installed for 2 weeks at a time to give enough time for people to use them. A 2-way, 10 feet wide, 6" thick concrete bike trail was constructed on the south side of 900 South as an extension of the 9-Line Trail. To allow this bike trail to be constructed the south curb had to be moved to the north which narrowed 900 South, resulting in slower vehicular speeds and safer pedestrian and bicycle mobility. Due to the amount of traffic, 8" thick concrete, with 1" dowels, was determined to be the best material to replace the asphalt. The contractor asked if fiberglass dowel bars could be used in place of steel dowels. The fiberglass dowels were much less costly than steel dowels and much easier for the contractor to place. The project began in May 2019 and was completed in December 2019.

Project Scope (20pts)

Project Item	Total
Project Cost	\$2,640,000
Concrete Paving, Repair, or RCC Cost	\$935,000
Project Length	0.5ml
Total Square Yards of Paving	17,000yd ²
Total Lane Miles	2.4ml

Number of Intersections/Interchanges Within Project	4
Number of Bridges Along the Route	0
Number of Businesses Along the Route	23
Phases or Paving Segments Employed	5

Work zone traffic volume that was managed during construction (vehicles/day, trucks/day)?
8,000 vehicles/day

How was this traffic managed during construction (lane reductions, staging, phases, etc.)?
Traffic was managed throughout the project by maintaining 2-way traffic at all times during construction. This was especially important to the businesses along the route. Most of these businesses are small businesses which are much more susceptible to loss of business. The traffic was moved to the south initially while construction was completed on the north. After the north side of 900 South was completed, the traffic was moved to the north side and construction was completed on the south side.

Utility Work Required

Sewer: Yes No

Water: Yes No

Telephone: Yes No

Cable: Yes No

Gas: Yes No

*Click on gray box for drop-down menu

***Subgrade Type:** None/Clay

***Subgrade Stabilization Required:** None

***Subbase Type:** Dense-Graded Gravel or Crushed Stone

Subbase Thickness: 8 in.

*Pavement Type: Jointed Reinforced

Pavement Thickness: 8 in.

Dowels Joints: Yes No

Joint Spacing: 14 ft.

*Shoulder Type: None

*Curb: Yes, Separately Paved

*Surface Texture Type: Transverse Tining

Sustainability Considerations (10pts)

Describe what (if any) specific considerations were taken with regard to sustainability, including economic and environmental factors. This could be in the mixture, the use of energy-saving equipment or processes, recycling, environmental protective measures, streetscape or decorative measures, etc:

Specific considerations were taken to the steel shortage and the steel expense by using fiberglass dowels in dowel baskets which are used in the transverse joints. The roundabout is a decorative measure which was used at the intersection of 900 South 1100 East. Recycled Aggregate In Place was used as a sustainable process where the material is milled and then mixed together and placed as the base material after being treated with cement slurry which is directly under the pavement. This provides a solid base for the pavement and is an energy-saving process and an environmental friendly process by saving fuel and reducing emissions into the environment.

Innovation(10pts)

Describe any unique or innovative designs elements, materials employed, testing procedures, equipment solutions, or processes used on the project:

An innovative design element which was used on this project. besides the construction of the roundabout, was the construction and used of a "pop-up" of the roundabout. This helped the design team look at the possibility of placing a roundabout at the 900 South 1100 East intersection. It also helped the public see and use the "roundabout" with a small cost to the project. The "pop-up" was constructed of traffic cones and potted plants. Due to the cost of steel which had risen, the use of fiberglass dowels were considered and installed in the transverse joints instead of steel dowels. This allowed the work to progress much faster and made moving and placing the dowel baskets much easier for the contractor. The construction of the roundabout is an innovative design which improves mobility along 900 South. Roundabouts have helped to prevent congestion which reduces emissions.

Describe any unique problems encountered on the project and solutions that were used to overcome them:

The project called for installing raised crosswalks at the 5 legs of the roundabout. During design it was determined to be possible, but during construction it was determined that some of the raised crosswalks would not be possible on the east side of the roundabout on the downhill side. This was due to the steep slope of the roadway. The crosswalks were required to have a cross-slope of 2%. This resulted in not having a raised crosswalk on the approach from the east into the roundabout and a steep ramp after crossing the crosswalk.

Safety (5pts)

Were your crew and workers required to wear personal protective equipment (PPE)?
(Must be evident in pictures submitted with the project submittal):

Yes

No

Was an internal traffic control plan developed and employed?

Yes

No

Describe any temporary traffic control measures used to keep the work site safe from public traffic:

Type 3 barricades and other traffic devices were employed to maintain safe traffic movement throughout the project. A buffer zone was maintained to allow the traffic to pass at a safe

distance from the work being done. Roadways were closed to allow work to be completed at certain locations where traffic would have caused a safety hazard.

What other steps were taken to ensure safety for your crew and other jobsite workers?

Hard hats and orange vests were worn to provide worker visibility on the project. Flaggers were used in movement operations to help direct traffic around the work zones.

Public Relations (5pts)

Describe what (if any) specific steps were taken to ensure that those affected by the project were informed before, during, and after the project regarding the project status, potential delays, etc:

Before the project began, numerous community meetings were held to help inform the public of the ideas being considered. Salt Lake City held open houses at Tracy Aviary where we had plot maps of the area being affected and project renderings which residents could vote on. A "pop-up" was built at the 900 South 1100 East intersection to try and simulate the roundabout so that the residents could get a "feel" of the coming changes. The residents were very supportive of the "pop-ups". They said it helped them to visualize the roundabout and how it would feel. The other option was to tee Gilmer into 1100 East. This was also tested in the "pop-up". The Salt Lake City Civil Engagement and Public Relations team and Salt Lake City Transportation and Engineering worked hard getting feedback from the residents. During construction, every Friday of every week Jordan Valley distributed flyer to each business and home along the construction corridor telling them the activities that were planned to take place the following week. This helped to inform people to the upcoming construction events that were about to take place. Jordan Valley also spoke to every property owner and business before removing driveways to allow them to move vehicles prior to removing the driveway. Jordan Valley also gave the owners a timeline of when to expect to get back in their driveways. We were able to provide additional parking during construction to businesses when work was not being performed at that location. After the project was completed, the Salt Lake City Mayor held a ribbon cutting to celebrate the completion of the project.

The sections above must be completed to be considered for an award for the Utah ACPA Awards. If any portion of the application is not applicable to your project, you may leave that section blank. If you would like to be considered for the National ACPA Awards, please continue to complete the remaining categories below. The categories below are not required for the Utah ACPA Awards.

Project Schedule (5pts)

	START DATE (MM/DD/YYYY)		COMPLETION DATE (MM/DD/YYYY)	
	Scheduled	Actual	Scheduled	Actual
SCHEDULE FOR ENTIRE PROJECT	April 15, 2019	May 13, 2019	September 27, 2019	December 1, 2019
SCHEDULE FOR PAVING				

Were completion time incentives offered?

Yes No

If yes, were they earned?

Yes No
If Yes, Amount Earned \$

Were liquidated damages for late completion specified for the project?

Yes No
If Yes, Amount Assessed \$0.00

Please elaborate on any noteworthy details of the project schedule (including # of working days, unusual schedule challenges, weather issues, etc.):

During the construction of 900 South, a storm drain pipe was discovered to have corroded to the point that it began to collapse. This was not taken into consideration during design. Working with Salt Lake City Public Utilities, a new storm drain pipe was designed to replace the existing storm drain. This delayed the project by a few weeks. Another delay was at the beginning of the project when residents were upset about the loss of parking along the project due to the design of the roundabout and bulbouts along 900 South. The project was delayed to allow the resolution of the parking to take place. This resulted in the construction of additional cutback parking to be constructed along 900 South.

Concrete Materials (5pts)

How was the mixture supplied? Central Mix Plant

Mixture Type: Binary (W/Fly Ash)

Cement Type Used: 2 to 5

Fly Ash Used: Yes, Type F

Slay Cement Used: Yes No

Admixtures Employed: Poly-997, Micro-AE

Was the combined aggregate gradation optimized (i.e, using Shilstone)? Yes No

Please elaborate on any noteworthy details of the concrete materials:

Materials and concrete supplied by Staker Parsons.

Paving Process(10pts)

Describe each step of the concrete paving process. Please be specific in responding to each process listed below and discuss in detail the steps taken to ensure quality.

Base Preparation:

Full-Depth Reclamation using reclaimed aggregate and cement treated base using 4% cement by weight which was tilled into the base material. After 72 hours of curing, the base was then fractured using a vibratory roller and then pavement was placed.

Stringline or Stringless Grade/Elevation Control:

Concrete Forms

Concrete batching and hauling:

Concrete Plant and Ready Mix Truck

Placement method(s):

Pavement was placed using a roller screed and ready mix trucks.

Paving (slipform, fixed-form, RCC):

Fixed-form, paving was done next to existing curbing.

Finishing techniques:

Tined

Curing operations:

Used ASTM C 309 cure

Sawing operations:

Dry sawing and vacuuming up the dust

Additional / special steps taken during construction::

Quality Control and Testing (15pts)

Did you use control charts to monitor the materials during your paving operations?

Yes

No

If yes, what factors were monitored?

Did you monitor thickness results on the project?

Yes

No

If yes, what method was employed? Coring of the pavement

	Required	Average Achieved	Standard Deviation
Thickness	8 in.	8.15 in.	0.25 in.

*What strength measurement method was employed on the concrete? Compressive

	Required	Average Achieved	Standard Deviation
Strength	4000 psi	5910 psi	450 psi

Were incentives earned on strength?

Yes

No

Were disincentives earned on strength?

Yes No

Did you use a maturity testing on the concrete?

Yes No

If yes, for what did you use the testing? Other

Did you monitor air content of the concrete mixture on the project?

Yes No

If yes, what method was employed? Air Pot Testing

	Required	Average Achieved	Standard Deviation
Air Content	6 %	6.5 %	1.5 %

Did you use a real-time smoothness measuring system?

Yes No

If yes, what method was employed?

Did you measure/verify dowel alignment after paving? No

If yes, what method was employed?

Please describe results achieved:

Did you measure/verify tiebar location after paving? No

If yes, what method was employed?

Please describe results achieved:

For RCC only, did you perform density testing?

Yes No

If yes, what method was employed?

	Required	Average Achieved	Standard Deviation
Density	%	%	%

Please elaborate on any noteworthy or unusual details of the QA/QC testing for the project including other tests that were employed (unit weight, concrete temperature, etc.):

Smoothness (15pts)

Describe the smoothness measurement methods and results.

Smoothness Measurement Device: Profilograph with zero blanking band

Smoothness Specification Criteria (Straightedge, Maximum Profile Index, Blanking Band (0.0-in, 0.1-in, 0.2-in), Must Grind Areas, Incentive Programs, IRI, etc.): Blanking Band (0.0-in)

Were corrective measures taken to bring pavement within specified smoothness tolerances?

Yes No

If yes, average smoothness after corrective measures: Not yet completed

Was an incentive offered for smoothness?

Yes No

If yes, what percentage of the total available incentive was achieved?

Please elaborate on any aspects of the work environment that made achieving smoothness results difficult (i.e. a challenging grade, bridges, intersections, etc.):

Challenging grade on all parts of the project. The average grade on the project was 5%. Having a 5-leg roundabout at 900 South 1100 East intersection. Raised crosswalks at McClelland St. and all 5 legs of the roundabout. Numerous manholes and utility boxes. Center medians at the roundabout and at McClelland St.



UTAH ANNUAL AWARDS FOR EXCELLENCE IN CONCRETE PAVEMENT

2020

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Winners will be honored at ACPA Utah’s annual Workshop and invited to present their project in a special session of the workshop.

Project Name: Wild West Playground at Veterans Memorial Park

Project Location: 1825 W. 8000 S.

Please Indicate The Correct Project Category:

***Hover over the product category for a description**

- [Divided Highway \(Urban\)](#)
- [Divided Highways \(Rural\)](#)
- [State Roads](#)
- [County Roads](#)
- [Municipal Streets & Intersections \(<30,000 SY\)](#)
- [Municipal Streets & Intersections \(>30,000 SY\)](#)
- [Urban Arterials & Collectors](#)
- [Commercial Service & Military Airports](#)
- [Reliever & General Aviation Airports](#)
- [Concrete Pavement Restoration \(CPR\)](#)
- [Concrete Overlays \(Airports\)](#)
- [Concrete Overlays \(Highways\)](#)

- [Concrete Overlays \(Streets and Roads\)](#)
- [Industrial Paving](#)
- [Roller Compacted Concrete \(Industrial\)](#)
- [Roller Compacted Concrete \(Special Application\)](#)

General Contact Information

Concrete Paving Contractor	
Concrete Contractor's Representative:	Lionel Smith
Company:	City of West Jordan, Streets Division
Title:	Streets Supervisor
Address:	7960 S. 4000 W.
City, State, Zip:	West Jordan
Phone Number:	(801) 569-5700
Email Address:	Lionel.smith@westjordan.utah.gov

Design Engineer	
Engineer's Representative:	
Company:	
Title:	
Address:	
City, State, Zip:	
Phone Number:	
Email Address:	

Project Owner	
Owner Representative:	City of West Jordan
Company:	
Title:	
Address:	
City, State, Zip:	
Phone Number:	
Email Address:	

*Contact Person	
Contact Person:	Tim Peters
Company:	City of West Jordan
Title:	Public Services Manager
Address:	7960 S. 4000 W.
City, State, Zip:	West Jordan
Phone Number:	(801) 381-8112

Email Address:

Tim.peters@westjordan.utah.gov

- * Notification of the results and plaque proofs will be sent to the contact person listed above.
- * All contact info is mandatory.

Executive Summary

Use the executive summary to provide a brief overview of your project. The summary should emphasize the highlights of your project, drawing the attention of judges to what's most important or noteworthy. Specific project details or technical explanations should be reserved for the various scored sections of the submittal. While this section is not scored, completion is mandatory for award consideration.

The original Wild West Jordan Playground was built in 2005 and was weathered by time and worn out by love. Extremely heavy use and our severe climate wore it to the point of being unsafe. In short, it was "loved to death." Knowing how beloved this iconic feature was within the community as well as its history as a community-funded and built project, city officials hired contractors to complete a playground assessment and a safety audit. They concluded that the most fiscally responsible and safest option for children would be to rebuild the playground with modern materials and an all-abilities-friendly design – all while incorporating the Wild West theme.

The decision to rebuild was not made lightly. This playground was a city icon that brought countless hours of joy and laughter to thousands of children. A town hall meeting was held November 12th and was streamed on the West Jordan City Hall Facebook Page. The playground was a community-driven labor of love – and we want the new park to be that as well, so we asked for input on the types of amenities to include via a survey that was conducted last November/December. From this survey, the playground designer designed an all-abilities, state-of-the-art playground for children to enjoy for many years to come.

The Concrete Crew in the Streets Division of Public Works completed the grading, the playground and rubberized surface was installed by a contractor. Lionel Smith and the Concrete Crew graded the baserock and placed the sidewalk around the perimeter. Much of the project was a "design-build" and grades were adjusted in the field. The concrete crew also placed the concrete for the footing for the new sign and then installed the sign itself.

The project itself wasn't terribly challenging for our Concrete crew, but maintaining a tight schedule and working with other parties made it challenging. In addition - this was work that was in addition to their typical assignments of trip hazard removal, sidewalk and gutter replacement, mudpumping, etc.

There was a rush on grading and concrete placement at the new playground at Veterans Memorial Park as our staff had to complete their work in particular "windows" of time after work by others was completed and prior to the next phase. The work included:

- Installing the entrance sign. Sign weight estimated at 7000 lbs.
- o Bluestake/utility locating
- o Needed staking for center of 24" holes with a minimum of two offsets each
- o Needed to rent a loadall and obtain straps – load estimated at 7000lbs.
- o Two holes, 24" diameter x 5' deep (vacuum excavated)
- o Sign to be assembled onsite, set into place and installed with "quick set"/high early concrete – however; the sign will need to be held in place for 24 – 48 hours
- Grading the artificial turf area (roughly 30' x 100')
- o Finished base rock grade is 1.5" below finished grade.
- o Plans show 2.1% slope from top edge of walk for 30', which equals 0.63' or 7-1/2"~ fall from top edge of walk to top of mow band.
- Grading, forming and pouring a concrete mow strip 12" x 6" x about 130 feet in length
- First concrete pour at the entrance, two 5" thick pads which are 9' x 12' with fixtures set in place adjacent to sign post
- Second concrete pour at the entrance, (protect the fixtures set with first pour and then pour 4" thick pad which is about 35' x 20')
- Grade and pour north sidewalk connection between existing sidewalk and new playground

Project Scope (20pts)

Project Item	Total
Project Cost	\$
Concrete Paving, Repair, or RCC Cost	\$6000
Project Length	ml
Total Square Yards of Paving	yd2
Total Lane Miles	ml
Number of Intersections/Interchanges Within Project	
Number of Bridges Along the Route	
Number of Businesses Along the Route	
Phases or Paving Segments Employed	

Work zone traffic volume that was managed during construction (vehicles/day, trucks/day)?

How was this traffic managed during construction (lane reductions, staging, phases, etc.)?

Utility Work Required

Sewer:

Yes

No

Water:

Yes

No

Telephone:

Yes

No

Cable:

Yes

No

Gas:

Yes

No

*Click on gray box for drop-down menu

*Subgrade Type:

Gravel

*Subgrade Stabilization Required:

None

*Subbase Type:

Dense-Graded Gravel or Crushed Stone

Subbase Thickness:

8 in.

*Pavement Type:

Jointed Plain

Pavement Thickness:

5 in.

Dowels Joints:

Yes

No

Joint Spacing:

Varied ft.

*Shoulder Type:

None

*Curb: No

*Surface Texture Type: Broom

Sustainability Considerations (10pts)

Describe what (if any) specific considerations were taken with regard to sustainability, including economic and environmental factors. This could be in the mixture, the use of energy-saving equipment or processes, recycling, environmental protective measures, streetscape or decorative measures, etc: The City's concrete crew did much of the work (including grading, concrete flatwork, installing the sign, installing sign fixtures as a "cost saving measure" so more funding could be spent on the design and the components of the playground.

Innovation(10pts)

Describe any unique or innovative designs elements, materials employed, testing procedures, equipment solutions, or processes used on the project: Obviously, our staff does not typically set signs. In this case, they had to set a sign which had an estimated weight of 7000 lbs. We were provided a design for the footings, but staff had to obtain equipment and straps for that load, so there was research which went into those items and safety was a top priority.

Describe any unique problems encountered on the project and solutions that were used to overcome them: Working with a tight deadline and other parties/contractors. Communication was key to stay on schedule as we had to make certain we had resources (staff and material) available for the window of time when we had to complete our part.

Safety (5pts)

Were your crew and workers required to wear personal protective equipment (PPE)?
(Must be evident in pictures submitted with the project submittal):

Yes

No

Was an internal traffic control plan developed and employed?

Yes

No

Describe any temporary traffic control measures used to keep the work site safe from public traffic: Site was fenced off and secured. The site was in a park - so even though it had a fence around it, it had to be secured and monitored.

What other steps were taken to ensure safety for your crew and other jobsite workers?
Tailgate meeting and enforcement of PPE's in the work area

Public Relations (5pts)

Describe what (if any) specific steps were taken to ensure that those affected by the project were informed before, during, and after the project regarding the project status, potential delays, etc: Weekly site meeting with the designer, contractor and other Divisions. E-mail "groups" were established to keep not only those currently working on a particular phase of the project informed, but others who might be involved in the next phase. This helped keep all stakeholders informed of contractor delays and weather delays.



UTAH ANNUAL AWARDS FOR EXCELLENCE IN CONCRETE PAVEMENT

2020

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Winners will be honored at ACPA Utah’s annual Workshop and invited to present their project in a special session of the workshop.

Project Name: I-84; MP 81.48 - 87.64 Preservation High Volume

Project Location: I-84 between Riverdale Road and US-89

Please Indicate The Correct Project Category:

***Hover over the product category for a description**

- [Divided Highway \(Urban\)](#)
- [Divided Highways \(Rural\)](#)
- [State Roads](#)
- [County Roads](#)
- [Municipal Streets & Intersections \(<30,000 SY\)](#)
- [Municipal Streets & Intersections \(>30,000 SY\)](#)
- [Urban Arterials & Collectors](#)
- [Commercial Service & Military Airports](#)
- [Reliever & General Aviation Airports](#)
- [Concrete Pavement Restoration \(CPR\)](#)
- [Concrete Overlays \(Airports\)](#)
- [Concrete Overlays \(Highways\)](#)

- [Concrete Overlays \(Streets and Roads\)](#)
- [Industrial Paving](#)
- [Roller Compacted Concrete \(Industrial\)](#)
- [Roller Compacted Concrete \(Special Application\)](#)

General Contact Information

Concrete Paving Contractor	
Concrete Contractor's Representative:	Daniel Bird
Company:	Geneva Rock Products
Title:	Project Manager
Address:	1225 Stock Road
City, State, Zip:	Ogden, Utah, 84401
Phone Number:	801-360-5513
Email Address:	dabird@genevarock.com

Design Engineer	
Engineer's Representative:	UDOT Region 1, Rumi Marsh
Company:	UDOT
Title:	
Address:	166 West Southwell Street
City, State, Zip:	Ogden, Utah, 84404
Phone Number:	801 620-1644
Email Address:	rumimarsh@utah.gov

Project Owner	
Owner Representative:	UDOT
Company:	
Title:	
Address:	166 West Southwell Street
City, State, Zip:	Ogden, Utah, 84404
Phone Number:	
Email Address:	

*Contact Person	
Contact Person:	PJ Roubinet
Company:	UDOT
Title:	Resident Engineer
Address:	166 West Southwell Street
City, State, Zip:	Ogden, Utah, 84404
Phone Number:	801-648-8818
Email Address:	proubinet@utah.gov

- * Notification of the results and plaque proofs will be sent to the contact person listed above.
- * All contact info is mandatory.

Executive Summary

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The project removed and replaced 6,443 SY of full depth slab replacement using standard concrete. Removed and replaced 133 CY of full depth slabs on ramps using Rapid Setting Concrete. 230 SY of partial depth repairs were also completed. After all the rehabilitation was done to the PCCP the HMA shoulders were milled and filled and 177,739 SY of concrete grinding was done. Grooved in pavement markings were applied.

The project smoothness was greatly increased. The average percent improvement was 28%

Project Scope (20pts)

Project Item	Total
Project Cost	\$5,110,937
Concrete Paving, Repair, or RCC Cost	\$\$2,148,660.04
Project Length	12.32ml
Total Square Yards of Paving	6,576yd ²
Total Lane Miles	24.64ml
Number of Intersections/Interchanges Within Project	3
Number of Bridges Along the Route	7
Number of Businesses Along the Route	0
Phases or Paving Segments Employed	3

Work zone traffic volume that was managed during construction (vehicles/day, trucks/day)?

From UDOT data about 21,000 AADT

How was this traffic managed during construction (lane reductions, staging, phases, etc.)?

This section of I-84 is two lanes and had low enough volumes that one lane would accommodate traffic during construction. Traffic was pushed into one lane during construction. During ramp work at night ramp closures and detours were used.

Utility Work Required

Sewer: Yes No

Water: Yes No

Telephone: Yes No

Cable: Yes No

Gas: Yes No

*Click on gray box for drop-down menu

*Subgrade Type: None/Clay

*Subgrade Stabilization Required: None

*Subbase Type: Dense-Graded Gravel or Crushed Stone

Subbase Thickness: N/A in.

*Pavement Type: Jointed Plain

Pavement Thickness: 9-10 in.

Dowels Joints: Yes No

Joint Spacing: Match Existing ft.

***Shoulder Type:** Asphalt

***Curb:** No

***Surface Texture Type:** Diamond Ground

Sustainability Considerations (10pts)

Describe what (if any) specific considerations were taken with regard to sustainability, including economic and environmental factors. This could be in the mixture, the use of energy-saving equipment or processes, recycling, environmental protective measures, streetscape or decorative measures, etc: None that I can think of.

Innovation(10pts)

Describe any unique or innovative designs elements, materials employed, testing procedures, equipment solutions, or processes used on the project: In order to reduce downtime on the ramps to and from I-84 and US-89 rapid setting concrete was used. Wider striping with the center skips having greater reflectivity at night was used.

Describe any unique problems encountered on the project and solutions that were used to overcome them: Due to this project using standard PCCP to replace the panels on I-84 protection of the panels was a concern. Geneva Rock used plastic flat delineators to mark curing panels. Part of this project was to mill and fill a structure over I-84. The underside of the structure showed signs of age and the project team wanted to reduce time it would take to mill and fill the bridge surface. It was decided to close the structure on a weekend night and mill and pave the entire deck in one shift. This required a large PI effort and coordination with South Weber City. The underside was monitored and if pieces of the deck were to fall away I-84 could be shut down using the on and off ramps as detours. Fortunately the deck was fine and no detours were needed. However having that option took away lots of stress.

Safety (5pts)

Were your crew and workers required to wear personal protective equipment (PPE)?
(Must be evident in pictures submitted with the project submittal):

Yes

No

Was an internal traffic control plan developed and employed?

Yes

No

Describe any temporary traffic control measures used to keep the work site safe from public traffic: A traffic control plan with detours was developed by an engineer working for the contractor. The plan was reviewed and accepted for use by UDOT.

What other steps were taken to ensure safety for your crew and other jobsite workers? Pre shift safety meetings were conducted by the contractor each day. Weekly meetings where safety was discussed were conducted. Each member of the team would bring up any safety concerns they had and those would be addressed.

Public Relations (5pts)

Describe what (if any) specific steps were taken to ensure that those affected by the project were informed before, during, and after the project regarding the project status, potential delays, etc: Part of this project included the removal of almost 300 dead trees. Many of these trees were near homes along the corridor. PI with UDOT passed out flyers and met with home owners who would be affected by the tree removal and construction noise. UDOT worked with South Weber City to coordinate detours. This project needed to re-surface a bridge that connected residents from the north and south sides of I-84. In order to allow for a possible detour of I-84 onto the on and off ramps, the structure (Adams Ave) needed to be closed. This was a large PI effort to get the word out for the work and detours. PI worked with UDOT and South Weber City to get notices on websites and social media. The UDOT TOC was also notified and assisted with messaging on overhead message signs. During ramp closures the public was notified via websites, social media, email, and portable message signs. During closures detours were in place.



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Project Name: Repair Runway, Shoulders, and Lighting

Project Location: Hill AFB, UT

Please Indicate The Correct Project Category:

***Hover over the product category for a description**

- [Divided Highway \(Urban\)](#)
- [Divided Highways \(Rural\)](#)
- [State Roads](#)
- [County Roads](#)
- [Municipal Streets & Intersections \(<30,000 SY\)](#)
- [Municipal Streets & Intersections \(>30,000 SY\)](#)
- [Urban Arterials & Collectors](#)
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- [Concrete Overlays \(Streets and Roads\)](#)
- [Industrial Paving](#)
- [Roller Compacted Concrete \(Industrial\)](#)
- [Roller Compacted Concrete \(Special Application\)](#)

General Contact Information

Concrete Paving Contractor	
Concrete Contractor's Representative:	Sammuel Syphrett
Company:	Geneva Rock Products
Title:	Project Engineer
Address:	1565 W 400 N
City, State, Zip:	Orem, Utah, 84057
Phone Number:	801-380-4011
Email Address:	ssyphrett@genevarock.com

Design Engineer	
Engineer's Representative:	Bryan Keas
Company:	Jacob's Engineering
Title:	Civil Engineer - Aviation
Address:	1999 Bryan Street, Suite 1200
City, State, Zip:	Dallas, Texas 75201
Phone Number:	720-286-1290
Email Address:	bryan.keas@jacobs.com

Project Owner	
Owner Representative:	Paul Waite
Company:	75 CEG/CENME
Title:	Chief, Project Execution Support
Address:	57133 Lahm Lane
City, State, Zip:	Hill AFB, Utah 84056
Phone Number:	801-777-0584
Email Address:	paul.waite.2@us.af.mil

*Contact Person	
Contact Person:	Sammuel Syphrett
Company:	Geneva Rock Products
Title:	Project Engineer
Address:	1565 W 400 N
City, State, Zip:	Orem, Utah, 84057
Phone Number:	801-380-4011
Email Address:	ssyphrett@genevarock.com

- * Notification of the results and plaque proofs will be sent to the contact person listed above.
- * All contact info is mandatory.

Executive Summary

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The project consisted of the repair of the existing runway, shoulders, and lighting. The project was executed in 5 phases over the course of the year. Following the strict UFGS specifications, there were many hurdles to overcome throughout the project. Before mainline PCC paving could commence, approval of a PCCP Test Section had to take place. After addressing some minor concerns, mainline paving took place six days after the test section. The panels that were repaired on the runway were 25' x 25' and 100 percent reinforced with #4 rebar. A Gomaco Placer and Paver were utilized to place the concrete for most of the project, other areas were hand placed. Straightedge testing procedures were used in the place of a California Profilograph, must grinds were anything greater than 0.4" with no abrupt change greater than 0.25" were required. Minimal diamond grinding operations took place to correct a handful of areas that were out of tolerance. Thickness tolerances were met, plan grades were achieved and governed by a 0.5" tolerance, and compressive and flexural strengths were met. Strict quality control measures on materials were followed on a daily basis to ensure the government was receiving the highest quality product. Timelines had to be met to open certain segments of the runway to allow normal base operations to commence. Working with airfield management, the project owners, and their representatives helped meet those deadlines. With these repairs to the runway, normal Hill Air Force Base operations can continue.

Project Scope (20pts)

Project Item	Total
Project Cost	\$44,615,400
Concrete Paving, Repair, or RCC Cost	\$2,561,071
Project Length	ml
Total Square Yards of Paving	15,840 yd2
Total Lane Miles	ml
Number of Intersections/Interchanges Within Project	0
Number of Bridges Along the Route	0
Number of Businesses Along the Route	0

Work zone traffic volume that was managed during construction (vehicles/day, trucks/day)?
N/A

How was this traffic managed during construction (lane reductions, staging, phases, etc.)?
Phases

Utility Work Required

Sewer: Yes No

Water: Yes No

Telephone: Yes No

Cable: Yes No

Gas: Yes No

*Click on gray box for drop-down menu

*Subgrade Type: None/Clay

*Subgrade Stabilization Required: None

*Subbase Type: Other

Subbase Thickness: 6 in.

*Pavement Type: Jointed Plain

Pavement Thickness: 15 in.

Dowels Joints: Yes No

Joint Spacing: 25 ft.

*Shoulder Type: Asphalt

*Curb: No

*Surface Texture Type: Burlap Drag

Sustainability Considerations (10pts)

Describe what (if any) specific considerations were taken with regard to sustainability, including economic and environmental factors. This could be in the mixture, the use of energy-saving equipment or processes, recycling, environmental protective measures, streetscape or decorative measures, etc:

Innovation(10pts)

Describe any unique or innovative designs elements, materials employed, testing procedures, equipment solutions, or processes used on the project:

Describe any unique problems encountered on the project and solutions that were used to overcome them:

Safety (5pts)

Were your crew and workers required to wear personal protective equipment (PPE)?
(Must be evident in pictures submitted with the project submittal):

Yes

No

Was an internal traffic control plan developed and employed?

Yes

No

Describe any temporary traffic control measures used to keep the work site safe from public traffic:

What other steps were taken to ensure safety for your crew and other jobsite workers?

Public Relations (5pts)

Describe what (if any) specific steps were taken to ensure that those affected by the project were informed before, during, and after the project regarding the project status, potential delays, etc: Weekly Coordination Meetings were held.