Submitting an Award Worthy Project

Concrete Paving Association of Minnesota

Annual Concrete Paving Workshop

Concrete Pavements:
"A Better Way"

The Park Event Center ● Waite Park, Minnesota

Matthew (Matt) Zeller, PE

Concrete Paving Association of MN

CONCRETE PAVING ASSOCIATION OF MINNESOTA CPAM

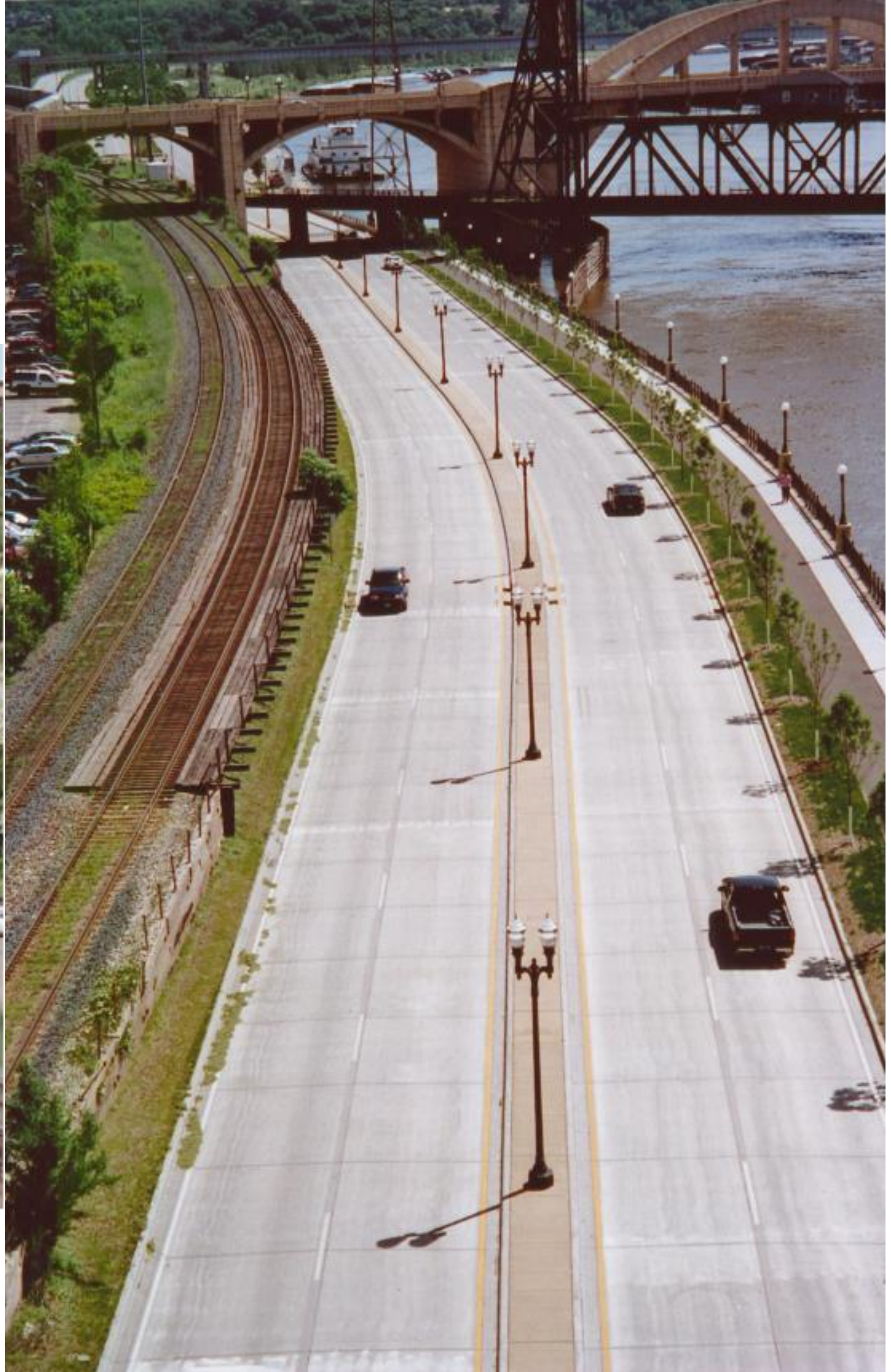
Some Previous National Award Winners

2003	Concrete Pavement Restoration (CPR)	SILVER	S.A.P. No. 55-625-17, County State-Aid Highway 25	Olmsted County
2003	County Roads	SILVER	S.A.P. No. 55-608-11, County State-Aid Highway 8	Olmsted County
2003	Urban Arterials & Collectors	GOLD	S.P. No. 6933-77, Mesaba Avenue (Trunk Highway 194)	Duluth
2004	County Roads	GOLD	S.A.P. 55-625-19, County State-Aid Highway 25 (16th St. SW)	Olmsted County
2004	Concrete Pavement Restoration (CPR)	SILVER	Oakland Avenue West Concrete Rehabilitation	Austin
2004	Best Street	GOLD	Project 02-P-1200, Shepard Road – Ontario Street to Jackson Street	City of St. Paul
2004	Urban Arterials & Collectors	GOLD	Project 02-P-1200, Shepard Road – Ontario Street to Jackson Street	City of St. Paul
2004	Commercial Service & Military Airports	SILVER	Runway 4/22 Reconstruction, Segment 3, Minneapolis-St. Paul International Airport	Minneapolis-St. Paul
2004	Overlays	SILVER	U.S. Trunk Highway 10 Unbonded Overlay, S.P. 7702-41, Motley to Staples	Todd County
2006	State Roads	SILVER	3rd Avenue Reconstruction Project	Alexandria
2006	County Roads	GOLD	CSAH 9 - Unbonded Concrete Overlay	Olmsted County
2006	Commercial Service & Military Airports	GOLD	Runway 17-35 Construction at Minneapolis-St. Paul International Airpot	Minneapolis
2006	Divided Highways - Urban	SILVER	ROC 52 (Mn/DOT SP 5502-85, Reconstruction of US 52)	Rochester
2006	Commercial Service & Military Airports	GOLD	Runway 17-35 Construction at Minneapolis-St. Paul International Airpot	Minneapolis

- 14 winners in 3 years

TH 194 / Mesaba Ave

Shepard Road



MSP 4-22 Phase 3

TH 10 Motley to Staples

ROC 52

MSP 17-35

Some Previous National Award Winners

2008	Urban Arterials & Collectors	GOLD	Highway 10/61 and Jamaica Ave. Roundabout Interchange	City of Cottage Grove
2008	Reliever & General Aviation Airports	SILVER	Mankato Regional Airport Runway 15-33 Reconstruction & Extension	Mankato
2010	Municipal Streets & Intersections (<30,000 SY)	SILVER	Woodbridge Neighborhood Pervious Concrete Construction	Shoreview
2011	County Roads	SILVER	CSAH 34 in Owatonna, MN	Steele County
2011	County Roads	GOLD	CSAH 52 Unbonded Overlay, Clay County, MN	Clay
2019	Overlays (Highways)	SILVER	MN Hwy. 63 Fiber-Reinforced Overlay, Rochester-Zumbro Falls, MN	Rochester-Zumbro Falls
2021	County Roads	SILVER	County State Aid Highway 1	Fillmore County
2022	Overlays (Streets and Roads)	GOLD	County State Aid Highway (CSAH) 13 Concrete Overlay; Nicollet County, Minnesota	Nicollet County

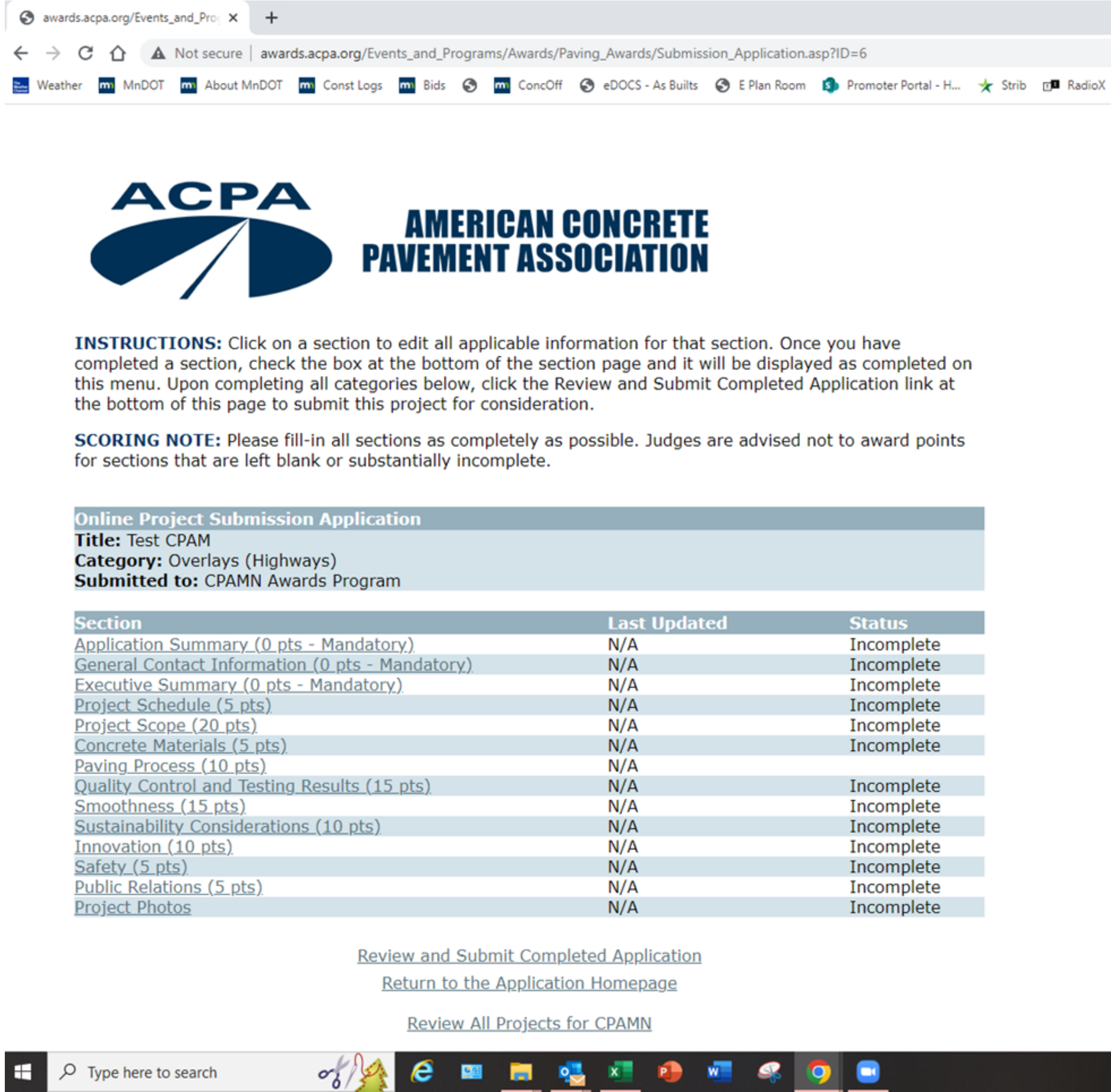
- 8 winners in 14 years

Minnesota is Considered a Leader in Concrete Pavements

- Answer all the questions and expand on your answers
- Exploit what is ‘normal’ for us
  - w/c ratio
  - Smoothness
  - Aggregate gradation
  - Aggregate quality
- Production rates
- Traffic Control
- Opening Strengths

Now Using ACPA Submittal

- One submittal for both MnDOT/CPAM and ACPA
- Process not long or cumbersome



awards.acpa.org/Events_and_Pro

Not secure | awards.acpa.org/Events_and_Programs/Awards/Paving_Awards/Submission_Application.asp?ID=6

Weather MnDOT About MnDOT Const Logs Bids ConcOff eDOCS - As Builts E Plan Room Promoter Portal - H... Strib RadioX

ACPA AMERICAN CONCRETE PAVEMENT ASSOCIATION

INSTRUCTIONS: Click on a section to edit all applicable information for that section. Once you have completed a section, check the box at the bottom of the section page and it will be displayed as completed on this menu. Upon completing all categories below, click the Review and Submit Completed Application link at the bottom of this page to submit this project for consideration.

SCORING NOTE: Please fill-in all sections as completely as possible. Judges are advised not to award points for sections that are left blank or substantially incomplete.

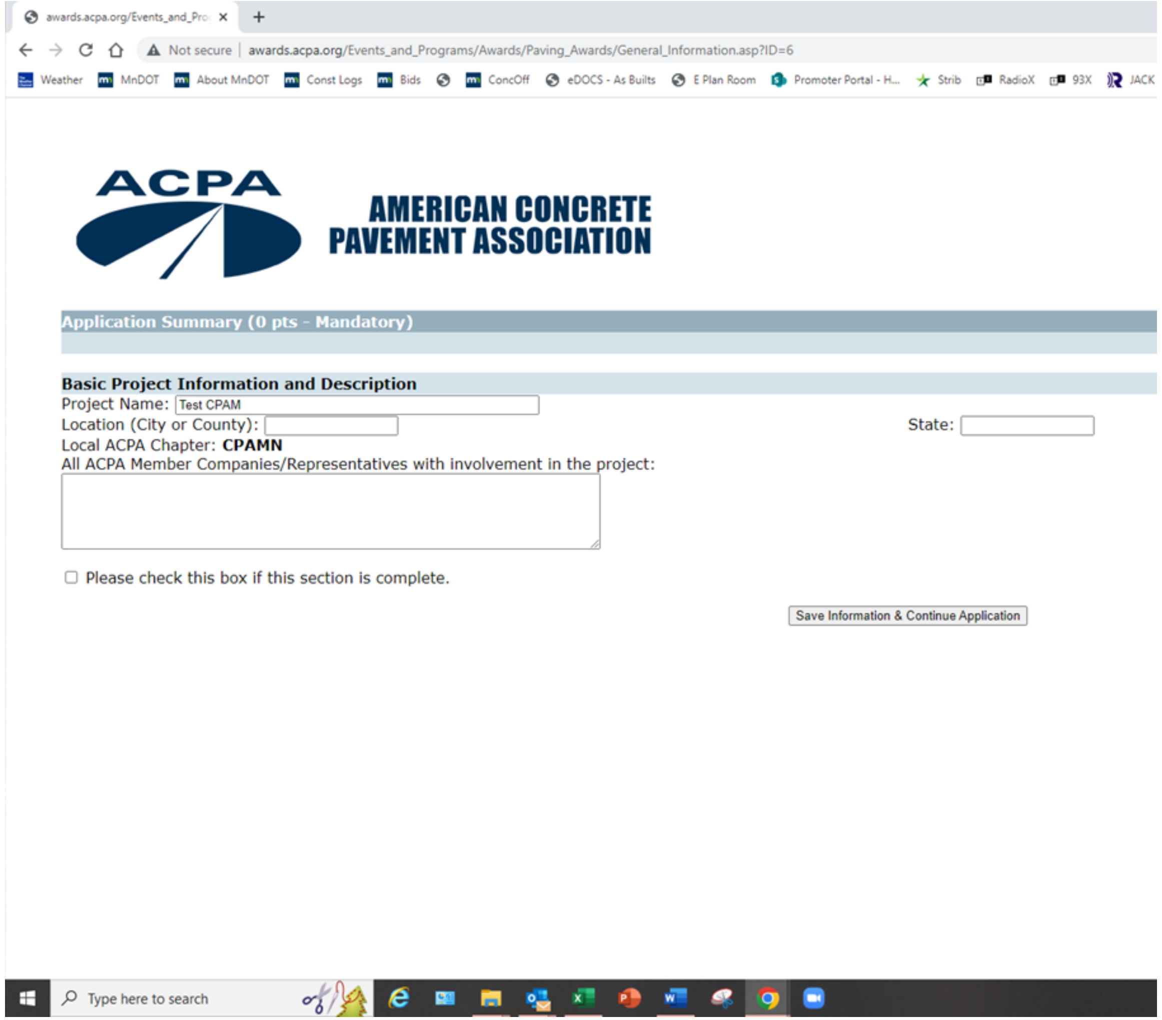
Online Project Submission Application
Title: Test CPAM
Category: Overlays (Highways)
Submitted to: CPAMN Awards Program

Section	Last Updated	Status
Application Summary (0 pts - Mandatory)	N/A	Incomplete
General Contact Information (0 pts - Mandatory)	N/A	Incomplete
Executive Summary (0 pts - Mandatory)	N/A	Incomplete
Project Schedule (5 pts)	N/A	Incomplete
Project Scope (20 pts)	N/A	Incomplete
Concrete Materials (5 pts)	N/A	Incomplete
Paving Process (10 pts)	N/A	
Quality Control and Testing Results (15 pts)	N/A	Incomplete
Smoothness (15 pts)	N/A	Incomplete
Sustainability Considerations (10 pts)	N/A	Incomplete
Innovation (10 pts)	N/A	Incomplete
Safety (5 pts)	N/A	Incomplete
Public Relations (5 pts)	N/A	Incomplete
Project Photos	N/A	Incomplete

Review and Submit Completed Application
Return to the Application Homepage
Review All Projects for CPAMN

Type here to search

Online Submittal



awards.acpa.org/Events_and_Programs/Awards/Paving_Awards/General_Information.asp?ID=6

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Application Summary (0 pts - Mandatory)

Basic Project Information and Description

Project Name: Test CPAM

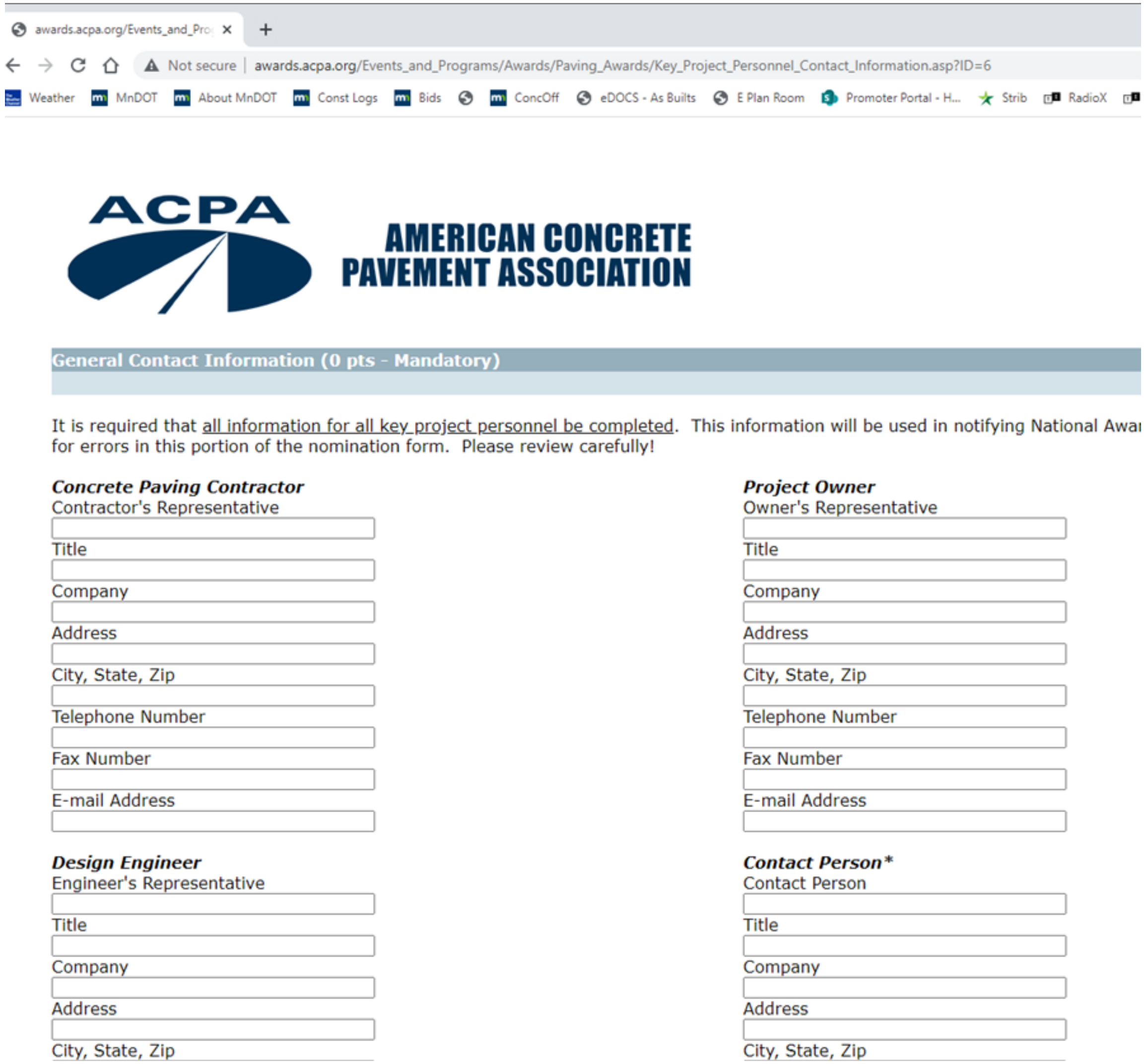
Location (City or County): State:

Local ACPA Chapter: **CPAMN**

All ACPA Member Companies/Representatives with involvement in the project:

Please check this box if this section is complete.

Save Information & Continue Application



awards.acpa.org/Events_and_Programs/Awards/Paving_Awards/Key_Project_Personnel_Contact_Information.asp?ID=6

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General Contact Information (0 pts - Mandatory)

It is required that all information for all key project personnel be completed. This information will be used in notifying National Awa for errors in this portion of the nomination form. Please review carefully!

Concrete Paving Contractor

Contractor's Representative

Title

Company

Address

City, State, Zip

Telephone Number

Fax Number

E-mail Address

Project Owner

Owner's Representative

Title

Company

Address

City, State, Zip

Telephone Number

Fax Number

E-mail Address

Design Engineer

Engineer's Representative

Title

Company

Address

City, State, Zip

Contact Person*

Contact Person

Title

Company

Address

City, State, Zip

Be Specific and Include Details

- What may seem normal or minimal to us may be extraordinary to others
- Traffic control
  - Considering the traveling public
  - Safety of workers
- Innovation
  - w/c ratio
  - Smoothness techniques
  - Opening Strength
  - Base/PASSRC/fabric

Understand the Scoring

- Don't skimp on the big point discussions

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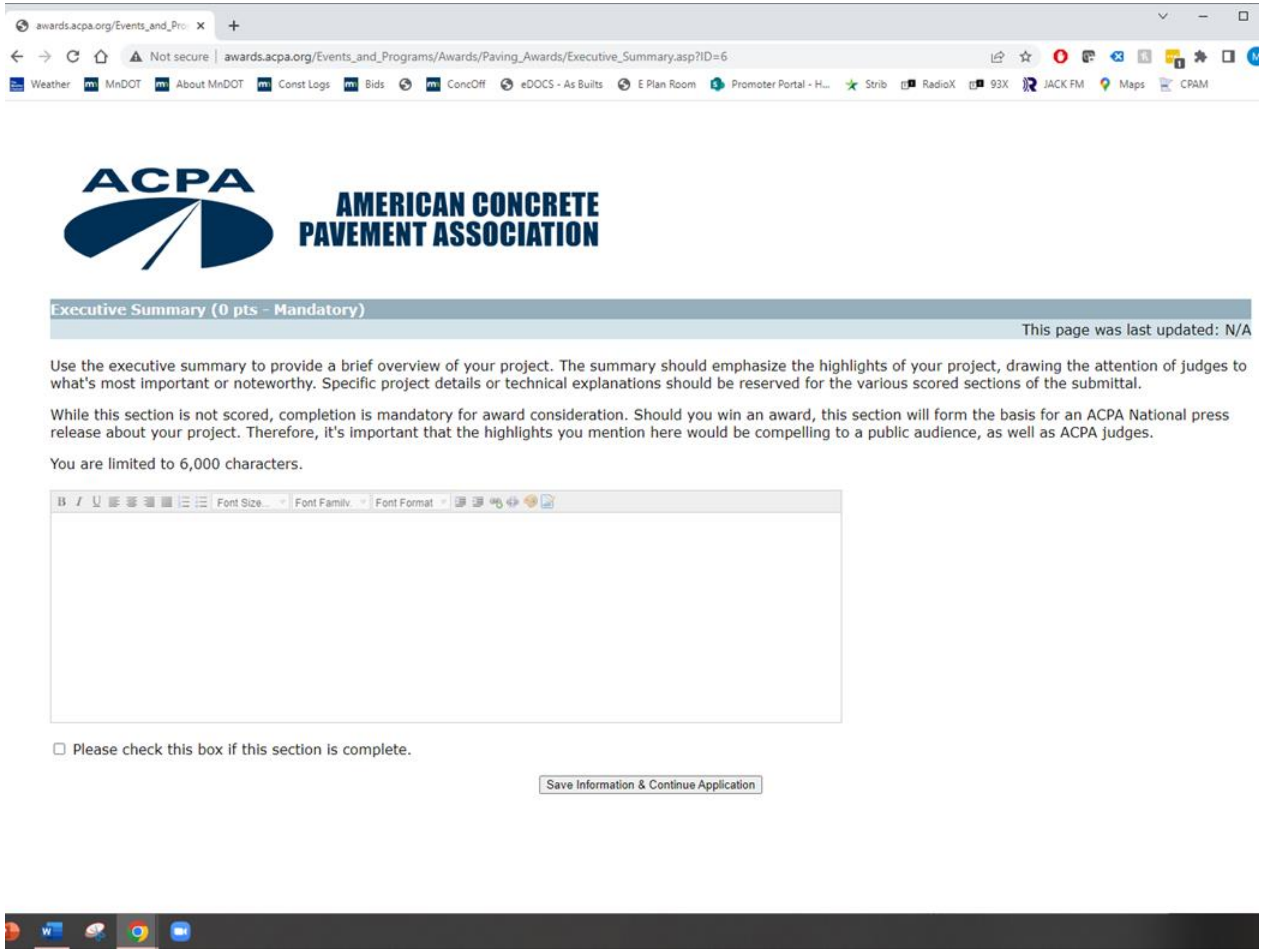
General Contact Information (0 pts - Mandatory)	N/A	Incomplete
Executive Summary (0 pts - Mandatory)	N/A	Incomplete
Project Schedule (5 pts)	N/A	Incomplete
Project Scope (20 pts)	N/A	Incomplete
Concrete Materials (5 pts)	N/A	Incomplete
Paving Process (10 pts)	N/A	
Quality Control and Testing Results (15 pts)	N/A	Incomplete
Smoothness (15 pts)	N/A	Incomplete
Sustainability Considerations (10 pts)	N/A	Incomplete
Innovation (10 pts)	N/A	Incomplete
Safety (5 pts)	N/A	Incomplete
Public Relations (5 pts)	N/A	Incomplete
Project Photos	N/A	Incomplete

Tell the Story

- Use Executive Summary as opportunity to summarize project



Project Scope
<u>20 PTS!!!</u>

Give details, answer all questions

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Project Scope (20 pts)

Use the fields below to describe the scope of the project. There is a comment box at the end for you to elaborate on any special considerations or highlights.

Project Item	**Total**
Project Cost	$
Concrete Paving, Repair, or RCC Cost	$
Project Length	mi
Total Square Yards of Paving	yd²
Total Lane Miles	mi
Number of Intersections/Interchanges Within Project	
Number of Bridges Along the Route	
Number of Businesses Along 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

Other

Subgrade Type — Select Item

If other, please describe:

Subgrade Stabilization Required — Select Item

If other, please describe:

Subbase Type — Select Item

If other, please describe:

Subbase Thickness	in.	
Pavement Type	Select Item	
Pavement Thickness	in.	
Dowels Joints	○ Yes	○ No
Joint Spacing	ft.	
Shoulder Type	Select Item	
Curb	Select Item	

Paving Process

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Paving Process (10 pts)

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:

Quality Control

- Always discuss the efforts and partnering with the various testing
- Always include a discussion of the incentives and how they add life to the pavement and give the traveling public a better product as well as more bang for the buck

Quality Control

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Quality Control and Testing Results (15 pts)

Describe the QC/QA testing applied on the project. Do not submit actual test result reports. Use the following for describing the methods/results.

Did you use control charts to monitor the materials during your paving operations? ○ Yes ○ No

If yes, what factors were monitored?

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Did you monitor thickness results on the project? ○ Yes ○ No

If yes, what method was employed?

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Please provide:	Required	Average Achieved	Standard Deviation
Thickness	in	in	in

What strength measurement method was employed on the concrete? Select Item

Please provide:	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? Select Item

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If other, please describe:

Smoothness

- Discuss the process used by the contractor
  - Dual stingline
  - Stringless
  - Extra surveying
  - Staking/spacing
  - Realtime smoothness
- Talk about mix design and efforts to use a workable mix that adds to smoothness
- Include plant location and trucks to ensure uniform delivery

Smoothness

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Smoothness (15 pts)

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.):

Sustainability

- Relatively new
- Stiffer pavements use less fuel; less fuel less CO_2
- Smoother pavements use less fuel
- Longer lasting pavements save natural resources (aggregates) in long run
- Easily return smoothness to 'like new' with diamond grinding ensuring smoothness savings and minimizing using natural resources (aggregates) and more binder

Sustainability

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Sustainability Considerations (10 pts)

Describe what (if any) specific considerations were taken with regard to sustainability, including economic and environmental factors. This could be in the mixtu
recycling, environmental protective measures, streetscape or decorative measures, etc.

You are limited to 6,000 characters.

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☐ Please check this box if this section is complete.

Save Information & Continue Application

Innovation

- w/c ratio
- Smoothness techniques
- Opening Strength
- Base/PASSRC/fabric

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Innovation (10 pts)

Use the fields below to elaborate on any innovations employed on this project.

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

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

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☐ Please check this box if this section is complete.

Save Information & Continue Application

Safety & PR

- Not big points, but…
- Both go a long way in telling the story
- Small things count

PHOTOS

- Lots of photos
  - Subgrade
  - Base
  - Paving
  - Curing
  - Sawing
  - Loading
  - Open to traffic
  - Public use
  - Partnering
  - Innovation
- Photos are cheap to develop nowadays


BARKO 160A
PCI


5/23/2000


70
40


7/1/2002


7/1/2002


7/1/2002


7/1/2002


7/1/2002


7/1/2002


DO NOT
ENTER
ONE WAY
RIGHT
TURN
LANE

Final Thoughts

- Discuss challenges and solutions
- Highlight positives and partnering
- Sustainability and Resilience are big drivers
- Caption photos so reviewer knows exactly what you are showing
- Collaborate between Agency/Engineer/Contractor
  - Share information
- A few hours of time is well worth the National exposure
- Let's get back to bringing several National Awards home annually