

The Cement Association of Canada & Concrete Alberta Proudly Present



**Concrete Pavement Design and Maintenance
Principles and Contemporary Approaches to Meet the Needs of
Today's Owners/Specifiers & Designers**

New Dates November 22nd Red Deer and November 23rd Edmonton 2022!

Same Venues

The Cement Association of Canada, in partnership with Concrete Alberta, is pleased to present two consecutive days of Concrete Pavement Design and Maintenance Principles and Design Software Workshops.

This third installment of the Sustainable Roadways Series Kicks off in Red Deer, AB with an Owner's perspective of selecting sustainable road designs and transitions through a review of the principle building blocks to achieve durable sustainable pavements. The second half of the day covers the approaches to developing a concrete maintenance plan and provides guidance on what to monitor and when to implement measures citing local examples including the 67 St Roundabout. We'll close the day, with an outline from Alberta Transportation of what they want included in a concrete alternate pavement design submission. This year, speakers will include pavement project owners, as well as, members from the organizations that have conducted and authored a number of studies and publications on sustainable pavement design and who have provided input into the development and evolution of today's pavement design software.

The second day's workshop takes place in Edmonton and gives attendees the opportunity to kick the tires of some of today's contemporary pavement design software. We start with a review of concrete pavement design details and their effect on the pavement thickness design. Next we'll walk you through the thickness design process using tools such as Streetpave, PavementDesigner.org and AASHTOWare Pavement ME software programs to compare results. Come and see first-hand how easy these tools are to use!

We look forward to seeing you all at the workshops.

LEARNING OBJECTIVES

Day One: Red Deer, AB

- When is concrete paving the most practical and sustainable choice?
- Fundamentals that must always be remembered when making a pavement selection
- Critical Construction Practices including jointing detailing and tie-ins with curb gutter and asphalt
- The Pavement Maintenance Plan Fundamentals Approaches and Options
- The 67 St Roundabout Maintenance Plan Review
- Concrete Overlays: A practical solution for historically high maintenance intersections
- AT Concrete Alternate Pavement Strategy Submissions Format & Analysis Content

Day Two: Edmonton, AB

- Hands On Workshop: Software Options for Pavement Design

WHO SHOULD ATTEND:

- Provincial and municipal officials
- Consulting engineers
- Concrete contractors

PRICE

- \$50 + tax per day or \$90 + tax if attending both days; includes lunch and morning and afternoon breaks

Presenters:



Karim, Mohammad, M.A.Sc., P.Eng.

Mohammad Karim going by his last name Karim is the surfacing standards specialist with Alberta Transportation for the last five-six years. Prior to joining Alberta Transportation, he worked with the City of Calgary as well as in the consulting world. He has a Master's Degree in pavement engineering from the University of Waterloo and a bachelor's degree in Civil Engineering from Pakistan. Karim has extensive knowledge and experience in the area of pavement design, construction and management, both in urban and rural environment and asphalt as well as concrete pavements. He has authored/co-authored more than 20 technical papers, has spoken at multiple forums, is a guest lecturer at University of Alberta to the grad students, and is a contributing member of multiple technical standing committees and technical organizations nationally and internationally.



Tim J Smith, P.Eng., MSc. Eng.

Tim Smith is the Senior Director, Built Environment, Transportation and Public Works for the Cement Association of Canada (CAC) responsible for providing technical expertise and promotional support to internal and external customers related to transportation infrastructure cement and concrete products. Tim was also the former Director of Transportation & Public Works for the CAC where he worked as a technical expert on concrete pavements, roller compacted concrete pavement, engineered soils and brownfield remediation.

Tim is the former Pavement and Remediation Solutions Manager for Lafarge Canada and has also worked with New Brunswick Department of Transportation, Marine Atlantic, Englobe and Stantec Consulting Ltd. Additionally, Tim is a member of several technical committees, including the Transportation Association of Canada, ACI, Canadian Airfield Pavement Technical Group (CAPTG) and a member of the Ontario Good Roads Association – Municipal Concrete Liaison Committee. He holds a B.Sc. Eng. and M.Sc. Eng (Transportation) from the University of New Brunswick.



Mark Popik, P. Eng., M. Eng

Mark Popik, AVS is an Associate and Senior Pavement Engineer at Thurber Engineering Ltd. With over 20 years of experience providing Pavement Engineering Services across Canada. Mr. Popik received his Bachelor Degree from University of Waterloo, and a Master of Engineering Degree from the University of Florida.

Throughout his career, he has worked on a variety of pavement related projects, ranging from high-volume freeways, intermodal facilities, industrial and commercial distribution centres, to airport facilities. His experience includes Completing geotechnical/pavement investigations and providing detailed pavement recommendations for a variety of pavement types, including composite, rigid and roller compacted concrete pavements.



Shane Mulligan P.Eng., LEED Green Associate

Shane Mulligan is the Sustainability and Technical Marketing Manager at Lehigh Hanson, where he is responsible for all aspects of sustainable sales and marketing efforts in Lehigh Hanson's concrete business in Canada. This includes working with architects, engineers, and designers towards lower carbon, sustainable solutions in the built environment. He has over 17 years of experience in a variety of civil engineering sectors including the technical promotion of cement and concrete products, structural design of underground infrastructure, waste diversion planning, and stormwater management. His previous experience includes roles with the Cement Association of Canada and Lafarge Canada Inc.



Ms. Bozena Czarnecki, Ph.D., P.Eng.,

Ms. Bozena Czarnecki, Ph.D., P.Eng., is a Principal Specialist, Senior Materials Engineer with Tetra Tech Canada Inc. She brings a wide range of materials engineering-related experience to projects involving concrete pavement design for airfield and road applications, detection, and failure analysis of materials-related distress in concrete pavements, all aspects of quality control and quality assurance of construction materials, and construction monitoring. Her areas of expertise include specification development, concrete pavement and concrete overlays design, concrete mix design, physical evaluation of concrete performance, durability of concrete, HPC, concrete petrography, forensic analysis, mass transport of chloride ions in concrete, service life predictions of new and rehabilitated reinforced concrete structures, and bridge deck surveys and development of rehabilitation strategies.

