

12th Australian Small Bridges Conference

22-23 October 2024

www.smallbridges.com.au

Accepted Abstracts

As of 25 March, 2024

(Note that some accepted abstracts are not listed below as are awaiting Asset Owner, or other, Approval)

60M SPAN SPLICED SUPER T BRIDGE DESIGN

Noritomo Maruo, SMEC

A CRITICAL REVIEW OF CRACK CONTROL PROVISIONS IN AS5100.5-2017 FOR PIER WALLS IN BRIDGES

Sleiman Mikhael, Arcadis

Suthan Mohanakumar, Arcadis

A FIELD INVESTIGATION OF DETERIORATION OF REINFORCED CONCRETE USING A UAV-BASED SOUNDING METHOD – A CASE STUDY WITH FIELD VALIDATION

Ash Pender, Arcadis

Harsh Rathod, Niricson

Joshua Columbus, Niricson

Simon Borst, Niricson

Shannon Rosario, DTP Vic

Yanan Yang, DTP Vic

A MODERN CONUNDRUM – CAN WE DELIVER OUR PROJECTS – WITHOUT DRAWINGS?

John Legge-Wilkinson, Arup

Oystein Ulvestad, Arup

A NON-CONSERVATIVE DESIGN APPROACH TO DESIGN BRIDGE AND ROAD BARRIERS

Basim Matar, SMEC

Huy Binh Pham, SMEC

BLI BLI BRIDGE – GIRDER REHABILITATION AND STRENGTH RESTORATION

Ben Wiggins, Transport and Main Roads Queensland

BLUESCOPE COMPOSITE STEEL ROAD BRIDGES – UPDATING A DESIGN GUIDE

Raed El Sarraf, WSP

Rob Danis, Bluescope

Sabina Piras, WSP

BREAKFAST CREEK GREEN BRIDGE

Alistair Smith, SMEC

Paul Bradbury, SMEC

BRIDGE ASSESSMENTS – PLAUSIBILITY GAPS AND PITFALLS

Adam O'Rourke, Ductile Consulting Engineers

Edward Eskew, Ductile Consulting Engineers

BRIDGE ASSET MANAGEMENT: THE GOOD, THE BAD AND THE FUTURE

David Baby, CT Management

Neal Lake, Osborn Consulting Engineers

Tim Heldt, Osborn Consulting Engineers

BRIDGE BARRIER UPGRADES TO VARIOUS REGIONAL BRIDGES IN SOUTH AUSTRALIA

Howard Jiang, Jacobs

Larry Yang, Jacobs

BRIDGE BARRIERS: WHAT CAN ASSET OWNERS DO TO IDENTIFY AND ADDRESS KEY RISKS ON THEIR NETWORK?

Joshua Hniat, pitt&sherry

Richard Cassidy, pitt&sherry

CASE STUDY - DESIGN AND CONSTRUCTION OF THE INTEGRAL BRIDGES ON THE NEW BRIDGEWATER BRIDGE PROJECT

Darnell Santos, Jacobs

CHALLENGES IN THE DESIGN OF A 50M STEEL TRUSS BRIDGE OVER STEELS CREEK

Hassan Asif, Stantec

Muhammad Abdullah, Stantec

Yasir Ali, Stantec

**COMPARISON OF TRAIN ROLLING STOCK LOADS TO 300LA
CONFIGURATION OVER MULTIPLE SPAN LENGTHS**

Stephen Hives, V/Line

**CONGELLA CREEK BRIDGE CROSSHEAD STRENGTHENING – A CASE
STUDY ABOUT FRP DESIGN OPTIMISATION**

Aviral Choudhary, Mapei Australia

Umberto Rico, Mapei S.p.A

COST EFFECTIVE STEEL CONCRETE COMPOSITE BRIDGE BEAMS

Wolfram Schwarz, WSP

**CULVERT AND BRIDGE DESIGN INTERFACE WITH ENVIRONMENTAL, FAUNA
MANAGEMENT AND CHALLENGING GROUND CONDITIONS**

Vahid Gheshlaghiofat, Aurecon

Veeral Patel, Aurecon

**DESIGN AND DELIVERY OF THE WOODS STREET RAIL BRIDGE
SUPERSTRUCTURE RENEWAL PROJECT IN MELBOURNE**

Ahmed Al-Aghbari, Hatch

Tanmay Vegad, Hatch

**DESIGN CONSIDERATIONS OF ACCESSIBLE STEEL BOX GIRDERS
SUPPORTING OVERHEAD SIGNAGE**

Hasret Aydin, SMEC

Huy Binh Pham, SMEC

DESIGN OF CULVERTS WITH PRECAST SEGMENTAL BASE SLABS

Amir Holakoo, KBR

Tony Phan, KBR

**DESIGN OF THE NEW BEAUMONT BRIDGE – CROSSING NEW ZEALAND'S
LARGEST RIVER**

Jeremy Jennings, WSP

DWAARLINDJIRRAAP PEDESTRIAN BRIDGE

Andrew Grime, Arup

Antony Schofield, Arup

Jose Garcia-Boente Fernandez, Arup

Sarah Madrigal, Arup

EFFECTIVE THERMAL MANAGEMENT IN PRECAST CONCRETE ELEMENTS: A CASE STUDY ON VICTORIA PARK-CANNING LEVEL CROSSING REMOVAL (LXR) PROJECT

Frank Papworth, BCRC

Herman Jong, BCRC

Inam Khan, BCRC

Stuart Young, APS

ELIZABETH AVENUE PEDESTRIAN OVERPASS - CLONTARF

Bj Byrnes, SMEC

Loïc Fields, SMEC

GARIE ROAD FLOOD RECOVERY - ANCHORED BORED PILE WALL SLOPE STABILISATION

James Dickson, Aurecon

Marcia Prelog, Aurecon

Nazanin Salehi, Aurecon

Tim Donovan, Aurecon

HERITAGE TIMBER RAIL BRIDGE PIER REPLACEMENTS IN THE TABLELANDS SYSTEM

Harrison Fugate, BG&E

HICKSON ROAD HERITAGE BRIDGES MAINTENANCE – A CASE STUDY

Joe Joyce, FSC Range

Oliver Gasior, Marine & Civil Maintenance

Troy Palmer, Marine & Civil Maintenance

IMPLEMENTATION OF RISK BASED CULVERT ASSESSMENTS

Adam O'Rourke, Ductile Consulting Engineers

Stephen Wood, Port Macquarie Hastings Council

IMPLEMENTATION OF RISK BASED CULVERT ASSESSMENTS AT PORT MACQUARIE HASTINGS COUNCIL

Edward Eskew, Ductile Consulting Engineers

KOLOONA DRIVE BRIDGE REPLACEMENT

Mike Wright, InQuik Bridging Systems

LAHRS ROAD BRIDGE – REUSE OF A REUSED BRIDGE – WHOLISTIC MODIFICATION AND SUBSTRUCTURE STRENGTHENING WITH FRP

Aida Bartels, Arup

Tracey Knight, Arup

**MAINTENANCE PLAN FOR SUSTAINABLE DEVELOPMENT OF TIMBER
VEHICLE BRIDGE IN NEW ZEALAND**

Hanshen Wang, University of Auckland

**MANAGEMENT OF BRIDGE ASSETS ON THE ARC INFRASTRUCTURE RAIL
NETWORK**

Verity Scott , Arc Infrastructure

Zia Rice , Arc Infrastructure

O'KEEFE STREET VELOBRIDGE

Conor Doherty, AECOM

John Hart, AECOM

Patrick Arteaga, Dept of Transport & Main Roads

**PRECAST PRESTRESSED CONCRETE BEAMS MADE CONTINUOUS OVER
SUPPORTS – VARIABILITY OF LONG-TERM DESIGN ACTIONS**

Konrad Slominski, Arcadis

Sleiman Mikhael, Arcadis

**PYRMONT BRIDGE – CHALLENGES ASSOCIATED WITH THE OVER-WATER
STRUCTURAL REMEDIATION OF A HERITAGE-LISTED TIMBER BRIDGE**

Daniel Lu, Marine & Civil Maintenance

Maverick Penman, FSC Range

Max Panafieu, Marine & Civil Maintenance

**RENEWAL OF RAILWAY CORRIDOR TO DEVELOP TOURISM ACCESS IN
REGIONAL VICTORIA**

Eric Hooimeyer, Teleo Design

REPAIR OF BATTER SLOPE BENEATH ROAD BRIDGE

Jack Arnold, Mainmark

James O'Grady, Mainmark

SAN REMO BRIDGE – LOAD ASSESSMENT FOR SCAFFOLD LOADING

Dr Stephen Salim, Hatch

Timothy Lui, Hatch

**STEEL HALF-THROUGH GIRDER RAIL BRIDGES: RECENT EXPERIENCE IN
VICTORIA**

John Cain, Arup

Martin Holt, Mott MacDonald

**STRENGTHENING OF BRIDGE STRUCTURES: A REVIEW OF EXISTING
METHODS WITH RECOMMENDATIONS**

Christophe Camille, Western Sydney University

Fidelis Mashiri, Western Sydney University

Olivia Mirza, Western Sydney University
Saman Karimi, Western Sydney University

STRENGTHENING WORKS OF BARRY ROAD BRIDGE OVER RAIL

Amir Holakoo, KBR
Kirush Kirushanthan, KBR

SUGGESTED CHANGES TO AS 5100 BRIDGE DESIGN FOR FIRE DESIGN

Ross Pritchard, SMEC

THE DESIGN OF FIRST HELICOIDAL RAMP IN MALAYSIA

Alvin Ang Cheng Hin, TYLin International Malaysia
Cheng Fan Chuen, TYLin International Malaysia
Mohd Faizal Atan, PROLINTAS Group of Companies

THE INSPECTION AND ASSESSMENT OF SMALL REINFORCED CONCRETE RAILWAY BRIDGES WITH UNKNOWN REINFORCEMENT IN REMOTE SCOTLAND, UK

Conor Flannery, FSC Range

THE INTEGRATION AND APPLICATION OF DATA, DIGITAL TOOLS, AND ALGORITHMS TO ASSIST WITH MANAGEMENT STRATEGIES IN SUSTAINING PUBLIC INFRASTRUCTURE ASSETS

Harshil Patel, Aurecon
Kim Biau Chua, Aurecon

THE RE-EMERGENCE OF ELECTROCHEMICAL CHLORIDE EXTRACTION FOR BRIDGE REMEDIATION

Blane McGuinness, Marine & Civil Maintenance
Troy Palmer, Marine & Civil Maintenance

UNION AND MONT ALBERT ROAD LEVEL CROSSING REMOVAL BRIDGES: CONSTRUCTION LED DESIGN

Darnell Santos, Jacobs
Hamish Currie, Jacobs
Lachie Gallop, Jacobs

UPDATING THE WEATHERING STEEL GUIDE FOR AUSTRALIAN BRIDGES

Michail Karpenko, HERA
Raed El Sarraf, WSP
Rob Danis, Bluescope

USING REAL TIME MONITORING TO DELAY REPAIRS ON A DETERIORATING CULVERT

Charl Pieterse, EngAnalysis
Henry Griscti, EngAnalysis

John Vasey, EngAnalysis
William Macdonald, EngAnalysis