



#### **Instructor:**



Arup Mukherjee is a Professional Engineer with 30 years experience in Municipal Engineering. He recently retired as Director of Public Works for the United Counties of Leeds and Grenville in Eastern Ontario. Prior to that, he worked for both local and regional governments in Toronto, Markham, York Region and Bradford. He is a member of Professional Engineers Ontario (PEO) and Municipal Engineers Association (MEA). He is also the Chair of the Ottawa Valley Branch for the Ontario Public Works Association (OPWA).

### **Course Syllabus:**

The MEA is offering a course/webinar on Ontario Provincial Standards (OPS). It will be delivered in 2 modules over 2 days at approximately 2-hours per day. This course/webinar will provide an overview of OPS for Roads and Public Works (OPS), the rational/history regarding OPS, it's governance and the benefits of using these harmonized standards. The fundamental elements of typical public works contact, and the means of building better contracts using OPS manuals will be explained through group exercises. Other critical components in contract development will be discussed in the municipal public works context. Case studies will be used to explore the real-world applications of these topics.

#### Course Outline:

- Course Introduction
- Benefits of OPS
- Foundational Elements of Contract
- Navigating Through OPS to Build Better Contracts
- Case Studies
- Other Critical Components in Contract Development

### Who Should Attend?

Individuals involved in the design and delivery of infrastructure construction projects from the municipal, provincial, consultant, or contractor's side. Participants will learn:





- 1. The purpose and benefits of harmonised standards such as OPS
- 2. How to apply OPS to: Improve contract preparation and management
- 3. Building efficient and industry standard specifications
- 4. Mitigate financial and legal risks for your Organization.

### **Course Agenda:**

1:00PM	Day 1				
1.001 111	Housekeeping and Introductions (10 min)				
1:10PM	Course Introduction – What is OPS? (10 min)				
1. TOP W	History – rational of establishing OPS				
	Ownership (MEA and MTO)				
	Background				
	Structure / Maintenance				
	Otractare / Maintenance				
1:20PM	Benefits of OPS - Why OPS? (35 min)				
	Consistency				
	Standardization				
	benefit to contractors				
	Ease of use – Suppliers				
	Transferable				
	Universal				
	Flexibility – (Insurance, Bond)				
	Questions Break				
	Claims Management and Dispute Resolution				
1:45PM	Foundational Elements of Contract (30 min)				
	Contract elements / Sample docs.				
	( <b>Exercise-1</b> : fundamental elements of a contract)				
	(Exercises 1. randamental cionicities of a contract)				
	Explanation of typical fundamental elements of a contract				
	Discussion on elements that should be included in the contract				
	Tour of OPS Website				
2:15PM	Case Study #1 – Joe Accardi (45min)				
	Presentation: Watermain Abandoning and Grouting				
	Q&A / Discussion				
3:00PM	Navigating Through OPS to Build Better Contracts -				
	How to use OPS (45 min)				
	Exercise-2: (Spec Writing) Learn what it takes to write a technical				
	specification and how to utilise OPS to save you time and effort				
	Navigating through OPS volumes and find Specs. and Drawings, etc. online				
	OPS Volumes (Students must bring laptop to access OPS online)				
	Question Break				
	Summary of Day 1				
3:45PM	End of Day 1				





	Day 2				
1:00PM	How to use OPS (cont.) (45 min)				
	Recap of Day 1 and intro to Day 2				
	<b>Exercise-3.a</b> : (Locating OPS Spec) practice how you to obtain specific technical information to help you reach to the end product results you desire in your public work project				
	<b>Exercise-3.b</b> : (Adding OPS Specs into a Contract) Gain experience into creating simple contract documents (Paving Project BOQ) using OPS manuals to Complete the BOQ with the required specifications				
1:45PM	Case Study 2 – Gary Carroll (45min) Presentation: Application of OPS in Real Life Example – City of Oshawa Project				
	Q&A / Discussion				
2:45PM	Other Critical Components in Contract Development - Next Steps / Execution (30 min)				
	Amending OPS Documents				
	Contract award				
	Administration				
	Change orders and amending OPS Documents (General Conditions)				
	Recent changes (Construction act)				
	Substantial performance				
3:15PM	Summary and end of course				





#### **REGISTRATION FORM**

Please check one:	☐ Mastercard ☐ V	'isa		
Last name	First name		Title	
Municipality/Company				
Address				
Town/City		Postal Code		
Business Telephone		Email address		
WORKSHOP TITLE	LOCATION	DATES	FEE	TOTAL
Introduction to OPS	Teleconference Details will be provided	☐ April 19-20, 20	\$200 +HS (MEA memb \$250 + HS (Non-memb	bers) ST
CARD#		EXPIRY DATE		
NAME ON CARD:				
SIGNATURE:				
	FORM TO 289-291-6477 Municipal Engineers Association			
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- If written cancellation is received at least 10 working days in advance 100% refund
- If written cancellation is received 9-3 working days in advance 50% refund
- If written cancellation is received less than 3 working days in advance No Refund
- If payment has not been received at the time of cancellation, an invoice will be issued for the appropriate amount as costs have already been incurred.
- If circumstances prevent a previously registered person from attending a course, substitutions are permitted up to and on the day of the event.