

**Missouri Department of Transportation (MoDOT)**  
**“Self-Consolidating Concrete for Infrastructure Elements”**  
**TRyy1103**

**Will MoDOT require the research to be performed under the immediate personal supervision of a professional engineer licensed in the state of Missouri?**

Thank you for your questions regarding MoDOT’s research program. Historically, we have not required our research projects to be led by a Missouri licensed professional engineer. We appreciate you drawing this to our attention and will take it under advisement. Please note, not all of MoDOT's research projects or technical reports are engineering related and therefore, if a decision is made to consider this as a requirement of our research efforts, it will only apply to engineering specific research projects.

**Will MoDOT require the Final Report and Final Specification to be signed and sealed by a Missouri licensed professional engineer?**

Please see the response to the question above. However, it should be made clear that any suggested specifications coming out of a research project are only recommendations. ALL MoDOT specifications are determined and finalized by a MoDOT engineer who is licensed by the State of Missouri.

**We request an electronic or hardcopy of the MoDot draft specification which requires the Moustafa Method as prescribed by PCI. This specification is mentioned in Task 3 of the RFP.**

MoDOT will provide the selected research team all draft specifications and special provisions related to SCC. Since these documents are in draft form we cannot provide them except to the selected research team.

**We request an electronic or hardcopy of the MoDOT draft special provision for SCC. This document is mentioned in Task 6 of the RFP.**

Please see response above.

**Under Task 4 the project team is asked to determine the hardened properties of SCC. Does the DOT have a preference on the type of permeability testing that is undertaken? The two most common test methods for Chloride Permeability are ASTM C 1202 “Standard Test Method for Electrical Indication of Concrete’s Ability to Resist Chloride Ion Penetration” (or AASHTO T 259) and ASTM T 277 “Standard Method of Test for Rapid Determination of the Chloride Permeability of Concrete” or is this left to the research team to decide?**

MoDOT has traditionally used AASHTO T 277 "Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration" for measuring the permeability of concrete. MoDOT has the

equipment for conducting this test since 1995. AASHTO T 277 would be the preferred method. If the research team decides that other testing in addition to AASHTO T 277 needs be performed, MoDOT would have no objections.

**Can MoDOT clarify the use and terminology of the word “value” they are asking the research team to determine? Is this a dollar amount for an expected cost saving in fabrication and concrete placement (i.e. what is the expected upfront cost savings) or by “value” is the DOT asking a more generic sense, for example, what are the mechanical and durability values brought to the life-cycle history of using SCC?**

MoDOT would like to quantify the “value” of its’ research projects. The ideal “value” would be the money saved, both upfront and life-cycle costs, and/or the number of lives saved for projects involving safety. For this project, an attempt should be made to put a dollar value to the money MoDOT would save by utilizing this technology. Other “values” would be beneficial as well such as those listed in the question above, speed of construction, reducing traffic congestion, etc. This task should be viewed as how we would “sell” this project to MoDOT management to convince them this technology would be a good use of taxpayer money. It should be noted this is assuming the research does show this would be a good technology to use. As with any research project it should not be approached as proving the technology works, but rather determining if the technology does work.