



# AGENDA

**Concrete Products Task Group Meeting  
(CT-Industry)  
Oct 10, 2013  
Time 10:00 AM to 12:00 PM  
OSM Conference Room,  
Room 514  
5900 Folsom Blvd.  
Sacramento, CA 95814**

Time	Topic	Presented By	Purpose/Endstate
1000 – 1005	Welcome, Attendance and Agenda Review	All Co-Chairs	Meeting Begins
1005 – 1015	Review Last Meeting's action items	All Co-Chairs	Establish/Close-Out Due-Outs
1015 – 1020	Housekeeping Items – The following are to be discussed: <ul style="list-style-type: none"> <li>• Current Print-Out Package</li> <li>• Concrete Task Group Website</li> <li>• 2013 Calendar</li> </ul>	Bobby Petska	Ensure all members are postured for success
1020 – 1040	“State of the Industry” Update Brief	Industry Co-Chairs	Ensure key concerns from Industry are heard
1040 – 1050	General Discussion of Topics of Interest from Industry (e.g. New activities and/or external committee discussion)	TG Co-Chairs	Ensure all potential and upcoming topics are discussed
Sub-Task Group co-chairs provide update on <ul style="list-style-type: none"> <li>• Overview of Actions taken place over last quarter</li> <li>• Upcoming Actions for next quarter</li> <li>• Review of Issues, including level of effort and potential updates to Scoping Documents</li> <li>• Discussions of any new proposed Scoping Documents</li> <li>• Discuss any recommendations for changes in priorities</li> </ul>			
1050 – 1110	Materials/QA Sub-Task Group	Keith Hoffman/Mark Hill	STG Co-Chairs provide update on decisions made/concerns for each activity
1110 – 1130	CIP Pavement Sub-Task Group	Mehdi Parvini/Craig Hennings	STG Co-Chairs provide update on decisions made/concerns for each activity
1130 – 1150	Precast Sub-Task Group	Keith Hoffman/Cliff Ohlwiler	STG Co-Chairs provide update on decisions made/concerns for each activity
1150 – 1200	Round Table Discussion, Discussion Issues, Questions and Action items	All	Document due-outs and decisions made

## Concrete Products Meeting Action Item Review

Below is the brief summary and status of action items from the previous TG meetings:

<b>Action Items from 7/11/13 meeting</b>	<b>Due Date</b>	<b>Responsible Person</b>	<b>Status</b>
Garner resolution from Construction for the purpose of the changes to the Section 90-4 final specification	17 July 2013	Chuck Suszko/Bobby Petska/Precast STG Members	Specification finalized on 20 July
Distribute to TG for Final Review the Report and Executive Summary for the COTE Activity	20 Sept 2013	Amy Fong	Complete
Update Final Completion for QCQA Activity on Activity Tracker	10 Oct 2013	Keith Hoffman/Bobby Petska/Mark Hill	Complete
Update Final Completion for Recycled Concrete on Activity Tracker	10 Oct 2013	Keith Hoffman/Bobby Petska/Mark Hill	Complete
Update Precast Pavement Scoping Document to reflect updated Deliverables	10 Oct 2013	Mehdi Parvini	Pending
Update Bin List Priority for Materials/QA STG and determine which projects would be next in line	10 Oct 2013	Materials/QA STG Co-Chairs	Complete

<b>Action Items from 4/11/13 meeting</b>	<b>Due Date</b>	<b>Responsible Person</b>	<b>Status</b>
Link RPC Website to the Concrete Task Group website on METS-OSM Page	11 July 2013	Chuck Suszko	Complete
Discuss scheduling of Green Sulcrete discussion at the next CalcIMA Technical Committee meeting or the next RPC Meeting	1 May 2013	Bobby Petska/Keith Hoffman	Discussion took place at May 1 meeting
Create a Spreadsheet to capture Precast Pavement Pilot Projects, dates project meetings took place, and Lessons Learned notes	11 July 2013	Mehdi Parvini/Jeremy Peterson-Self	Complete
Refine Work Plan for the "Precast Pavement" project that consists of formal list of Pilot Projects and Activity End Date	11 July 2013	Mehdi Parvini/Jeremy Peterson-Self	Scoping document to be revised for time at project team



			level
Conduct follow-up meeting regarding “Dowel Bar Alignment” Scoping Document	29 April 2013	Mehdi Parvini/CIP Pavement STG	Impasse sent to RPC level
Innocuous Aggregate Link Updating – Capture new list with clarification on “PE” language and conduct follow-on discussion with Mark Hill	30 April 2013	Bobby Petska/Keith Hoffman/Mark Hill	Updates to the AML have been posted and discussion has taken place
Upload Aggregate Sustainability Report onto the TG Website	11 July 2013	Bobby Petska	Complete

Pending Items	Due Date	Responsible Person	Notes
<b>From 01/10/13 Meeting</b>			
Discuss updates on the I-5/14 Precast Pavement Lessons Learned report and target deadlines	31 Jan 2013	Jeremy Peterson-Self/Mehdi Parvini	Task under development at project team level
Participation Memo for Marc Robert for inclusion into the Materials/QA STG	31 Jan 2012	Bobby Petska	Complete
Upload latest Precast Pavement Methodology and Section 11-2 onto TG Website	31 Jan 2013	Bobby Petska	Complete

**Concrete Products TG Quarterly Meeting Attendance Log as of 10 October 2013**

Member	Role	TG Meeting (CT and Industry)										
		4/14/2011	7/14/2011	10/13/2011	1/26/2012	4/12/2012	7/12/2012	10/11/2012	1/10/2013	4/11/2013	7/11/2013	10/10/2013
Dan Speer	Caltrans Co-Chair	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Chuck Suszko	Caltrans Construction	✗	✓	✓			✗	✗	✓	✓	✓	
Bill Farnbach/Amy Fong	Caltrans Pavement Program	✗	✗	✓	✓	✓	✗	✓	✓	✓	✓	
Roberto Lacalle	Caltrans Struct. Specs & Estmt.	✓	p	✓								
Marcelo Peinado	Caltrans District -11 Engineering	✓	✗	✗								
Dennis Agar	Caltrans District -10 Engineering	✓	✓	✓								
Jeremy Peterson-Self	Co-Chair, Precast Concrete STG						✓	✓	✓	✓		
Keith Hoffman	Co-Chair, Materials/QA & Precast STG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Cornelis Hakim	Co-Chair, Cast In Place Concrete Pavement STG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mehdi Parvini	Co-Chair, Cast In Place Concrete Pavement STG	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Jinesh Mehta/Bobby Petska	Caltrans, Structural Materials Rep. (note taker)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Charley Rea	Industry Co-Chair-CALCIMA	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Bruce Carter	Industry Co-Chair	✓	✓	✓	✓							
Ron Stickel	Industry Co-Chair					✓	✓	✓	✓	✓	✓	
Cliff Ohlwiler	Industry, Co-Chair, Precast Concrete STG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Tom Tietz	Industry, CNCA	✗	✗	✓	✓							
Mark Hill	Industry, Syar					✓	✓	✓	✓	✓	✓	
Craig Hennings	Industry, ACPA-SW	✗	✗	✗	✗	✓	✗	✗	✗	✗	✓	

**Legend:**

- ✓ Present
- ✗ Absent
- p Pre-designated proxy

DEPARTMENT OF TRANSPORTATION

**JAN**

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

**FEB**

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	15
17	18	19	20	21	22	23
24	25	26	27	28		

**MAR**

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

**APR**

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	13	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

**MAY**

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

**JUN**

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

**JUL**

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

**AUG**

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
15	26	27	28	29	30	31

**SEPT**

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

**OCT**

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

**NOV**

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

**DEC**

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Calendar Legend
Quarterly Rock Products Committee (RPC) Meeting
Monthly RPC Co-Chairs 3+1 Meetings
Asphalt Task Group 3+2 Meetings
Concrete Task Group 3+2 Meetings (1:30pm - 2:30pm)
Pavement Foundations Task Group 3+2 Meetings
Pavement Preservation Task Group 3+2 Meetings
State Holidays
Concrete Materials & QA STG Meeting (1:00 - 4:30 pm) - CT only
Concrete Materials & QA STG Meeting (1:00 - 4:30 pm) - All
Precast Subtask Group Meeting (9:00 - 11:30 am) - All
Precast Concrete Subtask Group Meeting (9:00 - 11:30 am) - CT only
Concrete Products Task Group Meeting (10:00-12:00)- All
Concrete Task Group CT Only Meeting (1:00-3:00 pm)-CT only
Cast In Place Pavement Subtask Group Meeting (9:00am - 11:00am)-All
Cast In Place Pavement Subtask Group Meeting (9:00am - 11:00am)-CT Only

Concrete Materials & QA Sub-Task Group: Issue Status Summary, October 2013					
Project Priority	Project	Purpose	Overall Progress	Target Completion Date	% Complete
1	Structural Concrete QC/QA Specification Development	Implement performance-based specifications for materials management of structural concrete.	Additional outreach with other pilot projects and Industry to take place. Coordination to continue for scheduling of ACI trainings and Pre-Bid Outreach meetings for Pilot Projects both in Northern CA and Southern CA. Continue conducting pre-bid meetings. Use gathered feedback from beta testing of DIME to update and roll out for larger use. Finalize the plain language spec and create a spec back up report as draft specification is finalized. Finalize QA guidance report to generate corresponding bulletins for state staff. Amendment to IA manual upcoming, develop long term IA processes. Discuss project lists. Discuss communications with Districts and Contractors (Outreach).	12/31/2014	75%
2	Update Construction Manual	Update Construction Manual to conform to changes made to Sections 6, 9, 11, 40, 49, 51, 53, 72, 73, 83, and 90 of the 2010 Standard Specifications.	Review of draft subsections taking place. Subject matter experts creating workplans and drafts for remaining Section 3, 4, 5, and 8 subsections and Section 6 and 7.	12/31/2012	85%
3	Recycled Concrete	Evaluate possibilities for use of recycled (hardened and plastic) concrete	Monthly project team meetings to continue. Next scheduled meeting is on October 11, 2013. Industry to send requested information on MPQP manual. The carbon footprint savings report was received by project team on June 21, 2013 and sent to Caltrans environmental planning for review. Draft Specs to be complete in coming weeks.	12/31/2013	60%
Bin List Items	Shotcrete Specification Updates	Update the provisions in Section 53 to clarify such factors as SCM content, testing requirements, etc.	Draft scoping document in process; discussion underway at within Industry; timeline and necessary deliverables to be clarified in coming months	TBD	N/A
	Flexural Beam Testing in accordance with ASTM	Industry requesting update of ASTM/CTM requirements related to Flexural Test specimen curing, testing, etc.	Draft scoping document in process; discussion underway at various levels and at CIP Pavement; timeline and necessary deliverables to be clarified in coming months	TBD	N/A
	Green Concrete/ASR/Limestone Spec Updates in Section 90	Update the provisions in Section 90 to ensure that CO2 reduction goals are captured but independent of ASR Reduction goals	Activity to be developed in conjunction with "ASR Research Problem Statement". Research from ASTM Limestone Cement updates may be incorporated into this activity	TBD	N/A
	Smog-Eating Concrete	Develop specifications and design guidelines for the use	This item is currently under evaluation. A pilot project is to be selected in the near future, with the goal of capturing lessons learned. A meeting with Caltrans and Lehigh personnel took place on 30 August 2012.	TBD	N/A
	Cubic Yardage Concrete and Aggregate Deduction	Update the provisions in Section 90 to better ensure compliance with Specifications	Discussion underway at STG level; timeline and necessary deliverables to be clarified	TBD	N/A
	Evaluate shrinkage specification for concrete	Review SE/CV characteristics and then effect on shrinkage performance and evaluate shrinkage control needs for CT concrete	Draft scoping document in process; discussion underway at project team level; timeline and necessary deliverables to be clarified in coming months	TBD	N/A
	Performance-Based Specifications for concrete	With the latest advances in concrete technology and availability of new tests. move towards performance specifications	Using surface resistivity and other performance criteria refine the specifications from prescriptive to performance	TBD	N/A
	PT Grout Specification	Pre-approved list for grout products and updated specification is needed	STG is working on developing a pre-approved list for grouts with successful history on projects. Minimal Resources anticipated; working in conjunction with DES Prestress Committee and Precast Design Committee	TBD	N/A

## Structural Concrete QC/QA Specification Development

**Sub Task Group (STG): Materials & QA**

**Priority: 1**

**STG Co-Chair: Keith Hoffman**

**Project Team Lead: John Lammers**

**Project Team Members:** Cathrina Barros, Ruth Fernandes, Austin Perez, Craig Knapp, Mike Cook, Rosme Aguilar, The' Pham, Deepak Maskey, Al Ochoa, Rick Navarro, (CCTIA)

**Project Team Advisors:** Rita Leahy, Jinesh Mehta, Ken Beede

**DEADLINE: 12/31/2013**

**PERCENT COMPLETE: 75%**

### OBJECTIVES:

Implement quality control sampling and testing for structural concrete as directed in the decision document signed by the Chief Engineer and Deputy Director of Maintenance and Operations in December 2010. Determine appropriate QC sampling and testing standards as well as acceptance (QA) sampling and testing guidance consistent with federal regulations. These requirements and guidance should be implementable for any project regardless of procurement methods.

### ANTICIPATED SPEC-WRITER INVOLVEMENT:

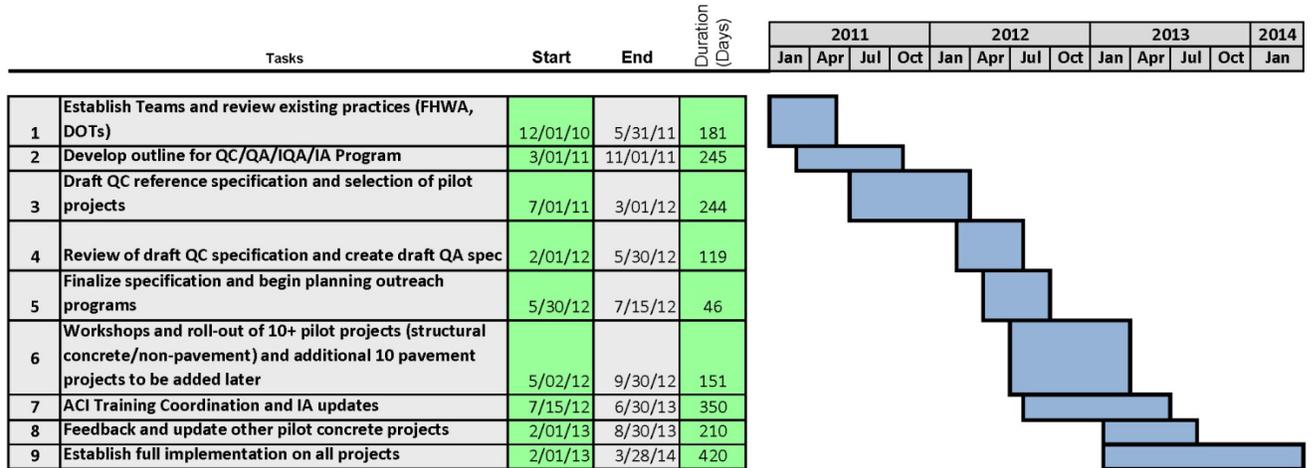
Plain language version of the specification was finalized prior to start of District 11 project in February of 2013.

### RECENT ACTIVITIES:

- Sample ID/Test ID Spec change language – Complete
- ACI Training Roster– Classes scheduled to occur at Translab on Oct 11<sup>th</sup>/18<sup>th</sup> and at Southern Regional Lab Nov 15<sup>th</sup>/ 22<sup>nd</sup>. Coordination being worked on for Hayward and Irvine class in December. Training contracts approved for three 20-person classes in Northern CA and four 20-person classes in Southern CA.
- Full listings of all Pilot Projects are currently tracked and are continuously updated as needed.
- Coordination of Pre-Bid Outreach Meetings for upcoming Pilot Projects continues.
  - D04 Pilot Project Pre-Bid Outreach currently being coordinated with prebid outreach language added before project gets advertised by end of October.
  - D8 Pilot Project – Project ongoing. Approximately 40 QC Tests have been input into DIME.
  - D11 Pilot Project – Project ongoing. Approximately 10 QC Tests have been input
  - D6 Pilot Project – In beginning stages. Pre Concrete meeting and DIME Training have taken place over the past month.
- QA Guidance Doc Development –continues to be refined. METS currently working with OSC on this activity. Updates being made to document include FAQ section, DIME instructions, sample QC meeting agenda, QC checklist and sample QC Plan.

### UPCOMING ACTIVITIES:

- Additional outreach with other pilot projects and Industry to take place.
- Coordination to continue for scheduling of ACI trainings and Pre-Bid Outreach meetings for Pilot Projects both in Northern CA and Southern CA.
- Continue conducting pre-bid meetings.
- Use gathered feedback from beta testing of DIME to update and roll out for larger use.
- Finalize the plain language spec and create a spec back up report as draft specification is finalized.
- Finalize QA guidance report to generate corresponding bulletins for state staff.
- Amendment to IA manual upcoming, develop long term IA processes.
- Discuss project lists. Discuss communications with Districts and Contractors (Outreach).



Schedule to be continuously updated per Pilot Project roll-out dates and project progress.

## Use of Recycled Concrete Materials

**Sub Task Group (STG): Materials & QA**

**Priority: 4**

**STG Co-Chair: Keith Hoffman**

**Project Team Lead: Mike Donovan,  
Don Vivant**

**Project Team Members:** Charley Rea, Craig Hennings,  
Deepak Maskey, Keith Hoffman,  
Jinesh Mehta, Pat Imhoff, Tarek Khan,  
Mike Serra, Robert Graine, Paul Fayer,  
Ruth Fernandes, Jim Cotey  
Basil Miranda, Steven Cook

**Project Team Advisors: TBD**

**DEADLINE: 12/30/2013**

**PERCENT COMPLETE: 60 %**

### OBJECTIVES:

By using various appropriate measures and devising clear limitations and practices, activity will examine returned concrete for use as minor (non-structural) concrete without compromising life cycle.

Currently, Caltrans specifications allow *aggregate* from plastic or hardened concrete to be used in road base and in various appropriate applications in new concrete. However, the use is not widely seen and therefore requirements should be evaluated and modified to promote more use for specified applications without compromising life cycle.

### ANTICIPATED SPEC-WRITER INVOLVEMENT:

Once the objective is clearly defined and necessary background research is performed, project team will work on coming up with recommended changes. It is likely that Specification involvement will include reviewing the draft Recycled Concrete Section 90 subsection.

### RECENT ACTIVITIES:

- Project team met with Division of Weights and Measures on August 9, 2013 to discuss the MPQP process and understand their concerns.
- Project team met with Climate Earth and industry to discuss carbon footprint savings for returned plastic concrete on June 4, 2013.
- A field trip was scheduled on September 11, 2013 to observe manufacturing of recycle concrete operations.
- Project team meeting took place on September 13, 2013. Key deliverables for the coming months were discussed including draft specifications.

### UPCOMING ACTIVITIES:

- Monthly project team meetings to continue.
- Next scheduled meeting is on October 11, 2013.
- Industry to send requested information on MPQP manual.
- The carbon footprint savings report was received by project team on June 21, 2013 and sent to Caltrans environmental planning for review.
- Draft Specs to be complete in coming weeks.

### SCHEDULE AND PROGRESS:

Current target completion date is December 2013.

**CIP Concrete Pavement Sub-Task Group: Issue Status Summary, October 2013**

Priority	Project	Purpose	Overall Progress	Target Completion Date	% Complete
1	Coefficient of Thermal Expansion (CoTE)	To CoTE as a criteria for design and construction of concrete pavements.	Received 278 total test results to date from 20 projects using six labs.	12/30/2013	90%
2	Roller Compacted Concrete	Develop standard provisions for the use of Roller Compacted Concrete	Draft special provisions are ready for implementing on trial project. Incorporated into one project in District 7	12/30/2013	35%
3	Dowel location and tolerance	Clarify the location and tolerance for dowels	Waiting for Scoping Document. Plan to prepare before March STG.	TBD	N/A

## Precast Pavement Specification Development

**Sub Task Group (STG): Precast**

**Priority: 1**

**STG Co-Chair: Keith Hoffman**

**Project Team Lead: Mehdi Parvini**

**Project Team Members:** Doug Mooradian, Ruth Fernandes, Jim Ma, Jim Cotey, Tinu Mishra, Kirsten Stahl, Debbie Wong, Jonathan den Hartog, Shiraz Tayabaji, Tracy Vacura, Dave Merritt, John Grafton, Ziad Sakkal, Bobby Petska, Steve Healow, Sharon Hansen

**Project Team Advisors:** N/A

**DEADLINE: 12/31/2013**

**PERCENT COMPLETE: 60%**

### OBJECTIVES:

Precast concrete pavement systems were developed as an alternative for fast-setting cements or asphalt pavement systems in cases where a highway closure for longer than six hours is not a viable option. These systems are also beneficial in cases where high concrete durability and long pavement life are desired.

Although a few precast concrete pavement projects have already been built throughout the state, there is no comprehensive departmental guidance or standard approach on the use of precast concrete pavement.

### ANTICIPATED SPEC-WRITER INVOLVEMENT:

Some involvement needed in final review of SSPs and in compiling input from various stakeholders.

### RECENT ACTIVITIES:

SSP and Standard Plans will continue to be updated and refined. Feedback will be garnered from current pilot projects.

Project team meeting took place 4 June 2013 to discuss 3<sup>rd</sup> final draft, I-680 lessons learned, finalized scoping documents, and updates to activity timeline. Ongoing discussion related to how I-680 design lessons learned can apply to I-710 and other projects.

The latest Scoping Document has been distributed to STG and project team.

The Precast Pavement Design Methodology report has been posted to the TG Website. The CalPPCP excel spreadsheet accompanying the report is available by request.

### UPCOMING ACTIVITIES:

#### For the next month:

- Discuss I-680 design lessons learned and how it can be applied to I-710 and other projects.
- The project team has developed an updated version of the Precast-Prestressed Concrete Pavement nSSP. This version will go to the Sub-Task Group for final approval once it is completed for the I-80 Solano project.
- Completion of the PPCP and PCP Standard Sheets

#### For the next two months:

- Lessons Learned documents will be captured throughout Fall of 2013 for all ongoing Precast Pavement projects.
- The project team will continue to hold monthly meetings as necessary.

- Continued refinement of the PCP and PPCP nSSP
- Provide path forward for completion of this task beyond December 2013.

**Precast Concrete Sub-Task Group: Issue Status Summary, October 2013**

<b>Project Priority</b>	<b>Project</b>	<b>Purpose</b>	<b>Overall Progress</b>	<b>Target Completion Date</b>	<b>% Complete</b>
1	Precast Pavement Specification Development	Develop comprehensive departmental guidance or standard approach on the use of precast concrete pavement.	Lessons Learned documents will be captured throughout Fall of 2013 for all ongoing Precast Pavement projects. The project team will continue to hold monthly meetings as necessary. Continued refinement of the PCP and PPCP nSSP. Provide path forward for completion of this task beyond December 2013.	12/31/2013	60%
Bin List Items	Use of Type III Cement for Precast Concrete	Development of Specification and Performance Criteria for use of Type III Cement in Precast applications.	Activity has been discussed by STG and is still in the initial stages	TBD	N/A