PMPC Materials and QA STG Meeting Minutes

Date: Wednesday – March 13, 2019 Time: 9:00 AM – 10:00 AM Location: OSM Building, Rm 514 Phone Bridge: (866) 676-8836 – Code: 6275887

Facilitator: Jacquelyn Wong (CT Chair)

Attendees: Patrick Lo (CT), Jacquelyn Wong (CT), David Lim (CT), Nathan Forrest (CNCA), Samir Ead (CT), Lance Li (CT), Brett Soldano (CT), Rob Hightower (Syar)*

*by phone

1. Introduction (Phone*) Nathan Forrest (CNCA)

Rob Hightower (Syar)* Brett Solano^ (CT) [^]Working Group Chair Jacquelyn Wong (CT) D Patrick Lo[^] (CT) S Lance Li (CT, Meeting Secretary)

David Lim (CT) Samir Ead (CT)

2. Scoping Document Update/Briefing by WG Chairs

Use 4x8 cylinders for compressive strength test (Patrick Lo)

- In general, 33 states DOTs use 4x8 inches cylinders for compressive strength testing, and 4 states are adopting to use now.
- The strength result difference between 6x12 inches and 4x8 inches cylinders is very minimal and even negligible. Only 1 state is using strength correction factor between 6x12 inches and 4x8 inches cylinders, while no correction factor is being used for the rest of 32 states.
- The data collected from the pilot projects will be uploaded to the DIME, and it will use to support that the 4x8 inches cylinders results can be directly used without any correction factor.
- A NSSP is drafted for these pilot projects and it has been routed within the working group. Larry will identify several pilot projects to apply this project, and ideally in Northern California.
- Samir shared some historical data from KIE-CON, Inc. regarding the strength testing results comparison of 6x12 inches and 4x8 inches cylinders. The results indicate the data is very consistent and the variation is negligible. This company is very comfortable with using 4x8 inches cylinders for strength testing.
- ASTM is used in the NSSP trying to take care of the issues like aggrege size and materials, and to ensure the language is clean and clear.
- A NSSP draft for pilot project is reviewed and it looks good for all members.

Suggestions and comments:

• Since DIME doesn't have the function to input the strength ratio, suggest to including the strength ratio in comments. (Brett)

• The cylinders shall have the same record for both sizes of cylinders when associated with the same sample ID. (Brett)

Concrete Mix Design Naming system (Brett Soldano)

- Had a meeting on yesterday and will draft a specification that has an allowance/tolerance for when should give a new name in the mix design.
- The next step is going to draft the specification and routed in the working group. The next working group meeting is on April 9th.
- Will move forward.

<u>Recycled Crushed Concrete Aggregate for use in Cast In-Place Concrete Pavement (Samir</u> <u>Ead, WG member for Ron Jones)</u>

- WG had one meeting before and next meeting in on this Friday (March 15th).
- The scope of this project needs to be narrowed down. Like what kind of the recycle crushed concrete is sourced from, the types of the demolished building or structural. The scope document should clarify the direction.
- The cleaning process or the source of the cycle aggerate need to be included. Otherwise, the demolished concrete may contain deleterious chemicals (like Chloride or reactive aggregate) which may cause durability issues after being used in pavement or infrastructures.
- William Sommer will withdraw from the WG and Jackie will let all members know who will replace him.

New: Flex Beam Test Method (CT 523/ASTM C78) (Jackie Wong)

- The Scoping document for CT 523 Method of Test for Flexural Strength of Concrete was reviewed on the meeting.
- Two sub-bullets of detailed strength requirements under the "Keep the current flexural strength criteria when adopting ASTM C31/C78 methods" may subject to change in the future. So, decided to remove these two detailed sub-bullets.

Action item:

• Remove the two sub-bullets of detailed strength requirements under the "Keep the current flexural strength criteria when adopting ASTM C31/C78 methods" in page 2.

3. Open discussion

M&QA STG Bin List Prioritization (March 2019)

• A voting survey was conducted for 12 potential bin list projects and they were ranked depending on the voted importance.

Action Item:

• Drop the bottom 5 projects and re-discuss the shorter list after we have the capacity to work with new projects.

Reminder: QC/QA for CIP Structural Concrete is in the April 2019 RSS to be posted.