



WORKING GROUP MEETING

Meeting Minutes

LOCATION: County Operations Center / Kearny Mesa 5500 Overland Avenue, Room No. 120 San Diego, CA 92123; and Virtual via Microsoft Teams Meeting

DATE OF MEETING: June 4, 2024 (1:30 PM to 3:00 PM)

ATTENDEES: See attached attendance roster

PRESENTATION: Refer to the presentation link under the 06/04/24 meeting

AGENDA:

- 1) Sign-in/Meeting Overview
- 2) Public Comments
- 3) Welcome Message
- 4) Key Presentation
- 5) Interactive Poll Recap
- 6) Industry/Organization Updates
- 7) Regional Paving Forecast
- 8) Subcommittee Update
- 9) Next Working Group Meeting/Close

1) SIGN-IN / MEETING OVERVIEW

Orland Mott, SNC CIVIL, Consultant for County of San Diego

- Orland began second meeting of 2024.
- Covered attendance via sign-in sheet for in-person attendees and asked virtual attendees to enter name, organization, and e-mail address in the chat window
- Mentioned that February meeting set record for attendance
- Notified participants that this meeting is being recorded per the Brown Act
- Mentioned that this meeting will be feature packed and contain several presentations, one about Asphalt Shingles and another about paving forecasting for the future
- Briefly discussed meeting agenda
- Reviewed housekeeping, facility orientation/building logistics and emergency/safety protocols for in-person attendees
- Reviewed virtual platform/Teams instructions, functions and etiquette for the virtual attendees, including submitting questions via the chat feature, or by raising a hand

2) PUBLIC COMMENTS

- Orland informed attendees that meeting files will be posted on BBR website for public comment due to the Brown Act
- Dillon Jones from Road Soup informed about an agreement with Minnesota DOT where they will install their 100% RAP Cold Mix that contains polymer compound on 230-ft of road on their test track at the end of June.
- Mentioned that ongoing testing will take place as a result of this and that it aligns perfectly with BBR
- Orland thanked Dillon for the public comment and mentioned that it will be entered into the record.

3) WELCOME

Orland introduced Keith Kezer, County of San Diego, Project Manager

- Keith thanked everyone for attending today's meeting and that he is taking Bill Morgan's place today
- Mentioned that BBR has been going on for six years and this is the 17th meeting
- Expressed thanks for all the participants especially since it is our normal job and is an extra duty
- Informed attendees about pilot projects starting up and resources available to them, such as trainings, guidance documents, requirements, specifications, etc.
- Orland expressed his own thanks for participants attending the last 17 meetings and all accomplishments.

4) KEY PRESENTATION: Asphalt Shingle Use in HMA Maure Creager, Saint-Gobain

- Orland introduced Maure and briefly explained AB 2953 and the requirements that specifications entail, such as use of recycled material in mixes.
- Maure began presentation by thanking everybody for inviting her to present and mentioning that Saint-Gobain is one of the world's largest manufacturers of construction products.
- Emphasized goal of being worldwide leader in light and sustainable construction, while also mentioning they have advanced knowledge of different materials, design, distribution, manufacturing, and recycling
- Shared goals related to net zero carbon emissions, non-recyclable waste, water use, and other forms of sustainability prior to 2025 and 2030
- Displayed previous challenges of Recycled Asphalt Shingles (RAS) in pavements from 2010-2014, which led to drop in usage starting 2015
- Introduced Certaineed and Asphaltica solution – Recycled Asphalt Shingles (RAS) – pre-treatment of shingles by grinding, adding of recycling agents, and softening to make binder that is acceptable for paving
- Shared that RAS is included in mix designs with 25% and 30% RAP
- Discussed Ideal-CT Testing – 3 mixes, CT Index increases with greater asphaltica composition
- Concluded that asphaltica pellets have been shown to reduce rutting and cracking, with no

plant feed issues and reduced need for virgin binder

- Mentioned that RAS has been mostly utilized in areas of Oregon and Washington starting in 2021 with about 750,000 tons of HMA produced
- Shared benefits, such as cost savings, availability, effectiveness, greater ability to be recycled, and that it follows recent requirements to policies
- Orland invited group for questions.
- Keith Kezer asked about progress photos and time lapses. Maura mentioned they have them available.
- Pascal asked if different pellets are made for each PG binder grade, and Maura answered that it is possible.
- David Cortez from Caltrans Materials Testing Lab asked if shingles are manufacturing waste or if they come from building waste, and Maure answered saying they create the shingles themselves and find the technology to keep value in the material at the end of their lifespan.
- Keith asked about cost and Maure answered that it depends on what design we are going for, that there is a set amount to be taken into account because of the technology used, and that the final cost should be cheaper as it is recycled material.
- Orland asked if their process makes most of the asphalt shingle material usable and Maura answers that with 35,000 Tons of singles yields about 7,000 Tons of asphalt replaced and 28,000 Tons of sand and fiber that can be used in the mix.
- Pascal asked about use of the screen being presented and Bill Dempsey responded saying it is to screen out any larger aggregates as they do not help the mixes.
- Orland thanked Maure for her presentation and mentioned that the presentation would be made available on the website.

5) INTERACTIVE POLL RECAP

Orland Mott, SNC CIVIL, Consultant for County of San Diego

- Orland recapped that from Question 1, it was seen that industry updates were the most beneficial segments in the meetings.
- Mentioned that from Question 2, 84% of attendees thought 90 minutes was a good amount of time for the meeting
- Showed that from Question 3, the majority of the BBR attendees have used the website or see it often
- Showed that from Question 4, Guidance Documents, meeting minutes, and pilot studies are the most popular features on the BBR website and mentioned that these will continue to be uploaded to the site in a timely manner
- Showed that from Question 5, new technologies and processes are the top topics to focus on in 2024, and Orland mentioned that future meetings will have more of these presentations

6) INDUSTRY / ORGANIZATION UPDATES

Orland Mott, SNC CIVIL, Consultant for County of San Diego

Orland introduced Brandon Milar from CalAPA

- Brandon mentioned that a recent National Asphalt Pavement Association report has been made available regarding usages of RAP, RAS, and WMA.
- Presented that the average usage of RAP is 22%, 98.1 million tons have been placed throughout the country, and these numbers are expected to increase
- Informed that Environmental Product Declarations need to be submitted per Caltrans by 2026
- Showed tables that show RAP is shown to significantly reduce emissions.
- Shared high level work plan information for emerging Balanced Mix Design, continued RAP usage, fog seals, and other RAP seals
- Mentioned that 2023 Caltrans Specifications and 2024 Greenbook are now available and that 2024 Greenbook contains AB 2953 language
- Announced that the Greenbook Asphalt task force will start back on Wednesday, July 10, 2024
- Announced that CalRecycle 2024 Tire Conference to be held June 19-20, 2024

Orland introduced Cameron Richardson from CalCIMA

- Cameron thanked Brandon Milar for his updates and mentioned that he is taking over for CalCIMA updates as the Director of Technical Affairs.
- Mentioned that there are some issues with implementation of AB 2953 in the Greenbook
- Announced conclusion of high RAP and RAS pilot projects and Caltrans asked for a 5-year evaluation period
- Shared other processes and reviews regarding Caltrans specifications and test method reviews and their Low-Carbon Transportation Materials Grants Program
- Thanked Brandon Milar for taking over as cochair of Greenbook Asphalt task force
- Showed some upcoming events in Northern and Southern California: Top Golf on July 18th and 2024 Education Conference in Napa on October 28-31, 2024.
- Orland thanked Cameron for his presentation.

7) REGIONAL PAVING FORECAST

Orland Mott, SNCCIVIL, Consultant for County of San Diego

- Orland showed that City of San Diego is increasing their resurfacing effort due to increased SB1 funding, which has been split into 13 contracts just for 2024.
- Invited City attendees to provide further information if any were in attendance
- Showed that the County is continuing their Road to 70 program and confirmed that the PCI is at 68
- Shared that several resurfacing projects are being planned, advertised or awarded, or in construction in the next year similar to the City of San Diego
- Emphasized that just under 200 miles of road will be resurfaced costing about \$100 million in the next year
- Shared that SB1 funding should fund about \$300 million of resurfacing work in the next 2 years for just the City and County of San Diego

8) SUBCOMMITTEE UPDATE

Orland Mott, SNC CIVIL, Consultant for County of San Diego

Orland introduced Andrew Suarez from Martin Marietta (ATP)

- Andrew began by mentioning that findings that will be presented are through the subcommittee alone and not recommendations by Martin Marietta.
- Shared thoughts on high RAP and how it aligns with BBR
- Showed timeline of RAP implementation and mix design methods in the last century
- Shared goal to produce sustainable, long lasting, and high performing pavements with elevated RAP or RAM that meet County Section 39 standards
- Shared goal of pilot study in the future, but work plan is still in research phase
- Showed conclusions based on discussions with industry experts, such as ease of creating mixes and the requirements.
- Informed that a ¾" mix with 40% RAP was chosen as it is best based on research criteria
- Showed testing performed on the mixes, such as Hamburg and Tensile Strength testing
- Explained delta Tc testing for thermal cracking and flexibility and the differences shown in different values
- Sarah Chavez asked where the asphalt has been placed and Andrew answered that it has just been tested and not placed yet.

9) NEXT WORKING GROUP MEETING/CLOSE

Orland Mott, SNC CIVIL, Consultant for County of San Diego

- Orland announced that the next working group meeting will be October 2024
- Mentioned that meeting will contain enhanced subcommittee updates and new subcommittees will be announced
- Reminded the attendees that the meeting recording and minutes will posted online
- **<Meeting Adjourned>**