

COURSE AGENDA

HAPI/HI MIX DESIGN TECHNOLOGIES WORKSHOP – July 2015

Saturday (7/25) – Classroom Session

- 8:00 Welcome, Safety, & Introductions
- 8:15 Asphalt Materials – Section 1, (including LTPP)
- 9:45 Binder Lab Testing Overview
- 10:00 **BREAK**
- 10:15 RAP Binder Recovery, Testing, and Blending Charts – Section 2
- 11:30 Mix Design and Volumetric Concepts – Section 3
- 12:00 **LUNCH**
- 1:00 Introduction to Aggregate – Section 4
- 1:45 Aggregate Properties and Criteria – Section 5
- 2:45 **BREAK**

Saturday (7/25) – Laboratory Session

- 3:00 Aggregate Testing – Bring Lab Booklet

Laboratory Staff (4 lab groups)

Group	Coarse Aggregate Specific Gravity	Fine Aggregate Specific Gravity	Aggregate Gradations	Sand Equivalent
1	3:00	3:30	4:00	4:30
2	3:30	4:00	4:30	3:00
3	4:00	4:30	3:00	3:30
4	4:30	3:00	3:30	4:00

Coarse Aggregate Specific Gravity & Sample Reduction

--- *Brent Ishikawa*

Fine Aggregate Specific Gravity & Sample Reduction

--- *Danny Gierhart*

Aggregate Gradations

--- *Forrest Souza*

Sand Equivalent (SE)

--- *Bob Humer*

- 5:00 **ADJOURN**

Sunday (7/26) – Classroom Session

8:00 Aggregate Analysis for Mix Design – Section 6

9:45 BREAK

10:00 HMA Volumetric Analysis – Section 7

12:00 LUNCH

1:00 Mix Design Calculations – Hand out homework for aggregate properties, gradation & mix design

1:15 Trial Blend Analysis – Section 8

2:30 BREAK

2:45 Superpave Mix Design and Analysis – Section 9

3:10 Moisture Sensitivity Testing: AASHTO T-283 – Section 10

5:00 ADJOURN

Monday (7/27) – Classroom Session

8:00 Homework Review – (Combined gradations, aggregate calculations, mix volumetrics, batching with RAP)

9:45 BREAK

Monday (7/27) – Laboratory Session

10:00 Mixture Testing & Compaction - Bring Lab Booklet

Laboratory Staff (4 lab groups)

Group	Bulk Specific Gravity & Corelok	Splitting & Maximum Specific Gravity	TSR	Mixing, Aging, and Gyrotory Compaction
1	10:00	10:30	11:00	11:30
2	10:30	11:00	11:30	10:00
3	11:00	11:30	10:00	10:30
4	11:30	10:00	10:30	11:00

Bulk Specific Gravity (Gmb) & Corelok

--- Felicia Souza

Sample Reduction & Maximum Specific Gravity (Gmm)

--- Danny Gierhart

Tensile Strength Ratio (TSR)

--- Bob Humer

Mixing, Aging, and Gyrotory Compaction

--- Forrest Hammann

12:00 LUNCH

1:00 Reclaimed Asphalt Pavement (RAP) & Recycled Asphalt Shingles (RAS) Mix Design – Section 11

2:00 Performance Testing Overview – Section 12

2:30 BREAK

2:45 Designing SMA, OGFC, and WMA Mixtures – Section 13

4:00 Final Homework Review and Q & A (for those who want to stay)

5:00 ADJOURN

Tuesday (7/28) – Classroom Session

8:00 Certification Exam

12:00 ADJOURN – End of Examination