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| REVIEW OF NEW SPECIFICATION OR SPECIFICATION CHANGE  | **Log No.**  401-72 |
| **Specification Section No.:** 401 | **Item:** Temperature Segregation |
| **Originating Office:** Region 6 | **By:** Masoud Ghaeli |
| **Date Sent For Review:** September 3, 2010 | **Date Comments Due: October1, 2010** |
| Please submit response to: STANDARDS AND SPECIFICATIONS UNIT, ROOM 290, HEADQUARTERS, DENVER |
| **Reviewer** | **Concurrent Reviews – Others Commenting** | The attached Draft Specification is submitted for your review and comments. If not returned by Date Comments Due, the draft specification will be considered to be approved unless the Specification Unit of Staff Design [(303) 757-9474, (303) 757-9402] is advised otherwise.**REMARKS:** If these proposed modifications are approved, it will result in the issuance of a revised version of this standard special provision. |
|  | **Spec Committee Members:** |  |
|  | Chairman: Wassenaar | X |
|  | Region 1: Cox | **X** |
|  | Region 2: Burch | **X** |
|  | Region 3: Alexander | **X** |
|  | Region 4: Frieler | **X** |
|  | Region 5: Beller | **X** |
|  | Region 6: Koenig | **X** |
|  | Project Development: Lacey | **X** |
|  | Specifications: Brinck | **X** |
|  | Bridge: Hasan | **X** |
|  | Agreements: Wassenaar | **X** |
|  | Materials: Zufall | **X** |
|  | Traffic Engineering: Matthews | **X** | REVIEWER COMMENTS:( ) Approved ( ) Disapproved ( ) ModifiedIf disapproved or modified, give reason why and show any modifications on the attached draft copy: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ Name/Signature Date |
|  | Maintenance: Mueller | **X** |
|  | FHWA: Urban | **X** |
|  | Attorney General: Spear | **X** |
|  | Attorney General: Morrow | **X** |
|  |  |  |
|  | **Others:** |  |
|  | Colorado Contractors Assoc.: Moody | **X** |
|  |  |  |
|  | **Technical Committees:** |  |
|  | Bridge |  |
|  | Culvert |  |
|  | Joint Co-op, CCA/CDOT |  |

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| SUBMITTAL OF NEW SPECIFICATION OR SPECIFICATION CHANGE  | **Log No. 401-72**(Assigned by Specification Unit) |
| **T0:** Standards & Specs Unit, Room 290 | **FROM**:  | Name: Masoud Ghaeli |
| Region, Branch, or Technical Committee: Region 6 |
| **SPECIFICATION SECTION NO.****401-72** | ITEMTemperature Segregation | PRIORITYRoutine [ X ] Fast [ ] |
| **Reason for this new or changed specification:**Stone Matrix asphalt (SMA) task force committee was jointly established with the industry to clarify specification requirements on (SMA) projects for uniformity in application.As a result of the task force, below specifications were revised to address the following issues:- To clarify specification requirements on stone matrix asphalt (SMA) projects for uniformity in application.- Mix design adjustments- Density Targets- Compaction Test Section |
| **New or Revised Specification:**1. Revision of Section 401, Compaction of Hot Mix Asphalt. 2. Revision of Section 401, Compaction Pavement Test Section (CTS). . 3. Revision of Section 401, Temperature Segregation. 4. Revision of Section 401 and 703, Stone Matrix Asphalt pavement. 5. Creation of new Standard Special Provision, Section 703, Mineral Filler 6. Creation of a new Standard Special Provision, Revision of Section 620, Field Office. |
| **NOTE: See Procedural Directive 513.1 for a description of appropriate specification development procedures.** |

REVISION OF SECTION 401

Temperature Segregation

Section 401 of the Standard Specifications is hereby revised for this project as follows:

Subsection 401.16 shall include the following:

The Engineer will perform a systematic segregation check in accordance with CP 58 as early in the project as is feasible to determine if temperature segregation problems exist. Temperature segregation will be of concern on the project if, across the width of the mat, temperatures vary by 25 °F or more. Densities will not need to be taken in the systematic segregation study. The Engineer will discuss the temperature findings of the systematic segregation check with the Contractor.

The Engineer may evaluate the HMA for low density due to temperature segregation any time industry best practices, as detailed on Form 1346, are not being followed or the Engineer suspects temperature segregation is occurring. The Engineer will first meet with the Contractor to discuss the paving practices that are triggering the temperature investigation. Areas across the mat, excluding the outside 1 foot of both edges of the mat, that are more than 25 °F cooler than other material across the width may be marked for density testing. Material for temperature comparison will be evaluated in 3-foot intervals behind the paver across the width of the mat. The material shall be marked and tested in accordance with CP 58. If four or more areas within a lot of 500 tons have densities of less than 93 percent of the material’s maximum specific gravity for SMA mixes or less than 92 percent of the material’s maximum specific gravity for all other HMA mixes, a 5 percent price disincentive will be applied to the 500 ton lot. The 500 ton count begins when the Engineer starts looking for cold areas, not when the first cold area is detected. This price disincentive will be in addition to those described in Sections 105 and 106. Only one area per delivered truck will be counted toward the number of low density areas. Temperature segregation checks will be performed only in areas where continuous paving is possible.