

Recycled Content in Paving Materials

Community Development Agency
Transportation Division

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Purpose/Overview

● Purpose:

- Present to the Board on the use of paving materials with recycled content and request the Board's permission to cap the use of recycled materials at 15% for paving materials and 0% for shoulder backing.

● Regulations:

- Assembly Bill (AB) 2355
- Public Resources Code Section 42704.5

State Regulations

● Assembly Bill 2355

- Requires local agencies to adopt standards for using recycled materials in road construction by January 1, 2017.

● Public Resources Code 42704.5

- By January 1, 2017, a local agency that has jurisdiction over a street or highway shall do either of the following:
 - a) Adopt the standards developed by the Department of Transportation (Caltrans) pursuant to Section 42700 for recycled paving materials and for recycled base, subbase, and pervious backfill materials.
 - b) Discuss at a regularly scheduled public hearing of the local agency's legislative or other governing body why the standards are not being adopted.

Caltrans Standard Specifications

- Current Caltrans standards require local agencies to use recycled materials in pavement, base, subbase, or pervious backfill according to Public Resources Code 42700
- 2015 Caltrans standards state use of up to 25% recycled content in the top lift of asphalt and up to 40% in the lower lifts by January 1, 2017

Problems

- Caltrans issued a memorandum dated June 22, 2016 that states the use of recycled materials in paving materials over 15% is showing premature failure of the pavement
 - Premature failure would cause the County to have to perform road maintenance earlier than anticipated leading to increased maintenance costs.
- This memo also states the use of recycled materials greater than 15% in paving materials will require further mix design testing in the form of blending charts
 - This will require additional testing and cost for projects that are not currently required with 15% recycled content.

Transportation's Standards

- Current standards cap the use of recycled content in paving materials at 15%.
- The use of any recycled content in shoulder backing is not currently allowed.
- Currently follow Caltrans standards for the use of recycled base, subbase, and pervious backfill materials.
- Project track records demonstrates anticipated performance and life cycle is being met.

Examples

- The following projects all used 15% RAP:
 - Bass Lake Road Overlay Project
 - North Shingle Road Overlay Project
 - Gold Hill Road Overlay Project
 - Patterson Drive and Missouri Flat Road Overlays Project
 - Green Valley Road at Weber Creek Bridge Replacement Project
 - Silva Valley Interchange Project
 - Cold Springs Road at Mount Shasta Lane Realignment Project
 - Salmon Falls Road South of Glenesk Lane Realignment Project
 - Sawmill Bike Path Bridge Deck Repair Project
 - Pleasant Valley Road at Oak Hill Road Intersection Improvements Project
 - US 50 HOV Lanes Phase 0 Project
 - US 50 HOV Lanes Phase 1 Project
 - US 50 HOV Lanes Phase 2A Project
 - Missouri Flat Road Interchange Phase 1B
 - Pleasant Valley Road at Patterson Drive Signalization Project

Recommendations

- State regulations allow local agencies to adopt their own standards by approval of the governing body and does not require the use of any recycled materials.
- Authorize the CDA to cap the recycled content at 15% for paving materials and 0% for shoulder backing.
- Authorize CDA Director to allow use of up to 25% recycled content once Transportation experts, staff, and Caltrans determines why there is premature failure of pavement or when performing work on a State maintained road.

Questions & Discussion

