APAI Community Crossings Guide for Asphalt Projects

Purdue Road School
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OVERVIEW OF GUIDE

➢ The “Need”
➢ Indiana Code Requirements
➢ Asset Management Plan
➢ APAI Documents
  ▪ Asphalt Design & Construction Guide
  ▪ Bid Form Template
  ▪ Sample Advertisements for Bids
  ▪ Sample Award Procedure
  ▪ Contract Template
➢ Endorsed by INDOT and LTAP
APA Community Crossings Guide for Asphalt Projects

The Asphalt Pavement Association of Indiana (APAI), in collaboration with INDOT and Indiana LTAP, has developed Community Crossings Matching Grant (CCMG) guidance documents to assist counties, cities and towns with navigating the grant procurement process, delivering funds in the correct manner and designing and constructing quality asphalt pavement projects. We thank INDOT and Indiana LTAP staff along with APAI membership for their invaluable assistance in developing this guide.

Community Crossings Matching Grant Program Information

The INDOT Community Crossings website provides background information about the program, project eligibility information, timelines for application and award, example applications based on project total cost, frequently asked questions, and other, informative documents. APAI guidance documents were developed to supplement the information available on INDOT’s website. Project questions should be directed to CCMD district administrators.

LTAP Asset Management Guide

The CCMD program requires local agencies to have approved asset management plans to qualify for funds. This resource by Indiana LTAP introduces asset management and outlines the steps involved in developing an effective asset management plan.

Asphalt Design and Construction Guide

APAI created this topical guide to assist locals with designing and constructing quality asphalt pavements. The design section provides guidance to specify correct asphalt mixtures in accordance with INDOT Standard Specifications, Section 403 – Hot Mix Asphalt Pavement. The construction section helps Owners/Instructors ensure Contractor is observing best practices during asphalt paving operations.

Bid Form Template

A bid form with list of commonly used bid items with appropriate units is provided as downloadable MS Excel document. User should add and remove items to customize for project needs. Owner/designer will fill out "unit" column and include in project documents for bid. Contractor will fill in "price" column, and "total" column will automatically compute. Bid form will be used to determine low bidder.

Sample Advertisements For Bids

Sample newspaper advertisements for bids are provided for Owner to custom with project specific information. Bidding procedures vary based on total project cost and Owner should review Indiana code to determine requirements.

Sample Award Procedure

Sample award procedure, customizable with project specific information, is provided for Owner to use at Board meeting to award contract to low bidder.

Contract Template

Contract template, customizable with project specific information, may be used as agreement between Owner and Contractor for CCMD projects. This contract specifies that all work should be performed according to project specifications and INDOT published standards. Indiana code for CCMD projects allows Owner to elect either unit price (INDOT recommendation) or fixed price contract.
DESIGN AND CONSTRUCTION
BEST PRACTICES
**Mixture Specification**

- Align with current INDOT Standard Specs
- Mixture Designation
  - Type B or C depending on ESALs
  - PG binder grade
  - HMA, Type B, 64, Surface, 9.5mm
- Recycled content
  - Maximum binder replacement = 25%
Subgrade and Subbase
- Subgrade uniformly compacted
  - Proof roll to check stability
- Aggregate subbase compacted & smooth
- Roadway properly graded

Milling
- Mill to sound surface
- Patch and crack repair
- Clean surface – no dust or debris
CONSTRUCTION BEST PRACTICES

Tack Coat
- Uniformly applied across lane width
- No streaking or ponding
- Time to break and set

Mixture Placement
- Minimize segregation
- Smooth finished mat
- Temperature requirements
Compaction

- Most critical part of asphalt installation
- Establish rolling pattern
  - Initial breakdown when HOT
- Proper roller operation techniques
- Lift thicknesses
Thank you!

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