MATERIAL OPTIONS FOR RIGID BRIDGE DECK OVERLAYS

Reference: IDM 412-3.02(04) Rigid Overlays

In the past, microsilica-based bridge deck overlays fell out of favor with the Department due to cracking issues related to the material’s sensitivity to curing. Recent changes in admixtures and a number of successful installations throughout the state have brought microsilica-based overlay back as a feasible option for rigid overlays. These modern microsilica-based overlays are believed to have the same design life at latex modified concrete overlays.

The Department encourages designers to provide a microsilica-based overlay material as an option in latex modified overlay contracts. The Contractor is ultimately responsible for installing the highest quality at the lowest cost. Allowing the Contractor to pick the material they are most comfortable installing will result in higher quality and lower prices.

Follow the steps below to include an optional overlay materials in a contract.

INSTRUCTIONS FOR SETTING UP AN OPTIONAL BID FOR BRIDGE DECK OVERLAY MATERIALS

Latex Modified and Microsilica Concrete

1. Include the following Material Notes in the plan set:

   MATERIAL NOTES
   Bridge Deck Overlay:
   1 3/4" Latex Modified Portland Cement Concrete
   or
   1 3/4" Silica Fume Modified Structural Concrete
   (See Provisions for details)
2. Include Recurring Special Provision 102-C-082 (contract specific provision) in the contract documents. Complete the provision as follows:

102-C-082 SCHEDULE OF PAY ITEMS FOR OPTION BIDS

(Revised 06-10-13)

The Standard Specifications are revised as follows:

SECTION 102, AFTER LINE 12, INSERT AS FOLLOWS:

The Schedule of Pay Items is set up in three sections.

Section 0001, or Common Biddable Items, is the list of all pay items which are common to Section 0002 and Section 0003.

Section 0002, or Option Group OP1, is the list of all pay items required to perform the construction of a Latex Modified Concrete Overlay in accordance with the details shown on the plans for Str. No. XXX-XX-XXXX.

Section 0003, or Option Group OP2, is the list of all pay items required to perform the construction of Microsilica Concrete Overlay in accordance with the details shown on the plans for Str. No. XXX-XX-XXXX.

The bidder shall completely fill in and submit Section 0001 and Section 0002, or Section 0001 and Section 0003 of the Schedule of Pay Items. The Schedule of Pay Items thus submitted will be the one which will be compared to the Schedule of Pay Items submitted by all other bidders.

The work shall be constructed in accordance with the Schedule of Pay Items sections upon which award of the contract was based.

3. Include RSP 736-B-105 Silica Fume Modified Structural Concrete Bridge Deck Overlay in the contract documents.
4. Follow these steps to properly input the estimate into CES
   a. Insert all the pay items into CES either individually or through import from BidTabs
   b. Click on the “Categories” Tab inside the job file
   c. Right Click in the grey area below the existing category line and select “Add”
   d. Enter 0002 in the Add Category Number window
e. Enter “Latex Modified Concrete Overlay Option” in the Description Box

<table>
<thead>
<tr>
<th>Category Number</th>
<th>Description</th>
<th>Bridge ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001</td>
<td>DISTRICT BRIDGE PROJECT (REHABILITATION)</td>
<td>045-2806236</td>
</tr>
<tr>
<td>0002</td>
<td>Latex Modified Concrete Overlay Option</td>
<td></td>
</tr>
<tr>
<td>0003</td>
<td>Microsilica Concrete Overlay Option</td>
<td></td>
</tr>
</tbody>
</table>

f. Repeat steps c. through e. to create Category Number 0003 with Description Microsilica Concrete Overlay Option

g. Click on the “Items” tab to assign each item a Category Number and then select the “Tree View Button”
h. Complete the “Category” field and in the “Alternate Code” field with the appropriate numbers shown below.

Assign each pay item as follows:
- **Bridge Deck Overlay**
  - Category: 0002
  - Alternate Code: OP1
- **Bridge Deck Overlay, Microsilica**
  - Category: 0003
  - Alternate Code: OP2
- **All other pay items**
  - Category: 0001**
  - Alternate Code: blank

** If pay items are imported from OMAN BidTabs software, all items are automatically assigned to Category 0001. If pay items are individually added to CES, the Category field will be blank. **MAKE SURE EVERY PAY ITEM HAS A CATEGORY NUMBER!!**

i. The Inflated Estimate Total and the Total Estimate in the Job Summary printout from CES will only sum the total of the option with the lowest bid. The Estimate Item Total will include all optional bid items and should not be used for the total project estimate.