Value Engineering

Ben Johnson, PE and Clare Fullerton, PE

PCCP Conference – October 30, 2018
Value Management Team

State Value Management Engineer
Vacant

- Value Management Program Engineer
  - Dan Snoke, PE

- Value Management Program Engineer
  - Ben Johnson, PE

- Value Management Program Engineer
  - Alyson Tamer, PE, CPM

- Value Management Program Engineer
  - Clare Fullerton, PE

- Value Management Engineer
  Vacant
## Value Management Program Timeline

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Value Engineering Proposal
104-12 VALUE ENGINEERING PROPOSAL

This value engineering specification is to provide an incentive to the Contractor to initiate, develop and present to the Department for consideration, any cost reduction proposals conceived by him involving changes to the contract. This specification does not apply unless the proposal submitted is specifically identified by the Contractor as being presented for consideration as a Value Engineering Proposal (VEP). Submittals that propose material substitutions of permanent features, such as, but not limited to, changes from rigid to flexible or flexible to rigid pavements, concrete to steel or steel to concrete bridges will not be considered acceptable VEPs. Depending on the complexity of evaluation and implementations, VEPs that provide for a total savings before distribution of less than $10,000 may not be considered.
VEP Process

**OPTIONAL**
- Contractor Submits Preliminary Proposal
- Preliminary Proposal Reviewed

**REQUIRED**
- Contractor Submits Final Proposal
- Final Proposal Reviewed
VEP Process

**OPTIONAL**
- Contractor Submits Preliminary Proposal

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- Preliminary Proposal Reviewed
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VEP Process

**OPTIONAL**
- Contractor Submits Preliminary Proposal
- Preliminary Proposal Reviewed

**REQUIRED**
- Contractor Submits Final Proposal
- Final Proposal Reviewed
Contractor Submits Preliminary Proposal

Preliminary Proposal Reviewed

Contractor Submits Final Proposal

Final Proposal Reviewed
VEP Process

Proposed elimination of EB (R05.00) under shoulder and extend (01) (GRB-SA) and proposed Nonwoven Geotextile Interlayer fill width under NCOP.
VEP Process

OPTIONAL

Contractor Submits Preliminary Proposal

Preliminary Proposal Reviewed

REQUIRED

Contractor Submits Final Proposal

Final Proposal Reviewed
Resource Conservation Program
Resource Conservation Program

Submit data on recycled, solid waste, and reused material utilized during construction and maintenance projects.

This is a contract requirement, see Article 104-13 in the 2018 Standards and Specifications included in your contract.

Contact us with questions:
valuemanagementunit@ncdot.gov
919-707-4806.

Use the QR code on this card or go to https://connect.ncdot.gov/resources/Products/Pages/Recycle.aspx to reach fillable form.

When reporting include:
- Division #,
- Reporting
- Location/
- Project number,
- Fiscal Year, and
- Quantities of recycled material.
Resource Conservation Program

Recycled Products & Solid Waste Utilization in Construction & Maintenance Projects Form
Submit your annual recycling report

Each year, in accordance with General Statute 136-20.8, the Department publishes an Annual Recycled Products and Solid Waste Utilization Report and provides it to the Secretary of Transportation. This report summarizes the types and quantities of recycled and solid waste materials that were used during each state fiscal year ending June 30th.

The purpose of this form is to gather data to report the recycled, solid waste, and reused material utilized in each Division and compiled to be submitted as the Department’s efforts to recycle construction and maintenance materials as a whole. All District Engineers, Resident Engineers, Roadside Environmental Engineers, and any other working sections within your Division that may have utilized recycled, solid waste, or reused materials in construction and maintenance projects should complete this form.

Thank you for reporting this data.

Recycle Form

Division #
Reporting Location

https://connect.ncdot.gov/resources/Environmental/Pages/North-Carolina-Recycling-Locations.aspx
Product Evaluation Program
Product Evaluation Website

Product Evaluation Program (PEP), Product Submission Process and Additional NCDOT Product Resources.

Approved Products List
- NCDOT’s Approved Products List
- NCDOT Standard Specifications (2012)
  - NCDOT Standard Specifications (2012)
- Value Management Guidelines
  - Overview of the Product Evaluation Program

Submit Products for Evaluation
Value Management is modernizing product evaluation by building this online product submission tool. The first version is available now via the green button below. Click First Time Users to enroll.

Submit Products

www.connect.ncdot.gov/resources/Products/Pages/default.aspx
Approved Products List

https://apps.ncdot.gov/vendor/approvedproducts/
### Approved Products List

<table>
<thead>
<tr>
<th>Product ID</th>
<th>Plant ID</th>
<th>Company Name</th>
<th>Product Group</th>
<th>Product Category</th>
<th>Product Name</th>
<th>Model Number</th>
<th>Product Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP12-5994</td>
<td></td>
<td>Crafo, Inc.</td>
<td>Concrete and Concrete Patching Materials</td>
<td>Concrete and Concrete Patching Materials</td>
<td>TechCrete</td>
<td>N/A</td>
<td>Approved</td>
<td>Flexible Repair Material for Concrete Pavement</td>
</tr>
<tr>
<td>MP12-4242</td>
<td></td>
<td>FlexKrete Technologies</td>
<td>Concrete and Concrete Patching Materials</td>
<td>Concrete and Concrete Patching Materials</td>
<td>FlexKrete Technologies FK-102</td>
<td>Approved</td>
<td>Advanced thermoset vinyl polymer for repairing concrete structures, bridges, etc.</td>
<td></td>
</tr>
<tr>
<td>MP12-4256</td>
<td></td>
<td>Belzona, Inc.</td>
<td>Concrete and Concrete Patching Materials</td>
<td>Concrete and Concrete Patching Materials</td>
<td>Belzona Magma-Build Belzona 4141</td>
<td>Approved</td>
<td>Concrete bridge repair material for vertical and overhead uses</td>
<td></td>
</tr>
<tr>
<td>MP12-5134</td>
<td></td>
<td>Utilcor Technologies Inc</td>
<td>Concrete and Concrete Patching Materials</td>
<td>Concrete and Concrete Patching Materials</td>
<td>Utilbond</td>
<td>UB-TPA</td>
<td>Approved</td>
<td>Utilbond is specially formulated and engineered bonding compound designed to be used for pavement cores in asphalt and concrete roads, sidewalks and other paved surfaces. <a href="http://WWW.Utilcor.com">WWW.Utilcor.com</a></td>
</tr>
<tr>
<td>MP12-5161</td>
<td></td>
<td>Norchem, Inc.</td>
<td>Concrete and Concrete Patching Materials</td>
<td>Concrete and Concrete Patching Materials</td>
<td>Eucron MSA</td>
<td>N/A</td>
<td>Approved</td>
<td>Powdered microsilica (silica fume) conc. admixture. Reacts chemically with calcium hydroxide to form calcium hydrate gel that significantly enhances strength &amp; durability. Fills voids in cement permeable conc.</td>
</tr>
<tr>
<td>MP12-6010</td>
<td></td>
<td>Silicone Specialties, Inc</td>
<td>Concrete and Concrete Patching Materials</td>
<td>Concrete and Concrete Patching Materials</td>
<td>Silspc Flexpatch</td>
<td>N/A</td>
<td>Approved</td>
<td>A three-component, 100% solids, multi-purpose, high-strength, non-shrink, waterproof, non-polymer patching mortar. The system combines a high quality polymer resin and curing agent blended with coarse aggregates.</td>
</tr>
</tbody>
</table>
Approved Products List

Product Listing Detail

Product ID (ex. NPYY-xxxx): NPG-4242

Plant ID:

Product Name: FlexKrete Technologies
Model Number: FK-102

Description: Advanced thermoset vinyl polymer for repairing concrete structures, bridges, etc.

Comments:

Manufacturer/Distributor: FlexKrete Technologies

Approval Responsibility: M&T

Group: Concrete and Concrete Patching Materials
Category: Concrete and Concrete Patching Materials
Brand: FlexKrete Technologies
Status: Approved

Manufacturer Contact:

Distributor Contact:
How to Apply

1. Create a NCID account
   (00A) NCID Instructions - US Based
   Instructions for obtaining a NCID account for US based companies

2. Register your NCID account
   First Time Users

3. Click on submit products and login
   Submit Products

4. Receive an acknowledgement letter with next steps
Vendor submits product → Technical Work Group reviews product → Status given to Vendor and shown on the APL
Innovations
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Value Engineering Program

Value

Function

Cost
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Post Construction Assessment Program
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<td>Ben Johnson, PE</td>
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<tr>
<td></td>
<td><a href="mailto:bljohnson2@ncdot.gov">bljohnson2@ncdot.gov</a></td>
</tr>
<tr>
<td></td>
<td>919-707-4801</td>
</tr>
<tr>
<td>Product Evaluation Program (PEP)</td>
<td>Dan Snoke, PE</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:djsnoke@ncdot.gov">djsnoke@ncdot.gov</a></td>
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<td><a href="mailto:cfgriffith@ncdot.gov">cfgriffith@ncdot.gov</a></td>
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<tr>
<td>Post Construction Assessment Program (PCAP)</td>
<td>919-707-4812</td>
</tr>
<tr>
<td>Service Accounts</td>
<td><a href="mailto:ProductEvaluation@ncdot.gov">ProductEvaluation@ncdot.gov</a> (919-707-4808)</td>
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<td><a href="mailto:ValueManagementUnit@ncdot.gov">ValueManagementUnit@ncdot.gov</a></td>
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