DOCUMENTATION APPENDIX

SPECIFIC TASK TRAINING PROGRAM

Conducted by the
ILLINOIS CENTER FOR TRANSPORTATION (ICT)
AND
IDOT BUREAU OF CONSTRUCTION

FY 2019
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(August 18, 2017)

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Current Construction Memorandums
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Project Procedures Guide
Current Construction Inspector’s Checklists
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Equal Opportunity Employment
The following are manuals, guides and forms provided to comply with construction projects for IDOT and local entities.

**Manuals & Guides**

- Construction Manual
- Documentation of Contract Quantities
- Highway Standards
- Inspector Checklists

Construction Inspector’s Checklists are issued by IDOT’s Bureau of Construction to provide guidance to IDOT and local agency employees for the performance of required inspection for the major categories of work involved in department contracts.

For technical support call (217) 782-2760.

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CONSTRUCTION INSPECTOR’S CHECKLIST
FOR
CONTRACT ADMINISTRATION

While its use is not required, this checklist has been prepared to provide the Resident Engineer a summary of easy-to-read step-by-step requirements relative to Contract Administration. The following questions are based on information found in the Standard Specifications, Construction Manual, Policy Memorandums, and letters.

BEGINNING OF CONTRACT

1. Have you received from your Construction Office the following? ____
   - Special Provisions
   - Plans
   - Copy of executed contract (i.e. signed by the Secretary of Transportation)
   - Commitment File
   - Copy of Joint Agreements and Letters of Understanding
   - 404 Permits, etc.
   - NPDES Plan & NOI
   - Design calculations
   - ROW plats for any proposed ROW or easements
   - Preprinted Quantity book pages.
   - Copy of first pay estimate
   - Subcontractor Approvals
   - Approved material sources
   - Job Stamp or preprinted labels

2. Establish contract files that includes the following as a suggested minimum? ____
   - As Built Plans
   - Binder for IDR’s, BC 628
   - Asphalt and Concrete Reports
   - Material Inspection Reports - MIRC08
   - Audit Reviews
   - Miscellaneous
   - Authorizations
   - NPDES Reports
   - Calculations
   - Pay Estimates / Material Allowance
   - Commitments
   - Proportioning Reports - Plant Reports
   - Contract
   - QC/QA Plan, Reports
   - Contractor’s Payroll
   - Shop Drawings
   - Correspondence
   - Subcontractor Approvals
   - EEO Reports
   - Delivery Ticket Files/Envelopes
   - Erosion Control Reports
   - Traffic Control Reports
   - Final Papers
   - Trainee Reports
   - Force Account Reports
   - Weekly Reports

3. Are you setting up the following documents? ____

b. Binder for Inspector’s Daily Reports, for any IDR’s prepared during the project. See Section A of the Documentation Section.

c. Field Books. Put identifying information on any field books to be used. See Section A of the Documentation Section.


4. Have you been informed as to when and where the Pre-Construction Conference will be held?

   a. Pick up several sets of plans and special provisions, and order full scale sized sets if it is a major project.

   b. Have your key personnel attend this meeting (with Supervisor’s permission).

   c. Keep a copy of the minutes in your contract file.

   d. Discuss any agreement to plan quantity (BC 981).

   e. Scheduled jobsite inspection to review and designate the locations and types of erosion control protection to be placed. (Article 280.03)

   f. Discuss material sources and suppliers.

   g. Discuss progress schedule submittal and start of work. See Section 108 of the Standard Specifications.

   h. Discuss the proposed workforce and equipment to be used. See Section 108 of the Standard Specifications.

5. Have you contacted the designer and discussed this contract?

   a. Obtain a copy of the Design Calculations for future reference. They show how the plan quantities were determined.

   b. If the project involves rehabilitation, obtain a set of current as built plans plans from microfilm.
6. Have you discussed the following concerning this contract with your supervisor? ____
   a. Personnel requirements.
   b. Vehicles.
   c. Survey and measurement equipment.
   d. ICORS equipment
   e. Material testing equipment.
   f. Authorization pre-approvals.
   g. Special commitments.

7. Have you discussed with the Contractor the location of the field office and given him/her a list of any special equipment required by the contract? See Section 670 of the Standard Specifications. ____

Provide the exact location of the field office and the field office phone numbers to your District Construction office.

8. Are you and your staff carefully examining the plans, Special Provisions, Recurring Special Provisions, Supplemental Specifications and Specifications? Any discrepancies shall be reconciled in accordance with Article 105.05. ____

9. Does your contract contain a temporary erosion control plan? If not, have you discussed this with the Contractor and your Landscape Architect? Follow the Construction Inspector’s Checklist for Erosion Control. ____

10. Has the Traffic Control Authorization Request Form OPER 725 been prepared, submitted and approved? ____

11. Are you setting up a Project Diary for this contract? See Section A in the Documentation Section of the Construction Manual. ____

12. Are you checking the list of Construction Memorandums found in the Construction manual to see if any apply to your contract? (Note: Construction Memorandums are not contract documents. Construction Memorandums are policy.) ____

13. Do you have access to the pertinent Departmental Manuals listed on Page No. 1 of the Administration Section of the Construction Manual? ____

14. Review the standard forms necessary for documentation along with pertinent guidelines such as who prepares the form, the purpose of the form, instructions on its preparation and distribution that are contained in the forms section of the Construction Manual? ____

15. Prior to the contractor starting work, have you: ____

Sheet 3 of 8
a. Received a satisfactory progress schedule from the contractor? (Article 108.02) 

b. Received approval for first or second-tier subcontractors the contractor has requested to use on the project? 

c. Determine if original cross sections are needed for earthwork? 

d. Measured items to be removed? (e.g. trees) 

e. Established bench marks needed for the work? 

f. Conducted the jobsite erosion control review scheduled at the pre-construction conference. (Article 280.03) 

g. Prior to commencing earthwork, installed Erosion and Sediment Control measures. (Article 280.03)

16. Are you determining the ROW limits and any construction easements and marking them for the contractor. (Article 107.32) 

a. In some cases it may be necessary to contact your District Land Acquisition Office to obtain the ROW plats. 

b. See Section 100 in the Construction manual. 

17. Are you establishing stationing throughout the project? 

Sometimes it is advantageous to run an offset line other than the centerline especially in urban areas. 

18. Are you locating the stations of all permanent signs, no passing zones, special pavement markings, etc.? 

The Bureau of Operations have the signs inventoried by mile stations. 

19. Are you discussing the traffic control plan with the Contractor? (Section 700) 

a. Read Section 700 in the Standard Specifications. 

b. Contact your District Traffic Control Supervisor and discuss any recent specification changes. Ask if State Police hireback money is available for your project. Have him/her inspect the initial traffic control setup for specification compliance. 

**PROSECUTION AND PROGRESS OF CONTRACT** 

1. Are you making out a Pay Estimate at least once a month of the materials in place complete, the amount of work performed, and the value thereof, at the contract unit prices? (Article 109.07)
a. Enter the cumulative quantity from the quantity book not to exceed the plan quantity or authorized quantity on the corresponding line item of the pay estimate.

b. Refer to Construction Memorandum No. 76 for specific procedures.

c. See the Forms Section of the Construction Manual for more information.

d. Do not include on the pay estimate quantities which do not have evidence of material inspection. Consult your District Materials office.

2. Are you performing erosion control inspections as required and ensuring the erosion control plan is being followed by the Contractor? __

   a. Follow the Construction Inspector’s Checklist for Erosion Control.
   
   b. See Construction Memorandum No. 60.

3. Are you filling out the Weekly Report of The Resident Engineer, form BC 239? (Article 108.04) __

   a. The Weekly Report is used by the Central Bureau of Construction to generate the “Monthly Construction Report” for each district. This monthly report tracks the progress and status of each contract in every district statewide.
   
   b. Discuss the progress of the work with the Contractor and compare it to the progress schedule. (Article 108.02)
   
   c. Extension of time requests can be initiated by either the contractor or Engineer. (Article 108.08) (Form BC-2019)
   
   d. See also Construction Memorandum No. 28.

4. Are you performing traffic control inspections as required by Section 700 in the Construction Manual? __

   Coordinate through your District Traffic Control Supervisor from the Bureau of Operations.

5. Are you ensuring all materials incorporated into the work has evidence of Material Inspection? __

   a. Contact your District Bureau of Materials.
   
   b. Follow the requirements of the Project Procedures Guide.
   
   c. Request Report 16S from the Bureau of Materials. It summarizes all the Mistic MIRC08 reports for your contract.
6. Are you completing Contractor evaluations on an annual basis on Form BC 1777, Contractor’s Performance Evaluation? __________
   a. This form is used to help determine the prequalification Work Rating of a Contractor.
   b. See Form BC 1778, Numerical Guidelines For Use With Contractor’s Performance Evaluation.

7. Are all field books set up as outlined in Section A (examples in Section F) in the Documentation Section of the Construction Manual? __________
   a. Do not leave field books in drawers or State trucks.
   b. Are daily bituminous, concrete and piling notes being recorded in hard-backed field books?

8. Are Truck Tare Weights being recorded daily on pay items paid for by the ton? __________
   a. See Section A in the Documentation Section of the Construction Manual, Documentation of Pay Quantities Based on Weight Tickets.
   b. Use form BC 1465, Truck Tare Weights.
   c. Are independent weight checks being conducted. See Special Provision and Documentation Section of the Construction Manual.

9. For Extra Work are you filling out daily copies of Form BC 635, Extra Work Daily Report or establishing an agreed unit price for the work? (Article 109.04) __________
   a. Form BC 635 must be jointly signed by the Resident (or inspector) and the Contractor, recording labor, equipment, and material used. See Schedule of Average Annual Equipment Expense in the Construction Manual and Construction Memorandum No. 4.
   b. Agreed unit prices require a letter from the Contractor and a memorandum from the District Estimator. See Section A in the Documentation Section of the Construction manual.
   c. If prior approval from supervisor (or higher) was required, record in the project diary the name of the person and when the approval was received

10. Are you ensuring that the Contractor is complying with all the EEO requirements? Are you periodically making spot interviews of employees of the Contractor and subcontractor(s) on the job to establish that the minimum wage and other labor standards of the contract are being fully
complied with and that there is no misclassification of labor or disproportional employment of apprentices, etc.?

a. See Construction Memorandum No. 24 and EEO Checklist, Form SBE 1008.


d. See Checksheet #4, Required Provisions - State Contracts.

e. Interview one employee from each craft.

f. Compare the wage rates to the Illinois Department of Labor's prevailing wage list for the appropriate county(s) contained in each contract.

g. Report discrepancies to your supervisor and District EEO Officer.

11. Are you documenting thickness for items as indicated on the Thickness Determination Schedule contained in Section A of the Documentation Section in the Construction Manual?
END OF CONTRACT

1. Are you checking the plans to be sure all work was performed under the contract? ____

2. Are you giving the Contractor a punch list of items to be completed before the project can be accepted? ____

   Make a joint inspection with either the Maintenance Field Engineer or Field Technician.

3. Are you performing final documentation as indicated in Section A in the Documentation Section of the Construction Manual? ____

   See Form BC 111, Checklist For Engineer’s Final Payment Estimate.

4. If the contractor wishes to submit a claim on this contract is he/she following the procedures outlined in Article 109.09? ____

   Refer to Construction Memorandum No. 71.

5. Are you preparing an As-Built sets of plans for this contract? ____

   a. Use 1/4 size plan sheets and mark changes in green or blue (red pencil does not copy well).

   b. Make two sets for contracts that involve changes or revisions to bridge plans.
Current Construction Memorandums

Construction Memorandums are issued by IDOT’s Bureau of Construction to distribute policy information.

**Special Instructions:** The current memos are available for download. Users can download individual memos or all memos. To download an individual file to your hard drive click the link with the right mouse button, then choose “save target as.” To view the file, click the link with the left mouse button. An index with links to all the current memos is also available. After downloading, the memo files and the index must be placed in the same directory.

Files are in Adobe PDF format. Adobe Reader is required to view these files.

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Coordination of Contract Documents - Art. 105.05
Letting April 22, 2016

NOTICE TO PROSPECTIVE BIDDERS
This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT’s Central Bureau of Construction.
BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL

Notice to Bidders, Specifications, Proposal, Contract and Contract Bond

Illinois Department of Transportation
Springfield, Illinois 62764

Contract No. 70767
MCLEAN County
Section (57-20,57-1)RS&56RS-3
Route FAP 730,FAP 322
Project ACNHPP-000V(048)
District 5 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:

☐ A Bid Bond is included.
☐ A Cashier’s Check or a Certified Check is included
☐ An Annual Bid Bond is included or is on file with IDOT.

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Contract Total Award: 409,252.83
Item Number Designation

- The first three numbers show the Section of Standard Specs.
- Letter prefix has special meaning
  - “A” through “K” indicate plant & landscape items
  - “M” indicates a metric pay item on a metric project
  - “X” indicates a special provision or general note has modified the item from the Standard Specs.
  - “Z” indicates an item shown only in the Special Provisions
  - “XZ” indicates pay items that were created for special circumstances which may be used with special provision or general note for clarification

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<tr>
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<td>CHANGEABLE MESSAGE SN</td>
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<tr>
<td>Z0012130</td>
<td>BR DECK SCAR</td>
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<td>40603335</td>
<td>HMA SC &quot;D&quot; N50</td>
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CHANGEABLE MESSAGE SIGN
Eff. 03-23-2004

This work shall consist of furnishing, placing, and maintaining changeable message sign(s) at the location(s) shown on the plans or as directed by the Engineer.

The sign(s) shall be trailer mounted. The message panel shall be at least 7 ft (2.1 m) above the pavement, present a level appearance, and be capable of displaying up to eight characters in each of three lines at a time. Character height shall be 18 inches (450 mm).

The message panel shall be of either a bulb matrix or disc matrix design controlled by an onboard computer capable of storing a minimum of 99 programmed messages for instant recall. The computer shall be capable of being programmed to accept messages created by the operator via an alpha-numeric keyboard and able to flash any six messages in sequence. The message panel shall also be capable of being controlled by a computer from a remote location via a cellular linkage. The Contractor shall supply the modem, the cellular phone, and the necessary software to run the sign from a remote computer at a location designated by the Engineer. The Contractor shall promptly program and/or reprogram the computer to provide the messages as directed by the Engineer.

The message panel shall be visible from ¼ mile (400 m) under both day and night conditions. The letters shall be legible from 750 ft (250 m).

The sign shall include automatic dimming for nighttime operation and a power supply capable of providing 24 hours of uninterrupted service.

The Contractor shall provide all preventive maintenance efforts s(he) deems necessary to achieve uninterrupted service. If service is interrupted for any cause and not restored within 24 hours, the Engineer will cause such work to be performed as may be necessary to provide this service. The cost of such work shall be borne by the Contractor or deducted from current or future compensation due the Contractor.

When the sign(s) are displaying messages, they shall be considered a traffic control device. At all times when no message is displayed, they shall be considered equipment.

Basis of Payment: When portable changeable message signs are shown on the Standard, this work will not be paid for separately, but shall be considered as included in the cost of the Standard.

For all other portable changeable message signs, this work will be paid for at the contract unit price per CALENDAR DAY for CHANGEABLE MESSAGE SIGN. Any portion of one calendar day during which the sign is operated as directed by the Engineer shall be paid as one full calendar day.

X7015005
“X” item number
ADJUSTING OF FRAMES AND GRATES OF DRAINAGE AND UTILITY STRUCTURES
Eff.: 03-09-2001
Rev.: 03-28-2007

At the contractor’s option the adjustment of the casting may be performed after the surface course has been placed.

If this option is chosen, the existing pavement adjacent to and for a distance not exceeding 12 inches (300 mm) outside the base of the casting to be adjusted shall be broken sufficiently to permit its removal.

After the casting has been adjusted, the pavement and hot-mix asphalt mixture removed shall be replaced with Class SI concrete not less than 9 inches (225 mm) thick. The concrete surface to a depth of 1 inch (25 mm) shall be darkened with a mortar additive to match the adjacent hot-mix asphalt mixture.

Payment will be in accordance with Articles 602.16 or 603.09.

CONCRETE CURB REPAIR

Description: This work shall consist of removal and replacement of concrete curb at locations determined by the Engineer.

Construction Requirements: This work shall be completed according to the applicable portions of Section 440 and Section 606 of the Standard Specifications, and as directed by the Engineer. The minimum length of the curb repair shall be four feet. The minimum length of existing curb to be left in place between areas shall be ten feet. Joints in concrete gutter, curb and combination curb and gutter shall be constructed as a continuation of the joints in the adjacent concrete pavement, base course, base course widening, shoulder. Expansion joints adjacent to drainage castings may be placed in prolongation with other joint types. When concrete curb and combination curb and gutter are constructed adjacent to flexible Pavement or shoulders, joints shall be constructed at distances in accordance with existing joints.

Basis of Payment: This work will be paid for at the contractors unit price per foot measured in place for CONCRETE CURB REPAIR, which the price shall include the removal and disposal of the existing curb and reinforcement bars, as well as seeding and shaping any soil disturbed in order to perform said work.
STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction, Adopted April 1, 2016”, the latest edition of the “Manual on Uniform Traffic Control Devices for Streets and Highways”, and the “Manual of Test Procedures for Materials” in effect on the date of invitation for bids, and the “Supplemental Specifications and Recurring Special Provisions” indicated on the Check Sheet included herein, which apply to and govern the construction of FAP Routes 730 & 322 (US 51 & US 51 BUS), Project ACNHPP-000V(048), Section (57-20,57-1)RS & 56RS -3, McLean County, Contract No. 70767, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

DESCRIPTION OF PROJECT

The project consists of patching, milling, resurfacing, guardrail improvement and other miscellaneous items necessary to complete the work.

INTENT OF PROJECT

The intent of this project is to resurface FAP Routes 730 & 322 (US 51 & US 51 BUS) from Woodrig Road in Bloomington to Country Acres Road to provide an improved roadway surface. The items on this project will be constructed while maintaining at least one lane of traffic.

This work must be accomplished in a manner causing the least amount of damage possible to the environment and giving the maximum possible protection to the public, while minimizing disruption and inconvenience.

TRAFFIC CONTROL PLAN

Eff. 09-11-1990 Rev. 01-01-2014

Traffic control shall be in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these Special Provisions and any special details and highway standards contained herein and in the plans.

Special attention is called to Articles 107.09 and 107.14 of the Standard Specifications, the following Highway Standards relating to Traffic Control, and the listed Supplemental Specifications and Recurring Special Provisions.

Highway Standards: 701101 701400 701406 701411 701421 701426 701456 701701 701901
VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."
Per Article 105.05, Highway Standards indicated by revision number listed in the Index of Highway Standards on the plans override the index numbers listed anywhere else.
LETTING DATE: 04/22/2016  LETTING TYPE: 1-SCHEDULED  
LETTING ITEM NBR: 046  CONTRACT NBR: 70767  DISTRICT: 05  RESP BUREAU: DESIGN  
ESTIMATED NBR OF WORKING DAYS: 065  
WORK DESCRIPTION: This project consists of 2.92 miles of resurfacing with guardrail upgrades on US 51 and US Business 51 from Woodridge Road in Bloomington to Country Acres Road.  
CONTRACTOR 5183 - Rowe Construction, a division of United Contractors Midwest, Inc.  
1523 N. Cottage Street  
Bloomington  
IL 61701-0609  
AWARD DATE 05/19/2016  
PROJECT IND:  PROJECT NBR: NHPP-000V/048/  
PROJECT SECTION: (57-20,57-1)RS & 56RS-3  
ROUTE: FAP 730  FAP 322  
STATE JOB NBR: C-95-024-09  
PPS NUMBER(S): 5-53809-0000  
CONTRACTOR PAYMENT NON-OBLIGATED FUNDS:  
EXP  IDOT  BOB  RELEASE  RELEASE  AMOUNT  PERCENTAGE  AUTHORIZATION  POSTING ALLOWED  
AMOUNT  %  
A  02A  00  01  16 695-49442-7700-0115  7721  2015-0017  06-1153  3,043,222.80  100.000  YES  
GROUP  PARTICIPANT  PAYMENT  PARTICIPATION  AMOUNT  MAXIMUM AMOUNT  
**********  PARTICIPANT  AMOUNT  %  
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STATE OF IL  144,400.21  20.0000  
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STATE OF IL  464,244.35  20.0000  
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COUNTY TOTALS  3,043,222.80  
PROJECT TOTALS  3,043,222.80  
CONTRACT TOTALS  3,043,222.80  
Awarded date 05/19/2016
STATE OF ILLINOIS

CONTRACT

1. THIS AGREEMENT, made and concluded this 31st day of May, 2016
(for Department use only)

between the State of Illinois, acting by and though the Department of Transportation, known as the party of the first, and

Rowe Construction, A division of United Contractors Midwest, Inc.
his/their executors, administrators, successors or assigns, known as the party of the second part.

2. WITNESSETH: That for and in consideration of the payments mentioned in the Proposal hereto attached, to be made and performed by the party of the first part, and according to the terms expressed in the Bond referring to these presents, the party of the second part agrees with said party of the first part at his/their own proper cost and expense to do all the work, furnish all materials and all labor necessary to complete the work in accordance with the plans and specifications hereinafter described, and in full compliance with all of the terms of this agreement and the requirements of the Engineer under it.

Execution Date:
Cannot start before execution date Per Article 108.03; must start within 10 days after the date the contract was executed, unless otherwise provided in the contract or directed in writing by the Regional Engineer
STATE OF ILLINOIS

CONTRACT BOND

ITEM 046
04/22/2016

KNOW ALL MEN BY THESE PRESENTS, That we Rowe Construction, A division of United Contractors Midwest, Inc.

a Corporation organized under the laws of the State of Illinois

and licensed to do business in the State of Illinois, as Principal, and Travelers Casualty and (Name of Surety)

Surety Company of America

and existing under the laws of the State of Connecticut, with authority to do business in the State of Illinois, as Surety, are held and firmly bound unto the People of the State of Illinois in the penal sum of

THREE MILLION FORTY-THREE THOUSAND TWO HUNDRED TWENTY-TWO DOLLARS & 79/100 CENTS ($3,043,222.79)

lawful money of the United States, well and truly to be paid unto said People of the State of Illinois, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly, severally and firmly by these presents.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that whereas, the said Principal has entered into a written contract with the State of Illinois acting through the Department of Transportation, for the construction of the work designated as:

Contract 70757 McLean County Section (57-20,57-1)RS&56RS-3

Fed. Proj. No. ACNHPP-000V(048) FAP 730,FAP 322 District 5

which contract is hereby referred to and made a part thereof, as if written herein at length, in and whereby the said Principal has promised and agreed to perform said work in accordance with the terms of said contract,
**Progress Schedule**

**State of Illinois**  
**Department of Transportation**

**Date of Award**: 5/19/2016  
**Execution Date**: 6/6/2016  
**Starting Date**: 6/6/2016  
**Date of Estimated Completion**: 10/5/2016  
**Contractor**: Rowe Construction, a div of UCM, Inc.  
**Address**: 1523 N Cottage Ave, Bloomington, IL 61701

**County**: MCLEAN  
**Section**: (57-20,57-1)RS&58RS-3  
**Route**: FAP 730, FAP 322  
**District**: 5  
**Contract No.**: 70767  
**Job No.**: C-95-024-09  
**Project**: ACNHPP-000V(048)

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**LEGEND**

- **Controlling**
- **Non-Controlling**
- **Proposed**
- **DBE/WBE**
- **Trainees**

**Contractor Date**:  
**District Construction Engineer Date**: BC 255 (Rev. 2/05)

**Printed**: 5/25/2016  
**Appendix Page**: 25
SECTION 109. MEASUREMENT AND PAYMENT

109.01 MEASUREMENT OF QUANTITIES

109.01-1 Documentation

109.01-1(a) Department Documents

The IDOT Documentation of Contract Quantities publication provides detailed information on calculating quantities for payment. All Department field staff must have an in-depth knowledge of this publication. The following also apply to documentation:

- Construction Memorandum No. 33, Operational Review of Contract Quantities, in Appendix A, discusses procedures for District reviews of project support documentation for contract quantities.

- Construction Memorandum No. 81, District Construction Project File Requirements, in Appendix A, presents requirements for the retention of District construction files (e.g., retainage).

109.01-1(b) General

Contract work, as bid by the Contractor, is measured and paid as contract pay items. The contract documents will specify the following information for each item:

- The unit of measure
- The method of measurement
- The estimated quantity
- The system for the unit of measure (i.e., US Customary or metric (SI))

Each contract item represents a unique construction element of the project (e.g., guardrail, pipe culvert, riprap). Contract items may be measured by units of each, length, area, volume, weight or lump sum. The contract documents also include the estimated quantity of each contract item. The actual quantities of the various contract items performed by the Contractor must be determined by measurement and calculation, unless Form BC 981: Agreement on Accuracy of Plan Quantities, is signed.

Differences often exist between the estimated quantities shown in the contract documents and the actual quantities that result during construction. If necessary, contact the designer to discuss the project quantities (e.g., how were the quantities calculated?). If necessary, request additional backup quantity information, such as earthwork calculations, to assist in determining the planned quantity for a specific item for payment, or if there is a suspected conflict or discrepancy with the field-calculated earthwork based on the project staking notes.
109.01-2 **Accuracy of Measurement**

All pay item quantity documentation is subject to audit and review and, therefore, must be complete, accurate and established in a manner that is clear, concise and easily followed and understood by personnel unfamiliar with the project.

All contract quantities must have written data to support payment. The source document should include all pertinent information on the location, method of measurement (e.g., tons, cubic yards, square yards, lump sum, pounds, each), dates of installation, etc.

Measure and calculate contract item quantities to a degree of accuracy according to Section B of the IDOT *Documentation of Contract Quantities*.

109.01-3 **Weight Checks**

This Section presents the Department’s policy for the performance of independent weight checks for pay items where the method of measurement for payment is based on weight.

The IDOT *Documentation of Contract Quantities* outlines three types of weight checks that must be performed by State (or local agency) representatives. They include one for weekly independent weight checks, and two types (that should be alternated) for ticket weights determined from batch weights.

The weekly independent weight check will be documented on Form BIC 2367. A copy of Form BIC 2367 (performed by Department personnel) will be forwarded to the Central Bureau of Construction and the Bureau of Investigations and Compliance.

The two weight checks for batch plants may be reported on 1) the Bituminous Daily Plant Output Report, Form MI-305, or 2) the Independent Weight Check, Form BIC 2367, or 3) other methods using the format described in the IDOT *Documentation of Contract Quantities*. Results shall be placed in the job file. Do not forward copies to the Central Bureau of Construction nor to the Bureau of Investigations and Compliance.

109.01-4 **QC Checks By Contractor**

The IDOT *Documentation of Contract Quantities* outlines the scale checks that must be performed by Contractors as part of the QC process. The scale checks will be documented on Form BIC 2367 and/or the Bituminous Daily Plant Output Report. Copies of QC checks by the Contractor should not be forwarded to the Central Bureau of Construction nor to the Bureau of Investigations and Compliance.

109.01-5 **Weighing**

See the IDOT *Documentation of Contract Quantities*. If loads or portions of loads are rejected, notes explaining the reason should be made on the respective load ticket or invoice, initialed and dated by the authorized Department Inspector.
109.04 PAYMENT FOR EXTRA WORK

109.04-1 General

The Department reserves the right to require the performance of extra work to satisfactorily complete the contract work. It is in the best interest of both the Department and the Contractor to anticipate extra work whenever possible. Options for completing any extra work should be discussed with both the Contractor and Construction Field Engineer/Area Supervisor. A Contractor shall not begin this work without written authorization from the Department. Refer to Article 104.02 and Construction Memorandum No. 4 in Appendix A for extra work payment.

109.04-2 Method of Payment Definitions

The basic method of payment to the Contractor for extra work will be one of the following:

1. Contract Unit Prices. This method uses existing items and unit prices in the bidding schedule.

2. Agreed Unit Price (AUP)/Lump-Sum Price. AUP establishes new items and unit prices to pay for extra work. In general, an agreed unit price approach is used when there is a key component (e.g., cubic yards of structural concrete) of the overall construction element that can be used to provide payment for the Contractor’s work. The AUP approach is best suited when the work can be quantified in advance.

   Lump sum is used for payment for extra work when it is appropriate to pay for the completed work as a unit; i.e., the lump-sum price is the total agreed cost for all work associated with the construction of an overall construction element. It includes the cost of all materials, labor and equipment. This method is appropriate when it can be determined that there will be no changes or adjustments to the original scope or quantity of extra work agreed upon.

3. Force Account. A force account compensates the Contractor for extra work based on the actual hours worked and the equipment and materials used (i.e., time and materials). It is more cumbersome and administratively complex than either an agreed unit price or lump-sum price payment. Force account is best used when:
   - Defining the work clearly and accurately enough for a change order with an agreed unit or lump-sum price is too difficult
   - The extra work needs to begin immediately
   - The Department and the Contractor cannot agree on an agreed unit or lump-sum price for the extra work

109.04-3 Lump Sum or Agreed Unit Price

Either the Resident or the District Office will receive a letter from the Contractor proposing payment for extra work at a lump sum price or an agreed unit price. This request is forwarded to
the District estimator who either approves or rejects the price. If the lump sum or agreed price is approved, the Contractor shall be given written confirmation of the approved method of payment and permission to proceed with the work. If the request is denied, one or two options exist — either the Contractor may resubmit the proposal with changes, or the Department will direct the Contractor to proceed under a force account basis.

109.04-4  **Force Account**

If it becomes necessary to do extra work under a force account basis, the Contractor shall perform the work in the most expedient and economical manner possible. This shall be discussed before the work actually begins. In this discussion, the labor force required, equipment to be used, and any material needed will be determined. After these issues are resolved, the extra work may proceed.

On a force account, the Resident should agree with how the work will be performed and the labor, materials and equipment that the Contractor will use before the work is performed. The Resident can also decide what to include and exclude on a force account.

Each day that the Contractor proceeds working on the extra work, an Extra Work Daily Report, Form BC 635: Extra Work Daily Report, shall be completed. Form BC 635 shall then be signed by both the Contractor’s and Department’s representatives. The original shall be given to the Contractor for future billing and a copy retained in the job file. Upon receiving the force account billing from the Contractor, the Resident shall check it for accuracy with the Extra Work Daily Report, Form BC 635, in the job file. The Contractor billing should resemble that shown in the IDOT *Documentation of Contract Quantities*. Once checked, processing for payment may proceed.

When extra work is performed by an Engineering firm hired by the Contractor, the cost should be administered as work performed by an approved Subcontractor per article 109.04(b)(7).

It is recommended that an authorization for an estimated amount is processed before the work begins.

Refer to Construction Memorandum No. 9 in Appendix A for procedures to process a force account bill.

**109.05  EXPENSES INCURRED BY THE DEPARTMENT**

The following are examples of items that typically apply to Article 109.05:

- Professional services such as:
  - Design work (based on change in design) provided by Contractor/supplier not included in plans
  - Shop drawing work originally directed by the Department but then no longer needed
  - Generating/reviewing technical reports, submittals, permits, lab analysis, etc.
• Utility work such as residential service hookup (beyond the meter) and utility service drops
• Railroad flagger bills in accordance with Article 107.12

109.07 PARTIAL PAYMENTS

One of the most important duties of the Resident is to submit pay estimates for quantities of completed work. The contract between the State and the Contractor differentiates two types of payments to the Contractor – partial payments (Article 109.07) and final payments (Article 109.08). The Resident’s work on a project is not complete until the final payment has been made to the Contractor.

109.07-1 Progress Payments

109.07-1(a) Frequency of Progress Pay Estimates

Due to the large dollar value and duration of many contracts, Article 109.07 of the Standard Specifications for Road and Bridge Construction provides for partial payment to the Contractor for work completed to date. A partial payment, commonly referred to as a progress payment, is initiated by the Resident when he/she completes and submits a pay estimate. Article 109.07 specifies that a partial payment will be made to the Contractor at least once per month. However, if the State is the awarding authority, payment will be made only if the value of the payment is $1,000 or greater.

Depending on the size of the contract, progress pay estimates may be submitted on a more frequent basis. Normally, pay estimates are not submitted more often than twice a month. However, on a multimillion-dollar project, progress pay estimates may be submitted weekly if sufficient work has been completed to justify that schedule. The Resident may wish to discuss the payment schedule with the prime Contractor to ensure that all involved know when payments can be expected.

Each pay estimate must be processed individually by the Central Bureau of Construction. Due to the time required to process each payment, pay estimates should not be submitted more frequently than once per week. Two or more estimates should never be submitted at the same time.

109.07-1(b) Submittal of Progress Pay Estimates

Pay estimate entries may be made using ICORS or on preprinted forms. If ICORS is used, pay estimates should be emailed with a statement indicating the Resident’s approval for the contract and pay estimate number (i.e., “I hereby approve this estimate for payment.”) and an original signed copy is to be kept in the Resident’s file.

On contracts staffed by State personnel, one copy should be either mailed to Central Construction or emailed to “Pay Estimate Central,” one copy each to the District, prime Contractor and a signed copy to be retained in the Resident’s file.
On contracts staffed by other than State personnel, two copies including the original should be sent to the State’s Resident, one copy each to the prime Contractor and contract file. If use of ICORS is approved, pay estimates should be emailed to the State’s Resident, prime Contractor and one copy retained in the contract file. Once approved, the State’s Resident should email the pay estimate to “Pay Estimate Central.”

On local agency contracts, three copies should be mailed to the District contact for approval and one copy retained in the project file. On manual (non-ICORS) contracts, two sets of signature approvals are required — one from the local agency employee in responsible charge of the contract, and the other from an IDOT employee overseeing the local agency’s contracts (the district contact). If use of ICORS is approved and after the local agency employee in responsible charge of the contract includes a statement indicating their approval of the estimate (i.e., “I hereby approve this estimate for payment.”), pay estimates should be emailed to the District contact. After the estimate is approved in the District, the pay estimate, along with a statement indicating the District’s approval (i.e., “I hereby approve this estimate for payment.”), should be emailed to “Pay Estimate Central” and the Contractor.

**109.07-1(c) Quantities to Submit on a Progress Pay Estimate**

On progress pay estimates, the payment quantities for most pay items may be estimated. Estimates can be made for either the quantity of completed work (e.g., volume of earth excavation completed) or the percentage of work completed. The basis for all estimates should be clearly stated in the Resident’s documentation. Quantities paid must be assigned to the correct fund code and County, Construction, Safety (CCS) Code, because these must be correct by the end of the project. These codes may appear to be random but are not. They are utilized to ensure that proper funding is charged for the project from State, Federal and local sources.

The *Project Procedures Guide* provides information for what is acceptable evidence of material inspection. This is a critical item and the Resident must have the evidence in their files, if the evidence is a document (i.e., tickets or an inspection report).

The pay estimate will include the quantities for all pay item work completed in accordance with the contract. It is in the best interest of the State that the Contractor is paid promptly for all work properly performed. All quantities, which are submitted on a pay estimate, must be supported by acceptable documentation. See Section 109.07-1(e).

All work accepted for progress payment must be maintained in acceptable condition until final payment. For example, new drainage structures must be clean at the time of final inspection. The cost of maintaining newly installed structures is included in the cost of the drainage structures. Ordinarily, it is not necessary to withhold a percentage of the payment for the item for such contingencies. Withholding must be discussed with the Resident’s Construction Field Engineer/Area Supervisor.

The Resident must use discretion when deciding how to pay for work that is partially completed. The Resident must never pay the full price for partially completed pay item quantities. The following general principles apply:
1. **The value of the partially completed work.** The norm is to pay the Contractor for completed units of pay item work. However, if the Contractor is bearing a large cost for partially completed work, typically for lump sum or each items, it may be in the interest of the State to pay a calculated percentage of the pay item cost. Examples of incomplete work include intermediate lifts on bituminous pavement and traffic control (for which the Department has set up a partial payment schedule).

2. **Risk to the State if the work is not eventually completed by the Contractor or if the work is not completed in a timely manner.** This may happen, for example, if the Contractor goes out of business before the work is completed. Control of payment for partially completed work is one of the Resident’s most effective tools for encouraging the Contractor to comply with the terms of the contract.

3. **Risk of damage to partially completed work.** For example, the Department does not ordinarily pay for traffic signal control cabinets installed but not yet tested.

**109.07-1(d) Effect of Change Authorizations on Pay Estimates**

When additional work has been added to a contract, whether it is due to a routine change in contract quantities or an addition of new work to the contract, the Contractor needs to be paid for the completed work in a timely manner. To accomplish this, a change authorization adding the work should be submitted as soon as a contract addition is known. If the work will be done on a force account basis, an authorization using the estimated costs should be submitted as early as possible, with a revised authorization submitted when final costs are known. There are a number of pay items that have been set up for specific items on change authorizations. A list of these items is included in Construction Memorandum No. 4, Contract Changes – Articles 104.02 and 109.04.

Balancing authorizations should be submitted as work under various pay items are completed, rather than waiting until the end of the project to submit a single balancing authorization for all of the pay items.

**109.07-1(e) Items NOT to Submit on a Progress Pay Estimate**

1. Never pay for work for which you do not have adequate evidence of material inspection. Section 106, Control of Materials, of the *Standard Specifications* discusses approval of materials incorporated into the work.

2. Never pay for work that has not been performed. For example, at the end of the fiscal year in June, payments may be temporarily delayed while the Comptroller performs their end-of-year accounting and establishes the appropriations for the upcoming fiscal year. On the last pay estimate of the fiscal year, it is illegal to pay for quantities of work that the Contractor intends to perform in the immediate future.

3. Never “swap” pay items. It is illegal to pay for work covered by one pay item by submitting it on the pay estimate as a different pay item, no matter how similar in description or price the pay items are. If a new type of work is required, then a new pay item (agreed unit price or force account) must be added to the contract by a change authorization.
4. Never bury non-pay item costs in the contract. For example, if an engineering mistake is made in laying out an item, causing the Contractor to have to perform the work twice, the extra cost should be submitted on an authorization as extra cost due to an engineering error. It is not acceptable to pay for the work twice under the pay item.

5. Never pay for work that is not complete in accordance with the contract specifications. If it is decided that non-compliant work may remain in place, a credit for non-compliant work/material may be pursued.

6. Never pay for work for which you do not have adequate documentation to support the quantity paid. For example, if the Contractor refuses to cooperate in weighing a tonnage item on an approved scale (when required by the contract), then do not pay for the unsupported quantity unless directed to do so by your Construction Field Engineer/Area Supervisor.

Paying for work in other than the approved manner may constitute a felony. Residents should be careful to follow the policies and procedures enumerated in the above related to payments.

109.07-1(f) Corrections to Pay Estimates

If errors are discovered in the project quantity documentation, the errors must be corrected as soon as possible. The quantity must also be updated as soon as possible so that the correction can be reflected no later than the next pay estimate. This is especially important if the error being corrected resulted in a large overpayment to the Contractor.

If an error is discovered in the preparation of a pay estimate after submitting the estimate, under most circumstances, if the error is discovered immediately, the correction can be made over the telephone. In this case, the Resident should contact the District Construction Office which, in turn, will contact the Central Bureau of Construction to make the correction. Any corrections made by telephone should be documented in the project diary, and the quantity book must be updated to reflect the correction on the next pay estimate.

109.07-2 Material Allowances

Article 109.07 permits the Department, at its discretion, to pay the Contractor for costs incurred supplying non-perishable materials under certain conditions.

The intent of this provision is to pay the Contractor for costs incurred for a particular contract for payment that would not normally be made until the materials are incorporated into the project. It is not the intent of this provision to pay material allowances for stocks of materials that can easily be acquired by the Contractor to meet project scheduling.

A material allowance is different from a payment for partially completed work. In the case of a partially completed pay item, material is consumed as work progresses and the Contractor is paid based on work accomplished. For material allowances, none of the covered material is yet incorporated into the project pay items.

The following conditions must be met to qualify for a material allowance:
1. The Contractor must submit acceptable evidence of passing material inspection(s).

2. The material must be non-perishable and is intended for use only on a specific contract.

3. The material should normally be ready to incorporate into the work. For example, structural steel must be fabricated. Exceptions can be considered in cases of raw steel shortages or to meet tight project schedules. Form BBS 59 shall be used as documentation to substantiate the material allowance for fabricated structural steel.

4. All material for which an allowance is to be paid must be in secure storage on the project or at a location acceptable and accessible at any time by the Department. The material must be properly protected from damage. If the material becomes damaged or otherwise unacceptable, it shall be removed from the material allowance. If stored off the project site, the location must be such that the Resident can maintain reasonable control, either directly or through District staff. The State must be able to “take possession” of the material if the Contractor should default on the contract. For this reason, certain materials such as borrow cannot be considered for an allowance due to the problems the Department would encounter in taking title under this situation.

5. The Contractor must present proof of payment within 60 days after receiving payment from the Department or the material allowance will be reclaimed. Proof of payment could include:
   - Copies of canceled checks (front and back)
   - Copies of checks with some form of verification from the financial institution
   - A copy of an invoice from the Supplier marked “Paid by check number ______,” which also includes the date, signature and title of the supplier’s representative
   - Other acceptable documentation

6. There must be a clear benefit to the Department and the Contractor for purchasing the material in advance. For example:
   - There is a perceived or potential national or regional shortage of the material.
   - The time required to prepare the material is critical to meeting the contract schedule.
   - The cost of the material is expected to rise before the material is to be incorporated into the work.

7. Materials that can be readily supplied to the contract and materials that are expected to be incorporated within 60 calendar days should not be included in material allowances.

8. The inclusion of a material on a material allowance should not place an undue burden on the District with extra inspections or other monitoring requirements.
9. Because other costs are included with the material cost in the unit price of a pay item, the dollar value of the material allowance should represent only the bare material cost and cost plus transportation shall not exceed 70% of the cost of the corresponding pay item(s). Paying for more than 70% of the pay item cost can be considered in special situations but under no circumstances shall the value of the material allowance equal the value of the corresponding pay item work.

10. No allowance will be made for fuels, form lumber, falsework, temporary structures or other work that will not become an integral part of the finished construction.

11. As the materials are incorporated into the project and paid as a normal pay item, the value of the material allowance(s) will be reduced on the same pay estimate.

12. The following items are typically acceptable for material allowance payment:

   - Fabricated structural steel
   - Complete bridge bearing assemblies
   - Precast structural units (e.g., beams, deck planks)
   - Fabricated sign trusses
   - Mast arms
   - Items impacted by a regional or statewide shortage
   - Groups of items common except for type or size (e.g., pipe for culverts or storm sewers)

13. All material allowances must be submitted by the prime Contractor. Direct submittals from subcontractors or material suppliers will not be allowed.

Note: This list intentionally does not include aggregates or raw unfabricated structural steel. The District must satisfy itself that special conditions exist that justify considering such materials for an allowance. Secure storage and accessibility by the Department are critical for these and similar materials.

To maintain uniformity in the payment of material allowances, the Bureau of Construction is always available for consultation on special situations involving material allowances. This is strongly encouraged for such issues as perceived material shortages and for non-typical material allowances.

109.08  ACCEPTANCE AND FINAL PAYMENT

109.08-1 Final Payment

The final payment is based on those completed pay item quantities included in the original contract documents and those quantities that have been added by an approved change order. A
representative of the State or local agency must be present for all measurements taken for final payments. Payments shall not be based on Contractor measurements.

Final payment is normally made to the Contractor only after the following conditions have been met:

1. All physical work has been satisfactorily completed and accepted.
2. All documentation requirements have been satisfactorily completed.
3. All materials incorporated into the work have been certified.
4. The Contractor has agreed to final quantities.
5. Any performance bonds required by the contract have been received, including thermoplastic and/or planting bonds if the establishment periods have not been completed.
6. DBE payment agreement forms have been submitted to document compliance with DBE goals (if required).
7. All appropriate EEO forms and payrolls have been filed.

109.08-2 Contract Closeouts

Contract closeouts are an important part of the overall contract administration process. Until a project is closed and the Contractor receives the final payment, the project is not complete. The following closeout process has been developed as a guide to facilitate the timely closeout of projects. Recognizing that projects differ in complexity and size, the time frames given may need to be adjusted in certain situations.

The positions listed are suggestions of who may perform the duties. The actual individual or position completing a process will vary depending on the District, available personnel, if a local agency is involved and other factors. All projects should be closed within six months of the final inspection. However, there will occasionally be projects with bonds, performance requirements, liens, warranties, claims or other special circumstances that may require additional time.

I. WEEKLY REPORT OF RESIDENT (Form BC 239) submittal, Final Inspection and Punch List (Article 105.13) time frames.

A. The Resident submits Form BC 239 at 99.5% a maximum of 3 days from the date all physical work was complete.

B. The Resident performs inspection a maximum of 2 days after the physical work complete date to determine initial punch list.

1. No initial punch list by the Resident.
a. The Resident contacts the Construction Field Engineer/Area Supervisor to perform final inspection. The Construction Field Engineer/Area Supervisor conducts the final inspection, including other Bureaus and local agencies as necessary, within ten days and, if all work is completed, the Resident submits Form BC 239 at 100% within three days.

b. If a punch list is developed, the Resident submits Form BC 239 at 99.9% within 3 days. The Contractor is allowed 5-7 days to re-mobilize to perform punch list items before Resident begins to charge working days. When punch list items have been completed to the satisfaction of the Resident and Construction Field Engineer/Area Supervisor, the Resident submits Form BC 239 at 100% within three days.

2. Initial punch list issued by Resident.

a. Resident issues initial punch list to Contractor and submits Form BC 239 at 99.9% within 3 days. The Contractor is allowed 5-7 days to re-mobilize to perform punch list items before Resident begins to charge working days. If possible, this initial punch list is given to the Contractor prior to their demobilization. When initial punch list items have been completed to the satisfaction of Resident, the Resident contacts Construction Field Engineer/Area Supervisor to conduct the final inspection. The Construction Field Engineer/Area Supervisor conducts the final inspection including other Bureaus and local agencies as necessary and, if all work is completed, the Resident submits Form BC 239 at 100% within three days.

b. If a subsequent punch list is issued to the Contractor, the Contractor is allowed 5-7 days to re-mobilize to perform punch list items before Resident begins to charge working days. When punch list items have been completed to the satisfaction of Resident and Construction Field Engineer/Area Supervisor, the Resident submits Form BC 239 at 100% within three days.

C. Once the 100% weekly report is received, Support checks database for any outstanding items that need to be addressed (e.g., extension of time, liquidated damages, Operations approval, coring waiver) and notifies appropriate personnel to resolve as soon as possible.

D. Support personnel generate the “Final Inspection Letter(s)” for signature and distribution and begins preparation of office and Equal Employment Opportunity (EEO) files and plan retention. Support personnel begin to manage and assemble all final documents for final paperwork submittal to Central Bureau of Construction. Another option is the Resident or Construction Field Engineer/Area Supervisor generates the “Final Inspection Letter(s)” for signature, distribution and cc’s to Support.

E. If the above guidelines are not met, non-compliance notifications may be sent by Support to the appropriate personnel, and the Construction Engineer is copied. The Construction Engineer will intervene if warranted. All time frames can be extended to allow for mitigating circumstances.

II. CONTRACT RECORDS AND AUTHORIZATION SUBMITTALS AND TIME FRAMES AFTER 100% COMPLETION DATE FROM FORM BC 239 IS KNOWN.
A. The Support Office must receive the contract records (job boxes) within 30 days after the 100% completion date for documentation and material certification reviews to commence. The Resident is required to contact the Support Office with an explanation if the 30-day time frame will not be met.

B. The Resident submits to the Construction Field Engineer/Area Supervisor a balancing authorization of all remaining outstanding contract pay items, except outstanding force account work (see II.C.), within 30 days after 100% completion date and notifies Support of any outstanding authorizations. At this point, the Resident and Contractor have tentatively agreed to “final” quantities. If there are no outstanding extra work invoices (see II.C.), this authorization will be marked by Resident as “Final.”

1. The Construction Field Engineer/Area Supervisor checks the authorization for errors and omissions. All District signatures are obtained per Construction Memorandum No. 4 in Appendix A. Support will again check for errors, omissions and BCM screen 64 for 4 (four) signature status. Support will then input authorization data into the District Project Implementation Support database for tracking purposes and to facilitate in the creation of the Net Cost of Section. The processing is completed and the authorization is mailed to CBC. The target time for this process is 2 days.

2. Support monitors Report to Web daily for authorization posting by CBC and notifies and processes.

3. The Resident will contact Support personnel if the contract will have no authorizations.

C. The Resident must receive all extra work invoices from the Contractor within 60 days after completion of the work (Article 109.04) for the Contractor to be paid for any extra work. This also includes items paid for by Article 109.05. The Resident will only accept corrected invoices after the 60-day parameter has lapsed. Resident submits the marked “Final” authorization to Construction Field Engineer/Area Supervisor 80 days after 100% completion date.

D. If the above guidelines are not met, non-compliance notifications may be sent by Support to the Resident, and the Construction Engineer is copied. The Construction Engineer will intervene if warranted. All time frames can be extended to allow for mitigating circumstances.

E. Once the acceptable contract files are submitted to the District office, the contract becomes the responsibility of the District. Implementation Support staff in direct charge of closing out the contract may create and sign the final “balancing” pay estimate that does not involve significant contract administration issues when the Resident is not available to do so. Construction Field Engineer/Area Supervisor or higher-line authorities may also create and sign the final pay estimate, or any future pay estimates that may involve significant contract administration issues as needed when re-opening the contract when the Resident is not available to do so.

III. FINAL QUANTITY SUBMITTAL AND TIME FRAMES AFTER “FINAL” AUTHORIZATION HAS BEEN POSTED BY CBC.
A. Support personnel download the Final Quantity Approval Sheets from mainframe TSOA program. These are mailed certified to the Contractor for its signature of approval with a cover letter stating the need for the following submittals. The Final Quantity Approval Sheets must be checked against the hard copy of the Final Pay Estimate by Support and, if any payments have not been made by the Resident, they are verified and added to the Final Pay Estimate for submittal with final paperwork. As an alternative, a Final Pay Estimate from BCM may be used if the Contractor’s signature and date are still collected.

It is not necessary to wait until Support has completed its review of final quantities to send the Contractor the final quantities. If the review finds quantity adjustments need to be made, the Resident will generate an authorization to correct the quantity, and Support sends the Contractor a Final Quantity Adjustment Letter or Revised Quantity Approval Sheets.

1. The Contractor has 21 calendar days from receipt of certified mail to either agree to final quantities or respond in writing indicating the quantities that are in disagreement. Failure to do so will be considered acceptance of the final quantities.

2. Performance bonds, Form SBE 2115: DBE Payment Agreement, for each DBE Subcontractor (if applicable) and a Form BC 2115: Subcontractor Payment Agreement, for non-DBE Subcontractors (if applicable). Time frames for submittal to Support depend on the Contractor and Subcontractor. Another option is for Support to send this request for submittal to the Contractor with the “Final Inspection Letter” (see I.D.).

a. Bonds – If a Contractor (Subcontractor) chooses to submit, the time frame is 1 month after Final Quantity Approval Sheets from TSOA have been approved. If not submitted, closeout cannot occur until warranty inspections are performed as directed in the Standard Specifications. This can delay closeout by several months.

b. Form SBE 2115 and Form BC 2115 – Submitted within one month after Final Quantity Approval Sheets have been agreed to and submitted; this may require intervention by the District EEO Liaison.

B. The Form SBE 2115 is attached to the DBE/WBE Final Documentation Form (Form SBE 2028) and submitted to the Bureau of Small Business Enterprises (SBE) in the Office of Business and Workforce Diversity. SBE will respond to the District, and this entire information becomes part of the final documentation submitted to CBC.

C. Copies of the Final Quantity Approval Sheets are retained with the other Support final documents and given to Support Documentation and Support Material Certification personnel for the review process.

D. Support will supervise and control the status of all document submittals on a daily basis. Once final quantities are agreed to, Support orders from BCM screen 41 a hard copy of “RE Pay Estimate Report,” to prepare for submittal to CBC with other final paper work upon District closeout date.
E. If the above guidelines are not met, non-compliance notifications may be sent to the Contractor by Support, and the Construction Engineer is copied. The Construction Engineer will intervene if warranted. All time frames can be extended to allow for mitigating circumstances.

IV. SUPPORT DOCUMENTATION REVIEW AND TIME FRAMES

A. A contract records check-in sheet is completed by the Resident and submitted with the contract records. The check-in sheet is a fairly comprehensive visual aid for the documentation personnel to quickly locate certain items. It also aids the Resident to ensure that all documents are present.

1. When records are submitted, the documentation reviewer checks the EEO monthly and payroll weekly log-in sheets for compliance. This check may also be completed by the District EEO Liaison or the Resident. If any required submittals are not logged-in, notification letters are generated, signed and sent to the Contractor. The District EEO Liaison and non-compliant Sub(s) are cc’d on the letter. A more comprehensive review of these items will occur when the actual documentation review process begins.

B. The documentation reviewer starts the review process within 3 weeks after contract records are submitted. The documentation reviewer must have Final Quantity Approval Sheets to check accuracy of Quantity Book pay item quantities (see III.B.).

1. Target times for initial review completion is 1 day to 3 weeks depending on the number of pay items, the dollar amount of the contract and the volume of documents.

2. Form BC 111: Checklist for Engineer's Final Payment Estimate is started. Items 1-6, 10, 11, 19, 24, 26-28 are completed by the documentation reviewer with the Resident supporting if necessary. Form BC 111 is retained in a file on the S drive so that it can be accessed and completed by other Support personnel as the conclusion of closeout nears.

C. Documentation personnel complete the review process and Resident is notified.

1. Resident has 10 days to complete all contract documentation deficiencies.

D. Documentation reviewer checks to ensure that all deficiencies have been corrected.

1. If corrections are not complete, Resident has 2 days to complete.

2. Documentation reviewer completes review within 2 days, distributes and retains findings.

E. If the above guidelines are not met, non-compliance notifications may be sent by Support to the Contractor or Resident, and the Construction Engineer is copied. The Construction Engineer will intervene if warranted. All time frames can be extended to allow for mitigating circumstances.

V. SUPPORT MATERIAL CERTIFICATION REVIEW AND TIME FRAMES
This process time can be significantly decreased and, therefore, contract closeout time decreased, if the Resident strictly adheres to the discussion in Section 109.07-1(e), which presents items that must never be submitted on a progress pay estimate.

A. Material certifications should be in compliance when contract records are submitted. Resident will have submitted contract records (job boxes) within 30 days of the 100% Form BC 239: Weekly Report of Resident submittal.

B. Materials certification reviewer starts process within 1 month after Final Quantity Approval Sheets are received (see III.B.).

C. Material certification reviewer completes review within 2 weeks and generates a “Shortage Letter” that is sent to Resident and copied to Contractor.

D. Resident and material certification personnel work with Contractor, Subcontractors, suppliers and producers to resolve outstanding material certification issues. Material certification personnel work with other Districts to generate out-of-District material assignments and with District materials personnel for approvals. Target time frame for resolution is 1 month.

E. Material certification reviewer conducts a final review and completes process within 1 week.

F. An alternative option is, when the contract is 85% complete, a preliminary list of material certification deficiencies is compiled and sent to the Resident and Contractor. This provides all entities with another opportunity to reconcile deficiencies before contract records are submitted for review. The process will then follow A. through E.

G. If the above guidelines are not met, non-compliance notifications may be sent by Support to the Contractor or Resident, and the Construction Engineer is copied. The Construction Engineer will intervene if warranted. All time frames can be extended to allow for mitigating circumstances.

VI. SUPPORT PREPARES FINAL DOCUMENTS FOR SUBMITTAL TO CBC AND CONTRACT CLOSE-OUT IS COMPLETE

Support personnel obtain all documents necessary for closeout by the time the material certification review has been completed. Once the material certification review is complete, the close-out and final documents submittal to CBC occurs within 1 day.

VII. DATABASE

Support personnel should manage and track all documents necessary through a database that was created in part considering monitoring requirements. The database should also generate various status sheets, reports, letters, etc., that aid in the administration and monitoring of all phases of the closeout processes for all District contracts.

VIII. CONTRACTOR
The Contractor is also responsible for ensuring that projects are closed in a timely manner as described above. This includes the timely submission of all required documentation. The Resident should never pay for work for which there is not adequate documentation to support the quantity paid. Partial payment is discussed in Section 109.07. Failure to timely submit the required documentation, including that necessary to close a project, may result in a finding of non-responsibility on the part of the Contractor, resulting in the revocation of its prequalification.

### 109.09 CONTRACT CLAIMS

#### 109.09-1 Claims Avoidance

#### 109.09-1(a) General

The best mechanism for avoiding claims is to take an open and professional approach to claims avoidance by equitable adjustments for changes. Emphasizing field staff responsibilities for identifying and reporting potential change issues provides the “early warning” needed to avoid potential conflicts and disputes over change issues as they arise.

To avoid construction Contractor claims effectively, the following guidelines are recommended:

- Emphasize documentation and document controls to all project staff.

- Detailed Project Diaries; include phone conversations (written follow up) and any discussions.

- Good organization of all project records and claims documentation helps to retrieve these documents if necessary at a later date, sometimes years later.

- Follow the conditions of the contract. By not following the conditions of the contract, the Contractor may later argue that the Department set a precedent contrary to the contract by neglecting to administer and enforce the requirements.

- Issue non-conformance notifications as required. If the Contractor is not following the contract, let them know clearly what the issue is and the required action and do this timely and in writing.

- Hold progress meetings with the Contractor frequently (at least weekly) to discuss issues, schedules, etc. Issue the meeting minutes as part of the project record.

- Do not allow issues to be ignored and become possibly inflammatory issues at the end of the project. Bring closure to all issues as soon as possible and try not to defer issues for resolution later.

- Track labor, equipment and materials for disputed items of work.
109.09-1(b) Resident’s Responsibilities

Management at the project site can play an important role in minimizing problems and avoiding disputes. Following are some tools for accomplishing this:

- Ensure that the good practice guidelines as listed in the “Construction Inspector's Checklist for Contract Administration” and Section A of the IDOT Documentation of Contract Quantities are met.

- Review and discuss the project schedule with the Contractor.

- Recognize unreasonable or inaccurate schedules and define this to the Contractor, in writing, and require an updated schedule.

A photo/video history is a good means of recording progress, equipment in use and conditions.

109.09-2 Claims Review

This Section provides the Residents, Construction Field Engineers/Area Supervisors and District Construction Engineers with a uniform set of guidelines that may be used as a reference in addressing claims made by Contractors on construction projects. Knowledge of the examples included, plus familiarity with the contract documents, will assist engineers when analyzing contract claims. Proper analysis of contract claims will preclude recommendations of settlements that exceed Department policies or may establish potentially costly precedents.

The Department’s philosophy in addressing construction contract claims is predicated on the concept of equitable treatment for the Contractor and the Department as owner. Several questions should be addressed before making recommendations or decisions on claim settlements:

1. Has the Contractor been damaged?

   If the Contractor has not suffered a documented financial loss or delay resulting from circumstances or events related to the contract, compensation is generally not granted.

2. Is the amount of the damage claim fair?

   The Contractor may not be awarded settlements that exceed documented actual expenses. Assumed loss of profits or pro rata overhead costs are generally not recognized. Once entitlement is recognized, real costs that are not precluded by contract terms may be considered.

3. Is the payment excluded under the contract terms?

   The requirements set forth in the contract documents may exclude entitlement for excusable delays and/or compensable damages resulting from compliance with the provisions of the contract. Claims are generally not considered where excluded by “no damage” terms in the contract.
4. Has the Contractor been asked to assume an unfair risk?

Occasionally, “no damage” or exculpatory terms may be considered when the adverse or damaging conditions exceed those contemplated by the contract. It is prudent to consider what was contemplated by the contract when analyzing this type of claim.

5. Would settlement establish an undesirable precedent?

Claims practices and procedures are based to a large extent on precedents established by past settlements. In analyzing claims, the impact a settlement may have in setting a precedent for future claims must be recognized in reaching a recommendation. The risk of establishing a damaging precedent is greatly increased when commitments are made prior to claims settlement.

109.09-3 Types of Costs

The following are examples of costs that are typically claimed by Contractors together with the Department’s position on whether such costs are compensable and, if so, to what extent. Entitlement must be established before any costs are considered compensable:

1. **Idled Equipment.** Equipment required for a work operation that is idled and cannot be used on other work due to a compensable delay caused by the Department.

   This is an identifiable cost and the hours claimed for reimbursement for the idled equipment must be documented by the Resident for future reference. Payment for idled equipment will be made in accordance with Article 105.07. The Contractor has an obligation to minimize idled equipment expenses to the extent practical. Payment for removing the equipment from the project should be considered if it is more economical than keeping it idled on the jobsite.

2. **Idled Personnel.** The labor force required for a work operation that is idled and cannot be used on other work due to a compensable delay caused by the Department.

   This is a compensable cost which should be paid for in accordance with Articles 109.04(b)(1) and (2), without additives, for the time between the start of delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

   Salaried employees of the Contractor who are idled may be paid for the duration of the delay depending on the nature of their occupation. For example, an idled paving superintendent and plant operator would be eligible for compensation.

   General superintendents, mechanics, and bookkeepers would not be paid unless all progress on the contract is delayed. Payment will be considered only for those hours solely attributable to the contract for which complete documentation is provided.

3. **Increased Wage Rates and Material Costs.** Added costs that a Contractor incurs when a compensable delay causes work, which otherwise would have been completed, to be performed after labor and material costs have increased.
Such costs are compensable only to the extent that the delay actually impacted the work operation. For example, a Contractor’s paving operation is delayed for two weeks due to an act of the Department. During the two-week period, only seven working days are available because of rain. One week after resuming work, the Contractor is required to pay increased wage rates due to a new collective bargaining agreement. The Contractor is entitled to compensation for the difference in wage rates for those workers included in the paving operation for a period of seven days only — not the entire remaining paving operation.

4. Jobsite Overhead. Includes the cost of items such as salaried personnel, rental of office space, lease of plant and storage sites, telephones and utilities.

If a compensable delay affects a controlling item or the entire project such that the Contractor is required to remain at the project site for a longer duration, jobsite overhead may be considered to be compensable.

Each item of the jobsite overhead must be reviewed independently rather than accepting a daily or percentage rate. The cost of utilities will generally be directly related to the duration of use. However, rental or lease arrangements may be on a monthly, semi-annual or annual basis and not be affected by the delay. Salaried personnel who were compensated as “idled personnel” should not be included in jobsite overhead.

5. Loss of Efficiency. A reduction in labor or equipment productivity due to an act or omission of the Department. Such reductions in productivity must be documented to be compensable.

When a Contractor is delayed and is required to deviate from the progress schedule, the Contractor may claim that the work efficiency “built into” the schedule is lost, resulting in added costs. Similarly, when the Department decides to pay the premium portion of overtime rather than granting an extension of time, it may be claimed that work productivity declines due to the sustained work hours also resulting in added costs. Such added costs may be determined in accordance with the Department’s policy on acceleration. See Section 108.03.

6. Loss of Use of Money or Interest. A cost that reflects the time value of money.

If a Contractor incurs “out of pocket” costs, it may claim that he was unable to invest funds equal to those costs in the marketplace or conversely was required to pay interest on money borrowed to meet those costs for the period from when the costs were incurred until the claim is settled.

Whether such claims have merit is a moot point. The Court of Claims has never awarded interest because there is no basis in the Mechanic’s Lien Act for levying interest against the State. Such claims are therefore non-compensable.

7. Loss of Anticipated Profit. Profit is the excess of returns over expenditures on a business venture.
The amount of profit that a Contractor realizes on a project is dependent upon the profit factor included in the bid to remain competitive, actual productivity compared to planned productivity, weather, strikes, increased material costs, etc.

If a Contractor is required to perform added work beyond the original scope of the contract, such work is paid for on the basis of contract bid prices, agreed prices or force account, each of which provides for a profit factor.

If a Contractor incurs out of pocket costs in performing the original scope of work and is compensated for those costs, then the margin of profit on the original scope of work has not been diminished.

No allowance will be made for any loss of anticipated profit.

8. **Preparation of Claims.** A cost incurred by a Contractor in preparing and submitting a claim for additional compensation or time.

   If a Contractor desires to pursue additional compensation or time, it should bear the cost of establishing entitlement and documenting associated costs. The Department also incurs costs as part of the claims settlement process in the form of review time, meetings, preparation of correspondence and, in some instances, attorney and consultant fees.

   Costs for preparing claims are not considered compensable.

**109.09-4 Processing**

Claims for additional compensation that are supported by the Region Engineer must be submitted to the Central Bureau of Construction together with the District’s supportive recommendation as to entitlement. The recommendation of the local agency should also be submitted for claims on FAS and FAUS contracts awarded by the Department.

If the District and Central Bureau of Construction agree that entitlement has been established, the District will review the Contractor’s records in accordance with the above guidelines and refer to Article 109.09 to verify the amount of entitlement due the Contractor.

The District will then submit a supportive recommendation as to the amount of the proposed settlement to the Central Bureau of Construction.

Requests for extensions of time will be reviewed in accordance with Article 108.08 of the Standard Specifications and Section 108.08 of the Construction Manual.
<table>
<thead>
<tr>
<th>Pay Item Nbr</th>
<th>Description</th>
<th>Quantity Awarded</th>
<th>Added by Authorization</th>
<th>Deducted by Authorization</th>
<th>Adjusted Total Quantity</th>
<th>Completed at Last Report</th>
<th>Total Completed to Date</th>
</tr>
</thead>
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<td>XZ193400</td>
<td>SURVEY MARKER T2 SPL</td>
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</tr>
<tr>
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<td>1,192.800</td>
</tr>
<tr>
<td>40600990</td>
<td>TEMPORARY RAMP</td>
<td>369.400</td>
<td>0.000</td>
<td>0.000</td>
<td>369.400</td>
<td>145.500</td>
<td>232.600</td>
</tr>
<tr>
<td>40603540</td>
<td>P HMA SC &quot;D&quot; N70</td>
<td>1,971.500</td>
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<td>1,971.500</td>
<td>0.000</td>
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</table>
**Illinois Department of Transportation**  
**Division of Highways**  
**Report of Resident**  
**Line Item Detail of Completed Work-In-Place**

**Contractor:** Rowe Construction Co.  
**CtrNumber:** 5183  
**Contract:** 70767  
**County:** MCLEAN

**Pay Estimate Number: 4**

<table>
<thead>
<tr>
<th>Pay Item Nbr</th>
<th>Quantity Awarded</th>
<th>Added by Authorization</th>
<th>Deducted by Authorization</th>
<th>Adjusted Total Quantity</th>
<th>Completed at Last Report</th>
<th>Total Completed to Date</th>
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<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Resident:**  
**Date Prepared:** 9/6/16

**Regional Engineer:**  
**Date Mailed:** 9/6/16

---

**Note:** “Engineer of Record” must be signing pay estimate and a signed file copy must be retained in the jobsite project records as per Const. Man. 109.07-1(b)
PPG Section 300 – Responsibilities of Resident

• Ensures all materials are inspected and approved
• Ensures that the sampling and testing are in accordance with the PPG
• Communicates with the District Materials office ensuring all testing is accomplished
• Should not include any pay item on a pay estimate for which there is no evidence of material inspection or approval
• Force Account and Agreed Unit Price pay items shall be treated the same as contract pay items

PPG Section 400 – Responsibilities of Contractor

• Provide materials that meet or exceed specification requirements
• Provide IDOT with required evidence of inspection prior to incorporating material into project
• Give IDOT advance notice to have sampling and testing performed for source inspection
FIELD ACCEPTANCE

Construction materials do not just “appear” on the jobsite. In most cases, the material has been pre-inspected or may have been produced under a Department-approved Quality Control program. Evidence of Materials Inspection is the minimum proof that Method of Acceptance sampling and testing has been performed. This attachment identifies the type of evidence that is required. Additional information on Evidence of Materials Inspection may be found in the Manual for Materials Inspection. It is not always possible to update all documents concurrently. In case of a conflict, the most current edition should take precedence. If the Evidence of Materials Inspection is not clear, contact the Bureau of Materials for assistance.

This attachment does not describe the detailed Method of Acceptance sampling and testing requirements. Detailed information regarding materials inspection programs such as certified products, QC/QA programs, and warehouse inspections may be found in the Manual for Materials Inspection.

Column 1 - Product
The table is arranged in alphabetical order by type of material or construction. An attempt was made to include major items. If an item is not listed, contact the District Materials Engineer or the Bureau.

Column 2- Material Series
The number in this column represents the first three digits of the MISTIC Material Code for the product. If the product spans several sequential Material Series, only the first is listed. This number may be used as a cross-reference to find more information about a product from the Manual for Materials Inspection.

Column 3 - Evidence of Materials Inspection
This column lists the minimum information that the Project Inspector needs to accept the material. Definitions of the most common methods are listed below. It is important to understand that other methods may also be appropriate. For example,

- A product TEST may be appropriate at any time as determined by the Resident/Inspector.

- In addition to the notation in this column, a Visual Examination always applies. A piece of paper or Inspector’s stamp does not guarantee that all product defects were caught in the QC and QA process or that it was not damaged in transit.

- A passing test result that has been reported in the MISTIC system is always acceptable Evidence of Materials Inspection.
<table>
<thead>
<tr>
<th><strong>EVIDENCE</strong></th>
<th><strong>COMMENT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BBS 59 (BB59)</td>
<td>Report of acceptance of fabrication of structural steel. The Bureau of</td>
</tr>
<tr>
<td></td>
<td>Bridges and Structures usually performs this type of inspection and testing.</td>
</tr>
<tr>
<td>BILL OF LADING (BOL)</td>
<td>A shipping ticket that accompanies a product to the job site and which</td>
</tr>
<tr>
<td></td>
<td>identifies the product, source, and lot.</td>
</tr>
<tr>
<td>CBM (CBM)</td>
<td>Bureau of Materials approval letter.</td>
</tr>
<tr>
<td>CERTIFICATION (CERT)</td>
<td>Manufacturer’s written certification that indicates material complies with</td>
</tr>
<tr>
<td></td>
<td>the specifications or contract. Supplier certifications are not acceptable.</td>
</tr>
<tr>
<td>DAILY PLANT REPORTS</td>
<td>(DPR) For PCC and HMA, reports generated that provide mixture test results</td>
</tr>
<tr>
<td></td>
<td>and other production data. For non-QC/QA projects, Daily Plant Reports are</td>
</tr>
<tr>
<td></td>
<td>the responsibility of the <strong>Inspector</strong>. For QC/QA projects, refer to the</td>
</tr>
<tr>
<td></td>
<td>appropriate special provisions to determine responsibility for Daily Plant</td>
</tr>
<tr>
<td></td>
<td>Reports.</td>
</tr>
<tr>
<td>ILL OK STAMP (ILOK)</td>
<td>Material is stamped by an IDOT <strong>Inspector</strong> with an “ILL OK” stamp</td>
</tr>
<tr>
<td></td>
<td>indicating prior inspection and acceptance. An inspection tag may be used</td>
</tr>
<tr>
<td></td>
<td>as <strong>Evidence of Materials Inspection</strong> and approval.</td>
</tr>
<tr>
<td>LA-15 (LA15)</td>
<td>This <strong>Department</strong> form is a supplier’s certification indicating material</td>
</tr>
<tr>
<td></td>
<td>is from approved stock. The form is sometimes used as a Bill of Lading to</td>
</tr>
<tr>
<td></td>
<td>indicate prior approval. The form should include supplier, proper contract/</td>
</tr>
<tr>
<td></td>
<td>job designation, material description, manufacturer, specific approved</td>
</tr>
<tr>
<td></td>
<td>material (test ID number, lots, or batches), and quantity. Additional</td>
</tr>
<tr>
<td></td>
<td>information on LA 15’s is provided in Attachment 1.</td>
</tr>
<tr>
<td>QUALIFIED PRODUCT/</td>
<td>(LIST) The material appears on a current list of <strong>Department</strong>-approved</td>
</tr>
<tr>
<td>PRODUCER LIST</td>
<td>products or approved sources found at the <strong>Department’s</strong> web site, <strong>IDOT</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Website</strong>, under “Doing Business/Material Approvals.” Contact the</td>
</tr>
<tr>
<td></td>
<td>inspecting district’s Materials Office for information on aggregates.</td>
</tr>
<tr>
<td>MARK (MARK)</td>
<td>A commercial label, tag, or other marking which indicates product</td>
</tr>
<tr>
<td></td>
<td>specification compliance and/or an approved source/manufacturer.</td>
</tr>
<tr>
<td>TEST (TEST)</td>
<td>Approved test result available via the <strong>MISTIC</strong> system or from locally</td>
</tr>
<tr>
<td></td>
<td>performed lab or field tests (e.g., soil density).</td>
</tr>
<tr>
<td>TICKET (TICK)</td>
<td>A ticket from an approved source indicating <strong>Department</strong> material or</td>
</tr>
<tr>
<td></td>
<td>aggregate quality and gradation, job designation, purchaser, and weight</td>
</tr>
<tr>
<td></td>
<td>(if applicable).</td>
</tr>
<tr>
<td>VISUAL ACCEPTANCE</td>
<td>(VIS) A RE memo denoting visual inspection is required in the project file,</td>
</tr>
<tr>
<td></td>
<td>and input into <strong>MISTIC</strong> is required.</td>
</tr>
<tr>
<td>VISUAL EXAMINATION</td>
<td>(VISE) Same as VIS, but no RE memo or input into <strong>MISTIC</strong> is required.</td>
</tr>
</tbody>
</table>
MIXTURES and AGGREGATE

In addition to field tests, approval for aggregate and mixtures is based on other final acceptance criteria. The following items identify the initial method of approving such materials.

AGGREGATE:
1. Approved Aggregate Producer (CBM List)
2. Approved quality and gradation (ticket) per current CBM policy memorandum
3. Verify quality and gradation (INV) if appropriate.

HOT MIX ASPHALT:
1. Approved plant and lab (CBM)
2. Approved/verified mixture design
3. Approved materials – Aggregate (above), Asphalt Binder (CBM list)
4. Compliance with mixture and compaction specifications (QC/QA specifications or Sampling Schedule 4, as applicable).

PORTLAND CEMENT CONCRETE:
1. Approved plant and lab (CBM and District)
2. Approved/verified mixture design
3. Approved materials – Aggregates (above), Cement and Finely Divided Materials (CBM lists), Admixtures (CBM list)
4. Compliance with QC/QA or non-QC/QA specifications and Sampling Schedule 3, as applicable.

CONCRETE AGGREGATE MIXTURE (CAM II):
1. Approved plant and lab (CBM and District)
2. Approved/verified mixture design
3. Approved materials – Aggregates (above), Cement and Finely Divided Materials (CBM lists), Admixtures (CBM list)
4. Compliance with QC/QA or non-QC/QA specifications and Sampling Schedule 2, as applicable.

LIME MODIFIED SOIL, LIME STABILIZED BASE AND SUBBASE, AND SOIL-CEMENT:
1. Approved/verified mixture design
2. Approved materials – Aggregates (above), Cement and Finely Divided Materials (CBM lists)
3. Compliance with specifications and Sampling Schedule 1 or 2, as applicable.

Column 4 - Jobsite Sample
This column identifies sampling responsibilities of Project Inspectors. For mixture components, sampling is generally handled at the plant by Plant Inspectors. Additional sampling requirements for other non-jobsite samples are detailed in the Manual for Materials Inspection. Non-jobsite samples, other than mixture component samples, are generally sampled by District Inspectors or CBM personnel.
An “NR” in this field indicates that a jobsite sample is not required. However, if the method of acceptance for a material is TEST and there is no evidence that the material has been sampled and tested, or if the material is suspect, the Project Inspector should obtain a sample and submit for testing. Other entries in this column direct the Project Inspector to sampling policy documents.

**Column 5 - Responsible Lab** – The Bureau Laboratory responsible for receiving samples and establishing the testing policy for a product. If the entry is “DI,” any testing is performed by District Inspectors.

- AC – Analytical Chemistry
- AG – Aggregate
- BC – Bituminous Chemistry
- BM – Bituminous Mixture
- CM – Cement
- CN – Concrete
- JMM – Materials IT
- MT – Metals
- PC – Precast
- SL – Soils
- DI – District

**Column 6 - Sample Size**
When a field sample is required, the sample size is indicated in this column. (Contact the responsible lab for mix design sample sizes.) The following table summarizes the size of aggregate samples for gradation testing.

**Fine Aggregate**

- FA1 – FA 22

**Coarse Aggregate**

- CA1 - CA5
- CA6 - CA11
- CA12 - CA15
- CA16
- CA17 - CA19
- CA20

25 lb.

110 lb.

55 lb.

35 lb.

25 lb.

35 lb.

25 lb.

**LIMIT AGGREGATE SAMPLES TO 40 LB. PER BAG FOR SAFETY PURPOSES**

For select fill, 80 lb. of fine aggregate and 120 lb. of coarse aggregate are required to perform the internal friction angle, pH, resistivity, chlorides, sulfates, and organic content tests.

**Column 7 – Container**
Samples submitted to the Bureau Laboratory must be clearly labeled with the name of the material on the body of the container.

Following are recommended container types:

1. Screw top metal container.
2. Plastic bag in double canvas sacks.
3. Canvas sacks. Do not use burlap or “sugar sacks” for fine aggregate.
4. Plastic/Polyethylene container/bucket with secured lid.
5. Friction top metal container.
6. Telescoping (cardboard) carton.
7. Fiber Carton 4'' x 5'' x 5'', or large enough to fit core.
8. Well packed.
9. Securely fastened plastic bag in either a cardboard carton or a friction top metal container.
11. Plastic/Polypropylene bag.
14. Concrete cylinder mold (tightly sealed).
15. Test panel 18'' x 18'' x 3.5'' (Steel 3/16 in. minimum thickness bottom and sides; Wood 3/4 in. minimum thickness bottom/1.5 in. minimum thickness sides).

**Column 8 - Small Quantity per Contract**
Small quantity is the recommended amount of a material per contract that can be accepted or certified without standard testing and documentation. Under no conditions are materials to be used from an unknown source. Alternative materials inspection requirements for small quantities are discussed in Section 600, SMALL QUANTITIES.

Quantities in excess of these amounts must be approved by the District Materials Engineer. For PCC and HMA, the small quantity criteria are for non-QC/QA work. QC/QA specifications provide specific small quantity criteria for PCC and HMA.
<table>
<thead>
<tr>
<th>Product</th>
<th>Material Series</th>
<th>Evidence of Materials Inspection</th>
<th>Jobsite Sample</th>
<th>Responsible Lab</th>
<th>Sample Size</th>
<th>Container</th>
<th>Small Quant. Per Contract</th>
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</thead>
<tbody>
<tr>
<td>Adhesives</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Bonding epoxy</td>
<td>427</td>
<td>CERT or MARK</td>
<td>NR</td>
<td>CN</td>
<td>-</td>
<td>5 or 12</td>
<td>N/A</td>
</tr>
<tr>
<td>Chemical Adhesive (Dowel &amp; Tie Bar)</td>
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<td>LIST</td>
<td>NR</td>
<td>MT</td>
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<td>-</td>
<td>N/A</td>
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<td>Glass Capsules for Anchor Bolts</td>
<td>427</td>
<td>LIST</td>
<td>NR</td>
<td>MT</td>
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<td>-</td>
<td>N/A</td>
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<tr>
<td>Aggregate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For Mixtures &amp; Granular Use</td>
<td>001</td>
<td>LIST + TICK</td>
<td>See Sampling Schedules</td>
<td>DI</td>
<td>See Field Acceptance – Column 6</td>
<td>3 or 4</td>
<td>500 TON</td>
</tr>
<tr>
<td>Lightweight, for P.C. Concrete</td>
<td>025</td>
<td>CERT</td>
<td>See Sampling Schedules</td>
<td>DI</td>
<td>See Field Acceptance – Column 6</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Riprap, Concrete</td>
<td>001</td>
<td>LIST + TICK</td>
<td>NR</td>
<td>AG</td>
<td>-</td>
<td>3 or 4</td>
<td>20 TON</td>
</tr>
<tr>
<td>Riprap, Stone</td>
<td>001</td>
<td>LIST + TICK</td>
<td>NR</td>
<td>AG</td>
<td>-</td>
<td>3 or 4</td>
<td>20 TON</td>
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<tr>
<td>Bridge Bearing Pads</td>
<td></td>
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<tr>
<td>Elastomeric (Whole pad)</td>
<td>703</td>
<td>CERT + CBM</td>
<td>*Sample when notified by CBM</td>
<td>MT</td>
<td>1 Pad</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>Fabric</td>
<td>703</td>
<td>LA15 or TEST</td>
<td>When directed</td>
<td>MT</td>
<td>12” x 12”</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>Pot &amp; Disk Bearing (HLMR)</td>
<td>703</td>
<td>CERT + CBM</td>
<td>*Sample when notified by CBM</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>Bituminous Materials</td>
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<tr>
<td>PG Asphalt Binder</td>
<td>101</td>
<td>(LIST or TEST) + BOL</td>
<td>See CBM Policy Memo</td>
<td>BC</td>
<td>1 QT</td>
<td>5</td>
<td>N/A</td>
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<tr>
<td>Road Oil &amp; Cutback Asphalt</td>
<td>103</td>
<td>(LIST or TEST) + BOL</td>
<td>NR</td>
<td>BC</td>
<td>1 QT</td>
<td>1 or 5</td>
<td>N/A</td>
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<tr>
<td>Emulsified Asphalt</td>
<td>107</td>
<td>(LIST or TEST) + BOL</td>
<td>NR</td>
<td>BC</td>
<td>1 GAL uncut emulsion</td>
<td>4</td>
<td>N/A</td>
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<td>Product</td>
<td>Material Series</td>
<td>Evidence of Materials Inspection</td>
<td>Jobsite Sample</td>
<td>Responsible Lab</td>
<td>Sample Size</td>
<td>Container</td>
<td>Small Quant. Per Contract</td>
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<td>----------------------------------------------</td>
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<tr>
<td>Hot Mix Asphalt</td>
<td>195</td>
<td>DPR + TICK + TEST</td>
<td>See Std. Specs.</td>
<td>DI</td>
<td>Per Manual Test Proc. for Mat'ls</td>
<td>3</td>
<td>Special Provision</td>
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**Block/Brick**

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<th>Sample Size</th>
<th>Container</th>
<th>Small Quant. Per Contract</th>
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<tbody>
<tr>
<td>Clay or Shale Building Brick</td>
<td>704</td>
<td>TEST</td>
<td>NR</td>
<td>CN</td>
<td>10 EA</td>
<td>8</td>
<td>100</td>
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<tr>
<td>Clay or Shale Paving Brick</td>
<td>704</td>
<td>TEST</td>
<td>NR</td>
<td>CN</td>
<td>10 EA</td>
<td>8</td>
<td>100</td>
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<tr>
<td>Concrete Building Brick</td>
<td>251</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
<td>6 EA</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>Concrete Masonry Units for Buildings/ Catch Basin/ Manhole/ Inlet/ Valve Vault</td>
<td>261</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
<td>6 EA</td>
<td>8</td>
<td>N/A</td>
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<td>NR</td>
<td>CN</td>
<td>6 EA</td>
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<td>N/A</td>
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<tr>
<td>Precast Block Revetment Mat</td>
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<td>NR</td>
<td>CN</td>
<td>6 EA</td>
<td>-</td>
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<td>Precast Articulated Block Revetment Mat</td>
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<td>CN</td>
<td>6 EA</td>
<td>-</td>
<td>N/A</td>
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<td>Segmental Concrete Block Walls (Retaining Wall)</td>
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<td>NR</td>
<td>CN</td>
<td>6 EA</td>
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<td>N/A</td>
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**Bridge Rail**

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<th>Jobsite Sample</th>
<th>Responsible Lab</th>
<th>Sample Size</th>
<th>Container</th>
<th>Small Quant. Per Contract</th>
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<tr>
<td>Railing</td>
<td>541</td>
<td>CBM</td>
<td>NR</td>
<td>MT</td>
<td>See MMI</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>Structural Steel</td>
<td>541</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td>See MMI</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>Aluminum, Steel, Stainless</td>
<td>541</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td></td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>Post, Anchoring Device</td>
<td>541</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td></td>
<td>-</td>
<td>N/A</td>
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**Cementitious Materials**

<table>
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<th>Evidence of Materials Inspection</th>
<th>Jobsite Sample</th>
<th>Responsible Lab</th>
<th>Sample Size</th>
<th>Container</th>
<th>Small Quant. Per Contract</th>
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<tbody>
<tr>
<td>Cement</td>
<td>379</td>
<td>TEST</td>
<td></td>
<td>CM</td>
<td>6 LB</td>
<td>5 or 11</td>
<td>N/A</td>
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<tr>
<td>Calcium Aluminate</td>
<td>379</td>
<td>TEST</td>
<td></td>
<td>CM</td>
<td>6 LB</td>
<td>5 or 11</td>
<td>N/A</td>
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<tr>
<td>Portland or Blended</td>
<td>376</td>
<td>(LIST or TEST) + BOL</td>
<td></td>
<td>CM</td>
<td>6 LB</td>
<td>5 or 11</td>
<td>N/A</td>
</tr>
<tr>
<td>Rapid Hardening</td>
<td>379</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
<td>3-5 as sold bags</td>
<td>4 or 12</td>
<td>N/A</td>
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## Cementitious Materials, continued

<table>
<thead>
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<th>Product</th>
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<th>Evidence of Materials Inspection</th>
<th>Jobsite Sample</th>
<th>Responsible Lab</th>
<th>Sample Size</th>
<th>Container</th>
<th>Small Quant. Per Contract</th>
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<tbody>
<tr>
<td>Finely Divided Minerals- Fly Ash, Ground Granulated Blast- Furnace Slag, Microsilica, High- Reactivity Metakaolin</td>
<td>378</td>
<td>LIST or TEST</td>
<td>Yes, per CBM Policy Memo</td>
<td>CM</td>
<td>6 LB</td>
<td>5 or 11</td>
<td>N/A</td>
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### Chemicals / Admixtures

<table>
<thead>
<tr>
<th>Product</th>
<th>Material Series</th>
<th>Evidence of Materials Inspection</th>
<th>Jobsite Sample</th>
<th>Responsible Lab</th>
<th>Sample Size</th>
<th>Container</th>
<th>Small Quant. Per Contract</th>
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</thead>
<tbody>
<tr>
<td>HMA – Anti-Strip Additive for Bituminous Mixtures</td>
<td>434</td>
<td>DPR</td>
<td>NR</td>
<td>BM</td>
<td>1 PT</td>
<td>1</td>
<td>N/A</td>
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<tr>
<td>HMA – Asphalt Truck Release Agent</td>
<td></td>
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<tr>
<td>Calcium Chloride (Dry, Liquid)</td>
<td>804</td>
<td>TEST</td>
<td>NR</td>
<td>AC</td>
<td>1 QT</td>
<td>4</td>
<td>1 TON or 500 GAL</td>
</tr>
<tr>
<td>- Dust Palliative</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>- PCC – Calcium Chloride Accelerator</td>
<td></td>
<td>CERT</td>
<td>NR</td>
<td>CN</td>
<td>1 QT</td>
<td>4 or 13</td>
<td>N/A</td>
</tr>
<tr>
<td>CLSM – Air Entraining Admixture</td>
<td>421</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
<td>1 QT</td>
<td>4 or 13</td>
<td>N/A</td>
</tr>
<tr>
<td>PCC – Corrosion Inhibitor</td>
<td>437</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
<td>1 QT</td>
<td>4 or 13</td>
<td>N/A</td>
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<tr>
<td>PCC – Latex Emulsion</td>
<td>437</td>
<td>CERT</td>
<td>NR</td>
<td>AC</td>
<td>1 QT</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>PCC - Air- Entraining Admixture</td>
<td>421</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
<td>1 QT</td>
<td>4 or 13</td>
<td>N/A</td>
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<tr>
<td>PCC – Type A – G Admixture</td>
<td>437</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
<td>1 QT</td>
<td>4 or 13</td>
<td>N/A</td>
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<tr>
<td>PCC – Rheology Modifying Admixture</td>
<td>438</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
<td>1 QT</td>
<td>4 or 13</td>
<td>N/A</td>
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<tr>
<td>PCC – Viscosity Controlling Admixture</td>
<td>438</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
<td>1 QT</td>
<td>4 or 13</td>
<td>N/A</td>
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<tr>
<td>PCC – Membrane Curing Compound</td>
<td>430</td>
<td>LA15 or ILOK or TEST</td>
<td>NR</td>
<td>CN</td>
<td>1 QT/LOT</td>
<td>4 or 13</td>
<td>N/A</td>
</tr>
<tr>
<td>PCC – Membrane Curing Compound/ Linseed Oil Emulsion</td>
<td>430</td>
<td>LA15 or ILOK or TEST</td>
<td>NR</td>
<td>CN</td>
<td>1 QT/LOT</td>
<td>13</td>
<td>N/A</td>
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<tr>
<td>Concrete Seat Sealer</td>
<td>427</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
<td>1 QT</td>
<td>1 or 4</td>
<td>N/A</td>
</tr>
<tr>
<td>Protective Coat (Linseed Oil/ Petroleum Spirits)</td>
<td>426</td>
<td>LA15 or ILOK or TEST</td>
<td>NR</td>
<td>AC</td>
<td>1 QT</td>
<td>1 or 13</td>
<td>55 GAL</td>
</tr>
<tr>
<td>Rock Salt, Sodium Chloride</td>
<td>804</td>
<td>TEST</td>
<td>NR</td>
<td>AC</td>
<td>10 LB</td>
<td>4 or 13</td>
<td>N/A</td>
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<td>Product</td>
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<td>Evidence of Materials Inspection</td>
<td>Jobsite Sample</td>
<td>Responsible Lab</td>
<td>Sample Size</td>
<td>Container</td>
<td>Small Quant. Per Contract</td>
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<td><strong>Chemicals / Admixtures, continued</strong></td>
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<tr>
<td>➢ Water, for concrete, mortar, or curing</td>
<td>425</td>
<td>TEST</td>
<td>If not potable</td>
<td>AC</td>
<td>1 QT</td>
<td>4</td>
<td>N/A</td>
</tr>
<tr>
<td>➢ Weed Killer</td>
<td>803</td>
<td>MARK or VIS</td>
<td>NR</td>
<td>JMM</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Concrete</strong></td>
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<tr>
<td>➢ Polymer Concrete</td>
<td>216</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
<td>1.5 FT³</td>
<td>12</td>
<td>N/A</td>
</tr>
<tr>
<td>➢ Portland Cement Concrete - Other than QC/QA</td>
<td>216</td>
<td>DPR + TICK (TICK not req'd for volumetric mixer) + TEST</td>
<td>See Sampling Schedules</td>
<td>CN</td>
<td>Per Manual Test Proc. for Mat’ls</td>
<td>-</td>
<td>100 CY</td>
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<tr>
<td>➢ Portland Cement Concrete - QC/QA</td>
<td>216</td>
<td>DPR + TICK (TICK not req'd for volumetric mixer) + TEST</td>
<td>See Sampling Schedules</td>
<td>CN</td>
<td>Per Manual Test Proc. for Mat’ls</td>
<td>-</td>
<td>Special Provision</td>
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<tr>
<td>➢ CAM II – Cement Aggregate Mixture</td>
<td>218</td>
<td>DPR + TICK (TICK not req'd for volumetric mixer) + TEST</td>
<td>See Sampling Schedules</td>
<td>CN</td>
<td>Per Manual Test Proc. for Mat’ls</td>
<td>-</td>
<td>600 SY</td>
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<td>➢ CLSM - Controlled Low-Strength Material</td>
<td>216</td>
<td>DPR + TICK (TICK not req'd for volumetric mixer) + TEST</td>
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<td>CN</td>
<td>Per Manual Test Proc. for Mat’ls</td>
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<td>50 CY</td>
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<td>➢ Non-Shrink Grout</td>
<td>216</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
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<tr>
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<td>216</td>
<td>LIST</td>
<td>NR</td>
<td>CN</td>
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<td>N/A</td>
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<tr>
<td>➢ PCC – Curing Blanket- Burlap, Burlap/Poly, Waterproof Paper, White Poly, Cotton Mat</td>
<td>702</td>
<td>VISE</td>
<td>NR</td>
<td>CN</td>
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<td>11</td>
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<td>➢ Architectural Products</td>
<td>250</td>
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<td>NR</td>
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<td>➢ Bridge Beams</td>
<td>253</td>
<td>LIST + ILOK</td>
<td>NR</td>
<td>PC</td>
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<td>➢ Bridge Slabs</td>
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<td>PC</td>
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<td>➢ Bridge- Three Sided Structure</td>
<td>484</td>
<td>LIST + ILOK</td>
<td>NR</td>
<td>PC</td>
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<tr>
<td>➢ Drainage Products</td>
<td>252</td>
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<td>NR</td>
<td>PC</td>
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<tr>
<td>➢ Noise Abatement Wall</td>
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<td>TEST</td>
<td>NR</td>
<td>PC</td>
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<td>➢ MSE Retaining Wall</td>
<td>255</td>
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<td>➢ Modular Retaining Wall</td>
<td>255</td>
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<td>NR</td>
<td>PC</td>
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<td>Jobsite Sample</td>
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<td>➢ Traffic Barrier</td>
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<td>NR</td>
<td>PC</td>
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<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ R.O.W, Drainage, Section, &amp; Permanent Survey Markers</td>
<td>260</td>
<td>LIST</td>
<td>NR</td>
<td>PC</td>
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<td>➢ Headwall</td>
<td>257</td>
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<td>PC</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ Bumper Blocks (Wheel Stops for Cars)</td>
<td>255</td>
<td>LIST</td>
<td>NR</td>
<td>PC</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<td>➢ Picnic Table, Trach Receptacle, Planter</td>
<td>259</td>
<td>LIST</td>
<td>NR</td>
<td>PC</td>
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<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ Splash Blocks</td>
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<td>NR</td>
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<td>216</td>
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<td>➢ Rapid Hardening Cementitious Material</td>
<td>221, 379</td>
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<td>NR</td>
<td>CN</td>
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<td>➢ Cable, unit duct</td>
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<td>MARK</td>
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<td>-</td>
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<td>208, 313</td>
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<td>-</td>
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<td>306</td>
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<td>MT</td>
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<td>-</td>
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<td>➢ Fabric, Post, Wire</td>
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<td>➢ Glare Guard, Slats</td>
<td>586</td>
<td>VIS</td>
<td>NR</td>
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<td><strong>Guard Rail</strong></td>
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<td>➢ Cable for Road Guard</td>
<td>552</td>
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<td>➢ Fasteners</td>
<td>676</td>
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<td>NR</td>
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<tr>
<td>➢ Steel Plate &amp; Accessories</td>
<td>551</td>
<td>LIST + CERT</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>N/A</td>
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<td>➢ Steel Post</td>
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<td>NR</td>
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<td>➢ Traffic Barrier Terminal End Section</td>
<td>556</td>
<td>NCHRP 350 = (LIST + CERT) or LA15; Pdts. Not covered by NCHRP 350 = CERT or LA15</td>
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<td>➢ Wood Post, Plank</td>
<td>553</td>
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<td>MT</td>
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<td>MT</td>
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<td><strong>Joint Fillers and Sealers</strong></td>
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<td>➢ Mastic for Precast Concrete Pipe</td>
<td>617</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>BC</td>
<td>1 QT</td>
<td>5</td>
<td>N/A</td>
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<tr>
<td>➢ Hot-Poured Sealer</td>
<td>619</td>
<td>LA15 or ILOK or TEST or CBM</td>
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<td>BC</td>
<td>1 mfg. sealed box per lot</td>
<td>12</td>
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<tr>
<td>➢ Cold-Poured Sealer</td>
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<td>NR</td>
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<tr>
<td>➢ Polysulfide Sealer</td>
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<td>CERT or LA15</td>
<td>NR</td>
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<td>➢ Asphalt Fillers</td>
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<tr>
<td>- PAF</td>
<td>620</td>
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<td>NR</td>
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<td>- Fiber- Modified (Pavement Preserve.)</td>
<td>620</td>
<td>CERT</td>
<td>NR</td>
<td>BC</td>
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<tr>
<td>➢ Preformed- Bituminous, cork, foam, fiber, plastic</td>
<td>616</td>
<td>LA15 or TEST</td>
<td>NR</td>
<td>BC</td>
<td>2 SF</td>
<td>9 or 12</td>
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<td>➢ Preformed Elastomeric Compression</td>
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<td>1 @ 6 FT</td>
<td>12</td>
<td>100 LF</td>
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<td>➢ Preformed Neoprene, EPDM</td>
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<td>LA15 or TEST</td>
<td>NR</td>
<td>MT</td>
<td>1 LF-Neoprene; 2 LF-EPDM</td>
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<td>100 LF</td>
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### Joint Fillers and Sealers, continued

<table>
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<tr>
<th>Product</th>
<th>Material Series</th>
<th>Evidence of Materials Inspection</th>
<th>Jobsite Sample</th>
<th>Responsible Lab</th>
<th>Sample Size</th>
<th>Container</th>
<th>Small Quant. Per Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCC - Silicone</td>
<td>619</td>
<td>CERT or MARK (if it contains spec. info.) or LA15</td>
<td>NR</td>
<td>AC</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>Water Seal, PVC</td>
<td>618</td>
<td>LA15 or TEST</td>
<td>NR</td>
<td>MT</td>
<td>1 LF per batch</td>
<td>-</td>
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### Landscaping

<table>
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<tr>
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<th>Sample Size</th>
<th>Container</th>
<th>Small Quant. Per Contract</th>
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<tbody>
<tr>
<td>Agricultural Lime (Dept of Ag. Program)</td>
<td>002</td>
<td>LIST + TICK</td>
<td>NR</td>
<td>AG</td>
<td>9 LB</td>
<td>2 or 10</td>
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<tr>
<td>Excelsior Blanket</td>
<td>562</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>200 SY</td>
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<tr>
<td>Fertilizer</td>
<td>561</td>
<td>CERT (bulk) or MARK (bags)</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>20 LB</td>
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<tr>
<td>Mulch - Straw</td>
<td>562</td>
<td>VIS</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<td>Mulch- Paper, Wood cellulose</td>
<td>562</td>
<td>MARK or CERT</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
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<td>Compost</td>
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<td>NR</td>
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<td>Peat Moss</td>
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<tr>
<td>Seed, Sod</td>
<td>563, 567</td>
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<td>MT</td>
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<tr>
<td>Trees, Shrubs, Plants</td>
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<td>CERT</td>
<td>NR</td>
<td>MT</td>
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### Lighting and Signals

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<th>Sample Size</th>
<th>Container</th>
<th>Small Quant. Per Contract</th>
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<tbody>
<tr>
<td>Controllers &amp; Cabinets</td>
<td>330</td>
<td>VIS compared to approved submittals + CERT</td>
<td>NR</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>Lamps, Luminaires &amp; Ballast</td>
<td>330</td>
<td>VIS compared to approved submittals + CERT</td>
<td>NR</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>Traffic Signal Components</td>
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<td>VIS compared to approved submittals + CERT</td>
<td>NR</td>
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<tr>
<td>Break-away Supports</td>
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<td>VIS compared to approved submittals + CERT</td>
<td>NR</td>
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<td>- Steel, Aluminum</td>
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<td>NR</td>
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<tr>
<td>- Wood</td>
<td>331</td>
<td>MARK</td>
<td>NR</td>
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### Product

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<td>➢ Mast Arm Assemblies</td>
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<td>NR</td>
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<tr>
<td>➢ Composite Handholes &amp; Gulfbox</td>
<td>261</td>
<td>CERT</td>
<td>NR</td>
<td>PC</td>
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<td>➢ Treated or Untreated Lumber</td>
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<td>➢ Rodent Shield</td>
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<td>NR</td>
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<tr>
<td>➢ Geotextile Fabric - French Drain, Ground Stabilization, Pipe Underdrain, Rip Rap, Silt Filter Fence, &amp; Weed Barrier</td>
<td>498</td>
<td>CERT or LA15</td>
<td>NR</td>
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<td>➢ Bridge Paint &amp; Primer</td>
<td>414</td>
<td>TEST (approved lot) or CBM</td>
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<td>1 PT</td>
<td>13 or 4</td>
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<td>➢ Glass Beads</td>
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<td>1 QT</td>
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<tr>
<td>➢ Raised Pavement Marker</td>
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<td>NR</td>
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<td>8</td>
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<td><strong>Pavement Marking, continued</strong></td>
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<tr>
<td>➢ Thermoplastic - granular/block</td>
<td>706</td>
<td>LA15 or ILOK or CBM</td>
<td>NR</td>
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<td>1 GAL from 3 different bags</td>
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<td>100 LB</td>
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<td>NR</td>
<td>AC</td>
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<td>150 LF</td>
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<td><strong>Piling</strong></td>
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<td></td>
<td></td>
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<tr>
<td>➢ Metal Shell, Steel H, Steel Sheet or Steel Soldier</td>
<td>367</td>
<td>CERT or LA15 or ILOK</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>➢ Precast Concrete</td>
<td>366</td>
<td>LIST + ILOK</td>
<td>NR</td>
<td>PC</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>➢ Precast, Prestressed Concrete</td>
<td>366</td>
<td>ILOK</td>
<td>NR</td>
<td>PC</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ Timber</td>
<td>370</td>
<td>CERT or MARK or LA15</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td><strong>Pipe, Culvert and Drain</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>➢ Cast or Ductile Iron Pipe</td>
<td>511</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>100 LF</td>
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<tr>
<td>➢ Pipe - Plastic, PVC, HDPE - water/sewer</td>
<td>491</td>
<td>ILOK or LA15 or TEST</td>
<td>NR</td>
<td>MT</td>
<td>Per MMI</td>
<td>-</td>
<td>100 LF</td>
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<tr>
<td>➢ Pipe Fittings - PE, PVC</td>
<td>493</td>
<td>VIS</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ Pipe Liner- PE, PVC</td>
<td>496</td>
<td>ILOK or LA15 or TEST</td>
<td>NR</td>
<td>MT</td>
<td>4 LF</td>
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<td>➢ Pipe Underdrain</td>
<td>493</td>
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<td>NR</td>
<td>MT</td>
<td>2 @ 5 LF</td>
<td>-</td>
<td>100 LF</td>
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<tr>
<td>➢ Plastic Deck Drain</td>
<td>499</td>
<td>CERT</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>100 LF</td>
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<tr>
<td>➢ Precast Concrete Pipe or Box Culvert</td>
<td>475</td>
<td>LIST + MARK</td>
<td>NR</td>
<td>PC</td>
<td>-</td>
<td>-</td>
<td>100 LF</td>
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<tr>
<td>➢ Underdrain Mat, Wall Drain</td>
<td>496</td>
<td>LA15 or TEST</td>
<td>NR</td>
<td>MT</td>
<td>3 LF full width</td>
<td>-</td>
<td>100 LF</td>
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<td><strong>Signing</strong></td>
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<td></td>
<td></td>
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<tr>
<td>➢ Completed Sign Panels &amp; standard- Aluminum Sheet</td>
<td>601</td>
<td>LA15 or TEST or CBM</td>
<td>NR</td>
<td>AC</td>
<td>12” x 12”</td>
<td>8</td>
<td>N/A</td>
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<tr>
<td>➢ Completed Sign Panels &amp; standard - Reflective Sheeting</td>
<td>602</td>
<td>LA15 or TEST or CBM</td>
<td>NR</td>
<td>AC</td>
<td>13” x 13”</td>
<td>8</td>
<td>N/A</td>
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<tr>
<td>➢ Post, Break-away</td>
<td>607</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td></td>
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<tr>
<td>➢ Post, Metal &amp; Hardware</td>
<td>606</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
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<tr>
<td>➢ Post, Tubular (round, rectangle)</td>
<td>609</td>
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<td>NR</td>
<td>MT</td>
<td>1 LF</td>
<td>-</td>
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<tr>
<td>➢ Post, Steel Delineator</td>
<td>606</td>
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<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Product</td>
<td>Material Series</td>
<td>Evidence of Materials Inspection</td>
<td>Jobsite Sample</td>
<td>Responsible Lab</td>
<td>Sample Size</td>
<td>Container</td>
<td>Small Quant. Per Contract</td>
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<td>Signing, continued</td>
<td>Post, Wood</td>
<td>610</td>
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<td>NR</td>
<td>MT</td>
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<tr>
<td></td>
<td>Reflector, Delineator, Terminal</td>
<td>612</td>
<td>LIST</td>
<td>NR</td>
<td>AC</td>
<td>3 EA per lot</td>
<td>8</td>
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<td></td>
<td>Reflector, Prism</td>
<td>613</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>AC</td>
<td>3 EA per lot</td>
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<tr>
<td></td>
<td>Sign Structure, Overhead</td>
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<td>BB59 + CERT</td>
<td>NR</td>
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<td>-</td>
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<td>Structural Fasteners</td>
<td>655</td>
<td>CBM or LA15 or ILOK or TEST</td>
<td>NR</td>
<td>MT</td>
<td>5 per lot</td>
<td>4 or 11</td>
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Soil / Modification / Stabilization

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<th>Product</th>
<th>Material Series</th>
<th>Evidence of Materials Inspection</th>
<th>Jobsite Sample</th>
<th>Responsible Lab</th>
<th>Sample Size</th>
<th>Container</th>
<th>Small Quant. Per Contract</th>
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<tr>
<td></td>
<td>CAM - Cement Aggregate Mixture</td>
<td>750</td>
<td>TEST</td>
<td>See Sampling Schedule</td>
<td>DI/SL</td>
<td>Per Manual Test Proc. for Mat'ls</td>
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<tr>
<td></td>
<td>Topsoil</td>
<td>563</td>
<td>TEST</td>
<td>YES</td>
<td>SL</td>
<td>3 LB</td>
<td>3 or 11</td>
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<tr>
<td></td>
<td>For IBR - Fine-Grained Soil</td>
<td>563</td>
<td>TEST</td>
<td>NR</td>
<td>DI/SL</td>
<td>75 LB</td>
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<td></td>
<td>For IBR - Coarse-Grained Soil</td>
<td>563</td>
<td>TEST</td>
<td>NR</td>
<td>DI/SL</td>
<td>100 LB</td>
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<td>For Moisture Density - Fine-Grained Soil</td>
<td>563</td>
<td>TEST</td>
<td>YES</td>
<td>DI/SL</td>
<td>30 LB</td>
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<td>For Moisture Density - Coarse-Grained Soil</td>
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<td>TEST</td>
<td>YES</td>
<td>DI/SL</td>
<td>100 LB</td>
<td>3</td>
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<tr>
<td></td>
<td>Pozzolanic Stabilized Subbase or Base Course</td>
<td>750</td>
<td>TEST</td>
<td>See Sampling Schedule</td>
<td>DI/SL</td>
<td>Per Manual Test Proc. for Mat'ls</td>
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<tr>
<td></td>
<td>Cement (Portland or Blended)</td>
<td>376</td>
<td>(LIST or TEST) + BOL</td>
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<td>DI/SL</td>
<td>6 LB</td>
<td>5 or 11</td>
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<td></td>
<td>Fly Ash</td>
<td>378</td>
<td>LIST or TEST</td>
<td>See Sampling Schedule</td>
<td>CM</td>
<td>6 LB</td>
<td>5 or 11</td>
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<td></td>
<td>Lime</td>
<td>003</td>
<td>CERT + TEST</td>
<td>See Sampling Schedule</td>
<td>DI/SL</td>
<td>6 LB; 1 QT (slurry)</td>
<td>4 or 5</td>
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<td>Modified Soil with Lime, Portland Cement, Portland Blast, Furnace Slag Cement, or Fly Ash</td>
<td>750</td>
<td>TEST</td>
<td>See Sampling Schedule</td>
<td>SL</td>
<td>Per Manual Test Proc. for Mat'ls</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Product</td>
<td>Material Series</td>
<td>Evidence of Materials Inspection</td>
<td>Jobsite Sample</td>
<td>Responsible Lab</td>
<td>Sample Size</td>
<td>Container</td>
<td>Small Quant. Per Contract</td>
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<td><strong>Soil / Modification / Stabilization, continued</strong></td>
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<tr>
<td>➢ Lime Stabilized Subbase or Base Course</td>
<td>750</td>
<td>TEST</td>
<td>See Sampling Schedule</td>
<td>SL</td>
<td>Per Manual Test Proc. for Mat’ls</td>
<td>3 or 4</td>
<td>600 SY</td>
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<tr>
<td>➢ Soil-Cement Base Course</td>
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<td>TEST</td>
<td>See Sampling Schedule</td>
<td>SL</td>
<td>Per Manual Test Proc. for Mat’ls</td>
<td>3 or 4</td>
<td>600 SY</td>
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<td><strong>Steel and Casting</strong></td>
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<tr>
<td>➢ Cast Frames &amp; Grates/Lids</td>
<td>200</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>5 EA</td>
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<tr>
<td>➢ Cast Manhole Steps</td>
<td>210</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
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<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ Deck Drains</td>
<td>686</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ Gabions, Slope Mattress</td>
<td>680</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
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<td>-</td>
<td>N/A</td>
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<td>➢ Pipe Casing</td>
<td>680</td>
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<td>NR</td>
<td>MT</td>
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<td>-</td>
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<tr>
<td>➢ Steel Frames &amp; Grates</td>
<td>684</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td><strong>Steel, Miscellaneous</strong></td>
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<tr>
<td>➢ Anchor Bolts</td>
<td>676</td>
<td>CBM or LA15 or ILOK or TEST</td>
<td>NR</td>
<td>MT</td>
<td>3 pieces of each full size or 3 FT plus threads from each heat</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td><strong>Steel, Reinforcing</strong></td>
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<tr>
<td>➢ Dowel Bars - black or epoxy coated</td>
<td>626</td>
<td>LIST + CERT</td>
<td>Yes, per CBM Policy Memo</td>
<td>MT</td>
<td>2 @ 6 FT EA for each size, grade and source</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ Dowel Bar Assembly (Only)</td>
<td>627</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ Pavement Fabric &amp; Wire Mesh</td>
<td>628</td>
<td>LIST + CERT</td>
<td>Yes, per CBM Policy Memo</td>
<td>MT</td>
<td>See MMI</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ Prestressing Strand</td>
<td>631</td>
<td>CBM</td>
<td>NR</td>
<td>MT</td>
<td>2 @ 4 LF for each reel</td>
<td>-</td>
<td>N/A</td>
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Appendix Page 65
<table>
<thead>
<tr>
<th>Product</th>
<th>Evidence of Materials</th>
<th>Jobsite Sample</th>
<th>Responsible Lab</th>
<th>Sample Size</th>
<th>Container</th>
<th>Small Quant. Per Contract</th>
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<td><strong>Steel, Reinforcing, continued</strong></td>
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<tr>
<td>➢ Reinforcing Bar – black or epoxy coated</td>
<td>LIST + CERT + MARK</td>
<td>Yes, per CBM Policy Memo</td>
<td>MT</td>
<td>2 @ 6 LF</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ Rebar Splicers – black or epoxy coated</td>
<td>LIST + CERT</td>
<td>Yes, if Contract Quantity of All Splicers &gt; 100</td>
<td>MT</td>
<td>3 assemblies each size and source - min. 18” of rebar on each side</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td><strong>Steel, Structural</strong></td>
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</tr>
<tr>
<td>➢ Fasteners</td>
<td>CBM or LA15 or ILOK or TEST</td>
<td>NR</td>
<td>MT</td>
<td>5 pieces per lot</td>
<td>4 or 11</td>
<td>N/A</td>
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<tr>
<td>➢ Structural Steel</td>
<td>BB59 + CERT</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>➢ Stud Shear Connectors</td>
<td>(MARK + CERT) or LA15</td>
<td>NR</td>
<td>MT</td>
<td>5 pieces per lot</td>
<td>11</td>
<td>N/A</td>
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<td><strong>Temporary Items</strong></td>
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<tr>
<td>➢ See Sections 100, 500 Except VISE</td>
<td>See Paint, Pavement Marking and Signing requirements</td>
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<td>➢ Reflective Materials</td>
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<td><strong>Waterproofing Materials</strong></td>
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<tr>
<td>➢ Asphalt Emulsion (Art. 1060.08)</td>
<td>LIST or TEST ) + BOL</td>
<td>NR</td>
<td>BC</td>
<td>1 GAL</td>
<td>4</td>
<td>55 GAL</td>
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<tr>
<td>➢ Membrane System (Sec. 1061) - Coal-Tar Pitch Emulsion &amp; Primer</td>
<td>LA15 or TEST</td>
<td>NR</td>
<td>BC</td>
<td>1 QT EA</td>
<td>5</td>
<td>56 GAL</td>
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<tr>
<td>➢ Membrane System (Sec. 1061) - Fabric, Glass</td>
<td>LA15 or TEST</td>
<td>NR</td>
<td>BC</td>
<td>1 @ 5 FT</td>
<td>8</td>
<td>N/A</td>
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<tr>
<td>➢ Reflective Crack Control (Sec.1062) - Reinforcing Fabric</td>
<td>CERT or LA15</td>
<td>NR</td>
<td>MT</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
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<tr>
<td>➢ Fiberglass Repair System (Sec. 1063) - Fiberglass Fabric</td>
<td>LA15 or TEST</td>
<td>NR</td>
<td>BC</td>
<td>1 @ 5 FT</td>
<td>8</td>
<td>N/A</td>
</tr>
<tr>
<td>➢ Fiberglass Repair System (Sec. 1063) - Bit. Adhesive</td>
<td>LA15 or TEST</td>
<td>NR</td>
<td>BC</td>
<td>1 mfg. sealed box</td>
<td>12</td>
<td>N/A</td>
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Illinois Department of Transportation  
Bureau of Materials  
QUALIFIED PRODUCER LIST OF CERTIFIED PRECAST CONCRETE PRODUCERS  
August 31, 2018  
This list supersedes the May 25, 2018 list.  
Standard Specifications for Road and Bridge Construction, Sections 522 and 1042  
Guide Bridge Special Provision “Three Sided Precast Concrete Structure”  
Contract Special Provision “Noise Abatement Wall”  
Current Policy Memorandum “Quality Control / Quality Assurance Program for Precast Concrete Products”

For information regarding new product submittal, click the “New Submittal” bookmark to the left.

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<thead>
<tr>
<th>Producer/Supplier No.</th>
<th>Producer</th>
<th>Location</th>
<th>Prod. Mark</th>
<th>Products</th>
<th>Resp Dist/ CBM</th>
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<td>5482-01</td>
<td>Architectural Cast Stone</td>
<td>W. Chicago, IL</td>
<td>A:5, I:2</td>
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<td>444-01</td>
<td>Concrete Specialties Co.</td>
<td>Elgin, IL</td>
<td>CSE</td>
<td>B:1,2, C:5,6,7, D:1,2,3,4,5,6,7,8,10</td>
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<tr>
<td>7107-01</td>
<td>Great Lakes Concrete &amp; Supply</td>
<td>Chicago Heights, IL</td>
<td>Great Lakes</td>
<td>B:1,2, C:5, D:1,2,3,4,5,6,7,8,10, E:1,2,3</td>
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<td>519-01</td>
<td>DiCicco Concrete Products Co.</td>
<td>Chicago Heights, IL</td>
<td>DiCicco</td>
<td>B:1,2 (Note 1), C:5 (Note 1), D:1,2,3,4,5,6,7,8,10 (Note 1), E:1,2,3 (Note 1), I:4 (Note 1)</td>
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<td>1062-01</td>
<td>Kieft Brothers Co.</td>
<td>Elmhurst, IL</td>
<td>Kieft Bros.</td>
<td>B:1,2, D:1,2,3,4,5,6,7,10</td>
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<td>444-05</td>
<td>Concrete Specialties Co.</td>
<td>Kenosha, WI</td>
<td>CSK</td>
<td>B:1,2, D:1,3,4,5,6,7,10</td>
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<td>1442-01</td>
<td>Northfield Block Co.</td>
<td>Mundelein, IL</td>
<td>G:1,2,4,6</td>
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<tr>
<td>444-02</td>
<td>Concrete Specialties Co.</td>
<td>Romeoville, IL</td>
<td>CSR</td>
<td>B:1,2, C:1,2,6,7</td>
<td>1</td>
</tr>
<tr>
<td>2509-01</td>
<td>Norwalk Tank Co.</td>
<td>Joliet, IL</td>
<td>NTCO</td>
<td>C:5,6, D:1,2,3,4,5,6,7,10, I:1</td>
<td>1</td>
</tr>
<tr>
<td>5086-01</td>
<td>Unilock Chicago, Inc.</td>
<td>Aurora, IL</td>
<td>G:5,6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3641-01</td>
<td>V &amp; N Concrete Products, Inc.</td>
<td>Romeoville, IL</td>
<td>V &amp; N</td>
<td>D:1,3,4,5,7,10, I:1</td>
<td>1</td>
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<tr>
<td>3505-01</td>
<td>Welch Brothers</td>
<td>Elgin, IL</td>
<td>Welch Bros-E</td>
<td>B:1,2, C:1,2,4,5, D:1,2,3,4,5,6,7,10, F:1</td>
<td>1</td>
</tr>
<tr>
<td>3505-04</td>
<td>Welch Brothers</td>
<td>Bartlett, IL</td>
<td>Welch Bros-E</td>
<td>B:1,2, C:1,2,4,5, D:1,2,3,4,5,6,7,10, F:1</td>
<td>1</td>
</tr>
</tbody>
</table>
Note 1: This producer is a certified precast concrete producer only for products manufactured on or before May 25, 2018.

Note 2: This producer is a certified precast concrete producer only for products manufactured on or before April 29, 2016.

Note 3: This producer is a certified precast concrete producer only for products manufactured on or before February 3, 2017.

A Product markings are applicable to products A1, A6, B1, B2, C1-7, D1-9, and F1. Refer to Attachment C in the current Bureau of Materials and Physical Research’s Policy Memorandum, “Quality Control/Quality Assurance Program for Precast Concrete Products” for additional information regarding minimum identification markings. For traffic barrier, refer to Design and Environment Highway Standard 704001.

B Central Bureau of Materials

Inspectors are reminded to visually inspect precast concrete products which arrive at the jobsite. Refer to Sections 23.0 and 24.0 in the current Bureau of Materials and Physical Research’s Policy Memorandum, “Quality Control/Quality Assurance Program for Precast Concrete Products” for additional information on visually inspecting and repairing precast concrete products. This Policy Memorandum can be found on the Internet at http://www.idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Guides-Handbooks/Highways/Materials/Precast-Prestress/19-08%20precastQCQA.pdf. Photographs of precast concrete products that are acceptable, unacceptable, and unacceptably repaired may be found on the Internet at http://www.idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Guides-Handbooks/Highways/Materials/Precast-Prestress/precastconcretephotos.pdf. Regarding identification markings on a product, inspectors are reminded to verify the producer’s mark to determine the actual manufacturer. Some precast concrete producers will acquire products from another manufacturer and resell it. Any questions on the acceptability of a product should be referred to the District Materials Engineer or Physical Test Engineer.

Products Key:

A. Structural Members
1. Bridge Slabs
2. Pile Caps
3. Other Structural Members
4. Piles and Extensions
5. Decorative Bridge Structural Elements
6. Three Sided Precast Concrete Structures

B. Box Culvert
1. Box Culvert Sections
2. Box Culvert End Sections

C. Pipe
1. Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
2. Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
3. Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
4. Concrete Sewer, Storm Drain, and Culvert Pipe
5. Reinforced Concrete Rectangular End Sections
6. Reinforced Concrete Flared End Sections
7. Reinforced Concrete Elliptical Flared End Sections

D. Drainage Structures
1. Inlet Boxes for Pipe Culverts and Medians
   Types 24A-G, 36A, 48A, and Flush Inlet Box for Median
2. Headwall for Pipe Drain
3. Catch Basins Types A, B, C, D
4. Manhole Type A
5. Inlets Types A, B
6. Drainage Structures Types 1, 2, 3, 4, 5, 6
7. Valve Vault Type A
8. Bridge Approach Drains
9. Reserved
10. Other Inlets (Applies when there is no Design and Environment Highway Standard.)

E. Markers
1. Right of Way
2. Drainage
3. Permanent Survey
4. Section

F. Traffic Barrier
1. Temporary Concrete Barrier

G. Block/Brick
1. Erosion Control: Precast Block Revetment Mats
2. Erosion Control: Precast Articulated Block Revetment Mats
3. Concrete Brick
4. Concrete Masonry Units
5. Concrete Pavers
6. Segmental Concrete Block Walls

H. Walls
1. Facing Panels for Mechanically Stabilized Earth Systems
2. Noise Abatement Walls (Reflective Type)
3. Modular Retaining Walls
4. Non-smooth Facing Panels for Mechanically Stabilized Earth Systems

I. Miscellaneous
1. Bumper Blocks (Wheel Stops For Cars)
2. Picnic Tables, Trash Receptacles, Planters
3. Splash Blocks
4. Handholes

The Products Key does not include composite concrete handholes (Article 1088.05/Design and Environment Highway Standards 814001 and 814006), composite concrete gulfbox junction (Article 1088.07(b)), precast concrete railroad crossings, or precast prestressed concrete products. In addition, clay paving bricks (Article 1041.01), decorative pavers and some special purpose blocks are not included.
Subject: Force Account Billing
Article 109.04

CONSTRUCTION MEMORANDUM 08-09

Effective: January 1, 2008
Expires: Indefinite

Paying for extra work on a Force Account Basis is an accepted and common practice throughout the highway construction industry. The purpose of this memorandum is to provide direction to Department personnel for reviewing contractor force account billings.

This memorandum also serves to implement Equipment Watch’s Rental Rate Blue Book (Blue Book) as the source of equipment rates for force account billing. The Department’s Schedule of Average Annual Equipment Ownership Expense will no longer be used for this purpose.

Included in this memorandum are:

Guidelines for Force Account Billings

Attachment 1 - Rates for Items not Available from the Blue Book
Attachment 2 – BC 635, Example Extra Work Daily Reports
Attachment 3 - Sample Force Account Billing
Attachment 4 - BC 2370, Equipment Expense Rate Data

Particular attention should be paid to the following:

1. Each day that force account work is being performed Form BC 635, Extra Work Daily Report, must be completed. All manpower, equipment and material used in the force account work shall be agreed to by both the Contractor and the Engineer and entered on this form at the end of each day. The Contractor must then prepare the force account bill from the daily reports. Only the manpower, equipment and material shown on the daily reports shall be included on the force account bill.

2. The verification of labor cost and the affidavit as to materials taken from stock.

3. Payroll additives are to be restricted to actual costs.
a) Workmen’s compensations insurance is chargeable for all hours worked on a straight time basis. Overtime premiums (1 ½ x, 2 x, 3 x, etc.) are not eligible.

b) Truck drivers’ total salaries shall be excluded from computation of public liability and property damage insurance as these insurance costs are covered by equipment ownership expense.

c) Federal Unemployment Insurance is contributed by the employer on the first $7,000 paid to each worker in a calendar year. Year to date employee earnings are to be reported in the force account bill. The Federal rate is 6.2%. However, employers who have made all required payments to their state system in a full and timely manner receive a 5.4% “credit”, making the effective Federal rate 0.8%.

d) State Unemployment Compensation is contributed by the employer on the first $11,500 paid to each worker in a calendar year. Year to date employee earnings are to be reported in the force account bill. These percentages are subject to change by legislative action. Employers who begin operations in Illinois will receive a “starter’s rate” based on their industry in either their first two or three calendar years. Thereafter, they receive an experience rate which reflects their experience with the payment of benefit claims. This experience rate varies and changes annually. More information can be obtained from the Illinois Department of Employment Security. However, employers whose computed rate is 5.5% or higher and total quarterly wages are less than $50,000 pays contributions at a rate of 5.4%. These percentages are subject to change by legislative action.

e) Federal Social Security Tax is contributed at the rate of 6.2% plus 1.45% for Medicare, a total of 7.65%, on the first $97,500 paid to an individual as wages in calendar 2007. After the first $97,500 in wages, the rate for Medicare continues at 1.45%.

4. The following policies shall be used in determining rates:

a) Equipment owned by Contractor.

i) Equipment on jobsite

The time paid for shall be the period that the equipment is in operation on the force account work, and in addition shall include traveling time to the locations of the force account work when the equipment is moved under its own power. In rare instances, such as the transportation of a crane having a long boom, it may be necessary for the machine to be in operation while being transported to the location of the force account work, in which case the time paid for shall include the time operated during transportation. Loading and transportation costs will be allowed when equipment is moved through means rather than its own power, but payment time for equipment so moved shall be restricted to actual operating time on the work, except as noted in the preceding sentence.
ii) Equipment not on jobsite

Same as (a) except that minimum total operating time paid for on the work shall be not less than four hours.

The hourly rates for Contractor owned equipment will be determined from the applicable volume of the Equipment Watch Rental Rate Blue Book (Blue Book). The Blue Book is available to all Department personnel at Inside IDOT, [http://insideidot/default.aspx](http://insideidot/default.aspx). Click on Applications

1) The Blue Book will be used in the following manner:

(i) The hourly rate will be determined by using the FHWA Hourly Rate. The monthly, weekly, daily or hourly rates will not be used.

(ii) The current revisions will be used in establishing rates. The current revision applicable to specific Force Account work is as of the first day of work performed on that Force Account work and that rate applies throughout the period the Force Account work is being performed.

(iii) The Regional adjustment for Illinois will be made. Model year adjustment will also be made. No user defined adjustments will be made.

(iv) The estimated operating costs per hour are included in the FHWA Hourly Rate and will be used for each hour that the equipment is in operation on the Force Account work. Such costs do not apply to idle time regardless of the cause of the idleness.

(v) The rates established above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance and all incidentals. No additional compensation will be allowed for normal operating expenses. The rates do not include labor.

(vi) The Contractor shall submit Form BC 2370 Equipment Expense Rate Data Sheet to the Engineer with sufficient information for each piece of equipment and its attachments to enable the Engineer to verify the rental rate. As an option, the contractor may submit a copy of the printable report from the Blue Book. All equipment shall, in the opinion of the Engineer, be in good operating condition. Equipment used by the Contractor shall be specifically described and be of suitable size and suitable capacity required for the work to be performed.

(vii) Standby time for equipment beyond the end of the shift when the delay occurred will not be paid for, except where the
equipment has been held on the Project site on a standby basis at the request of the Engineer. Such payment will be made based upon:

0.5 X (FHWA Hourly adjusted for Model Year and Region - Estimated Operating Costs)

2) Rates for equipment not listed but available upon request from Blue Book:

The contractor shall submit a fully completed BC 2370, Equipment Expense Rate Data sheet. This information can be forwarded to Equipment Watch for a rate determination.

3) Individual pieces of equipment not listed in Attachment 1 of this memorandum and having a replacement value of $1,000 or less shall be considered to be tools or small equipment and no payment will be made for their use on the work. Compensation will be allowed for actual cost of consumables (oxygen, acetylene, propane, etc.) used by small tools.

b) Equipment rented by the Contractor.

i) Whenever it is necessary for the Contractor to rent equipment elsewhere, he shall be paid the rental and transportation cost of such equipment to which 5% shall be added. **THE RENTAL RATES MAY NOT EXCEED THOSE ALLOWABLE FOR EQUIPMENT OWNED BY THE CONTRACTOR UNLESS FIRST APPROVED IN WRITING BY THE ENGINEER BEFORE THE WORK IS STARTED.** IN NO CASE SHALL THE RENTAL RATES EXCEED THOSE OF ESTABLISHED DISTRIBUTORS OR EQUIPMENT RENTAL AGENCIES.

ii) When the contractor rents equipment from a related party and that equipment was used in the determination of the contractor’s prequalification ratings, the contractor shall be paid per a) above regardless of the rental agreement between the contractor and the related party.

5. Preparation of force account bills.

All force account bills should show an accurate description of equipment used on force account work by year manufactured, type, size and horsepower and/or capacity.

Any changes or correction of ownership expenses rates on a force account bill must be made on each revised bill to indicate that the Contractor has approved the revised amount before the bill will be approved for payment.

Contractors are eligible for an additive to a bill prepared by a subcontractor. See Art. 109.04(b)(7).

Pay item XXX15000 should be used when the force account or a portion thereof, involves issues related to a remedial or response action, or to the identification, handling, storage, treatment or disposal of a pollutant, or other items subject to payment into the Response Contractors Indemnification Fund (RCIF).

7. Where work extends over more than one week or payroll period, one bill should be submitted whenever possible, listing all labor together and all equipment together.

It will be proper to pay a foreman’s salary based on the individual’s actual wage and allow actual cost or company average for company contribution to life insurance, health insurance, or pension funds. We will also pay documented travel expense if it applies. Bonuses or profit sharing arrangements will not be allowed. Under some limited circumstances, the contractors’ superintendent may act as a foreman. In those situations it may be appropriate to pay for those costs as normally would be done for a foreman.

Some flaggers may be shown simply under the laborer wage rate. Others may have a special wage rate for laborers when acting as flaggers. It is also possible for flagger’s wage rates to be under traffic control workers rather than laborers. For force account bills the designation flaggers should be used if they are paid a different wage rate than laborers.

Roger L. Driskell, P. E.
Engineer of Construction
ATTACHMENT 1

ITEMS NOT AVAILABLE FROM BLUE BOOK

ARROW BOARD

For vehicle mounting, rate for vehicle not included

**HOURLY EXPENSE RATE = Flat rate for all models**
$2.45 for all models for a maximum of 176 hours per month
**STANDBY HOURLY RATE = Hourly Expense Rate x 0.897 x 0.50**

ATTENUATOR

Crash, for truck mounting, rate for truck not included, one-piece aluminum, one-piece fiberglass

**HOURLY EXPENSE RATE = Flat rate for all types**
$3.40 for all models for a maximum of 176 hours per month
**STANDBY HOURLY RATE = Hourly Expense Rate x 0.942 x 0.50**

Crash, for truck mounting, rate for truck not included, two-piece aluminum

**HOURLY EXPENSE RATE = Flat rate for all types**
$4.50 for all models for a maximum of 176 hours per month
**STANDBY HOURLY RATE = Hourly Expense Rate x 0.942 x 0.50**

Impact, sand module, temporary

**DAILY EXPENSE RATE = Flat rate for all types**
$5.55 for all models for a maximum of 180 days

BARRICADE

Type I or Type II

**DAILY EXPENSE RATE = Flat rate for all models**
$1.00 for each type I or type II barricade for a maximum of 180 days

Type III

**DAILY EXPENSE RATE = Flat rate for all models**
$2.35 for each type III barricade for a maximum of 180 days

BARRIER WALL

Concrete, temporary; 3.05 m (10 ft) section

**DAILY EXPENSE RATE = Flat rate for all types**
$0.25 for each section for a maximum of 180 days
Lifting Clamp

REIMBURSEMENT RATE = Flat rate for all types
$ 0.25 for each section placed and removed

DELINEATOR

Barrel

DAILY EXPENSE RATE = Flat rate for all types
$ 1.25 for each delineator barrel for a maximum of 180 days

Cone

DAILY EXPENSE RATE = Flat rate for all types
$ 0.50 for each cone for a maximum of 180 days

LITE

Flasher

DAILY EXPENSE RATE = Flat rate for all types
$ 0.20 for each flasher for a maximum of 180 days

Hi-intensity, sign mounted

DAILY EXPENSE RATE = Flat rate for all types
$ 1.70 for each sign mounted hi-intensity lite for a maximum of 180 days

Steady Burn

DAILY EXPENSE RATE = Flat rate for all types
$ 0.30 for each steady burn for a maximum of 180 days

SIGN

Construction Work Zone

DAILY EXPENSE RATE = Flat rate for all types
$2.00 for each hi-intensity sign for a maximum of 180 days

TRENCH BOX

Steel or aluminum, single or double wall; all lengths and depths; including braces
NOTE: Area equals depth times length

HOURLY EXPENSE RATE = $0.043 times the box’s area in square feet plus $3.05
for a maximum of 176 hours per month

STANDBY HOURLY RATE = Hourly Expense Rate x 0.900 x 0.50

Appendix Page 75
Attachment 2

County
Section
Route
District
Contractor  Smith Construction Co.
Contract No.
Report No.  1  Date  mm/dd/yyyy  Job No.
Authorization No.  Project No.

Description and Location of Work:  Additional Pipe & Collars at Station 00+30

<table>
<thead>
<tr>
<th>LABOR</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name, Worker Classification</td>
<td>Total Hours Worked (Straight-Time) (Overtime)</td>
</tr>
<tr>
<td>Matt Reilly, Foreman</td>
<td>6</td>
</tr>
<tr>
<td>Tim Seitz, Laborer</td>
<td>6</td>
</tr>
<tr>
<td>Bernie Henderson, Laborer</td>
<td>6</td>
</tr>
<tr>
<td>Earl Roth, Laborer</td>
<td>6</td>
</tr>
<tr>
<td>John Graham, Laborer</td>
<td>6</td>
</tr>
<tr>
<td>Sarah Reid, Teamster</td>
<td>6</td>
</tr>
<tr>
<td>Jeanmarie Smith, Operator</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EQUIPMENT USED</th>
<th>MATERIAL USED</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Description: List Manufacturer, Model, Year Built, Capacity</td>
<td>Number of Hours</td>
<td>Description</td>
</tr>
<tr>
<td>2006 Caterpillar 814 F Wheel Dozer (240HP)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2006 Chevy Light Duty P/U Truck, 4x4 Crew Cab 1/2 ton</td>
<td>6</td>
<td>24 in RCP</td>
</tr>
<tr>
<td>2004 On-Hwy Rear Dump Trk 4x4 Diesel 30,000lb/GVW</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

REMARKS: ________________________________________________________

APPROVED:  R L Smith  APPROVED:  Stephanie Jones
Contractor’s Representative  State’s Representative

Appendix Page 76
### Extra Work Daily Report

**Contractor**: Smith Construction Co.  
**Report No.**: 2  
**Date**: mm/dd/yyyy  
**Job No.**:  
**Authorization No.**:  
**Project No.**:  

**Description and Location of Work**: Additional Pipe & Collars at Station 00+30

#### LABOR

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<thead>
<tr>
<th>Name, Worker Classification</th>
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<td>Tim Seitz, Laborer</td>
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<tr>
<td>Bernie Henderson, Laborer</td>
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</tr>
<tr>
<td>Earl Roth, Laborer</td>
<td>8</td>
</tr>
<tr>
<td>John Graham, Laborer</td>
<td>8</td>
</tr>
<tr>
<td>Sarah Reid, Teamster</td>
<td>8</td>
</tr>
<tr>
<td>Jeanmarie Smith, Operator</td>
<td>8</td>
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#### EQUIPMENT USED

<table>
<thead>
<tr>
<th>Description: List Manufacturer, Model, Year Built, Capacity</th>
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<th>Description</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>2006 Caterpillar 814 F Wheel Dozer (240HP)</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006 Chevy Light Duty P/U Truck, 4x4 Crew Cab 1/2 ton</td>
<td>6</td>
<td>Trench Backfill</td>
<td>48.6 tons</td>
</tr>
<tr>
<td>2004 On-Hwy Rear Dump Tr 4x4 Diesel 30,000lb/GVW</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### REMARKS:

---

**APPROVED**:  
Contractor’s Representative: [Signature]  
State’s Representative: [Signature]

---

Original: Contractor  
cc: District File  
Printed 10/14/2013  

**Appendix Page 77**
**Extra Work Daily Report**

Contractor: Smith Construction Co.

**Description and Location of Work:** Additional Pipe & Collars at Station 00+30

### LABOR

<table>
<thead>
<tr>
<th>Name, Worker Classification</th>
<th>Total Hours Worked (Straight-Time) (Overtime)</th>
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</thead>
<tbody>
<tr>
<td>Matt Reilly, Foreman</td>
<td>8 Straight, 2 OT</td>
</tr>
<tr>
<td>Tim Seitz, Laborer</td>
<td>8 Straight, 2 OT</td>
</tr>
<tr>
<td>Bernie Henderson, Laborer</td>
<td>8 Straight, 2 OT</td>
</tr>
<tr>
<td>Earl Roth, Laborer</td>
<td>8 Straight, 2 OT</td>
</tr>
<tr>
<td>John Graham, Laborer</td>
<td>8 Straight, 2 OT</td>
</tr>
<tr>
<td>Sarah Reid, Teamster</td>
<td>8 Straight, 2 OT</td>
</tr>
<tr>
<td>Jeanmarie Smith, Operator</td>
<td>8 Straight, 2 OT</td>
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</table>

### EQUIPMENT USED

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of Hours</th>
<th>Description</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>2006 Caterpillar 814 F Wheel Dozer (240HP)</td>
<td>8</td>
<td>Portland Cement</td>
<td>6 sacks</td>
</tr>
<tr>
<td>2006 Chevy Light Duty P/U Truck, 4x4 Crew Cab 1/2 ton</td>
<td>10</td>
<td>Aggregate</td>
<td>1.5 tons</td>
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<tr>
<td>2004 On-Hwy Rear Dump Trk 4x4 Diesel 30,000lb/GVW</td>
<td>8</td>
<td>Form Lumber, 1in x 6in x 14ft</td>
<td>24pcs</td>
</tr>
</tbody>
</table>

**REMARKS:**

**APPROVED:**

Contractor’s Representative: [Signature]

State’s Representative: [Signature]

Original: Contractor

cc: District File

Printed 10/14/2013
This sample bill does not establish any policy relative to the amount to be allowed for any particular item of materials or equipment or as representing actual rates for insurance. Its sole purpose is to **standardize the form** of force account bills.

**SAMPLE OF A FORCE ACCOUNT BILL (USING 2007 BLUEBOOK RATES) SHOWING FORM TO BE FOLLOWED**

**CONTRACTOR’S LETTERHEAD**

<table>
<thead>
<tr>
<th>Route</th>
<th>Section</th>
<th>County</th>
<th>Auth. No.</th>
<th>Force account bill for</th>
<th>Contract No.</th>
</tr>
</thead>
</table>

|       |         |        |           | Additional Pipe & Collars |             |

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Section</th>
<th>County</th>
<th>Auth. No.</th>
<th>Total Hours</th>
<th>Insurance</th>
<th>Payroll</th>
<th>Earnings to Date</th>
<th>Payroll Amount Eligible for Unemployment Tax</th>
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</thead>
<tbody>
<tr>
<td>Matt Reilly, Foreman</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>22</td>
<td>2</td>
<td>15.60</td>
<td>$374.40</td>
<td>$390.00</td>
<td>$35,000.00</td>
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<td>6</td>
<td>8</td>
<td>10</td>
<td>22</td>
<td>2</td>
<td>12.50</td>
<td>300.00</td>
<td>312.50</td>
<td>8,000.00</td>
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<td>8</td>
<td>10</td>
<td>22</td>
<td>2</td>
<td>12.50</td>
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<td>Earl Roth, Laborer</td>
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<td>10</td>
<td>22</td>
<td>2</td>
<td>12.50</td>
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<tr>
<td>John Graham, Laborer</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>22</td>
<td>2</td>
<td>12.50</td>
<td>300.00</td>
<td>312.50</td>
<td>9,100.00</td>
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<tr>
<td>Sarah Reid, Truck Driver</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>22</td>
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<td>14.50</td>
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<td>8</td>
<td>22</td>
<td>2</td>
<td>17.60</td>
<td>387.20</td>
<td>387.20</td>
<td>40,000.00</td>
</tr>
</tbody>
</table>

**Subtotals, Labor** $2,280.60 $2,346.20 $525.00 $1,250.00

*Laborer Pension & Welfare Funds – 96 hours @ 0.32
Operating Engineer Pension & Welfare – 22 hours @ 0.55

**Subtotals, Labor** $2,389.02

**Subtotals, Labor** $3,225.18

**Plus:** Workmen’s Compensation Ins. 3.48% of $2,280.60
Public Liability and Property Damage Ins., excluding payroll of Truck Drivers 2.0% of $1,961.60

**Federal Unemployment Tax** 6.8% of $252.00
**State Unemployment Tax** 6.8% of $1,250.00

**Federal Social Security Tax** 7.65% of $2,346.20
**Total Payroll Additives** 387.27
**Plus 10% of $387.27** 38.73

**Total Labor** $3,651.18

---

*These are not suggested rates, as these rates vary widely between Union Locals. This is intended as an example only.

**Do not include costs for employees which have reached the $7,000 ceiling on Federal Unemployment Tax (F.U.T.)
**Do not include costs for employees which have reached the $11,500 ceiling for State Unemployment Tax (S.U.T.)

I hereby certify that the above statement is a copy of that portion of the payroll which applies to the above stated work and that the rates shown for taxes and insurance are actual costs.

(Signed) __________________________ (Contractor)
Construction Memorandum 08-09

Sheet 12 of 16

January 2008

**Equipment Expense**

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Total Hrs</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006 Caterpillar 814F Wheel Dozer, (240 HP)</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>22</td>
<td>$100.50</td>
<td>$2,211.00</td>
</tr>
<tr>
<td>2006 Chevy Light Duty Pickup Truck, 4X4 Crew Cab (1/2 ton)</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>24</td>
<td>$11.86</td>
<td>$284.64</td>
</tr>
<tr>
<td>2004 On-Hwy Rear Dump Truck, 4X4, Diesel, (30,000 lb GVW)</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>22</td>
<td>$35.22</td>
<td>$774.84</td>
</tr>
</tbody>
</table>

Total equipment expense: $3,270.48

**Material Used**

- 24 in. R.C.P., 64 ft. @ $4.30 per ft. (receipted invoice attached) $275.20
- (Trench backfill, 48.6 tons @ $0.85 per ton) (taken from stock) 41.31
- Portland cement, 6 sacks @ $1.60 (taken from stock) 9.60
- (Aggregate, 1.5 tons @ $1.40 per ton) (taken from stock) 2.10
- (Form lumber, 24 pieces, 1x6, 14 feet long @ $1.232 per piece) (receipted invoice attached) 29.57
- Less salvage value of form lumber, 50% (14.79)

Subtotal material 342.99

Total material $394.44

**AFFIDAVIT**

This is to certify that the material entered on this force account bill which was taken from stock is shown at our cost.

Smith Construction Co.
(Company)

By R. L. Smith

**Total Labor** $3,651.18
**Total Equipment Expense** 3,270.48
**Total Materials** 394.44

**Total** $7,316.10

**Bond 0.75%** 54.87
**Plus 10% of Bond** 5.49

**Total Bill** $7,376.46

Resident
ATTACHMENT 4

Equipment Expense Rate Data

To Be Filled Out by the Requesting Agency or Contractor:

Contract Number: ________________

Name: __________________________________________________________

Address: __________________________________________________________________________________________

City: __________________________________________________________________________________________ State: ______ Zip Code: __________

Telephone Number: ________________________________

Description of Equipment

Type: __________________________________________________________

Make: __________________________________ Model: __________________________

Year Manufactured: ______________ Fuel Type: ______________ Horsepower: ______________

Size and/or Capacity: ____________________________

Remarks: ____________________________________________

Cost of Equipment (For Equipment Not Listed in Blue Book)

Purchase Price: ___________________________ Year Purchased: _____________________________

Estimated or Actual Annual Repair Cost: ______________

Estimated or Actual Annual Usage of Equipment in Hours per Year: ____________________________

Additional Comments: __________________________________________________________________________

__________________________________________________________________________________________

(Upon completion, please submit to the appropriate District Office)
ATTACHMENT 5

Blue Book Supplemental Information

After discussions with the staff at Equipment Watch, the following guidelines have been prepared to provide additional assistance with using the Blue Book for force account billings:

If a particular equipment category, make, and model number is known, rather than using all of the information to drill down through the categories, simply type in the model number in the search feature and click on search. The categories assigned by Blue Book are sometimes difficult to determine.

Contractors are to be paid the FHWA Hourly Rate. When the rate is not given, it can be calculated as follows:

\[
\text{The FHWA Hourly Rate} = \left[ \left( \frac{\text{monthly rate}}{176} \right) \times (\text{model year adj.}) \times (\text{Illinois adj.}) \right] + \text{EOC}
\]

Where: \( \text{EOC} = \text{Estimated Operating Costs per hour (from the Blue Book)} \)

Authorized idle (standby) time payment will be made at the following hourly rate:

\[
0.5 \times (\text{FHWA hourly rate} - \text{EOC}).
\]

Equipment Watch updates the Rental Rate Blue Book twice per year, once in January, and once in July. Only half of the Book is updated each period, so in effect, a particular equipment rate stays valid for one year. All forms of the Rental Rate Blue Book (print, CD and on-line) are updated simultaneously, so the rates are consistent regardless of format. Also, most, if not all reports list the revision date for each rate (1st Half 2007, 2nd Half 2007, etc.), so it can be traced back to the proper time period for auditing purposes should it become an issue.

The Blue Book is a guide and if there are any units which a contractor feels is not represented in the guide, Equipment Watch will determine a custom rate based on the contractor completing a survey. When using a custom rate, check to ensure the "Illinois" and "Model Year" adjustments have been properly applied.

The "Model Year" adjustment is not available for pieces of equipment that are more than 20 years old. There are contractors that have older pieces of equipment. Most state DOT's accept the rate adjusted to the earliest published year (currently 1987), and IDOT has decided to accept this methodology as well. There are many ways to justify this treatment. Equipment Watch feels that large capital investments for major rebuilds must be made, in order to extend the economic life of these older pieces of equipment; additionally the operating cost may be higher. Thus you get a smaller ownership cost and a larger operating cost. Both of these factors tend to extend the validity of the published Blue Book rate.

For older pieces of equipment, greater than 20 years, that have a discontinued model number, most states use rates for the closest model (horsepower, capacity, etc.) published. IDOT has decided to adopt this practice. If a close match cannot be located, Equipment Watch can be contacted for a custom rate.

For new models of existing equipment (i.e. 2008 light-duty trucks) that won't be incorporated into the Blue Book until the July 1, 2008 update, other states accept the
closest model year published, in this case the 2007 models. IDOT has accepted this practice. Equipment Watch feels that they are conservative on their rates, and in the case of a truck, contractors will find that the acquisition cost of their trucks regardless of the GVW, is usually covered by the closest published model.

Until more Material Transfer Devices (MTD's) are incorporated into the Blue Book, custom rates will need to be requested. A few MTDs are located under the category "Asphalt pickup machines". Equipment Watch will be including more makes and models into future updates of the Blue Book.

The main purpose of the Buckets section is to allow for attachments. The best example is a hydraulic breaker for an excavator. The rate for the unit is determined by subtracting the rate for the standard bucket (or closest listed) from that of the Excavator (which includes the bucket) and adding in the rate for the appropriate hammer.

Most states avoid allowing rate changes for daily or hourly bucket changes, because it is not only an administrative nightmare but it brings the whole standby rate question to bear. The duty of the buckets (general purpose, heavy duty or severe duty) is a reflection of manufacturer nomenclature and not discrete wall thickness ranges. Model year of a bucket may be impossible to determine. Therefore, when determining a rate for equipment with bucket attachments, use the rate given for the manufacturer’s standard size bucket and the same model as the equipment.

Construction Memorandum 07-09 - Section 4a) 1) covers rates obtained from the Blue Book; 4a) 2) covers equipment rates not listed in the Blue Book but available upon request from Equipment Watch and; 4a) 3) covers equipment not available in the Blue Book nor upon request from Equipment Watch, but is listed in Attachment 1 of the memorandum. This is primarily Traffic Control items.

Changeable Message Signs - Although the rates for Changeable Message Signs are now being provided by Blue Book, the maximum number of hours per month remains 176. This is consistent with our previous policy when the Schedule of Average Annual Equipment Ownership Expense guide was used for equipment rates.

Due to the variability in equipment rates provided by Equipment Watch for the same piece of equipment based solely on differing annual usage hours per year provided by the contractor, when requesting a “custom” rate from Equipment Watch for a piece of equipment not available in the Rental Rate Blue Book, request “standard annual usage hours”. Widely variable annual usage hours provided by the contractor greater than 2080 hours or less than 176 hours tend to create anomalies with Blue Book methodology and can significantly impact a given equipment rate. Standard annual usage hours are typically 800 to 1500 hours per year depending on the type of equipment in question. If Equipment Watch catches reported annual usage hours on a custom rate request that are out of the range of normal equipment use, they may question the requesting party.

Pile leads are listed under Pile Drivers, and one needs to "build" the required length of the lead based on dimensions and section type (top, mid, swivel, etc.) to get to the required length for either the fixed or swinging type leads. The fixed leads are listed in increments from 10 to 40ft.; the swinging leads are listed in increments of 5 to 40ft.

Because of the many variations on the cabs, conventional, crew, extended, extra-cab, etc., and the different doors, half doors, full rear seats, fold down rear seats, when Equipment Watch does their averaging, they include as "crew cab" any of the
crew/extended cab/rear seating options. In other words, if it's larger than a "conventional cab" then it would be included in the "crew cab" averages.

Equipment Watch publishes rates for some equipment in the Shop Tools, Miscellaneous, and Air tools sections that are based on list prices less than $1000. We are continuing the policy of not giving equipment rates for small tools with a replacement value of under $1000. Therefore no payment will be made for their use on the work.

Some listings in the Blue Book give different rates for ROPS and EROPS versions of the equipment. ROPS/ OROPS- "Roll Over Protective System", "Rollover Protective Structures" or "Open Roll Over Protective System" are different than EROPS- "Enclosed Roll Over Protective Structure". ROPS is a cab or frame that provides a safe environment for the tractor operator in the event of a rollover. The ROPS frame must pass a series of static and dynamic crush tests. These tests examine the ability of the ROPS to withstand various loads to see if the protective zone around the operator station remains intact in an overturn. A homemade bar attached to the tractor axle, or simple sun shades, cannot protect the operator if the tractor overtops. The ROPS must meet standards, such as those set forth by the American Society of Agricultural Engineers, which certify they provide adequate protection in a tractor upset. If the ROPS is certified, there will be a certification label on the unit.
Prior Approval Authorization of Contract Change

Please attach a copy of this approved form to the BC 22, Authorization of Contract Change, submitted for this work.

County:
Section:
Route:
District:

Contract Number:
Authorization Number:

FHWA Approval Required □ Yes □ No

Awarded Contract Value:
Estimated Cost of this Authorization:

Determination
The undersigned determine that the change is germane to the original contract as signed, because:

☐ Provision for this work is included in the original contract.
☐ Work of this type was included in the original contract, and the additional efforts of this work are within the intent of the contract and Department policy.
☐ The change represents an adjustment required by the contract, based on unpredictable developments in the work.
☐ The change in design is necessary to fulfill the original intent of the contract.
☐ Other. Explain:

Location and Description of Work:

Reason:

By
Secretary
Date

By
Date

By
Director of Finance & Administration
Date

By
Chief Counsel
Date

FHWA

Acceptable to Proceed: □ Yes □ No

Approved for Participation: □ Yes □ No

By
FHWA Representative
Date

THE STATE OF ILLINOIS
By the Department of Transportation

Prepared By
Date

Regional Engineer
Date

Engineer of Construction
Date

Director of Highways PI/Chief Engineer
Date

Printed 10/3/2016
BC 2256 (Rev. 08/18/16)
The contractor’s contribution to Federal Unemployment Insurance Tax (F.U.T.) for an employee applies only to the first $7,000 of wages earned in a calendar year. For 2017, the rate of contribution remains at 6.0%, but employers who pay contributions on time receive a credit with the maximum credit being 5.4%; therefore, those employers contributing on time will have a Federal rate of 0.6% (6.0% - 5.4%), for a maximum FUTA tax of $42.00 per employee, per year (.006 X $7,000 = $42.00). This information can be found on the U.S. Department of Labor, Employment & Training Administration website at http://workforcesecurity.doleta.gov/unemploy/uitaxtopic.asp. Additional information can be located at IRS Publication 15 “Employer’s Tax Guide” at http://www.irs.gov/pub/irs-pdf/p15.pdf.

Also, the contractor’s contribution to State Unemployment Insurance Tax (S.U.T.) for an employee applies only to the first $12,960 (unchanged from 2016) of wages earned for calendar year 2017 and has not yet been determined for calendar year 2018. The rate of contribution varies for each employer. This information can be found on page 5 of the State of Illinois Department of Employment Security’s “2017 State Experience Factor and Employers’ UI Contribution Rates” at http://www.ides.illinois.gov/IDES%20Forms%20and%20Publications/EA-50_2018.pdf. Additional information regarding this matter can be found on IDES’ “Illinois Unemployment Insurance Law Handbook” at http://www.ides.illinois.gov/IDES%20Forms%20and%20Publications/CLI106L.pdf.

When these insurances are being charged on a force account bill, it is the contractor’s responsibility to monitor and charge accordingly (see the Instructions for Preparing Force Account Bills located within Construction Memorandum No. 09). The Resident is not required to maintain a record of contractor employee’s wages to determine payment on these two insurances. The contractor’s billing should reflect proper charges for these insurances and the Resident has the option of having the contractor provide evidence of employee’s wage earnings to verify these charges.
1. You instructed the contractor to furnish 45 foot piles.

2. Measure the length of pile delivered.

3. Determine the pay length for furnishing pile.

4. Determine the elevation of the top of the pile and mark the plan cut off elevation on the pile.

5. Determine the cut off.

6. Determine the pay length for driving pile.

Pay furnishing pile
Pay driving pile
# BITUMINOUS MIX RECORD
*(EXAMPLE ONLY)*

Bit Mix No: 82BIT1234  
Material Code: 19513  
Name: HMA SC N50 C

<table>
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<tr>
<th>Matl Code</th>
<th>Material Name</th>
<th>Source</th>
<th>Source Name</th>
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<td>2260-03</td>
<td>EMLSCT @ URBANA/SALINE</td>
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## Mix Formula

- 25 mm /1": 1.18 mm / #16: 30 Gmm: 2.453
- 19 mm / 3/4": 0.600 mm / #30: 19 (+/-4) Gmb: 2.340
- 12.5 mm / 1/2": 100 (+/-6) 0.300 mm / #50: 10 % Voids: 4.0
- 9.5 mm / 3/8": 98 (+/-6) 0.150 mm / #100: 7 VMA: 14.6
- 4.75 mm / # 4: 63 (+/-5) 0.075 mm / #200: 5.5 (+/-1.5) VFA: 72.6
- 2.36 mm / # 8: 42 (+/-5) AC 5.8 (+/-0.3) TSR: 0.86
- 1.18 mm / # 16: 30 Gmm: 2.453
- 19 mm / 3/4": 0.600 mm / #30: 19 (+/-4) Gmb: 2.340
- 12.5 mm / 1/2": 100 (+/-6) 0.300 mm / #50: 10 % Voids: 4.0
- 9.5 mm / 3/8": 98 (+/-6) 0.150 mm / #100: 7 VMA: 14.6
- 4.75 mm / # 4: 63 (+/-5) 0.075 mm / #200: 5.5 (+/-1.5) VFA: 72.6
- 2.36 mm / # 8: 42 (+/-5) AC 5.8 (+/-0.3) TSR: 0.86

## Optimum Design Data

**Central Mix Design:** 32BIT5678  
**Effective Date:** 04/21/08 I/A

### Aggregate Quality Reports are on file in the District Materials Office

**Producer No.:** 6420-05  
**Name:** ABC ASPHALT @ Anytown, IL

**Type of Plant:** H&B DRUM MIXER  
**Batch Size or Ton / Hr:** 276 TPH

**Plant Approved:** 03/19/08  
**Responsible Loc:** 92

**Copies to:**
- Res. Engr.: SMITH
- Matls Tech: EAP
- Contractor: XYZ CONSTRUCTION
- Producer: ABC ASPHALT @ Anytown, IL
- QC Mngr: B.J. JONES
- File:

**County:** STEPHENSON  
**Section:** 20RS-1&20 BR  
**Route:** FAP 5  
**District:** 2  
**Cont. No.:** 84776  
**Job No.:** C-92-072-08  
**Project:** STPF-BRF-0005/050/000  
**Date:** 08/17/2008

82BIT1234
Contract: 76864
State of Illinois
Resident: Brett Schwalb
County: MADISON
Department of Transportation
Supervisor: John Scheibal
Section: 54BR-1
ICORS SYSTEM
Field Office Phone: (618)659-9781
Route: FAP 789
Daily Quantities
Project: BRF-0789/045

District: 08

DQ Number: 235 Date: 09/16/2011 Contractor: C.E. Mahoney Co.
Pay Item Key: 40603315-L110L01-119I0002A-A HMA SC “C” N70
Quantity Inspected: 234.70 TON Posted X Paid on Estimate Number: 22
Estimate or Final: Final
Evidence of Inspection: Plant Report & Tickets in File & Test
Location: EB & WB 275+00 – 289+75
Contract: 76864    State of Illinois
County: MADISON    Department of
Section: 54BR-1    Transportation
Resident: Brett Schwalb
Supervisor: John Scheibal
Field Office Phone: (618)659-9781
Job Number: C-98-032-05
Project: BRF-0789/045

District: 08    HMA SC “C” N70

Qty Book Page: 40603315-L110L01-A    HMA SC “C” N70
Pay Item Number: 40603315    FASID L110L01    Subjob A
Units TON Unit Price $83.0600

Quantity Awarded 229.000 Adjusted Total Qty: 234.700

Finaled Yes

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<th>Auth Letter</th>
<th>CCS Code</th>
<th>Date Approved</th>
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Locations:
EB & WB 275+00 – 289+75

Estimate or Final: Final

Friday, September 23, 2011
Report Name: Quantity Book
This memorandum supersedes Construction Memorandum No. 15-4 dated April 1, 2015.

This memorandum provides the procedures by which highway construction contract changes will be administered, as well as the circumstances under which such changes will be permitted. These procedures are designed to ensure compliance with the letter and spirit of all applicable laws, to foster proper administration of the provisions of all Department-let highway construction contracts in accordance with accepted legal principles, and to avoid disputes that can arise when it is necessary to modify the terms of a highway construction contract. These procedures apply to all contracts that are let by the Department of Transportation. It should be noted, that for the purpose of this memorandum, the term “changes” includes change orders and adjustments.

A contract change is one of the most important aspects of contract administration. By definition, it alters the contract work from that awarded under the competitive bidding process and, therefore, requires clear explanation and careful consideration. The signature of the Regional Engineer on such an order (BC 22), Authorization of Contract Changes signifies complete review of and support for the change proposed.

The applicable state laws are the Illinois Procurement Code (30 ILCS 500), the State Finance Act (30 ILCS 105/9.02) and the Criminal Code (720 ILCS 5/33E). The Secretary of Transportation and the Director of Highways have directed further changes in procedure both to bring the Department into conformance with the laws and to better enable the Department to administer contract changes (Departmental Order 2-2, Signature Authority).

**Basic Requirements**

- All contract changes must be germane to the original contract.

- On a limited basis, Small Purchases may be approved by the Central Bureau of Construction and paid for under an existing contract.

- All extra work must be approved and directed in writing before the work begins. The method of payment should be determined prior to beginning any extra work.

- The written approval of a contract change and the written directive to the contractor may or may not be the same document. The approval or the directive can be in the form of a Resident's memo, form BC 2256, Prior Approval.
Authorization of Contract Change, form BC 22, Authorization of Contract Changes, or other written instrument, as appropriate.

- The contract change must be approved by a person who has direct or delegated authority to approve the type, scope or value of the work involved in the change.

- The written approval for a contract change must include a determination that the work is germane to the contract, and the reasons for this germaneness determination. Ordinarily, emergency contracts are procured as outlined at https://insideidot.portal.illinois.gov/SiteDirectory/CPO/Procurement%20Processes/Emergency%20Process.pdf however, in case of an immediate hazard to public safety, the Resident is granted limited authority to initiate work if immediate action is necessary.

- Contract changes for individual extra work efforts greater than $30,000 must be published in the Transportation Bulletin on the Internet. An extra work effort is comprised of all the work, paid under one or more new or existing pay items, necessary to accomplish the goal of the extra work. To the extent practical, the districts are asked to submit a separate BC 22 for each extra work effort that requires publication. The Central Bureau of Construction will not try to dissect the items on the BC 22. Instead, the relevant information treated as a whole, will be published.

- Contract changes for individual extra work efforts greater than $30,000 must also be reviewed by the Procurement Policy Board (PPB). The BC 24 is to be submitted to the Central Bureau of Construction to provide the information in the format agreed to by the PPB. Certain changes require the waiver prior to beginning the work.

- The delegated authority to approve contract changes is in relation to the entire work effort involved in the change. A work effort may involve payment under several different pay items. The delegated authority levels are for the net value of a work effort, including both additions and deductions to the various pay item quantities involved in the changed work effort.

- Residents will assign a two-digit code number to each authorization line item, to categorize the type of change involved in the line item. This requirement applies primarily to State projects. For Local Agency projects, there is a single category code (33) that is to be used for all contract changes.

**Change Order - Contract Adjustment**

44 Administrative Code Part 6 provides the following definitions:

**Change Order** – A formal, written directive issued to a contractor or an agreement that amends a contract in order to address contingencies affecting the performance and completion of the contract, including but not limited to such matters as extra work,
design changes or alterations to plans, or special provisions or specifications for which no provision is included in the original contract.

**Contract Adjustment** – A written price adjustment that adds to or deducts from a contract in accordance with provisions included in the original contract, including but not limited to increases or decreases in quantities, incentives, changed conditions and the addition of missing pay items called for in the contract.

In the past, the terms change order and authorizations have been used interchangeably. To help administer contract changes, the term change order will be used to refer only to such contract changes which modify the work called for in the contract. The term authorization is used more generically to refer to all the contract changes and adjustments submitted on a BC 22. See the Procurement Policy Board section for further discussion on Change Orders and Contract Adjustments.

**Major and Minor Changes**

It is the policy of the Department to require the approval of the Central Bureau of Construction prior to a commitment for all major changes in the plans or contract provisions. The prior approval of the Federal Highway Administration is required for all Major Changes on Projects of Division Interest (full oversightPoDI) (Project of Division Interest) /and/or Projects of Corporate Interest (PoCI) (Project of Corporate Interest) (formerly referred to as non-exempt) projects.

A. **Major** is considered to apply to any contract change that:

1. Revises the alignment or typical section of the mainline roadway, ramps, frontage roads or crossing areas.

2. Revises the access control (either temporary or permanent).

3. Accelerates work on the project involving payment for premium time or loss of productivity, or involving other forms of acceleration (e.g. winter protection of concrete), greater than $20,000 per contract.

4. Revises the staging of construction or the traffic control plan and reduces the number of lanes open to traffic or otherwise impacts traffic flow or traffic patterns.

5. Changes the limits of the project or adds omitted work.

6. Impacts a protected environmental resource or modifies an environmental commitment such that follow-up coordination is required with the affected entities.

7. An extra work effort at contract unit prices, agreed unit prices or force account methods that equals or exceeds a total cost of $250,000. On FHWA full-oversight (non-exempt) projects, the FHWA must grant prior approval for extra work efforts exceeding $250,000.

9. Changes the Method of Measurement or Basis of Payment for an item of work.

10. Small Purchases procured in accordance with Section 6.100(b) of the Department Procurement Rules. (Small Purchases will not require prior approval from FHWA on PoDi / PoCl projects)

B. Minor is considered to apply to any contract change that is:

1. An adjustment in unit prices, less than $250,000, specifically required by the Standard Specifications or a Special Provision (a traffic control price adjustment is one example).

2. An extra work effort that is to be accomplished at contract unit prices, agreed unit prices, force account or a combination thereof that does not classify as Major under items A.1 through A.6 and will not exceed a total cost of $250,000. The $250,000 limitation applies to the individual added extra work effort rather than the total additions of the authorization, which might include other added extra work efforts or adjustments.

3. A contract change that adjusts contract quantities to final as-built quantities.

4. Acceleration of work on the project costing $20,000 or less per contract.

Approval Procedures

The Criminal Code and the Illinois Procurement Code both include provisions that require documentation of prior approval, depending on the nature and value of the change and the value of the original contract. The State Finance Act contains additional approval requirements governing higher value changes.

These provisions have created a complex web affecting the addition of work to a contract and the payment for that work. From the perspective of the contractor, proper and timely approval facilitates lawful and timely payment.

Therefore, in order to assure compliance with Illinois and Federal law, the Department's Determination to protect the public interest, and the expeditious prosecution of the work, the following requirements are established to be followed in approving all contract changes (see also Departmental Order 2-2):

1. All extra work must be approved in writing and a copy provided to the contractor before the work is begun. The written approval must include the signature of the person who approved the change, and that person must have direct or delegated authority to approve such a change. The written approval must also include a description and reason for the change, a statement that the change is germane and a description of why the change is germane (unless an Emergency Purchase Affidavit is filed).
2. The **Resident** is directly authorized to verbally or by action (i.e. layout) approve and direct additional quantities to contract pay items, when the quantities can be considered balancing. The Resident is not directly authorized to approve additional quantities if there is a significant discrepancy in the plan quantities, or the amount is greater than $20,000.

When verbal approval is given for balancing quantity adjustments, the Resident should submit these quantities on form **BC 22**, Authorization of Contract Changes, in a timely basis as needed to ensure timely payment to the contractor for significant additions. The original contract documents serve as the written authorization to the contractor to proceed, so no separate written directive to the contractor is needed.

3. The Regional Engineer has the authority to approve minor changes less than $250,000. The levels of delegated authority for minor contract changes on projects are as follows:

<table>
<thead>
<tr>
<th>Position</th>
<th>Authority Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation Engineer</td>
<td>$150,000</td>
</tr>
<tr>
<td>Construction Engineer</td>
<td>$100,000</td>
</tr>
<tr>
<td>Supervising Field Engineer</td>
<td>$40,000</td>
</tr>
<tr>
<td>Resident Engineer or Technician</td>
<td>$20,000</td>
</tr>
</tbody>
</table>

All delegations listed above are mandated down to the level of Residents. The Regional Engineer may delegate additional authority above these minimum levels.

For such added work the district may proceed with the added work prior to submitting the **BC 22** to the central bureau, however, change orders greater than $30,000 will require the waiver of the Procurement Policy Board prior to work beginning as noted later. The **BC 22** will indicate that this is a minor addition. The Regional Engineer’s signature on the **BC 22** will be accepted as approval of the work. An appropriate **BC 22** should be submitted as soon as possible in order that the quantities can be reflected in the Bureau of Construction Management (BCM) system. All district approvals shall comply with the law, the contract and Department policy.

4. The **Engineer of Construction** is authorized to approve change orders to expedite or accelerate the construction work (Major Change) up to a value of $250,000.

5. The **Engineer of Construction** is authorized to approve payment of Small Purchase work under an existing contract.

6. The **Engineer of Construction** is authorized to approve claim settlement offers at claim review Levels 1 and 2 up to a value of $250,000.

7. In accordance with Departmental Order 2, Signature Authority, the Secretary must approve all changes resulting in a net addition of $250,000 or more.
Finance Code Requirements. In accordance with the [Illinois Finance Code](#) and Departmental Order 2-2, when a single or cumulative contract change results in a net change that is equal to or greater than $250,000 in a fiscal year, before funds may be obligated for such a change, the [BC 22](#), Authorization of Contract Changes, must have the signatures of the Secretary, Director of Highways Project Implementation, Director of Finance & Administration, Chief Counsel and the Chief Procurement Officer for the Department’s construction and construction related procurements. In addition, for contracts with an awarded value in the range of $200,000 to $1,000,000, a single or cumulative change order resulting in a net change that is equal to or greater than 25% of the awarded contract amount in a fiscal year will also require the five signatures.

For contracts with an awarded amount of less than $250,000, when the cumulative change results in a total contract value greater than $250,000, five signatures will be required.

The Central Bureau of Construction will coordinate with the chief executive officers to obtain these signatures. It is understood that these signatures may be obtained after the work has already been ordered, when the [BC 22](#) includes only minor changes approved at the district level. The Central Bureau of Construction will obtain these signatures, when applicable, for all major changes before the work is approved.

Coordination with FHWA. By agreement, the Federal Highway Administration (FHWA) reviews all authorizations (change orders) of contract changes on selected full involvement PoDI / PoCI (non-exempt) contracts identified as PoDI or PoCI, and other contracts as that may be required by the Oversight Agreement. The Central Bureau of Construction will advise the districts as to which contracts are full-involvement PoDI or PoCI. A list will be provided at the beginning of every Federal performance year, which begins on June 1.

Federal-aid policy requires prior approval for major changes or when the net positive value of a work effort, including both additions and deductions to the various pay item quantities involved is greater than $250,000. It is recognized that some anticipated extra payments exceeding $250,000 will, by their nature, not require prior approval.

Although all authorizations for full-involvement PoDI / PoCI projects may require FHWA review and approval, such additions, not requiring prior approval, include the following:

- Contract Adjustments that include Balance Final Field Measurements (category code 01), Allowable Contingencies (category code 03), and Specification Performance Adjustment (category code 16) for which the work and the method of payment are included in the contract.

The district should keep the FHWA Transportation Engineers (TEs) aware of pending major changes during project visits or through telephone calls or e-mails.

Authorization Approval Process

The Resident Engineer prepares a [BC 22](#) then forwards it to the District Office. The District Office reviews and forwards the [BC 22](#) to the Central Bureau of Construction. The central bureau will send a copy of the authorization ([BC 22](#)) to the FHWA TE after it has been entered in the BCM system. The FHWA TE will review and sign either as
participating or non-participating, make a copy and return a signed copy to the central Bureau of Construction.

For authorizations requiring prior approval by the FHWA, an approved BC 2256, the approval must be in writing, an e-mail or Fax would be adequate, and must accompany the BC 22.

Prior Approval Process

For work efforts requiring prior approval, the Resident Engineer initiates the BC 2256 or BC22. The Resident Engineer forwards the BC 2256 or BC22 to the District Office for appropriate signatures per delegated authority approval levels.

The FHWA prior approval must be in writing, an e-mail or Fax would be adequate and documented on a BC 2256. In emergency situations, a verbal, e-mail or fax request and approval is adequate to allow the work to begin but must immediately be followed up by a BC 2256.

When the prior approval is for a major change or the amount is greater than $250,000, the District Office forwards the BC 2256 or BC22 to the Central Bureau of Construction. Upon concurrence of the change, the Central Bureau of Construction forwards copies of the BC 2256 or BC22 to FHWA and Executive Officers for their signatures. Upon concurrence of the change, the FHWA and Executive Officers sign and return the BC 2256 or BC22 to the Central Bureau of Construction. Upon receiving FHWA and Executive Officers’ signatures, the Central Bureau of Construction forwards a copy of the BC 2256 or BC22 to the District Office.

The District Office forwards the BC 2256 or BC22, email or fax to the Resident Engineer. The work is authorized and can now be performed. The signed BC 2256 if used must accompany the BC 22 for processing as per the approval process described above.

Local Agency Contracts Awarded by the Department. The laws noted above apply to State-let local agency projects as well as State contracts. Residents on local agency projects must coordinate carefully with the districts to ensure that any changes made to a contract are within the limits proscribed by the laws. Delegation of approval authority will be discussed with the local agency Resident at the preconstruction conference.

Failure to follow the procedures in this memorandum could result in the loss of State or Federal-Aid participation in the cost of the project.

The district will obtain the local agency’s approval of major changes and added work prior to approving a BC 22. This will afford the local agency the opportunity to determine that the necessary funding is available and that the completed project will be acceptable for maintenance.

Environmental Commitments. When a change on any project, regardless of project funding or highway system, modifies an environmental commitment or permit requirement, it will be necessary to have the District Environmental Coordinator, and the central Bureau of Design and Environment as appropriate, reevaluate the continuing validity of the environmental document. The reevaluation shall be coordinated, as necessary, with affected agencies to determine the acceptability of the...
proposed change and the need for mitigation, prior to implementing the change. When
the reevaluation indicates a change in the impacts evaluated in an approved federal
environmental document, prior approval of the Federal Highway Administration (FHWA)
will also be required. Changes to permit requirements will be coordinated with the
permitting agency.

Transportation Bulletin

The Procurement Code and the rules promulgated under this Code require that all
contract changes for which the value of the extra work effort is greater than $30,000
must be published in the Department’s volume of the Illinois Procurement Bulletin.
IDOT’s volume is called the Notice of Contract Awards Transportation Bulletin. For
germane contract changes, the publication of this information will be coordinated by the
Central Bureau of Construction. However, in order to comply with the disclosure
requirements and time limits of the law it is essential that the districts submit all the
necessary information with the authorization in a timely manner.
The Central Bureau of Construction will submit for publication the following information from an authorization:

- **Contract Number**
- **Project description.** The description will be the one published in the Transportation Bulletin and will be obtained from the Bureau of Design & Environment after the contract is let.
- **The name of the prime contractor.**
- **Description and reason for the change.** This will be copied in its entirety directly from the BC 22 submitted by the district.
- **Net Change shown on the BC 22.** If this authorization (e.g. Auth. No. 11A) is an adjustment to a work effort submitted on a previous authorization (e.g. Auth. No. 11), then the total change for this work effort must be included in the Description.
- **Determination statement that the change is germane, and the reason why it is germane, will be copied from the authorization.**

**Procurement Policy Board**

On July 30, 2004 legislation was enacted establishing the Procurement Policy Board (PPB). One of the functions of the PPB is to provide oversight of the procurement of construction activities. As a result, all Authorizations resulting in an increase to the contract greater than $30,000 require the review and waiver from the PPB.

Additionally, Change Orders require a waiver **prior to beginning the work.**

**Change Orders** include plan omissions, design changes, acceleration and other germane additions for which no provision is included in the original contract. (Category Codes 9, 19, 28 and 30)

**Contract Adjustments**, which would include balancing, incentives and other additions for which both the work and the method of payment are included in the contract as well as additions for missing pay items where the work was included in the plans, plan errors, plan quantity errors and differing sight conditions. (Category Codes 1, 3, 12, 16, 22, 24, 26 and 29)

Authorizations resulting in a net change of $30,000 or less, regardless of Category Code are not required to be submitted to the PPB.

Authorizations with the Category Codes 33 and 85 may or may not be considered Change Orders. These Authorizations should be examined on a case by case basis.

On Local Agency projects, Category Code 33, the Local Agency will be responsible for making the determination of a Change Order. If the determination is not readily apparent, consult the District Office or Central Bureau of Construction.

When determination is made that an Authorization (BC 22) or Prior Approval (BC 2256) will be in excess of $30,000, the Resident Engineer, District Office, or Local Agency will submit the BC 24 to the Central Bureau of Construction. ICORS users can transmit the information electronically. For non-ICORS contracts, the BC 24 form can be
emailed to DOT.BC24.Mailbox@illinois.gov or faxed to 217-524-4922. The BC 24 form can be e-mailed to BC24Mailbox@illinois.gov or faxed to 217-524-4922.

The information will be published in the Transportation Bulletin and then reviewed by the PPB. To see when the PPB has granted the waiver, log on to:

http://apps.dot.illinois.gov/changeorder/
http://www.dot.il.gov/Proc bulletin/HwyConstChange/eproc.asp

and click on the contract number. A copy of the waiver documentation should be printed and retained in the Resident’s file.

Additionally, notification of a waiver may be sent by e-mail to selected District personnel. The Districts are responsible for supplying a list of e-mail recipients and keeping the list current.

The process for approving Authorization of Contract Changes (BC 22) or Prior Approval Authorizations (BC 2256) which are Major Changes or require executive signatures remains the same. The IDOT approval for these Authorizations BC 22’s or BC 2256’s can be processed concurrently with the submittal for PPB review; however, the work for Authorizations BC 22’s or BC 2256’s considered Change Orders cannot begin until the PPB has granted a waiver. For this reason, timely submission of the BC 24 is critical to minimizing delay to the contract.

**Contract Renewals**

For contracts containing provisions for a renewal, the following procedures apply. Please note the terminology is “renewal” and not “extension”.

Notify the contractor in writing of the Department’s desire to renew the contract and have the Contractor concur in writing.

Obtain the Contractor’s signature on the BC100 (Bureau of Construction Contract Renewal Form) prior to the original contract ending date and in accordance with the contract renewal special provision.

Submit the BC 24 for the PPB review. **Procurement law requires the PPB waiver be requested within 10 days of the Department electing to exercise its option to renew the contract.** In the Reason for Extra Work section of the BC 24 note this is a contract renewal. For example, “This is renewal 1 of 1 as provided for in the contract.”

Submit the BC 100, BC 22, and PPB waiver to the Central Bureau of Construction. The Central Bureau of Construction will obtain the required executive signatures, submit the package to the Comptroller, and inform the District when required approvals have been granted.

**Submittal of BC 22, Authorization of Contract Changes**

All contract pay item quantity changes must be submitted to the Central Bureau of Construction on form BC 22, Authorization of Contract Changes. The submittal should
include the original signature of the Regional Engineer. Copies maybe accepted under extenuating circumstances.

The guidelines for including line item changes on an authorization (BC 22) are as follows:

- Submit changes related to a specific extra work effort on a separate BC 22, when the value of the extra work effort exceeds $30,000, or has some possibility of exceeding $30,000 on future authorizations. Only items related to that extra work effort should be included on that BC 22.

If subsequent authorizations are needed to adjust the quantities involved in the extra work effort, those authorizations should use the same Authorization Number as the original, and assign a sequential Authorization Letter to the subsequent authorizations. For example, if the items related to the original authorization are submitted on Authorization Number 22, then later authorizations for the same change order should be numbered and lettered as 22A, 22B, etc. The explanation on these subsequent authorizations will include the cumulative total of this work effort. (Note that subsequent line items used to balance previously submitted force account or agreed unit price extra work pay items should be designated with the same category code as the original submittal of the line items.)

- Small Purchases to be paid under an existing contract are to be submitted on a separate BC 22, since the determination statement will be different from ordinary, germane contract changes.

- Contract changes which represent balancing of quantities can be submitted together on a single authorization. The description of the changes can be, simply, "Balancing final quantities."

- New pay items for force accounts or agreed unit prices representing individual work efforts (not part of another work effort) can be submitted together, or included on a balancing authorization. If it is known that the total value of the work represented by each item is less than $30,000, and the net value of the BC 22 is less than $30,000.

Both the Procurement Code and the Finance Code forbid line item changes to be artificially divided among separate authorizations so as to avoid any of the requirements of the laws.

Documentation

Written Direction vs. Written Approval. As stated in Article 109.04, Payment for Extra Work, all extra work must be directed in writing to the contractor. However, the written directive to the contractor to proceed with the extra work may or may not be the same document as the written approval of the extra work. For example, approval of the work may be documented on form BC 2256, but the directive to the contractor may be accomplished by a letter from the district or a memo from the Resident.

The BC 22 may be used as both the written approval of the work and the written directive to proceed only when it has been fully approved before the work is to be
started. Do not forward a copy of the BC 22 to the contractor unless it includes the approval signature of a person with sufficient authority to approve the change.

When approval at the district level is needed before the BC 22 can be submitted to that office (to allow a quick directive to the contractor), then form BC 2256 is to be used to document the approval.

For minor changes, the BC 22 may be considered the written approval when it is signed by, or for, the Regional Engineer, as long as this approval occurs before the contractor is directed to perform the work. In this case, the district may use some other form to direct the contractor to proceed with the work.

**Description and Reason for the Change.** There must be an explanation for each item, or group of items, which someone not familiar with the project can understand. Brief explanations such as "balancing" and "change of Fund Code" are acceptable. If extra work is directed by a member of the district staff, the individual's name and title should be included with the explanation. For example, "Supervising Field Engineer Bill Smith directed that the culvert under the field entrance left of Station 16 + 143.015 be lowered to prevent the ponding of water in the ditch."

For subsequent authorizations of an extra work effort (e.g. #11A, 11B, etc.), the description and reason will be repeated on each authorization.

To avoid ambiguities that could result in contract disputes, the written directive to the contractor must provide a clear description of the work to be performed, including any reference to any applicable Specifications by which the work is expected to be performed. The method of payment should also be determined at that time.

Keep in mind that for authorizations to be published in the Transportation Procurement Bulletin, the Description and Reason will be published but not the actual line items. Make sure the written description is understandable when read separate from the actual BC 22.

**Determination Statement.** A determination statement must be included on all documents approving extra work efforts. The determination statement must also be included on the BC 22 (whether or not a separate document was used to document approval of the work).

For germane (ordinary) contract changes, the determination must state that the change is germane, and explain why the change is germane.

The portion of the determination statement that is required by the Criminal Code for germane changes is: "The undersigned determine that the change is germane to the original contract as signed."

1. The Procurement Code goes a step further and requires that under certain conditions a determination be made as to why the change is germane. The following typical germaneness determinations can be used, when appropriate. However, these are simple examples; actual circumstances may require greater detail. The undersigned determine that the change is germane to the original contract as signed, because provision for this work is included in the original contract.
2. The undersigned determine that the change is germane to the original contract as signed, because work of this type was included in the original contract, and the additional efforts of this work are within the intent of the contract and Department policy.

3. The undersigned determine that the change is germane to the original contract as signed, because the change represents an adjustment required by the contract, based on unpredictable developments in the work.

4. The undersigned determine that the change is germane to the original contract as signed, because the change in design is necessary to fulfill the original intent of the contract.

5. The undersigned determine that the change is germane to the original contract as signed. See attached sheet for additional explanation of germaneness.

For subsequent authorizations of an extra work effort (e.g. #11A, 11B, etc.), whether germane or emergency, the determination must be repeated on each authorization.

It is not permissible to simply place the ICORS germaneness code (e.g. G1, G2, etc.) on the BC 22. A determination statement must be used.

For Small Purchases paid under an existing contract, the following determination statement is to be used:

- Small Purchase procured in accordance with Section 6.100(b) of the Department Procurement Rules. The undersigned determine that this change is in the best interest of the State and is authorized by law.

Miscellaneous BC 22 Documentation. The following miscellaneous information must be noted on the BC 22 submitted to the central office:

- Type of Authorization: Contract Adjustment, Change Order.
- Major vs. Minor. Indicate whether the contract changes included on the BC 22 represent a major or a minor change.
- FHWA Oversight. On Federal-aid projects, indicate whether the project is classified as Exempt or a Full Oversight PoDI / PoCI. (Non-Exempt).
- Project Location. This is intended to be a brief description of the entire project, for the benefit of the reader unfamiliar with the project. Specific location descriptions related to the included contract changes will be included with the Reason and Description, as appropriate.
- Resident/Supervisor. The name of the Resident and the IDOT Supervising Field Engineer should be noted. Both individuals must sign the authorization.
- Designer. For State let contracts, it should be noted whether the plans related to the changes included were prepared by IDOT ("In House") or by a consultant. If prepared by a consultant, then the name of the consultant will also be noted.

Supporting Documentation. When additional documentation is required to support a contract change, it should be submitted with the BC 22. The documents should
reference the specific contract change by including the contract number and the authorization number on each document.

Agreed Unit Prices. Agreed unit prices require the District Estimator’s review and written approval. An authorization that contains agreed unit prices will have the District Estimator’s written approval or comments attached.

The contractor’s written request for an Agreed Unit Price (AUP) must contain a written description of the work, quantity, and price. In order to expedite the review of an AUP request by the District Estimator, if higher than historical bid prices for a given type of work effort are requested by the contractor, justification for the higher costs (lower production rates due to confined areas, small quantities which may have higher unit prices, limited availability of material, etc.) should be clearly documented and provided in the contractor’s request. Other justification that would assist the District Estimator in evaluating requests could also include documented material costs such as actual price quotes from a material supplier, a contractor’s unit cost worksheet, associated mobilization costs, an “estimated” force account bill, documented production rates for the type of work specified, or any other non-typical situation which would substantiate the higher costs.

The District Estimator must document whether the approval was based on an estimates worksheet, historical bid prices, concurrent similar projects or some other basis in accordance with the Bureau of Design and Environment guidelines. A copy of the documentation should be submitted with the authorization.

FAS ID’s and CCS Codes. State and federal accounting procedures require that all contract changes be posted to the correct FAS ID (Fund-Area-System) and CCS Code (County-Construction Type-Safety Type). The FAS ID and CCS Code of each line item must be identified. Due to the structure of the BCM system into which all authorizations must be entered, the Districts will group together all changes for the same combination of FAS ID and CCS Code on the BC 22.

Eligibility of Roadway Maintenance Work for Federal Funding. The broad category of work called Roadway Maintenance has, in the past, included various sub-categories of work, some eligible for Federal Funding and some not eligible for Federal Funding. The following presents a breakdown of what types of roadway maintenance work that is eligible for Federal Funding and what types are not eligible for Federal Funding:

A. Types of Roadway Maintenance Work that are Eligible for Federal Funding:
   - Patching, overlays, and repairs of roadway to accommodate staged traffic configuration;
   - Placement, repairs and maintenance of Temporary Traffic (crash) Attenuators placed due to Maintenance of Traffic for construction to be removed at completion of project(s) (presuming that IDOT has made every effort to pursue reimbursement for any damage to attenuators from parties responsible for the damage.)
   - Placement, repairs and maintenance of Permanent or Temporary guardrail damaged within construction zones when the temporary lane configurations expose the guardrail to increased risk of damage and no accident report exists allowing the Department to recover costs through MCHD program (traffic staged
closer to guardrail or other safety appurtenance than will be in final configuration) (presuming that IDOT has made every effort to pursue reimbursement for any damage to guardrail from parties responsible for the damage).

B. Types of Roadway Maintenance Work that are normally NOT Eligible for Federal Funding:

- Permanent Safety Appurtenances (Guardrail, drums, attenuators, signs, etc.) damaged when traffic configuration and appurtenance are in their permanent configuration whether before, during or after project construction activities;
- Culvert cleaning;
- Snow plowing;
- Mowing;

Work that is eligible for Federal Funding and work that is not eligible for Federal Funding are to be broken out into separate authorizations. Payments for efforts not eligible for participation under the descriptions above are to be separated into 07A fund codes. The description of work on authorizations for roadway maintenance are to be detailed enough to clearly specify which type of roadway maintenance work is being performed in order to assure eligibility for Federal Funding.

Force Account. When balancing force account work a recap should be provided as shown below:

<table>
<thead>
<tr>
<th>Authorization #11</th>
<th>Estimate</th>
<th>$20,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorization #11A</td>
<td>Estimate</td>
<td>$32,000.00</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$52,000.00</td>
</tr>
</tbody>
</table>

Actual Billing $51,959.03

Total Deduction this Authorization #11B <$40.97>

Force account billings and daily reports are not to be submitted with the authorization and will be retained in the district’s files.

New Pay Items and Special Item Numbers. When new pay items are added to the contract, the districts will use the following format for creating the pay item number:

- For force accounts, the first three characters of the number should be "FRC". The second three digits will correspond to the authorization number on which the item was first submitted. The last two digits will normally be "00", but if more than one new pay item is submitted on the same authorization, then change the last two digits (e.g. "0A", "0B", etc., or "01", "02", etc.) to distinguish the additional items. The unit of measure for force account items is DOLLAR ($), and the unit price is $1.00. The value of the force account is given in the quantity of the force account pay item.

- For agreed unit price items, the first two characters should be "X9" and the third character will be the district number. The remaining characters should follow the same scheme as described above for new force account items.
For example, the pay item number "FRC01000" identifies a force account that was first submitted on authorization number 10. "X9100401" identifies a new agreed unit price item from District 1 that was the second new agreed unit price pay item number submitted on authorization number 4.

In addition, the Department is tracking historical data on certain pay items that may be added to contracts. A list of these Special Pay Item Numbers is included at the end of this memorandum (see Attachment 4). If any of these types of work are added to a contract, the Resident will use the appropriate special pay item number from this list.

The list is organized by change category, to show which change category should be indicated when the item is added to the contract. Note that some of the special pay items are rarely used anymore, but are maintained in the list for historical reasons.

All the special item numbers begin with "XXX". If the same special item number is needed more than once on a contract, the last two digits of the item number can be changed for the additional occurrences, such as "0A", "0B", etc., or "01", "02".

**Hand Written Copies.** On projects where the Illinois Construction Records System (ICORS) is not available, Residents should hand write, in ink, a legible BC 22, and submit it to the district office for typing. The BC 22 submitted to the Central Bureau of Construction must be typed.

Tim Kell, P.E.
Engineer of Construction
### Authorization Chart

<table>
<thead>
<tr>
<th>Code</th>
<th>New Category</th>
<th>Authorization Type</th>
<th>BC 24 Prior Approval</th>
<th>Germaine Reason*</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Balance Final Field Measurements</td>
<td>Adjustment</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>03</td>
<td>Allowable Contingencies</td>
<td>Adjustment</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>09</td>
<td>Design Change</td>
<td>Change Order</td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>Utility Cause Change/Addition</td>
<td>Adjustment</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>Specification Performance Adjustment</td>
<td>Adjustment</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>Contract Acceleration</td>
<td>Change Order</td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>22</td>
<td>Differing Site Condition</td>
<td>Adjustment</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>Contract Administration</td>
<td>Adjustment</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>Highway Plan Quant Omission or Error</td>
<td>Adjustment</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>28</td>
<td>Highway Design Engineering Error</td>
<td>Change Order</td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>29</td>
<td>Bridge Plan Error or Omission</td>
<td>Adjustment</td>
<td>No</td>
<td>1 or 4</td>
</tr>
<tr>
<td>30</td>
<td>Construction Engineering Error</td>
<td>Change Order</td>
<td>Yes</td>
<td>5</td>
</tr>
<tr>
<td>33</td>
<td>Local Agency Project</td>
<td>***</td>
<td>***</td>
<td>**</td>
</tr>
<tr>
<td>85</td>
<td>Miscellaneous</td>
<td>Adjustment</td>
<td>No</td>
<td>**</td>
</tr>
</tbody>
</table>

**Authorizations $30,000 or Less, Regardless of Type, Do Not Require a BC 24**

All Authorizations > $30,000, Regardless of Type, require a BC 24

* Most common reason. Could vary based on individual circumstances.

** Could be any of the 5 reasons

*** Could be either
## Change Category Descriptions

<table>
<thead>
<tr>
<th>Code</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Balance Final Field Measurements</td>
</tr>
</tbody>
</table>
|      | Changes needed to account for the difference between estimated plan quantities and final, as-built quantities, when the work is built to the lines and grades shown on the plans. The Resident should use reasonable judgment whether an adjustment is within the expected tolerance for the accuracy of plan quantities.  
This category also includes bookkeeping changes and maximum payment adjustments. Note that this category does not include balancing changes for extra work items or quantities since the total cost of the extra work effort should be designated under the same, appropriate category code. Changes in this category are always considered germane since they are a specified adjustment of pay quantities to perform the specified work. Contract changes of this type do not require additional written direction to the contractor prior to the start of the work. |
| 03   | Allowable Contingencies           |
|      | These are “built-in” changes that are required by the specifications or state-wide changes in department policy based on the type of work involved in the contract or conditions found at the job site. Generally, changes in this category are work efforts called for in the contract but specified to be paid for as extra work, or they are planned contingencies, that is, work efforts that depend on the actual field conditions which could not be known at the time of design. Examples include accident cleanup, anti-strip additive, repairing water main breaks, water main or service breaks, temporary drainage facilities, mowing prior to final inspection, additional cofferdams, cofferdam inspection, cofferdam excavation, storage of structural steel, pile splices, replacing damaged pipe, repairing state-owned traffic signal control equipment, additional flaggers or traffic control devices, replacing temporary striping, repair traffic barrier terminals or sand impact attenuators, railroad flaggers, pavement cleaning, temporary access, blading earth shoulders (adjacent to resurfacing), preparing or repairing existing base, covering CRCP patches, preservation of stone markers and survey monuments, installation and electricity charges for traffic signal and lighting service installations, repairing slope failures, excess field office telephone charges, samples for destructive testing, additional erosion control devices, traffic control price adjustments, investigation and cleanup of hazardous or controlled waste, and adjustments in contract unit prices as provided in the contract. Changes in this category are most always germane to the contract, since provision for the work is included in the specifications. Germaneness of this type of change would be questionable, though, if the cost of the change was grossly disproportionate to the value of the original contract. |
| 09   | Design Change                     |
|      | This category includes all changes in the specifications or design that are not specified in another category without regard as to why they were initiated or who initiated them. Care must be taken to determine the germaneness of any design change. |
| 12   | Utility Caused Change/Addition    |
|      | Compensation to the contractor for compensable delay damages caused by utilities, locating utilities, as well as changes in the design made primarily to accommodate or avoid utilities within the right-of-way. Note that this category does not necessarily include miscellaneous bills paid in accordance with Article 109.05. Such bills should be included under category 03, if more appropriate. |
Contract changes in this category are considered germane contract adjustments, insofar as the changes are provided for in the contract.

16 **Specification Performance Adjustment**

This category includes adjustments or credits to the contract as result of deficient work or materials accepted by the Department, assessment of liquidated damages, incentive/disincentive adjustments, thickness and smoothness adjustments, traffic control deficiency deductions and erosion control deficiency deductions.

Note that most of these types of adjustments have special pay item codes (XXX___) associated with them.

These adjustments are specifically provided for in the contract and are, therefore, considered germane contract adjustments. Since these adjustments must occur after the work is performed, the requirement for prior written approval does not apply to this type of change.

19 **Contract Acceleration**

Adjustments made to the contract for the purpose of accelerating the contractor's progress in the work. Examples include pay for Premium Time, High-Early Cement, and Wintertime Concrete Protection.

22 **Differing Site Condition**

Compensation to the contractor for additional costs incurred when subsurface or latent physical conditions are encountered in the project, in accordance with Art. 104.03.

24 **Contract Administration**

Any costs added to the contract as a direct result of a contract claim settlement.

Note that the Contract Acceleration category should be used for an item such as Premium Time, if the acceleration item is not an explicit part of the formal claim.

All additions and deductions in pay items or quantities, including the actual value engineering incentive payment, as a result of the acceptance of a value engineering proposal from the contractor.

All other changes related to state costs for administering the contract. Examples include samples for destructive testing (such as for bearing pads), contractor furnished equipment and Partnering,

Any costs in this category that are provided for in the contract are germane contract adjustments.

26 **Highway Plan Quantity Omission or Error**

Changes in plan quantity due to significant discrepancy between plan quantity and the as-built quantity with no change in the intended scope of work shown on the plans, as well as changes for a pay item that was not include in the plans, but for which the work was called for in the plans with the intention of paying for such work as a separate pay item. This category does not include errors in bridge plans.

Design errors in this category are not a change to the intended design but include costs that, had the error not been made, would have been included in the awarded contract amount.

Changes due to account for plan quantity errors are generally considered germane contract adjustments, unless the error is so large that the additional quantity changes the nature of the work or could be considered under a separate contract.
28 Highway Design Engineering Error
Changes in pay items or quantities resulting from an inappropriate design, given field conditions
that were known or should have been known at the time the plans were being prepared. This
category may include resolution of commitments made during the planning and design of the
project, if the resolution was not adequately addressed in the plans. This category does not include
errors in bridge plans.

Design errors in this category involve costs that should not have been paid had the original plans
been correctly designed.

Changes due to design errors require special consideration, as some design errors changes could
change the scope of the contract and would not, therefore, be considered germane.

29 Bridge Plan Error or Omission
Any changes resulting from an error in the bridge plans.

Note that a change is categorized as an error only if the issue involving the change was something
that the designer should have known about, was within the scope of the design, and should have
addressed in the plans. This category does not include errors or omissions in the highway plans.

Changes due to design errors require special consideration, as some design errors changes could
change the scope of the contract and would not, therefore, be considered germane.

30 Construction Engineering Error
Additional compensation to the contractor due to errors in layout or construction within the
responsibility of the department. This category includes construction errors by both in-house staff
and consultant construction staff.

Work in this category is generally considered germane to the contract, since the extra cost is
needed to restore the work to what was intended by the contract. This work would be considered a
change order.

33 Local Agency Project
All changes on a local agency project can be grouped under this category. The other categories
are intended to identify changes on State projects.

In regards to the Germaneness or classification (contract adjustment vs. operational/non-operational
change order) of the change, refer to the discussions noted under the appropriate category.

85 Miscellaneous
Changes not included in any other category above. (It is intended that this category be used rarely,
if at all.)
### Special Pay Item Numbers

<table>
<thead>
<tr>
<th>Category</th>
<th>Pay Item Nbr</th>
<th>Special Item</th>
<th>Typical Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>XXX01000</td>
<td>Failure to Open Lanes to Traffic</td>
<td>DOLLAR</td>
</tr>
<tr>
<td>03</td>
<td>XXX02100</td>
<td>Railroad Flaggers</td>
<td>DOLLAR</td>
</tr>
<tr>
<td>03</td>
<td>XXX03100</td>
<td>Traffic Control Price Adjustments (per contract specifications)</td>
<td>EACH, L SUM, DOLLAR</td>
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<tr>
<td>03</td>
<td>XXX03200</td>
<td>Antistrip Additive</td>
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</tr>
<tr>
<td>03</td>
<td>XXX04000</td>
<td>Mentor Protégé Reimbursement</td>
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</tr>
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<td>CCDD Testing</td>
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</tr>
<tr>
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<td>XXX05100</td>
<td>CCDD Extra Costs</td>
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<td>03</td>
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<td>Pay Items Subject to RACIF</td>
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<tr>
<td>85</td>
<td>XXX06000</td>
<td>PLA Reporting</td>
<td>DOLLAR</td>
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<tr>
<td>16</td>
<td>XXX16000</td>
<td>Traffic Control Deficiency</td>
<td>CAL DAY</td>
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<tr>
<td>16</td>
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<td>Credit Non-Compliant Work</td>
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</tr>
<tr>
<td>16</td>
<td>XXX16200</td>
<td>Credit Non-Compliant Material</td>
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</tr>
<tr>
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<td>Erosion Control Deficiency</td>
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<tr>
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<td>DBE Goal Not Met</td>
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<tr>
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<td>XXX16700</td>
<td>Idling Deficiency</td>
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<tr>
<td>16</td>
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<td>Ultra Low Sulfur Diesel Deficiency</td>
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</tr>
<tr>
<td>16</td>
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<td>Diesel Retrofit Deficiency</td>
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</tr>
<tr>
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<td>CAL DAY</td>
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<td>CAL DAY</td>
</tr>
<tr>
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<td>Lane Rental Disincentive</td>
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</tr>
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<td>16</td>
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<tr>
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<td>PFP Disincentive</td>
<td>SQ YD, SQ M, DOLLAR</td>
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<tr>
<td>16</td>
<td>XXX19900</td>
<td>PFP Resolutions Testing</td>
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<tr>
<td>16</td>
<td>XXX20000</td>
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<tr>
<td>16</td>
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</tr>
<tr>
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<td>XXX203**</td>
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</tr>
<tr>
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<td>XXX204**</td>
<td>Thick Inc FD HMA</td>
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</tr>
<tr>
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<td>Smooth Inc PCC</td>
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</tr>
<tr>
<td>16</td>
<td>XXX212**</td>
<td>Smooth Dis PCC</td>
<td>SQ YD, SQ M, DOLLAR</td>
</tr>
<tr>
<td>16</td>
<td>XXX213**</td>
<td>Smooth Inc FD HMA</td>
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</tr>
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<td>16</td>
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<td>Surface Variations HMA SC 2T</td>
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<td>XXX27000</td>
<td>Speed Display Trailer</td>
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</tr>
<tr>
<td>03</td>
<td>XXX27100</td>
<td>Truck Mounted Attenuator</td>
<td>DOLLAR</td>
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<tr>
<td>03</td>
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<td>Traffic Control Standard Adj (changes to the standard)</td>
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<tr>
<td>03</td>
<td>XXX97000</td>
<td>Steel Price Adjustment Decrease</td>
<td>DOLLAR</td>
</tr>
</tbody>
</table>

** For Pavement Thickness Incentive/Disincentive and Pavement Smoothness Incentive/Disincentive Items: Include the actual pay item description in the Special Item description. The description must be no longer than 22 characters and spaces; abbreviate where necessary. If more than one pay item falls within the same Special Item number, the last two digits should be changed (i.e.
XXX20100, XXX20101, XXX20102). Do not delete the original pay item. The unit price for the Special Item will only reflect the incentive or disincentive.
Request for Procurement Policy Board Waiver

Contract Number: ____________________  Authorization No.  ____________________  Date:  ____________________

County: ________________________________________________________________

Section: ________________________________________________________________

Route: _________________________________________________________________

District: _______________________________________________________________

Project: ________________________________________________________________

Description: ____________________________________________________________

Contractor: _____________________________________________________________

Awarded Contract Value:  $______________

Authorization Amount:  $______________

Category Code:  _____________________________

Reason for Extra Work:  _____________________________________________________

Determination of Germaneness:

☐ The undersigned determined that the change is germane to the original contract as signed, because provision for this work is included in the original contract.

☐ The undersigned determined that the change is germane to the original contract as signed, because work of this type was included in the original contract, and the additional efforts of this work are within the intent of the contract and Department policy.

☐ The undersigned determined that the change is germane to the original contract as signed, because the change represents an adjustment required by the contract, based on unpredictable developments in the work.

☐ The undersigned determined that the change is germane to the original contract as signed, because the change in design is necessary to fulfill the original intent of the contract.

☐ The undersigned determined that the change is germane to the original contract as signed, because

Resident:  _______________________________  _______________________________  Date

Appendix Page 113
The following change from the plans in the construction of the above designated section of highway improvement is authorized and directed. The estimated quantities are shown below at the awarded contract prices except as indicated. The first addition of an item not in the original contract under the fund type or county is indicated by an asterisk.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>*</th>
<th>Cat</th>
<th>Pay Item</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Price</th>
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<th>Addition</th>
<th>Deduction</th>
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<td>78300200</td>
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<td>RAISED REF PVT MK REM</td>
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<td>XXX03100</td>
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<td>TRAF CONT PR ADJ 701201</td>
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<td>SURF VAR HMA SC 2T</td>
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<td>11,000</td>
<td>-170,300</td>
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<td>($1,873.30)</td>
<td>$0.00</td>
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<td></td>
<td></td>
<td>METAL POST TY B</td>
<td>FOOT</td>
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<td>30,350</td>
<td>D</td>
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<td>$789.10</td>
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</table>

Amount of Original Contract: $3,949,999.99  
Net Change To Date: $48,180.04  
Percent Change: 1.22%  
Net Change To Date: -3,164.77  
Totals: ($1,820.67)  
$1,344.10

Project Location: US 45- RANTOUL - FORD CO

THE STATE OF ILLINOIS  
By the Department of Transportation

Randall S. Blankenhorn, Secretary  
Date

Matt Magalis, Chief Fiscal Officer  
Date

Phillip C. Kaufmann, Chief Counsel  
Date

Supervisor: JASON R SMITH  
Date

Resident: M GUTTERRIDGE  
Date

FHWA Acceptable to Proceed:  
Yes  No

FHWA Participation:  
Yes  No

FHWA Representative  
Date

Print Date: 08/07/2018
<table>
<thead>
<tr>
<th>Traffic Control</th>
<th>Evaluate: (G) Good, (F) Fair, (D) Deficient, (X) Does Not Apply</th>
<th>Description, Comments or Corrective Measures Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signs</td>
<td>G</td>
<td>RAMP OPEN AHEAD &amp; RAMP OPEN AHEAD SIGNS IN PLACE @ BOTH RAMP S.</td>
</tr>
<tr>
<td>Sign and Device Lights</td>
<td>X</td>
<td>CONES USED. SPACING'S PROPER. NEED A CONE IN FRONT OF OPEN PATCHES.</td>
</tr>
<tr>
<td>Channelizing or Hazard Marking Devices</td>
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<td></td>
</tr>
<tr>
<td>Pavement Markings</td>
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<td></td>
</tr>
<tr>
<td>Arrow Board(s) and Changeable Message Signs</td>
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<td></td>
</tr>
<tr>
<td>Temporary Traffic Signals</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Temporary Barrier Wall</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Flagger(s)</td>
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<td>FLAGGER @ MILL, FLAGGERS @ RAMPS (3)</td>
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</tbody>
</table>

Comments on other Items: NB PL & RAMPS QUEST TO WOODRIG, PDR Patching

Do any previously reported discrepancies still exist?  ☒ Yes  ☒ No

If yes, describe:  

Submitted by:  

Reviewed by:  

BSE 726 (Rev.04/13/15)
August 7, 2018

SUBJECT: Contract No. 61E32
Cook County
Section 14-00028-00-SW
Route FAU 1602
Project BR78-203
District 1

Davis Concrete Construction Company
11244 W. Manhattan-Monee Rd.
Monee, IL 60449

Dear Contractor:

Approval was received on July 26, 2018 from Metra for the Railroad Protective Liability Insurance Policy No. RP008U418 you furnished in connection with the subject improvement.

The policy you furnished indicates that coverage expires April 6, 2019.

Very truly yours,

Jack A. Elston, P.E.
Engineer of Design & Environment

By: Katharine L. Finn
Chief Contract Official

KF/jv

cc: Anthony Quigley, Region 1, District 1
Magdalena Marinkovic, District 1
Design Environment File
Unit File

If you have questions, contact Contracts at Design & Environment at (217) 782-7806.
406.11 SURFACE TESTS

The Department uses a bump buggy or straightedge to check the surface smoothness of the new pavement overlay. See Figure 400-13.

Figure 400-13 — 16-FT STRAIGHTEDGE

406.14 BASIS OF PAYMENT

406.14-1 General (Tack Coat)

To accurately pay for tack coat material placed on the pavement surface, the quantity measured for payment will be the actual residual amount of asphalt applied. The volume of the cutback or emulsion used and any water added will not be the amount that is measured for payment. The residual amount of asphalt in the emulsion or cutback will be used for payment.

A test procedure has been developed to physically check the residual amount of asphalt applied to the pavement surface. For projects that contain at least 2000 tons (1815 metric tons) of HMA, the Inspector shall determine the residual amount of asphalt placed using the test procedure titled, “Determination of Residual Asphalt in Prime and Tack Coat Materials,” which is Appendix B24 in the BMPR Manual of Test Procedures for Materials. If a copy of the Manual is not available in the Resident’s field office, a copy of the test procedure can be obtained from the BMPR or IDOT’s website.

The test shall be performed at least once per project for each type of surface being tacked for which at least 2000 tons (1815 metric tons) of HMA will be placed, preferably on the first day tack coat is placed on a given surface. More tests may be performed at the Resident’s discretion. The Contractor may proceed with paving as soon as the tack fully breaks and before the test results are provided. However, test results should be obtained as quickly as possible.
This test is not intended to be the sole criteria used for acceptance of the work, but it is a tool for the Resident to evaluate the Contractor’s performance. The residual rate of material placed will be calculated as described below based on truck weights.

If the test results and/or quantity calculations indicate that the residual amount of tack on the surface to be paved does not meet the specified amount, the tack may be considered unacceptable. However, research has shown that tack coat applied with a tolerance of plus or minus 0.01 lb./sq. ft. is adequate. Recognizing that precisely meeting the specified rate can be difficult, engineering judgment should be used to consider if unacceptable work performed is adequate to leave in place. In accordance with Article 105.03, the Department reserves the right to accept work that is in close conformity with the contract by a contract modification. The construction supervisor and BMPR should be consulted on how to address the situation. The Contractor shall make appropriate adjustments for further applications so that the correct amount of material is placed. Payment will be made by weight as described in Section 406.14-2.

406.14-2 Payment Procedures

The Inspector will need to know the following to properly calculate the amount of material for payment:

- The total weight of the material applied (This weight includes any additional water added to the emulsion). The actual percentage of residual asphalt in the emulsion or cutback as produced
- The amount of water added to the emulsion

The pressure distributor shall be weighed before and after placement of the tack coat to determine the net amount of material placed. Any scale of adequate size and displaying a current Department of Agriculture sticker will be sufficient to perform the weighing.

The actual percentage of residual asphalt in the emulsion or cutback, as produced, will be indicated on the producer’s Bill of Lading or attached Certificate of Analysis from the BMPR. The amount of additional water (if any) added to an emulsion will also be indicated on the Bill of Lading.

The amount of water added is necessary to calculate the percent of emulsion in the diluted emulsion mix. The Bill of Lading will show the amount of water that was added to a tanker of the emulsion from which the pressure distributor is loading out. For example, a pressure distributor may only have two tons of a diluted emulsion mix in its tank, but the tanker it loads out from will have much more. The amounts of emulsion and water on the Bill of Lading may far exceed the quantity delivered in a pressure distributor. Information provided in this fashion is appropriate because only the percentages of water and emulsion are necessary to calculate quantities for payment. Payment is based on weighing the amount of diluted emulsion placed from the pressure distributor.

Using the percentage of residual asphalt for the material used, the quantity of residual asphalt placed can then be calculated as shown in the following two examples.
Example to Calculate Residual Amount of Asphalt from an Emulsion

Known: Material used is an emulsion.

Percent of residual asphalt in the emulsion = 57% (from the producer’s Bill of Lading or attached Certificate of Analysis)

Weight of pressure distributor before application of material = 35,000 lb

Weight of pressure distributor after application of material = 28,000 lb

Amount of water added (from Bill of Lading) = 2208 lb added to a tanker containing 8300 lb of the emulsion

Calculate the amount of residual asphalt for payment:

Net weight of material:

\[35,000 - 28,000 = 7000 \text{ lbs.}\]

Percentage of emulsion in the pressure distributor:

\[8300 \text{ lb.} + 2208 \text{ lb.} = 10,508 \text{ lb.} \text{ (total weight of diluted emulsion mix)} \]
\[8300 \text{ lb.}/10,508 \text{ lb.} = 79\% \text{ (amount of emulsion in the pressure distributor)}\]

Percent residual asphalt for payment:

\[7000 \text{ lb.} \times 0.79 = 5530 \text{ lb. of emulsion}\]

\[5530 \text{ lb.} \times 0.57 = 3152 \text{ lb. of residual asphalt}\]

3152 lb. represents the weight of actual residual asphalt that can be paid as Tack Coat

The provisions for maximum payment will apply to this quantity. For example, assume that the quantity ordered by the Resident for tack coat is 3100 lb (based on the area to be tacked and the appropriate residual rate):

Maximum payment = 3100 lb. \times 1.05 = 3255 lb.

Therefore, all 3152 lb. of residual asphalt placed can be paid for.

Example to Calculate Residual Amount of Asphalt from a Cut Back

Known: Material used is a cutback.

Percent of residual asphalt in the cutback = 60% (from the Bill of Lading or attached Certificate of Analysis)
Weight of pressure distributor before application of material = 35,000 lb.

Weight of pressure distributor after application of material = 29,750 lb.

Calculate the amount of residual asphalt for payment.

Net weight of material:

$35,000 - 29,750 = 5250 \text{ lb.}$

Percent residual asphalt for payment:

$5250 \text{ lb.} \times 0.60 = 3150 \text{ lb.}$

3150 lb. represents the weight of actual residual asphalt that can be paid as Tack Coat

The provisions for maximum payment will apply to this quantity. For example, assume that the quantity ordered by the Resident for tack coat is 3100 lb. (based on the area to be tacked and the appropriate residual rate):

Maximum payment = $3100 \times 1.05 = 3255 \text{ lb.}$

The Method of Measurement for Bituminous Materials (Tack Coat) is located in Article 1032.02. The Article states that a weight ticket for each truck load shall be furnished to the Inspector. The truck referred to in this Article is the pressure distributor that is required to place the material. Tack to the project is in a large semi tanker, a tank at the Contractor’s yard or from a tank at the producer’s facility. Weight tickets are not needed for materials contained in these tanks. Only material that is delivered to the project in a pressure distributor requires weight tickets.

SECTION 407. HOT-MIX ASPHALT PAVEMENT (FULL DEPTH)

407.01 DESCRIPTION

The specifications for the construction of HMA (full depth) are essentially the same as that for the construction of binder and surface courses (see Section 406). The difference for a full-depth pavement is the construction of the pavement in multiple lifts with a maximum thickness for each lift.

Review the Construction Inspector’s Checklist for HMA Pavement (Full Depth).

407.05 SUBGRADE

Check the subgrade to ensure that it is at the proper grade and cross section. The riding quality of the new pavement will depend largely on the smoothness of the grade on which it is placed. Check the grade on subgrades by stringline from grade stakes or level shots. Many problems with thin pavements and/or rough riding pavement are due to poor grade control.
**PAYMENT CALCULATION FOR RESIDUAL AMOUNT OF ASPHALT FROM AN EMULSION**

Calculations per Construction Manual

<table>
<thead>
<tr>
<th>CALC BY</th>
<th>DATE</th>
<th>CONTRACT #</th>
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<td>DGR</td>
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<td></td>
</tr>
<tr>
<td>AOK</td>
<td>7/15/2015</td>
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</table>

Knowns:
- material used is an emulsion
- % of residual asphalt in the emulsion (from Bill of Lading) = 0.57 A
- wt of distributor before application = LB 35000 B
- wt of distributor after application = LB 28000 C
- amount of water added (from Bill of Lading) = LB 2208 D
- added to a tanker with shown amount of emulsion = LB 8300 E

### NET WEIGHT OF MATERIAL:

- net wt of distributor before application = LB 35000 B
- net wt of distributor after application = LB 28000 C

NET WT OF MATERIAL = (B - C) = LB 7000 F

### PERCENT OF ORIGINAL EMULSION IN DISTRIBUTOR:

- TOTAL WT OF DILUTED EMULSION MIX = E + D = G = LB 10508 G
- AMOUNT(%) OF ORIGINAL EMULSION IN DISTRIBUTOR = E/G = H = 0.790 H

### POUNDS OF RESIDUAL ASPHALT:

- POUNDS OF EMULSION = F X H = I = LB 5529 I
- POUNDS OF RESIDUAL ASPHALT = I X A = J = LB 3152 J

(Represents the amt of actual asphalt that can be paid as prime coat)

### Rate Based on Area/lbs of Residual Asphalt

- LENGTH (MEASURED) = FT 5175 K
- WIDTH (MEASURED) = FT 12 L
- SQ FT = 62100 M
- rate = Z = J/M = LB/SQ FT 0.0508 Z

### SPECIFIED RATE

- ENTER RATE = LB/SQ FT 0.05 N

### THEORETICAL AMOUNT OF ASPHALT

<table>
<thead>
<tr>
<th>O = M X N</th>
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<tbody>
<tr>
<td>LB 3105 O</td>
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</table>

### MAX PAY

- 105% X O = P = LB 3260 P

(Allowable)

**PAY QUANTITY** = 3152 LB

---

If Delivered Residual (J) < Max Pay (P), then Pay Delivered Residual (J)
If Delivered Residual (J) > Max Pay (P), then Pay Max Pay (P)

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VERIFICATION OF RESIDUAL ASPHALT APPLICATION RATE

PER APPENDIX B24 FROM MANUAL OF TEST PROCEDURES FOR MATERIALS

ONLY USE IF PROJECT HAS > 2000 TONS OF HMA

NOTE:
ONLY USED TO VERIFY THE RATE IS CORRECT. DO NOT USE FOR PAYMENT ADJUSTMENT

1) CUT 12 IN X 12 IN PIECE OF CARDBOARD; WEIGH CARDBOARD (TO NEAREST 0.1 GRAM)

2) PLACE CARDBOARD ON PAVEMENT AHEAD OF PRIME TRUCK, AND PRIME OVER CARDBOARD

3) TAKE CARDBOARD + PRIME TO OVEN AND DRY AT 230 ° ± 9° F

4) WEIGH DRY CARDBOARD + PRIME (TO NEAREST 0.1 GRAM)

| WEIGHT OF CARDBOARD (NO PRIME) | GRAMS  | 50.1  |
| WEIGHT OF CARDBOARD (WITH DRY PRIME) | GRAMS  | 73.0  |

RESIDUAL ASPHALT APPLICATION RATE = S = R-Q/454 = LBS/SQ FT

| LB/SQFT | 0.0504 |

CALC BY DATE
DGR 7/15/2015
CKD BY DATE
AOK 7/15/2015
ALTERNATE METHOD

New % Residual Asphalt =

\[
\frac{(\text{Wt. Emulsion}) \times (\% \text{ Residue})}{(\text{Wt. Emulsion}) + (\text{Wt. Added Water})}
\]

Pounds of Residual Asphalt Applied =

\[
(\text{New % Residual Asphalt}) \times (\text{Wt. Applied})
\]

(Initial Wt. – Final Wt.)

Initial Truck Wt. = 31,200 lbs
Final Truck Wt. = 21,420 lbs