



# Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

June 21, 2006

## **CIRCULAR LETTER 2006-05**

### **2005 JOINT CONSTRUCTION PROGRESS REVIEW PROGRAM**

COUNTY ENGINEERS/SUPERINTENDENT OF HIGHWAYS  
MUNICIPAL ENGINEERS/DIRECTORS OF PUBLIC WORKS/MAYORS  
CONSULTING ENGINEERS

Each year the Office of Finance and Administration (OFA) and the Division of Highways conduct the Joint Construction Progress Review Program (JCPRP), which is a construction documentation review program with review teams consisting of members from the OFA's Audit Section and the Central Bureau of Construction. The scope of the reviews included sufficient testing of construction projects in progress at Districts 1 through 9, Chicago Department of Transportation, and the Division of Aeronautics. On-going projects were identified as either state jobs or local agency jobs.

An initial random selection was made that resulted in a total of 61 reviewed jobs: 33 were state jobs; 22 were state awarded local agency jobs; 3 were Chicago DOT jobs; and 3 were Division of Aeronautics jobs. Each review consisted of four parts:

1. an internal questionnaire;
2. pay item progress documentation testing;
3. administrative documentation testing; and
4. re-measurements of selected pay items.

Local agency projects were deficient in the following 5 key areas:

#### **Incomplete Traffic Control Documentation and Missing Traffic Control Drive-through Inspections**

Project records did not always include sufficient traffic control documentation. Of the contracts reviewed, 58 contracts required traffic control inspections to be documented on the Traffic Control Inspections Report (form BC 726). Of the 58 contracts requiring traffic control inspections to be documented on form BC 726, 24 (17 on local projects), or 41.38%, did not have sufficient inspections. This compared to 35.56% missing such documentation where applicable as noted in the prior year Joint Construction Progress Review Summary (AR #05-06-049 JT).

Traffic control drive-through inspections were not being performed and documented in accordance with the Illinois Department of Transportation's (IDOT) Bureau of Construction policy. Of the 61 contracts reviewed, 58 contracts required traffic control drive-through inspections. Of the 58 contracts, 8 (7 on local projects) or 13.79% of the contracts had observations concerning traffic

control drive-through inspections. This compared to 13.33% missing such documentation where applicable, as noted in the prior year Joint Construction Progress Review Summary (AR #05-06-049 JT).

According to Section 700 of the IDOT Construction Manual, the importance of correctly placed and maintained traffic controls in construction work zones cannot be overstressed. This importance does not diminish when the day's activities are completed and the workforce leaves the job site. To assure that the required traffic controls are in their proper position and functioning properly, the following actions are required:

1. When temporary traffic control devices are in place, the resident engineer, or appropriate designee, shall routinely drive through the job site, and document the drive-through in writing. Every effort should be made to drive through the job site at the beginning and end of each workday; however, this may not be possible. The following schedule outlines the minimum requirements:

<b>ADT</b>	<b>Frequency</b>
< 5,000	Two times per week.
5,000 - 50,000	One time per day on days the contractor is working.
> 50,000	Two times per day, every day, including weekends and holidays.

During periods longer than 21 days when no work is being performed (winter shutdown, suspension of work, extraordinary third party delay, strikes, etc.), a drive-through shall be performed at least two times per week if temporary traffic control devices are in place.

2. In addition, when temporary traffic control devices are in place, one detailed daytime inspection shall be done weekly for projects having hazards in the work zone, barricades on the pavement, or barricades on the shoulders. These inspections shall be recorded on the Traffic Control Inspection Report (form BC 726).
3. When temporary traffic control devices are in place, routine nighttime inspections shall be performed at least two times per month to assure sign reflectivity; identify light outages and required maintenance of traffic control devices; and to confirm clear direction to motorists through the work zones.
4. Should any deficiency be discovered during a drive-through or inspection, the contractor shall be notified in writing. The contractor shall notify the engineer when the deficiency has been corrected. The contractor shall be given evidence of the date and time the deficiency was corrected. If a deficiency is not corrected in accordance with the provisions provided for in the contract, the traffic control deficiency deduction will be applied.

These reviews are especially critical before weekends and/or holiday periods. With routine inspection of traffic control, work zones will be safe for both the motoring public and individuals working within the work zone.

### **Incomplete Progress Documentation**

Contracts pay items lacked proper calculations, proper method of estimation, proper evidence of material inspection, and no source documentation. Of the 61 contracts reviewed, 17 (all on local projects) or 27.87% of the contracts had pay items that lacked proper calculations, proper method of estimation, proper evidence of material inspection, and no source documentation. This compared to 37.50% missing such documentation where applicable, as noted in the prior year Joint Construction Progress Review summary (AR #05-06-049 JT).

According to the IDOT Construction Manual, in order to properly document the quantities shown on partial payment estimates, progress entries in the Quantity Book are required. These daily quantities can be based upon either estimates or final measurements. In either case, progress documentation must be kept on file (preferably on the Inspector's Daily Report or in a field book) to indicate how the quantity was established. The method must be documented, clearly and reasonably.

#### **Evidence of Material Inspection Cited Incorrectly**

Of the 61 contracts reviewed, 7 (6 on local projects) or 11.48% of the contracts had observations concerning the evidence of material inspection being incorrectly cited. This compared to 20.83% missing such documentation where applicable as noted in the prior year Joint Construction Progress Review Summary (AR #05-06-049 JT).

According to the IDOT Construction Manual, the evidence of inspection required in the Project Procedures Guide should be strictly adhered to for both progress and final documentation and must lead to a verifiable source of information. A review of the Documentation section and the Project Procedures Guide should be made prior to inspecting the installation of a pay item to assure proper evidence of inspection has been provided. Uniformity in recoding the evidence of material inspection in the Quantity Book is required. Illinois Construction Records System (ICORS) users can accomplish this by using the drop-down menu to tag the proper evidence of material inspection.

#### **Missing Independent Weight Checks**

Independent weight checks were missing or not performed in accordance with IDOT Bureau of Construction policy. Of the 61 contracts reviewed, 29 contracts required independent weight checks. Of the 29 contracts, 7 (5 on local projects) or 24.14% had observations concerning independent weight checks not being performed. This compared to 14.29% missing such documentation where applicable as noted in the prior year Joint Construction Progress Review Summary (AR #05-06-049 JT).

According to the Documentation Section of the Construction Manual, a weekly random check must be performed by a state (or local agency and quality control)

representative to verify the actual weight of material delivered. Independent weight checks are to be performed as follows:

1. The weight check will be measured on an independent, approved platform scale other than the scale on which the original measurement is performed and not owned or controlled by the contractor or material supplier. The independent scale must be approved, and the Department of Agriculture decal information is to be recorded in the project records.
2. Gross and tare weights will be measured and recorded, so that the actual net weight of material can be determined.
3. The independently measured net weight must agree with the weight shown on the tickets within a tolerance of 0.5 percent.
4. The independent weight check results are to be recorded and placed in the job file available for inspection, with corrective action taken for deviations from tolerance noted.
5. Independent weight checks must be performed at least once per week per scale when any item is placed for which payment is based on weight tickets. If the same scale is used for several contracts during the week, and the weight check performed for any one of the contracts will be sufficient for all the contracts, a copy of the initial check is to be included in the records for each of the projects.

According to the Construction Memorandum 00-08 (Independent Weight Checks and Scale Checks – dated, October 1, 2000), the weekly independent weight check will be documented on the Independent Truck Weight Check (form BC-2367). A copy of the completed form will be forwarded to the Central Bureau of Construction.

If your agency is scheduled to perform a construction project using federal funds, we strongly recommended that you send the person that will be responsible for construction documentation to the department's Construction Documentation and Construction Material Inspection Documentation courses prior to the project beginning. The department encourages all local agencies to become familiar with construction inspection requirements and to implement the requirements on all projects regardless of funding source.

Sincerely,



Charles J. Ingersoll, P. E.  
Engineer of Local Roads and Streets



Roger Driskell, P.E.  
Engineer of Construction