



# Construction & Materials Tips

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## The Pay Estimate Process

### Overview

On construction and maintenance projects, large amounts of public funds are expended involving many different pay items. Some of these items constitute a major portion of the project cost, but others represent only a small part. Large items of work often require long periods of time, while others can be installed in hours. It is the responsibility of the engineer in charge, with the aid of inspection personnel, to assure that each item of work is completed in accordance with the plans and specifications, and to make and record sufficient field measurements to assure that all pay quantities can be accurately calculated and properly documented. This requirement applies to each item of work, no matter how large or small.

### Project Personnel

Measure the quantity of work performed by the contractor and document the measurements on the appropriate form. Measurement can include the use of drawings, calculations, surveys, haul tickets, etc., which become part of the pay documentation for Form 1257 (Work Report), or daily work report (DWR) for SiteManager projects.

Project personnel should ensure that these items are completed:

1. The inspector provides the pay quantity on Form 1257 (Work Report) or DWR (SiteManager)
2. The bookkeeper checks the inspector's calculations and records the quantity on a Daily Quantity Sheet (CIS)
3. The chief inspector/project manager reviews the DWR's for approval of payment in SiteManager
4. The bookkeeper lines across the Daily Quantity Summary sheet to enter the appropriate estimate number for item entries during the month to track the totals paid for each item (CIS)
5. The bookkeeper and project manager examine Forms 1914/1915 (Request for MOH) for errors and verify that the material is on site (or visually check at contractor's storage) and verify that the contractor receives payment within 60 days.

### Area/Maintenance Office Personnel

1. The Construction Records Keeper checks the CIS 35 worksheet (CIS) or Line Items Report (SiteManager) for items that have increased significantly in quantity from the previous month's estimate. If so, there must be verification by project personnel

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2. Check for accuracy of quantity and bid price as new items are added by change order on M-2 card (CIS) and M-3 card (CIS) respectively
3. Process the estimate and clear up discrepancies before notifying the District Construction Auditor that the estimate is ready for posting of payment.

### **District Office Personnel**

1. Look for items or dollar amounts that seem out of the ordinary and check with the Area Office
2. Check for items added by change order for accuracy and the appropriate approval.
3. Check major items for over/under-runs and that a change order accounts for + 25% over/under.

The suggestions outlined above are intended to provide a sound basis for documenting project pay quantities. It is understood that an individual's responsibility may cause some of the project personnel and area/maintenance office personnel functions to overlap and this is acceptable.

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## **Using the New Ride Specification**

There is a new ride specification, Item 5880, that was piloted this summer and approved for use beginning with the September letting. This specification has several changes that Districts need to be aware of. The first and most obvious is the equipment. The old style profilograph is no longer allowed, nor is the Profile Index (PI) measurement. Our new equipment is an inertial profiler that measures "true" profile and uses the International Roughness Index (IRI). This equipment has to be certified at the TTI annex before it can be used on a TxDOT project. Certified equipment will have a certification sticker affixed in a prominent spot.

The Contractor is still responsible for obtaining ride quality data and presenting it to TxDOT in a specific format. However, instead of taking daily measurements, the new specification allows the Contractor to collect data at the completion of the project, or of major project segments, with the Engineer's approval. The Contractor may also request that data be collected during off-peak hours, such as late at night or during the early morning. (For example, to collect data regarding mix placed over old Jointed Concrete Pavement (JCP), which experiences curling and warping during heating and cooling or wetting and drying cycles, and may be most stable during early morning hours.)

Other changes involve the specification default language, which is much different from previous specifications. The first default change is that Type B (measured with a profiler) is now the standard default when the specification is used. If you intend to use the Type A (straightedge), you have to call for it in the General Notes. Due to this change, and to protect the Industry from misuse, the second major default is in pay adjustments. There are now three pay adjustment schedules - 1, 2 and 3.

Schedule 1 is typically required when the Contractor has ample opportunity to improve Ride Quality. Schedule 2 is typically required on concrete and asphalt concrete pavements when the Contractor has limited opportunity to improve Ride Quality. Schedule 3 is the default, which allows the Contractor to attain bonuses but not be penalized for roughness. (See the memo from Mr. Ken Bohuslav dated April 23, 2002 for guidance in using the pay schedules.)

The next default involves the penalty for bumps or "areas of localized roughness." This penalty provision is only invoked when there is a General Note requiring it. Otherwise the areas are measured and reported but not penalized.

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