



South Carolina
Department of Transportation

DM0199

January 5, 1999

MEMORANDUM TO GROUP LEADERS & CONSULTANTS

SUBJECT: New Pay Items

The attached Instructional Bulletin No. 98-12 provides for three new pay items that may be required on road and bridge projects. The Project Manager or his representative will determine at the time of the PS & E if these new pay items will apply to a project.

The Design Group Leader can find out from the Bridge Project Manager or the Assistant Bridge Design Engineer if these new pay items apply to a project. These new pay items are to be included in the CATS file for a project, but are not to be shown on the bridge title sheet for the project.

These new pay items should be included in the CATS file for projects beginning with the February 1999 Letting.

Also, attached is a copy of the new Special Provisions that apply to the new pay items.

A handwritten signature in black ink, appearing to read "Randy R. Cannon".

Randy R. Cannon, P.E.
Bridge Design Engineer

Attachments:

cc: Assistant Bridge Design Engineers

File: PC/REL





South Carolina
Department of Transportation

September 9, 1998

INSTRUCTIONAL BULLETIN NO. 98-12

SUBJECT: PS&E (Field Review) Plans Title Sheet
EFFECTIVE DATE: September 15, 1998
SUPERSEDES: None
RE: None

Three new pay items have been added to the pay item list. They are:

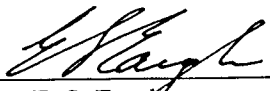
1050800	Construction Stakes, Lines and Grades	EA
1050810	Construction Stakes, Lines and Grades (For Bridge Only)	EA
1090100	Construction Estimates and Final Plans	LS

These items also have been added to the PS&E Title Sheet. It will be the responsibility of the Design Group employee to find out from the District representative on the field review whether or not these items will be included in the project.

The item "Construction Stakes, Lines and Grades" will be bid "Each" for each roadway in the project plans with its own "Summary of Estimated Quantities" Sheet. It is desirable for each roadway in a project to be handled the same as for construction staking. If the District plans to do its own staking then no bid item will be necessary.

A bid item of "Construction Stakes, Lines and Grades (For Bridge Only)" has been added also. This item should be used in a project when the road is to be staked by the District and the bridge is to be staked by the Contractor. If the road is to be staked by the contractor, then the bridge will be included in the pay item of "Construction Stakes, Lines and Grades" in the roadway estimated quantities. No separate pay item for contractor staking of the bridge will be necessary when the roadway carries the pay item.

The item "Construction Estimates and Final Plans" is to be added to the plan quantities when the Contractor is to provide for the monthly progress estimates and the final estimate and plans. During the PS&E Field Review, the District representative should advise the Road Design Group employee on the inclusion of this item.

Approved: 
E. S. Eargle
Road Design Engineer

ESE:adf

cc:
Federal Proj. Dev. Engr. Pratt
"C" Proj. Dev. Engr. Kneece



SPECIAL PROVISIONS

(2) MONTHLY CONSTRUCTION ESTIMATE - FINAL CONSTRUCTION PLANS - FINAL CONSTRUCTION ESTIMATE:

The Contractor shall prepare and submit for the Engineer's approval, the following items:

Monthly Construction Estimate:

The Monthly Construction Estimate (Form 607) is a summary of the total value of the work performed to date and the cumulative total of the previous payments to the Contractor. The amount due the Contractor is the difference in these figures (plus or minus penalties and incentives, and less retainage.) See Section 109.06 of the Standard Specifications for payment schedule.

Contractor's Tasks:

Prior to beginning work, furnish for approval by the SCDOT a system of record keeping that accumulates quantities for each pay item and extends them using the unit bid prices to provide a cumulative value of work for each pay item. The total value of work for each Contract Group is the summation of value of work for each pay item in the group.

Provide the equipment, tools, material, products and personnel to implement, operate, and maintain the record keeping system.

Collect, calculate, and/or otherwise provide the necessary substantiation normally required by the Department for each pay item.

Submit worksheets and/or notes along with the required documentation for ratification by the Engineer for completed items of work, either daily, weekly, and/or monthly.

Make corrections and/or revisions in the Monthly Construction Estimate (Form 607) as requested by the Engineer.

To aid the Contractor in his tasks the Department will furnish a diskette with SCDOT Final Construction Plans Worksheet Nos. FP102 through FP113. These worksheets are currently used by the Department to tabulate such items as asphalt items, earthwork, pipe, and structural items. These worksheets may be filled in by computer or manually. The Department will also provide a 3-hour training session in the policies and procedures for the preparation of Construction Estimates (Form 607) and Final Construction Plans for the successful bidder's "Clerk of the Works."

The Engineer will review the Contractor's Construction Estimate, and submit for processing and payment the "Engineer Accepted" Monthly Construction Estimate.

Final Construction Plans:

The Final Construction Plans consist of full size "Final Construction Plans Title Sheet"(FP201), "Final Construction Plans Summary Sheet"(FP203),"Pile Driving Record"(FP204)(if necessary), As-Built Plans, and any other sheets as necessary, such as revised roadway profiles, revised typical sections, roadway cross-sections, and borrow pit cross-sections. Field notes, referenced in the Final Construction plans, shall be submitted with the plans.

The As-Built plans shall consist of a set of blue/black line prints with approved field changes delineated in red ink. All redline revisions shall be located properly on the drawing and shall be true to scale. In addition, the Contractor shall provide two (2) extra copies of the final As-Built plans.

The Final Construction Plans shall be submitted within ninety (90) days following the date of the Department's final acceptance of the project. It is the Department's intent to check the Final Construction Plans and issue its listing of final quantities and unit prices within forty-five (45) days from the receipt of the plans.

After the Final Construction Plans have been checked by the Department, a listing of the final construction quantities and unit prices will be issued by the Department's Final Construction Plans unit.

SPECIAL PROVISIONS

Final Construction Estimate:

The Final Construction Estimate is similar to the Monthly Construction Estimate. The value of work is calculated using the listing of final quantities and unit prices issued by the Department. Over-runs and/or under-runs of the contract plan quantity of each pay item are calculated and explanations for the deviations are provided. Retainage is not withheld on this estimate, and liquidated damages and other penalties, if applicable, are applied on this estimate.

Any survey work required in the execution of this project shall be performed by a registered land surveyor or a registered engineer in the State of South Carolina. All work performed by the designated RLS or PE, affecting the layout cross sections, computations, etc. shall be accompanied by the designated RLS's or PE's seal and signature.

MEASUREMENT:

Measurement is to be on a lump sum basis.

PAYMENT:

Payment for this item is to be as follows:

75% of the contract amount is to be distributed over the duration of the project, and paid in amounts proportional to the amount of contract work completed.

The remaining 25% of the contract amount is to be paid on the Final Construction Estimate.

In no case is the payment for this item to be in excess of the contract amount.

The Bid Item for this work is as follows:

Item Number	Item	Unit
1090100	Construction Estimates and Final Plans	LS

SPECIAL PROVISIONS

(1) CONSTRUCTION STAKES, LINES AND GRADES:

Section 105.08 of the Standard Specifications is amended to the extent that the Contractor will be responsible for this work.

The Contractor will be required to provide all the layouts necessary to construct the elements of this project. The SCDOT will provide adequate reference points to the center line of survey and bench marks as shown in the plans or as provided by the Engineer. Any additional control points set by the SCDOT shall be identified in the field and documented in writing to the Contractor and the field notes shall be kept in the office of the Resident Construction Engineer.

The Contractor shall provide field personnel and set all additional stakes for this project, which are needed to establish offset stakes, reference points, and any other horizontal or vertical controls, including supplementary bench marks, necessary to secure a correct layout of the work. The Contractor will not be required to determine the property line between properties.

Any survey work required in the execution of this project shall be performed by a registered land surveyor or a registered engineer in the State of South Carolina. All work performed by the RLS or PE, affecting the layout, cross sections, computations, etc. shall be accompanied by the designated RLS's or PE's seal and signature.

The Contractor shall be responsible for having the finished work substantially conform to the lines, grades, elevations and dimensions called for in the plans or as provided by the Engineer. Any inspection or checking of the Contractor's layout by the Engineer and the acceptance of all or any part of it shall not relieve the Contractor of his responsibility to secure the proper dimensions, grades and elevations of the several parts of the work. The Contractor shall exercise care in the preservation of stakes and bench marks, and shall have them reset at his expense when any are damaged, lost, displaced or removed. The Contractor shall use competent personnel and suitable equipment for the layout work required. The Contractor shall not engage the services of any person or persons in the employ of the SCDOT for the performance of any work covered by this item.

The Engineer will make random checks of the Contractor's staking to determine if the work is in substantial conformance with the plans. Where the Contractor's work will tie into work that is being or will be done by others, checks will be made to determine if the work is in conformance with the proposed overall grade and horizontal alignment. For bridge construction projects, the Contractor shall be required to provide bridge deck grades to the Engineer for review prior to placing deck forms.

If during the course of staking or construction work, unforeseen utilities and/or field conditions arise which conflict with construction as shown in the plans, the Contractor shall immediately notify the Resident Construction Engineer. The Engineer will review the Contractor's findings and adjust the lines and grades accordingly or make arrangements for the utility to relocate its facilities. The resulting adjustments will be provided to the Contractor so that his survey crew can perform the adjusted staking. Adjusted staking as described above shall be considered a normal consequence of construction. No additional compensation will be due to the Contractor for this work, or for any delays due to adjustments to staking.

MEASUREMENT:

Measurement is to be for each item of "CONSTRUCTION STAKES , LINES AND GRADES" bid in the project.

PAYMENT:

Payment for each item of "CONSTRUCTION STAKES, LINES AND GRADES" in the project is to be proportional to the amount of the relevant contract work completed. In no case is the payment for this item to be in excess of the contract amount.

The Bid Item for this work is as follows:

Bid Item Number	Item	Unit
1050800	CONSTRUCTION STAKES, LINES AND GRADES	EA

SPECIAL PROVISIONS

(1) CONSTRUCTION STAKES, LINES AND GRADES (FOR BRIDGES ONLY):

Section 105.08 of the Standard Specifications is amended to the extent that the Contractor will be responsible for this work.

The Contractor will be required to provide all the layouts necessary to construct the bridge elements of this project. The SCDOT will provide adequate reference points to the center line of survey and bench marks as shown in the plans or as provided by the Engineer. Any additional control points set by the SCDOT shall be identified in the field and documented in writing to the Contractor and the field notes shall be kept in the office of the Resident Construction Engineer.

The Contractor shall provide field personnel and set all additional stakes for the bridge elements of this project, which are needed to establish offset stakes, reference points, and any other horizontal or vertical controls, including supplementary bench marks, necessary to secure a correct layout of the work. The Contractor will not be required to determine the property line between properties.

Any survey work required in the execution of this project shall be performed by a registered land surveyor or a registered engineer in the State of South Carolina. All work performed by the RLS or PE, affecting the layout, cross sections, computations, etc. shall be accompanied by the designated RLS's or PE's seal and signature.

The Contractor shall be responsible for having the finished work substantially conform to the lines, grades, elevations and dimensions called for in the plans or as provided by the Engineer. Any inspection or checking of the Contractor's layout by the Engineer and the acceptance of all or any part of it shall not relieve the Contractor of his responsibility to secure the proper dimensions, grades and elevations of the several parts of the work. The Contractor shall exercise care in the preservation of stakes and bench marks, and shall have them reset at his expense when any are damaged, lost, displaced or removed. The Contractor shall use competent personnel and suitable equipment for the layout work required. The Contractor shall not engage the services of any person or persons in the employ of the SCDOT for the performance of any work covered by this item.

The Engineer will make random checks of the Contractor's staking to determine if the work is in substantial conformance with the plans. Where the Contractor's work will tie into work that is being or will be done by others, checks will be made to determine if the work is in conformance with the proposed overall grade and horizontal alignment. For bridge construction projects, the Contractor shall be required to provide bridge deck grades to the Engineer for review prior to placing deck forms.

If during the course of staking or construction work, unforeseen utilities and/or field conditions arise which conflict with construction as shown in the plans, the Contractor shall immediately notify the Resident Construction Engineer. The Engineer will review the Contractor's findings and adjust the lines and grades accordingly or make arrangements for the utility to relocate its facilities. The resulting adjustments will be provided to the Contractor so that his survey crew can perform the adjusted staking. Adjusted staking as described above shall be considered a normal consequence of construction. No additional compensation will be due to the Contractor for this work, or for any delays due to adjustments to staking.

MEASUREMENT:

Measurement is to be on a lump sum basis for each item of "CONSTRUCTION STAKES , LINES AND GRADES (FOR BRIDGE ONLY)(____)" bid in the project.

PAYMENT:

Payment for each item of "CONSTRUCTION STAKES, LINES AND GRADES (FOR BRIDGE ONLY)(____)" in the project is to be proportional to the amount of the relevant contract work completed. In no case is the payment for this item to be in excess of the contract amount.

The Bid Item for this work is as follows:

Bid Item Number	Item	Unit
1050810	CONSTRUCTION STAKES, LINES AND GRADES(FOR BRIDGE ONLY)	EA