## Construction Cost Estimates QAR findings and Lessons Learned

- Plan and pay item notes continue to duplicate text from the Specifications. This is to be avoided.
- Traffic Operations sites should not use 695- pay items.
- Maintenance Only pay items (such as Desilting pipe) may not be used without being explicitly requested by District Maintenance.
- All Painted Pavement Markings are to be paid under pay item: 710-90 [Painted Pavement Markings- Final Surface]
  - RPMs are also to be included under this pay item.
- All pay items must be identified by both quantity and location on the summary box. When an Area ID or length & width columns are present, the designer must complete the required information.
  - Soil Tracking Prevention Devices and Inlet protection systems are to be identified by each location, not total quantity for the project.
  - Litter Removal and Mowing quantities should not be grouped together. They are to be shown separately, by location, using either Area IDs or Length and Width.
- Pavement Overbuild quantities must be totaled separately from Structural Course pavement quantities.
  - Any pavement pay items that are used in an estimate must be detailed on either typical sections or typical details.
- Always verify that Tabulation of Quantities sheet labels correspond correctly with plan sheet numbers.
- Per specification, conflicting pavement markings are included under payment for Maintenance of Traffic items. The removal of thermoplastic striping at the beginning of construction limits is not paid separately.
- Non-standard summary boxes are not to be used.
- Pay item descriptions are not to be modified or altered.
  - All descriptions are to match the pay item descriptions from the Master Pay Item List.
- Do not include permanent work items in Summary of Temporary Traffic Control Plan Items.
- Pay items 102-1 Maintenance of Traffic, and 102-2 Special Detour items should be located only in the Summary of Temporary Traffic Control Plan Items summary box and not in Summary of Lump Sum Items.
  - Despite being a Lump Sum pay item, Clearing and Grubbing quantities must include shape/location details and may not be listed with bounds from project "end to end."
    - Clearing and Grubbing should also include all removal of flexible pavement.
- Pavement markings/striping
  - Thermoplastic striping is often neglected in early LREs and it is it never listed as a portion of the project unknowns. This is almost always a notable addition to the cost and needs to be incorporated earlier in the schedule.
  - Despite 6" white striping being included in almost every LRE, it is rarely accompanied by 6" yellow. This is true for both thermoplastic and painted pavement markings.
  - 6" White striping is frequently grossly overestimated.
- Earthwork
  - While difficult to quantify accurately in early phases, an approximate quantity and all types of necessary earthwork are to be included in early versions of the estimate.
- Erosion Control

Erosion Control related pay items are frequently added to later versions of the LRE and subsequently removed, or vice versa. The need for erosion control should be solidified earlier.

- Link to State website for Estimates Applications:
  - o <u>http://www.fdot.gov/programmanagement/Estimates/EstApps/Default.shtm</u>