

1020504 MAINTENANCE OF TRAFFIC  
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

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Comments: (6-22-11)

1. What is the definition of "final configuration"? Is it final configuration of the detector or the traffic lanes?

Response: It is the final configuration of the lanes.

2. If the video detector is in the final position, but the lanes are still shifted, will it be paid under Section 102?

Response: Yes. Payment for detection will continue to be paid for under the 102 pay item until both the permanent detection is operational and the traffic lanes are in their final configuration.

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Eddy Scott  
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Comments: (6-23-11)

District 2 really appreciates the changes being made in Section 102. I do have a few comments attached. Along with a suggestion addition below that has been giving us problems in D2. I think Stephanie Maxwell is aware of the issue we've been having.

Please consider changing 102-1 the last paragraph to something similar to the following:

Include the cost of any work that is necessary to meet the requirements of the Contract Documents *for MOT* under the MOT pay item, when ~~there is not a~~ *no* pay item ~~provided~~ *exists*.

Response: Thank you for your comment; however this is beyond the scope of the current changes. This will be considered for future revisions. No changes made.

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Anonymous

Comments: (7-1-11)

Delete "portable" in the third paragraph.

**102-9.12 Temporary ~~Traffic Control~~ Signals *ization and Maintenance*: ~~Furnish, install and operate~~ *Provide* temporary ~~traffic control~~ *signalsization and maintenance at existing, temporary, and new intersections including but not limited to the following:***

*Installation of temporary poles and span wire assemblies as ~~indicated~~ *shown* in the ~~p~~Plans,  
Temporary ~~portable~~ traffic signals as shown in the Plans,  
Adding or shifting signal heads,*

*Trouble calls,  
Maintaining intersection and coordination timing and preemption devices.  
-Restore any loss of operation within 12 hours after notification* ~~Temporary traffic control signals will consist of either portable or fixed traffic signals.~~

Provide ~~portable~~ traffic signals *equipment* that meets the requirements of the Design Standards, and 603-2 ~~and are listed on the APL~~. The Engineer may approve used signal equipment if it is in acceptable condition. *Replacement components for traffic signal cabinet assemblies will be provided by the maintaining agency.*

Response: The first item (temporary poles and span wire assemblies) refers to fixed temporary signalization and the second to portable temporary signalization. No changes made.

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James T. Barfield  
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Comments: (7-14-11)

We have reviewed the document, entitled "Maintenance of Traffic" and offer the comments below for your consideration.

1. **102-7:** We request the list of uniformed law enforcement officer's usages to be expanded to include:

*5. Highly congested nighttime paving operations on rural and urban non-limited access facilities.*

*6. Lane closures in highly congested corridors to enhance motorist and workers safety or as called for in the Traffic Control Plans.*

*7. To be utilized as called for in the plans or as directed by the Engineer.*

The above situations result in increased project cost because the designer only includes hours that meet the current conditions specified. With this expansion, the project would be designed with adequate hours for traffic control officers and ensure enhancement of motorist and workers' safety.

Response: The situations listed above should be addressed on a project by project basis by the designer. No changes made.

2. **102-13.18 and 102-13.19:** Instead of paying for temporary detection and signalization for intersections on a per day basis, we recommend this work being included under maintenance of traffic pay item.

Response: Thank you for your comment. No changes made.

3. **102-13.12.1 and 102.89:** In addition, regarding pay item 102-89 Crash Cushion (Temporary) per location, please accept the following: In cases when the contractor will have to assume the risk of damage and repair/replacement of the temporary crash cushion, this will increase the bid of this item with a great possibility of no damage occurring to the temporary cushion during its utilization on the project. We do not recommend this change.

Response: The Department has considered all the comments related to the proposed specification change and has determined that the best interest of the Department and the public is to move forward with eliminating separate reimbursement for restoration of damaged attenuators for the following reasons:

1. This item should be treated like all other temporary traffic control devices damaged during construction with compensation for estimated potential damage considered in the initial line item bid. We understand we will see an initial increase in cost, but we are confident everyone will benefit from savings in the long run **due to the Contractor using the most cost effective system.**
2. For minor damage cost is absorbed in the initial price, major damage can be reimbursed by insurance companies of the at-fault individuals. A crash report typically is provided for major hits to crash cushions.
3. Additional consideration will need to be given by the contractor to ensure that the crash cushions selected for a given location will provide the protection and long term life cycle cost when considering initial installation and repair costs.
4. When a contractor chooses to use an alternative traffic control plan, their designer will consider the strike potential for crash cushion placement during the development of the traffic control plan.
5. This change will eliminate the difficulties **and administrative paperwork** associated with invoicing for repairs.

No changes made.

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David Olund  
407-482-7816  
Orlando Construction

Comments: (7-14-11)

The only minor comment I have for the Maintenance of Traffic section is highlighted in yellow below (add):

**102-9.12 Temporary ~~Traffic Control~~ Signa**lization and Maintenance:** ~~Furnish, install and operate~~ Provide temporary ~~traffic control~~ **signa**lization and maintenance at existing, temporary, and new intersections including but not limited to the following:******

*Installation of temporary poles and span wire assemblies as ~~indicated~~ shown in the ~~p~~Plans,*

*Temporary portable traffic signals as shown in the Plans,*

*Adding or shifting signal heads,*

*Trouble calls,*

*Maintaining intersection and coordination timing and preemption devices.*

~~-Restore any loss of operation within 12 hours after notification~~ ~~Temporary traffic control signals will consist of either portable or fixed traffic signals.~~

Provide ~~portable~~ traffic signals *equipment* that meets the requirements of the Design Standards, **and *specification* 603-2 and are listed on the APL.** The Engineer may approve used signal equipment if it is in acceptable condition. *Replacement components for traffic signal cabinet assemblies will be provided by the maintaining agency.*

Response: The word “specification” (or Section) is not included unless we are referring to an entire section. Language is consistent with other specifications. No changes made.

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Ed Petersen  
352-326-7729  
Leesburg Operations

Comments: (7-14-11)  
See my comment in **green**:

**102-9.13 Temporary Traffic Detection Technology and Maintenance:** ~~Furnish, install and operate~~ *Provide Temporary Traffic Detection Technology and maintenance at existing, temporary, and new intersections. Provide temporary traffic detection equipment listed on the Department's APL and approved by the Engineer to restore detection capabilities. Restore any loss of detection within 12 hours after notification. Ensure 90% accuracy per signal phase, measured at the initial installation and after any lane shifts, by comparing sample data collected from the detection system with ground truth data collected by human observation. Collect the sample and ground truth data for a minimum of five minutes during a peak and five minutes during an off-peak period with a minimum three detections for each signal phase. Perform the test in the presence of the Engineer.*

Response: Notification is not a department requirement to restoring detection. No changes made.

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Tom Wasielewski  
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Comments: (7-14-11)

The proposed change to this section is absolutely another attempt by the FDOT to abrogate it's responsibility to fairly and justly compensate the repair of Redirective Temporary Crash Cushions. The matter has devolved to this point for several reasons.

1. The FDOT has allowed so many different types of Redirective Temporary Crash Cushions (RTCC) onto the APL that they have encouraged some contractors to purposefully use "Disposable" Crash Cushions which have led to huge repair costs to the FDOT.
2. The FDOT did not make any preliminary studies concerning repair costs to any of the approved RTCC's. They believed that if the product passed the approval testing that everything would work out. Wrong!
3. The consequences of not evaluating the RTCC's for repair costs prior to approval has led to some contractors flaunting the current repair compensation specifications.
4. At this time, the FDOT has let a contract in District 1 to replace five (5) perfectly performing Permanent Crash Cushions with a new proprietary hydraulic cylinder type Crash Cushion. Sound Crazy? These five (5) Crash Cushions are not in high risk areas nor or they damaged. The FDOT should cancel the contract and spend the money on purchasing the units, pay a contractor to install them on high risk construction projects, and see if they perform as the "manufacturer" has alleged. Use these five RTCC's on multiple projects and track the repair cost, performance and

condition. Then do the same with other type RTCC's. After obtaining sufficient data, pick those RTCC's that are least expensive to repair.

5. The proposed changes to this section 102-13.12.1 is not correcting any of the problems. The changes only serve to "pass the buck".

It appears the FDOT is angry because some contractors "gamed" the system for financial gain. Instead of eliminating the bad RTCC's for disciplining the contractors who abused the system, it seems that FDOT wants to wash their hand of the problem and put the onus on every contractor.

Response: See response No. 3, fourth comment.

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Ken Zinck  
386-740-3471

Comments: (7-19-11)

Comments from D5 Construction adding "and specification" and "after Notification":

**102-9.12 (last paragraph):** Provide portable traffic signals *equipment* that meets the requirements of the Design Standards, and "specification" 603-2 ~~and are listed on the APL~~. The Engineer may approve used signal equipment if it is in acceptable condition.

Response: The word "specification" (or Section) is not included unless we are referring to an entire section. Language is consistent with other specifications. No changes made.

**102-9.13:** ....Restore any loss of detection within 12 hours "after notification". Ensure 90% accuracy per signal phase, measured at the initial installation and after any lane shifts, by comparing sample data collected from the detection...

Response: Notification is not a department requirement to restoring detection. No changes made.

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Tom Brady  
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Comments: (7-20-11)

Attenuator Repair – Why the elimination of this specification would cost the FDOT, Contractors, and tax payers more, not less.

FDOT is currently receiving very competitive rates for the rental of temporary impact attenuators. In many cases, the per location price barely covers the cost of materials such as bolts, epoxy, and the labor to install and remove the attenuator.

FDOT only pays for actual damages for the cost of the parts plus 20%. The 20% is not profit for the contractor, yet meant to cover other expenses involved with the repair such as labor, paperwork, and shipping costs of the parts. In essence, FDOT currently pays for actual damages

and related expenses; instead of the FDOT having to pay for all attenuators on every job whether they get hit or not.

The elimination of this specification will not reduce FDOT's overall expense for attenuators. If the contractor is forced to absorb the risk of damages, he must reflect this in his bid. Therefore, it will drastically increase the cost to the FDOT. It is proven in other states such as New York, Alabama, and Texas, that the per location price is several times that of Florida's.

Most damages to attenuators are caused by hit and run accidents. The at-fault party is often unknown, or if found, uninsured/underinsured. The minimum requirement for property damage insurance in Florida is \$10,000. This would not cover a total loss to most attenuator types and sizes. If the contractor has no recovery of dollars on the hit and run, WHY WOULD THEY CONTINUE TO RUSH OUT AND REPAIR OR REPLACE IT WITHIN 24 HOURS AS REQUIRED(WHO RUSHES OUT TO LOSE MONEY?)? Requiring the repair without offering payment for the repair does not give the contractor the incentive to respond timely or even to respond at all.

It is impossible to build these unknown repair costs into our per location price. We cannot forecast which attenuators will be hit, how many times they will be hit, or how bad the damages will be. Right now, the State only pays for actual damages to attenuators. If the parts plus 20% is eliminated, the State will pay much higher prices for what we think may be hit.

Most of the contractors in Florida are against any change to the current specification. I have received signed petitions from individuals representing Lane Construction, Anderson Columbia, Hubbard Construction, APAC Southeast, Pepper Contracting, Kiewit Infrastructure, Woodruff and Sons, Superior Asphalt, Ajax Paving, Atlantic Civil Constructors, Community Asphalt, The Demoya Group, Duval Asphalt, JW Cheatham, Horizon Contractors, Ripa and Associates, MCM, RE Purcell Construction, Superior Construction Company, VE Whitehurst and Sons, Weekley Asphalt, Dragados USA, General Asphalt, and Ranger Construction.

The answer to this is not a newer and unproven attenuator. These units can only be found on a select few jobs throughout the State. More than 90% of the jobs in Florida utilize attenuators with a proven track record of several years. Additionally, these unproven attenuators are not interchangeable like the existing attenuators are for various speed zones.

The research rebuttal that FDOT cited was that in 2009, the Department paid approximately 2.3 million dollars for Temp. Attenuator/Crash Cushion Repairs. The contractors are convinced as any accounting firm could readily point out, that if the specification change is adopted, the FDOT's costs would escalate to approximately 5 to 6 million dollars based on an average price of \$5,000 to \$6,000 per location.

They say, "If it's not broken, don't fix it." In this case, when it is broken, the contractor is fixing it within the 24 hours required at a cost of at least 50% less than the specification change would bring on. Therefore, let's leave it as it is. It's working and costing the State less.

**Response: See response No. 3, fourth comment.**

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Charles Manganaro  
954-777-4186  
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Comments: (7-20-11)

Under Sec. 102-9.12 Provide portable traffic signals *equipment* that meets the requirements of the Design Standards, and **Section** 603-2 and are listed on the APL. The Engineer may approve

used signal equipment if it is in acceptable condition. *Replacement components for traffic signal cabinet of assemblies will be provided by the maintaining agency.*

Response: The word “specification” (or Section) is never included unless we are referring to an entire section. No change made.

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Christian Cummings  
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Comments: (7-20-11)

Ostensibly, FDOT has proposed changing specification 102-13.12.1 in an effort to save the State money. However, not only will eliminating the provision for reimbursement of repairs fail to save FDOT money, it will cost FDOT and Florida tax payers money and negatively impact the industry.

Eliminating the reimbursement for repairs will not change the fact that attenuators will continue to be hit and there will continue to be costs associated with the resulting repairs no matter what type of attenuator is utilized. The only change will be that FDOT will then pay for theoretical, potential and actual repairs on all attenuators, at the time of bid acceptance. This is because contractors must attempt to include all of the potential costs associated with repairs in their bid price, as opposed to FDOT only paying for actual repairs to attenuators when they are damaged. In addition, Contractors will also be forced to include a substantial risk factor in their bid price. Attenuators are not insurable. There is no way to estimate with any accuracy the frequency or severity of impacts or the percentage of non-recoverable damages caused by uninsured or underinsured drivers. Therefore, the risk factor will be high in order to ensure coverage. In addition, there is no attenuator that has a zero risk of being severely damaged or totaled after a real world impact.

FDOT should compare average bid prices in Florida to those of other states that do not reimburse contractors for repairs to damaged attenuators. Bid prices in other states where there is no reimbursement are indicative of what bid prices will be in Florida if the specification is changed as proposed. Statistics such as these demonstrate that changing the specification will cost FDOT millions of dollars beyond what is saved in reimbursements.

Finally, for the contractor, changing the specification creates an environment where the success of a project is determined solely by chance. Try as bidders might, there is no way for a contractor to accurately project the number of attenuators that will be damaged, or the extent of such damage. Hence, contractors may receive a windfall on projects where there are no or few impacts to attenuators. On the other side, contractors will lose money on projects where the frequency/severity of damaged attenuators is substantially higher than estimated.

Response: See response No. 3, fourth comment.

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Don Brackins  
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Comments: (7-21-11)

Several references are being made to ~~Advanced Warning Arrow Panel~~**Board**.

The official Name of these units in the BOE are **ARROW BOARD / ADVANCE WARNING ARROW PANEL**.

I feel that all of the documents should be consistent.

Response: The pay item description was intended to include both the old/new descriptions, so that ongoing projects with the old description would not be adversely affected.

We did a similar description change to impact attenuators/crash cushions, over a 2-3 year transition. The specs are fine with only the new description, as they only affect current projects and later. No changes made.

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John Previte  
863-519-2676

Comments: (7-21-11)

Great job!

**102-9.13 Temporary Traffic Detection Technology and Maintenance:** ~~Furnish, install and operate~~*Provide Temporary Traffic Detection Technology and maintenance at existing, temporary, and new intersections. Provide temporary traffic detection equipment listed on the Department's APL and approved by the Engineer to restore detection capabilities. Restore any loss of detection within 12 hours. Ensure 90% accuracy per signal phase, measured at the initial installation and after any lane shifts, by comparing sample data collected from the detection system with ground truth data collected by human observation. Collect the sample and ground truth data for a minimum of five minutes during a peak and five minutes during an off-peak period with a minimum three detections for each signal phase. Perform the test in the presence of the Engineer.*

Response: Thank you for your comment.

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