BOE
Basis of Estimates

2010

State Specifications and Estimates Office
Estimating Systems Support Section
<table>
<thead>
<tr>
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# Basis of Estimates

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<td>Chapter 20</td>
<td>Items 1000 through 1999</td>
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</table>

### Appendices (available online)

| Appendix 1 | Past Updates/ Cover Letters/ Bulletins |
| Appendix 2 | History- Obsolete Structures |
|            | Additional Resources |
I.1 PURPOSE

The *Basis of Estimates Manual* sets forth the standard methods of documenting design quantities, as well as selection criteria, for construction pay items for Florida Department of Transportation (FDOT) projects.

I.2 AUTHORITY

Sections 334.044(2), 20.23(3)(a), and 334.048(3), Florida Statutes (F.S.)

I.3 SCOPE

This procedure impacts anyone preparing construction plans or specifications for the Department.

I.4 GENERAL INFORMATION

*Chapter 334* of the *Florida Statutes*, as part of the *Florida Transportation Code*, establishes the responsibilities of the State, counties, and municipalities for the planning and development of the transportation systems serving the people of Florida, with the objective of assuring development of an integrated, balanced statewide system. The Code's purpose is to protect the safety and general welfare of the people of the State and to preserve and improve all transportation facilities in Florida. Under *Sections 20.23(3)(a) and 334.048(3), F.S.*, the Code sets forth the powers and duties of the Department of Transportation including adopting rules, procedures and standards for the conduct of its business operations and the implementation of any provisions of law for which the Department is responsible.

I.5 DISTRIBUTION

This document is published online at [http://www.dot.state.fl.us/specificationsoffice/](http://www.dot.state.fl.us/specificationsoffice/). Contacts, updates and registration information are available at the Basis of Estimates link on the above internet web page.

I.6 REGISTRATION

All users are encouraged to register online with the FDOT Project Management Contact Database located at [http://www.dot.state.fl.us/projectmanagementoffice/contactdatabase.shtm](http://www.dot.state.fl.us/projectmanagementoffice/contactdatabase.shtm). Registered users will receive e-mail notification of major updates and bulletins.
I.7 REVISIONS and UPDATES

*Basis of Estimates* holders are encouraged to submit comments and suggestions for changes to this manual to the State Specifications and Estimates Office. When ideas or suggestions are received, they will be reviewed by appropriate Design and/or Construction staff in a timely manner, and will be coordinated with other offices affected by the proposed change. Issues warranting immediate change will be made with the approval of the State Estimates Engineer in the form of an *Estimates Bulletin*.

*Estimates Bulletins* will be posted online at [http://www.dot.state.fl.us/specificationsoffice/](http://www.dot.state.fl.us/specificationsoffice/).

**NOTE:** *Estimates Bulletins* will remain effective until either:

a) an official manual revision is published, or
b) the Estimates Bulletin is made void.

The State Specifications and Estimates Office will coordinate proposed revisions or additions with affected offices within the Central Office. All new chapters and substantive revisions that result in policy change will be coordinated in accordance with the Forms and Procedures Office in accordance with Procedure No. 025-020-002, *Standard Operating System*, and the Executive Committee for concurrence.

Basis of Estimates Coordinator,  
FDOT State Specifications and Estimates Office  
605 Suwannee St., MS 34  
Tallahassee, FL 32399-0450  
[http://www.dot.state.fl.us/specificationsoffice/](http://www.dot.state.fl.us/specificationsoffice/)

Updates are posted online at least twice a year. Issues resulting in an *Estimates Bulletin* will be updated as approved by the State Estimates Engineer. Additions, minor issues, or corrections not requiring a bulletin will be updated as needed.

I.8 TRAINING

No training required. Optional training on the *Basis of Estimates*, reports, and supporting computer systems is available through the Estimating Systems Support section of the State Specifications and Estimates Office.

I.9 FORMS

The Pay Item Request form is available online at [http://www2.dot.state.fl.us/proceduraldocuments/forms/forms.asp](http://www2.dot.state.fl.us/proceduraldocuments/forms/forms.asp)  
The use of this form is optional; refer to *Chapter 6* for complete information.
Revision History

This is the revision history for the Introduction; revisions to Chapters 1-10 are located at the end of each chapter. Revisions and history of individual pay items is available through the State Specifications and Estimates Office, care of the Basis of Estimates Coordinator.

12-9-09: Expanded Revisions and Updates to include a limitation on the lifespan of an Estimates Bulletin.
6-30-09: Removed draft watermark. Changed header date for publication.
11-14-08: Updated internet links to current addresses.
11-5-08: Updated formatting in accordance with Forms and Procedures Office’s recommendations.
10-1-08: Updated header dates for 2009 edition. Forms- added note to indicate form is optional.
Chapter 1
Updates and Registration

1.1 Registration

All users of the Basis of Estimates (BOE) are encouraged to register with the Contact Database at [http://www.dot.state.fl.us/projectmanagementoffice/contactdatabase.htm](http://www.dot.state.fl.us/projectmanagementoffice/contactdatabase.htm). Registration is free. Additional information about the contact database is available at the web page above.

1.2 Update notices

An e-mail message is sent to all registered users when major updates occur, normally twice a year.

Estimates Bulletins will be posted online for major pay item changes. E-mail messages will be sent when it is determined that an issue has a “significant impact” on a large number of projects. E-mail messages will only be sent with approval of the State Estimates Engineer.

Major changes and bulletins must be implemented according to the posted implementation schedule for the specific pay item(s). The implementation dates are scheduled to coordinate specifications, standards, and other design guidance.

Minor changes will be posted online, as needed. Note the revision date for the applicable file or chapter. A summary of minor changes will be posted online, with the major updates. Minor changes should be implemented in design, as early as practical.

1.3 Proposed Changes

Users are encouraged to submit comments and suggestions for changes to the BOE. All items will be reviewed by the BOE Coordinator, and processed as follows:

a) Pay item Issues: Refer to Chapter 6 for additional information.
b) Formatting Issues: Evaluated by the BOE Coordinator.
c) Other Content Issues: Evaluated by the BOE Coordinator and/or the responsible office.

Issues forwarded to the C-Team are processed as detailed in Chapter 6. Other issues requiring review will be discussed with the State Estimates Engineer, and processed as recommended.

1.4 Submitting Proposed Updates

To submit a comment or suggestion, send the appropriate information to the BOE Coordinator or State Estimates Engineer. Contact Information is listed in Chapter 5, and on the State Estimates Office’s web pages.
Please include the complete pay item number (if applicable), a detailed explanation of the proposal, and contact information (if you would like a response).

### 1.5 Critical Dates for BOE Updates

In order to process changes in a timely manner, please submit proposed changes as early as possible. What may appear as a minor change for one office may result in major changes for another office. With assistance from the Coordination team, all issues will be resolved prior to announcement in an Estimates Bulletin or Summary of Major Changes.

The following dates are normal processing deadlines. Issues impacting a significant number of projects and/or dollar value may require longer or shorter processing times, as recommended by FDOT managers.

<table>
<thead>
<tr>
<th>Deadline</th>
<th>Annual Edition</th>
<th>Mid-Year Update</th>
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<tbody>
<tr>
<td>Normal Implementation of issues*</td>
<td>July letting</td>
<td>January letting</td>
</tr>
<tr>
<td>Publication Date (approx 6-9 months prior to implementation)</td>
<td>October-January</td>
<td>April-June</td>
</tr>
<tr>
<td>Other affected specifications, manuals and/or handbooks**</td>
<td>varies</td>
<td>varies</td>
</tr>
</tbody>
</table>

*Issues with less than 6 months advance notice will normally be issued as a Bulletin, Mandatory, or other special announcement to registered users.

**Contact the responsible office for critical dates and update procedures. Specifications, manuals, and handbooks may take 6-18 months from start to implementation.

### Chapter 1 Revision History

10-19-2009: Removed cover letter reference; all major changes announced with a bulletin.
## Chapter 2
### Units of Measure

### 2.1 Abbreviations

Listed below are selected abbreviations used in the Basis of Estimates. For a more complete list of abbreviations, refer to Design Standards, Index No. 001.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Unit Description</th>
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<tr>
<td>AC</td>
<td>Acre</td>
</tr>
<tr>
<td>AS</td>
<td>Assembly</td>
</tr>
<tr>
<td>BU</td>
<td>Bushel</td>
</tr>
<tr>
<td>CF</td>
<td>Cubic Foot</td>
</tr>
<tr>
<td>CO</td>
<td>Cleanout</td>
</tr>
<tr>
<td>CY</td>
<td>Cubic Yard</td>
</tr>
<tr>
<td>DA</td>
<td>Day</td>
</tr>
<tr>
<td>DD</td>
<td>Dollars per Day</td>
</tr>
<tr>
<td>EA</td>
<td>Each</td>
</tr>
<tr>
<td>ED</td>
<td>Each Day</td>
</tr>
<tr>
<td>GA</td>
<td>Gallon</td>
</tr>
<tr>
<td>GK</td>
<td>Gross Kilometer</td>
</tr>
<tr>
<td>GM</td>
<td>Gross Mile</td>
</tr>
<tr>
<td>HA</td>
<td>Hectare</td>
</tr>
<tr>
<td>HR</td>
<td>Hour</td>
</tr>
<tr>
<td>KG</td>
<td>Kilogram</td>
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<td>Kiloliter</td>
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<td>Kilometer</td>
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<td>LF</td>
<td>Foot</td>
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<td>LI</td>
<td>Liter</td>
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<tr>
<td>LO</td>
<td>Location</td>
</tr>
<tr>
<td>LS</td>
<td>Lump Sum</td>
</tr>
<tr>
<td>LU</td>
<td>Luminaire</td>
</tr>
<tr>
<td>M1</td>
<td>Meter</td>
</tr>
<tr>
<td>M2</td>
<td>Square Meter</td>
</tr>
<tr>
<td>M3</td>
<td>Cubic Meter</td>
</tr>
<tr>
<td>MB</td>
<td>Board Measure/ Thousand Feet</td>
</tr>
<tr>
<td>MG</td>
<td>Thousand Gallons</td>
</tr>
<tr>
<td>MH</td>
<td>Man-hour**</td>
</tr>
<tr>
<td>MI</td>
<td>Mile</td>
</tr>
<tr>
<td>MO</td>
<td>Month</td>
</tr>
<tr>
<td>MT</td>
<td>Metric Ton</td>
</tr>
<tr>
<td>NK</td>
<td>Net Kilometer</td>
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</table>
Units of Measure

<table>
<thead>
<tr>
<th>Unit</th>
<th>Description</th>
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<tbody>
<tr>
<td>NM</td>
<td>Net Mile</td>
</tr>
<tr>
<td>PA</td>
<td>Per Analysis*</td>
</tr>
<tr>
<td>PB</td>
<td>Per Building*</td>
</tr>
<tr>
<td>PI</td>
<td>Per Intersection*</td>
</tr>
<tr>
<td>PL</td>
<td>Plant*</td>
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<td>PM</td>
<td>Per Mile*</td>
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<td>PS</td>
<td>Per Set*</td>
</tr>
<tr>
<td>PW</td>
<td>Per Well*</td>
</tr>
<tr>
<td>SF</td>
<td>Square Foot</td>
</tr>
<tr>
<td>SY</td>
<td>Square Yard</td>
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<tr>
<td>TH</td>
<td>Therms</td>
</tr>
<tr>
<td>TN</td>
<td>Ton</td>
</tr>
<tr>
<td>YD</td>
<td>Yard</td>
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</tbody>
</table>

*Units which may be replaced with unit of Each (EA), upon pay item review
**Units may be replaced with Hour (HR), upon review.

2.2 ACCURACY

Unless otherwise indicated for a specific pay item, accuracy is recorded as follows:

<table>
<thead>
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<th>Unit of Measure</th>
<th>Accuracy*</th>
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<tbody>
<tr>
<td>AC</td>
<td>1/10 of an acre</td>
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<tr>
<td>CF</td>
<td>1/10 of a cubic foot</td>
</tr>
<tr>
<td>CY</td>
<td>1/10 of a cubic yard</td>
</tr>
<tr>
<td>GM</td>
<td>1/1000 of a mile</td>
</tr>
<tr>
<td>MB</td>
<td>1/10 of a thousand foot board measure</td>
</tr>
<tr>
<td>NM</td>
<td>1/1000 of a mile</td>
</tr>
<tr>
<td>TN</td>
<td>1/10 of a Ton</td>
</tr>
</tbody>
</table>

Unit items: Unit quantity: each, assembly, location, set, intersection
Others: To the nearest whole number: pound, foot, square yard, gallon, day,

*Note: Calculations are performed with one additional significant figure, and then rounded to the above accuracy for measurement/payment.

2.3 CONVERSION FACTORS

Linear Measure

25.4 mm/in
0.03937 in/mm
0.3048 m/ft
3.2808 ft/m
0.9144 m/yard
1.0936 yard/m
1.609 km/mi
0.621 mi/km
Area Measure
9 ft²/yd²
0.836 m²/yd²
1.2 yd²/m²
0.40 ha/ac
4047 m²/ac
2.477 ac/ha
43,560 ft²/ac
4840 yd²/ac
640 ac/mi²
0.386 mi²/km²
2.590 km²/mi²

Volume, Liquid Measure
1728 in³/ft³
0.028 m³/ft³
0.765 m³/yd³
27 ft³/yd³
0.2642 gal/l
3.785 l/gal

Force, Weight Measure
2.205 lb/kg
1.10 TN/MT
0.907 MT/TN (short ton)
2000 lb/ton (short ton)
1000 kg/MT

Additional items to be added upon request.

Chapter 2 Revision History

1-28-09: Added 2.2 Accuracy. Renumbered 2.3 Conversion Factors.
Chapter 3

Blank- for future enhancement

Chapter 3 Revision History

Users, please use search/find, as needed.
Chapter 4

Blank- for future enhancement

Chapter 4 Revision History

Chapter 5
Contact Lists

The Basis of Estimates is the result of coordination between District Estimates Offices and Central Office Design, Construction, and Maintenance. Issues are identified in the districts, options are proposed through the Responsible Offices, and finally, recommendations are presented for management approval and statewide implementation.

In general, **Designers should coordinate with the FDOT Project Manager.** Pay item issues should be forwarded through the District Estimates and Specifications Coordinator(s) to the Central Office BOE Coordinator. Issues that require major changes (plans, standards, specifications, pay items, or other manuals) will be coordinated between the Responsible Offices, and any recommendations will be forwarded from the Coordination Team. Refer to the tables below for District and Responsible Office contacts.

### 5.1 CENTRAL OFFICE PAY ITEM COORDINATORS

<table>
<thead>
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<th>CENTRAL OFFICE</th>
<th>COORDINATOR</th>
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<tr>
<td>Estimates, Engineering Support Services</td>
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<tr>
<td>Basis of Estimates</td>
<td>Melissa Hollis</td>
<td>850-414-4182</td>
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<tr>
<td>Long Range Estimates</td>
<td>Dale Stanley</td>
<td>850-414-4197</td>
</tr>
<tr>
<td>TRNS*PORT PES/CES</td>
<td>Cheri Sylvester</td>
<td>850-414-4179</td>
</tr>
<tr>
<td>Final Estimates</td>
<td>David Chason</td>
<td>850-414-4171</td>
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<tr>
<td>Construction COMP Book forms</td>
<td>Sherry Valdez</td>
<td>850-414-4249</td>
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<tr>
<td>Specifications</td>
<td>Rudy Powell</td>
<td>850-414-4280</td>
</tr>
<tr>
<td></td>
<td>Frances Thomas</td>
<td>850-414-4101</td>
</tr>
<tr>
<td></td>
<td>Debbie Toole</td>
<td>850-414-4114</td>
</tr>
<tr>
<td>Construction</td>
<td>Stefanie Maxwell</td>
<td>850-414-4314</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Deanna Carroll</td>
<td>850-410-5757</td>
</tr>
<tr>
<td></td>
<td>Ray Haverty</td>
<td>850-410-5531</td>
</tr>
<tr>
<td>CADD</td>
<td>Michelle Guynn</td>
<td>850-245-1621</td>
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### 5.2 DISTRICT SPECIFICATIONS AND ESTIMATES COORDINATORS

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>COORDINATOR (Titles vary by District)</th>
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<tr>
<td>First</td>
<td>Specifications:</td>
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</tr>
<tr>
<td></td>
<td>John Previte</td>
<td>863-519-2679</td>
</tr>
<tr>
<td></td>
<td>Fern Jackson</td>
<td>864-519-2242</td>
</tr>
<tr>
<td></td>
<td>Marilyn Hancock</td>
<td>864-519-2919</td>
</tr>
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<tr>
<td></td>
<td>Gena Batman</td>
<td>863-519-2558</td>
</tr>
<tr>
<td></td>
<td>Tommy Thompson</td>
<td>863-519-2612</td>
</tr>
<tr>
<td></td>
<td>Ronny Hall</td>
<td>863-519-2602</td>
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<td></td>
<td>Tim Phillips</td>
<td>863-519-2514</td>
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<tr>
<td>Second</td>
<td>Specifications:</td>
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<tr>
<td></td>
<td>Eddy Scott</td>
<td>386-961-7831</td>
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<td></td>
<td>Teresa Thrasher</td>
<td>386-961-7470</td>
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<td>Chad Townsend</td>
<td>386-961-7844</td>
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<td></td>
<td>Richard Rountree</td>
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<td>Chris O’Gara</td>
<td>386-961-7708</td>
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<td>Ronnie Sadler</td>
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<td>Amir Zad</td>
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<td>Third</td>
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<td>Tim Smith</td>
<td>850-415-9513</td>
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<td>William Evans</td>
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<td>Clay Boutwell</td>
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NOTE: Some districts operate as a “PS&E” group (Plans, Specifications, & Estimates), while others have separate offices. Additional names and/or descriptions may be added upon request of the District Office(s).
### 5.3 CONTACT PERSONS- BY PAY ITEM NUMBER RANGE

<table>
<thead>
<tr>
<th>ITEM NUMBERS</th>
<th>SUBJECT/GROUP</th>
<th>CENTRAL OFFICE COORDINATOR</th>
<th>PHONE</th>
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<tr>
<td>100-102</td>
<td>MOT</td>
<td>Cheryl Adams</td>
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<tr>
<td>103</td>
<td>Temporary Structures</td>
<td>Tom Andres</td>
<td>850-414-4269</td>
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<td>104-108</td>
<td>Erosion Control Drainage</td>
<td>Larry Ritchie</td>
<td>850-414-4168</td>
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<tr>
<td>109</td>
<td>Field Office</td>
<td>Stefanie Maxwell</td>
<td>850-414-4314</td>
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<tr>
<td>110-199</td>
<td>&quot;Dirt&quot; Earthwork</td>
<td>Construction</td>
<td>Stefanie Maxwell</td>
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<td></td>
<td>Roadway</td>
<td>Cheryl Adams</td>
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<tr>
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<td>Geotechnical</td>
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<td>Topsoil/Vegetation</td>
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<td>850-414-4168</td>
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<tr>
<td>200-299</td>
<td>Base Courses</td>
<td>Emmanuel Uwaibi</td>
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<td>300-399, except 346-347</td>
<td>Surface Courses, Concrete Pavement</td>
<td>Emmanuel Uwaibi</td>
<td>850-414-4372</td>
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<td>346-347</td>
<td>Concrete</td>
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<td>Angel Rodriguez</td>
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<td>516-559</td>
<td>Incidental Construction- Roadway Items</td>
<td>Andy Keel</td>
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<td>Chester Henson</td>
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<td>Traffic Control Devices- Signals &amp; ITS</td>
<td>Trey Tillander</td>
<td>850-410-5617</td>
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<td>Traffic Control- Signing &amp; Pavement Markings</td>
<td>Chester Henson</td>
<td>850-414-4117</td>
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<td>714</td>
<td>Motorist Aid Call Boxes</td>
<td>Trey Tillander</td>
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<td>Highway Lighting</td>
<td>Chester Henson</td>
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<td>720-734</td>
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<td>735-739</td>
<td>Turnpike Service/Toll Plaza</td>
<td>Steven Sheffield</td>
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<td>Incidental Construction- Traffic Monitoring (TMS)</td>
<td>750-775</td>
<td>Dean Perkins</td>
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<td>Trey Tillander</td>
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<td>Gordon Wheeler</td>
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### Chapter 5 Revision History
- 10-29-09: Updated Pay Item ranges & contact persons.
- 10-22-09: Updated contact information for CO and District Specs/Estimates.
- 10-22-08: Updated contact information for District Specs/Estimates.
- 10-1-08: Updated header dates for 2009 edition.
- 10-1-08: Updated CO Specs contact information.
5-28-08: Updated contact information for Districts 3.
Chapter 6
Requesting Pay Items

6.1 General

Occasionally a project requires the use of a pay item that is not currently active in the Master Pay Item Listing, or not defined in the Pay Item Structure. When this occurs, a request must be submitted. All pay item requests must go through the District Estimates Engineer. See the instructions below for Opening Pay Items (Items which are listed on the pay item structure) or Requesting New Items (Items which require a new/expanded structure).

Note: According to the Plans Preparation Manual, Volume II, Chapter 2, items should be loaded for a project at Phase II. Quantities should be completed in Phase III. Due to processing times noted below, items should be requested as soon as a need is identified. DO NOT WAIT until Phase III or IV submittals are due.

Note: The Specifications Office requires that Technical Special Provisions (TSPs) be submitted along with new pay item requests. To avoid production delays, TSPs should be submitted for District Review as soon as a need is identified. Refer to the Specifications Office’s web page at www.dot.state.fl.us/specificationsoffice for additional instructions.

6.2 Opening Pay Items

For items included in the Pay Item Structure, but not currently open on the Master Pay Item list, submit the following information via e-mail to the District Estimates Engineer:
- Financial Project ID,
- Letting date,
- FDOT project manager’s name,
- Pay item number and description,
- Cost data: Supplier (name, address, phone number) and unit price. (For commonly used items, a related pay item number is acceptable),
- Contact name and phone number.

For Tech Spec items: Coordinate with the District Specifications Office before requesting pay items.
SAMPLE E-Mail for Opening Pay Items  
(with Valid Pay Item Structure)

TO: District Estimates Engineer  
Copy: Project Manager  
From: Designer  
Subject: Pay Item Request, Project 123456-1-52-01

Please open the following Pay Item(s) for Project 123456-1-52-01, scheduled for 01/01/2010 letting:

0123-456 Item Description (size)(shape defined in structure), EA  
Approval of the Tech Spec is included below. (E-mail forwarded from District Specifications’ approval.)

0123-457 Item Description (size in structure), LS  
Covered by current specifications.

Requested By: Joe Designer, ABC Company, phone 850-555-1212.

The District Estimates Engineer will review the request, verify specification status as needed, and forward the information to the TRNS*PORT Coordinator in the State Estimates Office.

While most requests are completed within 2 hours, please allow up to 2 working days for items to be opened. Upon completion of the request, a “reply to all” e-mail will be sent so that the item(s) may be loaded on the identified project(s).

6.3 Requesting New Items
To expand or request a new pay item structure, submit the following information via e-mail to the District Estimates Engineer (form 600-000-02 may be used, as needed)

- Item Description and suggested unit of measure, accuracy  
- BOE Detail text,  
- Proposed pay item structure (if applicable for items with multiple sizes, functions, etc.)  
- Specifications (refer to current specification section, or attach proposed Developmental and/or Technical Special Provision)  
- PPM reference, standards, and/or plan notes that may apply,  
- Supporting information (drawings, Manufacturer’s literature, etc.), if available  
- Cost data: Supplier (name, address, phone number) and unit price. (For commonly used items, a related pay item number is acceptable),  
- Contact name, e-mail address, and phone number of Designer and/or Project Manager  
- Financial Project ID & Letting Date
The District Estimates Engineer forwards the request to the State Estimates Office. It is reviewed by the responsible office(s), Specifications Office, and then returns to the Estimates Office. Each office has the opportunity to indicate if the proposed change affects current documents (specifications, standards, and/or other manuals).

Requests for items with no known impact on specifications, standards, or other manuals (normally expanded sizes, shapes, etc.) will be completed within 2 working days*. Upon completion of the request, the originator will be contacted, so that the item may be loaded on the identified project.

*NOTE: While minor changes to the pay item structure can be completed within 2 hours, other changes may require additional time. When a pay item request MAY involve a new/changed specification, existing pay item, standard, and/or manual, the request will be forwarded to the C-Team for evaluation. Updates to these items may involve extended industry review period(s) and coordination for implementation. Requests for new items should be submitted as early as possible in the design phase. Refer to the C-Team information below for process details.

6.4 Pay Item Request Form Instructions

The Pay item request form 600-000-02 is available at http://www2.dot.state.fl.us/proceduraldocuments/forms/forms.asp As noted above, the form is optional; the required information may be submitted via e-mail.

To complete the form, the Originator completes the fields marked with an asterisks(*). The Originator may be a Consultant Designer (for project specific needs), an FDOT Designer (for new products, processes, etc.) or any FDOT Employee (for implementing policy or procedures).

Fields without an asterisks (*), or unknown information, may be left blank. They will be completed by the BOE Coordinator and/or Responsible Office, as necessary.

Item Structure (Pay item number):

This number will be assigned by the Basis of Estimates Coordinator in the Central Office. Specification Section numbers will be selected with recommendations from the State Specifications Office. Refer also to Developmental Pay Items below.

Guidelines for new pay item structures 0123-456-789:

First three digits (123) match the Specification Section. See also Developmental Pay Items for special cases.

Digits 456-789 are right justified within the group.

Variables ABC-DEF may be used to define operation, size, shape, color, type, etc. when needed to separate items with significantly different cost. Variables that can be defined in the plans or specifications DO NOT need separate pay items, if the cost is similar. Contact the Basis of Estimates Coordinator for assistance.
When Install, Relocate, or other non-furnish operations are defined, the remaining variables may be blank or zero. These should be clearly indicated with the structure.

Refer to Chapter 10 for details on the Pay Item Structure/Number. Specification Section numbers will be selected with recommendations from the State Specifications Office. Refer also to Developmental Pay Items below.

*Description:
Describe the new pay item so that this "name" best relates to future users what this item is used for. The same name will be used for English & Metric lists; therefore, dimensions or unit specific names should be used at the structure level.

*Unit of measure:
A maximum of two spaces used to abbreviate the method of measure for this item. (see Section 3 of the Basis of Estimates for acceptable units.) Include both English and Metric units.

*Requested Action:
Check the type of action requested: New Item or Permanent Block. When this item is to be processed with other items, note the related item(s), i.e. Item No. ###-abc-def, or "MOT items for updated standards". An expanded pay item structure is considered a "new item".

*Structure:
The pay item structure ###-abc-def, should be used to define parameters which affect the price (i.e. size, shape, material), where items a through f are detailed as needed.
Additional parameters which do not affect the price may be detailed in the plans; DO NOT create additional pay item structures for these parameters. Limited structures can be used to encourage price competition between products that perform similar functions and/or provide similar end results. Use additional sheet(s) if necessary.
Refer to Chapter 10 for details on the pay item structure/number.

*Detail Information:
Describe the item, application, recommended use, materials, etc. This information will be used to help identify the appropriate pay item, and cost estimate distribution. This information is used in the Basis of Estimates detail to assist designers in the selection and quantity calculations of an item.

Text may include "Use When…“, "Do not use when…", "Estimate xx items per…", and/or "Item(s)… are recommended/required when this item is used."

The pay item detail information is not a substitute for specifications. In case of doubt, always refer to the applicable specification(s) for a complete description of the work to be completed, materials, measurement, and payment.

*Method of Measure, Accuracy:
Unit of Measure & Accuracy used for payment. Consider payment accuracy of similar
items, as shown in the Basis of Estimates. Note: Calculation/Documentation may require higher level of accuracy in the plans and/or computation book.

**Plan Quantity:**
Yes, if payment of item to be based on Plan Quantity, subject to specifications. No, if payment to be based on Field Measurement.

Ensure that this selection matches compensation information in the applicable specifications.

**Documentation-**

**Specification- Section, Article; Tech Specs?**:
- *For items with existing or related specifications* (requests for items with new size, shape, or function), refer to the applicable Section number.
- *For project specific items* without existing specifications (requests for items with limited use or project specific conditions), contact the District Specifications Office; a copy of the Technical Special Provision will be required with the pay item request form.
- *For new, general use items* without existing specifications (requests for items based on changes to standards, specifications, and or policy), contact the State Specifications Office. The implementation of these items will be coordinated with all affected offices.

**Specifications Submitted, Date:**
List the name of the person originating the specification, and the date it was sent to the Specifications Office.

**Plans Prep Manual:**
Refer to Volume and Chapter for applicable information. If a revision is necessary, contact the State Roadway Design Office to propose revision(s).

**Standards Index No(s):**
Applicable *Roadway and Traffic Design Standards*, or *Structures Design Standards*, with index number(s). If a revision is necessary, contact the applicable office.

**CADD/COMP Form Number(s):**
Applicable form(s) for documentation of quantities. Refer to Section 1 of the Basis of Estimates for current forms.

**Plan Notes:**
If plan notes will be required, provide sample text of note. (Plan notes should not replace or duplicate specification text.) All plan notes should be coordinated with the PPM text.

**Other:**
If use of this item is included in other documentation (Drainage, Pavement Design, Traffic Signals, or other Manual/Handbook), note applicable volume, chapter, or edition. If revisions are necessary, coordinate changes with applicable office.
Responsible Office Approval, Date:
This is the Office and Contact Person listed in Chapter 5, generally within the Office of Design in Tallahassee. The Contact Person in the Responsible Office should refer to Chapter 10 for assistance in completing the blank fields on the form.

Cost Data-
Related Pay Item(s), Unit Price, Additional Cost, Availability:
For items similar in cost, provide related item numbers. (This information is used to assist in Preliminary Cost Estimates.) If no similar item exist, provide price and availability information. Unit price includes cost of material; additional cost to include installation, delivery, incidental materials, etc. Availability to include suppliers or manufacturers.

Estimator’s Approval, Date:
State Estimates Office, Preliminary Estimates Section will review of the proposed price and/or related items.

Originator-
Name, Date, Office, Phone, District:
The originator may be a Consultant or FDOT employee, currently working on the project for which the item is requested. This person should be able to answer any additional questions regarding the use/application of this item. Complete information as requested.

District Estimates Office Approval:
For Items originating in the districts, the District Estimates Engineer should sign, indicating that the form contents have been completed and reviewed.

Central Office Approvals-
Design Coordinator, Specifications Coordinator, BOE Coordinator, TRNS*PORT Coordinator:
Each person responsible for approval should verify that requested action is necessary, meets existing/proposed standards, guidelines, handbooks, etc, and not in conflict with existing item(s).

Implementation-
Effective Letting Date, C-Team Issue #, Summary Details:
The implementation information will be completed in the Central Office, following all approvals. Actions which require coordination between offices will be addressed by the Coordination Team, with approved implementation plans detailed in the Basis of Estimates Summary of Changes. Minor actions, not requiring an implementation plan, will be implemented immediately.

Master File- Item Number, Financial Project Number, and Project Letting Date:
If a project number is known, the item(s) will be opened upon approval and implementation. If the project number is unknown, the structure will be established, but the item will not be opened until requested.
6.5 Inactive Items

In an effort to remove unused pay items, those items not used within a 2 year period will be labeled as “inactive” and considered for temporary and/or permanent blocking.

Opening inactive items will require that the Designer follow the instructions for opening an item (i.e. submit an e-mail with the requested information, as described above. A copy of the Tech Spec may be required). The Central Office Estimates staff will request approval from the responsible office, prior to opening. Designers should allow up to an additional 2 working days for this approval.

If an inactive item remains unused for 3 years, the Estimates Office will recommend to the responsible office that the pay item structure be blocked. Once blocked, a pay item request form must be completed in accordance with Requesting new items, as described above.

6.6 Pay Item Reviews

When a major specification or standards change is made, the responsible office is requested to review the pay item structure to ensure that the affected items meet the needs of Design, Construction, Maintenance, and other industries. Historical use and item averages are available, but should not be the only consideration.

As recommended with new items, the pay item structure ###-abc-def, should be used to define parameters as needed. Some factors to consider when reviewing the pay item structure:

a. What factors are most important to the Designer, Estimator, Supplier, Manufacturer, and/or Contractor? Can they be detailed in the plans? Are they included in the specification? Does it affect the price?
   Note: Not all factors should be weighted equally. Sometimes the installation (labor) is more significant than the materials.

b. Are there standards/specifications for the item?
   There may be 2 standard products and 8 “special” items. If the 2 standard items account for a significant percentage of applications, could the “special” items be combined under one “special” item?

Additional parameters which do not affect the price may be detailed in the plans; DO NOT create additional pay item structures for these parameters. Limited structures can be used to encourage price competition between products that perform similar functions and/or provide similar end results.

6.6 Coordination Team

A team representing many Design & Construction Offices has been established to coordinate the review and implementation of various issues. By working together, the team is able to ensure that pay items, specifications, and standards, as well as supporting
handbooks and manuals, are available in a timely manner— with a coordinated implementation plan. Design Representatives include the persons from Roadway, Structures, Specifications, Standards, and Estimates. Construction and Maintenance are also represented. When necessary, representatives from other affected offices are requested to attend.

Issues may be submitted by any office or representative, but are normally the result of changes to pay items, specifications, and/or standards. Each office’s representative is encouraged to keep the team informed of issues that may impact others. Representatives’ names and contact information are listed in Chapter 5. When proposing major changes to the pay item structure, specifications or standards, please coordinate with the contact person(s) listed for the affected items.

Issues brought to the attention of the C-Team will be evaluated and processed on a “case-by-case” basis. Issues with minimal impact on others are noted, with little or no further C-Team activity. Issues with extensive impact may be assigned to a committee for further investigation. The result of C-Team activity should be a recommended implementation plan, complete with a brief history and resulting changes. Implementation will be scheduled to coincide with Specification, BOE, Standard, and Manual updates, when possible.

The State Estimates Office compiles information resulting from C-Team recommendations for the Summary of Major Changes included with each edition/update to the Basis of Estimates. Managers of the affected offices approve issues included in the summary. Overall approvals, from the Directors of the Office of Design and Highway Operations, are also included.

### 6.7 Developmental Pay Items / Trial Pay Items

When an item is recommended for implementation while details are under review (specifications, standards, policy, etc.) a developmental pay item may be assigned. Developmental items are created for limited use, for a limited period of time, while the item is under review. A monitor will be assigned for each Developmental Item.

Developmental pay item numbers will be assigned as follows: (year)-(section)-(sequential use). The monitor’s name will be included with the structure. Any problems or concerns with these items, from either Design or Construction, should be directed to the monitor, in writing.

Contact the monitor prior to using a Developmental Pay Item. If the monitor approves the item for use, the monitor will e-mail the central offices of Design, Specifications and Estimates approving the use of that trial pay item number with specifications dated mm/dd/yy for a specific project.

Upon completion of the specification, standard, and/or policy change(s), the monitor will recommend that the item be opened for statewide implementation, the Coordination Team
will recommend an implementation date, and a new pay item number will be assigned.

6.8 Related Documents

COMPUTATION BOOKS
The Computation Book(s) are to be prepared in accordance with the Department’s directive/procedure No. 700-050-001, Computation Methods for Design, Construction, and Final Estimates, and accompanying handbook. Included in the procedure are instructions for documentation of Lump Sum items, Plan Quantity items, as well as final measure items. This information is available online at www.dot.state.fl.us/construction.

ALTERNATIVE CONTRACTING USER’S GUIDE
It is the intention of the Department to use various techniques on a wide range of project types in order to determine which techniques work best with each project type. The goal of this program is to reduce the cost and time overruns, and thereby reducing the impact of construction on motorists, businesses and homeowners within the transportation corridor.

Most of the alternative contracting practices involve financial incentives to expedite work. Methods include A+B Bidding, Lane Rental, Design-Build, Bonus, Liquidated Savings, and Lump Sum Projects. *Note: For more detailed instructions, refer to the Department’s Alternative Contracting User’s Guide on the Construction Office’s web page at www.dot.state.fl.us/construction

PLANS PREPARATION MANUAL
The Roadway Design office maintains the Plans Preparation Manual (PPM). The manual sets forth geometric and other design criteria, as well as procedure for FDOT projects. This document is now available online at www.dot.state.fl.us/rddesign

Chapter 6 Revision History
10-1-2008: Updated text to make the pay item request form optional. Complete information may be submitted by e-mail.
Chapter 7
Design Tools

7.1 General Information

Detailed plan notes and/or technical special provisions must be provided by the designer for all items not covered by existing specifications. Plan notes are not acceptable as a substitute for Technical Special Provisions. Plan notes are intended to work with the specifications, and are not intended to supersede the specifications. Plan notes must not:
- Change the specifications
- Conflict with the specifications
- Duplicate the specifications

When existing specifications are not applicable, coordinate the specification revisions with the District Specifications Office. Every effort should be made to avoid conflicts, as plan notes are overridden by some specifications and take precedence over others. In either case, plan notes must never conflict with specifications. Details necessary for complete information include:
- Description of item
- Materials
- Construction and installation
- Method of measurement
- Basis of payment.

NOTE: Refer to the Plans Preparation Manual (Topic 625-00-006) for additional guidelines on using plan notes. It is located online at http://www.dot.state.fl.us/rd/design/default.htm Contact the Roadway Design Office with any questions, comments, or corrections regarding these notes.

7.2 Tech Spec or Detail Flags

Several letters or “flags” are used on the Master Pay Item list and Summary of Pay Items to indicate when a Tech Spec and/or Plan detail is likely needed. Below is a current list of these flags:
- T= Tech Spec and/or Plan Detail required
- D= Plan Details required
- M= Monitored Item
- G= Generic Item
- P= Permit required
- A= Approvals needed
Whenever one of these flags is used, refer to the pay item details in the *Basis of Estimates* for additional information. A “Quick Reference” handout is provided at the end of this Chapter.

**Chapter 7 Revision History**

5-28-08: Deleted notes; refer to PPM for current information for: Key Sheet Notes, Typical Section Notes, Summary of Quantities Sheet Notes, Plan and Profile Sheet Notes, Pay Item Footnotes, Drainage Map Notes, and Utility Adjustment Sheet Notes.
BOE Quick Reference: Tech Spec or Plan Detail
Refer to BOE Chapter 7 for complete information

Quick Questions:
1. What is the work to be completed?
2. What are the material requirements? What are the testing criteria?
3. How is this to be installed? What are the performance requirements?
4. Will the item be measured in the field, or paid by plan quantity?
5. What work/materials are included with, or excluded from, this payment?

- When is a Plan Note sufficient? When the quick questions above are answered by the specifications, a plan note is sufficient. Remember, plan details/drawings show dimensions and location; they are not a substitute for complete specifications.

- When is a Tech Spec Required? If the above quick questions are not answered by the existing specifications, a tech spec is required. The Designer is responsible for ensuring that all pay items are completely covered within the contract documents (specs, standards, and/or plans).

A complete specification includes:

- **Description:** A Description of the work to be completed may be in the form of a drawing/plan detail, words in a specification, or both.
- **Material requirements:** Materials may be identified in the specifications, design standards, by reference to ASTM or other testing criteria, or by notes in the plans. Consider long-term material requirements, such as UV protection or other coatings.
- **Construction:** Either installation methods or performance requirements may be given. Some products may be installed “in accordance with manufacturer’s instructions.”
- **Method of Measurement:** Describe how the item will be measured, as well as whether it will be paid by plan quantity or field measured.

Many items are “furnish & install”, for a complete and accepted installation. When working with “install only” items, ensure that the pick-up/delivery instructions are included. For “relocate” items, clearly identify original and final location, as well as clean-up work at the original location and incidental items needed at the final location. “Remove” items should clearly identify whether contractor takes ownership (dispose) or the Department retains ownership (stockpile- within right or way, or delivered to maintenance yard). Additional operations are explained in the **BOE, Chapter 10**.

Special/Custom items should only be used when there is a significant deviation from the standard item of work; existing specs and/or standards do not apply. Complete specifications are needed. Note: Minor changes may be noted in the plans, using standard pay items, as long as conflicts are not created within the contract documents. Coordinate spec changes with the District Specifications Office.

**Basis of Payment:** Payment is often “full compensation for all work specified” for a complete and accepted installation.
Chapter 8
FORMS

CADD Forms/Sheets/Cells are maintained by the State Engineering/CADD Office at http://www.dot.state.fl.us/ecso/default.htm

COMP Forms are maintained by the State Construction Office at http://www.dot.state.fl.us/construction/formsonl/Forms_on.htm

For information regarding these forms, please contact these offices directly.

8-1 Introduction


The forms referenced in this section were developed by the Department of Transportation to serve the needs of Design, Construction and Estimates personnel. In Design, they are used to record calculations and tabulations for plan quantity. Construction personnel must verify the original quantity or modify it to reflect what was constructed, and enter a tentative final pay quantity. Estimates personnel must check both the original or plan quantity, versus the final quantity, and substantiate what quantity is to be paid to the contractor in agreement with all specifications and Department policies.

It is MANDATORY that each pay item be documented. When two or more forms are available, the Designer should select the best form (CADD or COMP) to document the pay item quantity, based on project conditions. For example, a simple area of turf may be documented in a CADD summary box in the plans. A complex area of turf should be shown in the plans with detailed quantity calculations documented in the comp book. DO NOT use both forms, as this duplication of effort causes additional work for designers, reviewers, estimators, and others.

There are three groups of forms applicable for estimate purposes: Computation Book Forms, Plans Forms, and Miscellaneous Forms. Computation Book forms are maintained by the State Construction Office, Final Estimates Section. Plans forms are maintained by the Engineering CADD Systems Office, with input from affected Design Offices. The State Estimates Office, Engineering Support Section, maintains miscellaneous Forms. Web links to these forms are included with each group.

DISCLAIMER: The information contained within this Section is for information/reference purposes only. The intent is to provide a brief summary of the forms referenced by specific pay items. Current forms are available from the responsible office, as noted above. Any questions, comments, or other correspondence related to forms should be directed to the responsible office.

8.2 Computation Book Forms

The forms assembled in the Computation Book provide a simple and logical basis of documentation for the Summary of Pay Items Sheet in the contract plans. The calculations required for different forms, range from tabulations of “each items” or “lump sum items” to complex area or volume calculations. The designer should use the form recommended for each item calculated or tabulated, if practical.
<table>
<thead>
<tr>
<th>Form Number</th>
<th>Form Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>700-050-01</td>
<td>Area Computations</td>
</tr>
<tr>
<td>700-050-02</td>
<td>Curb and/or Gutter Computation</td>
</tr>
<tr>
<td>700-050-03</td>
<td>Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computations</td>
</tr>
<tr>
<td>700-050-04</td>
<td>Volume Measure Items</td>
</tr>
<tr>
<td>700-050-05</td>
<td>Lump Sum Quantities</td>
</tr>
<tr>
<td>700-050-06</td>
<td>Weight Measure or Liquid Volume Computations</td>
</tr>
<tr>
<td>700-050-07</td>
<td>Concrete &amp; Reinforcing Steel Computations</td>
</tr>
<tr>
<td>700-050-08</td>
<td>Piling Tabulation</td>
</tr>
<tr>
<td>700-050-09</td>
<td>Linear Measurement Computation with Components</td>
</tr>
<tr>
<td>700-050-10</td>
<td>Computation Book Pay Item Summary Sheet</td>
</tr>
<tr>
<td>700-050-11</td>
<td>Computation Book Pay Item Summary and Certification Sheet</td>
</tr>
<tr>
<td>700-050-50</td>
<td>Off Duty Police Officer</td>
</tr>
<tr>
<td>700-050-51</td>
<td>Daily Log Sheet, Maintenance of Traffic</td>
</tr>
<tr>
<td>700-050-52</td>
<td>Daily Log Sheet (Striping)</td>
</tr>
<tr>
<td>700-050-54</td>
<td>Daily Report of Truck-Measured Material</td>
</tr>
<tr>
<td>700-050-55</td>
<td>Daily Log Sheet for Tracking Grassing Items</td>
</tr>
<tr>
<td>700-050-56</td>
<td>Daily Log Sheet for Miscellaneous Items</td>
</tr>
<tr>
<td>700-050-62</td>
<td>Contractor’s Certified Invoice, Maintenance of Traffic Sheet</td>
</tr>
</tbody>
</table>

For questions or comments regarding these forms, please contact the State Construction Office, Final Estimates Section. Contact information is located in the introduction section of this handbook.

Forms are available in .pdf format from the Office of Forms and Procedures at [http://www.dot.state.fl.us/proceduraldocuments/](http://www.dot.state.fl.us/proceduraldocuments/) Search by Number, Office (Construction) or Title.

To retrieve forms from the FDOT CADD software, use the bar menu. Contact your CADD Manager for details and software updates.

### 8.3 Plans Forms (CADD-Generated)

Plans Forms are CADD-generated. They provide the designer with a simple and logical format for summarizing quantities by the type of item. These forms contain spaces for recording both original design quantities and final "as built" quantities.

<table>
<thead>
<tr>
<th>Form Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to the CADD office web page for form/sheet names</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pole Data Sheet (Sheets 1 and 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabulation of Quantities *</td>
</tr>
<tr>
<td>Summary of Pay Items</td>
</tr>
<tr>
<td>Summary of Drainage Structures</td>
</tr>
<tr>
<td>Summary of Guardrail</td>
</tr>
<tr>
<td>Summary of Ditch Pavement and Sodding</td>
</tr>
<tr>
<td>Summary of Fencing</td>
</tr>
<tr>
<td>Summary of Fencing Type B</td>
</tr>
<tr>
<td>Summary of Fencing Type A</td>
</tr>
<tr>
<td>Summary of Earthwork</td>
</tr>
</tbody>
</table>
**Summary of Sodding**

**Summary of Side Drain and Mitered End Sections (Without Offset and Flow Line)**

**Summary of Sheeting**

**Summary of Turnouts**

**Summary of Underdrain**

**Summary of Gravity Wall and Aluminum Handrail**

**Summary of Flood Data**

**Cross Drain Optional Materials Tabulation (With Flow Line) (Sheets 1 & 2)**

**Optional Materials Tabulation (without Flow Line Changes) (Sheets 1 & 2)**

**Summary of Edgedrain**

**Summary of Sidedrain and Mitered End Sections (With Offset and Flow Line)**

* The Tabulation of Quantities format shall be used for the following:
  1. Signalization Plans
  2. Signing and Pavement Marking Plans
  3. Lighting Plans
  4. Landscaping Plans
  5. Utility Joint Project Agreement Plans
  6. Other items, as indicated in the Basis of Estimates Handbook.

**CONTACT INFORMATION**

For questions or comments regarding these forms, please contact the Engineering CADD Systems Office. To retrieve CADD forms, visit the Engineering/CADD Systems Office web site at: [http://www.dot.state.fl.us/ecso/default.htm](http://www.dot.state.fl.us/ecso/default.htm)

**8.4 Quantity Manager & Computation Book (A Note from the CADD and Construction Offices)**

When the Designer utilizes the Department's Quantity Manager Tool within MicroStation/GEOPAK, the data that is depicted on the Computation Sheets may not utilize the whole form. The data shown on the Computation Sheets may only fill a portion of the actual form, and not display the whole form with blank lines. This will be an acceptable format, as the data depicted on the Computation Sheets should be complete. The first page will continue to provide a signature block for plan quantity items, as well as the area of notes for over/under runs, and the extra notes below that. The remainder of the sheets will provide quantities for the individual sheets. By utilizing the Quantity Manager tool in GEOPAK, the Designer will eliminate potential errors in data transfer and transposition of numbers by being automated.
8.5 Estimates Forms

**PAY ITEM REQUEST**

**600-000-02**

This form is used by designers and consultants when a project requires the use of a pay item that is not defined in the pay item structure. Refer to Chapter 6 for more details. Note: This form is optional; required information may be sent via e-mail, per Chapter 6.
Chapter 8 Revision History

10-6-08: Updated header dates for 2009 edition.
10-6-08: Updated pay item request form information, per Chapter 6. Use of the form is optional.
5-14-08: Inserted 8.4, note from Construction and CADD Offices. Requested by Sherry Valdes, State Construction Office & Kenny Rudd, District 3 CADD Office.
Chapter 9
WEBGATE: TRNS*PORT DESIGNER INTERFACE & REPORTS

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9.1 General

9.1.1 Intro to TRNS*PORT Suite
TRNS*PORT is a suite of programs owned by AASHTO (American Association of State Highway Transportation Officials). Many states around the country use this suite of programs for their transportation contracts. The TRNS*PORT programs used by FDOT include:

- PES: Proposal Estimating System
- CES: Cost Estimating System
- LAS: Letting and Award System
- SiteManager

9.1.2 Levels: Proposal, Project, Category, and Pay Item
TRNS*PORT data is organized into several levels. Starting at the lowest level, pay items are used to pay for a given item of work, as defined in the plans and/or specifications. Pay Items may include materials, equipment, and/or labor to complete the defined work. Multiple pay items may be included in a category of work. Categories include Structures, Roadway, Signing, Lighting, etc. For each category of work, a component set of plans is usually provided. A project may include one or more categories of work, within a defined geographic area. For example, a project may include a bridge (structure), resurfacing and drainage improvements (roadway), and related striping (signing and pavement markings). When ready for letting, one or more projects may be combined in a proposal. The proposal includes any additional components (letting, award, and execution information) necessary for the contract.

9.1.3 Training & Helpful Hints
Training is available from the State Specifications and Estimates Office, Engineering Systems Support section. Dates are scheduled at the District Offices, when requested. Please contact your District Estimates Office to request training.

Additional information and “Helpful Hints” handouts are available on the Estimates Office web pages at http://www.dot.state.fl.us/estimates/Training/training.htm

9.1.4 Security
Security within TRNS*PORT is managed by Control Groups (access to Projects & Proposals) and Roles (User functions).

Control Groups: Control Groups are used by TRNS*PORT to assign projects and/or proposals to selected users or groups. The typical designer (user) control group is CD??U525, where CD indicates that the project is for Construction (as opposed to Maintenance), originating in the District. The question marks (??) are wildcard indicators for the district number. These wildcards may be replaced by a two digit number, when the user is restricted to a single district. Finally, the last 4 digits indicate the designer's company. The District Estimates Engineer assigns projects to a company's control group. A sample Project control group might be CD03U525. Note: by using the ?? for
district number in a user’s control group, a designer (user) is permitted to see all projects, in all districts, which have been assigned to their company (project).

**User Control Group:** CD??A123

**Project Control Group:** CD##A123, where ## is the district number, and A123 is the company code, as defined in TRNS*PORT PES.

If you are unable to access a project, contact your District Estimates Office. In the early design phase, it is possible that the project has not been assigned to your company. In later design phases, it is possible that the project has changed control for estimating and/or letting purposes. The Project Manager and/or District Estimates Office will make arrangements to return control to designers if/when revisions are necessary. Addendums (revisions after advertisement) must be coordinated with the District Estimates Office.

**Roles:** Most designers are given the role “Designer”. This role allows the designer to access the Designer Interface, as well as to run selected reports. Non-Designers may be given the role “Public”, to allow report access without the Designer Interface. Specialized roles are available to FDOT reviewers and estimators; contact the District Estimates Office for additional information.

### 9.2 Webgate

The Webgate is an internet page that serves as a doorway to the Designer Interface, Reports Menu, and other applications. It is accessed with the RACF userID and password.

#### 9.2.1 Menu

The screen below shows the options available at the Webgate menu.
The Webgate (formerly known as the Designer Web pages) was developed by FDOT to assist the Designer with pay item needs. With the Webgate, the designer uses an internet connection (dial-up, DSL, cable, etc.) to access the web pages located at https://www3.dot.state.fl.us/TrnsportReports/default.asp
Additional Instructions and “Helpful Hints” handouts are located on the Estimates web pages at http://www.dot.state.fl.us/estimates/training/training.htm

9.2.2 Designer Interface
The Designer Interface is a tool used for loading project pay items into TRNS*PORT’s Project Estimating System (PES) module.

Projects are initiated in the FDOT Financial Management (FM) System. The District Estimates staff creates a project in PES, and transfers FM information into the header. The District Estimates staff then sets the control group, based on the design firm assigned to work on the project. Additional details are provided below for using the Designer Interface.

9.2.3 Reports
The Reports menu allows users to select and produce reports based on current “live” information. Some of the reports are based on historical (awarded) projects, while other reports are based on future (proposed) projects. Additional details are provided below for using the Reports.

9.2.4 Other Applications
Additional applications, including LRE (Long Range Estimates System), are available from the Webgate menu. Note that additional “roles” may be required to fully utilize these applications. Contact your District Estimates Office for information and/or to request access to these applications. Access will be based on the applications needed to complete the FDOT work assigned to a user and/or their employer.

9.3 Designer Interface

9.3.1 Project Access and Verification
Once assigned to a project, the designer should verify:
   a) that the project exists (or that proper control has been given)
   b) that all project header information is correct

If proper control is not given, the project will not appear on the designer’s list of available projects. The designer should contact the District Estimates Office to request control. See below for more information on Control Groups.

9.3.2 Headers
TRNS*PORT information is grouped at various levels:
   Proposal
   Project
Category (aka Design Group)
Pay Item
Each level includes information applicable to the levels above and/or below it.

Proposal Headers: The District Estimates Office creates the proposal prior to the letting. The proposal is used to “link” or “string” one or more projects, for letting purposes. All projects must be assigned a proposal number prior to advertisement.

Note: The State Estimates Office recommends that the proposal be created between 90-100% plans. Creating the proposal prior to 90% plans is possible, but causes PES issues when adding or deleting pay items- section and line numbers must be re-generated within PES, prior to producing a proposal summary. Currently, the designer must request that the District Estimates Office “Generate Section and Line Numbers.”

Project Headers: When first given access to the project, and at each design phase, the designer must verify the project header information. While much of this information is automatically transferred from FM to TRNS*PORT, the designer should check the letting date, spec year, and other information. Any errors should be immediately reported to the FDOT project manager for correction.

If project header information is incorrect, DO NOT attempt change it; this information is refreshed nightly from FM. It MUST BE CORRECTED IN FM. The designer should contact the FDOT project manager prior to making any changes. The project manager will coordinate FM changes with the responsible office(s) in the district. See below for more information on Project Headers.

Category Headers: From the project level of the Designer Web Pages, the designer can select, copy, and/or delete categories. At a minimum, each component set of plans (structures, roadway, lighting, etc.) must have a corresponding category. In accordance with the Plans Preparation Manual (PPM), it is possible to have minor/incidental work from another design group included on the roadway plans, yet still have a separate category for pay items. Unused categories should be deleted.
Items are categorized by pay item range:

<table>
<thead>
<tr>
<th>Item Numbers (Specification Sections)</th>
<th>SUBJECT/GROUP</th>
<th>TRNS*PORT Category / Design Group/ Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-102</td>
<td>MOT</td>
<td>0200 Roadway</td>
</tr>
<tr>
<td>103</td>
<td>Temporary Structures</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>Erosion Control</td>
<td>Drainage Environmental</td>
</tr>
<tr>
<td>106-108</td>
<td>Environmental Coordinator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water/Erosion Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Air Quality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decontamination/Hazardous Materials</td>
<td></td>
</tr>
<tr>
<td>109</td>
<td>Field Office</td>
<td></td>
</tr>
<tr>
<td>110-199</td>
<td><em>Dirt</em> Earthwork</td>
<td>Roadway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Erosion Control</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Topsoil/Vegetation</td>
</tr>
<tr>
<td>200-299</td>
<td>Base Courses</td>
<td></td>
</tr>
<tr>
<td>300-399</td>
<td>Surface Courses, Concrete Pavement</td>
<td>0100 Structures or 0200 Roadway</td>
</tr>
<tr>
<td>except 346-347</td>
<td>Concrete</td>
<td></td>
</tr>
<tr>
<td>400-499</td>
<td>Structures</td>
<td>0100 Structures</td>
</tr>
<tr>
<td>except 425-449</td>
<td>Drainage Structures</td>
<td>0200 Roadway</td>
</tr>
<tr>
<td>500-515</td>
<td>Incidental Construction- Structures</td>
<td>0100 Structures</td>
</tr>
<tr>
<td>516-559</td>
<td>Incidental Construction- Roadway Items</td>
<td>0200 Roadway</td>
</tr>
<tr>
<td>560-569</td>
<td>Incidental Construction- Structural Paint</td>
<td>0100 Structures</td>
</tr>
<tr>
<td>570-599</td>
<td>Incidental Construction- Turf &amp; Landscaping</td>
<td>0200 Roadway or 0600 Landscaping</td>
</tr>
<tr>
<td>600-699</td>
<td>Traffic Control Devices (Signals)</td>
<td>0500 Signals</td>
</tr>
<tr>
<td>700-714</td>
<td>Traffic Control</td>
<td>0300 Signing</td>
</tr>
<tr>
<td>715</td>
<td>Traffic Control- Lighting</td>
<td>0400 Lighting</td>
</tr>
<tr>
<td>720-740</td>
<td>Incidental Construction- Other</td>
<td>0200 Roadway</td>
</tr>
<tr>
<td>741-749</td>
<td>Incidental Construction- Traffic Monitoring (TMS)</td>
<td>0550 ITS</td>
</tr>
<tr>
<td>750-770</td>
<td>Incidental Construction- Other</td>
<td></td>
</tr>
<tr>
<td>780-789</td>
<td>Intelligent Transportation Systems (ITS)</td>
<td>0550 ITS</td>
</tr>
<tr>
<td>800-899</td>
<td>Mass Transit (Railroad)</td>
<td>0900 Mass Transit</td>
</tr>
<tr>
<td>1000-1999</td>
<td>Utilities</td>
<td>0100 Structures</td>
</tr>
</tbody>
</table>

NOTE: While pay item ranges are generally grouped by category, some items may be used in multiple categories. Refer to the specific items for details.

**Bridge Category Header:** The bridge header requires information specific to each structure. Each bridge must be loaded into a separate category, with details specific to that bridge. With each bridge category, the Designer Interface requires that the bridge
category header information, specifically the bridge ID, be entered prior to loading/editing pay items. The following fields must be completed:

**Alternate Code:** leave blank unless using alternate structures. Contact your District Estimates Office for assistance when considering alternate structures.

**Bridge Length (feet):** Enter the total bridge length, not including approach slabs.

**Bridge Width (feet):** Enter the total bridge deck width, from outside to outside of traffic railing. For bridges with variable width, divide the total bridge deck area, outside to outside, by the length to obtain the average width.

**Number of Spans:** Enter the correct number

**Bridge Type:** Select the appropriate type.

**Bridge ID:** Enter the valid bridge number. For bridge replacements, use the new bridge ID (replacement) number, not the old number.

**Note:** As of April 2005, the list of bridge types and the corresponding definitions are under review. Contact your District Estimates Engineer if assistance is needed. An updated list will be included with the October 2005 update.

**Begin/End Termini:** Not used.

**Superstructure Type:** Select the appropriate type; for box culverts, select “none”.

**Substructure Type:** Select the appropriate type; for box culverts, select “none”.

**Foundation Type:** Select the appropriate type; for box culverts, select “none”.

**Structure Location:** Select the appropriate type.

**Structure Work Type:** Select the appropriate type; for pedestrian overpass, select “Miscellaneous”.

**Pay Item Header:** Pay Item header information (description, unit of measure, etc.) is maintained by the State Estimates Office, Engineering Systems Support section. Any errors in the pay item header should immediately be brought to the attention of the State Estimates Office.

If the pay item description does not meet the project needs, refer to Chapter 6 for Requesting a New Pay Item. Additional items can be created within 24 hours, pending approval of the specifications. See below for additional information regarding pay items.

### 9.3.3 Leading Zeros

Leading zeros for pay items are optional, except as required by the TRNS*PORT system.

**Designer Web Pages / Summary of Pay Items:** When entering English items 50- through 999 into the TRNS*PORT system, a leading zero must be added before the first group of digits, i.e. 102- 1 becomes 0102- 1. (A leading zero replaces the leading space only in the first group of digits.) Metric items and English Utility items are unaffected, as they already have four numbers in the first group of digits.
Comp Book Forms: Automated comp book forms use pay items generated by the TRNS*PORT system, and therefore will include the leading zero. (The automated comp book forms may also be used by TRNS*PORT's Site Manager module. The leading zero must be retained on these forms.)

CADD Forms: CADD forms, including tabulation sheets in the plans, will be accepted with or without the leading zero.

Other Documents: The plans, specifications, standards, and other documents, including the BOE, will continue to refer to the item numbers without the leading zero.

### 9.3.4 Alternates

Pay Item Alternates use a 3 character code to describe the Category, alternate group, and item(s) within the group. Using structures alternates as an example, category letter would be A. The first alternate group would be A, and the items for the alternates would start with 1. For bid items, with the above example, the alternate code might be:

- AA1 Item 0450-999-1
- AA1 Item 0450-999-2
- AA1 Item 0450-999-3
- AA2 Item 0450-999-4
- AA2 Item 0450-999-5

In the above example, the contractor would be required to bid either the AA1 or AA2 group, that is, AA1 group items 0450-999-1, 0450-999-2, and 0450-999-3 OR AA2 group items 0450-999-4 and 0450-999-5.

If there is a need to consider alternate categories (rather than just alternate items), contact your District Estimates Office for assistance.

### 9.3.5 Participating/Non-Participating Field

The column labeled “Non-Part” within the designer interface screens and reports is an indicator or “flag” for those items not participating in the major funding group, as defined in PES. Designers are no longer able to change this field. Please consult with your District Estimates Engineer if unusual funding is anticipated.

### 9.3.6 Pay Items, TRNS*PORT Category, and Component Plans

Pay items within a category must correspond to the work shown in the component plans. For example, the signals items shown in the signals category/summary of pay items must correspond to the work shown in the signals plans.

Category totals are used for reporting purposes. Ensure that all work shown in a category uses the appropriate items for that category. Additional reminders are as follows:

- For landscaping- all work must be detailed in the plans.
- For structures- each bridge must be entered separately. All work associated with each structure must be entered accordingly.
- For ITS- only projects identified by the State ITS office, with ITS funding, are to be entered with ITS pay items. (Signals projects without ITS funding should use signals items with signals plans, even for computerized or future ITS installations.)
For Signals- use signals pay items.
For lighting- use lighting pay items.

Note: Some items are valid in multiple categories; they include directional drilling, jack & bore. Some items are separated by category and specification; they include conduit (separate items for lighting, signals, ITS, and utilities), fiber optic, pull & junction boxes, electrical work, and foundations. Select the pay item appropriate for the category and work to be completed. Refer to the specifications for materials and installation requirements.

When a project does not have a roadway component (structures only, signals only, landscape only, etc.), the “roadway” pay items are loaded into the category that corresponds with the primary component plans. For example, Mobilization and Maintenance of Traffic are included in the signalization component plans & category of a “signalization project” without roadway plans. The pay items within a category will continue to correspond to the work shown in each of the component plans.

9.4 Reports

9.4.1 General
Many of the reports are available to any user with access to the Reports Menu. The reports listed below are generally used by the Designer, with the “Designer” role. Users with a “Public” role may not have access to all of the reports listed below.

The following definitions are important in TRNS*PORT.

Project: A single project, with appropriate Financial Project number, header information, funding, items, etc.
Proposal: One or more projects combined for the purpose of creating a contract for letting. Projects are “strung” only when combined to form a proposal. The District Estimates Office, according to district practices, will create proposals.

9.4.2 Project Edit Report
The Project Edit Report is the single most important report. It should be run at the project level after updating any items or quantities, after an update bulletin, or after a project has been idle or “shelved” for a period of time. In addition to listing the current items and quantities, this report will provide an item check based on the proposed letting date.

9.4.3 Master Pay Item List
The Master Pay Item List is a list of items currently available in the TRNS*PORT PES module. It also includes valid (effective/obsolete) dates, a Tech Spec flag, and a Reference Price from LRE. Additional items are opened upon request; refer to Chapter 6 for additional information.

Note: The Reference Price is for general information only. It is based on a weighted average, with extreme high/low values removed. It should NOT be used for project estimates, without consideration of other project conditions.

9.4.4 Proposal Summary of Pay Items (CADD)
After the District Estimates Office has created a proposal, the Designer will be able to select a Proposal Summary of Quantities from the Reports menu. After entering the proposal number, a report (.txt format) will be sent to the CADD ftp site. The designer can download and import the file according to established CADD procedures.

For early phase reviews (up to 90%, or until the proposal has been created), the Project Summary of Quantities Report must be used. (No proposal, no proposal report.) If multiple projects are anticipated to be let together, the Designer should be sure to print each project’s Summary of Quantities for review. These reports may be printed on standard 8.5” by 11” paper.

For later phase reviews (90%, or after the proposal has been created), the Proposal Summary of Quantities Report should be used. After the Designer submits the report from the interface menu, the output will be sent to the CADD ftp site in 5-10 minutes.

9.4.5 Project Summary of Pay Items
This report will print in .pdf format for a specified project. This report will be used for early phase reviews. Note: If a proposal has already been created, the proposal number will be included in the report header.

9.4.6 Project Item List
This report will list the items and quantities for a given project number.

9.4.7 Pay Item Average Unit Cost
This report will provide historical project information for specific pay items. Note: The pay items must be entered individually, rather than as a group. This report is helpful when detailed project information is needed for a specific pay item.

9.4.8 Item Average Unit Cost
This report provides a historical average for a pay item range, over a specified date range. This report is helpful when general price information is needed for selected pay item(s).

9.4.9 Custom Reports
The State Estimates Office has the ability to create and/or run custom reports for user specified criteria. Please contact your District Estimates Office if custom reports are needed.

Note: Pricing for individual projects does not require a custom report. Pricing (Authorization and Official Estimate) before the letting is completed by the District Estimates Office using the TRNS*PORT CES module. Design estimates should be project specific- based on specifications, location, market area, materials, quantity, equipment, labor, and other related factors.

Chapter 9 Revision History
10-30-09: Updated header dates for 2010 edition. Updated formatting for section &
subsection titles.
1-27-09: Expanded 9.3.6 to include instructions for projects without roadway component plans.
10-1-08: Updated 9.3.6 Pay Items, TRNS*PORT Category, and Component Plans to include examples of items/category usage.
Chapter 10
Formatting Pay Items

10.1 General
The purpose of this Chapter is to assist those responsible with maintaining the pay item structure and associated documentation. It will also assist users with understanding how/why pay items are formatted.

Much of the information in this Chapter begins as a Pay Item Request. Refer to Chapter 6 for information on completing the pay item request form.

This chapter should be considered a guide for pay items. It is not a restriction on how they may/may not be used. Each pay item should be evaluated based on the many needs of our customers: Design, Estimates, Construction, Contracts, and Management. Note that the needs of one group may be considerably different than those of another. Communication between these groups, whenever a pay item is evaluated, is essential.

10.2 Format / Legend

The pay item information shown in the online BOE is formatted as follows:

<table>
<thead>
<tr>
<th>Pay Item Number</th>
<th>PAY ITEM DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
<td>Pay Item Request</td>
</tr>
<tr>
<td>Details</td>
<td>Pay Item Description</td>
</tr>
<tr>
<td>Related Items</td>
<td>Required</td>
</tr>
<tr>
<td>Forms</td>
<td>Recommended</td>
</tr>
<tr>
<td>Documentation</td>
<td>Design</td>
</tr>
<tr>
<td>References</td>
<td>Construction</td>
</tr>
<tr>
<td>TRNS*PORT Category</td>
<td>Design</td>
</tr>
<tr>
<td>Status</td>
<td>English Structure</td>
</tr>
<tr>
<td>Structure</td>
<td>English Structure</td>
</tr>
<tr>
<td>Structure Notes</td>
<td>Pay Item Number: Each 10 digit Pay Item is structured into three parts: 1234-567-890. Spaces and/or digits may be used to detail an item.</td>
</tr>
</tbody>
</table>
Within the first group (first 4 digits), the leading digit indicates the unit system: 0 - English, 1 - English Utilities, 2 - Metric, 3 - Metric Utilities, 9 - Special. The remaining digits (second through fourth digits), identify the applicable Specification Section.

The remaining groups (fifth through tenth spaces/digits), are descriptive fields, as detailed for each item. These variables are described in the pay item structure below.

**Pay Item Description:** The Description. This description may be abbreviated on some reports, due to space constraints. The Complete (Long Description) is used whenever possible.

**Unit:** Unit of measure, as defined in Chapter 2. When secondary units are shown, they are intended for estimating purposes, and should be documented in the Comp Book or plans as instructed.

**Accuracy:** The degree of accuracy of decimal rounding for the total quantity of the item. Intermediate computations should be made to at least the next higher decimal.

**Important Notes or Dates:** Many pay items are blocked or opened with an effective letting date. Verify that the applicable dates correspond a project’s scheduled letting date. TRNS*PORT PES will verify dates for selected pay items.

Important dates are normally shown in this field for 1 year after implementation of the change.

**Detail:** Description of the most common usage of the pay item, intended to assist designers with the selection of pay items. Also includes, when necessary, detailed information useful to the designer for calculating quantities and determining related pay items. Text may include "Use When...", “Do not use when...”, "Estimate xx items per...", and/or "Item(s)... are recommended/required when this item is used."

See errors & omissions below for an explanation of missing detail information.

**Related Items, Recommended:** Lists item numbers that are recommended, or should be considered, when using this pay item.

**Related Items, Required:** Lists item numbers that, under normal circumstances, are required when using this pay item.

**Original, Design:** Available Methods for documentation of design quantities in the plans and/or computation book, with appropriate form numbers noted.
When both a CADD and COMP book form are listed, the designer should select the appropriate form based on the item and form contents. Some forms have additional fields to detail complex lines, grades, areas, and/or other features. **Do NOT use both a CADD and COMP book form for the same item.**

**Final, Construction:** Required methods for detailed back-up calculations and documentation of final pay quantities, with appropriate form numbers noted.

**Plan Quantity?** Indicator (Yes or No) that this item is (or is not) designated to be paid under the Plan Quantity concept, per Article 9-1.3.2 of the Specifications. Refer to specifications for measurement and payment details.

**References, PPM Chapter, SDGs, Other:** *This field is currently under development.* Links are provided to applicable Plans Preparation Manual Chapter(s), Structures Design Guidelines, or other design references.

**FEPDM:** Final Estimates Preparation and Documentation Manual reference chapter number(s), when applicable.

**Standards:** Indicates the index sheet number(s) for the applicable Design Standards. When listed, the pay item must be used in accordance with the referenced standard. Contact the BOE Coordinator and/or Responsible Office for non-standard applications. Non-standard applications may be required to use a different pay item number.

**Specifications:** *This field is currently under development.* Links are provided to current Standard Specifications (Specifications Book) and/or current workbook. These links are for reference purposes only; the designer is responsible for using applicable specifications, as available from the State Specifications Office. Contact your District Specifications Office for further assistance.

**Plan Detail and/or Tech Spec recommended:** Coordinate with your District Specifications Office. If blank, a Tech Spec is not normally necessary.

**NOTE:** If the current specifications do not appropriately cover the work necessary for a given project, a plan detail and/or Tech Spec may be necessary. Standard Specifications DO NOT normally cover “custom”, “modify”, “special”, or “relocate”, as these are project specific situations. Plan Details and/or Tech Specs will be required. Remember- complete specifications for each pay item include a description of the work, materials and/or equipment required, construction or performance requirements, method of measurement, and basis of payment.

**Status:** Indicates the status of the Item Structure. Refer to Chapter 6 for assistance with items that are not currently open in the Master File.
**TRNS*PORT Category:** This is the recommended TRNS*PORT category for normal usage of the pay item. Pay items within a category must correspond to the work shown in the component plans. Additional details are included in Chapter 9 for loading pay items into TRNS*PORT.

When an item is used outside of the recommended category, the designer and reviewer should consider whether the appropriate item is used, in accordance with the specifications (signals items used for signals work, lighting items used for lighting work, etc.).

### 10.3 Pay Item Structure

The Pay Item Structure may vary between items, but the intent is to define the operation and variables needed to pay for the work and/or materials provided.

<table>
<thead>
<tr>
<th>Pay Item Structure</th>
<th>Item Description</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay Item Structure- Operations and other variables</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td><strong>Common Operations</strong> - refer to individual items as needed:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Furnish &amp; Install)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 (Furnish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 (Install)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 (Relocate)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 (Adjust &amp; Modify)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 (Remove &amp; Dispose)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 (Remove &amp; Stockpile)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 (Plug &amp; Place out of service)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 other item specific operation, as needed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FURNISH & INSTALL:** Includes all work and materials necessary for a complete installation in accordance with the contract documents (plans, specs, standards, etc.).

**FURNISH:** To be used ONLY with approval of ____. Do not furnish additional items to DOT maintenance yards using construction funds. When requested, and funded by the maintaining agency, the furnish only item may be used. Plans or specifications must detail instructions for delivery of item(s) to the maintaining agency. Do not use separate “Furnish” and “Install” pay items for the same item of work.

**INSTALL:** To be used ONLY when the item is to be furnished by the Department or other maintaining agency. Plans or specs should clearly identify the item(s) to be installed, pick-up/delivery instructions, as well as installation instructions. Payment includes any incidentals necessary (furnished by the Contractor) for a complete installation.
RELOCATE: Ensure that the existing item is in good condition; may not be cost effective to relocate an old/obsolete item. Plans or specs should clearly identify the item and initial/final locations. As needed, detail incidental items to be furnished by the Contractor for a complete installation. Clearly identify conditions under which item replacement (damaged by contractor) is needed.

ADJUST/MODIFY: Detail minor work to be completed by the Contractor. Incidental items to be furnished by the Contractor.

REMOVE: Plans or specs should identify if contractor is to take ownership, stockpile, or deliver item(s) to a FDOT maintenance yard.

REMOVE & DISPOSE (Contractor takes ownership): Plans or specs should identify limits of item to be removed: incidental components, foundation, wiring, or other work.

REMOVE & STOCKPILE (DOT/maintaining agency retains ownership): Plans or specs should identify if contractor is to stockpile or deliver item(s) to a FDOT maintenance yard.

PLUG & PLACE OUT OF SERVICE: Plans or specs should identify materials and work to be completed.

SPECIAL/CUSTOM: To be used only when there is a significant deviation from the standard item or work to be completed: existing specifications and/or standards do not apply. Complete details including description, materials, installation, maintenance, method of measurement, and basis of payment are to be included in the plans or specifications.

10.3 Pay Item Ranges and Other Variables

The pay item structure ###-abc-def, should be used to define parameters which affect the price (i.e. size, shape, material), where variables a through f are detailed as needed. Parameters which do not affect the price may be detailed in the plans; DO NOT create additional pay item variables for these parameters. Limited structures can be used to encourage price competition between products that perform similar functions and/or provide similar end results (i.e., more items, less history per item).

Ranges are established to combine items/sizes with similar installed costs. When a pay item range is used, the designer must specify the specific size/shape needed on the plans and/or tabulation sheet(s). Ranges are not intended as a "contractor's option".

For most reports, including the Master Pay Item List and Pay Item Summary, descriptive information, such as size, shape, and color, will be included after the primary description. The title and/or description may be abbreviated on various reports, as necessary.
Currently open pay item combinations are shown following the pay item structure. For additional information on opening or requesting new pay items, refer to Chapter 6.
10.4 Where to Find It

As noted above, the first 3 digits of the pay item corresponds to the applicable specification section. The following table is helpful for finding the pay item group. Note that it does not include all possible section numbers; it is only a guide help identify “Where to find it…”

<table>
<thead>
<tr>
<th>Pay Item Group/ Specification Section</th>
<th>Description, including key words for searches</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>Mobilization</td>
</tr>
<tr>
<td>102</td>
<td>Maintenance of Traffic</td>
</tr>
<tr>
<td>104</td>
<td>Erosion Control</td>
</tr>
<tr>
<td>110</td>
<td>Clearing and Grubbing</td>
</tr>
<tr>
<td>120-175</td>
<td>Excavation, Embankment, and other Earthwork</td>
</tr>
<tr>
<td>200s</td>
<td>Base Courses</td>
</tr>
<tr>
<td>300-341</td>
<td>Bituminous Mixtures, Milling, Superpave, Friction Courses</td>
</tr>
<tr>
<td>346-347</td>
<td>Portland Cement Concrete</td>
</tr>
<tr>
<td>350-353</td>
<td>Concrete Pavement</td>
</tr>
<tr>
<td>400</td>
<td>Concrete Structures</td>
</tr>
<tr>
<td>415</td>
<td>Reinforcing Steel</td>
</tr>
<tr>
<td>425-449</td>
<td>Drainage: Inlets, Manholes, Junction Boxes, Pipe, Trench Drain, Underdrain, French Drain, Edgedrain</td>
</tr>
<tr>
<td>450</td>
<td>Precast, Prestressed Concrete</td>
</tr>
<tr>
<td>455</td>
<td>Structures Foundations: Piling, Drilled Shafts</td>
</tr>
<tr>
<td>470</td>
<td>Timber Structures</td>
</tr>
<tr>
<td>508-510</td>
<td>Movable Bridges: Navigation Lights, Machinery</td>
</tr>
<tr>
<td>520s</td>
<td>Concrete Gutter, Curb, Barriers, Traffic Separator, Sidewalk</td>
</tr>
<tr>
<td>523</td>
<td>Patterned/Textured Pavement</td>
</tr>
<tr>
<td>530</td>
<td>Riprap</td>
</tr>
<tr>
<td>534</td>
<td>Sound Barriers</td>
</tr>
<tr>
<td>536-538</td>
<td>Guardrail</td>
</tr>
<tr>
<td>550</td>
<td>Fencing</td>
</tr>
<tr>
<td>555-557</td>
<td>Directional Bore, Vibratory Plowing, Jack &amp; Bore</td>
</tr>
<tr>
<td>570-580</td>
<td>Grassing, Seeding, Sodding, Landscaping, Trees, Plants</td>
</tr>
<tr>
<td>600s</td>
<td>Signaling: Conduit, Mast Arms, Detectors, Cabinets</td>
</tr>
<tr>
<td>700-705</td>
<td>Signaling, Delineators</td>
</tr>
<tr>
<td>710-714</td>
<td>Pavement Markings: Paint, Thermo</td>
</tr>
<tr>
<td>715</td>
<td>Lighting: Poles, Conduit,</td>
</tr>
<tr>
<td>780s</td>
<td>Intelligent Traffic Systems (ITS)</td>
</tr>
<tr>
<td>800s</td>
<td>Mass Transit</td>
</tr>
<tr>
<td>900s</td>
<td>Special, Developmental, Trial Items</td>
</tr>
</tbody>
</table>
10.5 Errors, Omissions, Comments

The Engineering Systems Support Section of the State Specifications and Estimates Office maintains the Basis of Estimates, Pay Item Structure, as well as the Master Pay Item List(s). Details, notes, and documentation information is based on information provided with the pay item request. When a detail is missing or incomplete, you may contact the responsible coordinator (listed in Chapter 5), or submit a recommendation via e-mail. Links are provided within the BOE pages on the Specifications and Estimates Office web pages at http://www.dot.state.fl.us/specificationsoffice/.
While we make every effort to provide the most current information, pay items and related FDOT handbooks/manuals are continuously developing.

If an error is found with any of the BOE content, please notify the State Specifications and Estimates Office- Engineering Systems Support Section.

We appreciate your comments and suggestions.

Chapter 10 Revision History

9-16-09: Added 10.3 Pay Item Structure, with guidance on common operations. Corrected Office and web links to “State Specifications and Estimates Office”.
1-28-09: Expanded 10.2 to include TRNS*PORT Category.
### Design / Build

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This item to be used for Districts letting Design-Build projects. This item to be used only when identified by the District as a &quot;Design-Build&quot; project. Include Initial Contingency Amount under 999-25 (2999-25) item.</td>
</tr>
<tr>
<td></td>
<td>When multi-category work is called for, use the pay item structure that represents the largest percentage of the total dollars.*</td>
</tr>
</tbody>
</table>

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>999-25 (2999-25)</td>
<td>Refer to Comp Book</td>
</tr>
<tr>
<td>Construction</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
<td></td>
</tr>
</tbody>
</table>

### Documentation

<table>
<thead>
<tr>
<th>Design</th>
<th>Contractor is responsible for design. The computation book, if required, will show lump sum tasks (lump sum constructed project pay items), as listed in the proposal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Any adjusted final quantities for the lump sum payment will require appropriate documentation and Supplemental Agreements. The &quot;as-built&quot; final plans must show any additions/deletions that occurred on the project.</td>
</tr>
</tbody>
</table>

### Plan Details and/or Technical Specifications required

### Preparation and Documentation Manual Chapter(s)

| 11 |

### TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

### Status

#### Structure: 50-A Design / Build

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESIGN - BUILD, RESURFACING</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>DESIGN / BUILD, ROADWAY</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>DESIGN / BUILD, BRIDGE CONSTRUCTION</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>DESIGN / BUILD, BUILDING / TOLL FACILITY / REST AREA / SERVICE PLAZA</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>DESIGN / BUILD, TRAFFIC OPERATIONS</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*
### MOBILIZATION

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/LS</th>
<th>Accuracy</th>
<th>Lump Sum</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

**Notes**

Consists of work and operations necessary to begin work on a project. Includes moving in equipment and personnel, establishing temporary offices, safety equipment and sanitary facilities. May include surveying, bond and insurance expenses. In some cases, may consist of security services and/or expenses associated with night work.

For contracts with more than one project, the pay item for Mobilization will be shown on each project's Summary of Pay Items. An exception to this is when the contract contains a Joint Project Agreement (JPA); the Mobilization will not be shown on the Summary of Pay Items for the JPA; the cost of Mobilization will be included in the prime project.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
</tr>
<tr>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
</tr>
<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
</tr>
<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

**References**

PPM Chapter

Other

Standards

Specifications Section 101

Prep & Doc Manual Chapter(s) 7, 13

### MAINTENANCE OF TRAFFIC

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/DA</th>
<th>Accuracy</th>
<th>Lump Sum (Day)</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

**Notes**

Includes all items required to safely maintain traffic throughout a transportation work zone with minimal inconvenience to the public and fit into one of the following categories:

1) cannot reasonably be quantified;
2) cannot be addressed under current pay items;
3) are incidental to the operations necessary to safely maintain traffic throughout a work zone.

Code the second unit of measure (number of days) from the construction day estimate.

For contracts with more than one project, the pay item for Maintenance of Traffic will be shown on each project's Summary of Pay Items. An exception to this is when the contract...
contains a Joint Project Agreement (JPA): the Maintenance of Traffic will not be shown on
the Summary of Pay Items for the JPA; the cost of Maintenance of Traffic will be included
in the prime project.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tr>
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</tr>
<tr>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
</tbody>
</table>

**Construction**

| Design | Refer to Comp Book |

**Documentation**

| Design | Use a quantity of 1, but calculations and documentation must be to the
second unit of measure. Locate or define the scope of work involved on the plans. |

| Construction | Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances. |

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
</tr>
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</table>

| Standards | Index No. 600 |
| Specifications | Section 102 |

**Prep & Doc Manual Chapter(s)**

| 7, 13 |

**TRNS*PORT Category (DRAFT FIELD):**

| 0200 Roadway |

**Struct.**

| 102- 1- MAINTENANCE OF TRAFFIC LS/DA |

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**102- 2- AA SPECIAL DETOUR**

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<th>Unit</th>
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<td></td>
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</table>

**Notes**

Details

Consists of work and materials necessary to construct a diversion (Temp Roadway). May also include temporary bridge (Acrow panel, or similar.) The quantities for major items necessary for the Special Detour shall be shown in the plans but paid for under Special Detour. Items that will be used in the Special Detour that will remain as part of the final product will be paid for under the appropriate pay item (i.e., earthwork). Show the limits of each Special Detour in the plans. Traffic control devices, warning devices, barriers, signing and pavement markings will be paid for separately.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
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<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
</tbody>
</table>

**Construction**

| Design | Refer to Comp Book |

**Documentation**

| Design | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor. |

| Construction | Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances. |
**Struct.  102-  2- AA SPECIAL DETOUR LS/LS**

AA = Detour Number
1 (First Detour Of Several)
2 (Second Detour Of Several)
3 (Third Detour Of Several)
4 (Fourth Detour Of Several)
N (Nth Detour Of Several)
N = 1 Thru 30

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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### 102-3- COMMERCIAL MATERIAL FOR DRIVEWAY MAINTENANCE

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<tbody>
<tr>
<td>CY; M3</td>
<td>Cubic Yard; Cubic Meter</td>
<td>no</td>
</tr>
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</table>

**Notes**

Consists of furnishing and placing suitable material which may be necessary for providing safe access to businesses and residences affected by the construction. If authorized, portions of this material may be salvaged and reused at other driveways along the length of the project.

**Quantity Estimation:** Use 250 cubic yards per mile (200 cubic meters per kilometer) on rural projects and 500 cubic yards per mile (400 cubic meters per kilometer) on urban projects. Use 250 cubic yards (200 cubic meters) as a minimum.

Per the specification, "The quantity to be paid for will be the certified volume, in cubic yards, of all materials authorized by the Engineer, acceptably placed and maintained for driveway maintenance. The volume, which is authorized to be reused, and which is acceptably salvaged, placed, and maintained in other designated driveways will be included again for payment."

**Related Items**

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
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**Documentation**

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<tbody>
<tr>
<td>Construction</td>
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<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</tbody>
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**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
<th>Standards</th>
<th>Specifications</th>
<th>Prep &amp; Doc Manual Chapter(s)</th>
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<tbody>
<tr>
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<td></td>
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<td>Section 102</td>
<td>7, 13</td>
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**TRNS*PORT Category (DRAFT FIELD):**

- **0200 Roadway**

**Status**

**Struct. 102-3- COMMERCIAL MATERIAL FOR DRIVEWAY MAINTENANCE CY**

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*
**102- 11-**

**SERVICE PATROL- ROAD RANGER OR SIMILAR**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>MH</td>
<td>Hour</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Used when it is determined during design that an active service patrol ("Road Ranger" or similar service) will be needed to keep traffic flowing. The Traffic Control Plan (TCP) or Technical Special Provisions should explain when and where the service patrol will be needed, as well as what type of services will be provided, and what type of service vehicle will be needed. Time shall be based on an 8 hour day.

Coordinate services with District Office(s) that may have a Road Ranger service in effect-Maintenance, Operations, Construction, or other. Do not duplicate services that are available under a separate contract. Refer to Traffic Operations web page for additional information on Road Ranger services.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
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**Forms**

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**Construction**

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<tr>
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<tbody>
<tr>
<td>Standards</td>
<td>Index No. 600</td>
</tr>
<tr>
<td>Specifications</td>
<td>Plan Details and/or Technical Specifications required</td>
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</table>

**Prep & Doc Manual Chapter(s)**

7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0200 Roadway

**Status**

<table>
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<tr>
<th>Struct.</th>
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<tbody>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<td>D</td>
<td>1/1/2010</td>
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</tbody>
</table>

**102- 14-**

**TRAFFIC CONTROL OFFICER**
Provide uniformed traffic control officers, including marked law enforcement vehicles, to assist in controlling and directing traffic in the work zone ONLY when the following types of work is necessary on projects:
* traffic control in a signalized intersection when signals are not in use,
* when standard index no. 619 is used on Interstate at nighttime and called for in the plans,
* when standard index no. 625 or 655 are used,
* when traffic pacing is called for in the plans or approved by the Engineer, or
* when pulling conductor/cable above an open traffic lane on limited access facilities, when called for in the plans or approved by the Engineer.

The Department will include pay item 102-14 for officers directing traffic as defined above. For Speed and Law Enforcement officers, see pay item 999-102.

### Related Items

<table>
<thead>
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<th>Recommended</th>
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<td>999-102-xxa</td>
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### Forms

**Construction**

| Design | SHTabQuant: Tabulation of Quantities Sheet |

**Documentation**

| Design | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. |
| Construction | All field records are required for this item. Final payment is based on field book/records. |

### References

PPM Chapter

Other Standards

Specifications

**Section 102**

Plan Details and/or Technical Specifications required

### Status

**Struct.** 102-14

TRAFFIC CONTROL OFFICER

MH

### Notes

Refer to 999-102 for Speed/Law Enforcement.

### Details

Used for the purpose of informing motorists of the work zone and work zone related (i.e. temporary regulatory or temporary route) conditions that will be encountered. Tabulate the number of individual sign panels (20 square feet or less)/(1.9 square meters or less) as
recorded per day for each phase of the project. When multiple signs are located together on a single or multiple posts, each sign panel will be paid for individually.

Non-standard sign panels, including Project Information Signs, (greater than 20 square feet)/(greater than 1.9 square meters) will be detailed in the plans and paid for under Maintenance of Traffic, Lump sum.

Refer to PPM (Plans Preparation Manual) Vol 1, Chapter 10 for additional information.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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<tr>
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| Prep & Doc Manual Chapter(s) | 7, 13 |

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>WORK ZONE SIGN ED</th>
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</table>

**Notes**

Signs LESS THAN 20 ft² only- see details above

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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**102- 61- BUSINESS SIGN**

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
</tr>
</thead>
</table>

**Notes**

Used to assist motorists with finding the appropriate business driveway entrance while the roadway is under construction. The quantity is based on one business sign for each business whose driveway entrance could be affected. When several businesses share a common driveway, one sign per common driveway should be estimated.

Per the specifications, “Provide and place signs in accordance with the plans and Design Standards. The maximum sign size is 24 by 36 inches.

Use signs with specific business names on each sign. Install logos provided by business owners and approved by the Engineer. Standard Business entrance signs meeting the requirements of Index 17355 without specific business names may be used only with the approval of the Engineer.”

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Forms</td>
<td></td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>
### Notes

Included for the protection of the traveling public and workers. May be moved from one location to another on the project. Estimate length of wall needed for each phase, and then choose the maximum length anticipated for any one phase to be paid for as Temporary Barrier. Phasing in plans must indicate adequate quantity of barrier prior to calling for relocating of barrier. Add the estimated lengths for the remaining phases together and pay for under Barrier Wall (Temporary) Relocate. When this item is used, include lights or glare screen.

For example:
- 200 LF needed for phase 1 = 200 LF F&I
- 300 LF needed for phase 2 = 100 LF left in place from phase 1 (no movement; no payment) +100 LF Relocated from phase 1 +100 LF F&I
- 150 LF needed for phase 3 = 150 LF relocated from phase 2 (remaining quantity stockpiled; no payment)
- 400 LF needed for phase 4 = 300 LF relocated from earlier phase(s) or stockpile + 100 LF F&I
- 200 LF needed for phase 5 using phase 4 wall in existing location = 0 LF relocated (remaining quantity stockpiled, if needed for later use)

Note: No separate payment for "removal" or "stockpiling"

Maximum quantity F&I for above example: 400 LF
Relocate paid when moved to a new phase, NOT when removing or stockpiling.

**QPL** - Temporary barrier wall shall conform to the requirements of the pre-approved alternatives listed on the Department's Qualified Products List (QPL), unless otherwise called for in the plans.
NOTE: For bridge applications, ONLY Type K permitted.

**Related Items**

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<td>102- 81- 1, and/or 102- 89-xxa</td>
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**Forms**

- **Design**
  - SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

- **Construction**
  - Refer to Comp Book
- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Other**
  - Standards: see detail
  - Specifications: Section 102

**Prep & Doc Manual Chapter(s)**

- 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

- 0200 Roadway

**Status**

**Struct.**

- **102- 71- AB**
  - TEMPORARY BARRIER WALL
  - LF

  - A = Operation
    - 1 (Furnish & Install)
    - 2 (Relocate)
  - B = Material
    - 1 (Concrete)
    - 2 (Water filled)
    - 3 (Low Profile Concrete)
    - 4 (Type K) bridge applications

**Notes**

- Effective 1/04 letting: B= 3, 4

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tr>
<td>0102 71 11</td>
<td>BARRIER WALL, TEMPORARY, F&amp;I, CONCRETE</td>
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<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0102 71 12</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0102 71 13</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0102 71 14</td>
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<tr>
<td>0102 71 21</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

**102- 73-**

**TEMPORARY GUARDRAIL**

Details and Structure: Items 000 to 199
Unit LF; M1  Accuracy Linear Foot; 10th of a Meter  PlanQuantity? no

Notes Details
For Temporary applications, use in accordance with Index 400. Payment includes installation, maintenance, and removal of guardrail.

For permanent applications, refer to 536 items.

Per the specification, "The quantity to be paid for will be the length, in feet, of temporary guardrail constructed and certified as installed/used on the project. The length of a run of guardrail will be determined as a multiple of the nominal panel lengths."

Related Items
Required Recommended
Forms Design SHTabQuant: Tabulation of Quantities Sheet

Documentation
Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Specifications Section 102

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status
Struct. 102-73- TEMPORARY GUARDRAIL LF

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<td>0102 73</td>
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<td>LF</td>
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<td>1/1/2010</td>
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</tbody>
</table>

102-74- A TEMPORARY BARRICADE/CHANNELIZING DEVICE

Notes Details
Included for the protection of workers and the public from hazards within the traffic control zone. The designer is NOT to add plan notes specifying one type of barricade/channelizing device (Type I, II, DI, VP, or Drum).

DI = Direction Indicator Barricade, shown on Index 600.
VP = Vertical Panel

Estimate for each Traffic Control Plan phase based on the type of operation and duration anticipated as follows: Quantity = (Length of Setup / Spacing) X Phase Duration.

Related Items
Required Recommended
Forms Design SHTabQuant: Tabulation of Quantities Sheet
### Specifications Section 102

#### 102-74- A

**TEMPORARY BARRICADE/CHANNELIZING DEVICE**

**A = Type**
1. Types I, II, DI, VP & Drum
2. Type III-6'

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0102 74 1</td>
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<td>ED</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0102 74 2</td>
<td>BARRICADE, TEMPORARY, TYPE III, 6'</td>
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</table>

### 102-76-

**ADVANCE WARNING ARROW PANEL**

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<th>Accuracy</th>
<th>Plan Quantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>Each Day</td>
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</tr>
</tbody>
</table>

#### Notes

Included for the purpose of providing advanced warning of a lane closure. (Not intended for lane shifts.) Estimate the number needed for each Traffic Control Plan phase times the phase duration.

#### Related Items

<table>
<thead>
<tr>
<th>Required</th>
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</table>

#### Documentation

**Construction**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

**PPM Chapter**

Design

Other

Standards

Index No. 600

Specifications

Section 102

Prep & Doc Manual Chapter(s) 7, 13
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>1/1/2010</td>
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</tbody>
</table>

#### 102-77-

**HIGH INTENSITY FLASHING LIGHT, TEMPORARY, TYPE B**

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<th>Unit</th>
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<tbody>
<tr>
<td>ED</td>
<td>Each Day</td>
<td>no</td>
</tr>
</tbody>
</table>

**Details**

Included as a safety device, to draw attention to the warning sign. The lights shall be mounted on the first advanced post mounted warning sign where only one sign is used, and on the first and second advanced post mounted warning signs where two or more signs are used. This applies to all approaches to any work zone. When this item is used, item 102-60 (2102-60) must be used.

Refer to the PPM for Warning Lights.

**Related Items**

- **Required**: SHTabQuant: Tabulation of Quantities Sheet

**Forms**

- **Design**
  - **Construction**: 700-050-51
  - **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**: Vol 1, Ch 10.
- **Other**: Index No. 600
- **Specifications**: Section 102
- **Prep & Doc Manual Chapter(s)**: 7, 13

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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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#### 102-78-

**TEMPORARY RETROREFLECTIVE PAVEMENT MARKER**

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<tbody>
<tr>
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<td>Each</td>
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</table>

Details and Structure: Items 000 to 199
Class A, B, D, or E RPMs used to supplement pavement markings, as shown in Index 600.

**Required**

**Recommended**

**Forms**

**Construction** Refer to Comp Book

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Reference**

PPM Chapter

**Other**

Index No. 600, 17352

**Specifications** Section 102

**Prep & Doc Manual Chapter(s)** 7, 13

**Related Items**

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

**Status**

**Struct.** 102-78- TEMPORARY RETROREFLECTIVE PAVEMENT MARKER

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**102-79-** TYPE C STEADY BURN LIGHT, TEMPORARY, BARRIER WALL MOUNT

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<th>Unit</th>
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<tbody>
<tr>
<td>ED</td>
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</tr>
</tbody>
</table>

**Notes**

These lights are placed on Barrier Wall (Temp), excluding low profile. The standard spacing will be:

- 50’ on centers for transitions,
- 100’ on centers for curves,
- 200’ on centers tangents

Curves that are flat enough to maintain a normal 2% cross slope shall have spacing equal to that of a tangent.

QPL- Temporary barrier wall mount lights shall conform to the requirements of the pre-approved alternatives for temporary concrete or water filled barrier wall listed on the Department's Qualified Products List (QPL).

Barrier mounted wall lights will not be required when glare screen is used.

**Related Items**

**Required**

**Recommended**

**Forms**

**Construction** 700-050-51

**Design** Locate in plans. Summarize quantities by location on tabulation of
quantities sheet in the plans, or detail calculations in the computation book.

**Construction**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
PPM Chapter
Other

**Specifications**
Section 102

**Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 102-79- TYPE C STEADY BURN LIGHT, TEMPORARY, BARRIER WALL MOUNT

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>1/1/2010</td>
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---

**102-81-2 TEMPORARY CRASH CUSHION - GATING**

**Notes**

**Details**
Formerly known as "Impact Attenuator Modules"
Roadway Design permission needed before "sand barrels" may be used; requires special design
QPL- Temporary Gating Crash Cushions shall conform to the requirements of the pre-approved alternatives listed on the Department's Qualified Products List (QPL), unless otherwise called for in the plans.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Documentation**

**Construction**
Refer to Comp Book

**Design**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
PPM Chapter
Other

**Specifications**
Section 102

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 102-81-2 TEMPORARY CRASH CUSHION - GATING LO
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>1/1/2010</td>
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**Notes**

Contact Cheryl Adams prior to use. Project specific conditions must be reviewed.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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</table>

**Related Items**

Required: SHTabQuant: Tabulation of Quantities Sheet

**References**

PPM Chapter: 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

**Notes**

Payment will be made based on each location of the crash cushion/attenuator. Redirective cushions selected by contractor, subject to Design Standards. Restricted options to be detailed in plans and documented in project file.

QPL- Temporary Redirective Crash Cushions shall conform to the requirements of the pre-approved alternatives listed on the Department's Qualified Products List (QPL), unless otherwise called for in the plans.

Formerly known as "Impact Attenuators"

**Notes**

See barrier wall detail for measurement. This item is used with Temporary Barrier Wall
(Concrete).

Refer to specification from QPL requirements.

When glare screen is used, barrier mounted lights will not be required.

### Related Items

<table>
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<tr>
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### Forms

**Design**

SHTabQuant: Tabulation of Quantities Sheet

### Documentation

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**
- **Other**
  - **Standards**
    - **Specifications** Section 102

### Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD):

0200 Roadway

### Status

**Struct.**

102-94-AB GLARE SCREEN LF

A = Operation
Blank (Furnish and Install)
1 (Relocate)

B = Wall Material
1 (Concrete)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
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<td>GLARE SCREEN, TEMPORARY, F&amp;I, WALL MATERIAL-CONCRETE</td>
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### 102-98-A BARRICADE TYPE III-TO REMAIN

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### Notes

Details

#### Related Items

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</table>

#### Forms

**Design**

SHTabQuant: Tabulation of Quantities Sheet

#### Documentation

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
**Struct. 102-98- A**  
**BARRICADE TYPE III- TO REMAIN**  
**EA**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</table>

**102-99-**  
**PORTABLE CHANGEABLE MESSAGE SIGN- TEMPORARY**

**Notes**

Should be considered for use in complex, high-density work zones. Messages must be simple, with a minimum number of words and lines, and should require no more than two displays of no more than three lines each. The Traffic Control Plan (TCP) shall include the location and messages to be displayed. Refer to the PPM for message guidelines and acceptable abbreviations.

Estimate the number needed for each traffic control plan phase, times the number of days needed (phase duration). May be used 14 days before contract time begins, as authorized by the Engineer. Not to be used when standard signs are available. Refer to the Plans Preparation Manual for proper usage.

**Related Items**

**Forms**

<table>
<thead>
<tr>
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<th>Recommended</th>
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</table>

**Construction**

<table>
<thead>
<tr>
<th>Design</th>
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</table>

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**  
Vol 1, Ch 10

**Other**

**Standards**  
Index No. 600

**Specifications**  
Section 102

**Prep & Doc Manual Chapter(s)**  
7, 13
**Scenario:**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>1/1/2010</td>
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<tr>
<td>0102104 2</td>
<td>TEMPORARY TRAFFIC CONTROL, FIXED SIGNAL</td>
<td>ED</td>
<td>1/1/2010</td>
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</tbody>
</table>

**Details and Structure:** Items 000 to 199
Identify intersections where required. Estimate number of intersections times number of contract days. Do not include "new" intersections. Payment will be for number of days Temp Traffic Detection Technology is used and authorized by Engineer.

**Related Items**

**Forms**

- **Design**: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**: Section 102
- **Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 102-107- TEMPORARY TRAFFIC DETECTION, INTERSECTION DA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Description</th>
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<td>TEMPORARY TRAFFIC DETECTION, INTERSECT</td>
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<td></td>
</tr>
</tbody>
</table>

**102-150- 1 PORTABLE REGULATORY SIGN**

**Notes**

This device is part of the Motorist Awareness System (MAS). Design should work with Construction to determine the estimated days for each component of the motorist awareness system to be included in the contract.

Portable Regulatory Sign (PRS): The purpose of this device is to highlight the regulatory speed for the work zone. A PRS is a trailer that has the regulatory sign mounted with flashing lights on each side of the sign. The lights are used to draw the driver's attention to the regulatory speed.

**Related Items**

**Forms**

- **Design**: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

- **Construction**: 700-050-51
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form...
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tbody>
<tr>
<td>0102150 1</td>
<td>PORTABLE REGULATORY, SIGN</td>
<td>ED</td>
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<td>1/1/2010</td>
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</table>

**102-150- 2 RADAR SPEED DISPLAY UNIT**

<table>
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<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>Each Day</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

This device is part of the Motorist Awareness System. Refer to item 102-150- 1 for additional detail information.

Radar Speed Display Unit (RSDU): The purpose of this device is to display the motorist's work zone speed. A radar speed display unit is a portable trailer that displays the speed of approaching motorists on a LED display panel. The radar mounted on the unit detects the speed. A regulatory sign with the posted speed is mounted above the LED display panel. The unit is fitted with a device which counts the number of vehicles passing the Radar Speed Display Unit. The counter device is capable of: digital readout of the total number of vehicles passing the radar speed display unit, and digital readout of the number of vehicles exceeding the speed limit shown on the radar speed display unit. The device can be set that only speeds greater than the work zone speed are displayed.
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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</thead>
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### 102-911- A REMOVABLE TAPE PAVEMENT MARKING - WHITE/BLACK

<table>
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<th>Unit</th>
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<tbody>
<tr>
<td>LF; M1; SF; M2</td>
<td>Linear Foot; 10th of a Meter; Square Foot; Square Meter</td>
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### Notes

Use of removable work zone pavement markings shall be as defined by 102-10 of the specifications.

OTHER (SF): Pay item 102-911- 3 (2102-911- 3) is used for stop bars, turn arrows, etc.

### Related Items

<table>
<thead>
<tr>
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<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
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</tr>
</tbody>
</table>

### Forms

- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**: Index No. 600
- **Other**: Section 102

### Prep & Doc Manual Chapter(s)

- 7, 13

### TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

### Status

<table>
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<tbody>
<tr>
<td>A = Type</td>
<td>1 (Skip) LF</td>
</tr>
<tr>
<td></td>
<td>2 (Solid) LF</td>
</tr>
<tr>
<td></td>
<td>3 (Other) SF</td>
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</table>

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Topic No. 600-000-002

#### Basis of Estimates

##### 2010 Edition

**December 30, 2009**

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</tr>
<tr>
<td>0102911 2</td>
<td>PAVEMENT MARKING REMOVABLE TAPE, WHITE-BLACK, SOLID</td>
<td>LF</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0102911 3</td>
<td>PAVEMENT MARKING REMOVABLE TAPE, WHITE-BLACK, OTHER</td>
<td>SF</td>
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<td>1/1/2010</td>
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#### Item Description

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<th>Accuracy</th>
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<tbody>
<tr>
<td>LF, M1, M2</td>
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#### Notes

Use of removable work zone pavement markings shall be as defined by 102-10 of the specifications.

#### Related Items

**Required**

**Recommended**

- **Forms**
  - **Design**: SHTabQuant: Tabulation of Quantities Sheet

- **Construction**
  - **Design**: Refer to Comp Book
  - **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

- **PPM Chapter**
  - Other
- **Specifications**
  - Index No. 600
  - Section 102
- **Prep & Doc Manual Chapter(s)**
  - 7, 13

#### TRNS*PORT Category (DRAFT FIELD):

- 0200 Roadway

### Status

**Struct.**

- **102-912- A**
  - REMOVABLE TAPE PAVEMENT MARKING - YELLOW LF; SF

  - A = Type
  - 1 (Skip) LF
  - 2 (Solid) LF
  - 3 (Other) SF

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<tr>
<td>0102912 2</td>
<td>PAVEMENT MARKING REMOVABLE TAPE, YELLOW, SOLID</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0102912 3</td>
<td>PAVEMENT MARKING REMOVABLE TAPE, YELLOW, OTHER</td>
<td>SF</td>
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 TEMPORARY WORK STRUCTURE

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/LS</th>
<th>Accuracy</th>
<th>Lump Sum</th>
<th>PlanQuantity?</th>
<th>yes</th>
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</table>

Notes
Monitor: Robert Robertson, State Structures Design Engineer

Details
M= Monitored Item.
Coordinate with the State Structures Design Office on the use of this item.

The plans shall include drawings depicting the construction methods assumed in the preparation of the plans. The designer shall determine if a temporary structure (temporary bridges, platforms, etc.) is needed to furnish the contractor with access to the site to enable the bridge to be built. When a temporary structure is required, the anticipated structure type will be shown in the plans.

Temporary Structures will be paid separately only if they are required for access or to comply with permit restrictions. If access is available by including, but not limited to, barges, mats, or existing ground, no temporary structure is required.

State Structures Office must request unblock pay item structure.

Required

SHTabQuantLS: LS Tabulation of Quantities
COMP 700-050-05: Lump Sum Quantities

Recommended

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

Plan Details and/or Technical Specifications required

PPM Chapter
Design
Construction

Other

Specifications Section 103

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

103-  1-  A

TEMPORARY WORK STRUCTURE

A= Project Number
1 (valid through 12-31-2008; for any project)
2…next number (project number, as approved by State Structures Design Office)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
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<th>Item</th>
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<td>M</td>
<td>1/1/2010</td>
<td>10/30/2014</td>
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ARTIFICIAL COVERINGS/ROLLED EROSION CONTROL PRODUCTS

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<tr>
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<th>SY; M2</th>
<th>Accuracy</th>
<th>Square Yard; Square</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

Details and Structure: Items 000 to 199
This item may be used for several purposes. Estimate and/or calculate according to the following information. The total quantity is the sum used for the applicable purposes below. Tabulate the quantity and purpose of each in the plans. Install the product(s) in accordance with the Erosion and Sediment Control Manual.

FOR PAUSES IN CONSTRUCTION: Used for pauses in construction due to inclement weather or other circumstances. For this purpose, artificial coverings may be composed of natural or synthetic fiber mats, plastic sheeting or netting. Estimate 1% of the total permanent grassing area, where the total grassing area is defined as the sum of the seeding + seeding and mulching + sodding areas. Coverings used for this purpose are typically removed when construction resumes.

FOR EROSION CONTROL: Used for erosion control that facilitates plant growth, while permanent grass is established. Biodegradable erosion control blankets are installed over a seeded area and may be used on fill slopes and in ditches, and left in place to biodegrade. Show in plans (plan view or tabulation of quantities) the locations where erosion control blankets are to be used. Calculate the quantity in square yards (square meters).

FOR DRAINAGE CHANNEL: Use the E&SC Manual Selection Guide to determine the correct product type. Shear Stress and velocity calculations must be completed, as shown in the E&SC manual.

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
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<th>Recommended</th>
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<tbody>
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<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
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<td>Design</td>
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<tr>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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<thead>
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<td>Other</td>
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<tr>
<td>Standards</td>
<td>SY 6, 7, 13</td>
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### Notes

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

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</table>

### Related Items

**Details and Structure: Items 000 to 199**
Unit | AC; HA | Accuracy | 10th of an Acre; 10th of a Hectare
--- | --- | --- | ---
Details | DO NOT USE THIS ITEM WITH SECTION 570- PERFORMANCE TURF.
This item is included for routine maintenance of existing, permanent, and temporary grassing until the project is completed.
Coordinate the use of this item with Sections 570 and 580. DO NOT use this item when payment for mowing is to be made under Section 570. When 570 items are used, all mowing, including undisturbed areas within project limits, is included under payment for 570 items.
Estimated Design Quantity: Use total grassed area, plus any other undisturbed areas within the project limits that need to be mowed during the life of the contract. Obtain the mowing cycle from the local Maintenance Office; multiply the area by the number of mowing cycles to be performed during the life of the contract. Convert units to acres (hectares), as necessary. Detail calculations in the comp book.
Related Items | Required | Recommended | 570-1-A, 580-1-A
Forms | Design | Ref to Comp Book
Documentation | Design | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction | Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References | PPM Chapter | Other | Standards | Specifications | Section 104
Prep & Doc Manual Chapter(s) | 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway
Status
Struct. | 104- 4- | MOWING | AC

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>AC</td>
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<td>6/30/2010</td>
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104- 5- SANDBAGGING

<table>
<thead>
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<th>Item</th>
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<th>TSP/Detail</th>
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<td>0104 5</td>
<td>SANDBAGGING</td>
<td>CY; M3</td>
<td>12&quot;x24&quot;x6&quot; bags</td>
<td>12&quot;x24&quot;x6&quot; bags</td>
<td>6/30/2010</td>
</tr>
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</table>

Notes | Included for the purpose of controlling erosion and siltation. Use 12"x24"x6" bags (0.3 x 0.6 x 0.15 meter bags). Refer to index for applications and estimated quantity.

Details and Structure: Items 000 to 199
**Required**

**Recommended**

<table>
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<tr>
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<td>Section 104</td>
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<th>6, 7, 13</th>
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**Related Items**

**Notes**

**Status**

**Struct.** 104-5- **SANDBAGGING** CY

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**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

### 104-6- **TEMPORARY SLOPE DRAIN / RUNOFF CONTROL STRUCTURE**

<table>
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<tr>
<th>Unit</th>
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<tbody>
<tr>
<td>Accuracy</td>
<td>Linear Foot; 10th of a Meter</td>
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**Notes**

Pay Item Description changed to Runoff Control Structure. Refer to Specification for current usage.

**Details**

Refer to the Erosion and Sediment Control manual (E&SC manual) for correct use of this item. Runoff Control Structures include temporary slope drains and check dams. All items shown in the manual or design standard are included in the payment, per length, along the centerline of the structure.

**Related Items**

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<tr>
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Details and Structure: Items 000 to 199
Struct. 104-6- TEMPORARY SLOPE DRAIN / RUNOFF CONTROL STRUCTURE

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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104-7- SEDIMENT BASIN/CONTAINMENT SYSTEM

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<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
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</thead>
<tbody>
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<td></td>
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<td>Each</td>
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</tr>
</tbody>
</table>

Notes
Refer to Estimates Bulletin 09-02 and E&SC manual for correct usage.

Details
Refer to the Erosion and Sediment Control manual (E&SC manual) for correct use of this item. These systems work to retain sediment, as well as to slow water velocities. Payment will include all items shown in the plans or E&SC manual, for a complete system.

Cleanings to maintain the system will be paid under pay item 104-9.

Related Items
Required 104-9- (2104-9-)

Forms
Design SHTabQuant: Tabulation of Quantities Sheet

Documentation
Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

Specifications
Section 104

Prep & Doc Manual Chapter(s) 7, 13

104-9- SEDIMENT BASIN/CONTAINMENT SYSTEM-CLEANOUT

<table>
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<tr>
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</thead>
<tbody>
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<td></td>
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<td>Per Clean Out; Each</td>
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Notes
Refer to Estimates Bulletin 09-02 and E&SC manual for correct usage.
Estimate one cleanout per sediment Basin/Containment system, Item 104- 7 (2104- 7), on the project.

Sediment shall be removed or "cleaned-out" from the basin/containment system, as indicated in the plans, or as directed by the Engineer. Actual number of cleanings will depend on project conditions, as necessary to maintain the containment system(s).

**Related Items**

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**Forms**

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**Documentation**

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**References**

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<tr>
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<td>6, 7, 13</td>
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**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
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<tbody>
<tr>
<td>0104 9</td>
<td>SEDIMENT BASIN/ CONTAINMENT SYSTEM- CLEANOUT</td>
<td>EA</td>
<td>1/1/2010</td>
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</table>

**104- 10- 2 SYNDTHETIC BALES**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Valid through 12-31-09; replaced by Sediment Barrier. Refer to Estimates Bulletin 09-02 for additional information.

**Details**

Consists of synthetic bales to protect against downstream accumulations of silt. Dams shall be constructed in accordance with the details shown in the plans or Design Standards. Standard lengths for common inlets will be shown on the Design Standards. Note that synthetic bales may be cleaned or replaced as necessary. Do not estimate for replacement cycles; payment includes maintenance of the erosion control device (cleaning and/or replacement), until permanent erosion control measures are in place. All bales must be listed on the QPL, according to specification.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 104-10-3 SEDIMENT BARRIER

<table>
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<tbody>
<tr>
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<td>Linear Foot; 10th of a Meter</td>
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</table>

**Notes**

Effective with the January 2010 letting, New Item to replace 104-10-2 Synthetic Bales and 104-13- Staked Silt Fence. Refer to Estimates Bulletin 09-02

**Details**

To be used in accordance with the Erosion and Sediment Control Manual to protect against downstream accumulation of sediment. Includes synthetic bales, silt fence, and other similar materials shown in the manual.

Refer to the manual for examples of appropriate and inappropriate use of materials.

Payment is made per length of material, for each location on the project, regardless of whether the materials are new or relocated. The contractor must maintain the sediment barrier, by removing sediment, throughout the installed life of the product. No separate payment is made for maintaining the barrier. Refer to the specification for complete payment information.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>0104 10 3</td>
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104- 11- A  FLOATING TURBIDITY BARRIER

<table>
<thead>
<tr>
<th>Notes Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be used in accordance with the Erosion and Sediment Control Manual. Common uses include areas where dredging, filling or other construction activities may cause turbidity in water. Also refer to Design Standard Index 103, and any applicable permit requirements. Per the specifications, each location is paid per length, regardless of whether the barrier is new, used, or relocated from a previous location. The designer should estimate the quantity based on the tabulated length at each location.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Items</th>
</tr>
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<tbody>
<tr>
<td>Required</td>
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<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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<th>Forms</th>
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<tbody>
<tr>
<td>Required</td>
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<tr>
<td>Construction</td>
</tr>
<tr>
<td>Refer to Comp Book</td>
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<table>
<thead>
<tr>
<th>Documentation</th>
</tr>
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<tr>
<td>Design</td>
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<tbody>
<tr>
<td>PPM Chapter</td>
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<td>Other</td>
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<tr>
<td>Standards</td>
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<tr>
<td>Index No. 103</td>
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<td>Specifications</td>
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<tr>
<td>Section 104</td>
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<table>
<thead>
<tr>
<th>Prep &amp; Doc Manual Chapter(s)</th>
</tr>
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<tbody>
<tr>
<td>6, 7, 13</td>
</tr>
</tbody>
</table>

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 104- 11- A FLOATING TURBIDITY BARRIER LF

A = Blank (Standard)
To be used in accordance with the Erosion and Sediment Control Manual and the Design Standards. This item is commonly used in areas where continuous construction activities change the natural contour and drainage runoff. Refer to Design Standard Index 106. Note that the material required by the standard is nylon reinforced PVC. (Geotextile fabric, such as silt fence, is not a substitute for this item.)

Required

Recommended

Specifications
Section 104

Design
SHTabQuant: Tabulation of Quantities Sheet

Construction
Refer to Comp Book

Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

PPM Chapter
Index No. 103

Prep & Doc Manual Chapter(s)
6, 7, 13

Roadway

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>0104 12</td>
<td>STAKED TURBIDITY BARRIER- NYLON REINFORCED PVC</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
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</table>

104-13- A STAKED SILT FENCE

Valid through 12-31-09. Replaced by 104-10-3 Sediment Barrier item. Refer to Estimates Bulletin 09-02 for additional information.

Details

Used for erosion control in areas where construction activities may cause silt runoff. Type III Silt Fence, as detailed in Index No. 102, should be used in most locations. Type IV fence has greater strength and height and should be used where a large sediment load is anticipated (steep fill slopes, long fill slopes, or a combination of both likely to produce a large sediment load).

Each type of silt fence will have an estimated service life of 12 months. The quantity will be developed by estimating the time (in months) the fence will be in place at each location and dividing by 12 (rounding up to the nearest whole) to determine the number of replacements. The total length of fence at each location is determined by multiplying the
length of fence at each location by the number of replacements.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tbody>
<tr>
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**Construction**

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**Documentation**

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**References**

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<td>Index No. 102, 106</td>
<td>Section 104</td>
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**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 104-13- A STAKED SILT FENCE LF

A = Type
1 (Type III)
2 (Type IV)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>104-15-</th>
<th>SOIL TRACKING PREVENTION DEVICE</th>
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<tbody>
<tr>
<td>Unit</td>
<td>EA</td>
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<td></td>
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**Notes**

Should be constructed at points of egress from unstabilized areas of the project to minimize offsite tracking of sediment. To minimize tracking from the roadway portion of the project, use one device per mile (one device per 2 kilometers) with a minimum of two per project. Include an additional device for each storm water pond or mitigation site that is not adjacent to the roadway right-of-way. RRR projects should be handled on a case-by-case basis. Payment includes excavation, grading, pipe, filter fabric, aggregate, etc., as indicated in Design Standard 106. Separate payment is made for hay bales and silt fence.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
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**Forms**

| Design | SHTabQuant: Tabulation of Quantities Sheet |

**Documentation**

<table>
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**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 104-13- A STAKED SILT FENCE LF

A = Type
1 (Type III)
2 (Type IV)

**Notes**

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<td>Unit</td>
<td>EA</td>
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**Forms**

| Design | SHTabQuant: Tabulation of Quantities Sheet |

**Documentation**

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<thead>
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**References**

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**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 104-13- A STAKED SILT FENCE LF

A = Type
1 (Type III)
2 (Type IV)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>104-15-</th>
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<td>Unit</td>
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**Notes**

Should be constructed at points of egress from unstabilized areas of the project to minimize offsite tracking of sediment. To minimize tracking from the roadway portion of the project, use one device per mile (one device per 2 kilometers) with a minimum of two per project. Include an additional device for each storm water pond or mitigation site that is not adjacent to the roadway right-of-way. RRR projects should be handled on a case-by-case basis. Payment includes excavation, grading, pipe, filter fabric, aggregate, etc., as indicated in Design Standard 106. Separate payment is made for hay bales and silt fence.

**Related Items**

<table>
<thead>
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**Forms**

| Design | SHTabQuant: Tabulation of Quantities Sheet |

**Documentation**

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**References**

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**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 104-13- A STAKED SILT FENCE LF

A = Type
1 (Type III)
2 (Type IV)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
Standards  
Index No. 106
Specifications
Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200   Roadway

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**104-16-**  
ROCK BAG

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</table>

**Notes**
Valid through 12-31-09. Replaced by 104-18 Inlet Protection System. Refer to Estimates Bulletin 09-02 for additional information.

**Details**
Include for the purpose of controlling siltation at curb and gutter inlets as shown in the Design Standards. Bags are to be 12"x12"x4" (0.3 m x 0.3 m x 0.1 m). Estimate 20 bags for each curb inlet.

**Related Items**
Required: 104-10-1, 104-10-2, 104-10-3, 104-10-4
Recommended: 104-10-1, 104-10-2, 104-10-3, 104-10-4

**Forms**
Design: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**
Design: Refer to Comp Book

**Construction**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**
PPM Chapter
Other
Standards  
Index No. 102
Specifications  
Section 104
Prep & Doc Manual Chapter(s)  
6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200   Roadway

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**104-17-**  
SAND FENCE

<table>
<thead>
<tr>
<th>Unit</th>
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<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>
Temporary fence for sand locations, used for erosion control purposes.

Tech Specs and/or plan details to include: fence size, slat size, post and fence materials, construction, installation, maintenance, removal, measurement, and payment. Spec to include option to allow fence to remain in place, at the discretion of the Engineer.

<table>
<thead>
<tr>
<th>Details</th>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</table>

**Documentation**

| Status | Structural | SAND FENCE | LF |

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Details and Structure: Items 000 to 199**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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</table>

104-19- CHEMICAL TREATMENT- POWDERED (For Erosion Control)

- **Unit**: SY; M2
- **Accuracy**: Square Yard; Square Meter
- **PlanQuantity?**

**Notes**: New item effective January 2010, per Estimates Bulletin 09-02.

**Details**: This item is to be used in accordance with the Erosion and Sediment Control Manual.

Polyacrylamides and Aluminum Sulfate are used to “clarify turbid or sediment laden water that does not yet meet surface water quality standards… or as an amendment to other erosion prevention and sediment control products, to aid in their performance.” This pay item is typically used for soil stabilization in conjunction with Rolled Erosion Control Products (RECP); designers should estimate the same amount of area used for RECPs. The product must be installed in accordance with the chemical manufacturer’s suggested application rate.

**Related Items**
- Required
- Recommended

**Forms**
- Design
- Construction

**Documentation**
- Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**
- PPM Chapter
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)
### Basis of Estimates

**December 30, 2009**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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#### 104- 20- CHEMICAL TREATMENT- FLOC LOGS, ALUM DRUMS (For Erosion Control)

**Unit**: EA  
**Accuracy**: Each

**Notes**: New item effective January 2010, per Estimates Bulletin 09-02.

**CONTACT THE MONITOR**: Larry Ritchie, Environmental Specialist, State Construction Office.

**Details**: Coordinate the use of this item with the State Construction Office.

This item is to be used in accordance with the Erosion and Sediment Control Manual.

The 104-20 pay item is considered a Contractor’s option for sediment control on the project site. It is typically used in conjunction with water treatment systems constructed by the contractor to control sediment that results from project specific issues. Do not use in design without contacting Larry Ritchie, Environmental Specialist, in the State Construction Office.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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**Forms**

- **Construction**
- **Design**

**Documentation**

- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**

- PPM Chapter
- Other Standards
- Specifications

**Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):**

**Status**

**Struct. 104- 20-** CHEMICAL TREATMENT- FLOC LOGS, ALUM DRUMS (For Erosion Control)

**Notes**: DO NOT OPEN WITHOUT APPROVAL OF THE MONITOR- Environmental Specialist, State Construction Office.

---

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<td>CHEMICAL TREATMENT - FLOC LOGS, ALUM DRUMS</td>
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<td>1/1/2010</td>
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#### 107- 1- LITTER REMOVAL AND DISPOSAL

**Unit**: AC; HA  
**Accuracy**: 10th of an Acre; 10th of a Hectare


---

**Details and Structure**: Items 000 to 199
 Bulletin for additional information.

Details
Estimate the area for each phase, based on the Temporary Traffic Control plans. It is not necessary to adjust for inlets, drains, slopes, small variations in tree lines, etc.

Estimate one litter removal and mowing cycle every 30 days, for the duration of the project. Do not adjust the estimated number of cycles for growing season, special events, or project location; these will be adjusted by the engineer during construction, as needed.

Use a summary table in the plans to show the duration, estimated area, mowing frequency, and estimated number of cycles for each phase and the estimated total area. Use a minimum of 1 cycle per phase; after dividing the phase duration by 30 days, round to the nearest cycle.

Payment will be based on the area calculated by the Engineer, per litter removal or mowing cycle.

Additional comments: If the contractor changes phasing, the CEI will still base the payment for that mowing and litter removal cycle by determining the “actual area completed and accepted…determined by calculation using the lengths and widths based on the station to station dimensions shown in the plans.” This means that the CEI will figure the area the contractor mowed (or is supposed to mow) by measurements on the plans…i.e., the approximate width mowed on each side times the length, less any areas deducted by engineer (areas not mowed).

If the number of cycles changes (due to wet or dry weather conditions, grass height, or other), payment will be made for the actual area and number of cycles completed.

While litter removal is normally completed prior to mowing, It is possible to have additional litter cycles (without mowing cycles), when directed by the Engineer.

Related Items

Required
Design SHTabQuant: Tabulation of Quantities Sheet
(No COMP Form; use tabulation sheet)

Recommended
Construction Refer to Comp Book

Documentation

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter
Other
Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status
Struct. 107-1- LITTER REMOVAL AND DISPOSAL AC

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
Estimate one litter removal and mowing cycle every 30 days, for the duration of the project. Do not adjust the estimated number of cycles for growing season, special events, or project location; these will be adjusted by the engineer during construction, as needed.

Use a summary table in the plans to show the duration, estimated area, mowing frequency, and estimated number of cycles for each phase and the estimated total area. Use a minimum of 1 cycle per phase; after dividing the phase duration by 30 days, round to the nearest cycle.

Payment will be based on the area calculated by the Engineer, per litter removal or mowing cycle.

Additional comments: If the contractor changes phasing, the CEI will still base the payment for that mowing and litter removal cycle by determining the “actual area completed and accepted…determined by calculation using the lengths and widths based on the station to station dimensions shown in the plans.” This means that the CEI will figure the area the contractor mowed (or is supposed to mow) by measurements on the plans…i.e., the approximate width mowed on each side times the length, less any areas deducted by engineer (areas not mowed).

If the number of cycles changes (due to wet or dry weather conditions, grass height, or other), payment will be made for the actual area and number of cycles completed.

While litter removal is normally completed prior to mowing, it is possible to have additional litter cycles (without mowing cycles), when directed by the Engineer.

**Related Items**

- **Forms**
  - **Required**
    - Design: SHTabQuant: Tabulation of Quantities Sheet
  - **Recommended**
    - Design: Refer to Comp Book

- **Documentation**
  - **Design**
    - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
  - **Construction**
    - Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**Notes**

The designer should contact the District Construction Office to determine if this item should be used on a project. Consists of providing, furnishing and maintaining an Engineer's field office for exclusive use by the Department. Type B Fencing shall be used as detailed on Roadway and Traffic Design Standards, Index No. 452 for enclosing the field office. Payment for the fence shall be included in the bid price of the field office. The field office shall be a building or mobile trailer erected at locations selected by the engineer. The field office shall be paid for at the contract unit price per day, per the specifications, "Provide a Field Office for Department use beginning 10 working days before contract time begins, and remain for 30 days after final acceptance, unless the Department request removal earlier. Payment will be made for each day the field office is available for use by Department personnel."

Required Recommended
Standards Index No. 802
Specifications Section 109

Details and Structure: Items 000 to 199
**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0109 71 1</td>
<td>FIELD OFFICE, 300 SQ FT</td>
<td>DA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0109 71 2</td>
<td>FIELD OFFICE, 600 SQ FT</td>
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<td></td>
<td>1/1/2010</td>
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<tr>
<td>0109 71 3</td>
<td>FIELD OFFICE, 900 SQ FT</td>
<td>DA</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0109 71 4</td>
<td>FIELD OFFICE,1200 SQ FT</td>
<td>DA</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0109 71 5</td>
<td>FIELD OFFICE,1500 SQ FT</td>
<td>DA</td>
<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

**110- 1- 1 CLEARING AND GRUBBING**

**Unit**  LS/AC; LS/HA  **Accuracy**  Lump Sum (1/100th of an Acre); Lump Sum (1/100th of a Hectare)  **PlanQuantity?**  yes

**Notes**

Consists of complete removal and disposal of all vegetation, debris, drainage structures, flexible pavement, buildings or any other obstructions in all areas where excavation is to be done, or where embankments or structures will be constructed. This includes roadway area, ditch area, borrow and material pits, and areas where culverts or pipe lines will be constructed. Code the number of acres (hectares). Locate or define the scope of work involved on the contract plans.

Refer to Pay Item 110-4 for removal of concrete pavement, sidewalk, curb and gutter, etc.

Refer to specifications for guidance "when no direct payment is provided" for clearing and grubbing.

**Related Items**

**Required**

**Design**  SBEHWK; SBEarthwork: Summary of Earthwork

**Construction**  Refer to Comp Book

**Recommended**

**Design**  COMP 700-050-05: Lump Sum Quantities

**Construction**  Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

**PPM Chapter**

**Other**

**Specifications**  Section 110

**Prep & Doc Manual Chapter(s)**  7, 13

**TRNS*PORT Category (DRAFT FIELD):**  0200  Roadway

**Status**

**Struct.**  110- 1- 1  CLEARING AND GRUBBING  LS/AC

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Item Description | Unit | TSP/Detail | Valid Date | Obsolete Date
--- | --- | --- | --- | ---
0110 1 1 CLEARING & GRUBBING | LS | 1/1/2010 | |

#### 110- 2- 1 CLEARING AND GRUBBING (PUSH BUTTON CONTRACT)

**Unit** AC; HA  
**Accuracy** 10th of an Acre; 10th of a Hectare  
**PlanQuantity?** no

**Notes**
FOR PUSH BUTTON CONTRACTS ONLY  
Consists of complete removal and disposal of all vegetation, debris, drainage structures, flexible pavement, buildings or any other obstructions identified in the plans or specifications. Locate or define the scope of work involved. (Removal of concrete pavement, non-asphalt, to be paid under 110- 4- (2110- 4-))

**Related Items**

**Required** SBEHWK; SBEarthwork: Summary of Earthwork

**Forms**

**Design** Refer to Comp Book

**Construction**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Documentation**

**Design** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Other**

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 110- 2- 1 CLEARING AND GRUBBING (PUSH BUTTON CONTRACT)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Item Description | Unit | TSP/Detail | Valid Date | Obsolete Date
--- | --- | --- | --- | ---
0110 2 1 CLEARING & GRUBBING (PUSH BUTTON CONTRACT) | AC | 1/1/2010 | |

#### 110- 3- REMOVAL OF EXISTING STRUCTURE

**Unit** LS/SF; LS/M2  
**Accuracy** Lump Sum (Square Foot);  
**PlanQuantity?** yes Lump Sum (Square Meter)

**Notes**
Used for the removal of existing bridge structures and box culverts. Includes all work of removal (complete and/or partial), and disposal of the designated structures. Code the number of square feet (square meters), out-to-out of coping from begin bridge to end bridge.

If bridge debris is to be delivered to another agency, refer to specifications for delivery.
location. Delivery costs are included in the price for Removal of Existing Structure.

Add pay item note in plans that address bridges to be completely removed and bridges to be partially removed.

Tabulate bridges by bridge number and deck area to be removed. Quantities are based on out-to-out of coping from begin bridge to end bridge or from coping line to saw cut line from begin bridge to end bridge as applicable. Do not include rip-rap, fill slope area in removal quantity. Detail items to be removed in pay item note. Insert existing bridge plans into plan set. Show existing piling on Foundation Layout Sheet that requires complete removal (conflict with proposed foundations, or conflicts with future channel dredging per permit requirements, etc.).

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
<tr>
<td>Construction Design</td>
<td>Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
<td></td>
</tr>
</tbody>
</table>

**Specifications Section 110**

**Prep & Doc Manual Chapter(s) 6, 13**

---

**Related Items**

**Forms**

**Design** SHTabQuantLS: LS Tabulation of Quantities

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

**Construction**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

**Status**

**Struct. 110- 3-** REMOVAL OF EXISTING STRUCTURE LS/SF

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<td>01103</td>
<td>REMOVAL OF EXISTING STRUCTURE</td>
<td>LS</td>
<td>1/1/2010</td>
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<td></td>
</tr>
</tbody>
</table>

**110- 4-** REMOVAL OF EXISTING CONCRETE PAVEMENT

**Unit** SY; M2

**Accuracy** Square Yard; Square Meter

**PlanQuantity?** no

---

**Notes**

Consists of removing and disposing of existing concrete pavement, concrete sidewalks, slope pavement, ditch pavement and curb and gutter, where required because of construction operations. Specifically excludes retaining walls and drainage structures.

NOTE: Do not include flexible pavement removal under this item.

Guidance: When is payment included under Clearing and Grubbing? When is Removal of Existing Concrete Pavement needed?

Consider project specific conditions:

---

**Details**

...
If curb & gutter, sidewalk, etc. would likely be removed during standard clearing and grubbing operations (widening projects), then payment could be included in pay item 110-1. No separate payment is needed.

If the project involves removal of concrete pavement, sidewalk, etc., without the broad removal of items normally considered standard clearing and grubbing, then the Removal of Existing Pavement item might be the best choice. The square yard measurement would be clearly defined for these areas.

If the project involves replacement of a section of sidewalk and/or curb, the “no direct payment” option might be best; payment would be included in the cost for the new item(s).

---

### Required Recommended

#### Forms
- **Design**: SHTabQuant: Tabulation of Quantities Sheet

#### Documentation
- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References
- **PPM Chapter**: Section 110
- **Other Standards**:
- **Specifications**:

#### Prep & Doc Manual Chapter(s)
- 7, 13

---

**TRNS**^PORT Category (DRAFT FIELD): 0200  Roadway

**Struct.**: 110-4  
**REMOVAL OF EXISTING CONCRETE PAVEMENT**

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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<td>REMOVAL OF EXISTING CONCRETE PAVEMENT</td>
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<td>1/1/2010</td>
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</table>

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**110-5-**  
**PLUGGING WATER WELL- ARTESIAN**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

Artesian is defined in specifications as "an artificial hole in the ground from which water supplies may be obtained and which penetrates any water bearing rock, the water in which is raised to the surface by natural flow…"
### 110- 5- PLUGGING WATER WELL- ARTESIAN EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>01105</td>
<td>PLUGGING WATER WELLS, ARTESIAN</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Related Items**

Required: SHTabQuant: Tabulation of Quantities Sheet

**Forms**

Design

**Construction**

Refer to Comp Book

**Documentation**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### 110- 6- PLUGGING WATER WELL- NON-ARTESIAN

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Comments</th>
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<tbody>
<tr>
<td>01106</td>
<td>PLUGGING WATER WELLS, NON-ARTESIAN</td>
<td>EA</td>
<td>Each</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

Non-Artesian is defined in the specifications as "a well in which the source of water is an unconfined aquifer. The water… does not rise above the source bed."

**Related Items**

Required: SHTabQuant: Tabulation of Quantities Sheet

**Forms**

Design

**Construction**

Refer to Comp Book

**Documentation**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
UNIT EA Accuracy Each PlanQuantity? no

Notes
Details
Used for replacement of residential or business mailboxes that must be removed during construction operations. Refer to Index 532 for details.

Related Items
Required Recommended
Forms Design SHTabQuant: Tabulation of Quantities Sheet

Documentation
Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Specifications
Section 110

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status
Struct. 110-7- A MAILBOX EA

A = Description
1 (Furnish & Install Single)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
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<tbody>
<tr>
<td>0110 7 1</td>
<td>MAILBOX, F&amp;I SINGLE</td>
<td>EA</td>
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<td>1/1/2010</td>
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</tbody>
</table>

110-8- A UNDERWATER DEBRIS REMOVAL

Unit DA; TN; MT Accuracy Day; Ton; Metric Ton PlanQuantity? no

Notes
Details
The specification must describe the item in detail, including its acceptance criteria, method of measurement, and for lump sum items, any secondary units of measure. This item should only be used when the designer is reasonably sure of the number of days which will be required for the task. The daily unit cost for the cranes and barges typically used in this item is relatively high and can quickly lead to large overrun costs if the number of days cannot be accurately estimated. Item 110-3 (2110-3) is a more appropriate item to use when an accurate estimate of days required cannot be made.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items
Required Recommended
Forms Design SHTabQuant: Tabulation of Quantities Sheet
### Struct. 110-8- A UNDERWATER DEBRIS REMOVAL DA; TN

A = Method of Measurement  
blank (Day) DA  
1 (Weight) TN

#### Notes

Plan Details and/or Technical Specifications required  

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

#### Status

**Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.**  
**Record final quantity on the tabulation sheet (plans) or computation form (comp book).**

#### Documentation

**Design**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

**PPM Chapter**

**Other**

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

#### Status

**Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.**  
**Record final quantity on the tabulation sheet (plans) or computation form (comp book).**

#### Documentation

**Design**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

**PPM Chapter**

**Other**

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0110 8</td>
<td>UNDERWATER DEBRIS REMOVAL</td>
<td>DA</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0110 8 1</td>
<td>UNDERWATER DEBRIS REMOVAL</td>
<td>TN</td>
<td>T</td>
<td>1/1/2010</td>
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#### 110-12- A HYDRODEMOLITION

#### Notes

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

#### Related Items

**Required**

**Recommended**

SHTabQuant: Tabulation of Quantities Sheet

---

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

#### Related Items

**Required**

**Recommended**

SHTabQuant: Tabulation of Quantities Sheet

---

**Documentation**

**Design**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

**PPM Chapter**

**Other**

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required
Struct.  110- 12- A HYDRODEMOLITION SY; SF

A = Description/Unit of Measure
1 (Removal Of Deck Surface) SY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>110- 12- 1</td>
<td>HYDRODEMOLITION, REMOVAL OF DECK SURFACE</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

110- 71- 1 BRIDGE FENDER SYSTEM, REMOVAL & DISPOSAL- REHAB PROJECTS ONLY

Unit LF; M1 Accuracy Linear Foot; 10th of a Meter PlanQuantity? no

Notes

Details

For use on Fender System Rehab projects only.

For projects with bridge and fender system replacement, payment for removal and disposal of existing fender system is included under Removal Of Existing Structures, item 110-3.

Plan Details and/or Tech Spec must address proper disposal of timber, as well as measurement and payment of rehab work. Refer to Section 110 of Specifications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required Recommended

Forms

Design SHTabQuant: Tabulation of Quantities Sheet

Documentation

Construction Refer to Comp Book

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0110 71 1</td>
<td>BRIDGE FENDER SYSTEM, REMOVAL &amp; DISPOSAL</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

110-73- REMOVE EXISTING BULKHEAD

| Unit | LF; M1 | Accuracy | Linear Foot; 10th of a Meter | PlanQuantity? | no |

Notes
Details
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items
Required
Recommended
Design
SHTabQuant: Tabulation of Quantities Sheet

Forms

Construction
Refer to Comp Book

Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)
7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Status
Struct. 110-73- REMOVE EXISTING BULKHEAD LF

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<tr>
<td>0110 73</td>
<td>REMOVE EXISTING BULKHEAD</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

110-82- REMOVE & DISPOSE STRUCTURAL TIMBER

| Unit | MB; M3 | Accuracy | 10th of a Thou Board Measure; 10th of a Cubic Meter | PlanQuantity? | no |

Notes
Details
one board foot = one foot square by one inch thick; convert to thousand board foot for pay item.
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

### Forms

<table>
<thead>
<tr>
<th>Construction</th>
<th>700-050-56</th>
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<tbody>
<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

### References

- **PPM Chapter**
- **Other**
- **Specifications**

**Notes**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 100 or 200 Structures or Roadway

**Status**

**Struct.** 110-82- REMOVE & DISPOSE STRUCTURAL TIMBER MB

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0110 82</td>
<td>REMOVE &amp; DISPOSE STRUCTURAL TIMBER MB</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 110-84-

TRANSPORT EXISTING MATERIAL FOR REEF ESTABLISHMENT

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS/LS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
</tr>
<tr>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
</tbody>
</table>

### Forms

<table>
<thead>
<tr>
<th>Construction</th>
<th>Refer to Comp Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
</tr>
<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

### References

- **PPM Chapter**
- **Other**
### 110-84- TRANSPORT EXISTING MATERIAL FOR REEF ESTABLISHMENT

**Standards**

**Specifications**

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

### 110-85- CLEANING INTERIOR OF SEGMENTAL BOX GIRDER SPAN

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

**Notes**

**Details**

Valid for maintenance use. Detail cleaning requirements in the plans or specifications.

**Related Items**

**Forms**

**Design**

CADD Form not specified.

**Documentation**

**Construction**

Refer to Comp Book

**PPM Chapter**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Other**

**Standards**

**Specifications**

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0110 85</td>
<td>CLEANING INTERIOR OF SEGMENTAL BOX GIRDER SPAN</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 110-86- DELIVERY OF SALVAGEABLE MATERIAL TO FDOT

**Unit**

**LS/LS**

**Accuracy**

**Lump Sum**

**PlanQuantity?**

yes

**Notes**

Details and Structure: Items 000 to 199
Designer must coordinate with Maintenance Office prior to using this item. Plan note as to delivery location of salvageable material must be included.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
</tr>
<tr>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
</tr>
</tbody>
</table>

### Documentation

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans.</td>
</tr>
<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifications</td>
<td>Section 110</td>
</tr>
</tbody>
</table>

**Plan Details and/or Technical Specifications required**

#### Prep & Doc Manual Chapter(s)

7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**

0200 Roadway

### Status

**Struct.** 110-86-

**DELIVERY OF SALVAGEABLE MATERIAL TO FDOT**

**LS/LS**

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0110 86</td>
<td>DELIVERY OF SALVAGEABLE MATERIAL TO FDOT</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

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### Item 120-1-

**REGULAR EXCAVATION**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY; M3</td>
<td>Cubic Yard; Cubic Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

#### Notes

Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items. This item should be used on projects with cross sections to pay for the quantity of excavation on the project.

#### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>SBEHWK; SBEarthwork: Summary of Earthwork</td>
</tr>
<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
</tr>
</tbody>
</table>

#### Documentation

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
</tr>
<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0120 1</td>
<td>REGULAR EXCAVATION</td>
<td>CY</td>
<td>no</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**: Item used for Price Trends Report

Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items.

TRUCK MEASURE: This item should only be used on projects with limited or no cross sections. The method to determine the quantity of borrow excavation is as follows:

\[
\text{Fill} \times \text{Fill Adjustment Factor} \times \text{Truck Adjustment Factor} = \text{Borrow Excavation (Truck Measure)}.
\]

For example, if the fill adjustment is 20%, the fill adjustment factor is 1.2; and if the truck adjustment is 25%, the truck adjustment factor is 1.25

Applied to the above equation, an original fill amount of 253 CY would become:

\[
253 \times 1.2 \times 1.25 = 380 \text{ CY of Borrow, Truck Measure}
\]

Note- the adjustments vary based on the type of material. Per the PPM, contact the District Materials of District Construction Office for project specific numbers.

For final quantity, measure the width, height, and length inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% of the result to account for the hoist box and bed fillets.

**Related Items**

**Forms**
- **Required**: SBEHWK; SBEarthwork: Summary of Earthwork
- **Recommended**: 120-71 (2120-71)

**Documentation**
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**: Vol 1, Chapter 3
- **Other**
Standards  Index No. 500, 505
Specifications  Section 120
Prep & Doc Manual Chapter(s)  6, 8, 13

Struct.  120-  2-  A  BORROW EXCAVATION  CY

A = Measure Type
2 (Truck Measure)

Notes  Item used for Price Trends Report

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0120 2 2</td>
<td>BORROW EXCAVATION, TRUCK MEASURE</td>
<td>CY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

120-  3-  LATERAL DITCH EXCAVATION

Notes  Item used for Price Trends Report

Details  Consists of excavation on portions of lateral ditches beyond the limits of the roadway ROW. Includes inlet and outlet ditches, ditches parallel to the roadway, and may include channel excavation if Item 120-5 (2120-  5) is not used.

Required  Design  SBEHWK; SBEarthwork: Summary of Earthwork

Related Items  Construction  Refer to Comp Book

Documentation  Design  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction  Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References  PPM Chapter  Vol 1, Chapter 3

Other  Standards  Index No. 281, 500

Specifications  Section 120
Prep & Doc Manual Chapter(s)  9, 13

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0120 3</td>
<td>LATERAL DITCH EXCAVATION</td>
<td>CY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
SUBSOIL EXCAVATION

Unit: CY; M3  Accuracy: Cubic Yard; Cubic Meter  PlanQuantity?: no

Details:
Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items. Consists of excavation and disposal of muck, clay, rock or other material that is unsuitable in its original position, and that is excavated below the finished grade line template. Also includes all suitable material necessary to be removed in order to excavate the unsuitable material. The areas used to calculate subsoil excavation must also be used in calculating the fill areas, if material is to be replaced.

Related Items:
Required: 120-2 or 120-6  Recommended: 120-2 or 120-6 (2120-2 or 2120-6)

Forms:
Design: SBEHWK; SBEarthwork: Summary of Earthwork

Documentation:
Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References:
PPM Chapter: Vol 1, Chapter 3
Other: Index No. 500, 505
Specifications: Section 120
Prep & Doc Manual Chapter(s): 9, 13

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0120 4</td>
<td>SUBSOIL EXCAVATION</td>
<td>CY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CHANNEL EXCAVATION

Unit: CY; M3  Accuracy: Cubic Yard; Cubic Meter  PlanQuantity?: no

Details:
Consists of excavation and disposal of all material from the limits of the channel, within the lines and grades indicated in the plans and permit.

Related Items:
Required:  | Recommended:

Forms:
Design: SBEHWK; SBEarthwork: Summary of Earthwork

Documentation:
Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).
### Struct. 120-5-

**CHANNEL EXCAVATION CY**

**Notes**

Item used for Price Trends Report

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0120 5</td>
<td>CHANNEL EXCAVATION</td>
<td>CY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

### Struct. 120-6-

**EMBANKMENT CY**

**Notes**

Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items. This item should be used on projects with cross sections to pay for the quantity of embankment on the project.

**Related Items**

- **Required**: 120-1 (2120-1)
- **Recommended**: 120-1 (2120-1)

**Forms**

- **Design**: SBEHWK; SBEarthwork: Summary of Earthwork

**Documentation**

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
- **Construction**: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0120 6</td>
<td>EMBANKMENT</td>
<td>CY</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>120- 71-</td>
<td>REGULAR EXCAVATION (3R PROJECTS ONLY)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Unit</strong></td>
<td>LS/LS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Lump Sum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plan Quantity?</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items. To be used only on resurfacing or minor widening and resurfacing projects which conform to the guidelines in the Plans Preparation Manual. The designer will calculate quantities based on information obtained from the field and the proposed typical section. The designer will continue to show the Summary of Earthwork in the plans. The summary should show all quantities and adjustments.

Effective 7/2000 letting: This item should be used on projects with limited or no cross sections, to pay for the quantity of excavation on the project. Item 120- 2- 2 (2120- 2- 2) should be considered.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

**Forms**

- **Design**: SHTabQuantLS: LS Tabulation of Quantities
- **Construction**: Refer to Comp Book

**Documentation**

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
- **Construction**: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- **PPM Chapter**: Vol 1, Chapter 3
- **Other Standards**: Section 120

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>120- 71-</th>
<th>REGULAR EXCAVATION (3R PROJECTS ONLY)</th>
<th>LS/LS</th>
</tr>
</thead>
</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0120 71</td>
<td>REGULAR EXCAVATION (3-R PROJECTS ONLY)</td>
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<table>
<thead>
<tr>
<th>120- 72-</th>
<th>GRAVEL FILL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>CY; M3</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Cubic Yard; Cubic Meter</td>
</tr>
<tr>
<td><strong>Plan Quantity?</strong></td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Calculations will be made by the average end area method for all material placed within the limits and according to the detail shown in the plans.

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0120 72</td>
<td>GRAVEL FILL</td>
<td>CY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**120-73- LIGHTWEIGHT AGGREGATE FILL**

- **Unit**: CY; M3
- **Accuracy**: 10th of a Cubic Yard; 10th of a Cubic Meter
- **Plan Quantity?**: no
- **Notes**

Calculations will be made by the average end area method for all material placed within the limits and according to the detail shown in the plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required**: SHTabQuant: Tabulation of Quantities Sheet
- **Recommended**: Refer to Comp Book

**Related Items**

- **Forms**
  - **Design**: SHTabQuant: Tabulation of Quantities Sheet

- **Documentation**
  - **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

- **References**
  - **PPM Chapter**: Vol 1, Chapter 3
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 9, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status
Struct. 120-73- LIGHTWEIGHT AGGREGATE FILL CY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
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<tr>
<td>0120 73</td>
<td>LIGHTWEIGHT AGGREGATE FILL</td>
<td>CY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

120-74- SURCHARGE EMBANKMENT

Unit CY; M3  Accuracy Cubic Yard; Cubic Meter  PlanQuantity? no

Notes Details

The work of constructing surcharge fills, as shown in the plans and any extensions thereof, directed by the engineer, shall be included in the price and payment for surcharge embankment. The quantity shall be measured as provided in Section 120, with the exception that the original ground line used in computations shall be the finished grading template for the permanent construction. The measurement shall include only surcharge material actually placed above the original ground line (as defined above) and within the lines and grades for surcharge construction, as indicated in the plans or directed by the engineer. No allowance will be made for subsidence of material below the original ground line, as defined above. The price and payment for surcharge embankment shall be full compensation for all work required to construct and remove surcharge fills, including furnishing from areas provided by the contractor and borrow excavation required. Surcharge embankment requires a Technical Specification for materials, placement, measurement, and payment.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Forms

Design Required SHTabQuant: Tabulation of Quantities Sheet

Documentation

Design Construction

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter Vol 1, Chapter 3

Other Standards Specifications

Plan Details and/or Technical Specifications required
### Structures 120-74: Surcharge Embankment CY

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
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<tbody>
<tr>
<td>0120 74</td>
<td>Surcharge Embankment</td>
<td>CY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

**121-70: Flowable Fill CY**

**Unit**: CY; M3  
**Accuracy**: Cubic Yard; Cubic Meter  
**Plan Quantity?**: no

**Details**

Applications for flowable fill include: beddings, encasements, closure for tanks, pipes, and general backfill for trenches.

**Related Items**

- **Required**: Design  
- **Recommended**: SHTabQuant: Tabulation of Quantities Sheet

**Forms**

- **Construction**
  - Design: Refer to Comp Book
  - Construction: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - Design: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Documentation**

- **PPM Chapter**: Other  
  - Standards: Index No. 307  
  - Specifications: Section 121

**Prep & Doc Manual Chapter(s)**: 7, 13

---

**125-1: Excavation for Structures CY**

**Unit**: CY; M3  
**Accuracy**: Cubic Yard; Cubic Meter  
**Plan Quantity?**: no

**Details**

Includes excavation for bridge foundations, box culverts, pipe culverts, retaining walls, headwalls for pipe culverts and drains, manholes, and similar structures. 

Direct Payment: refer to Method of Measurement in specifications.
No Direct Payment: work is included in the price for concrete or other related items.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Construction**

Refer to Comp Book

**Documentation**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Specifications Section 125

Prep & Doc Manual Chapter(s) 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

Struct. 125- 1- EXCAVATION FOR STRUCTURES CY

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tbody>
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<td>0125 1</td>
<td>EXCAVATION FOR STRUCTURES</td>
<td>CY</td>
<td>no</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**125- 3- SELECT BEDDING MATERIAL**

**Notes**

No payment for this material will be made when available from excavation of pipe culvert or from other material from grading operations at a location not sufficiently remote to require loading on trucks.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Construction**

700-050-54

**Documentation**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.

**References**

PPM Chapter

Other

Specifications Section 125

Prep & Doc Manual Chapter(s) 6, 7, 13
Struct. 125-3- SELECT BEDDING MATERIAL CY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>Item</th>
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<td>0125</td>
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<td>CY</td>
<td>1/1/2010</td>
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</tbody>
</table>

129-1-AAA NATURAL DISASTER/PRE-EVENT CONTRACTS

<table>
<thead>
<tr>
<th>Unit</th>
<th>Mixed</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Refer to item structure and details</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coordinate with the State Maintenance Office prior to using these items.

Valid for Emergency Pre-event or Emergency Response contracts. May need to be coordinated with FEMA for post-event response contracts.

DO NOT use these items on standard Design-Construction contracts.

Crew Pre-positioning: Specifications should indicate that payment will be made for each crew, per day. This item is normally used with cut and toss, for pre-event contracts.

Crew: 2 People and vehicle, per hour. Specifications should indicate any specialized equipment that may need to be included with the vehicle. Overtime, after 8 hours, needs to be defined in the specifications- per 24 hour period, continuous shift, etc.

Cut and Toss: Hourly rate normally includes vehicle, 2 chain saw operators, and a supervisor. Specifications should detail specific requirements for contract. This item is normally used with crew pre-positioning, for pre-event contracts.

COLLECTION, HAULING, AND REDUCTION ITEMS:

Loading and hauling debris to TDS site: Specifications must define measurement of the load, i.e. per truck volume, for a full to "slightly mounded" load. Quantity to be reduced for a partial load, based on truck volume. Price to include Maintenance of Traffic (MOT), CY

Reduction by grinding at the TDS, CY: Specifications to indicate whether this is based on volume of ground material, or truck load of loose unground material.

Reduction by incineration at the TDS, CY: Specifications to indicate how material is to be measured, before or after incineration.

Stump removal, per each. Specifications should indicate that no separate payment is made for stumps less than 24".

MISCELLANEOUS ITEMS:

Sweeping Curb and Gutter, HR: Payment will be made per person for sweeping with power blower. Equipment provided by the contractor.

Vacuum Inlets, HR: Payment will be made for clearing debris from inlets.

Removal of Hanging Limbs, HR: Payment will be made for each person removing hanging limbs.

Loading and hauling construction and demolition debris, CY: Specifications must define measurement of the load, i.e. per truck volume, for a full to "slightly mounded" load.
Quantity to be reduced for a partial load, based on truck volume. Price to include Maintenance of Traffic (MOT), CY

White Goods and Hazardous Household Waste Disposal, EA: Specifications should indicate that payment is based on each “white good”. Define Hazardous waste disposal?

Freon Recovery, EA: Specifications need to define the work (remove, recover, etc.) to be completed. Payment is for each white good properly serviced to recover the freon.

LOADING OF REDUCED MATERIAL, FINAL DISPOSITION
Loading and Hauling Reductions to a final disposition site, including MOT, CY: Specifications to indicate whether this is based on volume of ground material, or truck load of loose unground material. DO NOT USE BOTH CY AND TN Item on the same contract.

Loading and Hauling Reductions to a final disposition site, including MOT, TN: Specifications to indicate when/where weight measurements are to be made. DO NOT USE BOTH CY AND TN Item on the same contract.

Disposal/Tipping Fees: no-bid item, Contractor will be paid actual cost for this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
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<td></td>
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<tr>
<td>Specifications</td>
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</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):** 0200 or other Roadway or other- see details

**Status**

**Struct.** 129-1-AAA  NATURAL DISASTER/PRE-EVENT CONTRACTS  Mixed

AAA= Operation and Unit of Measure
Pre-event, First response
1 (Crew Pre-positioning) DA
2 (Cut and Toss) HR
3 (Crew, 2 people and service Truck, Regular Time) HR
4 (Crew, 2 people and service Truck, After 8 Hours) HR
5 (Crew, 2 people and Bucket Truck, Regular Time) HR
6 (Crew, 2 people and Bucket Truck, After 8 Hours) HR

Collection, Hauling, and Reduction
11 (Loading and Hauling debris to TDS site) CY
12(Reduction by grinding at the TDS) CY
13 (Reduction by incineration at the TDS) CY

Stump Removal
21(24-48” diameter stump removal) EA
22(>48” diameter stump removal) EA
Miscellaneous Work
31 (Sweeping Curb and Gutter) HR
32 (Vacuum Inlets) HR
33 (Removal of Hanging Limbs) HR
34 (Loading and hauling construction and demolition debris) CY
35 (White Goods and Hazardous Household Waste Disposal) EA
36 (Freon Recovery) EA

Loading of Reduced Material, Final Disposition
50 (Disposal/Tipping Fees- no-bid item, Contractor will be paid actual cost for this item
51 (Loading and Hauling Reductions to a final disposition site, including MOT) CY; see detail to
distinguish between CY and TN items.
52 (Loading and Hauling Reductions to a final disposition site, including MOT) TN; see detail to
distinguish between CY and TN items.

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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0129 1 32  NATURAL DISASTER /PRE EVENT CONTRACTS, VACUUM INLETS  HR  T  1/1/2010
0129 1 33  NATURAL DISASTER /PRE EVENT CONTRACTS, REMOVAL OF HANGING LIMBS  HR  T  1/1/2010
0129 1 34  NATURAL DISASTER /PRE EVENT CONTRACTS, LOADING AND HAULING CONSTRUCTION AND DEMO DEBRIS  CY  T  1/1/2010
0129 1 35  NATURAL DISASTER /PRE EVENT CONTRACTS, WHITE GOODS AND HAZARD HOUSEHOLD WASTE DISPOSAL  EA  T  1/1/2010
0129 1 36  NATURAL DISASTER /PRE EVENT CONTRACTS, FREON RECOVERY  EA  T  1/1/2010
0129 1 50  NATURAL DISASTER /PRE EVENT CONTRACTS, DISPOSAL AND TIPPING FEES-DO NOT BID  LS  T  1/1/2010
0129 1 51  NATURAL DISASTER /PRE EVENT CONTRACTS, LOADING AND HAULING REDUCTIONS TO FINAL DISP, INC MOT  CY  T  1/1/2010
0129 1 52  NATURAL DISASTER /PRE EVENT CONTRACTS, LOADING AND HAULING REDUCTIONS TO FINAL DISP, INC MOT  CY  T  1/1/2010

141- 70-  SETTLEMENT PLATE ASSEMBLY

| Notes | Coordinate with the State Maintenance Office prior to using these items. |
| Details | Used with surcharge embankment item |
| For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item. |
| Related Items | Required | Recommended |
| Form Design | SHTabQuant: Tabulation of Quantities Sheet |
| Documentation | Design | Refer to Comp Book |
| Construction | Design | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. |
| Construction | Record final quantity on the tabulation sheet (plans) or computation form (comp book). |
| References | PPM Chapter |
| Other Standards | Index No. 540 |
| Specifications | Plan Details and/or Technical Specifications required |
| Prep & Doc Manual Chapter(s) | 6, 7, 13 |

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status Struct. 141- 70-  SETTLEMENT PLATE ASSEMBLY AS; EA

Details and Structure: Items 000 to 199
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0141 70</td>
<td>SETTLEMENT PLATE ASSEMBLY</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

142-70-  SAND FILL

- **Unit**: CY; M3
- **Accuracy**: Cubic Yard; Cubic Meter
- **PlanQuantity?**: no

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Documentation**

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.

**References**

- **PPM Chapter**: 700-050-54
- **Design**: 6, 7, 13
- **Other**: 0200 Roadway
- **Standards**: TRNS_PORT Category (DRAFT FIELD): 0200 Roadway
- **Specifications**: 0200 Roadway

**TRNS_PORT Category (DRAFT FIELD)**: 0200 Roadway

**Status**

- **Struct.**: 142-70-  SAND FILL

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>FILL SAND</td>
<td>CY</td>
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</table>

144-1- A  DIGITAL INCLINOMETER CASING

- **Unit**: LF; M1
- **Accuracy**: Linear Foot; 10th of a Meter
- **PlanQuantity?**: no

**Notes**

Coordinate the use of this item with the State Geotechnical Engineer.

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</tr>
</tbody>
</table>

**144- 71- A**  
PORE-PRESSURE TRANSDUCER (PIEZOMETER)

**Notes**  
Coordinate the use of this item with the State Geotechnical Engineer.

**Details**  
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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**References**  
PPM Chapter

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Unit</th>
<th>TSP/Detail</th>
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<tr>
<td>0144 1 1</td>
<td>DIGITAL INCLINOMETER CASING, VERTICAL LF</td>
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</tbody>
</table>
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 144-71- A PORE-PRESSURE TRANSDUCER (PIEZOMETER) EA

A= Transducer Type
blank (type defined in plans/specs) valid through 6/30/2009
1 (Pneumatic) also use item 144-72 for tubing; effective 7/1/2009
2 (Vibrating Wire) do not use item 144-72; effective 7/1/2009

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

144-72- TUBING FOR PIEZOMETER

Unit LF; M1 Accuracy Linear Foot; 10th of a Meter

Notes Coordinate the use of this item with the State Geotechnical Engineer.

Details For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items Required Recommended
Forms Design SHTabQuant: Tabulation of Quantities Sheet

Documentation

Construction Refer to Comp Book
Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Other
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 144-72- TUBING FOR PIEZOMETER LF

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
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<th>Unit</th>
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<td>TUBING FOR PIEZOMETER</td>
<td>LF</td>
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<td>12/31/2010</td>
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</table>

### 144-74- A PORE-PRESSURE TRANSDUCER-CONTROL/READOUT UNIT

**Notes**

Coordinate the use of this item with the State Geotechnical Engineer.

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

Required | Recommended
--- | ---

**Forms**

Design | SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Prep & Doc Manual Chapter(s)**

PPM Chapter

Other

Specifications

Plan Details and/or Technical Specifications required

**Struct.**

144-74- A PORE-PRESSURE TRANSDUCER-CONTROL/READOUT UNIT

A= Transducer Type

Blank (type defined in plans/specs) valid through 6/30/2009

1 (Pneumatic) effective 7/1/2009

2 (Vibrating Wire) effective 7/1/2009

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
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<th>Obsolete Date</th>
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<tr>
<td>0144 74 1</td>
<td>PORE-PRESSURE TRANSDUCER, CONTROL/READOUT UNIT PNEUMATIC</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 145-1- GEOSYNTHETIC REINFORCED SOIL SLOPE

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF; M2</td>
<td>Square Foot; 10th of a Square Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

Refer to Plans Prep Manual, Volume 1, Chapter 31, to establish design guidelines, parameters, and limitations for these systems. The designer must provide the requirements in the plans for choosing the material from those listed in Index 501. For
design assistance, contact the State Geotechnical Engineer.

Payment will be based on Plan Quantity, regardless of the length or number of layers of geosynthetic, including any reinforcement required below ground line. Does not include the cost of backfill material or placement of backfill.

Plan measurement will be based on the projected height of the slope face, from top of slope to the ground line at the toe of slope. Refer to the specifications.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

### Documentation

<table>
<thead>
<tr>
<th>Required</th>
</tr>
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<tbody>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Design</td>
</tr>
<tr>
<td>Construction</td>
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</tbody>
</table>

### References

<table>
<thead>
<tr>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPM Chapter</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Standards</td>
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<tr>
<td>Specifications</td>
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</table>

Plan Details and/or Technical Specifications required

**PPM Chapter**

Design: 6, 7, 13

**Prep & Doc Manual Chapter(s)**

6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0200 Roadway

**Status**

**Struct.**

145- 1- GEOSYNTHETIC REINFORCED SOIL SLOPE SF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>0145 1</td>
<td>GEOSYNTHETIC REINFORCED SOIL SLOPE</td>
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<td>D</td>
<td>1/1/2010</td>
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</table>

145- 2- GEOSYNTHETIC REINFORCED FOUNDATION OVER SOFT SOIL

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M2</th>
<th>Accuracy</th>
<th>Square Yard; Square Meter</th>
<th>PlanQuantity?</th>
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</table>

**Notes**

Refer to Plans Prep Manual, Volume 1, Chapter 31, to establish design guidelines, parameters, and limitations for these systems. The designer must provide the requirements in the plans for choosing the material from those listed in Index 501. For design assistance, contact the State Geotechnical Engineer.

Payment will be based on Plan Quantity, regardless of the length or number of layers of geosynthetic, including any reinforcement required below ground line. Does not include the cost of backfill material or placement of backfill.

Plan measurement will be based on the area of embankment to be reinforced. Refer to specifications.

### Related Items

<table>
<thead>
<tr>
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<th>Recommended</th>
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<tbody>
<tr>
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<td>1/1/2010</td>
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#### Detail

**145- 71-**

**REINFORCEMENT GRID FOR SOIL STABILIZATION**

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
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</tr>
</thead>
<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Coordinate the use of this item with the State Geotechnical Engineer.

**Details**

Geosynthetic Reinforced Roadway Base for Construction Expedient, as shown on Index 501. Full material technical specifications are required.

This item is intended for Soil Stabilization applications. For drainage/erosion control applications, refer to Section 530 items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
### 145-71- A REINFORCEMENT GRID FOR SOIL STABILIZATION

**Unit:** SY; M2  
**Accuracy:** Square Yard; Square Meter  
**Plan Quantity:** no

**Notes:**
Valid Through Dec 31, 2009; replaced by 145-71. Coordinate the use of this item with the State Geotechnical Engineer.

**Details:**
Geosynthetic Reinforced Roadway Base for Construction Expedient, as shown on Index 501.

Intended for Soil Stabilization applications. For drainage/erosion control applications, refer to Section 530 items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
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<tr>
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**Documentation**

<table>
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<th>Design</th>
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<tr>
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<th>Design</th>
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**References**

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<thead>
<tr>
<th>PPM Chapter</th>
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<td>Index No. 501</td>
<td></td>
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<table>
<thead>
<tr>
<th>Standards</th>
<th>Specifications</th>
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<tbody>
<tr>
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**Prep & Doc Manual Chapter(s):** 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 145-71- A REINFORCEMENT GRID FOR SOIL STABILIZATION SY
A = Description
1 (Biaxial Type 1)
2 (Biaxial Type 2)
3 (Biaxial Type 3)

For other types, including Plastic Cellular Confinement Systems, contact the State Geotechnical Engineer; additional items to be added, pending approval.

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
<td>0145 71</td>
<td>REINFORCEMENT GRID FOR SOIL STABILIZATION</td>
<td>SY</td>
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<td>1/1/2010</td>
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</table>

**160- 3- COMMERCIAL STABILIZING MATERIAL**

<table>
<thead>
<tr>
<th>Unit</th>
<th>CY; M3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>Cubic Yard; Cubic Meter</td>
</tr>
</tbody>
</table>

**PlanQuantity**? no

**Notes**
All Stabilization work specified in Section 160 is paid under pay item 160-4.

**Details**
Contact the District Soils Engineer for basis of estimate on each project. Show basis in the plans.

**Related Items**
Required | Recommended
Design | SHTabQuant: Tabulation of Quantities Sheet

**Forms**
Design | 700-050-54

**Documentation**
Design | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction | Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.

**References**
PPM Chapter | Other
Standards | Specifications Section 160
Prep & Doc Manual Chapter(s) | 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**
Struct. 160- 3- COMMERCIAL STABILIZING MATERIAL CY

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**160- 4- TYPE B STABILIZATION**

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>Square Yard; Square Meter</td>
</tr>
</tbody>
</table>

**PlanQuantity**? yes
Casts of stabilizing designated portions of the roadbed to provide a firm and unyielding subgrade. Stabilizing material can be obtained from existing base material, or from commercial and local materials.

### Required and Recommended Standards

**Index No. 506**

**Specifications**

**Section 160**

### Standards

**Ref**

**Design**

**506**

**Construction**

**Refer to Comp Book**

**Notes**

**Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.**

**Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.**

**Related Items**

**Forms**

**Design**

**SHTabQuant: Tabulation of Quantities Sheet**

### Related Items

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

### Status

**Struct.**

160- 4-

**TYPE B STABILIZATION**

**SY**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0160 4</td>
<td>TYPE B STABILIZATION</td>
<td>SY</td>
<td>no</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 160- 6-

**STABILIZED SUBBASE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Item valid through 12-31-2009. Replaced by 160-4, per specification.

**Details**

Stabilized subbase intended to strengthen the upper portion of the subgrade.

Refer to Section 180 (180 items) for Special Select Stabilized Subbase.

### Related Items

**Required**

**Recommended**

**Forms**

**Design**

**SHTabQuant: Tabulation of Quantities Sheet**

### Documentation

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

**Design**

6, 7, 13

**Construction**

6, 7, 13

**Other**

**Standards**

Index No. 506

**Specifications**

Section 160

**Prep & Doc Manual Chapter(s)**

6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0200 Roadway
### Specifications Section 160

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

#### Status

**Struct. 160-6-** STABILIZED SUBBASE SY

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>161- ??</th>
<th>PREDEIGNED STABILIZED SUBGRADE</th>
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</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>SY; M2</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Square Yard; Square Meter</td>
</tr>
<tr>
<td><strong>PlanQuantity?</strong></td>
<td>yes?</td>
</tr>
</tbody>
</table>

**Notes**: Specification change pending.

**Details**: Per the specifications, Section 161 is valid only for shoulder and non-traffic areas. Refer to Section 160 for roadway stabilization.

**Related Items**: Required

**Forms**: Design CADD Form not specified.

**Documentation**: Design Construction

**References**: PPM Chapter Other Standards Specifications

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

#### Status

**Struct. 161-??** PREDEIGNED STABILIZED SUBGRADE SY

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>162-1-AB</th>
<th>PREPARED SOIL LAYER</th>
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</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>SY; M2</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Square Yard; Square Meter</td>
</tr>
<tr>
<td><strong>PlanQuantity?</strong></td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**: Not to be used for Section 580: Landscape Operations. Refer to 580 specifications.

**Details**: Not to be used for Section 580: Landscape Operations. Refer to 580 specifications.

FINISH SOIL LAYER: to be used for areas to be seeded, seeded and mulched, or planted. (Included for sodded areas when called for in the plans.) Refer to 162 specifications.

ORGANIC SOIL LAYER: only when required by permit. 6” depth.
BLANKET MATERIAL: only when required by permit. Show depth in plans

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
<tr>
<td>Documentation</td>
<td>Construction</td>
<td>Refer to Comp Book</td>
</tr>
<tr>
<td></td>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</tbody>
</table>

**References**

PPM Chapter

Other Standards

Index No. 105
Blanket Material: Index No. 505

Specifications Section 162

**Selected items to be used by Permit only**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 162- 1- AB PREPARED SOIL LAYER SY

A= Material
1 (Finish Soil Layer)
2 (Organic Soil Layer) Note: by Permit only. 6" depth, per specification.
3 (Blanket Soil Layer) Note: By Permit Only

B= Depth
1 (6") Standard depth
2 (12") A=1 or 3
3 (Special Depth) A=2 or 3 only

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0162 1 11</td>
<td>PREPARED SOIL LAYER, FINISH SOIL LAYER, 6&quot;</td>
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<td>0162 1 12</td>
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<td>1/1/2010</td>
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<tr>
<td>0162 1 21</td>
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<td>1/1/2010</td>
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<td>0162 1 33</td>
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<td>1/1/2010</td>
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</table>

**173- 71-** DRILLING HOLES FOR PRESSURE GROUTING

<table>
<thead>
<tr>
<th>Unit</th>
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**Notes**

Details

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
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<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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### Documentation

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<thead>
<tr>
<th>Design</th>
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<tbody>
<tr>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
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<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</table>

### References

- **PPM Chapter**
- Other
- **Standards**
- **Specifications**

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

### TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Status

**Struct.** 173-71- **DRILLING HOLES FOR PRESSURE GROUTING** EA

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### Notes

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

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<th>Recommended</th>
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</table>
**Prep & Doc Manual Chapter(s)** 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

Struct. 173-76- GROUT PIPE INSTALLATION LF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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</table>

**173-77- A SUBSURFACE PRESSURE GROUTING**

<table>
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<th>Unit</th>
<th>CY; M3</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10th of a Cubic Yard; 10th of a Cubic Meter</td>
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<td></td>
</tr>
</tbody>
</table>

**Notes**

Contact the State Geotechnical Engineer prior to using this item.

**Details**

This item to be used for subsurface applications only. May be used for sinkhole repair. Tech Specs should indicate that this item includes all work and materials for grout injection; drilling holes and grout pipe may be paid separately under related 173 items. Clearly define material properties in specifications. For concrete structures, refer to Structures items 400 to 460.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required** | **Recommended** 173-71-, 173-76-

**Forms**

**Design**

SHTabQuant: Tabulation of Quantities Sheet

COMP 700-050-04/07: Volume Measure Items and Continuation; Concrete & Reinforcing Steel Comp. and Cont.

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

Other

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

Struct. 173-77- A SUBSURFACE PRESSURE GROUTING CY

A= Grout Material

1 (Sand-Cement)

2 (Sand Cement with Calcium Chloride) CaCl₂
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0173 77 1</td>
<td>SUBSURFACE PRESSURE GROUTING, SAND CEMENT</td>
<td>CY</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0173 77 2</td>
<td>SUBSURFACE PRESSURE GROUTING, SAND CEMENT WITH CALCIUM CHLORIDE</td>
<td>CY</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0173 77 3</td>
<td>SUBSURFACE PRESSURE GROUTING, CEMENT SLURRY</td>
<td>CY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

175- 1- RESEATING CONCRETE PAVEMENT

Unit SY; M2 Accuracy Square Yard; Square Meter PlanQuantity? yes

Notes

Perform controlled cracking of concrete pavement and reseating of the cracked slabs, by rolling, tamping, etc., on the underlying subgrade to provide a firm base for asphalt concrete surfacing.

Related Items Required Recommended
Forms Design SHTabQuant: Tabulation of Quantities Sheet

Documentation

Construction Refer to Comp Book
Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

Specifications Section 175

Prep & Doc Manual Chapter(s) 6, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 175- 1- RESEATING CONCRETE PAVEMENT SY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</table>
## 210-1 AA  REWORKING LIMEROCK BASE

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M²</th>
<th>Accuracy</th>
<th>Square Yard; Square Meter</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

### Notes

**Details**
Rework (or rework and widen) the existing rock base, by adding new limerock material as required by the plans and Section 210 of the specifications. Construct adjacent turnouts, entirely with new limerock.

### Related Items

**Required** 210-2  **Recommended**

### Forms
**Design**
SHTabQuant: Tabulation of Quantities Sheet

### Documentation
**Design**
Refer to Comp Book

**Construction**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

**PPM Chapter**

**Other**

**Standards**

**Specifications** Section 210, 285

**Prep & Doc Manual Chapter(s)** 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Status

**Struct.** 210-1 AA  **REWORKING LIMEROCK BASE**  **SY**

**AA = Thickness**
1 (6")
8 (4")
9 (3")

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0210 1 1</td>
<td>REWORKING LIMEROCK BASE, 6&quot;</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0210 1 8</td>
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<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0210 1 9</td>
<td>REWORKING LIMEROCK BASE, 3&quot;</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

## 210-2 LIMEROCK, NEW MATERIAL FOR REWORKING BASE

| Unit | CY; M³ | Accuracy | Cubic Yard; Cubic Meter | PlanQuantity? | no |

### Notes

**Details**
To be used in accordance with Section 210 of the specifications.

Measurement, from specification: The quantity to be paid for will be the number of cubic yards of only the new limerock material actually placed in the road and accepted. The quantity will be determined by measurement in loose volume, in truck bodies, at the point of dumping on the road, with proper deduction for all materials wasted, left in trucks or otherwise not actually used in the road. For this purpose, level the material in the truck.
bodies to facilitate accurate measurement.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Design</th>
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</thead>
<tbody>
<tr>
<td>210- 1- A</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Construction** 700-050-54

**Documentation**

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction** Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.

**References**

PPM Chapter

Other

Standards

Specifications Section 210, 285

**Prep & Doc Manual Chapter(s)** 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct. 210- 2-** LIMEROCK, NEW MATERIAL FOR REWORKING BASE CY

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0210</td>
<td>LIMEROCK-NEW MATERIAL FOR REWORKING BASE</td>
<td>CY</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

**285-7AA-** OPTIONAL BASE

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

**Details**

Consists of base construction of one of the optional materials shown in the plan typical sections. The plans will include typical sections specifying only the base group on new construction and complete reconstruction projects, permitting the maximum number of general use options that the contractor can utilize. Note that there are still limitations given in the notes. Also, the designer can still specify base materials, if this is appropriate for the project. The Optional Base item is also used when specifying only one option, such as ABC III. The quantity must include a 4" (0.1 m) overhang, as shown on the typical section for rural projects.

NOTE: The cost of prime or tack coats used between layers of the base are included in the cost of the Optional Base.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Construction** Refer to Comp Book

**Documentation**

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction** Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- **PPM Chapter**
- **Other**
- **Standards** Index No. 514
- **Specifications** Section 285
- **Prep & Doc Manual Chapter(s)** 6, 9, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

- **Struct.** 285-7AA- OPTIONAL BASE SY

   AA = Is 01 Thru 15 which indicates Base Group, as shown on Index 514

**Notes**

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<td>0285703</td>
<td>OPTIONAL BASE, BASE GROUP 03</td>
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<td>0285704</td>
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<td>0285705</td>
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<tr>
<td>0285706</td>
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<tr>
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<td>1/1/2010</td>
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</table>

---

**286-1- TURNOUT CONSTRUCTION**

**Unit** SY; M2 **Accuracy** Square Yard; Square Meter **Plan Quantity** yes

**Notes**

**Details** To be used in accordance with Section 286 of the specifications and Index 516. Consists of constructing new turnouts or extending existing turnouts on resurfacing and widening/resurfacing projects. Consists of excavation and construction of base course, and specifically excludes placing of AC surface course.

**Related Items**

- **Required**
- **Recommended**

**Forms**

- **Design** SBTURN; SBTurnouts: Summary of Turnouts

---

Details and Structure: Items 200 to 299
STANDARDS

INDEX NO. 516

SPECIFICATIONS

SECTION 286

Construction 286-1- TURNOUT CONSTRUCTION SY

Notes

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other

Standards Index No. 516

Specifications Section 286

Prep & Doc Manual Chapter(s) 6, 9, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 286-1- TURNOUT CONSTRUCTION SY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<td>0286</td>
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<td>SY</td>
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<td>1/1/2010</td>
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</tbody>
</table>

286-2- TURNOUT CONSTRUCTION- ASPHALT

Notes

To be used in accordance with Section 286 of the specifications and Index 516. Consists of constructing new turnouts or extending existing turnouts on resurfacing and widening/resurfacing projects. Consists of excavation and construction of asphalt base course, and specifically excludes placing of AC surface course.

Related Items

Forms

Required

Design SBTURN; SBTurnouts: Summary of Turnouts

Recommended

Construction 700-050-06: Weight Measure or Liquid Volume Comp & Cont.

Construction 700-050-56

Documentation

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 516

Specifications Section 286

Prep & Doc Manual Chapter(s) 6, 9, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 286-2- TURNOUT CONSTRUCTION- ASPHALT TN

Details and Structure: Items 200 to 299
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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### 287-1-
#### ASPHALT TREATED PERMEABLE BASE

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<tr>
<th>Unit</th>
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</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>Cubic Yard; Cubic Meter</td>
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<tr>
<td>PlanQuantity?</td>
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</tbody>
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**Details**

**Related Items**

<table>
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<tr>
<td>Design</td>
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**Forms**

**Construction**

700-050-54

**Documentation**

Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Constructions: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter: 6, 9, 13

**Prep & Doc Manual Chapter(s)**

6, 9, 13

**Status**

Inactive Structure

**Struct.**

287-1-

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
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### 288-001-
#### CEMENT TREATED PERMEABLE BASE

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<th>Unit</th>
<th>CY; M3</th>
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</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>Cubic Yard; Cubic Meter</td>
</tr>
<tr>
<td>PlanQuantity?</td>
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**Details**

**Related Items**

<table>
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<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
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</tbody>
</table>

**Forms**

**Construction**

700-050-56

**Documentation**

Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
Construction: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
- PPM Chapter
- Other
- Standards: Index No. 287
- Specifications: Section 288
- Prep & Doc Manual Chapter(s): 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status: Inactive Structure

Struct. 288-001- CEMENT TREATED PERMEABLE BASE CY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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</table>
**315- 1- STRESS ABSORBING MEMBRANE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M2</th>
<th>Accuracy</th>
<th>Square Yard; Square Meter</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

**Notes**

CONTACT THE STATE PAVEMENT DESIGN OFFICE for approval, prior to using this item.

Details

Project specific specifications, including material and installation requirements, are needed.

Payment for this item includes all work and materials for the membrane.

NOTE: This item may serve as a replacement for Pavement Overlay fabric (Item 518-70), when approved by State Pavement Design Office.

**Related Items**

- Required: 
- Recommended: 

**Forms**

- Design

**Documentation**

- Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**

- PPM Chapter
- Other
- Standards
- Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

- TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

**Status**

**Struct.** 315- 1-

**STRESS ABSORBING MEMBRANE** SY

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>STRESS ABSORBING MEMBRANE</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

**327- 70- AA MILLING EXISTING ASPHALT PAVEMENT**

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M2</th>
<th>Accuracy</th>
<th>Square Yard; Square Meter</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

**Notes**

Consists of removing existing AC pavement to improve the rideability of the finished pavement, to lower the finished grade adjacent to existing curb prior to resurfacing, or to completely remove existing pavement. Includes transporting the milled material to the asphalt plant site, and stockpiling the material. Also includes removal of existing Reflective Pavement Markers. Show basis of calculation, include exceptions.

**Related Items**

- Required: 
- Recommended: 300- 1- 1 (2300- 1- 1)

**Forms**

- Design

SHTabQuant: Tabulation of Quantities Sheet

---

Details and Structure: Items 300 to 399
Standards Specifications

Section 327

Struct. 327-70- AA MILLING EXISTING ASPHALT PAVEMENT SY

AA =
1 (1" Avg. Depth)
2 (3 1/2" Avg. Depth)
3 (4 1/2" Avg. Depth)
4 (3" Avg. Depth)
5 (2" Avg. Depth)
6 (1 1/2" Avg. Depth)
7 (4" Avg. Depth)
8 (2 1/2" Avg. Depth)
9 (5 1/4 Avg. Depth)
10 (5" Avg. Depth)
11 (2 1/4" Avg. Depth)
12 (1 1/4" Avg. Depth)
13 (1 3/4" Avg. Depth)
14 (6 1/2" Avg. Depth)
15 (2 3/4" Avg. Depth)
16 (1/2" Avg. Depth)
17 (3 1/4" Avg. Depth)
18 (5 1/2" Avg. Depth)
19 (3/4" Avg. Depth)
20 (3 3/4" Avg. Depth)
21 (7" Avg. Depth)
22 (4 1/4" Avg. Depth)
23 (6" Avg. Depth)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0327 70 1</td>
<td>MILLING EXIST ASPH PAVT, 1&quot; AVG DEPTH</td>
<td>SY</td>
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<tr>
<td>0327 70 2</td>
<td>MILLING EXIST ASPH PAVT, 3 1/2&quot; AVG DEPTH</td>
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**334- 1- AA**  
**SUPERPAVE ASPHALTIC CONCRETE**

**Unit**: TN; MT  
**Accuracy**: 10th of a Ton; 10th of a Metric Ton  
**PlanQuantity?**: no  

**Notes**

Consists of using SUPERPAVE asphalt mixture design and analysis test equipment and procedures, Gyratory Compactor to better simulate actual pavement loadings (five different traffic levels available) to provide for a better rut-resistant mix design. Use 110 lb per square yard per 1 inch (24 kg/m2 per 10 mm) lift. Note: Other rates and PG 76-22 Binder may be used only when recommended by District Materials Engineer.

**Details**

**Related Items**

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<thead>
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<th>Required</th>
<th>Recommended</th>
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**Forms**

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**Notes**

Details and Structure: Items 300 to 399
quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Approved automated asphalt plant tickets shall be used and submitted as Department records; in case of a malfunction of the automated system, the data shall be hand written on blank plant tickets. Transfer quantity to computation book.

### References

**PPM Chapter**

**Other**

**Standards**

**Specifications** Section 334

**Prep & Doc Manual Chapter(s)** 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

---

**Struct.** 334-1- AA SUPERPAVE ASPHALTIC CONCRETE TN

AA = Traffic

11 (A)
12 (B)
13 (C)
14 (D)
15 (E)
21 (Traffic A, PG 76-22)
22 (Traffic B, PG 76-22)
23 (Traffic C, PG 76-22)
24 (Traffic D, PG 76-22)
25 (Traffic E, PG 76-22)

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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**337-7- AA ASPHALTIC CONCRETE FRICTION COURSE**

**Unit** TN; MT  
**Accuracy** 10th of a Ton; 10th of a Metric Ton  
**PlanQuantity?** no

---

**Notes**

The maximum spread rate used for estimating quantities are as follows:

a=5~ FC-5(Rubber): 80 lb/yd2 (44 kg/m2); recommended thickness 3/4 in (20mm)
a=7~ FC-9.5 (Rubber): 110 lb/yd2 (72 kg/m2); recommended thickness 1 in (30mm)
a=6~ FC-12.5 (Rubber): 165 lb/yd2 (96 kg/m2); recommended thickness 11/2 in (40mm)
a=21~ FC-9.5 (PG 76-22): 110 lb/yd² (72 kg/m²); recommended thickness 1 in (30mm)
a=20~ FC-12.5 (PG 76-22): 165 lb/yd² (96 kg/m²); recommended thickness 1 1/2 in (40mm)
a=22~ FC-5 (PG 76-22): 80 lb/yd² (44 kg/m²); recommended thickness 3/4 in (20mm)

The actual spread rate will be based on the contractor's mix design per specifications. Designers must specify on the Typical Section, the traffic Level for structural Friction Courses FC-9.5 and FC-12.5. Refer to Pavement Design Manual for additional information.

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<th>Related Items</th>
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| Prep & Doc Manual Chapter(s) | 11, 13 |

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 337-7- AA ASPHALTIC CONCRETE FRICTION COURSE TN

AA = Type
5 (FC-5, Rubber)
22 (FC-5, PG 76-22)

30 (Traffic B, FC-9.5, Rubber)
31 (Traffic B, FC-12.5, Rubber)
32 (Traffic C, FC-9.5, Rubber)
33 (Traffic C, FC-12.5, Rubber)
35 (Traffic D, FC-12.5, Rubber)

40 (Traffic B, FC-9.5, PG 76-22)
41 (Traffic B, FC-12.5, PG 76-22)
42 (Traffic C, FC-9.5, PG 76-22)
43 (Traffic C, FC-12.5, PG 76-22)
45 (Traffic D, FC-12.5, PG 76-22)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### MISCELLANEOUS ASPHALT PAVEMENT

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#### Notes

Consists of construction of asphalt pavement in areas which will not be subjected to vehicular traffic, such as pavement under guardrail, bicycle paths, median pavement, sidewalks, etc. The pay quantity will be based on the average spread rate or dimensions for the project, limited to a maximum of 105% of the plan quantity. For calculation, use a weight of 100 lb/sy-in (22kg/m² per 10mm) thickness.

#### Related Items

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#### Documentation

| Design | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. |
| Construction | Approved automated asphalt plant tickets shall be used and submitted as Department records; in case of a malfunction of the automated system, the data shall be hand written on blank plant tickets. Transfer quantity to computation book. |

#### References

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<th>Other</th>
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### 351- 70-
#### ASPHALT RUBBER MEMBRANE INTERLAYER

- **Unit**: SY; M2
- **Accuracy**: Square Yard; Square Meter
- **PlanQuantity?**: no

**Notes**

- Consists of a separate application of asphalt rubber binder covered with a single application of aggregate. Payment for bituminous material (rubber binder) is incidental to this item.

**Details**

- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Related Items**

- **Required**: Design
- **Recommended**: SHTabQuant: Tabulation of Quantities Sheet

**Documents and Structure**

- **Prep & Doc Manual Chapter(s)**: 6, 7, 13

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Consists of placement of plain Portland Cement Concrete pavement and also of construction of pavement joints. For colored concrete, see 523 items.

**Required**

**Recommended**

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<tr>
<th>Forms</th>
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**Construction**

Refer to Comp Book

**Documentation**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**PPM Chapter**

Design

**Specifications**

Section 350

**Prep & Doc Manual Chapter(s)**

6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0200 Roadway

**Struct.**

350- 1- AA CEMENT CONCRETE PAVEMENT PLAIN SY

AA = Average thickness

1 (6")
2 (7")
3 (8")
4 (9")
5 (10")
8 (7 1/2")
9 (Var. 7 1/2" Avg.)
10 (12")
11 (13")
12 (11")
13 (11 1/2")
14 (14")
15 (13 1/2")
16 (10 1/2")
17 (8 1/2")
19 (12 1/2")
20 (Var. 9 1/2" Avg.)
21 (Var. 11" Avg.)
22 (Var. 11 1/2" Avg.)
23 (14 1/2")

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
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<th>Item</th>
<th>Description</th>
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<td>SY</td>
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<tr>
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<td>0350 1 10</td>
<td>PLAIN CEMENT CONCRETE PAVEMENT, 12”</td>
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<td>0350 1 17</td>
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<tr>
<td>0350 1 20</td>
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<td>1/1/2010</td>
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<tr>
<td>0350 1 21</td>
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<td>0350 1 23</td>
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<td>SY</td>
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### 350- 2- AA CEMENT CONCRETE PAVEMENT, REINFORCED

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
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<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>yes</td>
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</tbody>
</table>

**Notes**

Consists of placement of steel reinforced Portland Cement Concrete pavement and also of construction of pavement joints, as described in Section 350.

For fiber reinforced concrete, contact the State Pavement Design Office.

For colored concrete, see 523 items.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

Refer to Comp Book

**Documentation**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Details and Structure:** Items 300 to 399
PLAN QUANTITY will be basis of payment to the Contractor.

**Construction** Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

**PPM Chapter**

**Other**

**Specifications** Section 350

**Prep & Doc Manual Chapter(s)** 6, 7, 13

---

### TRNS*PORT Category (DRAFT FIELD):

0200 Roadway

---

### Status

**Struct.** 350- 2- AA CEMENT CONCRETE PAVEMENT, REINFORCED SY

AA = thickness
1 (6")
3 (8")
4 (9")
10 (12")

---

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0350 2 1</td>
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<tr>
<td>0350 2 3</td>
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<tr>
<td>0350 2 4</td>
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<td>SY</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0350 2 10</td>
<td>CEMENT CONC PAVT REINFORCED,12&quot;</td>
<td>SY</td>
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<td>1/1/2010</td>
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</tbody>
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---

### 350- 72- CLEANING & RESEALING JOINTS IN CONCRETE PAVEMENT

<table>
<thead>
<tr>
<th>Unit</th>
<th>Linear Foot; 10th of a Meter</th>
<th>PlanQuantity?</th>
<th>no</th>
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<tbody>
<tr>
<td><strong>Notes</strong></td>
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<td></td>
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</tbody>
</table>

Longitudinal and transverse joints must be summarized. This item to be used on existing concrete pavement only.

DO NOT Use on bridge structures; refer to item 400-12.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</table>

**Forms**

<table>
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<tr>
<th>Construction</th>
<th>Design</th>
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</thead>
<tbody>
<tr>
<td>Refer to Comp Book</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
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</table>

**Documentation**

<table>
<thead>
<tr>
<th>Construction</th>
<th>Design</th>
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<tbody>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</table>

**References**

**PPM Chapter**

**Other**

**Specifications** Section 350

**Prep & Doc Manual Chapter(s)** 6, 7, 13

---

**Details and Structure:** Items 300 to 399
**Struct. 350-72- CLEANING & RESEALING JOINTS IN CONCRETE PAVEMENT**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0350 72</td>
<td>CLEANING &amp; RESEALING JOINTS in CONCRETE PAVEMENT</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**350-78- CLEANING AND SEALING RANDOM CRACKS IN CONCRETE PAVEMENT**

**Notes**

Longitudinal and transverse joints must be summarized. This item to be used on existing concrete pavement only.

DO NOT Use on bridge structures; refer to Section 400 items.

**Related Items**

**Forms**

Required: Tabulation of Quantities Sheet

Recommended: SHTabQuant

**Documentation**

Design: Refer to Comp Book

Construction: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Prep & Doc Manual Chapter(s)**

6, 7, 13

**References**

PPM Chapter

Other

Standards

Specifications: Section 350

**Struct. 350-78- CLEANING AND SEALING RANDOM CRACKS IN CONCRETE PAVEMENT**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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</thead>
<tbody>
<tr>
<td>0350 78</td>
<td>CLEANING &amp; SEALING RANDOM CRACKS IN CONCRETE PAV'T</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

**352-70- GRINDING CONCRETE PAVEMENT**

**Notes**

Details and Structure: Items 300 to 399
This item to be used on existing concrete pavement only. Grinding of new concrete pavement included in the bid price for Cement Concrete Pavement. DO NOT Use on bridge structures; refer to Section 400 items.

**Related Items**

**Required**

**Recommended**

**Forms**

**Design**

SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Standards

Specifications Section 352

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 352- 70- GRINDING CONCRETE PAVEMENT SY

**Notes**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Related Items**

**Forms**

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Notes**

For use on existing Concrete Pavement roadways only.

Per specification, “the quantity will be calculated on the basis of field measured horizontal dimensions and pavement design thickness. No additional compensation will be allowed for additional concrete required to bring the proposed concrete slab up to finished grade.”

**Related Items**

**Required**

**Recommended**

**Forms**

**Design**

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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**370- 1-** BRIDGE APPROACH EXPANSION JOINT FOR CONCRETE PAVEMENT

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 10th of a Meter  
**PlanQuantity?**: yes

**Notes**
Consists of the construction of special expansion joints for concrete pavement near the bridge approach slabs. These joints contain a section of reinforced concrete subslab supporting the concrete pavement, and a portion of the pavement over the subslab interrupted by a galvanized sheet metal strip.

**Related Items**
- **Required**: Design
- **Recommended**: SHTabQuant: Tabulation of Quantities Sheet

**Forms**
- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
- **Construction**: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**
- **PPM Chapter**: Design, Construction  
- **Other**: Index No. 306  
- **Specifications**: Section 350, 370  
- **Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

**Status**

**Struct.**: 370- 1- BRIDGE APPROACH EXPANSION JOINT FOR CONCRETE PAVEMENT

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

Details and Structure: Items 300 to 399
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</table>
400- ALL

Class NS, I, II, III, IV, V, VI Details

Unit CY; M3  Accuracy 10th of a Cubic Yard; 10th of a Cubic Meter  PlanQuantity? yes/no

Notes

NOTES BELOW ARE FOR CLASS NS, I, II, III, IV, and V, VI Concrete

Details

No separate payment made for deck scuppers, poured expansion joints, deck control joints, preformed anchor bolt holes, plain neoprene bearing pads. These items are included in the cost of the concrete.

Reinforcement steel may be incidental to the cost of the concrete; refer to Section 400 of the specifications. Reinforcement is incidental for concrete jackets on steel piles, steel in barriers, traffic separators, and parapets. For Gravity Walls, reinforcement steel is incidental to cost of concrete.

Include quantity block in plans by component (except for misc. concrete). Mass concrete should be broken out in the quantity block separately. See SDG’s 3.9. When component is phased, break down quantity by phase. Concrete quantity is PLAN QUANTITY (except for misc. concrete). See Section 400-22.2.2 of the Specifications.

ENDWALLS: Refer to Design Standards for correct class of concrete and other payment details. For some U-endwalls, including Index 260 and 261, payment is made under 430 items. For Index 250, reinforcing steel is included in cost of concrete.

Misc Concrete (through June 2009 letting): Estimate 5 CY (5 M3) minimum. PENDING: To be replaced by Class NS concrete or other non-concrete items, to which concrete is incidental.

Misc Concrete (effective July 2009 letting): No separate payment is made for Misc Concrete. Work and materials are to be included in the item to which it is incidental- pull & junction box, lighting, signing, etc.

Precast Deck Overlay: consists of Class II with steel fiber reinforcement; Class IV with polymer fiber reinforcement and low shrinkage admixtures. Coordinate Use of this item with the State Structures Design Office. Requires modified specifications.

Class III: When it is not practical to dewater land pier footings, show seal concrete in the plans. For water piers, both waterline and mud line footings require seal concrete to be shown in the plans. See SDG’s 3.7.

Precast Segmental Production: Refer to Section 452 of the specifications, as needed.

Superstructure Light-Weight Concrete requires plan notes and/or a TSP for unit weight, aggregate requirements, etc.

Low Shrink Deck Concrete requires a TSP.

Self-Consolidating Concrete requires a Tech Spec. Coordinate this specification with the State Structures Design Office.

Counterweight Concrete may require plan notes and/or a TSP for unit weight, aggregate requirements, etc.

Concrete for bascule bridge pier should be paid for under Substructure or Mass-Substructure pay items. See SDG’s 3.9.

Clearly delineate limits of microsilica concrete in the plans. Clearly delineate limits of
calcium nitrite in the plans. CIP concrete requiring calcium nitrite should be paid for using the normal concrete pay item. See SDG’s 1.4.3.

Class VI: Coordinate the use of these items with the State Structures Design Office.

ORIGINAL MEASUREMENT:
ALL, Except MISC: Detailed calculations are required in the computation book, calculate carefully to reflect actual scope of work. PLAN QUANTITY will be basis of payment to the Contractor.
MISC: Detailed calculations are required in computation book.

FINAL:
ALL, Except MISC: No calculations required unless item is to be adjusted. Final pay quantity will be PLAN QUANTITY with proper considerations for Specification tolerances.
MISC: Final measurements should be recorded in field book showing detailed calculations. (Refer to subarticle 400-20.2.2 in the specifications.) Transfer final quantity to proper form in computation book.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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<tr>
<td></td>
<td></td>
<td>COMP 700-050-04/07: Volume Measure Items and Continuation; Concrete &amp; Reinforcing Steel Comp. and Cont.</td>
</tr>
<tr>
<td>Documentation</td>
<td>Construction</td>
<td>Refer to Comp Book</td>
</tr>
<tr>
<td></td>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
<tr>
<td>References</td>
<td>PPM Chapter</td>
<td>Mass Concrete SDG’s 3.9, Class and Admixtures SDG’s 1.4.3, Cofferdams and Seals SDG’s 3.7. Normally requires SHOP DRAWINGS</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>Index Numbers: APPROACH SLABS: 20900, 20910</td>
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<tr>
<td></td>
<td></td>
<td>CIP Retaining Wall: 5100</td>
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<td>CULVERTS: 289</td>
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<td></td>
<td>ENDWALLS: 250, 251, 252, 253, 255, 264, 266, 295</td>
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<td>MISC: 270, 280, 286, 287</td>
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<td>GRAVITY WALL: 520</td>
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<tr>
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<td>RET WALLS: 5000 series</td>
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</table>

Specifications | Sections 346, 400 |
Prep & Doc Manual Chapter(s) | 6, 7, 13 |

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Status

Struct. 400- ALL Class NS, I, II, III, IV, V, VI Details CY

AAA = Applications, Valid Class(es)
1 (Culverts) Class I, II, IV
2 (Endwalls) Class I, II, IV, excluding Index 260 & 261 endwalls
4 (Superstructure) Class II, IV
5 (Substructure) Class II, IV
6 (Counterweight) Class IV
8 (Bulkhead) Class IV
10 (Approach Slabs) Class II
11 (Retaining Walls) Class NS: Gravity Wall, Index 520; Class II: Gravity Wall w/ junction slab, Index 520. NOTE: DO NOT use this item for walls covered by 548 specifications.
12 (Trench Slabs) Class II
13 (Concrete Steps) Class NS: Index 521 **New item effective 7/09 letting**
15 (Miscellaneous) **Valid through June 2009 letting**
20 (Seal) Class III
22 (Superstructure Closure Joint) Class ??
25 (Mass- Substructure) Class ??
39 (Precast Segmental Superstructure) Class IV, V, VI. Refer to Section 452.
40 (Precast Segmental Substructure) Class IV, V. Refer to Section 452.
41 (Precast Deck Overlay) Class II with steel fiber reinforcement; Class IV with polymer fiber reinforcement & low shrink admixtures
42 (Substructure Self-Consolidating Concrete) Class VI, Tech Spec required
43 (Superstructure Self-Consolidating Concrete) Class VI, Tech Spec required
104 (Superstructure Light-Weight) Class ??
105 (Superstructure Special) Class ??
106 (Microsilica Substructure) Class V
107 (Microsilica Substructure-Mass) Class V
239 (Low Shrink Deck) Material Only, Class V

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
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<th>CLASS NS CONCRETE</th>
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<tbody>
<tr>
<td>Unit CY; M3</td>
</tr>
<tr>
<td>Accuracy 10th of a Cubic Yard; 10th of a Cubic Meter</td>
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<tr>
<td>PlanQuantity? yes/no</td>
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</table>

Effective July 2009.

-ALL for details on all classes of concrete

Required

Recommended 415- 1- A

Design SHTabQuant: Tabulation of Quantities Sheet

COMP 700-050-04/07: Volume Measure Items and Continuation; Concrete & Reinforcing Steel Comp. and Cont.

Refer to Comp Book

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

PPM Chapter Mass Concrete SDG’s 3.9, Class and Admixtures SDG’s 1.4.3, Cofferdams and Seals SDG’s 3.7. Normally requires SHOP DRAWINGS

Refer to 400-ALL for details on all classes of concrete

Sections 346, 400

6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

AAA = Class 0 Applications
## Notes
CLASS NS: DO NOT OPEN until specifications & standards are approved

### The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>0400 0 11</td>
<td>CONCRETE CLASS NS, GRAVITY WALL</td>
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<tr>
<td>0400 0 13</td>
<td>CONCRETE CLASS NS, STEPS</td>
<td>CY</td>
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<td>1/1/2010</td>
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### 400- 1-AAA CLASS I CONCRETE

#### Unit
CY; M3

#### Accuracy
10th of a Cubic Yard; 10th of a Cubic Meter

#### PlanQuantity?
yes/no

### Notes
Refer to 400- ALL for details on all classes of concrete

### Related Items
**Required**
415- 1- A

### Forms
**Design**
SHTabQuant: Tabulation of Quantities Sheet

**Construction**
Refer to Comp Book

### Documentation
**Design**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References
**PPM Chapter**
Mass Concrete SDG’s 3.9, Class and Admixtures SDG’s 1.4.3, Cofferdams and Seals SDG’s 3.7.

**Other**
Normally requires SHOP DRAWINGS

### Standards
Refer to 400- ALL for details on all classes of concrete

### Specifications
Sections 346, 400

### Prep & Doc Manual Chapter(s)
6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**
100 or 200 Structures or Roadway

### Status
**Struct.**
400- 1-AAA CLASS I CONCRETE CY

AAA = Class I Applications
1 (Culverts)
2 (Endwalls) Index 250, 264, 266, 282
11 (Retaining Walls) Gravity Wall, Index 520 **Valid through 6-30-2009; replaced by Class NS Gravity Wall**
15 (Miscellaneous) **Valid through June 2009 letting**
<table>
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### 400-2-AAA CLASS II CONCRETE

**Unit:** CY; M3  
**Accuracy:** 10th of a Cubic Yard; 10th of a Cubic Meter  
**PlanQuantity?** yes/no

#### Notes

**Details**  
Refer to 400-**ALL** for details on all classes of concrete

**Related Items**  
**Required**  
**Recommended**  
415-1-A

**Forms**  
**Design**  
SHTabQuant: Tabulation of Quantities Sheet  
COMP 700-050-04/07: Volume Measure Items and Continuation; Concrete & Reinforcing Steel Comp. and Cont.

**Construction**  
Refer to Comp Book

#### Documentation

**Design**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

**PPM Chapter**

**Other**  
Mass Concrete SDG’s 3.9, Class and Admixtures SDG’s 1.4.3, Cofferdams and Seals SDG’s 3.7.

**Standards**  
Refer to 400-**ALL** for details on all classes of concrete

**Specifications**  
Sections 346, 400

**Prep & Doc Manual Chapter(s)**  

---

**TRNS*PORT Category (DRAFT FIELD):**  
100 or 200 Structures or Roadway

### Status

**Struct.**  
400-2-AAA  
CLASS II CONCRETE  
CY

AAA = Class II Applications
1 (Culverts)
2 (Endwalls) Index 251, 252, 253, 255; NOT Index 260 or 261
4 (Superstructure)
5 (Substructure)
10 (Approach Slabs)
11 (Retaining Walls) Gravity Wall w/ junction slab, Index 520. NOTE: DO NOT use this item for walls covered by 548 specifications.
12 (Trench Slabs)
15 (Miscellaneous) **Valid through June 2009 letting**
41 (Precast Deck Overlay) w/admixtures

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Basis of Estimates

**2010 Edition**

**December 28, 2009**

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#### 400- 3-AAA CLASS III CONCRETE

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**Notes**

**Details**
- Refer to 400-ALL for details on all classes of concrete

**Related Items**

**Required Forms**
- Design: SHTabQuant: Tabulation of Quantities Sheet
- COMP 700-050-04/07: Volume Measure Items and Continuation; Concrete & Reinforcing Steel Comp. and Cont.

**Documentation**
- Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
- Other: Mass Concrete SDG’s 3.9, Class and Admixtures SDG’s 1.4.3, Cofferdams and Seals SDG’s 3.7.
- Standards: Refer to 400-ALL for details on all classes of concrete
- Specifications: Sections 346, 400

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

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**Status**

**Struct.**

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AAA = Class III Applications
15 (Miscellaneous) **Valid through June 2009 letting**
20 (Seal) Class III

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*
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### 400- 4-AAA  CLASS IV CONCRETE

**Unit**: CY; M3  **Accuracy**: 10th of a Cubic Yard; 10th of a Cubic Meter  **Plan Quantity**: yes/no

**Notes**

Refer to 400- -ALL for details on all classes of concrete Class IV normally used for aggressive environments.

**Related Items**

**Required**: COMP 700-050-04/07: Volume Measure Items and Continuation; Concrete & Reinforcing Steel Comp. and Cont.

**Recommended**: 415- 1- A

**Forms**

**Design**: SHTabQuant: Tabulation of Quantities Sheet

**Construction**: Refer to Comp Book

**Documentation**

**Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**: Mass Concrete SDG’s 3.9, Class and Admixtures SDG’s 1.4.3, Cofferdams and Seals SDG’s 3.7.

**Other**: Refer to 400- -ALL for details on all classes of concrete

**Specifications**: Sections 346, 400

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD)**: 100 or 200 Structures or Roadway

**Status**

**Struct.**: 400- 4-AAA  **CLASS IV CONCRETE**  **CY**

**AAA** = Class IV Applications
1 (Culverts)
2 (Endwalls)
4 (Superstructure)
5 (Substructure)
6 (Counterweight)
8 (Bulkhead)
15 (Miscellaneous) **Valid through June 2009 letting**
41 (Precast Deck Overlay) w/admixtures

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### PRECAST ANCHOR BEAMS

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#### Notes

**Details**

Intended for Precast Tie Back anchors for use in anchored wall systems. Include in anchored wall quantity block in plans.

**Related Items**

**Form Required**

Design

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book.

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Standards

Specifications Section 400

**Prep & Doc Manual Chapter(s)**

6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**

100 or 200 Structures or Roadway

**Status**

**Struct.**

400- 6-

PRECAST ANCHOR BEAMS

EA

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

Details and Structure: Items 400 to 499
### 400- 7-

**BRIDGE DECK GROOVING- DECK THICKNESS LESS THAN 8.5"**

<table>
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**Unit**: SY; M2  
**Accuracy**: Square Yard; Square Meter  
**Plan Quantity?**: yes

**Notes**

Item intended for cases where deck profilograph and planing is not required by specification. When rigid approach slab is utilized, include approach slab area only. Quantity based on area bound by bridge gutter lines, begin/end of bridge or begin/end approach slab (if not covered by asphalt wearing surface).

**Related Items**

Required:  
Recommended:  

**Forms**

Design: HSTabQuant: Tabulation of Quantities Sheet

**Documentation**

Construction: Refer to Comp Book  
Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**References**

PPM Chapter:  
Other: SDG’s 4.2

**Standards**

Specifications: Section 400

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

**Struct.**: 400- 7-

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

### 400- 8-AAA

**CLASS V CONCRETE**

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**Unit**: CY; M3  
**Accuracy**: 10th of a Cubic Yard; 10th of a Cubic Meter  
**Plan Quantity?**: yes/no

**Notes**

Refer to 400- -ALL for details on all classes of concrete

**Related Items**

Required:  
Recommended:  

**Forms**

Design: HSTabQuant: Tabulation of Quantities Sheet

COMP 700-050-04/07: Volume Measure Items and Continuation; Concrete & Reinforcing Steel Comp. and Cont.
### Construction
Refer to Comp Book

### Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

### Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References
PPM Chapter
Other
Mass Concrete SDG’s 3.9, Class and Admixtures SDG’s 1.4.3, Cofferdams and Seals SDG’s 3.7.

### Standards
Refer to 400-ALL for details on all classes of concrete

### Specifications
Plan Details and/or Technical Specifications required

---

**TRNS*PORT Category (DRAFT FIELD):**
100 or 200 Structures or Roadway

### Status
Strict. 400-8-AAA
**CLASS V CONCRETE**

AAA = Class V Applications
39 (Precast Segmental Superstructure)
40 (Precast Segmental Substructure)
106 (Microsilica Substructure)
107 (Microsilica Substructure-Mass)
239 (Low Shrink Deck) Material Only

---

### Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 400-9-
**BRIDGE DECK GROOVING AND PLANING: DECK THICKNESS 8.5" or GREATER**

#### Unit
SY; M2

#### Accuracy
Square Yard; Square Meter

#### PlanQuantity?
yes

### Notes
Item intended for cases where deck profilograph, and planing is required by specification. When rigid approach slab is utilized, include approach slab area. Quantity based on area bound by bridge gutter lines, begin/end of bridge or begin/end approach slab (if not covered by asphalt wearing surface).

### Related Items
**Required**
**Recommended**

### Forms
**Design**
SHTabQuant: Tabulation of Quantities Sheet

---

Details and Structure: Items 400 to 499
**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

**PPM Chapter**

Other

SDG’s 4.2

**Standards**

**Specifications**

Section 400

**Prep & Doc Manual Chapter(s)** 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

**Struct.** 400-9-

BRIDGE DECK GROOVING AND PLANING- DECK THICKNESS 8.5” or GREATER

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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**400-16-AAA**

Class VI Concrete

**Unit**

CY; M3

**Accuracy**

10th of a Cubic Yard; 10th of a Cubic Meter

**Plan Quantity?**

yes/no

**Notes**

Details

Refer to 400-ALL for details on all classes of concrete

Related Items

Required

Recommended 415-1-A

**Forms**

Design

**Documentation**

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

Other

**Standards**

**Specifications**

Refer to 400-ALL for details on all classes of concrete

**Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

**Struct.** 400-16-AAA Class VI Concrete CY

---

Details and Structure: Items 400 to 499
AAA = Application
22 (Superstructure Closure Joint)
25 (Mass- Substructure)
39 (Precast Segmental Superstructure)
42 (Substructure Self-Consolidating Concrete)
43 (Superstructure Self-Consolidating Concrete)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</tr>
</tbody>
</table>

400-20- GRINDING BRIDGE DECK- REHABILITATION ONLY

| Unit    | SY; M2   | Accuracy       | Square Yard; Square Meter | PlanQuantity? | no |

Notes
Estimates Support: Contact the State Structures Design Office before opening item.

Details
For use on bridge rehabilitation projects only.

Related Items
Required: Recommended
Forms
Design
SHTabQuant: Tabulation of Quantities Sheet

Documentation
Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status
Struct. 400-20- GRINDING BRIDGE DECK- REHABILITATION ONLY SY

Notes
Estimates Support: Contact the State Structures Design Office before opening item
400- 32-  CONCRETE FOR JOINT REPAIR

Unit       CY; M3    Accuracy  10th of a Cubic Yard;
           10th of a Cubic Meter
PlanQuantity? yes

Notes
Details
Intended for rehabilitation or widening projects to repair or replace concrete deck at
expansion joints. Include in Quantity Block in Plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description,
materials, construction/installation requirements, method of measurement and basis of
payment are available in the contract documents to clearly define the work to be
completed for payment under this item.

Related Items
Required       Recommended
Forms
Design          SHTabQuant: Tabulation of Quantities Sheet

Construction
Refer to Comp Book

Documentation
Design
Locate in plans. Summarize quantities by location on tabulation of
quantities sheet in the plans, or detail calculations in the computation book.
PLAN QUANTITY will be basis of payment to the Contractor.

Construction
Final pay quantity will be PLAN QUANTITY with proper consideration for
Specification tolerances.

References
PPM Chapter
Other
       SDG’s 6.4

Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD):  0100  Structures

Status
Struct.  400- 32-  CONCRETE FOR JOINT REPAIR  CY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>T</td>
<td>1/1/2010</td>
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</table>

400- 60-  A  CATHODIC PROTECTION- ELECTRICAL WORK

Unit       LS/LS    Accuracy  Lump Sum
PlanQuantity? Lump Sum

Notes
Details
Intended for Electrical Work associated with Cathodic Protection. 3 pay items (power,
conduit, and equipment, as described below) are needed for a complete electrical system.
Use with either 400-142 Cathodic Protection (CP) of mass concrete products, 455-81 CP
for piles, or 457 items- CP for integral pile jackets. Contact the Materials Lab for
assistance with using this item.

AC or DC POWER SOURCE ASSEMBLY: Includes all work and materials for providing
power to the Cathodic Protection System. For AC assemblies, this includes all costs.
associated with connection between system and external power source. For DC assemblies, includes solar panels, batteries, incidentals, and wiring necessary to provide power.

CONDUIT: Includes all conduit from power source assembly to end location(s), junction boxes, wiring, and all incidentals. Measure as the length of conduit from the power system, along the bridge, and down each pier to be protected.

EQUIPMENT & INSTRUMENTATION: Lump sum item to include all remaining items necessary for a complete system. Detail major equipment, by location, in the plans or Tech Specs.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

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<thead>
<tr>
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<tbody>
<tr>
<td>400-142, 455-81, or 457 items.</td>
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Forms

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<td>COMP 700-050-05: Lump Sum Quantities</td>
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Documentation

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References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
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<tbody>
<tr>
<td>Other</td>
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Standards Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct. 400- 60- A CATHODIC PROTECTION- ELECTRICAL WORK LS/LS

A= Components (Select only 1 power source assembly; use with BOTH A= 3 and 4)
1 (AC Power Source Assembly) LS
2 (DC Power Source Assembly) LS
3 (Conduit, Wiring, and Accessories) LS/LF
4 (Equipment & Instrumentation) LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
400-72- PRECAST BULKHEAD PANELS

Unit: SF; M2
Accuracy: Square Foot; 10th of a Square Meter
PlanQuantity?: yes

Notes

Details

Intended for precast panels used as part of a soldier pile wall system.

Pay Item note recommended; coordinate with specifications. Add pay item note similar to concrete sheet piles (Spec. 455-9.4 and 455-12.7) to include cost of trenching, preformed holes in cost of precast panels. Include in Soldier Wall Quantity Block in Plans.

May require specification modifications as follows: 455-5.15.2 and 455-5.15.3 Placement Tolerances (+/-1") and Batter Tolerances (1/8 in/ft)

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required: SHTabQuant: Tabulation of Quantities Sheet
Recommended: 455-34- AA

Forms

Design

Refer to Comp Book

Documentation

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
SDG’s 3.12.9 and Figure 3-13.

Other

Normally requires SHOP DRAWINGS

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)
7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct. 400-72- PRECAST BULKHEAD PANELS SF

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 400-91 - DEWATERING FOR SPREAD FOOTINGS

**Unit**: EA  
**Accuracy**: Each  
**Plan Quantity?**: yes

#### Notes
Required on all spread footing projects where dewatering is anticipated due to high water table. Include in Footing Quantity Block in Plans. Usually used with Pay Items 400-4-25, 400-2-25, 415-1-5. Include Pay Item 125-1 only when additional excavation is required below bottom of footing elevation.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

#### Related Items
- Required: sumdrd.dgn: Summary of Drainage Structures

#### Forms
- Design

#### Documentation
- Design: Refer to Comp Book
- Construction: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

#### References
- PPM Chapter: 7, 13
- Other: Plan Details and/or Technical Specifications required

#### Status
- Struct. 400-91 - DEWATERING FOR SPREAD FOOTINGS

#### Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 400-95 - COFFERDAM

**Unit**: EA  
**Accuracy**: Each  
**Plan Quantity?**: yes

#### Notes
Intended to construct/dewater cofferdams. Cofferdams may be required to construct or demolish mud line footings located in the waterway. This pay item is not to be utilized when full containment structures are required due to special environmental turbidity requirements, or when a pier footing is located at the shoreline making dewatering
difficult. Do not use for waterline or slightly submerged footings.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

**Forms**
- **Required**: 400- 3- 20
- **Recommended**: SHTabQuant: Tabulation of Quantities Sheet

### Construction
- Refer to Comp Book

### Design
- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

### Construction
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References
- **PPM Chapter**: SDG’s 3.7.
- **Other**: SDG’s 3.7.

### Standards Specifications
- **Plan Details and/or Technical Specifications required**

### Prep & Doc Manual Chapter(s)
- 7, 13

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**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

### Status

**Struct.** 400- 95- A

COFFERDAM EA

A =
1 (Bascule Pier)
2 (Control House)
3 (Special)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>0400 95 3</td>
<td>COFFERDAM, SPECIAL</td>
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### 400-113-

**PRECAST BENT CAPS (END)**

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<th>Unit</th>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>yes</td>
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</tbody>
</table>

### Notes Details

Intended for prefabricated end bent caps (furnish and install). Include in End Bent Quantity Block in Plans. Address cost of connection to piles and flowable fill (or similar) required to fill under finished cap. Tech Spec or Plan note may be necessary to address connection to piles.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be
completed for payment under this item.

<table>
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<tr>
<th>Related Items</th>
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<tbody>
<tr>
<td>Forms</td>
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**Documentation**

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<thead>
<tr>
<th>Standards</th>
<th>Specifications</th>
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<tr>
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<td>Plan Details and/or Technical Specifications required</td>
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<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
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<td>Struct. 400-113-</td>
<td>PRECAST BENT CAPS (END) LF</td>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**400-114- PRECAST BENT CAPS (INT)**

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<th>Unit</th>
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</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Details**

Intended for prefabricated bent caps (furnish and install). Include in Bent Cap Quantity Block in Plans. TSP or plan notes may be necessary to address connection to piles.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
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<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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**Documentation**

<table>
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<th>Standards</th>
<th>Specifications</th>
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<tbody>
<tr>
<td>Design</td>
<td>Refer to Comp Book</td>
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<tr>
<td>Construction</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
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<table>
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<th>Related Items</th>
<th>Required</th>
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<tr>
<td>Forms</td>
<td>Construction</td>
<td>Refer to Comp Book</td>
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<tr>
<td>Documentation</td>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
</tr>
<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
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**References**

PPM Chapter

<table>
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<th>Other Standards</th>
<th>Specifications</th>
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<tr>
<td>Design</td>
<td>Other</td>
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<tr>
<td>Plan Details and/or Technical Specifications required</td>
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<tr>
<td>Refer to Comp Book</td>
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</table>

**Prep & Doc Manual Chapter(s)**

**Details and Structure: Items 400 to 499**
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct. 400-114- PRECAST BENT CAPS (INT) LF

Notes

Plan Details and/or Technical Specifications required

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>400-128-</th>
<th>GROUTING PRECAST DECK PANELS (NON-SHRINK GROUT)</th>
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<tbody>
<tr>
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<tr>
<td>Accuracy</td>
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<tr>
<td>Plan</td>
<td>no</td>
</tr>
<tr>
<td>Quantity?</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

Details
Intended for grouting the keyways of precast deck panels for both new and rehabilitation projects. On rehabilitation projects, include pay item notes to address payment of the various work items involved. TSP may be required on rehabilitation projects to address removal of existing asphalt overlay, removal and preparation of existing keyways, grouting of keyways, post-tensioning and new overlay requirements.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required
Design

Recommended
SHTabQuant: Tabulation of Quantities Sheet

Forms

Construction
Refer to Comp Book

Documentation

Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Other
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct. 400-128- GROUTING PRECAST DECK PANELS (NON-SHRINK GROUT) LF

Notes

Details and Structure: Items 400 to 499
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<td>GROUTING PRECAST DECK PANELS, NON-SHRINK GROUT</td>
<td>LF</td>
<td>1/1/2010</td>
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</tbody>
</table>

400-136- EPOXY CONCRETE OVERLAY- STRUCTURES REHAB

**Notes**

**Details**

Used for rehabilitation of existing bridges. Item includes all costs for shotblasting deck, cleaning deck surface, testing cohesion, furnishing & installing epoxy overlay wearing surface. Contact State Structures Office for assistance.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
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<tr>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
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</table>

**Forms**

**Construction**

Refer to Comp Book

**Documentation**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

Struct. 400-136- EPOXY CONCRETE OVERLAY- STRUCTURES REHAB SY

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<td>EPOXY CONCRETE OVERLAY- STRUCTURES REHAB</td>
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<td>T</td>
<td>1/1/2010</td>
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</table>

400-140- A NEOPRENE PAD REPLACEMENT

**Notes**

Details and Structure: Items 400 to 499
Intended for rehabilitation and widening projects to replace existing damaged pads. Show locations with quantity block in plans. Include pay item note to include cost of neoprene pads, jacking bridge, disposal of old pads, and all other labor and materials required to replace existing bearing incidental to cost of this item. For Composite pads, refer to pay item 400-147.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
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### Construction

- Refer to Comp Book

### Documentation

- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- PPM Chapter
- SDG’s 6.5
- Index No. 20500, 20501

### Standards

- Index No. 20500, 20501

### Specifications

- Plan Details and/or Technical Specifications required

### Status

**Struct.** 400-140- A

**NEOPRENE PAD REPLACEMENT EA**

A =
- 1 (Bent / Pier)
- 2 (Abutment)
- 3 (Box Pier)
- 4 (Trestle Pier)
- 5 (V - Pier)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<td>1/1/2010</td>
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**400-142- A**

**CATHODIC PROTECTION SYSTEM**

- **Unit**: SF; M2
- **Accuracy**: Square Foot; 10th of a Square Meter
- **PlanQuantity?**: no

**Notes**

Intended for rehabilitation projects when galvanic or impressed current cathodic systems are used for mass concrete or structural components. Contact State Materials Office, Corrosion Lab for assistance in use of this item. Show locations in plans with quantity block.
Use Item 400-60 for Electrical Work associated with this item.

DO NOT USE this item for Pile or Pile Jacket Cathodic Protection. See 455-81 (pile) or 457-71 (pile jacket) for other Cathodic Protection items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

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<tr>
<th>Related Items</th>
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<tr>
<td>Forms</td>
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**Plan Details and/or Technical Specifications required**

| Prep & Doc Manual Chapter(s) | 6, 7, 13 |

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**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

<table>
<thead>
<tr>
<th>Struct.</th>
<th>400-142- A</th>
<th>CATHODIC PROTECTION SYSTEM</th>
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<tbody>
<tr>
<td>A = 3 (Zinc Aluminum Spray)</td>
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</tr>
<tr>
<td>4 (Zinc Aluminum Sheets)</td>
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<tr>
<td>7 (Titanium Mesh) effective 7/1/06</td>
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<tr>
<td>8 (Titanium Bars) effective 7/1/06</td>
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<tr>
<td>9 (Other) effective 7/1/06</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes</th>
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**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0400142 3</td>
<td>CATHODIC PROTECTION SYSTEM, ZINC ALUMINUM SPRAY</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0400142 4</td>
<td>CATHODIC PROTECTION SYSTEM, ZINC ALUMINUM SHEETS</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0400142 7</td>
<td>CATHODIC PROTECTION SYSTEM, TITANIUM MESH</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
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</table>

<table>
<thead>
<tr>
<th>400-143-</th>
<th>CLEANING AND COATING CONCRETE SURFACES, CLASS 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
<td>SF; M2</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Square Foot; 1/10th of a Square Meter</td>
</tr>
<tr>
<td>PlanQuantity?</td>
<td>yes</td>
</tr>
</tbody>
</table>

---

Details and Structure: Items 400 to 499
This is a concrete texture coating utilized as a final concrete finish. This item is used on bridge widening jobs for applying a class 5 finish coating to existing concrete surfaces or where existing bridges/walls within the limits of a project require a class 5 finish coating.

Per specification, "The cost of coating new concrete will not be paid for separately, but will be included in the cost of the item to which it is applied."

Show locations in plans w/ quantity block.

### Related Items

**Required**

<table>
<thead>
<tr>
<th>Forms</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction</strong></td>
<td>Refer to Comp Book</td>
</tr>
</tbody>
</table>

**Documentation**

<table>
<thead>
<tr>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</strong></td>
</tr>
</tbody>
</table>

| **Construction** | Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances. |

### References

| **Other** |

### Standards

| **Specifications** | Section 400 |
| **Prep & Doc Manual Chapter(s)** | 6, 7, 13 |

### Notes

Details and Structure: Items 400 to 499

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0400143</td>
<td>CLEANING &amp; COATING CONCRETE SURFACE, CLASS 5</td>
<td>SF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

400-145- A CLEANING CONCRETE SURFACE

| Unit   | LS/SF; LS/M2 | Accuracy | Lump Sum (Square Foot); Lump Sum (Square Meter) | PlanQuantity? | yes |

Notes

Details

Intended for cleaning existing class 5 finish coating of existing bridge. Show locations in plans w/ quantity block. Include pay item note in plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
COMP 700-050-05: Lump Sum Quantities

Construction
Refer to Comp Book

Documentation
Design
Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter
Other
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Status

Struct. 400-145- A CLEANING CONCRETE SURFACE LS/SF

A = location
Blank (Above Water)
1 (Underwater)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tr>
<td>0400145</td>
<td>CLEANING CONCRETE SURFACE</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

400-147- COMPOSITE NEOPRENE PADS

Unit CF; M3
Accuracy 10th of a Cubic Foot; 100th of a Cubic Meter

PlanQuantity? no

Notes

Details
Intended for composite (steel reinforced) neoprene bearing pads for bridges. Include cost of plain neoprene bearing pads in cost of concrete superstructure component. Add pay item note for this case. Show locations in plans w/ quantity block. For replacement of neoprene pads, refer to pay item 400-140.

Related Items
Required
Recommended
Forms
Design SHTabQuant: Tabulation of Quantities Sheet

Documentation

Construction 700-050-56

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other SDG’s 6.5, Normally requires SHOP DRAWINGS
Standards Index No. 20500, 20501
Specifications Section 400

Details and Structure: Items 400 to 499
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0400147</td>
<td>COMPOSITE NEOPRENE PADS</td>
<td>CF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**400-153-** NON SHRINK GROUT- MISCELLANEOUS

**Unit**: CF; M3  
**Accuracy**: 10th of a Cubic Foot; 100th of a Cubic Meter

**Notes**

For rehabilitation/widening projects only. Use 10.0 CF (0.03 M3) as a minimum quantity. Show locations in plans w/ quantity block. Include pay item note in plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Documentation**

Design  
Refer to Comp Book

Construction  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter  
Other  
Standards  
Specifications

*Plan Details and/or Technical Specifications required*

**Prep & Doc Manual Chapter(s)**  6, 7, 13
**401-70- A**

**RESTORE SPALLED AREAS**

| Unit | CF; M3 | Accuracy | 10th of a Cubic Foot; 100th of a Cubic Meter | Plan Quantity? | no |

**Notes**

**Details**

Used on rehabilitation projects to cover costs of patching existing concrete spalls. Show locations in plans with quantity block. Include pay item note in plans. Cost includes cost of preparation, labor and material of concrete patch. Use 10.0 CF (1.00 M3) as a minimum quantity.


For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Forms**

**Design**

SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Other**

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0100 Structures

**Struct.**

401-70- A

**RESTORE SPALLED AREAS**

**CF**

A =

1 (Epoxy)

2 (Latex Modified Mortar - Styrene-Butadiene)

3 (Latex Modified Mortar - Acrylic)

4 (Portland Cement Grout)

5 (Contractors Option)

6 (Thermosetting Polymer Concrete)

Blank (Gunite)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0401 70</td>
<td>RESTORE SPALLED AREAS, GUNITE</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0401 70 1</td>
<td>RESTORE SPALLED AREAS, EPOXY</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0401 70 2</td>
<td>RESTORE SPALLED AREAS, LATEX MODIFIED MORTAR- STYRENE BUTADIENE</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0401 70 3</td>
<td>RESTORE SPALLED AREAS, LATEX MODIFIED MORTAR- ACRYLIC</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0401 70 4</td>
<td>RESTORE SPALLED AREAS, PORTLAND CEMENT GROUT</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0401 70 5</td>
<td>RESTORE SPALLED AREAS, CONTRACTORS OPTION</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0401 70 6</td>
<td>SPALLED AREAS RESTORE, THERMOSETTING POLYMER CONC</td>
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<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 405-70- A LATEX MODIFIED PORTLAND CEMENT CONCRETE

**Unit**: CF; M3  
**Accuracy**: 10th of a Cubic Foot; 100th of a Cubic Meter  
**Plan Quantity?**: no

**Notes**
Intended for thin deck overlays. Show locations in plans w/ quantity block. Include pay item note in plans. Cost includes cost of preparation, labor and material of latex modified concrete overlay. Use 10.0 CF (1.00 M3) as a minimum quantity.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Documentation**

<table>
<thead>
<tr>
<th>Design</th>
<th>Refer to Comp Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

**Prep & Doc Manual Chapter(s)**

6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0100 Structures

**Struct.** 405-70- A LATEX MODIFIED PORTLAND CEMENT CONCRETE CF

A =
1 (Type I Cement)  
2 (Type III Cement)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0405 70 1</td>
<td>LATEX MODIFIED PORTLAND CEMENT CONCRETE, TYPE I</td>
<td>CF</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0405 70 2</td>
<td>LATEX MODIFIED PORTLAND CEMENT CONC, TYPE III</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 407- 1- AB PRECAST THREE SIDED CULVERT

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 10th of a Meter  
**PlanQuantity?**: yes

**Notes**

Per specifications, 3 sided box culvers are not an equivalent substitution for Precast Concrete Box Culverts. Refer to PPM for selection and design criteria.

**Related Items**

- **Required**
- **Recommended**

**Forms**

- **Design**: sumdrd.dgn: Summary of Drainage Structures

**Documentation**

- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**: Vol 1, Chapter 33
- **Other**
- **Standards**
- **Specifications**: Section 407
- **Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD)**: 100 or 200 Structures or Roadway

### Status

**Struct.** 407- 1- AB PRECAST THREE SIDED CULVERT LF

- A = Span (Total width of culvert when multiple barrels)
  - 1 (up to 20 ft)
  - 2 (20-29 ft)
  - 3 (30-39 ft)
  - 4 (40-49 ft)
  - 5 (50 ft or greater)
- B = Height
  - 1 (up to 10 ft)
  - 2 (10 ft or greater)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0407 1 21</td>
<td>PRECAST CONCRETE 3 SIDE BOX CULVERT, 20-29' SPAN, &lt; OR = 10' HEIGHT</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>
### 411- 1-  EPOXY MATERIAL FOR CRACK INJECTION

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA; LI</td>
<td>Gallon; Liter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

**Details**

Items 411-1 and 411-2 are for separate payment of materials and labor for Epoxy Injection of cracks in existing concrete surfaces, in accordance with specification Section 411.

**Related Items**

- Required
- Recommended

**Forms**

- Design

**Documentation**

- Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**

- PPM Chapter
- Other
- Standards
- Specifications Section 411

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

- 0100 Structures

**Status**

**Struct.**

- 411- 1-  EPOXY MATERIAL FOR CRACK INJECTION  GA

### 411- 2-  INJECT AND SEAL CRACK

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

**Details**

See Item 411-1 for detail information.

**Related Items**

- Required
- Recommended

**Forms**

- Design

**Documentation**

- Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**

- PPM Chapter
- Other
- Standards
- Specifications Section 411

---

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tr>
<td>0411 1</td>
<td>EPOXY MATERIAL FOR CRACK INJECTION- STRUCTURES REHAB</td>
<td>GA</td>
<td>T</td>
<td>1/1/2010</td>
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**Details and Structure:** Items 400 to 499
## Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

### Status

**Struct.** 411-2- **INJECT AND SEAL CRACK** LF

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
<td>041112</td>
<td>CRACKS INJECT &amp; SEAL - STRUCTURES</td>
<td>LF</td>
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<td>1/1/2010</td>
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</table>

### 413-149-** PENETRANT SEALER**

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO SEPARATE PAYMENT FOR NEW, PRECAST ITEMS. Pay Item for Rehabilitation jobs only. Intended to cover material cost of penetrant sealer. Pay Item 413-154 to cover labor costs. Show locations in plans w/ quantity block.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required</strong></td>
</tr>
<tr>
<td>413-154</td>
</tr>
<tr>
<td><strong>Recommended</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Forms</th>
<th>Design</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
<tr>
<td></td>
<td>COMP 700-050-06: Weight Measure or Liquid Volume Comp &amp; Cont.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPM Chapter</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Standards</td>
</tr>
<tr>
<td>Specifications</td>
</tr>
<tr>
<td>Section 413</td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
</tr>
</tbody>
</table>

## 100 or 200 Structures or Roadway

### Status

**Struct.** 413-149- **PENETRANT SEALER** GA

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0413149</td>
<td>PENETRANT SEALER</td>
<td>GA</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### 413-151-** METHYLACRYLATE MONOMER**

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For use on rehabilitation projects to seal existing deck cracks. Contact State Materials</td>
</tr>
</tbody>
</table>

---

Details and Structure: Items 400 to 499
(Gainesville Corrosion) Lab for assistance with Specs. Intended to cover material cost of methacrylate monomer. Pay Item 413-154 to cover labor costs. Show locations in plans w/ quantity block.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>413-154</td>
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</tbody>
</table>

### Forms

<table>
<thead>
<tr>
<th>Design</th>
<th>Construction</th>
</tr>
</thead>
</table>
| SHTabQuant: Tabulation of Quantities Sheet | LOCATE IN PLANS. SUMMARIZE QUANTITIES BY LOCATION ON TABULATION OF QUANTITIES SHEET IN THE PLANS, OR DETAIL CALCULATIONS IN THE COMPUTATION BOOK.

### Documentation

<table>
<thead>
<tr>
<th>Design</th>
<th>Construction</th>
</tr>
</thead>
</table>
| LOCATE IN PLANS. SUMMARIZE QUANTITIES BY LOCATION ON TABULATION OF QUANTITIES SHEET IN THE PLANS, OR DETAIL CALCULATIONS IN THE COMPUTATION BOOK. | RECORD FINAL QUANTITY ON THE TABULATION SHEET (PLANS) OR COMPUTATION FORM (COMP BOOK).

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other Standards</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 413</td>
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</tbody>
</table>

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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<th>Unit</th>
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### 413-154-

CLEANING AND SEALING CONCRETE SURFACES: PENETRANT SEALER OR METHACRYLATES

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
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<tbody>
<tr>
<td>SF; M2</td>
<td>Square Foot; 10th of a Square Meter</td>
<td>no</td>
<td>NO SEPARATE PAYMENT for prestressed, precast items. REFER TO SECTION 400 for other coatings. Intended to cover labor cost of penetrant sealer or Methacrylates. Pay Item 413-149 or 413-151 to cover material costs. Show locations in plans w/ quantity block.</td>
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### Related Items

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### Forms

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</table>
| SHTabQuant: Tabulation of Quantities Sheet | REFER TO COMP BOOK.

### Documentation

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<th>Construction</th>
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| LOCATE IN PLANS. SUMMARIZE QUANTITIES BY LOCATION ON TABULATION OF QUANTITIES SHEET IN THE PLANS, OR DETAIL CALCULATIONS IN THE COMPUTATION BOOK. | RECORD FINAL QUANTITY ON THE TABULATION SHEET (PLANS) OR COMPUTATION FORM (COMP BOOK).

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
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Standards
Specifications Section 413
Prep & Doc Manual Chapter(s)

**TRNS**PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

**Struct.** 413-154-

**CLEANING AND SEALING CONCRETE SURFACES:** SF PENETRANT SEALER OR METHACRYLATES

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
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**415- 1- A** REINFORCING STEEL

**Unit** LB; KG **Accuracy** Pound; Kilogram **PlanQuantity?** yes

**Notes**

Show locations in plans with quantity block by component (when component is constructed in phases break down quantity by phase). Include complete bar lists in plans.

APPROACH SLABS: Item No. 415- 1- 9 (2415- 1- 9) to be used with Item No. 400- 2-10 (2400- 2- 10).

**Related Items**

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<td>COMP 700-050-07: Concrete &amp; Reinforcing Steel Comp &amp; Cont.</td>
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</tr>
<tr>
<td></td>
<td>Refer to Comp Book</td>
<td></td>
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<tr>
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<tr>
<td></td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
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**References**

PPM Chapter
Other
Standards ENDWALLS: 295 MISC: Index 280 for guard at pipe end
Specifications Section 415
Prep & Doc Manual Chapter(s)

**TRNS**PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

**Struct.** 415- 1- A REINFORCING STEEL LB

A =
1 (Roadway)
3 (Retaining Wall)
4 (Superstructure)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
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**415- 2- A REINFORCING STEEL- STAINLESS**

**Notes**

Coordinate the use of Stainless Steel with the State Structures Office.

Intended for stainless steel or stainless steel clad reinforcing. Show locations in plans with quantity block. Include bar lists.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

- SHTabQuant: Tabulation of Quantities Sheet
- COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.

**Recommended**

- Refer to Comp Book

**Documentation**

**Design**

- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Other**

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

7, 13

**TRNS*PORT Category (DRAFT FIELD):**

100 or 200 Structures or Roadway

**Status**

**Struct.** 415- 2- A REINFORCING STEEL- STAINLESS LB

Details and Structure: Items 400 to 499
A =
1 (Roadway)
3 (Retaining Wall)
4 (Superstructure)
5 (Substructure)
6 (Miscellaneous)
7 (Sound Barrier Wall)
8 (Bulkhead)
9 (Approach Slabs)

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
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425- 1-AAB INLETS

Notes
"Partial" is used when an existing structure is to be modified.
"Modified" is used when the standard structure on new construction is modified. Modification of the Standard Index Drawing by adding weirs, notches, skimmers, and/or a change to dimensions and reinforcement, are to be detailed in the plans.
"Special" is not limited to any particular inlet type. If a designer has a need for something other than an inlet covered by the standard indexes, it is regarded as special (as in special design). Special Designs require signed and sealed drawings to be included in the plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

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Documentation

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<td>Design</td>
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<td>Specifications</td>
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| Selected Items may require Plan Details and/or Technical Specifications |

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Details and Structure: Items 400 to 499
AA =  
20 (Curb Type 9)  
21 (Curb Type 10)  
31 (Curb Type P-1) B not 3, 4, 7, or 8  
32 (Curb Type P-2) B not 3, 4, 7, or 8  
33 (Curb Type P-3) B not 3, 4, 7, or 8  
34 (Curb Type P-4) B not 3, 4, 7, or 8  
35 (Curb Type P-5) B not 3, 4, 7, or 8  
36 (Curb Type P-6) B not 3, 4, 7, or 8  
41 (Curb Type J-1) B not 3, 4, 7, or 8  
42 (Curb Type J-2) B not 3, 4, 7, or 8  
43 (Curb Type J-3) B not 3, 4, 7, or 8  
44 (Curb Type J-4) B not 3, 4, 7, or 8  
45 (Curb Type J-5) B not 3, 4, 7, or 8  
46 (Curb Type J-6) B not 3, 4, 7, or 8  
47 (Curb Type 7)  
48 (Curb Type 8)  
50 (Ditch Bottom Type A)  
51 (Ditch Bottom Type B)  
52 (Ditch Bottom Type C)  
53 (Ditch Bottom Type C Mod) B not 9  
54 (Ditch Bottom Type D)  
55 (Ditch Bottom Type E)  
56 (Ditch Bottom Type F)  
57 (Ditch Bottom Type G)  
58 (Ditch Bottom Type H)  
59 (Ditch Bottom Type I)  
60 (Ditch Bottom Type J)  
61 (Ditch Bottom Type K)  
70 (Gutter Type S)  
71 (Gutter Type V)  
72 (Gutter Type S Mod) B not 9  
80 (Med Barrier Type 1)  
81 (Med Barrier Type 2)  
82 (Med Barrier Spec Type 1)  
83 (Med Barrier Spec Type 2)  
84 (Med Barrier Type 3)  
85 (Med Barrier Type 4)  
86 (Med Barrier Type 5)  
88 (Barrier Wall, Rigid, Curb & Gutter)  
89 (Barrier Wall)  
90 (Special) B not 7 or 8*  
91 (Closed Flume) B= 0  

B =  
1 (<= 10')  
2 (> 10')  
3 (J Bot, < 10') (Standard Index 201)  
4 (J Bot, > 10') (Standard Index 201)  
5 (Partial)  
7 (J Bottom, <10', Special)  
8 (J Bottom, >10', Special)  
9 (Modify)  
0 (N/A) only for A=91
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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The designer should consider calling for a ring and cover where routine cleanout and inspection is anticipated, such as a French Drain.

## Related Items
- **Required**: Design
- **Recommended**: sumdrd.dgn: Summary of Drainage Structures

## Forms
- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

## Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Details and Structure**: Items 400 to 499
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### 425-3-AAB JUNCTION BOX (DRAINAGE)

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**Notes**

Refer to the specifications for requirements.

**Details**

REPAIR: Detail repairs to be completed in the plans or specifications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

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<th>Forms</th>
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**Design**

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Documentation**

**References**

PPM Chapter
Other

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<td>Section 425</td>
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Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s) 7, 13

---

**Details and Structure:** Items 400 to 499
**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 425- 3-AAB JUNCTION BOX (DRAINAGE) EA

AA =
4 (P-7)
6 (J-7)
5 (Repair) B=0
8 (Special)*
9 (Utility)
10 (Utility, Modify)
11 (Utility, Remove)

B =
1 ( =< 10') Refer to Index 201
2 ( > 10')  "  "  "
3 (Partial)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**425- 4- INLET- ADJUST**

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**Notes**

Consists of changing the vertical placement of an existing inlet so that it will conform to the finished grade as designated in the plans.

**Related Items**

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**Construction**

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
Standards
Index No. 200, 201, 210
Specifications
Section 425
Prep & Doc Manual Chapter(s)
7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct.  425-  4- INLET- ADJUST EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Struct.  425-  5- A MANHOLES- ADJUST EA

Notes

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## Basis of Estimates

### 2010 Edition

### December 28, 2009

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### 425- 6- VALVE BOX- ADJUST

#### Notes
- **Unit:** EA
- **Accuracy:** Each
- **PlanQuantity:** no

#### Details

#### Related Items
- **Required:** Recommended

#### Forms
- **Design:** sumdrd.dgn: Summary of Drainage Structures

#### Documentation
- **Design:** Refer to Comp Book
- **Construction:** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction:** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References
- **PPM Chapter:** Design
- **Other:** Construction
- **Specifications:** Section 425

#### Prep & Doc Manual Chapter(s)
- 7, 13

---

### TRNS*PORT Category (DRAFT FIELD):

#### Status
- **Struct.** 425- 6- VALVE BOX- ADJUST
- **Unit:** EA

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 425- 8- DRAINAGE STRUCTURES, MISCELLANEOUS- ADJUST

#### Notes
- **Unit:** EA
- **Accuracy:** Each
- **PlanQuantity:** no

#### Details

#### Related Items
- **Required:** Recommended

#### Forms
- **Design:** sumdrd.dgn: Summary of Drainage Structures

#### Documentation
- **Design:** Refer to Comp Book
- **Construction:** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction:** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

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Details and Structure: Items 400 to 499  Page 45 of 154
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<td>0425-8</td>
<td>DRAINAGE STRUCTURES, MISCELLANEOUS, ADJUST EA</td>
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<td>1/1/2010</td>
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<td></td>
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</tbody>
</table>

### 425-10- YARD DRAIN

**Unit**: EA  
**Accuracy**: Each  
**Plan Quantity?**: no

**Notes**

For use outside of the R/W. Refer to Design Standard for details.

**Related Items**

- Required: Recommended

**Forms**

- **Design**: sumdrd.dgn: Summary of Drainage Structures

**Documentation**

- **Construction**: Refer to Comp Book

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Other
- Standards: Index No. 282
- Specifications: Section 425

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

### Status

**Struct.**: 425-10- YARD DRAIN EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Obsolete Date</th>
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<td>YARD DRAIN</td>
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<td>1/1/2010</td>
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### 425-11- DRAINAGE STRUCTURE- MODIFY EXISTING

Details and Structure: Items 400 to 499
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**Notes**

**Details**

**Related Items**

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**Forms**

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</thead>
</table>

**Specifications**

- sumdrd.dgn: Summary of Drainage Structures

**Documentation**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
</table>

**Design**

- Refer to Comp Book

**Construction**

- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Other
- Standards

**Prep & Doc Manual Chapter(s)**

- 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 425-11-

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>0425 11</td>
<td>DRAINAGE STRUCTURE MODIFY</td>
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<td>T</td>
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<td></td>
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</table>

**425-71-**

**INLETS RELOCATION**

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<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
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<th>no</th>
</tr>
</thead>
</table>

**Notes**

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
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</table>

**Forms**

<table>
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**Specifications**

- sumdrd.dgn: Summary of Drainage Structures

**Documentation**

<table>
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<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
</table>

**Design**

- Refer to Comp Book

**Construction**

- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Other
- Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 425-71- INLETS RELOCATION EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

425-74- A MANHOLES AND INLETS, CLEANING & SEALING

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

Notes

Details

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required: Design

Recommended: sumdrd.dgn: Summary of Drainage Structures

Forms

Design

Construction

Refer to Comp Book

Documentation

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 425-74- A MANHOLES AND INLETS, CLEANING & SEALING EA

A =
1 (<10')
2 (>10')

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0425 74 1</td>
<td>MANHOLES &amp; INLETS CLEANING &amp; SEALING, &lt;10'</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0425 74 2</td>
<td>MANHOLES &amp; INLETS CLEANING &amp; SEALING, &gt;10'</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 425-78- INLET CAP, PRECAST

**Notes**

- Unit: EA
- Accuracy: Each
- PlanQuantity?: no

**Related Items**

- Required
- Recommended

**Forms**

- Design
  - sumdrd.dgn: Summary of Drainage Structures

**Documentation**

- Construction
  - Design: Refer to Comp Book
  - Construction: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**

- PPM Chapter
- Other
- Standards: Index No. 200, 201, 280
- Specifications
  - Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

- 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

- 0200 Roadway

**Status**

**Struct.** 425-78- INLET CAP, PRECAST

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0425 78</td>
<td>INLET CAP, PRECAST</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### 425-82- REPLACE GRATE

**Notes**

Payment includes "...new grates, and removing and stockpiling existing grates", per specification.

**Related Items**

- Required
- Recommended

**Forms**

- Design
  - sumdrd.dgn: Summary of Drainage Structures

**Documentation**

- Construction
  - Design: Refer to Comp Book
  - Construction: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
**Construction** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**
- Other
- **Standards**
- **Specifications**

**Special Provision available**

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 425-82- REPLACE GRATE EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
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<td>REPLACE GRATE</td>
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</table>

**430-94- AA DESILT PIPE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Includes furnishing equipment and labor necessary to desilt the pipe, and also includes disposing of all silt and debris removed during the desilting operation. Summarize on plans by pipe location, diameter (or equivalent round diameter), and length to be desilted.

**Related Items**

- **Forms**
  - Required: SBSPMS; SBSDMES: Sidedrain & MES, w/o offset
  - Recommended: 

**Documentation**

- **Construction** Refer to Comp Book
- **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**
- Other
- **Standards**
- **Specifications**

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 430-94- AA DESILT PIPE LF

**Notes**

AA= Pipe Diameter
1 (0 to 24")
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0430 94 1</td>
<td>DESILTING PIPE, 0 - 24”</td>
<td>LF</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0430 94 2</td>
<td>DESILTING PIPE, 25 - 36”</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0430 94 3</td>
<td>DESILTING PIPE, 37 - 48”</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0430 94 4</td>
<td>DESILTING PIPE, 49 - 60”</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0430 94 5</td>
<td>DESILTING PIPE, 61” OR GREATER</td>
<td>LF</td>
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<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

430-150-ABB CAST IRON SOIL PIPE

- **Unit**: LF; M1
- **Accuracy**: Linear Foot; 10th of a Meter
- **PlanQuantity?**: yes

**Notes**: Inactive Structure; verify applicable standard index. Consider using Optional Pipe for this application.

**Details**: to be used in accordance with Index 282 for back of sidewalk drainage only.

**Related Items**: Required = Recommended

**Forms**: Design = sumdrd.dgn: Summary of Drainage Structures

**Documentation**: Design = Refer to Comp Book

**Construction**: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**PPM Chapter**: Design

**Standards**: Index No. 282

**Specifications**: Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

**Status**: Inactive Structure

**Struct.**: 430-150-ABB CAST IRON SOIL PIPE LF

- A = 1 (Service) SV
- BB = Standard Pipe Sizes
  - 13 (4")

**Notes**: The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

430-17A-BCC PIPE CULVERT OPTIONAL MATERIAL
UNIT LF; M1  ACCURACY Linear Foot; 10th of a Meter  PLAN QUANTITY? yes

Notes  Pipe Ranges valid through 12-31-2010. Specific pipe sizes effective 1/1/2011.

Details  Show application, size, and material with class/gage/corrugation on the contract plans. Refer to Index 205 for valid sizes, class/gage/corrugation. For pipe other than round (elliptical concrete and metal pipe arch) show actual size, class/gage/corrugation shown on standard index 205. Use equivalent round pipe size for payment.

Related Items  Required Recommended

Forms  Design  SBSPMS; SBSDMES: Sidedrain & MES, w/o offset

Construction  Refer to Comp Book

Documentation  Design  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction  Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References  PPM Chapter

Other  Drainage Manual

Standards  Index No. 205

Specifications  Section 430

Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD):  0200  Roadway

Status

Struct.  430-17A-BCC  PIPE CULVERT OPTIONAL MATERIAL  LF

A = Application
3 (Gutter Drain) GD
4 (Side Drain) SD
5 (Storm and Cross Drain)
B = Shape
1 (Round Shape)
2 (Other –Elliptical/Arch)

CC= Standard Pipe Sizes, vld through 12-31-2010
01 (up to 24")
02 (25 to 36")
03 (37 to 48")
04 (49 to 60")
05 (61" or greater)

BB = Standard Pipe Sizes, Effective 1-1-2011
12 (12")
15 (15")
18 (18")
24 (24")
30(30")
38 (36")
42 (42")
48 (48")
54 (54")
60 (60")
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
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<td>1/1/2010</td>
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<td>1/1/2010</td>
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<td>1/1/2010</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0430175103</td>
<td>PIPE CULVERT, OPT MATERIAL, ROUND, 37-48&quot;S/CD</td>
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<td>1/1/2010</td>
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<tr>
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<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
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<td>PIPE CULVERT, OPT MATERIAL, ROUND, 61&quot; OR &gt; S/CD</td>
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<td>1/1/2010</td>
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<tr>
<td>0430175201</td>
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<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

**Notes**

- 66 (66")
- 72 (72")
- 78 (78")
- 84 (84")
- 90 (90")
- 96 (96")
- 99 (99" or greater) Note size in plans
### 430-200-ABB FLARED END SECTION

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

Intended for use outside the clear zone on median drain and cross drain installations. Pipe sizes 12" and 15" (300 mm and 375 mm) are permitted within the clear zone. Specifically not intended for side drain installation.

**Details**

Refer to Comp Book

**Related Items**

**Forms**

**Construction** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**PPM Chapter** 

**Other** Standards Index No. 270

**Specifications** Section 430

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Status

**Struct.** 430-200-ABB FLARED END SECTION EA

A = Blank (Concrete)

BB = Standard Pipe Sizes

21 (12"

23 (15"

25 (18"

27 (21"

29 (24"

31 (27"

33 (30"

34

38 (36"

40 (42"

41 (48"

42 (54"

43 (60"

44 (66"

45 (72"

**Notes**

Details and Structure: Items 400 to 499
**Basis of Estimates**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
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<td>0430200 38</td>
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### 430-6AB-CDD  U-ENDWALL

**Unit**: EA  
**Accuracy**: Each  
**PlanQuantity?**: no

**Notes**

Refer to Standard Index 260 or 261 for proper selection. To be used only in the clear zone for the drainage of medians and other areas having low design velocities. Precasting or cast-in-place will be permitted. Cost of this item shall include concrete, reinforcing steel, grate and all accessories.

For items included on Index 250, payment will be made under concrete and steel items. Refer to Design Standards.

**Related Items**

**Required**  
**Recommended**

**Forms**

**Design**: sumdrd.dgn: Summary of Drainage Structures

**Documentation**

**Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**:  
**Other**:  
**Standards**: Index No. 260, 261  
**Specifications**: Section 430

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

**Struct.** 430-6AB-CDD  
**U-ENDWALL**  
**EA**

A = Index No.  
0 (Std 260) when A =0, BC =21  
1 (Std 261)
B = Appurtenance
0 (none)
1 (baffles)
2 (grate)
3 (baffles and grate)

C = slope
0 (1:6)
1 (1:4)
2 (1:3)
3 (1:2)

DD = Standard Pipe Sizes
23 (15”)
25 (18”)
29 (24”)
33 (30”)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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**430-72A-BCC PIPE, SLOTTED OR PERFORATED CULVERT**

**Notes**
- to be used for French Drain applications only. Refer to Design Standards. Show size, class/gage and material on the contract plans. Payment is based on equivalent round pipe size.

**Related Items**
- **Required**
  - Design: SBSPMS; SBSDMES: Sidedrain & MES, w/o offset
- **Recommended**
  - Design

**Documentation**
- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
- **Construction**
  - Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**
- PPM Chapter
  - Design
  - Construction

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 430-72A-BCC PIPE, SLOTTED OR PERFORATED CULVERT LF

A =
1 (Storm Sewer) French Drain ONLY
B = Material
4 (Optional)
CC = Standard Pipe Sizes
23 (15’’)
25 (18’’)
27 (21’’)
29 (24’’)
31 (27’’)
33 (30’’)
38 (36’’)
40 (42’’)
41 (48’’)
42 (54’’)

**Details and Structure:** Items 400 to 499
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**430-82A- BB CLEANING & SEALING EXISTING PIPE JOINT**

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**Notes**

For cleaning and sealing existing joints only.

Coordinate use of this item w/ State Drainage Office to evaluate the condition of the existing pipe. Replacement of the pipe (paid under optional pipe) should be considered.

Tech Specs should detail the work to be completed, the sealing materials, and any testing that may be required.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required**: sumdrd.dgn: Summary of Drainage Structures

**Forms**

- **Design**: Refer to Comp Book

**Documentation**

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

- **Construction**: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**

Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status Inactive Structure

Struct. 430-82A- BB CLEANING & SEALING EXISTING PIPE JOINT EA

A =
1 (Storm Sewer)
2 (Cross Drain)

BB = Standard Pipe Sizes
23 (15")
25 (18")
27 (21")
29 (24")
31 (27")
33 (30")
34
38 (36")
40 (42")
41 (48")
42 (54")
43 (60")
61 (61" and greater)

Notes

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430-830- PIPE FILLING AND PLUGGING- PLACE OUT OF SERVICE

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<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY; M3</td>
<td>Cubic Yard; Cubic Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

to be used only for filling/plugging existing drainage culverts, where called for in the plans.
Per the specifications, "The cost of filling and plugging pipe shown in the plans as existing, to be placed out of service"
NOTE: "The cost of plugging pipe, shown in the plans as proposed new pipe, will be included in the contract unit price for pipe culvert." (Do not use this pay item for temporarily plugging new pipe.)

Related Items

Required Recommended

Forms

Design sumdrd.dgn: Summary of Drainage Structures
### 430-830- PIPE FILLING AND PLUGGING - PLACE OUT OF SERVICE

**Unit**: CY  
**TSP/Detail**: 1/1/2010

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0430830</td>
<td>PIPE FILLING AND PLUGGING - PLACE OUT OF SERVICE</td>
<td>CY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**430-860- STORM SEWER TRENCH**

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 10th of a Meter  
**PlanQuantity?**: yes

**Notes**

**Details**

**Related Items**

**Required Design**: sumdrd.dgn: Summary of Drainage Structures

**Documentation**

**Construction**: Refer to Comp Book

**Notes**

**Details**

**Related Items**

**Required Design**: sumdrd.dgn: Summary of Drainage Structures

**Documentation**

**Construction**: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

**PPM Chapter**: 6, 7, 13

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

---

**Details and Structure**: Items 400 to 499
Struct.  430-860- A  STORM SEWER TRENCH  LF

A =
2 (2' Wide)
3 (3' Wide)
4 (4' Wide)
5 (5' Wide)
6 (6' Wide)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

430-880- AA  FLAP GATES  EA

Unit     EA  Accuracy  Each  PlanQuantity? no

Notes

Refer to Drainage Manual for additional information.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>sumdrd.dgn: Summary of Drainage Structures</td>
</tr>
</tbody>
</table>

Forms

Construction  Design

Refer to Comp Book

Documentation

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct.  430-880- AA  FLAP GATES  EA

AA= Standard Pipe Sizes (effective 1/1/2007)
01 (0 to 24")
02 (25 to 36")
03 (37 to 48")
04 (49 to 60")
05 (61" or greater)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 430-950- DESILTING CONCRETE BOX CULVERT

#### Notes

**Details**

Payment is for the VOLUME OF SILT removed, based on the length and width of the box culvert, and the average DEPTH OF SILT to be removed.

**Related Items**

**Required**

**Recommended**

**Forms**

**Design**

sumdrd.dgn: Summary of Drainage Structures

#### Details and Structure: Items 400 to 499
Standards

Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 430-963- AA PVC PIPE FOR BACK OF SIDEWALK DRAINAGE LF

A= Size
1 (4" diameter) Standard
2 (Non-Standard diameter)

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0430963 1</td>
<td>PVC PIPE FOR BACK OF SIDEWALK, 4&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0430963 2</td>
<td>PVC PIPE FOR BACK OF SIDEWALK, NON STANDARD DIAMETER</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

430-970- PROTECTIVE PIPE BEDDING

Unit LF; M1 Accuracy Linear Foot; 10th of a Meter PlanQuantity? no

Notes
Pipe bedding is incidental to cost of pipe for most applications. If a special bedding is needed, contact the State Drainage Office prior to requesting this item.

Details
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required

Recommended

sumdrd.dgn: Summary of Drainage Structures

Related Items
Forms

Documentation

Design

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards
### Specifications

#### Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200  Roadway

**Status**  Inactive Structure

**Struct.**  430-970-  PROTECTIVE PIPE BEDDING  LF

**Notes**  Contact the State Drainage Office prior to opening.

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 430-98A-BCC  MITERED END SECTION

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

**Details**  Includes all pipe, grates (when required), fasteners, reinforcement, connectors, anchors, concrete, sealants, jackets, coupling bands, and all work required to install the mitered end section. Show shape and size on the contract plans. Refer to Index 273 for valid sizes. Use equivalent round pipe size for payment.

**Related Items**

**Forms**  
- Design  SBSPMS; SBSDMES: Sidedrain & MES, w/o offset

**Construction**  Refer to Comp Book

**Documentation**

- Design  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
- Construction  Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter  
.Other  
- Standards  Index No. 205, 272, 273  
- Specifications  Section 430  
- Prep & Doc Manual Chapter(s)  6, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200  Roadway

**Status**

**Struct.**  430-98A-BCC  MITERED END SECTION  EA

A = Application  
2 (Cross Drain)  
4 (Side Drain)  
B = Shape  
1 (Optional Round)  
6 (Optional Other – Elliptical/Arch)  
CC = Standard Round or Equivalent Other Shape Pipe Sizes  
Standard Pipe Sizes  
21 (12")  
23 (15")  
25 (18")
27 (21")
29 (24")
31 (27")
33 (30")
34
38 (36")
40 (42")
41 (48")
42 (54")
43 (60")
44 (66")
45 (72")
46 (78")
47 (84")
48 (90")
49 (96")
50 (102")
51 (108")
52 (120")
53 (132")
54 (144")
55 (156")
56 (168")
57 (180")

Refer to Standard Index 205

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0430982121</td>
<td>MITERED END SECTION, OPTIONAL ROUND, 12&quot; CD</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0430982123</td>
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<td>1/1/2010</td>
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<tr>
<td>0430982125</td>
<td>MITERED END SECTION, OPTIONAL ROUND, 18&quot; CD</td>
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<td>1/1/2010</td>
<td></td>
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<tr>
<td>0430982129</td>
<td>MITERED END SECTION, OPTIONAL ROUND, 24&quot; CD</td>
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<tr>
<td>0430982133</td>
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<td>0430982141</td>
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<tr>
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<tr>
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<tr>
<td>0430984121</td>
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<tr>
<td>0430984123</td>
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<tr>
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<tr>
<td>0430984129</td>
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<tr>
<td>0430984133</td>
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<tr>
<td>0430984138</td>
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<tr>
<td>0430984140</td>
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<tr>
<td>0430984141</td>
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<tr>
<td>0430984142</td>
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<tr>
<td>0430984143</td>
<td>MITERED END SECTION, OPTIONAL ROUND, 60” SD</td>
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<tr>
<td>0430984144</td>
<td>MITERED END SECTION (OPTIONAL ROUND)[66” SD]</td>
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<tr>
<td>0430984147</td>
<td>MITERED END SECTION, OPTIONAL ROUND, 84” SD</td>
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<td>1/1/2010</td>
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<tr>
<td>0430984623</td>
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<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0430984625</td>
<td>MITERED END SECTION, OPTIONAL - ELLIPTICAL / ARCH, 18” SD</td>
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<td>1/1/2010</td>
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</tbody>
</table>
### 430-990-

**MITERED END SECTION, REPLACE GRATE**

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For replacement of grate on an existing MES. DO NOT USE this item for a new MES.</td>
</tr>
<tr>
<td></td>
<td>Installation should be in accordance with design standards, unless otherwise shown in the plans.</td>
</tr>
<tr>
<td></td>
<td>Payment is per MES, for replacement of complete set (all bars).</td>
</tr>
</tbody>
</table>

**Related Items**
- **Required**
- **Recommended**

**Forms**
- **Construction**
- **Design**

**Documentation**
- **Design**
- **Construction**

**References**
- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**

**Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):**

**Status**

**Struct.** 430-990- MITERED END SECTION, REPLACE GRATE EA

---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0430990</td>
<td>MITERED END SECT, REPLACE GRATE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

Details and Structure: Items 400 to 499
This item is used to rehabilitate an existing pipe by forming a lining on the host pipe's interior, thereby allowing a debilitated pipe to regain strength and performance capabilities. Box to Box liners are preferred.

Contact the State Drainage Office if sectional liners are considered (see item 908-431-A)

Design with manufacturer's lengths in mind for all practical applications. Refer to specifications for current industry practices.

Per Specifications, "The plans will indicate the location of the pipe to be rehabilitated, the material composition and the alternate liner types that may be used to rehabilitate the pipe, and the method of liner installation."

Required Recommended 121- 70, 430- 94-AA

Design sumdrd.dgn: Summary of Drainage Structures

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

PPM Chapter Other

Specifications Section 431

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
Basis of Estimates

432- 3- A  CHEMICAL GROUT REPAIR - PIPE, NON-TEST

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0431 1 1</td>
<td>PIPE LINER, OPTIONAL MATERIAL, 0-24&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0431 1 2</td>
<td>PIPE LINER, OPTIONAL MATERIAL, 25-36&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0431 1 3</td>
<td>PIPE LINER, OPTIONAL MATERIAL, 37-48&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0431 1 4</td>
<td>PIPE LINER, OPTIONAL MATERIAL, 49 - 60&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0431 1 5</td>
<td>PIPE LINER, OPTIONAL MATERIAL, 61&quot; AND GREATER</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

Notes

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required Recommended

Standards

Specifications

Struct.  432- 3- A  CHEMICAL GROUT REPAIR - PIPE, NON-TEST  EA

A =
1 (15")
2 (18")
3 (21")
4 (24")
5 (30")
6 (36")
7 (42")
8 (48")
9 (54")
10 (66")
11 (72")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 433-1 CHEMICAL GROUT REPAIR- MANHOLE/INLET

<table>
<thead>
<tr>
<th>Item</th>
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tr>
<td>0432 3 2</td>
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<tr>
<td>0432 3 4</td>
<td>CHEMICAL GROUT REPAIR, PIPE, NON-TEST, 24&quot;</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0432 3 5</td>
<td>CHEMICAL GROUT REPAIR, PIPE, NON-TEST, 30&quot;</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0432 3 6</td>
<td>CHEMICAL GROUT REPAIR, PIPE, NON-TEST, 36&quot;</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0432 3 7</td>
<td>CHEMICAL GROUT REPAIR, PIPE, NON-TEST, 42&quot;</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0432 3 8</td>
<td>CHEMICAL GROUT REPAIR, PIPE, NON-TEST, 48&quot;</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0432 3 9</td>
<td>CHEMICAL GROUT REPAIR, PIPE, NON-TEST, 54&quot;</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0432 3 10</td>
<td>CHEMICAL GROUT REPAIR, PIPE, NON-TEST, 66&quot;</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required**: Design
- **Recommended**: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

- **Construction Design**: Refer to Comp Book
- **Construction**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Other
- Standards
- Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 433-1 CHEMICAL GROUT REPAIR- MANHOLE/INLET EA

**Notes**

---

Details and Structure: Items 400 to 499
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0433 1</td>
<td>CHEMICAL GROUT REPAIR, MANHOLE / INLET</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 435- 1- AA   STRUCTURAL PLATE PIPE CULVERT

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**
- Coordinate the use of this item with the State Drainage Office prior to requesting pay items.

**Details**
- Required
- Recommended

**Forms**
- Design

**References**
- PPM Chapter
- Other
- Standards
- Specifications: Section 435

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>Item</th>
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<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>435- 1- AA</td>
<td>STRUCTURAL PLATE PIPE CULVERT</td>
<td>LF</td>
<td>1/1/2010</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AA= Blank for drainage applications
99 (Animal Crossing)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0435 1</td>
<td>STRUCTURAL PLATE PIPE CULVERT</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0435 1 99</td>
<td>STRUCTURAL PLATE PIPE CULVERT SPECIAL- ANIMAL CROSSING</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 436- 1- A   TRENCH DRAIN

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**
- Use in accordance with Index 206. Various alternatives are available on the standard.
- Special should only be used if you have a significant design change. Plan Details and/or Tech Spec will be required.
- Minor changes to the standard may be noted in the plans, and used with the "standard" pay item.
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

### Construction

**Design**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

**Other**

**Standards**

**Specifications**

Selected Items may require Plan Details and/or Technical Specifications

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Status

**Struct.** 436-1- A TRENCH DRAIN LF

A = size
1 (Standard)
2 (Special) see details above

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0436 1 1</td>
<td>TRENCH DRAIN, STANDARD</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0436 1 2</td>
<td>TRENCH DRAIN, SPECIAL</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

#### Details

Item based on the size of the smooth interior product. Price per length shall include cost of pipe, fittings, aggregate, sock, filter fabric, cleanouts, and concrete aprons.

#### Related Items

**Forms**

**Design**
SBUNDR; SBUnderdrain: Summary of Underdrain

**Documentation**

**Design**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
### Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

### Standards

Index No. 286

### Specifications

Section 440

### Prep & Doc Manual Chapter(s)

7, 13

### TRNS*PORT Category (DRAFT FIELD):

0200 Roadway

### Status

**Struct.** 440-1- AA

**UNDERDRAIN**  LF

\( AA = \)

10 (Type I)
20 (Type II)
30 (Type III)
50 (Type V)
60 (Type Special)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0440 1 10</td>
<td>UNDERDRAIN, TYPE I</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0440 1 20</td>
<td>UNDERDRAIN, TYPE II</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0440 1 30</td>
<td>UNDERDRAIN, TYPE III</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0440 1 50</td>
<td>UNDERDRAIN, TYPE V</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0440 1 60</td>
<td>UNDERDRAIN, TYPE SPECIAL</td>
<td>LF</td>
<td>T</td>
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</table>

### UNDERDRAIN INSPECTION BOX

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

### Notes

**Details**

**Related Items**

Required

Recommended

Design

SBUNDR; SBUnderdrain: Summary of Underdrain

**Construction**

Refer to Comp Book

**Documentation**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

### Other

**Standards**

Index No. 245, 286

### Specifications

Section 440

### Prep & Doc Manual Chapter(s)

6, 7, 13
**TRNS*PORT Category (DRAFT FIELD):** 0200  Roadway

**Status**

**Struct.** 440-70- UNDERDRAIN INSPECTION BOX EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0440 70</td>
<td>UNDERDRAIN INSPECTION BOX</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**440-73- A UNDERDRAIN OUTLET PIPE**

**Unit** LF; M1  
**Accuracy** Linear Foot; 10th of a Meter  
**PlanQuantity?** no

**Notes**

Use in accordance with Standard Index. Price per length includes trench excavation, pipe, fittings, concrete aprons, hardware cloth for concrete aprons, stubbing into drainage structures, backfill in place, and removal of excess materials.

**Details**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Related Items**

**Required**  
**Recommended**

**Forms**

**Design** SBUND; SBUnderdrain: Summary of Underdrain

**Construction** Refer to Comp Book

**Documentation**

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Other**

**Standards** Index No. 286  
**Specifications** Section 440

**TRNS*PORT Category (DRAFT FIELD):** 0200  Roadway

**Status**

**Struct.** 440-73- A UNDERDRAIN OUTLET PIPE LF

A = Size  
1 (4")  
2 (6")  
3 (8")  
4 (10")  
5 (12") Note: 12" is non-standard; will require plan details and/or Tech Spec  
6 (5")

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 442-70- VERTICAL DRAINAGE WICKS

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 10th of a Meter  
**PlanQuantity?**: no

**Notes**

**Related Items**  
Required:  
Recommended: sumdrd.dgn: Summary of Drainage Structures

**Forms**  
Design

**Documentation**  
Construction  
Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.  
Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**  
PPM Chapter  
Other  
Standards  
Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**  
6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**  
0200 Roadway

### Status

**Struct.**  
442-70- VERTICAL DRAINAGE WICKS  
LF

---

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0442 70</td>
<td>VERTICAL DRAINAGE WICKS</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

### 443-70- AA FRENCH DRAIN

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 10th of a Meter  
**PlanQuantity?**: no

**Notes**

This item includes furnishing and placing pipe, pipe plugs, pipe fittings, coarse aggregate and filter fabric, and also includes trenching, backfilling, sheeting and, when necessary, pavement restoration.

When using elliptical pipe, payment will be according to the equivalent round size, as noted in the plans.

---

**Details and Structure**: Items 400 to 499
**Struct. 443-70- AA FRENCH DRAIN LF**

AA = Size. Additional sizes per index 285
3 (18")
4 (24")
5 (30")
6 (36")
7 (42")
8 (48")
9 (54")

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0443 70 3</td>
<td>FRENCH DRAIN, 18&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>0443 70 4</td>
<td>FRENCH DRAIN, 24&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0443 70 5</td>
<td>FRENCH DRAIN, 30&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0443 70 6</td>
<td>FRENCH DRAIN, 36&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0443 70 7</td>
<td>FRENCH DRAIN, 42&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0443 70 8</td>
<td>FRENCH DRAIN, 48&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**443-71- A BALLAST ROCK**

**Unit** CY; M3  
**Accuracy** Cubic Yard; Cubic Meter  
**PlanQuantity?** no

**Details** 
Do not use with 443-70 French Drain item; refer to Index 285 for details

**Related Items**

**Forms**

**Required** SHTabQuant: Tabulation of Quantities Sheet

**Recommended**

**Construction** 700-050-54

**Documentation**

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.

### Notes

A = 1 (French Drain Aggregate)

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0443 71 1</td>
<td>BALLAST ROCK, FRENCH DRAIN AGGREGATE CY</td>
<td>CY</td>
<td>no</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

This item is to be used in accordance with Index 288 for drainage applications.

For irrigation wells, see pay item 730-83.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
</tr>
</tbody>
</table>

### Documentation

**Construction Design**

Refer to Comp Book

**Construction**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

6, 7, 13

**Other**

**Standards**

Index No. 288

**Specifications**

Section 443

**Prep & Doc Manual Chapter(s)**

6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0444 70 11</td>
<td>DEEP WELL- OPEN HOLE, 24&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**444- 71- AA DEEP WELL CASING**

- **Unit**: LF; M1
- **Accuracy**: Linear Foot; 10th of a Meter
- **PlanQuantity?**: no

**Notes**

- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required**: Design
- **Recommended**: SHTabQuant: Tabulation of Quantities Sheet

**Forms**

- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**: Index No. 288
- **Other Standards**: 
- **Specifications**: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 6, 7, 13
AA =
5 (12")
6 (14")
7 (16")
8 (18")
11 (24")
14 (30")
17 (36")

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0444 71 11</td>
<td>DEEP WELL CASING, 24&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**444- 72- AA** DEEP WELL CLEANING

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes
This item is to be used in accordance with Index 288 for drainage applications.

For irrigation wells, see pay item 730-83.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

Documentation

<table>
<thead>
<tr>
<th>Construction</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
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</table>

References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
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<tr>
<td>Index No. 288</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Standards</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan Details and/or Technical Specifications required</td>
<td></td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

<table>
<thead>
<tr>
<th>Inactive Structure</th>
</tr>
</thead>
</table>

**Struct.** 444- 72- AA DEEP WELL CLEANING LF

AA = Well Diameter
5 (12")
6 (14")
7 (16")
8 (18")
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0444 72 11</td>
<td>DEEP WELL CLEANING, 24&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

#### 446-1- A EDGEDRAIN DRAINCRETE

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 10th of a Meter  
**PlanQuantity?**: no

**Notes**: Price per length includes removal of existing shoulder pavement, trench excavation, disposal of excess materials, filter fabric, draincrete, edgedrain pipe and fittings. Refer to Design Standard for payment details, based on new/rehab construction.

**Related Items**
- **Required**: SBEDDR; SBEdgedrains: Summary of Edgedrain
- **Recommended**: 

**Forms**
- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Documentation**
- **Design**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**: 
- **Other**: Index No. 286, 287
- **Specifications**: Section 446
- **Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**
- **Struct. 446-1- A EDGEDRAIN DRAINCRETE**: LF

  A= pipe size  
  1 (Standard)  
  9 (non-standard)*  
  standard per Index 287 is 4"

**Notes**: * non-standard may require Tech Spec and/or Plan Detail

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
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<td>EDGEDRAIN DRAINCRETE, STANDARD</td>
<td>LF</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

#### 446-71- A EDGEDRAIN OUTLET PIPE

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 10th of a Meter  
**PlanQuantity?**: no

**Notes**

---

Details and Structure: Items 400 to 499
Includes removal of existing shoulder pavement, trench excavation, pipe and fitting, concrete apron, sod, stubbing into existing inlets and paved ditches, etc. Refer to Design Standard for details.

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SBEDDR; SBEdgedrains: Summary of Edgedrain</td>
</tr>
</tbody>
</table>

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

PPM Chapter

Design

Index No. 287

Specifications

Section 446

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<th>TSP/Detail</th>
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<td>0446 71 1</td>
<td>EDGEDRAIN OUTLET PIPE, 4&quot;</td>
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<td>1/1/2010</td>
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</table>

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
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<tr>
<th>Required</th>
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<tr>
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<td>SHTabQuantLS: LS Tabulation of Quantities COMP 700-050-05: Lump Sum Quantities</td>
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</table>

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

PPM Chapter

Design

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status
Struct. 448-73- PUMPING STATION LS/LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Unit</th>
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<td>0448 73</td>
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</table>

450-1-AAA PRESTRESSED BEAMS

Unit LF; M1
Accuracy Linear Foot; 10th of a Meter
PlanQuantity? yes

Notes

Intended for prestressed beams for bridge construction. Summarize quantities by location per span.
AAA= 201, 202, 203 are typically used for bridge widening projects. These are non-standard and will require project specific design. Designers must work with the District and/or State Structures Office when using these items.
AAA=278, 378 are typically used for post-tensioned beams. These are non-standard and will require project specific design. Designers must work with the District and/or State Structures Office when using these items.

Non-Standard beam types: Coordinate standards (as applicable / if available), with details shown in the plans.

Florida-I Beams: See pay item 450- 2-. Pay items will be effective with implementation of Design Standards. For earlier implementation, contact the State Structures Design Office. Full design details will be required in the plans.

Other beam types: Pay Items for other beam types may be expanded upon request. Minor "non-standard" changes may be paid under the applicable beam type, with applicable details in the plans or specifications.

Related Items

Required Recommended
Forms Design SHTabQuant: Tabulation of Quantities Sheet

Documentation

Design Refer to Comp Book

Construction

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other

Standards Index No. 20110 thru 20199, and 20310, 20320.

Details and Structure: Items 400 to 499
Specifications  Section 450
Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD):  0100  Structures

Status

Struct.  450- 1-AAA  PRESTRESSED BEAMS  LF

AAA =
1 (Type II)
2 (Type III)
3 (Type IV)
4 (Type V)
5 (Type VI)
7 (Special) see pay item details
54 (Bulb T, 54") *non-standard
63 (Bulb T, 63") *non-standard
72 (Bulb T, 72")
78 (Bulb T, 78")
118 (Florida Double Tee, Fdt18) *non-standard
124 (Florida Double Tee, Fdt24) *non-standard
130 (Florida Double Tee, Fdt30) *non-standard
201 (Type II Modified) *non-standard
202 (Type III Modified) *non-standard
203 (Type IV Modified) *non-standard
250 (Inverted T, 20")
278 (Bulb T, 78", Modified, w/post tensioning) *non-standard
378 (Bulb T, 78", Haunched, Modified, w/post tensioning) *non-standard

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>0450 1 1</td>
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<td>0450 1 2</td>
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<td>0450 1 3</td>
<td>PRESTRESSED BEAMS, TYPE IV</td>
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<td>0450 1 5</td>
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<tr>
<td>0450 1 7</td>
<td>PREST BEAMS, SPECIAL</td>
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<tr>
<td>0450 1 72</td>
<td>PRESTRESSED BEAMS, BULB T - 72&quot;</td>
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<tr>
<td>0450 1 78</td>
<td>PRESTRESSED BEAMS, BULB T - 78&quot;</td>
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<td>1/1/2010</td>
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<td>0450 1201</td>
<td>PREST BEAMS, TYPE II, MODIFIED</td>
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<td>0450 1202</td>
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<td>0450 1250</td>
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450- 2-AAA  PRESTRESSED BEAMS: FLORIDA-I BEAM

<table>
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<th>PlanQuantity?</th>
<th>Details</th>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>yes</td>
<td>Intended for prestressed beams for bridge construction.</td>
</tr>
</tbody>
</table>

Notes

June 2009: Refer to Temporary Design Bulletin on Structures Office Web Page for implementation instructions.

Details and Structure: Items 400 to 499
Summarize quantities by location per span.

Non-Standard beam types: Coordinate standards (as applicable / if available), with details shown in the plans.

Florida-I Beams: Pay items will be effective with implementation of Design Standards. For earlier implementation, contact the State Structures Design Office. Full design details will be required in the plans.

Other beam types: Pay Items for other beam types may be expanded upon request. Minor "non-standard" changes may be paid under the applicable beam type, with applicable details in the plans or specifications.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
<tr>
<td>Documentation</td>
<td>Design</td>
<td>Refer to Comp Book</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
</tr>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter</th>
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<tr>
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<td>Other</td>
</tr>
<tr>
<td>Standards</td>
<td>Index No. 20110 thru 20199, and 20310, 20320.</td>
</tr>
<tr>
<td>Specifications</td>
<td>Section 450</td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td>6, 7, 13</td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

### Status

**Struct.** 450- 2-AAA PRESTRESSED BEAMS: FLORIDA-I BEAM LF

AAA = Size
- 36 (36")
- 45 (45")
- 54 (54")
- 63 (63")
- 72 (72")
- 78 (78")
- 84 (84")

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>0450 2 36</td>
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<td>1/1/2010</td>
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<td>0450 2 45</td>
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<td>1/1/2010</td>
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<tr>
<td>0450 2 54</td>
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<td>1/1/2010</td>
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<td>0450 2 63</td>
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<tr>
<td>0450 2 72</td>
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<tr>
<td>0450 2 78</td>
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</table>
**450- 3- AB**  
**PRESTRESSED SLAB UNITS**  

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>yes</td>
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</table>

**Notes**  
New Standards effective 2009??, series 20350  
Intended for non-post-tensioned prestressed bridge deck panels w/ concrete wearing surface.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Required**  
**Recommended**

**Forms**  
**Design**  
SHTabQuant: Tabulation of Quantities Sheet

**Construction**  
Refer to Comp Book

**Documentation**  
Design  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction  
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**  
PPM Chapter  
SDG’s 4.4, Normally requires SHOP DRAWINGS

Other  
Index 20350 series

**Specifications**  
Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**  
0100 Structures

**Struct.**  
450- 3- AB  
PRESTRESSED SLAB UNITS  
LF

A = Width  
1 (48")  
2 (60")  
3 (96")  
4 (72")  
5 (36") valid through 12/2008  
6 (54")  
7 (57")  
9 (Variable 30-47") Per design standard index, B=1 or 5 only

B = Thickness  
1 (12")  
2 (16")  
3 (10")  
4 (18")  
5 (15")

**Notes**

Details and Structure: Items 400 to 499
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>0450 3 11</td>
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<td>0450 3 21</td>
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**450- 4-AAA PRESTRESSED BEAM (FLORIDA U-BEAM)**

**Unit** LF; M1  
**Accuracy** Linear Foot; 10th of a Meter  
**Plan Quantity?** yes

**Notes**

Intended for prestressed Florida U-beams for bridge construction. Summarize quantities by location per span.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required** Design  
**Recommended** SHTabQuant: Tabulation of Quantities Sheet

**Forms**

Refer to Comp Book

**Documentation**

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction** Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter  
Other Standards Index No. 20210 thru 20299  
Specifications Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 6, 7, 13
**Struct. 450-4-AAA PRESTRESSED BEAM (FLORIDA U-BEAM) LF**

AAA =
1 (48”)
2 (54”)
3 (63”)
4 (72”)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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**450-82- BEAM REPAIR**

<table>
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<th>Unit</th>
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<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
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</table>

**Notes**

Details

Intended for rehabilitation projects to strengthen or repair existing concrete beams. Show locations in plans. Include pay item note to clarify payment for various work items. See also item 450-83.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Forms**

Design

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Other

Normally requires SHOP DRAWINGS

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Item 450-83- A BEAM REPAIR

<table>
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</tbody>
</table>

**Notes**

Intended for rehabilitation projects to strengthen or repair existing concrete beams. Show locations in plans. Include pay item note to clarify payment for various work items. See also item 450-82.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required**: SHTabQuant: Tabulation of Quantities Sheet

**Forms**

- **Design**
  - Refer to Comp Book

**Documentation**

- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**: 7, 13

- **Other Standards**

- **Specifications**
  - Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

- 7, 13

**TRNSPORT Category (DRAFT FIELD):**

- 0100 Structures

**Struct.**

- 450-83- A BEAM REPAIR

  A =
  1 (Strand Splices)
  2 (Bar Splices)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Item 450 83-1 BEAM REPAIR, STRAND SPLICE

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Square Foot; 10th of a Square Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

Details and Structure: Items 400 to 499
Notes

Details

Intended for post-tensioned prestressed bridge deck panels w/ concrete or asphalt wearing surface.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required

Recommended

Forms

Design

SHTabQuant: Tabulation of Quantities Sheet

Construction

Refer to Comp Book

Documentation

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

SDG’s 4.4, Normally requires SHOP DRAWINGS

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct. 450- 88- AA PRESTRESSED SLAB UNITS TRANSVERSELY POST TENSIONED

AA =
12 (12")
14 (14")
15 (15")
16 (16")
18 (18")
19 (19")
20 (20")
21 (21")
24 (24")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0450 88 15</td>
<td>PRESTRESSED SLAB UNITS TRANSVERSELY POST TENSIONED, 15&quot;</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0450 88 18</td>
<td>PRESTRESSED SLAB UNITS TRANSVERSELY POST TENSIONED, 18&quot;</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

451- 70- AA PRESTRESSED SOIL ANCHOR

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>
For permanent applications only. Do not pay for separately when prestressed soil anchors are part of a temporary steel sheet pile wall system. Intended for payment of prestressed soil anchor, proof and creep test. See specification 451-12. Show anchor spacing and force/anchor. Show locations in plans w/ quantity block.

Required
- SHTabQuant: Tabulation of Quantities Sheet

Recommended

Notes

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
- PPM Chapter
- Other
- Standards
- Specifications Section 451
- Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Status

Struct. 451-70- AA PRESTRESSED SOIL ANCHOR EA

AA =
Blank (F&I, With Standard Tests)
1 (Performance Test)
2 (Creep Test)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0451 70</td>
<td>PREST SOIL ANCHORS</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0451 70 1</td>
<td>PRESTRESSED SOIL ANCHOR, PERFORMANCE TEST</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0451 70 2</td>
<td>PRESTRESSED SOIL ANCHOR, CREEP TEST</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

452-70- PRECAST SEGMENT PRODUCTION

Notes

Details

Intended to cover for segmental casting yard set-up costs. Required on all Precast Segmental Bridge Projects.

Related Items

Required
- SHTabQuantLS: LS Tabulation of Quantities
- COMP 700-050-05: Lump Sum Quantities

Recommended
- Refer to Comp Book

Forms

Design

Documentation

Design

Locate in plans. Summarize quantities by location on tabulation of
quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

### References

<table>
<thead>
<tr>
<th>Standards</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 452</td>
<td></td>
</tr>
</tbody>
</table>

**Prep & Doc Manual Chapter(s)** 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

---

### Status

**Struct.** 452-70- PRECAST SEGMENT PRODUCTION LS/LS

---

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0452 70</td>
<td>PRECAST SEGMENT PRODUCTION</td>
<td>LS</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

---

**455-2- A TREATED TIMBER PILING**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
<td>Designer must verify material requirements with State Materials Lab prior to requesting item. Intended for temporary detour bridge applications, or special use structures. Summarize quantities by location per bent. The quantity to be paid for shall be the length, in feet (meters), of piling actually remaining in the completed structure below the elevation of cut-off shown in the plans or designated by the Engineer. For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.</td>
</tr>
</tbody>
</table>

---

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

---

**Forms**

**Design**
Refer to Comp Book

**Documentation**

**Design**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

---

**References**

<table>
<thead>
<tr>
<th>Standards</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 455</td>
<td></td>
</tr>
</tbody>
</table>

---

Details and Structure: Items 400 to 499
Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Status

Struct. 455-2- A TREATED TIMBER PILING LF

A = Treatment
Blank (Single Treatment)
1 (Dual Treatment)

Notes
Designer must verify material requirements with State Materials Lab prior to requesting item.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455 2</td>
<td>TREATED TIMBER PILING</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

455-14- AA CONCRETE SHEET PILING

Unit LF; M1
Accuracy Linear Foot; 10th of a Meter
PlanQuantity? no

Notes
Details Intended for concrete sheet pile walls. Show locations in plans. Include quantity block in plans.
Related Items
Forms Required SHTabQuant: Tabulation of Quantities Sheet
Recommended

Construction
Design Refer to Comp Book

Documentation
Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other Normally requires SHOP DRAWINGS
Standards Index 20400 thru 20440
Specifications Section 455
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Status

Struct. 455-14- AA CONCRETE SHEET PILING LF

A =
1 (7" X 30")
2 (8" X 30")
3 (10" X 30")
4 (12" X 30")
5 (Special)
6 (6" X 30")
7 (5" X 24")
8 (6" X 48")
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455 14 2</td>
<td>CONCRETE SHEET PILING, 8&quot;X30&quot;</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 14 3</td>
<td>CONCRETE SHEET PILING, 10&quot;X30&quot;</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 14 4</td>
<td>CONCRETE SHEET PILING, 12&quot;X30&quot;</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 14 5</td>
<td>CONCRETE SHEET PILING, SPECIAL</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**455- 18- PROTECTION OF EXISTING STRUCTURES**

| Unit | Accuracy | Lump Sum | Plan Quantity? |
|------|----------|----------|----------------|---------------|
| LS/LS|          |          | yes            |

**Notes**

The item is to protect adjacent buildings, RR tracks, existing bridge structures, etc that may be impacted by vibration affects of the new construction.

Survey existing older bridges and monitor vibration/settlement of existing structures located within a few hundred feet of the following construction operations: pile driving, drilled shaft excavations, blasting, vibro-compaction, steel sheet pile installations, well point dewatering systems, etc. Of special concern are old bridge structures on timber piles, existing retaining walls, existing building on shallow foundations, etc.

IN THE PLANS, list the adjacent structures not covered under 455-1.1 that require surveying and vibration monitoring, or structures that require special attention during construction.

The item is usually loaded as a structures items due to pile driving operations. However, blasting, sheet pile wall installations and super-pave vibratory compaction operations can cause vibrations sufficient to create damage to adjacent structures also.

NOTE: Protection of structures that are under construction (existing portion of a bridge during widening) is incidental to the bridge costs. No separate pay item is needed.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
<tr>
<td></td>
<td>Refer to Comp Book</td>
<td></td>
</tr>
</tbody>
</table>

**Documentation**

<table>
<thead>
<tr>
<th>Design</th>
<th>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Soils and Foundations Handbook 7.1.6, 9.2.4</th>
</tr>
</thead>
</table>

**Details and Structure:** Items 400 to 499
Specifications Section 455

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

*TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Notes

Plan Details and/or Technical Specifications required

Status

Struct. 455-18 PROTECTION OF EXISTING STRUCTURES LS/LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455 18</td>
<td>PROTECTION OF EXISTING STRUCTURES</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

455-34- AA PRESTRESSED CONCRETE PILING

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

Effective January 2009- refer to specification changes for dynamic load tests.

Details

For projects let January 2009 and later: Intended to cover cost and installation of the square prestressed concrete piling.

Design quantity computed as the total anticipated length of pile WITHOUT ALLOWANCES for cutoffs, splices, dynamic load tests, or preforming. Construction Final Quantity will be adjusted based on allowances, per the specifications.

Related item 455-143, except for fender system piling, & piling for soldier pile walls.

Per specification, "No payment will be made for dynamic load tests used to evaluate the integrity of a pre-planned epoxy-bonded dowel splice. Include all costs associated with dynamically testing production piles with epoxy-bonded dowel splices in the Pay Item 455-34."

For projects let through December 2008: Intended to cover cost and installation of the square prestressed concrete piling.

Quantity computed as the total anticipated length of pile without allowances for cutoffs, splices or preforming. Related items 455-143 & 455-137, except for fender system piling, & piling for soldier pile walls

Related Items

Required

Design SHTabQuant: Tabulation of Quantities Sheet

Construction COMP 700-050-08: Piling Tabulation and Cont.

Documentation

Design Locate in plans. Detailed calculations are required in computation book to reflect actual scope of work.

Construction Final tabulation of quantities must be recorded on proper form in computation book by location.

References

PPM Chapter

Other SDG’s 3.5

Standards Index 20600 thru 20631.

Specifications Section 455

Prep & Doc Manual Chapter(s) 7, 13
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455 34 1</td>
<td>PRESTRESSED CONCRETE PILING, 12&quot; SQ.</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0455 34 2</td>
<td>PRESTRESSED CONCRETE PILING, 14&quot; SQ.</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0455 34 3</td>
<td>PRESTRESSED CONCRETE PILING, 18&quot; SQ</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0455 34 4</td>
<td>PRESTRESSED CONCRETE PILING, 20&quot; SQ</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0455 34 5</td>
<td>PRESTRESSED CONCRETE PILING, 24&quot; SQ</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0455 34 6</td>
<td>PRESTRESSED CONCRETE PILING, 30&quot; SQ</td>
<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td>0455 34 8</td>
<td>CONCRETE PILING PRESTRESSED, SPECIAL</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Details

**Notes**

Intended to cover cost and installation of the steel “H” or pipe piling. Quantity computed as the total anticipated length of pile without allowances for cutoffs, splices or preforming.

**Related Items**

- **Required Design**
  - SHTabQuant: Tabulation of Quantities Sheet
  - COMP 700-050-08: Piling Tabulation and Cont.

- **Recommended Construction**
  - Refer to Comp Book

**Documentation**

- **Design**
  - Locate in plans. Detailed calculations are required in computation book to reflect actual scope of work.

- **Construction**
  - Final tabulation of quantities must be recorded on proper form in computation book by location.

**References**

- **PPM Chapter**
- **Other**
  - SDG’s 3.5

**Standards**

**Specifications**

- **Section 455**

**Prep & Doc Manual Chapter(s)**

- 7, 13

**Unit**

LF; M1

**Accuracy**

Linear Foot; 10th of a Meter

**PlanQuantity?**

no
Struct. 455-35- AA PILING, STEEL LF

AA =
1 (Hp 8 X 36)
2 (Hp 10 X 36)
3 (Hp 10 X 42)
4 (Hp 12 X 53)
5 (Hp 14 X 73)
6 (Hp 14 X 89)
7 (Hp 14 X 102)
8 (Hp 14 X 117)
9 (Special)
20 (18" Dia Pipe)
21 (20" Diameter Pipe)
22 (24" Diameter Pipe)
23 (30" Diameter Pipe)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455 35 4</td>
<td>STEEL PILING, HP 12 X 53</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 5</td>
<td>STEEL PILING, HP 14 X 73</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 6</td>
<td>STEEL PILING, HP 14 X 89</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 7</td>
<td>STEEL PILING, HP 14 X 102</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 8</td>
<td>STEEL PILING, HP 14 X 117</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 9</td>
<td>STEEL PILING, SPECIAL</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 21</td>
<td>STEEL PILING, 20&quot; DIA. PIPE</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 22</td>
<td>STEEL PILING, 24&quot; DIA. PIPE</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 23</td>
<td>STEEL PILING, 30&quot; DIA. PIPE</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</table>

455-36- A CONCRETE CYLINDER PILES- FURNISHED & DRIVEN

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF, M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

Intended to cover cost and installation of the concrete cylinder piling. Concrete cylinder piles may be precast pretensioned or spun cast post tensioned concrete.

Quantity computed as the total anticipated length of pile without allowances for cutoffs, splices or preforming.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required
Design SHTabQuant: Tabulation of Quantities Sheet

Recommended
COMP 700-050-08: Piling Tabulation and Cont.
Standards
Index 20654, 20660.

Specifications
Section 455

Struct. 455-36- A CONCRETE CYLINDER PILES- FURNISHED & DRIVEN LF
A =
1 (54” Diameter)
2 (60” Diameter)

Notes
Plan Details and/or Technical Specifications required

Status
Locate in plans. Detailed calculations are required in computation book to reflect actual scope of work.
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

Prep & Doc Manual Chapter(s) 7, 13

Documentation
PPM Chapter
Other
SDG’s 3.5
Specifications
Section 455

Plan Details and/or Technical Specifications required

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

455-37- A FIBERGLASS STRUCTURALLY REINFORCED COMPOSITE PILES

Unit LF; M1 Accuracy Linear Foot; 10th of a Meter Plan

Notes
to be used with Fender System, Section 471. Refer to Design Standards and Specifications for additional information.

Construction Required Recommended
Design SHTabQuant: Tabulation of Quantities Sheet
COMP 700-050-08: Piling Tabulation and Cont.

Construction
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Details and Structure: Items 400 to 499
COMPOSITE PILES

A = Size
1 (13” Diameter) to be opened only with Structures Design Approval
2 (16” Diameter)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455 37 2</td>
<td>FIBERGLASS STRUCTURALLY REINFORCED COMPOSITE PILE, 16” D</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

455- 39- A MINIPILE FOUNDATION SYSTEMS- FURNISH AND INSTALL

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

Details

Intended for strengthening existing bridges or used on new structures that have restricted overhead room. Payment is per each; length is determined by the contractor’s specialty engineer. Minimum tip elevation and minimum casing lengths shall be shown in the plans. Use requires State Structures Design Office approval.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
<tr>
<td></td>
<td>COMP 700-050-08: Piling Tabulation and Cont.</td>
</tr>
<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
</tr>
</tbody>
</table>

Documentation

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Soils and Foundations Handbook 8.2.5

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

Soils and Foundations Handbook 8.2.5

TRN$PORT Category (DRAFT FIELD): 0100 Structures

Struct. 455- 39- A MINIPILE FOUNDATION SYSTEMS- FURNISH AND INSTALL

A = Nominal Pile Diameter
blank (unspecified)
1 (10" Diameter)
2 (12" Diameter)
3 (14" Diameter)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 455-76- WRAP PILE CLUSTERS

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
</table>
|       | Repair/Rehab Projects only.  
|       | Intended on fender repair projects.  
|       | Show locations in plans w/ quantity block.  
|       | For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item. |

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

### Forms

<table>
<thead>
<tr>
<th>Design</th>
<th>Construction</th>
</tr>
</thead>
</table>
| Refer to Comp Book | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.  
| Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
<th>Standards</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Plan Details and/or Technical Specifications required</td>
</tr>
</tbody>
</table>

### Prep & Doc Manual Chapter(s)

7, 13

### TRNS*PORT Category (DRAFT FIELD): 0100 Structures

<table>
<thead>
<tr>
<th>Status</th>
</tr>
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<tbody>
<tr>
<td>Struct. 455-76- WRAP PILE CLUSTERS EA</td>
</tr>
</tbody>
</table>

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0455 76</td>
<td>WRAP PILE CLUSTERS</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 455-81-ABB CATHODIC PROTECTION

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
</table>
|       | Intended for Pile or Pier installation of Zinc or Titanium anode, installed as routine maintenance on H-piles and steel sheet piles used for seawalls. Show locations in plans with quantity block. Contact State Materials Office, Corrosion Lab for assistance in use of this item.  
|       | Electrical Work paid under item 400-60-A. |
DO NOT USE this item with 400-142 (Cathodic Protection for mass concrete or structural components) or 457 items (integral pile jackets).

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required 400-60

Recommended

Required Forms

Design SHTabQuant: Tabulation of Quantities Sheet

Recommended Construction

Design Refer to Comp Book

Construction

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

Required References

PPM Chapter 7, 13

Other

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. 455-81-ABB CATHODIC PROTECTION EA

A = Operation
1 (Furnish & Install)

BB =
01 (Pile, Zinc Anode Assembly)
02 (Pier, Zinc Anode Assembly)
04 (Pile, Titanium Anode Assembly)
05 (Pier, Titanium Anode Assembly)
06 (Other)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455 81101</td>
<td>CATHODIC PROTECTION, F&amp;I, PILE, ZINC ANODE ASSEMBLY</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 81102</td>
<td>CATHODIC PROTECTION, F&amp;I, PIER, ZINC ANODE ASSEMBLY</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 81104</td>
<td>CATHODIC PROTECTION, F&amp;I, PILE, TITANIUM ANODE PROTECTION</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

455-87- STEEL ANCHOR BAR

Unit EA Accuracy Each PlanQuantity? no

Notes

Details and Structure: Items 400 to 499
Intended for wall anchor tiebacks to connect wall to dead men, or anchor piles. Not for prestressed soil anchor applications. Show locations in plans w/ quantity block. Design for sacrificial thickness and coat with coal tar epoxy, if required.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td></td>
</tr>
</tbody>
</table>

### Forms

<table>
<thead>
<tr>
<th>Design</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
</tr>
</tbody>
</table>

### Documentation

<table>
<thead>
<tr>
<th>Design</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to Comp Book</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
<td></td>
</tr>
</tbody>
</table>

### Standards

<table>
<thead>
<tr>
<th>Other Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifications</td>
</tr>
</tbody>
</table>

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
</tr>
<tr>
<td>Construction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prep &amp; Doc Manual Chapter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6, 7, 13</td>
</tr>
</tbody>
</table>

### TRNS*PORT Category (DRAFT FIELD):

| 0100 Structures |

### Status

<table>
<thead>
<tr>
<th>Struct.</th>
</tr>
</thead>
<tbody>
<tr>
<td>455- 87- STEEL ANCHOR BAR EA</td>
</tr>
</tbody>
</table>

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455 87</td>
<td>ANCHOR BAR, STEEL</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

455- 88- AA DRILLED SHAFT

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

### Notes

Intended to pay for the cost of concrete and steel, temporary casing, all labor, materials, equipment and incidentals necessary to complete the drilled shaft. Length is measured from top-of-shaft elevation to the design tip elevation shown in the plans. Pay Item 455-122-XAA is required with this item. Pay Item 455-122 covers the cost of the shaft excavation. Clearly specify in plans CSL testing requirements as required. Cost of Shaft Inspection Device included in cost of drilled shaft, 455- 88-XAA. CSL tubes included under 455- 88-XAA. CSL testing paid for under Item 455-142.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>455-122 (2455-122)</td>
<td>455-142 when CSL testing is required</td>
</tr>
</tbody>
</table>

### Forms

<table>
<thead>
<tr>
<th>Design</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
</tr>
</tbody>
</table>

### Documentation

<table>
<thead>
<tr>
<th>Design</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to Comp Book</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
<td></td>
</tr>
</tbody>
</table>

### Details and Structure

Items 400 to 499
Standards Specifications Section 455

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455 88 3</td>
<td>DRILLED SHAFT, 36&quot; DIA</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 88 4</td>
<td>DRILLED SHAFT, 42&quot; DIA</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 88 5</td>
<td>DRILLED SHAFT, 48&quot; DIA</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 88 6</td>
<td>DRILLED SHAFT, 60&quot; DIA</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 88 7</td>
<td>DRILLED SHAFT, 72&quot; DIA</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 88 8</td>
<td>DRILLED SHAFT, 84&quot; DIA</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 88 15</td>
<td>DRILLED SHAFT, 90&quot; DIA</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 88 21</td>
<td>DRILLED SHAFT, 96&quot; DIA</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

455- 89- AA DRILLED SHAFT TIP GROUTING

Notes

Details

Intended for the post grouting of drilled shaft tips after installation. The item includes all materials, hardware, and labor to perform the work.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required 455-122 (2455-122), 455- Recommended
88- AA (2455- 88- AA)

**Forms**
- **Design**: SHTabQuant: Tabulation of Quantities Sheet

**Construction**
- **Design**: SHTabQuant: Tabulation of Quantities Sheet
- **Construction**: Refer to Comp Book

**Documentation**
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**: SDG’s 3.6

**Standards Specifications**
- Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0100 Structures

**Status**

**Struct.** 455- 89- AA DRILLED SHAFT TIP GROUTING EA

**AA =**
- 1 (24” Diameter)
- 2 (30” Diameter)
- 3 (36” Diameter)
- 4 (42” Diameter)
- 5 (48” Diameter)
- 6 (60” Diameter)
- 7 (72” Diameter)
- 8 (54” Diameter)
- 9 (66” Diameter)
- 19 (90” Diameter)
- 20 (108” Diameter)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>455- 93-</th>
<th>THERMAL INTEGRITY TESTING FOR DRILLED SHAFTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>EA</td>
</tr>
</tbody>
</table>

**Notes**
- **Monitor**: Larry Jones, State Geotechnical Engineer

**Details**
- Contact the monitor prior to use. Project specific approval required; do not use without approval of the State Geotechnical Engineer. Specifications are under development by the monitor.

Estimate the quantity based on the number of drilled shafts to be tested.

**Related Items**
- **Required**
- **Recommended**

**Forms**
- **Design**

**Documentation**
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Refer to Comp Book
**455-101- A LOAD TEST- OSTERBERG**

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>no</td>
</tr>
</tbody>
</table>

**Details**

Intended to load test drilled shafts using Osterberg Cells. Show location and test load of o-cells test shafts. Show number and depth of o-cells for each test shaft.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required**: 455-129-XXA
- **Recommended**: 455-131- and 455-132-

**Forms**

- Design: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

- Construction: Refer to Comp Book
- Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Other: Soils and Foundations Handbook 10.3.3
- Standards
- Specifications

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**  100 or 200  Structures or Roadway

**Status**

**Struct.** 455-101- A  LOAD TEST- OSTERBERG  EA

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Details and Structure:** Items 400 to 499
A =
1 (Less Than 5 Cells)
2 (5 Or More Cells)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455101</td>
<td>TEST LOAD, OSTERBERG CELL, LESS THAN FIVE CELLS</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

455-103-ABB  LOAD TEST- STATNAMIC

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Related Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required</td>
</tr>
<tr>
<td>Recommended</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
</tr>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Documentation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPM Chapter</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Standards</td>
</tr>
<tr>
<td>Specifications</td>
</tr>
</tbody>
</table>

Plan Details and/or Technical Specifications required

<table>
<thead>
<tr>
<th>Prep &amp; Doc Manual Chapter(s)</th>
<th>6, 7, 13</th>
</tr>
</thead>
</table>

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct.  455-103-ABB  LOAD TEST- STATNAMIC  EA

A = Type
1 (Compression)
2 (Lateral)

BB = Test Capacity
01 (100 Tons)
02 (200 Tons)
03 (300 Tons)
04 (400 Tons)
### Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOAD TEST - STATNAMIC, COMPRESSION, 1000TN</td>
<td>EA T</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 455-107- AA DRILLED SHAFT CASING

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
<td>Intended on drilled shaft projects when plans require permanent casing method be used. Permanent casing is typically not paid for separately for portions of shaft in waterway unless permanent casing method is required for shaft below the mud line. Show locations and depths in drilled shaft data table.</td>
</tr>
</tbody>
</table>

### Related Items
- **Required**: 455-122- AA, 455-88- AA
- **Recommended**: 455-107- AA DRILLED SHAFT CASING LF

### Forms
- **Design**: SHTabQuant: Tabulation of Quantities Sheet
- **Construction**: Refer to Comp Book

### Documentation
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References
- **PPM Chapter**: SDG’s 3.6
- **Standards**: Section 455

### Prep & Doc Manual Chapter(s)
- 6, 7, 13

### TRNS*PORT Category (DRAFT FIELD)
- 0100 Structures

### Status
- **Struct.** 455-107- AA DRILLED SHAFT CASING LF

AA =
1 (24" Diameter)
2 (30" Diameter)
3 (36" Diameter)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0455107 3</td>
<td>DRILLED SHAFT CASING, 36” DIAMETER</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0455107 4</td>
<td>DRILLED SHAFT CASING, 42” DIAMETER</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455107 5</td>
<td>DRILLED SHAFT CASING, 48” DIAMETER</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455107 6</td>
<td>DRILLED SHAFT CASING, 60” DIAMETER</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455107 7</td>
<td>DRILLED SHAFT CASING, 72” DIAMETER</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0455107 21</td>
<td>DRILLED SHAFT CASING, 96” DIAMETER</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

#### 455-111- CORE/PILOT HOLE- DRILLED SHAFT EXCAVATION

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 10th of a Meter  
**PlanQuantity**: no

**Notes**

Intended for payment of pilot holes or cores for drilled shaft projects to determine the quality of the material below the tip. Pilot holes are taken at shaft locations prior to shaft excavation. Cores are taken below the tip of an excavated shaft. Pilot holes or cores when deemed necessary, are typically taken 3 to 5 shaft diameters below the shaft’s planned tip elevation. Use 3 shaft diameters unless otherwise noted in the plans. Show location in the plans. Clarify whether pilot holes or cores are to be taken. Base quantity on the anticipated pilot hole and/or core length needed. Include pay item note.

Establish quantities as follows: Cores: measured from the bottom of shaft elevation to the bottom of the core (3 to 5 shaft diameters below tip); Pilot holes: measured from the ground elevation to the bottom elevation of the pilot hole (3 to 5 shaft diameters below tip).

**Related Items**

- **Required**: 455- 88- AA, 455-122- AA  
- **Recommended**: SHTabQuant: Tabulation of Quantities Sheet

**Forms**

- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Other**
- **Standards**
Specifications  Section 455
Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD):  0100  Structures

Status
Struct.  455-111-  CORE/PILOT HOLE- DRILLED SHAFT EXCAVATION  LF

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0455111</td>
<td>CORE-PILOT HOLE, DRILLED SHAFT EXCAVATION</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

455-112-  A  PILE- AUGER GROUTED

Unit  LF; M1  Accuracy  Linear Foot; 10th of a Meter  PlanQuantity?  no

Notes

Details
Intended for payment of auger cast piles to support miscellaneous structures. Do not use with Pay Item 534-72-1AA. Cost of sound barrier foundations included in the cost of sound barrier wall. Not for use to support bridge structures.

Related Items
Required  Recommended
Forms  Design  SHTabQuant: Tabulation of Quantities Sheet

Documentation
Construction  Refer to Comp Book
Design  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other  Soils and Foundations Manual 8.2.4, SDG’s 3.1

Standards
Specifications  Section 455
Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0100  Structures

Status
Struct.  455-112-  A  PILE- AUGER GROUTED  LF

A =
1 (16" Diameter)
2 (14" Diameter)
3 (24" Diameter)
4 (30" Diameter)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0455112 3</td>
<td>PILE AUGER GROUTED, 24&quot; DIA</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**455-119-ABB LOAD TEST- STATIC**

**Unit** EA  **Accuracy** Each  **PlanQuantity?** no

**Notes**
Intended for static axial or lateral load testing of piles or drilled shafts. Not used for Osterberg-Cell or Statnamic tests. Show location and test load in plans.

**Details**

**Related Items**
- **Required** 455-129- A
- **Recommended** 455-131- and 455-132-

**Forms**
- **Design** SHTabQuant: Tabulation of Quantities Sheet

**Documentation**
- **Design** Refer to Comp Book
- **Construction** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Standards**
- **PPM Chapter** 455
- **Specifications** Section 455

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 455-119-ABB LOAD TEST- STATIC EA

A = Type Load
1 (Compression)
2 (Tension)
3 (Lateral)

BB = Amount Of Load
01 (0 - 50 Tons)
02 (51 - 100 Tons)
03 (101 - 600 Tons)
04 (601 - 1200 Tons)
05 (1201-1800 Tons)

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0455119103</td>
<td>LOAD TEST-STATIC, COMPRESSION,101-600 TONS</td>
<td>EA</td>
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<tr>
<td>0455119201</td>
<td>LOAD TEST-STATIC, TENSION, 0-50 TONS</td>
<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0455119301</td>
<td>LOAD TEST-STATIC, LATERAL, 0-50 TONS</td>
<td>EA</td>
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<td>1/1/2010</td>
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</table>

**455-120- A PILE POINT PROTECTION**

**Details and Structure:** Items 400 to 499
Notes
Details
Related Items Required 455-35, 455-133
Recommended
Forms Design SHTabQuant: Tabulation of Quantities Sheet

Unit EA Accuracy Each PlanQuantity? no

Intended for steel “H” or pipe piling and steel sheet piling projects when borings show soils that may be difficult to penetrate. Show locations in plans w/ quantity block.

Required

Recommended

Details

Related Items

Forms

Notes

Details

Related Items

Forms

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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<tbody>
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<td>0455120 1</td>
<td>PILE POINT PROTECTION, HP 14&quot; X 89&quot;</td>
<td>EA</td>
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<tr>
<td>0455120 2</td>
<td>PILE POINT PROTECTION, 20&quot; SQ</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0455120 3</td>
<td>PILE POINT PROTECTION, 24&quot;</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0455120 4</td>
<td>PILE POINT PROTECTION, HP 14&quot; X 117&quot;</td>
<td>EA</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

Notes

Details

Related Items Required 455-88- AA

Recommended

Forms Design SHTabQuant: Tabulation of Quantities Sheet

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
**Construction**
Refer to Comp Book

**Basis of Estimates**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Notes**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

---

**Structure:**
455-122- AA

**UNCLASSIFIED SHAFT EXCAVATION**

<table>
<thead>
<tr>
<th>AA =</th>
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</thead>
<tbody>
<tr>
<td>1 (24&quot; Diameter.)</td>
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<tr>
<td>2 (30&quot; Diameter.)</td>
</tr>
<tr>
<td>3 (36&quot; Diameter.)</td>
</tr>
<tr>
<td>4 (42&quot; Diameter.)</td>
</tr>
<tr>
<td>5 (48&quot; Diameter.)</td>
</tr>
<tr>
<td>6 (60&quot; Diameter.)</td>
</tr>
<tr>
<td>7 (72&quot; Diameter.)</td>
</tr>
<tr>
<td>8 (54&quot; Diameter.)</td>
</tr>
<tr>
<td>9 (66&quot; Diameter.)</td>
</tr>
<tr>
<td>19 (90&quot; Diameter.)</td>
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<tr>
<td>20 (108&quot; Diameter.)</td>
</tr>
<tr>
<td>21 (96&quot; Diameter.)</td>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
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<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455122 3</td>
<td>EXCAVATION UNCLASSIFIED SHAFT, 36&quot; DIA</td>
<td>LF</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0455122 4</td>
<td>EXCAVATION UNCLASSIFIED SHAFT, 42&quot; DIA</td>
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<td>1/1/2010</td>
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<tr>
<td>0455122 5</td>
<td>EXCAVATION UNCLASSIFIED SHAFT, 48&quot; DIA</td>
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<tr>
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<td>EXCAVATION UNCLASSIFIED SHAFT, 60&quot; DIA</td>
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<tr>
<td>0455122 7</td>
<td>EXCAVATION UNCLASSIFIED SHAFT, 72&quot; DIA</td>
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<td>1/1/2010</td>
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<tr>
<td>0455122 8</td>
<td>EXCAVATION UNCLASSIFIED SHAFT, 54&quot; DIA</td>
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<td>1/1/2010</td>
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<tr>
<td>0455122 15</td>
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<tr>
<td>0455122 19</td>
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<tr>
<td>0455122 21</td>
<td>EXCAVATION UNCLASSIFIED SHAFT, 96&quot; DIA</td>
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</tbody>
</table>

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**455-129-A**

**INSTRUMENTATION AND DATA COLLECTION**

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/LS</th>
<th>Accuracy</th>
<th>Lump Sum</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**
Intended for use with all static, statnamic and Osterberg Cell load tests.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of
payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

**Required** 455-101, 455-103, or 455-119

### Forms

**Design** SHTabQuantLS: LS Tabulation of Quantities

**Construction** Refer to Comp Book

### Documentation

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction** Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

**PPM Chapter**

**Other** Soils and Foundations Handbook 10.3

### Standards

**Specifications** Section 455

Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

7, 13

---

### Status

**Struct.** 455-129- A INSTRUMENTATION AND DATA COLLECTION LS/LS

A =
1 (Pile Foundation)
2 (Drilled Shaft Foundation)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0455129</td>
<td>INSTRUMENTATION &amp; DATA COLLECT, DRILL SHAFT FOUND</td>
<td>LS</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

**455-131-** PLATFORM, WORKING SERVICE

### Unit

**EA**

**Accuracy** Each

**PlanQuantity?** no

### Notes

Intended for access platform at pile/shaft test site. Use with all static, statnamic and Osterberg Cell load test projects when tests are located in waterway or on land tests where access is difficult.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

**Required** 455-101, 455-103, or 455-119

### Forms

**Design** SHTabQuant: Tabulation of Quantities Sheet
### 455-131- PLATFORM, WORKING SERVICE

**Unit**: EA  
**Accuracy**: Each  
**PlanQuantity**: no

**Notes**

Intended for survey platform at test pile/shaft. Use with all static, statnamic and Osterberg Cell load test projects when tests are located in waterway or on land tests where access is difficult.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**: 455-101, 455-103, or 455-119  
**Recommended**:  

**Forms**

**Design**: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

Design  
Construction

**Other**


**Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**  7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**  0100  Structures

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>Plan Quantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>455-133- A</td>
<td>SHEET PILING, STEEL</td>
<td>SF; M2</td>
<td>Square Foot; 10th of a Square Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

PERMANENT: Complete designs and details must be provided in the plans including the Steel sheeting section, begin and end stations, top and bottom pile elevations.

TEMPORARY: This item should be utilized for temporary sheet pile installations that are installed at “critical locations.” Critical walls” are walls necessary to maintain the safety of the traveling public or structural integrity of nearby structures, roadways and utilities during construction.

For temporary critical walls requiring soil anchors, dead men etc., provide full details in plans (design of wale, soil anchor spacing and load, dead men anchor, number of proof test and creep test required, etc.).

Complete design and details must be provided in the plans including the section modulus, begin and end stations, top and bottom pile elevations.

See 455-12.6.2 for additional information.

TRNS*PORT Category: When walls are used for construction of a structure and shown in the structures plans, load the item in the corresponding structures category. When walls are used for other applications (roadway or utilities), load the item in the corresponding category.

MEASUREMENT: The area to be paid for will be measured from top of pile elevation to bottom of pile elevation and longitudinally from beginning to end of wall, as shown in the plans.

PAYMENT: PLAN QUANTITY will be the basis of payment to the contractor. No separate payment will be made for the cost of the anchor system for anchored

**Related Items**

**Forms**

- **Required**: SHTabQuant: Tabulation of Quantities Sheet

**Design**

- Refer to Comp Book

**Construction**

- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**PPM Chapter**

- SDG’s 3.5, Normally requires SHOP DRAWINGS

**Specifications**

- Section 455

**Prep & Doc Manual Chapter(s)**

- 6, 7, 13
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455133 2</td>
<td>SHEET PILING STEEL, TEMPORARY-CRITICAL</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0455133 3</td>
<td>SHEET PILING STEEL, F&amp;I PERMANENT</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

Selected items are monitored by the State Geotechnical Engineer. Contact Larry Jones, State Geotechnical Engineer in the State Structures Design Office, prior to including the monitored items on any project.

STEEL PERMANENT: Complete designs and details must be provided in the plans including the Steel sheeting section, begin and end stations, top and bottom pile elevations. Refer to Section 455 for current specifications.

STEEL TEMPORARY: This item should be utilized for temporary sheet pile installations that are installed at “critical locations.” Critical walls” are walls necessary to maintain the safety of the traveling public or structural integrity of nearby structures, roadways and utilities during construction. Refer to Section 455 for current specifications.

For temporary critical walls requiring soil anchors, dead men etc., provide full details in plans (design of wale, soil anchor spacing and load, dead men anchor, number of proof test and creep test required, etc.).

COMPOSITE POLYURETHANE & GLASS FIBER: Low height sheet pile for shoreline protection. Polyurethane resin/glass fiber matrix pultruded material. Experimental use only. The use of this item must be approved by the State Geotechnical Engineer.

VINYL: The Interlocking Vinyl Sheet Piling Wall consists of Vinyl sheet piling manufactured from extruded, UV stabilized Polyvinyl Chloride (PVC). The use of this item must be approved by the State Geotechnical Engineer.

Complete design and details must be provided in the plans including the section modulus, begin and end stations, top and bottom pile elevations. See 455-12.6.2 for additional information.

TRNS*PORT Category: When walls are used for construction of a structure and shown in the structures plans, load the item in the corresponding structures category. When walls are used for other applications (roadway or utilities), load the item in the corresponding category.

MEASUREMENT: The area to be paid for will be measured from top of pile elevation to bottom of pile elevation and longitudinally from beginning to end of wall, as shown in the plans.

PAYMENT: PLAN QUANTITY will be the basis of payment to the contractor. No separate payment will be made for the cost of the anchor system for anchored
Related Items | Required | Recommended | 455-120
--- | --- | --- | ---
Forms | Design | SHTabQuant: Tabulation of Quantities Sheet

**Construction**
- Refer to Comp Book

**References**
- PPM Chapter
- Other
  - SDG’s 3.5, Normally requires SHOP DRAWINGS

**Standards**
- Specifications
  - Section 455
  - Selected Items may require Plan Details and/or Technical Specifications

**Prep & Doc Manual Chapter(s)**
- 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**
- 100 or 200 Structures or Roadway

### Status

**Struct.**
- 455-133-AAA
  - SHEET PILING
  - SF

  AAA = Material & Operation for Concrete-use Item 455-14-
  - 2 (Steel, Temporary-Critical)
  - 3 (Steel, Furnish & Install Permanent)
  - 4 (Composite Polyurethane & glass fiber) *
  - 5 (Vinyl, Furnish & Install Permanent) *

  *Must be approved by State Geotechnical Engineer for each project; Tech Specs required.

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 455-137- LOAD TEST- DYNAMIC

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**
- Valid through December 2008; refer to specification changes for Section 455.

**Details**
- For Project let January 2009 and later: No separate payment will be made for Dynamic Load Tests. For Test Piles, Dynamic Load tests will be incidental to the Test Piling. For Production piles, Dynamic Load Test will be paid as additional length of piling, according to Section 455 of the specifications.

- For projects let through December 2008: Intended on driven piling projects for PDA testing. Quantity given should be equal to the number of test piles called out on the Foundations Layout Sheet.

**Related Items**
- **Required** 455-143-XAA, 455-144-XAA, 455-145-XXA
- **Recommended**

**Forms**
- Design SHTabQuant: Tabulation of Quantities Sheet
<table>
<thead>
<tr>
<th>Documentation</th>
<th>Construction</th>
<th>Refer to Comp Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
<tr>
<td>References</td>
<td>PPM Chapter</td>
<td></td>
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<tr>
<td></td>
<td>Other</td>
<td>Soils and Foundation Handbook 10.1, 10.2</td>
</tr>
<tr>
<td>Standards</td>
<td>Specifications</td>
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<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td>6, 7, 13</td>
<td></td>
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</tbody>
</table>

**Status**

**Struct.** 455-137- LOAD TEST- DYNAMIC EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 455-142- CROSSHOLE SONIC LOGGING / DRILLED SHAFT TESTING

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

**Notes**

Intended for integrity testing of drilled shafts. CSL tubes are required to be placed in all drilled shafts, but only a portion of shafts will actually be tested. Determine number of shafts to be CSL tested; identify shafts in the plans.

This pay item should NOT be included for miscellaneous structures with drilled shafts smaller than 60 inches in diameter.

If the Engineer suspects defects in any drilled shaft installation, additional CSL testing may be required. If the installation is found to be defective, no additional payment will be made for testing or required corrections. If the installation is found to meet specifications, then payment for CSL testing will be made as unforeseeable work.

**Related Items**

**Required** 455-88, 455-122-XAA  
**Recommended**

**Forms**

**Design** SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

**Construction** Refer to Comp Book

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Other** Soils and Foundation Handbook 10.4.2, 10.4.3

**Standards**

**Specifications** Section 455

**Prep & Doc Manual Chapter(s)** 6, 7, 13

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Details and Structure: Items 400 to 499
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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<td>CROSSHOLE SONIC LOGGING EA T</td>
<td>EA</td>
<td>Linear Foot; 10th of a Meter</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### Notes

**Details**

For Projects let January 2009 and later: Intended to cover cost and installation of the prestressed concrete test piling. Includes the payment for dynamic load test on test piles. Quantity computed as the total anticipated length of pile, without allowances for cutoffs, splices, or preforming.

For projects let through December 2008: Intended to cover cost and installation of the prestressed concrete test piling. PDA paid for separately under item 455-137. Intended to cover cost and installation of the prestressed concrete piling. Quantity computed as the total anticipated length of pile, without allowances for cutoffs, splices, or preforming.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tbody>
<tr>
<td>Design</td>
<td>455-137, 455-34</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</tbody>
</table>

### Documentation

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<thead>
<tr>
<th>Construction</th>
<th>Design</th>
<th>Details and Structure: Items 400 to 499</th>
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<td>PPM Chapter</td>
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<td>Soils and Foundation Handbook 10.1, 10.2</td>
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### Standards

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</tr>
</thead>
<tbody>
<tr>
<td>Section 455</td>
<td>7, 13</td>
</tr>
</tbody>
</table>

Selected Items may require Plan Details and/or Technical Specifications
**AA =**
1 (12" Sq.)
2 (14" Sq.)
3 (18" Sq.)
4 (20" Sq.)
5 (24" Sq.)
6 (30" Sq.)
7 (36" Dia)
8 (Special)*

**Notes**  
* Special may require Tech Spec and/or Plan Detail

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>0455143 1</td>
<td>TEST PILES-PRESTRESSED CONCRETE,12&quot; SQ LF</td>
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<td>0455143 3</td>
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<tr>
<td>0455143 4</td>
<td>TEST PILES-PRESTRESSED CONCRETE,20&quot; SQ LF</td>
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**455-144- AA**  
TEST PILES- STEEL

<table>
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<th>Accuracy</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
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**Notes**

**Details**

Intended to cover cost and installation of the steel test piling. PDA paid for separately under item 455-137.

Design quantity computed as the total anticipated length of test pile without allowances for cutoffs, splices or preforming. Show locations on Foundation Layout Sheet. Give test pile lengths in Pile Installation Table.

Construction/Final quantity for Test Piles is computed as follows:

\[(\text{Sum of test pile lengths}) + [(0.3) \times \text{Sum of required preformed pile hole depths for test piles}]\]

Do not add allowances for splices.

Include quantity for preformed holes only if preforming is known to be required and shown in the plans. Do not use as contingency.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

Required 455-137, 455-34  
Recommended

**Forms**

**Design**  
SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

**Design**  
Refer to Comp Book

**Construction**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).
Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s): 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct.  455-144- AA TEST PILES- STEEL LF

AA =
1 (Hp 8 X 36)
2 (Hp 10 X 36)
3 (Hp 10 X 42)
4 (Hp 12 X 53)
5 (Hp 14 X 73)
6 (Hp 14 X 89)
7 (Hp 14 X 102)
8 (Hp 14 X 117)
9 (Special)*
20 (18” Dia Pipe)
21 (20” Dia Pipe)
22 (24” Dia Pipe)
23 (30” Dia Pipe)

Notes  * Special may require Tech Spec and/or Plan Detail

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>TEST PILES - STEEL, HP 12 x 53</td>
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<td>0455144 9</td>
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<td>0455144 22</td>
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<td>0455144 23</td>
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455-145- A TEST PILE- CONCRETE CYLINDER PILES

Unit LF; M1  Accuracy Linear Foot; 10th of a Meter  PlanQuantity? no

Notes
Details

Intended to cover cost and installation of the prestressed concrete test piling.  PDA paid for separately under item 455-137.
Design quantity computed as the total anticipated length of test pile without allowances for cutoffs, splices or preforming. Show locations on Foundation Layout Sheet.  Give test pile lengths in Pile Installation Table.

Construction/Final quantity for Test Piles is computed as follows:
(Sum of test pile lengths) + [(0.3) x Sum of required preformed pile hole depths for test piles]
Do not add allowances for splices.

Include quantity for preformed holes only if preforming is known to be required and shown in the plans. Do not use as contingency.

Related Items
- **Required**: 455-137, 455-34
- **Recommended**: 

Forms
- **Design**: SHTabQuant: Tabulation of Quantities Sheet

Documentation
- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
- **PPM Chapter**
- **Other**: Soils and Foundation Handbook 10.1, 10.2

Specifications
- **Section 455**

Prep & Doc Manual Chapter(s)
- 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0100 Structures

**Status**

**Struct.** 455-145- A TEST PILE- CONCRETE CYLINDER PILES LF

A =
1 (54" Diameter)
2 (60" Diameter)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**455-146- EMBEDDED DATA COLLECTOR**

<table>
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<tr>
<th>Unit</th>
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<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

Details

to be used with all prestressed concrete test piles. Estimate a quantity of 1 per test pile. Each collector system will include gauges at the top and tip, as well as antenna and incidental equipment for installation in each pile, as shown in the standard.

Related Items
- **Required**
- **Recommended**

Forms
- **Design**: SHTabQuant: Tabulation of Quantities Sheet

Documentation
- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
- **PPM Chapter**
- **Other**
### Standards
Interim 20602

### Specifications
Special Provision available

### Prep & Doc Manual Chapter(s)

<table>
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<th>TRNS*PORT Category (DRAFT FIELD):</th>
<th>0100</th>
<th>Structures</th>
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### Status

**Struct.** 455-146-
**EMBEDDED DATA COLLECTOR**

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<th>Unit</th>
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#### 457-1-AB
**STANDARD INTEGRAL PILE JACKET**

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
</tr>
</thead>
</table>

**Notes**

Intended for rehabilitation projects to repair concrete pile damage or to protect sheet piles. Project details (plans or specs) must include jacket lengths. Grout material(s) should be specified in the plans or specifications. Epoxy Grout filler may be used ONLY with permission of the State Materials Office, Corrosion Lab.

Estimate quantity based on measurement from the bottom of the form to the top of the form, per the specifications. Show locations in plans w/ quantity block. Contact State Materials Office, Corrosion Lab for assistance in use of this item.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

#### Related Items

<table>
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<tbody>
<tr>
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<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</tbody>
</table>

#### Forms

**Construction**

**Reference**

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

#### Prep & Doc Manual Chapter(s)

| 6, 7, 13 |

### Status

**Details and Structure:** Items 400 to 499

---

Page 123 of 154
**Struct.  457- 1- AB  STANDARD INTEGRAL PILE JACKET  LF**

A = Type  
1 (non-structural)  
2 (Structural)  

B= Pile Size  
1 (up to 16”)  
2 (16.1 to 30”)  
3 (30.1 and larger)  

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<td>STANDARD INTEGRAL PILE JACKET, NON-STRUCTURAL, UP TO 16”</td>
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<tr>
<td>0457 12</td>
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<tr>
<td>0457 21</td>
<td>STANDARD INTEGRAL PILE JACKET, STRUCTURAL, UP TO 16”</td>
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<tr>
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</table>

**457- 2- AB  CATHODIC PROTECTION INTEGRAL PILE JACKET**

**Unit**  LF; M1  
**Accuracy**  Linear Foot; 10th of a Meter  
**PlanQuantity?**  no  

**Notes**

Intended for rehabilitation projects to repair concrete pile corrosion damage. Project details (plans or specs) must include jacket lengths, anode type and configuration, as well as connection methods and materials for cathodic protection. Grout material(s) should be specified in the plans or specifications.

Estimate quantity based on measurement from the bottom of the form to the top of the form, per the specifications. Show locations in plans w/ quantity block. Contact State Materials Office, Corrosion Lab for assistance in use of this item.

Electrical Work will be paid under 400-60, when required for impressed current jackets. For galvanic jackets, include a note in the plans or specifications indicating that electrical work is incidental to the cost of the integral Cathodic protection pile jacket.

See items 400-142 (structure) and 455-81 (pier or pile) for other Cathodic Protection work.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**  400-60-  
**Recommended**  SHTabQuant: Tabulation of Quantities Sheet  

**Forms**

**Design**  Refer to Comp Book  

**Documentation**

**Design**  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Normally requires SHOP DRAWINGS

**Standards Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 6, 7, 13

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**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

**Struct.** 457- 2- AB  CATHODIC PROTECTION INTEGRAL PILE JACKET LF

A = Type
1 (non-structural)
2 (Structural)

B= Pile Size
1 (up to 16"
2 (16.1 to 30"
3 (30.1 and larger)

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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
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<tr>
<td>0457 2 12</td>
<td>CATHODIC PROTECTION INTEGRAL PILE JACKET, NON-STRUCTURAL, 16.1-30.&quot;</td>
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<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0457 2 13</td>
<td>CATHODIC PROTECTION INTEGRAL PILE JACKET, NON-STRUCTURAL, 30.1&quot; AND LARGER</td>
<td>LF</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0457 2 21</td>
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<td>0457 2 23</td>
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<td>1/1/2010</td>
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</table>

**457- 70-ABB**  INTEGRAL PILE JACKET

**Notes**

Valid through 12-31-2008; replaced by 457-1 and 457- 2 items

**Details**

Intended for rehabilitation projects to repair concrete pile corrosion damage or to protect steel piles. Contact State Materials Office, Corrosion Lab for assistance in use of this item. Show locations in plans w/ quantity block.

Grout material(s) and jacket lengths should be specified in the plans or specifications. Epoxy Grout filler may be used ONLY with permission of the State Materials Office, Corrosion Lab.
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
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<tr>
<td>Forms</td>
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</tr>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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### Construction

- **Design**: Refer to Comp Book
- **Documentation**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**: Normally requires SHOP DRAWINGS
- **Other**: Normally requires SHOP DRAWINGS

### Standards

#### Specifications

Plan Details and/or Technical Specifications required

#### Prep & Doc Manual Chapter(s)

6, 7, 13

#### TRNS*PORT Category (DRAFT FIELD):

0100 Structures

### Status

**Struct.** 457-70-ABB

INTEGRAL PILE JACKET

| LF |

A =
- 2 (Portland Cement Grout Filler)
- 3 (Class III Concrete Seal Filler)
- 4 (Others)

BB =
- 01 (12")
- 02 (14")
- 03 (15")
- 04 (16")
- 05 (18")
- 06 (20")
- 07 (21")
- 08 (22")
- 09 (24")
- 10 (27")
- 11 (30")

**Notes**

A=1 blocked 4-8-08

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<td>0457 70306</td>
<td>INTEGRAL PILE JACKET, CLASS III CONCRETE FILLER, 20&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td>Valid through 12-31-2008; replaced by 457-2 items</td>
</tr>
<tr>
<td>0457 70309</td>
<td>PILE JACKET INTEGRAL, CLASS III CONC FIL, 24&quot;</td>
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<td>1/1/2010</td>
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<tr>
<td>0457 70401</td>
<td>INTEGRAL PILE JACKET, OTHER, 12&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 457-71-AB CATHODIC PROTECTION- INTEGRAL PILE JACKET

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 10th of a Meter  
**Plan Quantity**: no

**Notes**:  
Valid through 12-31-2008; replaced by 457-2 items

**Details**:  
Coordinate with the State Materials Office, Corrosion Lab for assistance in use of this item. Intended for rehabilitation projects to repair piles with corrosion damage using cathodic protection. Show locations and jacket lengths in plans w/ quantity block. Electrical Work paid under item 400-60-A. See items 400-142 (structure) and 455-81 (pier or pile) for related work.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**  
**Required**: 400-60-  
**Recommended**: SHTabQuant: Tabulation of Quantities Sheet

**Forms**  
**Design**: Refer to Comp Book

**Documentation**  
**Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.  
**Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**  
**PPM Chapter**: Normally requires SHOP DRAWINGS

**Specifications**:  
Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0100 Structures

### Standards

**Specifications**

#### A =
1. (Galvanic Cathodic Protection Non-Structural)  
2. (Galvanic Cathodic Protection Structural)  
3. (Impressed Current Cathodic Protection Non-Structural)  
4. (Impressed Current Cathodic Protection Structural)  
5. (Other)

#### B = Pile Size
1. (up to 16")  
2. (16.1 to 30")  
3. (30.1 and larger)

**Notes**

Details and Structure: Items 400 to 499
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
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<tbody>
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<td>0457 71 12</td>
<td>CATHODIC PROTECTION-INTEGRAL PILE JACKET, GALVANIC, NON-STRUCTURAL, 16.1 - 30&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0457 71 22</td>
<td>CATHODIC PROTECTION-INTEGRAL PILE PROTECTION, GALVANIC, STRUCTURAL, 16.1 - 30&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0457 71 33</td>
<td>CATHODIC PROTECTION-PILE JACKET, IMPRESSED CURRENT, NON-STRUCTURAL, 30.1&quot; AND LARGER</td>
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<td>T</td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

**458- 1- AB BRIDGE DECK EXPANSION JOINT**

| Unit    | LF; M1 | Accuracy | Linear Foot; 10th of a Meter | PlanQuantity? | yes |
|---------|--------|----------|-------------------------------|---------------|

**Notes**
- Refer to Design Standards and Specifications for selection and use of these joints.
- Poured joints- Type A, B, or C silicone is included in the cost of the concrete item; no separate payment.
- Poured Joints with Backer Rod- Type D silicone is paid under this item.
- Strip Seal Joint System- Elastomeric material, as indicated in specs & standards, is paid under this item.
- Note: Tech Specs are required for selected types of joints/materials, as shown in the pay item structure.

For Bridge Approach Expansion Joints near bridge approach slabs, refer to 370 items.
For Concrete Joint repairs in Structures, refer to 400 items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</table>

**Documentation**

<table>
<thead>
<tr>
<th>Design</th>
<th>Refer to Comp Book</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
</tr>
<tr>
<td></td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
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</table>

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other Standards</th>
<th>Specifications</th>
<th>Prep &amp; Doc Manual Chapter(s)</th>
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<tbody>
<tr>
<td></td>
<td>Index No. 21110, 21100</td>
<td>Section 458</td>
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**TRNS*PORT Category (DRAFT FIELD):**

| 0100 | Structures |

**Details and Structure:** Items 400 to 499
### Struct. 458-1-AB BRIDGE DECK EXPANSION JOINT LF

A= Operation  
1 (New Construction- F&I)  
2 (Rehabilitation- Clean, Seal, Replace)  

B= Type  
1 (Poured Joint with Backer Rod) Type D silicone  
2 (Strip Seal Joint System)  
3 (Modular) Note: Tech Spec Required, including material and installation specs  
4 (Finger Joint) Note: Tech Spec Required, including material and installation specs  
5 (Compression Elastomeric) Note: For Rehab only. Tech Spec Required, including material and installation specs  
6 (Other) Note: For Rehab only. Tech Spec Required, including material and installation specs

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0458 1 11</td>
<td>BRIDGE DECK EXPANSION JOINT, NEW CONSTRUCTION, F&amp;I POURED JOINT WITH BACKER ROD</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0458 1 12</td>
<td>BRIDGE DECK EXPANSION JOINT, NEW CONSTRUCTION, F&amp;I STRIP SEAL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0458 1 13</td>
<td>BRIDGE DECK EXPANSION JOINT, F&amp;I MODULAR</td>
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<td>T</td>
<td>1/1/2010</td>
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<td>0458 1 14</td>
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<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0458 1 21</td>
<td>BRIDGE DECK EXPANSION JOINT, REHABILITATION, POURED JOINT WITH BACKER ROD</td>
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<td>1/1/2010</td>
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<tr>
<td>0458 1 22</td>
<td>BRIDGE DECK EXPANSION JOINT, REHABILITATION, STRIP SEAL</td>
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<td>1/1/2010</td>
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<tr>
<td>0458 1 23</td>
<td>BRIDGE DECK EXPANSION JOINT, REHABILITATION, MODULAR</td>
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<tr>
<td>0458 1 24</td>
<td>BRIDGE DECK EXPANSION JOINT, REHABILITATION, FINGER JOINT</td>
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<td>1/1/2010</td>
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<tr>
<td>0458 1 25</td>
<td>BRIDGE DECK EXPANSION JOINT, REHABILITATION, COMPRESSION ELASTOMERIC</td>
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<tr>
<td>0458 1 26</td>
<td>BRIDGE DECK EXPANSION JOINT, REHABILITATION, OTHER</td>
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<td>T</td>
<td>1/1/2010</td>
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### 459-71- PILES, POLYETHYLENE SHEETING

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

#### Notes

Details

Intended on piling or drilled shaft projects to wrap portion of end bent pile or shaft within the fill height to reduce down-drag. Add note on Foundation Layout Sheet. Pay quantity is the pile area wrapped, NOT the quantity of material applied. For each pile, record the perimeter and the height to be wrapped. Payment includes 2 layers, lubricant, and overlap, as required by specification. Bitumen Coating paid separately.

Related Items

- Required
- Recommended
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0459 71</td>
<td>PILES, POLYETHYLENE SHEETING SY</td>
<td>SY</td>
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<td>1/1/2010</td>
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</tbody>
</table>

### 460- 1- AA  STRUCTURAL STEEL- REHAB

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
</tr>
</tbody>
</table>
| Do not use for new steel structures. This item will be used on all rehabilitation work only. Show steel quantities in quantity blocks on plans. Pay for painting of structural steel separately. Conduct lead based paint survey. Add general note to alert Contractor of existing lead based paint.

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
</tr>
<tr>
<td>COMP 700-050-06: Weight Measure or Liquid Volume Comp &amp; Cont.</td>
<td></td>
<td></td>
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<table>
<thead>
<tr>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Normally requires SHOP DRAWINGS</td>
</tr>
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<table>
<thead>
<tr>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifications</td>
</tr>
<tr>
<td>Section 460</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prep &amp; Doc Manual Chapter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7, 13</td>
</tr>
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</table>
**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct. 460-1- AA**

**STRUCTURAL STEEL- REHAB**

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>STRUCT STEEL- REHAB, CARBON</td>
<td>LB</td>
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<tr>
<td>STRUCT STEEL, LOW ALLOY</td>
<td>LB</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>STRUCT STEEL - REHABILITATION, SHOE ASSEMBLIES</td>
<td>LB</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>STRUCT STEEL - REHABILITATION, BASCULE LEAVES</td>
<td>LB</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>STRUCTURAL STEEL REHAB- SCREWS,BOLTS &amp; WASHER ASSEMBLIES</td>
<td>LB</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>STRUCTURAL STEEL REHAB- BOLTS, NUTS, WASHERS &amp; PLATES</td>
<td>LB</td>
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<td>1/1/2010</td>
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<tr>
<td>STRUCTURAL STEEL - REHABILITATION, MISCELLANEOUS</td>
<td>LB</td>
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**460-2- AA**

**STRUCTURAL STEEL- NEW/WIDENING**

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>LS/LB; LS/KG</td>
<td>Pound; Kilogram</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

Intended for new construction of steel structures and bridge widenings. When painting is specified, cost of painting is incidental to this item.

WEATHERING item used when uncoated weathering steel is specified.

CARBON item used for Grades 36 and higher including weathering steel when painted.

LOW ALLOY item used for Grade 50 steel.

BASCULE LEAVES item used for all grades of steel in bascule leaf except steel used for decking, and steel counterweight blocks. When flanking span remains within the limits of bascule pier, pay under BASCULE PIERS. If not, include under CARBON or LOW ALLOY.

Cost of F-shaped or vertical shape steel traffic railing barrier located on bascule leaf included in steel quantity under BASCULE PIERS. Leaf Centering Device Assembly included in steel quantity under BASCULE LEAVES.

BASCULE PIERS item used for all grades of steel in bascule pier except for steel for...
decking. Cost of F-shaped or vertical shape steel traffic railing barrier located within limits of bascule pier included in steel quantity under BASCULE PIERS. Calculate weight of steel for estimating purposes only. Due not tabulate steel quantities in the plans. On steel box girder projects add note to include cost of all access hatches, and screen doors in cost on structural steel.

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
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<td>COMP 700-050-05: Lump Sum Quantities</td>
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<table>
<thead>
<tr>
<th>Documentation</th>
<th>Design</th>
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</thead>
<tbody>
<tr>
<td>Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.</td>
<td></td>
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</tbody>
</table>

### References

| Standards | Specifications | Section 460 |

### Prep & Doc Manual Chapter(s)

7, 13

### TRNS*PORT Category (DRAFT FIELD):

0100 Structures

### Status

**Struct. 460- 2- AA**

<table>
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<th>Structural Steel- New/Widening LS/LB</th>
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<th>Accuracy</th>
<th>Pound; Kilogram</th>
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<th>PlanQuantity?</th>
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### The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<td>0460 2 2</td>
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<td>0460 2 5</td>
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<td>0460 2 6</td>
<td>STRUCT STEEL, BASCULE PIERS</td>
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### 460- 6- LADDERS & PLATFORMS

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<th>Unit</th>
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</table>

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<thead>
<tr>
<th>Accuracy</th>
<th>Pound; Kilogram</th>
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</table>

<table>
<thead>
<tr>
<th>PlanQuantity?</th>
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</thead>
</table>
Notes
Details
Intended for both steel and aluminum ladders and platforms when necessary for personnel/maintenance access. Clearly define location w/ quantity block in plans.

Related Items
Required
Recommended
Forms
Design
SHTabQuant: Tabulation of Quantities Sheet
COMP 700-050-06: Weight Measure or Liquid Volume Comp & Cont.

Documentation
Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter
Other
Normally requires SHOP DRAWINGS

Standards
Specifications
Section 460

Prep & Doc Manual Chapter(s)
6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Notes

Status
Struct. 460-6- LADDERS & PLATFORMS LB

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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460-10- A STAINLESS STEEL (For Keys Bridges and Port of Miami)

Notes
Details
Project Specific Items

Related Items
Required
Recommended
Forms
Design

Documentation
Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

References
PPM Chapter
Other

Standards
Specifications

Prep & Doc Manual Chapter(s)
Stainless Steel (For Keys Bridges and Port of Miami)

A= Project Specific Items
Valid for Keys Bridges and Port Of Miami ONLY

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Obsolete Date</th>
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<tr>
<td>0460 10 2</td>
<td>STAINLESS STEEL, PERSONNEL ACCESS MANHOLE, BOTTOM SLAB, APPROX 3’x3’ GRATE-BAR TYPE, KEYS BRIDGES</td>
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<tr>
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<td>1/1/2010</td>
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<tr>
<td>0460 10 6</td>
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<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**460-13- A**  STRUCTURAL STEEL REHAB- SANDWICH PLATE SYSTEM

**Unit**  SY; M2  **Accuracy**  Square Yard; Square Meter  **PlanQuantity?**  yes

**Notes**  Experimental Item. Requires State Structures Design Office Approval / FHWA

**Details**  Must be coordinated with State Structures Design Office.
Consists of Furnishing and Installing Sandwich Plate System, including wearing surface, bridge deck, and supporting stringer.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**  Refer to Comp Book

**Documentation**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
</tr>
<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

460-70- A ALUMINUM BULLET RAILINGS

Unit LF; M1
Accuracy Linear Foot; 10th of a Meter
Plan Quantity? yes

Notes
Details Consists of furnishing and installing bullet railing on top of traffic railing barriers and parapets to protect pedestrians or bicycles. Note details on Indexes 423, 820, 821, and 822.
For other aluminum railings, refer to Index Series 860 and 870, and pay items 515-1-xxa and 515-2-xxa.

Related Items
Required 521-6- A when Index 820 Pedestrian Bicycle railing is used
Recommended

Forms
Design SHTabQuant: Tabulation of Quantities Sheet

Documentation
Design Refer to Comp Book

Construction
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter
Other
Standards Index No. 423, 820, 821, 822
Specifications Section 460

Prep & Doc Manual Chapter(s) 6, 7, 13
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0460701</td>
<td>ALUMINUM BULLET RAILINGS, SINGLE RAIL</td>
<td>LF</td>
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</tr>
<tr>
<td>0460702</td>
<td>ALUMINUM BULLET RAILINGS, DOUBLE RAIL</td>
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<td>1/1/2010</td>
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<tr>
<td>0460703</td>
<td>ALUMINUM BULLET RAILINGS, TRIPLE RAIL</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

#### 460-71- A METAL TRAFFIC RAILING

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>yes</td>
<td></td>
</tr>
</tbody>
</table>

**Details**

Consists of furnishing and installing metal traffic barriers, for new construction or Barrier Retrofit. Show location in plans and include in quantity block.

**Related Items**

- **Required**: SHTabQuant: Tabulation of Quantities Sheet
- **Recommended**: Refer to Comp Book

**Forms**

- Construction: Refer to Comp Book
- Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
- **Construction**: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- **PPM Chapter**: SDG’s 6.7
- **Other Standards**: Index 470 through 476
- **Specifications**: Section 460
- **Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 100 or 200 Structures or Roadway

**Status**

**Struct. 460-71- A METAL TRAFFIC RAILING LF**

- **A =**
  - 1 (Thrie Beam Retrofit)
  - 2 (Steel Post And Rail)*
  - 3 (Steel Post and Rail-Retaining Wall System Maintenance)

**Notes**

*Non-standard; custom design may be required.
### 460- 81- A RIVET / HIGH STRENGTH BOLT REPLACEMENT

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

#### Notes

For Rehabilitation projects only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

#### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

#### Forms

- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### Documentation

- **PPM Chapter**: Section 460
- **Other Standards**: specified as required
- **Specifications**: Plan Details and/or Technical Specifications required

#### Prep & Doc Manual Chapter(s)

- 7, 13

### TRNS*PORT Category (DRAFT FIELD):

100 or 200 Structures or Roadway

### Status

**Struct.** 460- 81- A RIVET / HIGH STRENGTH BOLT REPLACEMENT EA

A = Blank (Standard)

1 (Special)

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0460 81</td>
<td>RIVETS - HIGH STRENGTH BOLTS, REPLACEMENT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0460 81</td>
<td>RIVETS - HIGH STRENGTH BOLT REPLACEMENT, SPECIAL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 460- 95- STRUCTURAL STEEL REPAIR

| Unit | LB; KG | Accuracy | Pound; Kilogram | PlanQuantity? | yes |

### Details and Structure:

Items 400 to 499
Intended on rehabilitation projects for in-place heat straightening. Quantity based on weight of steel components to be repaired. Show locations in the plans w/ pay item note to address all work items required.

**Related Items**

- **Required**: 460-1-XAA
- **Recommended**

**Forms**

- **Design**: SHTabQuant: Tabulation of Quantities Sheet
- **Construction**: COMP 700-050-06: Weight Measure or Liquid Volume Comp & Cont.
- **Construction**: Refer to Comp Book

**Documentation**

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
- **Construction**: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**Notes**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**References**

- **PPM Chapter**
- **Other**: Normally requires SHOP DRAWINGS

**Standards**

**Specifications**: Section 460

**Prep & Doc Manual Chapter(s)**: 7, 13

---

**TRANSPORT Category (DRAFT FIELD)**: 0100 Structures

**Struct.** 460-95- STRUCTURAL STEEL REPAIR LB

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0460 95</td>
<td>STRUCTURAL STEEL REPAIR</td>
<td>LB</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

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**460-98- A** PIPE HANGER

**Unit**: EA

**Accuracy**: Each

**PlanQuantity?**: no

**Notes**

To be used ONLY for non-drainage system applications such as structure utility attachments. When deck inserts are required for utility attachments by others, do not include this item. Deck inserts are included in the cost of the superstructure concrete. Show location spacing w/ quantity block in plans.

**Note**: Pipe hangers for bridge drainage system paid for under 506-2.

**Related Items**

- **Required**

**Forms**

- **Design**: SHTabQuant: Tabulation of Quantities Sheet
- **Construction**: Refer to Comp Book

**Documentation**

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Other**
### Standards
### Specifications
Section 460

### Prep & Doc Manual Chapter(s)
7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

#### Status

**Struct.** 460-98- A  PIPE HANGER EA

A =
1 (Carbon)
2 (Stainless)

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0460 98 1</td>
<td>PIPE HANGER, CARBON</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0460 98 2</td>
<td>PIPE HANGER, STAINLESS</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

---

**460-112- ANCHOR BOLT REPLACEMENT**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

#### Notes

For rehabilitation jobs only. Show location with quantity block in plans.

#### Related Items

Required: Recommended

#### Forms

Design: SHTabQuant: Tabulation of Quantities Sheet

### Documentation

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

PPM Chapter
Other
Standards
Specifications
Section 460

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

#### Status

**Struct.** 460-112- ANCHOR BOLT REPLACEMENT EA

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0460112</td>
<td>ANCHOR BOLT REPLACEMENT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

**461-113- AB MULTI ROTATIONAL BEARING ASSEMBLY**

Details and Structure: Items 400 to 499
Notes

Details

Intended furnish and installing pot, disc or cylindrical bearing assemblies. Include location w/ quantity block in plans.

Related Items

Required

Recommended

Forms

Design

SHTabQuant: Tabulation of Quantities Sheet

Construction

Refer to Comp Book

Documentations

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Design

Construction

Other

SDG's 6.5, Normally requires SHOP DRAWINGS

Standards

Specifications

Section 461

Prep & Doc Manual Chapter(s)

7, 13

TRNS*PORT Category (DRAFT FIELD):

0100 Structures

Struct.

461-113- AB

MULTI ROTATIONAL BEARING ASSEMBLY

EA

A = Operation
1 (Furnish & Install)
B =
1 (1 - 250 Kips)
2 (251 - 500 Kips)
3 (501 - 750 Kips)
4 (751 - 1000 Kips)
5 (1001 - 1250 Kips)
6 (1251 - 1500 Kips)
7 (1501 - 1750 Kips)
8 (1751 - 2000 Kips)
9 (> = 2001 Kips)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0461113 12</td>
<td>MULTIROTATIONAL BEARING ASSEMBL-FIXED, F&amp;I, 251-500 KIPS</td>
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<tr>
<td>0461113 13</td>
<td>MULTIROTATIONAL BEARING ASSEMBL-FIXED, F&amp;I, 501-750KIPS</td>
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<td>1/1/2010</td>
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<tr>
<td>0461113 14</td>
<td>MULTIROTATIONAL BEARING ASSEMBL-FIXED, F&amp;I, 751-1000KIPS</td>
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<td>1/1/2010</td>
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<tr>
<td>0461113 15</td>
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<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0461113 16</td>
<td>MULTIROTATIONAL BEARING ASSEMBL-FIXED, F&amp;I, 1251-1500 KIPS</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
### Notes

**Details**
Intended furnish and installing pot, disc or cylindrical bearing assemblies. Include location w/ quantity block in plans.

**Related Items**
- **Required**
- **Recommended**

**Forms**
- **Design**
  - SHTabQuant: Tabulation of Quantities Sheet

**Documentation**
- **Design**
  - Refer to Comp Book
- **Construction**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**
- **Other**
  - SDG’s 6.5, Normally requires SHOP DRAWINGS

**Specifications**
- **Section 461**

**Prep & Doc Manual Chapter(s)**
- 7, 13

### Status

**Struct.** 461-114- AB
**MULTI ROTATIONAL BEARING ASSEMBLY- EXPANSION**

**TA**

- **A** = Operation
  - 1 (Furnish & Install)

- **B** =
  - 1 ( 1 - 250 Kips)
  - 2 ( 251 - 500 Kips)
  - 3 ( 501 - 750 Kips)
  - 4 ( 751 - 1000 Kips)
  - 5 (1001 - 1250 Kips)
  - 6 (1251 - 1500 Kips)
  - 7 (1501 - 1750 Kips)
  - 8 (1751 - 2000 Kips)
  - 9 ( > = 2001 Kips)

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>0461114 12</td>
<td>MULTIROTATIONAL BEARING ASSEMBLY EXP, F&amp;I, 251-500KIPS</td>
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<td>1/1/2010</td>
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<tr>
<td>0461114 13</td>
<td>MULTIROTATIONAL BEARING ASSEMBLY EXP, F&amp;I, 501-750KIPS</td>
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<td></td>
<td>1/1/2010</td>
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<tr>
<td>0461114 14</td>
<td>MULTIROTATIONAL BEARING ASSEMBLY EXP, F&amp;I, 751-1000KIPS</td>
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<td>1/1/2010</td>
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<tr>
<td>0461114 15</td>
<td>MULTIROTATIONAL BEARING ASSEMBLY EXPANSION, F&amp;I, 1000-1250KIPS</td>
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<td>0461114 16</td>
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<tr>
<td>0461114 17</td>
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<tr>
<td>0461114 18</td>
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<tr>
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</table>

### 462-2 AA POST TENSIONING TENDONS

<table>
<thead>
<tr>
<th>Unit</th>
<th>LB; KG</th>
<th>Accuracy</th>
<th>Pound; Kilogram</th>
<th>PlanQuantity?</th>
<th>yes</th>
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</thead>
</table>

### Notes

### Details

#### Related Items

**Required**

- SHTabQuant: Tabulation of Quantities Sheet
- COMP 700-050-06: Weight Measure or Liquid Volume Comp & Cont.

#### Forms

- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

- **Construction**
  - Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

#### Documentation

- **Design**
  - Refer to Comp Book
- **Construction**
  - Normally requires SHOP DRAWINGS

#### References

- **PPM Chapter**
- **Other**
- **Specifications** Section 462

#### Prep & Doc Manual Chapter(s)

- 7, 13

#### TRNS*PORT Category (DRAFT FIELD):

- 0100 Structures

### Status

#### Struct.

- 462-2 AA POST TENSIONING TENDONS LB

**AA** =

- 11 (Superstructure Strand)
- 12 (Superstructure Bar)
- 13 (Substructure Strand)
- 14 (Substructure Bar)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tr>
<td>0462 2 11</td>
<td>POST TENSIONING TENDONS, SUPERSTRUCTURE STRAND</td>
<td>LB</td>
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<tr>
<td>0462 2 12</td>
<td>POST TENSIONING TENDONS, SUPERSTRUCTURE BAR</td>
<td>LB</td>
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<tr>
<td>0462 2 13</td>
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<tr>
<td>0462 2 14</td>
<td>POST TENSIONING TENDONS, SUBSTRUCTURE BAR</td>
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<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

### 462- 3- ADDITIONAL POST-TENSIONING IN SEGMENTAL BOX SPAN

**Unit**: EA  
**Accuracy**: Each  
**PlanQuantity?**: no

**Notes**

Intended for rehabilitation projects intended to strengthen span with the installation of additional post-tensioning. Show location in plans. Include a schedule of post tensioning tendons w/ quantity block in plans. Include a pay item notes as necessary to cover the work activity.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Documentation**

**Design**

Refer to Comp Book

**Construction**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Record final quantity on the tabulation sheet (plans) or computation form (comp book).**

**Prep & Doc Manual Chapter(s)**

**PPM Chapter**: SDG’s 4.5

**Other**: Index 21801 thru 21803

**Specifications**

Plan Details and/or Technical Specifications required

**TRNS*PORT Category (DRAFT FIELD)**: 0100 Structures

**Status**

Inactive Structure

**Struct.**

462- 3- ADDITIONAL POST-TENSIONING IN SEGMENTAL BOX SPAN

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 462- 20- A POST TENSIONING REPAIR

**Unit**: EA; LF; CF  
**Accuracy**: Each; Linear Foot; Cubic Foot  
**PlanQuantity?**: no

**Notes**

Details and Structure: Items 400 to 499
NOT FOR USE ON NEW CONSTRUCTION. Details to be included in Tech Specs.
Tendon Inspection: Do not include repairs under this item, except for repair of inspection holes.
Anchorage Inspection: Do not include void repairs or pour backs under this item.
Tendon Repair Set-up: to be used every time a void is detected and is to cover the cost of installing injection and outlet points, preparing to fill void, and sealing of these areas after completion. Shop drawings may be required.
Replace Anchorage Protect Sys: Includes replacement of the tendon anchorage protect system
Tendon Repair Set-up: to be used every time a void is detected and is to cover the cost of installing injection and outlet points, preparing to fill void, and sealing of these areas after completion. Shop drawings may be required.
Repair External Ducts: Not for use to repair areas damaged while repairing voids.
Tendon Replace: Remove & replace complete tendons, including anchorage components, placement & stressing new tendon, grouting, inspection, and protection system.
Grout Tendon Voids: Includes installation & material, detailed in Tech Spec
Install Grout Ports: includes drilling and installing grout ports suitable for connection to grouting equipment.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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<tr>
<td>Documentation</td>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</table>

**References**
- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**

**Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

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<th>Struct.</th>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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<th>Item</th>
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<td>0462 20 7</td>
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<tr>
<td>0462 20 9</td>
<td>POST TENSIONING REPAIR, INSTALL GROUT PORTS</td>
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<td>T</td>
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</tbody>
</table>

**465- 1- MOVABLE BRIDGE- MECHANICAL EQUIPMENT**

**Unit** LS/LS  **Accuracy** Lump Sum  **PlanQuantity?** yes

**Notes**

For new bridge construction only. Intended for furnishing and installing complete mechanical system for bascule bridge. Includes all mechanical equipment and appurtenances (speed reducer and gear train, trunnion assemblies, span locks, couplings, live load shoes, flat & curved tracks, plain journal bearings, spherical bearings, supports and brackets, hydraulic systems, and all other equipment/service) required for a complete mechanical system on new bascule bridges. Clearly define scope of work in plans and specifications.

Contact State Structures Design for boiler plate Specification 465 to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
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<th>Required</th>
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<td>Design</td>
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<td>COMP 700-050-05: Lump Sum Quantities</td>
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<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
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<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
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<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
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</table>

**References**

PPM Chapter  Other  SDG’s Chapter 8

Standards Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)
Struct.  465- 1- MOVABLE BRIDGE- MECHANICAL EQUIPMENT LS/LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</table>

465- 2-ABB MOVABLE BRIDGE MACHINERY AND CASTINGS- REHAB

Unit LS/LS; EA; AS Accuracy Lump Sum; Each; Assembly PlanQuantity? yes

Notes

Intended for rehabilitation projects for bascule bridge machinery and castings. For new structures, the complete machinery system is included under 465-1, LS. Contact C.O. Structures Design for boiler plate 465 Specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required Recommended

Forms Design SHTabQuantLS: LS Tabulation of Quantities COMP 700-050-05: Lump Sum Quantities

Construction Design Refer to Comp Book

Documentation Design LUMP SUM ITEMS: Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans. EACH ITEMS: Location must be summarized on the plans.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter Other Standards Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

Details and Structure: Items 400 to 499
4 (Recondition)
5 (Adjust /Modify)
6 (Remove & Dispose) Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership
8 (Field Machining)

BB= Equipment
01 (Speed Reducer And Gear Train) LS/LS
04 (Trunnion Assembly) EA
05 (Span Locks) AS
07 (Couplings) EA
08 (Live Load Shoes) LS/LS
10 (Flat Rack, Curved Rack, Flat Track) EA
11 (Hopkins Frame) EA
21 (Plain Journal Bearing) EA
22 (Spherical Bearing) EA
52 (Hydraulic Cylinder) EA
53 (Hydraulic Motor) EA
54 (Hydraulic Power Pack) EA
55 (Temporary Hydraulic System) EA
60 (Other Machinery Components) LS

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<td>1/1/2010</td>
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**465-3-AB MOVABLE BRIDGE COUNTERWEIGHT**

- **Unit**: EA; TN; MT
- **Accuracy**: Each; Ton; Metric Ton
- **Plan Quantity?**: no

**Details and Structure**: Items 400 to 499
Notes

Details
Applies for either rehabilitation or new bridge projects. Intended for work items related to bascule bridge counterweights (balance calculations, balance blocks, steel ballast, transition slabs, sump pumps, bumper blocks). Steel ballast intended for bulk steel counterweight (transition slabs, steel plates). Show location & quantity block in plans. When using "Adjust" item, Tech Spec must clearly define method of measurement: adjustment of each bridge, leaf, or after specific operations.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

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<td>Documentation</td>
<td>Design</td>
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References

PPM Chapter
Other
SDG's Chapter 8

Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct. 465-3-AB

MOovable Bridge Counterweight EA; TN

A= Operation
1 (Furnish & Install)
5 (Adjust) EA; for A=5, B=0
9 (Clean) Valid for B=6 only

B= Item
1 (Fiberglass Pocket Cover) EA
2 (Sump Pump) EA
4 (Bumper Block) EA
6 (Pockets) EA
7 (Balance Blocks) EA
9 (Steel Ballast) TN

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
**465- 4- MOVABLE BRIDGE SPAN JACKING**

**Notes**

**Details**

Intended for rehabilitation projects to jack bascule span off trunnion supports. Used in conjunction with trunnion reconditioning or bearing replacement. Tech Spec should include jacking procedure, and require that procedures and calculations be completed by a Florida Licensed Engineer.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**

Required: SHTabQuantLS: LS Tabulation of Quantities

Recommended: COMP 700-050-05: Lump Sum Quantities

**Documentation**

Required: Refer to Comp Book

Recommended: Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Recommended: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

**Struct. 465- 4- MOVABLE BRIDGE SPAN JACKING LS/EA**

**Notes**

Details and Structure: Items 400 to 499
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 465-20- MOVABLE BRIDGE- PREVENTATIVE MAINTENANCE

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<td>Lump Sum (Day)</td>
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**Notes**

This item covers the cost of maintaining a movable bridge during construction.

Contact the Movable Bridge Section of the State Structures Design Office prior to use of this item. Specifications may be available.

**Related Items**

<table>
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<th>Recommended</th>
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</table>

**Forms**

- Design

**Documentation**

- Construction
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**

- PPM Chapter
- Other
- Standards
- Specifications

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

- Struct. 465-20- MOVABLE BRIDGE- PREVENTATIVE MAINTENANCE LS/DA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 465-21- MOVABLE BRIDGE OPERATOR

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<td>Day</td>
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**Notes**

This item covers the cost of furnishing a bridge tender during construction.

Contact the Movable Bridge Section of the State Structures Design Office prior to use of this item. Specifications may be available.

**Related Items**

<table>
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**Forms**

- Design
  - SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

- Construction
  - Refer to Comp Book

- Design
  - Locate in plans. Summarize quantities by location on tabulation of...
quantities sheet in the plans, or detail calculations in the computation book.

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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**465-71- A MOVABLE BRIDGE FUNCTIONAL CHECKOUT**

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<tbody>
<tr>
<td>Phase A to be used to test first-two leaves of a four leaf bascule, Phase B to be used for the Second-two leaves, and Phase C to be used for the complete bridge. Sometimes Phase C and Phase B are combined for simplicity. This item is required on all new bascule bridges and on all bascule bridge rehabilitation projects where the leaf operation, weight is being affected. Where phasing is not required, only a single checkout (Phase C) is required. Contact State Structures Design for boiler plate 465 Specification to be modified as required for project specifics. For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.</td>
</tr>
</tbody>
</table>

**Related Items**

<table>
<thead>
<tr>
<th>Required Forms</th>
<th>Design</th>
<th>Required</th>
<th>SHTabQuantLS: LS Tabulation of Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Documentation</td>
<td>Design</td>
<td>Recommended</td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Required References</th>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>SDG’s 8.7.19</td>
</tr>
<tr>
<td>Standards</td>
<td>Specifications</td>
</tr>
</tbody>
</table>

---

Details and Structure: Items 400 to 499
Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct. 465- 71- A MOVABLE BRIDGE FUNCTIONAL CHECKOUT LS/LS

A = See detail for Phasing
1 (Phase A) for 1st 2 leaves
2 (Phase B) for 2nd leaves
3 (Phase C) for Complete

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0465 71 1</td>
<td>MOVEABLE BRIDGE FUNCTIONAL CHECKOUT, PHASE A</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0465 71 3</td>
<td>MOVEABLE BRIDGE FUNCTIONAL CHECKOUT, PHASE C</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

470- 1- TREATED TIMBER, STRUCTURAL

Unit MB; M3

Accuracy 10th of a Thou Board Measure; 10th of a Cubic Meter

PlanQuantity? yes

Notes

Details

Intended for the cost of treated structural timber. The quantity of timber to be based on the final width and thickness shown in the plans. When applicable, indicate in the plans the nominal size (2x6) and dressed dimension. Quantity is to be based on the dressed volume. For rough cut or “full sawn” sizes, the nominal size is the finished size and the basis of the quantity. Timber piles paid for under 455-2-XXA.

The board-foot measure is the unit of volume for measuring lumber. One board-foot measure is a 12-inch long 1-inch-by-12-inch volume. MB is per thousand board-foot measure.

Example calculation:
800' - 12X6 Rough Sawn = 800x12x6/12,000= 4.8 MB
800' - 12X6 Dressed Lumber (Dressed 11 ½ " X 5 ½") = 800X11.5X5.5/12,000= 4.2 MB

Related Items

Forms

Design SHTabQuant: Tabulation of Quantities Sheet

Documentation

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter Structures Detailing Manual Chapter 12.

Other Standards Specifications Section 470
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
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<td>TREATED TIMBER, STRUCTURAL</td>
<td>MB</td>
<td></td>
<td></td>
<td>1/1/2010</td>
</tr>
</tbody>
</table>

### 471- 1- A FENDER SYSTEM, PLASTIC MARINE LUMBER

#### Notes

to be used for wales and dimensional lumber for fender systems. Plastic piling to be paid separately under Section 455 items.

one board foot= one foot square by one inch thick; convert to thousand board foot for pay item.

Refer to Design Standards and Specifications for additional information.

#### Related Items

**Required** 455- 37- a **Recommended**

Forms

**Design** SHTabQuant: Tabulation of Quantities Sheet

**Construction** Refer to Comp Book

Documentation

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction** Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

#### References

PPM Chapter

Other

Standards Index No. 21900 thru 21930

Specifications Section 471
504- 1- AA  STEEL ROADWAY FLOOR

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF; M2</td>
<td>Square Foot; 10th of a Square Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

Notes

Details

Intended for steel grating for sidewalks and bridge decks usually on bascule leaves. Show location w/ quantity block in plans. Make deductions in quantities for openings or joints. When concrete filled decks are called for in the plans, no separate payment is made for fill concrete. See Section 504 for Specifications.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

Construction

Refer to Comp Book

Documentation

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normally requires SHOP DRAWINGS</td>
</tr>
</tbody>
</table>

Standards

Specifications Section 504

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct. 504- 1- AA STEEL ROADWAY FLOOR SF

A =
1 (5" Open)
2 (3" Armored)
3 (4 1/2" Open)
4 (5 1/2" Open)
5 (5 1/2" Armored)
6 (3 1/2" Armored)
7 (7 1/2" Open)
8 (6" Open)
9 (3 1/2" Open)
10 (5" Armored)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0504 1 1</td>
<td>ROADWAY FLOOR, STEEL, 5&quot; OPEN</td>
<td>SF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0504 1 2</td>
<td>ROADWAY FLOOR, STEEL, 3&quot; ARMORED</td>
<td>SF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

504- 2-  SIDEWALK FLOOR, STEEL - REHAB

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF; M2</td>
<td>Square Foot; 10th of a Square Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

Details and Structure: Items 500 to 599
Intended for rehabilitation projects when steel sidewalks gratings is required without roadway grating. Clearly identify work to be completed including area, type of rehab work, and acceptance criteria. On new bascule bridge projects, include both sidewalk and roadway grating quantity under 504-1.

Show location w/ quantity block in plans. Make deductions in quantities for openings or joints. When concrete filled decks are called for in the plans, include cost of the concrete fill under this pay item (add pay item note).

Required

Recommended

Notes

Details

Related Items

Forms

Construction

Design

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other

Normally requires SHOP DRAWINGS

Specifications

Section 504

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct.

504- 2- SIDEWALK FLOOR, STEEL - REHAB SF

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0504 2</td>
<td>SIDEWALK FLOOR, STEEL, REHABILITATION</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

506- 2- BRIDGE DRAIN PIPE

Unit LF; M1 Accuracy Linear Foot; 10th of a Meter

PlanQuantity? yes

Notes

Details

Related Items

Forms

Required      Recommended

Design        SHTabQuant: Tabulation of Quantities Sheet
**Standards**

**Specifications** Section 506

**Prep & Doc Manual Chapter(s)** 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

**Struct.** 506-2- BRIDGE DRAIN PIPE LF

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0506 2</td>
<td>BRIDGE DRAINAGE PIPE</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**506-3- BRIDGE DRAINS**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

**Details**

Intended for payment for deck inlets located on bridge structure. Bridge piping paid under 506-2. Deck scuppers holes cast into bridge deck should not be paid for under this item unless they consist of a casting. Pay for deck scupper holes under superstructure concrete (add pay item note). Show location w/ quantity block in plans.

**Related Items**

**Required** 506-2- **Recommended**

**Forms**

**Design** SHTabQuant: Tabulation of Quantities Sheet

---

**Documentation**

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction** Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

**PPM Chapter**

**Other** Normally requires SHOP DRAWINGS

**Specifications** Section 506

**Prep & Doc Manual Chapter(s)** 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

**Struct.** 506-3- BRIDGE DRAINS EA

---

Details and Structure: Items 500 to 599
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0506 3</td>
<td>BRIDGE DRAINS</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

**506- 72-** POWER CLEAN BRIDGE DOWN DRAIN

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

Notes

Valid for Maintenance Use. Plans or Specifications must detail cleaning requirements including: method(s), permitted chemicals, etc.

Details

Required

Recommended

Related Items

Forms

Design

Documentation

Construction

Refer to Comp Book

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD):

Status

Struct. 506- 72- POWER CLEAN BRIDGE DOWN DRAIN EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0506 72</td>
<td>BRIDGE POWER CLEAN DOWN DRAIN</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</table>

**507- 70-** ALUMINUM SIDEWALK FLOOR

<table>
<thead>
<tr>
<th>Unit</th>
<th>SF; M2</th>
<th>Accuracy</th>
<th>Square Foot; 10th of a Square Meter</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

Notes

Intended for aluminum sidewalks usually on bascule leaves. Show location w/ quantities block in plans.

Details

Intended for aluminum sidewalks usually on bascule leaves. Show location w/ quantities block in plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required

Recommended
### Forms
- **Design**: SHTabQuant: Tabulation of Quantities Sheet

### Construction
- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
- **Notes**: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### Documentation
- **Design**: Plan Details and/or Technical Specifications required
- **Construction**: Normally requires SHOP DRAWINGS

### References
- **PPM Chapter**: PPM Chapter
- **Other**: Normally requires SHOP DRAWINGS
- **Standards**: SHTabQuant: Tabulation of Quantities Sheet
- **Specifications**: Refer to Comp Book

### Prep & Doc Manual Chapter(s)
- **7, 13**

### TRNS*PORT Category (DRAFT FIELD)
- **0100**: Structures

### Status
- **Struct.**: 507-70- ALUMINUM SIDEWALK FLOOR SF

### Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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<th>TSP/Detail</th>
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<tbody>
<tr>
<td>0507 70</td>
<td>ALUMINUM SIDEWALK FLOOR</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### Item Details
- **508-1- A MOVABLE BRIDGE ELECTRICAL EQUIPMENT**

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
</table>
|       | For movable bridges only. Clearly define scope of work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.  

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.  

NEW- FURNISH & INSTALL: Includes complete, new, electrical system for bascule bridge. Includes all electrical equipment and appurtenances (emergency generator, submarine cable, motors, control console, brakes, programmable controller, motor control center, drive system, CCTV system, navigation lights, gates, signals, and all other equipment/service) required for a complete installation on bascule bridges.  

EXISTING- ADJUST/MODIFY/REHAB: Includes all electrical system equipment, components, and/or work not paid for separately under other items. May include furnishing/wiring/installation of new or rehab electrical components.  

REMOVAL: Clearly identify which items are to be stockpiled or disposed. For stockpiled items, include a location for delivery (define limits of contractor's work) and a contact name.
### Related Items

**Forms**
- **Design**
  - Required: SHTabQuantLS: LS Tabulation of Quantities
  - Recommended: COMP 700-050-05: Lump Sum Quantities

**Construction**
- Refer to Comp Book

**Documentation**
- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
- **Construction**
  - Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**
- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**
  - Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

### Status

**Struct.** 508-1- A

**MOVABLE BRIDGE ELECTRICAL EQUIPMENT**

- LS/LS

A= Operation
- 1 (New- Furnish & Install)
- 4 (Relocate)
- 5 (Existing- Adjust/Modify/Rehab)
- 6 (Remove & Dispose) Note: Contractor takes ownership
- 7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership

### Notes

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0508 1 1</td>
<td>MOVABLE BRIDGE ELECTRICAL EQUIPMENT, F&amp;I</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0508 1 5</td>
<td>MOVABLE BRIDGE ELECTRICAL EQUIPMENT, EXISTING- ADJUST/ MODIFY/REHAB</td>
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<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0508 1 6</td>
<td>MOVABLE BRIDGE ELECTRICAL EQUIPMENT, REMOVE &amp; DISPOSE CONTRACTOR TAKES OWNERSHIP</td>
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<td>T</td>
<td>1/1/2010</td>
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</table>

### 508-2- A

**MOVABLE BRIDGE GATE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>AS</th>
<th>Accuracy</th>
<th>Assembly</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>yes</td>
</tr>
</tbody>
</table>

**Details**

For use on movable bridges only. This item may be used with 508-1 for rehab bridge projects. (DO NOT use on New Bridge Construction.) Clearly define scope of work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

Design Standards shows location. Remaining specs/details are needed.

For Plan Detail/Tech Spec items: The Designer should ensure that the description,
materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

FURNISH & INSTALL: Furnish & Install new gates on an existing bascule bridge.

ADJUST/MODIFY/REHAB: Includes all work and materials necessary for rehab of existing gates. Include pay item 508-1 for other electrical system work.

Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Documentation

<table>
<thead>
<tr>
<th>Forms</th>
<th>Design</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Refer to Comp Book</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
<td></td>
</tr>
</tbody>
</table>

References

PPM Chapter

<table>
<thead>
<tr>
<th>Standards</th>
<th>PPM Chapter Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifications</td>
<td>Index No. 17890</td>
</tr>
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Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

<table>
<thead>
<tr>
<th>TRNS*PORT Category (DRAFT FIELD):</th>
<th>0100 Structures</th>
</tr>
</thead>
</table>

Status

Struct. 508- 2- A MOVABLE BRIDGE GATE AS

A= Operation
1 (Furnish & Install)
4 (Relocate)
5 (Adjust/Modify/Rehab)
6 (Remove & Dispose) Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0508 2 1</td>
<td>MOVABLE BRIDGE GATE, F&amp;I</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0508 2 6</td>
<td>MOVABLE BRIDGE GATE, REMOVE &amp; DISPOSE</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0508 2 7</td>
<td>MOVABLE BRIDGE GATE, REMOVE &amp; STOCKPILE/SALVAGE</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
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</table>

508- 3- A MOVABLE BRIDGE SIGNAL

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>PlanQuantity?</td>
<td>yes</td>
</tr>
</tbody>
</table>

For use on movable bridges only. This item may be used with 508-1 for rehab bridge projects. (DO NOT use on New Bridge Construction.)
Clearly define scope of work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics. Coordinate with details shown on Design Standard.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

FURNISH & INSTALL: Furnish & Install new signals on an existing bascule bridge. Includes the mast arm, monotube, or other supports, as shown in the standards or plans.

ADJUST/MODIFY/REHAB: Includes all work and materials necessary for rehab of existing signals. Include pay item 508-1 for other electrical system work.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
<tr>
<td>Documentation</td>
<td>Design</td>
<td>Refer to Comp Book</td>
</tr>
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<td></td>
<td>Construction</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
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<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
<tr>
<td>References</td>
<td>PPM Chapter</td>
<td></td>
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<tr>
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<td>Standards</td>
<td>Index No. 17890</td>
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<td></td>
<td>Specifications</td>
<td>Plan Details and/or Technical Specifications required</td>
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<td>Prep &amp; Doc Manual Chapter(s)</td>
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</tr>
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</table>

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 508-3- A MOVABLE BRIDGE SIGNAL AS

A= Operation
1 (Furnish & Install)
4 (Relocate)
5 (Adjust/Modify/Rehab)
6 (Remove & Dispose) Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0508 3 1</td>
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<td>T</td>
<td>1/1/2010</td>
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<td>0508 3 6</td>
<td>MOVABLE BRIDGE - SIGNAL, REMOVE &amp; DISPOSE</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
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<td>0508 3 7</td>
<td>MOVABLE BRIDGE - SIGNAL, REMOVE &amp; STOCKPILE/SALVAGE</td>
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</table>

**508-4-** MOVABLE BRIDGE ELECTRICAL EQUIPMENT, REHAB

Details and Structure: Items 500 to 599
### 508-4: MOVABLE BRIDGE ELECTRICAL EQUIPMENT, REHAB

<table>
<thead>
<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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<td>LS T</td>
<td>1/1/2010</td>
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</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Details**

Includes standby generator system (generator, transfer switch, control panel, etc.) for bascule bridge rehabilitation projects only.

For new structures, emergency generator is included under 508-1-. Clearly define work in plans and specifications.

Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

**Documentation**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**
- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**
- **Struct. 508-72- A**
- MOVABLE BRIDGE EMERGENCY GENERATOR AS

A = 1 (Furnish & Install)
3 (Install)
4 (Remove)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>0508 72 1</td>
<td>MOVABLE BRIDGE EMERGENCY GENERATOR, F&amp;I</td>
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<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0508 72 4</td>
<td>MOVABLE BRIDGE EMERGENCY GENERATOR, REMOVE</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**508-73- A SUBMARINE CABLE ASSEMBLY**

**Unit** LS/LF; LS/M1  **Accuracy** Lump Sum (Linear Foot); **PlanQuantity?** yes Lump Sum (Meter)

**Notes**

Details

Intended for sub-aqueous cable. For bascule bridge rehabilitation projects only or fixed new bridge projects.

For new bascule bridge projects, submarine cable is included under 508-1-. Clearly define work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
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<tr>
<td>Design</td>
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<td>COMP 700-050-05: Lump Sum Quantities</td>
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<tr>
<td>Construction</td>
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**Documentation**

<table>
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<th>Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.</th>
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<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
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Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0100  Structures

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>0508 73 3</td>
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<tr>
<td>0508 73 4</td>
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<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

508- 76- A  MOVABLE BRIDGE REHAB- SPAN MOTORS AND CONTROLLERS

Notes

Details
Includes span drive motors and speed controllers for bascule bridge rehabilitation only. For new structures, span motors are included under 508- 1-. Clearly define work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required

Recommended

Related Items

Forms
Design  SHTabQuantLS: LS Tabulation of Quantities

Construction  COMP 700-050-05: Lump Sum Quantities

Documentation
Design  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction  Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter

Other  SDG’s Chapter 8
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct. 508-76- A MOVABLE BRIDGE REHAB - SPAN MOTORS AND CONTROLLERS LS/LS

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Recondition)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Description</th>
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</tr>
<tr>
<td>0508 76 4</td>
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<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

508-77- A MOVABLE BRIDGE REHAB - PROGRAMMABLE LOGIC CONTROLLER

Unit EA Accuracy Each PlanQuantity? no

Notes

Details
Includes programmable logic controllers (controllers, I/O racks, power supplies, programming) for bascule bridge rehabilitation only. For new structures, logic controllers are included under 508-1-. Clearly define work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required Recommended
Forms Design SHTabQuant: Tabulation of Quantities Sheet

Documentation

Construction Design
Refer to Comp Book

Construction
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

References
PPM Chapter SDG’s Chapter 8

Details and Structure: Items 500 to 599
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct. 508-77- A MOVABLE BRIDGE REHAB- PROGRAMMABLE LOGIC CONTROLLER

A = 1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Programming)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
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<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

508-78- A MOVABLE BRIDGE REHAB- LIMIT SWITCHES AND TRANSDUCERS

Unit LS/LS Accuracy Lump Sum PlanQuantity? yes

Notes

Details

Includes limit switches and transducers for bascule bridge rehabilitation only. For new structures, limit switches and transducers are included under 508-1-. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

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<th>Recommended</th>
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<tr>
<td>Design</td>
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<tr>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
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<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
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<tr>
<td>Design</td>
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</tr>
<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

References

PPM Chapter Other
SDG’s Chapter 8

Details and Structure: Items 500 to 599
Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

**Struct. 508- 78- A**

MOVABLE BRIDGE REHAB- LIMIT SWITCHES AND TRANSUDERS

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Programming)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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**508- 79- A**

MOVABLE BRIDGE REHAB- CONTROL CONSOLE

<table>
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<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
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</thead>
</table>

**Notes**

Includes control console and associated equipment (switches, indicating lights, relays, etc.) for bascule bridge rehabilitation only. For new structures, control console is included under 508- 1-. Clearly define work in plans and specifications. Contact State Structures Design Office for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**

<table>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</table>

**Documentation**

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

SDG’s Chapter 8

**Other**

SDG’s Chapter 8

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 7, 13
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tbody>
<tr>
<td>0508 79 1</td>
<td>MOVABLE BRIDGE-REHAB,CONTROL CONSOLE, F&amp;I</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0508 79 4</td>
<td>MOVABLE BRIDGE-REHAB,CONTROL CONSOLE, REMOVE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</table>

**508- 80- A MOVABLE BRIDGE REHAB- BRAKE SYSTEM**

**Unit**: EA  
**Accuracy**: Each  
**PlanQuantity?**: no

**Notes**
Includes brake systems (brake shoes, brake drums, brake operators) for bascule bridge rehabilitation only. For new structures, brake system is included under 508- 1-. Clearly define work in plans and specifications.
Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**
**Required**
- Design

**Recommended**
- SHTabQuant: Tabulation of Quantities Sheet

**Forms**
- Design

**Documentation**
- Construction Design
  - Refer to Comp Book
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Construction Design
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
- Other
  - SDG’s Chapter 8
- Standards
- Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13
A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Recondition)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<td>MOVABLE BRIDGE-REHAB, BRAKE SYSTEM, F&amp;I</td>
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<td>1/1/2010</td>
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<tr>
<td>0508 80 4</td>
<td>MOVABLE BRIDGE-REHAB, BRAKE SYSTEM, REMOVE</td>
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<td>1/1/2010</td>
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</table>

508- 82- A MOVABLE BRIDGE REHAB- CONTROL PANEL / MOTOR CONTROLLER

Notes

Includes motor control center and starters for bascule bridge rehabilitation only. For new structures, control panel or motor controller is included under 508- 1-. Clearly define work in plans and specifications.

Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required Recommended

| Related Items | Design | SHTabQuant: Tabulation of Quantities Sheet |

Forms

Construction

Design

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

SDG’s Chapter 8

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Status

Struct. 508- 82- A MOVABLE BRIDGE REHAB- CONTROL PANEL / MOTOR CONTROLLER

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Recondition)
5 (Replace)*

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
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<td>1/1/2010</td>
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<td>0508 82 5</td>
<td>MOVABLE BRIDGE-REHAB, CONTROL PANEL - MOTOR CONTROLLER, REPLACE</td>
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<td>1/1/2010</td>
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</table>

**508-83-ABB MOVABLE BRIDGE REHAB- INTEGRATED DRIVE SYSTEM**

**Notes**

Includes drive systems (motor(s), variable speed drive, shop testing) for bascule bridge rehabilitation only. For new structures, integrated drive system is included under 508-1-.

Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

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<tr>
<th>Required</th>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</table>

**Documentation**

- Design: Refer to Comp Book
- Construction: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Other: SDG’s Chapter 8
- Standards
- Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0100 Structures

**Status**

**Struct. 508-83-ABB MOVABLE BRIDGE REHAB- INTEGRATED DRIVE SYSTEM**

A = Operation
1 (Furnish & Install)
2 (Replace)
3 (Recondition)
4 (Repair)

BB = Drive Type
01 (25 kW Or Less)
02 (26 - 40 kW)
03 (41 - 60 kW)
04 (61 - 80 kW)
05 (81 - 115 kW)
06 (116 - 155 kW)
07 (156 - 190 kW)
08 (191 Or Larger)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0508 83101</td>
<td>MOVABLE BRIDGE INTEGRATED DRIVE SYS, F&amp;I, 25KW OR LESS</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0508 83107</td>
<td>MOVABLE BRIDGE-REHAB, INTREGRATED DRIVE SYSTEM, F&amp;I 156 - 190 KW</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**510-1- A NAVIGATION LIGHTS- FIXED BRIDGE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/LS; EA</th>
<th>Accuracy</th>
<th>Lump Sum; Each</th>
<th>PlanQuantity?</th>
<th>yes/no</th>
</tr>
</thead>
</table>

**Notes**

Details

Includes all work related to the navigation lights and accessories for fixed bridges, including the fender and channel lights. Per specification, conduit and pull boxes are incidental. For bascule bridges, navigation lights are included under 508-1.

NOTE: navigation lighting systems, including all wiring, conduit, wiring devices, transformers, enclosures, grounding system, controls, protective devices, lights, etc., are to be furnished/installed as shown in the plans. The designer should ensure that all details are complete, to correspond to spec references.

LUMP SUM: No calculations required unless item is to be adjusted. All calculations and documentation of adjustments, in accordance with the Specifications, are required. EACH: Final quantity must be recorded in space provided on summary sheet in the plans. All changes must be shown on final plan sheets.

**Required**

Forms

Design

COMP 700-050-05: Lump Sum Quantities

Construction

Refer to Comp Book

Documentation

Design

LUMP SUM ITEMS: Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans. EACH ITEMS: Location must be summarized on the plans.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Normally requires SHOP DRAWINGS

Standards

Index 21220

Specifications

Section 510

**Plan Details and/or Technical Specifications required**

Prep & Doc Manual Chapter(s) 7, 13
**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

**Struct.** 510-1- A NAVIGATION LIGHTS- FIXED BRIDGE LS/LS; EA

A =
Blank (Navigation Lights) LS/LS
3 (Piers) EA

**Notes**

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0510</td>
<td>NAVIGATION LIGHTS- FIXED BRIDGE</td>
<td>LS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

**512-1- A MOVABLE BRIDGE- CONTROL HOUSE**

**Unit** LS/LS  
**Accuracy** Lump Sum  
**PlanQuantity?** yes

**Notes**

Intended for the complete cost of control house for bascule bridges. Include cost of foundation under separate pay items (piling, shaft, etc.) Contact State Structures Design for boiler plate specification to be modified as required for project specifics. Clearly show limits in plans for payment purposes. Include complete bar lists for control house in the plans, Including cost of reinforcing steel for walls and floors.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
</tr>
<tr>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
</tr>
</tbody>
</table>

**Documentation**

| Design | LOCATE IN PLANS. SUMMARIZE QUANTITIES BY LOCATION ON TABULATION OF QUANTITIES SHEET IN THE PLANS, OR DETAIL CALCULATIONS IN THE COMPUTATION BOOK. PLAN QUANTITY WILL BE BASIS OF PAYMENT TO THE CONTRACTOR. |
|        | FINAL PAY QUANTITY WILL BE PLAN QUANTITY WITH PROPER CONSIDERATION FOR SPECIFICATION TOLERANCES. |

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
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<td></td>
<td>Normally requires SHOP DRAWINGS</td>
</tr>
</tbody>
</table>

**Prep & Doc Manual Chapter(s)** 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Status**

**Struct.** 512-1- A MOVABLE BRIDGE- CONTROL HOUSE LS/LS

A =
1 (Renovation)
Blank (New)

**Notes**

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

Details and Structure: Items 500 to 599
### 512-71- A MOBILE BRIDGE PLUMBING SYSTEM

**Unit**: EA  
**Accuracy**: Each

**Notes**

**Related Items**

**Required**: SHTabQuant: Tabulation of Quantities Sheet

**Recommended**

**Forms**

**Construction**: Refer to Comp Book

**Documentation**

**Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Design**

**Construction**

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 512-71- A MOBILE BRIDGE PLUMBING SYSTEM EA

A = Operation  
1 (Furnish & Install)

**Notes**

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 514-71- A FILTER FABRIC, PLASTIC

**Unit**: SY; M2  
**Accuracy**: Square Yard; Square Meter

**Notes**

**Details**

Intended for Subsurface Drainage or Stabilization applications, as detailed in Section 514 and 985 of Specifications.

Geotextile fabrics are divided into the following three main classes:

1. Drainage- under all rubble riprap, including cyclopean stone and under gabions; wrapped around drains, pipe joints, and edge-drains; filter behind walls, etc.
2. Erosion Control- silt fence, staked silt barrier, plastic erosion mat.
3. Stabilization- separator between embankment and soft subsoil, reinforcement and pipe bedding.

NOTE: When this item is incidental to other work, no separate payment is made for filter fabric.

Refer to specifications and/or design standards:
Ditch Pavement, Section 524: no separate payment for filter fabric

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
<th>Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifications</td>
<td>Index No. 199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standards</td>
<td>Section 514</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 514-71- A FILTER FABRIC, PLASTIC SY

A =
1 (Subsurface)
2 (Stabilization)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0514 71 1</td>
<td>PLASTIC FILTER FABRIC, SUBSURFACE</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0514 71 2</td>
<td>PLASTIC FILTER FABRIC, STABILIZATION</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
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</table>

**514-72-** LINER IMPERMEABLE PVC

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
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<th>Recommended</th>
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<tbody>
<tr>
<td>Forms</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>
Standards
Specifications

Struct.  514- 72- LINER IMPERMEABLE PVC SY

Notes
Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD):  0200 Roadway

Status

Struct.  514- 72- LINER IMPERMEABLE PVC SY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0514 72</td>
<td>LINER IMPERMEABLE PVC</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
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</table>

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>514- 73</td>
<td>GEOSYNTHETIC CLAY LINER</td>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

Notes
Contact Larry Jones, State Geotechnical Engineer

Details
Contact the State Geotechnical Engineer prior to using this item.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
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<th>Recommended</th>
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</thead>
<tbody>
<tr>
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<td></td>
</tr>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

Documentation

Construction  Refer to Comp Book
Design       Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Other
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  6, 7, 13
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Item Description

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<tr>
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<tbody>
<tr>
<td>0514 73</td>
<td>GEOSYNTHETIC CLAY LINER</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

### Details

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>yes</td>
<td>To be used as detailed on Design Standards Index 870 (aluminum) or 880 (steel). Two pipe handrail is generally used in locations where drop-off is between 10&quot; and 30&quot;. Additional applications may include &quot;steering&quot; pedestrians next to a sidewalk or out of a parking lot (with or without drop-off). For use next to drop-off greater than 30&quot;, refer to Index 800 series and pay items 460-70 or 515-2. Not valid for use on bridge. When PVC guiderail is used, complete specifications are needed; consider weather, UV requirements, etc when specifying material requirements.</td>
</tr>
</tbody>
</table>

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

### Documentation

**Design**

Refer to Comp Book

**Construction**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

**PPM Chapter**

Other

**Standards**

Index No. 870 (aluminum) or 880 (steel) only

**Specifications**

Selected Items may require Plan Details and/or Technical Specifications

**Prep & Doc Manual Chapter(s)**

6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

---

**Details and Structure:** Items 500 to 599

---

**Page 23 of 89**
Struct. 515-1- A PIPE HANDRAIL - GUIDERAIL

A =
1 (Steel) per Index 880
2 (Aluminum) per Index 870
5 (PVC) see BOE detail

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0515 1 1</td>
<td>PIPE HANDRAIL - GUIDERAIL, STEEL</td>
<td>LF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0515 1 2</td>
<td>PIPE HANDRAIL - GUIDERAIL, ALUMINUM</td>
<td>LF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0515 1 5</td>
<td>PIPE HANDRAIL- GUIDERAIL, PVC</td>
<td>LF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

515-2-ABB PEDESTRIAN/BICYCLE RAILING

Unit LF; M1
Accuracy Linear Foot; 10th of a Meter
PlanQuantity? yes

Notes
Details
To be used for pedestrian railing next to drop-offs greater than 30". Use in accordance with Index 850 and 860.

These specific rails replace the current two rail system, and are intended to be used when there is a drop-off next to a pedestrian or bicycle facility which must be protected. These rails are not intended for use on top of traffic barriers or where vehicle containment is required.

For drop-off locations less than 30", consider item 515-1. For other railings, refer to Index series 800 and pay item 460-70-xxa.

Special Materials: Full material specifications will be required. Ensure that material requirements address UV issues, strength, etc.

Non-standard type/height to be used only when existing design standards do not apply. For minor deviations from standards, note changes in the plans with pay item corresponding to applicable standard & height. Ensure that smaller railing heights are not a climbing issue.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items
Required Recommended
Design SHTabQuant: Tabulation of Quantities Sheet

Forms
Construction
Design Refer to Comp Book

Documentation
Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
**Selected Items may require Plan Details and/or Technical Specifications**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>PEDESTRIAN/BICYCLE RAILING</th>
<th>LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = Required Material Types</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Non Specified)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 (Steel Only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 (Aluminum Only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 (Special Materials) full material specifications needed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BB = Rail Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 (42” Picket Railing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 (54” Picket Railing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03 (Non-standard Height) see detail requirements above</td>
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</tr>
</tbody>
</table>

**Notes**

---

### The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0515 2101</td>
<td>PEDESTRIAN, BICYCLE RAILING, NON SPECIFIED,42” PICKET RAIL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0515 2102</td>
<td>PEDESTRIAN, BICYCLE RAILING, NON SPECIFIED,54” PICKET RAIL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0515 2201</td>
<td>PEDESTRIAN, BICYCLE RAILING, STEEL ONLY,42” PICKET RAIL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0515 2202</td>
<td>PEDESTRIAN / BICYCLE RAILING, STEEL ONLY, 54” PICKET RAIL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0515 2301</td>
<td>PEDESTRIAN, BICYCLE RAILING, ALUMINUM ONLY,42” PICKET RAIL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0515 2302</td>
<td>PEDESTRIAN, BICYCLE RAILING, ALUMINUM ONLY,54” PICKET RAIL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0515 2303</td>
<td>PEDESTRIAN, BICYCLE RAILING, ALUMINUM ONLY, SPECIAL</td>
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<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

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### BOLLARDS

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>Plan Quantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

- Intended for posts placed at the ends of pedestrian or special-use facilities. Space/locate as necessary to restrict certain vehicles, while allowing others.

- Tech Spec should indicate that this is a plan quantity item. Details to consider include: materials (concrete, wood, metal, other), installation methods and/or construction requirements. Materials spec to address UV, strength, and/or other applicable issues.
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

### Construction

**Design**

Refer to Comp Book

**Documentation**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### Standards

**Specifications**

Plan Details and/or Technical Specifications required

### References

**PPM Chapter**

Other

Normally requires SHOP DRAWINGS

### Prep & Doc Manual Chapter(s)

7, 13

### Status

**Struct.**

519-78-

BOLLARDS

EA

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tr>
<td>051978</td>
<td>BOLLARDS</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

### 520-1-AA

**CONCRETE CURB AND GUTTER**

**Unit**

LF; M1

**Accuracy**

Linear Foot; 10th of a Meter

**PlanQuantity?**

yes

### Notes

Includes construction of concrete curb and/or curb and gutter, and all forming, contraction joint forming, expansion joint construction, steel reinforcement, finishing and backfilling and compaction. Deduct inlet top lengths as shown in the standards from the length of curb and gutter. Length to be measure along the face of the curb. Cost of asphalt curb pad, and additional curb thickness required, to be included in the cost of curb and gutter.

Special Type: To be used for any curb & gutter, other than "Type E" or "Type F", as shown in the design standards or plans.

### Related Items

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

COMP 700-050-02 (with deductions): Curb/Gutter Calculations and Continuation; or 700-050-03 (no deductions) Linear Measurement, Component Weight, Per Hours, Per Day, or Per Each Computations and Continuation
**Construction**

Refer to Comp Book

**Documentation**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Other

Specifications

Section 520

Prep & Doc Manual Chapter(s) 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 520- 1- AA CONCRETE CURB AND GUTTER LF

AA = 7 (Type E)
8 (Special) see BOE detail
10 (Type F)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tr>
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</tbody>
</table>

**520- 2- AA CONCRETE CURB**

**Unit** LF; M1

**Accuracy** Linear Foot; 10th of a Meter

**PlanQuantity?** yes

**Notes**

For use next to concrete or flexible pavement. Per specification, asphalt curb pad will be included in unit price, when detailed in the plans.

Per the standard, joints are required between curb and concrete pavement. Per the spec, "Joint materials shall be included in the Contract unit price for the item in which it is used." (No separate payment for joint.)

SPECIAL: Do not use SPECIAL for Types A, B, or D. Small changes to Index 300 should be noted in the plans and paid under the applicable type. Special may be used when the existing standards are not applicable; full details are required in the plans.

**Related Items**

**Required**

**Recommended**

SHTabQuant: Tabulation of Quantities Sheet

COMP 700-050-02 (with deductions): Curb/Gutter Calculations and Continuation; or 700-050-03 (no deductions) Linear Measurement, Component Weight, Per Hours, Per Day, or Per Each Computations and Continuation

---

Details and Structure: Items 500 to 599
### 520 - 2- AA CONCRETE CURB LF

**AA =**
1 (Type A)
2 (Type B)
4 (Type D)
8 (Type RA)
9 (Special)*

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
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<tr>
<td>0520 2 2</td>
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<tr>
<td>0520 2 4</td>
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<tr>
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<td>CONCRETE CURB, SPECIAL</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
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</table>

### 520 - 3- CONCRETE VALLEY GUTTER

**Unit** LF; M1  
**Accuracy** Linear Foot; 10th of a Meter  
**PlanQuantity?** yes

### Notes

**Required** SHTabQuant: Tabulation of Quantities Sheet  
**Recommended** COMP 700-050-02 (with deductions): Curb/Gutter Calculations and Continuation; or 700-050-03 (no deductions) Linear Measurement, Component Weight, Per Hours, Per Day, or Per Each Computations and Continuation  
**Design** Refer to Comp Book

**Details**

**Related Items**

**Construction** Refer to Comp Book

**Documentation**

**Construction** Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
Specification tolerances.

References

<table>
<thead>
<tr>
<th>Standards</th>
<th>Other</th>
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<tbody>
<tr>
<td>Index No. 300</td>
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</table>

Specifications

Section 520

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 520-3- CONCRETE VALLEY GUTTER LF

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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520-5- AB CONCRETE TRAFFIC SEPARATOR

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

Notes

Details

Includes construction of traffic separator in 4, 6, and 8.5’ (1.2, 1.8, and 2.6 meter) widths. Includes all forming, contraction joint forming, expansion joint construction, steel reinforcement, finishing and backfilling and compaction. Include the length of the nose when calculating the linear feet (meters). Refer to Plans Preparation Manual for proper use.

For separator of variable width, consider item 520-70, paid per area.

Related Items

Required Recommended 520-70 (2520-70)

Forms

Design

SHTabQuant: Tabulation of Quantities Sheet

COMP 700-050-02 (with deductions): Curb/Gutter Calculations and Continuation; or 700-050-03 (no deductions) Linear Measurement, Component Weight, Per Hours, Per Day, or Per Each Computations and Continuation

Documentation

Design

Refer to Comp Book

Construction

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other

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<th>Specifications</th>
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<tr>
<td>Index No. 300, 302, 212, 213</td>
<td>Section 520</td>
</tr>
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</table>

Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13
**Topic No. 600-000-002**  
_Basis of Estimates_  
2010 Edition  
December 30, 2009

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.  520-  5- AB**  
**CONCRETE TRAFFIC SEPARATOR**  
**LF**

A =
1 (Type I)
2 (Type II)
4 (Type IV)
5 (Type V)

B =
1 (4' Wide)
2 (6' Wide)
6 (8.5' Wide)

**Notes**

NOTE: A= 1 Thru 6 Valid For Widths Of 4’, 6’ And 8.5’ Only; B = 1, 2 Or 6 Only.

Selected items blocked 6/30/2001

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**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
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<td>0520 5 12</td>
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<tr>
<td>0520 5 16</td>
<td>TRAFFIC SEPARATOR CONCRETE-TYPE I, 8.5' WIDE</td>
<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td>0520 5 21</td>
<td>TRAFFIC SEPARATOR - CONCRETE, TYPE II, 4' WIDE</td>
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<td>1/1/2010</td>
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<td>TRAFFIC SEPARATOR - CONCRETE, TYPE II, 6' WIDE</td>
<td>LF</td>
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<tr>
<td>0520 5 41</td>
<td>TRAFFIC SEPARATOR CONCRETE-TYPE IV, 4' WIDE</td>
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<td>TRAF SEP CONC, TYPE V, 4' WIDE</td>
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**520- 6-**  
**SHOULDER GUTTER, CONCRETE**

**Notes**

**Details**

Deduct inlet top lengths as shown in the standards from the length of curb and gutter. For Type S, length to be measured along the face of the curb.

When spillway is needed, as shown on Index 284, include payment for spillway in shoulder gutter. Add the length of the spillway to the shoulder gutter quantity for payment.

**Related Items**

**Forms**

**Required**

SHTabQuant: Tabulation of Quantities Sheet

**Recommended**

COMP 700-050-02 (with deductions): Curb/Gutter Calculations and Continuation; or 700-050-03 (no deductions) Linear Measurement, Component Weight, Per Hours, Per Day, or Per Each Computations and
Standards Index No. 220, 284, 300
Specifications Section 520

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

PLAN QUANTITY will be basis of payment to the Contractor. Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

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<td>1/1/2010</td>
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</table>

520- 7- A GRANITE CURB

Unit LF; M1 Accuracy Linear Foot; 10th of a Meter PlanQuantity? Required Recommended

Measured by Plan Quantity.

Tech Specs required to detail materials, construction/placement, as well as measurement and payment. Tech specs should indicate that damage due to contractors operations will be repaired/replaced at no additional cost to the department.

Details and Structure: Items 500 to 599
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>GRANITE CURB, FURNISH &amp; INSTALL</td>
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<tr>
<td>0520 7 2</td>
<td>GRANITE CURB, RESET</td>
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<td>1/1/2010</td>
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520-70-

**CONCRETE TRAFFIC SEPARATOR, SPECIAL - VARIABLE WIDTH**

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<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>yes</td>
<td>Includes construction of traffic separator in variable width, as indicated in the plans. Refer to Plans Preparation Manual for proper use. Use item 520-5 for constant width separator, paid per length. Plan Detail requirement: Show the limits of the variable width separator. Tabulate the area, by location, in the plans. This item will be paid per plan quantity.</td>
</tr>
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**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</table>

**Documentation**

<table>
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<tr>
<th>Design</th>
<th>Construction</th>
</tr>
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<tbody>
<tr>
<td>Refer to Comp Book</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
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<table>
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<th>Construction</th>
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**PPM Chapter**

<table>
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<th>PPM Chapter</th>
<th>Other Standards</th>
<th>Specifications</th>
<th>Prep &amp; Doc Manual Chapter(s)</th>
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<tbody>
<tr>
<td>Design</td>
<td>Index No. 302</td>
<td>Section 520</td>
<td>6, 7, 13</td>
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**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**Status**

**Struct. 520-70-**

**CONCRETE TRAFFIC SEPARATOR, SPECIAL - VARIABLE WIDTH**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>CONCRETE TRAFFIC SEPARATOR, SPECIAL - VARIABLE WIDTH</td>
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</tbody>
</table>
MEDITIAN CONCRETE BARRIER WALL

Unit: LF; M1
Accuracy: Linear Foot; 10th of a Meter
PlanQuantity?: yes

Notes

to be used when calling for concrete barrier wall that is to be located in a median (double face or full wall barrier); see 521-72- (2521-72- ) for shoulder wall. Consists of construction of plain or reinforced barrier wall. The contractor may request approval for precast construction in lieu of cast-in-place.

Related Items

Required
Recommended

Forms

Design
SHTabQuant: Tabulation of Quantities Sheet

Documentation

Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other
Normally requires SHOP DRAWINGS

Standards
Index No. 217, 410, 413, 415

Specifications
Section 521

Prep & Doc Manual Chapter(s)
6, 7, 13

TRNS*PORT Category (DRAFT FIELD):
0200 Roadway

Status

Struct.
521-1- A MEDITIAN CONCRETE BARRIER WALL LF
A =
Blank (Cast In Place)
1 (Precast)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<td>MEDIAN BARRIER WALL CONC, PRECAST</td>
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<td>1/1/2010</td>
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CONCRETE TRAFFIC RAILING- BRIDGE

Unit: LF; M1
Accuracy: Linear Foot; 10th of a Meter
PlanQuantity?: yes

Notes

Items to be used in accordance with Standard Indexes. Include barriers located on approach slabs in this item.

Details

If any modification is made to a standard barrier, the "Special" pay item should be used along with complete plan details. Details for any modified/non-standard barrier must be submitted to the Structures Design Office for approval, due to crash testing requirements.
Standard Indexes:
Index 420 - 32" F-Shape
Index 425: 42" F-Shape
Index 421: 32" Median, Double Face
Index 423: 32" Vertical Face
Index 422: 42" Vertical Face
Index 424: Corral With Curb
Index 424: Corral W/O Curb
Index 480 thru Index 483: Retrofit-Vertical Face
Index 5210: F–Shaped with Sound Barrier Wall, 8'Ht.

REPAIR EXISTING: The repair pay item should only be used for maintenance/operations contracts, where the type of barrier and/or repair details are provided in the plans or specifications. Ensure that complete details are provided for materials, repair requirements, measurement and payment.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

### Construction

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

### Documentation

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

PPM Chapter Vol 1, Ch 2
Other SDG 6.7

### Standards

See detail for index numbers 420, 421, 422, 423, 424, 425, 480, 481, 482, 483, 5210

### Specifications

Section 521

### Prep & Doc Manual Chapter(s)

6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

### Struct.

521- 5- A CONCRETE TRAFFIC RAILING- BRIDGE LF

AA =
1 (32" F-Shape)
2 (42" F-Shape)
3 (32" F-Shape Median, Double Face)
4 (32" Vertical Face)
5 (42" Vertical Face)
6 (Corral With Curb)
7 (Corral W/O Curb)
8 (Retrofit-Vertical Face)
9 (Special Design) see BOE Detail above
10 (Repair Existing Railing) see BOE Detail above
20 (F–Shaped with Sound Barrier Wall 8'Ht.)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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<td>CONCRETE TRAFFIC RAILING, BRIDGE 32&quot; F - SHAPE</td>
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<td>0521 5 2</td>
<td>CONCRETE TRAFFIC RAILING, BRIDGE 42&quot; F - SHAPE</td>
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<td>CONCRETE TRAFFIC RAILING, BRIDGE, 32&quot; F - SHAPE, MEDIAN, DOUBLE FACE</td>
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<td>1/1/2010</td>
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<tr>
<td>0521 5 4</td>
<td>CONCRETE TRAFFIC RAILING, BRIDGE, 32&quot; VERTICAL FACE</td>
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<tr>
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<td>CONCRETE TRAFFIC RAILING, BRIDGE, 42&quot; VERTICAL FACE</td>
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<td>0521 5 6</td>
<td>CONCRETE TRAFFIC RAILING- BRIDGE, CORRAL W/CURB</td>
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<td>CONCRETE TRAFFIC RAILING, BRIDGE, CORRAL WITHOUT CURB</td>
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<td>0521 5 8</td>
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<td>CONCRETE TRAFFIC RAILING-BRIDGE, F SHAPED WITH SOUND BARRIER WALL 8' HEIGHT</td>
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</table>

### CONCRETE PARAPET

| Unit | LF; M1 | Accuracy | Linear Foot; 10th of a Meter | PlanQuantity? | yes |

**Notes**

Intended for pedestrian/ bicycle railings located on bridge or on retailing walls. Includes cost of concrete portion of the parapet (including cost of sidewalk as applicable). Railing mounted on the top of parapet are to be paid for separately.

Show location w/ quantity block on bridge superstructure sheets and wall sheets as required.

When Index 800, Pedestrian Bicycle Railing is utilized, Pay Item 460-70-3 also Required

Special Design: If any modification is made to this design standard, the "Special" pay item should be used along with complete plan details.

**Related Items**

**Required**

- Design: SHTabQuant: Tabulation of Quantities Sheet

**Recommended**

**Forms**

Refer to Comp Book

- Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Documentation**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Other
Struct.  521-  6-  A  CONCRETE PARAPET

AA =
1 (Pedestrian/Bicycle)
2 (Special Design) see BOE detail
3 (Retaining Wall System Mounted w/ Sidewalk)
4 (Retaining Wall System Mounted w/ sidewalk and 8’ Sound Wall)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<td>0521 6 1</td>
<td>CONCRETE PARAPET, PEDEST/BICYCLE</td>
<td>LF</td>
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<tr>
<td>0521 6 2</td>
<td>CONCRETE PARAPET, SPECIAL</td>
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<tr>
<td>0521 6 3</td>
<td>CONCRETE PARAPET, RETAINING WALL MOUNTED WITH SIDEWALK</td>
<td>LF</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

521-  7- AA  CONCRETE TRAFFIC RAILING BARRIER- RETAINING WALL SYSTEM

Unit LF; M1  Accuracy Linear Foot; 10th of a Meter  PlanQuantity? yes

Details

Intended for 8’ retaining wall mounted sound barrier with junction slab. Show location with quantity block on wall sheets

Related Items

Required  Recommended

Forms

Design  SHTabQuant: Tabulation of Quantities Sheet

Documentation

Design  Refer to Comp Book

Construction  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction  Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other Standards  5210

Specifications  Section 521

Prep & Doc Manual Chapter(s)
A =
1 (F Shape with Sound Barrier Wall 8’ Ht.)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
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<tbody>
<tr>
<td>0521 71</td>
<td>CONCRETE TRAFFIC RAILING BARRIER- RETAINING WALL SYSTEM, F SHAPE WITH</td>
<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td></td>
<td>SOUND BARRIER WALL, 8’ HEIGHT</td>
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<table>
<thead>
<tr>
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<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>521- 8- AA</td>
<td>CONCRETE TRAFFIC RAILING BARRIER- RETAINING WALL SYSTEM, MOUNTED WITH SLEEPER SLAB</td>
<td>LF; M1</td>
<td>10th of a Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

### Notes

**Details**

Item to be used in accordance with Standard Indexes. Show location with quantity block in wall plans. Sometimes used with item 521- 5- A for traffic railing systems that extend onto bridge.

### Related Items

**Required**

**Recommended**

### Forms

**Design**

SHTabQuant: Tabulation of Quantities Sheet

### Documentation

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

**Other**

**Standards**

Index 420 & 5300- 32” F-Shape

Index 425 & 5300-42” F-Shape

Index 423 & 5300 -32” Vertical Face

Index 422 & 5300-42” Vertical Face

Index 424 & 5300-Corral With Curb

### Specifications

Section 521

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

100 or 200 Structures or Roadway

### Status

**Struct.**

521- 8- AA CONCRETE TRAFFIC RAILING BARRIER- RETAINING WALL SYSTEM, MOUNTED WITH SLEEPER SLAB

AA =

1 (32” F-Shape)

2 (42” F-Shape)

3 (32” Vertical Face)

4 (42” Vertical Face)

5 (Corral With Curb)

20 (Special)*

**Notes**

“Special” will require plan details and/or Tech Spec
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tr>
<td>0521 8 1</td>
<td>CONCRETE TRAFFIC RAILING BARRIER, RETAINING WALL SYSTEM MOUNTED WITH SLEEPER SLAB, 32&quot; F SHAPE</td>
<td>LF</td>
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<tr>
<td>0521 8 2</td>
<td>CONCRETE TRAFFIC RAILING BARRIER, RETAINING WALL SYSTEM MOUNTED WITH SLEEPER SLAB, 42&quot; F SHAPE</td>
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<td>1/1/2010</td>
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<tr>
<td>0521 8 3</td>
<td>CONCRETE TRAFFIC RAILING BARRIER, RETAINING WALL SYSTEM MOUNTED WITH SLEEPER SLAB, 32&quot; VERTICAL FACE</td>
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<td>1/1/2010</td>
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<tr>
<td>0521 8 4</td>
<td>CONCRETE TRAFFIC RAILING BARRIER, RETAINING WALL SYSTEM MOUNTED WITH SLEEPER SLAB, 42&quot; VERTICAL FACE</td>
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<td>1/1/2010</td>
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<tr>
<td>0521 8 20</td>
<td>CONCRETE TRAFFIC RAILING BARRIER, RETAINING WALL SYSTEM MOUNTED WITH SLEEPER SLAB, SPECIAL</td>
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<td>1/1/2010</td>
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</tbody>
</table>

### 521-72- AA  SHOULDER CONCRETE BARRIER WALL

- **Unit**: LF; M1
- **Accuracy**: Linear Foot; 10th of a Meter
- **Plan Quantity?**: yes

**Notes**

Intended for rigid shoulder roadway barriers with 8'-14' shoulder mounted sound barrier walls and box culvert mounted barriers. Use 521-1- (2521-1-) for median wall.

**Details**

Refer to Comp Book

**Documentation**

Refer to Comp Book

**Related Items**

Refer to Comp Book

**Forms**

Refer to Comp Book

**Prep & Doc Manual Chapter(s)**

6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

100 or 200 Structures or Roadway

**Status**

521-72- AA  SHOULDER CONCRETE BARRIER WALL  LF

AA =

2 (Box Culvert)

3 (Rigid - Shoulder) 32", Index 410

4 (Rigid - Retaining)

5 (Rigid - Curb & Gutter)

6 (Plain - Shoulder) A=6 valid through 12-31-2009
7 (Rigid - Shoulder, With 8’ Sound Wall)
10 (Rigid Shoulder 42") Index 411
11 (Rigid Shoulder 54") Index 411
20 (F-Shaped, With 8’ Sound Wall)
21 (F-Shaped, With 10’ Sound Wall)
22 (F-Shaped, With 12’ Sound Wall)
23 (F-Shaped, With 14’ Sound Wall)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<tr>
<td>0521 72 3</td>
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<td>0521 72 4</td>
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<tr>
<td>0521 72 7</td>
<td>SHOULDER CONCRETE BARRIER WALL, RIGID - SHOULDER WITH 8’ SOUND WALL</td>
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<td></td>
<td>1/1/2010</td>
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<tr>
<td>0521 72 10</td>
<td>SHOULDER CONCRETE BARRIER WALL, RIGID SHOULDER 42”</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0521 72 11</td>
<td>SHOULDER CONCRETE BARRIER WALL, RIGID SHOULDER 54”</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0521 72 20</td>
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<td>1/1/2010</td>
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<tr>
<td>0521 72 21</td>
<td>SHOULDER CONCRETE BARRIER WALL, F SHAPED, WITH 10’ SOUND WALL</td>
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<tr>
<td>0521 72 22</td>
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<tr>
<td>0521 72 23</td>
<td>SHOULDER CONCRETE BARRIER WALL, F SHAPED, WITH 14’ SOUND WALL</td>
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<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

521-73- CONCRETE BARRIER WALL- REMOVAL

Unit LF; M1 Accuracy Linear Foot; 10th of a Meter PlanQuantity? no

Notes

Details

This work normally paid for under Clearing and Grubbing or removal of existing structures. Read standards and specifications carefully before use; plan details may be required.

To be used for Roadway barrier only. For bridge barrier, refer to Structures Standards.

Related Items

Forms

Design SHTabQuant: Tabulation of Quantities Sheet

Documentation

Construction Refer to Comp Book

Details and Structure: Items 500 to 599
**Construction**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Notes**
Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tr>
<td>0521 73</td>
<td>CONCRETE BARRIER WALL, REMOVAL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

**Details**
Consists of construction of plain or reinforced sidewalk. Includes all materials, foundation preparation, joint forming (or sawing), placing, finishing and curing. Specifically excludes excavation.

Sidewalk 6" (0.15 meter) is used in traffic-bearing situations, i.e., driveways.
Detectable Warning for sidewalk ramps is incidental to the cost of new sidewalk; for retrofit of ramps, refer to Section 527 of the specifications.
Additional details on Index 310.
For designs near significant trees, consult with Environmental Management Office.

**Related Items**
Required: SHTabQuant: Tabulation of Quantities Sheet

**References**
PPM Chapter Vol 1, Ch 8
Other
Standards Index No. 282, 304, 310, 515
Specifications Section 522
Prep & Doc Manual Chapter(s) 6, 7, 13
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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<thead>
<tr>
<th>522- 2-</th>
<th>CONCRETE SIDEWALK, 6&quot; THICK</th>
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<tbody>
<tr>
<td>Unit</td>
<td>SY; M2</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Square Yard; Square Meter</td>
</tr>
<tr>
<td>PlanQuantity?</td>
<td>yes</td>
</tr>
</tbody>
</table>

#### Notes

Details

Refer to pay item 522-1 for details.

Related Items

Required

Recommended

Forms

Design

Refer to Comp Book

Documentation

Construction

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Vol 1, Ch 8

Other

Standards

Index No. 282, 304, 310

Specifications

Section 522

Prep & Doc Manual Chapter(s)

TERNS*PORT Category (DRAFT FIELD): 0200 Roadway

#### Status

Struct. 522- 2- CONCRETE SIDEWALK, 6" THICK SY

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Unit</th>
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<tr>
<td>0522 2</td>
<td>SIDEWALK CONCRETE, 6&quot; THICK SY</td>
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<table>
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<tr>
<th>523- 1-</th>
<th>PATTERNED / TEXTURED PAVEMENT</th>
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<tr>
<td>Unit</td>
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<tr>
<td>Accuracy</td>
<td>Square Yard; Square Meter</td>
</tr>
<tr>
<td>PlanQuantity?</td>
<td>yes</td>
</tr>
</tbody>
</table>

#### Notes

Details

Includes placement of a patterned (colored) and/or textured (imprinted, stamped) treatment. Work/materials (coloring, coating, etc.) for treatment included under this item. Underlying asphalt/concrete material paid for separately. Refer to the PPM for application restrictions.

Unit of measure is Plan Quantity, without deductions for trees, manholes, etc, per
specification.

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
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<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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### Documentation

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<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
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### References

<table>
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<th>Standards</th>
<th>Specifications</th>
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<tbody>
<tr>
<td>Section 523</td>
<td></td>
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</tbody>
</table>

### TRNS*PORT Category (DRAFT FIELD):

0200 Roadway

### Status

**Struct. 523-1- A**

**PATTERNED / TEXTURED PAVEMENT SY**

A= Underlying Pavement Material
1 (Asphalt)
2 (Concrete)

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
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<td>1/1/2010</td>
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</table>

### 524-1- A

**CONCRETE DITCH PAVEMENT: NON-REINFORCED**

**Unit** SY; M2

**Accuracy** Square Yard; Square Meter

**PlanQuantity?** yes

### Notes

**Details**

Consists of construction of concrete pavement in the flow channel of drainage ditches. Includes excavation below the finished grade, refilling and tamping, and disposal of surplus material. Also includes all costs of providing joints and weep holes, ditch blocks within ditch pavement area, furnishing and placing the filter fabric, skimmers, and any incidental materials, as detailed in the plans.

Refer to Index 281 for additional information.

Tabulate ditch pavement and ditch blocks, by location in the plans.

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td>SBDTPS; SBDitchPvmt: Summary of Ditch Pavement and Sod</td>
<td></td>
</tr>
</tbody>
</table>
Construction
Refer to Comp Book

Documentation
Design
Locate in plans. Detailed calculations are required in computation book to reflect actual scope of work.

Construction
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter

Specifications
Section 524

Specifications
Index No. 281

Prep & Doc Manual Chapter(s)
6, 7, 13

TRNS*PORT Category (DRAFT FIELD):
0200 Roadway

Status
Struct.
524-1-A

CONCRETE DITCH PAVEMENT: NON-REINFORCED

A =
1 (3"
2 (4"
3 (5"
4 (6"

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>CONCRETE DITCH PAVT, NON REINFORCED, 3&quot;</td>
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<tr>
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<td>CONCRETE DITCH PAVEMENT, NON REINFORCED, 4&quot;</td>
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<tr>
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<td>1/1/2010</td>
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<tr>
<td>0524 1 4</td>
<td>CONCRETE DITCH PAVEMENT, NON REINFORCED, 6&quot;</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

524-1-AB

CONCRETE DITCH PAVEMENT: REINFORCED

Unit
SY; M2

Accuracy
Square Yard; Square Meter

PlanQuantity?
yes

Notes
Consists of construction of concrete pavement in the flow channel of drainage ditches. Includes excavation below the finished grade, refilling and tamping, and disposal of surplus material. Also includes all costs of providing joints and weep holes, ditch blocks within ditch pavement area, furnishing and placing the filter fabric, skimmers, and any incidental materials, as detailed in the plans. Refer to Index 281 for additional information. When reinforcement is called for, detail quantities in the plans. No separate payment is made for reinforcement.

Related Items
Required
SBDTPS; SBDitchPvmt: Summary of Ditch Pavement and Sod

Recommended

Forms
Design

Details
Tabulate ditch pavement and ditch blocks, by location in the plans.
Struct. 524- 1- AB  CONCRETE DITCH PAVEMENT: REINFORCED  SY

A =
1 (3")
2 (4")
3 (5")
4 (6")

B =
9 (Reinforced)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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</table>

524- 2- A  CONCRETE SLOPE PAVEMENT: NON-REINFORCED

Notes

Details

Related Items

Required

Recommended

Forms

Construction

Refer to Comp Book

Design

Locate in plans, summarize quantities by location on summary sheet in the plans. PLAN QUANTITY will be basis of payment to the Contractor.

Construction

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
### Section 524

#### Struct.  524-  2-  A

**CONCRETE SLOPE PAVEMENT: NON-REINFORCED**

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M2</th>
<th>Accuracy</th>
<th>Square Yard; Square Meter</th>
<th>PlanQuantity?</th>
<th>yes</th>
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<tbody>
<tr>
<td><strong>A</strong></td>
<td>1 (3&quot;)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>2 (4&quot;)</td>
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<td>3 (5&quot;)</td>
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<td>4 (6&quot;)</td>
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#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0524 2 1</td>
<td>CONCRETE SLOPE PAVEMENT, NON-REINFORCED, 3&quot;</td>
<td>SY</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0524 2 2</td>
<td>CONCRETE SLOPE PAVEMENT, NON-REINFORCED, 4&quot;</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

#### Struct.  524-  2- AB

**CONCRETE SLOPE PAVEMENT: REINFORCED**

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M2</th>
<th>Accuracy</th>
<th>Square Yard; Square Meter</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Notes

Intended for reinforced slope pavement to protect bridge fill slopes, to line flow channels, and drainage ditches. Refer to 524- 1-xxa for details.

#### Related Items

**Required**

**Recommended**

**Forms**

**Design**

SHTabQuant: Tabulation of Quantities Sheet

#### Documentation

**Design**

Locate in plans, summarize quantities by location on summary sheet in the plans. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

#### References

**PPM Chapter**

**Other**

**Standards**

**Specifications** Section 524

**Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

---

**Status**

**Struct.**  524- 2- AB **CONCRETE SLOPE PAVEMENT: REINFORCED** SY

---

**Details and Structure:** Items 500 to 599
A =
1 (3")
2 (4")
3 (5")
4 (6")
B =
9 (Reinforced)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0524 2 4</td>
<td>CONCRETE SLOPE PAVEMENT, NON REINFORCED, 6&quot;</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0524 2 29</td>
<td>CONCRETE SLOPE PAVEMENT, 4&quot;, REINFORCED</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
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<td>0524 2 49</td>
<td>CONCRETE SLOPE PAVEMENT, 6&quot;, REINFORCED</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**524- 3-** CONCRETE CORE DITCH BLOCKS

Unit: CY; M3
Accuracy: 10th of a Cubic Yard; 10th of a Cubic Meter
PlanQuantity?: yes

Notes

Effective July 2009, with plan details or tech spec. Modified Section 524 pending for July 2010.

Details

Cubic Yard item for concrete core ditch blocks to be used ONLY for grass or earth ditches without other ditch pavement. Tabulate each location and cubic yard quantity of concrete in the plans. Plan quantity payment also includes any necessary earthwork.

Do not use this pay item for Ditch Blocks within areas where payment is made for Concrete Ditch Pavement.

Related Items

Required
Design
Recommended
SHTabQuant: Tabulation of Quantities Sheet

Forms

Construction

Documentation

Design
Locate in plans, summarize quantities by location on summary sheet in the plans. PLAN QUANTITY will be basis of payment to the Contractor.

Construction
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Other
Standards
Specifications

Prep & Doc Manual Chapter(s)

Status

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Notes

Details and Structure: Items 500 to 599
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0524 3</td>
<td>CONC CORE DITCH BLOCKS</td>
<td>CY</td>
<td>1/1/2010</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>525- 1-</td>
<td>ASPHALTIC CONCRETE CURB</td>
<td>LF, M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>yes</td>
<td>Not intended for temporary or MOT applications. Use in accordance with Index 300. Required Recommended SHTabQuant: Tabulation of Quantities Sheet COMP 700-050-02: Curb/Gutter Calculations and Continuation Plan QUANTITY will be basis of payment to the Contractor. PLAN QUANTITY will be basis of payment to the Contractor. Location in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor. Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

References:
- PPM Chapter
- Standards: Index 300
- Specifications: Section 525

Prep & Doc Manual Chapter(s): 6, 7, 13

Status:
Struct. 525- 1- ASPHALTIC CONCRETE CURB LF

Notes:

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0525 1</td>
<td>CURB ASPHALTIC CONC</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>526- 1-</td>
<td>PAVERS, ARCHITECTURAL</td>
<td>SY, M2</td>
<td>Square Yard; Square Meter</td>
<td>no</td>
<td>Used for roadway (roadway, commercial driveways) and/or sidewalk (sidewalks, medians, and residential driveway) applications. Refer to the PPM for restricted applications. Measurement is per square yard, with no deduction for ornamental trees, manholes, inlets, or other public appurtenances within the normal area of the pavers. Refer to the specifications for measurement details. For Patterned/Textured pavement (asphalt or concrete), use 523 items. Required Recommended</td>
</tr>
</tbody>
</table>

Details and Structure: Items 500 to 599
### 526-1- A

**PAVERS, ARCHITECTURAL**

\[ A = 1 \text{ (Roadway)} \]
\[ A = 2 \text{ (Sidewalk)} \]

#### Notes

- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### Related Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0526 1 1</td>
<td>PAVERS, ARCHITECTURAL, ROADWAY</td>
<td>SY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0526 1 2</td>
<td>PAVERS, ARCHITECTURAL, SIDEWALK</td>
<td>SY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 527-1-

**DETECTABLE WARNING ON EXISTING WALKING SURFACE**

#### Notes

- This pay item is to be used for Detectable Warnings applied to existing walking surfaces (RETROFIT for previous projects), used in coordination with Index 304.
- For new installations (detectable warnings constructed under the current project/proposal), use index 304; cost of detectable warning for new installations is included in the cost of the walking surface- sidewalk, curb, etc.
- Refer to specifications for a complete description of acceptable products.

#### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
</tr>
</tbody>
</table>

### TRNS*PORT Category (DRAFT FIELD):

- **0800 Architectural**

---

**Basis of Estimates**

**2010 Edition**

**December 30, 2009**

**Standards**

Index 515 for turnouts

**Specifications**

Section 526

**Vol 1, Ch 2**

**Struct. 526-1- A PAVERS, ARCHITECTURAL SY**

**Prep & Doc Manual Chapter(s)**

6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**

0800 Architectural

---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

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<tr>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0526 1 1</td>
<td>PAVERS, ARCHITECTURAL, ROADWAY</td>
<td>SY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0526 1 2</td>
<td>PAVERS, ARCHITECTURAL, SIDEWALK</td>
<td>SY</td>
<td>1/1/2010</td>
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</table>

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**Details and Structure: Items 500 to 599**

**Page 48 of 89**
Standards  Index 304
Specifications  Section 527
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):  0200  Roadway

Status

Struct.  527- 1-  DETECTABLE WARNING ON EXISTING WALKING SURFACE

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>0527 1</td>
<td>DETECTABLE WARNING ON EXISTING WALKING SURFACE, RETROFIT</td>
<td>EA</td>
<td>1/1/2010</td>
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</table>

530- 1- RIPRAP- SAND - CEMENT

<table>
<thead>
<tr>
<th>Unit</th>
<th>CY; M3</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>10th of a Cubic Yard; 10th of a Cubic Meter</td>
<td>no</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

Notes

Details

This item entails the use of sand-cement bags to construct endwalls, provide fill slope protection, and/or provide ditch bottom and ditch slope protection. To be used in accordance with Design Standards.

Note, per specification: Record and show how quantity was arrived at on tabulation form 700-050-56. If sand-cement is proportioned by volume, the sand shall be measured loose in an approved measure prior to mixing with cement. If proportioned by weight, approved scales shall be used for this purpose and the volume shall be calculated using a standard conversion factor for sand of 85 lb/ft³ (1360 kg/m³).

Related Items

Required  Recommended

Forms

Design  SHTabQuant: Tabulation of Quantities Sheet

Documentation

Design  700-050-56

Construction  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards  Index 258 or 268

Specifications  Section 530

Prep & Doc Manual Chapter(s)  6, 13

TRNS*PORT Category (DRAFT FIELD):  0200  Roadway

Status

Struct.  530- 1- RIPRAP- SAND - CEMENT CY

Notes

Details and Structure: Items 500 to 599
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0530 1</td>
<td>RIPRAP, SAND-CEMENT</td>
<td>CY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 530- 3- A RIPRAP- RUBBLE

**Unit**: TN; MT  
**Accuracy**: 10th of a Ton; 10th of a Metric Ton  
**Plan Quantity?**: no

**Notes**
To be used for bank and shore, bridge abutment, ditch, and outlet structure protection. Refer to Drainage Manual for design criteria. Gradation is given in the specifications. Design quantity is based on the following: 

\[
W = \text{Vol.s} \times \text{S.G.} \times W_w \times V_f 
\]

- \( W \) = Weight of Stone  
- \( \text{Vol.s} \) = Volume of Stone  
- \( \text{S.G.} \) = Specific Gravity  
  - =2.3 for Bank & Shore Protection  
  - =1.9 for Ditch Lining  
- \( W_w \) = 62.4 lb/ft³ (1 MT/M³) Weight of Water  
- \( V_f \) = .90 (Void Factor)

**NOTE**: remember to convert weight (LB) to (TN) for unit of measure & payment.

- **BANK & SHORE- LARGE BOULDERS**: Contact the State Drainage Office, prior to using this item. The standard specifications must be modified to detail the boulder size and specific gravity.
- **Final measure, per specifications, will be by railroad scales, truck scales, or barge displacement.**

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
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<tbody>
<tr>
<td>514-71</td>
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**Forms**

<table>
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<tr>
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<th>SHTabQuant: Tabulation of Quantities Sheet</th>
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<tbody>
<tr>
<td></td>
<td>COMP 700-050-06: Weight Measure or Liquid Volume Comp &amp; Cont.</td>
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**Construction**

<table>
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<tr>
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</table>

**Documentation**

<table>
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<td>Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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**References**

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<tr>
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<td></td>
<td>Standards</td>
</tr>
<tr>
<td></td>
<td>Specifications Section 530</td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td>6, 13</td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

**Struct.** 530- 3- A RIPRAP- RUBBLE TN

- \( A = 3 \) (Bank & Shore)  
- \( 4 \) (Ditch Lining)  
- \( 5 \) (Bank & Shore- Large Boulders) to be used only with approval; see details above.

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0530 3 3</td>
<td>RIPRAP- RUBBLE, BANK AND SHORE</td>
<td>TN</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0530 3 4</td>
<td>RIPRAP, RUBBLE, F&amp;I, DITCH LINING</td>
<td>TN</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0530 3 5</td>
<td>RIPRAP- RUBBLE, BANK AND SHORE- LARGE BOULDERS</td>
<td>TN</td>
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530-74- BEDDING STONE

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>530-74-</td>
<td>Quantities should be based on 115 lbs per cubic foot (1840 kg per cubic meter).</td>
</tr>
<tr>
<td>530-76- A</td>
<td>Standards under development; contact the State Drainage Office for assistance.</td>
</tr>
</tbody>
</table>

**BEDDING STONE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td>TN; MT</td>
<td>10th of a Ton; 10th of a Metric Ton</td>
<td>no</td>
</tr>
</tbody>
</table>

**Related Items**

| Prep & Doc Manual Chapter(s) | 6, 7, 13 |

**PPM Chapter**

Design: SHTabQuant: Tabulation of Quantities Sheet

Construction: COMP 700-050-06: Weight Measure or Liquid Volume Comp & Cont.

**Documentation**

Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Related Items**

**Forms**

Design: SHTabQuant: Tabulation of Quantities Sheet

Construction: COMP 700-050-06: Weight Measure or Liquid Volume Comp & Cont.

**Note:**

- The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Details**

- Quantities should be based on 115 lbs per cubic foot (1840 kg per cubic meter).
- Standards under development; contact the State Drainage Office for assistance.

**Related Items**

- Required
- Recommended

**NOTES:**

- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Status**

- Struct. 530-74- BEDDING STONE TN

Details and Structure: Items 500 to 599
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0530 76 2</td>
<td>GABION MAT, 9&quot; THICK</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0530 76 4</td>
<td>GABION MAT, 12&quot; THICK</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**530- 77- A  GABION BASKET**

**Unit**  SY; M2  **Accuracy**  Square Yard; Square Meter  **PlanQuantity?**  no

**Notes**  
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**  
Required  SHTabQuant: Tabulation of Quantities Sheet

**Documentation**  
Refer to Comp Book

**Design**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).
Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

**530-77- A**

GABION BASKET

A =
1 (12" Thick)
2 (36" Thick)
3 (30" Thick)
4 (18" Thick)

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>530-78-</th>
<th>RIPRAP- ARTICULATING BLOCK</th>
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</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>SY; M2</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Square Yard; Square Meter</td>
</tr>
<tr>
<td><strong>PlanQuantity?</strong></td>
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</tr>
</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**

- **Required**: Design
- **Recommended**: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Inactive Structure**

**530-78-**

RIPRAP- ARTICULATING BLOCK

**SY**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0530 78</td>
<td>RIPRAP - ARTICULATING BLOCK</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>530- 79-</td>
<td>PLASTIC CELLULAR CONFINEMENT SYSTEM</td>
<td>SY; M2</td>
<td>Accuracy</td>
<td></td>
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<td></td>
<td>Square Yard; Square Meter</td>
<td>PlanQuantity?</td>
</tr>
<tr>
<td>Notes</td>
<td>Effective January 2009 letting, with approval for specific projects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Details</td>
<td>Contact the State Drainage Office for approval, prior to using this item. Technical Specifications should be reviewed by Drainage Office, Construction Office, and/or State Geotechnical Engineer.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intended for permanent erosion control applications. Temporary applications are covered under Section/Items 104. Reinforced Soil Slopes and/or Soft Soil reinforcement covered under Section/Items 145.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Related Items</td>
<td>Required</td>
<td>Recommended</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forms</td>
<td>Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>Refer to Comp Book</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
<td></td>
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<tr>
<td></td>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>References</td>
<td>PPM Chapter</td>
<td>Other Standards Specifications</td>
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</tr>
<tr>
<td></td>
<td>Plan Details and/or Technical Specifications required</td>
<td></td>
<td></td>
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<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td></td>
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**TRNS*PORT Category (DRAFT FIELD):**

**Struct.** 530- 79- PLASTIC CELLULAR CONFINEMENT SYSTEM SY

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>534-72-1AA</td>
<td>SOUND BARRIERS- INCLUDING FOUNDATION</td>
<td>SF; M2</td>
<td></td>
<td>Square Foot; 10th of a Square Meter</td>
<td>yes</td>
</tr>
<tr>
<td>Notes</td>
<td>To be used for panel-type sound barrier (wall) construction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Details and Structure: Items 500 to 599
Refer to standards for details. Includes the cost of the foundation (auger cast piles or spread footings when called for in the plans), test wall, etc. Area bounded by top of panel, bottom of panel, without deductions for openings; refer to specs for additional information. Special details must be included in the plans.

NOTE: Sound barriers to be placed on bridges or MSE wall sections are not covered by the new standards or this pay item. Sound barriers in these locations have separate standards and pay items. See 521-5, 521-7, and 521-72 for shoulder mounted sound barriers.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
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</table>

### Documentation

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
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<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
</tr>
<tr>
<td>Construction</td>
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### References

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<tbody>
<tr>
<td>Standards</td>
<td>Index No. 5200 to 5206</td>
</tr>
<tr>
<td>Specifications</td>
<td>Section 534</td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td>6, 7, 13</td>
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### TRNS^PORT Category (DRAFT FIELD):

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<tbody>
<tr>
<td>Struct.</td>
<td>534- 72-1AA</td>
</tr>
<tr>
<td>A=</td>
<td>SOUND BARRIERS- INCLUDING FOUNDATION</td>
</tr>
<tr>
<td>01 (Permanent)</td>
<td>SF</td>
</tr>
<tr>
<td>02 (Temporary)</td>
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### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0534 72101</td>
<td>SOUND BARRIER-INC FOUNDATION, PERMANENT</td>
<td>SF</td>
<td>1/1/2010</td>
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<tr>
<td>0534 72102</td>
<td>SOUND BARRIER-INC FOUNDATION, TEMPORARY</td>
<td>SF</td>
<td>1/1/2010</td>
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### Details

#### 534- 73-

<table>
<thead>
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<tbody>
<tr>
<td>Unit</td>
<td>SF; M2</td>
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<tr>
<td>Accuracy</td>
<td>Square Foot; 10th of a Square Meter</td>
</tr>
<tr>
<td>PlanQuantity?</td>
<td>yes</td>
</tr>
</tbody>
</table>

### Notes

Monitor: Steve Nolan, State Structures Design Office

Details

To be used for perimeter wall construction, in accordance with Developmental Design Index D5250. Contact the State Structures Design Office for drawings and details. Also used with Developmental Specifications.

Includes the cost of the foundation (auger cast piles or spread footings when called for in the plans), test wall, etc. Area bounded by top of panel, bottom of panel, without...
deductions for openings; refer to specs for additional information.

NOTE: There is currently no specific criteria specifying when perimeter walls are justified. This will be a project by project decision based on project demands and resolved by the District.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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<tr>
<td></td>
<td></td>
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<tr>
<td>Documentation</td>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
</tr>
<tr>
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<tr>
<td>References</td>
<td>PP M Chapter</td>
<td>Chapter 32</td>
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<tr>
<td></td>
<td>Other</td>
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<td>Standards</td>
<td>Developmental Index No. D5250</td>
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<td>Specifications</td>
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<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td>6, 7, 13</td>
<td></td>
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TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status
Struct. 534-73- PERIMETER WALL SF

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tbody>
<tr>
<td>0534 73</td>
<td>PERIMETER WALL</td>
<td>SF</td>
<td>M</td>
<td>1/1/2010</td>
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</table>

536- 1- AA GUARDRAIL

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

Notes

Details

Consists of the construction of metal guardrail on posts of timber or steel. Panels are 12.5' (3.810 meters) in length. The plan length of a run of guardrail should normally be determined as a multiple of the nominal panel lengths.

When attaching guardrail to a new or widened bridge railing, the guardrail (including transition and thrie beam panels) is paid for under item 536-1- (2536-1-). The cost of connecting the guardrail to the bridge railing is included in the cost of the guardrail.

When connecting guardrail to an existing bridge railing or to vertical face rail retrofits, the guardrail (including transition and thrie beam panels) is paid for under the item 536-1- (2536-1-) and item 536-8 is included for the cost of connecting the guardrail to the existing bridge railing. Other situations should be noted in the plans.

Pipe rail is a pedestrian safety treatment; it is to be included in the cost of the guardrail, as
indicated on standards. Rub rail is used for guardrail placed on slopes, as shown on the standards, mounted approximately 12 inches below the center of the standard guardrail. Per the standard, payment is included in the contract unit price for guardrail. (When called for in the plans, please use the "Roadway, with rubrail" pay item.)

Document locations on summary table. Refer to PPM Vol 2, Chapter 7 for details.

Object markers used for facing reverse laning traffic are included in the cost of the guardrail.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>339- 1 (2339-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Recommended</td>
<td>536-7 and 536-8 (2536-7, 2536-8)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Forms</th>
<th>Design</th>
<th>SBGDRL; SBFGuardrail: Summary of Guardrail</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Documentation</th>
<th>Design</th>
<th>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter</th>
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<tbody>
<tr>
<td>Other</td>
<td>Normally requires SHOP DRAWINGS</td>
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<table>
<thead>
<tr>
<th>Standards</th>
<th>Index No. 400, 402</th>
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<table>
<thead>
<tr>
<th>Specifications</th>
<th>Section 536</th>
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</table>

<table>
<thead>
<tr>
<th>Prep &amp; Doc Manual Chapter(s)</th>
<th>6, 7, 13</th>
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</table>

| TRNS*PORT Category (DRAFT FIELD): | 0200 | Roadway |

<table>
<thead>
<tr>
<th>Status</th>
<th>Struct.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>536-1-AA GUARDRAIL LF</td>
</tr>
</tbody>
</table>

| A = |
| 1 (Roadway) |
| 2 (Bridge) |
| 3 (Roadway, Double Face) |
| 4 (Bridge, Double Face) |
| 5 (Roadway, Thrie Beam) |
| 6 (Bridge, Thrie Beam) |

| 8 (Roadway, With Rub Rail) see details above for pipe rail. |
| 9 (Roadway, Thrie Beam, Double Face) |
| 10 (Roadway, Weathering Steel) used for Suncoast Pkwy |
| 11 (Roadway, Modified Thrie Beam) |
| 12 (Roadway, Modified Thrie Beam, Double Face) |
| 13 (Roadway, Install only- materials available at FDOT Maintenance Yard) |

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
</table>

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0536 1 1</td>
<td>GUARDRAIL -ROADWAY</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0536 1 2</td>
<td>GUARDRAIL - BRIDGE</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0536 1 3</td>
<td>GUARDRAIL - ROADWAY, DOUBLE FACE</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0536 1 5</td>
<td>GUARDRAIL - ROADWAY, THRIE BEAM</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0536 1 6</td>
<td>GUARDRAIL - BRIDGE, THRIE BEAM</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0536 1 8</td>
<td>GUARDRAIL, ROADWAY, WITH RUB RAIL</td>
<td>LF</td>
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<tr>
<td>0536 1 9</td>
<td>GUARDRAIL - ROADWAY, THRIE BEAM, DOUBLE FACE</td>
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<td>1/1/2010</td>
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<td>0536 1 10</td>
<td>GUARDRAIL, ROADWAY, WEATHERING STEEL</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0536 1 11</td>
<td>GUARDRAIL, ROADWAY, MODIFIED THRIE BEAM</td>
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<tr>
<td>0536 1 12</td>
<td>GUARDRAIL, ROADWAY, MODIFIED THRIE BEAM - DOUBLE FACE</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0536 1 13</td>
<td>GUARDRAIL, ROADWAY, INSTALL ONLY - MATERIALS AVAILABLE AT FDOT MAINTENANCE YARD</td>
<td>LF</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### GUARDRAIL- SHOP BENT PANELS

**Unit**: LF; M1  **Accuracy**: Linear Foot; 10th of a Meter  **PlanQuantity?**: yes

**Notes:** When this item is used, item 339-1 must be used.

**Related Items**

**Required**

**Recommended**

**Forms**

**Design**: SBGDRL; SBGuardrail: Summary of Guardrail

**Documentation**

**Construction**: Refer to Comp Book

**Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**PPM Chapter**: Design  **Other Standards**: Index No. 400  **Specifications**: Section 536

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

**Status**

**Struct.**: 536-2- GUARDRAIL- SHOP BENT PANELS LF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 536- 4- A RETROFIT EXISTING GUARDRAIL

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 10th of a Meter  
**PlanQuantity?**: no

**Notes**
- This item to be used when existing guardrail is to be retrofitted with additional components. Do not use this item for replacement of complete guardrail system.

**Related Items**
- Required

**Forms**
- Design

**References**
- PPM Chapter
- Other
- Standards

**Memo**
- Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200  
**Roadway**

**Status**
- Struct. 536- 4- A RETROFIT EXISTING GUARDRAIL

**Notes**
- A= Component
- 1 (Pedestrian/Cyclist Pipe Rail)
- 2 (Rubrail)

---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0536 4 1</td>
<td>RETROFIT EXIST GUARDRAIL, PEDESTRIAN/ CYCLE PIPE RAIL</td>
<td>LF</td>
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<td>1/1/2010</td>
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</tbody>
</table>

---

### 536- 7- SPECIAL GUARDRAIL POST

**Unit**: EA  
**Accuracy**: Each  
**PlanQuantity?**: no

**Notes**
- Refer to Index 400 for all types of special posts: timber, steel, and others.
- Used when culvert, pier footing or other concrete structure precludes normal post installation and special fabrication is required. Specifically excludes posts for double-faced median guardrail. When this item is used, item 536- 1-xxa (2536- 1-xxa) must be used.

**Related Items**
- Required

**Forms**
- Design  
- SBGDRL; SBDguardrail: Summary of Guardrail
Details and Structure: Items 500 to 599

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Other**

**Standards**

Index No. 400

**Specifications**

Section 536

**Prep & Doc Manual Chapter(s)**

7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 536- 7- SPECIAL GUARDRAIL POST EA

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0536 7</td>
<td>SPECIAL GUARDRAIL POST</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

**536- 8- A GUARDRAIL BRIDGE ANCHORAGE ASSEMBLY**

**Unit**

EA

**Accuracy**

Each

**Plan Quantity?**

no

**Details**

Used when connecting guardrail to an existing bridge. Includes furnishing and installing special end shoes, wood blocks or concrete wedges, concrete posts and necessary hardware. When this item is used, item 536- 1 (2536- 1) must be used. Remove: Plans or specs to indicate disposal or salvage instruction.

**Related Items**

**Forms**

**Required**

**Recommended**

SBGDRRL; SBGuardrail: Summary of Guardrail

**Documentation**

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Other**

**Standards**

Index No. 402

**Specifications**

Section 536

**Prep & Doc Manual Chapter(s)**

7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 536- 8- A GUARDRAIL BRIDGE ANCHORAGE ASSEMBLY EA

A = Operation
Blank (Furnish & Install)
1 (Install)
2 (Furnish)
3 (Relocate)
6 (Remove)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0536 8</td>
<td>GUARDRAIL - BRIDGE ANCHORAGE ASSEMBLY (FURNISH &amp; INSTALL)</td>
<td>EA</td>
<td>1/1/2010</td>
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<td>0536 8</td>
<td>GUARDRAIL, BRIDGE ANCHORAGE ASSEMBLY, INSTALL</td>
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<td>1/1/2010</td>
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<tr>
<td>0536 8</td>
<td>GUARDRAIL, BRIDGE ANCHORAGE ASSEMBLY, REMOVE</td>
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<td>1/1/2010</td>
<td></td>
<td></td>
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</tbody>
</table>

536-73- GUARDRAIL REMOVAL

**Unit** LF; M1  
**Accuracy** Linear Foot; 10th of a Meter  
**PlanQuantity?** no

**Notes**

Details: For single run, double face guardrail: measurement and payment are based on the single run length. Refer to specification for details.

**Related Items**

Required: SBGDRL; SBGuardrail: Summary of Guardrail

Recommended: Design

**Forms**

Design

**Construction**

Refer to Comp Book

**Documentation**

Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Specifications Section 536

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

**Status**

Struct. 536-73- GUARDRAIL REMOVAL LF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0536 73</td>
<td>GUARDRAIL REMOVAL</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

536-76- GUARDRAIL POSTS- SPECIAL LENGTH

**Unit** EA  
**Accuracy** Each  
**PlanQuantity?** no

Details and Structure: Items 500 to 599
To be used only as detailed on index 400, for Special Length guardrail posts.

**Related Items**
- **Required:**
  - Design: SBGDRL; SBGuardrail: Summary of Guardrail

**Forms**
- **Construction:** Refer to Comp Book
  - Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**
- **Design**
- **Construction**

---

**Note**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0536 76</td>
<td>GUARDRAIL POST - SPECIAL LENGTH</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**536- 82-** GUARDRAIL ANCHORAGE- CONCRETE BARRIER WALL

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Note**

Independent stand alone anchorage to be used between guardrail and a fixed structure.

**Related Items**
- **Required:**
  - Design: SBGDRL; SBGuardrail: Summary of Guardrail

**Forms**
- **Construction:** Refer to Comp Book
  - Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**
- **Design**
- **Construction**

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0536 82</td>
<td>GUARDRAIL ANCHORAGE- CONCRETE BARRIER WALL</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 536- 83- A GUARDRAIL POST REPLACEMENT

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

#### Notes

To be used in accordance with Index 400.

#### Details

Required

Recommended

#### Related Items

Design

SBGDRL; SBGuardrail: Summary of Guardrail

#### Forms

Construction

Refer to Comp Book

Documentation

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

PPM Chapter

Other

Standards

Index No. 400

Specifications

Section 536

Prep & Doc Manual Chapter(s)

7, 13

### TRNS*PORT Category (DRAFT FIELD):

0200 Roadway

#### Status

Struct. 536- 83- A GUARDRAIL POST REPLACEMENT EA

A =

1 (Regular)

3 (Steel In Concrete, Regular)

4 (Steel In Asphalt, Regular)

5 (Steel In Soil, Regular)

6 (Wooden In Asphalt, Regular)

7 (Wooden In Soil, Regular)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0536 83 1</td>
<td>GUARDRAIL POST REPLACEMENT, REGULAR</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 536- 85- AA GUARDRAIL END ANCHORAGE ASSEMBLY

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

#### Notes

Details and Structure: Items 500 to 599
Includes furnishing and installing all necessary hardware, as shown in Standard Index 400.

Related Items

**Required**: 536-1

**Recommended**: 

Forms

**Design**: SBGDRL; SBGGuardrail: Summary of Guardrail

Documentation

**Design**: Refer to Comp Book

**Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

**PPM Chapter**: 

**Other**: 

**Standards**: Index No. 400

**Specifications**: Section 536

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

Status

**Struct.**: 536-85- AA GUARDRAIL END ANCHORAGE ASSEMBLY EA

AA =

22 (Flared)
24 (Parallel)
25 (Type II)
26 (Type CRT)
27 (Double Face Terminal)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0536 85 22</td>
<td>GUARDRAIL END ANCHORAGE ASSEMBLY-FLARED</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0536 85 24</td>
<td>GUARDRAIL END ANCHORAGE ASSEMBLY-PARALLEL</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0536 85 25</td>
<td>GUARDRAIL END ANCHORAGE ASSEMBLY-TYPE II</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0536 85 26</td>
<td>GUARDRAIL END ANCHORAGE ASSEMBLY-TYPE CRT</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0536 85 27</td>
<td>GUARDRAIL END ANCHORAGE ASSEMBLY-DOUBLE FACE TERMINAL</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**538-1- GUARDRAIL- RESET**

**Unit**: LF; M1

**Accuracy**: Linear Foot; 10th of a Meter

**PlanQuantity?**: no

Notes

**Details**: Consists of the removal of existing guardrail and resetting of the salvaged guardrail along with necessary new materials. Locations of the existing and proposed guardrail must be shown in the plans. Coordinate the use of this item with District Maintenance Office.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0538 1</td>
<td>GUARDRAIL RESET</td>
<td>LF</td>
<td>no</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

Material and installation requirements are needed for project specific conditions.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**

**Required**

Design: SHTabQuant: Tabulation of Quantities Sheet

**Recommended**

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Standards Index No. 400

Specifications Section 538

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 538-1- GUARDRAIL- RESET LF

Notes

Plan Details and/or Technical Specifications required
### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**  
Inactive Structure

**Struct.**  539-75-ABC  GLARE SCREEN  LF

- **A = Operation**
  1 (Furnish & Install)  
  2 (Furnish)  
  3 (Install) BC=00  
  4 (Remove) BC=00  
  6 (Relocate) BC=00

- **B = Material**
  1 (Modular)  

- **C = Height**
  1 (18")  
  2 (24")  
  3 (30")

### Notes

"The following items were open, as of the publication date. Refer to the Master Pay Item list for current items."

<table>
<thead>
<tr>
<th>539-80-ABC</th>
<th>OPAQUE VISUAL BARRIER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>LF; M1</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Linear Foot; 10th of a Meter</td>
</tr>
<tr>
<td><strong>Plan</strong></td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

- The Designer should coordinate the details on Index 461 with project specific conditions. Payment for barrier includes concrete and reinforcing steel, as shown on design standard.

- Non-concrete materials will require details and material specifications.

- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design</strong></td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
</tr>
</tbody>
</table>

**Documentation**

<table>
<thead>
<tr>
<th>Construction</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design</strong></td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</strong></td>
</tr>
</tbody>
</table>

**References**

<p>|</p>
<table>
<thead>
<tr>
<th><strong>PPM Chapter</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other</strong></td>
</tr>
<tr>
<td><strong>Standards</strong></td>
</tr>
<tr>
<td><strong>Specifications</strong></td>
</tr>
</tbody>
</table>

- Special Provision available for compensation information
- Selected Items may require Plan Details and/or Technical Specifications

---

**Details and Structure:** Items 500 to 599  

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[Page 66 of 89]
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 539-80-ABC OPAQUE VISUAL BARRIER LF

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BC=00
4 (Remove) BC=00

B = Material
1 (Concrete)
2 (Fiberglass)*
3 (Aluminum)*

C = Height
1 (2’ 3” Height)

Notes
*Only concrete option included on design standard

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0539 80111</td>
<td>OPAQUE VISUAL BARRIER, F&amp;I, CONCRETE, 2’3” HT</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

540- HIGH TENSION CABLE BARRIER SYSTEM WITH ANCHORS

Unit LF; M1
Accuracy Linear Foot; 10th of a Meter

Notes Future item; refer to developmental item 904-540-xx1

Details

Related Items

Required

Recommended

Forms Design

SHTabQuant: Tabulation of Quantities Sheet

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 540- HIGH TENSION CABLE BARRIER SYSTEM WITH ANCHORS LF

pending
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 542-70- BUMPER GUARDS, CONCRETE

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**
- Parking space bumper, used in rest areas, service plazas, etc. Concrete Bumper guard dimensions are shown on index 300. The Designer should coordinate the design standard and/or plan details as needed. If other materials are acceptable, detail the material requirements in the plans/specs.
- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**
- **Required**: SHTabQuant: Tabulation of Quantities Sheet

**Forms**
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**: 542-70
- **Other**: Index No. 300
- **Standards**: Plan Details and/or Technical Specifications required
- **PPM Chapter**: 7, 13

**Status**
- **Struct.**: 542-70- BUMPER GUARDS, CONCRETE EA

---

### 544-74- AA RELOCATE VEHICULAR IMPACT ATTENUATOR / CRASH CUSHION

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**
- Items to be installed in accordance with Standards and/or manufacturer's instructions.

**Related Items**
- **Required**: SHTabQuant: Tabulation of Quantities Sheet

**Forms**
- **Design**: Refer to Comp Book

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 or oth Roadway or other- see details
Standards
Index No. 432, 433, 434, 435, 436, 438
Specifications
Section 544

Struct. 544-74-AA RELOCATE VEHICULAR IMPACT ATTENUATOR / CRASH CUSHION

AA =
8 (Cat)
9 (Brakemaster)
10 (Dragnet)
13 (React 350)
14 (Quadgard)
17-20 Hold
23 (SCI)
24 (Quest)
25 (HEART)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0544 74 14</td>
<td>RELOCATE CRASH CUSHION - VEHICULAR IMPACT ATTENUATOR, QUADGUARD</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0544 74 23</td>
<td>RELOCATE CRASH CUSHION - VEHICULAR IMPACT ATTENUATOR, SCI</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0544 74 24</td>
<td>RELOCATE CRASH CUSHION - VEHICULAR IMPACT ATTENUATOR, QUEST</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

544-75-AA CRASH CUSHION-VEHICULAR IMPACT ATTENUATOR

Unit EA
Accuracy Each
PlanQuantity? no

Notes
Details
Refer to Plans Preparation Manual and Design Standards prior to selecting a specific option. Items are to be installed in accordance with Standards and/or manufacturer's instructions. All items must be listed on QPL, per specifications.

Related Items
Required
Recommended
Forms
Design SHTabQuant: Tabulation of Quantities Sheet

Documentation
Construction Refer to Comp Book
Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter: Vol 1, Chapter 4

Other

Specifications: Section 544

Prep & Doc Manual Chapter(s): 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct. 544-75- AA**

CRASH CUSHION - VEHICULAR IMPACT ATTENUATOR EA

\[ \text{AA} = \]

- 8 (Cat)*
- 9 (Brakemaster)*
- 10 (Dragnet)*
- 13 (React 350)*
- 14 (Quadguard)*
- 16 (Tracc)*
- 17 (QuadGuard Elite)*
- 18 (QuadGuard LMC)*
- 19 (QuadGuard LMA)*
- 20 (QuadTrend)*
- 21 (TAU-II)*
- 22 (Widetracc)*
- 23 (SCI)*
- 24 (Quest)*
- 25 (HEART)*
- 40 (Optional)

**Notes**

*AA=40 (Optional) should be used, unless there is a specific reason why options are limited to a single product.

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0544 75 13</td>
<td>CRASH CUSHION - VEHICULAR IMPACT ATTENUATOR, REACT 350</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0544 75 14</td>
<td>CRASH CUSHION - VEHICULAR IMPACT ATTENUATOR, QUADGUARD</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0544 75 21</td>
<td>CRASH CUSHION- VEHICULAR IMPACT ATTENUATOR, TAU-II</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0544 75 23</td>
<td>CRASH CUSHION - VEHICULAR IMPACT ATTENUATOR, SCi</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0544 75 24</td>
<td>CRASH CUSHION - VEHICULAR IMPACT ATTENUATOR, QUEST</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0544 75 40</td>
<td>CRASH CUSHION - VEHICULAR IMPACT ATTENUATOR, OPTIONAL</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

**544-76- A**

ATTENUATOR MODULES- SAND FILLED

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

Details and Structure: Items 500 to 599
### 546-71- RUMBLE STRIP SETS

<table>
<thead>
<tr>
<th>Unit</th>
<th>PS</th>
<th>Accuracy</th>
<th>Per Set</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

#### Notes
Raised rumble strip SETS shall be constructed at all structures with less than full width shoulders. They will also be constructed at intersection approaches only when specified in the plans. This item is to be used in accordance with Standard Index 518.

Note that thermoplastic sets typically include 4 strips; Asphalt sets include 6 strips. Refer to Index for details.

For ground-in strips, refer to item 546-72-AB.

#### Details
For open items, as of the publication date. Refer to the Master Pay Item list for current items.

#### Related Items
- **Required**: Design
- **Recommended**: SHTabQuant: Tabulation of Quantities Sheet

#### Forms
- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References
- **PPM Chapter**: Vol 1, Ch 2
Ground-in rumble strips (16" minimum width, 400 mm minimum width) shall be constructed on freeway and other limited access per Index No. 518. Other methods and types of applications shall not be used unless approved in writing by the State Roadway Design Engineer. Approval will be considered only with sufficient documented justification for variance from this standard.

For Raised Rumble Strips, refer to item 546-71-.

Measurement, per specification: The quantity of will be the plan quantity in miles, constructed and accepted. The plan quantity will be determined based on the roadway length minus bridge lengths for each shoulder on which Rumble Strips are to be constructed.

Per specifications, plan quantity will be determined based on the roadway length, minus bridge lengths for each shoulder on which Rumble Strips are to be constructed. (No deduction is made for skip section of skip array.)
Struct. 546-72-AB  RUMBLE STRIPS  PM; KM

A = Type
5 (Ground-In)

B =
1 (16" Min. Width)
0 (Non Standard)

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0546 72 50</td>
<td>RUMBLE STRIPS, GROUND-IN, NON STANDARD</td>
<td>PM</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0546 72 51</td>
<td>RUMBLE STRIPS, GROUND-IN, 16&quot; MIN. WIDTH</td>
<td>PM</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

547-70- A  RIPRAP, FABRIC-FORMED CONCRETE

Unit  SY; M2
Accuracy  Square Yard; Square Meter

Notes  Future use may require development of specs and/or standards.

Details

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items
Required  Recommended
Forms  Design  SHTabQuant: Tabulation of Quantities Sheet

Documentation  Construction  Refer to Comp Book
Design  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Standards
Specifications  Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200  Roadway

Status
Struct. 547-70- A  RIPRAP, FABRIC-FORMED CONCRETE  SY

A =
1 (8" Filter Points)
2 (10" Filter Points)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0547 70 1</td>
<td>RIPRAP FABRIC-FORMED CONCRETE, 8” FILTER POINTS</td>
<td>SY</td>
<td>T</td>
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<tr>
<td>0547 70 2</td>
<td>RIPRAP FABRIC-FORMED CONCRETE, 10” FILTER POINTS</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
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### 548- AA- RETAINING WALL SYSTEM

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF; M2</td>
<td>Square Foot; 10th of a Square Meter</td>
<td>yes</td>
<td></td>
</tr>
</tbody>
</table>

#### Notes

Approved walls are listed on the Qualified Products List (QPL).

The wall pay area is based on area bounded by coping line, top of leveling pad, begin and end of wall. Barriers and parapets paid for separately (Items 521-8 and 521-6.) The backfill material for the retaining wall volume, as defined in Section 548, is paid as embankment or borrow excavation, as applicable.

For Cast-in-Place walls, refer to design standards and use Concrete (CY) and Reinforcing Steel (LB) items.

*For Permanent-Widening walls, compensation information is needed in the specifications. Coordinate with Specs to modify existing spec.

NOTE: Include item in TRNS*PORT Roadway Category.

#### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td>521- 6-xxa, or 521-8-xaa</td>
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#### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
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<tr>
<td>Chapter 30</td>
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<table>
<thead>
<tr>
<th>Standards</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index 5300, 5301</td>
<td>Section 548</td>
</tr>
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</table>

Prep & Doc Manual Chapter(s) 6, 7, 13

### TRNS*PORT Category (DRAFT FIELD):

100 or 200 Structures or Roadway

### Status

Struct. 548- AA- RETAINING WALL SYSTEM SF

AA = Type
12 (Permanent) excluding barrier
13 (Temporary) excluding barrier
14 (Permanent- Widening) attached to existing wall; *see BOE detail
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0548 12</td>
<td>RETAINING WALL SYSTEM, PERMANENT, EXCLUDING BARRIER</td>
<td>SF</td>
<td>1/1/2010</td>
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<tr>
<td>0548 13</td>
<td>RETAINING WALL SYSTEM, TEMPORARY, EXCLUDING BARRIER</td>
<td>SF</td>
<td>1/1/2010</td>
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<tr>
<td>0548 14</td>
<td>RETAINING WALL SYSTEM, PERMANENT - WIDENING, ATTACHED TO EXISTING WALL</td>
<td>SF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

550-10-ABC FENCING

Unit LF; M1 Accuracy Linear Foot; 10th of a Meter PlanQuantity? no

Notes

Details

Includes all fence, posts, and incidental materials. Gates to be paid under 550-60-ABC.

Type A= 9 (Special) is used for decorative/wood fencing, other than A, B, or R. Tech Spec and/or plan details required to specify materials, installation, and payment.

Details/Features C=9 (Special) may be used for Type A or B fence, when special features, other than barbed attachment or coatings are needed. For example, fine mesh added to standard Type B fence, for restricting small critters.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required       Recommended 550-60-ABC

Forms

Design SBFN; SBFence; SBFNTA; SBFenceA; SBFNTB; SBFenceB: Summary of

Documentation

Design Refer to Comp Book

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter Vol 1, Ch 2 for Bridge Fencing

Other

Standards Indexes 800, 801, 802, 803, 810, 811, 812

Specifications Section 550

Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 550-10-ABC FENCING LF

A = Type 1 (Type A)
2 (Type B)
3 (Type R)
9 (Special) Not Type A, B, or R; C = 8 or 9

B = Nominal Fabric Height
1 (0.0-5.0' Height) Note: Type A Standard; may be used for other types
2 (5.1-6.0' Height) Note: Type B Standard; may be used for other types
3 (6.1-7.0' Height)
4 (7.1-8.0' Height)
5 (8.1-10.0' Height)

C = Details/Features
0 (Standard features) No coating, barbed wire, or other special features
1 (w/Barbed Wire Attachment), Type B Only
2 (w/Vinyl Coating), Type B Only
3 (Full Enclosure), Type R Only
4 (Partial Enclosure), Type R Only
5 (Vertical) Type R Only
8 (Reset Existing)
9 (Special Feature) Features), other than coating, barbs, or enclosure

Notes
*A= Special for non-standard types (wood fence?)
*C= Special for other than coatings or enclosure
*A or C =9 may require Tech Spec and/or Plan Detail

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0550 10110</td>
<td>FENCING, TYPE A, 0.0-5.0', STANDARD</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0550 10118</td>
<td>FENCING, TYPE A, 0.0-5.0', TYPE A STANDARD, RESET EXISTING</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0550 10120</td>
<td>FENCING, TYPE A, 5.1-6.0, STANDARD</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0550 10130</td>
<td>FENCING, TYPE A, 6.1-7.0, STANDARD</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0550 10140</td>
<td>FENCING, TYPE A, 7.1-8.0', STANDARD</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0550 10150</td>
<td>FENCING, TYPE A, 8.1-10.0', STANDARD</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0550 10210</td>
<td>FENCING, TYPE B, 0.0-5.0', STANDARD FEATURES</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0550 10212</td>
<td>FENCING, TYPE B, 0.5-5.0, W/ VINYL COATING</td>
<td>LF</td>
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<td>1/1/2010</td>
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<td>0550 10218</td>
<td>FENCING, TYPE B, 0.0-5.0', RESET EXISTING</td>
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<td>1/1/2010</td>
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<tr>
<td>0550 10220</td>
<td>FENCING, TYPE B, 5.1-6.0, STANDARD</td>
<td>LF</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0550 10221</td>
<td>FENCING, TYPE B, 5.1-6.0, W/ BARB WIRE ATTMT</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0550 10222</td>
<td>FENCING, TYPE B, 5.1-6.0, W/ VINYL COATING</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0550 10228</td>
<td>FENCING, TYPE B, 5.1-6.0, RESET EXISTING</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0550 10229</td>
<td>FENCING, TYPE B, 5.1-6.0, SPECIAL FEATURES</td>
<td>LF</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0550 10230</td>
<td>FENCING, TYPE B, 6.1-7.0', STANDARD</td>
<td>LF</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0550 10231</td>
<td>FENCING, TYPE B, 6.1-7.0, W/ BARB WIRE ATTMT</td>
<td>LF</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0550 10238</td>
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<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0550 10240</td>
<td>FENCING, TYPE B, 7.1-8.0', STANDARD</td>
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</tbody>
</table>
FENCE GATE

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>Plan</th>
<th>Quantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF</td>
<td>T</td>
<td></td>
<td></td>
<td></td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**
Fence to be installed in accordance with standards, Index Nos. 800-812.

Special: Tech Spec and/or plan details required to specify materials, installation, and payment. Do not use "special" item for type A, B, or R fencing.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**
- Required: SBFN; SBFence; SBFNTA; SBFenceA; SBFNTB; SBFenceB: Summary of 550-10-ABC
- Recommended: Refer to Comp Book

**Documentation**
- Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
**Construction**  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**  PPM Chapter

**Other**

**Standards**  Indexes 800, 801, 802, 803, 810, 811, 812

**Specifications**  Section 550

Selected Items may require Plan Details and/or Technical Specifications

---

**Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):** 0200  Roadway

---

**Status**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>550-60-ABC</th>
<th>FENCE GATE</th>
<th>EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = Type</td>
<td>1 (Type A)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 (Type B)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9 (Special) *Not Type A or B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B = Type</td>
<td>1 (Single)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 (Double)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 (Sliding / Cantilever)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C = Size of Opening</td>
<td>1 (0-6.0' Opening)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 (6.1-12.0' Opening)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 (12.1-18.0' Opening)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 (18.1-20.0' Opening)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 (20.1-24.0' Opening)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 (24.1-30.0' Opening)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>7 (Greater than 30' Opening)</td>
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**Notes**  * Special may require Tech Spec and/or Plan Detail

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0550 60111</td>
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<tr>
<td>0550 60112</td>
<td>FENCE GATE, TYPE A, SINGLE, 6.1-12.0' OPENING</td>
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<tr>
<td>0550 60122</td>
<td>FENCE GATE, TYPE A, DOUBLE, 6.1-12.0' OPENING</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0550 60123</td>
<td>FENCE GATE, TYPE A, DOUBLE, 12.1-18.0' OPENING</td>
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<td>1/1/2010</td>
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<tr>
<td>0550 60124</td>
<td>FENCE GATE, TYPE A, DOUBLE, 18.1-20.0' OPENING</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0550 60125</td>
<td>FENCE GATE, TYPE A, DOUBLE, 20.1-24.0’ OPENING</td>
<td>EA</td>
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<tr>
<td>0550 60126</td>
<td>FENCE GATE, TYPE A, DOUBLE, 24.1-30.0’ OPENING</td>
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<td>1/1/2010</td>
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<tr>
<td>0550 60127</td>
<td>FENCE GATE, TYPE A, DOUBLE, GREATER THAN 30’ OPENING</td>
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</table>
**DIRECTIONAL BORE**

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
<td>Payment will include work and materials, including casing, to be installed in accordance with specified method. Review alternate installation methods to determine best method for each location/crossing.</td>
</tr>
</tbody>
</table>

**Notes**
Per Specification, Bundled products in a single bore will be paid as a single bore, based on the required drill bit head or back reamer head size. Separate payment shall not be made for individual products in a bundle.

This item should be loaded into the category for which the item is used (Roadway, Lighting, Signals, etc.) The Item may appear on multiple categories, as needed.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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**Standards**

<table>
<thead>
<tr>
<th>Specifications</th>
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<tr>
<td>Section 555</td>
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**Prep & Doc Manual Chapter(s)**

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<tr>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>7, 13</td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):**

0200 or oth  Roadway or other- see details

**Struct.**

555- 1- A  

**DIRECTIONAL BORE**  

LF

A = Diameter Of Pipe/Conduit*

1 (Less Than 6")
2 ( 6" to <12")
3 (12" to <18")
4 (18" to <24")
5 (24" to <36")
6 (36" to <48")
7 (48" to <60")

**Notes**

Additional Ranges At 12" Increments  
*Refer to detail information when working with bundled products

---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>DIRECTIONAL BORE, LESS THAN 6&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>0555 1 2</td>
<td>DIRECTIONAL BORE, 6&quot; TO &lt; 12&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0555 1 3</td>
<td>DIRECTIONAL BORE, 12&quot; TO &lt; 18&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0555 1 4</td>
<td>DIRECTIONAL BORE, 18&quot; TO &lt; 24&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
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<tr>
<td>0555 1 5</td>
<td>DIRECTIONAL BORE, 24&quot; TO &lt; 36&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td>0555 1 6</td>
<td>DIRECTIONAL BORE, 36&quot; TO &lt; 48&quot;</td>
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<td>1/1/2010</td>
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<tr>
<td>0555 1 7</td>
<td>DIRECTIONAL BORE, 48&quot; TO &lt; 60&quot;</td>
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**556- 1- A**  

**JACK AND BORE**  

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a</td>
<td>no</td>
</tr>
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</table>

**Details and Structure:** Items 500 to 599
Payment will include work and materials, including casing, to be installed in accordance with specified method. Review alternate installation methods to determine best method for each location/crossing.

This item should be loaded into the category for which the item is used (Roadway, Lighting, Signals, etc.) The Item may appear on multiple categories, as needed.

### Related Items

**Required**

556-1-xaa, 557-1-xxa

**Recommended**

556-1-xaa, 557-1-xxa

### Forms

**Design**

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

### Documentation

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### Notes

**Details**

Payment will include work and materials, including casing, to be installed in accordance with specified method. Review alternate installation methods to determine best method for each location/crossing.

This item should be loaded into the category for which the item is used (Roadway, Lighting, Signals, etc.) The Item may appear on multiple categories, as needed.

### Standards

**PPM Chapter**

Design

**Construction**

Refer to Comp Book

### References

**PPM Chapter**

Design

**Construction**

Refer to Comp Book

### Prep & Doc Manual Chapter(s)

7, 13

### TRNS*PORT Category (DRAFT FIELD):

0200 or oth Roadway or other- see details

### Status

**Struct. 556-1-A**

JACK AND BORE

**Unit LF**

**AA = Diameter Of Casing**

1 (<6")

2 (6" to < 12")

3 (12" to < 18")

4 (18" to < 24")

5 (24" to < 36")

6 (36" to < 48")

7 (48" to < 60")

8 (60" to < 72")

9 (72" to < 84")

10 (84" to < 96")

11 (96" to < 108")

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0556 1 1</td>
<td>JACK AND BORE, CASING DIAMETER &lt;6&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0556 1 2</td>
<td>JACK AND BORE, CASING DIAMETER 6&quot;TO&lt;12&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0556 1 3</td>
<td>JACK AND BORE, CASING DIAMETER 12&quot;TO&lt;18&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0556 1 4</td>
<td>JACK AND BORE, CASING DIAMETER 18&quot;TO&lt;24&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Details and Structure:** Items 500 to 599
### JACK AND BORE, CASING DIAMETER

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>24&quot; TO &lt;36&quot;</td>
<td>LF</td>
<td>Linear Foot; 10th of a Meter</td>
</tr>
<tr>
<td>36&quot; TO &lt;48&quot;</td>
<td>LF</td>
<td>Linear Foot; 10th of a Meter</td>
</tr>
<tr>
<td>48&quot; TO &lt;60&quot;</td>
<td>LF</td>
<td>Linear Foot; 10th of a Meter</td>
</tr>
<tr>
<td>60&quot; TO &lt;72&quot;</td>
<td>LF</td>
<td>Linear Foot; 10th of a Meter</td>
</tr>
<tr>
<td>72&quot; TO &lt;84&quot;</td>
<td>LF</td>
<td>Linear Foot; 10th of a Meter</td>
</tr>
<tr>
<td>84&quot; TO &lt;96&quot;</td>
<td>LF</td>
<td>Linear Foot; 10th of a Meter</td>
</tr>
<tr>
<td>96&quot; TO &lt;108&quot;</td>
<td>LF</td>
<td>Linear Foot; 10th of a Meter</td>
</tr>
</tbody>
</table>

#### VIBRATORY PLOWING

**Unit**: LF; M1

**Accuracy**: Linear Foot; 10th of a Meter

**Plan Quantity?**: no

**Notes**: Effective January 03: Payment will include work and materials, including casing, to be installed in accordance with specified method. Review alternate installation methods to determine best method for each location/crossing.

This item should be loaded into the category for which the item is used (Roadway, Lighting, Signals, etc.) The Item may appear on multiple categories, as needed.

**Related Items**

**Required**: 556-1-xaa, 557-1-xaa

**Recommended**: 556-1-xaa, 557-1-xxa

**Forms**

**Design**: SHTabQuant: Tabulation of Quantities Sheet

**Construction**

- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**: Section 557
- **Prep & Doc Manual Chapter(s)**: 7, 13

---

**TRNS*PORT Category (DRAFT FIELD)**: 0200 or oth Roadway or other- see details

**Status**

**Struct.**: 557-1-A

**VIBRATORY PLOWING**: LF

- **A = Diameter Of Casing**
  - 1 ( < 6")
  - 2 ( 6" to < 12")
  - 3 (12" to < 18")

**Notes**

------------------------------------------------------------------------------------------------------------------
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 560- 1- PAINTING STRUCTURAL STEEL- REHAB

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/TN; LS/MT</th>
<th>Accuracy</th>
<th>Lump Sum (Ton); Lump</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>Intended for rehabilitation projects. For new bridges, the cost of painting is included in the cost of the structural steel. Do not include quantities in the plans. The weight of the steel to be painted is for estimating purposes only.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Related Items**

**Forms**

- **Design**: SHTabQuantLS: LS Tabulation of Quantities
- **Construction**: COMP 700-050-05: Lump Sum Quantities

**Documentation**

- **Design**: Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.
- **Construction**: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- **PPM Chapter**: 6, 7, 13
- **Other**: Refer to Comp Book

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0100 Structures

**Status**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0560</td>
<td>PAINTING STRUCTURAL STEEL</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 561-???- PROPOSED- REHAB PAINTING OF STRUCTURAL STEEL

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
<td>New pay items and specifications expected for July 2010 letting.</td>
<td></td>
</tr>
<tr>
<td>Details</td>
<td>For Remove/Coating systems, refer to specifications.</td>
<td></td>
</tr>
<tr>
<td>Related Items</td>
<td>Required</td>
<td></td>
</tr>
<tr>
<td>Forms</td>
<td>Design</td>
<td></td>
</tr>
</tbody>
</table>

**Details**

**Related Items**

**Forms**

**Documentation**

**References**

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0100 Structures
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>563- A</td>
<td>ANTI-GRAFFITI COATING</td>
<td>SF; M2</td>
<td>10th of a Square Meter</td>
<td>Pending specification change for July 2008: Measurement to be made by plan quantity. Coordinate the use of this item with District Maintenance Office. Consists of furnishing and applying anti-graffiti coating to the surfaces indicated in the plans. The work also includes surface preparations prior to application of the coating. All coatings are to be clear, unless otherwise specified in the plans, or approved by the Engineer. Pay Item specifies whether material is sacrificial or non-sacrificial. Measurement is based on the projected area of the wall (height x length) or surface, with no additional allowance for surface texture. For projects let before 7/2008, measurement/payment will be based on measured area, as indicated above. For projects let 7/2008 and later, measurement will be based on plan quantity, as indicated above.</td>
</tr>
</tbody>
</table>

**Details**
- Refer to Comp Book
- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Status

Struct.  563- A ANTI-GRAFFITI COATING SF

A =
3 (Sacrificial)
4 (Non – Sacrificial)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0563 3</td>
<td>ANTI-GRAFFITI COATING, SACRIFICAL</td>
<td>SF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0563 4</td>
<td>ANTI-GRAFFITI COATING, NON-SACRIFICAL</td>
<td>SF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

570- 1- A PERFORMANCE TURF

Unit SY; M2

Accuracy Square Yard; Square Meter

PlanQuantity? Yes

Effective July 2010, Mowing is paid separately. Refer to Estimates/Roadway Design Bulletin and specifications Section 107 for details.

Consists of establishing a stand of grass on slopes, shoulders, or other areas by seeding (includes seeding, seeding & mulching, hydroseeding, bonded fiber matrix, or any combination), or sodding, in accordance with Section 570.

Coordinate the use of this item with Sections 104, 107, and 580.

Through June 2010 lettings: This item includes the mowing of all areas, including undisturbed areas, within the project limits, as noted in the plans. DO NOT use item 104-4 when this item is used. Payment for all mowing is incidental to the turf payment.

Effective July 2010 letting: Litter Removal and Mowing are paid separately under Section 107.

Per Section 570 specification, the Statewide Disputes Review Board specifications must be included on projects with this item.

Related Items

Required Design

Recommended SHTabQuant: Tabulation of Quantities Sheet

Forms

Construction Refer to Comp Book

Documentation Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter Other

Standards Specifications Section 570
**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct. 570-1- A PERFORMANCE TURF SY**

- A = Type
- 1 *(leave secondary description blank- Contractor's Option*
- 2 (Sod)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0570 1 1 PERFORMANCE TURF</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0570 1 2 PERFORMANCE TURF, SOD</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**571-1-AB PLASTIC EROSION MAT**

- **Unit**: SY; M2
- **Accuracy**: Square Yard; Square Meter
- **PlanQuantity?**: no

**Notes**

Geosynthetic rolled erosion control product that retains soil, moisture, and seed; promotes vegetative growth while preventing erosion in ditches, channels, and spillways. to be used where conditions prevent vegetation that lasts past a single growing season.

Design standard 199 lists standard criteria/material properties. Plans/Specs need to detail installation requirements and compensation.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

- **Design**: SHTabQuant: Tabulation of Quantities Sheet

**Recommended**

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Other**
- **Standards**: Index No. 199
- **Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct. 571-1- AB PLASTIC EROSION MAT SY**

- A =Application

**Details and Structure**: Items 500 to 599
1 (TRM) “Turf Reinforcement Mat”

B = Type
1 (Type 1)
2 (Type 2)
3 (Type 3)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0571 1 11</td>
<td>PLASTIC EROSION MAT, TURF REINFORCED MAT, TYPE 1</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0571 1 12</td>
<td>PLASTIC EROSION MAT, TRM, TYPE 2</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0571 1 13</td>
<td>PLASTIC EROSION MAT, TURF REINFORCED MAT, TYPE 3</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

580- 1- A LANDSCAPE COMPLETE

Unit LS/LS Accuracy Lump Sum PlanQuantity? yes

Notes

Details

This item is for the complete installation of plants, in accordance with Specification Section 580, including all incidental work. The designer should coordinate plan details with installation requirements shown in the specifications.

Through June 2010: Mowing included as part of the landscape work will be identified in the contract documents. If mowing is required outside of the landscape areas, use pay item 104-4, unless 570-1-A is included.

July 2010 and later: Mowing included as part of the landscape work will be identified in the contract documents. If mowing is required outside of the landscape areas, use pay item 107-2.

Small plants includes all ground covers, shrubs to less than 7 gallon, trees to less than 7 gallon, palms clustering type less than 6 foot overall height, cycads to less than 7 gallon. Incidental, as shown in the landscaping plans, should be included on the tabulation sheet for payment along with small plans.

Large plants include shrubs 7 gallon or greater, trees 7 gallon or greater, all palms single trunk, palms clustering type 6 foot overall height and greater, cycads 7 gallon or greater, all Sabal palms (aka Sabal palmetto, cabbage palm, state tree)

Refer to the latest edition of the Florida Grades and Standards for Nursery Plants for classification. All plants must be detailed in the plans in accordance with Volume 2, Chapter 26 of the PPM. See also PPM Vol 1, Chapter 9.

The computation book will use form 70-050-05 Lump Sum Quantities. On the form, refer to the plans tabulation sheet for calculations; do not repeat tabulation sheet information on the comp book form.

All 580 and 590 items must be loaded in TRNS*PORT Category 0600. If there are only a few items, they may be shown in roadway plans, but tabulated with "Summary of Landscape Pay Items" in Category 0600.

Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SBTBLD: Tabulation of Quantities- Landscape</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
<td></td>
</tr>
</tbody>
</table>

Details and Structure: Items 500 to 599
**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

**PPM Chapter**

Vol 1, Chapter 9; Vol 2, Chapter 26

**Other**

Vol 1, Chapter 9; Vol 2, Chapter 26

**Standards**

**Specifications**

Section 580

**Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):** 0600 Landscaping

**Status**

**Struct.** 580-1- A LANDSCAPE COMPLETE LS/LS

A= Plant Size
1 (Small Plants) Includes incidental landscape work
2 (Large Plants)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0580 1 1</td>
<td>LANDSCAPE COMPLETE- SMALL PLANTS</td>
<td>LS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0580 1 2</td>
<td>LANDSCAPE COMPLETE- LARGE PLANTS</td>
<td>LS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**590-70-** IRRIGATION SYSTEM

**Unit** LS/LS  **Accuracy** Lump Sum  **Plan Quantity?** yes

**Notes**

All 580 and 590 items must be loaded in TRNS*PORT Category 0600. If there are only a few items, they may be shown in roadway plans, but tabulated with "Summary of Landscape Pay Items" in Category 0600.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**

**Required**

SBTBLD: Tabulation of Quantities- Landscape

COMP 700-050-05: Lump Sum Quantities

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

**PPM Chapter**

**Other**
Standards
Specifications

Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0600 Landscaping

Status
Struct. 590-70- IRRIGATION SYSTEM LS/LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0590 70</td>
<td>IRRIGATION SYSTEM</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
### 604- 3- A TIMING IMPLEMENTATION

<table>
<thead>
<tr>
<th>Unit</th>
<th>PI</th>
<th>Accuracy</th>
<th>Per Intersection</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
<td>Contact the State Traffic Ops office prior to using this item. BOE Details needed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Details</td>
<td>This pay item is for traffic signals and traffic control devices only.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Related Items</td>
<td>Required</td>
<td>Recommended</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**
- **Contact the State Traffic Ops office prior to using this item. BOE Details needed.**
- This pay item is for traffic signals and traffic control devices only.
- **Required**
- **Recommended**

**Design**
- Refer to Comp Book

**Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.**

**Record final quantity on the tabulation sheet (plans) or computation form (comp book).**

**PPM Chapter**
- Design
- Construction

**Prep & Doc Manual Chapter(s)**
- 7, 13

**TRNS*PORT Category (DRAFT FIELD):**
- 0500 Signalization

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0604 3 1</td>
<td>TIMING IMPLEMENTATION, CONTROLLER</td>
<td>PI</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0604 3 2</td>
<td>TIMING IMPLEMENTATION, CONTROLLER &amp; COORDINATION UNIT</td>
<td>PI</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0604 3 3</td>
<td>TIMING IMPLEMENTATION, MASTER CLOCK UNIT</td>
<td>PI</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 630- 1- AB SIGNALS- CONDUIT

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 10th of a Meter</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
<td>This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Details</td>
<td>Use 'Underground' in locations where the placement of the conduit will not necessitate saw-cutting of pavement. Most conduit placed on new construction projects will be placed underground prior to the placement of pavement, and should be paid for as 'Underground.' 'Underpavement' should be used when it is necessary to saw-cut and backfill the</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
pavement in order to place the conduit, i.e. EXISTING PAVEMENT.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

### Construction

- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### Standards

- **Index No.**: 17721
- **Specifications**: Section 630, Min Specs: Section A630

### References

- **PPM Chapter**
- **Other**: Normally requires SHOP DRAWINGS for Items 630-11 thru 630-22
- **Specifications**: Section 630
- **Prep & Doc Manual Chapter(s)**: 6, 7, 13

### TRNS*PORT Category (DRAFT FIELD): 0500 Signalization

### Status

**Struct. 630-1-AB**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0630 1 11</td>
<td>CONDUIT - SIGNALS, FURNISH &amp; INSTALL, ABOVEGROUND</td>
<td>LF</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>0630 1 12</td>
<td>CONDUIT - SIGNALS, FURNISH &amp; INSTALL, UNDERGROUND</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0630 1 13</td>
<td>CONDUIT - SIGNALS, FURNISH &amp; INSTALL, SAWCUT &amp; PLACE UNDER EXISTING PAVEMENT</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0630 1 14</td>
<td>CONDUIT, SIGNALS, F &amp; I, UNDERGROUND - JACKED</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0630 1 15</td>
<td>CONDUIT, SIGNALS, F &amp; I, BRIDGE MOUNT</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
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</tr>
<tr>
<td>0630 1 24</td>
<td>CONDUIT - SIGNALS, FURNISH &amp; INSTALL, UNDERGROUND-JACKED</td>
<td>LF</td>
<td>1/1/2010</td>
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### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Unit

<table>
<thead>
<tr>
<th>632-6-A</th>
<th>SIGNALS- CABLE OUTSIDE OF INTERSECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>LF; M1</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Linear Foot; 10th of a Meter</td>
</tr>
<tr>
<td><strong>PlanQuantity?</strong></td>
<td>no</td>
</tr>
</tbody>
</table>

Details and Structure: Items 600 to 699
This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

Use for runs to flashing beacon, signs, etc. beyond the normal limits of the intersection. Includes cable, support wire, cable ties, cable clamps, lashing wire, terminal connectors and cable grounding. Use item 632-7- (2632-7-) for cable within the intersection.

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

Normally requires SHOP DRAWINGS

Index No. 17727

Min Specs: Section A632

Prep & Doc Manual Chapter(s) 7, 13

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0632 6 1</td>
<td>CABLE - SIGNAL, FURNISH &amp; INSTALL</td>
<td>LF</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>0632 6 3</td>
<td>CABLE - SIGNAL, INSTALL</td>
<td>LF</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

Includes cable, support wire, cable ties, cable clamps, lashing wire, terminal connectors and cable grounding, within the normal limits of the intersection. Consider 632-6- (2632-6-) for runs outside the limits of the intersection.

SHTabQuant: Tabulation of Quantities Sheet
**Construction**  Refer to Comp Book

**Design**  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Other**  Normally requires SHOP DRAWINGS

**Standards**  Index No. 17727

**Specifications**  Section 632

**Min Specs**  Section A632

**Prep & Doc Manual Chapter(s)**  6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**  0500  Signalization

**Status**

**Struct.**  632- 7- A  SIGNALS- CABLE WITHIN INTERSECTION  PI

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Adjust)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0632 7 1</td>
<td>CABLE, SIGNAL, FURNISH &amp; INSTALL</td>
<td>PI</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0632 7 4</td>
<td>CABLE SIGNAL, ADJUST</td>
<td>PI</td>
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<td>1/1/2010</td>
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</tbody>
</table>

**632- 8-ABC  SIGNALS- INTERCONNECT CABLE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Details  This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

INSTALL: To be used ONLY when the item is to be furnished by the Department or other maintaining agency. Plans or specs should clearly identify the item(s) to be installed, pick-up/delivery instructions, as well as installation instructions. Payment includes any incidentals necessary (furnished by the Contractor) for a complete installation.

RELOCATE: Plans or specs should clearly identify the item and initial/final locations. As needed, detail incidental items to be furnished by the Contractor for a complete installation. Clearly identify conditions under which item replacement (damaged by contractor) is needed.

**Related Items**

- **Required**

**Forms**

- **Design**  SHTabQuant: Tabulation of Quantities Sheet
**Construction**

Refer to Comp Book

**Documentation**

Design

Locate in plans. Summarize quantities by location on tabulation of
quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form
(comp book).

**References**

PPM Chapter

Other

Normally requires SHOP DRAWINGS for Items 632- 8-111 thru 632- 8-
131, 632- 8-211 thru 632-8-222, and 632- 8-311 thru 632- 8-422

**Standards**

Index No. 17733

**Specifications**

Section 632

Min Specs: Section A632

**Prep & Doc Manual Chapter(s)** 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

**Status**

**Struct.** 632- 8-ABC SIGNALS- INTERCONNECT CABLE LF

A = Number Of Pairs
1 (to Be Determined By Contractor)
2 ( 1- 25)
3 ( 26- 50)
4 ( 51-100)
5 (101-150)

B = Operation
1 (Furnish & Install)
3 (Install)
4 (Relocate) A=1, C=0
For remove, see item 690-91

C = Type Of Interconnect Cable Installation
0 used for relocate item; details in plans
1 (Aerial)
2 (Underground)

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0632 8112</td>
<td>CABLE, INTERCONNECT, PAIRS - DETERMINED BY CONTRACTOR, F&amp;I, UNDER GROUND</td>
<td>LF</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0632 8131</td>
<td>CABLE, INTERCONNECT, PAIRS - DETERMINED BY CONTRACTOR, INSTALL, AERIAL</td>
<td>LF</td>
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<td>1/1/2010</td>
<td></td>
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<tr>
<td>0632 8140</td>
<td>CABLE, INTERCONNECT, PAIRS - DETERMINED BY CONTRACTOR, RELOCATE</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0632 8211</td>
<td>CABLE, INTERCONNECT, 1- 25, F&amp;I, AERIAL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0632 8212</td>
<td>CABLE, INTERCONNECT, 1-25 PAIRS, F&amp;I, UNDERGROUND</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0632 8231</td>
<td>CABLE, INTERCONNECT, 1-25 PAIRS, INSTALL, AERIAL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
633- 1-ABC  SIGNALS- FIBER OPTIC CABLE

Unit LF; M1  Accuracy Linear Foot; 10th of a Meter  PlanQuantity? no

Notes New items for Signals use, pending spec approval.

Details For use in fiber optic networks that support ITS devices and their connection to communication hubs, transportation management centers, and related facilities. Use "overhead" for installations involving bridges and other aboveground structures. Use "underground" for cable placed in buried conduit along the roadside.

REMOVE (A=6): For cable to be removed, detail location and size of cable (approximate number of fibers) to be removed. Contractor takes ownership (remove & dispose), unless otherwise indicated in the plans or specs.

REMOVE & STOCKPILE (A=7): For cable to be removed, detail location and size of cable (approximate number of fibers) to be removed. FDOT retains ownership of cable. Detail in plans location for stockpile, i.e. Maintenance yard.

Related Items  Required  Recommended
Forms Design  SHTabQuant: Tabulation of Quantities Sheet

Documentation  Construction  Refer to Comp Book
Construction  Design  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References  PPM Chapter Vol 1, Chapter 7
Other Standards Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization

New items for Signals use, pending spec approval.

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
6 (Remove) BC=00
7 (Remove and Stockpile) BC=00

B= Location
1 (Overhead)
2 (Underground)

C= Number of Fibers in Cable
1 (2 to 12)
2 (13 to 48)
3 (49 to 96)
4 (97 to 144)

Notes *Remove item may require plan details and/or tech spec

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0633 1111</td>
<td>SIGNALS FIBER OPTIC CABLE, F&amp;I, OVERHEAD, 2-12 FIBERS</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0633 1112</td>
<td>SIGNALS FIBER OPTIC CABLE, F&amp;I, OVERHEAD, 13-48 FIBERS</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0633 1113</td>
<td>SIGNALS FIBER OPTIC CABLE, F&amp;I, OVERHEAD, 49-96 FIBERS</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0633 1121</td>
<td>SIGNALS FIBER OPTIC CABLE, F&amp;I, UNDERGROUND, 2-12 FIBERS</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0633 1122</td>
<td>SIGNALS FIBER OPTIC CABLE, F&amp;I, UNDERGROUND, 13-48 FIBERS</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0633 1123</td>
<td>SIGNALS FIBER OPTIC CABLE, F&amp;I, UNDERGROUND, 49-96 FIBERS</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0633 1600</td>
<td>SIGNALS FIBER OPTIC CABLE, REMOVE</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

**633- 2- AB SIGNALS- FIBER OPTIC CONNECTION**

**Unit** EA  **Accuracy** Each  **PlanQuantity?** no

**Details**
New items for Signals use, pending spec approval.

For use in fiber optic networks where segments of fiber optic cable must be spliced together, or when cables must be terminated at the end of a segment. Note that each connection involves the fusing of individual optical fibers in a cable. Payment "each" is for each FIBER to be connected.

Type of connection must be noted in the plans.

**Related Items**

**Required**  **Recommended**  783-3

**Forms**

**Design** SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

**Design** Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Other
Standards
Specifications

Details and Structure: Items 600 to 699  Page 7 of 67
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):  0500  Signalization

Status

Struct.  633-  2- AB  SIGNALS- FIBER OPTIC CONNECTION  EA

New items for Signals use, pending spec approval.
A= Operation
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
B= Type
1 (Splice)
2 (Termination)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0633 2 31</td>
<td>SIGNALS- FIBER OPTIC CONNECTION, INSTALL, SPLICE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0633 2 32</td>
<td>SIGNALS- FIBER OPTIC CONNECTION, INSTALL, TERMINATION</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

633-  3- AB  SIGNALS- FIBER OPTIC CONNECTION HARDWARE

<table>
<thead>
<tr>
<th>Notes</th>
<th>New items for Signals use, pending spec approval.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>For use in fiber optic networks, where segments of cable must be spliced together. This item includes hardware and incidental materials for splices; payment for splicing individual fibers is made under 783-2.</td>
</tr>
<tr>
<td></td>
<td>For B=8 (Patch Cord), tech spec needed to describe the patch cord requirements. FO patch cords or Cat5 cables may be considered as incidental to the hardware to be installed. Ensure that the plans/specs clearly define if separate payment will be made for patch cords. Otherwise, payment will be considered as incidental to hardware being installed. When multiple cords/cables are needed, use a tabulation sheet in the plans to clearly identify the number of pairs and length of each cord/cable.</td>
</tr>
</tbody>
</table>

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tbody>
<tr>
<td>783-2</td>
<td></td>
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</table>

Forms

<table>
<thead>
<tr>
<th>Design</th>
<th>SHTabQuant: Tabulation of Quantities Sheet</th>
</tr>
</thead>
</table>

Documentation

<table>
<thead>
<tr>
<th>Design</th>
<th>Refer to Comp Book</th>
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<tbody>
<tr>
<td></td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Standards</td>
</tr>
<tr>
<td>Specifications</td>
</tr>
</tbody>
</table>

Prep & Doc Manual Chapter(s)
New items for Signals use, pending spec approval.

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

B= Component
1 (Splice Enclosure)
2 (Splice Tray)
3 (Preterminated Connector Assembly)
4 (Buffer Tube Fan Out Kit)
5 (Patch Panel, Preterminated)
6 (Patch Panel, Field Terminated)
7 (Connector Panel)
8 (Patch Cord)* Tech Spec needed; see BOE detail

* B=8: Tech Spec needed. Coordinate the use of this item with Traffic Ops Office.
Standards Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization

Status

Struct. 633-ABC- D SIGNALS- FIBER OPTIC CABLE LF

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)

B = Type Of Interconnect Cable Installation
1 (Aerial)
2 (Underground)
3 (Drop)

C = Type Of Fiber
1 (Single Mode)
2 (Multi Mode)
3 (Composite)

D = Number Of Fibers In Cable
1 (1 - 25)
2 (26 - 50)
3 (51 - 100)
4 (101 - 150)
5 (151 - 200)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>06331111 1</td>
<td>CABLE FIBER OPTIC, F&amp;I, 1-25PR, AERIAL, SINGLE</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>06331113 2</td>
<td>CABLE FIBER OPTIC, F&amp;I, 51-100PR, AERIAL, SINGLE MODE</td>
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<td>1/1/2010</td>
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<tr>
<td>06331211 1</td>
<td>CABLE - FIBER OPTIC, F&amp;I, UNDERGROUND, SGL MODE, 1-25 PR</td>
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<tr>
<td>06331212 2</td>
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<td>06331213 3</td>
<td>CABLE - FIBER OPTIC, F&amp;I, UNDERGROUND, SGL MODE, 51-100 PR</td>
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<td>06331214 4</td>
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<td>1/1/2010</td>
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<tr>
<td>Item</td>
<td>Description</td>
<td>Unit</td>
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<td>Per Intersection</td>
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<td>----------</td>
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</tr>
<tr>
<td>0633123 1</td>
<td>CABLE - FIBER OPTIC, F&amp;I, UNDERGROUND, COMPOSITE, 1-25 PR</td>
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</tr>
<tr>
<td>0633123 2</td>
<td>CABLE - FIBER OPTIC, F&amp;I, UNDERGROUND, COMPOSITE, 26-50 PR</td>
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</tr>
<tr>
<td>0633123 3</td>
<td>CABLE - FIBER OPTIC, F&amp;I, UNDERGROUND, COMPOSITE, 51-100 PR</td>
<td>LF</td>
<td>T</td>
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</tr>
<tr>
<td>0633131 1</td>
<td>CABLE FIBER OPTIC, F&amp;I, 1-25 PR, DROP, SINGLE MODE</td>
<td>LF</td>
<td>T</td>
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<td></td>
</tr>
<tr>
<td>0633131 3</td>
<td>CABLE - FIBER OPTIC, F&amp;I, DROP, SINGLE MODE, 51-100 PR</td>
<td>LF</td>
<td>T</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0633132 1</td>
<td>CABLE - FIBER OPTIC, F&amp;I, DROP, MULTI MODE, 1-25 PR</td>
<td>LF</td>
<td>T</td>
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</tr>
<tr>
<td>0633133 1</td>
<td>CABLE FIBER OPTIC, F&amp;I, DROP, COMPOSITE, 1-25</td>
<td>LF</td>
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<td></td>
</tr>
<tr>
<td>0633133 2</td>
<td>CABLE FIBER OPTIC, F&amp;I, DROP, COMPOSITE, 26-50</td>
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<td>0633422 1</td>
<td>CABLE - FIBER OPTIC, RELOCA, UNDERGROUND, MULTI MODE, 1-25 PR</td>
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<td></td>
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<tr>
<td>0633431 1</td>
<td>SIGNALS - FIBER OPTIC CABLE, RELOCA, DROP, SINGLE MODE, 1-25 PR</td>
<td>LF</td>
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<td></td>
</tr>
</tbody>
</table>

**634- 4-ABC SIGNALS- SPAN WIRE ASSEMBLY**

**Unit** | **PI** | **Accuracy** | **Per Intersection** | **PlanQuantity?** | **Notes**
---|---|---|---|---|---
Refer to Estimates Bulletin and Roadway Design Bulletin

**Related Items Forms**

**Required** | **Recommended**
---|---
Design | SHTabQuant: Tabulation of Quantities Sheet

Details and Structure: Items 600 to 699
**Construction**
Refer to Comp Book

**Documentation**
Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
PPM Chapter Vol 1, Ch 7.4.18
Other Normally requires SHOP DRAWINGS for Items 634- 4-111 thru 634- 4-311

**Standards**
Index No. 17727

**Specifications**
Section 634

**Prep & Doc Manual Chapter(s)** 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

**Struct.** 634- 4-ABC SIGNALS- SPAN WIRE ASSEMBLY PI

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) FDOT furnished
4 (Adjust)
Remove: Use item 690-80

B = Type Assembly
0 (One Wire) **5/22/08: effective date pending. 1-12-09: Not opened; see Estimates Bulletin**
1 (Two Wire) valid through 6-30-2009
2 (Three Wire) valid through 6-30-2009

B= Attachment Type
4 (Single Point) effective July 2009, or earlier
5 (Two Point) effective July 2009, or earlier

C = Type Span
1 (Perpendicular)
2 (Diagonal) see details above; flashing beacon installations only
3 (Box)
4 (Other - As Shown In Plans) Details required for approved design variances

**Notes**

---

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>0634 4141</td>
<td>SPAN WIRE ASSEMBLY, F&amp;I, SINGLE POINT, PERPENDICULAR</td>
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<tr>
<td>0634 4142</td>
<td>SPAN WIRE ASSEMBLY, F&amp;I, SINGLE POINT, DIAGONAL</td>
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<td>1/1/2010</td>
<td></td>
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<tr>
<td>0634 4143</td>
<td>SPAN WIRE ASSEMBLY, F&amp;I, SINGLE POINT, BOX</td>
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<td>1/1/2010</td>
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<tr>
<td>0634 4152</td>
<td>SPAN WIRE ASSEMBLY, F&amp;I, TWO POINT, DIAGONAL</td>
<td>PI</td>
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<td>1/1/2010</td>
<td></td>
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</tbody>
</table>
634- 5- A  SIGNALS- FIBERGLASS INSULATOR

| Unit  | LF; M1 | Accuracy          | Linear Foot; 10th of a Meter | PlanQuantity? | no |

Notes
Details
This pay item is for traffic signals and traffic control devices only.
Fiberglass Insulators are to be used on span wires located within 6 feet of overhead electric power lines. Detail length of each insulator in the plans.

Related Items
Forms
Required  Recommended
Design  SHTabQuant: Tabulation of Quantities Sheet

Documentation
Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Normally requires SHOP DRAWINGS

Specifications
Section 634

Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD):  0500  Signalization

Status
Details and Structure: Items 600 to 699
Struct. 634-5- A  SIGNALS- FIBERGLASS INSULATOR  LF

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>FIBERGLASS INSULATOR, FURNISH &amp; INSTALL</td>
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</table>

634-6- A  SIGNALS- MESSENGER WIRE

Unit LF; M1  Accuracy Linear Foot; 10th of a Meter  PlanQuantity? no

Notes

Details  This pay item is for traffic signals and traffic control devices only.
Related Items  Required Recommended
Forms  Design  SHTabQuant: Tabulation of Quantities Sheet

Documentation

Construction  Refer to Comp Book
Design  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References  PPM Chapter
Other  Normally requires SHOP DRAWINGS
Specifications

PPM Chapter

Index No. 17356, 17727

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500  Signalization

Status

Struct. 634-6- A  SIGNALS- MESSENGER WIRE  LF

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<td>MESSENGER WIRE, F&amp;I</td>
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<td>1/1/2010</td>
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</tbody>
</table>

634-7-  SIGNALS- CABLE, ADJUST
**Unit** EA  **Accuracy** Each  **PlanQuantity?** no

### Notes

This pay item is for traffic signals and traffic control devices only.

Tech Spec or Plan details to clearly define necessary adjustments to existing span wire assembly. DO NOT USE this item for Maintenance of Traffic adjustments. (Adjustment of new assemblies is incidental to the furnish/install item.)

### Details

#### Related Items

<table>
<thead>
<tr>
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#### Forms

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#### References

PPM Chapter

Other Standards Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

**Status**

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### Notes

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<th>Unit</th>
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<th>PlanQuantity?</th>
<th>Notes</th>
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<tr>
<td>635-1-AB</td>
<td>SIGNALS- PULL &amp; JUNCTION BOXES</td>
<td>EA</td>
<td>Each</td>
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</tbody>
</table>

This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

NOT TO BE USED FOR ITS Projects. Refer to 780 items.

Use in accordance with Section 635 of the specifications. For Special sizes, detail in the plans or specifications.

Install (A=3): Item furnished by maintaining agency. Plan details required to inform contractor how to obtain pull & junction box. Include Agency name, contact name & number, storage location, and/or delivery instructions (agency delivery or contractor pickup).

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of measurement are provided.
payment are available in the contract documents to clearly define the work to be
completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
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<th>Recommended</th>
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<tr>
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<td>Index No. 17500, 17503, 17733</td>
<td>Normally requires SHOP DRAWINGS for Items 635- 1- 11 thru 635- 1- 23, and 635- 1- 34</td>
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<tr>
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</table>

| Selected Items may require Plan Details and/or Technical Specifications |

| Prep & Doc Manual Chapter(s) | 7, 13 |

| TRNS*PORT Category (DRAFT FIELD): | 0500 Signalization |

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<tr>
<td>635- 1- AB</td>
<td>EA</td>
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</tbody>
</table>

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) B=0
B = Type Of Box
1 (Pull Box)
2 (Aerial Junction Box)
3 (Mounted Junction Box)
5 (Fiber Optics)
6 (Special)*

Notes
* Special may require Tech Spec and/or Plan Detail

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<td>1/1/2010</td>
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<tr>
<td>0635 1 12</td>
<td>PULL &amp; JUNCTION BOXES, F&amp;I, AERIAL JUNCTION BOX</td>
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<td>0635 1 13</td>
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<td>0635 1 15</td>
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<td>0635 1 16</td>
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<td>0635 1 30</td>
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<td>1/1/2010</td>
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</table>

| 639- 1- AB | SIGNALS- ELECTRICAL POWER SERVICE |

Details and Structure: Items 600 to 699
This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

### Required Forms
- **Design**: SHTabQuant: Tabulation of Quantities Sheet

### Documentation
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References
- **PPM Chapter**: Standards
- **Index No.**: 17736
- **Specifications**: Section 639
- **Min Specs**: Section A639

### TRNS*PORT Category (DRAFT FIELD): 0500 Signalization

### Status
- **Struct.** 639-1-AB

#### Notes
- **A** = Type Of Service
  - 1 (Overhead)
  - 2 (Underground)
- **B** = Meter Base
  - 1 (Furnished By Power Company)
  - 2 (Purchased By Contractor From Power Company)
  - 3 (Not Required)

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<td>1/1/2010</td>
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<tr>
<td>0639 1 12</td>
<td>SIGNALS, ELECTRICAL POWER SERVICE, OVERHEAD, METER FURNISHED BY CONTRACTOR</td>
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<tr>
<td>0639 1 13</td>
<td>SIGNALS, ELECTRICAL POWER SERVICE, OVERHEAD</td>
<td>AS</td>
<td>1/1/2010</td>
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<tr>
<td>0639 1 21</td>
<td>SIGNALS, ELECTRICAL POWER SERVICE, UNDERGROUND, METER FURNISHED BY POWER COMPANY</td>
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<td>0639 1 22</td>
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<td>1/1/2010</td>
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</tbody>
</table>
### 639-2- A  SIGNALS- ELECTRICAL SERVICE WIRE

| Unit | LF; M1 | Accuracy | Linear Foot; 10th of a Meter | PlanQuantity? | no |

**Notes**
- This pay item is for traffic signals and traffic control devices only.
- Payment shall be based on the linear foot (meter) of a single conductor. Refer to Specifications.

**Related Items**
- **Required**
  - Design
- **Recommended**
  - SHTabQuant: Tabulation of Quantities Sheet

**Forms**
- **Construction**
  - Refer to Comp Book
- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - Construction
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**
- **Other**
- **Standards**
  - Specifications
    - Section 639
    - Min Specs: Section A639

**Prep & Doc Manual Chapter(s)**
- 7, 13

**TRNS**PORT Category (DRAFT FIELD): 0500 Signalization

**Status**
- Struct. 639-2- A SIGNALS- ELECTRICAL SERVICE WIRE LF
  - A = Operation
  - 1 (Furnish & Install)
  - 2 (Furnish)
  - 3 (Install)

**Notes**

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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</table>

### 639-3- AB  SIGNALS- ELECTRICAL SERVICE DISCONNECT

| Unit | EA; AS | Accuracy | Each; Assembly | PlanQuantity? | no |

**Notes**
- This pay item is for traffic signals and traffic control devices only.

**Related Items**
- **Required**
- **Recommended**

**Forms**
- Design
  - SHTabQuant: Tabulation of Quantities Sheet
Standards

Index No. 17736

Specifications

Section 639
Min Specs: Section A639

Prep & Doc Manual Chapter(s): 7, 13

Stand. 639-3-AB SIGNALS- ELECTRICAL SERVICE DISCONNECT EA; AS

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
B = Type Mount
1 (Pole)
2 (Cabinet)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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</table>

639-4-A SIGNALS- EMERGENCY GENERATOR

Unit Mixed Accuracy Refer to item structure and details PlanQuantity? no

Notes Selected items are for Emergency / Pre-Event contract use only.

Details This pay item is for traffic signals and traffic control devices only.

FURNISH & INSTALL: COORDINATE THE USE OF THIS ITEM WITH THE STATE TRAFFIC OPERATIONS OFFICE. Tech Spec needs to address several issues related to the generator: Size, capacity, mounting, maintenance, and security.

*** Generators cannot be furnished to the maintenance yard or maintaining agency using construction funds.***

If Generator is to be installed at the signals location, maintenance agreements should be completed with maintaining agency. Installation details should address securing generator to minimize potential theft.

Install: For Pre-Event or Emergency contracts, coordinate the use of this item with the District Maintenance Office, to ensure the availability of generators. Tech Spec should detail security of generator and instructions for returning unit to FDOT maintenance yard.
Retrofit: Signalized location has been retrofit to accept generator connection.

Not Retrofit: Signalized location has NOT been retrofit to accept generator connection; contractor must complete the retrofit prior to generator installation. Payment for retrofit operation is included in the payment for installing generator.

Monitor & Refuel: Tech Specs should detail monitoring requirements. Fuel to be included in payment for hourly rate. (No separate payment for fuel.)

Install Generator Housing (Item furnished by maintaining agency): Details or Tech Spec should indicate that the contractor is to coordinate with the maintaining agency for pick-up/delivery of the housing to the project site. Contractor will install housing. Details or specs should indicate approximate housing dimensions, and whether a foundation/pad (included in this item for payment) is necessary.

Related Items

<table>
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<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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<tr>
<td>Documentation</td>
<td>Design</td>
<td>Refer to Comp Book</td>
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<td>Construction</td>
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<tr>
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<tr>
<td>Related Items</td>
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TRNS*PORT Category (DRAFT FIELD): 0500 Signalization

Status

Struct. 639- 4- A SIGNALS- EMERGENCY GENERATOR Mixed

A = Operation
1 (Furnish & Install) Blocked 8-10-08
3 (Install - Retrofit; FDOT furnished) EA; For Emergency /Pre-Event contracts only. Signalized location HAS BEEN RETROFIT to accept generator connection.
4 (Install - Not Retrofit; FDOT furnished) EA; For Emergency /Pre-Event contracts only. Signalized location HAS NOT BEEN RETROFIT to accept generator connection.
5 (Monitor and Refuel) HR; For Emergency /Pre-Event contracts only
6 (Install Generator Housing only) EA; housing furnished by maintaining agency.

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Basis of Estimates

**2010 Edition**

**December 28, 2009**

### Item Description

<table>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0639 4 3</td>
<td><strong>EMERGENCY GENERATOR - SIGNALS USE ONLY, INSTALL- RETROFIT; FDOT FURNISHED</strong></td>
<td>EA</td>
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---

### 641-1- SIGNALS- STRAIN POLES, GUYING, CONCRETE

**Unit** EA  
**Accuracy** Each  
**PlanQuantity?** no

**Notes**
This pay item is for traffic signals and traffic control devices only.

**Related Items**
- Required
- Recommended

**Forms**
- Design: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**
- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**
- **Other**
- **Standards**: Index No. 17725
- **Specifications**: Section 641
- **Prep & Doc Manual Chapter(s)** 7, 13

**TRNS^PORT Category (DRAFT FIELD):** 0500 Signalization

---

### Status

**Struct.** 641-1- SIGNALS- STRAIN POLES, GUYING, CONCRETE EA

---

**Notes**

---

### Item Description

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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>0641 1</td>
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<td>EA</td>
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---

### 641-2- AB PRESTRESSED CONCRETE POLES

**Unit** EA  
**Accuracy** Each  
**PlanQuantity?** no

**Notes**
This pay item is for traffic signals and traffic control devices only. Pole description, including the type, height, and other details must be included in the signal plans. to be used as detailed on index 17725. Poles must be on QPL list.

---

**Details and Structure:** Items 600 to 699
SHTabQuant: Tabulation of Quantities Sheet

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

PPM Chapter

Design

Index No. 17725

Specifications

Section 641

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) B=0

B = Pole Type (defined in Design Standards)
1 (Type P-II Pedestal)
2 (Type P-II Service Pole)
3 (Type P-III)
4 (Type P-IV)
5 (Type P-V)
6 (Type P-VI)
7 (Type P-VII)
8 (Type P-VIII)
9 (Custom Design)*

*Custom Design requires Tech Spec and/or Plan Detail

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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0641 2 19  PRESTRESSED CONCRETE POLE, F&I, CUSTOM DESIGN
0641 2 30  PRESTRESSED CONCRETE POLE, INSTALL

### 643- 1- STRAIN POLES, GUYING, WOOD

**Unit**  EA  |  **Accuracy**  Each  |  **PlanQuantity**?  no

**Notes**
This pay item is for traffic signals and traffic control devices only.

**Required**  
**Recommended**

**Forms**
Design  
SHTabQuant: Tabulation of Quantities Sheet

**Documentation**
**Construction**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**PPM Chapter**
Design  
Construction

**Other**  
Normally requires SHOP DRAWINGS

**Specifications**
Index No. 17356, 17727

**Prep & Doc Manual Chapter(s)**  
7, 13

**TRNS*PORT Category (DRAFT FIELD):**  
0500  Signalization

**Status**  

**Struct.**  

---

**Notes**  
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Item Description  Unit  TSP/Detail  Valid Date  Obsolete Date
0643 1  STRAIN POLES, GUYING, WOOD  EA  1/1/2010

### 643-ABB- STRAIN POLES, WOOD

**Unit**  EA  |  **Accuracy**  Each  |  **PlanQuantity**?  no

**Notes**  
This pay item is for traffic signals and traffic control devices only.

**Required**  
**Recommended**  
643- 1- (2643- 1)

**Forms**
Design  
SHTabQuant: Tabulation of Quantities Sheet

**Documentation**
**Construction**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).
Standards
Specifications

Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500  Signalization

Status

Struct.  643-ABB-  STRAIN POLES, WOOD  EA

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = Pole Length (Specified In 5' Increments Only)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<td>0643130</td>
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<td>0643140</td>
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<td>0643150</td>
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</tbody>
</table>

649- 1- AB  STEEL STRAIN POLES

Unit  EA  Accuracy  Each  PlanQuantity?  no

Notes

Details

This pay item is for traffic signals and traffic control devices only.
Pole description, including the type, height, and other details must be included in the signal plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required  Recommended
Design  SHTabQuant: Tabulation of Quantities Sheet

Forms

Construction  Design  Refer to Comp Book

Documentation

Design  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction  Record final quantity on the tabulation sheet (plans) or computation form
Selected Items may require Plan Details and/or Technical Specifications

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<th>Item</th>
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<td>1/1/2010</td>
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</table>

649- 1A-BBB  MONOTUBE ASSEMBLIES, STEEL

Details

This pay item is for traffic signals and traffic control devices only.

After December 2007: Design Standards are no longer available. Please contact the State Structures Office for assistance. Ensure that the maintaining agency and local authorities have agreed to the use of a monotube. Tech Specs and/or Plan Details will be required for structural size/shape, material requirements, installation details, and measurement/payment. Foundation is to be included in the price for the complete assembly.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of...
payment are available in the contract documents to clearly define the work to be completed for payment under this item.

NOT TO BE USED FOR ITS Projects. Refer to 780 items. Item used for monotube structures which carry signals. Refer to Plans Preparation Manual, Vol I Chapters 7 and 29, Vol II Chapter 24 for details. Use Monotube Tabulation Sheet (available from CADD bar menu).

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
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<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</table>

### Documentation

**Design**

Refer to Comp Book

**Construction**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### Standards

Index No. 17746 (valid through 12/2007)

### Specifications

Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

### Status

**Struct.** 649-1A-BBB MONOTUBE ASSEMBLIES, STEEL EA

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BBB =
001 (Special) see detail
002 (Special 2) see detail
003 (Special 3) see detail
110 (Standard 110’ span)
135 (Standard 135’ span)
160 (Standard 160’ span)
185 (Standard 185’ span)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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### Related Items

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### Notes

649-3A-BCC STEEL MAST ARM ASSEMBLY

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<th>PlanQuantity?</th>
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Details and Structure: Items 600 to 699
Effective January 2009: Refer to PPM (Plans Preparation Manual) Vol 1, Chapters 7 and 29 for current FDOT Policy on the use of Mast Arms: in general, only to be used within 10 miles of coastline.

This pay item is for traffic signals and traffic control devices only. Pole description, including the type, height, and other details must be included in the signal plans. Payment includes foundation, as well as all incidentals, per specifications.

When "w/ Luminaire" is used, detail luminaire requirements in the plans.

BCC=999 (Custom) to be used only when specifications and/or standards do not apply, due to significant design changes. Complete design calculations, including wind loads, are required in the plans.

Note: For minor changes in arm lengths, such as field cuts, use the standard pay item, with a note in the plans for the final length.

When street name signs are to be located on a signals mast arm, tabulate and detail the sign (size, shape, letters, etc.) in the SIGNING plans. Load the pay item in the SIGNING category. The installation location may be shown on the signal plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
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<th>Related Items</th>
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<td>Design</td>
<td>SHMastArmTab1; SHMastArmTab2: Mast Arm Tabulation Sheets</td>
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<td>Documentation</td>
<td>Design</td>
<td>Refer to Comp Book</td>
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<td>PPM Chapter</td>
<td>Vol 1, 7.4</td>
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Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization

Status

Struct. 649-3A-BCC STEEL MAST ARM ASSEMBLY EA

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BCC=000
4 (Relocate) BCC=000
B = Wind Speed
1 (150 with signal backplates)
2 (130 with signal backplates or 150 without signal backplates)
3 (110 with signal backplates)
9 (Custom) CC=99 *See details above

CC= Arm Length(s)
For Single Arm, w/o Luminaire
01 (36)
02 (46)
03 (60)
04 (70.5)
05 (78)
For Single Arm w/ Luminaire- see details above
06 (36)
07 (46)
08 (60)
09 (70.5)
For Double Arm w/o Luminaire
10 (36-36)
11 (36-46)
12 (36-60)
13 (36-70.5)
14 (46-46)
15 (46-60)
16 (46-70.5)
17 (60-60)
18 (60-70.5)
19 (70.5-70.5)
Custom/Non-Standard Arm Combinations
99= (Custom) B=9, *See details above

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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This pay item is for "permanent" traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable. For Maintenance of Traffic (MOT) activities, refer to MOT specifications, section 102.

Includes standard traffic signal, with LED indicators, and all other materials necessary for a complete and accepted installation.

Install only: Signal to be furnished by FDOT or Maintaining Agency. Plans or Specifications must provide pick-up or delivery instructions. Contractor to furnish any incidentals for a complete installation.

Relocate: Includes the removal of the signal head and installation at the location shown in the plans. Payment includes signal cable and all other materials necessary for a complete and accepted relocation. DO NOT USE this item for Maintenance of Traffic (MOT) adjustments.

Special: DO NOT Use this item for LED (standard) signals. "Special" types should be submitted to the State Traffic Ops office for review.

### Related Items

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### Forms

- **Design**: SHTabQuant: Tabulation of Quantities Sheet

### Documentation

- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**: 7, 13
- **Prep & Doc Manual Chapter(s)**: 7, 13

### TRNS*PORT Category (DRAFT FIELD): 0500 Signalization

### Status

**Struct.** 650-5A-BCD TRAFFIC SIGNAL AS

- **A** = Operation
- **B** = Number Of Sections On Each Face
- **C** = Number Of Directions
- **D** = Type

**Details and Structure:** Items 600 to 699
1 (Standard) LED indicators
2 (Light Weight)
3 (Special) see detail

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 653-ABC- PEDESTRIAN SIGNAL

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<th>Assembly</th>
<th>Plan Quantity?</th>
<th>Notes</th>
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**Required**

**Recommended**

**Forms**

**Design**

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**PPM Chapter**

Vol 1, Ch 7

**Other**

**Standards**

Index No. 17764, 17784

**Specifications**

Min Specs: Section A653

**Prep & Doc Manual Chapter(s)**

7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0500 Signalization

**Status**

653-ABC- PEDESTRIAN SIGNAL AS

Details and Structure: Items 600 to 699
A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) Items provided by local maintaining agency
4 (Relocate) BC=00
Remove: use item 690-20
B = Type Signal
1 (12" Incandescent)
2 (NEON International Symbol Low Wattage)
3 (LED)
4 (LED- Countdown) STANDARD
C = Number Of Directions (Ways)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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659-ABB- SIGNAL HEAD AUXILIARIES

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<th>Unit</th>
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<tr>
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**Notes**

Details and Structure: Items 600 to 699
This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

**Required**

- **Forms**
  - **Design** SHTabQuant: Tabulation of Quantities Sheet

**Recommended**

- **Construction**
  - Refer to Comp Book

**Recommended**

- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Related Items**

- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications** Min Specs: Section A659
- **Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

**Struct.** 659-ABB- SIGNAL HEAD AUXILIARIES EA

- **A** = Operation
- 1 (Furnish & Install)
- 2 (Furnish)
- 3 (Install)

  **Remove:** for signal pedestal, use item 690-31

- **BB** = 01 (Back Plates, 3 Section)
- 02 (Back Plates, 4 Section)
- 03 (Disconnect Hanger)
- 04 (Signal Lamps 140 Watt Max.)
- 05 (Signal Lamps 60 Watt Max.)
- 06 (Tunnel Visor)
- 07 (Aluminum Pedestal)
- 08 (Steel Pedestal)
- 09 (Concrete Pedestal, Type II)
- 10 (Louvers)
- 11 (Back Plates, 1-Section)
- 12 (Mounting Brackets, 2-Way)
- 13 (Mounting Brackets, 3-Way)
- 14 (Mounting Brackets, 4-Way)
- 15 (12" Lens)
- 16 (8" Lens)
- 17 (Signal Frame)
- 18 (Back Plates, 5-Section Cluster)
- 20 (LED Module)

**Notes**

---

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*
<table>
<thead>
<tr>
<th>Item</th>
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**660- 1-ABB LOOP DETECTOR, INDUCTIVE**

**Unit** | EA | **Accuracy** | Each | **Plan Quantity?** | no |
---|---|---|---|---|---|

**Notes**
This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

**Related Items**
**Required** | **Recommended**
---|---|
**Design** | SHTabQuant: Tabulation of Quantities Sheet

**Forms**
**Construction** | **Refer to Comp Book**
---|---|
**Design** | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction** | Record final quantity on the tabulation sheet (plans) or computation form (comp book).
---|---

Details and Structure: Items 600 to 699
**References**

PPM Chapter

Other

Standards

Specifications Min Specs: Section A660

Prep & Doc Manual Chapter(s) 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

**Status**

**Struct.** 660- 1-ABB LOOP DETECTOR, INDUCTIVE EA

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = Type
01 (Type 1, 1 Ch, R, S)
02 (Type 2, 1 Ch, R, S, TD)
03 (Type 3, 1 Ch, SS, S))
04 (Type 4, 1 Ch, SS, S, TD)
05 (Type 5, 2 Ch, SS, S)
06 (Type 6, 2 Ch, SS, S, TD)
07 (Type 7, 4 Ch, SS, S)
08 (Type 8, 4 Ch, SS, S, TD)
09 (Type 9, 2 Ch, SS, RM)
10 (Type 10, 2 Ch, SS, RM, TD)
11 (Type 11, 4 Ch, SS, RM)
12 (Type 12, 4 Ch, SS, RM, TD)

Legend
Ch = Channel
R = Relay Output
S = Shelf Mounted
TD = Time Delay
RM = Rack Mounted
SS = Solid State

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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
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Details and Structure: Items 600 to 699
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### 660-2-ABB LOOP ASSEMBLY

**Notes**

This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

Includes cost of loop material, labor, etc. according to specifications.

**Related Items**

- **Required**: Design
- **Recommended**: SHTabQuant: Tabulation of Quantities Sheet

**Forms**

- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Documentation**

- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**: Design
- **Other**: Reference
- **Standards**: Index No. 17781
- **Specifications**: Min Specs: Section A660
- **Prep & Doc Manual Chapter(s)**: 6, 7, 13

**Status**

**Struct.**: 660-2-ABB

- **A = Operation**
  - 1 (Furnish & Install)
  - 2 (Furnish)
  - 3 (Install)
- **BB = Type**
  - 01 (Type A)
  - 02 (Type B)
  - 03 (Type C)
  - 04 (Type D)
  - 05 (Type E)
  - 06 (Type F)
  - 07 (Type G)
  - 08 (Type H)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
This pay item is for traffic signals and traffic control devices only. Includes all work and materials necessary for a complete assembly, as detailed in the plans or specifications. One assembly is needed, per approach (normally 4 per intersection).

For Relocate operation, ensure that plans/specs detail removal and re-installation instructions, as well as guidance if detector is damaged or broken.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Notes**
- **Details**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Related Items**: Tabulation of Quantities Sheet
- **Forms**: Design
  - Required: SHTabQuant
  - Recommended: Tabulation of Quantities Sheet
- **Construction**: Refer to Comp Book
- **Documentation**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
  - Design
  - Construction
- Other
  - Standards
  - Specifications
  - Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

**Status**

**Struct. 663-74-AB VEHICLE DETECTOR ASSEMBLIES EA**

A = Operation
1 (Furnish & Install)
4 (Relocate)
Remove: use item 690-60

B = Assembly Type
Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 665- AB- PEDESTRIAN DETECTOR

**Unit** | EA
---|---
**Accuracy** | Each
**PlanQuantity?** | no

**Notes**

This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

Includes pedestrian signs, as shown on index 17784.

**INSTALL:** Detector and Sign to be furnished by FDOT or Maintaining agency. Plans or Specs must indicate pick-up or delivery instructions. Incidental parts to complete the installation to be furnished by the contractor.

**RELOCATE:** Ensure that plans/specs detail removal and re-installation instructions, as well as guidance if detector is damaged or broken.

**Related Items**

<table>
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<tr>
<th>Required</th>
<th>Recommended</th>
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<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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**Design**

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**PPM Chapter**

Other

Standards | Index No. 17784
Specifications | Min Specs: Section A665

Prep & Doc Manual Chapter(s) | 7, 13
**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

**Status**

**Struct. 665- AB- PEDESTRIAN DETECTOR EA**

A = Operation
1 (Furnish & Install)
3 (Install) B=0. Furnished by FDOT or Maintaining Agency
4 (Relocate) B=0 see details above
Remove: use item 690-70

B = Assembly Type
1 (Pole Or Controller Cabinet Mounted Detector Station & Sign)
2 (Detector Station With Post & Sign)
3 (Detector With Sign Only)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<td>PEDESTRIAN DETECTOR, F&amp;I, DETECTOR STATION WITH POST &amp; SIGN</td>
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<tr>
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**Struct. 668- AB- DETECTOR CABINET (SIGNALS)**

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
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</table>

**Notes**

This pay item is for traffic signals and traffic control devices only.

**Related Items**

**Required**

**Recommended**

**Forms**

Design: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

Design: Refer to Comp Book

Construction: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Other
Specifications

Prep & Doc Manual Chapter(s) 7, 13
A =
1 (Furnish & Install)
3 (Install)

B = Cabinet Size (Minimum)
1 (Type I   13" X 10" X  6")
2 (Type II  27" X 15" X 12")
3 (Type III 32" X 20" X 14")
4 (Type IV  48" X 29" X 16")
5 (Type V   54" X 38" X 24")
6 (Type Vi  74" X 38" X 24")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0668 11</td>
<td>DETECTOR CABINET, FURNISH &amp; INSTALL, TYPE I 13&quot;X10&quot;X6&quot;</td>
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<tr>
<td>0668 12</td>
<td>DETECTOR CABINET, FURNISH &amp; INSTALL, TYPE II 27&quot;X15&quot;X12&quot;</td>
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<tr>
<td>0668 16</td>
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670- 4- A  FLASHING BEACON CONTROLLER ASSEMBLY

<table>
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<tr>
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<th>AS</th>
<th>Accuracy</th>
<th>Assembly</th>
<th>PlanQuantity?</th>
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Notes

Details

This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

Related Items

Required
Design
Recommended
SHTabQuant: Tabulation of Quantities Sheet

Forms

Documentation

Construction
Refer to Comp Book

Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Other
Standards
Index No. 17841
Specifications
Min Specs: Section A670
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500  Signalization

Status

Struct.  670- 4- A  FLASHING BEACON CONTROLLER ASSEMBLY  AS

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0670 4 1</td>
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</table>

670- 5-ABC  TRAFFIC CONTROLLER ASSEMBLY

| Unit     | AS | Accuracy | Assembly | PlanQuantity? | no |
|----------|----|----------|----------|---------------|

Notes

Details

This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

For Modify, detail all work to be completed.
For Special Type, detail all components.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Forms

Required | Recommended
Design    | SHTabQuant: Tabulation of Quantities Sheet

Documentation

Construction

Refer to Comp Book

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications Min Specs: Section A670

Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s) 7, 13

Details and Structure: Items 600 to 699
**TRNS*PORT Category (DRAFT FIELD):** 0500  Signalization

**Struct. 670-5-ABC**  TRAFFIC CONTROLLER ASSEMBLY  AS

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

B = Type
1 (NEMA)
2 (170)
3 (Special)

C = Special Features
0 (None)
1 (One Preemption Plan)
2 (Two Preemption Plans)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<td>0670 5111</td>
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<tr>
<td>0670 5112</td>
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<td>0670 5120</td>
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<td>0670 5331</td>
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<td>0670 5410</td>
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<td>1/1/2010</td>
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</table>
This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

Required

Recommended

Design

SHTabQuant: Tabulation of Quantities Sheet

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

PPM Chapter

07, 13

Min Specs: Section A671

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization

Notes

Details

Struct.

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

B = Type
1 (NEMA)
2 (170)
3 (Special)
4 (2070)

Notes

Details and Structure: Items 600 to 699
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
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</table>

**678- 1-ABB CONTROLLER ACCESSORIES**

**Unit**: EA  **Accuracy**: Each  **PlanQuantity?**: no

**Notes**
This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

**Details**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Related Items**
Required  Recommended

**Forms**
Design  SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

**Design**
Refer to Comp Book

**Construction**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
PPM Chapter
Other
Standards
Specifications  Min Specs: Section A678
Prep & Doc Manual Chapter(s)  7, 13

**TRNS**PORT Category (DRAFT FIELD): 0500  Signalization

**Struct.** 678- 1-ABB  CONTROLLER ACCESSORIES  EA

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = Type Of Controller Accessory
01 (Type 3 Conflict Monitor)
02 (Type 6 Conflict Monitor)
03 (Type 12 Conflict Monitor)
04 (Load Switch)
05 (Type 1 Flasher)
06 (Type 3 Flasher)
07 (Type 1 Time Switch)
08 (Type 2 Time Switch)
09 (Type 3 Time Switch)
10 (Type 4 Time Switch)
11 (Power Reduction Assembly)
12 (Master Clock Unit)
**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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</table>

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**680-ABB- SYSTEM CONTROL EQUIPMENT**

| Unit   | EA   | Accuracy | Each | PlanQuantity? | no |

**Notes**

**Details**

This pay item is for traffic signals and traffic control devices only. Detailed plan notes or specifications to be provided by designer.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
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<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Documentation**

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

Details and Structure: Items 600 to 699
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<td>0680106</td>
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<td>0680113</td>
<td>SYSTEM CONTROL EQUIPMENT,F&amp;I, CENTRAL MICROCOMPUTER ASSEMBLY</td>
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**Forms**

- **Design**
  - SHTabQuantLS: LS Tabulation of Quantities
  - COMP 700-050-05: Lump Sum Quantities

- **Construction**
  - Refer to Comp Book

**Documentation**

- **Design**
  - Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans.

- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**

  Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0500 Signalization

**Status**

**Struct.** 681-ABB-

**SYSTEM SOFTWARE** LS/LS

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BB=00

BB = Item As Described
01 (CPU Software)
02 (UTCS Fortran Routines)
03 (UTCS Assembly Language Routines)
04 (Data Base)
05 (Control Patterns)
06 (Data Base Generator)
07 (Pattern Generator)
08 (SCS Operating Software)
09 (Motorist Aid Operating Software)
10 (Weigh In Motion Operating Software)
11 (Traffic Control System Software)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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**682-ABB-** SYSTEM DISPLAY

**Unit** EA

**Accuracy** Each

**PlanQuantity?** no

**Notes**

This pay item is for traffic signals and traffic control devices only. Refer to ITS Items for Intelligent Transportation System applications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description,
materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
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**Documents**

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**References**

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<th>Other</th>
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<tr>
<td>Standards</td>
<td>Specifications</td>
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**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

### Status

**Struct.** 682-ABB- SYSTEM DISPLAY EA

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

BB = Item As Described
01 (CRT Display)
02 (Panel Board Map)
03 (Projected Display)

**Notes**

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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**683-ABB- SYSTEM COMMUNICATIONS**

| Unit | LS/LS | Accuracy | Lump Sum | PlanQuantity? | no |
|------|-------|----------|----------|---------------|

**Notes**

**Details**

This pay item is for traffic signals and traffic control devices only.
Tabulation summary required on all projects.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

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**Details and Structure:** Items 600 to 699
COMP 700-050-05: Lump Sum Quantities

**Construction**
- Refer to Comp Book

**Documentation**
- Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans.
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
- Other

**Standards**

**Specifications**

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

**Status**

**Struct.** 683-ABB- SYSTEM COMMUNICATIONS LS/LS

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

BB= Item As Described
01 (FDM) Frequency Division Multiplexor
02 (TDM)
03 (TDM Hardware)
04 (TDM Radio)
05 (TDM Coaxial)
06 (Central Site Radio)
07 (System Communications Modems)
08 (Voice Equipment)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
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</table>

**684- AB- SYSTEM COMMUNICATIONS CARRIER**

**Unit** LF; M1
**Accuracy** Linear Foot; 10th of a Meter

**Notes**

This pay item is for traffic signals and traffic control devices only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**
- SHTabQuant: Tabulation of Quantities Sheet

**Recommended**

**Forms**

Details and Structure: Items 600 to 699

Page 51 of 67
## Details and Structure: Items 600 to 699

### Construction

Refer to Comp Book

### Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

### Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

### Status

**Struct.** 684- AB-

**SYSTEM COMMUNICATIONS CARRIER** LF

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B = Item As Described
1 (Multi-Pair Cable)
2 (Coaxial Cable)
3 (Lead Jacketed Coaxial Cable)
4 (Fiber Optic Cable)

---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

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**685-ABB-** SYSTEM AUXILIARIES

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### Notes

**Details**

This pay item is for traffic signals and traffic control devices only. NOT TO BE USED FOR ITS Projects. Refer to 780 items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
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**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

**Struct.** 685-ABB- SYSTEM AUXILIARIES EA

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = Item As Described
01 (RF Modulator)
02 (Multi-Plex Field Transceiver, Wire)
03 (Multi-Plex Field Transceiver, Radio)
04 (Data Accumulator)
05 (Master Clock Unit)
06 (Uninterruptible Power Source)
07 (Test Equipment)
08 (Equipment Cabinet, Type A)
09 (Equipment Cabinet, Type B)
10 (Equipment Cabinet, Type C)
11 (Equipment Cabinet, Type D)
12 (Bridge Continuity Sensor)
13 (Pier Vibration Detection System-Sensors)
14 (Pier Vibration Detection System-Monitor/Controller)
15 (Weather Instrumentation)
16 (Remote Site-Radio)
17 (Citizen Band-Radio)
18 (Telemetry Transmitter)
19 (Telemetry Receiver)
20 (Telemetry Transceiver)
21 (Pre-Timed Controller Adapter)
22 (2-Phase Or Full Actuated Adapter)
23 (3/Phase Thru 8-Phase Full Actuated Adapter)
24 (Universal Adapter)
25 (Standby System Relay)
26 (Standby System Timer)
27 (Telephone Connection Box)
28 (Interface Panel)
29 (Pneumatic Transport Tube Assembly)
30 (Weigh In Motion Scale Assembly)
31 (Static Scale Assembly)
32 (Public Address System Assembly)
33 (RF Demodulator)
34 (Dimensional Measurement Assembly)
36 (Low Band Vhf Radio)
37 (Line Amplifier)
38 (CCTV Camera Assembly)
39 (Fiber Optic Video Amplifier, Transmitter & Receiver)
40 (Fiber Optic, Modulator/Demodulator)
41 (Fiber Optic, Multiplexor/Demultiplexor)
42 (Video Central Control Equipment)
43 (Video Monitors)
44 (Video System Support Equipment)
55 (PLP FSK Card)
56 (FSK Modem, Interface Panel Wall)
57 (FSK Modem, Multiplexor Interface Panel)
58 (FSK Modem, Interface Panel Rack)
60 (Microwave Radar Detection Unit Assembly)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
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**Notes**

This pay item is for traffic signals and traffic control devices only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required Forms**
  - Design: SHTabQuant: Tabulation of Quantities Sheet

- **Construction Documentation**
  - Design: Refer to Comp Book
  - Construction: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

- **Plan Details and/or Technical Specifications** required

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization
Struct. 686-ABB- CLOSED CIRCUIT TELEVISION EQUIPMENT EA

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = Item As Described
01 (Camera Assembly)
02 (Monitor)
03 (Recorder)
04 (Central Controls)
05 (Camera Support)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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690- 10- TRAFFIC SIGNAL HEAD ASSEMBLY, REMOVAL

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Notes

Details

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

Related Items

Required | Recommended
Design     | SHTabQuant: Tabulation of Quantities Sheet

Forms

Construction | Refer to Comp Book
Design

Documentation

Design | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
### Structural 690-10- TRAFFIC SIGNAL HEAD ASSEMBLY, REMOVAL EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**690-20- SIGNAL PEDESTRIAN ASSEMBLY, REMOVE**

**Notes**

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

**Related Items**

**Forms**

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**Construction** Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**

**PPM Chapter**

Other

Specifications

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization
### 690-20 - SIGNAL PEDESTRIAN ASSEMBLY, REMOVE

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0690 20</td>
<td>SIGNAL PEDESTRIAN ASSEMBLY REMOVAL</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Details**

This pay item is for traffic signals and traffic control devices only.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

### 690-31 - SIGNAL PEDESTAL- REMOVE

**Notes**

This pay item is for traffic signals and traffic control devices only.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter: Other Standards Specifications

Prep & Doc Manual Chapter(s): 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

### 690-31 - SIGNAL PEDESTAL- REMOVE

**Notes**

This pay item is for traffic signals and traffic control devices only.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
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<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter: Other Standards Specifications

Prep & Doc Manual Chapter(s): 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

### 690-32 - POLE REMOVAL- SHALLOW

**Notes**

This pay item is for traffic signals and traffic control devices only.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter: Other Standards Specifications

Prep & Doc Manual Chapter(s): 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

### 690-32 - POLE REMOVAL- SHALLOW

**Notes**

This pay item is for traffic signals and traffic control devices only.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter: Other Standards Specifications

Prep & Doc Manual Chapter(s): 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization
Separate items exist for "shallow" and "deep" pole removal, as defined in the specifications.

Shallow: includes complete removal of the above ground portion of the pole, attachments, and removal of the pole foundation, including buried attachments to a depth of 4 feet (1.2 m) below existing grade, measured per each.

NOTE ALL: Plans should identify locations for pole removal, and type of pole to be removed at each location. Not to be used on poles for highway lighting, unless they are jointly used to support traffic signal mast arms or span wire assemblies.

Related Items

Required

Recommended

Forms

Design

SHTabQuant: Tabulation of Quantities Sheet

Construction

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization

Status

Struct. 690-32- A POLE REMOVAL- SHALLOW EA

A =

1 (Direct Burial)

2 (Bolt on Attachment)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0690 32 1</td>
<td>POLE REMOVAL, SHALLOW, DIRECT BURIAL</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
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</tr>
<tr>
<td>0690 32 2</td>
<td>POLE REMOVAL, SHALLOW, BOLT ON ATTACHMENT</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

690-33- A POLE REMOVAL- DEEP

Unit LF; M1

Accuracy Linear Foot; 10th of a Meter

PlanQuantity? no

Details This pay item is for traffic signals and traffic control devices only. Separate items exist for "shallow" and "deep" pole removal, as defined in the specifications.

Deep: includes complete removal of the above ground portion of the pole and attachments, and the complete removal of the pole foundation, measured per foot (meter) from the existing grade to the deepest portion of the pole foundation actually removed. Estimate 20 ft (6 meters) per deep pole removal.
NOTE ALL: Plans should identify locations for pole removal, and type of pole to be removed at each location. Not to be used on poles for highway lighting, unless they are jointly used to support traffic signal mast arms or span wire assemblies.

### Related Items

**Forms**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
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</table>

**Specifications**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>690-33- A</th>
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</thead>
<tbody>
<tr>
<td>POLE REMOVAL - DEEP</td>
<td></td>
</tr>
<tr>
<td>LF</td>
<td></td>
</tr>
</tbody>
</table>

A =
1 (Direct Burial)
2 (Bolt on Attachment)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<td>0690 33 1</td>
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<td>0690 33 2</td>
<td>POLE REMOVAL, DEEP, BOLT ON ATTACHMENT</td>
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</table>

### Related Items

**Required**

**Recommended**

**Forms**

**Design**

SHTabQuant: Tabulation of Quantities Sheet

### TRNS*PORT Category (DRAFT FIELD):

0500 Signalization

### Status

**Struct.** 690-33- A

**POLE REMOVAL - DEEP**

**LF**

### Notes

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.
Standards
Specifications
Struct. 690-50-A CONTROLLER ASSEMBLY- REMOVE EA

A =
'Blank' = Complete Assembly
1 (Cabinet Assembly, Less Foundation)
2 (Controller Unit)

Notes

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
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<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0690 50 1</td>
<td>CONTROLLER ASSEMBLY, REMOVE, CAB ASSEMBLY, LESS FOUNDATION</td>
<td>EA</td>
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<td>1/1/2010</td>
<td></td>
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<tr>
<td>0690 50 2</td>
<td>CONTROLLER ASSEMBLY, REMOVE, CONTROLLER UNIT</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

690-60- DETECTOR VEHICLE ASSEMBLY, REMOVE

Unit EA Accuracy Each PlanQuantity? no

Notes

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

Related Items

Required Recommended
Forms Design                      Design

Documentation

Construction Design

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Standards
Specifications

Struct.  690- 60- DETECTOR VEHICLE ASSEMBLY, REMOVE EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
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<tr>
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<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

690- 70- DETECTOR PEDESTRIAN ASSEMBLY, REMOVE

Notes

Details

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

Related Items

Forms

Design SHTabQuant: Tabulation of Quantities Sheet

Documentation

Construction Refer to Comp Book

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Other
Standards
Specifications

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
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<tr>
<td>0690 70</td>
<td>DETECTOR PEDESTRIAN ASSEMBLY REMOVE</td>
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<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### 690-80-

#### SPAN WIRE ASSEMBLY REMOVE

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

#### Notes

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

#### Related Items

**Required** | **Recommended**
--- | ---
Design | SHTabQuant: Tabulation of Quantities Sheet

#### Forms

**Construction**
Refer to Comp Book

**Design**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

**PPM Chapter**

**Other Standards**

**Specifications**

**Prep & Doc Manual Chapter(s)** 7, 13

#### Status

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

### Struct. 690-90-

#### REMOVE CONDUIT & CABLING

| Unit | PI | Accuracy | Per Intersection | PlanQuantity? | no |

Details and Structure: Items 600 to 699
This pay item is for traffic signals and traffic control devices only.

### Item Information

**Description:** SIGNAL INTERCONNECT CABLE, REMOVE

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>690-90</td>
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</tbody>
</table>

**Notes:**

This pay item is for traffic signals and traffic control devices only.

### Related Items

**Required:**

Design

SHTabQuant: Tabulation of Quantities Sheet

### Forms

**Construction:**

Refer to Comp Book

**Documentation:**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction:**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

Design

Construction

**Prep & Doc Manual Chapter(s)**

7, 13

### Status

Struct. 690-90- REMOVE CONDUIT & CABLEING PI

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

**Status**

**Struct.** 690-91- SIGNAL INTERCONNECT CABLE, REMOVE LF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<td>1/1/2010</td>
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</tbody>
</table>

**690-100-** SIGNAL EQUIPMENT, MISCELLANEOUS REMOVE

**Notes**

**Details**

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

**Related Items**

**Required**

Design

**Recommended**

SHTabQuant: Tabulation of Quantities Sheet

**Forms**

Construction

Refer to Comp Book

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Documentation**

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)  7, 13

**References**

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization

**Status**

**Struct.** 690-100- SIGNAL EQUIPMENT, MISCELLANEOUS REMOVE PI

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<td>1/1/2010</td>
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</table>

Details and Structure: Items 600 to 699
INTERNALLY ILLUMINATED SIGN

| Unit   | EA | Accuracy | Each | PlanQuantity? | no |

**Notes**

This item should be used when requested by maintaining agency. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

The internally illuminated street name sign is normally attached to the signals mast arm or span wire. This item should be shown on the signals plans and loaded in the signals category.

**Details**

INSTALL: To be used ONLY when the item is to be furnished by the Department or other maintaining agency. Plans or specs should clearly identify the item(s) to be installed, pick-up/delivery instructions, as well as installation instructions. Payment includes any incidentals necessary (furnished by the Contractor) for a complete installation.

RELOCATE: Plans or specs should clearly identify the item and initial/final locations. As needed, detail incidental items to be furnished by the Contractor for a complete installation. Clearly identify conditions under which item replacement (damaged by contractor) is needed.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</tbody>
</table>

**Forms**

- **Construction**
  - Refer to Comp Book

**Documentation**

- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**

- **Other**
  - Index No. 17748
  - Min Specs: Section A699

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

| 0500 | Signalization |

**Struct.**

| 699- 1- AB | INTERNALLY ILLUMINATED SIGN | EA |

A = Operation
blank (Furnish & Install)

2 (Install)
3 (Modify)
4 (Relocate)

B = Sign type
1 (Street Name)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
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<tr>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>0699 1 1</td>
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<td>EA</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0699 1 31</td>
<td>INTERNAL ILLUM SIGN, MODIFY, ST NAME</td>
<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0699 1 41</td>
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<td>EA</td>
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<td>1/1/2010</td>
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</table>
SINGLE POST SIGN

<table>
<thead>
<tr>
<th>Unit</th>
<th>AS</th>
<th>Accuracy</th>
<th>Assembly</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

Effective January 2010 letting, maximum panel area increased to 30 ft².

Includes sign panel, post, any foundation or breakaway base as required by the Design Standards or plans. Per specifications, "for the purpose of payment, a sign assembly consists of all the signs mounted on a single structure (one, two, or three posts, or overhead structure)..."

Back-to-Back and/or multiple signs on a single post: Select the sign panel size (B=1, 2, 3) based on the combined total sign area.

VALID THROUGH DECEMBER 2009 LETTING: Standards limit single post sign area (wind resistance area from any one direction) to 20 ft².

EFFECTIVE JANUARY 2010 LETTING: Standards limit single post sign area (wind resistance area from any one direction) to 30 ft².

IN-STREET FLEXIBLE POST SIGN: Used for R1-6 crosswalk signs. All signs must meet MUTCD requirements. Recommended plan note: "In-street flexible post sign must meet MUTCD requirements." A maintenance agreement with the maintaining agency must be included with the project file.

B=9 Custom: For signs with a wind resistance area/maximum projected area from any one direction greater than 20 ft², MULTI-POST SIGNS are recommended where site conditions allow installation. If project conditions require a single post sign greater than 30 ft², a custom (non-standard) sign may be used. Plan details will be needed. Verify with Roadway Design Office prior to opening/using pay item on a project.

Refer to design standards for single/multi-post requirements.

INSTALL: Install includes the installation of existing panel(s) on a new sign post.

**Related Items**

**Forms**

<table>
<thead>
<tr>
<th>Required</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</tbody>
</table>

**Documentation**

<table>
<thead>
<tr>
<th>Construction</th>
<th>Design</th>
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</thead>
<tbody>
<tr>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
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<table>
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<tr>
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<th>Design</th>
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<tbody>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
<td></td>
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</tbody>
</table>

**References**

PPM Chapter

Other Standards Specifications Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0300 Signing and Pavement Markings

**Status**

700-20-AB SINGLE POST SIGN AS

A= Operation 1 (Furnish & Install)

Details and Structure: Items 700 to 799
3 (Install)
4 (Relocate) B=0
6 (Remove) B=0

B= Sign Panel Size or Type
1 (less than 12 ft²)
2 (12-20 ft²)
3 (20+ back-to back)
4 (21-30 ft²) effective 1/2010
8 (In-Street Flexible Post) see details above
9 (Custom) see details above

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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**700- 21- AB**  MULTI-POST SIGN

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<th>Accuracy</th>
<th>Assembly</th>
<th>PlanQuantity?</th>
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Notes

Includes sign panel, post, any foundation or breakaway base as required by the Design Standards or plans. The number and size of post and the average post length must be shown in the plans. Per specifications, "for the purpose of payment, a sign assembly consists of all the signs mounted on a single structure (one, two, or three posts, or overhead structure)..."

INSTALL: Install includes the installation of existing panel(s) on new sign posts.

Related Items

Required
Design

Recommended
SHTabQuant: Tabulation of Quantities Sheet

Documentation

Construction
Refer to Comp Book

Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Other

Details and Structure: Items 700 to 799
### Standards

**Specifications**

Prep & Doc Manual Chapter(s) 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0300 Signing and Pavement Markings

**Status**

#### Struct.  700- 21- AB MULTI-POST SIGN AS

A = Operation
1 (Furnish & Install)
3 (Install)
4 (Relocate) B=0
6 (Remove) B=0

B = Sign Panel Size, square feet
1 (50 or less)
2 (51 to 100)
3 (101 to 150)
4 (151 to 200)
5 (201 to 250)
6 (251 to 300)
7 (over 300)
9 (Custom) non-standard sign

**Notes**

* B=9 (Custom) for non-standard designs. Verify with Roadway Design Office prior to opening.

---

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<table>
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<tr>
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<th>Obsolete Date</th>
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### 700- 22-ABC OVERHEAD TRUSS SPAN SIGN

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**Notes**

**Details**

FOR ITS APPLICATIONS, USE 780 items

---

Details and Structure: Items 700 to 799
Includes sign panels, overhead structure, foundations and other incidentals required for a complete assembly. Complete design and details of the structure and foundation must be shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.

All signs are to be lighted, unless otherwise noted in the plans. Payment is included in assembly.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
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<th>Related Items</th>
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<tr>
<td><strong>Forms</strong></td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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<td><strong>Documentation</strong></td>
<td><strong>Design</strong></td>
<td>Refer to Comp Book</td>
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<td><strong>Construction</strong></td>
<td><strong>Design</strong></td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
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<th>Vol 1, Ch 7 and 29</th>
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<td><strong>Specifications</strong></td>
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**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0300 Signing and Pavement Markings

**Struct.** 700-22-ABC OVERHEAD TRUSS SPAN SIGN AS

A= Operation
1 (Furnish & Install)
3 (Install) BC=00
4 (Relocate) BC=00
6 (Remove) BC=00

B= Truss Span Length (feet)
1 (50 or less)
2 (51-100)
3 (101-150)
4 (151-200)
5 (Greater than 200)

C= Sign Panel Size (square feet)
1 (300 or less)
2 (301-500)
3 (501-700)
4 (Greater than 700)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

Details and Structure: Items 700 to 799
<table>
<thead>
<tr>
<th>Item</th>
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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0700 22400 OVERHEAD TRUSS SPAN SIGN, RELOCATE AS 1/1/2010
0700 22500 OVERHEAD TRUSS SPAN SIGN, REPAIR AS 1/1/2010
0700 22600 OVERHEAD TRUSS SPAN SIGN, REMOVE AS 1/1/2010

700-23-ABC OVERHEAD TRUSS CANTILEVER SIGN

Notes
Details
FOR ITS APPLICATIONS, USE 780 items
Includes sign panels, overhead structure, foundations and other incidentals required for a complete assembly. Complete design and details of the structure and foundation must be shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.

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Related Items
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Required
Recommended
Design
SHTabQuant: Tabulation of Quantities Sheet

Documentation
Construction
Design
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Vol 1, Ch 7 and 29

Other

Standards

Specifications
Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s)
7, 13

TRNS*PORT Category (DRAFT FIELD): 0300 Signing and Pavement Markings

Status
Struct.
700-23-ABC OVERHEAD TRUSS CANTILEVER SIGN AS

A= Operation
1 (Furnish & Install)
3 (Install) BC=00
4 (Relocate) BC=00
6 (Remove) BC=00
B= Truss Span Length (feet)
1 (30 or less)
2 (31-40)
3 (41-50)
4 (over 50)
C= Sign Panel Size (square feet)
1 (100 or less)
2 (101-200)
3 (201-300)
4 (Greater than 300)

**Notes**

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### 700-38-AAB SIGN LIGHTED OVERHEAD TRUSS- MONOTUBE

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**Notes**

Standards valid through 12-31-06

**Details**

Includes sign panel, post, any foundation or breakaway base as required by the plans. Also includes sign luminaries, electrical enclosure and other incidentals required for a complete assembly. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item.

For projects let January 2008 and later: Ensure that complete drawings and specifications are available with the contract documents. Contact the maintaining agency prior to design; some agencies have requested standard sign structures be used, rather than monotubes.

**Related Items**

**Forms**

- Required: Design
- Recommended: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

- Construction: Refer to Comp Book
- Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Other
- Standards
- Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 7, 13

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**TRNS*PORT Category (DRAFT FIELD):**

0300 Signing and Pavement Markings

**Struct.**

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</table>

**AA** = Length Of Sign Truss

- 01 (20 Or Less)
- 02 (21 - 40)
- 03 (41 - 60)
- 04 (61 - 80)
- 05 (81 - 100)
- 06 (101 - 120)
- 07 (121 - 140)
- 08 (141 - 160)
- 09 (161 - 180)
- 10 (181 - 200)
- 11 (201 - 220)

**B** = Square Footage Of Sign Panel

- 1 (100 Or Less)
- 2 (101 to 200)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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700-39-AB SIGN LIGHTED OVERHEAD CANTILEVER-MONOTUBE

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Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0300 Signing and Pavement Markings

Details and Structure: Items 700 to 799
### Notes

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**Notes**

**Details**

The REMOVE item includes the removal of the sign panels and the complete support assembly.

The RELOCATE item includes the reinstallation of the complete assembly at the location shown in the plans.

The INSTALL item includes the installation of the assembly, at the location shown in the plans. Includes the breakaway base and foundation, if required for installation of the new
assembly. For a multi-post assembly, the number and size of the post and the average post length must be shown in the plans.

### Related Items

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- **A** = Operation
  - 1 (Remove)
  - 2 (Relocate)
  - 3 (Install)
- **B** = Sign Assembly Type
  - 5 (Span Wire)
  - 6 (Bridge Mounted)

- **NOTES**

  The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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### 700-48-AB

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### Notes

- **Details**

  This item is for the sign panel only. For posts, structures, etc, refer to other Section 700 items.

  The FURNISH AND INSTALL item includes the sign panel and materials required for installation on an existing post.

  The INSTALL item includes the materials required for installation. The sign panel will be furnished. Install on an existing post.
The OVERLAY item includes the sign panel and the materials required for installation.

The RELOCATE item includes the removal of the sign panel and the reinstallation at the location noted in the plans.

The REPLACE item includes the new sign panel, the removal of the existing panel and the installation of the new panel. The REMOVE item includes the removal of the existing sign panel.

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**TRNS*PORT Category (DRAFT FIELD):** 0300 Signing and Pavement Markings

**Status**

- **Struct.** 700-48-AB SIGN PANEL EA
  - A = Operation
  - 1 (Furnish & Install)
  - 2 (Install)
  - 3 (Overlay)
  - 4 (Relocate)
  - 5 (Replace)
  - 6 (Remove) B=0
  - 7 (Furnish Only)
  - B = Square Footage Of Sign Panel
    - 2 (101 to 200)
    - 3 (201 to 300)
    - 4 (301 to 400)
    - 5 (401 to 500)
    - 6 (501 to 600)
    - 7 (601 or greater)
    - 8 (15 Or Less)
    - 9 (16 to 100)
    - 0 (N/A)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
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**700-70-** SIGN, LIGHTED OVERHEAD - BRIDGE MOUNTED

**Notes**

Includes sign panels, overhead structure, sign luminaries, electrical enclosure and other incidentals required for a complete assembly. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item. Complete design and details of the structure and connections to the bridge must be shown in the plans. Includes all components listed in the Standards and all external...
conduit and conductors for the service.

**Related Items**

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
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**Documentation**

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<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
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<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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**References**

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**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0300 Signing and Pavement Markings

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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**TRNS*PORT Category (DRAFT FIELD):** 0700-82 OVERHEAD SIGN- SPAN WIRE MOUNTED

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<tr>
<td>This item includes sign panels, poles, span wire assembly and other incidentals required for a complete assembly. The type and length of the poles and the size of the span wires must be shown in the plans.</td>
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**Required**

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**Documentation**

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**Prep & Doc Manual Chapter(s)** 7, 13

**Details and Structure:** Items 700 to 799
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<td>0700 83</td>
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**700- 83- OVERHEAD SIGN- BRIDGE MOUNTED**

<table>
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<th>Notes</th>
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<th>References</th>
<th>Prep &amp; Doc Manual Chapter(s)</th>
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<tbody>
<tr>
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<td>This item includes sign panels, overhead structure, and incidentals required for a complete assembly. Complete design and details of the structure and connections to the bridge must be shown in the plans.</td>
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<td>Design</td>
<td>Construction</td>
<td>PPM Chapter</td>
<td>Other Standards Specifications</td>
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**700- 89- AA ELECTRIC POWERED SIGN**

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<tr>
<td></td>
<td>NOTE: not to be used for ITS projects; refer to 780 items for ITS systems. Refer to 699 items for Internally Illuminated signs. Includes the complete sign assembly, support and any foundation required. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign.</td>
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structure, are not covered by this item. Includes all components listed in the Standards and all external conduit and conductors for the service.

"Special" signs to be approved by Roadway Design. Plan Details and/or Tech Specs required to provide materials, construction, and payment information.

<table>
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<tr>
<th>Related Items</th>
<th>Required</th>
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<tbody>
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<td>7, 13</td>
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** TRNS*PORT Category (DRAFT FIELD): ** 0300 Signing and Pavement Markings

** Status **

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<tr>
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<td>2 (Blank-Out)</td>
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<td>3 (Changeable Message - Fiber Optics)*</td>
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<td>4 (Changeable Message - Light Bulb Matrix)*</td>
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<td>5 (Changeable Message - Electromagnetic Disk Matrix)*</td>
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<td>6 (Changeable Message - Drum - Type)*</td>
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<td>7 (Changeable Message - Vane Matrix)*</td>
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<td>8 (Lane Control - Vane Matrix)</td>
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<td>9 (Changeable Message - Flap Type)*</td>
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<td>10 (Changeable Message - Tricolor)*</td>
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** Notes **

* Consider ITS (780 items) for changeable message signs
** Special requires Tech Spec and/or Plan details. Do not use "Special" for Radar Display Sign Units; contact the Basis of Estimates Coordinator for the current status of this item.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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** Notes **

** 700- 90- AB ** SIGN, FLASHING BEACON

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** Accuracy ** Assembly

** PlanQuantity? ** no

** Details **

Includes the complete sign, flashing beacon, flashing beacon controller, support and any foundation required. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign, are not covered by this item. Includes all components listed in the Standards and all external conduit and conductors for the service.

** Related Items **

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<th>Recommended</th>
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Details and Structure: Items 700 to 799
### Forms
- **Design**: SHTabQuant: Tabulation of Quantities Sheet

### Construction
- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### Documentation
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References
- **PPM Chapter**: Design
- **PPM Chapter**: Construction
- **PPM Chapter**: Design
- **PPM Chapter**: Construction
- **PPM Chapter**: Other
- **Prep & Doc Manual Chapter(s)**: 7, 13

### Status
- **TRNS*PORT Category (DRAFT FIELD)**: 0300 Signing and Pavement Markings

### Structural Specifications
- **A**: Operation
  - 1 (Furnish & Install)
  - 2 (Relocate)
  - 3 (Remove)
- **B**: Sign Type
  - 1 (Ground Mount)
  - 2 (Overhead Mount)
  - 3 (Bridge Mount)
  - 4 (Span Wire)

### Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### Audible and Vibratory Pavement Markings

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Details and Structure: Items 700 to 799
Refer to May 9, 2008 Estimates Bulletin 08-07/Roadway Bulletin 08-05.

For use on "all rural construction projects, excluding limited access facilities". More specifically, "OUTSIDE EDGE line for all 2-lane and multi-lane undivided rural projects" (From FDOT Executive Committee Policy, approved March 19, 2008)

CENTERLINE: Audible and Vibratory pavement markings should be used on centerline of two lane rural roadways ONLY when there is a history of centerline cross over crashes.

Other applications: Audible and Vibratory markings shall also be considered on flush shoulder roadways within Urban 2 and Urban 3 boundaries; noise is the primary consideration in these areas.

***********************************************************************

Longitudinal stripes (along the direction of traffic) are normally applied by truck; these stripes are paid per NET MILE (solid) or GROSS MILE (skip). Most of these stripes are 6" in width. 3-9 and 10-30 skip stripes are included in the gross mile measurement. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3. It will not include any lengths of unpainted intervals which are greater than 30 ft, per the specifications.

Refer to the specification for complete Method of Measurement information. Accuracy: GM and NM items are measured to 1/1000 of a mile.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings, include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tbody>
<tr>
<td>Design</td>
<td></td>
</tr>
</tbody>
</table>

**References**

PPM Chapter
Other
Standards
Specifications

**Prep & Doc Manual Chapter(s)**

**Status**

**TRNS*PORT Category (DRAFT FIELD):** 0300 Signing and Pavement Markings

**Struct.** 701-1A-BCD **AUDIBLE AND VIBRATORY PAVEMENT MARKINGS** Mixed

A= Class
1 (Standard)

B= Color
1 (White)
2 (Yellow)
C= Type of Marking
1 (Solid) NM
2 (Skip) GM

D= Width
1 (6")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0701 11111</td>
<td>AUDIBLE &amp; VIBRATORY PAVEMENT MARKING, STANDARD, WHITE, SOLID, 6&quot;</td>
<td>NM</td>
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<tr>
<td>0701 11121</td>
<td>AUDIBLE &amp; VIBRATORY PAVEMENT MARKING, STANDARD, WHITE, SKIP, 6&quot;</td>
<td>GM</td>
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<td>1/1/2010</td>
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<tr>
<td>0701 11211</td>
<td>AUDIBLE &amp; VIBRATORY PAVEMENT MARKING, STANDARD, YELLOW, SOLID, 6&quot;</td>
<td>NM</td>
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<tr>
<td>0701 11221</td>
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</table>

702-???

WET WEATHER MARKINGS, formerly INVERTED RIB PROFILE MARKINGS

Unit  Mixed  Accuracy  Refer to item structure and details  PlanQuantity?

Notes  Future Effective Date: See 906-702 items.

Details  Required  Recommended

Related Items  Forms  Design  SHTabQuant: Tabulation of Quantities Sheet

References  PPM Chapter
Other
Standards
Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):
0300  Signing and Pavement Markings

Status  Struct.  702-???

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<tr>
<td>705-10- A</td>
<td>OBJECT MARKER</td>
</tr>
</tbody>
</table>

Unit  EA  Accuracy  Each  PlanQuantity?  no

Details and Structure: Items 700 to 799
Object Markers are to be used to mark obstructions within or adjacent to the roadway, as indicated in the Design Standards or on the plans. Additional details are available in the MUTCD, Chapter 3C.

Refer to Delineators for marking the roadway alignment

Reflective Railing Markers, as shown on Index 420, 421, and 422, are included in the cost of the railing; no separate payment is made for these markers.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>705-11</td>
<td>705-11</td>
</tr>
</tbody>
</table>

**Forms**

Design

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

**Documentation**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Vol 1, 7.2.9

Other Standards

Index No. 17349 (Object Markers), 17345 and 17346 (Delineators), 17349 (Object Markers) 17359 (Object Markers and Delineators)

**Specifications**

Prep & Doc Manual Chapter(s)

7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0300 Signing and Pavement Markings

**Status**

705-10- A OBJECT MARKER EA

A= Type*

1 (Type 1)
2 (Type 2)
3 (Type 3)
4 (Type 4)

*Note: The Type is defined in the MUTCD, Chapter 3C.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Valid Date</th>
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<tbody>
<tr>
<td>0705 10 1</td>
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<tr>
<td>0705 10 3</td>
<td>OBJECT MARKER, TYPE 3</td>
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<tr>
<td>0705 10 4</td>
<td>OBJECT MARKER, TYPE 4</td>
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705-11- A DELINEATOR

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
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</table>

Delineators are to be used along the side of the roadway to indicate the alignment of the roadway, as indicated in the Design Standards or on the plans. Additional details are available in the Plans Preparation Manual (PPM) Vol 1, Chapter 7, and the MUTCD, Chapter 3D.
The Department uses delineators to mark median opening for both rural and urban openings. In general, flexible delineators are used on urban median openings and nonflexible are used on rural median openings. A high visibility median delineator should be used on traffic separators in the following locations:
1. At multilane intersections where additional visibility is required for the marking of the traffic separator,
2. Where the separator is obstructed due to crest vertical curves,
3. At intersections where the alignment thru the intersection is not straight, and
4. Where traditional flexible delineators are constantly being replaced.

High visibility median delineators can be specified for urban median separators.

High performance delineators should be used in all applications where the delineator is being used to maintain lane positions, restrict vehicle movements or any other area where the delineator is subject to being frequently hit.

*******************
Refer to Object Markers to mark obstructions.
*******************

Reflective Railing Markers, as shown on Index 420, 421, and 422, are included in the cost of the railing; no separate payment is made for these markers.

<table>
<thead>
<tr>
<th>Related Items</th>
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<tr>
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<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
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<tr>
<td>Design</td>
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<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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<td>PPM Chapter</td>
<td>Vol 1, 7.2.9</td>
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<tr>
<td>Other Standards</td>
<td>Index No. 17349 (Object Markers), 17345 and 17346 (Delineators), 17349 (Object Markers) 17359 (Object Markers and Delineators)</td>
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**TRNS^PORT Category (DRAFT FIELD):** 0300 Signing and Pavement Markings

**Status**

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<th>Struct.</th>
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<tr>
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<tr>
<td>1 (Flexible Tubular)</td>
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<td>2 (non-Flexible)</td>
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<tr>
<td>3 (Flexible High Visibility Median)</td>
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<td>4 (Flexible High Performance)</td>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tr>
<td>0705 11 3</td>
<td>DELINEATOR, FLEXIBLE HIGH VISIBILITY MEDIAN</td>
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### 706- 3- RETRO-REFLECTIVE PAVEMENT MARKER

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

Refer to 710- 90 for final surface payment. Use Type B, unless otherwise shown in the plans. Use Pavement markers to supplement lane lines and gore markings, as shown on design standards.

**Details**

Refer to Comp Book

**Related Items**

Required

Recommended

**Forms**

Design

SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Index No. 17345, 17352

**Prep & Doc Manual Chapter(s)**

7, 13

TRNS*PORT Category (DRAFT FIELD): 0300 Signing and Pavement Markings

**Status**

Struct. 706- 3- RETRO-REFLECTIVE PAVEMENT MARKER EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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### 709- 1A-BCD TRAFFIC STRIPE- TWO REACTIVE COMPONENTS

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA, LF, GM, NM; GK, NK</th>
<th>Accuracy</th>
<th>Each; Linear Foot; 1/1000</th>
<th>PlanQuantity?</th>
</tr>
</thead>
</table>

**Notes**

Consists of "Two Reactive Component Traffic Stripe and Markings" used in areas representing final and work zone pavement markings. Broken (skip) stripes shall consist of a succession of solid stripes.

*T*****

Measurement and Payment for Pavement Markings:
LINEAR FOOT ITEMS: Intended for solid stripes 8" wide and greater. The linear foot quantity shall also be used to pay for 2-4 "guide line" and 6-10 “gap extension through cross-over area” (all skip lines, except 3-9 or 10-30 skip traffic stripe sections), as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and it shall NOT include the unpainted intervals.

GROSS MILE & NET MILE ITEMS: Intended for 6” stripe. The gross mile quantity shall be used to pay for all 3-9 or 10-30 skip traffic stripes, as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3. It will not include any lengths of unpainted intervals which are greater than 30 ft, per the specifications.

The net mile quantity shall be used to pay for all 6” solid stripe, except those identified above for payment as linear foot items.

******************************

CONTRASTING ALTERNATING SKIP: Use one application of white skip thermoplastic and one application of black skip paint. Payment will be made for the length of white + length of black stripe applied.

REMOVAL ITEM (A=7): The cost for removing any conflicting pavement markings is to be included in the cost of MOT Lump Sum, per Specification 710-4 and 102-5.8. Pay item 710-17 is only to be used for Maintenance projects to remove non-conflicting pavement markings (i.e. removal of paint prior to applying a two-component reactive material; or 711-17- for removal of thermoplastic prior to applying more thermo, because the maximum thickness will be exceeded if existing thermo is not removed).

YIELD LINE: Per the MUTCD, a yield line is a series of solid white isosceles triangles, used at intersection approaches controlled by a yield sign. It is measured per linear foot, with a length approximately equal to the lane width(s).

MESSAGES: Each word is paid as one message. For example, "SUN PASS ONLY" will be paid as 3 messages. Other example messages include "YIELD", "MERGE", "LEFT", "TURN", Bike symbol and wheelchair/"Universal Symbol of Accessibility". Additional messages shown on index 17346.

Refer to the Specification for the complete Method of Measurement.

ACCURACY: LF items are measured to the nearest Linear Foot; Mile items are measured to 1/1000th of a mile; and Square Foot items are measured to the nearest square foot.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings , include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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<tr>
<th>Documentation</th>
<th>Required</th>
<th>Recommended</th>
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<tr>
<td>Construction</td>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
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</table>

| Construction  | Design   | Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

Details and Structure: Items 700 to 799
### References

**PPM Chapter**: Vol 1, 7.2.8 for material selection guidance

**Other Standards Specifications**

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD)**: 0300 Signing and Pavement Markings

### Status

**Struct. 709-1A-BCD**

TRAFFIC STRIPE - TWO REACTIVE COMPONENTS EA, LF, GM,

A = Class
1 (Standard)
7 (Remove) SF Note: When A=7, BCD= Blank

B = Color
1 (White)
2 (Yellow)
3 (Black)

C = Type of Marking
1 (Solid) NM
2 (Solid) LF
3 (Skip) GM
4 (Skip) LF
5 (Dotted/Guideline/6-10 Gap Extension) LF

D = Width
1 (6")
2 (8")
3 (12")
4 (18")
5 (24")

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0709 11111</td>
<td>TRAFFIC STRIPE-TWO REACTIVE COMPONENTS, STANDARD, WHITE, SOLID, 6&quot;</td>
<td>NM</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0709 11123</td>
<td>TRAFFIC STRIPE-TWO REACTIVE COMPONENTS, STANDARD, WHITE, SOLID, 12&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0709 11124</td>
<td>TRAFFIC STRIPE-TWO REACTIVE COMPONENTS, STANDARD, WHITE, SOLID, 18&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<td>TRAFFIC STRIPE-TWO REACTIVE COMPONENTS, STANDARD, WHITE, SOLID, 24&quot;</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>
**TRAFFIC STRIPE—TWO REACTIVE COMPONENTS, STANDARD, YELLOW, SOLID, 8”**

**0709 11222**

**Unit:** Mixed  
**Accuracy:** Refer to item structure and details  
**PlanQuantity:** no  
**Details:** Consists of paint used in areas representing final and work zone pavement markings. Broken (skip) stripes shall consist of a succession of solid stripes.

Measuring and Payment for Pavement Markings:
Longitudinal stripes (along the direction of traffic) are normally applied by truck; these stripes are paid per NET MILE (solid) or GROSS MILE (skip). Most of these stripes are 6” in width. 3-9 and 10-30 skip stripes are included in the gross mile measurement. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3. It will not include any lengths of unpainted intervals which are greater than 30 ft, per the specifications.

Transverse stripes (across the direction of traffic) are applied by walking with a hand operated machine; these stripes are paid per linear foot. Most of these stripes are 8”-24” wide. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and it shall NOT include the unpainted intervals.

Dotted, 2-4 Guideline, and 6-10 Gap Extension Through Cross-over Area stripes are also paid per LF, due to the walking/hand application required. Most of these stripes are 6” wide.

**APPROACH TO TOLL PLAZA:** 12” wide Longitudinal lines used for the approach to toll plaza are paid per mile.

Non-standard stripe applications should be coordinated with the State Roadway Design Office, prior to including notes/items in the plans.

**CONTRASTING ALTERNATING SKIP:** Use one application of white skip thermoplastic and one application of black skip paint. Payment will be made for the length of white + length of black stripe applied.

**REMOVAL ITEM (A=7):** The cost for removing any conflicting pavement markings is to be included in the cost of MOT Lump Sum, per Specification 710-4 and 102-5.8. Pay item 710-17 is only to be used for Maintenance projects to remove non-conflicting pavement markings (i.e. removal of paint prior to applying a two-component reactive material; or 711-17 for removal of thermoplastic prior to applying more thermo, because the maximum thickness will be exceeded if existing thermo is not removed). Use Maintenance item E710-17.

**YIELD LINE:** Per the MUTCD, a yield line is a series of solid white isosceles triangles, used at intersection approaches controlled by a yield sign. It is measured per linear foot, with a length approximately equal to the lane width(s).

**MESSAGES:** Each word is paid as one message. For example, "SUN PASS ONLY" will
be paid as 3 messages. Other example messages include "YIELD", "MERGE", "LEFT", "TURN", Bike symbol and wheelchair/"Universal Symbol of Accessibility". Additional messages shown on index 17346. BLUE markings (accessible parking) will be paid per LF or EA.

Refer to the Specification for the complete Method of Measurement.

ACCURACY: LF items are measured to the nearest Foot; NM and GM items are measured to 1/1000th of a mile (about +/-5 ft); and SF items are measured to the nearest square foot.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings, include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.

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</tr>
<tr>
<td>Documentation</td>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td></td>
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**PPM Chapter**
700-050-52

**Prep & Doc Manual Chapter(s)**

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**TRNS*PORT Category (DRAFT FIELD):** 0300 Signing and Pavement Markings

**Details and Structure: Items 700 to 799**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0710 11111</td>
<td>PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6&quot;</td>
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<tr>
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<tr>
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<td>PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12&quot;</td>
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<td>0710 11124</td>
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**710-90- PAINTED PAVEMENT MARKINGS- FINAL SURFACE**

**Notes**

Effective July 2009, some districts will be using Thermoplastic in Construction contracts. Coordinate with District Design for district specific policy.

Includes payment for painted final surface pavement markings (1 or 2 applications of 710 paint), including RPMs (1 application). The number of applications will be indicated in the specifications, depending upon whether thermoplastic will be applied during construction or maintenance operations. Coordinate with District Design for district specific policy.

DOES NOT include pavement markings used for Maintenance of Traffic. Must continue to use other 710 items for MOT applications.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings, include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.

**Related Items**

- **Forms**
  - Required: SHTabQuantLS: LS Tabulation of Quantities
  - Recommended: COMP 700-050-05: Lump Sum Quantities

- **Construction**
  - Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
  - Construction: Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- PPM Chapter
- Other

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**Details and Structure:** Items 700 to 799
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**711-1A-BCD THERMOPLASTIC PAVEMENT MARKINGS**

- **Unit**: Mixed
- **Accuracy**: Refer to item structure and details
- **PlanQuantity?**: no

**Notes**

- Effective July 2009, some districts will be using Thermoplastic in Construction contracts. Coordinate with District Design for district specific policy.

**Details**

- Consists of Thermoplastic used for permanent pavement markings. Thermoplastic may be used on construction projects, in accordance with District specific policy.

- Broken (skip) stripes shall consist of a succession of solid stripes.

Measurement and Payment for Pavement Markings:

- Longitudinal stripes (along the direction of traffic) are normally applied by truck; these stripes are paid per NET MILE (solid) or GROSS MILE (skip). Most of these stripes are 6" in width. 3-9 and 10-30 skip stripes are included in the gross mile measurement. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3. It will not include any lengths of unpainted intervals which are greater than 30 ft, per the specifications.

- Transverse stripes (across the direction of traffic) are applied by walking with a hand operated machine; these stripes are paid per linear foot. Most of these stripes are 8"-24" wide. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and it shall NOT include the unpainted intervals.

- Dotted, 2-4 Guideline, and 6-10 Gap Extension Through Cross-over Area stripes are also paid per LF, due to the walking/hand application required. Most of these stripes are 6" wide.

- Non-standard stripe applications should be coordinated with the State Roadway Design Office, prior to including notes/items in the plans.

CONTRASTING ALTERNATING SKIP: Use one application of white skip thermoplastic and one application of black skip paint. Payment will be made for the length of white + length of black stripe applied.
REMOVAL ITEM (A=7): The cost for removing any conflicting pavement markings is to be included in the cost of MOT Lump Sum, per Specification 710-4 and 102-5.8. Pay item 710-17 is only to be used for Maintenance projects to remove non-conflicting pavement markings (i.e. removal of paint prior to applying a two-component reactive material; or 711-17- for removal of thermoplastic prior to applying more thermo, because the maximum thickness will be exceeded if existing thermo is not removed).

SUN PASS LANES: The 3-9 skip, 12” wide, per GM is used to designate a sun pass lane or similar approach to a toll plaza.

YIELD LINE: Per the MUTCD, a yield line is a series of solid white isosceles triangles, used at intersection approaches controlled by a yield sign. It is measured per linear foot, with a length approximately equal to the lane width(s).

MESSAGES: Each word is paid as one message. For example, "SUN PASS ONLY" will be paid as 3 messages. Other example messages include "YIELD", "MERGE", "LEFT", "TURN", Bike symbol and wheelchair/"Universal Symbol of Accessibility". Additional messages shown on index 17346. BLUE markings (accessible parking) will be paid per LF or EA.

Refer to the Specification for the complete Method of Measurement.

ACCURACY: LF items are measured to the nearest Linear Foot; Mile items are measured to 1/1000th of a mile; and Square Foot items are measured to the nearest square foot.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings, include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.

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<td>PPM Chapter</td>
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TRNS*PORT Category (DRAFT FIELD): 0300 Signing and Pavement Markings

Struct. 711-1A-BCD THERMOPLASTIC PAVEMENT MARKINGS Mixed

A=Class
1 (Standard)
2 (Refurbishment)
3 (Hot Spray)
4 (Preformed)
7 (Remove) SF Note: When A=7, BCD=blank. See details above.

B=Color
1 (White)
2 (Yellow) C=1,2,3,4,5
3 (Black) **
4 (Blue) C=2,6

**B=3 not valid as of 12-15-05; use 710 items.

C= Type of Marking
1 (Solid) NM
2 (Solid) LF
3 (Skip) GM, D=1, 2, 3
4 (Skip) LF, D=1, 2  Note: Do not use for longitudinal stripe (C=3) or Dotted/guideline (C=5) applications.
5 (Dotted/Guideline/6-10 Gap Extension) LF D=1
6 (Message) EA Includes Yield Messages
7 (Arrows) EA ; D=0
8 (Yield Line) LF, D=0

***when C= 6, 7, or 8, D=0

D= Width
1 (6")
2 (8")
3 (12")
4 (18")
5 (24")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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0711 13251 LF 1/1/2010

THERMOPLASTIC, PREFORMED, WHITE, SOLID, 8”  
0711 14122 LF 1/1/2010

THERMOPLASTIC, PREFORMED, WHITE, SOLID, 12”  
0711 14123 LF 1/1/2010

THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24”  
0711 14125 LF 1/1/2010

THERMOPLASTIC, PREFORMED, WHITE, SKIP, 6”  
0711 14131 GM 1/1/2010

THERMOPLASTIC, PREFORMED, WHITE, SKIP, 6”  
0711 14141 LF 1/1/2010

THERMOPLASTIC, PREFORMED, WHITE, MESSAGE  
0711 14160 EA 1/1/2010

THERMOPLASTIC, PREFORMED, WHITE, ARROWS  
0711 14170 EA 1/1/2010

THERMOPLASTIC, PREFORMED,YELLOW,SOLID, 8”  
0711 14222 LF 1/1/2010

THERMOPLASTIC, PREFORMED,YELLOW,SOLID,18”  
0711 14224 LF 1/1/2010

THERMOPLASTIC, REMOVE  
0711 17 SF 1/1/2010

### Notes

Consists of Preformed Tape used for permanent pavement markings; it should be considered for use on concrete surfaces. For MOT (Maintenance of Traffic) operations, “temporary” removable tape should be paid under 102-911- and 102-912- items.

High performance tapes are required for longitudinal markings; standard tapes are limited to transverse lines, arrows, and messages.

Broken (skip) stripes shall consist of a succession of solid stripes.

Measurement and Payment for Pavement Markings:

Longitudinal stripes (along the direction of traffic) are normally applied by truck; these stripes are paid per NET MILE(solid) or GROSS MILE (skip). Most of these stripes are 6” in width. 3-9 and 10-30 skip stripes are included in the gross mile measurement. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3. It will not include any lengths of unpainted intervals which are greater than 30 ft, per the specifications.

Transverse stripes (across the direction of traffic) are applied by walking with a hand operated machine; these stripes are paid per linear foot. Most of these stripes are 8”-24” wide. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and it shall NOT include the unpainted intervals.

Dotted, 2-4 Guideline, and 6-10 Gap Extension Through Cross-over Area stripes are also
paid per LF, due to the walking/hand application required. Most of these stripes are 6" wide.

Non-standard stripe applications should be coordinated with the State Roadway Design Office, prior to including notes/items in the plans.

*******************************************************************************
WHITE W/BLACK CONTRAST: The white with black contrast stripe is normally used as above for 6" stripe, although the total width is 9" (a 6" white stripe, plus additional black material to improve contrast). Similarly, for 8" contrast applications, the 11" total with stripe is available.

CONTRASTING ALTERNATING SKIP: Use one application of white skip thermoplastic and one application of black skip paint. Payment will be made for the length of white + length of black stripe applied.

REMOVAL ITEM (A=7): The cost for removing any conflicting pavement markings is to be included in the cost of MOT Lump Sum, per Specification 710-4 and 102-5.8. Pay item 710-17 is only to be used for Maintenance projects to remove non-conflicting pavement markings (i.e. removal of paint prior to applying a two-component reactive material; or 711-17- for removal of thermoplastic prior to applying more thermo, because the maximum thickness will be exceeded if existing thermo is not removed).

YIELD LINE: Per the MUTCD, a yield line is a series of solid white isosceles triangles, used at intersection approaches controlled by a yield sign. It is measured per linear foot, with a length approximately equal to the lane width(s).

MESSAGES: Each word is paid as one message. For example, "SUN PASS ONLY" will be paid as 3 messages. Other example messages include "YIELD", "MERGE", "LEFT", "TURN", Bike symbol and wheelchair/"Universal Symbol of Accessibility". Additional messages shown on index 17346.

Refer to the Specification for the complete Method of Measurement.

ACCURACY: LF items are measured to the nearest Linear Foot; Mile items are measured to 1/1000th of a mile; and Square Foot items are measured to the nearest square foot.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings , include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.

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<th>Required Design</th>
<th>Recommended Design</th>
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<td>PPM Chapter 700 to 799</td>
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### Structure

**Struct.** 713-1AA-BCD  
**Description:** PAVEMENT MARKING- PREFORMED TAPE  
**Mixed**

- **AA**: Class  
  01 (Standard)  
  02 (High Performance) longitudinal markings only  
  07 (Removal) SF, BCD=blank

- **B**: Color  
  1 (White)  
  2 (Yellow)  
  3 (Black)  
  4 (Blue)  
  5 (White w/Black Contrast) D=3 or 7

- **C**: Type of Marking  
  1 (Solid) NM  
  2 (Solid) LF  
  3 (Skip) GM  
  4 (Skip) LF  
  5 (Dotted / Guideline) LF  
  6 (Messages) EA, D=0  
  7 (Arrows) EA, D=0

- **D**: Width  
  0 when C=6, 7  
  1 (6")  
  2 (8")  
  3 (9") valid for 6" white/black contrast applications only, B=5  
  4 (12")  
  5 (18")  
  6 (24")  
  7 (11") valid for 8" white/black contrast applications only, B=5

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

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<th>Item</th>
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**Details and Structure:** Items 700 to 799
### 714- 1-ABC  MOTORIST AID CALL BOX

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**Notes**

**Details**

New installations- estimate quantity on basis of 2 per mile (1 per 804 meters) in project length for rural areas.

For projects let through June 2009: Per Index, concrete pad is paid under Class II concrete, Misc.

For projects let July 2009 and later: Concrete pad is included in cost of call box assembly. Refer to updated design standards.
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

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**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)** 7, 13

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**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status** Inactive Structure

**Struct.** 714- 1-ABC MOTORIST AID CALL BOX AS

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BC=00
4 (Modify Existing Roadside Terminal) BC=00
5 (Relocate Existing Roadside Terminal) BC=00
6 (Remove) BC=00
7 (Refurnish) BC=00

B = Installation Type
1 (Roadside Call Terminal)
2 (Call Box Assembly)
3 (Central Terminal)

C = Form
1 (Coded Message, Radio)
2 (Coded Message, Wire)
3 (Voice, Radio)
4 (Voice, Wire)

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### 714- 2- A  
**MOTORIST AID CONSOLE**

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**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Forms**

**Design**

**Refer to Comp Book**

**Construction**

**Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.**

**Record final quantity on the tabulation sheet (plans) or computation form (comp book).**

**References**

**PPM Chapter**

**Other**

**Standards**

**Specifications**

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**  7, 13

**TRNS*PORT Category (DRAFT FIELD):**  0200 Roadway

**Status**  Inactive Structure

**Struct.**  714- 2- A  
**MOTORIST AID CONSOLE**  
**EA**

A = Form
1 (Coded Message, Radio)
2 (Coded Message, Wire)
3 (Voice, Radio)
4 (Voice, Wire)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 714- 3- AB  
**MOTORIST AID COMPONENTS (F&I) CONSOLE**

| Unit   | EA   | Accuracy | Each | PlanQuantity? | no |

**Notes**

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

| Required | Recommended |

**Forms**

| Design | SHTabQuant: Tabulation of Quantities Sheet |

**Documentation**

| Design | Refer to Comp Book |
| Construction | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. |

**References**

| PPM Chapter |

**Prep & Doc Manual Chapter(s)**

7, 13

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**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

Inactive Structure

**Struct.**

714- 3- AB  
**MOTORIST AID COMPONENTS (F&I) CONSOLE**  
**EA**

A = Operation  
1 (Furnish & Install)  
2 (Furnish)  
3 (Install) Not Valid W/ B= 2, 3, & 4.  

B = Form  
1 (Antenna)  
2 (290' Guyed Tower)  
3 (190' Guyed Tower)  
4 (190' Self Support Tower)  
5 (Console)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

### 714- 4-ABB  
**MOTORIST AID MICROWAVE COMPONENT**

| Unit   | EA   | Accuracy | Each | PlanQuantity? | no |

**Notes**

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

| Required | Recommended |

---

**Details and Structure: Items 700 to 799**
### Forms
- **Design**: SHTabQuant: Tabulation of Quantities Sheet

### Construction
- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### Documentation
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References
- **PPM Chapter**: 7, 13
- **Prep & Doc Manual Chapter(s)**: 7, 13

### TRNS*PORT Category (DRAFT FIELD):
- **0200 Roadway**

### Status
- **Inactive Structure**

### Struct.
- **714- 4-ABB**
  - **MOTORIST AID MICROWAVE COMPONENT**
  - **EA**

<table>
<thead>
<tr>
<th>Component Code</th>
<th>Description</th>
</tr>
</thead>
</table>
| A = Operation  | 1 (Furnish & Install)  
|                | 2 (Furnish)  
|                | 3 (Install)  
|                | 4 (Relocate)  
| BB =           | 01 (10,000 F9 Microwave 1.9 GHz)  
|                | 02 ( 1,600 F9 Microwave 2.9 GHz)  
|                | 03 ( 800 F9 Microwave 2.1 GHz)  
|                | 04 (10,000 F9 Microwave 6.5 GHz)  
|                | 05 (Master Alarm System)  
|                | 06 (District Alarm System)  
|                | 07 (Alarm Monitor)  
|                | 08 (6' Grid Microwave Antenna)  
|                | 09 (8' Grid Microwave Antenna)  
|                | 10 (10' Grid Microwave Antenna)  
|                | 11 (10' Solid Microwave Antenna)  
|                | 12 (72 MHz Antenna)  
|                | 13 (150-170 MHz Antenna)  
|                | 14 (40- 50 MHz Antenna)  
|                | 15 (450-460 MHz Antenna)  
|                | 16 (CB Antenna)  
|                | 17 (1/2" Foam Connectors)  
|                | 18 (7/8" Air Connectors)  
|                | 19 (Dehydrator And Manifold)  
|                | 20 (1 5/8" Air Connectors)  
|                | 21 (72 MHz Base Station)  
|                | 22 (Waveguide Connectors)  
|                | 23 (DTMF Call Unit)  
|                | 24 (DTMF Card / Phone)  
|                | 25 (Power Divider Harness)  
|                | 26 (Transmitter Combiner)  
|                | 27 (Receiver Multicoupler)  
|                | 28 (6 GHz Digital Radio)  

### Details and Structure: Items 700 to 799
29 (10 GHz Digital Radio)  
30 (8' Solid Microwave Antenna)  
31 (6' Solid Microwave Antenna)  
32 (4' Solid Microwave Antenna)  
33 (72 MHz Antenna, High Gain)  
34 (Phone Ringing Generator)  
35 (10 GHz Waveguide Connector)  
36 (Phone System)  
37 (Channel Modem, Analog)  
38 (Channel Modem, Digital)  
39 (Pressurized Connector)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>Plan Quantity?</th>
<th>no</th>
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Notes

Details

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
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</thead>
</table>

Forms

Construction

Refer to Comp Book

Documentation

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD):  0200 Roadway

Status

Inactive Structure

Struct.  714- 5-ABB  
MOTORIST AID MICROWAVE TOWER  
EA

A = Operation  
1 (Furnish & Install)  
2 (Transport)  
3 (Disassemble)  
4 (Modify) BB = 00  
BB = Tower Height  
10 (51' - 75')  
11 (76' - 100')  
12 (101' - 125')

Details and Structure: Items 700 to 799
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 714-7- A MOTORIST AID TRANSMISSION LINES

<table>
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<tr>
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**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**

**Design**

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

Inactive Structure

**Struct.**

714-7- A MOTORIST AID TRANSMISSION LINES LF

A =

1 (1/2" Foam Transmission Line)
2 (7/8" Air Transmission Line)
3 (1 5/8" Air Transmission Line)
4 (2.01" X 1.16" Elliptic Waveguide)
5 (7/8" Foam Transmission Line)
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 714- 8- A MOTORIST AID MICROWAVE COMMUNICATION SHELTER

<table>
<thead>
<tr>
<th>Unit</th>
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<th>Accuracy</th>
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**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
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<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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**Forms**

<table>
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<tr>
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<th>Refer to Comp Book</th>
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**Documentation**

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<th>Other</th>
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</table>

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0200 Roadway

**Status**

Inactive Structure

**Struct.**

714- 8- A MOTORIST AID MICROWAVE COMMUNICATION SHELTER

A = Area In Square Feet

1 (<100 Sq. Ft. Shelter)
2 (100-125 Sq. Ft. Shelter)
3 (126-150 Sq. Ft. Shelter)
4 (151-175 Sq. Ft. Shelter)
5 (176-200 Sq. Ft. Shelter)
6 (201-250 Sq. Ft. Shelter)
7 (251-300 Sq. Ft. Shelter)
8 (301-400 Sq. Ft. Shelter)
9 (>400 Sq. Ft. Shelter)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 714- 9- A MOTORIST AID TECHNICAL SUPPORT

<table>
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<tr>
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<th>Accuracy</th>
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Details and Structure: Items 700 to 799
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

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<tr>
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<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</tbody>
</table>

**Forms**

- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**: 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.**  714-9- A  MOTORIST AID TECHNICAL SUPPORT  EA

\[
A = \\
1 \text{ (Training Session Number 1)} \\
2 \text{ (Training Session Number 2)} \\
3 \text{ (Training Session Number 3)} \\
4 \text{ (Testing Callboxes)} \\
5 \text{ (Control Console)}
\]

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

**714-73-** RELAY STATION COMMUNICATION ASSEMBLY

<table>
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<tr>
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**Notes**

**Details**

**Related Items**

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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

- **Construction**: Refer to Comp Book
- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).
### 714-74- Control Station Communication Assembly

<table>
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<th>Assembly</th>
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<th>no</th>
</tr>
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</table>

**Notes**

- Related Items: Required Design
- Forms: SHTabQuant: Tabulation of Quantities Sheet

**Details**

- Documentation: Construction Design: Refer to Comp Book
- Construction: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Other
- Standards
- Specifications

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status:** Inactive Structure

**Struct.:** 714-73- RELAY STATION COMMUNICATION ASSEMBLY AS

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### 714-75- Abb Motorist Aid Microwave

<table>
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<th>Each</th>
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</table>

**Notes**

- Refer to PPM for recommended pay item plan note.

**Details**

- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of
payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td></td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</tbody>
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### Construction

<table>
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<tr>
<th>Design</th>
<th></th>
<th>Refer to Comp Book</th>
</tr>
</thead>
</table>

### Documentation

| Design         |          | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

### References

<table>
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<th>PPM Chapter</th>
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<tr>
<td>Other</td>
<td></td>
<td></td>
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<tr>
<td>Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specifications</td>
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</table>

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status:** Inactive Structure

**Struct.** 714-75-ABB MOTORIST AID MICROWAVE EA

A =
1 (Spares)
2 (Test Equipment)

BB =
01 (Transmitter Baseband Combiner Card)
02 (Transmitter Baseband Amplifier Card)
03 (Transmitter Logic Card)
04 (Receiver Splitter Card)
05 (Receiver Baseband Amplifier Card)
06 (Receiver Logic Card)
07 (4w/4w Baseband Bridge)
08 (Alarm Card)
09 (Ringing Generator 5w)
10 (Hybrid Term Set)
11 (FXO Signaling Adaptor)
12 (FXS Signaling Adaptor)
13 (Bypass Card W.Attenuators)
14 (Line Pilot Sync Unit)
15 (Two-Step Group Translator)
16 (Dual Hybrid Card Kit)
17 (Equalizer / Timer For Battery Charger)
18 (RF Power Meter)
19 (RF Power Sensor)
20 (Tracking Generator)
21 (Selective Level Meter)
22 (Frequency Counter)
23 (RF Attenuator 20w, 30 Db)
24 (Variable Attenuator, 6-66 Db)
25 (Trans, Imparrment Measurement Set -TIMS)
26 (Digital Multimeter)
27 (4w/4w DTMF Bridge)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### LIGHTING- CONDUCTORS

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
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</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

- Includes conductors as per the plans and standard indexes. Design quantity shall be based on the length of single conductor in horizontal measurement.

- REMOVE & DISPOSE: Contractor takes ownership of the removed material. Any salvage value may be incorporated into the contractor's bid price.

- REMOVE & STOCKPILE: FDOT or maintaining agency retains ownership. Do not use this item, unless specifically requested by District Maintenance or the maintaining agency.

- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Forms**
  - Design: SBTBLT: Tabulation of Quantities- Lighting

- **Construction**
  - Refer to Comp Book
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).
Standards

Index No. 17500, 17501, 17502

Specifications

Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0400 Lighting

Status

**Struct.** 715-1-AB LIGHTING-CONDUCTORS LF

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) B=0
4 (Relocate) B=0
5 (Adjust/Modify) B=0
6 (Remove & Dispose) B=0, Note: Contractor takes ownership.
7 (Remove & Stockpile) B=0, Note: ONLY when requested by maintaining agency
8 (Place out of Service) B=0

B= Size
1 (No. 10 or smaller)
2 (No 8 to No. 6)
3 (No. 4 to No. 2)
4 (No. 1 to No. 0)
5 (No. 1/0 to No. 3/0)
6 (No. 4/0 or larger)

Notes

...The following items were open, as of the publication date. Refer to the Master Pay Item list for current items...

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tr>
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<td>0715 1 12</td>
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# LIGHTING CONDUIT

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<tbody>
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<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
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## Notes

For highway lighting applications only. Includes conduit, elbows, sweeps, connecting hardware, trenching and backfill as per the plans and standard indexes. Also includes the cost of restoring cut pavement, sidewalks, sod, etc. to its original condition.

Use 'Underground' in locations where the placement of the conduit will not necessitate saw-cutting of pavement. Most conduit placed on new construction projects will be placed underground prior to the placement of pavement, and should be paid for as Underground.

Underpavement should be used when it is necessary to saw-cut and backfill the pavement in order to place the conduit, i.e. under EXISTING PAVEMENT.

Additional conduit placed for future use should be detailed in the plans; tabulate quantity as furnished & installed conduit.

## Related Items

### Forms

- **Required**: SBTBLT: Tabulation of Quantities- Lighting
- **Recommended**: Refer to Comp Book

### Documentation

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

## References

### PPM Chapter

**Other**

- **Standards**: Index No. 17721
- **Specifications**

### Prep & Doc Manual Chapter(s)

- 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0400 Lighting

## Status

**Struct.** 715- 2- AB

- A= Operation
  - 1 (Furnish & Install)
- B = Location
  - 1 (Underground)
- 2 (Underpavement Sawcut) Note: Only when sawcutting is necessary for locations under EXISTING PAVEMENT
- 3 (Surface Mount)

## Notes

See details above for furnish item

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
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<th>Item</th>
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<th>Obsolete Date</th>
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<td></td>
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<tr>
<td>0715 2 12</td>
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<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 2 13</td>
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### 715-4-ABC LIGHT POLE COMPLETE

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</table>

**Notes**

Effective January 2008; replaces 715-4A-BCC

**Details**

For standard light pole designs; poles listed on Qualified Products List (QPL). If a special foundation is needed, select the pay item based on the pole type; detail the special foundation in the plans.

INSTALL: Plans or specs should identify agency furnishing pole, as well as pick-up or delivery instructions. Payment includes foundation and all incidentals for installation/operation.

REMOVE: Plans or specs should identify if contractor is to take ownership of the poles, stockpile, or deliver to a FDOT maintenance yard. Plans/specs to indicate if foundation is to be removed.

RELOCATE: Plans or specs should identify location(s) of poles, as well as compensation: Payment includes new foundation and all incidentals for installation/operation.

Use C=Custom only when the pole height is non-standard. Plans should clearly identify height for pole(s) included under this item. Remaining design standards apply.

For Special Design (non-standard) light poles, refer to 715-5AB-CDD.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

Required: 17501, 17503, 17515   Recommended: 17515

**Forms**

Design: SBTBLT: Tabulation of Quantities- Lighting

**Documentation**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter: Vol 1, 7.3

Other: Structures Manual, Vol 9

**Selected Items may require Plan Details and/or Technical Specifications**
TRNS*PORT Category (DRAFT FIELD): 0400 Lighting

Status

Struct. 715- 4-ABC LIGHT POLE COMPLETE EA

A = Operation
0 (Furnish & Install Standard Pole, Special Foundation) *foundations other than as shown on index 17515; details in plans
1 (Furnish & Install) Standard pole, standard foundation
3 (Install) BC=00
4 (Relocate) BC=00
6 (Remove) BC=00
B = Wind Speed (mph)
1 (150)
2 (130)
3 (110)
C = Pole Height (feet)
1 (40)
2 (45)
3 (50)
9 (Custom height)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 715- 5- AB LUMINAIRE & BRACKET ARM

**Notes**

Includes the bracket arm, luminaire with lamp and all necessary mounting hardware as per the plans and indexes.

**Related Items**

<table>
<thead>
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<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
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<td>Design</td>
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**Documentation**

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**References**

- **PPM Chapter**
- **Other**
  - Normally requires SHOP DRAWINGS
- **Standards**
  - Index No. 17500, 17501
- **Specifications**

**TRNS*PORT Category (DRAFT FIELD):** 0400 Lighting

**Status**

**Struct.** 715- 5- AB LUMINAIRE & BRACKET ARM EA

- A = Operation
  - 1 (Furnish & Install)
  - 2 (Furnish)
  - 3 (Install)
  - 4 (Relocate)
  - 5 (Remove)
- Code B = 0 if A = 3, 4, or 5
- B = Material Type
  - 1 (Aluminum)
  - 2 (Galvanized Steel)

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**715- 7- AB LOAD CENTER**

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<td>Includes all components listed in the Standards and all external and internal conduit and conductors for the service.</td>
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**Related Items**

**Forms**

**Design**

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**Documentation**

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

<table>
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**Prep & Doc Manual Chapter(s)**

7, 13

**TRNS*PORT Category (DRAFT FIELD):**

| 0400 | Lighting |

**Status**

**Struct.**

715- 7- AB LOAD CENTER EA

A = Operation
1 (Furnish & Install)
2 (Rework)
3 (Relocate)
4 (Remove)

B =Service
1 (Secondary Voltage)
2 (Primary Voltage)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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**715-10- A LIGHT POLE FOUNDATION**

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**Notes**
- DO NOT USE WITH LIGHT POLE COMPLETE. Foundation is included in cost of complete pole installation or removal.

This item is normally used for maintenance type functions. Includes the foundation and anchor bolts with lock nuts and washers as per the plans and standard indexes. Includes all components listed in the Standards and all external conduit and conductors for the service.

**Related Items**
- **Required**: SBTBLT: Tabulation of Quantities - Lighting
- **Recommended**: SBTBLT: Tabulation of Quantities - Lighting

**Forms**
- **Design**: Refer to Comp Book

**Documentation**
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**: Normally requires SHOP DRAWINGS for Furnish & Install Items
- **Other**: Index No. 17501, 17503, 17504

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0400 Lighting

**Status**
- **Struct. 715-10- A LIGHT POLE FOUNDATION EA**

A = Operation
2 (Furnish & Install) Do not use with F&I light poles.
3 (Repair)
4 (Straighten Existing Foundation)
5 (Remove) Do not use with light pole removal.
6 (Relocate)
7 (Furnish)
8 (Install)

**Notes**
- The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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**715-11-ABC LUMINAIRE**

**Notes**

Includes the luminaire with lamp and necessary mounting hardware as per the plans and standard indexes.

DO NOT USE WITH items 715-4-ABC Light Pole Complete or 715-5AB-CDD Light Pole Complete, Special Design; the luminaire is included with the complete pole.

DO NOT USE WITH NEW SIGN INSTALLATIONS; lighting for new signs is included in the cost of the sign. Refer to Section 700 of the specifications.

**Related Items**

**Required**
- Design

**Recommended**
- SBTBLT: Tabulation of Quantities- Lighting

**Forms**

**Construction**
- Refer to Comp Book

**Documentation**

**Design**
- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Prep & Doc Manual Chapter(s)**
- 7, 13

**PPM Chapter**
- Normally requires SHOP DRAWINGS for Furnish & Install Items

**Standards**
- Index No. 17500, 17501, 17502, 17505

**References**

**TRNS*PORT Category (DRAFT FIELD):** 0400 Lighting

**Status**

**Struct.** 715-11-ABC LUMINAIRE EA

A = Operation
- 1 (Furnish & Install)
- 2 (Furnish)
- 3 (Install) BC=00
- 4 (Relocate) BC=00
- 5 (Remove) BC=00
- 6 (Repair & Reinstall) BC=00

B = Classification
- 1 (Roadway) Do not use with "Light Pole, Complete" or "Light Pole, Special Design"
- 2 (Underdeck)
- 3 (Sign) for Retrofits only; no separate payment for lighting on new signs

C = Type
- 1 (Cobra Head)
2 (High Mast)  
3 (Pole Top)  
4 (Shoe Box)  
5 (Wall Mount)  
6 (Pendant Hung)  
7 (Sign Mount)  
8 (Flood)  
9 (Special)*  

**Notes**  *Selected Items require Tech Spec and/or Plan Details.*

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**715-14-AB LIGHTING- PULL BOX**

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</table>

**Notes**
Includes the pull box and cover as per plans and standard indexes.

**Details**

**Related Items**
Required  
Recommended

**Forms**
Design  
SBTBLT: Tabulation of Quantities- Lighting

**Construction**
Refer to Comp Book

**Documentation**
Design  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
**Construction**  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**  
- **PPM Chapter**
- **Other** Normally requires SHOP DRAWINGS for Furnish & Install Items

**Standards**  Index No. 17500, 17503

**Specifications**

**Prep & Doc Manual Chapter(s)**  7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**  0400 Lighting

**Status**

**Struct.**  715-14-AB  LIGHTING- PULL BOX  EA

A = Operation  
1 (Furnish & Install)  
2 (Furnish)  
3 (Install)  
4 (Relocate)  
5 (Remove)  
6 (Furnish & Install Cover Only)  
7 (Repair)  
B = Placement  
1 (Roadside) - Moulded  
2 (Sidewalk)  
3 (Embedded) - Bridge  
4 (Surface Mount)

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 14 11</td>
<td>LIGHTING - PULL BOX, F&amp;I, ROADSIDE-MOULDED</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 14 12</td>
<td>LIGHTING - PULL BOX, F&amp;I, SIDEWALK</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 14 13</td>
<td>LIGHTING - PULL BOX, F&amp;I, EMBEDDED BRIDGE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0715 14 14</td>
<td>LIGHTING - PULL BOX, F&amp;I, SURFACE MOUNT</td>
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<td></td>
<td>1/1/2010</td>
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<tr>
<td>0715 14 32</td>
<td>LIGHTING - PULL BOX, INSTALL, SIDEWALK</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 14 41</td>
<td>LIGHTING - PULL BOX, RELOCATE, ROADSIDE - MOULDED</td>
<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0715 14 42</td>
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<td>1/1/2010</td>
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<tr>
<td>0715 14 51</td>
<td>LIGHTING - PULL BOX, REMOVE, ROADSIDE, MOULDED</td>
<td>EA</td>
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<tr>
<td>0715 14 52</td>
<td>LIGHTING - PULL BOX, REMOVE, SIDEWALK</td>
<td>EA</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0715 14 61</td>
<td>LIGHTING - PULL BOX, F&amp;I COVER ONLY, ROADSIDE-MOULDED</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 14 62</td>
<td>LIGHTING - PULL BOX, F&amp;I COVER ONLY, SIDEWALK</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
### LIGHTING - PULL BOX, F&I COVER ONLY, SURFACE MOUNT
- **Unit**: EA
- **Valid Date**: 1/1/2010

### LIGHTING - PULL BOX, REPAIR, ROADSIDE-MOULDED
- **Unit**: EA
- **Valid Date**: 1/1/2010

### 715-19- A LIGHTING- SURGE PROTECTOR

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
<th>Related Items</th>
<th>Forms</th>
<th>Documentation</th>
<th>References</th>
<th>Prep &amp; Doc Manual Chapter(s)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Required</td>
<td>Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recommended</td>
<td>SBTBLT: Tabulation of Quantities- Lighting</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Construction** Refer to Comp Book

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Design** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### 715-19- ABC HIGH MAST LIGHT POLE, COMPLETE

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Includes the pole, luminaires with lamps, lowering system, breakers and anchor bolts with lock nuts and washers as indicated in the plans and the Design Standards.</td>
</tr>
<tr>
<td></td>
<td>NO SEPARATE PAYMENT for the foundation, drilled shaft excavation, CSL tubes, or concrete pad around pole or pull box; all foundation work is included in the payment for a complete light pole.</td>
</tr>
</tbody>
</table>

**Related Items**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
</table>
| 0715 19-1 | LIGHTING - SURGE PROTECTOR, POLE BASE | EA | T | 1/1/2010 | }
Standards
Specifications

Struct. 715-19-ABC HIGH MAST LIGHT POLE, COMPLETE EA

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BC=00
6 (Remove) BC=00

B= Wind Speed (mph)
1 (150)
2 (130)
3 (110)

C = Pole Height (feet)
1 (80)
2 (100)
3 (120)
9 (Custom)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 19111</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-150 MPH, POLE 80'</td>
<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0715 19112</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-150 MPH, POLE 100'</td>
<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0715 19113</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-150 MPH, POLE 120'</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 19119</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-150 MPH, CUSTOM HEIGHT</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 19121</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-130 MPH, POLE 80'</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 19122</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-130 MPH, POLE 100'</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 19123</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-130 MPH, POLE 120'</td>
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<tr>
<td>0715 19129</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-130 MPH, CUSTOM HEIGHT</td>
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<td>1/1/2010</td>
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715-20- A  LIGHTING- SCHEDULED CLEANING

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>Luminaire</th>
<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td>LU</td>
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<td></td>
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</table>

### Notes
This is a maintenance operation. Coordinate the use of this item with the District Maintenance Office. Verify correct funding for this pay item.

### Related Items
- **Required**
- **Recommended**

### Forms
- **Design**
  - SBTBLT: Tabulation of Quantities- Lighting

### Documentation
- **Design**
  - Refer to Comp Book
- **Construction**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References
- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**
- **Prep & Doc Manual Chapter(s)**: 7, 13

### TRNS*PORT Category (DRAFT FIELD):
0400 Lighting

### Status
**Struct.** 715-20- A LIGHTING- SCHEDULED CLEANING LU

A =
1 (Pole Mounted <50')
2 (Underdeck)
3 (Sign Luminaire)
4 (High Mast)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 20 4</td>
<td>LIGHTING - SCHEDULED CLEANING, HIGH MAST</td>
<td>LU</td>
<td>1/1/2010</td>
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</table>

715-26- A  QUICK DISCONNECT PLUG

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
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<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
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### Notes

### Details

### Related Items
- **Required**
- **Recommended**

### Forms
- **Design**
  - SBTBLT: Tabulation of Quantities- Lighting
**Construction**  Refer to Comp Book

**Design**  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

**Other**

**Standards**

**Specifications**

**Prep & Doc Manual Chapter(s)**  7, 13

### TRNS*PORT Category (DRAFT FIELD):

0400  Lighting

### Status

**Struct.**  715-26- A  QUICK DISCONNECT PLUG  EA

A =
1 (Switch Boxing - For Sign Structure)
2 (Plug Pole Base - High Mast)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 26 1</td>
<td>QUICK DISCONNECT PLUG, SWITCH BOXING FOR SIGN</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 26 2</td>
<td>QUICK DISCONNECT PLUG, PLUG POLE BASE, HIGH MAST</td>
<td>EA</td>
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<td>1/1/2010</td>
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</tbody>
</table>

### 715-30-AA  GROUP RELAMPING (LIGHTING)

<table>
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<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LU</td>
<td>Luminaire</td>
<td>no</td>
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</table>

### Details

**Forms**

**Related Items**

**Required**

**Recommended**

**Design**  SBTBLT: Tabulation of Quantities - Lighting

### Documentation

**Construction**  Refer to Comp Book

**Design**  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

**Other**

**Standards**

**Specifications**

**Prep & Doc Manual Chapter(s)**

### TRNS*PORT Category (DRAFT FIELD):

0400  Lighting

### Status

Details and Structure: Items 700 to 799
Struct.  715- 30- AA   GROUP RELAMPING (LIGHTING)   LU

   AA =
   1 (Mercury Vapor)
   2 (High Pressure Sodium)
   3 (Metal Halide)
   4 (Bridge Mounted HPS)
   5 (High Mast/HPS)
   6
   7
   8 (Low Pressure Sodium)
   9 (Fluorescent)
   10 (Incandescent)
   11 (State Furnished Lamps)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tr>
<td>0715 30 5</td>
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<td>1/1/2010</td>
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</table>

715- 31- AA   LIGHTING - ROUTINE MAINTENANCE

<table>
<thead>
<tr>
<th>Unit</th>
<th>LO</th>
<th>Accuracy</th>
<th>Location</th>
<th>PlanQuantity?</th>
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Notes

Details

Related Items

Forms

Construction

Refer to Comp Book

Documentation

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0400 Lighting

Status

Struct.  715- 31- AA   LIGHTING - ROUTINE MAINTENANCE   LO

   AA =
   1 (Shoulder, Single Arm)
   2 (Shoulder, Double Arm)
   3 (Median, Single Arm, Wall Mounted.)
   4 (Median, Double Arm, Wall Mounted.)
5 (Bridge Mounted)  
6 (Underdeck)  
7 (Load Center)  
8 (High Mast Pole)  
9 (Overhead Sign Assembly)

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0715 31 6</td>
<td>ROUTINE LIGHTING MAINTAINANCE, UNDERDECK</td>
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</tbody>
</table>

### 715-34- A LIGHT POLE (MAINTENANCE USE ONLY)

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

This is a Maintenance item. Coordinate with District Maintenance Office.

**Related Items**

Required Recommended

**Forms**

Design SBTBLT: Tabulation of Quantities- Lighting

**Documentation**

- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Other**
  - Normally requires SHOP DRAWINGS
- **Standards Specifications**
- **Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0400 Lighting

**Status**

<table>
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<th>Unit</th>
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<tbody>
<tr>
<td>715-34- A</td>
<td>LIGHT POLE (MAINTENANCE USE ONLY)</td>
<td>EA</td>
<td></td>
<td></td>
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</tbody>
</table>

A =  
1 (Furnish New Pole)  
2 (Repair A Pole And Furnish For Reuse)

**Notes**

Includes the frangible base, attachments, bolts and washers as per the plans and standard indexes.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 36 12</td>
<td>LIGHT POLE, FRANGIBLE BASE, F&amp;I, TRANSFORMER BASE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 36 14</td>
<td>LIGHT POLE, FRANGIBLE BASE, F&amp;I, DOOR ASSEMBLY</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 36 42</td>
<td>LIGHT POLE, FRANGIBLE BASE, REMOVE, TRANSFORMER BASE</td>
<td>EA</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 36 62</td>
<td>LIGHT POLE, FRANGIBLE BASE, REPLACE, TRANSFORMER BASE</td>
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<td>1/1/2010</td>
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</tbody>
</table>

715-37- A LIGHT POLE PHOTO ELECTRIC CONTROL ASSEMBLY

Unit EA
Accuracy Each
PlanQuantity? no

Notes
Includes the photo electric control, transformer, conduit and conductors as per the plans and standard indexes.

Related Items
Required
Forms Design
SBTBLT: Tabulation of Quantities - Lighting
**Structure 715-37-1 **

**LIGHT POLE PHOTO ELECTRIC CONTROL ASSEMBLY EA**

A = Operation  
1 (Furnish & Install)  
2 (Furnish)  
3 (Install)  
4 (Remove)  
5 (Relocate)

**Notes**  
Inactive

---

**References**

PPM Chapter  
Other  
Specifications

**Prep & Doc Manual Chapter(s)**: 7, 13

---

**Fabrication Category (DRAFT FIELD):** 0400 Lighting

**Status**  
Inactive Structure

---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0715 37 1</td>
<td>PHOTO ELECTRIC CONTROL ASSEMBLY, F&amp;I EA</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**715-50-**

**LIGHTING- INSIDE BOX GIRDER**

**Unit** LS/LS  
**Accuracy** Lump Sum  
**Plan/Quantity?**

**Notes**  
Intended for lighting system within box girder structures. Coordinate the use of this item with the Mechanical/Electrical Section of the State Structures Office. All work must be detailed in the plans/specifications, including a tabulation of materials.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**  
Required  
Recommended  
Design  
SHTabQuantLS: LS Tabulation of Quantities

**Documentation**

**Design**  
Refer to Comp Book

**Construction**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter  
Other
## 715-50-0 LIGHTING- INSIDE BOX GIRDER LS/LS

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>LIGHTING, INSIDE BOX GIRDER</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### Plan Details and/or Technical Specifications required

#### 715-500- A LIGHT POLE CABLE DISTRIBUTION SYSTEM

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>Plan Quantity?</th>
<th>no</th>
</tr>
</thead>
</table>

#### Details

Includes the surge protector, fuse holders with fuses, waterproof connectors and waterproof wiring connection to the luminaire. Refer to Section 992 of the Specifications for details.

#### Related Items

- **Required**: SBTBLT: Tabulation of Quantities- Lighting

#### Forms

- **Design**: SBTBLT: Tabulation of Quantities- Lighting

#### Documentation

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**

#### Prep & Doc Manual Chapter(s)

7, 13

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### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Details and Structure: Items 700 to 799
**715-5AB-CDD**  **LIGHT POLE COMPLETE, SPECIAL DESIGN**

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**Notes**
Effective 7/2010 letting, Median Barrier Mounted Aluminum Poles (single and double arm) are included on design standard.

**Details**
Used for Specially Designed Poles, including decorative or non-standard aluminum. Requires shop drawings.
Includes the pole, bracket arm, luminaire with lamp, anchor bolts with lock nuts and washers, frangible base and foundation.

For special foundations, select pay item based on pole type; detail foundation in the plans.
For standard aluminum poles, use item 715-4-ABC.

FURNISH (A=2): Do not furnish additional light fixtures to DOT maintenance yards using construction funds. When requested, and funded by the maintaining agency, the furnish only item may be used. Plans or specifications must detail instructions for delivery of item(s) to the maintaining agency.

Effective 7/2010 letting:
For Median Barrier Mounted Aluminum, refer to Index 17515. Do not use "Special Design" pay item for standard poles included on design standard; use pay item 715-4- for Light Pole Complete, for all standard poles.

For Turnpike Projects, Top Mount light specs/details may be available.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**
**Forms**
Required  Design  Recommended  SBTBLT: Tabulation of Quantities- Lighting

**Documentation**
Construction  Refer to Comp Book
Design  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**
PPM Chapter  Other  Normally requires SHOP DRAWINGS
Index No. 17500, 17501, 17503
Specifications  Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**  7, 13
**TRNS*PORT Category (DRAFT FIELD):** 0400 Lighting

**Status**

**Struct.** 715-5AB-CDD  LIGHT POLE COMPLETE, SPECIAL DESIGN  EA

A = Operation
1 (Furnish & Install)
2 (Furnish) approvals needed; see details above
3 (Install)
4 (Relocate) B-CDD = 0-000
5 (Remove) B-CDD = 0-000
6 (Repair & Reinstall) B-CDD = 0-000
7 (Furnish & Install With Internal Vibration Damper)

B = No. Arms & Location
1 (Single Arm Shoulder Mount)
2 (Double Arm Shoulder Mount)
3 (Single Arm Wall Mount) Do not used for designs shown on Index 17515.
4 (Double Arm Wall Mount) Effective 7/2010, do NOT use for poles covered by Index 17515, Median Barrier Wall Mount.
5 (Single Arm Bridge Mount)
6 (Pole Top Mount)*
7 (Double Arm Bridge Mount)
8 (Double Arm, Pole Top Mount)*

C = Material Type
1 (Aluminum) non-standard designs
2 (Galvanized Steel)
3 (Concrete)
4 (Fiberglass)
5 (Wood)
6 (Cast Iron)

DD = Mounting Height (Open In Five Foot Increments)

**Notes**  *Turnpike has adopted the Top Mount as a standard for some applications; specs/details may be available from District Design*

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*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

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For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required Forms**
  - Design: SHTabQuant: Tabulation of Quantities Sheet

- **Construction Documentation**
  - Design: Refer to Comp Book
  - Construction: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Other
- Standards
- Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0800 Architectural

**Status**

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Details
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items
Required Recommended
Forms Design SHTabQuant: Tabulation of Quantities Sheet

Documentation
Design Refer to Comp Book
Construction Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

References
PPM Chapter
Other
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0800 Architectural

Status
Struct. 721-74- A TRASH RECEPTACLE EA

A = Type
1 (Pre-Fabricated)
2 (Precast)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Details
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items
Required Recommended

Details and Structure: Items 700 to 799
### BENCHES

**A** = Type
1 (Pre-Fabricated)
2 (Precast)

**Notes**

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<th>Item</th>
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<td>T</td>
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</table>

#### 721-77- BICYCLE PARKING RACK

**Unit** | EA  
**Accuracy** | Each  
**PlanQuantity?** | no

**Notes**

- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

#### Required

- SHTabQuant: Tabulation of Quantities Sheet

#### Recommended

### Forms

**Design**

- SHTabQuant: Tabulation of Quantities Sheet

### Documentation

**Design**

- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**

- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

**PPM Chapter**

- Design
- Construction

**Other**

**Specifications**

- Plan Details and/or Technical Specifications required

### Related Items

**Prep & Doc Manual Chapter(s)**

- 7, 13

### TRNS*PORT Category (DRAFT FIELD): 0800

- Architectural
Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0800 Architectural

Status

Struct. 721-77- BICYCLE PARKING RACK EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</table>

721-80- PEDESTRIAN PLAZA

| Unit | LS/LS | Accuracy | Lump Sum | PlanQuantity? | yes |
|------|-------|----------|-----------|---------------|

Notes

Details

May include pedestrian banners, drinking fountains, kiosk, and other items, as detailed in the plans. Tabulation summary required on all projects.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

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Documentation

| Design   | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor. |
| Construction | Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances. |

References

| PPM Chapter |
| Other |
| Standards |
| Specifications |

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0800 Architectural

Status

Struct. 721-80- PEDESTRIAN PLAZA LS/LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

730-76-ABB STEEL CASING, OPEN TRENCH

Details and Structure: Items 700 to 799
Unit LF; M1 Accuracy Linear Foot; 10th of a Meter PlanQuantity? no

Notes Details

a=1, 4, 5 valid for open cut trench applications only. For Jack & Bore, Directional Bore, and/or vibratory plowing, refer to Items 555, 556, and/or 557.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

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Forms

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Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 730-76-ABB STEEL CASING, OPEN TRENCH LF

A = Operation
1 (Furnish & Install)
4 (Remove)
5 (Install)

BB = Size
01 (2")
02 (3")
03 (4")
04 (6")
05 (8")
06 (10")
07 (12")
08 (14")
09 (16")
10 (18")
11 (20")
12 (22")
13 (24")
14 (26")
15 (28")
16 (30")
17 (32")
### Notes

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<td>STEEL CASING, OPEN TRENCH, F&amp;I, 66&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0730 76130</td>
<td>STEEL CASING, OPEN TRENCH, F&amp;I, 72&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### CASING SPACERS

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be performed.
completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
<tr>
<td>Documentation</td>
<td>Construction</td>
<td>Refer to Comp Book</td>
</tr>
<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
<td></td>
</tr>
</tbody>
</table>

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### STRUCT. 730-77-AA

**CASING SPACERS**

AA = Carrier Size

- 01 (2")
- 02 (3")
- 03 (4")
- 04 (6")
- 05 (8")
- 06 (10")
- 07 (12")
- 08 (14")
- 09 (16")
- 10 (18")
- 11 (20")
- 12 (22")
- 13 (24")
- 14 (26")
- 15 (28")
- 16 (30")
- 17 (32")
- 18 (34")
- 19 (36")
- 20 (38")
- 21 (40")
- 22 (42")
- 23 (48")
- 24 (54")
- 25 (60")
- 26 (66")
- 27 (64")
- 28 (78")
- 29 (84")
- 30 (72")

**Notes**

Details and Structure: Items 700 to 799
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
</table>
| 0730 77 1| CASING SPACERS, 2" CARRIER  
SIZE            | EA   | 1/1/2010   |            |               |

### 730-83-AB IRRIGATION WELL

**Unit**: PW; EA; LF; M1

**Accuracy**: Per Well; Each; Linear Foot; 10th of a Meter

**PlanQuantity?**: no

**Notes**

Irrigation well for roadway, architectural, or landscaping applications. Designer should determine if permits are required by local and/or state agencies. For drainage deep wells, see 444-pay items and index 288.

When used for landscape applications, load pay item in landscape category. For roadway applications, load item in roadway category.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Final Measure:

For Per Each/Well Items: Final tabulation of quantities must be recorded on proper form in computation book by location.

For Length Measurements: Record final measurements on proper form in computation book or field book. When measurements have been recorded in the field book, transfer final quantities to computation book.

**Related Items**

**Forms**

**Design**

- SHTabQuant: Tabulation of Quantities Sheet

**Construction**

- Refer to Comp Book

**Documentation**

- Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

- Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

- 7, 13

**Other**

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

- 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 or oth Roadway or other- see details

**Struct.**

730-83-AB IRRIGATION WELL PW; EA; LF;

A = Depth

blank (up to 250’) per well

1 (250’ and greater) per LF

A =
4 (4" Casing)
6 (6" Casing)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0730 83 4</td>
<td>WELL, TO 250' DEPTH, 4&quot; CASING</td>
<td>PW</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0730 83 6</td>
<td>WELL, TO 250' DEPTH, 6&quot; CASING</td>
<td>PW</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

730- 88-   PUMPING SYSTEM- IRRIGATION WELL

Unit   EA    Accuracy  Each    PlanQuantity? no

Notes

Details

Irrigation well for roadway, architectural, or landscaping applications. Designer should determine if permits are required by local and/or state agencies. For drainage deep wells, see 444- pay items and index 288.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required Recommended

Forms

Design  SHTabQuant: Tabulation of Quantities Sheet

Documentation

Design  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter Other

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD):  0200 or oth  Roadway or other- see details

Status

Struct.  730- 88-   PUMPING SYSTEM- IRRIGATION WELL  EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0730 88</td>
<td>PUMPING SYSTEM</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

735- 74- AA   TOLL PLAZA

Unit   LS/LS    Accuracy  Lump Sum    PlanQuantity?  yes

Details and Structure: Items 700 to 799
Notes
Tabulation summary required on all projects. See 735-88-AA for modifications to existing toll plazas.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
</tr>
<tr>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
</tr>
<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
</tr>
<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

References
PPM Chapter
Other

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0800 Architectural

Status
Struct. 735-74-A A TOLL PLAZA LS/LS
AA =
blank (single location)
1 (Location 1)
2 (Location 2)
3 (Location 3)
4 (Location 4)
5 (Location 5)
6 (Location 6)
7 (Location 7)
8 (Location 8)
9 (Location 9)
10 (Location 10)
11 (Location 11)
12 (Location 12)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0735 74</td>
<td>TOLL PLAZA, SINGLE LOCATION</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 1</td>
<td>TOLL PLAZA, LOCATION 1</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 2</td>
<td>TOLL PLAZA, LOCATION 2</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

Details and Structure: Items 700 to 799
### 735-79- SERVICE PLAZA- SEWAGE AND WATER MODIFICATIONS

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/LS</th>
<th>Accuracy</th>
<th>Lump Sum</th>
<th>Plan</th>
<th>Quantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**
- **Required**
  - **Design**
    - SHTabQuantLS: LS Tabulation of Quantities
    - COMP 700-050-05: Lump Sum Quantities
  
- **Construction**
  - Refer to Comp Book

**Documentation**
- **Design**
  - Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans.
  
- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
- Other
- Standards
- Specifications

Required Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Status**
- Inactive Structure

**Struct.**
- 735-79-

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0735 79</td>
<td>SERVICE PLAZA- SEWAGE AND WATER MODIFICATIONS</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 735-80- SERVICE PLAZA RENOVATION

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/LS</th>
<th>Accuracy</th>
<th>Lump Sum</th>
<th>Plan</th>
<th>Quantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**
- **Required**
  - **Design**
    - SHTabQuantLS: LS Tabulation of Quantities
    - COMP 700-050-05: Lump Sum Quantities
  
- **Construction**
  - Refer to Comp Book

**Documentation**
- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
PLAN QUANTITY will be basis of payment to the Contractor.

**Construction** Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

**PPM Chapter**

**Other** Normally requires SHOP DRAWINGS

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0800  Architectural

**Status** Inactive Structure

**Struct.**  735- 80-  SERVICE PLAZA RENOVATION  LS/LS

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

**735- 81-  SERVICE/TOLL PLAZA- UNDERGROUND STRUCTURE**

**Unit**  EA  **Accuracy**  Each  **PlanQuantity?**  no

**Notes**

Valid for Turnpike/Service Plaza use only.

Detail the size, depth, and any material requirements in the plans or specifications. If structure is to be similar to drainage structure, consider reference to Section 425 of the specifications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**

**Required**  

**Recommended**

**Design**

**Documentation**

**Construction**  Refer to Comp Book

**Design**  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

**Construction**  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Other**

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

---

Details and Structure: Items 700 to 799
### SERVICE/TOLL PLAZA- UNDERGROUND STRUCTURE

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>735-82- A</th>
<th>TOLL PLAZA CANOPY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>SF; M2</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Square Foot; 10th of a Square Meter</td>
</tr>
<tr>
<td><strong>Plan Quantity?</strong></td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Required**

**Recommended**

**Forms**

**Design**

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

**Documentation**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0800 Architectural

**Status**

Inactive Structure

**Struct.**

735-82- A TOLL PLAZA CANOPY SF

A =

1 (Concrete)

2 (Aluminum)

3 (Steel)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>735-84- A</th>
<th>TOLL PLAZA ISLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>EA</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Each</td>
</tr>
<tr>
<td><strong>Plan Quantity?</strong></td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
**Struct.  735- 84-  A TOLL PLAZA ISLAND EA**

**A**

1 (New)
2 (Modify)
3 (Remove)
4 (New With Stairwell)

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0735 84 3</td>
<td>TOLL PLAZA ISLAND, REMOVE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**735- 88- AA TOLL PLAZA MODIFY EXISTING**

**Unit** LS/LS  **Accuracy** Lump Sum  **Plan Quantity?** yes

**Notes**

For use on Turnpike and other toll roads. Tabulation summary required on all projects. For NEW plaza construction, see item 735-74-AA.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
</tr>
<tr>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
</tbody>
</table>

**Details**

Refer to Comp Book

Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans.

**Construction**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
Stand.  735- 88- AA TOLL PLAZA MODIFY EXISTING LS/LS

AA = blank (single location)
1 (Location 1)
2 (Location 2)
3 (Location 3)
4 (Location 4)
5 (Location 5)
6 (Location 6)
7 (Location 7)
8 (Location 8)
9 (Location 9)
10 (Location 10)
11 (Location 11)
12 (Location 12)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0735 88</td>
<td>TOLL PLAZA MODIFY EXISTING</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 88 1</td>
<td>TOLL PLAZA MODIFY EXISTING, LOCATION 1</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 88 2</td>
<td>TOLL PLAZA MODIFY EXISTING, LOCATION 2</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

735- 89- REST AREA/SERVICE PLAZA- AUTOMATIC WINDSHIELD WASHER

Unit  EA  Accuracy  Each  PlanQuantity?  no

Notes

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
</tr>
</tbody>
</table>

Documentation

| Design |  
|--------|---|
| Refer to Comp Book |

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

| Design |  
|--------|---|
| Record final quantity on the tabulation sheet (plans) or computation form (comp book). |
### 737-70- A 

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Details**

This item is intended to be used for verification of utility locations designated in the plans, when necessary to specifically identify a location. This item is not to be used for incidental work covered by 7-11 of the specifications. Refer to the Utility Accommodation Manual and PPM for additional guidance.

For Plan Detail/ Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required**
  - Design: SHTabQuant: Tabulation of Quantities Sheet

- **Recommended**
  - Construction: Refer to Comp Book

**Forms**

- **Construction**
  - Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
  - Vol 1, Ch 5
- **Other**
  - Normally requires SHOP DRAWINGS

**Plan Details and/or Technical Specifications required**

Prep & Doc Manual Chapter(s): 6, 7, 13

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0737 70 1</td>
<td>UTILITY LOCATE, UNDERGROUND</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0737 70 2</td>
<td>UTILITY LOCATE, UNDER PAVEMENT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

737- 71- A ELECTRONIC UTILITY DESIGNATE

| Unit | Accuracy | PlanQuantity?
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

Details

This item is intended to be used for verification/designating/marking of utility locations designated in the plans. Marker requirements to be provided by designer for specifications. Pay item not intended for searching unknown conditions. This item is not to be used for incidental work covered by 7-11 of the specifications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

Forms

<table>
<thead>
<tr>
<th>Construction</th>
<th>Design</th>
<th>Refer to Comp Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
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</tr>
<tr>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
</tr>
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<tbody>
<tr>
<td>Normally requires SHOP DRAWINGS</td>
<td></td>
</tr>
<tr>
<td>Standards</td>
<td></td>
</tr>
<tr>
<td>Specifications</td>
<td></td>
</tr>
</tbody>
</table>

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 737- 71- A ELECTRONIC UTILITY DESIGNATE LF

A =
1 (Underground)
2 (Under Pavement)
3 (Electronic - Horizontal)
4 (Underwater)

Notes

Details and Structure: Items 700 to 799
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0740 71500</td>
<td>WALL, REHABILITATION</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

Details and Structure: Items 700 to 799

---

<table>
<thead>
<tr>
<th>740 - 71-ABC WALL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>LF; M1</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Linear Foot; 10th of a Meter</td>
</tr>
<tr>
<td><strong>Plan Quantity?</strong></td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

**Details**

**Related Items**

**Required**

- Design
  - SHTabQuant: Tabulation of Quantities Sheet

**Forms**

**Construction**

- Refer to Comp Book

**Documentation**

**Design**

- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Design**

**Construction**

**Prep & Doc Manual Chapter(s)**

- 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

- 0800 Architectural

**Status**

**Struct.**

- 740 - 71-ABC WALL
  - LF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
Basis of Estimates

Unit | EA | Accuracy | Each | PlanQuantity? | no
--- | --- | --- | --- | --- | ---

Notes

Details
Refer to Specifications for use and application.

Related Items
Required | Recommended

Forms

Construction
Refer to Comp Book

Documentation
Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0200  Roadway

Status

Struct.  741- 70-ABC  TRAFFIC MONITORING SITE, VEHICLE SENSOR-CLASS II

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

B = Vehicle Sensor Type
1 (Type I)
2 (Type II)

C = Sensor Length
1 (Half Lane Width)
2 (Full Lane Width)
3 (Non-Intrusive)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0741 70111</td>
<td>TMS VEHICLE SENSOR, CLASS II, F&amp;I, TYP 1, 1/2 LN</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0741 70112</td>
<td>TMS VEHICLE SENSOR, CLASS II, F&amp;I, TYP 1, FULL LANE WIDTH</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0741 70121</td>
<td>TMS VEHICLE SENSOR, CLASS 2, F&amp;I, TYP II, HALF LANE WIDTH</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0741 70123</td>
<td>TMS VEHICLE SENSOR, CLASS 2, F&amp;I, TYPE II, NON INTRUSIVE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

742- 1- A  TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS UNIT

Unit | EA | Accuracy | Each | PlanQuantity? | no
--- | --- | --- | --- | --- | ---

Details and Structure: Items 700 to 799
### Notes
*Effective January 2010 letting; replaces 742-70 item.*

### Details
Valid for use with Traffic Monitoring Systems only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items
**Required**

### Forms
**Design**

**Construction**

### Documentation
**Design**

**Construction**

### References
**PPM Chapter**

**Other**

**Standards**

**Specifications**

*Plan Details and/or Technical Specifications required*

**Prep & Doc Manual Chapter(s)**

---

**TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS UNIT**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0742-1 1</td>
<td>TMS WEIGH-IN-MOTION, ELECTRONICS UNIT, F&amp;I</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### Notes
*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

### Details
*Effective January 2010 letting; replaces 742-70 item.*

Valid for use with Traffic Monitoring Systems only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Forms**

**Design**

---

**TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS SENSORS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>742-2-AB</td>
<td>TMS WEIGH-IN-MOTION, ELECTRONICS SENSORS</td>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

### Notes
*Effective January 2010 letting; replaces 742-70 item.*

Valid for use with Traffic Monitoring Systems only.

---

**Details**

*Effective January 2010 letting; replaces 742-70 item.*

Valid for use with Traffic Monitoring Systems only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Forms**

**Design**
Basis of Estimates

December 28, 2009

Standards
Specifications

Struct. 742- 2- AB TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS SENSORS

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)

B = Weight Sensor Type
1 (Bending Plate)
2 (Piezoelectric/Quartz Piezoelectric)

Notes
Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 or other Roadway or other - see details

Status

Struct. 742- 2- AB TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS SENSORS

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0742 2 11</td>
<td>TMS WEIGH-IN-MOTION, ELECTRONICS SENSORS, F&amp;I BENDING PLATE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0742 2 12</td>
<td>TMS WEIGH-IN-MOTION, ELECTRONICS SENSORS, F&amp;I PIEZOELECTRIC/QUARTZ PIEZOELECTRIC</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0742 2 22</td>
<td>TMS WEIGH-IN-MOTION, ELECTRONICS SENSORS, FURNISH PIEZOELECTRIC/QUARTZ PIEZOELECTRIC</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

742- 70- AB TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS ASSEMBLY

Notes
Valid through December 31, 2009. Replaced by 742-1 Unit and 742-2 Sensors.

Details
Valid for use with Traffic Monitoring Systems only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items
Required: Design
Recommended: SHTabQuant: Tabulation of Quantities Sheet

Details and Structure: Items 700 to 799
**Construction**

Refer to Comp Book

**Documentation**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Standards

Specifications

---

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

---

**Status**

**Struct.** 742-70-AB TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS ASSEMBLY

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)

B = Weight Sensor Type
1 (Bending Plate)
2 (Piezoelectric)
3 (Capacitance)
4 (Combined Types)
5 (Other)

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**743-70-AB TRAFFIC MONITORING SITE, VEHICLE SPEED/CLASSIFICATION UNIT**

<table>
<thead>
<tr>
<th>Unit</th>
<th>AS</th>
<th>Accuracy</th>
<th>Assembly</th>
<th>PlanQuantity?</th>
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<td></td>
<td></td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Refer to Specifications for use and application.

**Related Items**

Required

Recommended

Design

SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Standards

Specifications

---

Details and Structure: Items 700 to 799
**Prep & Doc Manual Chapter(s)**  7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**  0200  Roadway

### Status

**Struct.**  743- 70- AB  TRAFFIC MONITORING SITE, VEHICLE SPEED/CLASSIFICATION UNIT

A = Operation  
1 (Furnish & Install)  
2 (Furnish)  
3 (Install)  
4 (Modify)

B = Assembly Component  
1 (Electronics Unit With Equipment Cable)  
2 (Electronics Unit Only)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0743</td>
<td>TMS VEHICLE SPEED/CLASS. UNIT, F&amp;I, ELECTRONICS UNIT WITH EQUIPMENT CABLE</td>
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<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

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**Theme:**  744- 70- AB  TRAFFIC MONITORING SITE, SOLAR POWER UNIT  

| Unit | AS | Accuracy | Assembly | PlanQuantity? | no |
|------|----|----------|----------|---------------|

### Notes

**Details**  
Refer to Specifications for use and application.

**Related Items**  
**Required**  
**Recommended**

**Forms**  
**Design**  
SHTabQuant: Tabulation of Quantities Sheet

**Documentation**  
**Construction**  
Refer to Comp Book

**Design**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

---

**References**  
PPM Chapter  
Other  
Specifications

**Prep & Doc Manual Chapter(s)**  7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**  0200  Roadway

### Status

**Struct.**  744- 70- AB  TRAFFIC MONITORING SITE, SOLAR POWER UNIT  

A = Operation  
1 (Furnish & Install)  
2 (Furnish)  
3 (Install)
B = Mounting
1 (New Pole)
2 (Existing Pole)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0744 70 11</td>
<td>TMS SOLAR POWER UNIT, F&amp;I, NEW POLE</td>
<td>EA</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0744 70 12</td>
<td>TMS SOLAR POWER UNIT, F&amp;I, EXISTING POLE</td>
<td>EA</td>
<td>1/1/2010</td>
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<td></td>
</tr>
</tbody>
</table>

745-70-AB TRAFFIC MONITORING SITE, INDUCTIVE LOOP ASSEMBLY

Notes

Details
Refer to Specifications for use and application.

Related Items
Required Recommended

Forms
Design SHTabQuant: Tabulation of Quantities Sheet

Documentation
Construction Refer to Comp Book
Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Standards
Specifications

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 745-70-AB TRAFFIC MONITORING SITE, INDUCTIVE LOOP ASSEMBLY

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
B = Number Of Loops Per Lane
1 (One)
2 (Two)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0745 70 11</td>
<td>TMS INDUCTIVE LOOP ASSEMBLY, F&amp;I, 1 LOOP / LANE</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0745 70 12</td>
<td>TMS INDUCTIVE LOOP ASSEM, F&amp;I, 2 LOOPS / LANE</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### 746- 7A-BCD TRAFFIC MONITORING SITE, CABINET

**Notes**

Refer to Specifications for use and application.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

<table>
<thead>
<tr>
<th>Construction</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to Comp Book</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
</tbody>
</table>

**Construction**

| Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

### References

- **PPM Chapter**
- **Construction**

**Prep & Doc Manual Chapter(s)**

- 7, 13

### Prep & Doc Manual Chapter(s)

- SHTabQuant: Tabulation of Quantities Sheet

### Notes

**References**

**Specifications**

Plan Details and/or Technical Specifications required

**TRNS*PORT Category (DRAFT FIELD):**

- 0200 Roadway

### Status

**Struct.**

746- 7A-BCD TRAFFIC MONITORING SITE, CABINET EA

- A = Operation
  - 1 (Furnish & Install)
  - 2 (Furnish)
  - 3 (Install) BCD=blank
  - 4 (Modify) BCD=blank
  - 5 (Relocate) BCD=blank
- B = Size
  - 1 (Type III)
  - 2 (Type IV)
  - 3 (Type V)
- C = Mounting
  - 1 (Base)
  - 2 (Pole)
  - 3 (Pedestal)
- D = Backplane
  - 1 (One)
# Notes
Existing Specs apply for A=1-3; Plan Detail and/or Tech Spec Required for A=4 or 5

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0746 71111</td>
<td>TMS CABINET, F&amp;I, TYPE III, BASE MOUNT, 1 BACKPLANE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0746 71112</td>
<td>TMS CABINET, F&amp;I, TYPE III, BASE MOUNT, 2 BACKPLANE</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0746 71122</td>
<td>TRAFFIC MONITORING SYSTEM CABINET, F&amp;I, TYPE III, POLE MOUNT, 2 BACKPLANE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0746 71131</td>
<td>TMS CABINET, F&amp;I, TYPE III, PEDESTAL MNT, 1 BACKPLANE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
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</tr>
<tr>
<td>0746 71132</td>
<td>TMS CABINET, F&amp;I, TYPE III, PEDESTAL MNT, 2 BACKPLANE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0746 71133</td>
<td>TMS CABINET, F&amp;I, TYPE V, PEDESTAL MNT, NONE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0746 71211</td>
<td>TMS CABINET, F&amp;I, TYPE IV, BASE MOUNT, 1 BACKPLANE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0746 71212</td>
<td>TMS CABINET, F&amp;I, TYPE IV, BASE MNT, 2 BACKPLANE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0746 71221</td>
<td>TRAFFIC MONITORING SYSTEM CABINET, F&amp;I, TYPE IV, POLE MOUNT, 1 BACKPLANE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0746 71222</td>
<td>TMS CABINET, F&amp;I, TYPE IV, POLE MOUNT, 2 BACKPLANE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
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</tr>
<tr>
<td>0746 71311</td>
<td>TMS CABINET, F&amp;I, TYPE V, BASE MOUNT, 1 BACKPLANE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0746 71312</td>
<td>TMS CABINET, F&amp;I, TYPE V, BASE MOUNT, 2 BACKPLANE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0746 74</td>
<td>TMS CABINET, MODIFY</td>
<td>EA</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0746 75</td>
<td>TMS CABINET, RELOCATE</td>
<td>EA</td>
<td>1/1/2010</td>
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---

## 747-70-AB TRAFFIC MONITORING SITE, MODEM

<table>
<thead>
<tr>
<th>Unit</th>
<th>AS</th>
<th>Accuracy</th>
<th>Assembly</th>
<th>PlanQuantity?</th>
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<tr>
<td></td>
<td>AS</td>
<td>Accuracy</td>
<td>Assembly</td>
<td>PlanQuantity?</td>
</tr>
</tbody>
</table>

### Notes
Refer to Specifications for use and application.

### Related Items

#### Required

#### Recommended

### Forms

#### Design

SHTabQuant: Tabulation of Quantities Sheet

### Documentation

#### Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

#### Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

PPM Chapter

Other
Standards
Specifications

Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0200  Roadway

Status

Struct.  747- 70- AB  TRAFFIC MONITORING SITE, MODEM  AS

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)
B = Item
1 (Modem)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0747 70 11</td>
<td>TMS MODEM, F&amp;I</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0747 70 31</td>
<td>TMS MODEM, INSTALL</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

750- 1- AB  ARCHITECTURAL- BUILDING

Unit  LS/SF; LS/M2  Accuracy  Lump Sum (Square Foot);  PlanQuantity?  no
Lump Sum (Square Meter)

Notes

Details

For all new/major rehab Architectural work. Includes all work (building, plumbing, electrical, water, HVAC, etc.) for a complete building. Tech Specs must detail all items, construction, and materials.
For limited incidental work, see 751 items.
Do not use for movable bridge structures; see 508 items and/or contact Movable Bridge Section. Do not use for Signing, Lighting, ITS, or Signalization.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
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Documentation

<table>
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<th>Construction</th>
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<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
<th>Standards</th>
<th>Specifications</th>
</tr>
</thead>
</table>

Details and Structure: Items 700 to 799
Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0800  Architectural

Status

Struct.  750-  1- AB  ARCHITECTURAL- BUILDING  LS/SF

A= Operation
1 (New)
5 (Rehab)
6 (Remove)
B= Facility
1 (Rest Area)
2 (Welcome Center)
3 (Weigh Station)
4 (Maintenance Facility Building)
5 (Office)
6 (Parking Garage)
7 (Storage/Mechanical)
8 (Uncovered Storage)
9 (Other building)*

*Contact Architectural Section for approval

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0750 1 11</td>
<td>ARCHITECTURAL, BUILDING, NEW, REST AREA</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0750 1 13</td>
<td>ARCHITECTURAL, BUILDING, NEW, WEIGH STATION</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0750 1 17</td>
<td>ARCHITECTURAL, BUILDING, NEW, STORAGE/Mechanical</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0750 1 19</td>
<td>ARCHITECTURAL, BUILDING, NEW, OTHER BUILDING</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0750 1 53</td>
<td>ARCHITECTURAL, BUILDING, REHAB, WEIGH STATION</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0750 1 55</td>
<td>ARCHITECTURAL, BUILDING, REHAB, OFFICE</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0750 1 59</td>
<td>ARCHITECTURAL, BUILDING, REHAB, OTHER BUILDING</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

751-  2-  ARCHITECTURAL- ELECTRICAL/POWER

Notes

Details

For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
Includes all work, hardware (lighting fixtures, generator, etc.), and materials for a complete electrical system, as detailed in the plans and/or tech specs.
Do not use for Signing, Lighting, ITS, or Signalization.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be performed.

Details and Structure: Items 700 to 799
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0751 2</td>
<td>ARCHITECTURAL - ELECTRICAL/POWER</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### Notes

For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.

DO NOT USE FOR: Signing, Lighting, ITS, or Signalization.

Includes all work, hardware, and materials for a complete Telephone/Communication system, as detailed in the plans and/or tech specs. Communications may include cable and/or fiber optic connections necessary for a complete system.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 751- 4- ARCHITECTURAL- WATER/SEWER INTERIOR

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/LS</th>
<th>Accuracy</th>
<th>Lump Sum</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.

Includes all work, hardware (sinks, toilets, water fountains), and materials for a complete water/sewer system for the interior of a building, as detailed in the plans and/or tech specs.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 751-5- ARCHITECTURAL- WATER, SANITARY SEWER/SEWAGE TREATMENT

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td>LS/LS</td>
<td>Lump Sum</td>
<td>no</td>
</tr>
</tbody>
</table>

**Details**

For use on Architectural projects only. May be used with 750-1 (New/Rehab building) item for major items of work. For minor water/sewer work associated with building, include with 750-1 item.

Includes all work, hardware (lift station, treatment plant, etc.) for a complete water/sewer system for the exterior of a building, as detailed in the plans and/or tech specs.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Forms**

Design: SHTabQuantLS: LS Tabulation of Quantities

COMP 700-050-05: Lump Sum Quantities

Construction: Refer to Comp Book

**Documentation**

Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Status**

Struct. 751-5- ARCHITECTURAL- WATER, SANITARY SEWER/SEWAGE TREATMENT

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0751 5</td>
<td>ARCHITECTURAL-WATER, SANITARY SEWER/SEWAGE TREATMENT</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
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</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 751-6- ARCHITECTURAL- HVAC

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
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</tr>
</thead>
<tbody>
<tr>
<td>LS/LS</td>
<td>Lump Sum</td>
<td>no</td>
</tr>
</tbody>
</table>

**Details**

For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
Includes all work, hardware (AC, ventilation, and/or heating units), and materials for a complete HVAC system, as detailed in the plans and/or tech specs.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
<tr>
<td>Documentation</td>
<td>Design</td>
<td>Refer to Comp Book</td>
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<tr>
<td></td>
<td>Construction</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</table>

**Required Standards**
- Specifications

**Notes**
- Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Struct. 751-6- ARCHITECTURAL- HVAC LS/LS**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 751-10- ARCHITECTURAL- ASBESTOS ABATEMENT

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Architectural Section before opening, due to possible CARS contract.</td>
</tr>
</tbody>
</table>

For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.

Includes all work, hardware, and materials for Asbestos Abatement, as detailed in the plans and/or tech specs.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
<tr>
<td>Documentation</td>
<td>Design</td>
<td>Refer to Comp Book</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>751-11- A</th>
<th>ARCHITECTURAL- SPECIAL</th>
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</thead>
<tbody>
<tr>
<td>Unit</td>
<td>Accuracy</td>
</tr>
<tr>
<td>Notes</td>
<td>Contact State Structures Design Office and/or State Architectural Section prior to use in any contract</td>
</tr>
<tr>
<td>Details</td>
<td>For use on Structural/Architectural plans only.</td>
</tr>
<tr>
<td>Related Items</td>
<td>Required</td>
</tr>
<tr>
<td>Forms</td>
<td>Design</td>
</tr>
<tr>
<td>Construction</td>
<td>Design</td>
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**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>751- 20- A</th>
<th>ARCHITECTURAL- LIGHTNING PROTECTION SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
<td>LS/LS</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Lump Sum</td>
</tr>
<tr>
<td>Plan Quantity?</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Details
For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
For movable bridge structures, refer to Section 508 items. For all other applications, lightning protection is incidental to the item being protected.
Do not use for Signing, Lighting, ITS, or Signalization.

*********************************
Includes all work, hardware, and materials for a complete lightning protection system, as detailed in the plans and/or tech specs.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
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<tr>
<td>Design</td>
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<td>Construction</td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
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**Documentation**

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<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</table>

**References**

PPM Chapter
Other
Standards
Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Status**

**Struct. 751- 20- A ARCHITECTURAL- LIGHTNING PROTECTION SYSTEM LS/LS**

A= Type of System
1 (Point Discharge)
2 (Static Charge Dissipation)
3 (Surge Suppression)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0751 20 1</td>
<td>ARCHITECTURAL- LIGHTNING PROTECTION SYSTEM, POINT OF DISCHARGE</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0751 20 3</td>
<td>ARCHITECTURAL- LIGHTNING PROTECTION SYSTEM, SURGE SUPPRESSION</td>
<td>LS</td>
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<td>1/1/2010</td>
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### Topic No. 600-000-002

#### Basis of Estimates

**2010 Edition**  
**December 28, 2009**

<table>
<thead>
<tr>
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<tr>
<td>0751 30 1</td>
<td>ARCHITECTURAL, PICNIC PAVILION, SMALL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### 751-30- A  ARCHITECTURAL- PICNIC PAVILION

**Unit** EA  
**Accuracy** Each  
**PlanQuantity?** no

#### Notes

**Details**

For use on Architectural projects only.  
Size (small/large) and details as shown on Design Standards.  
Non-standard sizes must be approved by the Architectural Section, with a new pay item request.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

#### Related Items

**Required** SHTabQuant: Tabulation of Quantities Sheet

**Recommended**

#### Forms

**Construction** Refer to Comp Book

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

**PPM Chapter** Other

**Index No. 530**

**Specifications**

Plan Details and/or Technical Specifications required

#### Prep & Doc Manual Chapter(s)

---

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

#### Status

**Struct.** 751-30- A  
**ARCHITECTURAL- PICNIC PAVILION**  
**EA**

A= Size, per index

1 (Small)  
2 (Large)

#### Notes

---

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

### 770-75- A  PRE-PASS SENSOR

**Unit** EA  
**Accuracy** Each  
**PlanQuantity?** no

#### Notes

**Details**

For use at weigh/inspection stations only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be...
completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</tbody>
</table>

### Forms

<table>
<thead>
<tr>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Design</td>
</tr>
<tr>
<td>Construction</td>
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</tbody>
</table>

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
<th>Standards</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Plan Details and/or Technical Specifications required</td>
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### Prep & Doc Manual Chapter(s)

<table>
<thead>
<tr>
<th>TRNS*PORT Category (DRAFT FIELD):</th>
<th>Design</th>
<th>Construction</th>
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### Status

<table>
<thead>
<tr>
<th>Struct.</th>
<th>770-75- A</th>
<th>PRE-PASS SENSOR</th>
<th>EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Location</td>
<td>1(Asphalt Embedded)</td>
<td></td>
</tr>
</tbody>
</table>

### Notes

The designer should details all requirements and components to be included in the system.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</tbody>
</table>

### Forms

<table>
<thead>
<tr>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Design</td>
</tr>
<tr>
<td>Construction</td>
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</tbody>
</table>

### References

<table>
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<th>Other</th>
<th>Standards</th>
<th>Specifications</th>
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<tbody>
<tr>
<td></td>
<td></td>
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<td>Normally requires SHOP DRAWINGS</td>
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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**770-78-**

<table>
<thead>
<tr>
<th>STATIC/WEIGH-IN-MOTION SCALE SYSTEM</th>
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<tbody>
<tr>
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### Notes

The designer should details all requirements and components to be included in the system.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0800 Architectural

Status Block Pending

Struct. 770-78- STATIC/WEIGH-IN-MOTION SCALE SYSTEM EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>1/1/2010</td>
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</table>

770-79- WEIGH STATION

Unit LS/LS Accuracy Lump Sum Plan Quantity? yes

Notes

The designer should detail all requirements and components to be included in the station.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required Recommended
Forms
Design SHTabQuantLS: LS Tabulation of Quantities
COMP 700-050-05: Lump Sum Quantities

Construction
Refer to Comp Book

Documentation
Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter Normal
Other Normally requires SHOP DRAWINGS

Specifications

Details and Structure: Items 700 to 799

Page 112 of 146
### 775-70- SCALE PIT STRUCTURES

<table>
<thead>
<tr>
<th>Unit</th>
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<th>PlanQuantity?</th>
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<tr>
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**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

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**Documentation**

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<th>PPM Chapter</th>
<th>Design</th>
<th>Construction</th>
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**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Inactive Structure**

<table>
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<th>775-70- SCALE PIT STRUCTURES</th>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 775-72- SCALE FOUNDATION

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</thead>
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**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
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<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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**Documentation**

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<thead>
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<th>Refer to Comp Book</th>
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<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
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<tr>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</table>
### Settings and Technical Specifications

**Plan Details and/or Technical Specifications required**

Prep & Doc Manual Chapter(s)

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**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Status:** Inactive Structure

**Struct.** 775-72- SCALE FOUNDATION EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td></td>
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</table>

**Notes**

For use in providing electrical power service to ITS devices in the field. Installations of service assemblies can be either for overhead or underground service, in accordance with the details in the plans, or in Index 17736 of the Design Standards. A service assembly may include a weather head, conduit, service wire, a meter base, service disconnect, and a transient protection device.

**Related Items**

**Required**

- **Forms** Design SHTabQuant: Tabulation of Quantities Sheet

**Construction** Refer to Comp Book

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter** Vol 1, Chapter 7

---

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS

**Status** 780-1-AB ITS ELECTRICAL POWER Mixed

**A= Operation**

1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust & Modify)
6 (Remove and Dispose- Contractor takes ownership)

B= Type  
1 (Service) AS  
2 (Service Wire) LF  
3 (Service Disconnect) EA

**Notes**  
Note: Mile (kilometer) units only valid with 6" or 8" stripes  
Note: Accuracy for LF items is per Linear Foot, Mile items to 1/1000th of a mile, and Square Foot items to the nearest square foot.

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>0780 1 13</td>
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<td>0780 1 41</td>
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<tr>
<td>0780 1 42</td>
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<td>0780 1 43</td>
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<tr>
<td>0780 1 51</td>
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**781- 2- AB**  
**ITS HIGHWAY ADVISORY RADIO**

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

**Notes**  
For installation along the roadway for the purpose of broadcasting traffic advisories to vehicle radios. The HAR installation consists of a radio antenna mounted on a pole, a control cabinet containing the transmitter, power supply, communication hardware, and conduit. The system includes a roadside HAR sign with flashing beacons to alert motorists that a message is being broadcast.  
Transmitter wattage, siting information, and installation details should be noted in the plans.  
For temporary MAS systems during construction, refer to Maintenance Of Traffic, Section 102 items.

**Related Items**  
**Required**  
**Recommended**  
**Forms**  
**Design**  
SHTabQuant: Tabulation of Quantities Sheet

---

Details and Structure: Items 700 to 799
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0781 2 12</td>
<td>ITS HIGHWAY ADVISORY RADIO, F&amp;I, AC POWER</td>
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<td></td>
<td>1/1/2010</td>
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<tr>
<td>0781 2 41</td>
<td>ITS HIGHWAY ADVISORY RADIO, RELOCATE, SOLAR POWER</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0781 2 42</td>
<td>ITS HIGHWAY ADVISORY RADIO, RELOCATE, AC</td>
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<td>1/1/2010</td>
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<tr>
<td>0781 2 52</td>
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<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

For installation at the roadside, on bridges or other new or existing structures to provide real-time weather data on temperature, humidity, precipitation, wind speed, and direction, and visibility. The RWIS is furnished with the weather instruments necessary to produce the readings desired and collects, stores, and processes the data for transmittal to the transportation management center (TMS). An RWIS with one central monitoring site can serve multiple field installations. The weather sensors are typically mounted on either a dedicated RWIS tower or existing structures.

**Notes**

**Details**

**Related Items**

**Forms**

**Prep & Doc Manual Chapter(s)**

**Transportation**

**References**

**PPM Chapter**

Vol 1, Chapter 7

**Other Standards**

Specifications

**Comments**

**Standards**

Specifications

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Documentation**

Refer to Comp Book

**Notes**

SHTabQuant: Tabulation of Quantities Sheet

**TRNS*PORT Category (DRAFT FIELD):**

0550 ITS

<table>
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<th>Struct.</th>
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<td>December 28, 2009</td>
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**Notes**

**Details**

For installation at the roadside, on bridges or other new or existing structures to provide real-time weather data on temperature, humidity, precipitation, wind speed, and direction, and visibility. The RWIS is furnished with the weather instruments necessary to produce the readings desired and collects, stores, and processes the data for transmittal to the transportation management center (TMS). An RWIS with one central monitoring site can serve multiple field installations. The weather sensors are typically mounted on either a dedicated RWIS tower or existing structures.

**Related Items**

**Forms**

SHTabQuant: Tabulation of Quantities Sheet
Standards
Specifications

Vol 1, Chapter 7

Struct.  781-  3-ABC ITS ROAD WEATHER INFORMATION SYSTEM EA

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BC=00
4 (Relocate) BC=00
5 (Adjust /Modify) BC=00

B= Equipment Type
1 (Field Hardware)
2 (Central Monitoring/Processing Equipment)

C= Sensor Mounting
1 (New Tower Included)
2 (Mounted to Existing Structure)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

781- 1A-BCD ITS DYNAMIC MESSAGE SIGN

Unit EA Accuracy Each PlanQuantity? no

Details

From the PPM, "The DMS is an electronic sign capable of displaying more than one message, which is changeable manually, by remote control, or by automatic control. The DMS is intended primarily to advise approaching motorists of freeway conditions, such as road construction or a traffic incident ahead, so that they can take appropriate action. In some instances the DMS could be used to display other messages, such as AMBER Alerts or traveler information related to special events, emergencies, and incidents impacting mobility and safety. A DMS generally displays messages that can be selected or modified by electronic means from a TMC or other central command location. As such, system designs utilizing DMS must also include designs for a communication infrastructure that supports this remote control capability."

18" Character Displays: for installation along interstate, expressway, or limited access corridors, or speed limits of 45 MPH or higher.

12" Character Displays: may only be used on roadways with speed limits lower than 45mph.
STRUCTURE TYPES: Mid-span- across one direction of travel; full span- across all lanes; cantilever- at the roadside.

SIGN TYPE: Front display surface, with either line matrix- pixels arranged in rows, or full matrix- pixels fully covering the surface. Designer should note the size of sign, structure, and installation details in the plans.

NOTE:
FURNISH & INSTALL: includes the furnishing of both the truss/structure and sign

FURNISH: Furnish the sign only (Signs are available on State purchase contracts)

INSTALL: Install sign on existing structure

FURNISH & INSTALL STRUCTURE, INSTALL SIGN: When sign is provided by FDOT (may have been purchased on state contract, or relocated from another location). Contractor must provide/construct truss, install sign.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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<table>
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<tr>
<th>Documentation</th>
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</table>

| Construction | Design      | Refer to Comp Book |
| Construction | Construction | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. |
| References   | PPM Chapter | Vol 1, Chapter 7 |
|              | Other       |

<table>
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<th>Standards Specifications</th>
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TRNS*PORT Category (DRAFT FIELD): 0550 ITS

Struct. 781-1A-BCD ITS DYNAMIC MESSAGE SIGN EA

A= Operation
1 (Furnish & Install) Sign and structure; C= 1,2, or 3
2 (Furnish) Sign only; CD = 40
3 (Install) Dept Furnished Sign on existing structure; CD = 40
4 (Relocate Sign) to another existing structure; CD = 40
5 (Relocate Sign and Structure) to a new location; CD = 50
9 (Furnish & Install structure; Install Sign) C = 1, 2, or 3

B=Sign Type
1 (LED Line Matrix- 18" Character Display)
2 (LED Full Matrix- 18" Character Display)
3 (LED Line Matrix- 12" Character Display)
4 (LED Full Matrix- 12" Character Display)

C=Sign Support Structure
1 (Mid-span)
2 (Full Span)
3 (Cantilever) D=1, 2, or 3 only
4 NA: Sign Only; no structure furnished by Contractor; D=0
5 NA: Sign and Structure; valid for A=5 only

D= Horizontal Structure Length
0 (Blank; No Structure) when C=2, 3, 4, 5
1 (0’ to 40’)
2 (41’ to 60’)
3 (61’ to 80’)
4 (81’ to 100’)
5 (101’ to 120’)
6 (121 to 140’)
7 (141 to 161’)
8 (161 to 180’)
9 (greater than 180’)

Notes: See detail for Furnish/Install options

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>1/1/2010</td>
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<td>0781 11215</td>
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<tr>
<td>0781 11217</td>
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<td>1/1/2010</td>
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<td>Item</td>
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<tr>
<td>0781 13213</td>
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<td>0781 13217</td>
<td>ITS DYNAMIC MESSAGE SIGN, INSTALL, LED FULL MATRIX MID SPAN, TRUSS - 141 - 160'</td>
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<td>0781 13228</td>
<td>ITS DYNAMIC MESSAGE SIGN, INSTALL, LED FULL MATRIX, 161-180'</td>
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<tr>
<td>0781 13231</td>
<td>ITS DYNAMIC MESSAGE SIGN, INSTALL, LED - FULL MATRIX, CANTILEVER, 0 - 40'</td>
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<td>0781 13240</td>
<td>ITS DYNAMIC MESSAGE SIGN, INSTALL, LED FULL MATRIX, SIGN ONLY</td>
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<tr>
<td>0781 14240</td>
<td>ITS DYNAMIC MESSAGE SIGN, RELOCATE SIGN TO EXISTING STRUCT, LED FULL MATRIX, SIGN ONLY</td>
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<td>0781 15250</td>
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<tr>
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<td>0781 19214</td>
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<td>0781 19215</td>
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<td>1/1/2010</td>
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<td>0781 19216</td>
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<tr>
<td>0781 19218</td>
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<tr>
<td>0781 19221</td>
<td>ITS DYNAMIC MESSAGE SIGN, F&amp;I TRUSS, INSTALL SIGN, LED FULL MATRIX, FULL SPAN, TRUSS - GREATER THAN 180'</td>
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<td>0781 19230</td>
<td>ITS DYNAMIC MESSAGE SIGN, F&amp;I TRUSS, INSTALL SIGN, LED FULL MATRIX, FULL SPAN, TRUSS - 0-40'</td>
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<td>0781 19232</td>
<td>ITS DYNAMIC MESSAGE SIGN, F&amp;I TRUSS, INSTALL SIGN, LED FULL MATRIX, CANTILEVER, TRUSS - 41 - 60'</td>
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## 782- 1- AB  ITS CCTV CAMERA

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<th>Unit</th>
<th>Accuracy</th>
<th>Plan Quantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
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</table>

Details and Structure: Items 700 to 799
Notes
For installations along the roadway or intersections, to provide video of traffic movements. Includes mounting hardware, cabling, and power supply. Cameras can be dome style enclosures, or "barrel type" units with external positioners. Either unit can be pressurized to reduce the effects of moisture, dust, and other contaminants.

REMOVE & DISPOSE: Plans or Specs should identify the limits of the item to be removed (incidental components, wiring, or other work).
REMOVE & STOCKPILE: Plans or Specs should indicate if the Contractor is to stockpile the item(s) within the project limits, or deliver to a FDOT maintenance yard.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
</tr>
</tbody>
</table>

Documentation

<table>
<thead>
<tr>
<th>Construction</th>
<th>Design</th>
<th>Refer to Comp Book</th>
</tr>
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</table>

| Construction | Design | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. |

| Construction | Design | Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Vol 1, Chapter 7</th>
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</table>

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0550 ITS

Status

<table>
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<tr>
<th>Struct.</th>
<th>782-1-AB</th>
<th>ITS CCTV CAMERA</th>
<th>EA</th>
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</thead>
</table>

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
6 (Remove & Dispose)
7 (Remove & Stockpile)

B= Type
1 (Dome enclosure, pressurized)
2 (External positioner, pressurized)
3 (Dome enclosure, non-pressurized)
4 (External positioner, non-pressurized)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Details

For use in the Transportation Management Center (TMC) to display video from the CCTV cameras in the field, and for displaying maps, graphics, traffic counts, and other visuals. Video Display cubes can be stacked to form a wall display. Other monitors are positioned in the room or on the operator's desktops for control purposes. The video controller receives the incoming video signals and arranges them on the various displays. Display types, room layout, and installation details must be noted in the plans.

### Related Items

**Required**
- Design

**Recommended**
- SHTabQuant: Tabulation of Quantities Sheet

### Documentation

**Design**
- Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Construction**
- Refer to Comp Book

### References

**PPM Chapter**
- Other

**Standards**
- Specifications

**Prep & Doc Manual Chapter(s)**

### Status

**TRNS*PORT Category (DRAFT FIELD):**

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<th>Struct.</th>
<th>ITS VIDEO DISPLAY</th>
<th>EA</th>
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<td>A= Operation</td>
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</tr>
<tr>
<td>1 (Furnish &amp; Install)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 (Furnish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 (Install)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 (Relocate)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 (Adjust /Modify)</td>
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<tr>
<td>B= Component</td>
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<tr>
<td>Design</td>
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<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</table>

**Notes**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).
1 (Cube for video wall) C=2
2 (Workstation) C=1 or 3
3 (Monitor)
4 (Controller) C=0

C= Technology
1 (LCD- Liquid Crystal Display)
2 (Rear Projection)
3 (CRT- Cathode Ray Tube)
4 (Special)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0782 2121</td>
<td>ITS VIDEO DISPLAY, F&amp;I, WORK STATION, LIQUID CRYSTAL DISPLAY</td>
<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0782 2131</td>
<td>ITS VIDEO DISPLAY, F&amp;I, MONITOR, LIQUID CRYSTAL DISPLAY</td>
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<tr>
<td>0782 2140</td>
<td>ITS VIDEO DISPLAY, F&amp;I, CONTROLLER</td>
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</table>

782- 3- A ITS REST AREA INFORMATION SYSTEMS

Unit EA  Accuracy Each  PlanQuantity? no

Notes

Details

For use in highway rest areas for the display of traffic conditions and other information for the traveling public. The system is rack mounted and has the necessary processing power, memory, network connection, and video output capability to provide images for LCD displays in the lobby or concourse area of rest plazas.

Related Items

Required Recommended

Forms Design SHTabQuant: Tabulation of Quantities Sheet

Documentation

Design

Refer to Comp Book

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0550 ITS

Status

Struct. 782- 3- A ITS REST AREA INFORMATION SYSTEMS EA

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>783- 1-ABC</th>
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<tr>
<td><strong>Unit</strong></td>
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<tr>
<td><strong>Accuracy</strong></td>
<td>Linear Foot; 10th of a Meter</td>
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<tr>
<td><strong>PlanQuantity?</strong></td>
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**Notes**

For use in fiber optic networks that support ITS devices and their connection to communication hubs, transportation management centers, and related facilities. Use "overhead" for installations involving bridges and other aboveground structures. Use "underground" for cable placed in buried conduit along the roadside.

*******

REMOVE (A=6): For cable to be removed, detail location and size of cable (approximate number of fibers) to be removed. Contractor takes ownership (remove & dispose), unless otherwise indicated in the plans or specs.

REMOVE & STOCKPILE (A=7): For cable to be removed, detail location and size of cable (approximate number of fibers) to be removed. FDOT retains ownership of cable. Detail in plans location for stockpile, i.e. Maintenance yard.

**Related Items**

**Required** | **Recommended**
---|---
Design | SHTabQuant: Tabulation of Quantities Sheet

**Forms**

**Construction** | **Design**
---|---
Refer to Comp Book | Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction** | **Design**
---|---
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter | Vol 1, Chapter 7
Other | 
Standards | 
Specifications | 

**TRNS*PORT Category (DRAFT FIELD):**

| 0550 | ITS |

**Status**

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<tr>
<td>4 (Relocate)</td>
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<td>5 (Adjust /Modify)</td>
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<td>6 (Remove) BC=00</td>
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<tr>
<td>7 (Remove and Stockpile) BC=00</td>
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<tr>
<td>B=</td>
<td>Location</td>
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<tr>
<td>1 (Overhead)</td>
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<td>2 (Underground)</td>
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<tr>
<td>C=</td>
<td>Number of Fibers in Cable</td>
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<td>1 (2 to 12)</td>
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Notes  *Remove item may require plan details and/or tech spec

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>0783 1112</td>
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<td>0783 1113</td>
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<tr>
<td>0783 1521</td>
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<tr>
<td>0783 1523</td>
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</table>
For use in fiber optic networks where segments of fiber optic cable must be spliced together, or when cables must be terminated at the end of a segment. Note that each connection involves the fusing of individual optical fibers in a cable. Payment “each” is for each FIBER to be connected. Type of connection must be noted in the plans.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**TRNS**PORT Category (DRAFT FIELD): 0550 ITS

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
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<td>0783 231</td>
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<td>0783 232</td>
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<td>0783 251</td>
<td>ITS FIBER OPTIC CONNECTION, ADJUST/MODIFY, SPLICE</td>
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<td>1/1/2010</td>
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### 783- 3- AB  ITS FIBER OPTIC CONNECTION HARDWARE

<table>
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<th>Accuracy</th>
<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**
For use in fiber optic networks, where segments of cable must be spliced together. This item includes hardware and incidental materials for splices; payment for splicing individual fibers is made under 783-2.

For B=8 (Patch Cord), tech spec needed to describe the patch cord requirements. FO patch cords or Cat5 cables may be considered as incidental to the hardware to be installed. Ensure that the plans/specs clearly define if separate payment will be made for patch cords. Otherwise, payment will be considered as incidental to hardware being installed. When multiple cords/cables are needed, use a tabulation sheet in the plans to clearly identify the number of pairs and length of each cord/cable.

**Related Items**
- Required: SHTabQuant: Tabulation of Quantities Sheet
- Recommended: 783-2

**Forms**
- Design: SHTabQuant: Tabulation of Quantities Sheet
- Construction: Refer to Comp Book

**Documentation**
- Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
- Other
- Standards
- Specifications

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS

**Status**

**Struct.**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

B=Component
1 (Splice Enclosure)
2 (Splice Tray)
3 (Preterminated Connector Assembly)
4 (Buffer Tube Fan Out Kit)
5 (Patch Panel, Preterminated)
6 (Patch Panel, Field Terminated)
7 (Connector Panel)
8 (Patch Cord)* Tech Spec needed; see BOE detail
Notes  *B=8: Tech Spec needed. Coordinate the use of this item with ITS Office.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tbody>
<tr>
<td>0783 3 11</td>
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<tr>
<td>0783 3 12</td>
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<td>1/1/2010</td>
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<tr>
<td>0783 3 13</td>
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<td>0783 3 14</td>
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<td>1/1/2010</td>
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<td>0783 3 16</td>
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<td>0783 3 17</td>
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**783- 4-1AB **

**ITS CONDUIT**

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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

Details

For fiber optic cable and ITS devices only. Underground: to be used when conduit is installed prior to placement of pavement, or where it does not interfere with existing pavement. Underpavement Sawcut: to be used only when sawcutting is necessary for location under EXISTING PAVEMENT.

Note: Specification change effective 7-1-08 letting has separate payment for Electronic Locate Transmitter & Receiver. Refer to specification for payment details.

Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
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Documentation

**Construction**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
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</table>

<table>
<thead>
<tr>
<th>Construction</th>
</tr>
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<tbody>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</tbody>
</table>

Details and Structure: Items 700 to 799
Standards
Specifications

Struct. 783-4-1AB ITS CONDUIT LF

A= Operation
1 (Furnish & Install)
2 (Furnish) B=0
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
6 (Remove and Dispose) B=0

B= Location
1 (Aboveground)
2 (Underground)
3 (Underpavement Sawcut) Note: to be used only when sawcutting is necessary
9 (Special)*

Notes
*Special to be used only with approval of the ITS Office
Plan Details and/or Tech Specs needed for Install, Relocate, Adjust/Modify, and Remove items.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
<td>0783 4112</td>
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<td>LF</td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0783 4113</td>
<td>ITS CONDUIT, F&amp; I, UNDER EXISTING PAVEMENT SAWCUT</td>
<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td>0783 4142</td>
<td>ITS CONDUIT, RELOCATEI, UNDERGROUND</td>
<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td>0783 4152</td>
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<td>1/1/2010</td>
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783-5-A ITS PULL BOX FOR FIBER OPTIC

<table>
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<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>Plan Quantity?</th>
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Notes
Details
For use in fiber optic networks as an access point for moving cable into position during installation. Refer to specification for size, materials, and other details for box.

Related Items
Required
Design
Recommended
SHTabQuant: Tabulation of Quantities Sheet

Forms

Construction
Refer to Comp Book

Documentation
Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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<tr>
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<td>EA</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0783 5 4</td>
<td>ITS PULL BOX FOR FIBER OPTIC CABLE, RELOCATE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0783 5 5</td>
<td>ITS PULL BOX FOR FIBER OPTIC CABLE, ADJUST AND MODIFY</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

Details:
For use in fiber optic networks as a housing for the connection or termination of cable segments. Refer to specification for size, materials, and other details for box.

REMOVE AND DISPOSE (A=6): Detail size and location in the plans. Contractor assumes ownership after removal- for disposal by the contractor.
REMOVE AND STOCKPILE (A=7): Detail size and location in the plans. FDOT retains ownership of the item. Detail location for stockpile, i.e. Maintenance yard or project Right of way.

Required Recommended

Documentation
Design
Refer to Comp Book
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS^PORT Category (DRAFT FIELD): 0550 ITS

Status

Struct. 783- 6- A ITS SPLICE BOX FOR FIBER OPTIC EA

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
6 (Remove & Dispose)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
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<td>1/1/2010</td>
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<tr>
<td>0783 6 4</td>
<td>ITS SPLICE BOX FOR FIBER OPTIC CABLE, RELOCATE</td>
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<td>1/1/2010</td>
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<tr>
<td>0783 6 5</td>
<td>ITS SPLICE BOX FOR FIBER OPTIC CABLE, ADJUST/ MODIFY</td>
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<td>1/1/2010</td>
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<td>0783 6 6</td>
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783- 7- A ITS PULL AND JUNCTION BOX

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

Details

For use on ITS projects. To be used for non-fiber optic wiring needs (power, communication, etc for ITS systems). Full details/specs are needed for this item. Designer may refer to other specification sections, as needed to detail required box.

NOTE: THIS ITEM IS NOT covered by current 783 specification.

For Pull/Junction or Splice Box for Fiber Optics, refer to items 783-5 and 783-6, as detailed in the specifications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

*******

REMOVE AND STOCKPILE (A=7): Detail size and location in the plans. FDOT retains ownership of the item. Detail location for stockpile, i.e. Maintenance yard or project Right of way.

Related Items

<table>
<thead>
<tr>
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<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
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</tbody>
</table>

Forms | Design | SHTabQuant: Tabulation of Quantities Sheet

Details and Structure: Items 700 to 799
Construction Specifications

Struct. 783-7- A ITS PULL AND JUNCTION BOX EA

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
7 (Remove and Stockpile)

Notes

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0550 ITS

Status

Struct. 783-7- A ITS PULL AND JUNCTION BOX EA

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tbody>
<tr>
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<tr>
<td>0783 7 3</td>
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<tr>
<td>0783 7 4</td>
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<tr>
<td>0783 7 5</td>
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<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

783-8- A ITS MULTI-CONDUCTOR COMMUNICATION CABLE

Unit LF; M1
Accuracy Linear Foot; 10th of a Meter

Notes

For use on ITS projects. Tech Spec and/or plan detail needed to specify material requirements and/or number of conductors. Primarily for communications, may carry incidental low voltage device power. When multiple cables are needed, use a tabulation sheet in the plans to clearly identify the number of pairs and length of each cable. Record the total length for payment under this pay item.

Note: FO patch cords or Cat5 cables may be considered as incidental to the hardware to be installed. Refer to 783-3 for patch cords.

For Plan Detail/Tech Spec items: The Designer should ensure that the description,
materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
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<tr>
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<td>Design</td>
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<td><strong>Construction</strong></td>
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<tr>
<td>Design</td>
<td>Refer to Comp Book</td>
</tr>
<tr>
<td><strong>Documentation</strong></td>
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<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
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**Standards**

**Specifications**

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

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<tr>
<td>Struct. 783- 8- A</td>
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</table>

**ITS MULTI-CONDUCTOR COMMUNICATION CABLE**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tr>
<td>0783 8 4</td>
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<tr>
<td>0783 8 5</td>
<td>ITS MULTI-CONDUCTOR COMMUNICATION CABLE, ADJUST/MODIFY</td>
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<td>1/1/2010</td>
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</table>

**783- 9- AB**

**ITS LOCATE SYSTEM ELECTRONIC EQUIPMENT**

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

**Notes**

For use on ITS projects. This pay items is intended for the electronic equipment used to detect buried conduit and other underground duct, cable, and infrastructure. The electronics used for this activity typically includes a portable transmitter, a hand-held receiver, and electronic markers that can be used together to determine the location of the underground utilities and other objects. Special configuration and/or installation details should be detailed in the plans on a project-
by project basis.

Electronic Box Marker: Specifications call for one electronic box marker in each pull box and splice box buried below finish grade. Additional markers may be used for existing ITS boxes within project limits.

NOTE: This item effective with the July 2008 letting; for projects let prior to July 2008, transmitter and receiver are included in the ITS conduit price, per specifications.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</table>

### Forms

#### Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

### Documentation

#### Design

#### Construction

#### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
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#### Standards

#### Specifications

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS

### Status

#### Struct.

783- 9- AB

**ITS LOCATE SYSTEM ELECTRONIC EQUIPMENT**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust/Modify)

B = Equipment Type
1 (Transmitter)
2 (Receiver)
3 (Electronic Box Marker) Note: Do not use this item for Electronic Route Markers

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>1/1/2010</td>
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**784- 1- A**

**ITS MANAGED FIELD ETHERNET SWITCH**

<table>
<thead>
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<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>EA</td>
<td>Each</td>
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</tr>
</tbody>
</table>

### Notes

Details and Structure: Items 700 to 799
For use in ITS communication networks to provide wire-speed fast Ethernet connections for ITS field devices. The Ethernet switch is hardened to withstand harsh environments and provides transmission rates of 100 megabits per second from the remote ITS device installation location to the ITS network trunk interconnection point.

**Details**

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
</tr>
</tbody>
</table>

**Construction**

Refer to Comp Book

**Documentation**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Design

Construction

**Prep & Doc Manual Chapter(s)**

*TRNS*PORT Category (DRAFT FIELD): 0550 ITS

**Status**

**Struct.** 784- 1- A

ITS MANAGED FIELD ETHERNET SWITCH

A= Operation

1 (Furnish & Install)

2 (Furnish)

3 (Install)

4 (Relocate)

5 (Adjust /Modify)

6 (Remove and Dispose) Contractor takes ownership

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0784 1 1</td>
<td>ITS MANAGED FIELD ETHERNET SWITCH, F&amp;I</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 1 3</td>
<td>ITS MANAGED FIELD ETHERNET SWITCH, INSTALL</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 1 4</td>
<td>ITS MANAGED FIELD ETHERNET SWITCH, RELOCATE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 1 6</td>
<td>ITS MANAGED FIELD ETHERNET SWITCH, REMOVE &amp; DISPOSE, CONTRACTOR TAKE OWNERSHIP</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**784- 2- A**

ITS DEVICE SERVER

**Unit** EA

**Accuracy** Each

**PlanQuantity?** no

**Notes**

For use when an ITS field device must connect to an Ethernet network but the device is only equipped with serial communication ports (i.e. EIA-232, EIA-422, or EIA-485 connections). Field devices that may require use of device servers include highway...
advisory radio field assemblies, microwave vehicle detection system devices, magnetic traffic detection systems, road weather information system stations, and other low-speed data output devices.

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
</tr>
</tbody>
</table>

### Construction

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**
- **Design**
- **Construction**

### Notes

- **Status**

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS

**Struct.** 784- 2- A ITS DEVICE SERVER EA

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
6 (Remove and Dispose) Contractor takes ownership

**Notes**

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0784 2 1</td>
<td>ITS DEVICE SERVER, F&amp;I</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0784 2 3</td>
<td>ITS DEVICE SERVER, INSTALL</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 2 4</td>
<td>ITS DEVICE SERVER, ADJUST/MODIFY</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

### 784- 3- AB ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>Each</td>
</tr>
<tr>
<td>PlanQuantity?</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

For use when analog video and data signals obtained in the field must be converted to digital signals for transmission across IP networks. The encoder and decoder are independent, network-based devices that utilize MPEG-2 and other video compression algorithms for transmission of high-bandwidth signals. Encoders may be hardened devices and are installed in the field. Decoders are housed in transportation management centers and can be either a hardware device or a decoder software program running on a computer.

**NOTE:** Software based decoder is incidental to the digital video encoder, per specifications.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
</table>

Details and Structure: Items 700 to 799
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0784 3 11</td>
<td>ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER, F&amp;I, HARDENED ENCODER</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 3 50</td>
<td>ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER, ADJUST/MODIFY</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 3 60</td>
<td>ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER, REMOVE &amp; DISPOSE, HARDENED ENCODER</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

784- 4- AB  ITS DIGITAL VIDEO DECODER

Unit    EA    Accuracy    Each    PlanQuantity? no

Notes
Details
DO NOT USE with Digital Video Encoder; see details with 784-3 item.
This item to be used only when a hardware-based decoder, or additional copies of the software-based decoder are needed.
Contact ITS Section prior to opening.

Related Items
Required
Forms  Design  SHTabQuant: Tabulation of Quantities Sheet

SHTabQuant: Tabulation of Quantities Sheet

Refer to Comp Book
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

Status
Struct.  784- 3- AB  ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER, F&I, HARDENED ENCODER

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) B=0
4 (Relocate) B=0
5 (Adjust /Modify) B=0
6 (Remove and Dispose) Contractor takes ownership, B=0
B= Component
1 (Hardened Encoder)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes Details

For use in ITS communication networks to provide centralized Ethernet connections for ITS field devices utilizing field or edge switches. The Ethernet hub switch is hardened to withstand harsh environments and installation at remote locations. "Long haul" and "short haul" are common terms applied to telecommunication equipment in order to generally describe a devices ability to transmit information over various distances.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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Documentation

<table>
<thead>
<tr>
<th>Construction</th>
<th>Design</th>
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<tbody>
<tr>
<td>Refer to Comp Book</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
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References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards</td>
<td>Specifications</td>
</tr>
</tbody>
</table>

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0550 ITS

Status

Struct. 784-4-AB ITS DIGITAL VIDEO DECODER EA

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) B=0
4 (Relocate) B=0
5 (Adjust /Modify) B=0
6 (Remove and Dispose) Contractor takes ownership B=0

B= Component*
1 (Hardware-based decoder)
2 (Software-based decoder)
*See details and/or specifications

Notes

Contact ITS Section prior to opening.
### Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

<table>
<thead>
<tr>
<th>Standards</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPM Chapter</td>
<td>Other</td>
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</tbody>
</table>

### Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD):

0550 ITS

### Status

**Struct.** 784- 5- AB

**IT'S MANAGED ETHERNET HUB SWITCH**

EA

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0784 5 11</td>
<td>ITS MANAGED ETHERNET HUB SWITCH, F&amp;I, LONG HAUL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 5 51</td>
<td>ITS MANAGED ETHERNET HUB SWITCH, ADJUST/MODIFY, LONG HAUL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**784- 6- AB**

**ITS WIRELESS COMMUNICATION DEVICE**

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

**Notes**

For use in transmitting and receiving data in ITS networks, especially between remotely located field devices and the mainline communications infrastructure that serves them. Devices include radio transmitter-receivers and antennas, power-over-Ethernet (PoE) injectors, serial cable, power supplies and mounting hardware. Access points and subscriber units are typically associated with Ethernet systems. Specifications needed to detail equipment requirements.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0784 6 11</td>
<td>ITS WIRELESS COMMUNICATION DEVICE, F&amp;I, ETHERNET ACCESS POINT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 6 12</td>
<td>ITS WIRELESS COMMUNICATION DEVICE, F&amp;I, ETHERNET SUBSCRIBER UNIT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 6 41</td>
<td>ITS WIRELESS COMMUNICATION DEVICE, RELOCATE, ETHERNET ACCESS POINT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 6 60</td>
<td>ITS WIRELESS COMMUNICATION DEVICE, REMOVE &amp; DISPOSE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

Details and Structure: Items 700 to 799

Notes

Use a lowering device in field locations where a CCTV camera or other ITS device is mounted on a pole, but the height precludes easy access to the equipment for maintenance or repair. The lowering device is provided along with a steel or concrete pole.

REMOVE: Plans or specs should identify if contactor is to take ownership, stockpile, or
deliver item(s) to a FDOT maintenance yard.
Retrofit: to be used where a pole is already provided, to include furnishing & installation of lowering device.

### Required

<table>
<thead>
<tr>
<th>Form</th>
<th>Design</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
</tr>
</tbody>
</table>

### Construction

- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**

### Prep & Doc Manual Chapter(s)

---

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS

### Status

**Struct.** 785- 1- AB ITS POLE EA

- **A**: Operation
  1. Furnish & Install
  2. Furnish
  3. Install
  4. Relocate
  5. Adjust /Modify
  6. Remove B=0
  9. Retrofit lowering device on existing pole B=0
- **B**: Type
  1. Concrete Pole w/ lowering device
  2. Steel Pole w/ lowering device
  3. Concrete Pole w/o lowering device
  4. Steel Pole w/o lowering device

### Notes

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0785 1 11</td>
<td>ITS POLE, F&amp;I, CONCRETE - WITH LOWERING DEVICE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0785 1 12</td>
<td>ITS POLE, F&amp;I, STEEL WITH LOWERING DEVICE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0785 1 13</td>
<td>ITS POLE, F&amp;I, CONCRETE WITHOUT LOWERING DEVICE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0785 1 14</td>
<td>ITS POLE, F&amp;I, STEEL WITHOUT LOWERING DEVICE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0785 1 42</td>
<td>ITS POLE, RELOCATE, STEEL POLE WITH LOWERING DEVICE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
For use on ITS project. Refer to Specification for cabinets covered by Section 785. For Install, relocate, or adjust/modify operations, detail mounting requirements in the plans and/or specifications. Specifications for Install only items should include existing location of materials/equipment (i.e. maintenance yard address). NOTE: Items listed in other sections may have cabinets incidental to item being installed.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Forms**

**Design**

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Standards

Specifications

Selected Items may require Plan Details and/or Technical Specifications

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

0550 ITS

**Status**

**Struct.**

785- 2-ABC

ITS FIELD CABINET

EA

A= Operation

1 (Furnish & Install)

2 (Furnish)

3 (Install) BC=00

4 (Relocate) BC=00

5 (Adjust /Modify) BC=00

6 (Remove and Dispose) Contractor takes ownership BC=00

B= Type

1 (Type 336)

2 (Type 336 w/ sunshields)

3 (Type 336S)
4 (Type 336S w/ sunshields)
5 (Type 332)
6 (Type 332 w/ sunshields)
9 (Special)*

C= Mounting
1 (Pole Mount)
2 (Ground Mount)

Notes  * Special may require Tech Spec and/or Plan Detail

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0785 2111</td>
<td>ITS FIELD CABINET, F&amp;I, TYPE 336, POLE MOUNT</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
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<tr>
<td>0785 2112</td>
<td>ITS FIELD CABINET, F&amp;I, TYPE 336, GROUND MOUNT</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0785 2121</td>
<td>ITS FIELD CABINET, F&amp;I, TYPE 336 WITH SUNSHIELDS, POLE MOUNT</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0785 2122</td>
<td>ITS FIELD CABINET, F&amp;I, TYPE 336 WITH SUNSHIELDS, GROUND MOUNT</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0785 2131</td>
<td>ITS FIELD CABINET, F&amp;I, TYPE 336S, POLE MOUNT</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0785 2141</td>
<td>ITS FIELD CABINET, F&amp;I, TYPE 336S WITH SUNSHIELDS, POLE MOUNT</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0785 2162</td>
<td>ITS FIELD CABINET, F&amp;I, TYPE 332 W/SUNSHIELDS, GROUND MOUNT</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0785 2191</td>
<td>ITS FIELD CABINET, F&amp;I, SPECIAL, POLE MOUNT</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0785 2192</td>
<td>ITS FIELD CABINET, F&amp;I, SPECIAL, GROUND MOUNT</td>
<td>EA</td>
<td>1/1/2010</td>
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<td>0785 2300</td>
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<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0785 2400</td>
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<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0785 2500</td>
<td>ITS FIELD CABINET, ADJUST/MODIFY</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0785 2600</td>
<td>ITS CABINET, REMOVE &amp; DISPOSE</td>
<td>EA</td>
<td>1/1/2010</td>
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</tbody>
</table>

**785- 3-ABC  ITS EQUIPMENT SHELTER**

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

**Notes**

**Details**

For use on ITS Projects. Refer to Specification for cabinets/shelter covered by Section 785. All shelter/building incidental must be detailed in the plans or specifications, including electrical, mechanical, and/or HVAC.

DO NOT Use 750 Architectural Items with this item.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**

**Required**

**Recommended**

Design  SHTabQuant: Tabulation of Quantities Sheet


**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Standards**

Selected Items may require Plan Details and/or Technical Specifications

**Specifications**

Prep & Doc Manual Chapter(s)

---

**TRNS*PORT Category (DRAFT FIELD):** 0550  ITS

**Status**

**Struct.** 785- 3-ABC  ITS EQUIPMENT SHELTER  EA

A= Operation
1 (Furnish & Install)
2 (Furnish)*
3 (Install) BC=00*
4 (Relocate) BC=00*
5 (Adjust /Modify) BC=00
6 (Remove and Dispose) Contractor takes ownership

B= Size (from exterior dimensions)
1 (up to 120 ft²)
2 (121 to 170 ft²)
3 (171 to 250 ft²)
9 (Special)*

C= Interior Ceiling Height
1 (8 ft)
2 (9 ft)

**Notes**

*A=2, 3, 4 verify with ITS Office prior to opening
*B=9 may require Tech Spec or Plan Detail

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
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<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0785 3112</td>
<td>ITS EQUIPMENT SHELTER, F&amp;I, 120 SQUARE FEET OR LESS 9' INTERIOR CEILING HEIGHT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0785 3191</td>
<td>ITS EQUIPMENT SHELTER, F&amp;I, SPECIAL 9’ INTERIOR CEILING HEIGHT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**786- 1- AB  ITS VEHICLE DETECTION SYSTEM**

**Unit**   EA

**Accuracy**  Each

**PlanQuantity?**  no

**Notes**

For use on ITS Projects. Refer to Specifications for types of detection systems. Special Detection Systems require approval of the State ITS Office.

For Plan Detail/Tech Spec items: The Designer should ensure that the description,

---

**Details and Structure:** Items 700 to 799
materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Construction**

Refer to Comp Book

**Documentation**

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Standards

Specifications

Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS

**Status**

**Struct.** 786- 1- AB

ITS VEHICLE DETECTION SYSTEM EA

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
9 (Retrofit lowering device on existing pole) B=0

B= Detector Type
1 (Microwave)
2 (Video)
3 (Magnetic)
4 (Acoustic)
9 (Special) * Note: Requires prior approval of the ITS Office

**Notes**

* Special may require Tech Spec and/or Plan Detail

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0786 1 11</td>
<td>ITS VEHICLE DETECTION SYSTEM, F&amp;I, MICROWAVE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0786 1 12</td>
<td>ITS VEHICLE DETECTION SYSTEM, F&amp;I, VIDEO DETECTOR</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0786 1 13</td>
<td>ITS VEHICLE DETECTION SYSTEM, F&amp;I, MAGNETIC DETECTOR</td>
<td>EA</td>
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<td>1/1/2010</td>
<td></td>
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<tr>
<td>0786 1 19</td>
<td>ITS VEHICLE DETECTION SYSTEM, F&amp;I, SPECIAL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>EA</td>
<td>Date</td>
<td></td>
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<td>-----</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>0786 1 31</td>
<td>ITS VEHICLE DETECTION SYSTEM, INSTALL, MICROWAVE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0786 1 39</td>
<td>ITS VEHICLE DETECTION SYSTEM, INSTALL, SPECIAL</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0786 1 41</td>
<td>ITS VEHICLE DETECTION SYSTEM, RELOCATE, MICROWAVE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0786 1 42</td>
<td>ITS VEHICLE DETECTION SYSTEM, RELOCATE, VIDEO</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0786 1 49</td>
<td>ITS VEHICLE DETECTION SYSTEM, RELOCATE, SPECIAL</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0786 1 51</td>
<td>ITS VEHICLE DETECTION SYSTEM, ADJUST &amp; MODIFY, MICROWAVE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**800- MASS TRANSIT- RAIL ROAD**

**Notes**

Items 800 to 899: Mass Transit items removed due to lack of use. Item Structures restored upon request.

**Details**

**Related Items**

- **Required**: Design

**Forms**

- **Design**

**Documentation**

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**

- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

*TRNS*PORT Category (DRAFT FIELD):

**Status**

Struct. 800- MASS TRANSIT- RAIL ROAD

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**823- 1A-BBB SUBBALLAST**

**Notes**

This item is to be used for railroad applications only.

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required**: Design

**Forms**

- **Design**: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

- **Design**: Refer to Comp Book

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
Standards
Specifications

Struct. 823-1A-BBB SUBBALLAST SF

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)

BBB =
3 (3 in.)
4 (4 in.)
5 (5 in.)
6 (6 in.)
12 (12 in.)

Notes
NOTE: Open in one inch increments only (Mass Transit Item)

Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 6, 7, 13

_status
PPM Chapter
Other
Standards
Specifications

TRNS*PORT Category (DRAFT FIELD): 0900 Mass Transit

825-1AB-CDE TRACK, STANDARD

Unit LF; M1
Accuracy Linear Foot; 10th of a Meter
Plan Quantity? no

Notes
Details
This item is to be used for railroad applications only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items
Forms

Required

Recommended

Design
SHTabQuant: Tabulation of Quantities Sheet

Documentation

Construction
Refer to Comp Book

Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Standards
Specifications

Details and Structure: Items 800 to 899
Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0900 Mass Transit

Status

Struct. 825-1AB-CDE TRACK, STANDARD LF

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust/Modify)
6 (Remove)

B = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

C = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

D = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

E = Rail Head Hardening
0 (Standard Rail Head)
1 (Hardened Rail Head)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0825114111</td>
<td>MASS TRANSIT-TRACK, F&amp;I, 132 LB/YD, CONTINUOUS WELDED RAIL, TIMBER TIE, HARDENED RAIL HEAD</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0825144111</td>
<td>MASS TRANSIT-TRACK,RELOCATE, 132 LB/YD, CONTINUOUS WELDED RAIL, TIMBER TIE, HARDENED RAIL HEAD</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0825154111</td>
<td>MASS TRANSIT-TRACK,ADJUST/MODIFY, 132 LB/YD, CONTINUOUS WELDED RAIL, TIMBER TIE, HARDENED RAIL HEAD</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0825164111</td>
<td>MASS TRANSIT-TRACK,REMOVE, 132 LB/YD, CONTINUOUS WELDED RAIL, TIMBER TIE, HARDENED RAIL HEAD</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

825-2AB-CCE TRACK UNDERCUTTING

Unit LF; M1
Accuracy Linear Foot; 10th of a Meter
PlanQuantity? no

Details and Structure: Items 800 to 899
Notes
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</tbody>
</table>

Forms

<table>
<thead>
<tr>
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<th>Design</th>
</tr>
</thead>
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<tr>
<td>Refer to Comp Book</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

References

- PPM Chapter
- Other
- Standards
- Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0900 Mass Transit

Struct.

<table>
<thead>
<tr>
<th>825-2AB-CCC</th>
<th>TRACK UNDERCUTTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF</td>
<td></td>
</tr>
</tbody>
</table>

A = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

B = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

CCC = 075 (3 in.)
100 (4 in.)
125 (5 in.)
150 (6 in.)

Notes
NOTE: Open in one inch increments only. (Mass Transit Item)

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

825-3AB-CCC TRACK RAISING

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes
This item is to be used for railroad applications only

Details

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
**Struct. 825-3AB-CCC TRACK RAISING LF**

A = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

B = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

CCC = Height
3 (3 in.)
4 (4 in.)
5 (5 in.)
6 (6 in.)

**Notes**
NOTE: Open in one inch increments only. (Mass Transit Item)

---

**TRNS*PORT Category (DRAFT FIELD):** 0900 Mass Transit

**Status**

**Related Items**

**Forms**

Required Design Recommended
SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

**Documentation**

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter 7, 13

**Prep & Doc Manual Chapter(s)**

7, 13

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**825-4AB- C LINE & SURFACE**

**Unit** LF; M1

**Accuracy** Linear Foot; 10th of a Meter

**PlanQuantity?** no

**Notes**

This item is to be used for railroad applications only

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
**Construction**  Refer to Comp Book

**Documentation**  Design  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. 

**Construction**  
Record final quantity on the tabulation sheet (plans) or computation form (comp book). 

**References**  
PPM Chapter 
Other 
Standards 
Specifications 

**Notes**  
Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  7, 13

**TRNS*PORT Category (DRAFT FIELD):**  0900  Mass Transit

---

**Status**

**Struct.**  825-4AB- C  
LINE & SURFACE  
LF

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
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</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**825-5AB-CDE**  
TURNOUT

**Notes**

**Details**  
This item is to be used for railroad applications only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**  
Design  
SHTabQuant: Tabulation of Quantities Sheet

**Recommended**  

**Forms**

**Documentation**  

**Construction**  Refer to Comp Book

**Design**  
Locate in plans. Summarize quantities by location on tabulation of
quantities sheet in the plans, or detail calculations in the computation book.

**Construction**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
PPM Chapter
Other
Standards
Specifications

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)** 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0900 Mass Transit

**Status**

<table>
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<tr>
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<tr>
<td>825-5AB-CDE</td>
<td>TURNOUT</td>
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**Notes**

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0825514121</td>
<td>MASS TRANSIT-TURNOUT, F&amp;I, 132 LB/YD RAIL, RIGHT HAND, SIZE NO. 10 , TIMBER TIE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

Details and Structure: Items 800 to 899
825-6AB-CDE CROSSOVER

Unit  EA  Accuracy  Each  PlanQuantity?  no

Notes
This item is to be used for railroad applications only.

Details
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required  Recommended

Forms
Design  SHTabQuant: Tabulation of Quantities Sheet

Documentation
Design  Refer to Comp Book
Construction  Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0900  Mass Transit

Structure

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)

B = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

C = 1 (Right Hand)
2 (Left Hand)

D = Crossover Size
1 (No. 08)
2 (No. 10)
3 (No. 12)
4 (No. 14)
5 (No. 15)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
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<tr>
<td>827-1-ABC</td>
<td>DERAIL</td>
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</table>

**Notes**

This item is to be used for railroad applications only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Documentation**

- **Design**: Refer to Comp Book
- **Construction**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**: Design, Construction
- **Other**: Standards, Specifications

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0900 Mass Transit

**Status**

<table>
<thead>
<tr>
<th>Structure</th>
<th>Item Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>827-1-ABC</td>
<td>DERAIL</td>
<td>EA</td>
</tr>
</tbody>
</table>

**Notes**

- A = Operation
  1 (Furnish & Install)
  2 (Furnish)
  3 (Install)
  4 (Remove)
  5 (Modify)
- B = Rail Size
  1 (100 lb/yd)
  2 (115 lb/yd)
  3 (119 lb/yd)
  4 (132 lb/yd)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0827 1141</td>
<td>MASS TRANSIT- DERAIL, F&amp;I, 132 LB/YD RAIL, MANUAL DERAIL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

827- 2-ABC  BUMPING POST

Unit EA  Accuracy Each  PlanQuantity? no

Notes
Details
This item is to be used for railroad applications only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items
Required Design  Recommended SHTabQuant: Tabulation of Quantities Sheet

Forms
Construction Refer to Comp Book
Design
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Other
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0900 Mass Transit

Status
Struct. 827- 2-ABC  BUMPING POST  EA

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)
B = Rail Size
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>830-1AB-CDE GRADE CROSSING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
</tr>
</tbody>
</table>

**Notes**

This item is to be used for railroad applications only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**

**Required** | **Recommended**
--- | ---
Design | SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

**Construction**

Refer to Comp Book

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter 830-1AB-CDE

**Prep & Doc Manual Chapter(s)** 7, 13

**Plan Details and/or Technical Specifications required**

### Status

**Struct.** 830-1AB-CDE  GRADE CROSSING  LF

A =Operation
1 (Furnish & Install)  
2 (Furnish)  
3 (Install)  
4 (Remove)  

**Notes**

**Details**

Describe the item as accurately as possible. Include all pertinent data and details necessary for the proper execution of the work. The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**TRNS*PORT Category (DRAFT FIELD):** 0900 Mass Transit

**Details and Structure:** Items 800 to 899
Basis of Estimates

2010 Edition
December 28, 2009

5 (Modify)

B = Grade Crossing Type
1 (Concrete)
2 (Rubber)
3 (Timber)
4 (Asphalt)
5 (Timber and Asphalt)
6 (Stone)
7 (Special)
0 (Temporary)

C = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

D = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

E = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0830111411</td>
<td>MASS TRANSIT- GRADE CROSSING, F&amp;I, CONCRETE GRADE, 132 LB/YD RAIL, CONT WELD RAIL, TIMBER TIE</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

832- 1- A WELDS, ELECTRIC FLASH-BUTT/ THERMITE

Notes

Detail

This item is to be used for railroad applications only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

Construction

Refer to Comp Book

Design

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
### Struct.  832-  1-  A WELDS, ELECTRIC FLASH-BUTT/TERMITE EA

| A = Rail Size | 1 (100 lb/yd) | 2 (115 lb/yd) | 3 (119 lb/yd) | 4 (132 lb/yd) | 5 (133 lb/yd) | 6 (136 lb/yd) | 7 (140 lb/yd) | 8 (Special) |

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 832-  2-  A THERMITE WELD

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
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</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Forms</th>
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<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td></td>
</tr>
</tbody>
</table>

**Documentation**

- **Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**
**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0832 2 4</td>
<td>MASS TRANSIT- THERMITE WELD, 132 LB/YD RAIL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 836-1AB-CDE INSULATED JOINTS

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

This item is to be used for railroad applications only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

- Design: SHTabQuant: Tabulation of Quantities Sheet

**Recommended**

- Documentation
  - Design: Refer to Comp Book
  - Construction: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Other

**Standards**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 6, 7, 13

**Status**

**Struct.** 836-1AB-CDE INSULATED JOINTS EA

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0836111411</td>
<td>MASS TRANSIT- INSULATED JOINTS, F&amp;I, FACTORY PREFAB BONDED PLUG, 132 LB/YD TRACK, CONT WELDED RAIL, TIMBER TIE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
**903-460- 1**  
**TUNNEL CONSTRUCTION 12' DIAMETER (F&I)**

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 10th of a Meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>PlanQuantity?</td>
<td>no</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**  
*This is a trial item; contact the Monitor prior to use.*

**Details**  
Intended for Lafayette St, Tallahassee, only. Valid for project 408049 only to be used in accordance with Tech Spec.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
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<tbody>
<tr>
<td>Design</td>
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**Forms**

<table>
<thead>
<tr>
<th>Construction</th>
<th>Refer to Comp Book</th>
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</table>

**Documentation**

<table>
<thead>
<tr>
<th>Design</th>
<th>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</table>

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
</tr>
</thead>
</table>

**Status**

**Struct.**  
903-460- 1  
**TUNNEL CONSTRUCTION 12' DIAMETER (F&I)**  
**LF**

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0903460 1</td>
<td>TUNNEL CONSTRUCTION, F&amp;I, 12' DIAMETER</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td>6/30/2010</td>
</tr>
<tr>
<td>0903460 2</td>
<td>ELECTRICAL SERVICE FOR TUNNEL CONSTRUCTION</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td>6/30/2010</td>
</tr>
<tr>
<td>0903460 3</td>
<td>TELEPHONE SERVICE FOR TUNNEL CONSTRUCTION</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td>6/30/2010</td>
</tr>
</tbody>
</table>

**904-540- A**  
**HIGH TENSION CABLE BARRIER SYSTEM**

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 10th of a Meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>PlanQuantity?</td>
<td>no</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

*Monitor: Andy Keel*

This is a trial item; contact the Monitor prior to use. Refer to Design Bulletin 07-08 for additional details.

Through 12/05: A=1 complete system included anchors.
Effective 1/2006: A=2 or 3 defines type of post system, to be used with A=4 end terminal.

THE MONITOR WILL SELECT WHICH ITEM(S) are to be used on a given project, as well as advise when specific notes and/or details are to be added to the plans.
Use Miscellaneous Asphalt item for mow strip.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

**Forms**

**Construction**
Refer to Comp Book

**Documentation**

**Design**
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Design**

**Construction**

**Notes**

*The Monitor will select which item(s) to use on a given project.*

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 904-540- A HIGH TENSION CABLE BARRIER SYSTEM LF

A= Type*
1 (System with anchors) LF
2 (Socketed Post System) LF
3 (Driven Post System) LF
4 (End Terminal) EA

**Notes**

*The Monitor will select which item(s) to use on a given project.*

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0904540 2</td>
<td>HIGH TENSION CABLE BARRIER SYSTEM - SOCKETED POST</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0904540 4</td>
<td>HIGH TENSION CABLE BARRIER SYSTEM - END TERMINAL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0904540 10</td>
<td>HIGH TENSION CABLE BARRIER SYSTEM - RELOCATE</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

906-102- 1 AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

**Unit** ED  
**Accuracy** Each Day  
**PlanQuantity?** no

**Notes**

Monitor: Cheryl Adams

**Details**

This is a developmental item; designers must get approval from the monitor prior to use.

Limited Use- When approved, Construction must document effectiveness for FHWA evaluation of this experimental item. Coordinate all reports with the monitor.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
<tr>
<td>Documentation</td>
<td>Design</td>
<td>Refer to Comp Book</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
<tr>
<td>References</td>
<td>PPM Chapter</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Specifications</td>
<td>Developmental Specification required.</td>
</tr>
</tbody>
</table>

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

**Struct.** 906-102- 1 AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) ED

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 906-173- A POLYURETHANE INJECTION

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LB; KG</td>
<td>Pound; Kilogram</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**


**Details**

This is a trial item; contact the Monitor prior to use.

To be used only with approval of State Structures Design Office, for specialty geotechnical work.

**Related Items**

**Forms**

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Other**

**Standards**

**Specifications**

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

---

Details and Structure: Items 900 to 999
**TRNS*PORT Category (DRAFT FIELD):**

**Status**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>POLYURETHANE INJECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>906-173- A</td>
<td>A POLYURETHANE INJECTION LB</td>
</tr>
</tbody>
</table>

A= location
1 (At Box Culvert)
2 (At Bridge Approach Slab)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0906173 2</td>
<td>POLYURETHANE INJECTION AT BRIDGE APPROACH SLAB</td>
<td>LB</td>
<td>T</td>
<td>1/1/2010</td>
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<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>Per Set</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>906-546- A</td>
<td>TEMPORARY RAISED RUMBLE STRIPS</td>
<td>PS</td>
<td>Accuracy</td>
<td>Per Set</td>
<td>PlanQuantity?</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

Monitor: Cheryl Adams

This is a trial item; contact the Monitor prior to use.

For use with flagging operations on a two-lane, two way roadway. Four Sets are to be used, in each direction of the roadway, in advance of the flagging station. Refer to the specification for details.

**Related Items**

**Required**

**Recommended**

**Forms**

**Design**

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

**Documentation**

**Design**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**PPM Chapter**

**Other**

**Specifications**

Developmental Specification required.

**Prep & Doc Manual Chapter(s)**

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

**Status**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>TEMPORARY RAISED RUMBLE STRIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>906-546- A</td>
<td>PS</td>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>906-548- 1</td>
<td>SOLDIER PILE WALL</td>
<td>SF; M2</td>
<td>Square Foot; 10th of a Square Meter</td>
<td>PlanQuantity?</td>
<td>no</td>
</tr>
</tbody>
</table>

Details and Structure: Items 900 to 999
### Notes
This is a project-specific item.

### Details
Contact the State Structures Design Office prior to requesting this item.

### Related Items
- Required
- Recommended

### Forms
- Design

### Documentation
- **Construction**
  - Refer to Comp Book
- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References
- PPM Chapter
- Other
- Standards
- Specifications

**Plan Details and/or Technical Specifications required**

---

**TRNS*PORT Category (DRAFT FIELD):**

### Status

<table>
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<tr>
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<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>906-548-1</td>
<td>SOLDIER PILE WALL SF</td>
<td>SF</td>
<td>M</td>
<td>1/1/2010</td>
<td>12/31/2010</td>
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### Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0906548 1</td>
<td>SOLDIER PILE WALL SF</td>
<td>SF</td>
<td>M</td>
<td>1/1/2010</td>
<td>12/31/2010</td>
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</table>

### 906-548-2

**SOLDIER NAIL WALL**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF; M2</td>
<td>Square Foot; 10th of a Square Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**
This is a project-specific item.

**Details**
Contact the State Structures Design Office prior to requesting this item.

**Related Items**
- Required
- Recommended

**Forms**
- Design

**Documentation**
- **Construction**
  - Refer to Comp Book
- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
- Other
- Standards
- Specifications

**Plan Details and/or Technical Specifications required**

---

### Details and Structure: Items 900 to 999
### Prep & Doc Manual Chapter(s)

#### TRNS*PORT Category (DRAFT FIELD):

**Status**

<table>
<thead>
<tr>
<th>Struct.</th>
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<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>906-548-2</td>
<td>SOLDIER NAIL WALL</td>
<td>SF</td>
<td>M</td>
<td>1/1/2010</td>
<td>12/31/2010</td>
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</tbody>
</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Item Description**

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<th>Item</th>
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<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0906548 2</td>
<td>SOIL NAIL WALL</td>
<td>SF</td>
<td>M</td>
<td>1/1/2010</td>
<td>12/31/2010</td>
</tr>
</tbody>
</table>

**906-702- AA**

**WET WEATHER PAVEMENT MARKINGS, formerly INVERTED RIB PROFILE MARKINGS**

**Unit** Mixed  
**Accuracy** Refer to item structure and details  
**PlanQuantity?** no

**Notes**

Monitor: Chester Henson

**Details**

Pay Item structure updated with 10-19-09 developmental specification.

Note: Removal item must be used for removal of existing stripe, prior to installation of new 702 stripe.

**Related Items**

**Required**  
**Recommended**

**Forms**

Design  
SBTBSP: Tabulation of Quantities- Signing & Pavement Markings

**Documentation**

**Construction**  
Refer to Comp Book

**Design**  
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Prep & Doc Manual Chapter(s)**

<table>
<thead>
<tr>
<th>Prep &amp; Doc Manual Chapter(s)</th>
<th>TRNS*PORT Category (DRAFT FIELD):</th>
</tr>
</thead>
<tbody>
<tr>
<td>0906-702- AA</td>
<td>0300 Signing and Pavement Markings</td>
</tr>
</tbody>
</table>

**Status**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>906-702- AA</td>
<td>WET WEATHER PAVEMENT MARKINGS, formerly INVERTED RIB PROFILE MARKINGS</td>
<td>Mixed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Verify structure with Monitor prior to opening items

AA= valid through 12-31-2009

31 (White, Skip, 6") GM  
32 (Yellow, Skip, 6") GM  
33 (White, Skip, 6") LF  
34 (Yellow, Skip, 6") LF  
35 (White, Solid, 6") LF  
36 (Yellow, Solid, 6") LF  
37 (White, Solid, 6") NM
38 (Yellow, Solid, 6") NM

AAA= effective 1-2010 letting, with updated developmental specification others, per specification.
17 (Removal of Existing Markings, prior to installation of Wet Weather Markings ONLY)
111 (Solid, White, 6") per net mile
131 (Solid, yellow, 6") per net mile

211 (Skip, White, 6") per gross mile
231 (Skip, yellow, 6") per gross mile

311 (Solid Wet Weather and Audible, White, 6”), per net mile
331 (Solid Wet Weather and Audible, Yellow, 6”), per net mile

411 (Skip Wet Weather and Audible, White, 6”) per gross mile
431 (Skip Wet Weather and Audible, Yellow, 6”) per gross mile

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0906702 17</td>
<td>WET WEATHER MARKINGS, REMOVE EXISTING MARKINGS</td>
<td>NM</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0906702111</td>
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<td>NM</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0906702131</td>
<td>WET WEATHER MARKINGS, SOLID, YELLOW, 6”</td>
<td>NM</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0906702211</td>
<td>WET WEATHER MARKINGS, SKIP, WHITE, 6”</td>
<td>GM</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0906702231</td>
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<td>GM</td>
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<td>1/1/2010</td>
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<tr>
<td>0906702311</td>
<td>WET WEATHER AND AUDIBLE MARKINGS, SOLID, WHITE, 6”</td>
<td>NM</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0906702331</td>
<td>WET WEATHER AND AUDIBLE MARKINGS, SOLID, YELLOW, 6”</td>
<td>NM</td>
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<td>1/1/2010</td>
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<tr>
<td>0906702411</td>
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<td>1/1/2010</td>
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<tr>
<td>0906702431</td>
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<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

908-102- 1  MICRO SURFACING FOR MOT

| Unit | SY; M2 | Accuracy | Square Yard; Square Meter | PlanQuantity? | no |

Notes
Monitor: Manny Uwaibi, State Pavement Design Office

Details
Monitored item. Developmental specifications may be available. Contact the State Pavement Design Office for approval, prior to using this item.

This item intended for placing a thin asphalt layer for covering pavement markings, rather than removing conflicting pavement markings, during construction MOT at critical areas such as entrances and exits to Service Plazas and Toll Plazas.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be performed.
completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
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<td>Design</td>
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### Construction

<table>
<thead>
<tr>
<th>Design</th>
<th>Refer to Comp Book</th>
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</table>

**Documentation**

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<td></td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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### Standards

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<tr>
<th>Specifications</th>
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**Plan Details and/or Technical Specifications required**

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Status

<table>
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<th>Struct.</th>
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<th>MICROSURFACING FOR MOT</th>
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### Notes

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

### 908-104- 1 CONTRACTOR'S SEDIMENT AND EROSION CONTROL

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/LS</th>
<th>Accuracy</th>
<th>Lump Sum</th>
<th>PlanQuantity?</th>
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</thead>
</table>

**Notes**

**Monitor:** Larry Ritchie, State Construction Office

**Details**

DEVELOPMENTAL SPECIFICATION REQUIRED; to be used only with permission of State Construction Engineer and/or State Drainage Engineer. Valid only for projects let July 1, 2008 to December 31, 2008, or as approved by Larry Ritchie.


When this item is used, DO NOT USE any other Sediment/Erosion Control items (104 items).

************************DRAFT BELOW**********

**PPM Guidance Pending **********

For the purposes of providing the contractor information needed for the development of its Erosion and Sediment Control Plan, the Department's Engineer of Record would need to provide the following information in the plans:

1. Delineation of wetland areas
2. Identification of Limits of Construction
3. Hydraulic maps
4. Contour maps
5. existing drainage facilities
6. drainage maps with flow patterns identified
7. forms required for reporting and documenting compliance
8. runoff coefficients
9. NPDES requirements
### Related Items

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
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<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
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</table>

### Documentation

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### References

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<tr>
<th>PPM Chapter</th>
<th>Other</th>
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<tr>
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</tbody>
</table>

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### TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

#### Status

**Struct. 908-104-1**

**CONTRACTOR’S SEDIMENT AND EROSION CONTROL LS/LS**

#### Notes

DO NOT OPEN without approval from David Sadler and/or Rick Renna

---

### The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<td>0908104 1</td>
<td>CONTRACTOR’S SEDIMENT AND EROSION CONTROL</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td>12/31/2010</td>
</tr>
</tbody>
</table>

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### 908-170- A DEEP SOIL MIXING

#### Unit

- CY; M3

#### Accuracy

- 10th of a Cubic Yard;
- 10th of a Cubic Meter

#### PlanQuantity?

- 

#### Notes

- Monitor: Larry Jones, State Geotechnical Engineer

#### Details

- Contact the State Structures Office for approval, prior to using this item.

This item is intended to be used for dry-method of mass soil mixing to stabilize organic subsoils and minimize the potential for future settlements.

The work includes mechanically blending the in-situ surface soils (muck) overlying limestone with a reagent binder to increase the soil strength, reduce settlement characteristics, and provide a stable soil surface for the roadway.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
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</tbody>
</table>

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### Details and Structure: Items 900 to 999
### Specifications

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

**Status**

<table>
<thead>
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<th>Struct.</th>
<th>908-170- A</th>
<th>DEEP SOIL MIXING</th>
<th>CY</th>
</tr>
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<tbody>
<tr>
<td>Notes</td>
<td>A= Method 1 (Dry)</td>
<td>Valid only for project 220499-1-52-01. Contact Monitor for consideration on other projects</td>
<td></td>
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*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
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<tr>
<th>908-333- 1</th>
<th>HIGH FRICTION SURFACE COURSE</th>
<th>SY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
<td>SY; M2</td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>Square Yard; Square Meter</td>
<td></td>
</tr>
<tr>
<td>PlanQuantity?</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td>Monitor: Greg Sholar</td>
<td></td>
</tr>
<tr>
<td>Details</td>
<td>This is a developmental Item. Project specific approval required.</td>
<td></td>
</tr>
<tr>
<td>Related Items</td>
<td>Required</td>
<td>Recommended</td>
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<tr>
<td>Forms</td>
<td>Design</td>
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**TRNS*PORT Category (DRAFT FIELD):**

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<th>908-333- 1</th>
<th>HIGH FRICTION SURFACE COURSE</th>
<th>SY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
<td>Monitor: Manny Uwaibi</td>
<td>This is a monitored item. It may be used only with approval of the State Pavement Design Office.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0908333 1</td>
<td>HIGH FRICTION SURFACE COURSE</td>
<td>SY</td>
<td>D</td>
<td>1/1/2010</td>
<td>6/30/2010</td>
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</tbody>
</table>

**Details and Structure: Items 900 to 999**
Technical Specifications required to detail glass fiber reinforcement. Concrete pavement to be installed in accordance with Section 350, unless otherwise noted in the specifications.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td></td>
</tr>
</tbody>
</table>

**Construction**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**

PPM Chapter

**Other**

**Standards**

Specifications 350

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

**Status**

**Struct.** 908-350- A  FIBER REINFORCED CONCRETE PAVEMENT SY

A= Thickness
1 (11” Average)
2 (14” Average)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0908350 1</td>
<td>FIBER REINFORCED CONCRETE PAVEMENT, 11” AVE THICKNESS</td>
<td>SY</td>
<td>M</td>
<td>1/1/2010</td>
<td>12/31/2010</td>
</tr>
<tr>
<td>0908350 2</td>
<td>FIBER REINFORCED CONCRETE PAVEMENT, 14” AVE THICKNESS</td>
<td>SY</td>
<td>M</td>
<td>1/1/2010</td>
<td>12/31/2010</td>
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**908-431- A**  PIPE LINER- SECTIONAL REPAIR

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<tr>
<th>Unit</th>
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<th>PlanQuantity?</th>
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<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
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</table>

**Details**

Monitors: Michael Shepard and Larry Ritchie

Contact the State Drainage Office prior to use.

Box-to-Box repairs are normally preferred (use Item 431-). When a Sectional Repair is considered, coordinate with the State Drainage Office. New materials/methods may be recommended.

**Related Items**

**Forms**

Required  Design

**Documentation**

Construction  Design

Refer to Comp Book

Locate in plans. Summarize quantities by location on tabulation of

Details and Structure: Items 900 to 999
quantities sheet in the plans, or detail calculations in the computation book.

**Construction**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Standards

Specifications

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Status**

Struct. 908-431- A PIPE LINER- SECTIONAL REPAIR LF

A= Pipe Diameter Size Range

1 (0=-24")

2 (25-36")

3 (37-48")

4 (49-60")

5 (61" and greater)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<td>0908431 1</td>
<td>PIPE LINER, SECTIONAL REPAIR, 0-24&quot;</td>
<td>LF</td>
<td>M</td>
<td>1/1/2010</td>
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**908-450- A** PRECAST CONCRETE DECK PANELS

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<th>Details</th>
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<th>Forms</th>
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<tr>
<td></td>
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<td>Required</td>
<td>Design</td>
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</table>

**Notes**

**Details**

**Related Items**

Required

Recommended

**Forms**

Design

**Construction**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**

PPM Chapter

Other

Standards

Specifications

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

**Status**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 908-571-1 TRANSITION MAT

<table>
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<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
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<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>no</td>
<td>Monitor: Larry Ritchie, State Construction Office</td>
</tr>
</tbody>
</table>

**Details**

Contact the State Construction Office for approval, prior to using this item.

Transition Mat for scour and permanent erosion control.

See 530-79 for Plastic Cellular Confinement System for other drainage/erosion control applications.

#### Related Items

- **Required**
- **Recommended**

#### Forms

- **Design**

#### Documentation

- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

#### References

- **PPM Chapter**
- **Other Standards**
- **Specifications**
  - Plan Details and/or Technical Specifications required

#### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### 909-335-1 MICRO-SURFACING FOR PAVEMENT PRESERVATION

<table>
<thead>
<tr>
<th>Unit</th>
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<tbody>
<tr>
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**Details**

Contact the State Pavement Design Office for approval, prior to using this item.

This item is a polymer-modified emulsion aggregate mixture, placed as a thin overlay, for the preservation of mildly distressed pavements and as a means to restore friction resistance to pavement.
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
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<th>Related Items</th>
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</thead>
<tbody>
<tr>
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**Construction**

**Document**

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<td>Other Standards</td>
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**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 909-335- A

MICRO-SURFACING FOR PAVEMENT PRESERVATION SY

A= Project Number

1 no number required

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Unit</th>
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**PlanQuantity?** no

**Related Items**

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**Forms**

SHTabQuantLS: LS Tabulation of Quantities

COMP 700-050-05: Lump Sum Quantities

**Documentation**

<table>
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<tbody>
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<tr>
<td>Other Standards</td>
<td></td>
</tr>
<tr>
<td>Specifications</td>
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</table>

**Prep & Doc Manual Chapter(s)** Contact Final Estimates

**Notes**

See latest guidelines for Innovative Bidding practices.
**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 999- 2- LUMP SUM CONTRACT (ALTERNATIVE BIDDING) LS/LS

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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<td>1/1/2010</td>
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</table>

**999- 16-** PARTNERING (DO NOT BID)  

**Unit** LS/LS  
**Accuracy** Lump Sum  
**PlanQuantity?** yes

**Notes**

The use of this pay item will be initiated by the District Construction Office. The purpose is to provide an amount of money to the contractor to pay for the cost of a partnering session(s). Designers will load the pay item and provide the cost to be overrun to the District Estimates Coordinator.

NOTE: Construction will advise the designer when to use this item. They will also provide the designer with the number of days and the cost per day.

**Related Items**  
**Required**    **Recommended**
**Forms**  
**Design** SHTabQuantLS: LS Tabulation of Quantities  
COMP 700-050-05: Lump Sum Quantities

**Construction** Refer to Comp Book

**Documentation**  
**Design** Computation book form or documentation from Construction required.

**Construction** Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**  
**PPM Chapter**

**Prep & Doc Manual Chapter(s)** 11, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 999- 16- PARTNERING (DO NOT BID) LS/LS

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0999 16</td>
<td>PARTNERING, DO NOT BID</td>
<td>LS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**999- 20-** DISPUTE REVIEW BOARD (DO NOT BID)  

**Unit** DA  
**Accuracy** Day  
**PlanQuantity?** no

**Notes**

The use of this pay item will be initiated by the District Construction Office. The purpose is...
to require a Dispute Resolution Board to be established for the project and to provide the contractor a specific amount of money to pay for the services of each of the three Board members. Designers will load the pay item and the number of days (meetings).

NOTE: Construction will advise the designer when to use this item. They will also provide the designer with the number of days (meetings), based on 1 meeting per month for the length of the contract. The cost has been hard coded at $3,300.00* as the unit price for this item. Only the Director of Construction can approve a change to this amount.

*Verify current amount with specification.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Documentation</th>
<th>References</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>PPM Chapter</td>
<td>Prep &amp; Doc Manual Chapter(s) 11, 13</td>
</tr>
<tr>
<td>Design</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Standards</td>
<td>Specifications</td>
<td></td>
</tr>
</tbody>
</table>

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Status

Struct. 999-20- DISPUTE REVIEW BOARD (DO NOT BID) DA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0999 20</td>
<td>DISPUTES REVIEW BOARD, DO NOT BID</td>
<td>DA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

999-25- INITIAL CONTINGENCY AMOUNT (DO NOT BID)

<table>
<thead>
<tr>
<th>Unit</th>
<th>$</th>
<th>Accuracy</th>
<th>Dollars</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

Notes

IMPORTANT: INITIAL CONTINGENCY TOTAL IS BASED ON PROPOSAL TOTAL, not individual project totals.

Details

Use when requested by Construction, in accordance with the CPAM (Construction Project Administration Manual). The item will be loaded as FA Participating and the cost will be input by the District Estimates Coordinator. Load item in Roadway Category. When a contract contains multiple projects, this item may be used on each project within the contract, if recommended by construction. Note that the totals listed in the CPAM are per PROPOSAL/CONTRACT, not per project. Department Policy (per F. Simmons, 10-1-02): Include Initial Contingency Amount on all Design-Build Contracts.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0999 25</td>
<td>INITIAL CONTINGENCY AMOUNT, DO NOT BID</td>
<td>LS</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

999-102- A  SPEED AND LAW ENFORCEMENT OFFICER

<table>
<thead>
<tr>
<th>Notes</th>
<th>Monitor: Cheryl Adams  A=Contract Type refers to the contract between FDOT and Law enforcement, NOT the type of Construction Contract.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>This item is used by the Construction Engineer to provide uniformed traffic control officers, including marked law enforcement vehicles, to assist in controlling speed and enforcing traffic laws in the work zone. Officers should be actively involved in either directing traffic or reducing speeding and traffic violations present in our work zones.</td>
</tr>
<tr>
<td>Note: The type of construction contract and/or location for letting (Tallahassee or District letting) is not a factor in selecting the type of Law Enforcement contract. Contact your Project Manager to determine the available Law Enforcement Contract(s) available in your district.</td>
<td></td>
</tr>
<tr>
<td>Per the PPM, &quot;The documentation for Speed and Law Enforcement Officer will be shown in the Computation Book only and there will be no reference made to these services in the plans, except as shown on the Summary of Pay Items Sheet.&quot; Refer to the PPM for calculation and documentation of this item.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>CADD Form not specified.</td>
</tr>
<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>See Detail</td>
<td></td>
</tr>
<tr>
<td>Documentation</td>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
<tr>
<td>References</td>
<td>PPM Chapter</td>
<td>Vol 1, Ch 10</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**TRNS*PORT Category (DRAFT FIELD):** 0200  Roadway

**Status**

**Struct.** 999-102- A  SPEED AND LAW ENFORCEMENT OFFICER  MH

A = Contract Type (Between FDOT and the Law Enforcement Agency)
1 = Central Office Statewide Contract
2 = District Contract

STATE FURNISHED; NON BID ITEM

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0999102 1</td>
<td>SPEED &amp; LAW ENFORCEMENT OFFICER, STATE FURNISHED, CENTRAL CONTRACT, NON BID ITEM</td>
<td>MH</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0999102 2</td>
<td>SPEED &amp; LAW ENFORCEMENT OFFICER, STATE FURNISHED, DISTRICT CONTRACT, NON BID ITEM</td>
<td>MH</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**9AA-BBB- CC** SPECIAL, DEVELOPMENTAL, OR TRIAL PAY ITEMS: SECTION

**Notes**

**Details**

**Related Items**

Required

Recommended

**Forms**

Design

SHTabQuant: Tabulation of Quantities Sheet

**Construction**

Refer to Comp Book

**Documentation**

Design

See Detail

Construction

see detail

**References**

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0000  Administrative

**Status**

**Struct.** 9AA-BBB- CC  SPECIAL, DEVELOPMENTAL, OR TRIAL PAY ITEMS: SECTION

**Notes**

AA = Year of Development
BBB= Spec Book Section
CC = Sequence of New Item in Spec Book Section
01 = (First Trial Item for Year)
02 = (Second Trial Item for Year) Etc.
<table>
<thead>
<tr>
<th>Item Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANDSCAPE DESIGN GROUP- GENERIC PAY ITEM</td>
<td>Mixed</td>
<td>Refer to item structure and details</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

**Details**
Generic Items: Contact the State Specifications and Estimates Office prior to use.

**Related Items**
- Required
- Recommended

**Forms**
- Design

**Documentation**
- Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**References**
- PPM Chapter
- Other
- Standards
- Specifications

**Status**

**Struct.** 0000-600-AAA  LANDSCAPE DESIGN GROUP- GENERIC PAY ITEM  Mixed

AAA= Item description, defined in plans with unit of measure

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
This pay item for Utility JPA projects Only. Tech Specs are required for all work to be completed.

Coordinate the use of this item with District Utilities Office. This is a LS project pay item; do NOT use separate pay items along with the LS item for any given JPA. Payment covers all work and materials for the entire utility project number. (Note: The Roadway project(s) may be either LS or standard pay items. Each utility project number may be either LS or standard pay items.)

Additional guidance: As with roadway projects, Utility LS projects should only be considered when the work to be completed (including known quantities) is clearly defined in the plans. LS projects should not be considered for unknown conditions.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required Recommended

<table>
<thead>
<tr>
<th>Forms</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>SHTabQuantLS: LS Tabulation of Quantities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Refer to Comp Book</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Documentation</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
<td></td>
</tr>
</tbody>
</table>

References

PPM Chapter

Other Standards Specifications

Plan Details and/or Technical Specifications required

<table>
<thead>
<tr>
<th>Prep &amp; Doc Manual Chapter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to Comp Book</td>
</tr>
</tbody>
</table>

TRNS*PORT Category (DRAFT FIELD): 0700 Utilities

Status

Struct. 1000- AA- UTILITY WORK LS/LS

AA =
5 (Sewer)
6 (Water)
7 (Power)
8 (Communications)
9 (Fuel)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 5</td>
<td>UTILITY WORK- JPA ONLY, SEWER</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td>2/29/2012</td>
</tr>
<tr>
<td>1000 6</td>
<td>UTILITY WORK- JPA ONLY, WATER</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td>2/29/2012</td>
</tr>
<tr>
<td>1000 7</td>
<td>UTILITY WORK- JPA ONLY, POWER</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td>2/29/2012</td>
</tr>
</tbody>
</table>

**1050- 1A-BCD  UTILITY PIPE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 10th of a Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

B=9 (Special) valid through 6-30-09; select item for material needs

**Details**

This pay item for Utility JPA projects Only

For new pipe, payment includes anchors & incidentals, as well as connections to existing systems; detail all work in the plans or specifications. HISTORICAL PRICES vary considerably based on location, depth, installation length, specification requirements (sanitizing, leak detection) and other factors. Consult the maintaining agency for guidance on unit prices.

For pipe up to 7.9" diameter, payment includes all fittings. Material requirements and pressure ratings must be included in the specifications.

For Casings, payment includes vents/air release valves.

For Plug/Place out of service, Specs/Details should indicate that payment includes all work & materials necessary. Plans should indicate length of pipe to be filled (payment length). For pipe up to 4", caps may be used, as allowed by the utility; this is an "each" item, valid only for A=8 (plug/place out of service). Caps must be detailed in the contract documents.

Tech Specs are required for all items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Documentation</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
<td></td>
</tr>
</tbody>
</table>

**References**

PPM Chapter
Other Standards Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)
TRNS*PORT Category (DRAFT FIELD): 0700 Utilities

Status

Struct. 1050-1A-BCD UTILITY PIPE LF

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BC=00
4 (Relocate) BC=00
5 (Adjust /Modify) BC=00
6 (Remove & Dispose) BC=00, Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) BC=00, Note: DOT/maintaining agency retains ownership
8 (Plug & Place out of Service) BC=00 Note: Utility Retains Ownership
9 (Temporary Pipe)

B=Material
1 (Concrete)
2 (PVC)
3 (PE)
4 (DI/CI)
5 (Steel)
9 (Special) valid through 6-30-09; material type needed

C= Application
1 (Casing/Conduit)
2 (Water/Sewer)
3 (Gas)
4 (Fuel Transmission)

D= Size or Equivalent Diameter
Sizes up to 7.9" includes the cost of all fittings
0 (cap for pipe up to 4") EA, valid only for A=8
4 (8.0 - 19.9")
5 (20.0 - 49.9")
6 (50.0" or larger)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1050 11124</td>
<td>UTILITY PIPE, F&amp;I, CONCRETE, WATER / SEWER, 8 - 19.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>1050 11125</td>
<td>UTILITY PIPE, F&amp;I, CONCRETE, WATER / SEWER, 20 - 49.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>1050 11211</td>
<td>UTILITY PIPE, F&amp;I, PVC, CASING / CONDUIT, 0 - 1.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>1050 11212</td>
<td>UTILITY PIPE, F&amp;I, PVC, CASING / CONDUIT, 2 - 4.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>1050 11213</td>
<td>UTILITY PIPE, F&amp;I, PVC, CASING / CONDUIT, 5.0 - 7.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>1050 11214</td>
<td>UTILITY PIPE, F&amp;I, PVC, CASING / CONDUIT, 8 - 19.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>1050 11215</td>
<td>UTILITY PIPE, F&amp;I, PVC, CASING / CONDUIT, 20.0 - 49.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>1050 11221</td>
<td>UTILITY PIPE, F&amp;I, PVC, WATER / SEWER, 0 - 1.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

Details and Structure: Items 1000 to 1999- Utility JPA
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit</th>
<th>Grade</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1050 11222</td>
<td>UTILITY PIPE, F&amp;I, PVC, WATER / SEWER, 2 - 4.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11223</td>
<td>UTILITY PIPE, F&amp;I, PVC, WATER / SEWER, 5 - 7.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11224</td>
<td>UTILITY PIPE, F&amp;I, PVC, WATER / SEWER, 8 - 19.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11225</td>
<td>UTILITY PIPE, F&amp;I, PVC, WATER / SEWER, 20 - 40.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11312</td>
<td>UTILITY PIPE, F&amp;I, PE, CASING/CONDUIT, 2.0 - 4.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11313</td>
<td>UTILITY PIPE, F&amp;I, PE, CASING/CONDUIT, 5.0 - 7.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11321</td>
<td>UTILITY PIPE, F&amp;I, PE, WATER / SEWER, 0 - 1.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11322</td>
<td>UTILITY PIPE, F&amp;I, PE, WATER / SEWER, 2 - 4.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11323</td>
<td>UTILITY PIPE, F&amp;I, PE, WATER / SEWER, 5 - 7.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11324</td>
<td>UTILITY PIPE, F&amp;I, PE, WATER / SEWER, 8 - 19.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11325</td>
<td>UTILITY PIPE, F&amp;I, PE, WATER / SEWER, 20 - 49.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11414</td>
<td>UTILITY PIPE, F&amp;I, DI/CI, CASING/CONDUIT, 8 - 19.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11415</td>
<td>UTILITY PIPE, F&amp;I, DI/CI, CASING/CONDUIT, 20 - 49.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11422</td>
<td>UTILITY PIPE, F&amp;I, DI/CI, WATER / SEWER, 2 - 4.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11423</td>
<td>UTILITY PIPE, F&amp;I, DI/CI, WATER / SEWER, 5 - 7.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11424</td>
<td>UTILITY PIPE, F&amp;I, DI/CI, WATER / SEWER, 8 - 19.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11425</td>
<td>UTILITY PIPE, F&amp;I, DI/CI, WATER / SEWER, 20 - 49.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11432</td>
<td>UTILITY PIPE, F&amp;I, DI / CI, GAS, 2-4.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11433</td>
<td>UTILITY PIPE, F&amp;I, DI / CI, GAS, 5-7.9&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>1050 11434</td>
<td>UTILITY PIPE, F&amp;I, DI / CI, GAS, 8-19.9&quot;</td>
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| Code   | Description                                                                 | Unit | Accuracy | Each | PlanQuantity?
|--------|-----------------------------------------------------------------------------|------|----------|------|---------------
| 1050 11924 | UTILITY PIPE, F&I, SPECIAL MATERIAL, WATER / SEWER, 8 -19.9"             | LF   | T        | 1/1/2010 | no            |
| 1050 11925 | UTILITY PIPE, F&I, SPECIAL MATERIAL, WATER / SEWER, 20-49.9"            | LF   | T        | 1/1/2010 | no            |
| 1050 11931 | UTILITY PIPE, F&I, SPECIAL, GAS, 0-1.9"                                   | LF   | T        | 1/1/2010 | no            |
| 1050 13002 | UTILITY PIPE, INSTALL, 2-4.9"                                          | LF   | T        | 1/1/2010 | no            |
| 1050 13004 | UTILITY PIPE, INSTALL, 8-19.9"                                         | LF   | T        | 1/1/2010 | no            |
| 1050 14004 | UTILITY PIPE, RELOCATE, 8-19.9"                                        | LF   | T        | 1/1/2010 | no            |
| 1050 15002 | UTILITY PIPE, ADJUST/MODIFY, 2 - 4.9"                                    | LF   | T        | 1/1/2010 | no            |
| 1050 15003 | UTILITY PIPE, ADJUST/MODIFY, 5 - 7.9"                                    | LF   | T        | 1/1/2010 | no            |
| 1050 15004 | UTILITY PIPE, ADJUST/MODIFY, 8 - 19.9"                                   | LF   | T        | 1/1/2010 | no            |
| 1050 16   | UTILITY PIPE, REMOVE & DISPOSE                                          | LF   | T        | 1/1/2010 | no            |
| 1050 16001 | UTILITY PIPE, REMOVE & DISPOSE, 0 - 1.9"                                | LF   | T        | 1/1/2010 | no            |
| 1050 16002 | UTILITY PIPE, REMOVE & DISPOSE, 2-4.9"                                   | LF   | T        | 1/1/2010 | no            |
| 1050 16003 | UTILITY PIPE, REMOVE & DISPOSE, 5-7.9"                                   | LF   | T        | 1/1/2010 | no            |
| 1050 16004 | UTILITY PIPE, REMOVE & DISPOSE, 8-19.9"                                  | LF   | T        | 1/1/2010 | no            |
| 1050 16005 | UTILITY PIPE, REMOVE & DISPOSE & DISPOSE, 20-49.9"                      | LF   | T        | 1/1/2010 | no            |
| 1050 16006 | UTILITY PIPE, REMOVE & DISPOSE & DISPOSE, 50" OR LARGER                 | LF   | T        | 1/1/2010 | no            |
| 1050 17004 | UTILITY PIPE, REMOVE & STOCKPILE/SALVAGE, 8-19.9"                       | LF   | T        | 1/1/2010 | no            |
| 1050 17005 | UTILITY PIPE, REMOVE & STOCKPILE/SALVAGE, 20-49.9"                      | LF   | T        | 1/1/2010 | no            |
| 1050 18000 | UTILITY PIPE, PLUG & PLACE OUT OF SERVICE                              | LF   | T        | 1/1/2010 | no            |
| 1050 18001 | UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, 0- 1.9"                      | LF   | T        | 1/1/2010 | no            |
| 1050 18002 | UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, 2- 4.9"                      | LF   | T        | 1/1/2010 | no            |
| 1050 18003 | UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, 5- 7.9"                      | LF   | T        | 1/1/2010 | no            |
| 1050 18004 | UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, 8-19.9"                      | LF   | T        | 1/1/2010 | no            |
| 1050 18005 | UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, 20-49.9"                     | LF   | T        | 1/1/2010 | no            |
| 1050 19222 | UTILITY PIPE, TEMPORARY, PVC, WATER/SEWER,2.4.9"                       | LF   | T        | 1/1/2010 | no            |
| 1050 19223 | UTILITY PIPE, TEMPORARY, PVC, WATER/SEWER,.5-7.9"                      | LF   | T        | 1/1/2010 | no            |
| 1050 19224 | UTILITY PIPE, TEMPORARY, PVC, WATER/SEWER, 8-19.9"                     | LF   | T        | 1/1/2010 | no            |
| 1050 19321 | UTILITY PIPE, TEMPORARY, PE, WATER/SEWER,0.1-1.9"                      | LF   | T        | 1/1/2010 | no            |
Notes
B=9 (Special) valid through 6-30-09; select item for material needs

Details
This pay item for Utility JPA projects Only

For pipe up to 7.9" diameter, payment includes all fittings.
Material requirements and pressure ratings to be included in the specifications.

Tech Specs are required for all items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Forms
Required
Design
Recommended
SHTabQuant: Tabulation of Quantities Sheet

Documentation

Design
Refer to Comp Book

Construction
Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Other
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0700 Utilities

Status

Struct. 1055- 1A-BCD
UTILITY FITTINGS
EA

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BCD=blank
4 (Relocate) BCD=blank
5 (Adjust /Modify) BCD=blank
6 (Remove & Dispose) BCD=blank, Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) BCD=blank, Note: DOT/maintaining agency retains ownership
8
9 OPEN Note: May be defined in item structure as Special, Rehab, etc.

B=Material
1 (Concrete)
2 (PVC)
3 (PE)
4 (DI/CI)
5 (Steel)
9 (Special) valid through 6-30-09; material type needed

C= Fitting Type
1 (Elbow)
2 (Tee)
3 (Reducer)
4 (Union)
5 (Cap/Plug)
6 (Y)
7 (Cleanout)
9 (Special)*

D= Size or Equivalent Diameter
Sizes up to 7.9" includes the cost of all fittings
4 (8.0 -19.9")
5 (20.0 - 49.9")
6 (50.0" or larger)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>This pay item for Utility JPA projects Only DO NOT USE for Milling adjustments; see 425 items for adjusting manholes &amp; utility valves For Utility Structures BELOW ground. For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.</td>
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### Details and Structure: Items 1000 to 1999- Utility JPA

**TRNS*PORT Category (DRAFT FIELD):** 0700 Utilities

**Status**

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<td>5 (Adjust/Modify)</td>
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<td>7 (Remove &amp; Stockpile/Salvage)</td>
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**B=Utility**

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<thead>
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<th>1 (Electrical/Communications)</th>
<th>2 (Water/Sewer)</th>
<th>3 (Other)*</th>
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**C= Volume**

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<thead>
<tr>
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<th>2 (&gt;80 FT3)</th>
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**D=Depth**

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<tr>
<th>1 (0-6')</th>
<th>2 (6.1-12')</th>
<th>3 (&gt;12')</th>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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</table>

**1060- 2A- BC UTILITY STRUCTURE- ABOVE GROUND**

**Unit** | **EA** | **Accuracy** | **Each** | **Plan Quantity?** | **no**
---|---|---|---|---|---

**Notes**
- This pay item for Utility JPA projects Only
- For Utility Structures ABOVE ground.
- Calculate pad volume as the length x width x depth of concrete. Covers are for non-electrical applications, aesthetic or weather enclosures. Material requirements to be included in the specifications.
- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**
- **Required**
- **Recommended**
- **Design** | SHTabQuant: Tabulation of Quantities Sheet

**Forms**
- **Construction**
  - Refer to Comp Book
- **Design**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**
- **Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0700 Utilities

**Status**

**Struct.** 1060- 2A- BC UTILITY STRUCTURE- ABOVE GROUND EA

- A= Operation
- 1 (Furnish & Install)
- 2 (Furnish)
- 3 (Install)
- 4 (Relocate)
- 5 (Adjust /Modify) BCD= blank
- 6 (Remove & Dispose) BCD= blank Note: Contractor takes ownership
- 7 (Remove & Stockpile/Salvage) BCD= blank Note: DOT/maintaining agency retains ownership
- B=Pad Volume
- 1 (0-1 YD3)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>1080-1A-BCC</th>
<th>UTILITY FIXTURES</th>
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<tbody>
<tr>
<td>Unit</td>
<td>EA</td>
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</tbody>
</table>

Notes

Details

This pay item for Utility JPA projects Only
Additional fixtures to be added as needed. Submit Request through District Estimates Office.
Tabulate all items in the plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required Recommended

Forms

Design SHTabQuant: Tabulation of Quantities Sheet

Documentation

Design Refer to Comp Book

Construction Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

Details and Structure: Items 1000 to 1999- Utility JPA
B= Size or Equivalent Diameter
1 (0 - 1.9")*
2 (2.0 - 4.9")*
3 (5.0 - 7.9")*
4 (8.0 - 19.9")
5 (20.0 - 49.9")
6 (50.0" or larger)

*NOTE: Fittings for pipe sizes up to 8" are included in the cost of the pipe. Fixtures, any size, may be paid under this item.

CC= Fixture
1 (Valve/Meter Box)
2 (Backflow Assembly)
3 (Tapping Saddle/Sleeve)
4 (Valve Assembly)
5 (Blowoff Assembly)
6 (VAC/AIR Assembly)
7 (Line Stop Assembly)
8 (Mechanical Joint Separator)
9 (Mechanical Joint Restraint)
10... submit request to expand structure

Note: CC list to be expanded as needed.

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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### 1135- A  UTILITY- GUYS AND ANCHORS- ABOVE GROUND

**Unit**: EA  
**Accuracy**: Each  
**Plan Quantity?**: no

**Notes**
- This pay item for Utility JPA projects Only- NEW installations only.
- Protection of existing structures during construction is incidental to the work being performed.
- For ABOVE GROUND installations only.

**Details**
- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**
- **Required**: SHTabQuant: Tabulation of Quantities Sheet

**Forms**
- **Construction Design**: Refer to Comp Book
- **Documentation Design**: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- **Construction**: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- **PPM Chapter**
- **Other**
- **Standards**
- **Specifications**

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD)**: 0700 Utilities

**Status**: Inactive Structure

**Struct.**: 1135- A  UTILITY- GUYS AND ANCHORS- ABOVE GROUND  EA

- A = Operation  
  1 (Furnish & Install)  
  2 (Furnish)  
  3 (Install)  
  4 (Salvage & Store/Reuse)  
  5 (Adjust & Modify Or Relocate)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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#### 1501-1- UTILITY LIFT STATION, SANITARY SEWER

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<tr>
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<td>Each</td>
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**Notes**

This pay item for Utility JPA projects Only
Includes pump(s), power, internal piping, housing, and incidentals associated with the station.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Forms**

- Design: SHTabQuant: Tabulation of Quantities Sheet

**Documentation**

- Design: Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
- Construction: Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Other Standards
- Specifications

**Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0700 Utilities

**Status**

**Struct.**

1501-1- UTILITY LIFT STATION, SANITARY SEWER EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**Notes**

This pay item for Utility JPA projects Only
Items to be used for Water Main & Service Applications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description,
materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

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<tr>
<td>Forms</td>
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**Construction**

Refer to Comp Book

**Documentation**

Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Other

Standards

Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0700 Utilities

**Struct. 1644-ABC-DEE** FIRE HYDRANT EA

A = Operation

1 (Furnish & Install)
2 (Furnish)
3 (Install) BC = 00, DEE = Blank
4 (Salvage & Store) BC = 00, DEE = Blank
5 (Salvage & Reuse) BC = 00, DEE = Blank
6 (Plug & Placed Out Of Service) BC = 00, DEE = Blank
7 (Adjust & Modify) BC = 00, DEE = Blank
8 (Relocate) BC = 00, DEE = Blank
9 (Remove) BC = 00, DEE = Blank

B = Type Of Hydrant

1 (Standard)
2 (Airport)
3 (Traffic)

C = Number Of Ways

1 (Hose)
2 (Two Hose)
3 (Two Hose, One Pumper)
4 (2 Way, Flush Type, One Hose, One Pumper)
5 (4 Way, Three Hose, One Pumper)
6 (3 Way, Two Hose, One Pumper)

D = (Open Leave Blank)

EE = Size

05 (2")
08 (6")
09 (8")

**Notes**

Note: Do Not Code Leading Zeros.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Details and Structure:** Items 1000 to 1999- Utility JPA
### Item Descriptions

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<td>FIRE HYDRANT, STANDARD, F&amp;I, 3 WAY, 2 HOSE, 1 PUMPER, 6&quot;</td>
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</table>

### Notes

**Details**

This pay item for Utility JPA projects Only Plans or Technical Specifications must detail item, materials, construction/installation requirements, as well as compensation.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

- **Required Forms**
  - Design forms
    - SHTabQuant: Tabulation of Quantities Sheet

- **Construction Documentation**
  - Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**
- **Other Standards**
- **Specifications**
  - Plan Details and/or Technical Specifications required

---

**Details and Structure**: Items 1000 to 1999 - Utility JPA
**TRNS*PORT Category (DRAFT FIELD):** 0700 Utilities

**Status**

**Struct.** 1720-ABB- UTILITY WORK- TRANSFORMER EA

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BB=00
8 (Relocate) BB=00
9 (Remove) BB=00

BB = Configurations
01 (25 kVA Continuous Single Phase)
02 (75 kVA Continuous Single Phase)
03 (250 kVA Continuous Single Phase)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>1720103</td>
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<td>1/1/2010</td>
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</table>

**1820- 1- AB UTILITY CABLE, TELEPHONE/COMMUNICATIONS**

**Unit** LF; M1  
**Accuracy** Linear Foot; 10th of a Meter

**Notes**

This pay item for Utility JPA projects Only

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

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<th>Required</th>
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<tbody>
<tr>
<td>Design</td>
<td>SHTabQuant: Tabulation of Quantities Sheet</td>
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</tbody>
</table>

**Documentation**

**Construction** Refer to Comp Book

**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

**Construction** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

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<th>Other Standards Specifications</th>
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<tr>
<td></td>
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</tr>
</tbody>
</table>

**Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):** 0700 Utilities

**Status**

**Struct.** 1820- 1- AB UTILITY CABLE, TELEPHONE/COMMUNICATIONS LF

Details and Structure: Items 1000 to 1999- Utility JPA
A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)*
4 (Relocate)*
5 (Adjust /Modify)*
6 (Remove & Dispose)* Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage)* Note: DOT/maintaining agency retains ownership
8 (Place out of Service)*
9 OPEN Note: May be defined in item structure as Special, Rehab, etc.
* When A=3-9, B=0

B= # of pairs
1 (up to 10 pair)
2 (11-50 pair)
3 (50-100 pair)
4 (greater than 100 pair)

Notes

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<tr>
<td>1820 1 60</td>
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<td>1/1/2010</td>
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</table>

1820- 2- AB UTILITY FIBER OPTIC, TELEPHONE/COMMUNICATIONS

Unit LF; M1 Accuracy Linear Foot; 10th of a Meter PlanQuantity? no

Notes

Details

This pay item for Utility JPA projects Only

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

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Documentation

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<tbody>
<tr>
<td>Specifications</td>
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Details and Structure: Items 1000 to 1999- Utility JPA
### Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0700 Utilities

**Status**

**Struct.** 1820-2-AB **UTILITY FIBER OPTIC, TELEPHONE/COMMUNICATIONS**

**Notes**

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