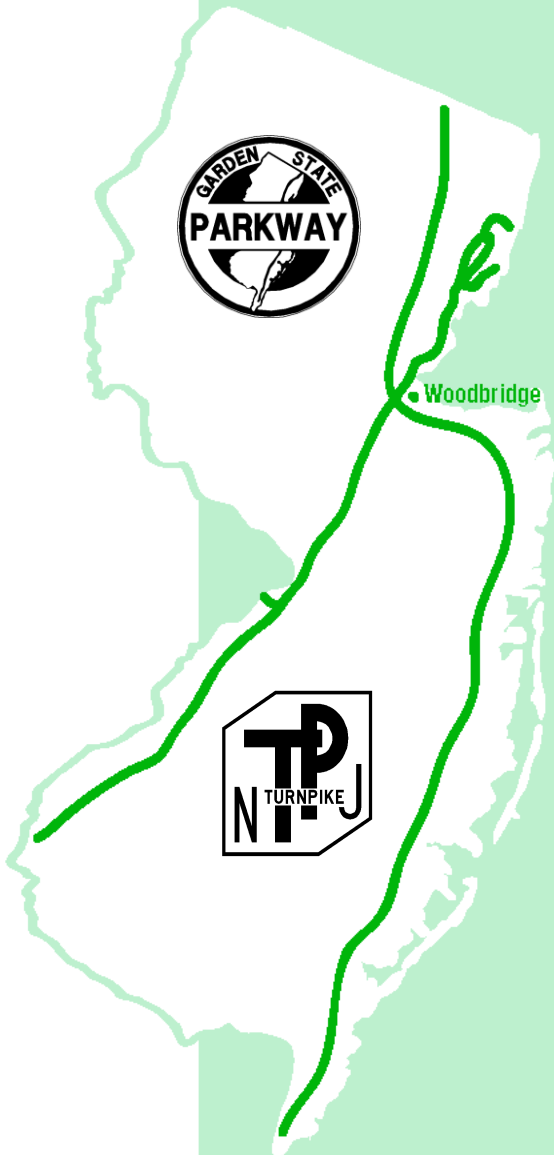


**NEW JERSEY TURNPIKE AUTHORITY
GARDEN STATE PARKWAY
NEW JERSEY TURNPIKE**



**MANUAL FOR UNIT
CODES**

February 2009

Updated 11/30/2010

NEW JERSEY TURNPIKE AUTHORITY MANUAL FOR UNIT CODES

Table of Contents

| | <u>Page No</u> |
|--|----------------|
| SUMMARY OF REVISIONS | 1 |
| 1 – OVERVIEW..... | 2 |
| 2 - PROCEDURE | 3 |
| 2.1 Development of Proposal Items..... | 3 |
| 2.2 Phase Unit Code Electronic Submissions..... | 3 |
| 2.3 Development of Phase Unit Code Lists..... | 5 |
| 2.4 Phase D Capex Submission | 5 |
| 2.5 Regarding Non-standard Sections and Items | 6 |
| 2.6 Proposal Item Guidelines | 7 |
| 3 – UNIT CODE PROGRAM USERS GUIDE..... | 9 |
| 3.1 Contents | 9 |
| 3.2 Introduction | 9 |
| 3.3 Requirements | 9 |
| 3.4 Directions | 9 |
| 3.4.1. Print/View/Search Unit Codes | 10 |
| 3.4.2. View Reports | 15 |
| 3.4.3. Check Unit Codes from Spreadsheet | 16 |
| 3.4.4. Check Engineer’s Estimate | 18 |
| APPENDIX A – APPROVED UNITS FOR PROPOSAL ITEMS..... | 19 |
| APPENDIX B – ABOUT SPECIAL UNIT CODES..... | 20 |

SUMMARY OF REVISIONS

The original Manual for Unit Codes was published in **February 2009**. This page serves to show all changes that have been made to the document since then.

| Date | Revision(s) |
|---------------|---|
| March 2009 | <ul style="list-style-type: none"> • Added instructions and figures related to the Import Checkout List feature in Section 4.3.1. |
| April 2010 | <ul style="list-style-type: none"> • Added a Combined List option for Unit Code Electronic Submissions in Section 2.2. • Added instructions on the order of Unit Codes to Section 2.3. • Revised the instructions and figure for Section 2.4. • Added examples to Section 2.5. • Added new Section 2.6 – “Proposal Item Guidelines.” |
| November 2010 | <ul style="list-style-type: none"> • Revised Figure 2 in Section 3.4.1 • Revised Figure 3 in Section 3.4.1 • Revised the Figure 5 instructions and picture in Section 3.4.1 • Revised Figure 9 in Section 3.4.1 |

SECTION 1 OVERVIEW

The Authority uses CapEx™ Manager (hereinafter referred to as “Capex”), a web-based application, as its capital expenditure manager for construction contracts. Capex tracks construction contracts from advertisement to completion. The Scope of Work of a contract is defined in Capex through the use of unique Proposal Items referred to as “Unit Codes”. It is the Engineer’s responsibility to develop this list of Unit Codes during design.

As of the date of this Manual, there are over 4,000 Unit Codes defined in Capex, about half of which represent Proposal Items identified in the Authority’s Standard Specifications (sixth edition 2004) and the Standard Supplementary Specifications. The other half includes Proposal Items that are not defined in the standards (non-standard items).

The Authority maintains and updates the master Unit Code list through additions, corrections and deletions. The Engineer shall therefore only use the latest Unit Code list. The Engineer shall not create any codes nor assume that codes used in previous contract documents are still valid. It is the Engineer’s responsibility to use as many Unit Codes that already exist in Capex during the design process, but may request Unit Codes for unissued standard and non-standard items during phase submissions.

SECTION 2 PROCEDURE

2.1. Development of Proposal Items

Design submissions require the development of contract Proposal Items in the form of a list of proposed Unit Codes. Existing Unit Codes can be viewed through a Microsoft Access database application entitled "Unit Code.mdb" which is updated regularly. The Engineer shall obtain the latest copy of the program which is available in a downloadable packet from <http://www.state.nj.us/turnpike/professional-services.html>.

Refer to Section 2.6 of this manual for Proposal Item Guidelines, which provides further instructions on how to determine the appropriate Unit Code and/or Item Description of your desired Proposal Item.

2.2. Phase Unit Code Electronic Submissions

The Engineer has two options for Unit Code Electronic Submissions: (1) submitting a Known and Requested Unit Code lists separately in two spreadsheets, or (2) submitting the lists in a single combined spreadsheet.

Option 1: Separate Lists

The first list includes those items for which the Unit Codes are known (these include available standard and non-standard items). This list shall be submitted in excel format with the "Unit Code", "Description" and "Unit" columns only (all text fields). This list shall be referred to as the Known Unit Codes list. For example:

| Unit Code | Description | Unit |
|-----------|---------------------------|------|
| 1D01LAY | CONSTRUCTION LAYOUT | L.S. |
| 1D10MOB | MOBILIZATION | L.S. |
| 1G01SCH | PROGRESS SCHEDULE | L.S. |
| 2A02CAG | CLEARING AND GRUBBING | L.S. |
| 2B02REX | ROADWAY EXCAVATION, EARTH | C.Y. |
| 2B05REX | ROADWAY EXCAVATION, MUCK | C.Y. |

The file name of this submission shall be "<Contract No.> Phase < > knowncodes.xls (i.e. "T100.011 Phase B knowncodes.xls").

Prior to submission of the Known Unit Codes list, it is recommended that the Engineer utilize the procedure outlined in 3.4.3 of this manual as a final check.

The second list shall include anticipated Proposal Items for which Unit Codes do not exist. This list shall also be submitted in excel format with “Section” (Proposed Specifications Section Number), “Section Title, If Non-Standard” (Proposed Specifications Section Title), “Description” and “Unit” columns only. This list shall be referred to as the Requested Unit Codes list. For example:

| Section | Section Title, If Non-Standard | Description | Unit |
|---------|--------------------------------|---------------------------|------|
| 417 | | Deck Joint Reconstruction | L.F. |
| 428 | Fender System | Plastic Lumber | C.F. |
| 503 | | Outlet Structure | Each |

The file name of this submission shall be “<Contract No.> Phase < > requestedcodes.xls (i.e. “T100.011 Phase C requestedcodes.xls”).

Option 2: Combined List

Alternatively, the known and requested codes can be submitted into one combined list. A sample submittal spreadsheet entitled “T200.001 Phase C requestedandknowncodes.xls” is included in the downloadable packet for Unit Code.mdb, which is set up like so:

| Unit Code | Description | Unit | Section Number | Section Title |
|-----------|--|------|----------------|----------------------|
| 2H45TEC | Construction Driveway | Tons | | |
| | Requested Code 1 | L.S. | 212 | Non-Standard Title 1 |
| 4H19LEB | Laminated Elastomeric Bearing, 9” x 10 ½” | Each | | |

Requested Codes should be situated on the list in the Unit Code order that is explained in Section 2.3.

The method of submittal (i.e. e-mail, CD) shall be determined by the Authority and may vary from contract to contract.

Once submitted, the Authority will check the Known Unit Codes and will address the Requested Unit Codes as follows:

- Find or Issue a Unit Code using the exact anticipated Proposal Item wording.
- Find or Issue a Unit Code using a modified Proposal Item wording: This is done at times to make the description generic enough to allow for Unit Code re-use or to follow existing naming conventions (see Section 2.6 of this manual for typical naming conventions). This may also be encountered if a Unit Code was found to apply to the Proposal Item.
- Request a clarification.

All excel files should be free of titles, merged or hidden cells, equations and links to other cells. All information should be shown on the first worksheet. Remaining worksheets should not contain any information.

2.3. Development of Phase Unit Code Lists

The Engineer shall submit Known Unit Codes and Requested Unit Codes for Phases B, C and D. In most cases, there will be no Requested Unit Codes at Phase D.

For these submissions, the list of Unit Codes shall be in the same order as proposed to appear in the contract documents, such as the proposal pages and the estimate of quantity sheets and individual quantity boxes on the plans.

The order of Unit Codes shall be as they would appear in the project's final compiled Specifications (Standard combined with Supplementary). In other words, it is sequential by Subsection, with Standard items first followed by Non-Standard items *in the order they appear in the Supplementary Specifications*. (Refer to Section 2.5 of this manual for more information on Non-Standard Sections and Items.)

Sorting Unit Codes in this manner allows for easier navigation between proposed item lists and the specifications during design, bidding, and construction. Although it is easier to sort Unit Codes alphanumerically, it is not preferred.

The Engineer shall notify the Authority if any Unit Codes created specifically for the contract during previous phases are no longer needed.

2.4. Phase D Capex Submission

The Engineer shall submit an additional excel file which contains the final list of Unit Codes. The file shall contain columns for "Item No." (number field), "Item No. Ext.", "Unit Code" (text field), "Description", "Unit of Measure", "Number of Units" (number field), "Unit Price" (number field), "Line Total", and "Bid Requirement". The list shall be in the same order as they appear in the contract documents. It should look like so (columns which are shown with no data may remain blank):

| Item No. | Item No. Ext. | Unit Code | Description | Unit of Measure | Number of Units | Unit Price | Line Total | Bid Requirement |
|----------|---------------|-----------|-------------|-----------------|-----------------|------------|------------|-----------------|
| 1 | | 1D01LAY | | | 1 | 100000 | | Base |
| 2 | | 5K00001 | | | 600 | 30.5 | | Base |

The file name of this submission shall be "<Contract No.> capex.xls (i.e. "T100.011 capex.xls").

2.5. Regarding Non-standard Sections and Items

Non-standard sections are specifications sections not included in the Authority's Standard Specifications (sixth edition 2004). All non-standard sections are issued numbers and titles in Capex sequentially which are not required to match the contract documents.

The Engineer shall number non-standard section numbers sequentially for their contract documents. For example, if "Sawing and Sealing Joints" (Section 312 in Capex) is the only non-standard section in a contract, the Engineer shall utilize 311 for their contract documents (since 310 is the last standard section). Also, the Engineer can use a different section title if using an item in a non-standard section. For example, the Unit Code 4ZH02SPP, "Furnish Steel Protection Plate" is in Capex Non-standard Section 434 entitled "Steel Protection Plates". The Engineer can use that Unit Code but with a different section title such as "Miscellaneous Structural Items".

Non-standard items are Proposal Items not defined in the Authority's Standard Specifications (sixth edition 2004). These can include Proposal Items issued under standard or non-standard specifications sections. The Engineer should try to use the same specifications section numbering for non-standard Proposal Items issued under standard specifications sections, rather than creating a new non-standard section in the specifications.

Here are some examples in properly using non-standard items:

Non-standard Proposal Item *2H40TEC, Inlet Filters*, was issued in the Unit Code database under *Standard Section 208 – Temporary Soil Erosion and Dust Control*. It should therefore appear in Section 208 of the Supplementary Specifications rather than being placed in a new non-standard section.

Non-standard Proposal Item *5ZL0001, 6-6" Electric Conduit Bank, Concrete Encased*, was issued in the Unit Code database under *non-Standard Section 538 – Utilities*. A "Utilities" Section does not have to appear in Section 538 of the Supplementary Specifications, but rather the first available non-Standard Section number.

2.6. Proposal Item Guidelines

The Authority's current list of issued items, as found in the latest Unit Code.mdb file, follows certain Item Description conventions which the Engineer is urged to adhere to as closely as possible when developing Proposal Items. Unit Code.mdb is an ever-evolving database which is updated with every new design contract in which an unissued Standard or Non-Standard Item is proposed. These guidelines serve to aid the Engineer in choosing or creating the appropriate Item Description for their Proposal Items so as to eliminate as many errors as possible during Electronic Submissions of Phase B, C, and D.

The first step the Engineer should take is to use the **search functions** in the latest Unit Code.mdb file, which is outlined in section 3.4.3 of this manual. In most cases, the desired Proposal Item exists in one form or another. To help discern whether it is better to use an existing Unit Code or request a new one, items have been categorized as follows:

1) Generic Items

Generic Items are items which may differ from project to project in terms of manufacturer, material, size, location, etc., but are still allowed to be chosen as a Proposal Item. For example,

4F01CSS Overhead Cantilever Sign Support Structure No. 1

is an item that has been used on multiple projects even though the sign support structures are not the same from project to project.

With Generic Items, the Engineer is allowed to use **clarifiers in parentheses** for the item description. For example, if the project has 2 sign support structures – one located at milepost 48.2N and another located at milepost 49.4N – the Engineer may use the following Proposal Items:

4F01CSS Overhead Cantilever Sign Support Structure No. 1 (48.2N)

4F02CSS Overhead Cantilever Sign Support Structure No. 2 (49.4N)

Making proper use of Generic Items, and clarifiers, is a good way to avoid requesting new Unit Codes that are not necessary.

2) Specific Items

Specific Items are items which fundamentally require their own Unit Code based on their unique properties. Specific Items most notably apply to Pay Items that appear in the Standard Specifications with a blank underscore or parentheses, indicating that it should be filled in with the appropriate Type, Dimensions, etc. This is most common with Structural and Electrical items. For example, Subsection 402.14 of the Standard Specifications lists the following two Pay Items:

| | |
|---|--------------------|
| <i>Prestressed Concrete Beams, Type _____</i> | <i>Linear Foot</i> |
| <i>Prestressed Concrete Deck Units, (Depth) x (Width)</i> | <i>Linear Foot</i> |

Theoretically, there can be an infinite number of Specific Items in the database, so they are issued on an as-needed basis. If the exact description for the Proposal Item does not exist, the Engineer should request a new Unit Code.

3) “No-Bid” Lump Sum Items

“No-Bid” Lump Sum items are items whose descriptions are based on the proposed no-bid cost of the item. For example,

3B100APA Asphalt Price Adjustment. (This is a NO-BID, Lump Sum item for this contract. The Lump Sum price is \$100,000. Enter a Unit Price of \$100,000 as your bid for this item.)

was issued based on the \$100,000 cost from the Engineer’s Estimate. For certain cases, like with “No-Bid” Lump Sum Items, the text in parentheses do not act as a clarifier but rather as the item’s actual description in the database.

The Engineer is urged to round their lump-sum costs to the nearest \$1,000, \$10,000, \$25,000, or \$50,000 depending on the magnitude of the cost, e.g. if an estimated cost is \$705,000, the Engineer would be asked to round to \$700,000. Use best judgment; this prevents the creation of items with ultimately insignificant digits.

4) Special Unit Codes

Refer to Appendix B of this manual regarding Special Unit Codes such as “DO NOT USE”, “RESERVED”, and “TO BE REASSIGNED”.

5) NJDOT Unit Codes

NJDOT Unit Codes exist in the database because they are issued for Authority contracts which require NJDOT items, usually due to the presence of NJDOT property within project limits. The Engineer is advised not to use these items unless directed by the Project Engineer.

These are but a few examples in a database comprised of thousands of various items, many of which do not fall under these categories. The Engineer is left to use best judgment when determining what description is appropriate for their Proposal Items, and will otherwise be instructed by the Authority on what to use during Phase submissions.

SECTION 3

UNIT CODE PROGRAM USERS GUIDE

3.1 Contents

Included in the downloadable packet are the following files:

- Unit Code.mdb: Database application that contains all of the Unit Codes.
- Manual for Unit Codes.doc: Instructions on program use.
- Sample excel spreadsheets used for the database application program features.
- Sample excel spreadsheets required for Phase submissions.

3.2 Introduction

Unit Code.mdb is an Access Database Application which allows a user to look up the latest Unit Codes. The following features are available:

1. Print/View/Search Unit Codes: A user can look up codes through filters and key word searches. A “checkout” feature allows a user to select the items needed for a specific contract. The selected items can be exported in excel format where it can be manipulated into contract documents (i.e. proposal pages, engineer’s estimates). Database includes cost history information.
2. Reports: This feature allows a user to look up Unit Codes added for contracts after September of 2007 via Contract Number and modified bid tabulations which show unit price information only.
3. Check Unit Codes From Spreadsheet: This feature allows a user to check an existing list of Unit Codes for correctness.
4. Check Engineers Estimate: This tool compares an estimate to historical unit price data. ***The Engineer shall be responsible to develop unit costs based on the specific contract requirements, methods of construction, construction sequencing, etc. Each contract is unique and the Engineer shall take all factors into account in the preparation of the contract’s unit costs and the development of the Engineer’s Estimate.***

3.3 Requirements

- System Requirements: Microsoft Access 2003
- Help and Support: Contact Ana Tatoris at 732-750-5300 x8262 or via e-mail at tatoris@turnpike.state.nj.us.

3.4 Directions

Screen shots on the following pages are gray scale. For forms, button backgrounds are color-coded as follows: Reports are blue, Quit/Exit red and Checked Out items are pink. For reports, color coding is explained in each report header or footer.

Open Unit Code.mdb to enter the main menu. See Figure 1.

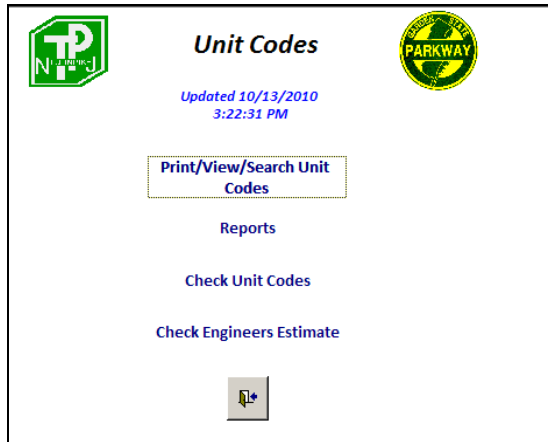


Figure 1) Main Menu.

3.4.1 Print/View/Search Unit Codes:

When the top button (“Print/View/Search Unit Codes”) of the Main Menu is selected, the following form opens:

| check out | Div | Sect | Source | CapEx | Section | Description | Description | Unit Code | Units | Issued For | Ave Price | Ave Qty | No Contracts | hist | Last Contract | Date Updated |
|-------------------------------------|-----|------|--------|----------|---------|-----------------|---|-----------|-------|----------------|----------------|-----------|--------------|------|---------------|--------------|
| <input checked="" type="checkbox"/> | N | 100 | 104 | | | CONTROL OF WORK | As-Built Survey | N1D0001 | L.S. | T700.069 | \$8,950.50 | 1 | 2 | hist | T700.152 | 2/9/2009 |
| <input type="checkbox"/> | N | 100 | 104 | | | CONTROL OF WORK | | 1D01HDS | Each | T869.120.701** | | | | hist | | 8/2/2010 |
| <input type="checkbox"/> | N | 100 | 104 | Standard | | CONTROL OF WORK | | 1D01LAY | L.S. | | \$401,686.34 | 1 | 61 | hist | T869.120.302 | 2/9/2009 |
| <input type="checkbox"/> | N | 100 | 104 | | | CONTROL OF WORK | | 1D01SDP | L.S. | T100.116 | \$84,306.37 | 1 | 2 | hist | T100.147 | 3/18/2009 |
| <input type="checkbox"/> | N | 100 | 104 | | | CONTROL OF WORK | | 1D02LST | L.S. | | | | | hist | | 2/9/2009 |
| <input type="checkbox"/> | N | 100 | 104 | Standard | | CONTROL OF WORK | | 1D10MOB | L.S. | | \$1,171,514.63 | 1 | 122 | hist | A700.215 | 2/9/2009 |
| <input type="checkbox"/> | N | 100 | 106 | | | | Oil Only Emergency Spill Kit | N1F0002 | Each | | \$1,259.86 | 2,714,286 | 7 | hist | T869.120.302 | 2/9/2009 |
| <input type="checkbox"/> | N | 100 | 106 | | | | Concrete Washout Facility | N1F0001 | L.S. | | \$23,971.65 | 1 | 11 | hist | T869.120.302 | 2/9/2009 |
| <input type="checkbox"/> | N | 100 | 106 | | | | Permit Fees (This is a NO BID, Lump Sum item for this contr | 1F01PMF | L.S. | P200.159* | \$2,500.00 | 1 | 1 | hist | P200.159 | 7/21/2010 |

Figure 2) Print/View/Search Unit Codes Form.

1. This form allows a user to view Unit Codes filtered by Division, Section or Keywords. It also includes a Quick Find feature.

- Filtering By Division: Division Filters can be applied by selecting/unselecting sections in the top left hand corner. See Figure 3.
- Filtering By Keyword(s): Keyword filters can be used by typing in up to two keywords or strings of texts in the field boxes within the middle top section. This feature is useful when there is uncertainty about the exact wording of an item. **Do not use quotes (“), ‘and’, ‘or’, ‘in’ within the keyword filter boxes.** See Figures 3 and 4.
- Filtering By Division and By Keyword are designed to work together. Using these filters in conjunction with the General Filtering feature described below, however, can only be done in top to bottom order. Use Division and Keyword(s) first, then General Filtering.
- Quick Find: The field box within the top right hand corner can be used in order to determine if a Unit Code exists. See Figure 4.
- General Filtering: A user can filter for a specific Section, Contract or Units, by right clicking the mouse in the appropriate field and selecting either “Filter By Selection”, “Filter Excluding Selection”, or “Filter For:_____”. As indicated before, using these filters in conjunction with the Division or Keyword Filters can only be completed in top to bottom order. Users are cautioned to remember to remove existing Filters by right clicking the mouse and selecting “Remove Filter” or by pressing the “Remove Filter” button on the form. See Figure 5.
- General Sorting: At any time, a user can sort any of the visible fields in ascending or descending order by right clicking on the field desired and selecting “Sort Ascending” or “Sort Descending”. General Sorting works with all filters.
- Printing Lists: At any time, a user can print out a hard copy of the records filtered on the form through Filtering by Division and Keyword(s) only by pressing the “Print Item List” button. To print a list of all items within the database, press the “Print Item List” button with no Division or Keyword filters. Filters through General Filtering (right click) will NOT be reflected in the report. See Figure 6.
- Preview Sections Only: This feature prints out all of the specifications sections of the filtered records on the form. All “Non-Standard” Sections are highlighted in purple. See Figure 6.
- View Price Information: Unit price information for the past year, if available, can be viewed by double-clicking the Unit Code field. Unit price information for all data collected can be viewed directly on the form.

The top screenshot shows a software interface with the following components:

- Select Specifications Division(s):** Radio buttons for 100, 200, 300, 400, 500, 600, 700, 800, and DOT. A 'select all' button is present.
- AND/OR:** A dropdown menu.
- Type in portion of Description i.e. "concrete". Do not use quotes, commas, "and", "or" or "in" within the boxes:** Two input fields containing 'trench' and 'drain', with 'Filter' and 'Remove Filter' buttons.
- Quick Find - Type in proposed Item. If it exists, you will see Sect. and Description:** An input field with 'No Match' displayed.
- Action Buttons:** Uncheck All, Print Checkout Items, Export Items (Export.xls), Import Checkout List, Print Item List, Preview Sections Only.
- Table:** A table with columns: check out, Div Sect, Source, CapEx Section Description, Description, Unit Code, Units, Issued For, Ave Price, Ave Qty, No Contracts, Last Contract, Date Updated. It lists items like 'Clean Existing Trench Drain', '16" Trench Drain', '10" Trench Drain', '12" Trench Drain', and '24" Trench Drain'.

The bottom screenshot is identical but with the following changes:

- Keywords:** The input fields now contain 'trench drain'.
- Quick Find:** Still shows 'No Match'.

Figure 3) Examples showing Filtering By Division and Keyword(s): Note the different methods used to find all “trench drain” items within all Divisions.

The screenshot shows the software interface with the following components:

- Select Specifications Division(s):** Same as Figure 3.
- Keywords:** Input fields contain 'clearing' and 'grubbing'.
- Quick Find:** Shows results for '2b01rex' with 'Section 202 - ROADWAY EXCAVATION' and 'L.S. Roadway Excavation, Earth'.
- Table:** Lists items like 'CLEARING AND GRUBBING' with descriptions 'Clearing and Grubbing' and unit codes '2A02CAG' and '2A01CAG'.

Figure 4) Example showing Filtering By Keyword(s) “clearing” and “grubbing”, and using Quick Find to determine if “2B01REX” exists.

The screenshot shows a context menu with the following options:

- Cut
- Copy
- Paste
- Sort A to Z
- Sort Z to A
- Clear filter from Section Number
- Text Filters**
 - Equals "201"
 - Does Not Equal "201"
 - Contains "201"
 - Does Not Contain "201"
- Delete

Figure 5) Example showing General Filtering of the field “Section” for number “201”. This tool is available when the user right clicks in any field. Note other filtering and sorting options. Box below shows prompt when “equal” is selected.

The screenshot shows a 'Custom Filter' dialog box with the following text:

Section Number is equal to [input field]

[OK] [Cancel]

| Unit Code List | | Keyword Filter 1 | Keyword Filter 2 | District Filters | 400 | (1) Contract Number last Used (2) "Standard" if Unit Code is a Pay Item defined in the Standard Specifications 2004 "Supplement" if Unit Code is a Pay Item defined in the Standard SUPPLEMENTS |
|--|----------------------------|--|-------------------------|-------------------------|---------------|---|
| <i>SECTIONS in Purple Signifies a "Non-Standard" Section</i> | | | | | | |
| DIVISION 400 | | | | | | |
| Section 401 | Section - Per CapEx | Section 401 - CONCRETE STRUCTURES | | | Latest | Contract (1) |
| <i>Source (2)</i> | Item ID | Description | Units | | | |
| 1) | Standard 4A00001 | Concrete Seal in Cofferdams | C.Y. | T300.064 | | |
| 2) | 4A00002 | Modular Expansion Joint, (Type A "9" Movement) | L.F. | | | |
| 3) | 4A00003 | Precast Rigid Frame | L.F. | T300.064 | | |
| 4) | 4A00004 | Concrete Collar | Each | | | |
| 5) | Standard 4A01CCS | Concrete Core Sampling | Each | T100.042 | | |
| 6) | Standard 4A01CSH | Concrete In Structures, Headwalls | C.Y. | P200.021 | | |
| 7) | Standard 4A01LMC | Latex Modified Concrete Overlay, 1/2" Thick | C.Y. | | | |
| 8) | Standard 4A01LSO | LowSlump High Density Concrete Overlay, 1/2" Thick | S.Y. | | | |

| Section Listing | | Keyword Filter 1 | Keyword Filter 2 | District Filters | 100 200 300 400 500 600 700 | 800 900 |
|--|--|-------------------------|-------------------------|-------------------------|------------------------------------|----------------|
| <i>All Non-Standard Sections are shown in PURPLE</i> | | | | | | |
| DIVISION 100 | | | | | | |
| <i>Section 104 - CONTROL OF WORK</i> | | | | | | |
| <i>Section 106</i> | | | | | | |
| <i>Section 107 - PROSECTION AND PROGRESS</i> | | | | | | |
| <i>Section 109</i> | | | | | | |
| DIVISION 200 | | | | | | |
| <i>Section 201 - CLEARING AND GRUBBING</i> | | | | | | |
| <i>Section 202 - ROADWAY EXCAVATION</i> | | | | | | |
| <i>Section 203 - EMBANKMENT</i> | | | | | | |
| <i>Section 204 - CHANNEL EXCAVATION</i> | | | | | | |
| <i>Section 205 - FOUNDATION EXCAVATION</i> | | | | | | |
| <i>Section 206 - TRENCH EXCAVATION</i> | | | | | | |
| <i>Section 207 - STONE FOR EROSION CONTROL</i> | | | | | | |
| <i>Section 208</i> | | | | | | |
| <i>Section 209 - SUBGRADE</i> | | | | | | |
| <i>Section 210 - DEMOLITION OF EXISTING STRUCTURES</i> | | | | | | |
| <i>Section 211 - TEMPORARY FENCING</i> | | | | | | |
| <i>Section 212 - SUBBASE</i> | | | | | | |

Figure 6) Report generated from "Print Item List" (top) and "Preview Sections Only" (bottom). Note the applicable Keyword and District Filters are indicated in the header and all "Non-Standard" Sections are shown in green.

- The checkout feature allows a user to export a list of Unit Codes in electronic format. The list can later be pasted or imported into the user's contract documents such as contract sheets, proposal pages or the Engineer's Estimate. While looking up Unit Codes, a user can "check" ✓ the items required for a Contract.
 - Checkout Items: Click the check out box adjacent to the item to add an item to (or remove an item from) the Checkout List. All checked items will turn pink. The "Uncheck All" button may be used to clear all selected Checkout Items. **All changes to the checkout list are automatically saved to the file. The user should therefore be wary of all changes that are made by anyone who has access to that file.** See Figure 7.
 - View Checkout Items: Press the "Print Checkout Items" button OR right click the check box and select "Filter by Selection. See Figures 8 and 9.
 - Export Checkout Items in Excel: Press the "Export Checkout Items in Excel" button. An output file "export.xls" will be created in the folder selected. See Figure 10.
 - Import Checkout List: Allows the user to import the items to the checkout list that are in an export checkout excel file format. This is useful for users that are actively working on developing a checkout list when a new version of the

database is issued by the Authority. The user can then export the list from the “old” version, download the new database, then import the previous checkout list.

| check out | Div Sect | Source | CapEx Section | Description | Description | Unit Code | Units | Issued For | Ave Price | Ave Qty | No Contracts | Last Contract | Date Updated |
|-------------------------------------|----------|--------|---------------|-----------------|---|-----------|-------|----------------|----------------|-----------|--------------|---------------|--------------|
| <input checked="" type="checkbox"/> | N100 | 104 | | CONTROL OF WORK | Historic District Sign | 1D01HDS | Each | T869.120.701** | | | | | 8/2/2010 |
| <input type="checkbox"/> | N100 | 104 | | CONTROL OF WORK | As-Built Survey | N1D0001 | L.S. | T700.069 | \$8,950.50 | 1 | 2 | T700.152 | 2/9/2009 |
| <input type="checkbox"/> | 100 | 104 | Standard | CONTROL OF WORK | Mobilization | 1D10M08 | L.S. | | \$1,171,914.83 | 1 | 122 | T4700.215 | 2/9/2009 |
| <input type="checkbox"/> | 100 | 104 | Standard | CONTROL OF WORK | Construction Layout | 1D01LAY | L.S. | | \$401,686.34 | 1 | 61 | T869.120.302 | 2/9/2009 |
| <input type="checkbox"/> | N100 | 104 | | CONTROL OF WORK | Shop Drawing Preparation | 1D01SDP | L.S. | T100.116 | \$84,906.37 | 1 | 2 | T100.147 | 3/18/2009 |
| <input type="checkbox"/> | N100 | 104 | | CONTROL OF WORK | Construction Layout for COP #1 Structures | 1D02LST | L.S. | | | | | | 2/9/2009 |
| <input type="checkbox"/> | N100 | 106 | | | Concrete Washout Facility | N1F0001 | L.S. | | \$22,971.63 | 1 | 11 | T869.120.302 | 2/9/2009 |
| <input checked="" type="checkbox"/> | N100 | 106 | | | Oil Only Emergency Spill Kit | N1F0002 | Each | | \$1,255.86 | 2,714,236 | 7 | T869.120.302 | 2/9/2009 |

Figure 7) Check Items Feature. Checked items are shaded pink.

| <i>Checkout Items Report</i> | | | | | | | | | |
|---|------------|--|-------|----------------------------------|-------------|------------|-----|-------------------|---------|
| Source | Item ID | Description | Units | Averages over 1 Year | | | | Total over 1 Year | |
| | | | | Cost | Max | Min | Qty | Contracts | Bidders |
| <i>Section 104 - CONTROL OF WORK</i> | | | | | | | | | |
| 1) | N1D0001 | As-Built Survey | L.S. | \$16,101.00 | \$25,000.00 | \$5,000.00 | 1 | 1 | 5 |
| <i>Section 107 - PROSECTON AND PROGRESS</i> | | | | | | | | | |
| 2) | Standard | 1G01SCH Progress Schedule | Lump | \$8,358.72 | \$50,000.00 | \$1.00 | 1 | 10 | 46 |
| <i>Section 109</i> | | | | | | | | | |
| 3) | Supplement | 1I01MAB Maintenance Bond | L.S. | -----No Cost Data Available----- | | | | | |
| <i>Section 401 - CONCRETE STRUCTURES</i> | | | | | | | | | |
| 4) | Standard | 4A06LMC Latex Modified Concrete Overlay, 1-3/4" Thick | S.Y. | -----No Cost Data Available----- | | | | | |
| 5) | Standard | 4A06LSO LowSlump High Density Concrete Overlay, 1-3/4" Thick | S.Y. | -----No Cost Data Available----- | | | | | |
| 6) | Standard | 4A06OVY Class B Concrete Overlay 1-3/4" Thick | S.Y. | -----No Cost Data Available----- | | | | | |

Figure 8) Report generated from “Print Checkout Items”. Note unit price information is included in this report.

| check out | Div Sect | Source | CapEx Section | Description | Description | Unit Code | Units | Issued For | Ave Price | Ave Qty | No Contracts | Last Contract | Date Updated |
|-------------------------------------|----------|--------|---------------|--------------------|-----------------------------------|-----------|-------|---------------|-----------|----------|--------------|---------------|--------------|
| <input checked="" type="checkbox"/> | 200 | 202 | Standard | ROADWAY EXCAVATION | Overload Removal | 2B200VR | C.Y. | | \$11.12 | 27788.35 | 9 | T869.120.605 | 2/9/2009 |
| <input checked="" type="checkbox"/> | 200 | 202 | Standard | ROADWAY EXCAVATION | Roadway Excavation, Muck | 2B05REX | C.Y. | | \$24.89 | 16542.22 | 9 | T869.120.302 | 2/9/2009 |
| <input checked="" type="checkbox"/> | 200 | 202 | Standard | ROADWAY EXCAVATION | Roadway Excavation and Embankment | 2B04REX | C.Y. | | \$27.67 | 63471.06 | 14 | T869.120.302 | 2/9/2009 |
| <input checked="" type="checkbox"/> | N | 200 | 203 | EMBANKMENT | Clay Liner | 2C00005 | C.Y. | T869.120.601* | \$24.06 | 22993 | 2 | T869.120.302 | 2/23/2009 |

- Cut
- Copy
- Paste
- Sort Selected to Cleared
- Sort Cleared to Selected
- Clear filter from checkout
- Is Selected**
- Is Not Selected
- Delete

Figure 9) Form filtered for all checked out items.

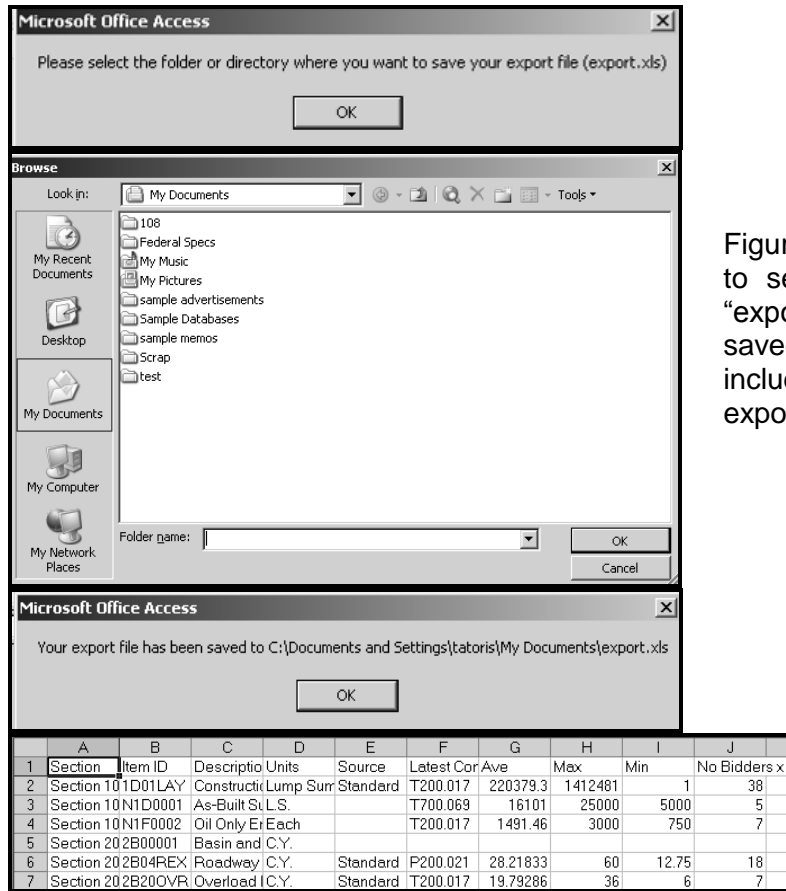


Figure 10) Various prompts to select folder where the “export.xls” file is to be saved. The bottom figure includes a view of the export.xls file.

3.4.2. View Reports:

When the button (“Reports”) of the Main Menu is selected, the following form opens:

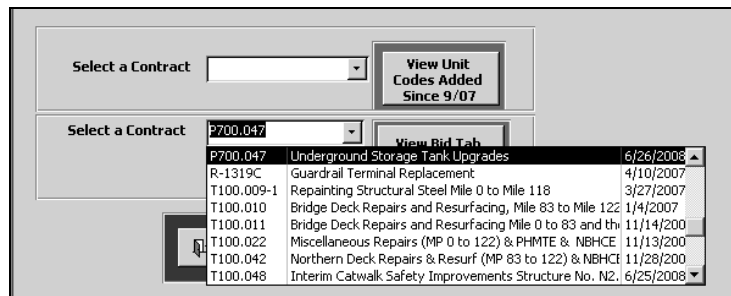


Figure 11) Top combo box shows Unit Codes added per Contract. The bottom combo box shows modified bid tabulation reports (unit prices only).

This form allows the user to print items added specifically for a recent Contract. This data is only available for the Contracts entered since the fall of 2007 when the Authority began to track this information (See Figure 12). The second type of report prints out a modified bid tabulation consisting of unit price information only (See Figure 13).

Unit Codes Recently Added

Contract 7700.069

| Section | Item ID | Description | Units |
|---|---------|---------------------------|-------|
| 1 Section 104 - CONTROL OF WORK | N1D0001 | As-Built Survey | L.S. |
| 2 Section 202 - ROADWAY EXCAVATION | N2B0002 | Dewatering | L.S. |
| 3 Section 207 - STONE FOR EROSION CONTROL | 2G00001 | Riprap and Scour Holes | Ton |
| 4 Section 207 - STONE FOR EROSION CONTROL | 2G06SEC | Stone for Erosion Control | Ton |

Figure 12) Report generated when the Contract is selected.

Unit Price Information

Unit High Price (Yellow)
Unit Low Price (Blue)

Contractor Name in Green denotes Low Apparent Bidder
Contractor Name in Orange denotes Lowest Responsible Bidder if different from Low Apparent Bidder

P700.047 6/26/2008
Underground Storage Tank Upgrades

| | | | Quantity | Average | SLACK, TED ENVIRONMENTAL SERVICES, INC. | INDEPENDENCE CONSTRUCTORS, INC. | PALMER WEST ASSOC., INC. T/A A&J CONSTRUCTION CO. | SPARK ELECTRIC SERVICE, INC. | |
|----|---------|---|----------|---------|---|---------------------------------|---|------------------------------|----------------|
| 1 | ID10MOB | Mobilization | L.S. | 1 | \$92,081.25 | \$99,441.00 | \$150,884.00 | \$50,000.00 | \$68,000.00 |
| 2 | 8B31MPT | Maintenance and Protection of Traffic | L.S. | 1 | \$6,875.00 | \$10,000.00 | \$5,000.00 | \$10,000.00 | \$2,500.00 |
| 3 | 9C00001 | Remove and Replace LSTs at Maintenance District 2U | L.S. | 1 | \$239,497.50 | \$204,080.00 | \$235,500.00 | \$285,000.00 | \$233,410.00 |
| 4 | 9C00002 | Remove and Replace LSTs at Bass River Base Bid | L.S. | 1 | \$204,884.00 | \$182,526.00 | \$282,250.00 | \$175,000.00 | \$179,760.00 |
| 5 | 9C00003 | Extend Existing Ballast Pad for Tank E-61 at Bass River | L.S. | 1 | \$7,772.50 | \$11,590.00 | \$5,000.00 | \$4,500.00 | \$10,000.00 |
| 6 | 9C00004 | Remove, Dispose of and Replace Existing Ballast Pad for Tank E-61 at Bass River | L.S. | 1 | \$17,535.00 | \$22,540.00 | \$14,600.00 | \$18,000.00 | \$15,000.00 |
| 7 | 9C00005 | Remove, Dispose of and Replace Existing Ballast Pad for Tank E-60 at Bass River | L.S. | 1 | \$20,035.00 | \$22,540.00 | \$14,600.00 | \$28,000.00 | \$15,000.00 |
| 8 | 9C00006 | Upgrade Tank E-41 at Woodbridge Motor Pool | L.S. | 1 | \$90,911.75 | \$72,412.00 | \$122,860.00 | \$99,000.00 | \$69,375.00 |
| 9 | 9C00007 | Remove, Replace and Upgrade LSTs at Maintenance District No. 1 | L.S. | 1 | \$200,851.00 | \$149,069.00 | \$253,600.00 | \$250,000.00 | \$150,735.00 |
| 10 | 9C00008 | Remove and Replace LST at Maintenance District No. 6 | L.S. | 1 | \$162,446.75 | \$105,762.00 | \$170,800.00 | \$244,000.00 | \$129,225.00 |
| 11 | 9C00009 | Excavation and Stockpiling of Contaminated Soil | Ton | 2000 | \$13.75 | \$10.00 | \$10.00 | \$17.00 | \$18.00 |
| 12 | 9C00010 | Additional Backfill to Replace Contaminated Soil | Ton | 2000 | \$25.19 | \$30.00 | \$24.75 | \$28.00 | \$18.00 |
| 13 | 9C00011 | Loading, Transportation and Disposal of Contaminated Soil | Ton | 2000 | \$55.73 | \$60.00 | \$64.90 | \$43.00 | \$55.00 |
| 14 | 9C00012 | Removal and Disposal of Contaminated Groundwater | Gallon | 75000 | \$0.77 | \$1.00 | \$0.49 | \$1.05 | \$0.55 |
| 15 | 9C00013 | Mobilization of Vacuum Truck | Each | 12 | \$547.00 | \$800.00 | \$488.00 | \$250.00 | \$650.00 |
| | | | | | \$1,296,716.25 | \$1,164,560.00 | \$1,497,000.00 | \$1,421,230.00 | \$1,104,055.00 |

Figure 13) Report generated when the Contract is selected. Report shows unit prices by bidders by contract. High and low unit prices are highlighted and averages are calculated. The bottom of the report does show total bid amount and % difference from the EE.

3.4.3. Check Unit Codes from Spreadsheet:

When the bottom button (“Check Unit Codes”) of the Main Menu is selected, the following form opens:

Spreadsheet Must have the fields: "Unit Code", "Description" and "Unit" Must be saved as an Excel File on your computer or network.

example

| Unit Code | Description | Unit |
|-----------|-------------------|----------|
| ID10MOB | Mobilization | Lump Sum |
| 1G01SCH | Progress Schedule | Lump Sum |
| 2B25RBS | Regrade Berm | C.Y. |

Show All Items In Unit Code Order

Show All Items In Spreadsheet Order

Show Missing Items In Spreadsheet Order

Figure 14) Check Unit Codes from Spreadsheet form.

The last option allows the user to check whether a spreadsheet has the correct Unit Codes. This feature is useful if a consultant is working off of an existing electronic list of items. The spreadsheet to be checked must be saved as an Excel File and be accessible from the user’s computer. The fields must be named “Unit Code”, “Description” and “Unit” (See Section 2.2). For best results, use a “clean”

spreadsheet, free of merged cells, references, equations, macros, formats, hidden columns or rows. Since this tool compares units for an exact match to the database, the Engineer should use the list of units in Appendix A which are the standard units currently used by the Authority. See Figure 15.

There are three reports available. The first lists all items in Unit Code order. See Figure 16. The second lists all items in the same order as the Spreadsheet. The last report shows ONLY those items that are missing Unit Codes. In the first two reports, all items that have incorrect or missing Unit Codes are highlighted. All descriptions and units that do not match exactly are also highlighted. See Figure 17.

| | A | B | C |
|----|-----------|--|------|
| 1 | Unit Code | Description | Unit |
| 2 | 4a20cdr | Concrete Divider Replacement | LF |
| 3 | n4a0013 | Parapet Replacement, Str. No. 149.1A | LF |
| 4 | n4a0014 | Parapet Replacement, Str. No. 150.3A | LF |
| 5 | n4I0002 | Modify 8" Drainage Pipe, Str. No. 138.6 | LS |
| 6 | n4z0001 | Clean and Waterproof Concrete Parapets | SF |
| 7 | 5zo0002 | Parapet Anchor Bolt Replacement | Each |
| 8 | 5zo0003 | Railroad Protective Barrier | LF |
| 9 | 4a11sfo | Silica Fume Concrete Overlay, 1-1/4" Thick | C.Y. |
| 10 | 4a40rfs | Mechanical Coupler | Unit |
| 11 | 4r121ss | Repair Structural Steel, Type A | Each |
| 12 | | | |

Figure 15) Sample "checkitems.xls" file.

ITEMS MISSING

This report lists all items in the Unit Code field of the c:\Documents and Settings\All Users\Documents\checkitems.xls spreadsheet. If the item does not exist in CapEx, it will be highlighted

In Ascending Unit Code Order

Item Descriptions, Units and Section AS they appear in CapEx

| Unit Code | Description | Units | Section |
|----------------|--|-------|---|
| 4a11sfo | Silica Fume Concrete Overlay, 1-1/4" Thick | C.Y. | |
| | Silica Fume Concrete Overlay, 3" Thick | S.Y. | Section 401 - CONCRETE STRUCTURES |
| 4a20cdr | Concrete Divider Replacement | LF | |
| | Concrete Divider Replacement | L.F. | Section 401 - CONCRETE STRUCTURES |
| 4a40rfs | Mechanical Coupler | Unit | |
| | Mechanical Coupler | Each | Section 401 - CONCRETE STRUCTURES |
| 4r121ss | Repair Structural Steel, Type A | Each | |
| MISSING | | | |
| 5zo0002 | Parapet Anchor Bolt Replacement | Each | |
| | Parapet Anchor Bolt Replacement | Each | Section 541 - MISCELLANEOUS SECTION 500 ITEMS |
| 5zo0003 | Railroad Protective Barrier | LF | |
| | Railroad Protective Barrier | L.F. | Section 541 - MISCELLANEOUS SECTION 500 ITEMS |
| n4a0013 | Parapet Replacement, Str. No. 149.1A | LF | |
| | Parapet Replacement, Str. No. 149.1A | L.F. | Section 401 - CONCRETE STRUCTURES |
| n4a0014 | Parapet Replacement, Str. No. 150.3A | LF | |
| | Parapet Replacement, Str. No. 150.3A | L.F. | Section 401 - CONCRETE STRUCTURES |
| n4I0002 | Modify 8" Drainage Pipe, Str. No. 138.6 | LS | |
| | Modify 8" Drainage Pipe, Str. No. 138.6 | L.S. | Section 412 - BRIDGE DRAINAGE STRUCTURES |
| n4z0001 | Clean and Waterproof Concrete Parapets | SF | |
| MISSING | | | |

Figure 16) Sample report in Ascending Unit Code Order. Note: If a Unit Code in the checkitems.xls spreadsheet does not match any of the Unit Codes in the database, it is highlighted as "MISSING".

this contract. The Lump Sum price is \$250,000. Enter a Unit Price of \$250,000 as your bid for this item.)

| | | | |
|----------------|--|-------------|---------------------------------------|
| 4R1BSR | Sidewalk, Parapet and Curb Surface Repairs | S.F. | |
| MISSING | | | |
| 4R01RSC | Vertical Spall Repair | S.F. | |
| MISSING | | | |
| 4ZH03SPP | Picking Up and Returning Authority's Steel Protection Plates | L.S. | |
| | Picking Up and Returning Authority's Steel Protection Plates | LS | Section 434 - STEEL PROTECTION PLATES |
| 4ZM02HPC | Concrete in Deck Slabs, HPC | C.Y. | |
| | Concrete in Deck Slabs, HPC | C.Y. | Section 439 |
| 5B01CSD | Cleaning Existing Storm Drains | Each | |
| | Cleaning Existing Storm Drains | L.F. | Section 502 - STORM DRAINS |
| 5J01P CG | Parapet Connection, Type G | Each | |
| | Parapet Connection, Type G | Each | Section 510 - GUARD RAIL |
| 5J01P CTB | Parapet Connection, Type TB | Each | |
| | Parapet Connection, Type TB | Each | Section 510 - GUARD RAIL |
| 5J20RGA | Raise Guard Rail, Type A | L.F. | |
| | Raise Guard Rail, Type A | L.F. | Section 510 - GUARD RAIL |
| 5J51E TW | Extruder Terminal | Each | |
| | Extruder Terminal | Each | Section 510 - GUARD RAIL |
| 5K01BRF | Bridge Fencing, 100" High | L.F. | |
| | Bridge Fencing, 60" High | L.F. | Section 511 - FENCING |
| 5K02BRF | Bridge Fencing, Curved Top, 107" High | L.F. | |
| | Bridge Fencing, Curved Top, 107" High | L.F. | Section 511 - FENCING |

Figure 17) Sample report showing missing numbers AND units and descriptions that do not match. Note that even if the units are highlighted as not matching, they may be correct (i.e. LS vs. L.S.).

3.4.4. Check Engineer's Estimate:

When the "Check Engineer's Estimate" button is selected on the main menu, the following form opens:

Spreadsheet Must have the fields: "Unit Code", "Unit Price" and "Quant"

example

| Unit Code | Unit Price | Quant |
|-----------|------------|-------|
| 1D10MOB | 125000 | 1 |
| 1G01SCH | 30000 | 1 |
| 2B25RBS | 420 | 56 |

From Date: 4/3/2008 [5 mo] 12 mo 18 mo all

To Date: 10/2/2008

Load Spreadsheet

⏪

Figure 18) Users are able to compare unit prices in their engineer's estimate to historical prices.

Check Engineer's Estimate Using Bid Data from 6/2/2008 to 12/1/2008 % Diff compares the EE unit price to the "Average"

Prices herein are for information. This information shall not be used directly for the development of estimates. Costs for Engineer Estimates shall still be derived specifically for each contract.

| | No of Contracts | Total Quantity | Quantity | EE (N/A) | Averages over Time Period | | | | Contract Info | | |
|--|-----------------|----------------|----------|----------|---------------------------|----------------|-------------|------------|---------------|-------|--------------|
| | | | | | Average | Max | Min | No Bidders | Unit Price | Quant | % Diff (Avg) |
| 1 1D01LAY L.S. Construction Layout | 5 | 5 | 1 | | \$413,651.71 | \$2,515,000.00 | \$1.05 | 6.60 | \$300,000.00 | 1 | -27.48% |
| 2 1D10MO L.S. Mobilization | 12 | 12 | 1 | | \$889,881.41 | \$9,200,000.00 | \$10,000.00 | 5.75 | 1,000,000.00 | 1 | 12.37% |
| 3 1G01SCH L.S. Progress Schedule | 7 | 7 | 1 | | \$22,100.33 | \$200,000.00 | \$1.00 | 6.43 | \$50,000.00 | 1 | 126.24% |
| 4 2A02CAG L.S. Clearing and Grubbing | 4 | 4 | 1 | | \$383,165.38 | \$2,125,000.00 | \$5,000.00 | 7.00 | \$20,000.00 | 1 | -94.78% |
| 5 2B02REX C.Y. Roadway Excavation, Earth | 5 | 130101 | 26020.2 | | \$44.96 | \$400.00 | \$1.00 | 6.60 | \$25.00 | 36114 | -44.40% |

Figure 19) Report comparing unit prices to a historical average. Users can select any range of dates.

APPENDIX A APPROVED UNITS FOR PROPOSAL ITEMS

| Approved Units | Definition, If Different |
|-------------------|-----------------------------|
| Acre | |
| Bag | |
| Barrel | |
| C.F. | Cubic Foot |
| C.P. | Cost Plus |
| C.Y. | Cubic Yard |
| Crew Days | |
| Each | |
| Each 55 Gal. Drum | |
| FBM | Foot Board Measure |
| Gallon | |
| Hour | |
| L.F. | Linear Foot |
| L.S. | Lump Sum |
| M.G. | Mega Gallons |
| M.H. | Man Hours |
| MFBM | 1000 Feet Board Measure |
| Month | |
| Pound | |
| S.F. | Square Foot |
| S.Y. | Square Yard |
| Thousand Gallons | |
| Ton | |
| Unit | |
| Week | |

APPENDIX B ABOUT SPECIAL UNIT CODES

Some Unit Codes are placed under special categories as follows:

- **DO NOT USE** – Unit code descriptions are preceded with “DO NOT USE” when Authority policy or practice calls for the unit code to be inactivated. These unit codes are still visible in the database since they are part of previous bid tabulations and have cost information. New Contracts should not use any DO NOT USE items in their Phase B or C submissions. A Unit Code in the DO NOT USE category that does not have any bid history may be deleted from the system.
- **RESERVED** – A Unit Code request that is questionable is preceded with “RESERVED”. In other words, the Authority will issue the Unit Code as requested but may be asking for a description or unit change to better fit Authority naming conventions. New Contracts using a RESERVED item are cautioned that the description may change. In some cases, RESERVED items end up not being used for its intended project but remain in the database with “(Description to be entered upon first use)” in the item description. These are typically deleted after a period of time, but may be re-issued with an updated description if the Engineer includes the request in the Requested Codes List submission.
- **TO BE REASSIGNED** – A Unit Code that is no longer required for a contract *AND* has not been requested on another Contract is preceded with “TO BE REASSIGNED”. This means that if another Consultant does not request that Unit Code within a few months, the Unit Code may be re-used.