

## 4. Summary of Quantities

Until recently, there has been no direction concerning the presentation of the Summary of Quantities within design plans. While this may not seem to be important to some, it does become very important when and if quantities of a project must be adjusted by the Department before going to Letting. For this reason, minimum requirements are being provided in [Section 4.2](#).

After working with plans using the previous requirements, it was determined that more space was needed for each row of the tables, thus reducing the number of pay items listed on each sheet of quantities. The information in sections 4.1 and 4.2 have been updated to reflect these changes.

### 4.1 Coded Pay Item Resources

The coded pay items are already available at <http://www.dot.il.gov/desenv/codedpayitems.html> as Adobe Acrobat (.pdf) file, Excel (.xlsx) file and a text (.txt) file. The data in these files can be manipulated and brought into the Summary of Quantities sheet(s) in MicroStation by various means. This data is maintained by the Bureau of Design and Environment.

An additional tool that is being made available is an Excel macro spreadsheet named "English\_SOQ\_mm\_dd\_yyyy". (Note that a new pay item list is created for each letting). It is available at <http://www.dot.il.gov/desenv/caddref.html>. This spreadsheet also contains all of the coded pay items. The macro takes the selected items and generates Summary of Quantities table(s), including the grid(s), in the file while removing the unselected coded pay items. The resulting text can be copied into MicroStation using the new cell, "SUMMARY\_OF\_QUANTITIES" located in the roadway cell library "IDOTroad.cel" (Note that this cell has been scaled 12X to be consistent with all other cells within the cell library). Third party software may be used instead in order to bring the resulting table and text into MicroStation. If using this macro spreadsheet, ensure that the date updated matches that of the data maintained by the Bureau of Design and Environment.

The basic procedure for using the macro spreadsheet is as follows (Additional information is included in the "Instructions" tab within each spreadsheet):

- Open a copy of the file "English\_SOQ\_mm\_dd\_yyyy" In the "Header" tab of the spreadsheet, select the appropriate information from the pull-downs for the construction and safety codes in cells F4 through Q6.
- In the "Summary of Quantities" tab, double-click the cell in column C corresponding to the desired coded pay item. The "N" will change to a "Y"
- Once all of the desired coded pay items have been selected, click on the "Create SOQ" button located in the cell "E1"
- Move/copy data into MicroStation design file

## 4.2 Requirements

The minimum requirements for all Summary of Quantities sheets:

- A grid must be used such as that generated by the Excel macro spreadsheet or the cell, "SUMMARY\_OF\_QUANTITIES" located in the roadway cell library. (Columns of the table cell may be added, removed, or modified as required)
- Coded pay item numbers, descriptions, units, and quantities must use the text style "Rdwy\_SOQ140" or its equivalent
- Coded pay items must be double-spaced (i.e. a blank line before the first pay item and after the last pay item as well as between each row of coded pay items)
- The full description (not the abbreviated description) of the pay items must be used in the Summary of Quantities

Reference the Summary of Quantities in the example plans at <http://www.dot.il.gov/desenv/caddref.html> for an example of the desired appearance.