



PROJECT QUANTITY SPREADSHEET (PQS)

INTRODUCTION TO THE PROJECT QUANTITY SPREADSHEET

- The Project Quantity Spreadsheet (PQS) is a tool designed by MDOT to standardize quantity calculations.
- It was developed to improve designer efficiency and reduce risk and errors throughout the design process.
- The PQS has features to streamline project packaging, automate quantity generation, and link quantities with Microstation.
- Each time the PQS opens it verifies that the pay items are current and up to date. If the pay items are not up to date it will automatically update its pay item list.

http://mdotwiki.state.mi.us/design/index.php/category:pqs

Category:PQS - design | × +

← → ↻ 🏠 🔍 mdotwiki.state.mi.us/design/index.php/Category:PQS

To see favorites here, select then , and drag to the Favorites Bar folder. Or import from another browser. [Import favorites](#)

Log in

Category Discussion Read View source View history 🔍 Go Search

Category:PQS

Contents [hide]

- Introduction to the Project Quantity Spreadsheet
- Software Requirements
- Options
 - General Option
 - Bridge Option
 - Road Option
 - Signal Option
- Best Practices
- PQS Process
- Help Resource
- Training
 - General Features
 - Combining PQS Files
 - Upgrading PQS Versions
 - Advanced Features
 - Basics Training
 - Workflows

Introduction to the Project Quantity Spreadsheet

The Project Quantity Spreadsheet (PQS) is a tool designed by MDOT to standardize quantity calculations. It was developed to improve designer efficiency and reduce risk and errors throughout the design process. The PQS has features to streamline project packaging, automate quantity generation, and link quantities with Microstation. Each time the PQS opens it verifies that the pay items are current and up to date. If the pay items are not up to date it will automatically update its pay item list.

The PQS is a spreadsheet with a combination of in-cell formulas and VBA macros. The spreadsheet macros work out of the MDOT ribbon at the top. The ribbon is dynamic and will change depending on what tab is selected. There are also default tabs that come with the PQS including:

- Info**
 - The Info tab gives basic information about the PQS including the version and what each update has included.
- Category**
 - The Category tab is where the project categories will be defined. All road items (non bridge) will be an odd category while all bridge items will be an even category.
- Plan Sheets**
 - The Plan Sheets tab is where the DGN's for the project are defined. Each defined DGN will have an associated Breakdown ID that can be linked with the pay item. This allows the user to associate the pay item with the defined DGN name and update the Breakdown ID in one location rather than updating it for every pay item.
- Table | Drain**
 - The Table | Drain is where the designer defines the characteristics of the drainage structures that can be linked with a pay item on the Project Qty tab and linked with Microstation.
- Table | Driveway**
 - The Table | Driveway is where the designer defines the characteristics of the driveway that can be linked with a pay item on the Project Qty tab and linked with Microstation.
- Project Qty**
 - The Project Qty tab is where the defined categories and the pay items are connected. The Project Qty tab can be used to define a pay item just enough to create an XML or it can be used to attribute pay items in such a way that they can be easily linked with Microstation.
- Pricing**
 - The Pricing Tab is used to define each pay items price once and then push it back to the Project Qty tab. This tab ignores the items with LSMU for units. The LSMU items will need to be priced in the Project Qty tab.

Summary | Qty

- The Summary | Qty tab gives a clean view of the project total quantities with the ability to sort by breakdown ID.

Summary | Est

- The Summary | Est tab gives a clean view of the project total quantities and cost with the ability to sort by breakdown ID.

https://mdotjboss.state.mi.us/SpecProv/trainingmaterials.htm#1225608



- Roads and Travel
- Rail and Public Transit
- Bridges, Borders and Ferries
- News and Information
- Projects and Programs
- Maps
- Act 51 Maps
- Reports, Publications and Specs
- About MDOT
- Doing Business
- Aeronautics
- Title VI Non-Discrimination

Support Services

Help, training and support information is provided below pertaining to the creation of digital design content for bridge, roadway and sub-surface utility modeling as well as survey, general workspace and plans production topics. These categories are provided to allow content creators a single location to find additional guidance for the creation of digital data.

Support Services Links:

- [Design Submittal Requirements](#)
- [Survey Standards of Practice](#)

Contact Information:

- If you need assistance or have questions, please visit the [Support Resources](#) section of the MDOT Development Guide.
- If you are having issues with the web site working properly contact the Design Automation section at [517-373-0773](tel:517-373-0773) or send an e-mail to VerhageH@michigan.gov.

Select a Help and Support category from the drop down menu:

Detour Signing Quantity Calculation

Earthwork

Project Quantity Spreadsheet (PQS)

[Project Quantity Sheet \(PQS\) Guidance Document.pdf](#)

[Project Quantity Sheet V1.3.7.xlsm](#)

Training

Workflows

AutoSave Off Project Quantity Sheet V1.3.7 (3).xslm - Ex... Berg, Karl (MDOT) BK

File Home Developer Insert DocuSign Page Layout Formulas Data Review View Add-ins Help BLUEBEAM ProjectWise Kofax PDF MDOT

Clipboard Font Alignment Protection Number Styles Cells Editing Bluebeam

C4

Sensitivity: Internal Data (Standard State Data)

MDOT
Michigan Department of Transportation

Version: V1.3.7
Date Update: 2/20/2020

Project Quantity Sheet

Update Description:
Fixed run time error message

- Search List [1]
- Work Items and Table Types List [2]
- Item Calculator - Notes Table [3]
- Item Calculator - Data Table [4]
- Item Calculator - Calculations Table [5]
- Job Number and Funding Code List [6]
- Sheet Scale List [7]
- Misc Items [8]
- Update Log [9]

Info

100%



2020 SPEC BOOK

- An option will be added to the PQS to use the 2020 spec book pay items
- Projects started before this functionality is added will need to follow the PQS upgrade process
- The upgrade process will highlight pay items that have changed