Manual

POTHOLE TABLE DESIGN

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1. INTRODUCTION

1.1 What Is Pothole Table Design

Pothole Table Design (PTD) is a smart and user-friendly engineering software exclusively developed for civil engineers by CESS LLC. Currently, no other software packages that are currently in the marketplace serve similar purposes; PTD Software presents a groundbreaking approach in providing a reliable yet easy-to-use solution that integrates the cutting-edge computer engineering technologies with our extensive experience in curb ramp design, obtained through numerous civil engineering projects. The powerful features of PTD software have enabled us as well as our clients to maximize the efficiency and productivity in a timely and cost-effective manner.
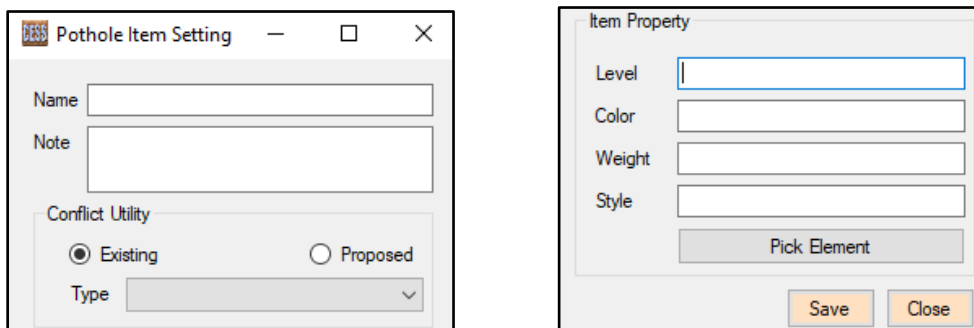
With a framework that was exclusively developed for pothole table design based on local design standards and specifications, PTD Software offers users to identified potholes automatically in MINUTES.

1.2 Features of PTD

- ***Automation*** - All potholes can be identified in MicroStation automatically.

- ***Efficiency*** - All potholes and its table can be done in minutes

- ***Once and For All*** - All conflict items are pre-set and can be applied for all projects.

- ***WYSIWYG*** - All water flow directions, slopes, etc. can be checked and displayed in MicroStation at any time during the design immediately.

- ***No Data Input*** - All data can be obtained automatically by just click some buttons for entire process of curb ramp design.

- ***User-Friendly Design*** - The software is a very intuitive and easy to master even for infrequent users.

- ***Fully Integrated with CAD Platforms*** - All curb ramp designs can be added to, updated, or removed from MicroStation or AutoCAD Automatically.

2. NEW POTHOLE ITEM

Pothole items need to be preset before automaton of pothole table design.
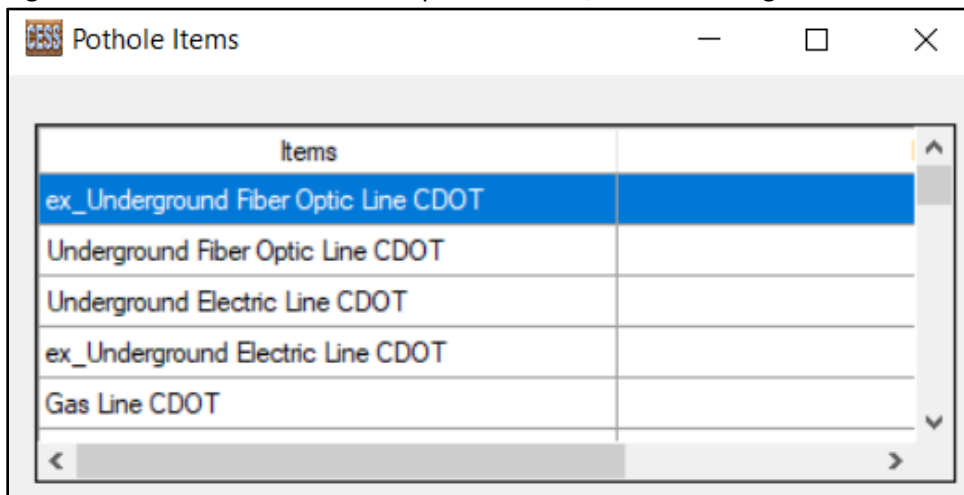

Name: Setting name,

Note: Take note for setting.

Conflict Unitilty: Including existing and proposed utility.

Type: Including Electric, gas, water, etc.

Item Property: item properties in Microstation. Click *Pick Element* to get properties from selected element in Microstation

3. ITEMS SUMMARY

Figure below is the interface for all pothole items, and all existing items are listed in the data grid.

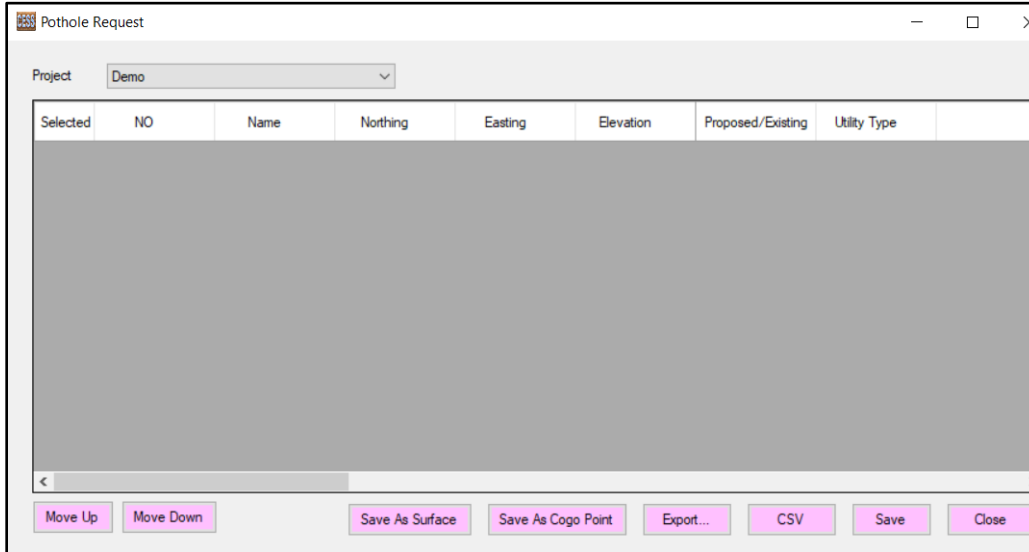Right click on data grid, there is a menu with three sub-menus:

New: Add a new pothole item.

Edit: Edit an existing pothole item.

Delete: Remove existing pothole from database.
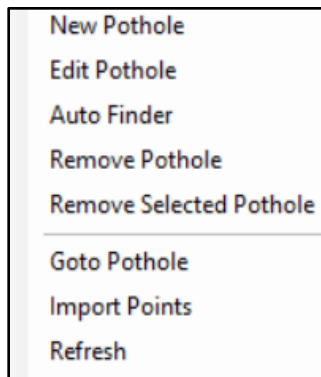
4. POTHOLE TABLE DESIGN

Figure below is the main interface for pothole table design. Select a project, all conflict points as pothole point in project are listed in the data grid.

Followings are introduction of the buttons in the interface:

1. *Move Up*: Move current pothole up.
2. *Move Down*: Move current pothole down.
3. *Save As Surface*: Save selected potholes to surface format which can be import in Inroads.
4. *Save Ad Cogo Point*: Save selected potholes to Cogo point format which can be import in Inroads.
5. *Export…*: Export potholes to spreadsheet.
6. *CSV*: Export pothole to text file with CSV format.
7. *Save*: Save any change to database.
8. *Close*: Close the application.

   Right click on the data grid, a menu with 18 sub-menus displays:

- o *New Pothole*: See details below
- o *Edit Pothole*: Similar with *New Pothole*.
- o *Auto Finder*: Automation for pothole design, see details below.
- o *Remove Pothole*: Delete pothole from the project.
- o *Remove Selected Pothole*: Delete all selected potholes.
- o *Goto Pothole*: Go to the pothole location in Microstation.
- o *Import Points*: Import points in selected objects in Microstation.

| Select All |
| Unselect All |
| Anti-Select |
| Draw Circle for Pothole |
| Draw Pothole Name |
| Draw Name with Arrow |
| ReNumber Name |
| ReNumber NO |
| Open DGN File |
| Select Alignment |

- o **Draw Circle for Pothole**: draw a circle for current pothole in Microstation.
- o **Draw Pothole Name**: Draw Pothole name at pothole location in Microstation
- o **Draw Name with Arrow**: Arrow and name is drawn for a pothole at its location in Microstation.
- o **Rename**: rename the all selected pothole.
- o **Renumber No.**: Re-index the NO for all pothole.
- o **Open Dgn File**: Open Microstation file which including the pothole information.
- o **Select Alignment**: assign the alignment for the potholes, and the station, offset is calculated for all pothole automatically.

New pothole

- o **Project**: Project of pothole.
- o **Name**: Name of pothole.
- o **No.**: Number of Pothole.
- o **Alignment**: assign alignment of pothole.
- o **Location**: Place of pothole.
- o **Conflict** Utility: Select type of conflict type
- o **Elevation**: Input all elevations of conflict utility.
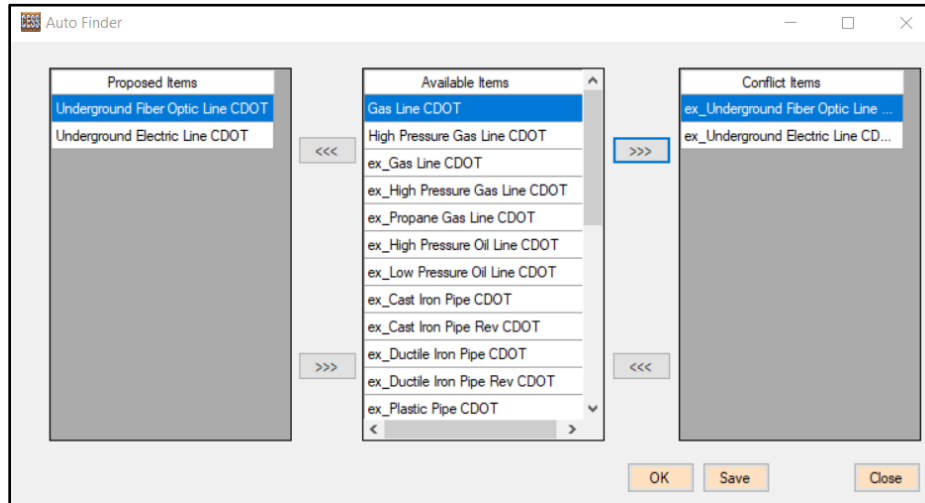- o

Click **Save** button to save a pothole to database.

5. AUTO FINDER

Figure below is auto finder interface, in this module, all pothole locations can be identified automatically.

Step 1: Select all possible proposed items, and conflict items form available items.

Step 2: Click **OK** button, and then all possible potholes are identified and loaded.

Step 3: Click **Save** button to save all potholes to database.