



Application Name:	ODOT_CreateNewProject.exe
Tested MicroStation Version:	Not Applicable
Tested GEOPAK/OpenRoads Version:	Not Applicable

## Application Description

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This program is used to create the project directory structure for ODOT projects as well as a MicroStation project configuration file (.pcf) for the project.

The folder structure created by this program should be used for new projects started after January 16, 2015 and is incompatible with previously published folder structures.

See the **ODOT CADD Engineering Standards Manual** section **300 File Management** for more information on ODOT standard directory structures.

In addition to creating the folder structure, the program preforms the following tasks:

- A MicroStation PCF file is created for the project
- The Survey basemap design file is created in the \Survey\basemaps folder
- If a Geopak folder is specified, the program will copy the ODOT Template Library to the new project and name is appropriately for the project
- Seed files for the project are created in the projects \standards\seed folder
- A MicroStation Geographic Coordinate System DTY file is copied to the \Survey\GCS folder that can be used to create a project specific ground coordinate system using the combined scale factor for the project
- Ability to add Design specific discipline folders to an existing project
- Ability to add Structure sub-folders for bridges and walls to existing projects

The program also includes the ability to process a BAT file after the new project has been created, or after new Discipline specific folders have been added to an existing project. As the last step of the processing, the program will look for and process the following BAT file if it exists:

`\ODOTcadd\Local\SetRights.BAT`

The file must be named as shown above. There is no option to turn on or off this functionality. If the file exists it will be processed.



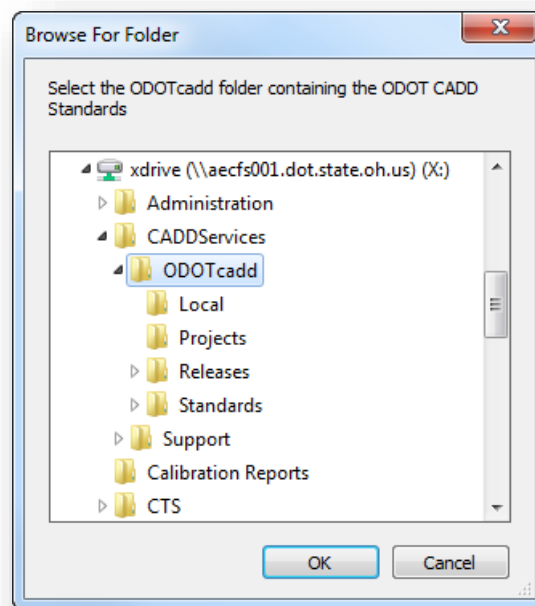
## Application Operation

The program is delivered with the ODOTcadd Standards in the following location:

...\ODOTcadd\Standards\ODOT\Project Tools\ODOT\_CreateNewProject.exe

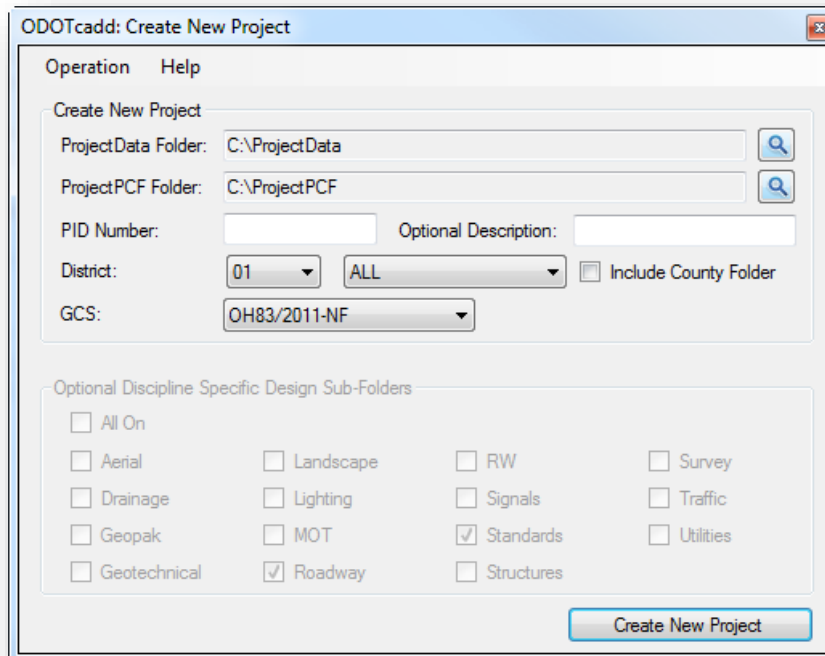
When the program is initiated, the program will look for an ODOTcadd Standards installation in the following folder: I:\ODOTcadd

If the ODOTcadd folder is not found, the user is prompted to select the location of the ODOTcadd folder as show below.



Select **OK** to confirm the folder selection. The program will remember the location of the ODOTcadd folder for future use.

The main dialog for the program is opened as shown below.



The program has two modes of **Operation: Create New Project**, and **Add Folders to Existing Project**.

### Operation: Create New Project

When this option is selected the dialog appears as shown above. Options to create a new project are presented to the user.

#### ProjectData Folder

This field is used to specify the location where the folders will be created to house the data for the new project. By default, the program will look for the ProjectData folder in the following location: I:\ProjectData. If the folder is not found, the **Select** button must be used to browse for the ProjectData folder that will contain the project PID Number folder (and an option County folder).

The program will remember the selection for future use.

#### ProjectPCF Folder

This field is used to specify the location where the Project configuration File (.pcf) will be created for the new project. By default, the program will look for the ProjectPCF folder in the following location: I:\ProjectPCF. If the folder is not found, The **Select** button must be used to browse for the ProjectPCF folder that will contain the .pcf file.

The program will remember the selection for future use.

#### PID Number

This key-in field is used to enter the ODOT PID number for the project. The field must contain a minimum of 5 numeric characters with a maximum of 6 numeric characters. If no PID number



has been assigned, use “000000” as the PID number and add a description. If the **District-Wide No PID** option is selected, the PID Number will default to “000000”.

### Optional Description

An optional description can be appended to the **PID Number**. The description is limited to 15 characters. Alphanumeric, dash, underscore, and period characters are supported. No other characters are permitted.

The description is appended to the **PID Number** with an underscore character to create the project’s folder name as well as the projects PCF file name. The description is intended to be used to designate the primary county, route and section for the project and is especially useful when the **District-Wide No PID** option is used (see **District/County** below) since the projects all receive the same “000000” PID number when the **District-Wide No PID** option is selected.

### District/County

The **District/County** drop-down lists are used to select the District and County for the project. This is only necessary if you plan to organize your projects by County (see **Include County Folder** below) or if you wish to have the program assign the Geographic Coordinate System for the project (see **GCS** below).

In addition to selecting the **County**, options are provided for “**District-Wide**” and “**District-Wide No PID**”. When **District-Wide No PID** is selected, the **PID Number** will default to “000000”.

### Include County Folder

The primary folder for an ODOT project is the PID Number folder. The PID number folder can be stored directly below the **ProjectData Folder** or optionally stored in county specific folders. The use of the county folder is optional, but should be consistent for your site.

If the **Include County Folder** option is toggled on, the 3-character code for the selected **County** will be used for the folder name that contains the PID number folder. The 3-character code is also used in the PCF file name.

### GCS

The **GCS** menu is used to select the Geographic Coordinate System to be used for the project. Three options are currently available from the menu:

- None
- OH83/2011-NF
- OH83/2011-SF

When the **County** is selected, the **GCS** will automatically select the appropriate State Plane coordinate system for the county (either OH83/2011-NF or OH83/2011-SF). Users must manually select the **None** option if a county folder is used but no **GCS** is to be defined.

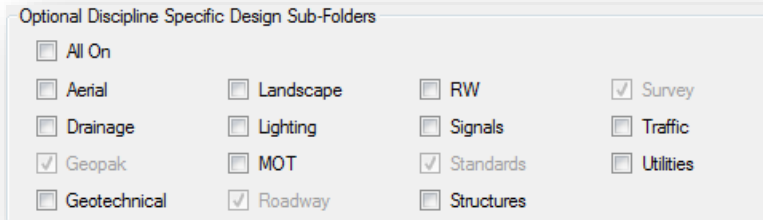
### Optional Discipline Specific Design Sub-Folders

The project’s “Design” sub folder is used for all Planning and Design information created for the project. For larger projects, the design team may wish to segregate the project data into



separate discipline specific sub-folders. The check boxes are used to toggle on/off the desired discipline specific sub-folders for the project.

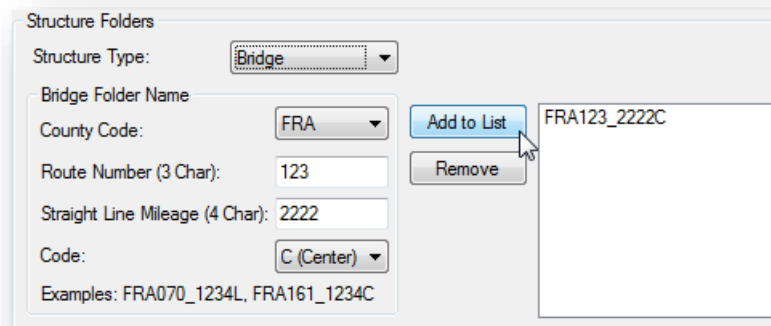
The \Design\Roadway and \Design\Standards folders will always be created for each project. If a GCS is selected, the \Design\Geopak and \Design\Survey folders are created as shown in the example below.



### Structure Folders

Bridges and Walls have specific file name and folder requirements as detailed in the [ODOT CADD Engineering Standards Manual](#).

When the **Structures** item is toggled on, the dialog expands to display the **Structure Folders** items as shown below.

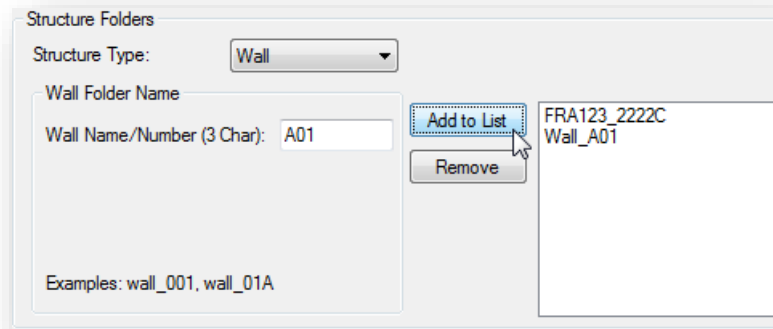


### Structure Type:

Two options are supported: **Bridge** or **Wall**. When **Bridge** is elected, the **Structure folders** portion of the dialog appears as shown above.

Select the **Add to List** button to add the structure folder to be created to the list box as shown in the example above. Multiple folder names can be added to the list.

When the **Wall** option is selected, the **Structure folders** portion of the dialog appears as shown below.



To remove a bridge or wall folder from the list, select it in the list box and then choose the **Remove** option.

### Create New Project

Select this button to initiate the project creation process. The following actions take place when the button is selected:

1. If the **Include County Folder** option is toggled on, the **County**, **PID Number**, and **Optional Description** are used to create the parent folder for the new project. This folder is created under the location specified by the **ProjectData Folder** field. An example is shown below:

I:\ProjectData\FRA\11111\_Description

If the **Include County Folder** option is toggled off, the **PID Number** and **Optional Description** are used to create the parent folder for the project. An example is shown below:

I:\ProjectData\11111\_Description

If a folder with the PID number and description already exists, the application stops processing and will not overwrite existing project folders. You must use a unique **PID Number** and **Description** name in order for the program to proceed.

For projects that do not have a PID assigned, it is recommended to use 000000 for the **PID Number** with an **Optional Description** to uniquely identify the project.

2. If the option to create a \Design\Geopak folder is toggled on, the ODOT template library, ODOT\_Templates.itl, is copied from the ODOT CADD Standards to the \Design\Geopak sub-folder in the new project. The copy is renamed using the **PID Number**. An example is shown below:

I:\ProjectData\FRA\11111\Design\Geopak\11111\_Templates.itl

3. The **GCS** option is used for the following purposes:



- The appropriate ODOT Seed Files are copied to the new project in the standards folder. An example is shown below:

I:\ProjectData\FRA\11111\Design\Standards\seed\

- The Bentley Map seed.dty file is copied to the new project in the survey\GCS folder. The copied .dty file is renamed using the **PID Number**. An example is shown below:

I:\ProjectData\FRA\11111\Design\Survey\GCS\11111\_Custom.dty

Note: This option only copies the dty file to the project folder. The dty file must still be edited to define custom coordinate systems for Grid-To-Ground conversions.

#### 4. The MicroStation PCF file is created.

The **County**, **PID Number**, and **Optional Description** that you have entered are used to create the PCF file name. The program checks the **ProjectPCF Folder** to ensure that a previous version of the file does not exist. If a file with the same name is found, the application stops processing and will not overwrite existing files. You must use a unique **PID Number** in order for the program to proceed.

An example is shown below:

FRA-11111\_SR123-1234.pcf

An example of the PCF file contents is shown below:

```
#-----  
# MicroStation Project Configuration File  
#  
# Written by the ODOT_CreateNewProject tool  
# Date: 3/30/2015 12:36:35 PM  
#  
#-----  
  
_USTN_PROJECTDESCR = ODOT Project FRA_123456_SR123-12.34 #Project Description  
_USTN_PROJECTDATA = C:/ProjectData/FRA/123456_SR123-12.34/Design/  
ODOT_PROJECTROOT = C:/ProjectData/FRA/123456_SR123-12.34  
ODOT_PID = 123456  
  
#-----  
  
MS_DEF = $_(USTN_PROJECTDATA) #Project Location Start  
MS_BACKUP = $_(DGNDIR) #Backup to same location as dgn  
MS_SEEDFILES = $_(USTN_PROJECTDATA)Standards/seed/ # Search Directory for Project Specific Seed files.  
MS_DESIGNSEED = 123456_Seed2d.dgn # Default Seed File.  
MS_GEOCOORDINATE_USERLIBRARIES = $_(USTN_PROJECTDATA)Survey/GCS/123456_Custom.dty  
CIVIL_ROADWAY_TEMPLATE_LIBRARY = $_(USTN_PROJECTDATA)Geopak/123456_Templates.itl  
MS_PRINTDEF_PATH = $_(USTN_PROJECTDATA)Standards/plotdrv/  
MS_PLTFILES = $(ODOT_PROJECTROOT)ProjectAdmin/PlanPackage/ # Output Directory for Print Files.
```



```
MS_REF_DEFAULTATTACHDIRECTORY = $_(USTN_PROJECTDATA) # Set the default directory when attaching
references instead of the last directory

%lock MS_PLTFILES
%lock MS_SEEDFILES
%lock MS_DESIGNSEED
%lock MS_GEOCOORDINATE_USERLIBRARIES
%lock CIVIL_ROADWAY_TEMPLATE_LIBRARY

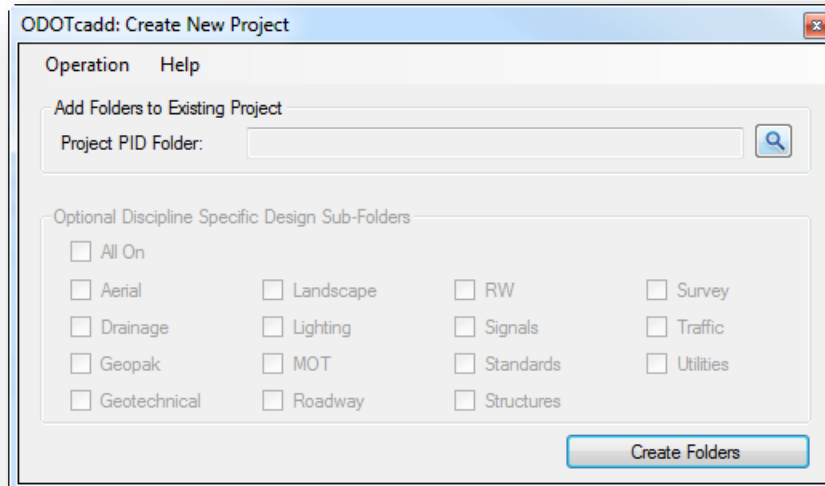
#-----
```

- 5. The survey basemap MicroStation design file is created in the \Survey\basemap.

**Note:** The design files is created using the seed file for the project. If a custom Geographic Coordinate System is to be used for the project it will be necessary to manually assign that GGS to each model in the seed files and the survey basemap design file once the GCS has been defined. See ODOT’s training guide for OpenRoads Survey for more information.

**Operation: Add Folders to Existing Projects**

This option is used to add discipline specific folders, bridge folders, or wall folders to a previously created project. When this option is selected, the dialog appears as shown below.



The **Project PID Folder** is used to select the PID folder for the project. Once selected, the **Optional Discipline Specific Design Sub-Folders** group is used to choose the folder that you wish to add to the project. Use the **Create Folders** button to complete the process.





## Contacts

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If you have any questions, suggestions, or problem with this application please contact the ODOT Office of CADD and Mapping Services by use of the following form on the ODOT website:

<http://www.dot.state.oh.us/Divisions/Engineering/CaddMapping/CADD/Pages/Suggestions.aspx>

## Acknowledgements

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This program was written for the Ohio Department of Transportation, Office of CADD and Mapping Services by Eric Thomas, Eric Thomas Consulting, LLC.



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