Project Manager

2.1 Introduction

Objectives	Learn how to set up a project using **Project Manager**. Learn how to utilize **Project Manager** as a workflow guide. Learn how to access GEOPAK dialog boxes from the **Project Manager**.
Menu Bar Application	**Applications > GEOPAK Road > Project Manager**
Road Tool Frame	

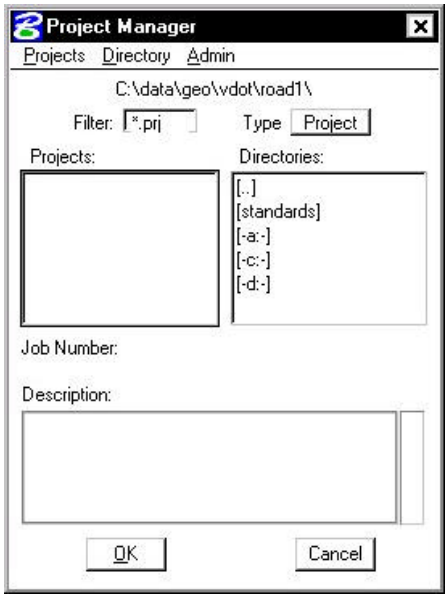
Project Manager is a GEOPAK tool that associates a project with its respective coordinate geometry job number, users, working directories and project files. Project Manager provides the user with an easy workflow system that keeps records of processes run throughout the design of a project.

2.2 Accessing Project Manager

To access Project Manager, select **Applications > GEOPAK Road > Project Manager** or click the Project Manager icon. The adjacent dialog box appears.

The current directory is displayed at the top of the dialog box. This may be modified by traversing to a different directory in the **Directories** list box. Project files (.prj) are displayed in the projects list box.

The remainder of the Project Manager dialog box displays information after a project has been selected from the **Projects** list box. At the bottom of the dialog box are the **OK** and **Cancel** buttons. To exit Project Manager, click the **Cancel** button. To continue in the Project Manager process, click the **OK** button.

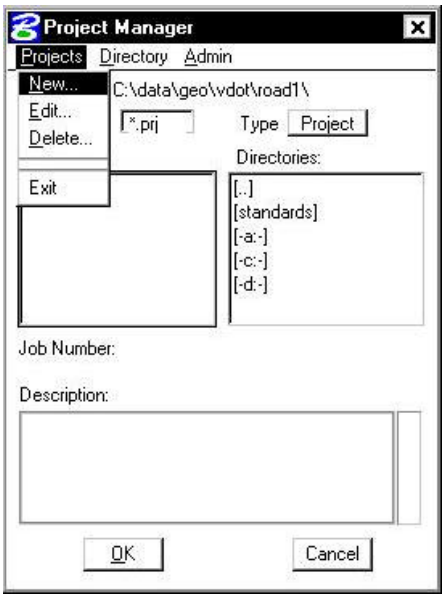


2.3 Project Manager Menu Bar

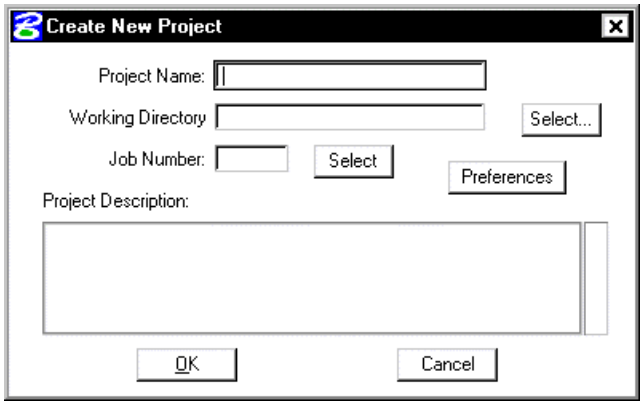
There are three options on the Menu Bar: **Projects, Directory** and **Admin.** Each of these choices has tools contained in the pull down.

2.3.1 Project Tools

There are four options under the Projects pull down, **New, Edit, Delete** and **Exit** as shown below.



The **New** menu option is used to create a new project. The .prj file is stored in the directory shown in the Directory path at the top of the Project Manager dialog box. When the **New** menu option is selected, the following Create New Project dialog box appears.

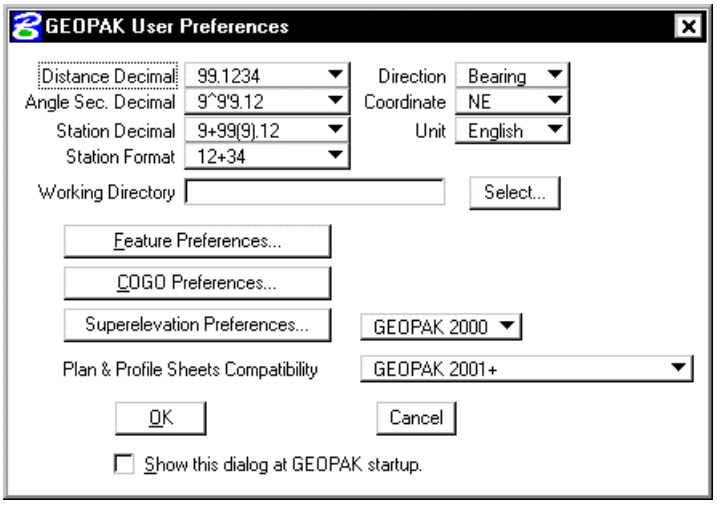


The **Project Name** can be any number of alphanumeric characters. The **Working Directory** specifies the location of the project data files and may be manually entered. In lieu of typing, the **Select** button may be clicked and the appropriate directory selected.

The **Working Directory** can be left blank if it is desired to have all of the MicroStation and GEOPAK files in a single directory.

The next field is for keying in the COGO **Job Number** or the **Select** button may be clicked and the appropriate COGO job number selected.

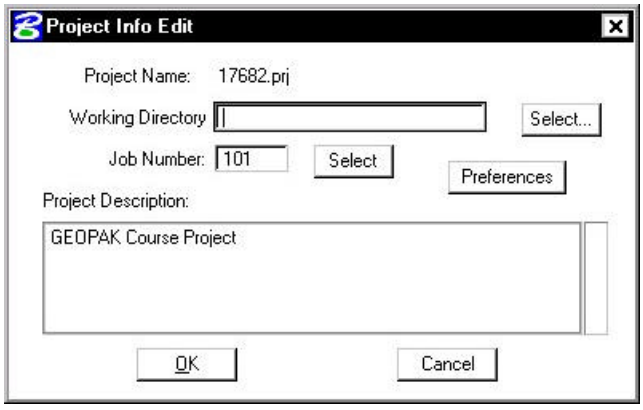
Next, the **Preferences** button should be clicked, invoking the Project Preferences dialog box.



The user may click on COGO Preferences, then set the particular parameters for each project as well as the directories for the COGO job number, COGO input files and COGO output files. By setting these parameters for each project, the user can open a design file in one directory and then open another design file in a different directory and still access the correct .gpk file and also save Cogo input and output files to the proper directory. The user simply chooses the project and all parameters are automatically set. After all the information is entered, the **OK** button is clicked or if the user wishes to abort, the **Cancel** button may be clicked.

NOTE**:** If these fields are left blank, the project working directory is used.

Shown below is a sample project that includes a project description, which may be keyed in at the bottom of the Create New Project dialog box or added later by accessing it from the Edit menu.



The **Edit** option on the pull down menu is used to change any settings associated with the currently selected project.

The **Delete** option on the pull down menu is used to delete any project that has been stored. The user highlights the project in the Projects list box and selects **Delete.**

The **Exit** option on the pull down menu closes the Project Manager and writes the settings to a resource file.

2.3.2 Directory Tools

There are two options under the **Directory** pull down, **Create New Directory** and **Current Working Directory** as shown.

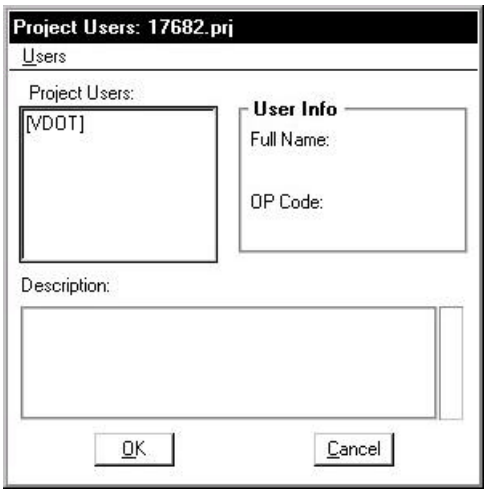
The **Create New Directory** option creates a new directory on your computer within the current directory. If the **Current Working Directory** option is chosen, the directory path in Project Manager is changed to that directory.

2.3.3 Administration Tools

The Administration menu option is used to set a password on a project, if desired.

2.4 Project Users Dialog Box

Once a project is highlighted and **OK** is selected, the Project Users dialog box appears.



This dialog box has three sections: **Project Users, User Info** and **Description**. The **Project Users** list displays a list of users that have been created to work with any project that resides in the current projects home directory. The names shown in **Project Users** will be the user id's of the people working on that project as specified in the **Start Job** dialog box. Within the **User Info** group box, the **Full Name** field further identifies the user, and displays the full name of the user that is currently selected. The **OP Code** field displays the Geopak Operator Code of the currently selected user. The Geopak Operator Code is used for all coordinate geometry operations during this session. The

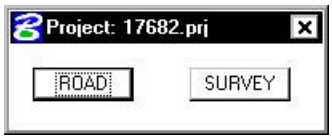
Operator Code, along with the Job Number will be utilized whenever a COGO input or output file is created by the software. The Operator Code is typically the user's initials. The **Description** field displays the description of the currently selected user.

Four tools are supported on the Project Users pulldown as depicted in the exploded view below.

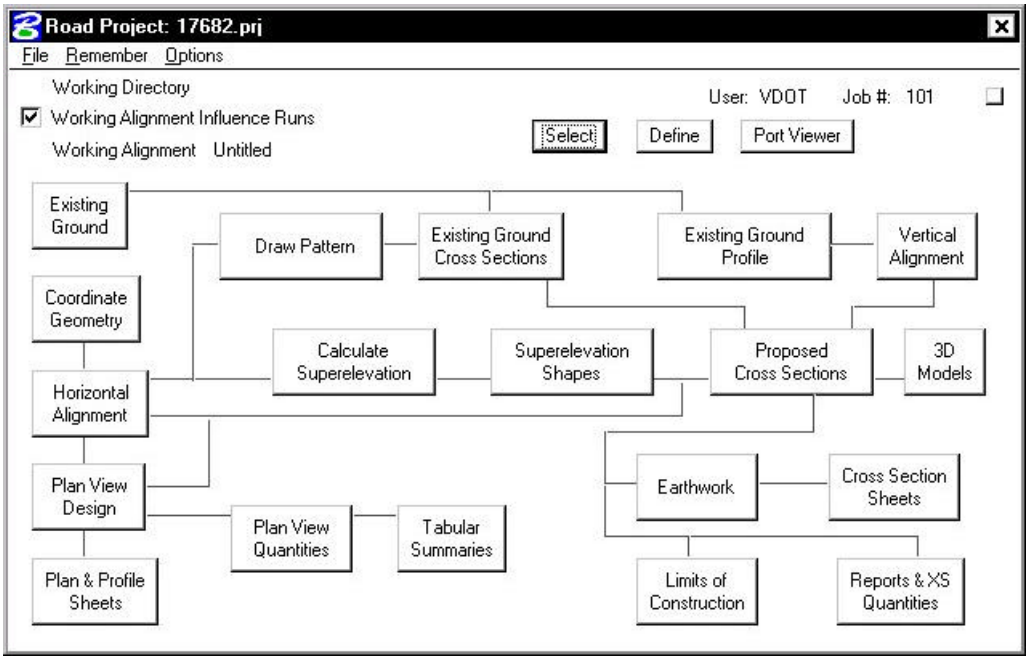
New	The New pull down menu option creates new users. This option will create users only for the selected project.
Edit	Enables the user to change any of the parameters of the currently selected user. **(Note: The User cannot be changed.)** This changes the user information for the current project only.
Delete	Deletes the highlighted user.
Password	Creates or modifies a password for the selected user. If the selected user already has a password, the user will be prompted to enter the current password before continuing.
Exit	Closes the User Dialog box and returns back to the Project Manager dialog box.

2.5 Road Project Dialog Box

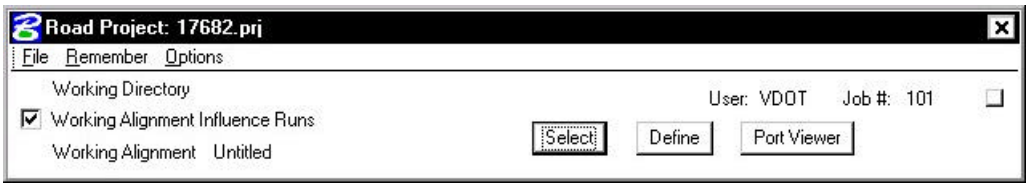
After a minimum of one user has been defined, click the **OK** button in the lower left corner of the Project Users dialog box or double click on a Project User opens the Applications dialog box as depicted.



When the Road option is clicked, the following dialog box appears.



The top of the dialog box displays the **Working Directory, Working Alignment** (if defined), **User** and **GEOPAK Job Number.** In addition, a toggle for **Working Alignment Influence Runs** is also supported. The bottom portion of the dialog box displays the various processes supported during the design process. The small square in the upper right corner will condense the dialog box as depicted in the graphic below.

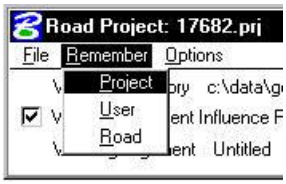


2.5.1 Road Project Dialog Menu Bar

There are two pull down menu bar options: **File** and **Remember**. When the **File** option is selected, **Close** and **Exit** are supported.

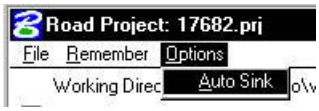
If the **Close** option is selected, the user is returned to the Applications dialog box. If **Exit** is selected the user is exited from the Project Manager.

When the **Remember** option is selected, the user can instruct the software to remember the Project, User, or Road in subsequent sessions. For example, if all three toggles are activated, and the Project Manager is completely closed (all dialog boxes), the invocation of the Project Manager immediately invokes the Road Project dialog box (flow chart) and utilizes the project name, user name, etc., which were active when the **Remember** toggles were selected.



If only the **Project** and **User** toggles are activated, the user is returned to the Project dialog box in later sessions. If only the **Project** toggle is activated, the user is returned to the Project Users dialog box in subsequent sessions. This option is particularly useful when numerous users are working on one project.

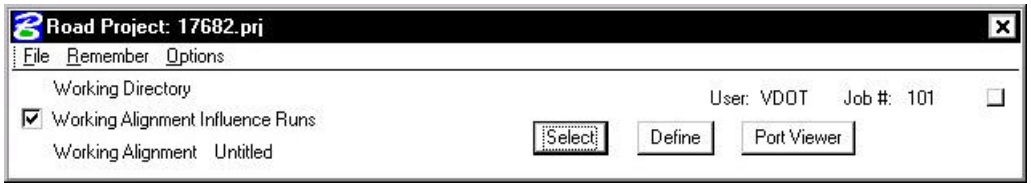
When the **Auto Sink** option is enabled, the Road Project flow chart sinks behind all open views when any tool is selected from the flow chart. Once the tool is closed, the Road Project flow chart will be brought to the top of the view window.



2.5.2 Working Alignment

The concept of a working alignment enables the designer to organize a project and to access project information without continually typing the required information. On a simple project, only one working alignment may be needed. However, on a more complicated project, an unlimited number of working alignments may be defined. With each working alignment, the designer can define associated data, i.e., name of cross section and plan view files, element symbology, etc. The designer can easily change from one working alignment to another by highlighting the desired alignment listed in the **Select** dialog box. Once the working alignment is selected, all previously stored data is utilized in subsequent processing. Three tools relating to working alignments are located at the top of the Road Project dialog box:

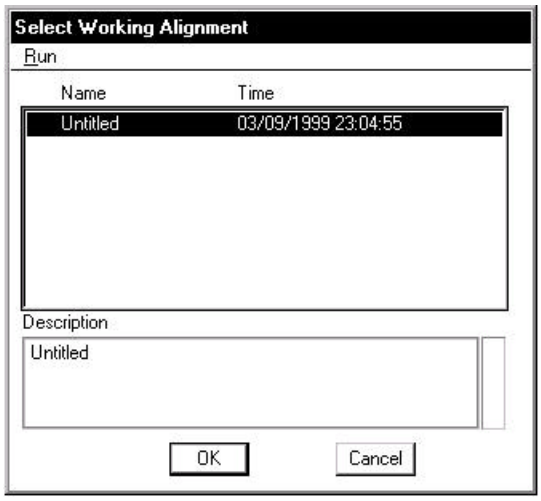
- **Select** Button
- **Define** button
- **Working Alignment Influence Runs** (toggle on left side of dialog box)



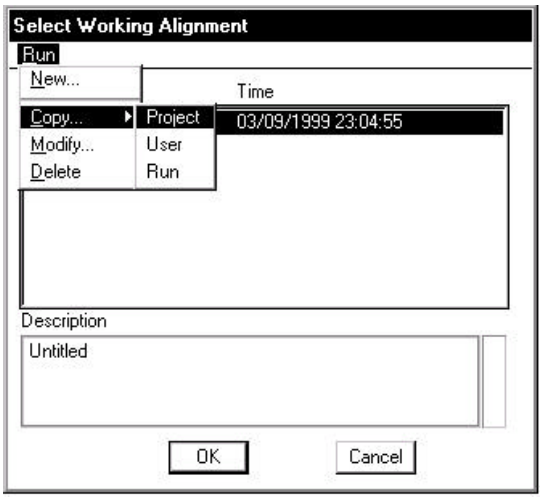
The **Port Viewer** (covered in detail in Chapter 13) is a tool that enables the user to view and manipulate all three major aspects of a road design simultaneously, even though they are located in different files. The Port Viewer tool is only available while working within the Project Manager application. The applicable views for design display include:

- Plan view layout
- Profile
- Cross sections

2.5.2.1 Select Option



When the **Select** button is clicked, the Select Working Alignment dialog box appears as depicted to the right. If no working alignments have been defined, UNTITLED appears in the Run List box. If working alignments have been defined, they are listed with the last run time. The description of the working alignment can be seen in the bottom of the dialog box when each Name is highlighted. To select a previously defined working alignment, highlight the run from the list, then click the **OK** button at the bottom of the dialog box. Double clicking on the Name also selects a previous working alignment for subsequent processing. Clicking the **Cancel** button will close the Select Run dialog box without any File selection. Several Run options are supported as depicted in the exploded view below.

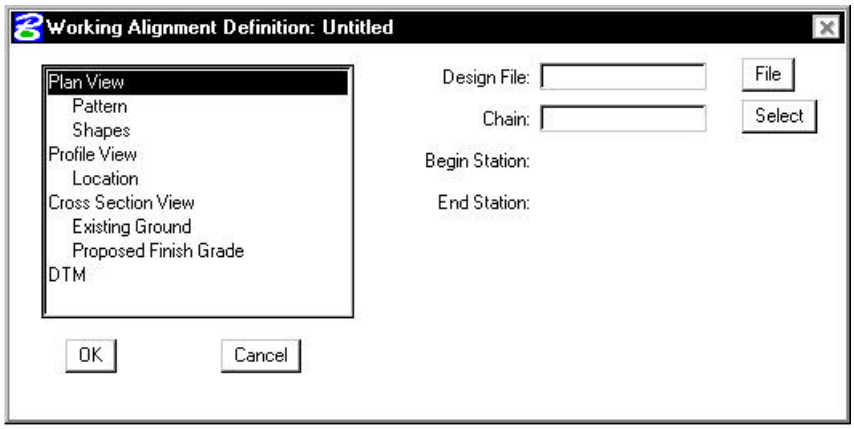


These are detailed in the table below.

New	Create a new working alignment
Copy	Copy a run from an existing Project, a User in the same project or Run created by the current user.
Modify	Change the name of the existing working alignment.
Delete	Delete an existing working alignment.

2.5.2.2 Define Option

Once a Run has been selected, clicking the **Define** button invokes the dialog box depicted below.

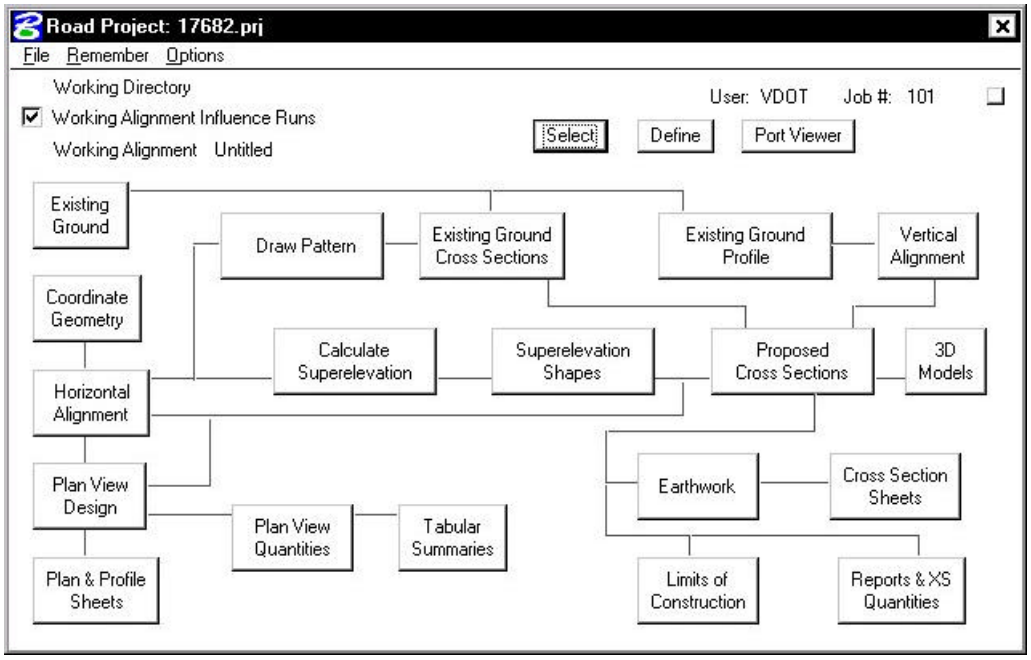


The information that can be associated with a working alignment is listed in the left portion of the dialog box. As each option is chosen, the right side of the dialog box will change to reflect the information needed as can be seen in the dialog box to the right after Profile View was selected.

All information entered in these fields can be used in subsequent processes run from Project Manager. In the beginning of a project, much of this information will not be known, but as the user goes through the design process, it can be added to the working alignment definitions.

For example, as soon as a chain has been stored in COGO, the user can enter that information in the Plan View fields on the right side of the dialog box. For a more complete explanation of each option shown, please see the GEOPAK Manual or On-Line Help.

2.6 Project Manager Process



The primary Project Manager dialog box is depicted above. The advantage of utilizing the Project Manager rather than selecting functions directly from the Road menu is that pertinent information stored within the Project Manager is automatically displayed within the invoked dialog box. Therefore, job numbers, chain names, stationing, file names and data associated with the project do not have to be typed in each time a dialog box is utilized. However, if the user chooses to change the fields, they have that option.

Many of the Project Manager processes function identically to their corresponding dialog boxes invocation from the Road menu. However, some of the procedures invoke the Select Run dialog box prior to invoking the actual dialog box. The Select Run dialog box enables the user to set up different options to use in alternative design choices or different typicals.

2.7 Online Help

More information can be found under **Applications > GEOPAK Road > Help > Project Manager**.

LAB 2: Project Manager

Introduction

Step 1. Execute **C:\data\geo\VDOT\road1\LAB2.EXE**.

Step 2. Open the MicroStation file **C:\data\geo\VDOT\road1\d17682dtm.dgn**

Step 3. Invoke the Road Tools tool frame from the MicroStation menu bar by selecting **Applications > GEOPAK Road > GEOPAK Road Tools.**

Step 4. Access Project Manager using the Project Manager icon from the Road Tools tool frame.

Step 5. From the right side of the Project Manager dialog box, in the Directories list box, ensure that the project directory is set to:

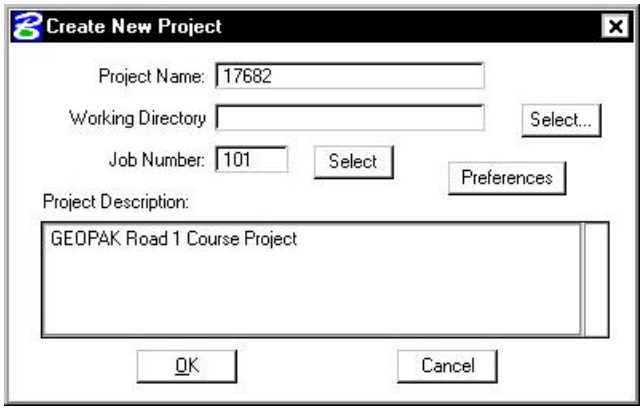
C:\data\geo\VDOT\road1

You can navigate quickly to your current working directory by using the pulldown Directory > Current Working Directory.

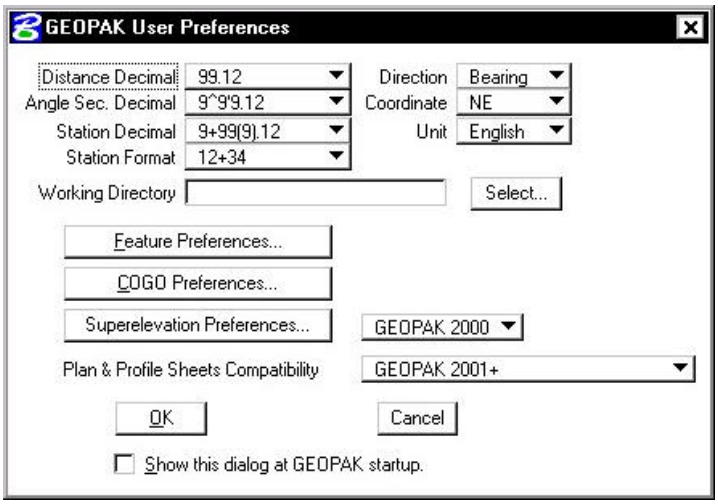
Select the **Projects > New** pulldown and create a new project as defined in the table below:

Project name:	17682
Working Directory:	
Job Number:	101
Project Description:	GEOPAK Road 1 Course Project

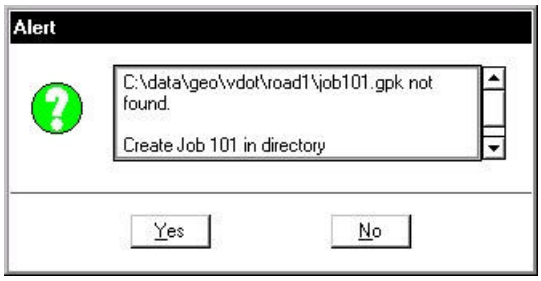
After filling out the dialog box as shown below, click **Preferences**.



Step 6. Set the project preferences as shown in the dialog box below. Click **OK** when complete.

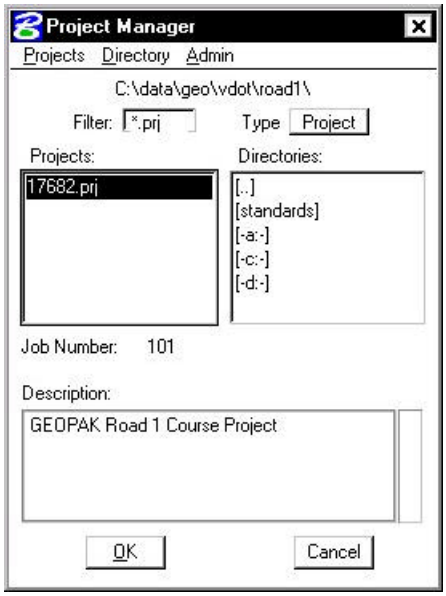


Step 7. After exiting the Preferences dialog box, you will return to the Create New Project dialog box. If everything here is satisfactory, click the **OK** button. An **Alert** message is displayed stating that Job 101 was not found in the Working Directory in which you defined.



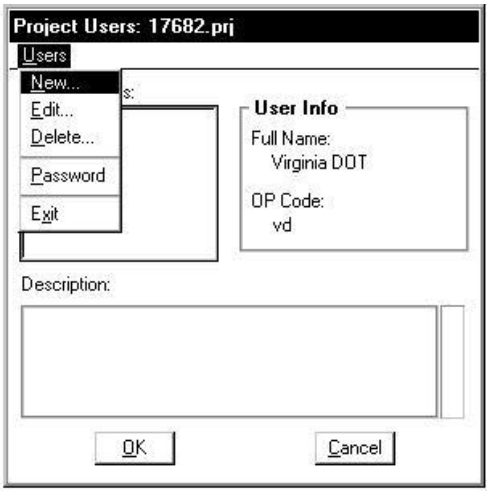
Click **Yes** to automatically create this job file.

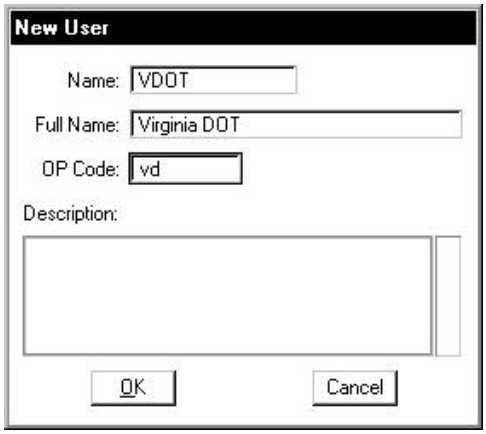
Step 8. The main Project Manager dialog box is now displayed and the project has been created and ready to be accessed. To access the project, select the project by single clicking on name of the project in the dialog box. The project is highlighted as shown in the dialog box with all pertinent information displayed.



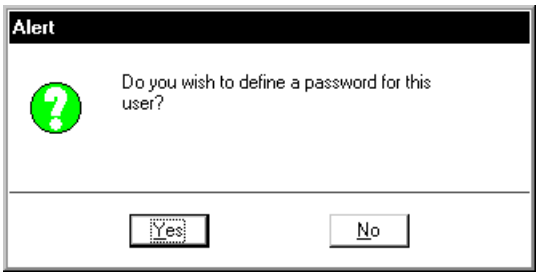
Click **OK** to invoke the Project Users dialog box as shown in Step 8.

Step 9. Create a new user by selecting **Users > New** from the Project User pull down menu bar. Complete the New User dialog box with the name and operator code as shown.

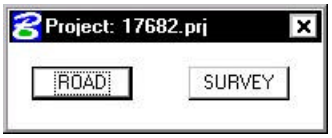




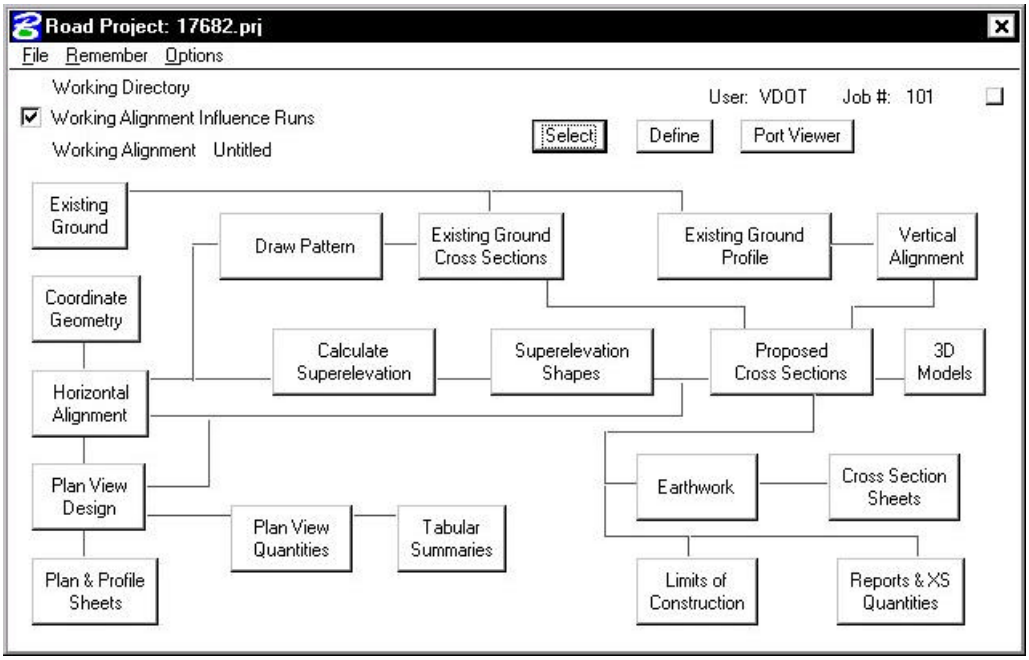
Step 10. After populating the dialog box click **OK**. When prompted to define a password for this user, click **No**.



Step 11. At this point double click the user and the following dialog box opens. You now have the option of accessing the Road or Survey workflow. Click **Road**.



Step 12. You will now see the main Workflow dialog box.



Step 13. Lastly, use the **Remember** option to have Project Manager remember our Project, User and Road and enable the **Autosink** option.

Step 14. **Exit** Microstation.

To create a project, contact the **AES Help Desk**.