

How to: Modify Field Character Limit and Data Type

The following instructions show how to change the character length and data type of a field that needs to be revised. Once a field is created on a shapefile, edits to the fields cannot be made to the field directly and any work arounds can be time consuming. The [Feature Class To Feature Class tool](#) is a quicker way to make edits to attribute fields by creating a new shapefile with all the same information and geometry, but with all the new field details added.

You must first add the shapefile that needs to have its attribute field character length and data type changed.

To get started, click the **Add Data** button.

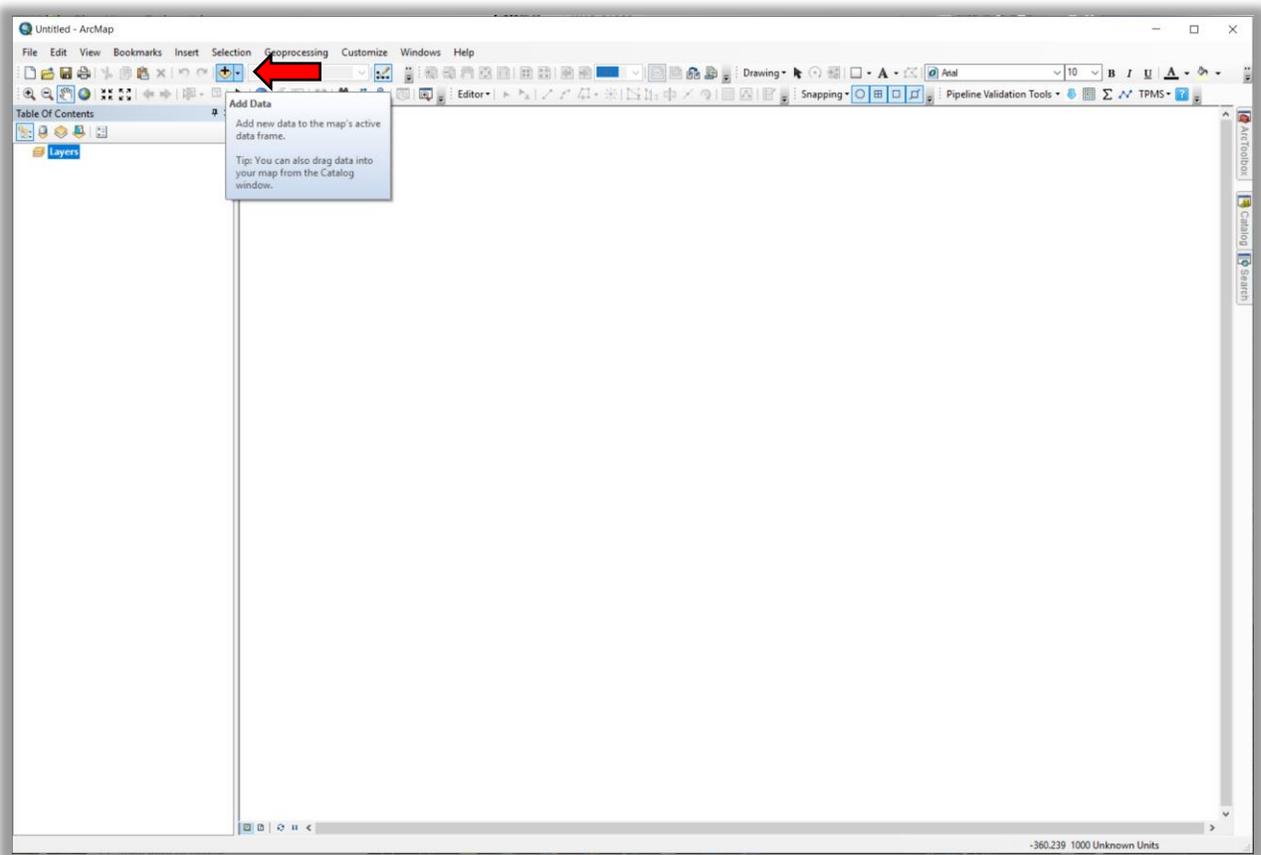


Figure 1. Finding the Add Data Button

Select the desired shapefile from the saved location on your computer.

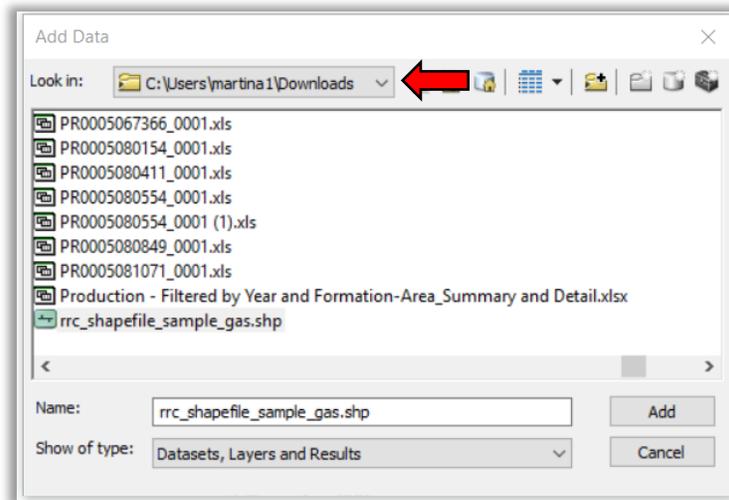


Figure 2. Navigating to the Desired Shapefile

Search for the **Feature Class to Feature Class** tool from the **Search** window.

If the search window is not already on the right pane of the **ArcMap** window, move your mouse to the **Windows** tab at the top of the **ArcMap** window and select **Search**.

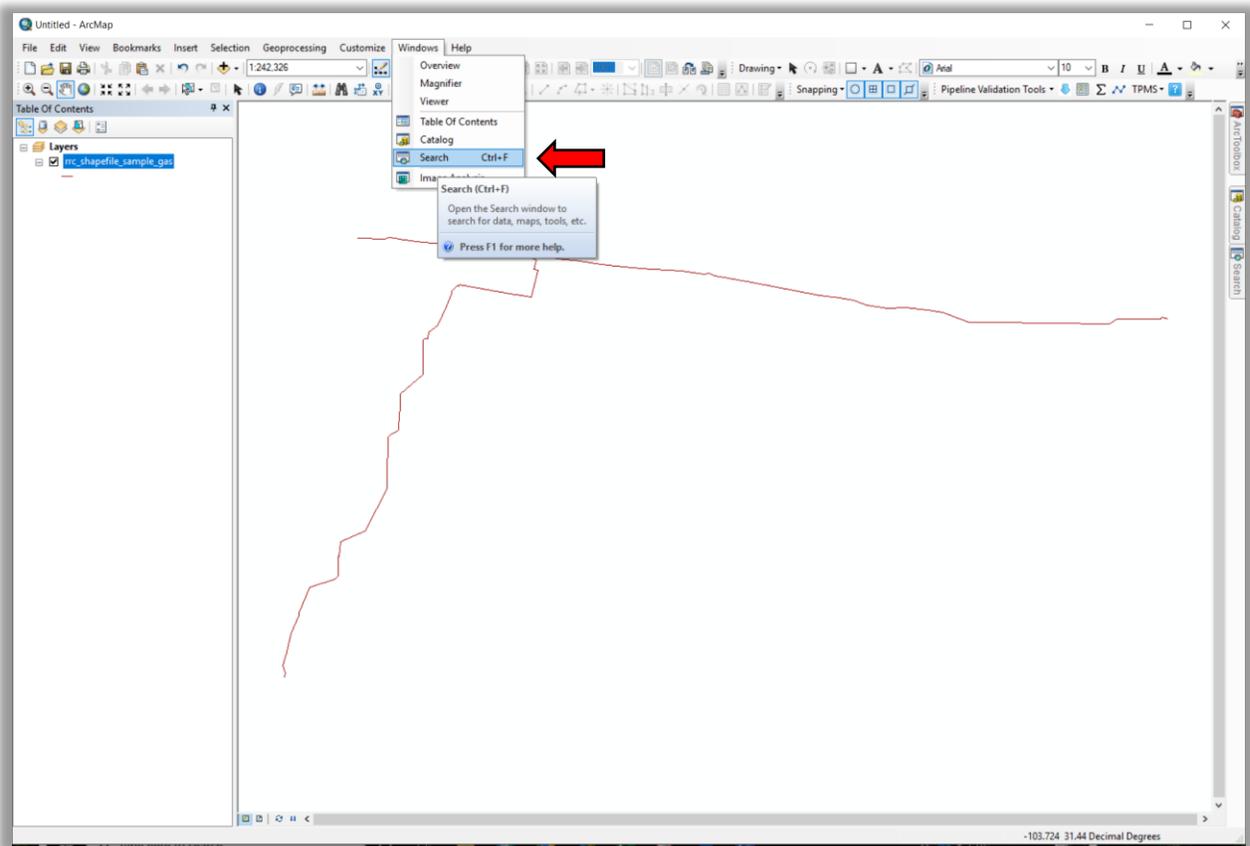


Figure 3. Finding the Search Function

The **Search** window will pop out from the right side of the **ArcMap** window. Type in “Feature Class to Feature Class” and click the **Search** button.

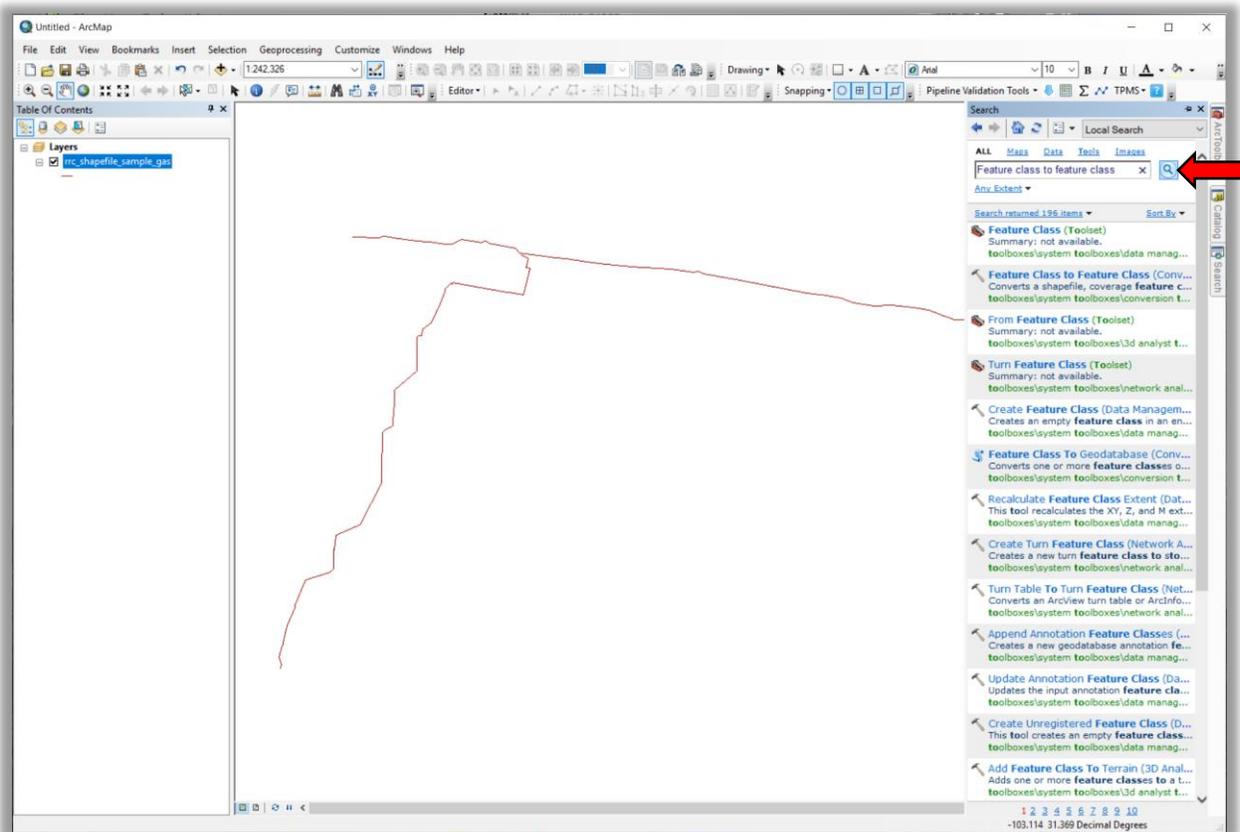


Figure 4. Searching for the Feature Class to Feature Class Tool

Click the second result with the hammer that says **Feature Class to Feature Class (Conversion)**.

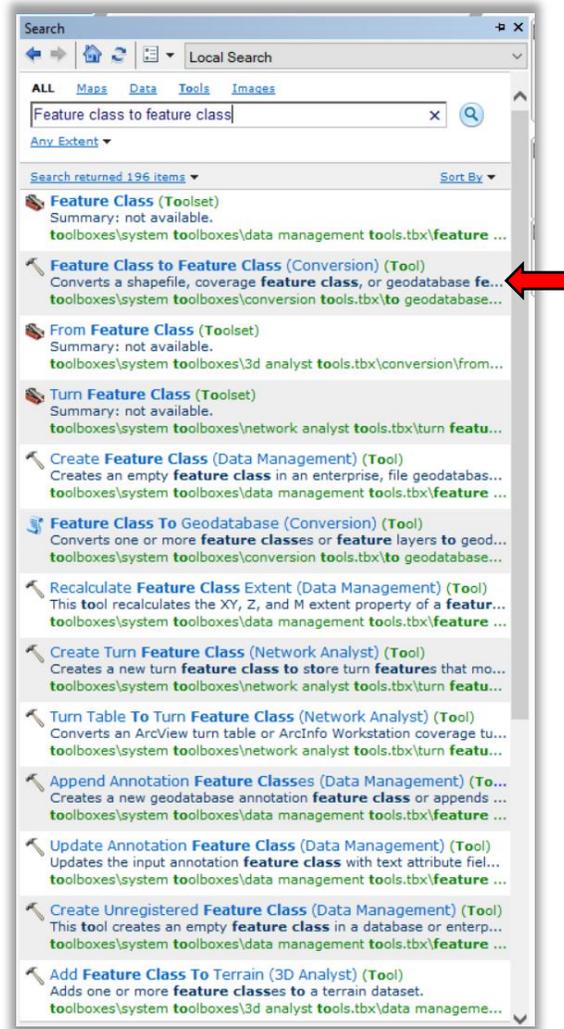


Figure 5. Finding the Feature Class to Feature Class Tool

A new window for the tool will pop up; here you will enter the **Input Features**, **Output Location**, **Output Feature Class**, and **Field Map** information.

To select the shapefile, click the drop-down arrow in the **Input Features** section and select the desired shapefile.

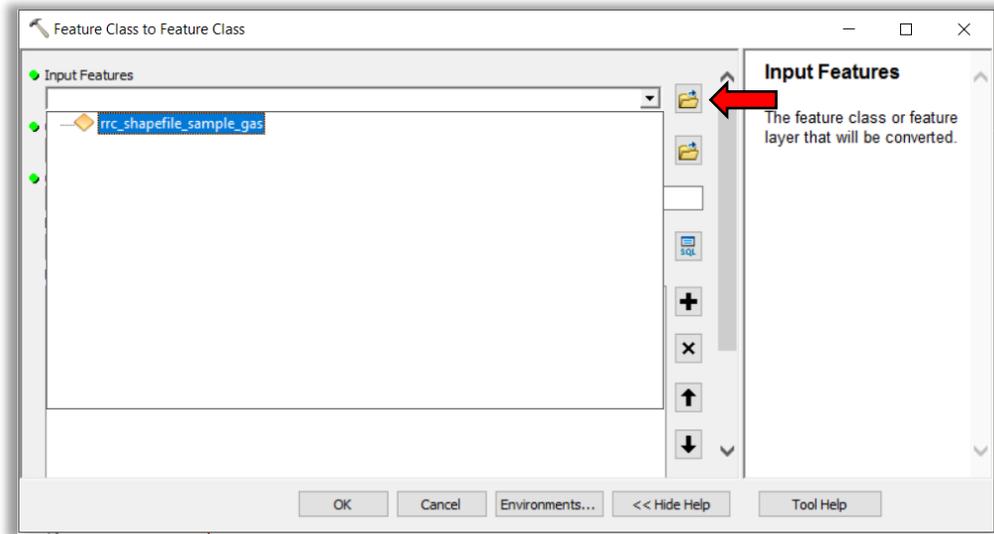


Figure 6. Finding the Input Features Button

For the **Output Location**, click the file folder in that row.

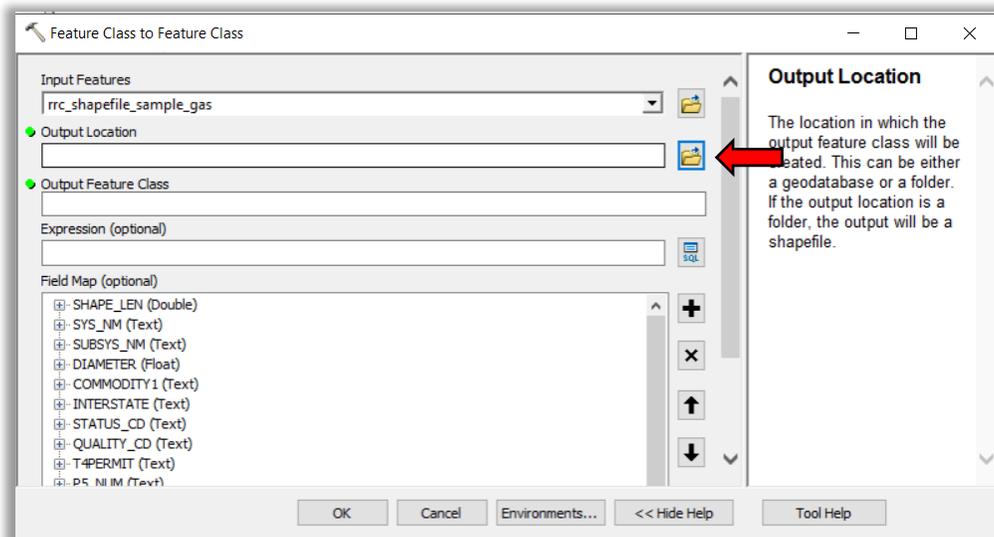


Figure 7. Finding the Output Location Button

Create a folder for the new shapefile with updated field attribute character lengths and data types that will be created after running the tool. This should be in an easy-to-find location on your computer. For example, if you want to save it in your **Documents Folder**, click the drop-down to the right of the **Look in:** section at the top of the window.

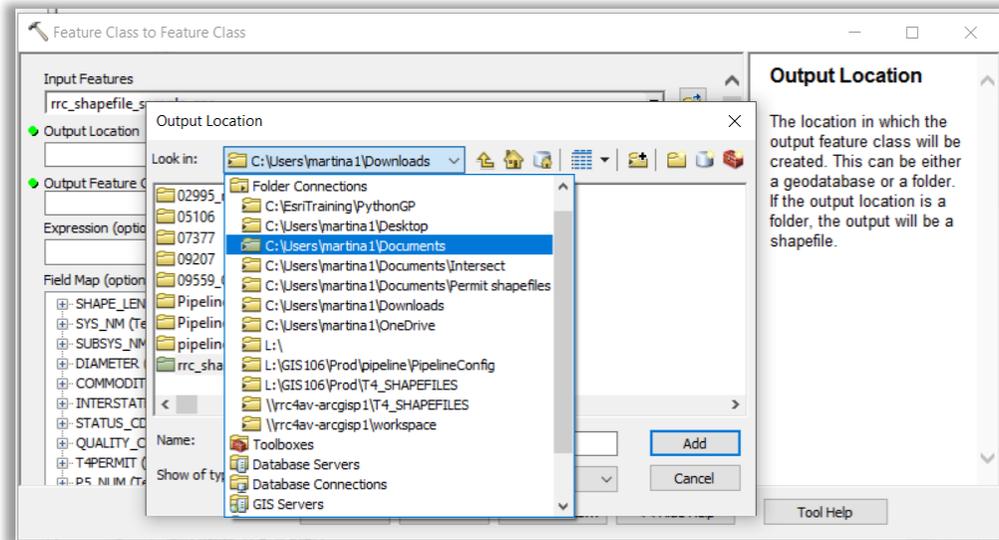


Figure 8. Finding the Correct Output Location Folder

If the folder is not already in the drop down, you can click the **Connect to** button, which is the folder with the + on top.

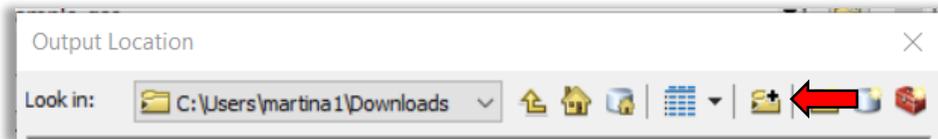


Figure 9. Finding the Connect to Button

A new window will pop up for you to select the folder you want the shapefile folder to be saved into.

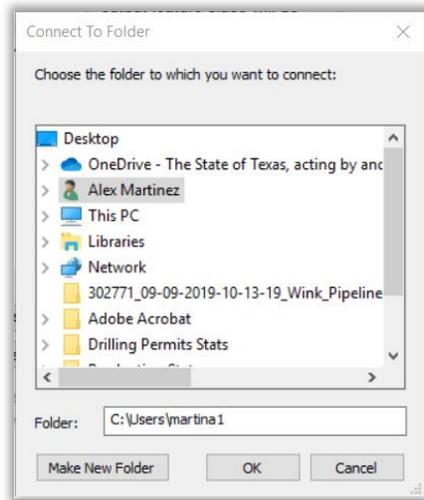


Figure 10. Choosing a Folder to Connect to

After the folder you want the shapefile saved in is navigated to, you must create a new folder by clicking the **New Folder** button.

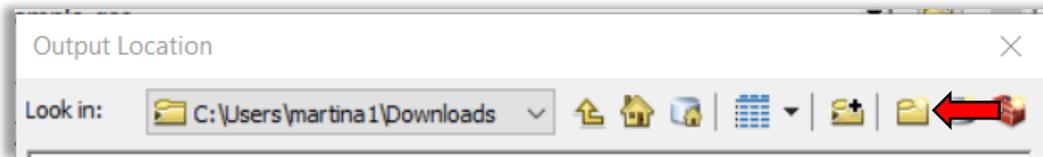


Figure 11. Finding the New Folder Button

Add whatever name you wish to help you locate the shapefile later (such as the permit number). Left click on the new folder once so it is highlighted and click the **Add** button.

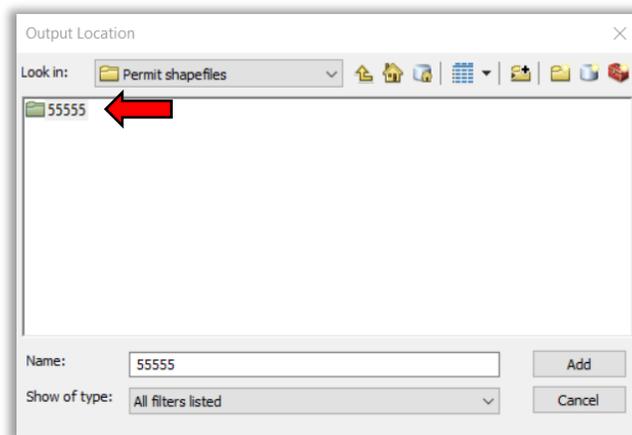


Figure 12. Adding a Shapefile Name

The **Output Location** should have the file path of where the new shapefile will be found.

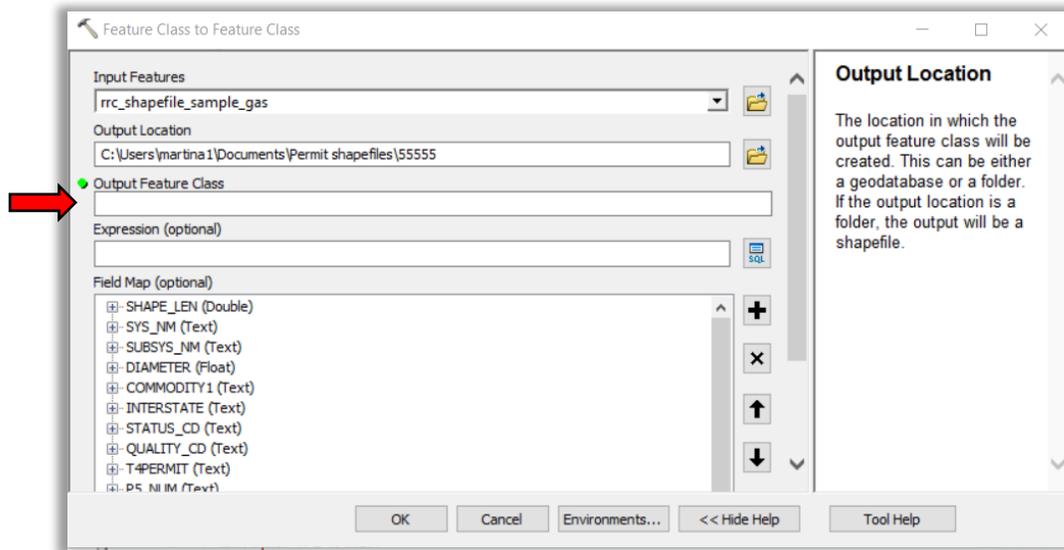


Figure 13. Finding the Output Feature Class

Now you will need to enter a value into the **Output Feature Class** of what you wish the shapefile to be named inside of the folder from the **Output Location** created previously.

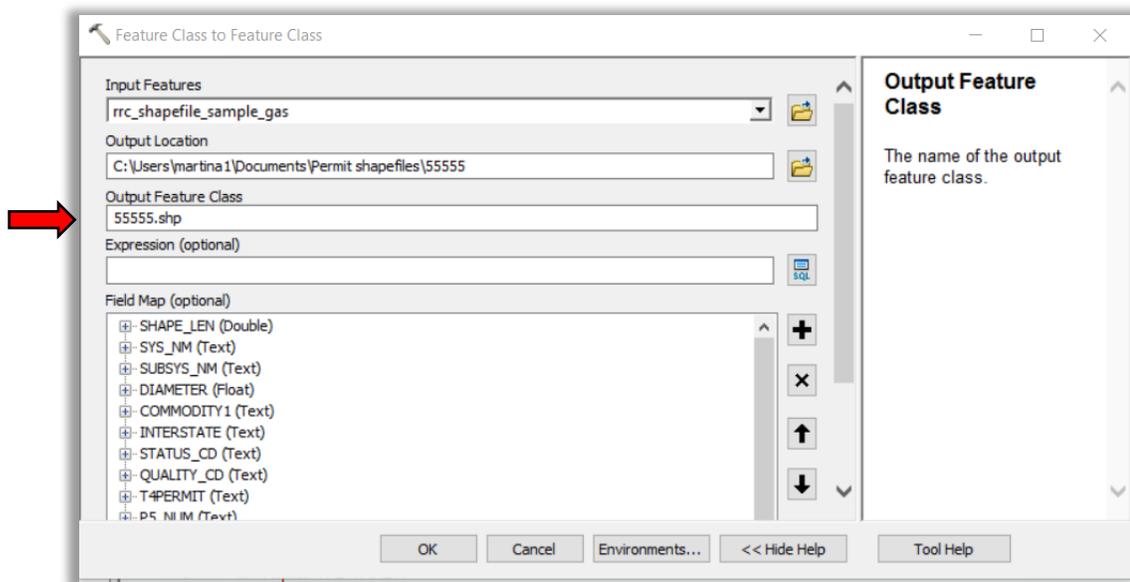


Figure 14. Naming the Output Feature Class

The **Expression** portion of the tool can be skipped.

The **Field Map** section of the tool is where all the changes to the field attribute character lengths and data types can be made.

Right click on the field you want to edit and select **Properties** from the selection window.

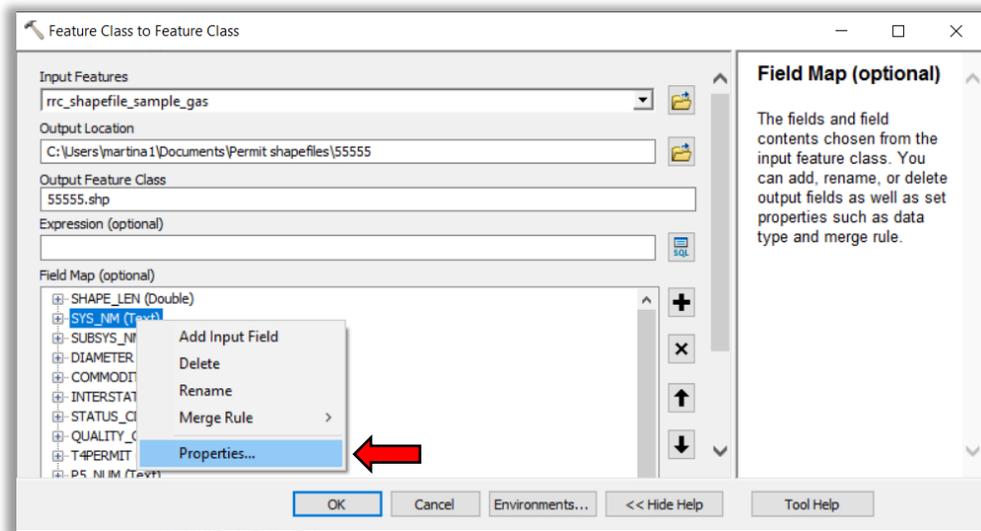
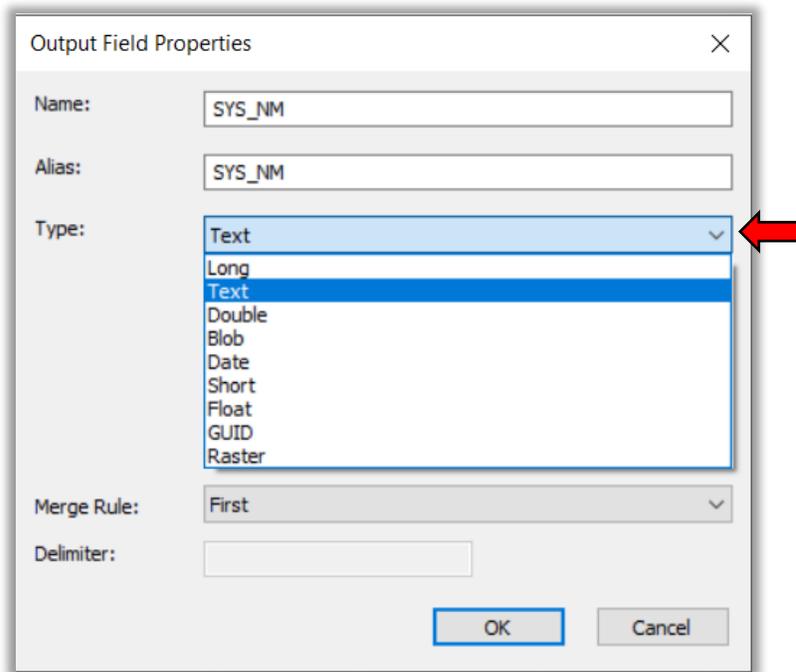
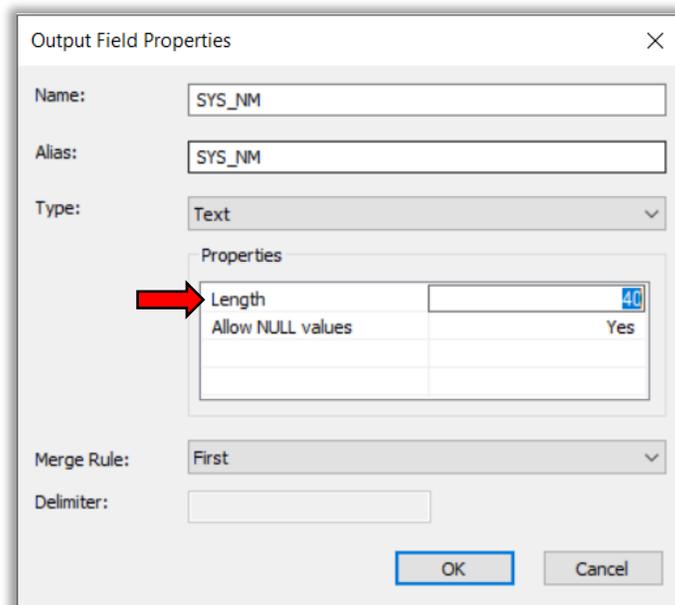


Figure 15. Finding the Field Properties

A new window will pop up for the selected field. There you can change the **Data Type** by selecting the dropdown to the right of **Type**.

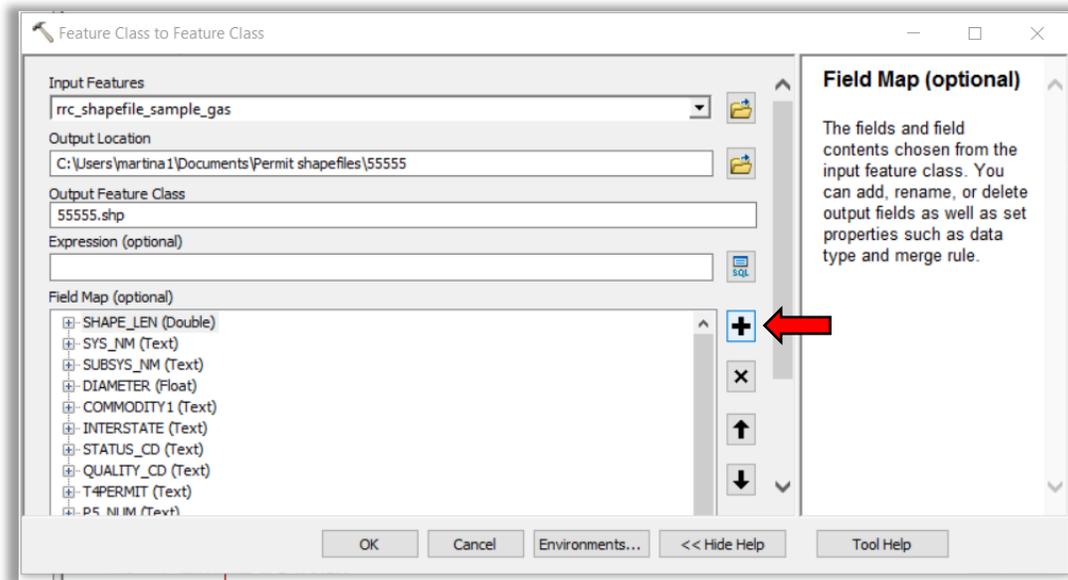


Next, you can change the character length of the field by clicking the cell to the right of the **Length** cell in the **Properties** section. Click the **OK** button after everything matches the required field data.

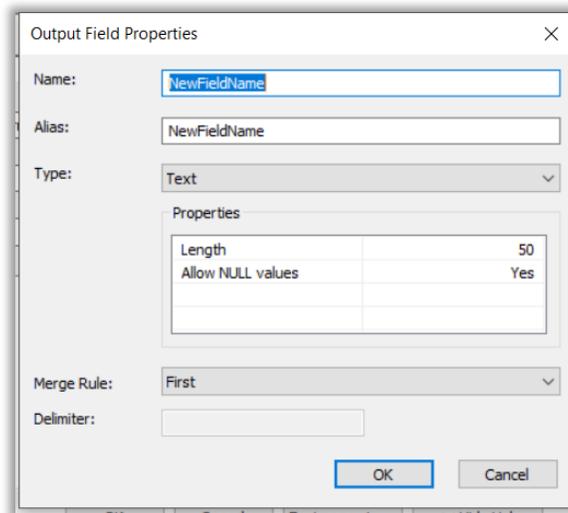


Then click the **OK** button after everything matches the required field data.

You can also add a data field if your shapefile was missing one. Click on the + button in the **Field Map** area to add a field to the shapefile.

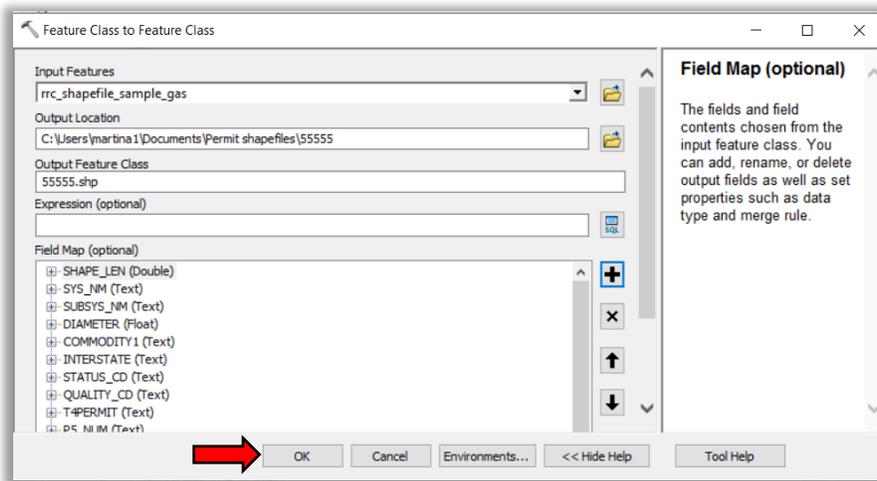


A new window will pop up, and you can add the field name that needs to be added, type of data and character length.

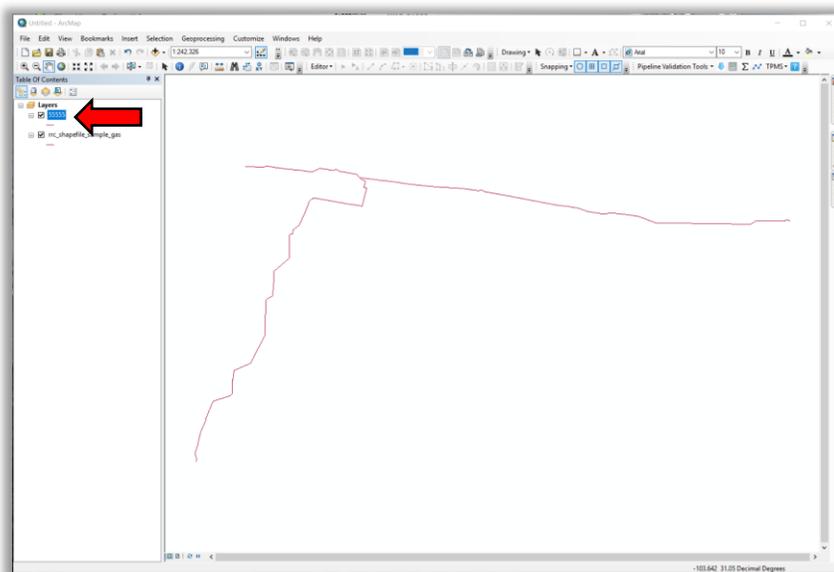


Click the **OK** button when you are finished.

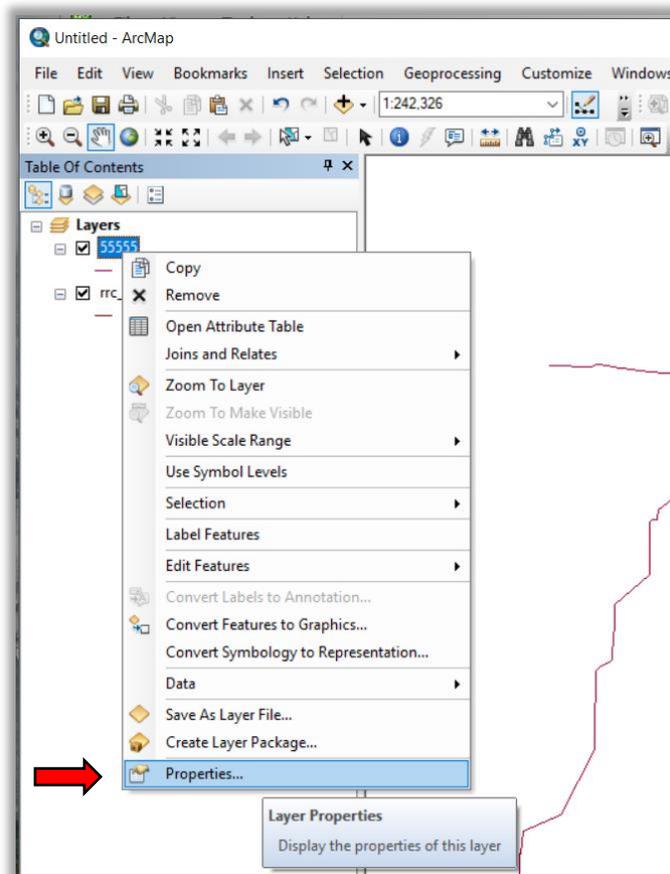
Once all the fields are revised and any new fields added, click the **OK** button at the bottom of the **Feature Class to Feature Class** tool window to create the new shapefile with updates.



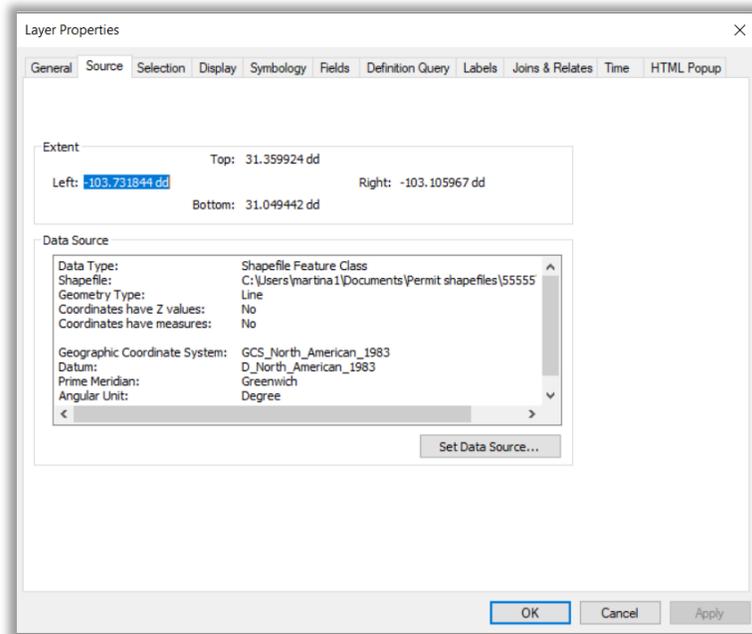
The new shapefile will be added to the **Table of Contents**.



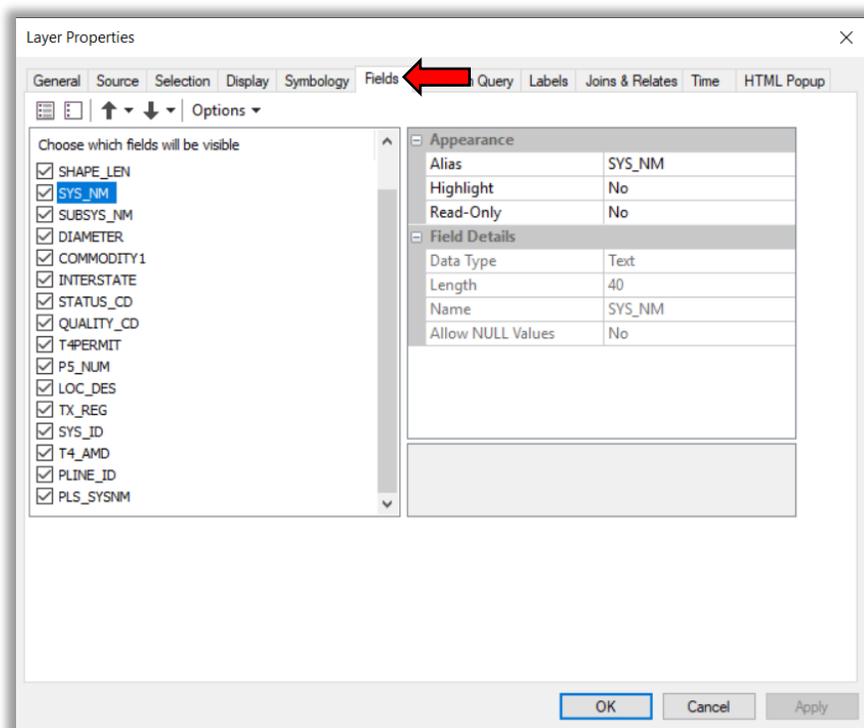
To review your changes and additions, and verify they all match the required values, right click on the new shapefile in the **Table of Contents** and select **Properties**.



A **Layer Properties** window will pop up.



Click on the **Fields** tab and the fields on the shapefile will show up.



Clicking on any of the fields on the left will populate the field details on the right, allowing you to check the **Data Type** and **Length** of all the required fields.

