



# Practice Workbook

This workbook is designed for use in Live instructor-led training and for OnDemand selfstudy. The explanations and demonstrations are provided by the instructor in the classroom, or in the OnDemand eLectures of this course available on the Bentley LEARN Server ([learn.bentley.com](http://learn.bentley.com)).

This practice workbook is formatted for on-screen viewing using a PDF reader. It is also available as a PDF document in the dataset for this course.

## Creating Quantity Data Using Item Types

This workbook contains an exercise to create an Item Type for a Fence line, create Item Properties, set default values and attach the newly created Item Type to existing Fence Line Geometry. This will be used in a later course for reporting and quantifying the fence line.



TRNC01882-1/0001

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## Description and Objectives

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### Course Description

This workbook contains an exercise to create an Item Type for a Fence line, create Item Properties, set default values and attach the newly created Item Type to existing Fence Line Geometry. This will be used in a later course for reporting and quantifying the fence line.

**Note** that the exercises contained in this workbook are designed to follow a specific workflow called **LEARNIng CONNECT**. The workflow is set via the Workflow toolbar shown below. The purpose of the **LEARNIng CONNECT** workflow is to simplify the menu choices for the new learner. However, you may also use the standard **Drawing** workflow. The location of the Ribbon Tabs, Ribbon Groups and Tools are identical for both workflows.



### Skills Taught

- Create and Item Type
- Attach new Item Type to Geometry

## Create an Item Type for Fence Line

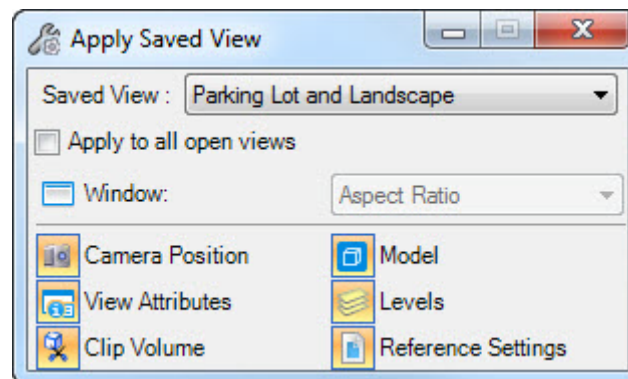
In this exercise, we will create an Item Type for a Fence line, create Item Properties, set default values and attach the newly created Item Type to existing Fence Line Geometry. This will be used in a later course for reporting and quantifying the fence line.

- Create an Item Type
- Attach new Item Type to Geometry

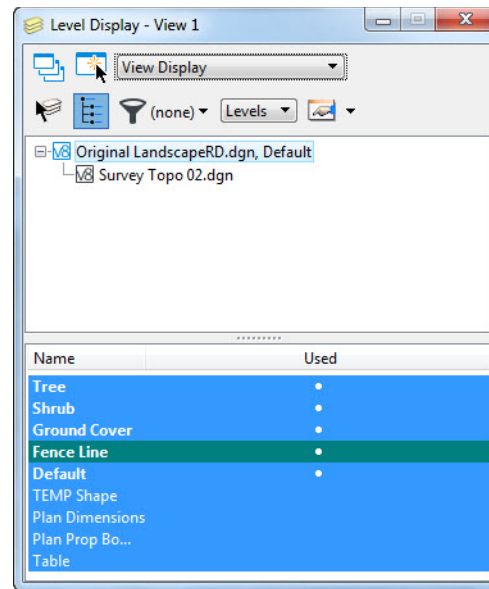
1. Start MicroStation, from **Projects** select the Project called **CreatingQuantityItemTypes**, Pin the project to the List and pick **Browse** to view the files in the DGN directory.
2. Open the design file **LandscapeRD\_3.dgn** from the DGN project directory.
3. Once the file is open, set the workflow to **LEARNING CONNECT**.



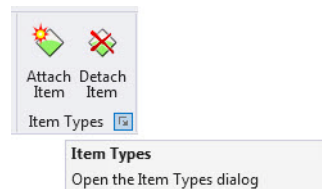
4. Apply the **Saved View Parking Lot and Landscape**. From the **View Ribbon Tab** select **Apply Saved View** from the **Ribbon Group Saved Views** then provide a data point within the view.



5. Next pick **Level Display** from the **Primary Ribbon Group** in the **Home Ribbon Tab**. From **Level Display**, make **Active** and **Display** the level **Fence Line**.if not already displayed.



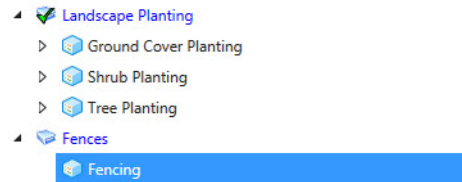
6. Our fence line, displayed as gray lines, and it needs to be tied to a new Item Type. From the **Attach Ribbon Tab**, pick **Item Types**, from the **Item Types Ribbon Group**.



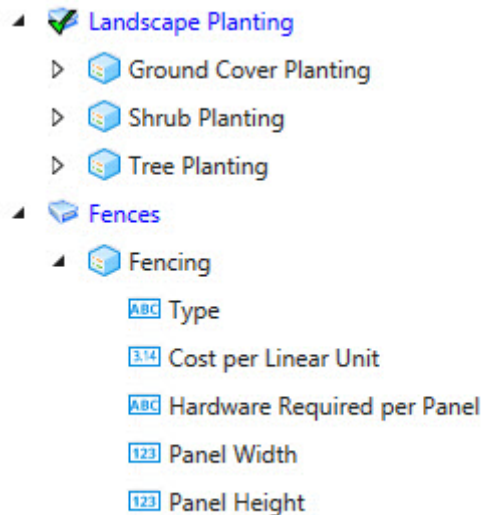
**Note:** The proper place to create the Item Type is in a configured DgnLib, not in the active file. For training purposes we will create the Item Type directly in the active file. This Item Type and Properties should be imported into the DgnLib so that all users would have access to it.

7. From the **Item Types** dialog, pick the Library **Landscape Planting**. Next select **Libraries** followed by **New**. Name the new library **Fences**.

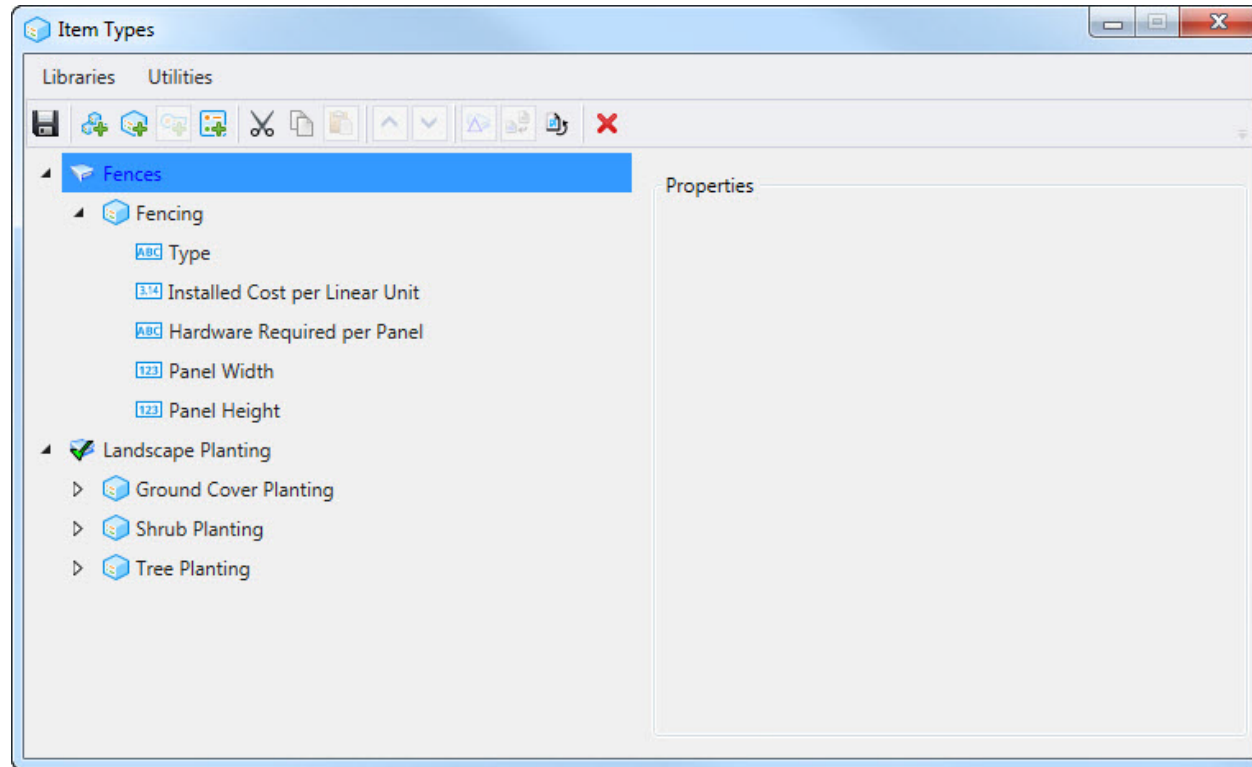
8. After creating the Library, select **New Item Type** and name it *Fencing*.



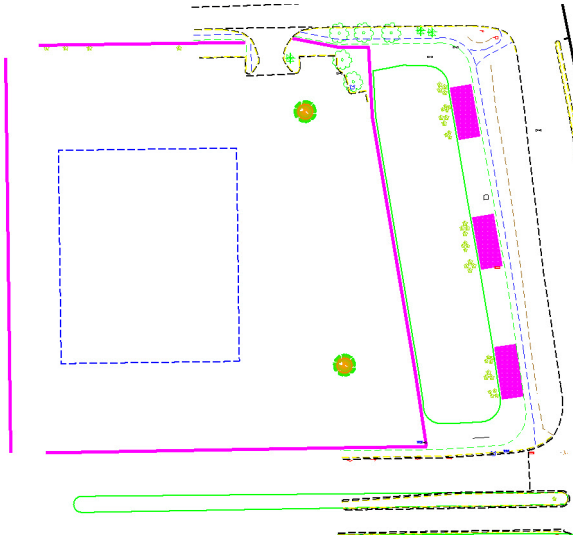
9. Select **New Property Definition**, naming it *Type*. The Type under Property Definition will be *Text*. This field will be used to define the type of fencing, such as Aluminum, Vinyl, Wood or Iron. Set the Default Value to Aluminum.
10. Create another **Property Definition** called *Installed Cost per Linear Unit*. The Type will be *Number*, and set the *Units* to *Dimensionless* followed by *\$dollar*. Set the Default to \$60.00
11. Create another **Property Definition** called *Hardware Required per Panel*, this *Type* will also be *Text*. Set the Default to 1 Post, 1 Post Cap, 1 Mounting Bracket, Screws
12. Create another **Property Definition** called *Panel Width*, its *Type* should be set to *Number*, set the *Units > Working Units > Distance* then setting the Default Value to 6.
13. Create another **Property Definition** called *Panel Height* its *Type* should be set to *Number*, set the *Units > Working Units > Distance* then setting the Default Value to 6.



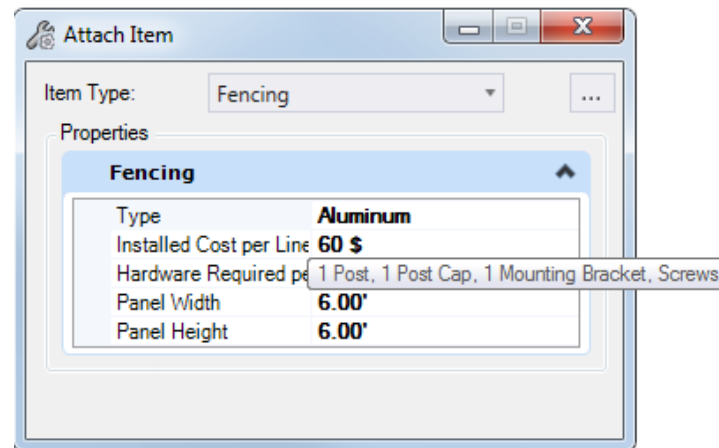
14. After creating the Item Type Library, ItemTypes and the Item Type Properties, they all need to be saved. As mentioned prior the best location to store Item Types is in a configured DGNLib. To save the item types and library, select the **Save** icon or select **Libraries > Save** from the **Item Types** dialog.



15. Using **Element Selection** select the fence lines.



16. Next **Attach Item**, from the **Items Types Ribbon Group**, located on the **Attach Ribbon Tab**. Setting the **Library** to **Fences** and the Item Type to **Fencing**. Fill out the values of the Properties as shown if needed.



17. Double check the attachment of the **Item Types** and **Properties** via **Element Selection** and **Right Press** and **Properties**.