

# LAB 11 - Creating a Closed Alignment

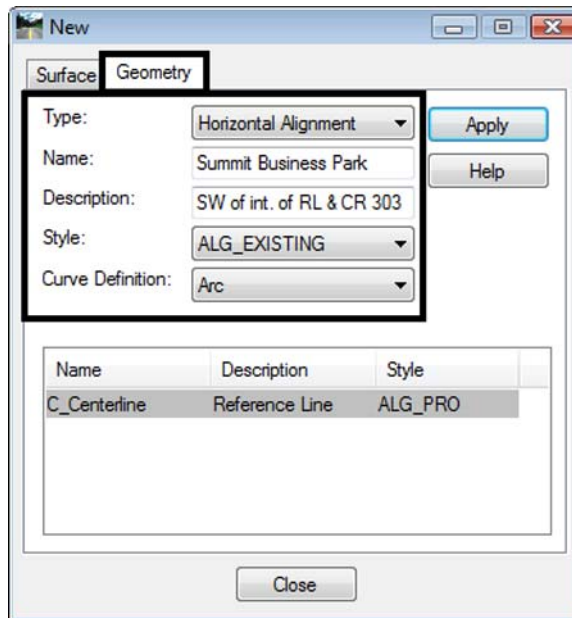
## Chapter Objectives:

- Create Cogo points through various Intersection Commands
- Generate Alignments from Cogo Points

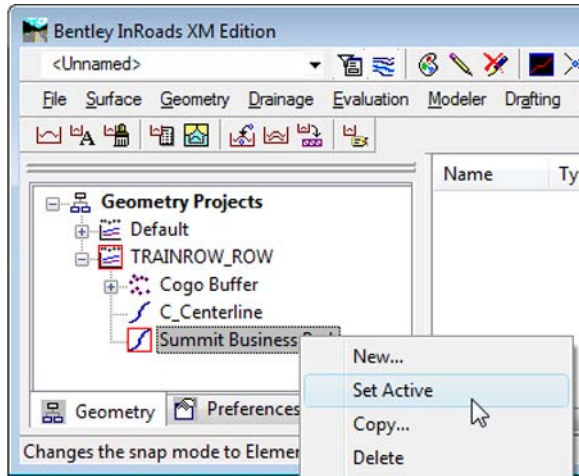
The plat of Summit Business Park has the 4 corners defined by Cogo points. Creating a closed alignment using the PI Method to represent the boundary of the plat will facilitate right of way creation.

Create a new horizontal alignment named *Summit Business Park*.

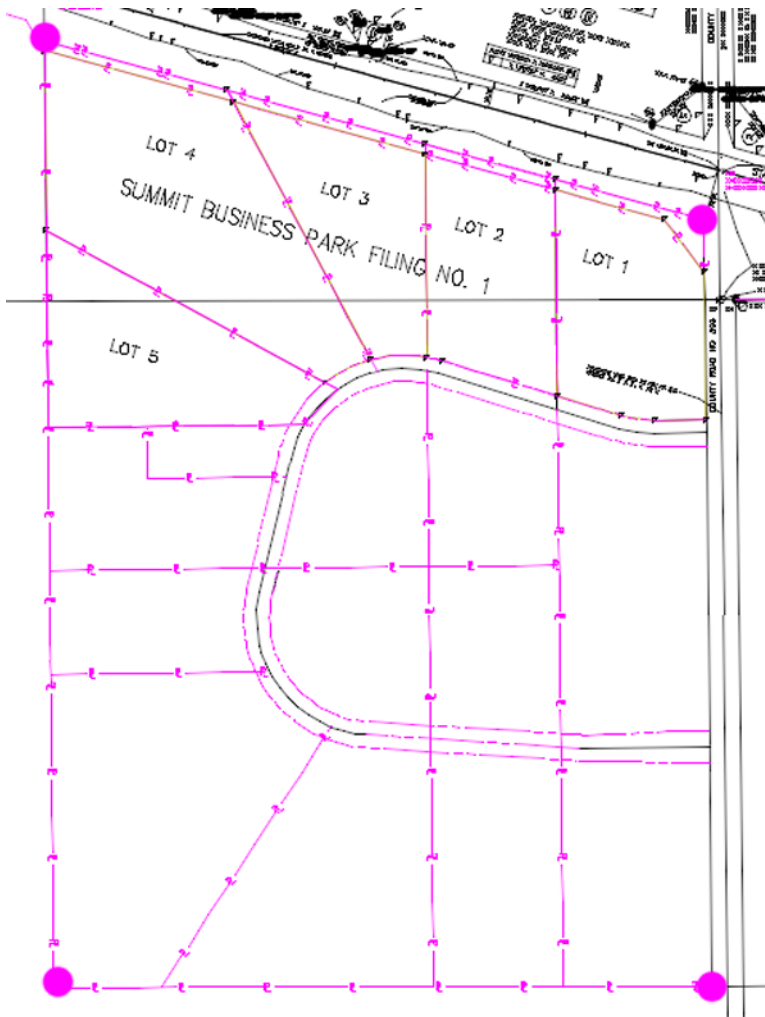
1. Select File > New > [Geometry]
2. *Type: Horizontal Alignment*
3. *Name: Summit Business Park*
4. *Description: SW of int. of RL & CR 303*
5. *Style: RW\_Property-Bndry-Line\_ex*
6. *Curve Definition: Arc*
7. <D> Apply





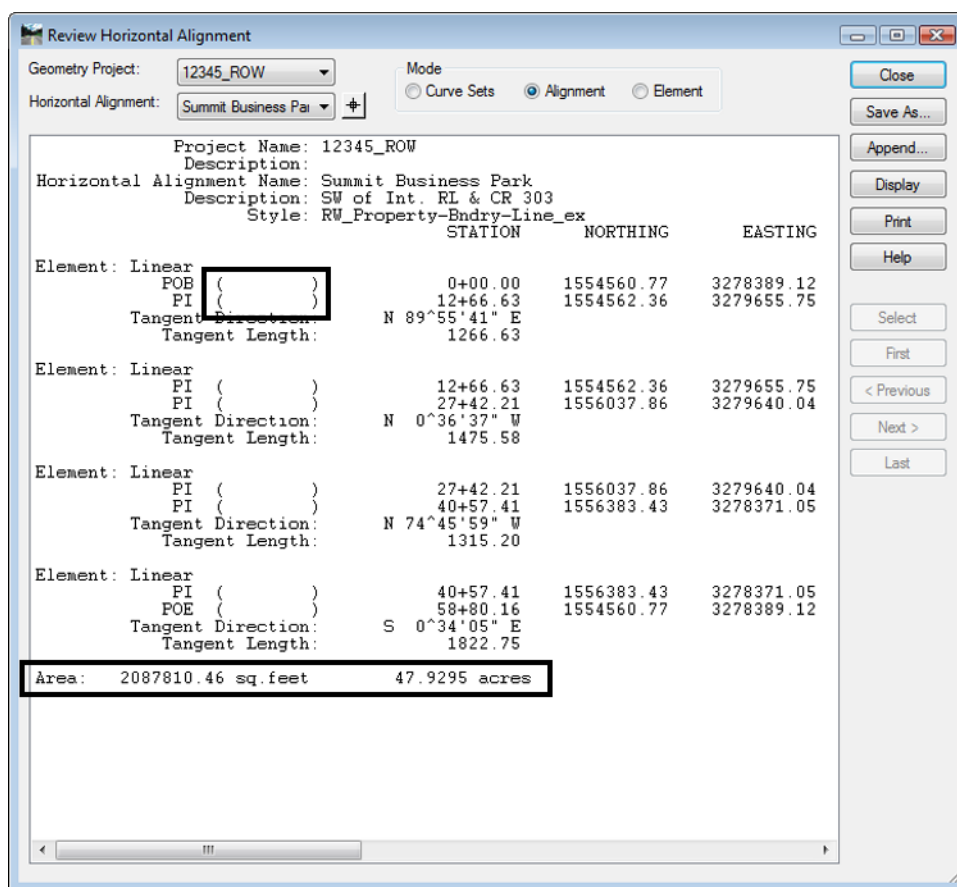
- Set the active horizontal alignment: *Summit Business Park*



- Select **Geometry > Horizontal Curve Set > Add PI**
- You are Prompted to: *Identify Alignment End*

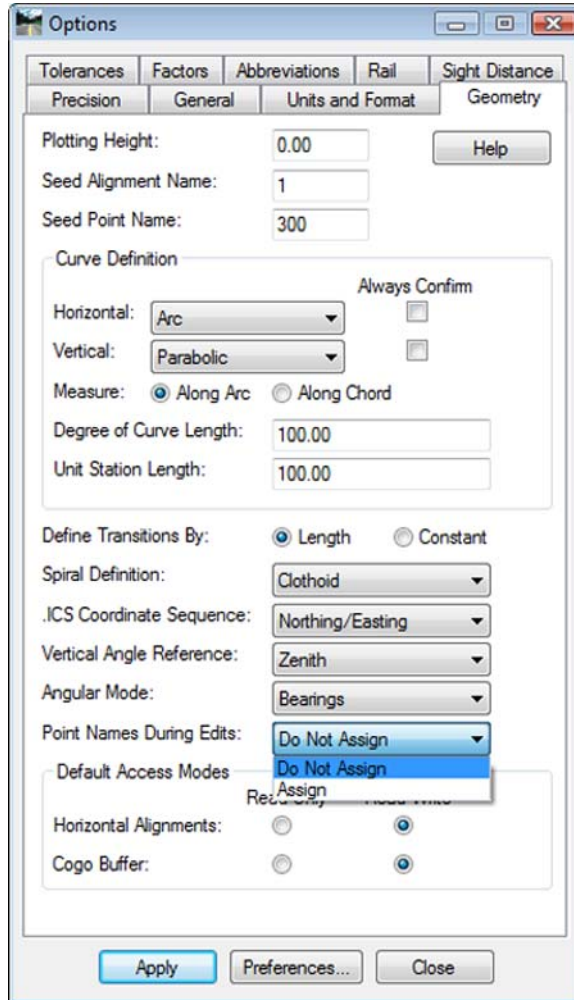


11. Toggle **On** the geometry Point snap 
12. Select the plat corners in a counter-clockwise direction
13. <D> near the **SW** corner of the plat (defines the POB)
14. <D> near the **SE** corner of the plat
15. <D> near the **NE** corner of the plat
16. <D> near the **NW** corner of the Plat
17. <D> near the **SW** corner of the plat (defines the POE)
18. <R> to cancel point selection, <R> to terminate the command
19. Toggle **Off** the geometry point snap 
20. Select **Geometry > Review Horizontal** to verify the contents of the alignment.



**Note:** Notice the lack of point names (or Cogo numbers) in the parentheses. Also note the parcel area information is displayed.

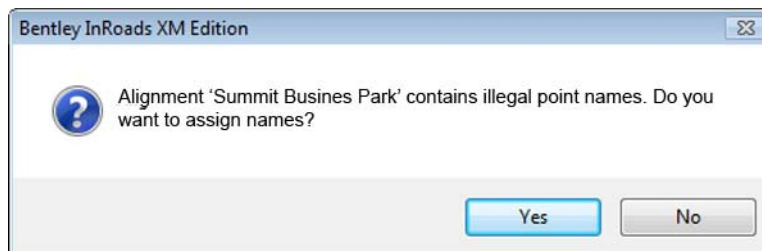
The population of the name/number field is contingent on the settings under **Tools > Options > [Geometry]** at time of geometry creation.



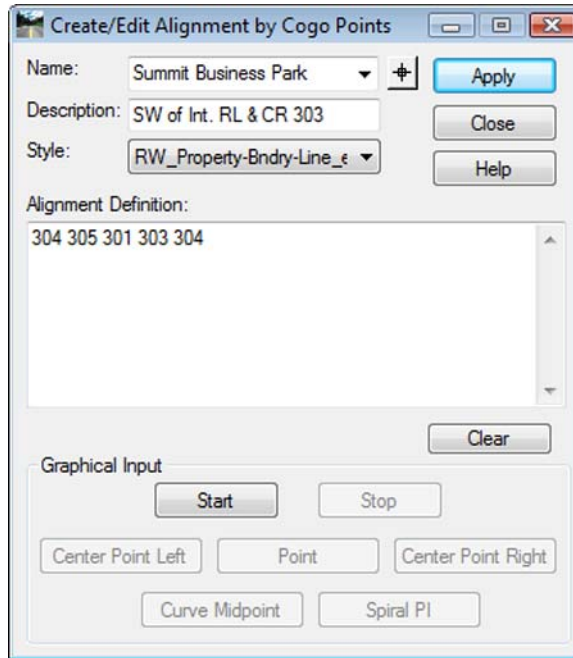
### Geometry Verification

As seen above, the Cogo points selected to define the alignment are not necessarily a part of the definition of the alignment. To rectify this, 2 possible solutions exist. Firstly, the Create/Edit Alignment by Cogo Points command could have been used to generate the alignment initially. Secondly, this same command can be used to assign and verify the alignment.

1. Select **Geometry > Utilities > Create/Edit Alignment by Cogo Points**



2. <D> Yes



The alignment is associated with the selected Cogo Points.

3. Edit points as necessary.
4. <D> **Apply** – verify results by reviewing the alignment.

