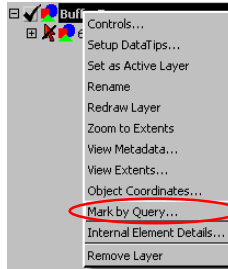# System
Query Builder with Layer Manager

The interactive Query Builder is available in all TNT processes that use a Layer Manager, which includes all processes with a View window. You can select elements by query for direct use in a process or use the selected elements to create a region that you then use to define the processing area. For example, you can select lines and create a buffer zone region or convert selected polygons into a region. All of the procedures described below can be done in any of the processes discussed.

You get a Layer Manager in the Vector Extract process when you choose to Select By Element. You get a Layer Manager in Raster Extract when you click on the Modify button. The features of the Query Builder are described in the Technical Guide entitled *Spatial Display: Using the Interactive Query Builder*. The right mouse button menu (RMBM) at the layer or element level of any geometric object in a Layer Manager has a Mark by Query choice that opens the Query Builder.

Raster Extract

A View window and a Layer Manager open when you click on the Modify button in the Raster Extract process (Image/Extract). If you add a vector or other geometric layer for reference, you can use the Query Builder to select polygons of interest.

① select polygons   ③ save region
② convert to region   ④ select By Region
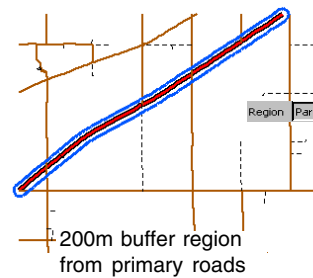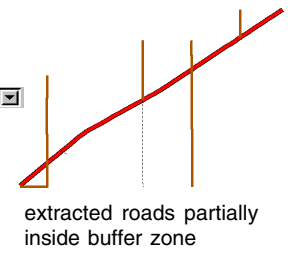

region from polygons

extracted result

Vector Extract

A View window and a Layer Manager open when you click on the Select button after setting element selection to By Element in the Extract to Vector process (Geometric/Extract to/Vector).

① select lines   ③ set region clipping
② generate buffer zone region   ④ select region
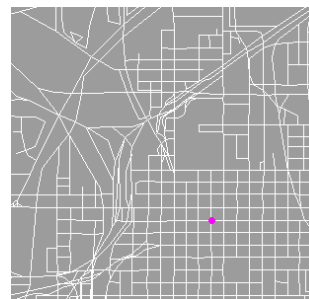

200m buffer region from primary roads

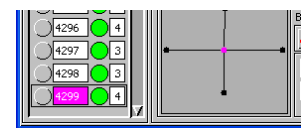extracted roads partially inside buffer zone

Network Analysis

Open the Layer Manager in this process from the Layer Controls icon at the right of the View window toolbar. In this process you generally want to select only one element at a time.

① select node or line   ② assign attributes

selected node
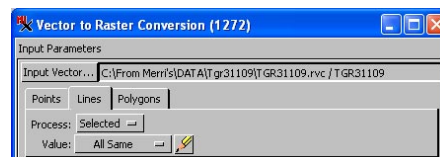

assign network attributes to node
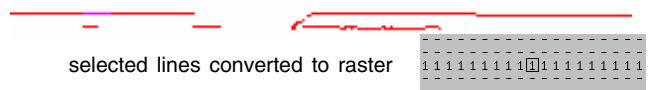
Vector to Raster Conversion

A View window and a Layer Manager open along with the Vector to Raster Conversion window, which enable you to select elements for conversion to raster using the interactive Query Builder.

① set elements to process to Selected
② use Query Builder to select elements

You can use any of these selection procedures for any process with a Layer Manager.

choose to convert lines selected by Query Builder to a raster

selected lines converted to raster