

OpenRoads Element Naming Conventions

Design Manual
 Chapter 20
 Project Automation Information
 Originally Issued: 09-02-16

Horizontal Alignments

Because information still is required to be written to the .GPK file for sheeting, there are restrictions on naming conventions for alignments that are sent to the .GPK file. When exporting a chain from a .DGN file to a .GPK file, there is no way to control the name of the parts of the chain (points, curves, spirals, etc.) beyond the name of the chain within OpenRoads. Chain elements are named by Geopak automatically as the chain name with an increasing numeric suffix.



Geopak allows point names to be alphanumeric or numeric only. Numeric-alpha (123ABC) names cannot be used for chain names.

Chains exported back to a .GPK file must start with an alpha prefix. Alpha-numeric-alpha will cause errors and should not be used. Special characters cannot be used in naming of chains either. If a chain is improperly named, using the Export to Native (GPK) tool will fail.

All alphanumeric names in the GPK file are limited to 15 characters. To allow suffixes, OpenRoads will attach to chain elements' names when storing a chain into the GPK file. Alignment names in OpenRoads should be no longer than 12 alphanumeric characters in length. See Table 1 below for examples of horizontal chain naming.

Table 1: Horizontal Alignment Naming.

alignment type	naming convention	examples
Mainline	<i>MLRouteNumber</i>	ML080, ML520, ML006
Side Road	<i>SRSideRoadName</i>	SR180 for 180 th St, SR100 for Iowa 100, SRD35 for Co. Rd. D35, SRFIRST for 1 st street
Ramps	<i>RPRampDesignationCrossingRouteName</i>	RPA100 for Ramp A of SR100, RPG080 for Ramp G of SR080
Dike/Levy	<i>DKAdjacentStation</i>	DK150 for dike adjacent to ML at station 150+00
Channel	<i>CHCrossingStation</i>	CH2500 for channel crossing ML at station 2500+00
Entrance	<i>ENTSideCrossingEvenStation</i>	ENTL2500 for entrance on Left side at Station 2500+25
Detour	<i>DETDetourNumber</i>	DET1, DET2, DET35040, etc.
Edge Returns	<i>RETQuadrantSideRoadName</i>	RETA100, See Figure 1 for Quadrant Naming
Collector Distributor Road	<i>CDRStartingStation</i>	CDR1500, starts at Sta. 1500+00 of the ML roadway.
Walls	<i>WALLDescription</i>	WALLNoise1, WALLMSE1, WALLRetain1
Survey Chain	<i>SURchainName</i>	SURML080, SURSR100, etc.

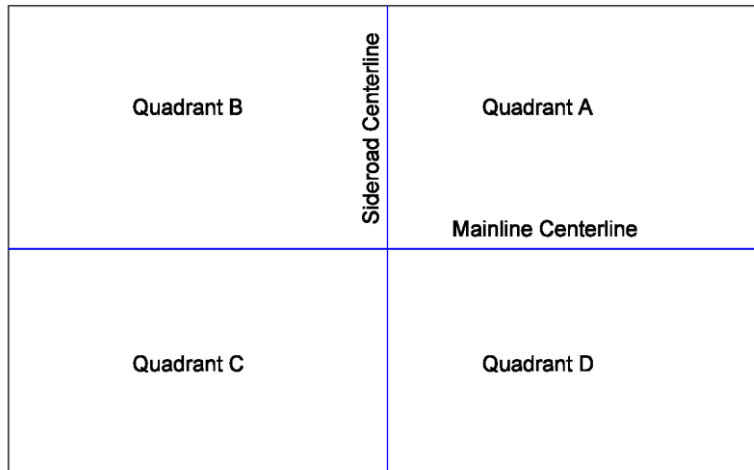


Figure 1: Return quadrant naming conventions.

Vertical Geometry

Name vertical geometry for centerline profiles the same as the chain (the exception being ditch grades). Geopak does not store vertical geometry the same as horizontal geometry (no elements with separate naming restrictions). See Table 2 for examples. When developing alternatives and split profiles, hyphens and underbars (“-” and “_”) or alpha-numeric-alpha naming can be used. However, the best option is to name the ultimately designed vertical profile the same as the chain with which it is associated. There is no need with OpenRoads to store an existing profile. Tools are available to draw the ground profile without the need to store geometry.

Table 2: Vertical Alignment Naming.

profile type	naming convention	examples
Proposed chain alignment	Chain Name	ML080, SR180, RPA180, ENTL2500, RETA180
Ditch Grade	<i>DGSideEvenStationBeginning</i>	DGL1500, DRG1500, DGM1500. Left, Right, Median respectively.
Benching	<i>BNCHSideEvenStationBeginning</i>	BNCHL1500, BNCHR1500

Chronology of Changes to Design Manual Section:

020D-102 OpenRoads Element Naming Conventions

9/2/2016	NEW
	New