



Bridge Design Details 2.5 January 2023

Horizontal Alignment

A horizontal alignment is provided in the Bridge Site Submittal from the District and is given as a stationed layout line for highways, off-ramps, walls, or other structures. All horizontal alignments are laid out by stations, which are given as 100-foot increments along the layout line. For smaller structures, the station line may be given as 20-foot increments along the layout line (e.g., +20, +40, +60, etc.). Whole stations shall not include “plus stations” (e.g., 10+00). For three-digit whole stations, it is acceptable to drop the first two digits and fully label every 500 feet (e.g., 100, 1, 2, 3, 4, 105, etc.).

Stations

Locations along a station line are generally shown to the nearest hundredth of a foot and without the station abbreviation (Sta).

Example: 12+56.00 "A" LINE

Bearings

Bearing direction for tangent lines, follows the direction of increasing stationing and north arrow.

Offsets

Any location within the same plane of a given horizontal alignment can be found using a station-offset from a specific alignment. Offsets are distances, left or right, from any given station line to the location of a specific point.

Example: P_1 is offset 2.00 feet left of station 12+10.00.

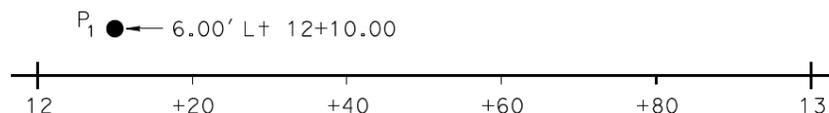


Figure 2.5.1 Point Offset Location



It is common practice to either begin retaining wall layout lines at 10+00.00 or to match the beginning station to the corresponding mainline alignment.

Example: Beginning of wall is 6.00 feet left of station; 12+08.00 "A" Line.

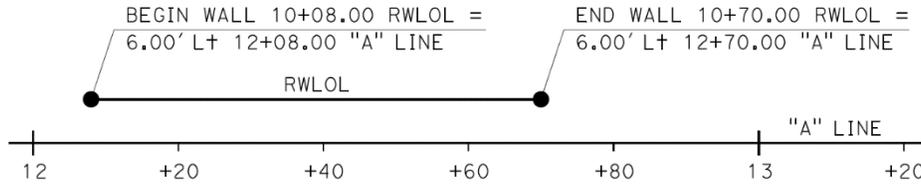


Figure 2.5.2 Retaining Wall Offset Locations