

are so close to each other that it does not make a difference in terms of the models calculated output whether the structures are modelled as two closely located structures or one cumulative structure.

This is also the case in scenarios where stairs and other egress features attached to residential structures (i.e., boardwalks, decks, etc.) that are in the direction that extend further out across the cross section, rather than into the cross section and accounted for within the obstruction shadow created by the residential structural, etc.

2. Equivalent Shape Modification- Some project sites may have structures that create an obstruction with a shape that is either not possible, or rather, not easy to design in the model. In these scenarios, modifying the structure's shape to better represent a more equivalent structure within the model may be used.

Ex. A deck at top of bank has stairs that lead down to the edge of water. From a cross sectional view, this would create an obstruction with a triangular shape. However, the HECRAS Blocked Obstruction feature does not allow the user to input single obstructions with different elevations on it's two sides, only a single elevation can be input for a single obstruction. In this scenario, a more rectangular obstruction will be used to represent the stairs that is more or equal to the actual cross sectional obstruction area created by the stairs. In most cases, the obstruction area used in the model will be greater than the actual obstruction created by the structure.

Note: See (Interpolated*) Proposed River Mile Cross Section graph illustrated in report and corresponding legend to identify method(s) and technique(s) used in HECRAS model