

### 3 Select the Deck Elevation and Support Configuration

## Deck Elevation:

16 meters

## Support Configuration:

 Standard Abutments

 Arch Abutments

Height of Arch:

4 meters

 No Pier (One Span)

 Pier (Two Spans)

Height of Pier:

0 meters

 No Cable Anchorages

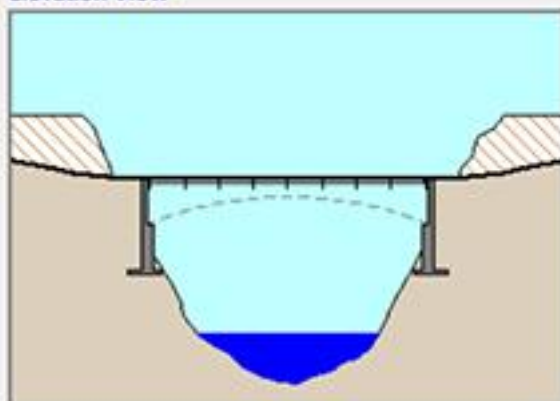
 One Cable Anchorage

 Two Cable Anchorages

## Deck Cross-Section



## Elevation View



= River Banks   
  = Excavation   
  = River  
 = Deck   
  = Abutment

## Design Tip:



The total cost of the design is the Site Cost plus the Truss Cost. The Site Cost is shown below. The Truss Cost will be computed when you design the truss.

In general, configurations that increase the Site Cost tend to reduce the Truss Cost and vice versa. For example, a lower deck elevation usually increases the Site Cost, because it requires more excavation; but a lower deck also reduces the Truss Cost, because it shortens the span length. Try to find the best balance between these two competing costs.

For more information on selecting a site configuration, click the Help button below.

## Site Cost:

\$108 800,00 (Includes cost of deck, excavation, and supports. Does not include cost of steel trusses.)

Help...

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Finish

### 4 Select the Deck Material and Truck Loading

## Deck Material

 Medium-Strength Concrete  
(0.23 meter thick)

 High-Strength Concrete  
(0.15 meter thick)

## Loading

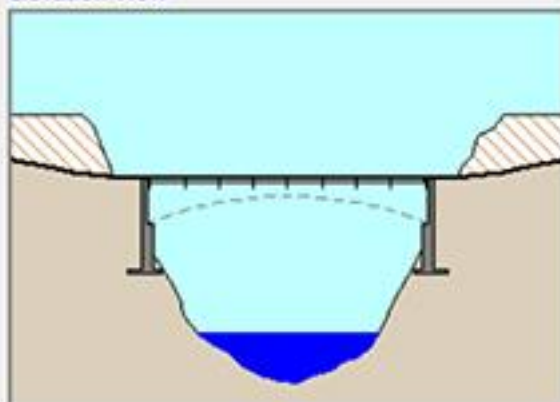
 Standard 180 kN Truck  
(Two Lanes)

 660 kN Permit Loading  
(Centered)

## Deck Cross-Section



## Elevation View



= River Banks   
  = Excavation   
  = River  
 = Deck   
  = Abutment

## Design Tip:



Medium-strength concrete is relatively inexpensive, but its use results in a thicker deck, which adds more load to the structure. Greater load will tend to increase the truss cost.

High-strength concrete is more expensive, but because of its higher strength, the deck can be thinner and thus lighter. Lower loads associated with the deck weight will tend to decrease the truss cost.

You may also choose either of the two truck loads shown.

For more information on selecting a load case, click the Help button below.

## Site Cost:

\$108 800,00 (Includes cost of deck, excavation, and supports. Does not include cost of steel trusses.)

Help...

Cancel

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