

DATA FOR DESIGNING IRON HIGHWAY-BRIDGE SUPERSTRUCTURES,  
AND ESTIMATING THEIR COST.

- Class of bridge required.
- Length of span or spans.
- Width of clear roadway.
- Headway required in clear above floor.
- Live load, if different from the ordinary.
- Wind pressure per square foot, if different from the ordinary.
- Any extraordinary load, such as paved flooring, heavy falls of snow, etc.
- The velocity of passing loads.
- Distance of bridge site from nearest railway-station or sea-port.
- Quality and condition of the roads between these places.
- Nature of bed of river, and velocity of stream.
- Height of lower chord above bed of river.
- Cross section of stream at crossing, showing borings, if any have been made.
- Angle which the direction of bridge makes with axes of piers or abutments.
- Nature of the country at the site.
- Any special difficulty that may be anticipated for the raising.
- Kind of falsework it would be advisable to use.
- Cost of piles at various places in the neighborhood, if any be required.
- Cost of transport of same to site.
- Cost of timber per thousand for falsework.
- Probable value of falsework timber after bridge is finished.
- Cost of withdrawing piles, if necessary.
- Number of lineal feet of piles required.
- Number of feet of lumber for falsework.
- Cost of spikes, bolts, and nails for falsework.
- Cost of driving piles.
- Cost of transporting pile-driver to and from site.
- Common laborer's wages.
- Skilled laborer's wages.
- Foreman's wages.
- Wages for team and teamster.