Bridge Proposal Worksheet

This proposal is submitted in response to the city of Needabridge’s request for proposals for a new transportation bridge to connect their city to another city across the river, 500 feet away.

We have estimated the amount of materials and costs required to make the bridge girders (beams) out of concrete and again out of steel. Because this bridge must be strong enough to carry cars, we recommend building the bridge out of ____________________________.

We propose the following bridge. (Draw your bridge design below. Write in the length of each bridge member in the drawing.)

We estimate the bridge design will use approximately _____ girders of concrete and ______ girders of steel in the above specified lengths.

This design will also have ______ concrete foundations to hold it safely in place over the river.

Other special characteristics of our design include:

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

It will take us approximately ________ months to build this bridge.
Below is our proposed budget: (Fill in costs for girders from the Cost Comparisons Worksheet. For multiple girders of different lengths, use another sheet of paper to total the amount and cost of materials.)

<table>
<thead>
<tr>
<th>Budget Item</th>
<th>How many?</th>
<th>Cost per item</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost for materials: girders (concrete)</td>
<td>_____ girders</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Cost for materials: girders (steel)</td>
<td>_____ girders</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Cost for materials: foundations (concrete)</td>
<td>_____ foundations</td>
<td>x $1,500</td>
<td></td>
</tr>
<tr>
<td>Cost for site investigation</td>
<td>_____ foundations</td>
<td>x $3,000</td>
<td></td>
</tr>
<tr>
<td>Cost for equipment</td>
<td>_____ months</td>
<td>x $1,000</td>
<td></td>
</tr>
<tr>
<td>Cost for engineering labor</td>
<td>_____ months</td>
<td>x $28,000</td>
<td></td>
</tr>
</tbody>
</table>

**Total Cost Estimation →**

We think you should choose our design because:

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

Thank you for your consideration,

Engineering firm name: __________________________

Lead engineer names: __________________________ and ___________________________

Proposal submission date: __________________________