Experience of Promoting PPP Projects in Nepal

Example:
Kathmandu – Terai/Madhes Fast Track Road Project
## Technical Highlights - Fast Track Road

<table>
<thead>
<tr>
<th>Details</th>
<th>Plain / Rolling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carriageways</td>
<td>2 X 7.5 m = 15m</td>
</tr>
<tr>
<td>Paved shoulder (Single Bituminous Surface Dressing)</td>
<td>2 X 3.0 m = 6m</td>
</tr>
<tr>
<td>Central Median</td>
<td>4.0 m</td>
</tr>
<tr>
<td>Total Formation width</td>
<td>25 m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Details</th>
<th>Mountainous / Steep Terrain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carriageways</td>
<td>2 X 7.5 m = 15m</td>
</tr>
<tr>
<td>Paved shoulder (Single Bituminous Surface Dressing)</td>
<td>2 X 2.5 m = 5m</td>
</tr>
<tr>
<td>Central Median</td>
<td>3.0 m</td>
</tr>
<tr>
<td>Total Formation width</td>
<td>23 m</td>
</tr>
</tbody>
</table>

### Structure Width
- Bridges length > 50 m: 2 x 11.70 m (2 x 9M + 2 X 1.5 m Footpath + 2 x 1.2 Crash barrier/Railing)
- Bridges length < 50 m: 2 x 13.70 m (2 x 11M + 2 x 1.5 M Footpath + 2 x 1.2 Crash barrier/Railing)
Kathmandu – Terai/Madhesh Fast Track Road Project

TCS - 01
TYPICAL CROSS SECTION FOR PLAIN / ROLLING TERRAIN
Kathmandu – Terai/Madhesh Fast Track Road Project
Kathmandu – Terai/Madhes Fast Track Road Project

TYPICAL CROSS SECTION FOR MOUNTAINOUS WITH HIGH EMBANKMENT ON ONE SIDE & CUTTING ON OTHER SIDE
### Technical Highlights - Fast Track Road (cont’d…)

<table>
<thead>
<tr>
<th>Details</th>
<th>For Bridge length &gt; 50m</th>
<th>For Bridge Length &lt;50m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carriageways</td>
<td>2 X 9 m = 18m</td>
<td>2 X 11 m = 22m</td>
</tr>
<tr>
<td>Footpath</td>
<td>2 X 1.5 m = 3m</td>
<td>2 X 1.5 m = 3m</td>
</tr>
<tr>
<td>Crash Barrier</td>
<td>2 X 0.45 m = 0.9m</td>
<td>2 X 0.45 m = 0.9m</td>
</tr>
<tr>
<td></td>
<td>2 X 0.50 m = 1.0m</td>
<td>2 X 0.50 m = 1.0m</td>
</tr>
<tr>
<td>Railing</td>
<td>2 X 0.25 m = 0.5m</td>
<td>2 X 0.25 m = 0.5m</td>
</tr>
<tr>
<td>Total Formation width</td>
<td>(2 x 11.7m) = 23.40 m</td>
<td>(2 x 13.7m) = 27.40 m</td>
</tr>
</tbody>
</table>
Cross section of Large / Major Bridges (Length of structures>50m) 4 lane Divided carriageway

Cross section of Large / Major Bridges (Length of structures<50m) 4 lane Divided carriageway
<table>
<thead>
<tr>
<th>Bridge Structure</th>
<th>Kathmandu - Nijgadh</th>
<th>Nijgadh - Pathlaiya</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Long Bridge (Length &gt; 100 m)</td>
<td>7 Nos</td>
<td>New Construction – 5 Nos. in existing road</td>
</tr>
<tr>
<td>2 Major Bridge (Span &gt;25m and Length &gt;50m)</td>
<td>57 Nos</td>
<td>Improvement – 5 Nos. in existing road</td>
</tr>
<tr>
<td>3 Minor Bridge (Span &lt;25m and Length &lt;50m)</td>
<td>35 Nos</td>
<td>Improvement – 14 Nos. in existing road</td>
</tr>
</tbody>
</table>

New Construction – 5 Nos. in existing road
Kathmandu – Terai/Madhesh Fast Track Road Project

Kathmandu – Nijgadh Section

Location: Km 29+750 to Km 31+120
Length - 1.370 Km
Width – 9.5 m
Height – 5.5 m

TCS - 11
TYPICAL CROSS SECTION FOR TUNNEL
**Technical Highlights - Fast Track Road (cont’d…)**

**Design Speed:**
- Plain – 120 Km/hr
- Hill – 65 Km/hr

*(Travel Time – 59 Minutes Kathmandu – Nijgad Sector)*

**Longitudinal Grade:**
- Maximum – 4% in Plain and Rolling
- Maximum – 5% in Mountain and Steep Mountain
Kathmandu – Terai/Madhesh Fast Track Road Project
Promoting PPP Projects in Nepal

- First Mega Road Project in Nepal - to the standard of Expressway.
- Seeking Private Sector’s Participation in Road Sector of Nepal.
- Establishment of Project Road Office in 2008/09 aiming, in the beginning, to acquire the land within the Right of Way and opening of the service track.
- Taking a long period in acquiring land.
- Still going on:
  - a prerequisite condition of developing Mega Road Project.
  - without this Private Sector’s involvement in such a mega project is difficult.
Kathmandu – Terai/Madhesh Fast Track Road Project
Promoting PPP Projects in Nepal

- First Attempt towards procuring the Project in 2008 – having criteria of investing, constructing and operation by private sector in the project implementation.
- Fail to proceed further.
  - because of the non-involvement of Nepalese Construction Industry in the bidding document (the document was in premature stage!)

- In July 2012,
  - on the basis of Public Private Partnership / BOT EXPRESSION OF INTEREST (EOI) was called to participate by Concessionaire.
Kathmandu – Terai/Madhes Fast Track Road Project
Promoting PPP Projects in Nepal

• 9 Applicants purchased documents,
• only 4 applicants: Reliance, Gammon, IL & FS, L & T and Gammon submitted the EOI documents.
• RFP was published in Dec. 2012 with giving four month initial time and later two times first one month and second time three months extension.
• The following were basic criteria given in the RFP documents for the selection of concessionaire.
  ▪ Quoted base year toll rates for the given vehicle composition with 10 (ten) percent increase after every five years for the concession period quoted in the bid.
  ▪ The total toll amount for the proposed toll operation period.
  ▪ The amount of royalty offered to be paid to the Government over the concession period.
Kathmandu – Terai/Madhesh Fast Track Road Project

Promoting PPP Projects in Nepal

- The proposed concession period.
- The grant amount expected by concessionaire to be borne by the Employer as equity support proposed by the bidder.
- The adjustment for the toll revenue for earlier transfer for the Project.
- Consideration for preference for Nepali contractor.

• But three shortlisted companies IL&FS, L&T and Reliance did not participate in the RFP stage.

“The reason behind not participating was thought that revenue collected from toll during operation period could not be sufficient to match the investment cost and profit.” – showing a need of viability Gap Funding.
Kathmandu – Terai/Madhes Fast Track Road Project
Promoting PPP Projects in Nepal

• On 10 September, 2014 again EOI on the basis of PPP/BOT model was published for all interested concessionaire to submit their profile.

• The following were the criteria given in this bidding process.
  ▪ Yearly minimum Revenue Guarantee Amount would be provided by GON. (according to budget speech No. 110 of FY 207/72 ..... “Minimum Traffic Guarantee including other facility .......”)
  ▪ Total Concession Period would be 5 year construction and 25 year operation period.
  ▪ NRs. 15 Billion would be provided as Equity Support.
• In 10 September, 2014 again EOI on the basis of PPP/BOT model was published for all interested concessionaire to submit their profile.

• The following were the criteria given in this bidding process.
  ▪ **In case of toll revenue collected in excess of MRG the surplus would be shared equally both by:**
    GON and Concessionaire.
  ▪ **The Concessionaire with having lowest sum of quoted MRG would be declared as a successful bidder.**
  ▪ **Special provision / preference is made in the document if the Concessionaire includes Nepali Contractors in his consortium / JV.**
Kathmandu – Terai/Madhes Fast Track Road Project
Promoting PPP Projects in Nepal

• Four Chinese and four Indian Companies purchased the EOI document but submitted by:
  - only 3 Indian Companies.

• In 16 Dec. 2014 RFP was published.
  - Only two companies namely IL&FS and OSE submitted the RFP document.

• In 29 Feb, 2015 IL&FS,
  - as a lowest evaluated substantially responsive bidder was declared as a successful bidder.
Kathmandu – Terai/Madhesh Fast Track Road Project
Promoting PPP Projects in Nepal

Lesson learned till to date from the Project:

• Less participation by Multinational Companies (Developers)!
• Less knowledge in procurement process under PPP model.
• BOT act does not make sufficient coverage to attract the foreign investment.
- Silence in Viability Gap Funding!

(Making difficulty to proceed GON Priority Project if the project viability is less!)
Lesson learned till to date from the Project:

- Public Sentiment!
  - Resistance to the proposed toll tax.
  - Attention is not given to the fact that Investment (Loan) should be repaid with principal and interest. This is recovered from the Toll paid by end user.
  - Long term commitment.
  - Any risk associated with the Concessionaire will be converted into cost through Insurance, contingency.

Risk Sharing should be transparent.
Lesson learned till to date from the Project:
Risk Sharing should be transparent.

In the Project:
MRG + Equity Support risk – GON

Anticipated Risk for GON:
• Band, Strikes affecting the project could lead to delay in completion.
• Significant Amount to be paid as shortfall if the target MRG is not met from TOLL during operation.
Lesson learned till to date from the Project:

Risk Sharing should be transparent.

In the Project:

**Design, Construction, Operation, Maintenance Risk – Concessionaire**

Anticipated Risk for Concessionaire:

- Cost associated with the inaccuracy in design, quality.
- Cost overrun quoted by EPC.
- The fraction of amount / events that do not cover by insurance.
Thank You.
Queries