

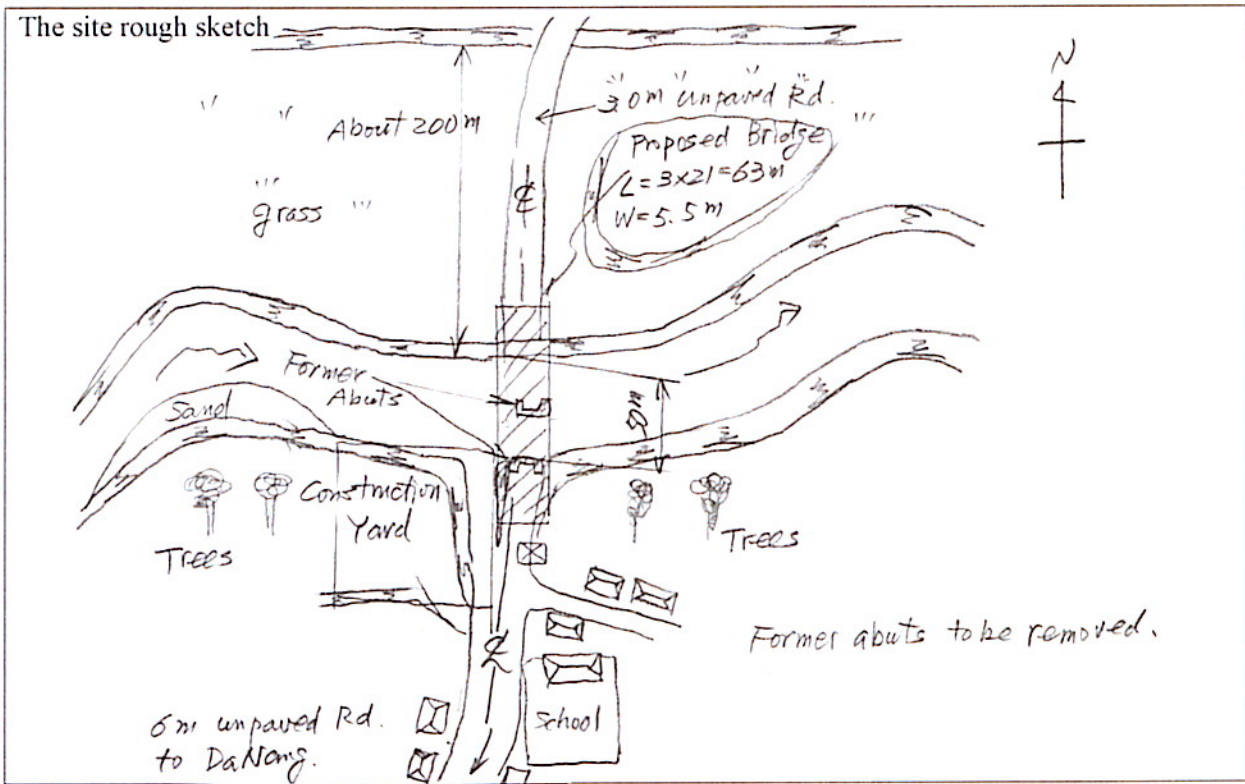
N. 27 Hoi Phuoc Bridge – Component A

(Da Nang City)

Site Information

- 1) The former bridge (length 20m only) was built on straight stream on winding river. Abutments on right bank and some part of left bank abutment (at present in the river) are left on the site. On right bank houses are built up on both sides of approach road, while on left bank no houses on higher land in river area. Therefore the former bridge location is most suitable for crossing point of the new bridge. The bridge length will be $3 \times 21 = 63\text{m}$ in order to cover river width of 50m. Width=5.5m.
- 2 HHWL=Abut on right bank+1.0m, HWL= ditto - 0.5m, LWL = ditto - 4.5m. Freeboard:0.5m.
- 3) Only one small hut on right bank approach road shall be removed.
- 4) No utilities will be relocated.
- 5) The construction yard will be located at small forest on right- upstream corner from the new bridge.
- 6) Access road to the bridge site is at present available only from right bank. The width of right access road has 6m, however surface is not good.

The site rough sketch



Picture 1: To look the right bank on proposed bridge center line

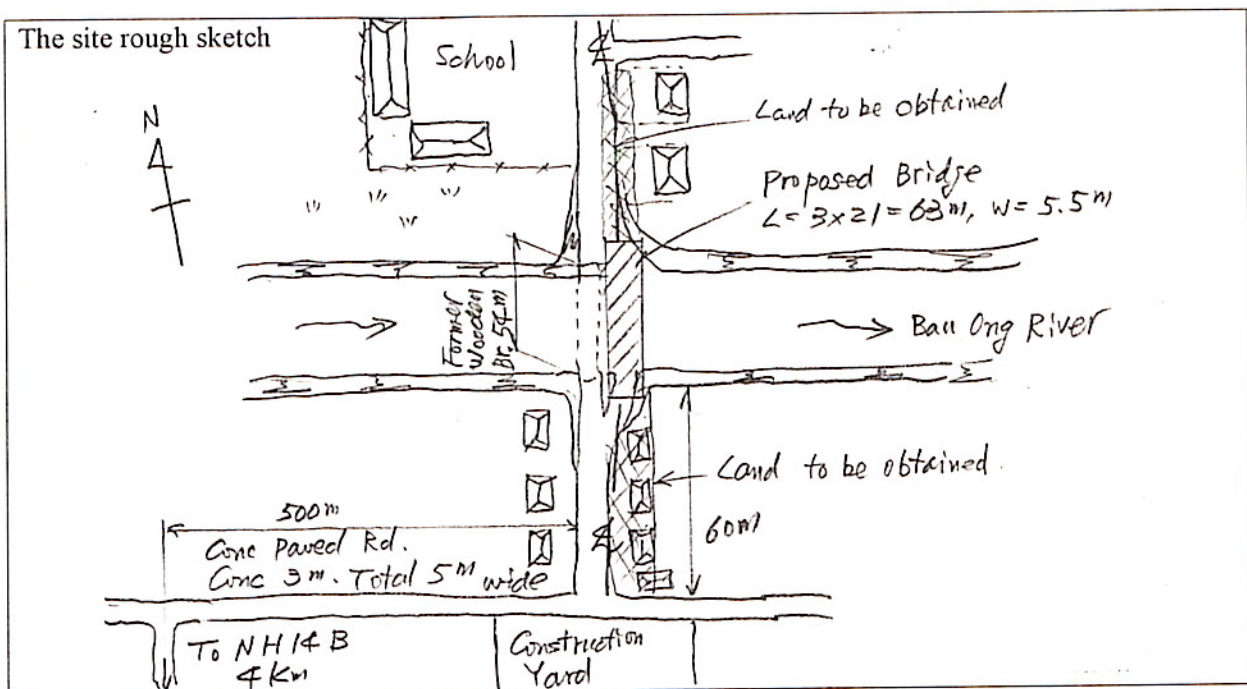


Picture 2: From the downstream

No. 35 Dai Loi Bridge – Component A

(Quang Nam Province)

Site Information
1) There was a wooden bridge at the 1 st bridge survey in August. However the bridge was washed away by the flood of Oct 22. Generally the wooden bridge is being replaced yearly.
2) The highest flood level of 1999 = bridge surface + 3.5m. Flood level of every year = bridge surface + 3.0m. For 50 to 100 days impassable per year. Freeboard:0.5m.
3) The proposed bridge will be built downstream side next to existing bridge. The length of bridge will be $3 \times 21 = 63$ m and width will be 5.5m.
4) Several houses on right bank access (downstream side) shall be removed for construction. Low voltage electric cable on river and right bank shall be relocated.
5) Construction yard shall be located at the open space on right bank. PC girders produced at the construction yard will be pulled on right bank access to the erection point.
6) Right bank access is 3m concrete pavement (total road width: 5m). It has a 90 degree bend, therefore the bend shall be widened.



Picture 1: On proposed bridge center line from left bank to right bank



Picture 2: Access road on right bank is narrow, 3m only. Several houses on downstream (right side of photo) shall be removed.

No. 36 Da Dung Bridge – Component A -

(Binh Thuan Province)

Site Information

- 1) Since this bridge connects the residential area with administration center in Ham Tan Commune as well as Ham Tan District with Tan Hai District, which is featured fishery production, the traffic volume on the bridge is very high.
- 2) The existing bridge was built in the 1960s. Since one pier was swept away due to flood in 1999, temporary pier was built of gabions. The load of a vehicle is limited to 13 ton.
- 3) H.W.L. is assumed to be 1.0 m over the bridge surface in 1999 according to the interview result
- 4) An access road on the right bank connecting with NR55 has been already upgraded with 7m in width and asphalt pavement. The access road on the left bank is upgrading and will complete to Ha Tai within 2001.
- 5) The new centerline will be around 15m upstream side from the existing one. The proposed bridge will be longer, around 90m in the total length with 3span of 30m girder, because abutments at both banks will be set back around 7-8m.
- 6) Although the proposed bridge will cause resettlement of eight houses on the left bank, the province has already negotiated with affected people and they have agreed to move from the existing position.
- 7) The electrical line should be shifted for construction. The water pipe(ϕ 250) will be shifted to the new bridge. The construction yard will be available on the upstream side of right bank.
- 8) The application of a pre-tension PC girder will be considered because of good access to the site and lack of the availability of construction yard for girder fabrication.

The site rough sketch

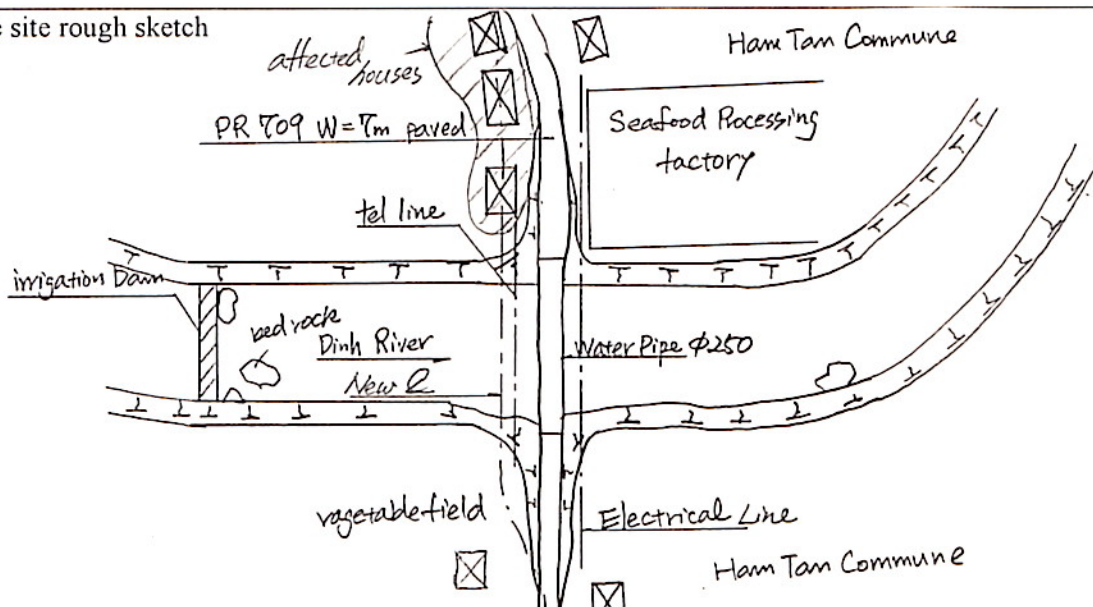


Photo 1 : Existing Bridge



Photo 2: Existing Bridge