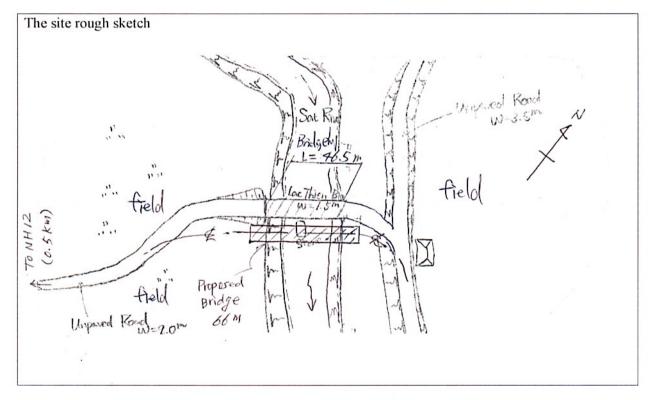
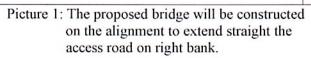
No.18 Lac Thien Bridge - Component A

Site Information

- 1) Existing bridge is suspension bridge for pedestrian. Length of bridge (between 2 towers) is 46.5m and width is 1.5m.
- 2) HHWL= bridge surface+1.0m, HWL= bridge surface-0.2m, LWL= bridge surface-9.0m. Freeboard:1.0m required.
- 3) The proposed bridge will be built 10 to 15m downstream, extending the right bank access straight to the bridge. Length will be 18+27+18=63m, and width is 5.5m.
- 4) No houses to be removed and no utilities to be relocated.
- 5) Construction yard will be located on the area, right bank, downstream.
- 6) Access road (from NH12 on right bank is 2.0m earth road (0.5km long) shall be widened in field.





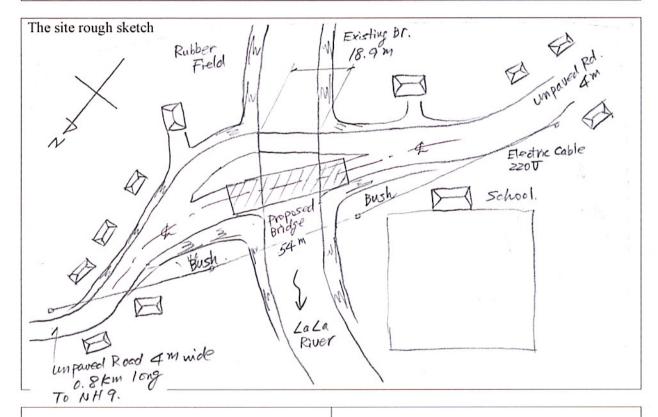




Picture 2: The existing bridge from left bank

Site Information

- 1) Existing bridge is 18.9m long 2.6m wide steel girder.
- 2) HHWL= bridge surface+3.0m, HWL= bridge surface+1.0m, LWL= bridge surface-2.5m. Freeboard:1.0m.
- 3) The proposed bridge will be built on existing riverbed road. The existing bridge (only for light vehicles and pedestrian) will be demolished and temporary bridge (for trucks as well) will be erected, since the space is quite limited. Proposed bridge will be 3x18=54m long and 5.5m wide. Steel girders are designed due to very limited working space on the site.
- 4) No houses will be removed and no utilities relocated.
- 5) Construction yard will be located on very limited space on road and open space behind the school.
- 6) Access from NH1. 1km is 60.m paved road, remaining is 4.0m unpaved.







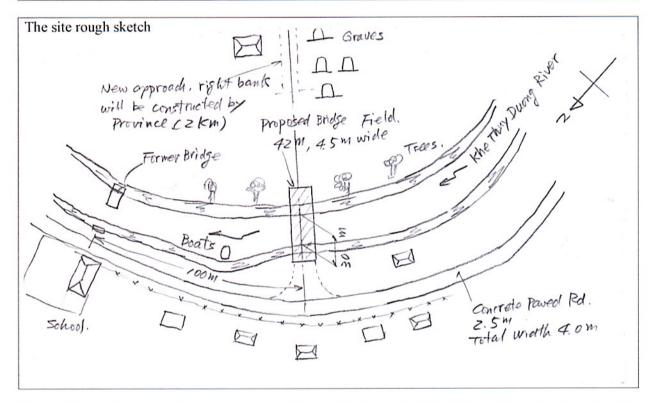
Picture 1: The existing bridge from right bank

Picture 2: From left bank

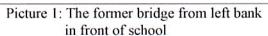
No.26 Khe Duong Bridge - Component A

Site Information

- 1) Former bridge was destroyed by the flood in 1999.
- HHWL=left bank road surface + 2.0m, HWL= left bank road surface+1.0m, LWL= left bank road surface=3.0m. Freeboard:0.5m.
- 3) Since the position of an old bridge is in a river curvilinear part, and in front of school, it is not desirable. The location 100m upstream is recommended. River width = 30m. There is a space for approach road on left bank. On right bank there are houses and cemetery. Proposed bridge will be 2x21=42m, width is 4.5m (Commune Road).
- 4) No houses will be removed. Low voltage electric cable will be relocated.
- 5) Construction yard will be located on left bank space between the river and the road.
- 6) Access road on left bank (2km from NH1) is 2.5m week concrete pavement (total width=4.0m). District has a plan to construct new road on right bank.









Picture 2: The proposed left bank approach and construction yard on left bank