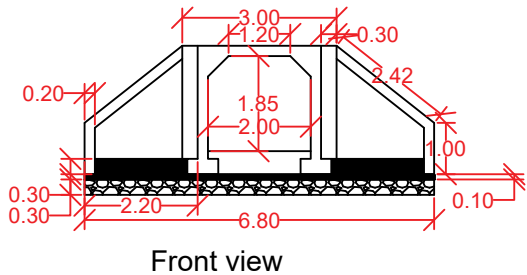
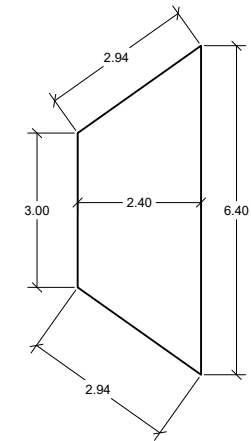
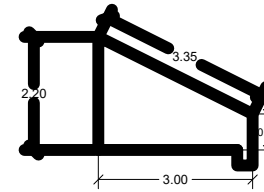
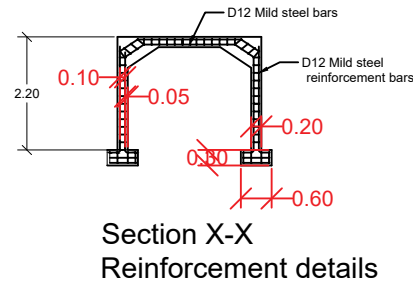
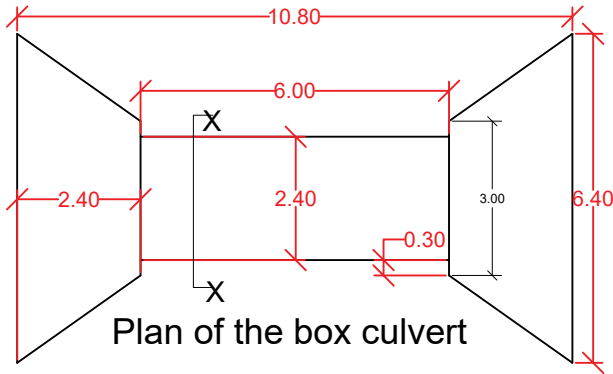


# Tabani river crossing in Tembelea - Matisi road

## Proposed small span box culvert



### EXCAVATION AND CONCRETE VOLUMES

ESTIMATED EXCAVATION VOLUMES FOR THE STRUCTURE.					
	AREA	VOLUME	No.	TOTAL AREA	TOTAL VOLUME
APRONS	11.28	22.56	2	45.12	90.24
BED	3	6	6	18	36
TOTAL ESTIMATED EXCAVATION VOLUMES FOR THE STRUCTURE.					126.24
ESTIMATED EXCAVATION VOLUMES FOR THE STRUCTURE.					
APRONS	11.28	2.933	2	22.56	5.866
BED	3	0.78	6	18	4.68
WINGWALLS	4.35	1.131	4	17.4	4.524
ABUTMENT WALLS	13.2	3.432	2	26.4	6.864
Decking	18	4.68	1	18	4.68
Total Volume of concrete required for the structure					26.614

### REINFORCEMENT BARS

	Bar size	Unit length (m)	No. of bars	Total length (m)
WINGWALLS	D12	3.00	72	264
		1.45	176	243.6
APRONS	D12	4.7	68	319.6
		2.4	128	307.2
BED	D12	6.0	34	204
		2.4	82	196.8
ABUTMENT WALLS	D12	6	64	384
		2.2	164	360.8
Decking	D12	6	34	204
		2.4	82	196.8
Total length of steel required for the structure			0.889kg/m	2,680.8
Total weight of steel required for the structure				2,383.2kg

### NOTES:

1. ALL DIMENSIONS ARE IN METERS UNLESS STATED.
2. REINFORCEMENT TO BE AS PER THE BRITISH STANDARDS
3. HARDCORE TO BE OF GOOD SELECTED MATERIAL
4. REINFORCEMENT SHOULD BE PLACED 150MM C/C
5. EXCAVATION DEPTH WILL BE DETERMINED ON SITE.
6. PAYMENT OF THE WORKS WILL BE DONE BASED ON MEASURED WORKS.

CLIENT: KCEP-CRAL

DRAWN BY

TABANI RIVER CROSSING  
IN TONGAREN SUB COUNTY

NOVEMBER 2018

MINISTRY OF AGRICULTURE,  
LIVESTOCK FISHERIES AND IRRIGATION

D. S TELIENY (P.Eng. Techn)

PROPOSED SMALL SPAN BOX CULVERT

**NAIMA  
WAREHOUSE**

DRWG NO. 001/2018