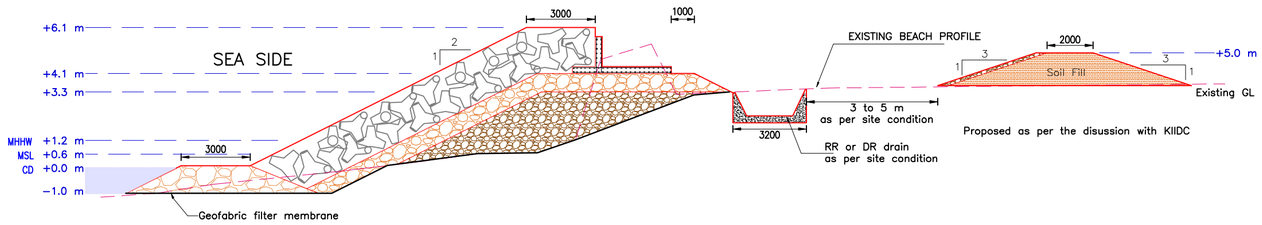
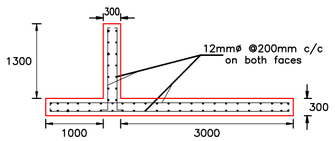
DRAWING–A



Typical Cross Section for Seawall at 1m Water Depth and 2m scour allowance

(SCALE 1:250)



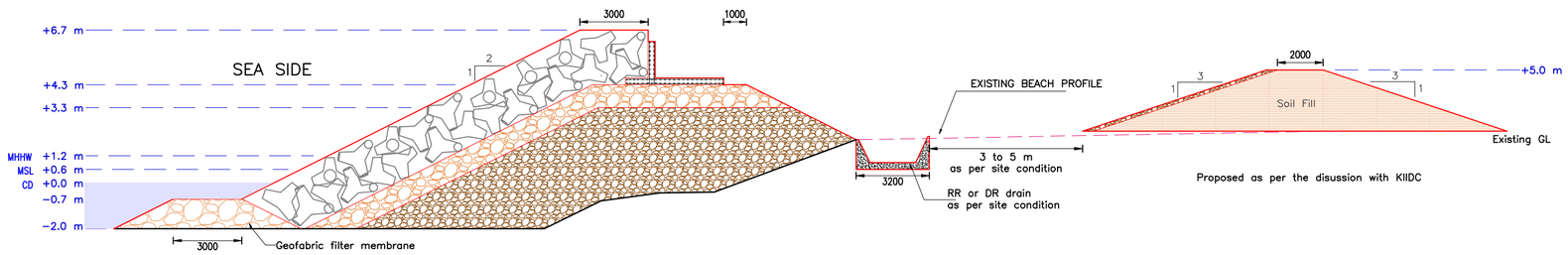
Walk Way Detail–A

(SCALE 1:100)

LEGEND–A

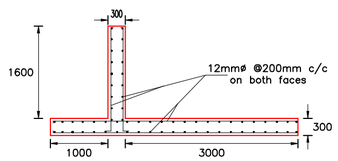
- 2t Tetrapod–2m thick
- Soil Fill
- 200–400 kg Stones–1.3m thick
- 150–200 kg Stones–1.0m thick
- 10–50 kg Stones Core layer

DRAWING–B



Typical Cross Section for Seawall at 2m Water Depth and 2m scour allowance

(SCALE 1:250)



Walk Way Detail–B

(SCALE 1:100)

LEGEND–B

- 3.5t Tetrapod–2.4m thick
- Soil Fill
- 350–700 kg Stones–1.3m thick
- 250–350 kg Stones–1.0m thick
- 10–50 kg Stones Core layer

Notes

1. All dimensions are in millimeter
2. All levels are in meters and referenced to CHART DATUM (CD).
3. Cement used should be suitable for marine environment.
4. Minimum grade of concrete M30 may be used for casting Tetrapods.
5. The tetrapods should be made from a coastal concrete design mix with a high content of cement and hard aggregate for durability.
6. Tetrapods shall be placed in 2 layers in the armour layer with minimum 3 numbers at the crest.
7. A slope of 2:1 is considered for both Sea ward and leeward side of sea wall.
8. Transportation and re–handling of precast armour units (Tetrapods) needs to be carefully planned to ensure that units do not get damaged.
9. The stones used in each layer shall confirm to the gradation provided.50% of the stones used in each layer should weigh more than the average of the weight range specified for that layer.
10. The stones used shall be angular with specific gravity of 2.65 t/m^3 and shall be placed in a random manner in 2 layers.
11. A layer of geofabric filter should be provided at the base.
12. The design has been done considering the critical profile at the location. If at any location, the existing land profile is lower than the considered design the core layer shall be extended till the existing ground level.
13. Bedding materials should be placed with care on geotextiles to prevent damage to the fabric from the bedding materials.
14. Geotechnical investigation and bathmetry profile should be done at appropriate location before execution of work.
15. Conisdered Design parameters as per by drawing provided by KIIFB for vetting.

DESCRIPTION	DWG–A	DWG–B	UNITS
Water depth	1.0	2.0	m
Mean high water level	1.2	1.2	m
Storm Surge	0.49	0.49	m
Scour allowance	2.0	2.0	m
Total depth, d	4.69	5.69	m
Hs(0.45d)	2.11	2.47	m
Design Wave Height H1/10(1.27*Hs)	2.68	3.1	m
Allowable runoff	5.0	5.0	%

ONLY DRAFT & NOT ISSUED FOR CONSTRUCTION

CLIENT:	KERALA INFRASTRUCTURE INVESTMENT FUND BOARD. (KIIFB)	
PROJECT:	VETTING OF SEA WALL DESIGN FOR CHELLANAM COAST, KERALA	
DRAWING TITLE:	SEAWALL LAYOUT	SCALE AS SHOWN
DRAWING NO:	NCCR – SHEET 1	REV: 01
CONSULTANT:	NATIONAL CENTRE FOR COASTAL RESEARCH, NCCR	