GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLMETRES.

2. ALL LEVELS REFER TO PRINCIPAL DATUM (PD) AND IN METRES.

3. THESE SEAWALL DETAILS ARE FOR REFERENCE ONLY. DETAILS AND DIMENSIONS OF WALL MEMBERS, LIFTING HOOKS, CONCRETE SEAWALL BLOCKS, TOE PROTECTION, EXTENT OF BERMSTONES ON RUBBLE MOUND, SLOPE OF RUBBLE MOUND, FILTER LAYER ETC. ARE SUBJECT TO DETAILED DESIGN.

4. FILTER LAYER SHALL BE PROVIDED BEHIND 18000 INTERVAL VERTICAL JOINT.

5. THE COPE LEVEL IS SUBJECT TO PROJECT REQUIREMENTS.

6. CONCRETE FOR REINFORCED CONCRETE ELEMENTS SHALL BE GRADE 45 IN ACCORDANCE WITH THE RECOMMENDED SPECIFICATION FOR REINFORCED CONCRETE IN MARINE ENVIRONMENT.

7. CONCRETE FOR SEAWALL BLOCKS, COPING AND BACKING SHALL BE GRADE 20/20.

8. DETAILS OF CONCRETE SEAWALL BLOCKS ARE SHOWN ON DRAWING C30101 TO C30106.

9. CONCRETE FINISHES SHALL BE AS FOLLOWS:
   EXPOSED : U3 OR F3
   BURRIED : U2 OR F2

10. STRUCTURAL DESIGN SHALL BE CARRIED OUT TO DETERMINE THE SIZES OF WALL MEMBERS AND AMOUNT OF STEEL REINFORCEMENT.

11. THE WAVE ABSORBING SEAWALL IS DESIGNED TO REDUCE SHORT PERIOD WAVES RANGED FROM 2S TO 5S.

12. THE POROSITY SHALL BE BETWEEN 22% AND 26% AND IS CALCULATED AS BELOW:

$$= \frac{\text{ACTUAL AREA OF THE PERFORATIONS}}{\text{TOTAL AREA OF THE FRONTWALL BETWEEN THE SOFFIT LEVEL AND BOTTOM SLAB TOP LEVEL OF THE WAVE ABSORBING CHAMBER}} \times 100\ \%$$

FOR EXAMPLE, FOR THE SEAWALL IN THIS DRAWING, POROSITY.

$$= \frac{24 \times 0.65^2 / 4 \times \pi}{(3.65 - (-3.2)) \times 4.5} \times 100\ \%$$

$$= 25.8\ \%$$

13. CAT LADDER, HANDRAIL, HOOK, STEP IRON AND CHAIN SHALL BE GRADE 1.4401 STAINLESS STEEL.

14. PROTECTIVE COATING SHALL BE APPLIED TO REINFORCED CONCRETE AT TIDAL AND SPLASH ZONES. COATING APPLIED ON THE FRONTAL SURFACE OF THE SEAWALL SHALL BE TRANSPARENT.

15. SUBJECT TO PHYSICAL MODEL TESTING, THE DESIGNER CAN DESIGN ALTERNATIVE LAYOUT TO SUIT PROJECT REQUIREMENTS.

REF.	REVISION	SIGNATURE	DATE
A	NOTES 13 AMENDED.	Original Signed	03.2015

WAVE ABSORBING SEAWALL

(SHEET 8 OF 8)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE	DRAWING NO.
DATE OCTOBER 2004	C3017 / 8A