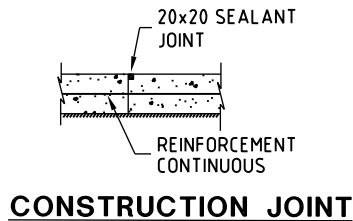


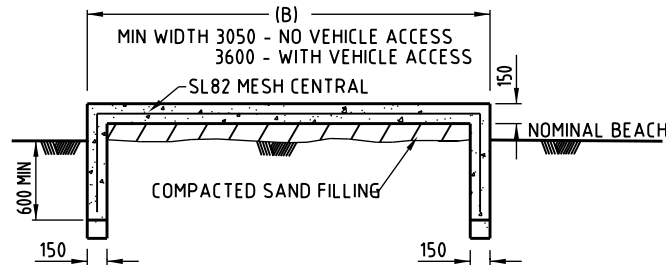
**INFORMATION:**

GOLD COAST CITY COUNCIL APPLICATION FOR APPROVAL OF FORESHORE STRUCTURES IS REQUIRED FOR ALL BOAT RAMP CONSTRUCTIONS. FOR FURTHER INFORMATION CONTACT COASTAL WORKS AND CITY CLEANING BRANCH. PH. 5581 6433.

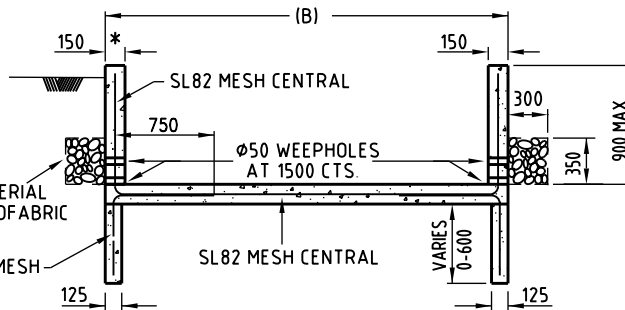
SECTION 86 APPROVAL FROM DEPARTMENT OF ENVIRONMENT IS REQUIRED FOR ALL BOAT RAMPS CONSTRUCTED IN TIDAL WATERWAYS.



**SECTION ON Q**

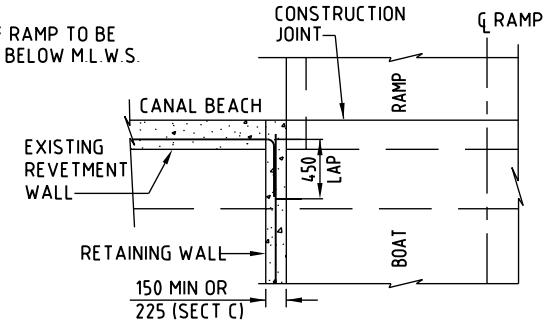


**SECTION B-B**



**SECTION C-C**

DETAILS TO BE COMPLETED		
LENGTH	(A)	
WIDTH	(B)	
SLOPE	(C)	
RL. TOP OF WALL	(D)	
RL. RAMP AT WALL	(E)	
RL. TOE OF RAMP	(F)	



**DETAIL A**

**NOTES:**

1. CONCRETE STRENGTH TO BE GRADE N40.
2. SURFACE OF RAMP TO BE ROUGH FINISHED AFTER INITIAL SET TO INHIBIT FORMATION OF A SLIPPERY SURFACE.
3. THE RAMP SURFACE IS TO BE WITHIN 200mm OF THE NATURAL SURFACE LEVELS WHEREVER POSSIBLE. FOR EXISTING CANALS THE NATURAL SURFACE IS CONSIDERED TO BE THE ORIGINAL DESIGN PROFILE OF THE BEACH.
4. SIDE AND EDGE WALLS TO EXTEND AROUND RAMP TO A DEPTH OF 600mm BELOW NATURAL GROUND LEVEL TO PREVENT SCOUR.
5. OPTIMUM RAMP GRADE IS 1:8 TO 1:10, HOWEVER SLOPES AS STEEP AS 1:6 ARE ACCEPTABLE PROVIDED THE SURFACE IS GROOVED OR RIDGED. STEEPER SLOPES WILL REQUIRE OPERATION BY WINCH. STEPS ARE DESIRABLE ADJACENT TO STEEP RAMPS.
6. THIS RAMP DESIGN ASSUMES GOOD SAND FOUNDATIONS EXIST. IN POOR OR CLAYEY GROUND CONDITIONS, AN ENGINEER'S DESIGN WILL BE REQUIRED.
7. GALVANISED REINFORCEMENT IS RECOMMENDED.
8. THIS DRAWING ASSUMES RETAINING WALLS ARE REINFORCED CONCRETE. ALTERNATIVE RETAINING WALLS (BLOCKS, SLEEPER, ETC.) WILL REQUIRE ENGINEERING DETAILS TO BE APPROVED BY COUNCIL.
9. GRANULAR BACKFILL BEHIND WEEPHOLES TO BE WRAPPED IN GEOFABRIC.
10. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
11. THE GRANTING OF APPROVAL FOR THIS WORK BY COUNCIL DOES NOT PRECLUDE THE NEED TO OBTAIN ANY FURTHER APPROVALS WHICH MAY BE REQUIRED BY LEGISLATION. EG. A PERMIT TO CUT MARINE PLANTS OR FOR WORKS IN A MARINE PARK OR WETLAND RESERVE.



Gold Coast City Council

PO BOX 5042 GOLD COAST MC 9729

THIS DRAWING IS NOT TO BE AMENDED WITHOUT REFERENCE TO STANDARDS COMMITTEE		CONTROLLED DOCUMENT	DO NOT SCALE TAKE FIGURED DIMENSIONS ONLY	
No.	AMENDMENT	APPROVED	DATE	ISSUED

DRAWN BY TECHNICAL SERVICES BRANCH	
PASSED	18/03/04
APPROVED	18/03/04

STANDARD DRAWING	MICROFILMED
CONCRETE BOAT RAMP RESIDENTIAL USE ONLY	STANDARD DRAWING No. 05-04-005
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