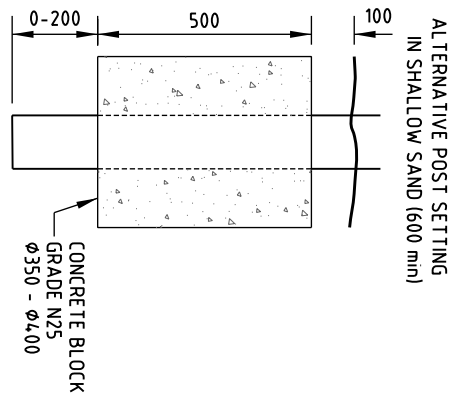
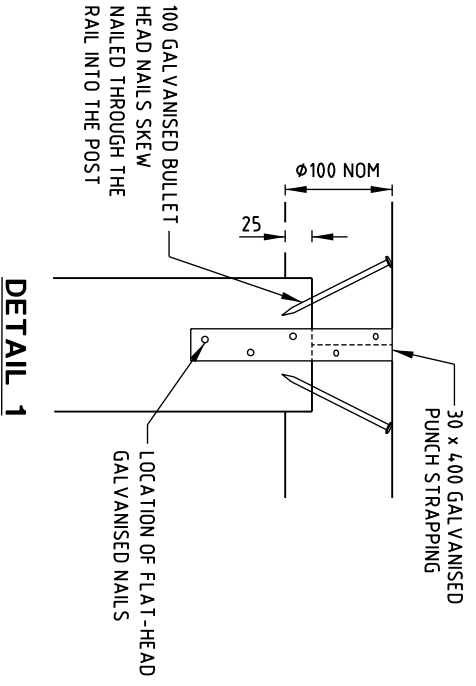


DUNE PROTECTION FENCE



NOTES:

1. STAPLES SHALL BE LOCATED AT 90° TO THE TIMBER GRAIN
2. KNITTED GREEN SHADE FABRIC SHALL BE LOCATED AND STAPLED ON THE SEAWARD SIDE OF THE FENCE.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

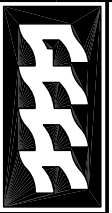
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CONTROLLED DOCUMENT

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Gold Coast City Council

GOLD COAST CITY COUNCIL
GOLD COAST, QLD 9729

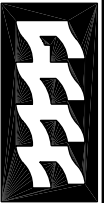
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|---------------------------|--------------------|----------|
| TECHNICAL SERVICES BRANCH | <i>[Signature]</i> | 18/03/04 |
| PASSED | <i>[Signature]</i> | 18/03/04 |
| APPROVED | <i>[Signature]</i> | 18/03/04 |

DUNE PROTECTION FENCE

STANDARD DRAWING No. **05-04-003**

ISSUE 2005 EDITION



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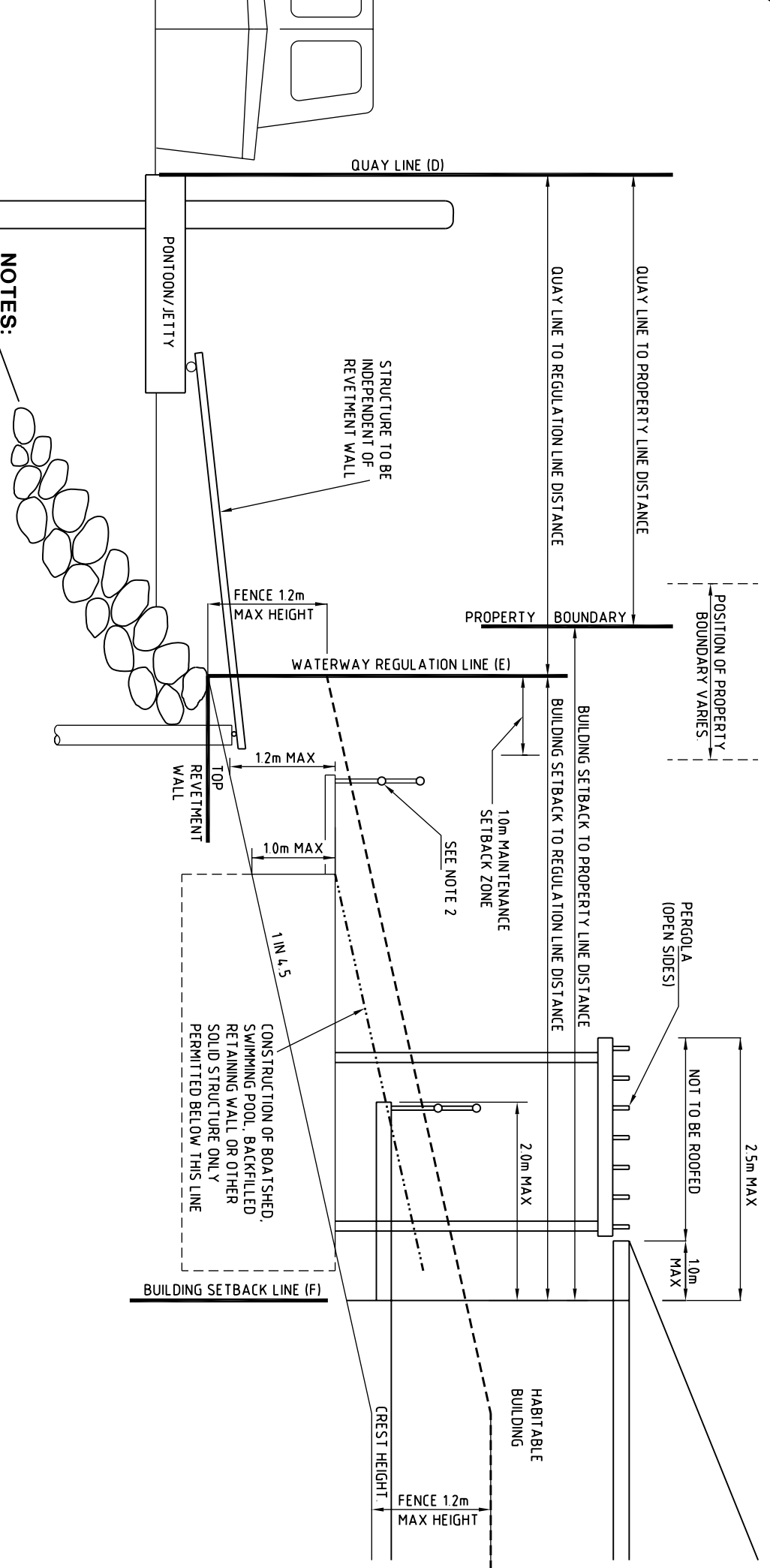
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| DRAWN BY | TECHNICAL SERVICES BRANCH | 18/03/04 |
| PASSED BY | <i>[Signature]</i> | 18/03/04 |
| APPROVED BY | <i>[Signature]</i> | 18/03/04 |

STANDARD DRAWING
WATERWAY DEVELOPMENT
CROSS SECTION

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 STANDARD DRAWING No.
05-04-004
 ISSUE
 2005 EDITION

- NOTES:**
1. UNDERTAKE A WATERFRONT SEARCH FOR THE POSITION OF QUAY LINE (D), WATERWAY REGULATION LINE (E) AND BUILDING SETBACK LINE (F).
 2. SWIMMING POOL FENCING ABOVE THE 12m LIMIT MUST BE OF AN APPROVED OPEN NATURE.
 3. WATER FRONT AND SIDE FENCES ARE TO BE OF AN APPROVED OPEN CONSTRUCTION





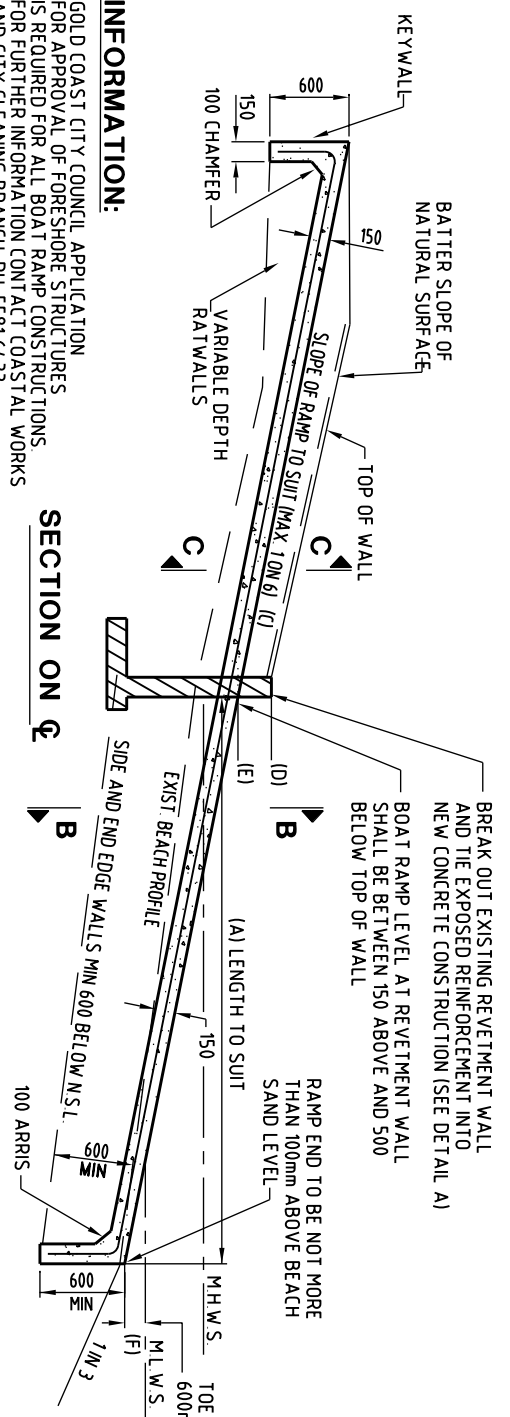
Gold Coast City Council
PO BOX 5542
GOLD COAST, Q.C. 9729

INFORMATION:

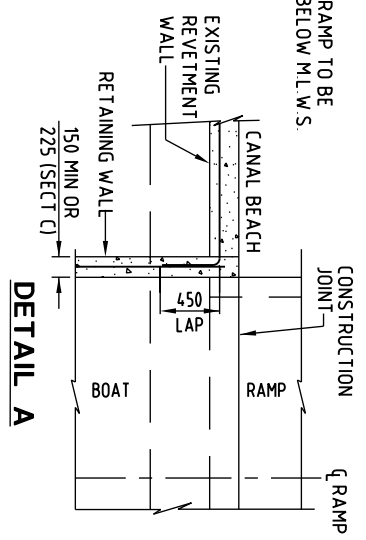
GOLD COAST CITY COUNCIL APPLICATION FOR APPROVAL OF FORESHORE STRUCTURES IS REQUIRED FOR ALL BOAT RAMP CONSTRUCTIONS. FOR FURTHER INFORMATION CONTACT COASTAL WORKS AND CITY CLEANING BRANCH, PH. 5581 6433.

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

SECTION ON Q-Q



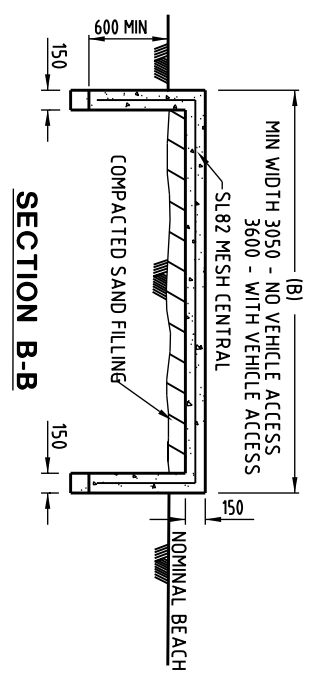
| DETAILS TO BE COMPLETED | |
|-------------------------|-----|
| LENGTH | (A) |
| WIDTH | (B) |
| SLOPE | (C) |
| R.L. TOP OF WALL | (D) |
| R.L. RAMP AT WALL | (E) |
| R.L. TOE OF RAMP | (F) |



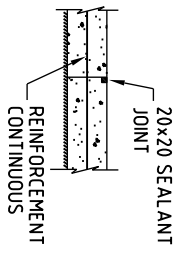
NOTES:

1. CONCRETE STRENGTH TO BE GRADE N4.0.
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 GEO-FABRIC.
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.

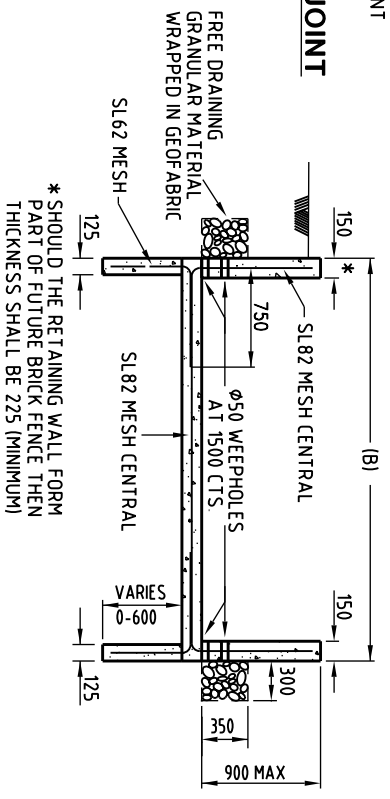
SECTION B-B



CONSTRUCTION JOINT



SECTION C-C



* SHOULD THE RETAINING WALL FORM PART OF FUTURE BRICK FENCE THEN THICKNESS SHALL BE 225 (MINIMUM)

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STANDARD DRAWING

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05-04-005
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