一、填表資訊

|  |  |
| --- | --- |
| 填表員工編號 |  |
| 填表員工姓名 |  |
| 填表時間 |  |

二、設計條件

|  |  |
| --- | --- |
| 深海波波向(16方位) |  |
| 海側方向(左/右) |  |
| 深海波波高(m) |  |
| 深海波週期(sec) |  |
| 設計潮位(m) |  |
| 海床波度 |  |
| 折射係數 |  |
| 淺化係數 |  |
| 繞射係數 |  |
| 波力折減係數 |  |
| 入射波與堤體法線之垂向夾角(未修正) |  |
| 入射波與堤體法線之垂向夾角(修正後) |  |
| 地面線(m) |  |
| 消波塊高程(m) |  |

三、外力計算

1. 水深條件

|  |  |
| --- | --- |
| (m) |  |
| (m) |  |
| (m) |  |
| (m) |  |

2. 有義波高及最大波高

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 概算係數 | | | 概算係數 | | |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

|  |  |
| --- | --- |
| 有義波高(m) |  |
|  |  |
|  |  |
| (m) |  |
| 最大波高(m) |  |

3. 波壓強度係數

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |

4. 液壓作用高度

|  |  |
| --- | --- |
|  |  |
|  |  |

5. 波壓力計算

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 分區 | 波壓強度  P(t/m2) | 波壓  FP(t/m2) | 力矩  Y(m) | 傾倒彎矩  Mp(t-m/m) |
|  |  |  |  |  |
| 合計 | ---- |  | ---- |  |

6. 揚壓力計算

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |

7. 堤體自重及抵抗彎矩

堤體自重

抵抗彎矩

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 分區 | 型塊名稱 | A  (m2) | Y  (t/m3) | W  (t/m) | X  (m) | Mw  (t-m/m) |
|  |  |  |  |  |  |  |
| 合計 | --- | --- | --- |  | --- |  |

四、堤體安定檢查

|  |  |  |
| --- | --- | --- |
| 1. 滑動 |  |  |
| 2. 傾倒 |  |  |

五、消波工重量計算

1. 堤身段(港外側)

|  |  |
| --- | --- |
| 消波形塊安定係數 |  |
| 消波塊單位體積重量 |  |
| 消波塊斜坡面與水平面之夾角 |  |
| W1(ton) |  |

2. 堤頭部加強

|  |  |
| --- | --- |
| 消波形塊安定係數 |  |
| 消波塊單位體積重量 |  |
| 消波塊斜坡面與水平面之夾角 |  |
| W2(ton) |  |

3. 堤身段(航道側)

|  |  |
| --- | --- |
| 消波型塊安定係數 |  |
| 消波塊單位體積重量 |  |
| 消波塊斜坡面與水平面之夾角 |  |
| 波高傳遞率 |  |
|  |  |
|  |  |
|  |  |
|  |  |
| W3(ton) |  |

六、胸牆部安定檢核

1. 滑動SF檢核

|  |  |
| --- | --- |
| 滑動SF |  |
| 混凝土容許應力 |  |
|  |  |
| 採用 |  |
| 胸牆EL值(以上) |  |

2. 傾倒SF檢核

|  |  |  |
| --- | --- | --- |
| 傾倒SF |  |  |

七、地盤反力及承載力檢核

1. 設計條件

|  |  |
| --- | --- |
| 土壤凝聚力() |  |
| 內摩擦角() |  |
|  |  |
|  |  |
|  |  |
| () |  |
| () |  |
| () |  |
| () |  |

2. 堤體底部反力(單位長度)

|  |  |
| --- | --- |
| 堤寬() |  |
| () |  |
| 作用合力位置() |  |
| 偏心矩() |  |
| 堤底作用力寬 |  |
| 最大反力 |  |
| 最小反力 |  |

3. 基礎拋石底部反力

|  |  |
| --- | --- |
| 拋石單位重 |  |
| 入土深度 |  |
| 拋石厚度 |  |
|  |  |
|  |  |
| 基礎作用力寬 |  |
| 最大反力 |  |
| 最小反力 |  |

4.地盤承載力

|  |  |
| --- | --- |
| 安全係數 |  |
| 極限承載力 |  |
| 容許承載力 |  |
| 判別 |  |