

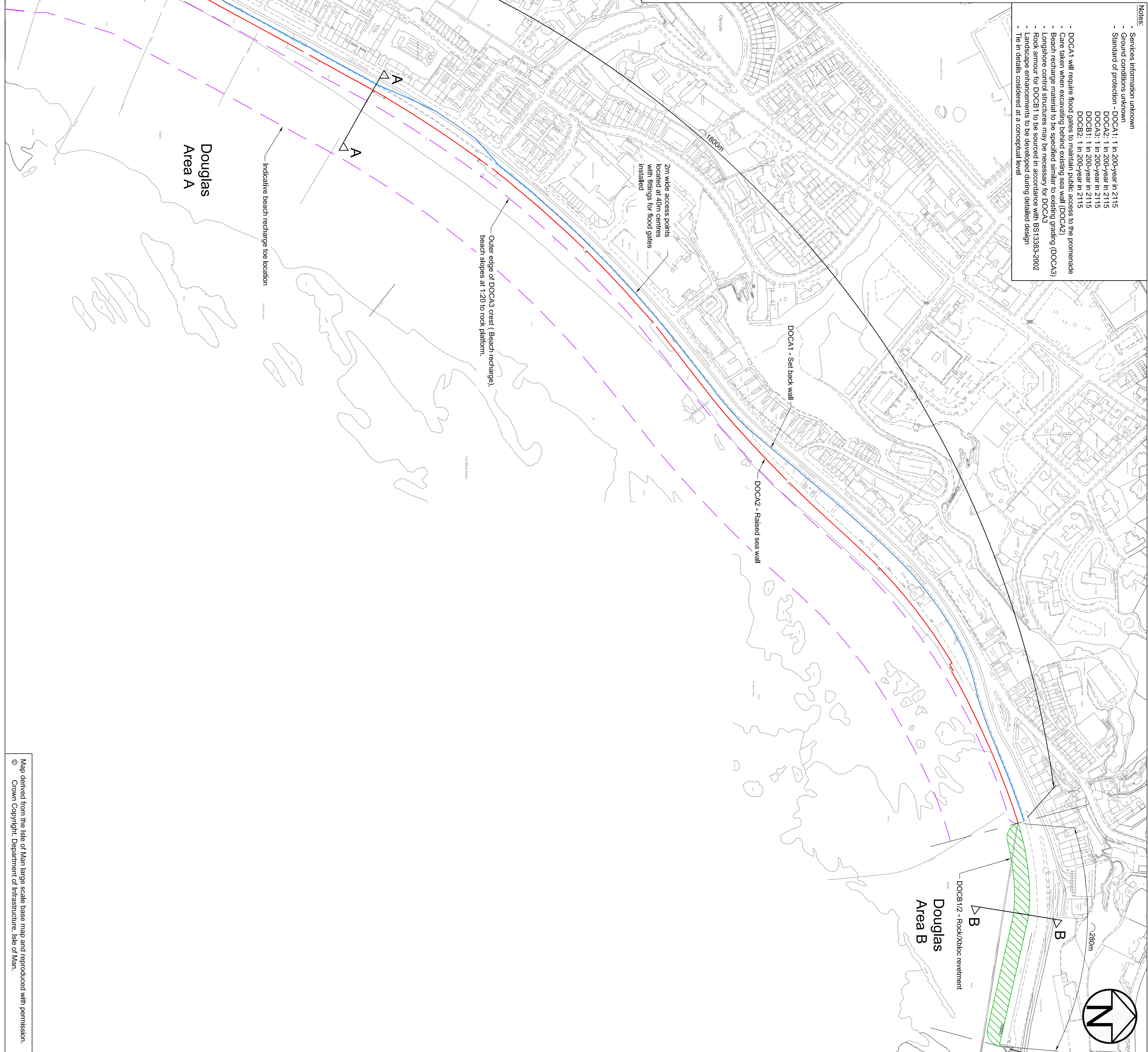
**KEY**

- DOCA1 - Set back wall
- DOCA2 - Raised sea wall
- DOCA3 - Beach recharge
- DOCB1/2 - Rock/Xbloc revetment



**Notes:**

- Services information unknown
- Ground conditions unknown
- Standard of protection - DOCA1: 1 in 200-year in 2115  
DOCA2: 1 in 200-year in 2115  
DOCA3: 1 in 200-year in 2115  
DOCB2: 1 in 200-year in 2115
- DOCA1 will require flood gates to maintain public access to the promenade
- Care taken when excavating behind existing sea wall (DOCA2)
- Beach recharge material to be specified similar to existing grading (DOCA3)
- Recharge control structures may be necessary for DOCA3
- Recharge structures to be developed during detailed design
- Longshore enhancements to be developed during detailed design
- The in details considered at a conceptual level



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- Restricted access and egress through streets around Douglas
- Working in an exposed coastal environment
- Working at height
- Unknown ground conditions
- Unknown condition and structural capacity of existing sea wall
- Services information currently unknown
- Placement of rock
- Public Intervention with rock armour/Xbloc
- Noise pollution and nuisance to residents during beach recharge pumping
- Working adjacent to public right of way
- Minimum height of wall and horizontal above ground level to be no less than 1100mm
- Risk of damage to flora and fauna
- Increased turbidity and sedimentation in dredge and disposal sites
- Pollution hazards associated with working near the sea
- Risk of damage to flora and fauna

**Construction Risks**

In addition to the hazards listed normally associated with the types of work detailed on this drawing, the contractor shall be responsible for the identification of any other risks. It is assumed that all works detailed on this drawing will be carried out by a competent contractor working, where appropriate, to an appropriate method statement.

**Public Risks**

**Environmental Risks**

- General Notes**
1. All dimensions shown are in metres unless otherwise stated and levels are in metres to Douglas2 Datum.
  2. Do not scale from this drawing. All dimensions must be checked/verified on site.
  3. Drawing to be read in conjunction with IOM-JBA-D-OC-DR-C-02 & -03
  4. All works affecting flood defences, main watercourses and/or ordinary watercourses Drainage Act 1991. The contractor shall ensure that all works are carried out in accordance with the guidance only. The Contractor will confirm the location of any services prior to the commencement of any works.
  5. The electronic model of this drawing is not to be used for setting out.
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Comments	Rev.	Date	Drawn	Designed	Checked	Approved
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Client Approval	Rev.:	Date	Drawn	Designed	Checked	Approved
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**ISLE OF MAN GOVERNMENT - SEA DEFENCE OPTIONS**

**DOUGLAS OPEN COAST PLAN**

for

**ISLE OF MAN GOVERNMENT DEPARTMENT OF INFRASTRUCTURE**

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