ANTICIPATED SLIPWAY CONSTRUCTION SEQUENCE

STAGE 1:

- Removal of existing seabed and foreshore material to correct level.
- Fill material placed and compacted, trimmed to correct level.

STAGE 2:

- Excavation of rock to form trench for toe beam. Elsewhere rock armour placed to form platform for toe beam. Blinding concrete laid.
- Placement of toe beam in-situ reinforcement.
- First stage toe beam in-situ pour to correct level.
- Precast toe beam placed at correct location and level. It is anticipated that the toe beam will be moved into position using either land based lifting plant or floated into position using bag lift approach. Toe beam to be supported in temporary condition by concrete blocks or similar. Refer Figure 1.
- Second stage toe beam in-situ concrete pours.
- Support beams (Beam E) connected to toe beam and installed to correct line and level. Temporary bracing may be required to ensure this.
- Support beams haunched in concrete to secure them in position, temporary bracing may be required to ensure this. Refer Figure 2.
- Blinding concrete placed between support beams.

STAGE 3:

- Precast slipway slab placed onto support beams, and slid (under control) along beams into position. Depending on friction between precast and beams, slab may alternatively need to be pushed into position. It is anticipated that precast slab will be lifted onto support beams using land based plant. Dependant on the Contractors approach, beams may require longitudinal restraint in temporary condition.
- Longitudinal reinforcement (pre-attached to underside of precast) will extend outwith upper side of precast. Refer Figure 3.
- In-situ pour below precast units, anticipated that this will be for 2nr bays at a time. Refer Figure 3.
- Repeat of stage 2 (installation of support beams) and stage 3 until all precast units are laid into position and all in-situ pours are complete.

STAGE 4:

- Preparation, placing of reinforcement and poring of concrete for in-situ RC slab and pile guide foundations for the pontoon. It is anticipated that the precast pile guide block will be moved into position using either land based lifting plant or floated into position using bag lift approach.
- To ensure tolerances for pile guide sockets is achieved, it is envisioned that works will commence from the head of the slipway and work downhill, with a template or similar used to ensure that pile sockets are correctly aligned.

STAGE 5:

- Wheel guide installed.
- Precast cope beams installed.
- Pontoon installed.

Refer to drawing 107065-MMD-01-XX-DR-C-0166 for construction of land reclaim and revetment works.

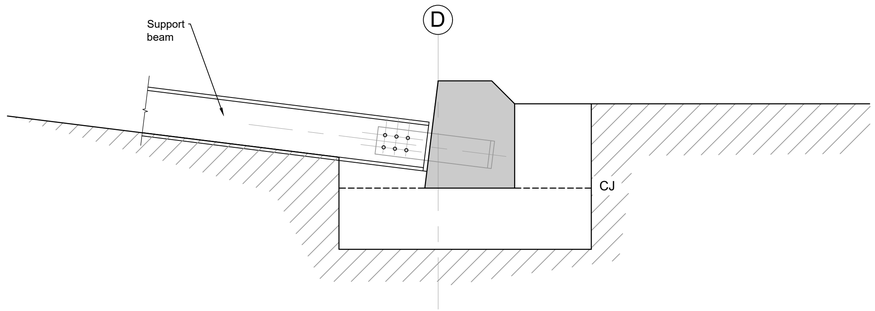

Figure 1
NTS

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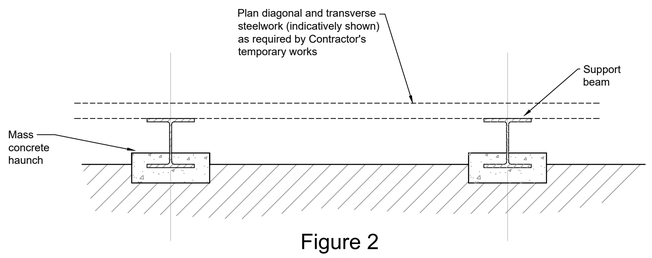

Figure 2
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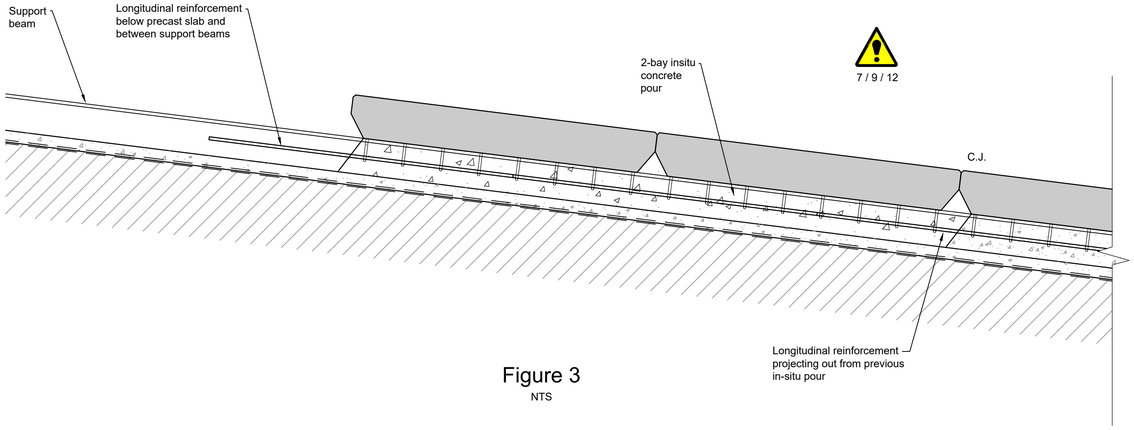

Figure 3
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SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

It is a requirement that only experienced and competent contractors carry out the work described, using a recognised safe method of working. The following are specific significant residual risks identified by the designer and are additional to those hazards/risks normally associated with this type of work.

CONSTRUCTION:

Hazard Ref.	Activity/material/ process/element	Key	Hazard Description
7	Slipway construction	7	Work exposing workers to the risk of drowning
8	Slipway construction	8	Works undertaken by divers having a system of air supply
9	Slipway construction	9	Heavy prefabricated components: Work involving the assembly or dismantling of heavy prefabricated components.
12	Slipway construction	12	Lifting hazards associated with the delivery, laydown, and installation of construction materials

OPERATIONS:

Refer drawing 107065-MMD-01-XX-DR-C-0160

MAINTENANCE:

Refer drawing 107065-MMD-01-XX-DR-C-0160

Notes

1. This drawing shall be read in conjunction with all parts of the Works Information.
2. Works shall be executed in accordance with the Specification and as set out in the Works Information.
3. The Contractor shall verify all dimensions, elevations, coordinates, and site conditions prior to execution.The Project Manager shall be notified immediately of any discrepancies encountered during execution.
4. All dimensions are in millimetres (mm) unless noted otherwise.
5. Levels are in metres relative to Chart Datum (CD) unless otherwise noted.
6. The drawing shall not be scaled. FOLLOW WRITTEN DIMENSIONS ONLY.
7. Details of existing structures and services have been taken from available record drawings and may not be complete in every detail. Details to be confirmed by the Contractor.
8. Dimensions marked with an asterix (*) shall be confirmed on site by the Contractor.
9. Access for harbour operations shall be maintained at all times. Harbour operations shall not be disrupted by the Contractor.
10. The Contractor is responsible for the temporary and permanent stability of the Works and adjacent structures during construction and shall implement necessary supports, monitor regularly, and address stability issues immediately.
11. Proprietary items shall be stored, handled, and installed in strict accordance with the manufacturer's written instructions including all COSHH data.

    Steelwork:
12. Steelwork shall be Grade S355J0 unless noted otherwise.
13. Steelwork shall be handled in a safe manner to avoid permanent distortion and surface damage.
14. Steelwork shall be protectively coated in accordance with Specification Appendix 19/5.
15. All bolts shall be supplied complete with matching washers and nuts, and be galvanized Grade 8.8 to BS 4190 unless noted otherwise.
16. All bolts shall be provided with locking devices i.e. spring washer, serrated washer, Nylok nut or accepted equivalent.
17. All welds shall be 8mm continuous fillet welds unless noted otherwise. Intermittent fillet welds shall NOT be permitted.

    Concrete:
18. Underwater concrete shall be tremied or pumped into place in a continuous operation.
19. Concrete shall not be permitted to fall through the water or air.
20. Concrete shall be placed to achieve a good quality dense concrete free from cold joints, segregation, contamination, and loss of material.
21. Concrete shall be protected from damage during its curing period.
22. Reinforcement shall be handled in a safe manner to avoid permanent distortion and surface damage.
23. Reinforcement shall be free from contamination or any substance that may reduce the bond or have an adverse chemical effect on the steel or concrete.
24. 25mm chamfers to all faces unless noted otherwise.

Key to symbols

Mass or Reinforced Concrete

Precast Concrete

Prepared Formation

Reference drawings

107065-MMD-01-XX-DR-C-0150 Series	Site Location Drawings
107065-MMD-01-XX-DR-C-0160 Series	General Arrangement & Sections
107065-MMD-01-XX-DR-C-0170 Series	Slipway Structure
107065-MMD-01-XX-DR-M-0180 Series	Mechanical, Electrical & Lighting
Slipway Structure:	
107065-MMD-01-XX-DR-C-0170	General Arrangement & Section
107065-MMD-01-XX-DR-C-0171	Plan Layout and Details
107065-MMD-01-XX-DR-C-0172	Sections & Details
107065-MMD-01-XX-DR-C-0173	Precast Details
107065-MMD-01-XX-DR-C-0174	Steelwork Details
107065-MMD-01-XX-DR-C-0175	Pontoon Components
107065-MMD-01-XX-DR-C-0176	Assumed Construction Sequence

Rev	Date	Drawn	Description	Ch'k'd	App'd
0	29/09/2025	LM	For Tender	DB	MR

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Garval Road
Tarbert
PA29 6TR

Tarbert Harbour
THE HEART OF THE HERITAGE VILLAGE

Title

Access Slipway and Car Park
Slipway Structure
Assumed Construction Sequence

Designed	D Brunner	DB	Eng check	A Currie	AC
Drawn	L Marini	LM	Coordination	D Brunner	DB
Dwg check	D Brunner	DB	Approved	M Ross	MR

Scale at A1	Status	Rev	Security
As Shown	TEN	0	STD

Drawing Number
107065-MMD-01-XX-DR-C-0176

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