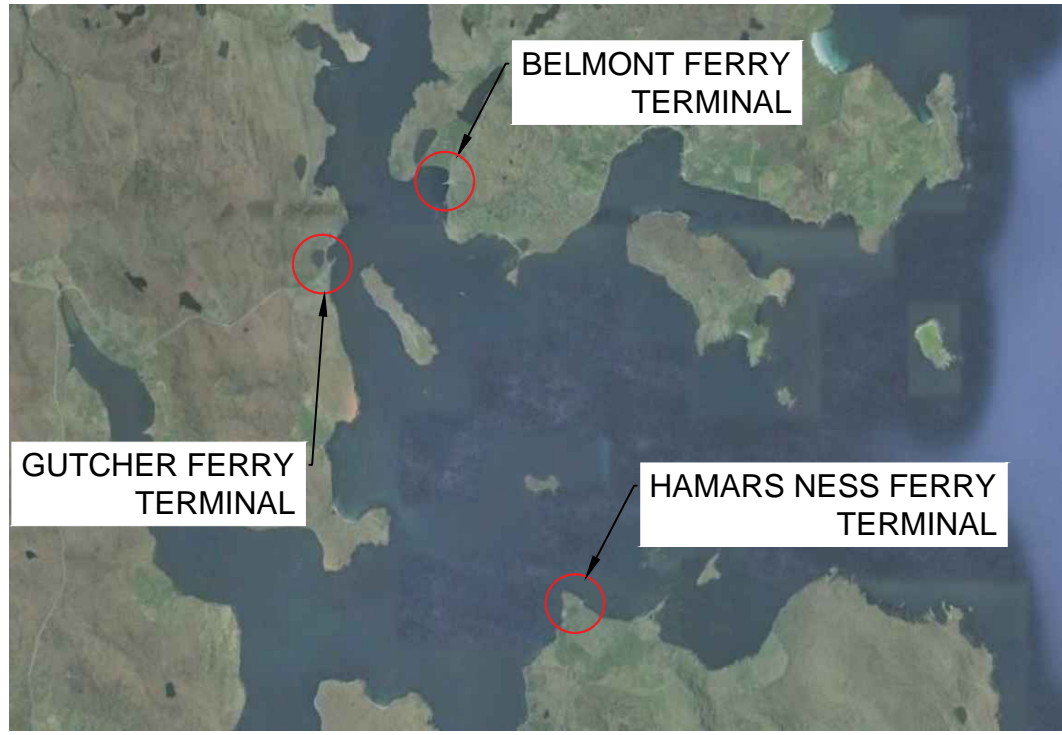
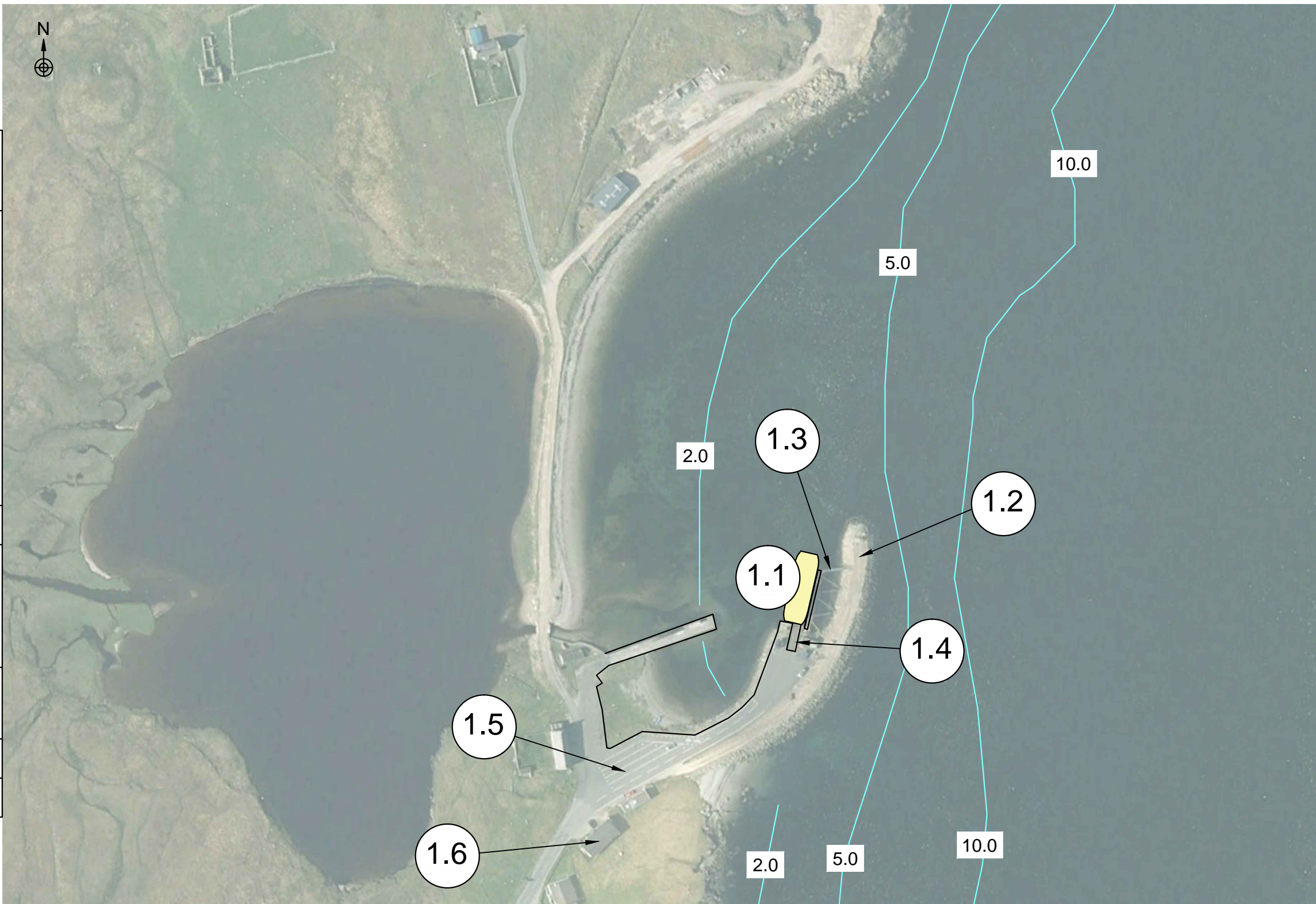


NTS



NTS

1) CURRENT CONDITION		
1.1	Current Main Vessel	<div>Size: MV BIGGA • Loa = 33 m • Beam = 10.1 m • Draught = 2.61 m</div> <div>MV GEIRA • Loa = 30m • Beam = 9m • Draught = 2.61m</div> <div>Capacity: • 96 passengers • 14 PCU</div> <div>• 96 passengers •10 PCU</div>
1.2	Breakwater	Rubble mound 150m long
1.3	RoRo Ferry Berth	<div>• 40m long berth composed by 3 timber dolphins supported against the breakwater with timber struts.</div> <div>• Vertical rubber D type fenders</div>
1.4	Linkspan	Small 4.5 m wide x 13.915 m long
1.5	Parking/waiting area	90 lane meters approx.
1.6	Facilities	Toilets & waiting room

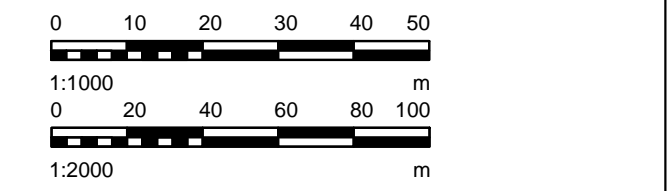


Scale approx. 1:2000

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 - IMAGERY FROM GOOGLE EARTH.
 - BED LEVELS FROM ADMIRALTY CHART 3292 EASTERN APPROACHES TO YELL SOUND, COLGRAVE SOUND AND BLUEMULL SOUND.
 - BERTH STRUCTURE REQUIRES FURTHER ASSESSMENT TO ESTABLISH NECESSARY REPAIRS/STRENGTHEN WORKS OR COMPLETE REPLACEMENT TO COMPLY WITH A 30 YEARS SERVICE LIFE.
 - FENDERS AND BOLLARDS FOR OVERNIGHT MOORING REQUIRE FURTHER ASSESSMENT TO ESTABLISH THEIR ADEQUACY FOR LARGER VESSELS.
 - IF BERTH STRUCTURE IS TO BE REPLACED IT IS RECOMMENDED TO REPLACE / UPGRADE LINKSPAN.

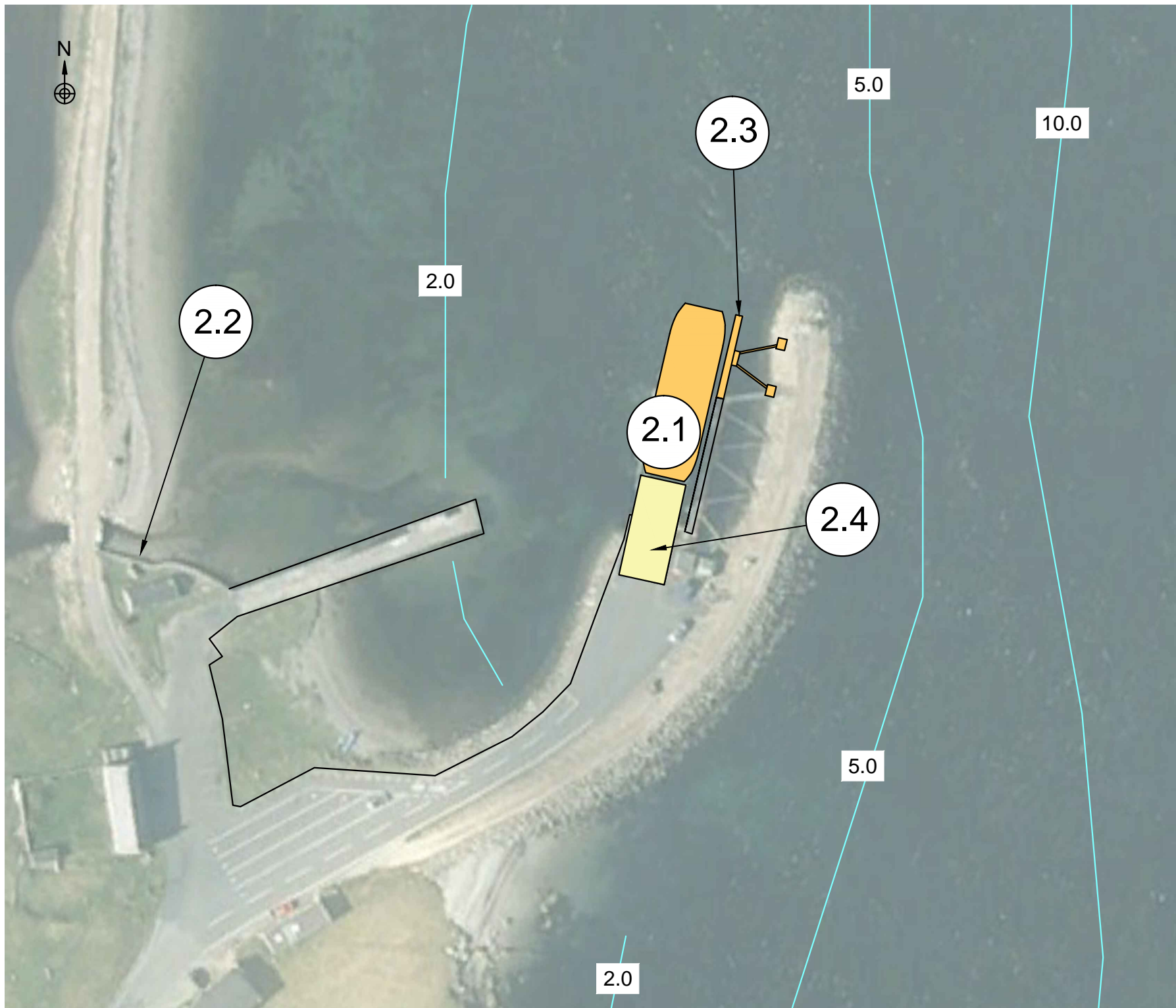
SHETLAND TIDAL LEVELS

LOCATION MHWS MHWN MLWN MLWS
Bluemull Sound 2.6 1.9 1.0 0.5



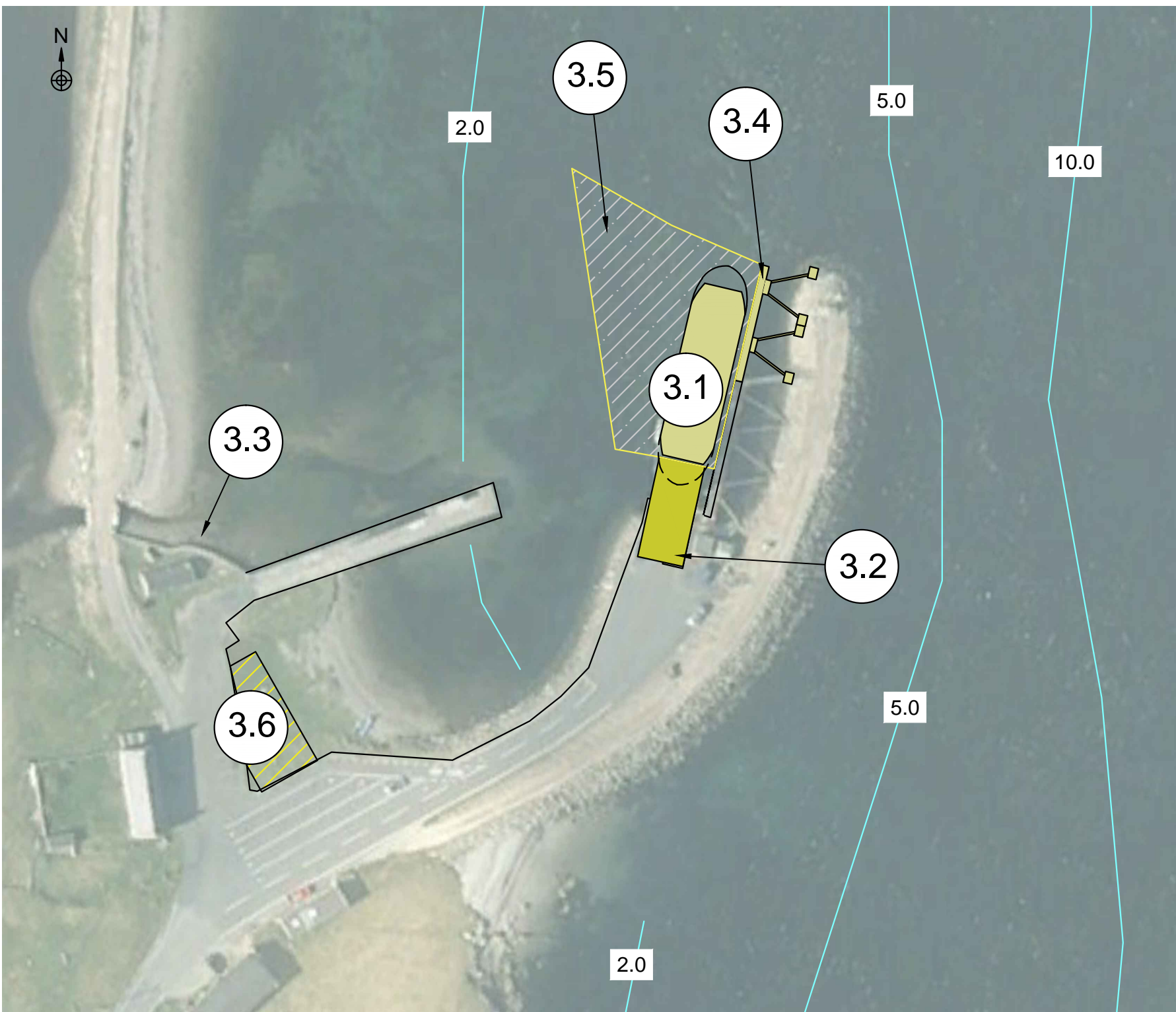
Reference Drawings:

2) LIKE FOR LIKE OPTION Terminal upgrades		
2.1	Vessel	TYPE 1
2.2	Inlet	Lagoon's inlet closeness to existing berth affects berthing operations during ebb tide and causes siltation. Recommended to relocate.
2.3	RoRo Ferry Berth	<div>• Extension of RoRo berth circa 15m (see note 7.)</div> <div>• Well sheltered. Safely overnight berthing.</div>
2.4	Linkspan	Upgrade to Large Linkspan (9.3m wide x 20.47m long) see note 9.



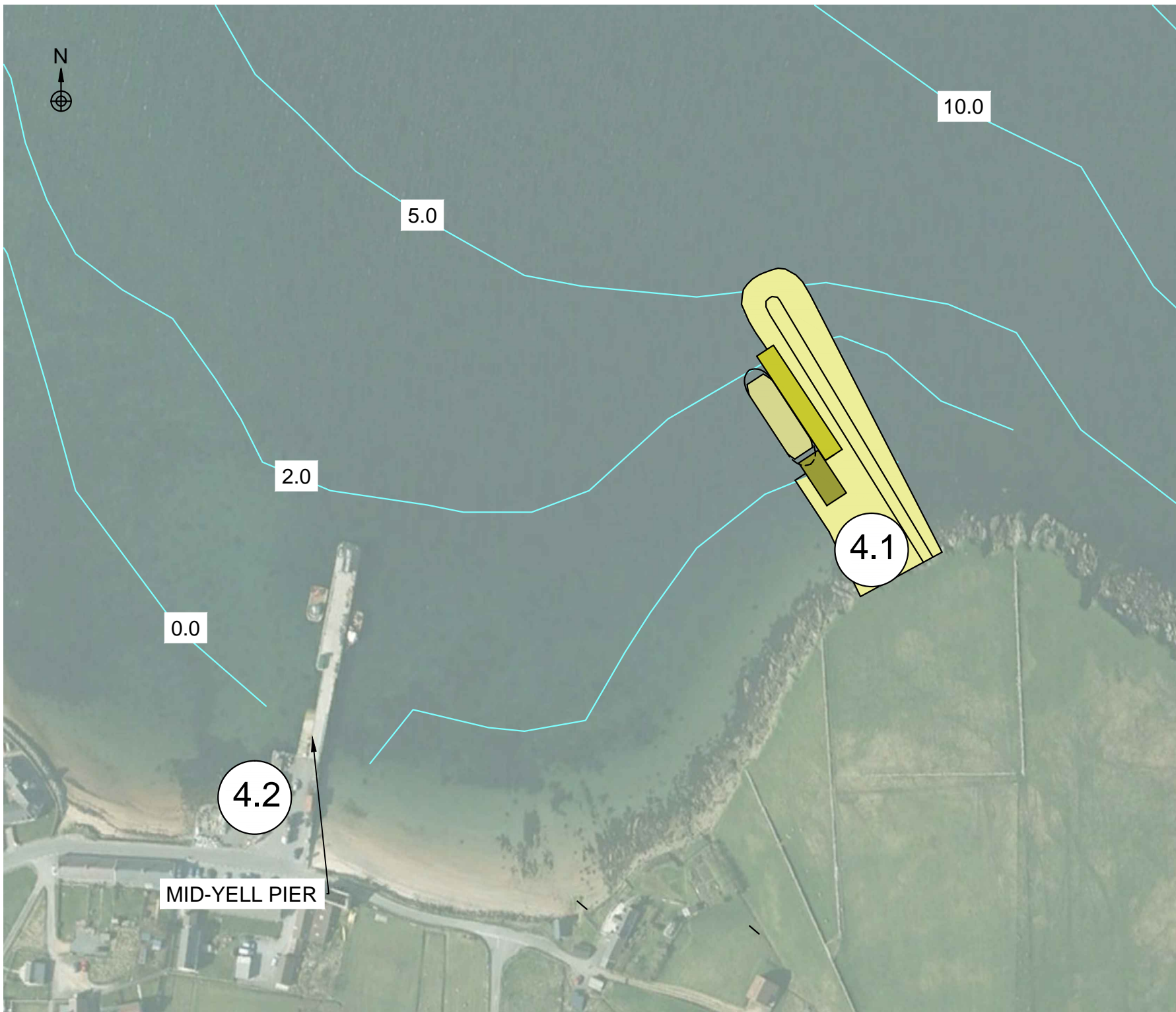
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3) LARGER VESSEL Terminal upgrades		
3.1	Vessel	TYPE 2
3.2	Linkspan	Upgrade to Large Linkspan (9.3m wide X 20.47m long)
3.3	Inlet	See 2.2.
3.4	RoRo Ferry Berth	<div>• Extension of RoRo berth circa 25m (see note 7).</div> <div>• Installation new bollards and fenders along the structure (see note 8).</div>
3.5	Dredging	Some minimum dredging could be required.
3.6	Parking	Recommended to increase parking/waiting area.



Scale approx. 1:1000

4) NEW HARBOUR AT MID-YELL Indicative layout		
4.1	Mid - Yell option 1	<div>• Approx. 160m rubble mound breakwater to provide a sheltered 50m long RoRo berth equipped with a large linkspan (9.4m wide X 20.47m long).</div> <div>• Berth protected from southeasterly swell and possible northerly sea.</div> <div>• Land reclamation required to provided access and parking/waiting area.</div> <div>• No or minimum dredging required.</div> <div>• Access road needs to be provided.</div>
4.2	Mid - Yell option 2	<div>• Use/replacement of the existing Mid - Yell pier (see note 7.)</div> <div>• Berth well sheltered.</div> <div>• Provision of parking waiting area (possible land reclamation)</div> <div>• Use of existing road access.</div> <div>• Dredging required to provided vessel access.</div>



Scale approx. 1:2000

B	18/07/16	SIC comments
A	14/06/16	PBA comments
Rev	Date	Details
Client:		
Project:		
SHETLAND INTER-ISLAND TRANSPORT STUDY		
Title:		
BLUEMULL - GUTCHER OPTIONEERING		
47 Gillingham Street Westminster, London SW1V 1HS www.becketttrankine.com		
Status:	Scale at A1 Original:	
FOR DISCUSSION	AS SHOWN	
Drawn:	Checked:	Date:
DP	GR	17/03/16
Drawing Number:	Revision:	
1537-01-301	B	