Marine Aquaculture Site SEAFORTH
Planning Application

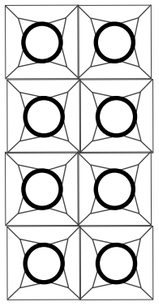
Document 3: Equipment Plans, Elevations, and Drawings

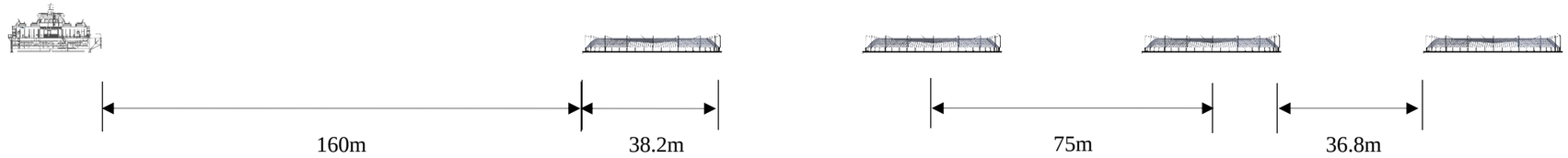
Mowi Scotland Limited

Claire Lumley-Holmes, NOVEMBER 2020

Registered in Scotland No. 138843 Registered Office: 1st Floor, Admiralty Park Admiralty Road Rosyth FIFE KY11 2YW	**Office postal address:** Farms Office Glen Nevis Business Park Fort William PH33 6RX	**Phone:** 01397 715078 **Email:** claire.lumley-holmes@mowi.com **Website:** http://mowi.com

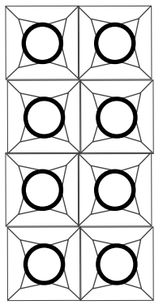
North

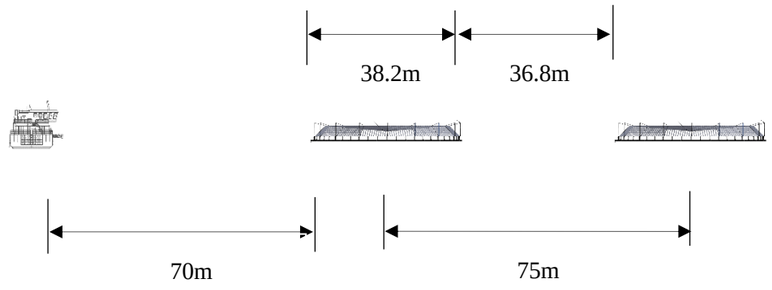




Plan – Not to Scale

North

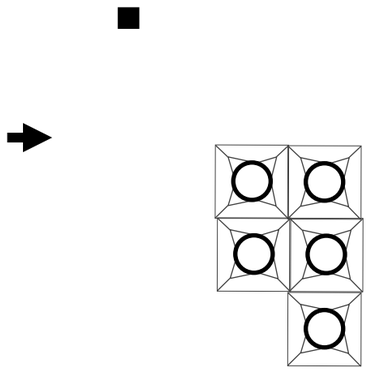




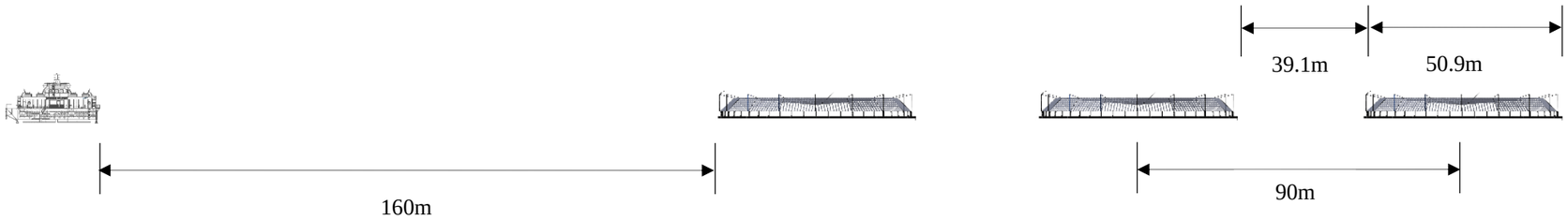
Plan – Not to Scale

EXISTING SEAFORTH, LOCH SEAFORTH **ELEVATIONS SITE CONFIGURATION** Figure 1 Surface Cross section view of 8 circular plastic pens of 120m circumference in a 75m matrix grid	Key: Feed System Typical Pen Design – Perimeter Top Net Poles	**1:1,500**	**26/10/2020**	**CLH**	**YB**	**0001**	**Final**
		Scale	Date	Drawn	Checked	Revision No.	Status

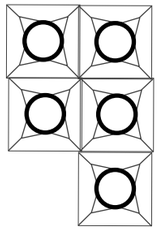
North



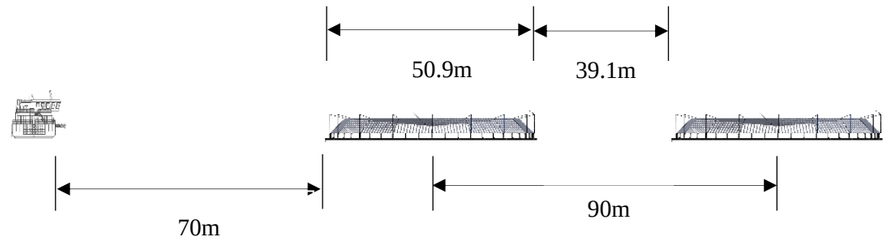
Plan – Not to Scale

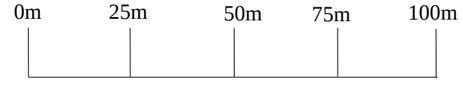


North



Plan – Not to Scale





PROPOSED SEAFORTH, LOCH SEAFORTH **ELEVATIONS SITE CONFIGURATION** Figure 2 Surface Cross section view of 5 circular plastic pens of 160m circumference in a 90m matrix grid	Key: Feed System Typical Pen Design	**1:1,500**	**26/10/2020**	**CLH**	**YB**	**0001**	**Final**
		Scale	Date	Drawn	Checked	Revision No.	Status

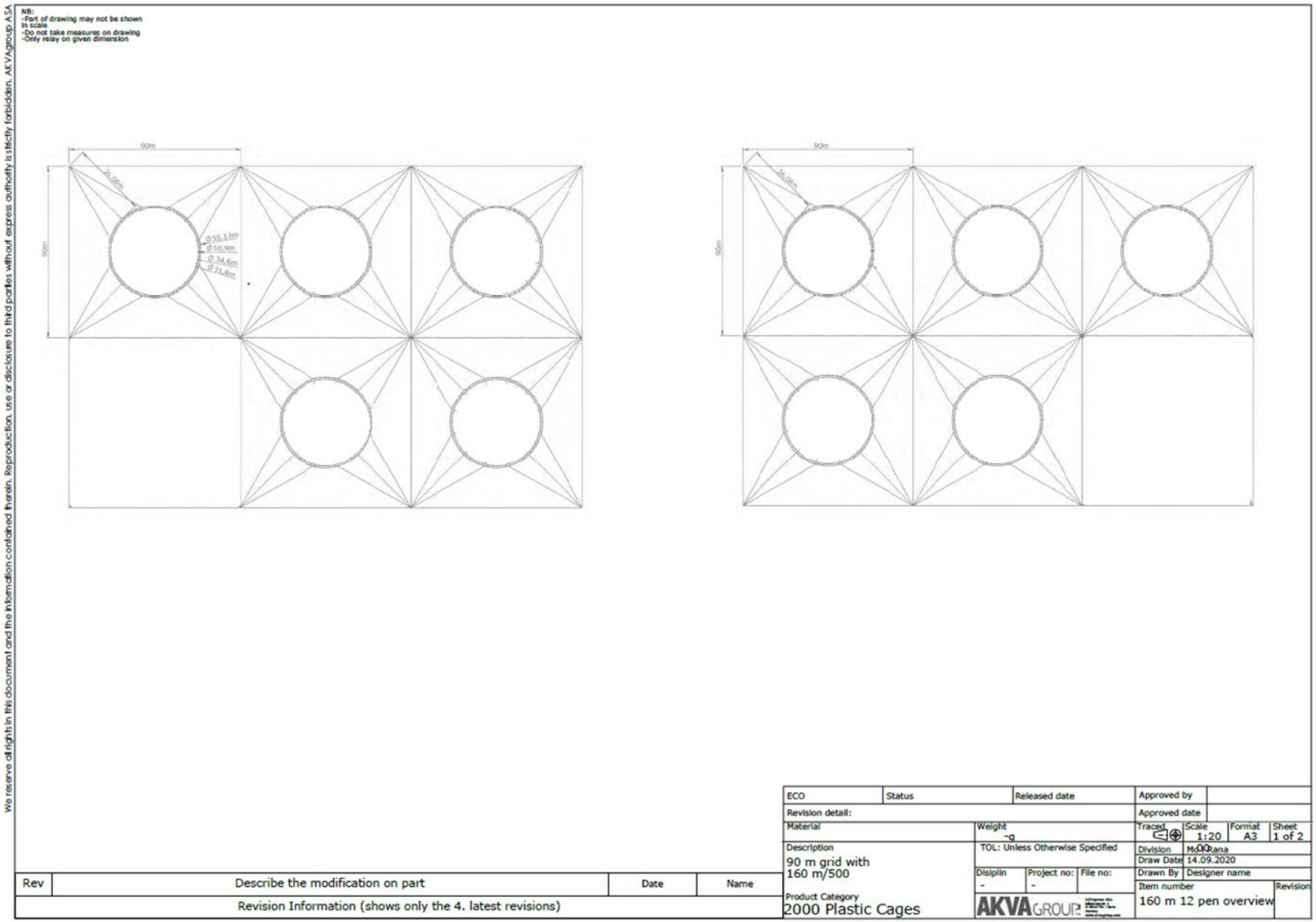


Figure 3. PROPOSED: Site Plan showing a typical circular pen of 160m circumference in a 90m matrix

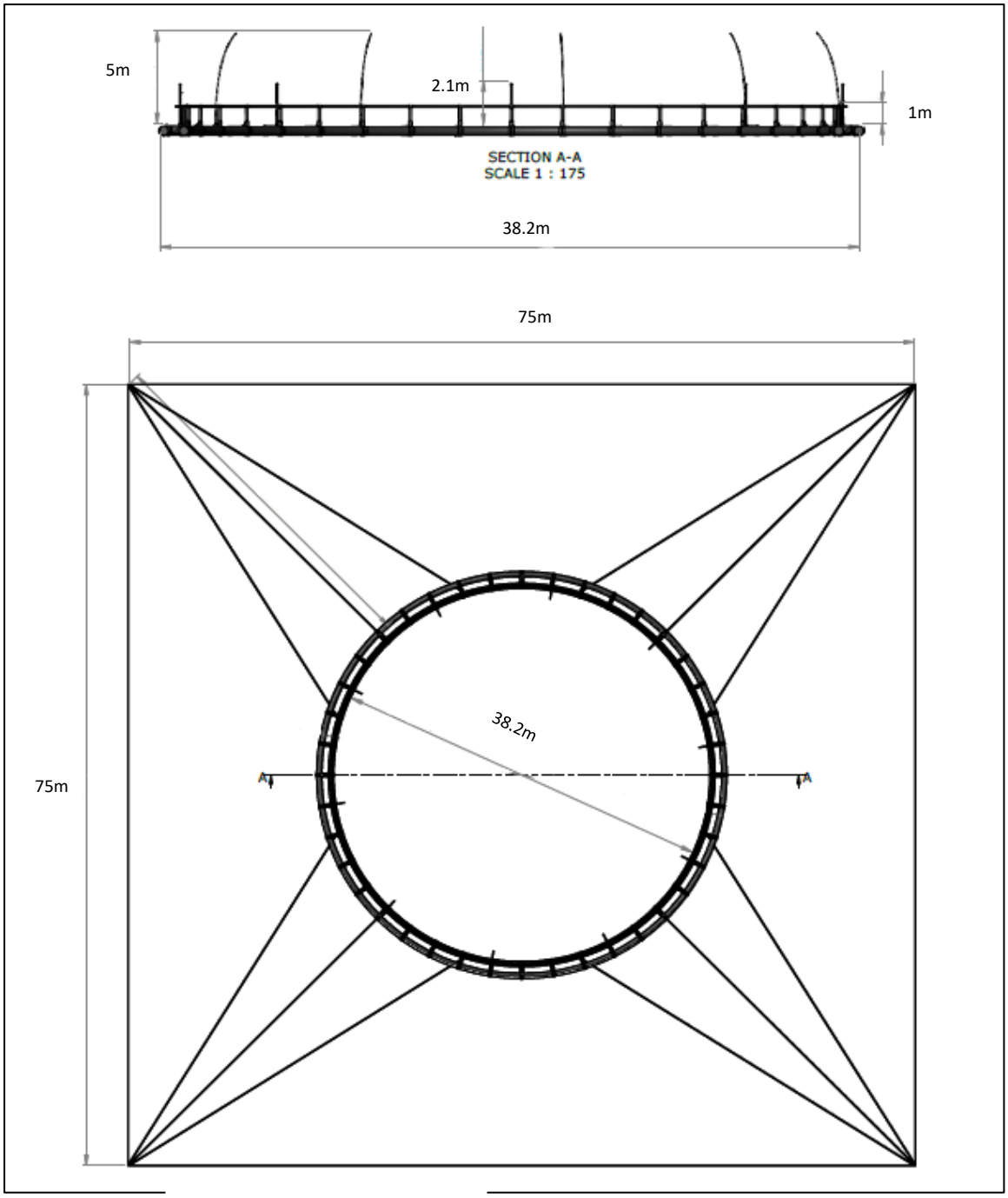


Figure 4. EXISTING: Technical drawing of a typical circular pen walkway of 120m circumference with top net support poles

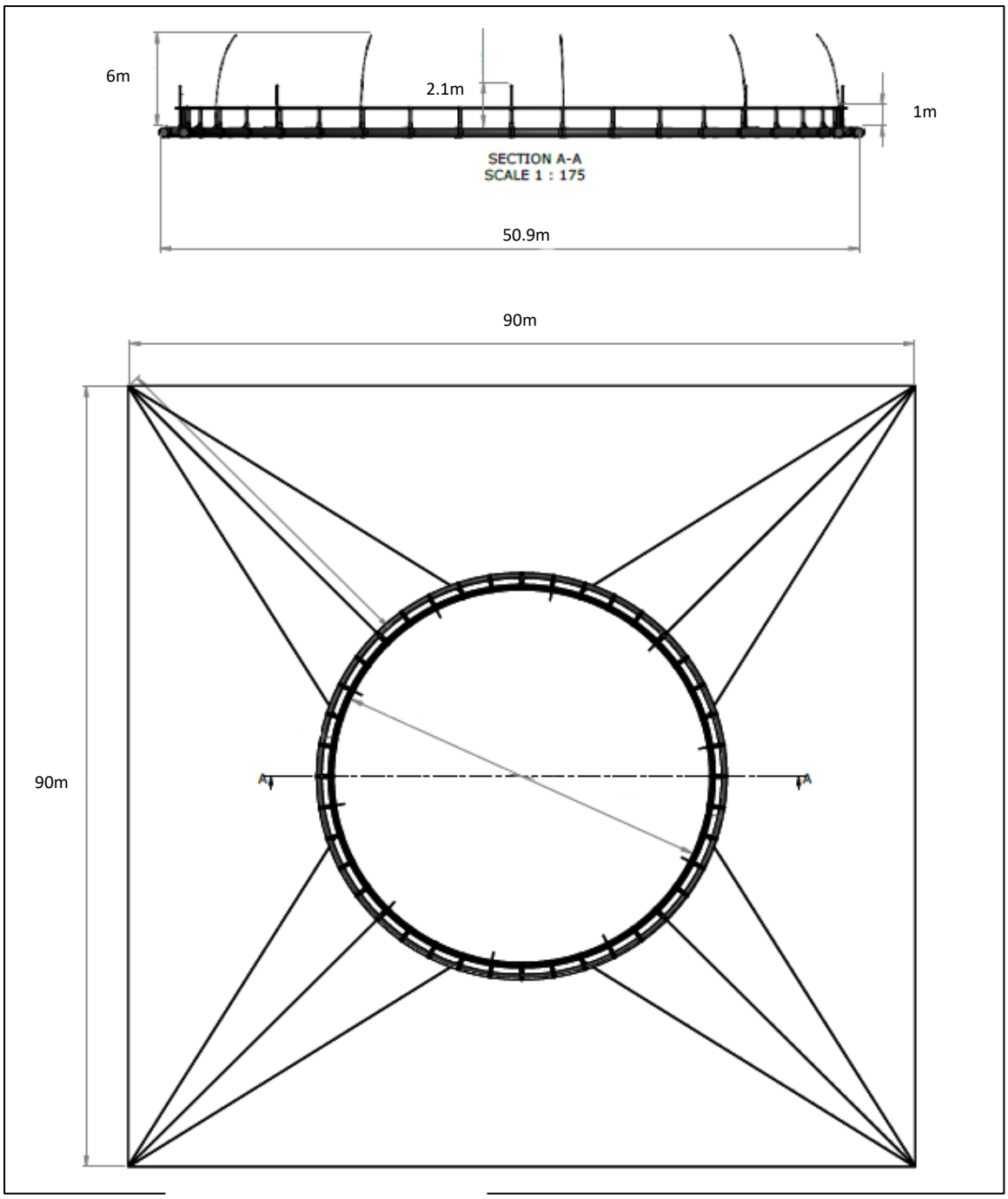


Figure 5. PROPOSED: Technical drawing of a typical circular pen walkway of 160m circumference with top net support poles

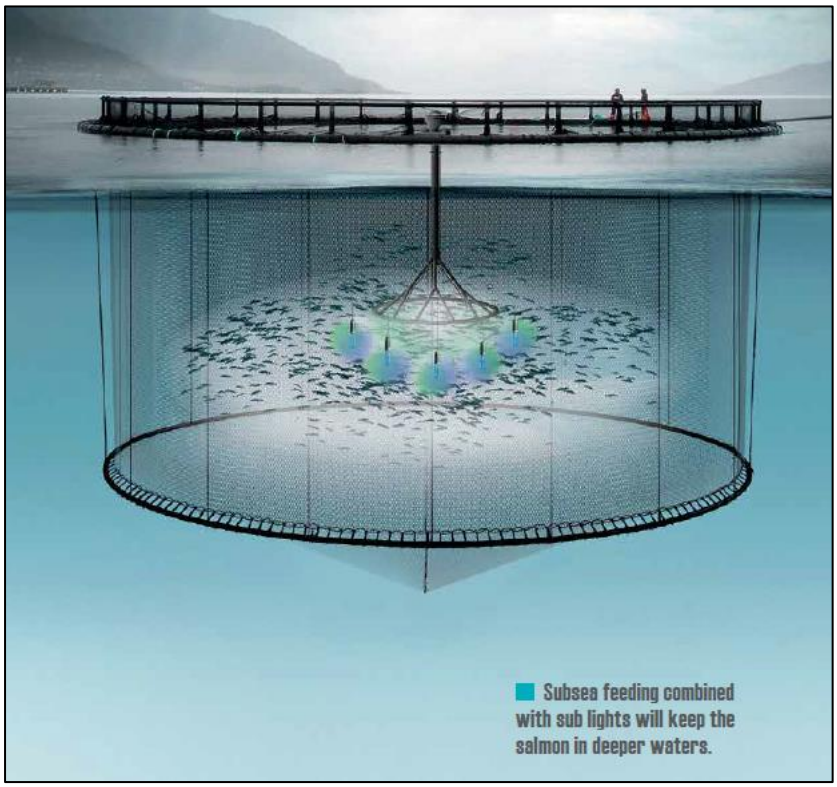
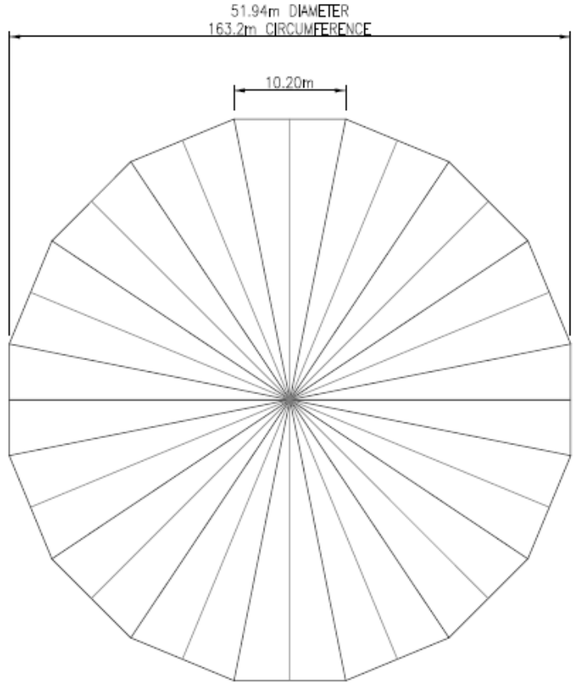
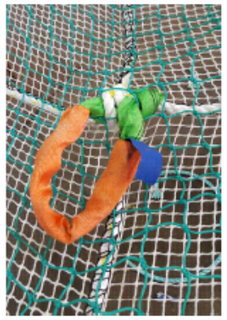


Figure 6: PROPOSED Elevation view of a typical net pen design including a deep water feeding system (Source: AKVA, 2020)

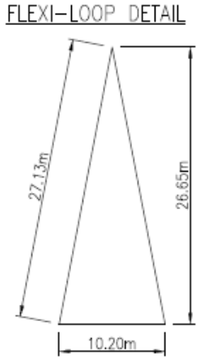
Figure 7: Photo of a circular pen with poles at the walkway to support the top/bird netting.



GRYO RING WITH NETTING COVER



FLEXI–LOOP DETAIL



FINAL BASE SEGMENT SIZE

NETTING (WALLS)	2.1mm SAPPHIRE SEAL PRO MBX – 18mm IH MESH
ROPE	16mm POLYSTEEL (MAXIMA)
TOP	ROPE INCLUDING THIMBLES AT ALL VERTICALS
WATERLINE	ROPE INCLUDING FLEXI–LOOP AT ALL VERTICALS
BASE PERIMETER	ROPED + 1.2kg/m LEAD LINE
VERTICAL ROPES	32x ROPES WITH FLEXI–LOOP AT BASE
SPANS	32x ROPES TO A 5T SWL GYRO RING AT BASE CENTRE
TWINE	1.1mm/1.8mm NYLON BRAID
SEAL BLIND	3.00mø NYLON 18s 6mm HALF MESH AT BASE CENTRE
ABRASION PANEL	1.50m PANEL FROM SAME NETTING AS MAIN NET TO STRADDLE THE WATERLINE 0.50m ABOVE AND 1.00m BELOW
SECURITY PANEL	1.00m PANEL FROM SAME NETTING AS MAIN NET. 0.50m UP WALLS AND 0.50m ONTO BASE
BASE CENTRE PANEL	10.00mø PANEL MADE FROM THE SAME NETTING AS THE BASE
FIXING	ALL PANELS STITCHED DOWN EACH ROPE TO REDUCE AREA FOR CLEANER FISH MOVEMENT
GYRO RING	5T SWL GYRO RING WITH INTERNAL AND EXTERNAL CONNECTIONS
LIFTING ROPES	32x 18mm POLYSTEEL CUT TO 21.50m LONG. SUPPLIED ATTACHED.
LANYARDS	32x 2.00m LONG AND 32x 3.00m LONG. 16mm POLYSTEEL WITH ONE SPLICED LOOP. SUPPLIED SEPARATELY
FLEXI–LOOPS	64x 0.425m 2 TON PROTECTED STROP. 1 AT EACH WATERLINE LOOP AND ONE AT EACH BASE LOOP
IDENTIFICATION TAGS	TAGS SHOWING NET NUMBER AND SUPPLIER NAME. TWO AT HEADLINE
SLIDER TAGS	ALL SLIDER ROPES TO BE IDENTIFIED BY NAMED "SLIDER" RUBBER TAG. (SLIDER ROPES WILL BE VERTICALS THAT MATCH SEGMENT JOINS.)
BUOYANCY RESOLUTION	ENHANCED FMO LEAD PATTERN ON BASE + SPANS
RUNNER ROPE	97m RUNNER ROPE TIED OFF AT TOP ROPE, RUN THROUGH INTERIOR CONNECTION ON GYRO RING AND TIED OFF AGAIN AT OPPOSITE SIDE

ALL NETS DESIGNED, CONSTRUCTED AND INSPECTED IN ACCORDANCE WITH SECTION 5 OF THE TECHNICAL STANDARD FOR SCOTTISH FINFISH AQUACULTURE.

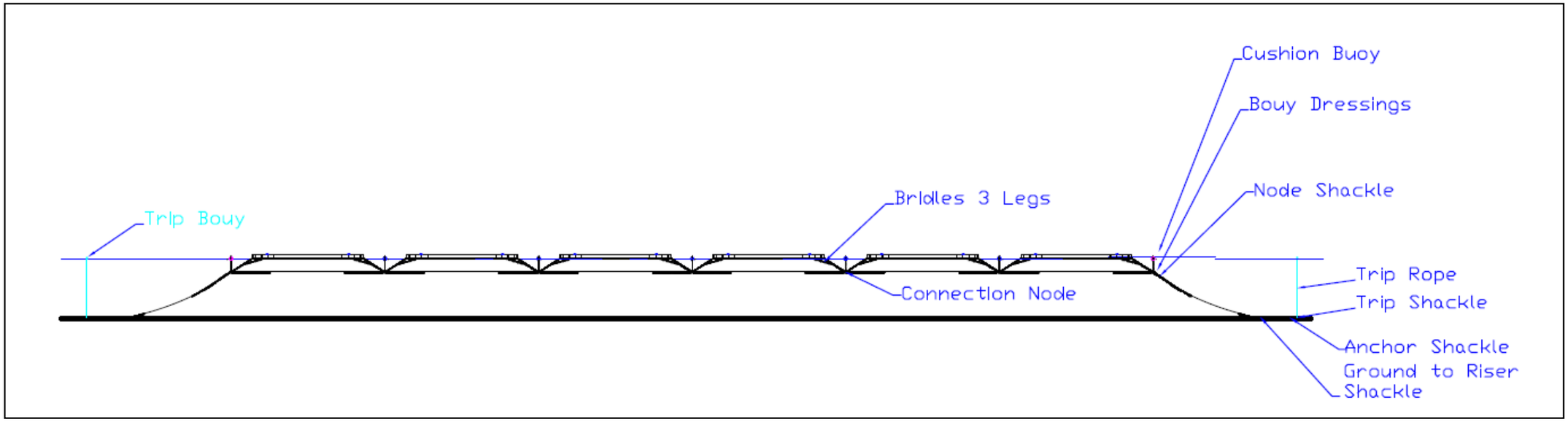
CUSTOMER	MOWI SCOTLAND
SITE	GENERIC
DRAWN BY	FRASER ARMOUR
DATE	MAR '20
SCALE	NTS

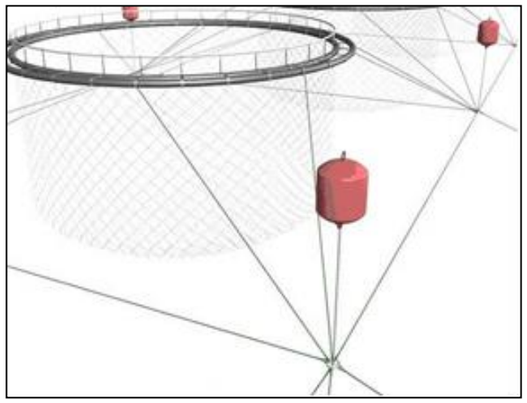
TITLE: 160m x 12m + 1.3m SSP MBX CAGE NET 6m DEEP BASE

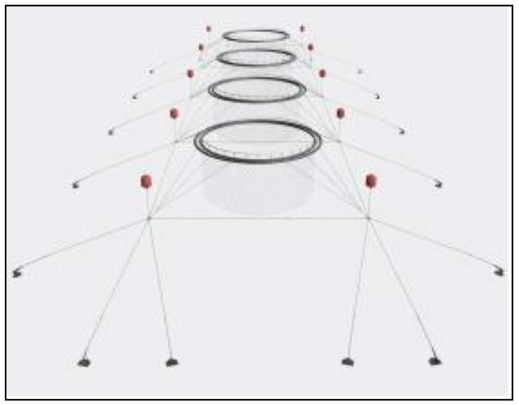
KNOX W & J KNOX

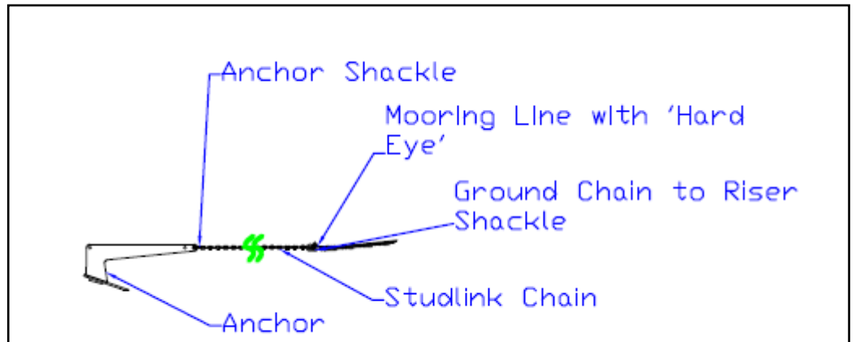
DRAWING NUMBER: KNN–01–0800 | REV: 0 | REV DATE:

PROPOSED SEAFORTH, LOCH SEAFORTH	Key: Note. Annotations stating dimensions might not reflect those used at the site. The position of the pens allows a 20m side wall, 15m cone, and 5m+ clearance to the seabed.	**Not to Scale**	**26/10/2020**	**CLH**	**YB**	**0001**	**Final**
ELEVATIONS SUB-SURFACE NET DESIGN							
Figure 8 Manufacturers Diagram – Sub-Surface Net Design		Scale	Date	Drawn	Checked	Revision No.	Status









EXISTING & PROPOSED SEAFORTH, LOCH SEAFORTH	Key:	**Not to Scale**	**26/10/2020**	**CLH**	**-**	**0001**	**Final**
ELEVATIONS PEN MOORING DESIGN	Please refer to the site plans for mooring lengths and positions						
Figure 9 Manufacturers Diagram – Typical Mooring Design		Scale	Date	Drawn	Checked	Revision No.	Status

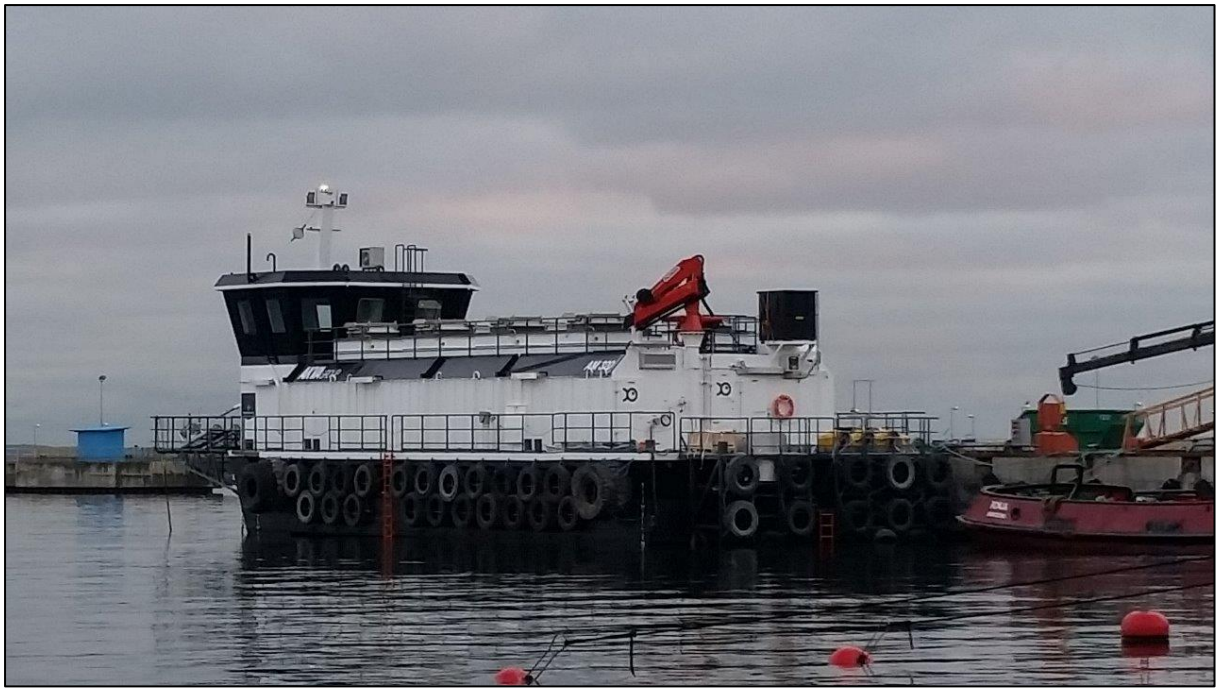


Figure 10. EXISTING & PROPOSED: Feed Barge. Approved by 15/000512

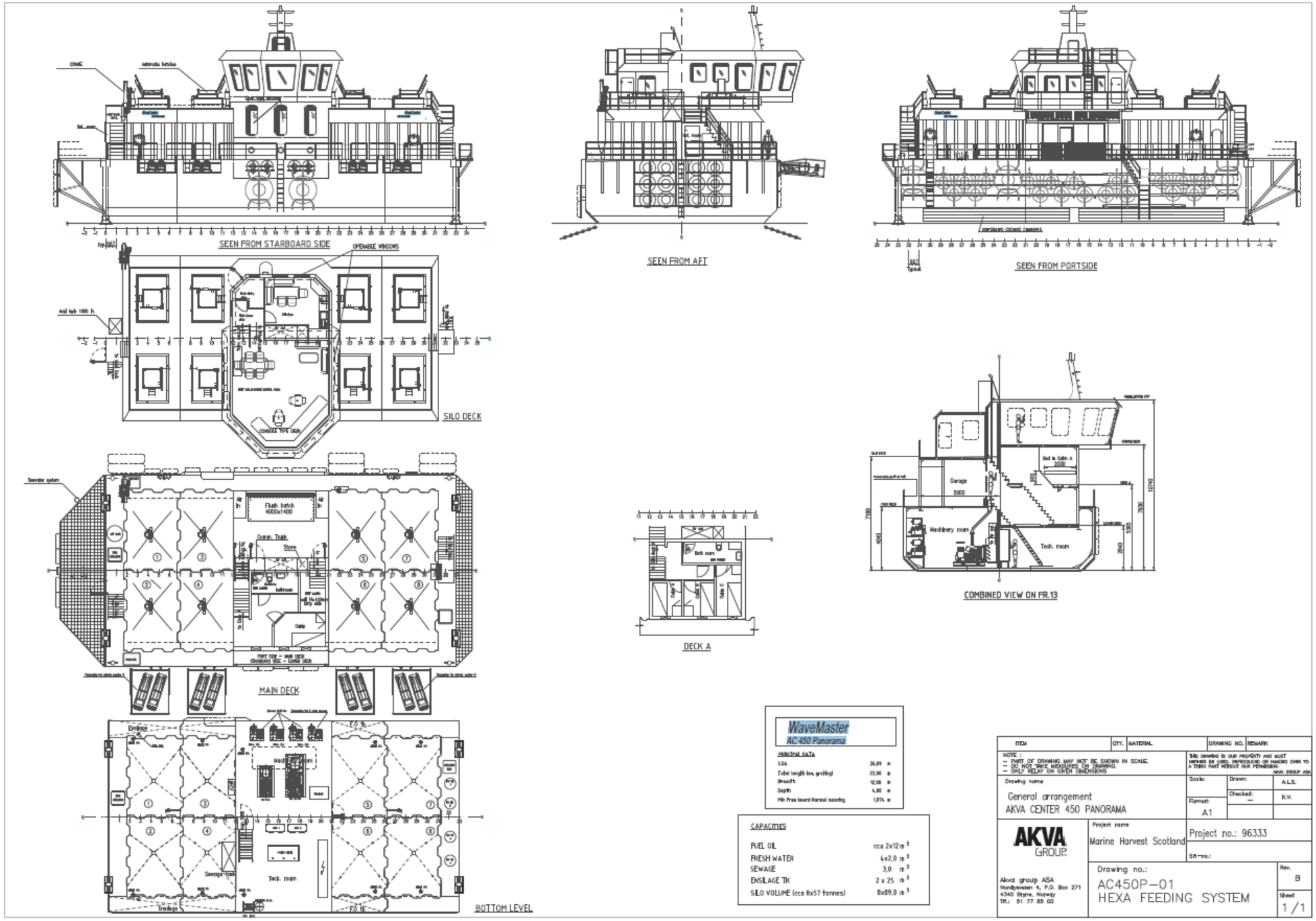


Figure 11. EXISTING & PROPOSED: Feed Barge Akva Master Comfort
Manufacturers dimensional illustration showing the Akva Master Comfort, black/white. 450 tonne capacity. Approx 9m height at all times, 26m by 12m.