

Item: 3

Development and Infrastructure Committee: 2 October 2025.

**Ferry Replacement Programme – Outer North Isles Outline Vessel
Tender Design.**

Report by Director for Enterprise and Resources.

1. Overview

- 1.1. As outlined in the Council Plan (2023-2028), infrastructure is the nuts and bolts that hold our communities together – the buildings, transport, roads and telecommunication networks that allow communities to thrive. It is therefore key that our transport infrastructure meets the needs of our communities and visitors, and this is particularly the case for our outlying islands.
- 1.2. The existing Orkney Ferries fleet is ageing and no longer fit for purpose, with accessibility issues and non-compliant living accommodation for crew. Replacement parts are challenging to obtain due to the age of fleet and refit costs have increased significantly, resulting in an extended refit period due to the level of work required to keep the vessels in operation.
- 1.3. The lack of accessible vessels for people with restricted mobility is a key concern. As noted in the Local Transport Strategy (2023 - 2043), we will ensure that accessibility is an integral feature of the design of our places, and the design for future ferries, aircraft, buses, community transport, taxis and other transport and travel infrastructure where possible.
- 1.4. There is a need to urgently progress with Phase 1 of the Ferry Replacement Programme to Design and Build stage for the Outer North Isles, to protect and potentially enhance the level of service provided to the communities, noting that Phase 2 of the programme which commenced in May 2025, focuses on the remaining network and considers vessels and infrastructure upgrades in tandem. Consultation for the remaining network will be carried out during January and February 2026.
- 1.5. Following confirmation of additional funding from Scottish Government to support the business case work associated with the Ferry Replacement Programme, consultants Knud E Hansen were appointed in December 2024 to complete the

Outer North Isles outline tender designs for Phase 1 of the Ferry Replacement Programme.

- 1.6. An initial outline design was circulated by Knud E Hansen for consideration on 3 March 2025. Consultation events on the outline design were held with Orkney Ferries crew, the Corporate Leadership Team, the Board of Orkney Ferries, North Isles Councillors, Outer North Isles Ferries Taskforce Group and all Elected Members throughout March 2025.
- 1.7. The outline design underwent simulation testing at Voith in Germany in the week commencing 23 June 2025, with crew from Orkney Ferries Ltd.
- 1.8. Following testing and consideration of comments received from the Mobility and Access Committee for Scotland (MACS), the amended outline design was considered again by the key stakeholder groups prior to wider community consultation during September 2025.
- 1.9. The General Arrangement design for the proposed vessels serving Eday, Sanday, Stronsay and Westray were circulated to the relevant Community Councils and Community Development Officers and went live via the Council website from 1 September 2025, for consideration and comment.
- 1.10. Consultation will be carried out from 24 to 29 September in Eday, Sanday, Stronsay, Westray and Kirkwall, prior to the Elected Members Seminar to be held on 30 September 2025.
- 1.11. The final Outer North Isles outline vessel tender design General Arrangement drawings, data sheet, preliminary renderings, stowage plan and ship/shore interface and green technology study are attached as Appendices 2 to 6 of this report.
- 1.12. Funding discussions are ongoing via the Ferries Taskforce Group with Scottish Government. The award of any Design and Build Contract will be subject to external grant funding and budget availability. A letter of comfort from Scottish Government will be required before the tender can be awarded to a specific shipyard.
- 1.13. It is proposed that the first phase of the procurement process will commence following Council approval of the outline vessel general arrangement design. Phase 1 of the procurement process will be initiated as soon as possible to provide sufficient time to progress with the next stage of the tender process, with the view

to align with the Scottish Government budget setting process for financial year 2026/27.

- 1.14. The Ferry Replacement Programme will span over 10+ years, with Phase 1 replacing the existing ro-ro fleet for Eday, Sanday, Stronsay and Westray and potentially the MV Hoy Head operating in the South Isles. For the remaining network, infrastructure upgrades will be required which will be considered alongside vessel design. Continued commitment from Scottish Government is required at each stage of the programme to ensure funding is available to complete the programme as currently outlined.

2. Recommendations

- 2.1. It is recommended that members of the Committee:
 - i. Approve the Outer North Isles Outline Vessel General Arrangement Design, attached as Appendix 1 to this report.
 - ii. Instruct the Director of Enterprise and Resources to commence the procurement process for the Final Design and Build of three 60m vessels for the islands of Eday, Sanday, Stronsay and Westray, with an option for a fourth identical vessel should that prove to be optimal under Phase 2 of the Ferry Replacement Programme for the South Isles service.
 - iii. Instruct the Director of Enterprise and Resources to submit a Capital Project Appraisal in respect of the Ferry Replacement Programme, to the Policy and Resources Committee, following confirmation of funding.

3. Background

- 3.1. Scottish Government confirmed additional funding during 2024/25 to complete the business case work in relation to the Ferry Replacement Programme. Discussions are ongoing in respect of the funding to progress with the Programme.
- 3.2. A review of the Outline Business Case was completed during 2024/25 to reconsider previous recommendations with the view to reduce the capital costs where possible. The review outlined that a significant reduction in infrastructure costs could be achieved in the Outer North Isles of Eday, Sanday, Stronsay and Westray if vessels were designed so that they were compatible with the existing piers and harbours infrastructure.
- 3.3. A key benefit of using the existing infrastructure in the Outer North Isles is the ability to progress to vessel design and build without the many years of work required to carry out the infrastructure upgrades to the five harbour areas. Investment in

infrastructure upgrades will however be required in most of the Inner and South Isles as well as Papa Westray and North Ronaldsay, which will be the focus of Phase 2 of the Ferry Replacement Programme.

- 3.4. The Design Options Assessment considered three vessel types for the Outer North Isles network, against a number of key performance indicators including cargo handling, shore interface, power and fuel consumption, operability and seakeeping, passenger comfort, safety and illness rating.
- 3.5. This information was presented by Council Officers and Leadship Design and Consulting to Elected Members at a Seminar on 11 March 2024 which concluded that the monohull design was best suited for the network, noting that a key parameter is compatibility with the existing piers and harbours infrastructure.
- 3.6. A report outlining the next steps in the Ferry Replacement Programme was presented to the Development and Infrastructure Committee on 4 June 2024, which outlined the previous business case work in some detail and the Design Options Assessment for the Outer North Isles by Leadship Design and Consulting.
- 3.7. The Development and Infrastructure Committee supported the findings of the Review of Outline Business Case and Design Options Assessment, instructing the Corporate Director for Enterprise and Sustainable Regeneration to progress with the Ferry Replacement Programme of works.
- 3.8. An update to communities was circulated to the Community Councils and Transport Representatives in July 2024.
- 3.9. Conclusion of the work from Leadship Design and Consulting was the production of a concept design to aid the next stage of the programme, outline tender design.

4. Ferry Replacement Programme – Phase 1

- 4.1. Following the work completed by Leadship Design and Consulting, the specification for Phase 1 of the Ferry Replacement Programme was developed during August and September 2024.
- 4.2. Phase 1 – Outer North Isles Outline Tender Design went out for competitive tender during October 2024 and following evaluation, the Contract was awarded to experienced maritime consultants Knud E Hansen in December 2024.
- 4.3. The consultants visited Orkney during January 2025 to consider the existing North Isles vessels, routes and infrastructure, noting that the Outline Vessel Tender Design

must be compatible with the existing piers and linkspans in Eday, Sanday, Stronsay, Westray and Kirkwall.

- 4.4. Following discussions with officers from Orkney Ferries and the Council, the consultants developed a General Arrangement, Vessel Fact Sheet, Berthing Drawings and 3D Concept Renderings of a first draft vessel as per the specification provided.
- 4.5. The preliminary designs were considered by Orkney Ferries crew, the Council's Corporate Leadership Team (CLT), Board of Orkney Ferries, North Isles Councillors and the newly established Outer North Isles Taskforce Group, involving Community Council Chairs, Transport Representatives and Community Development Officers from Eday, Sanday, Stronsay and Westray, during March and April 2025.
- 4.6. Following discussions with the North Isles Taskforce Group, it was determined that the best way to initially inform the public would be to issue a briefing note rather than present a design that could be subject to change. A briefing note was issued on 25 April 2025 to Community Councils, Community Development Officers and Elected Members.
- 4.7. The principal dimensions are outlined as follows in comparison with the largest of the Outer North Isles vessels:

	MV Varagen	New Vessels
Vessel size	50m	60m
Beam	11.4m	14.5m
Draught	3.0m	3.0m
Crew	10	10
Seating capacity	142 (summer)	190
Car Capacity	26	34
HGV	2	10 (12m)
Gross Tonnage	928	2384
Service Speed	11.5kn	13.0kn

- 4.8. The key specification elements for the new vessels were to improve the accessibility of the vessel. Therefore, all key services are located on the main deck, the design includes a lift from the car deck to the main deck (with stair lift as back up), wheelchair seating points and a Changing Places Facility, providing a larger specially-equipped accessible toilet for people with profound disabilities who cannot use standard accessible toilets. Features include a changing bench, hoist and more space allowing two carers to assist users. Other key features in the outline design include a workstation with suitable charging facilities, children's play area,

pet lounge, quiet area/medical bay and crewing accommodation, enabling vessels to overnight in the isles subject to berthing suitability.

- 4.9. Whilst the previous Outline Business Case outlined a vessel design with no overnight accommodation, the inclusion of accommodation has not materially impacted the design and provides an opportunity to improve the timetable using the existing crewing configuration. Therefore, the vessels could overnight in the isles, consistent with what operated before Covid i.e. two nights per week, thereby providing an earlier sailing time to Kirkwall as desired by the community. As a dedicated vessel to workboat code is proposed for Papa Westray and North Ronaldsay under Phase 2 of the Programme, this would further improve the timetable to the islands of Eday, Sanday, Stronsay and Westray, potentially with the same number of crew serving the four vessels.

5. Consultation – Stage 1

- 5.1. Consultation on the first draft Outer North Isles Outline Vessel Tender Design was carried out as follows:

Consultation Group	Date Completed
Orkney Ferries Initial Consultation	From 4 March 2025
Elected Members	11 March and 28 March 2025
Corporate Leadership Team	13 March 2025
Board of Orkney Ferries	11 March 2025
North Isles Ferries Taskforce Group	28 March 2025
Feedback to Consultants (stage 1)	31 March 2025
Briefing to Communities (enclosed)	25 April 2025
Radio Orkney Coverage	13 May 2025
The Orcadian Coverage	15 May 2025
Mobility and Access Committee Scotland	14 May 2025
Ferry Taskforce Group	18 May 2025
Design circulated to the MCA for initial consultation	May 2025

- 5.2. The initial designs were welcomed by all groups, noting that it was a significant improvement from the current vessels, particularly from an accessibility perspective.

- 5.3. It was noted that the initial design would be subject to change, following simulation testing which would determine the suitability of design with the existing piers and harbours network.
- 5.4. A briefing note was circulated to communities as an update to the programme and to provide next steps including consultation process. This was circulated to communities during April 2025 which followed a period of comms messages from the Council, Radio Orkney and the Orcadian.
- 5.5. At this stage, draft 1 of the outline design was circulated to the MCA for initial consideration as well as a number of accessibility groups including the Mobility and Access Committee for Scotland (MACS). Any relevant comments were fed back to the consultants to incorporate in the final design where possible.

6. Simulation Testing

- 6.1. Following the initial period of consultation and pre-simulation training for Orkney Ferries crew, the outline design underwent simulation testing at Voith in Germany during the week commencing 23 June 2025 to determine suitability of design when tested under harsh weather conditions at each of the pier locations. The training was carried out by a team of existing experienced Orkney Ferries Masters.
- 6.2. The Voith Schneider Propeller was selected by consultants Knud E Hansen as it combines propulsion and steering in one unit, providing improved manoeuvrability particularly under adverse conditions with wind, waves and currents. This provides more safety and increases efficiency.
- 6.3. Prominent and hazardous weather conditions were tested at least three times. Key tests were based on the experience of the Masters as to what was a priority to test, noting that these vary at each pier location. This resulted in approximately 150 berthings during the test period.
- 6.4. Manoeuvring was based on lining the vessel up outside the berth and then moving into berthing position with ahead/astern and port/starboard movements. This differs to the existing operation due to the larger design, however the increased power and manoeuvrability mean there were no issues with access to existing piers and harbours.
- 6.5. In summary, the trials confirmed that the proposed 60m vessel using increased propulsion is compatible with all existing infrastructure, key to the specification requirements. The simulation testing also confirmed that the vessels can

manoeuvre and berth at the east side basin in Kirkwall, thereby retaining use as a refuge berth.

- 6.6. Focus was given to southerly winds in Westray, westerly in Sanday, north easterly in Eday and Stronsay and a number of wind directions in Kirkwall. All tests confirmed that with the increased power and improved manoeuvrability, the vessels were able to berth when existing fleet would find it challenging or would not attempt to berth.
- 6.7. Overall, the simulation testing confirmed that the vessel design, specifically with the power output used, was able to berth in conditions which outperformed the existing North Isles fleet.
- 6.8. The results were relayed to the Harbours team on 4 July 2025 whereby it was noted that further consideration of Kirkwall pier and berthing may be required under the Orkney Harbours Masterplan.

7. Consultation – Stage 2

- 7.1. The second round of consultation commenced in August 2025, following completion of the package of works from Knud E Hansen.
- 7.2. Key consultation dates are as follows:

Second Phase of Consultation	Date Commenced
Ferry Forum – Update	19 August 2025
Strategic Officers Oversight Team	28 August 2025
North Isles Ferries Taskforce Group	29 August 2025
Update to Isles Community Council Chair	1 September 2025
Orkney Ferries Team meeting	4 September 2025
Public consultation of Outline Vessel Tender Design	From 5 September 2025
Westray Consultation	24 September 2025
Eday Consultation	25 September 2025
Stronsay Consultation	26 September 2025
Sanday Consultation	27 September 2025
Kirkwall Consultation	29 September 2025
Elected Members Seminar	30 September 2025

- 7.3. Consistent with initial discussions, the proposals have been welcomed by the key stakeholder groups, noting the significant improvement to facilities and access compared with the existing fleet. The consultation period in the isles will be summarised during the Elected Members' Seminar.

8. Final Outline Tender Design

- 8.1. Following completion of a number of work packages, Knud E Hansen completed the package of works associated under Phase 1 on 28 August 2025, with the General Arrangement design for consideration at Appendix 1 of this report.
- 8.2. As the simulation testing was successful in Germany, the outline design has not significantly altered. A number of comments were however taken on board from the Mobility and Access Committee for Scotland (MACS).
- 8.3. The first draft design had a medical bay located on the car deck. MACS noted that this should ideally be in a more accessible location. It was felt that locating on the car deck would also be challenging from a staffing perspective and this may be raised by the MCA when considering the final design.
- 8.4. The medical area has therefore been removed from the car deck and the quiet area on the main deck is now a multifunctional space doubling up as the medical area as and when required. The dual-purpose space has also been relocated so that it is within close proximity to the lift and changing places facility for convenience.
- 8.5. The General Arrangement design, 3D renderings and video of the proposed vessel design were presented to the Outer North Isles Ferry Taskforce Group on 29 August prior to the public consultation period followed by the Elected Members Seminar on 30 September 2025. The final draft data sheet, renderings, stowage plan and ship/shore interface are attached to this report for further information.
- 8.6. It should be noted that the final design may be subject to change at Final Design and Build stage, to ensure compliance with the MCA.
- 8.7. The Outline Business Case recommended a similar sized vessel for the South Isles network, serving the islands of Hoy and Flotta. This network is often capacity constrained and would therefore benefit from additional passenger, vehicle and freight carrying capacity.
- 8.8. A further stage of in depth consultation will be carried out as part of Phase 2 of the Ferry Replacement Programme, when considering the remaining network and associated piers and harbours infrastructure. This work will be carried out by

consultants Arch Henderson and Leadship Design and Consulting, with outline designs for vessels and harbours expected by August 2026. Detailed ground investigation works and final designs will be required before progressing further.

- 8.9. The Phase 2 process will outline the suitability of the vessel design for the South Isles network and shall also outline what infrastructure upgrades will be required to accommodate a larger vessel at Houton, Flotta and Lyness. This work will conclude if the vessel design proposed for the North Isles would also be suitable for the South Isles. For efficiency and Best Value reasons, it is proposed that the tender includes the option to award the contract for three vessels or four, depending on suitability in the South Isles.

9. Exempt and/or Confidential Information

- 9.1. Under Section 50A(4) of the Local Government (Scotland) Act 1973, the public should be excluded from the meeting in respect of any discussion relating to Appendix 6 . Appendix 6 contains exempt information as defined in paragraph 6 of Part 1 of Schedule 7A of the Act.

For Further Information please contact:

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Implications of Report

1. Financial

The Scottish Government provided funding in financial year 2024/25 to complete the business case work in relation to Phase 1 of the Ferry Replacement Programme.

The procurement process, for the final design and build of the vessels will quantify the cost of Phase 1 of the Ferry Replacement Programme and allow informed discussions with the Ferry Taskforce to take place in relation to the funding required from the Scottish Government to progress with the programme.

Once final costs and funding for the replacement ferry fleet and any works required to the associated piers and harbours infrastructure are known, any projects to be added to the Capital Programme, will require to come forward as a Capital Project Appraisal, where the affordability of the project, along with the revenue implications will be considered in detail.

As part of the existing Contract terms, consultants Knud E Hansen will provide assistance to the Council during the tender and selection procedure before award of the build contract. This is estimated to cost under £10,000.

Knud E Hansen will also be available to provide advice to the Council including on-site visits, during any construction, delivery or guarantee periods with regards to the

Outer North Isles Ferry Replacement Programme should this be required. This will be charged at an hourly rate basis as agreed by the Council.

2. Legal

Section 153(2) of the Local Government (Scotland) Act 1973 empowers the Council to “acquire, provide, maintain, improve and operate any ferry situated wholly or partly within their area”. Accordingly, the Council has the power to implement a ferry replacement programme.

3. Corporate Governance

Not applicable.

4. Human Resources

Not applicable.

5. Equalities

An Equality Impact Assessment has been undertaken and is attached at Appendix 7 to this report.

6. Island Communities Impact

An Island Communities Impact Assessment has been undertaken and is attached at Appendix 8 to this report.

7. Links to Council Plan:

The proposals in this report support and contribute to improved outcomes for communities as outlined in the following Council Plan strategic priorities:

- ☒ Growing our economy.
- ☒ Strengthening our communities.
- ☒ Developing our Infrastructure.
- ☐ Transforming our Council.

8. Links to Local Outcomes Improvement Plan:

The proposals in this report support and contribute to improved outcomes for communities as outlined in the following Local Outcomes Improvement Plan priorities:

- ☐ Cost of Living.
- ☒ Sustainable Development.
- ☒ Local Equality.
- ☐ Improving Population Health.

9. Environmental and Climate Risk

Decarbonisation is a key driver for replacement of the existing ferries fleet. This will be considered in more detail as part of the design and build process.

10. Risk

A key risk to the Council is operational failure as a result of the ageing fleet and the challenge to obtain suitable spares to ensure a fit for purpose lifeline service to the communities. This remains a key priority to the Council to resolve.

An added risk is around the funding challenges and securing sufficient funding to progress with the Ferry Replacement Programme which is now urgent.

11. Procurement

This report recommends progressing with the tender process for the final design and build of three vessels for the islands of Eday, Sanday, Stronsay and Westray, with an option for a fourth identical vessel should that prove to be optimal under Phase 2 of the Ferry Replacement Programme for the South Isles service.

Stage 1 of the procurement process, providing a 30-day notice period has commenced, with a recommendation to progress to Stage 2 of the tender process.

The award of Contract will be subject to confirmation of funding.

12. Health and Safety

Whilst the vessels are maintained to a high standard, the age of the existing fleet means that they do not meet modern day standards, particularly in respect of accessibility for people with restricted mobility. These issues would be resolved with new vessels which would be designed to comply with current legislation.

13. Property and Assets

The purpose of this report is to consider the Stage 1 replacement of the existing ferries fleet. Whilst the upgrade of the existing linkspans in the Outer North Isles is programmed towards the end of the programme, there are no immediate improvements proposed to associated piers and harbours.

14. Information Technology

No implications arising directly from the recommendations of this report.

15. Cost of Living

No implications arising directly from the recommendations of this report.

List of Background Papers

Briefing Note issued in April 2025.

Briefing Note issued in February 2025.

Leadship Design Options Assessment Report.

Review of Outline Business Case Report

Outline Business Case.

Strategic Business Case.

Routes and Services Methodology.

Appendices

Appendix 1 General Arrangement Design.

Appendix 2 Data Sheet.

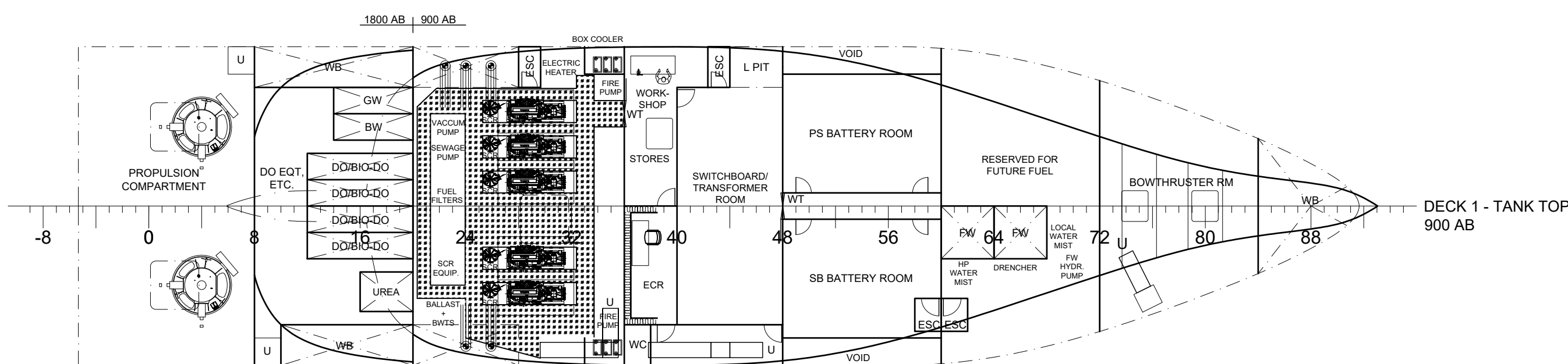
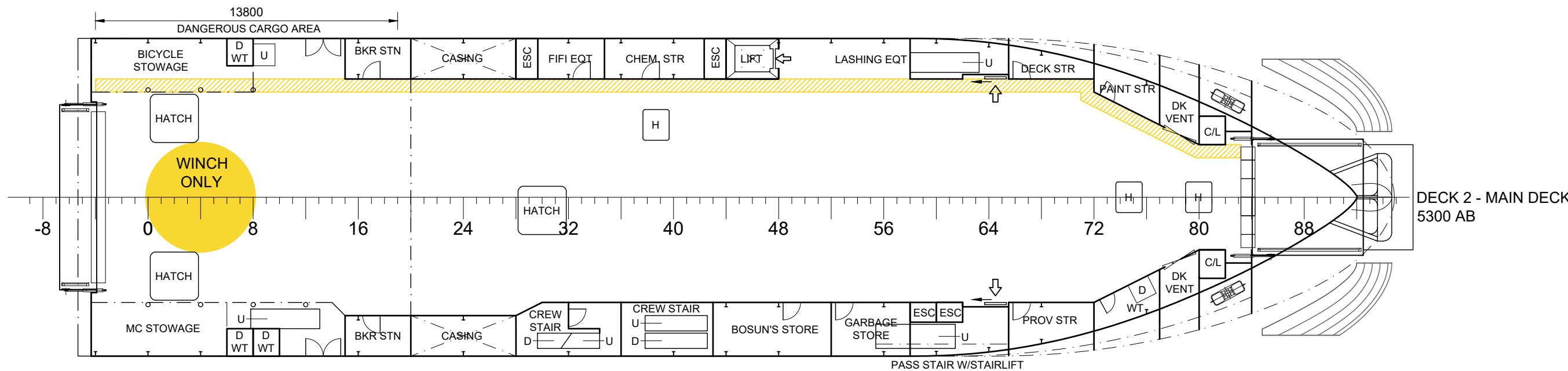
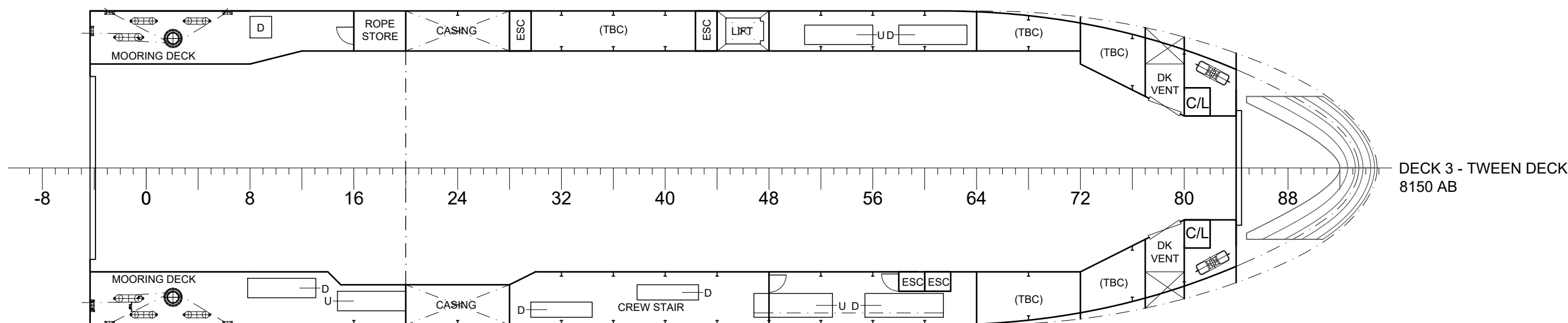
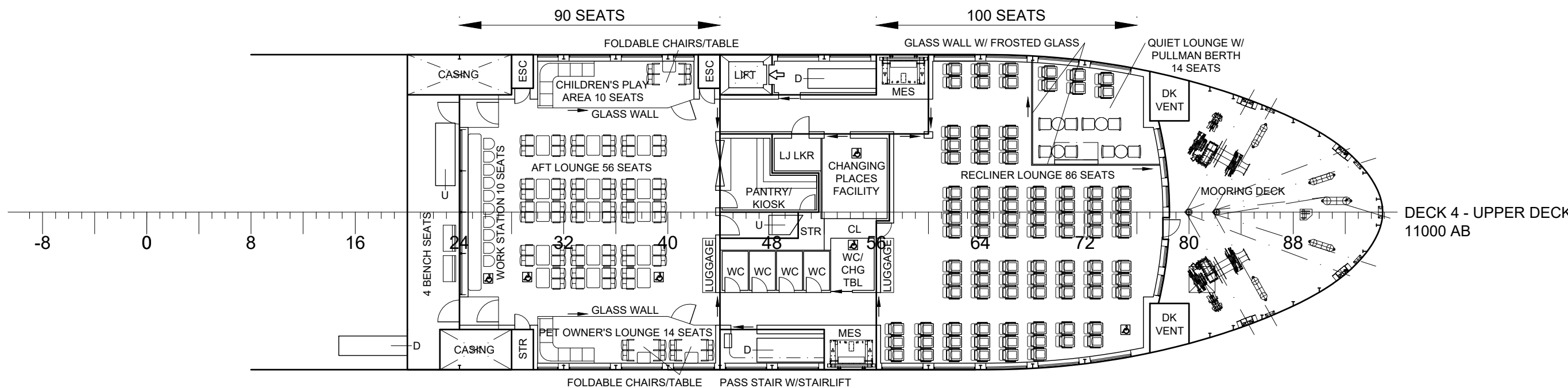
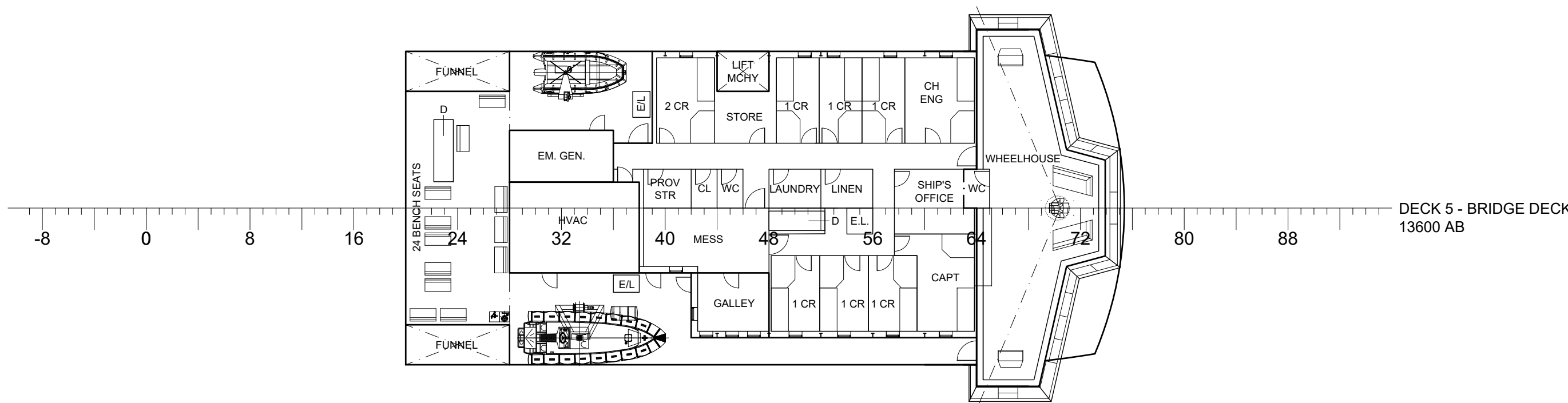
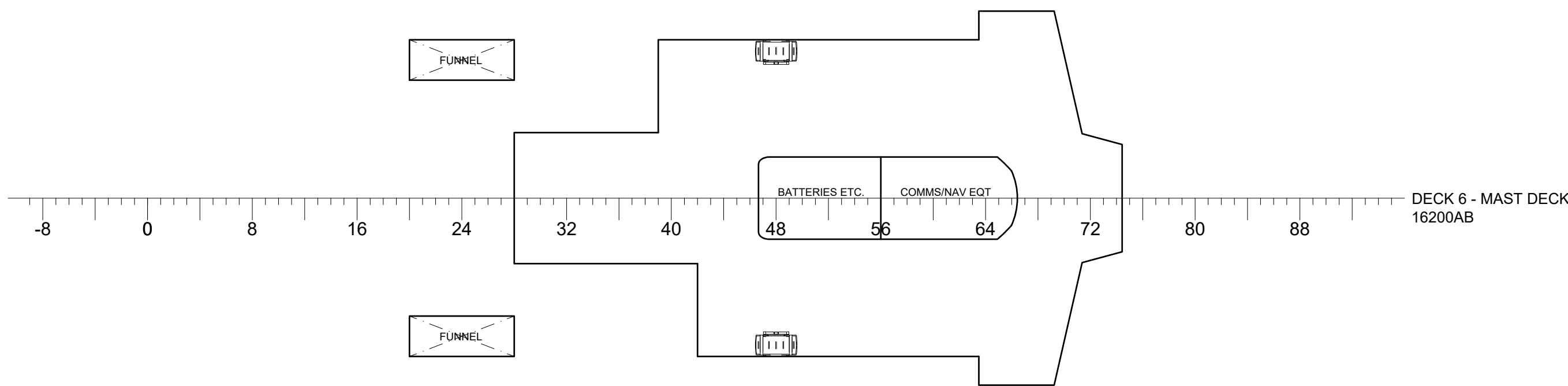
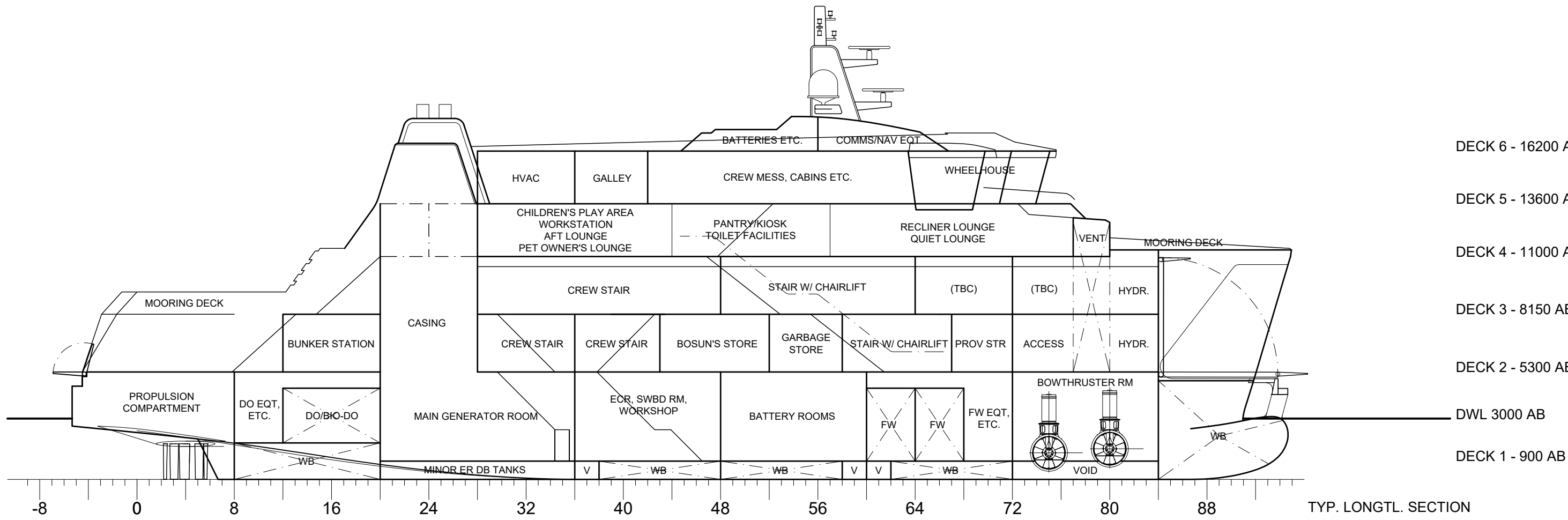
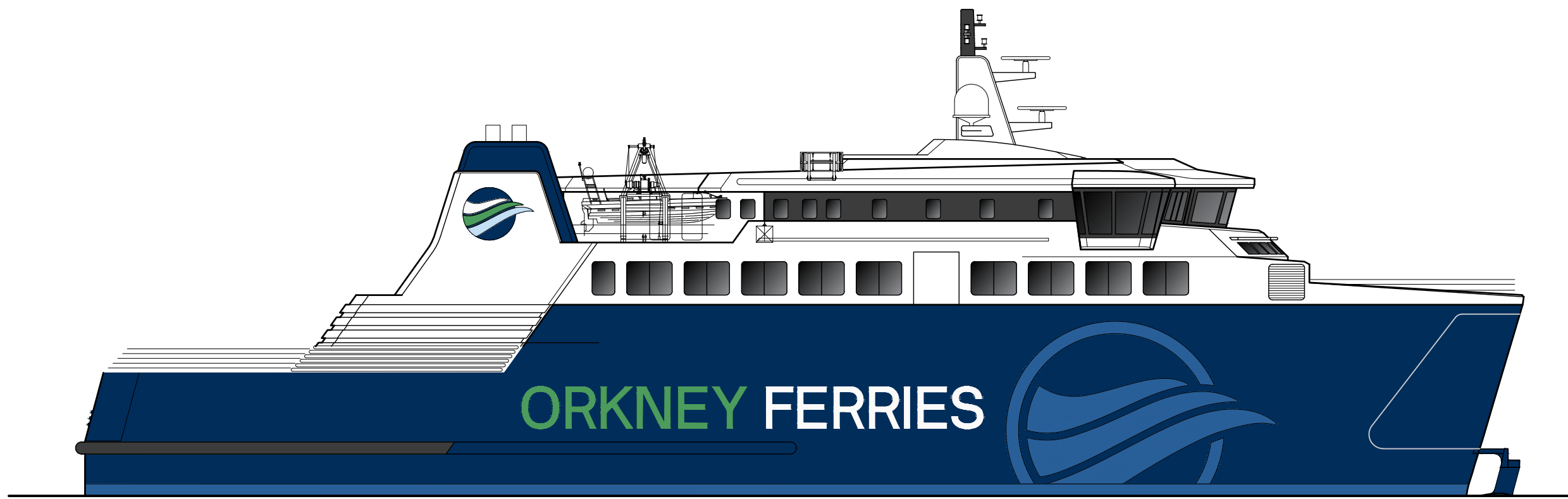
Appendix 3 3D Renderings.

Appendix 4 Indicative Cargo Stowage Plan.

Appendix 5 Ship/Shore Interface.

Appendix 6 OPEX Estimate.

Appendix 7 Equality Impact Assessment.



PRINCIPAL DIMENSIONS

LENGTH OVERALL	60.0 m
LENGTH PP	54.6 m
BEAM	14.5 m
DRAUGHT, design	3.0 m
DEPTH, maindeck	5.3 m
SERVICE SPEED	13.0 kn
GT, estimated	2384
PASSENGERS	190
CREW	10
HGVs (12.0m)	10
PRIVATE CARS (4.95m)	34
INTERIOR SEATS	190
EXTERIOR SEATS	28

DRAWING NOTES:

Rev.: YYYY.MM.DD	Int.: Description of modifications:	Chk. by: YYYY.MM.DD
Orkney Islands Council Outer North Isles RoPax Vessel General Arrangement		
Drawing number: 25003.22.0110.01	Date (orig. rel.): 2025.08.28	Revision: -
Drawn by: CHB	Checked by: KNC	Size: Scale (U.N.O.): 1:200
Sheet: 1/1		
This drawing is property of Knud E. Hansen A/S and is not to be reproduced or shown to any third party without prior consent of Knud E. Hansen A/S		

ORKNEY ISLANDS COUNCIL – NORTHERN ISLES ROPAX REPLACEMENT VESSELS



190 Passenger RoPax for the Northern Isles

The vessel is designed with a focus on passenger comfort. The main passenger facilities are located on the upper deck which is served by three passenger stairways and a lift. One of the stairways is fitted with a stairlift as a backup to the main lift.

The passenger facilities are split into different lounges to ensure flexibility and to cater for a varied customer base.

- The forward lounge is fitted with deluxe recliner chairs, each with a generous seat width of 20" and a seat pitch of 47". Each seat is fitted with a foldable table, reading light, power socket and USB charging point. Luggage racks are located at the aft end of the recliner lounge.
- The main lounge is fitted with fixed tables and chairs. Each table is fitted with two power sockets and two USB charging points.
- An area on the starboard side of the main lounge is dedicated to pet owners and is separated from the main lounge by a full height glass wall.
- An area on the port side of the main lounge is a designated quiet lounge. This area is fitted with recliner seats like those in the forward lounge and the area is separated from the main lounge by a full-height glass wall (part frosted glass for privacy).
- Additional seating is provided in the form of bar stool type high workstations, each of which is fitted with a power socket and a USB charging point.
- Six wheelchair-enabled seating points are provided, four by tables in the main lounge and two adjacent to recliner chairs in the forward lounge.
- A combined kiosk counter and pantry is available to dispense snacks, drinks and other offerings to the passengers.
- A total of six public toilets are available, one of which has baby changing facilities and one of which is designed according to Changing Places standards.
- Sheltered open deck space for passengers is provided aft on the upper deck with additional deck space located aft on the bridge deck.

ORKNEY ISLANDS COUNCIL – NORTHERN ISLES ROPAX REPLACEMENT VESSELS

Main Deck

The main deck is designed for driving through, is horizontal throughout the length and can accommodate 34 cars, 10 HGVs (12.0m units) or any combination thereof. An open-deck area is provided aft for the carriage of dangerous goods.

In a departure from the existing vessels, the aft mooring decks have been raised one deck above the main deck, to create more space and to avoid interference with RoRo operations and foot passengers.

A dedicated cycle and motorcycle stowage area is envisaged at the aft starboard and port sides of the RoRo deck, below the raised mooring decks.

The final size and configuration of the bow ramp is to be defined during the Tender Design phase as is the interface with existing linkspans.

The length of the stern ramp and its interface with the existing linkspans will be similar to those of the existing vessels.

MAIN PARTICULARS

Length o.a.approx.	60.00 m
Length p.o	54.60 m
Breadth, moulded	14.50 m
Draught (design)	3.00 m
Depth to main deck	4.50 m
Deadweight approx.	TBC t

CAPACITY

Passengers	190 pax
Crew	10 pers
Car capacity	34 pcs
HGVs (12.0m units)	10 pcs

PASSENGER ACCOMMODATION

Recliner lounge	94 seats
Dining lounge	56 seats
Bar style workstation	10 seats
Quiet lounge	5 seats
Pet owner's lounge	15 seats
Children play area	10 seats
Total indoor seats	190 seats
Outdoor seats	28 seats

Other passenger facilities:

Pantry/kiosk
Luggage racks in incliner lounge
Six toilets, one with baby changing facilities one according to Changing Places
Passenger lift and backup stair lift

CREW ACCOMMODATION

Crew cabins	10 pcs
Galley and mess room on the upper deck	
Laundry and linen store	

ORKNEY ISLANDS COUNCIL – NORTHERN ISLES ROPAX REPLACEMENT VESSELS

Machinery

The ship is equipped with a flexible energy platform that suits present demand as well as allowing updates throughout the lifetime of the ship to suit the green transition. The layout of the ship includes 5 gensets connected to a DC grid where battery packages are also connected.

This hybrid setup allows a part of the operation to be performed on electrical power charged and stored in port while the gensets can support the ship for long hauls during the day or in rough weather conditions.

The gensets can be running on a biomass-based diesel where the feedstock can be of e.g. Scottish origin. The design allows the batteries' share of energy to be increased during the lifetime of the ship, or an alternative means of power to be installed like fuel cells running on local produced hydrogen.

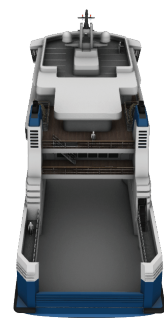


MACHINERY & EQUIPMENT

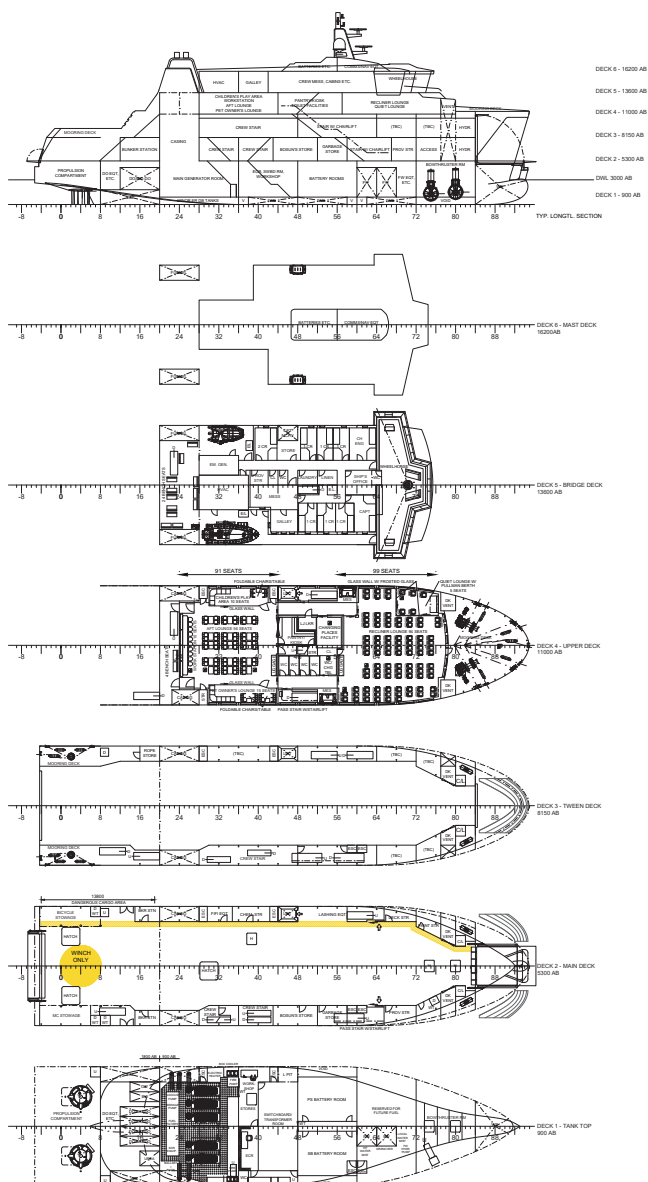
Gensets	5 x 545 kWe
Battery packages	2 x 0.6 MWh
Propulsor	2 x Cycloidal propellers
Bow thrusters	1 pcs

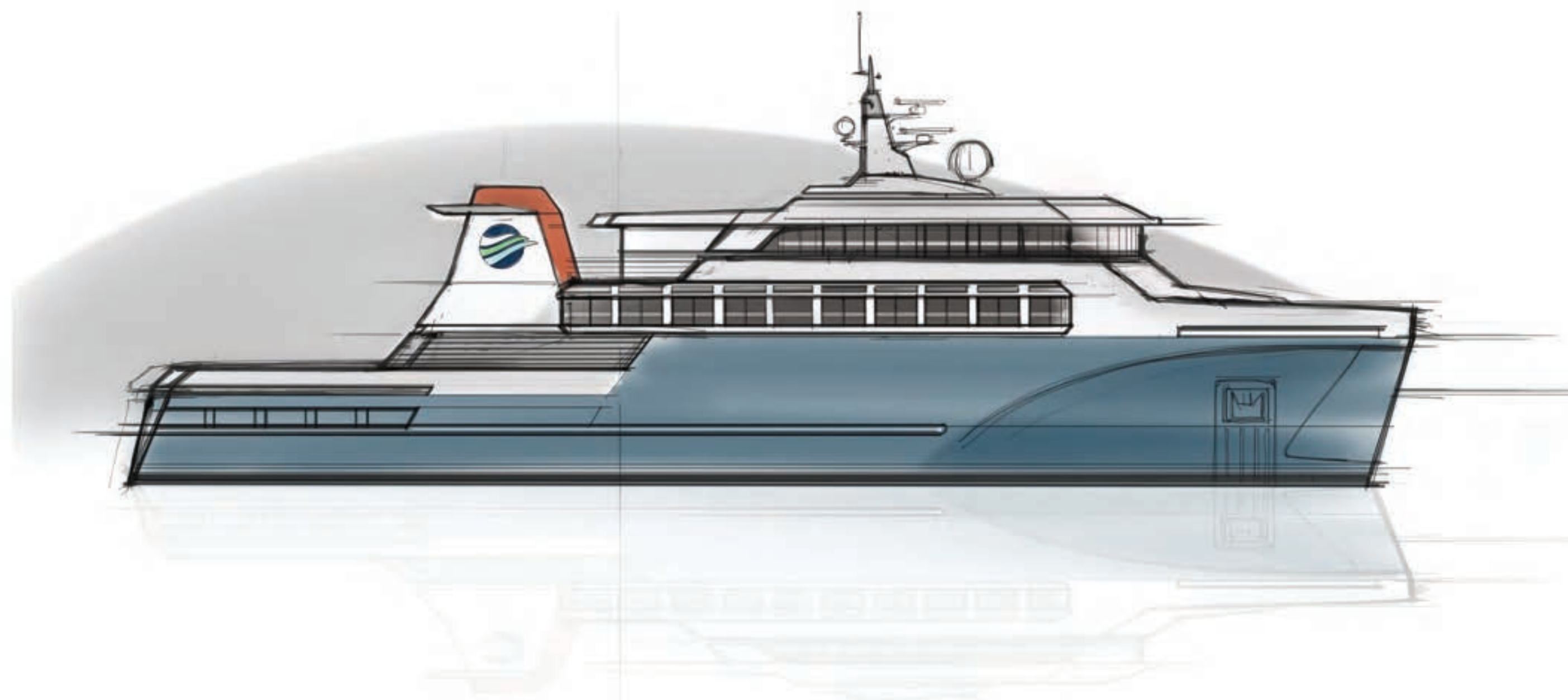
ACCOMPANYING DRAWINGS

25003.22.0110.01.A General Arrangement
25003.22.1020.01 Indicative Cargo Stowage Plan
25003.22.1030.01 Ship Shore Interface Rapness
25003.22.1030.02 Ship Shore Interface Eday
25003.22.1030.03 Ship Shore Interface Stronsay
25003.22.1030.04 Ship Shore Interface Sanday
25003.22.1030.05 Ship Shore Interface Kirkwall



ORKNEY ISLANDS COUNCIL – NORTHERN ISLES ROPAX REPLACEMENT VESSELS





ORKNEY FERRIES

KNUD E. HANSEN DESIGN

60 MT ROPAX • 25003



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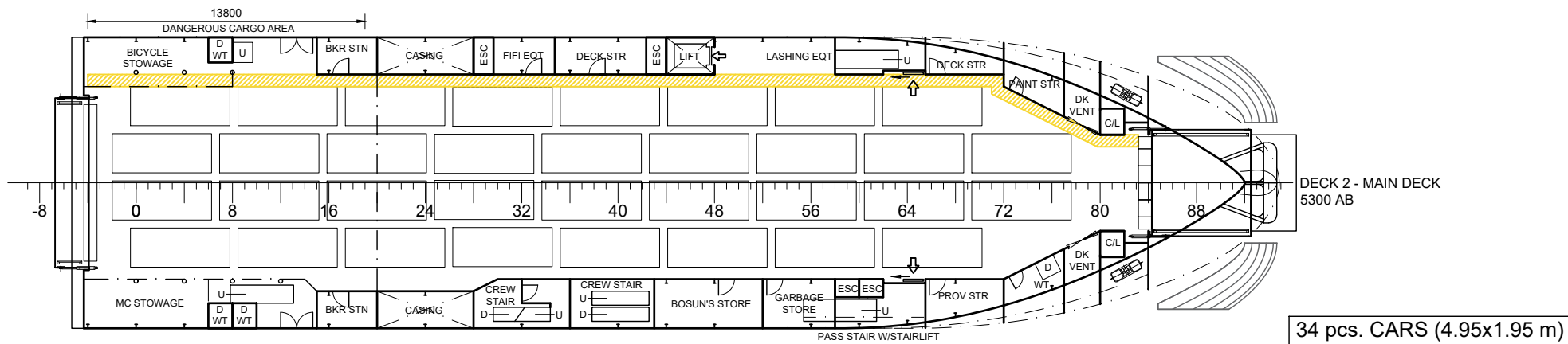
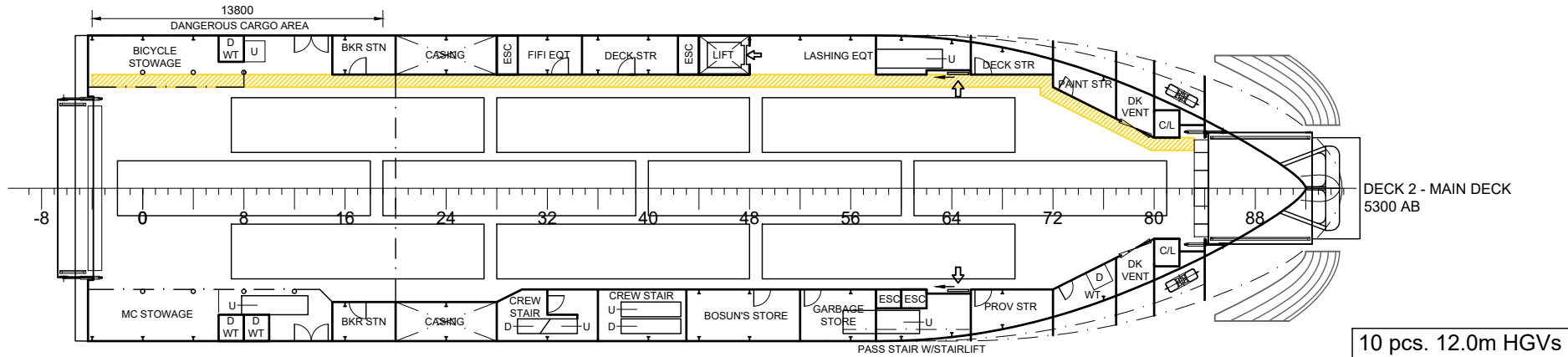
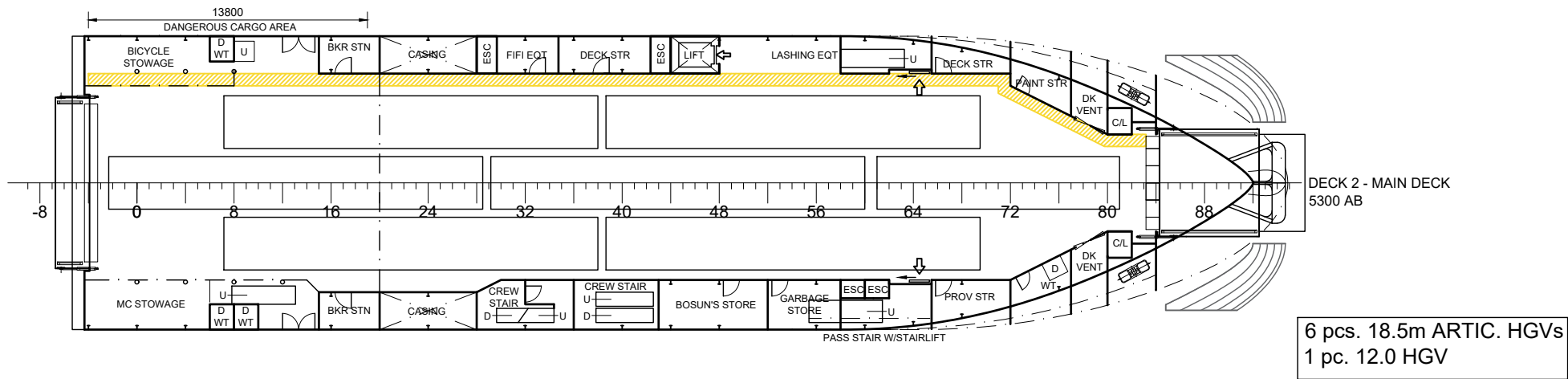





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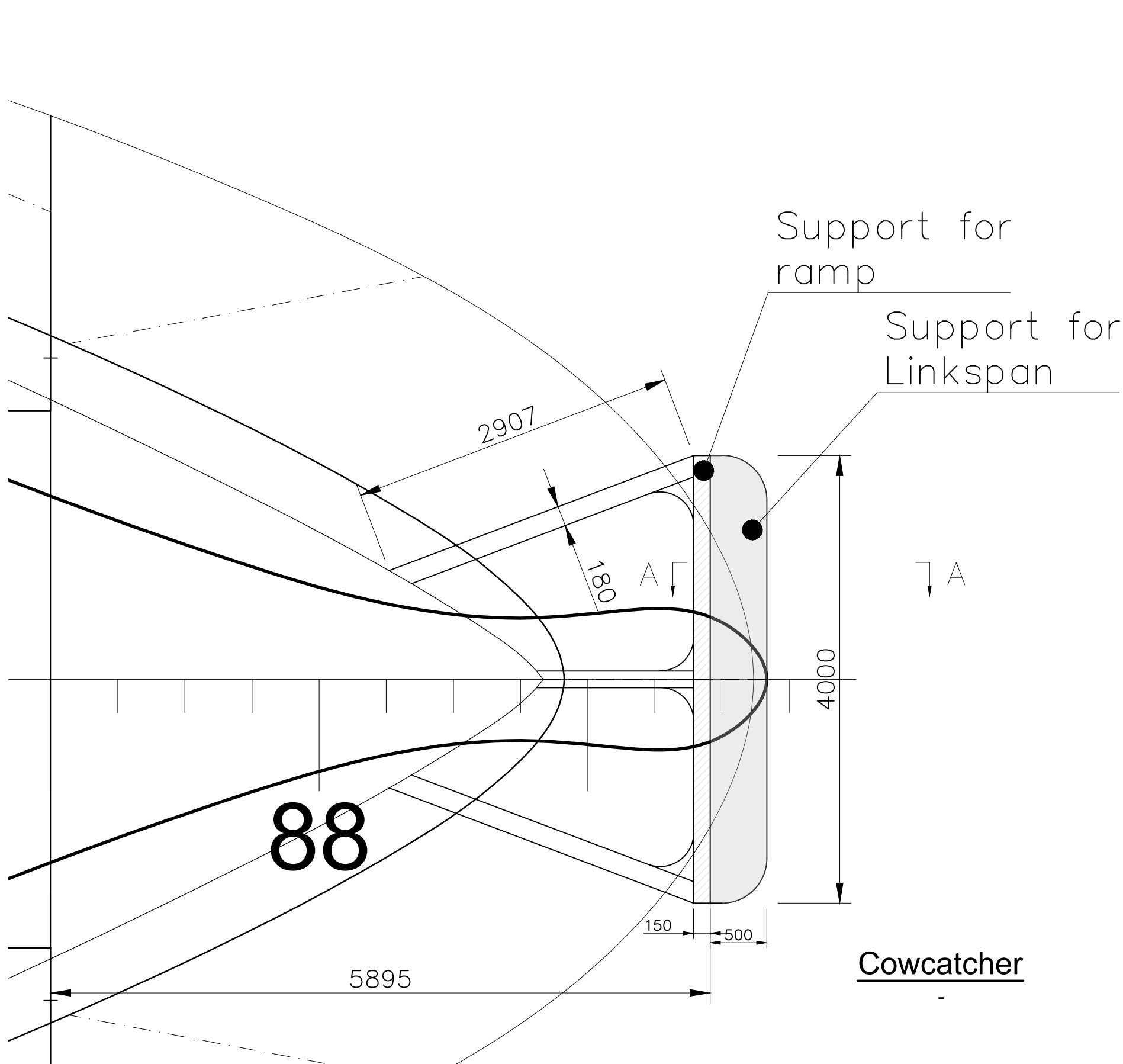
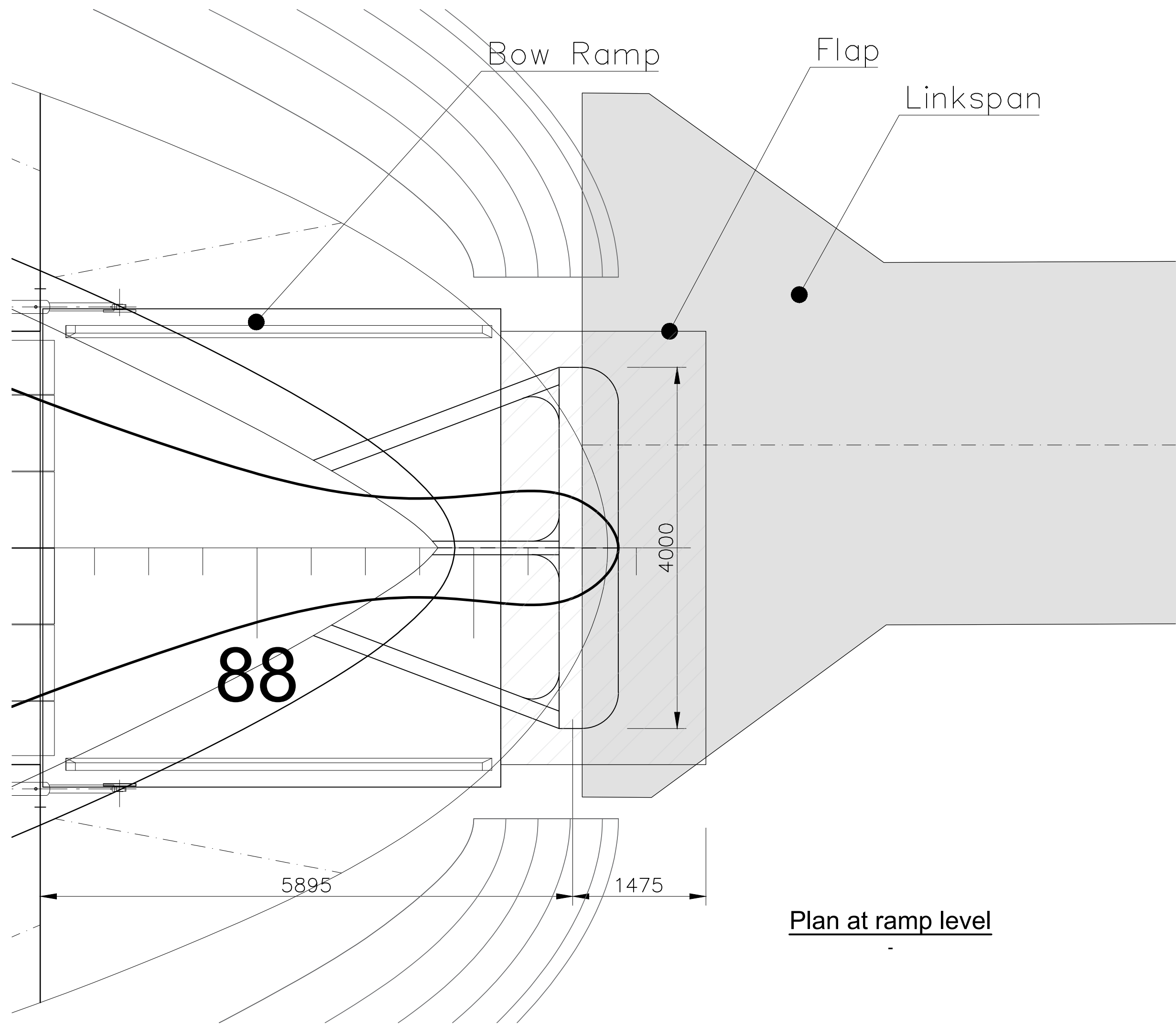
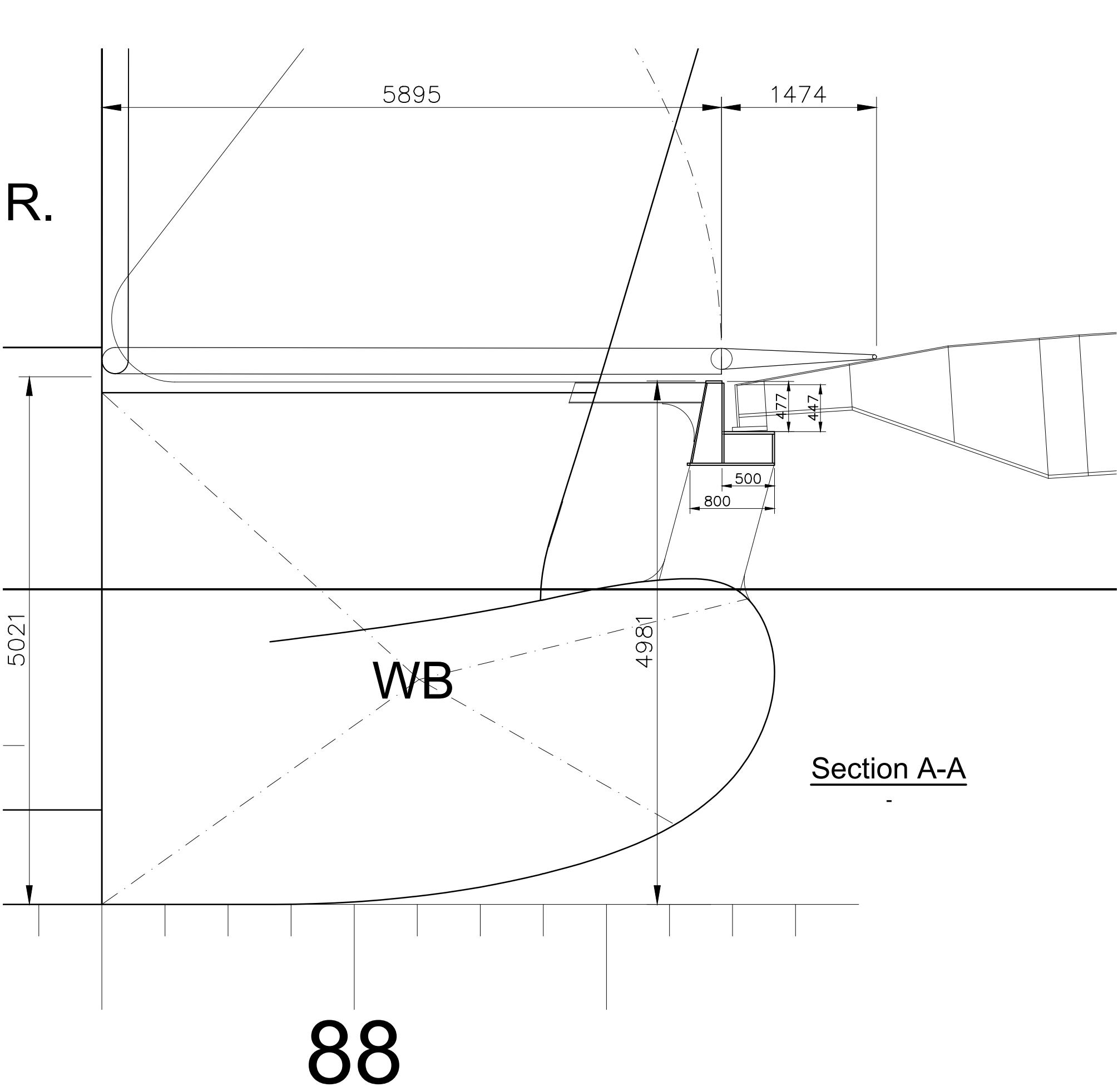
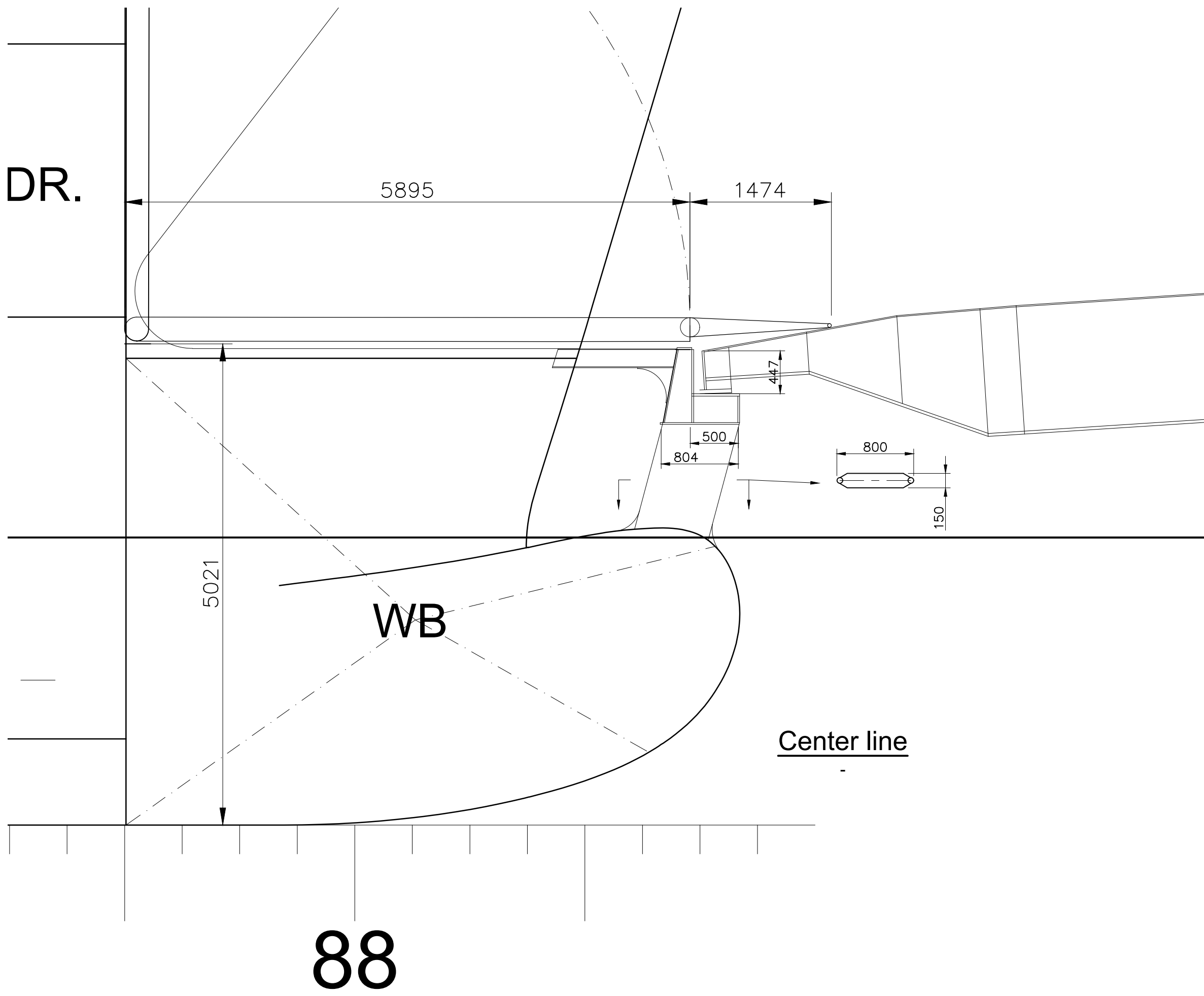


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			Orkney Islands Council Outer North Isles RoPax Vessel Principal Cargo Stowage Plan		
Drawing number:			25003.22.1020.01	Date (orig. rel.):	2025.08.28
Drawn by:			CHB	Checked by:	KNC
Size:				Scale (U.N.O.):	1:300
Revision:			-	Sheet:	1/1
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Drawing number: 25003.22.1030.05			Date (orig. rel.): 2025.08.28	Revision: -
Drawn by: CHB	Checked by: KNC	Size:	Scale (U.N.O.): 1:400	Sheet: 1/1


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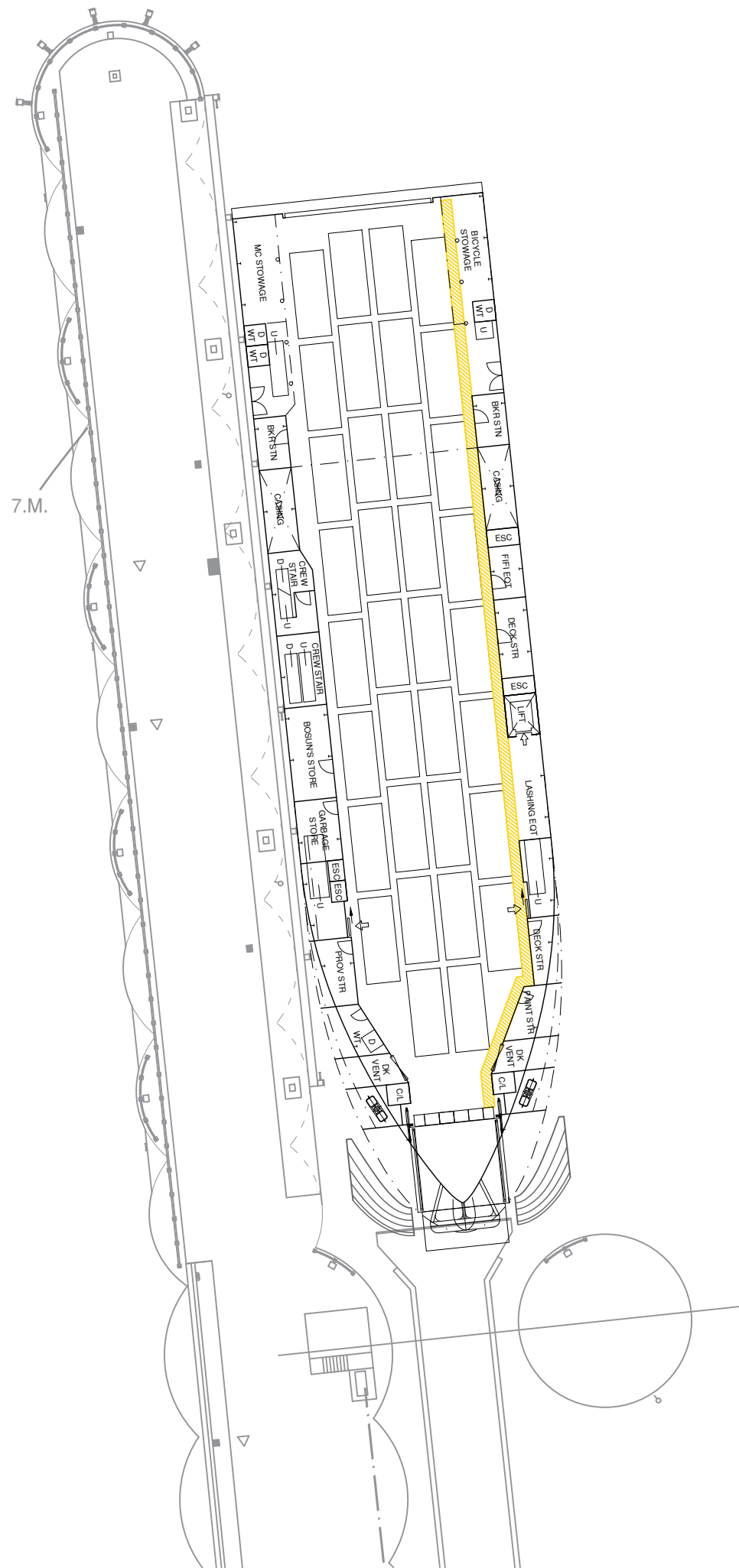
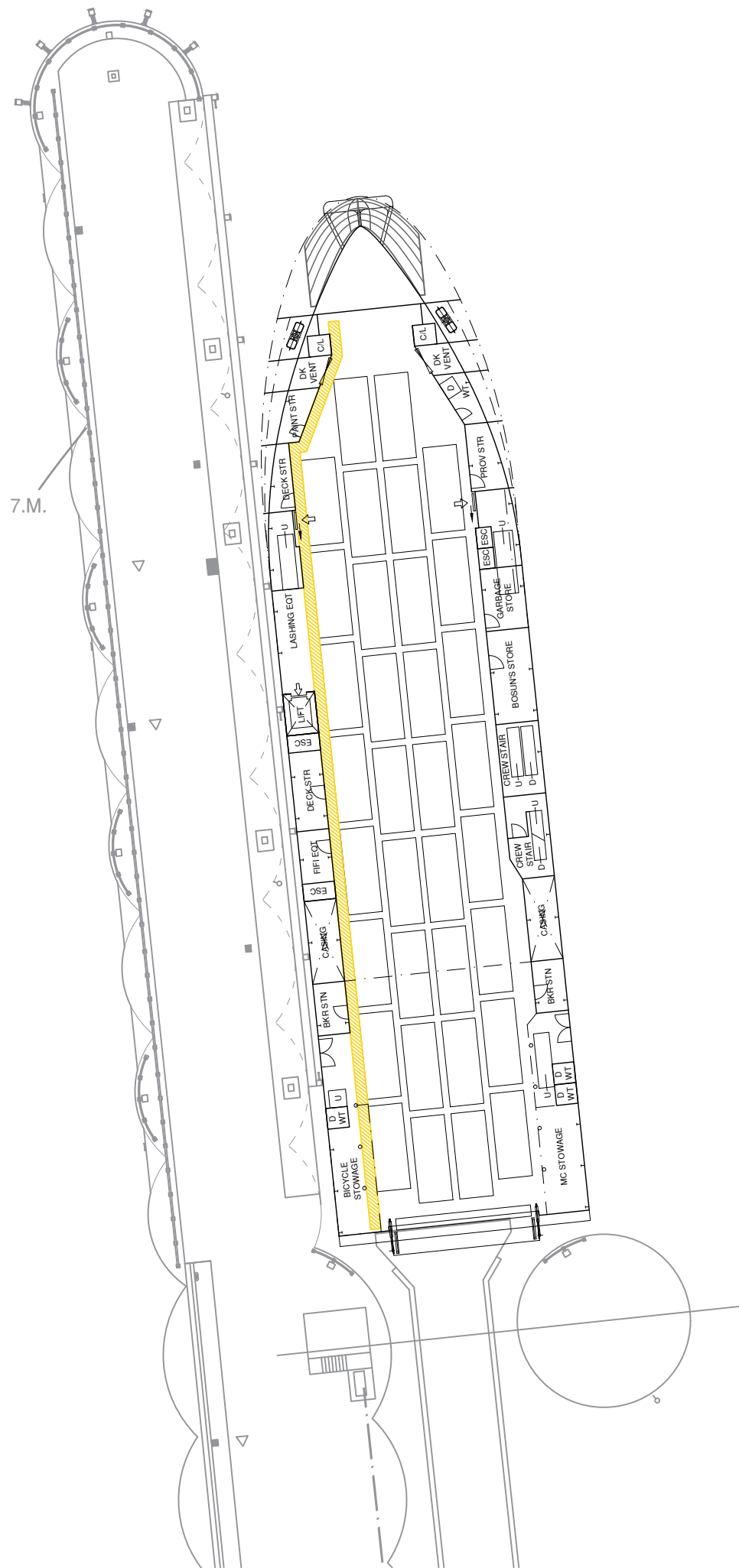


DRAWING NOTES:


NOTES:
Principal interface between the bow ramp and shore based linkspans.
Dimensions and measurements are approximate and shall be verified.

SCANTLINGS FOR GUIDANCE ONLY

Rev.:	YYYY.MM.DD:	Int.:	Description of modifications:	Chk. by:	YYYY.MM.DD:
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<div><div><div>KNUD E. HANSEN SHIP DESIGN 1957</div></div><div><div>Orkney Islands Council</div><div>Outer North Isles RoPax Vessel</div><div>PrincipalBow Ramp Linkspan Interface</div><div><div><div>Drawing number:</div><div>25003.22.1130.01</div></div><div><div>Date (orig. rel.):</div><div>2025.08.28</div></div><div><div>Revision:</div><div>-</div></div><div><div>Drawn by:</div><div>CNC</div></div><div><div>Checked by:</div><div>CHB</div></div><div><div>Size:</div><div>A1</div></div><div><div>Scale (U.N.O.):</div><div>1:40</div></div><div><div>Sheet:</div><div>1/1</div></div></div></div><div>This drawing is property of Knud E. Hansen A/S and is not to be reproduced or shown to any third party without prior consent of Knud E. Hansen A/S</div></div>					



DRAWING NOTE:
SHOREBASED INFRASTRUCTURE IS SCALED FROM OIC
DWG. 1008014 AND IS SUBJECT TO VERIFICATION.

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Rev.:	YYYY.MM.DD:	Init.:	Description of modifications:	Chk. by:	YYYY.MM.DD:
				Orkney Islands Council Outer North Isles RoPax Vessel Ship Shore Interface - Sanday	
				Drawing number:	25003.22.1030.04
Drawn by:	CHB	Checked by:	KNC	Size:	
This drawing is property of Knud E. Hansen A/S and is not to be reproduced or shown to any third party without prior consent of Knud E. Hansen A/S				Date (orig. rel.):	2025.08.28
				Scale (U.N.O.):	1:400
				Revision:	-
				Sheet:	1/1



Equality Impact Assessment Template

The purpose of an Equality Impact Assessment (EqIA) is to improve the work of Orkney Islands Council by making sure it promotes equality and does not discriminate. This assessment records the likely impact of any changes to a proposal or changes by anticipating the consequences and making sure that any negative impacts are eliminated or minimised and positive impacts are maximised.

Should you have any questions or wish for your draft EqIA to be reviewed by our Equality, Diversity and Inclusion Adviser, please contact OD@orkney.gov.uk.

1. Identification of the Proposal or Change

Name of proposal or change being assessed.	Ferry Replacement Programme
Responsible Service and Directorate.	Marine Services and Transportation
Date of assessment.	11/09/25
Is the proposal or change existing? (Please indicate if the service is to be deleted, reduced or changed significantly).	To consider the Ferry Replacement Programme for Orkney's lifeline Inter Island Ferry Services

2. Primary Information

What are the intended outcomes of the proposal or change?	To progress with a fleet replacement programme for Orkney's life-line ferry services.
Is the proposal or change strategically important?	Yes.
State who is or may be affected by this proposal or change, and how?	Benefit local island residents and also support businesses and tourism in the islands.
How have stakeholders been involved in the development of this proposal or change?	Yes, as outlined in the report.

Is there any existing data and / or research relating to equalities issues in this policy area? Please summarise. E.g. consultations, national surveys, performance data, complaints, service user feedback, academic / consultants' reports, benchmarking.	Yes, as outlined in the report.
Is there any existing evidence relating to socio-economic disadvantage and inequalities of outcome in this policy area? Please summarise. E.g. For people living in poverty or for people of low income. See The Fairer Scotland Duty Guidance for Public Bodies for further information.	<p>It is known that a higher population of residents in the Outer North Isles suffer from poverty however this can be hidden in such remote island locations.</p> <p>The Routes and Services Methodology has highlighted the limited operating day and frequency of ferry services that exist across Orkney, highlighting under provision compared with comparable areas in Scotland.</p> <p>The average age of ferry fleet in Orkney is considerably older than the 15-year-old average goal outlined in the draft Islands Connectivity Plan.</p>
Could the proposal or change have a differential impact on any of the following equality areas?	Please provide any evidence – positive impacts / benefits, negative impacts and reasons:
1. Race: this includes ethnic or national groups, colour and nationality.	n/a
2. Sex: a man or a woman.	n/a
3. Sexual Orientation: whether a person's sexual attraction is towards their own sex, the opposite sex or to both sexes.	n/a
4. Gender Reassignment: the process of transitioning from one gender to another.	n/a

5. Pregnancy and maternity.	n/a
6. Age: people of different ages.	Yes – older. The existing ferry fleet is not accessible, with steep passenger stairways and high door thresholds, making them inaccessible for people with restricted mobility.
7. Religion or beliefs or none (atheists).	n/a
8. Disability: people with disabilities (whether registered or not).	
9. Marriage and Civil Partnerships.	n/a
10. Caring responsibilities	Yes – positive. New vessels would address the accessibility issues which exist at present.
11. Socio-economic disadvantage.	Yes – positive in providing a fit for purpose service to our island communities.

3. Impact Assessment

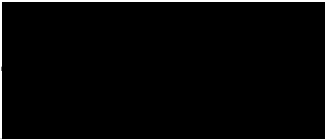
Does the analysis above identify any differential impacts which need to be addressed?	Yes (positive) action plan outlines a number of improvements to be made subject to budget and resource availability.
Does the analysis above identify any potential negative impacts?	No
Do you have enough information to make a judgement? If no, what information do you require?	Yes

4. Equality Impact Assessment Action Plan

Please complete the following action plan where you have identified any differential impacts or potential negative impacts in Section 3 of the Equality Impact Assessment.

Impact Identified	Action to be taken	Owner	How will it be monitored	Date Action to be completed

5. Sign and Date

Signature:	
Name:	Laura Cromarty
Date:	23/8/25

Island Communities Impact Assessment

Ferry Replacement Programme



Preliminary Considerations	Response
Please provide a brief description or summary of the policy, strategy or service under review for the purposes of this assessment.	Ferry Replacement Programme for Orkney's Lifeline Inter Island Ferry Service
Step 1 – Develop a clear understanding of your objectives	Response
What are the objectives of the policy, strategy or service?	To provide a safe, reliable and fit for purpose lifeline service to Orkney's island communities.
Do you need to consult?	Consultation has been carried out on the Strategic Business Case and Outline Business Case with further consultation to be completed during 2024/25.
How are islands identified for the purpose of the policy, strategy or service?	The service provision is specifically for island communities in Orkney where the level of provision has been considered and consulted on an island by island basis as the needs for each island differ.
What are the intended impacts/outcomes and how do these potentially differ in the islands?	<p>The Ferry Replacement Programme considers the vessels which are in need of replacement first, as part of an ongoing rolling programme of works. The size and type of vessels will be carefully considered and based on evidence compiled from the previous Outline Business Case and Strategic Business Case.</p> <p>The type of service provision will differ in the inner and south isles where distance is short and demand for frequent travel is higher compared with the Outer North Isles where distance is much greater, time at sea is longer and frequency is therefore less, as per the Scottish Government Routes and Services Methodology guidance. Services which are freight specific shall also be considered in a different manner to passenger services. In this instance, the lifeline mode of travel is by air as opposed to ferry.</p>

Is the policy, strategy or service new?	Provision of lifeline ferry services is a continued service for the Local Authority.
Step 2 – Gather your data and identify your stakeholders	Response
What data is available about the current situation in the islands?	Passenger, vehicle and freight carryings to determine demand and supply, data from previous reporting, information from consultation events.
Do you need to consult?	Yes, consultation to be carried during 2024/25 which is a continuation of previous work.
How does any existing data differ between islands?	Demand differs in island communities. For example, the demand for freight is significantly higher in Westray followed by Sanday in the Outer North Isles. Capacity constraints are experienced at some timing points and also across the South Isles and Inner North Isles, thereby recommending larger vessels to serve Hoy/Flotta and Rousay, Egilsay and Wyre.
Are there any existing design features or mitigations in place?	Frequency and length of operating day is currently restricted due to the current crewing pattern whereby the hours of work regulations restrict the number of hours worked by a single crew.
Step 3 – Consultation	Response
Who do you need to consult with?	Island communities
How will you carry out your consultation and in what timescales?	Intend to carry out consultation on island subject to staffing resource. Alternatively, meetings will be arranged via Teams.
What questions will you ask when considering how to address island realities?	Consultation will involve next steps and discussions around vessels. Feedback on vessel requirements will be noted.
What information has already been gathered through consultations and what concerns have been raised previously by island communities?	Significant consultation time has been spent on the Ferry Replacement Programme to date from the previous work through the Strategic and Outline Business Cases. This has concluded that in general, the majority of residents would like to see a slightly longer

	operating day with one or two more rotations in a day where possible. An evening service on a Friday and Saturday would be preferable for social and leisure purposes.
Is your consultation robust and meaningful and sufficient to comply with the Section 7 duty?	The Ferry Replacement Programme is specifically for island communities.
Step 4 – Assessment	Response
Does your assessment identify any unique impacts on island communities?	As above.
Does your assessment identify any potential barriers or wider impacts?	As above.
How will you address these?	As above.
<p>You must now determine whether in your opinion your policy, strategy or service is likely to have an effect on an island community, which is significantly different from its effect on other communities (including other island communities).</p> <p>If your answer is No to the above question, a full ICIA will NOT be required and you can process to Step 6.</p> <p>If the answer is Yes, an ICIA must be prepared and you should proceed to Step 5.</p> <p>To form your opinion, the following questions should be considered:</p> <ul style="list-style-type: none"> • Does the evidence show different circumstances or different expectations or needs, or different experiences or outcomes (such as different levels of satisfaction, or different rates of participation)? • Are these different effects likely? • Are these effects significantly different? • Could the effect amount to a disadvantage for an island community compared to the Scottish mainland or between island groups? 	
Step 5 – Preparing your ICIA	Response
In Step 5, you should describe the likely significantly different effect of the policy, strategy or service:	Programme is to specifically benefit isles communities by improving connectivity.

Assess the extent to which you consider that the policy, strategy or service can be developed or delivered in such a manner as to improve or mitigate, for island communities, the outcomes resulting from it.	As above.
Consider alternative delivery mechanisms and whether further consultation is required.	As above.
Describe how these alternative delivery mechanisms will improve or mitigate outcomes for island communities.	As above.
Identify resources required to improve or mitigate outcomes for island communities.	As above.
Stage 6 – Making adjustments to your work	Response
Should delivery mechanisms/mitigations vary in different communities?	The delivery of the Ferry Replacement Programme will be island specific.
Do you need to consult with island communities in respect of mechanisms or mitigations?	Consultation will be carried out with island communities to confirm any infrastructure changes and in respect of vessel design.
Have island circumstances been factored into the evaluation process?	The Ferry Replacement Programme is island specific.
Have any island-specific indicators/targets been identified that require monitoring?	Considered within the Outline Business Case and Review of Outline Business Case.
How will outcomes be measured on the islands?	Passenger, vehicle and freight data collected and views from consultation process.
How has the policy, strategy or service affected island communities?	The Ferry Replacement Programme is island specific.
How will lessons learned in this ICIA inform future policy making and service delivery?	The Ferry Replacement Programme is island specific.
Step 7 – Publishing your ICIA	Response

Have you presented your ICIA in an Easy Read format?	n/a
Does it need to be presented in Gaelic or any other language?	n/a
Where will you publish your ICIA and will relevant stakeholders be able to easily access it?	Attached to Ferry Replacement Programme report for information
Who will sign off your final ICIA and why?	Officer working on the programme

ICIA completed by:	Laura Cromarty
Position:	Service Manager (Transportation)
Signature:	
Date complete:	16/5/24
ICIA approved by:	James Buck
Position:	Head of Marine Services, Transportation and Harbour Master
Signature:	
Date complete:	12/9/25