CITY OF LONG BEACH

Memorandum

Date: January 10, 2024

To: Thomas B. Modica, City Manager

From: Bo Martinez, Economic Development Director

For: Mayor and Members of the City Council

Subject: **Queen Mary Update**

Background

The purpose of this memorandum is to provide an update on the City of Long Beach-owned (City) RMS Queen Mary. While the Ship is an important tourist and cultural asset for the City, it has a long and storied international history. So, to begin, I would like to provide a brief overview of the Ship's history.

- 1930 -1936: Queen Mary Constructed in Clydebank, Scotland
- May 27, 1936: Maiden Voyage, Southampton to New York
- 1940 -1946: War Years as Grey Ghost
- 1947 – 1967: Continued Trans-Atlantic and Cruise ship Service
- 1967: Purchased by the City of Long Beach
- October 31, 1967 – December 9, 1967, final voyage from Southampton to Long Beach
- 1968 – 1971: Drydocking and Conversion to Hotel and Museum
- 1972: Hotel opens
- 1978: Oversight of Queen Mary to Port of Long Beach
- 1980: Wrather Corporation signs 66-year Lease w/ Port of Long Beach
- 1988: Disney buys Wrather and takes over QM Lease
- 1992: Disney terminates lease, hotel/attraction closes
- 1992: Board of Harbor Commissioners transfers control to the City
- 1993: RMS Foundation Signs 5-year Lease
- 1995: Lease assigned to QSDI/subleased to RMS Foundation
- 1998: Amended & Restated Lease with QSDI for 66 years
- 2005: QSDI files bankruptcy
- 2007: Save the Queen (STQ) purchases Lease through bankruptcy

- 2009: STQ defaults on loan, Garrison takes over Lease
- 2015: Lease sold and assigned to Urban Commons
- 2019: Lease interest purchased by Eagle Hospitality REIT
- 2020: Queen Mary closed due to COVID-19 pandemic
- 2021: Eagle Hospitality files for Bankruptcy/City Resumes Control, begins repairs
- 2022 : City enters into Management Agreement w/ Evolution Hospitality, continues repairs
- 2023: City and Port Partnership Agreement provides $12M for Ship repairs/reopening
- 2023: Queen Mary Hotel, events, and attractions Re-open under City control

It's important to note that prior to engaging an operator to manage the Queen Mary, the City researched other options for the Ship including deconstruction in-place, relocation, recycling, and drydocking. These options and potential cost considerations were presented to the City Council at a study session on July 20, 2021. The alternatives to continued operation were costly, ranging from $100M to $500M in immediate expenditures.

On June 21, 2022, the City Council authorized a Hotel Management Agreement with Evolution Hospitality to manage the Queen Mary. This marked the first time in over 40 years that the Ship was not operated under the master lease model wherein risk, responsibility, and opportunity were essentially transferred to a private lease interest. Under the master lease model, over half a dozen entities burdened with debt and other financial obligations proved unsuccessful in managing the Ship on behalf of the city.

Under the approved Hotel Management Agreement, the City is directly responsible for operating and maintaining the Ship and will reinvest all revenues generated on the former leasehold back into the Ship, unburdened by payment due to investors or debt obligations from acquiring a long-term lease. The City will prioritize stabilizing and maintaining the Queen Mary, while also planning for the long-term development of the site.

Subsequently, the City Council approved the creation of the Pier H Bureau in the Department of Economic Development to oversee the management of the Queen Mary, the former leasehold area, and adjacent properties. The City Council also approved the hiring of a Public Works engineer dedicated to oversight of this important asset. The Economic Development Departments Pier H Bureau staff are sited at the Queen Mary and work closely with Evolution Hospitality to ensure transparent and successful operational accountability. The City Manager's Office of Special Events and Filming, in close cooperation with the Pier H Bureau staff, have taken on responsibility for most of the larger site-wide events, including those that utilize the Harry Bridges Special Events Park. In 2023 alone, the site has accommodated three weekend long music festivals hosting crowds between 20 – 30 thousand people.

City Stewardship

Upon taking control of the Queen Mary following the bankruptcy of Eagle Hospitality/Urban Commons, the City immediately began addressing maintenance concerns at the Ship. Since taking control of the Queen Mary in 2021, the City has undertaken numerous projects to improve the structural stability, safety, and customer experience for the Queen Mary. In a relatively short period of time, City staff have overseen the completion of a tremendous number of improvements including the following:

ASSET MANAGEMENT
PROPERTY MANAGEMENT SYSTEM
PLUMBING AND PIPING REPAIRS
FLOORING AND CARPETING REPAIRS
ELEVATOR REPAIRS
FURNITURE FIXTURES & EQUIPMENT
HVAC REPAIRS
BOILERS AND HEAT EXCHANGERS
PAINTING & RUST ABATEMENT
PROMENADE DECK REPAIRS
CRITICAL ELECTRICAL UPGRADES
LINOLEUM FLOORING

STRUCTURAL
LIFEBOAT REMOVAL
BILGE PUMPS & CONTROLS
GANGWAY REPAIRS
HULL AND TANK STUDY
SEWER PUMP REPAIRS
ROOF PATCHING

FIRE LIFE SAFETY
EMERGENCY GENERATOR
FIRE LIFE SAFETY REPAIRS
ALL HAZARDS RESPONSE PLAN

GUEST ROOMS/OPERATIONS
WOOD REPAIR/REFINISH
SOFT GOODS/LINENS
KITCHEN EQUIPMENT
ROOM REPAIRS
DEEP CLEANING

City staff will work closely with on-ship and contracted engineers, utilizing existing and ongoing assessments, to continue to identify and prioritize projects that address the needs of the Ship now and into the future.

City/Port Partnership Agreement

As noted in the preceding background of the Queen Mary, both the City and the Port of Long Beach have historically contributed to the stewardship of the Ship. Coming out of the pandemic and bankruptcy there was considerable discussion regarding the future of the Queen Mary, and what role the Port of Long Beach might play in that future. Ultimately, the City's experience with hotel, restaurant, parking, and passenger terminal leases and expertise related to special events and filming activity pointed to the City as the best steward for the Queen Mary and Pier H for the foreseeable future. But it was also understood that support and insight from the Port of Long Beach was critical for the Ship at this pivotal point.

To that end, the City and Port of Long Beach worked closely on a collaborative agreement that benefits both parties and support the Queen Mary during its transition back to City control after decades under the private lease model of management. In consideration of the City's goal to transition from fossil fuels, the Energy Resources Department identified 13.9 acres of underutilized oil operations properties within the Harbor District. These properties were then transferred to the Port of Long Beach to lease to Port customers. In exchange, the Port of Long Beach agreed to advance up to $12 million to support the re-opening efforts for the Queen Mary. New lease revenue derived from these former City properties would be used to repay the Port for the advance and would then be split equally between the Port and the City.

This advance from the Port of Long Beach is extremely beneficial to the Ship becoming self-sufficient as it provides funding for the considerable reopening expenses incurred at a time of limited revenue generation.

Hull and Tank Study

The Hull and Tank Study (Attachment A) represented yet another partnership opportunity for the Port and City. Early on, the City and Port decided it was important to ensure the safety and integrity of the Queen Mary. Both parties agreed to share in the expense of a comprehensive investigation of the Ship's hull and ballast tanks. This study was conducted by Longitude, a subsidiary of ABL Group, and took place over a period of approximately seven months.

A summary of the hull and tank study findings was provided in June of 2023. The study found that the hull and tanks were in better condition than expected and provided some recommendations for regular inspection and additional follow-up repairs. The inspection plan for the study included both an underwater inspection and an internal inspection that required removal of ballast in several tanks to facilitate inspection.

The consultant concluded that the vessel was overall in good condition for its age, and that the ballast tank coatings had been mainly preserved and had mitigated heavy corrosion. The inspection report noted that survey measurements provided confidence that the estimated global strength calculations are adequate, and the hull does not present any global strength issues. A soft patch at the hull was identified, and the consultant provided a repair recommendation. Staff are currently working to scope and implement that repair.

The tanks tops and tank structure coatings were found to be deficient, but the consultant noted that the tanks would only require additional repairs if new structures were added to that area of the Ship. Currently, there are no plans to add structures to the hull or tank areas of the Ship. Additionally, as per consultant recommendation, staff will scope and implement a regular hull and tank inspection program.

Financial Position

It is not unexpected that Fiscal Year 2023 (FY 23) ended in a net loss for the Queen Mary. Between October 1, 2022, and September 30, 2023, there were significant expenses associated with re-opening of the Ship, with little to no revenue until after the broader reopening on June 9, 2023. Revenue quickly increased to well over $2M monthly, and by the end of the fiscal year, the Queen Mary was net positive on a monthly basis. For the year, including extensive re-opening expenses, the Queen Mary ended the year at a loss of just over $7M. This loss, and the associated re-opening expenses, were primarily offset by the City/Port Partnership revenue advance.

The Ship's FY 24 proposed budget (Attachment B), estimates to end the year with net income of over $3.6M which includes hotel, attractions, and special events activities. It should be noted that this represents another year of phased reopening, and subsequent out years are

anticipated to be stronger. Additionally, this does not include revenue generated from the Carnival Dome and Parking Garage expected to generate approximately $4M combined in FY 24. All revenue generated on the former leasehold, will be invested back into the Ship and vicinity including addressing capital and operational needs. Net Income for the first month of FY 24 was over $360,000.

New and Upcoming Expanded Opportunities

In addition to expanding the hotel capacity from 100 to 200 guestrooms since the June re-opening, the Queen Mary has implemented several other operational improvements. A new pricing model was implemented in October that provides for off-peak pricing and increased accessibility to the historic Queen Mary for visitors on a more restricted budget. Additionally, the Queen Mary hosted two community free days. The most recent was a holiday-oriented event which included a visit by Santa Claus, and activities for adults and children. The Ship will work to expand these community free days for each Council District.

While the Ship opened with three tour offerings, this has already been expanded to 22 guest tours and experiences, including a newly developed Adian Sinclair experience and seance room, while increasing paranormal tours that continue to sell out due to increased interest at the Ship. A newly hired Director of Experiences is tasked with developing and expanding tours, exhibits and other experiential offerings at the Queen Mary. This includes the newly opened Observation Bar Game Room and the addition of the Piccadilly Candy Shoppe. The Ship will also begin to focus on marketing the Queen Mary for smaller meetings and conferences.

The Ship is also focused on bringing back popular venues and activities such as Sir Winston's Restaurant & Lounge. Sunday Brunch returned on December 3rd and included a live band with the intent of creating a musical series that represents the diverse demographic of Long Beach, with acts rotating throughout the month. The return of live music, special events and music festivals to the Queen Mary and Harry Bridges Special Events Park has further highlighted the importance of live music and entertainment to the future success of the Ship, with over approximately 60,000 guests coming aboard since the start of the fiscal year. The Queen Mary hosted highly successful Independence Day, Shaqtoberfest, and New Year’s Eve celebrations. In 2024, the Ship will see even more music and events as the City and operator look to expand music and entertainment opportunities.

Immediate Future

In addition to continued maintenance and repair projects planned for the next year, including repair/repainting of the third smokestack, elevator upgrades, HVAC controls, room repairs, and carpeting, there are some larger sitewide projects that will help prepare the Queen Mary property for increased music and entertainment activities and better position the site for future development. The vacant and dilapidated English village will be demolished and paved, along with other unused structures on the site. Additionally, staff are in the process of installing automated parking improvements which will enhance the guest experience for Queen Mary and Carnival guests. Staff is looking to develop a traffic circulation plan for the site, including

the implementation of a designated ride-share area to better streamline traffic flow to and from the Ship.

City staff are currently investigating opportunities to develop a temporary amphitheater within the former leasehold area. The goal would be to provide a unique venue to meet demand of concert promoters in the region, stimulate the tourist economy, and provide additional revenue generation to support the Queen Mary. Such a facility would also fill the gap while broader development at the site is considered.

On the Ship, an expansive section of the Sun Deck will be extensively repaired and renovated. This is a popular location for special events and weddings. It is expected to increase revenue generation immediately upon completion. There are also plans to renovate the Ghosts and Legends Tour, which is a popular and anticipated attraction. City staff will also look to work with non-profit partners to identify and fund art and historic restorations projects on the Queen Mary. Queen Mary's role as a historic and cultural resource will be further promoted by identifying ways to integrate art, music, and culture into Ship programming.

City staff are also working closely with representatives from California State University, Long Beach and Evolution Hospitality to develop academic programs and internship opportunities for students in the arts and hospitality management.

Planning for the Future

The Queen Mary, the adjacent former leasehold area, and the Harry Bridges Special Events Park collectively represent one of the City's most unique future development opportunities. The existing cultural and historic resources of the RMS Queen Mary, accompanied by approximately 43 acres of combined undeveloped and open recreation space situated on the waterfront, and oriented to enjoy the expansive shoreline and downtown views, makes this location one of Southern California's most unique opportunity sites.

A cross-department team will initiate a formal study to understand the development potential for the area. This study will take into account previous community and stakeholder input from the Queen Mary Land Development Task Force and consider changes to the post-pandemic development environment. This broader development will explore all aspects of future mixed-use development including parking, multi-modal circulation and access, aesthetics and design, the inclusion of public open space, and the potential for facilities such as a permanent amphitheater, marina, or an improved cruise terminal.

The City Council has provided structure and resources to position the Queen Mary for success and to leverage and develop adjacent property into world class entertainment and mixed-use development in the future.

Please contact Johnny Vallejo, Deputy Director, at Johnny.Vallejo@longbeach.gov if you have any questions.

ATTACHMENTS: A – HULL AND TANK STUDY
B – FISCAL YEAR 2024 BUDGET (QUEEN MARY)

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REPORT.

LONGITUDE
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QUEEN MARY

INSPECTION REPORT

REPORT DETAILS			
Document Number	L-HO-M10-030760-R04	**Client Name**	POLB
Revision	A	**Client Reference**	
Author	Sergiu Borsan	**Issue Date**	23-Jun-2023
Task Name	Inspection Report	**Task Number**	CTR 105

REPORT AMENDMENT RECORD					
Rev	**Date**	**Description of Amendment**	**Author**	**Checked**	**Approved**
A	23/06/2023	Issue for Review	SB	RK	NC

RECORD OF AMENDMENTS		
Rev	**Details of Changes**	**Page**
A	-	-

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1.0 Summary

This document presents the detailed results of the inspection activities on the Queen Mary to obtain quality data that can be used for a structural assessment of the structure.

Queen Mary was inspected internally and externally as per Inspection Plan Ref [8.] with minor deviations to optimize time and manpower. The inspections were carried out by CONSULTANT surveyors and Class Society (Lloyd's Register) surveyors. Hull external inspections and thickness measurements were performed by PoLB divers. Hull internal thickness measurements were performed by Sterling Inspection Services.

Inspection Plan [8.] operations were directed by CONSULTANT and carried out by US Ecology / NRC.

The vessel was found in an overall good condition considering its age. The tar type coating in mud double bottom tanks has been mainly preserved and mitigated heavy corrosion. There are local defects in the inner bottom (tank top) of the double bottom tanks but these should not impact the overall structural integrity of the vessel.

Repairs to the tank top are recommended if additional structures (such as walkways) will be added and supported by the tank top. Otherwise the tank top lost its structural integrity which is not critical as long as the external side shell remain watertight.

Repairs are recommended in way of the engine room soft patch. The remaining thickness is no longer satisfactory and any water ingress in the engine room would lead to a severe incident considering the lack of compartmentalization onboard. Such repair can be done using SPS.

CONSULTANT proposes the following recommendations moving forward:

1. Between 2-3 Double Bottom Tanks to be reinspected in 3-5 years to observe if any significant changes have occurred.
2. Different 2-3 Double Bottom Tanks to be inspected in 3-5 years to observe if condition of tanks is similar to adjacent already inspected tanks.
3. External hull to be inspected and UT every 1-2 years
4. For Double Bottom Tanks containing Fresh Water, the coating has degraded to POOR condition or removed entirely. Recoating the tanks or installing anodes to limit corrosion is recommended.
5. Draft survey every 6-12 months

The Queen Mary structures and superstructures above the double bottom were not inspected and it was found that a number of the structures were altered during the multiple vessel upgrades. CONSULTANT would recommend a thorough thickness measurement campaign of theses structure to set a baseline for PoLB. With such data a global finite element model can be prepared to confirm the integrity of the main supporting structures.

This report was prepared in good faith and without prejudice to any or all parties concerned.

2.0 General

2.1 Background

The R.M.S. Queen Mary was designed and constructed by the John Brown & Company Shipyard in Clydebank, Scotland in the 1930's. It served as an Ocean Liner from 1936 to 1967, when it was purchased by the City of Long Beach. It has been permanently docked at the Port of Long Beach, California since 1967, and is classified as a permanent floating structure.

Port of Long Beach ("CLIENT") contracted Longitude, an ABL Group Company, ("CONSULTANT") to assist them with naval architecture consulting and advisory services for the Queen Mary hull inspection.

The vessel has heavy corrosion in some locations which raises asset integrity concerns. CLIENT requested assistance from CONSULTANT for ballasting operations and asset integrity assessments when required.

CONSULTANT visited the ferry and defined a project execution strategy to implement an inspection campaign by Lloyds Register.

CONSULTANT prepared a stability model and benchmarked the model against available information and site inspection. There have been significant weight changes on throughout the vessels life, and a lack of traceability of the vessel weight since it was converted.

CONSULTANT prepared an underwater and internal inspection plan, so all the critical hull components are being inspected by Close Visual Inspection, General Visual Inspection or Ultrasonic Thickness Measurements.

Figure 2-1: Queen Mary

2.2 Main Dimension

The following table provides the overall dimensions and significant attributes of the ship.

Vessel Particulars	
Length OA	1,019'-6"
Length BP	965'
Breadth, MLD	118'
Height, H	115'-6"
Draft, D	39'-4-9/16"
Keel to promenade deck	92'-6"
Keel to top superstructure	124'
Keel to top forward funnel	181'
Keel to masthead top	237'
Gross tonnage	81,237 tons
Number of decks	12
Anchors	3 (16 tons ea.)
Lifeboats	24

2.3 Reference

[1.] *"The Cunard Liner: Queen Mary" R. Watton*
[2.] *Final Report – Marine Survey of the Queen Mary 25 January 2017 – SGH Project 157292*
[3.] *Queen Mary Hotel – Rados International Corporation*
[4.] *Queen Mary – Tank List*
[5.] *Queen Mary – General Arrangement 'dated 1968'*
[6.] *L-HO-M10-030760-R01 – Stability and Longitudinal Strength*
[7.] *L-HO-M10-030760-R02 – Inspection Ballast Plan*
[8.] *L-HO-M10-030760-R03-RevB – Inspection Plan and Contractor Handover*

2.4 Abbreviation

AFCM	*Alternating Current Field Measurement*
AP	*Aft Perpendicular*
CVI	*Close Visual Inspection*
FP	*Forward Perpendicular*

GM	*Metacentric Height*
GVI	*General Visual Inspection*
LBP	*Length Between Perpendiculars*
LR	*Lloyd's Register*
LS	*Longitudinal Strength*
MGS	*Marine Growth Survey*
MPI	*Magnetic Particle Inspection*
NACE	*National Association of Corrosion Engineers*
PT	*Penetrant Testing*
QM	*Queen Mary Vessel*
ROV	*Remotely Operated Vehicle*
SoW	*Scope of Work*
UTM / UT	*Ultrasonic Thickness Measurement*

Table 2-1: Abbreviations

3.0 Objective

The objective of this report is to provide the final results and recommendations following inspection of the Queen Mary.

The inspection plan for the Queen Mary comprised of Under-Water Inspection In-Lieu of Drydocking (UWILD) and an internal inspection plan to cover all the critical hull components under Close Visual Inspection, General Visual Inspection or Ultrasonic Thickness Measurement.

The Queen Mary has previously undergone inspection of critical hull components. In the interest of consistency, the critical areas considered for the scope of this report will be in line with previous reports.

Survey results are required to lead a measurable condition of the vessel structure in line with Lloyd's Register guidelines.

4.0 Survey Scope

4.1 External Survey SoW

The entire length of the vessel underwater from Frame 0 to Frame 356 was inspected from the waterline level to keel on both Port and Starboard sides.

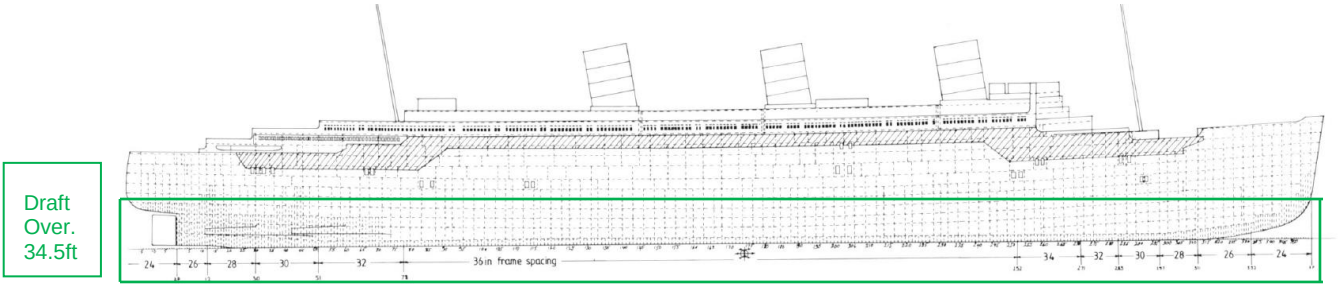

Figure 4-1: External Survey SoW

Please refer to [8.] Section 5.1 for details on External Survey SoW.

4.2 Internal Survey SoW

To optimize the tank inspection of the double bottoms, the following tanks were inspected as representative of the double bottom tanks:

- Tanks E5 and E6 (Mud)
- Tanks G3 and G4 (Mud)
- Tanks J2 and J3 (Mud)
- Tanks M1, M1 Void and M1 Cofferdam (Fresh Water)
- Tanks M2, M2 Void and M2 Cofferdam (Fresh Water)

A total of 8 Double Bottom tanks were inspected in addition to 4 auxiliary tanks, M1 and M2 (Void and Cofferdam tanks)

Please refer to [8.] Section 5.2 for details on Internal Survey SoW.

Note that due to operational circumstances, CONSULTANT selected different tanks for the internal survey scope of work compared to the original inspection plan referenced in [8.] Section 5.2.

Initially, Tanks K1, K2 were scheduled for inspection instead of M1, M2 and J2, J3;

Tanks K1, K2 are under an added concrete flooring which has an airgap of 4 ft to the tank top. This presented a difficult and risky challenge (confined space entry, tools size, hose sizes, lighting available etc.)

Tanks M1 and M2 were not originally part of the scope. They represent the largest tanks investigated at ~35,000 Gal excluding adjacent Cofferdam and Void Tank. Reference [4.] specified that the tanks contain drill mud. In addition, the manhole covers had been marked as containing drill mud. Upon close inspection, we discovered that only tanks M3 and M4 contained drill mud, M1 and M2 contained only fresh water.

Since the tank contents were fresh water instead of drill mud, the tank contents could be emptied and rinsed much faster (4-5 days). This presented an excellent opportunity to investigate in more detail different sections of the ship to better evaluate the condition of the vessel.

Double Bottom Tanks E5, E6, G3, G4, J2, J3, M1, M1 Void, M1 Cofferdam, M2, M2 Void and M2 Cofferdam were emptied of water contents, mud and debris, rinsed and pressure washed to the satisfaction of LR surveyors. Tanks were subject to GVI, CVI and UTM at the indication of CONSULTANT and LR.

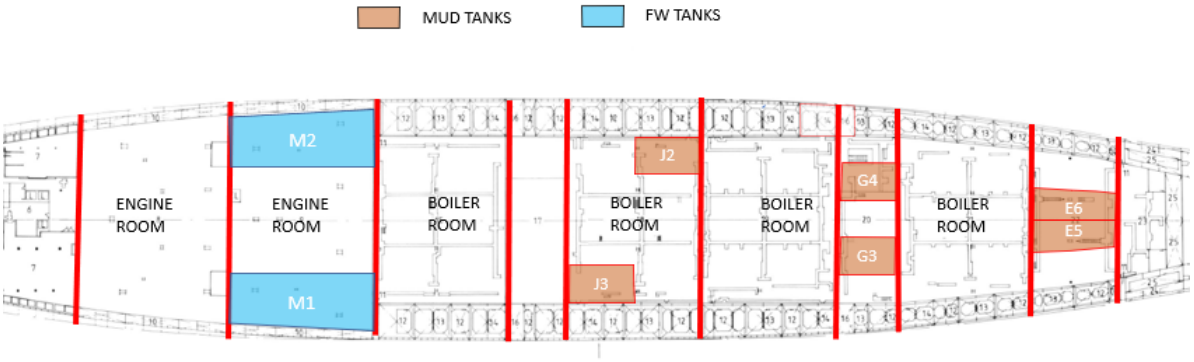

Figure 4-2: Tanks Inspected Internally

Tanks were inspected by ABL and LR surveyors following LR guidelines.

5.0 Summary of Results

5.1 External Survey

5.1.1 General Hull

External hull was found in general "*GOOD*" condition with no significant corrosion, damages, misalignments or abrasions identified. For detailed results, see Appendix A.

A soft patch was identified between frames 34-38, strake 16 on the STBD side of the external hull corresponding to Double Bottom Tank P (See Figure 5-1 and Figure 5-2). Thickness measurements in two (2) locations of this area read 0.234 in (5.94mm) and 0.292 in (7.41 mm) respectively.

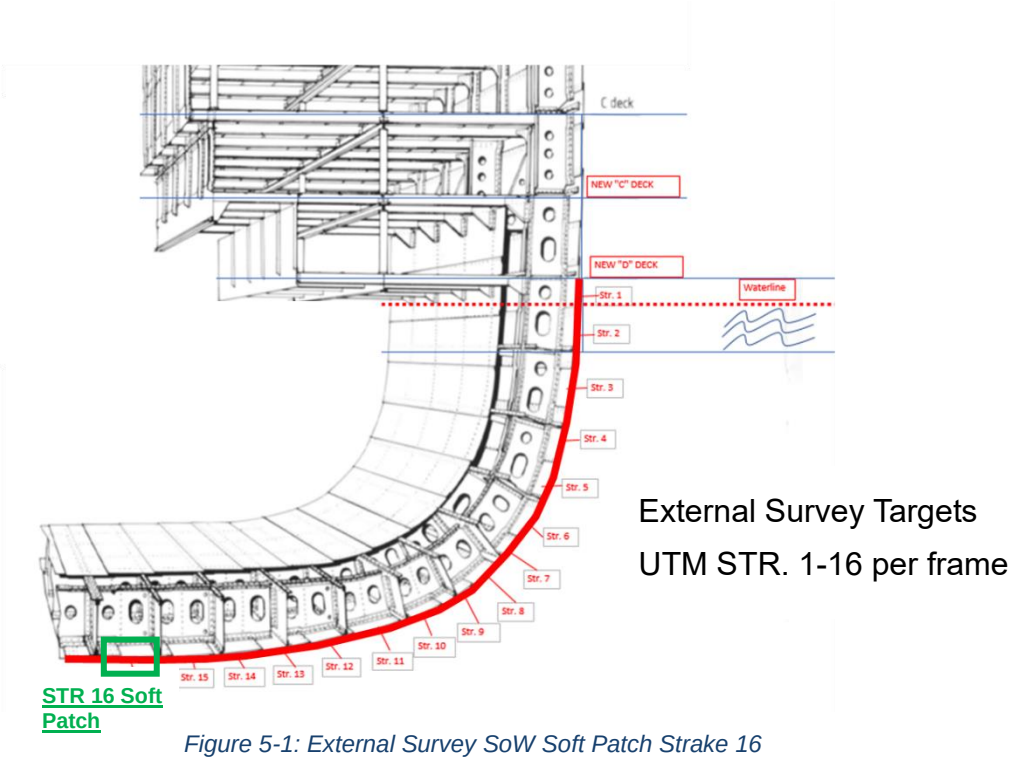

Figure 5-1: External Survey SoW Soft Patch Strake 16

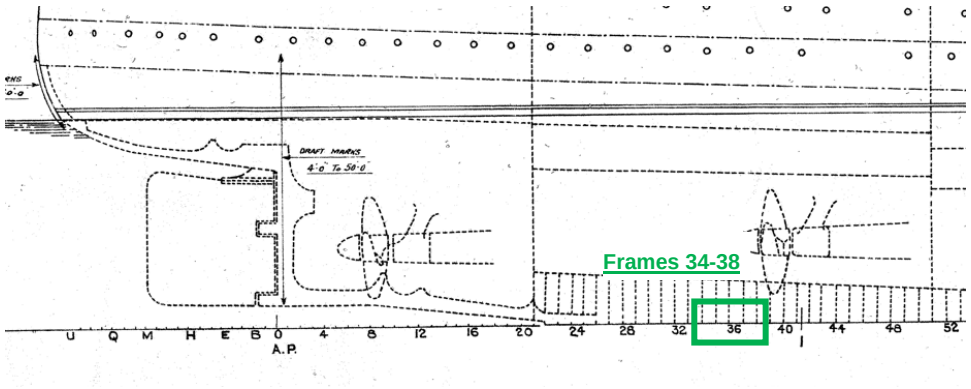

Figure 5-2: External Survey Soft Patch Frames 34-38

To maintain the watertight integrity of the hull, the soft patch should be repaired. If the soft patch is compromised allowing for water ingress, the entire engine room could flood. Since there are no watertight doors to separate compartments, the vessel could flood until grounding.

It is recommended to repair the soft patch by means of Sandwich Plate System(SPS).

SPS is a Class approved repair method that introduces an elastomer core supported by perimeter bars over the existing plate. New steel plate is added on top of the core (See Figure 5-3)

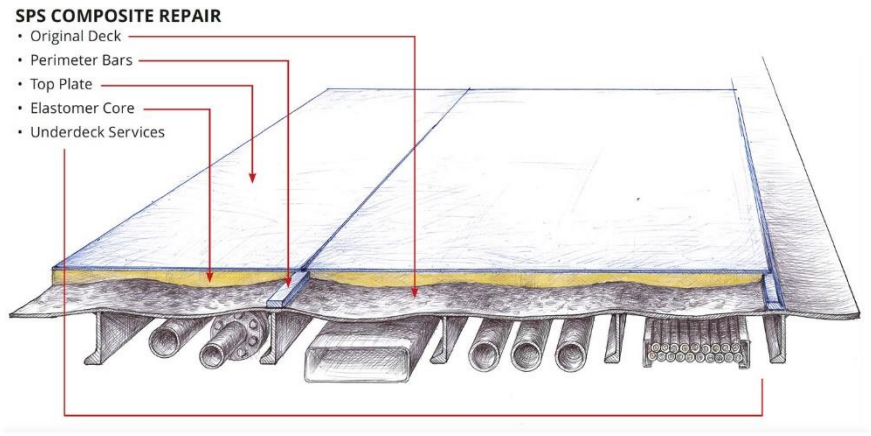

Figure 5-3: SPS Repair Example

5.1.2 Marine Growth

Marine growth was found to be minimal to nonexistent for the entire surveyed length of the hull.

5.1.3 Cathodic Protection

Cathodic protection systems onboard appear to be working as designed and are providing protection to the QM according to the National Association of Corrosion Engineers (NACE) criterion for cathodic protection.

Cathodic protection systems consist of six (6) working impressed current cathodic protection rectifiers and approx.. 102 sacrificial anodes designed to protect the exterior ship's hull and large propeller. Structure to water volt potentials readings exceeded the required -800 mV for ship perimeter.

For detailed results, see Appendix B.

5.2 Internal Survey

Overall, most of the tank structure is in GOOD to FAIR condition with some of the tanks having localized wastage and holes. The coating condition was POOR or NONE for most tanks. See Table 5-1 for Summary of Double Bottom Tank GVI and CVI results:

Tank	Tank Structure* Condition:	Coating Condition	Remarks
E6 (PS) Fr. 243-259	GOOD	FAIR	Good condition overall
E5 (SB) Fr. 243-259	GOOD	FAIR	Good condition overall
M2 (PS) Fr. 112-135	GOOD	POOR	Good condition overall
M2 (Void Tank) Fr. 121-128	GOOD	NONE	Good condition overall
M2 (Cofferdam) Fr. 120-129	GOOD	POOR	Good condition overall
M1 (SB) Fr. 112-135	GOOD	POOR	Good condition overall
M1 (Void Tank) Fr. 121-128	GOOD	NONE	Good condition overall
M1 (Cofferdam) Fr. 120-129	GOOD	NONE	Good condition overall
G3 (SB) Fr. 212-222	FAIR	POOR	The were no holes detected in the tank top plating. It was noted that sections of steel doubler plate had been previously welded to areas of the tank top plating external to the tank. Several lightening holes inside the tank structure for the longitudinal and transverse bulkheads were observed partly wasted and holed where the tank coating was not present
G4 (PS) Fr. 212-222	POOR	POOR	Structure condition marked as POOR, however, this was due to holed and corroded tank top. Except for tank top, remaining structure marked as GOOD There were five holes identified in the tank top, FR 214 measuring 75 x 55 mms. Another hole measuring 60 x 75 mms was also identified. The tank entry manhole ladder was wasted with the middle section ladder rungs not present.
J2 (PS) Fr. 179-190	FAIR	POOR	Localized corrosion/ thinning of steel plate and holes in way of several transverse bulkheads lightening holes.
J3 (SB) Fr. 168-179	FAIR	POOR	Localized corrosion/ thinning of steel plate and holes in way of several transverse bulkheads lightening holes.

***Tank structure refers to: Bottom Shell, Tanktop, Long. Blkheads, Web Frames, Watertight Blkheads and Support Structure**

Table 5-1: Summary Double Bottom Tanks Inspection

5.2.1 Additional Remarks

1. Tanks M2 (Void Tank) and M2 (Cofferdam) have open connection. Contractors observed that emptying of M2 (Cofferdam) reduced the level of contents in M2 (Void Tank) significantly. The open connection location could not be confirmed during survey of the tanks.
2. Tank J3 has an open connection with trim tank 29; Trim tank 29 was required to be emptied before access to tank J3 was possible. The location of the open connection could not be confirmed during survey of the tanks, but it is likely due to an open valve in the piping connecting both tanks.

5.2.2 Thickness Measurements

Thickness measurement UT reports can be found in Appendix C and Appendix D.

The Queen Mary is a riveted design construction with scantling drawings which provide a range of thicknesses for all scantling elements. As such, there is no available record of the actual thicknesses per frame and strake except for the values for maximum and minimum thicknesses. The governing criteria for the condition of the steel is the % diminution, therefore, it is more conservative to assume the maximum scantling thickness for the "as built".

See table Table 5-2 and figures below for comparison between assumed as-built thicknesses and thickness readings:

1 Panel – Max Thickness As built	2 Max Thickness No Corrosion	3 Max Thickness 50% Corrosion (2 x 50%)	4 Average Thickness 50% Corrosion LS calculation	5 Thickness UT Reading*	6 Max % Corrosion UT Reading (2 – 5) / 2	7 Corroded Plate % Dif to LS Calculation (5 – 4) / 2
Bottom Plating – Keel	31.75 mm	15.875 mm	12.4 mm	25.50 mm	20%	+41%
Bottom Plating – General	30.48 mm	15.24 mm	12.4 mm	12.95 mm	58%	+2%
Inner Bottom Plating (Keel)	20.32 mm	10.16 mm	8.5 mm	10.85 mm	47%	+12%
Inner Bottom Plating (Engine room)	20.32 mm	10.16 mm	8.5 mm	13.21 mm	35%	+23%
Inner Bottom Plating (Non-Engine Room)	18.29 mm	9.145 mm	8.5 mm	8.08 mm	56%	-2%
Floors outside ½ Length	12.70 mm	6.35 mm	N/A	12.62 mm	1%	N/A
Floors within ½ Length	13.72 mm	6.86 mm	N/A	11.02 mm	20%	N/A
CR. Girder Cont. & WT	26.42 mm	13.21 mm	7.5 mm	13.26 mm	49.8%	+22%
D.B. Continuous W.T. Side Girders	16.256 mm	8.128 mm	7.5 mm	12.12	25%	+28%
D.B. Continuous Intercoastal Side Girders	13.72 mm	6.86 mm	7.5 mm	12.07	12%	+33%

**Minimum reading based on all tanks surveyed*

Table 5-2: Comparison Thicknesses: Nominal, UT & LS Calculation Thicknesses

Preliminary longitudinal strength calculations were performed in Ref. [6.] for as-built average thicknesses and assuming auniform 50% corrosion to all longitudinal section elements (Column 4 in Table 5-2). This data is reflected in Column 4 in Table 5-2.

See Figure 5-4 below for a direct comparison between the cross section at 50% corrosion and minimum UT readings:

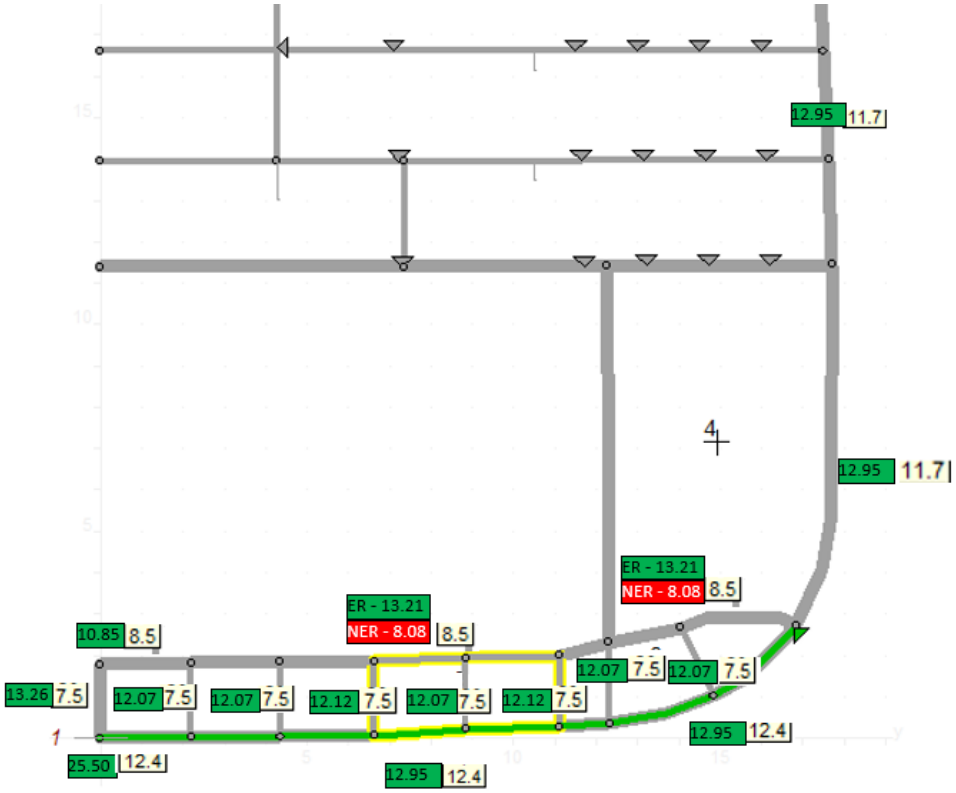

Figure 5-4: Comparison UT and LS Thicknesses

The minimum thicknesses measured in the double bottom section of the QM are above the LS thicknesses considered during the preliminary calculation of the longitudinal strength except for the inner bottom thicknesses in the non-engine room areas outboard of the keel. The thickness in non-engine room areas of the inner bottom considered in the calculations is 8.5mm whereas the UT measurement provided a minimum reading of 8.08 mm.

Based on previous surveys of the vessel, it was evident that the inner bottom in various sections of the vessel had visible holes pierced through. As such, a third LS calculation was performed in the preliminary stages which considered the inner bottom removed completely whilst the remainder of plating was assumed at 50% corrosion value from the average thickness.

The maximum estimated bending moment calculated during the ballasting operation was 604,742 Lt-ft. The design bending moments considered were as follows (see Ref. [6.]):

LS Strength Comparison	No Corrosion	50% Corrosion	50% Corrosion w/o Inner bottom	Double Bottom Thicknesses adjusted as per actual minimum UT readings
1 Estimated Bending Moment (Ballasting Operation)	604,742 Lt-ft OR 1,866,742 kN-m	604,742 Lt-ft OR 1,866,742 kN-m	604,742 Lt-ft OR 1,866,742 kN-m	**604,742 Lt-ft OR 1,866,742 kN-m**
2 Section Modulus Zmod	50.62 m^3	25.35 m^3	20.46 m^3	**27.99 m^3**
3 Permissible Bending Stress (75% yield stress) σ_{perm}	175,000 kN/m^2	175,000 kN/m^2	175,000 kN/m^2	**175,000 kN/m^2**
4 Calculated Stress (1 / 2)	36,879.74 kN/m^2	73,650.64 kN/m^2	91,216.76 kN/m^2	**66,693.17 kN/m^2**
5 Utilization (4 / 3)	21%	42%	52%	**38%**

Table 5-3: LS Strength Comparison

Note that only double bottom thicknesses were adjusted to actual minimum values. Thicknesses not part of the survey scope were assumed at a conservative 50% corrosion.

In total, we have inspected eight (8) double bottom tanks distributed across the entire length of the vessel. The corrosion rate between the inspected tanks was consistent, therefore, we were able to surmise that the corrosion rate in the tanks that were not inspected would be similar.

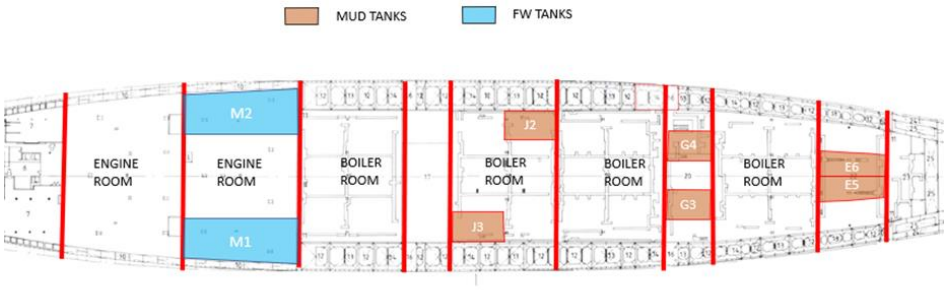

Figure 5-5: Inspected Double Bottom Tanks

General arrangement of the double bottom tank structure on the Queen Mary comprises six (6) double bottom tanks, three (3) STBD and three (3) PS tanks transversely. In the case of boiler rooms, there are eight (8) tanks, the outboard most tanks being split into two (2) tanks longitudinally (as is the case with tanks J2-J4 and J1-J3)

Tanks surveyed are representative of the centerline (E5 & E6), middle tanks (G3, G4, M2 and M1 adjacent) and most outboard tanks (J2, J3, M1,M2).

This provides confidence that the estimated global strength calculations in Table 5-3 are adequate and the hull does not present any global strength issues.

The local breakdown of the hull integrity would require more in-depth measurements and analysis for all double bottom tanks but this does not constitute an issue for the global integrity of the hull.

6.0 Operation Methodology

6.1 External

6.1.1 Diving Team – GVI and UTM

General Visual Inspection and Ultrasonic Thickness measurements on the external hull underwater were performed by PoLB Diving Contractors. Exact details of the schedule and methodology should be requested from PoLB.

6.2 Internal

Ballasting and mud transfer operation was performed by US Ecology/NRC under the guidance of CONSULTANT. Tank inspections were performed by LR and ABL surveyors.

6.2.1 Mud Tanks E5, E6, G3, G4, J2, J3

Double bottom tanks E5 and E6 were emptied onto frac tanks stationed quayside. Approximately 60,000 gal were extracted from tanks E5 and E6: 45,000 gal of drill mud and 15,000 gal of diluted mud-water mixture. A total of 3 x Frac tanks (~20,000 Gal each) were used to store the mud quayside. A 4th Frac tank was used to store rinse water.

Figure 6-1: Aft Manhole Tank E5 - Original Mud Contents

Figure 6-2: Mud Contents inside Tank E5

Upon emptying and cleaning, tanks E5 and E6 were inspected by ABL and LR surveyors.

The contents of Mud Tanks G3, G4 were transferred into tanks E5 and E6 and subsequently cleaned and inspected by ABL and LR surveyors.

The contents of Mud tanks J2 and J3 were transferred into tank G3, G4, E5 and E6 and subsequently cleaned and inspected by ABL and LR surveyors.

Upon completion of inspection for all SoW mud tanks, the tanks were refilled with mud from quayside and topped up with fresh water leaving a 2-3 inches airgap below the manhole.

6.2.1.1 Mud Tanks – Contents Transfer, Cleaning, Debris Removal and Refilling

The as-found drill mud contents had high viscosity which was not possible to transfer via diaphragm pumps unless contents were diluted using fresh water.

The pumps needed to be regularly checked for debris (steel bolts, nuts, rusted fragments, cement rocks etc) since there was a high chance of blocking the hoses and possibly damaging the equipment.

Figure 6-3: Tank G4 – Metallic Debris

The mud tanks had a stratum of 6-8 inches of fresh water sitting on top of the drill mud contents which allowed liquefaction in the initial stages of a pump transfer. Once this original stratum of fresh water was removed from the mud tank, new water had to be introduced to stimulate liquefaction of the contents. On average, around 4,000 - 5,000 gal of water were introduced in each tank to completely remove all mud contents.

Figure 6-4: Diluted Mud in Frac Tank

The tanks were subsequently removed of solid debris by hand into buckets and stored quayside in the 20-yard bin. The tanks were rinsed with fresh water using pressure washers.

Double bottom tanks on the Queen Mary are separated in compartments internally by intercoastal side girders and transverse girders.

Mud contents were stored in frac tanks with no internal divisions.

Figure 6-5: Mud Tank Compartment in E5 facing from CL to outboard (SB)

Longitudinal Girder Front; Transverse Girders Left and Right; Lightning Holes 30"x40" middle and 4" Ratholes bottom

6.2.2 Fresh Water Tanks M1 & M2

Double Bottom Fresh Water tanks M1, M1 Void Tank, M1 Cofferdam were emptied into frac tanks quayside. Approximately 30,000 gal were extracted into 2 x Frac tanks (~20,000 gal each).

Upon emptying and cleaning, tanks M1, M1 Void Tank, M1 Cofferdam were inspected by ABL and LR surveyors.

Double Bottom Fresh Water tanks M2, M2 Void Tank, M2 Cofferdam were transferred into M1, M1 Void Tank, M1 Cofferdam and subsequently cleaned and inspected by ABL and LR surveyors.

Upon completion of inspection of all SoW fresh water tanks, the tanks were refilled with fresh water from quayside and topped up with fresh water from the vessels fire suppression system (shore supply fresh water).

6.2.3 Ballasting

The Queen Mary has an estimated GM of 4.9 ft which causes the vessel to be susceptible to rolling and listing. There are 5 x Access Walkways on the Port side of the vessel at different elevations. To avoid excessive stresses in the walkways' structures, the vessel list was kept within 1deg.

Ballast transfers of fresh water were executed between SB and PS trim tanks to maintain list within 1 deg.

Trim Tanks 20, 22, 17,19, 23 and 27 were used for ballast transfers.

6.2.4 Equipment & Personnel

The following equipment was utilized for the ballast transfer and mud transfer activities:

Mud Transfer	Ballasting & Fresh Water Transfer
4 - Frac Tanks	4 – Frac tanks
1 - 20 yard bin	1 - 20 yard bin
1 - 1600 Compressor w/ Manifold	1 – 185 Compressor; 1 - 375 Compressor
2 - Temporary Fencing	2 - Temporary Fencing
1 - 120BBL Vac Trucks	1 - 120BBL Vac Trucks
4 - Work Trucks	2 - Work Trucks
1 - Generator	1 - Generator
1 - Pressure Washer	1 - Pressure Washer
1 - Confined Space/ Rescue Gear Set up	1 - Confined Space/ Rescue Gear Set up
8 - Radios	4 - Radios
2 - Pumps (DD Ball Valve)	4 - Pumps (DD Ball Valve)
1 - Pump (DD Flapper Valve)	1 - Pump (DD Flapper Valve)
2 - Air Monitors	2 - Air Monitors
Various MISC PPE, Hoses, Fittings, Blower, extra pumps on standby in case a unit goes down.	

Two (2) teams of 17 people in total were dedicated to the operation from NRC, including:

1 – Project Manager; 2 – Supervisor; 1 – EHS Rep; 11 – Technicians; 2 – Drivers

6.2.5 Vessel Stability

6.2.5.1 Instrumentation

A pendulum measuring system for measuring the vessel listing was installed by CONSULTANT in the tool storage room of the QM on C deck. The system was calibrated where 1 cm is the equivalent of 0.4 degrees of list in either direction with 30cm corresponding to even keel. (Figure 6-6)

Figure 6-6: Pedulum Reading 30.4 cm (0.16 deg to PS) - Vessel Post-Operational condition

Vessel stability was checked during operation using a GHS model of the QM developed by CONSULTANT. Loading condition of the vessel for each stage of ballasting was simulated in GHS to determine the vessel stability parameters and condition. (see Figure 6-7)

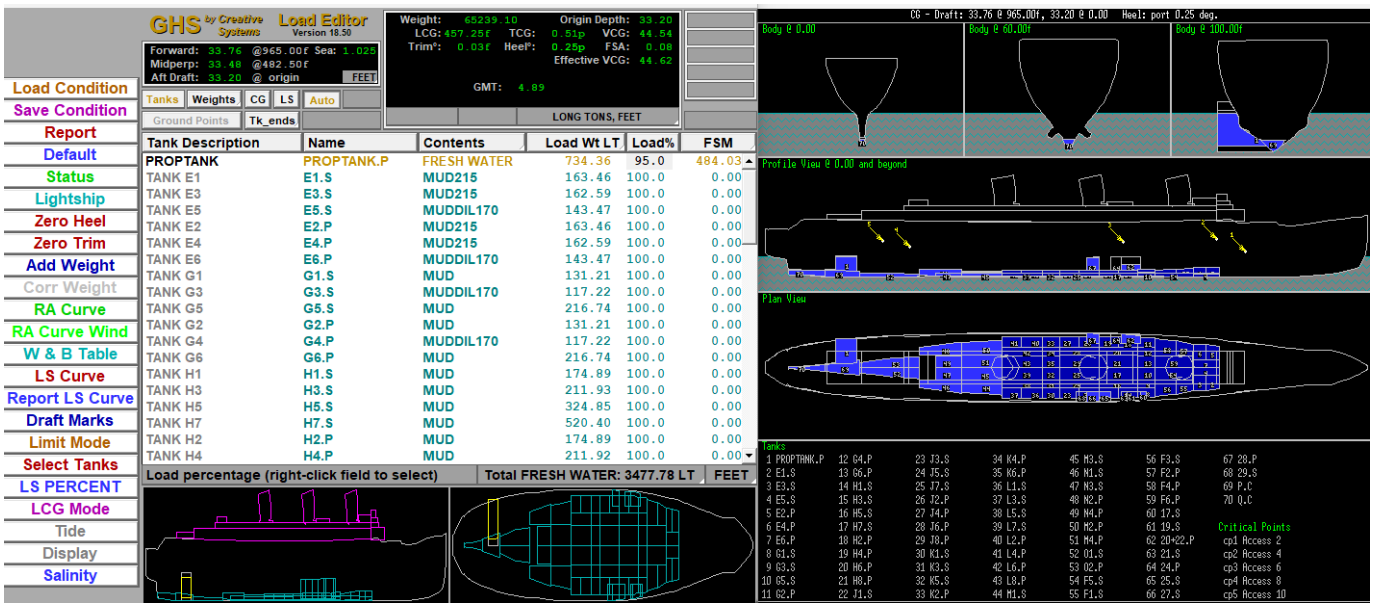

Figure 6-7: GHS Load Editor

6.2.5.2 Vessel Draft readings

Due to the movements of tank contents, it was expected that the draft and displacement of the vessel would change following completion of the operation. Draft readings were made before and after the operation and the exchange of tank contents was monitored throughout. Conditions between Pre and Post operation are similar. The overall displacement of the vessel is estimated to have increased by 26 LT based on the increased drafts and the changes to tank contents.

Table 6-1 shows the change is draft reading from pre to post operation.

Average Draft (ft) and heel (º)	Pre-Operation	Post-Operation	Change
FWD	34.24	34.25	+ 0.01
MID	32.47	32.61	+ 0.14
AFT	33.74	34.0	+ 0.26
Heelº	0.14º PS	0.16º PS	+0.02
Est. Displacement	65,341 LT	65,367 LT	+26 LT

Table 6-1: Vessel Condition Pre-Operation & Post-Operation

Table 6-2 shows the change in tank loadings from pre to post operation.

Tank	Est. Max Volume [Gal]	Est. Actual Content Volume [Gal]	Original Contents	Pre-Ops Est. Weight [LT]	Post -Ops Contents (Max Volume)	Post-Ops Est. Weight [LT]
E5	22,652	20,000	Mud (SPG 2.05)	152.75	Mud (SPG 1.70)	143.47
E6	22,652	20,000	Mud (SPG 2.05)	152.75	Mud (SPG 1.70)	143.47
G3	18,507	16,000	Mud (SPG 2.05)	122.2	Mud (SPG 1.70)	117.22
G4	18,507	16,000	Mud (SPG 2.05)	122.2	Mud (SPG 1.70)	117.22
J2	25,326	24,000	Mud (SPG 2.05)	183.3	Mud (SPG 1.70)	160.40
J3	24,885	24,885	Mud (SPG 2.05)	190.0	Mud (SPG 1.70)	157.6
M1 (incl. Void Tank & Cofferdam)	57,200	30,000	Fresh Water (SPG 1.0)	111.77	Fresh Water (SPG 1.0)	213.11
M2 (incl. Void tank & Cofferdam)	57,200	55,000	Fresh Water (SPG 1.0)	204.91	Fresh Water (SPG 1.0)	213.11

Table 6-2: Summary of loading changes

6.2.5.3 Pre-Operational and Post-Operational Displacement

Vessel displacement was estimated to increase by 26 LT following completion of the operation. The double bottom mud tank contents were diluted and decreased in weight by approximately 84 LT but this was compensated by increasing the water volume in the fresh water M tanks, which increased in weight by 110 LT.

Change in drill mud density

Samples of 1 gallon were obtained from each mud tank prior to emptying the tank to verify the density of the mud contents by using a digital weighing scale.

Mud contents are not uniform in density throughout the tank. Deepest layers in the tank are heavier (16.8 lbs/gal), whilst top layers are lighter (16.4 lbs/gal). An average of 16.6 lbs/gal (equivalent to SPG of 2.05) was considered in determining the weight of the mud contents removed.

The mud density was measured 3 times for each tank: 1st inside the frac tank, 2nd after the first transfer back into the vessel double bottom tank, 3rd after decanting was complete and tank was refilled.

The average mud density once the tank was decanted and refilled was 13.7 lbs/gal (equivalent to SPG of 1.70) Overall, there was an estimated loss of 84 LT due to decrease of drill mud density.

Fresh Water Addition

Originally, mud tanks E5, E6, G3 and G4 had an airgap of 6-8 inches. Following refill of the mud tanks, the airgap was reduced to 2-3 inches by adding fresh water on top of the mud contents.

Double Bottom Tanks M2 and adjacent Void Tank and Cofferdam were originally only ~50% full. The tanks were topped up to 2-3 inches of airgap at the manholes.

Overall, a total of 110 LT of Fresh Water was added to the vessel.

7.0 Conclusion and Recommendations

Queen Mary was inspected internally and externally as per Inspection Plan Ref [8.] with minor deviations to optimize time and manpower.

The vessel was found in an overall good condition considering its age. The tar type coating in mud double bottom tanks has been mainly preserved and mitigated heavy corrosion. There are local defects in the inner bottom (tank top) of the double bottom tanks but these should not impact the overall structural integrity of the vessel.

Repairs to the tank top are recommended if additional structures (such as walkways) will be added and supported by the tank top. Otherwise the tank top lost its structural integrity which is not critical as long as the external side shell remain watertight.

Repairs are recommended in way of the engine room soft patch. The remaining thickness is no longer satisfactory and any water ingress in the engine room would lead to a severe incident considering the lack of compartmentalization onboard. Such repair can be done using SPS.

CONSULTANT proposes the following recommendations moving forward:

1. Between 2-3 Double Bottom Tanks to be reinspected in 3-5 years to observe if any significant changes have occurred.
2. Different 2-3 Double Bottom Tanks to be inspected in 3-5 years to observe if condition of tanks is similar to adjacent already inspected tanks.
3. External hull to be inspected and UT every 1-2 years
4. For Double Bottom Tanks containing Fresh Water, the coating has degraded to POOR condition or removed entirely. Recoating the tanks or installing anodes to limit corrosion is recommended.
5. Draft survey every 6-12 months

The Queen Mary structures and superstructures above the double bottom were not inspected and it was found that a number of the structures were altered during the multiple vessel upgrades. CONSULTANT would recommend a thorough thickness measurement campaign of theses structure to set a baseline for PoLB. With such data a global finite element model can be prepared to confirm the integrity of the main supporting structures.

This report was prepared in good faith and without prejudice to any or all parties concerned.

Appendix A : LR Job Control Records

Appendix B : Cathodic Protection Report

Appendix C : UT Reports – External

Appendix D : UT Reports – Internal

Attachment B

Hotel Queen Mary
Statement of Income
2024 Budget

	Oct 2023 Working Budget	Nov 2023 Working Budget	Dec 2023 Working Budget	Jan 2024 Working Budget	Feb 2024 Working Budget	Mar 2024 Working Budget	Apr 2024 Working Budget	May 2024 Working Budget	Jun 2024 Working Budget	Jul 2024 Working Budget	Aug 2024 Working Budget	Sep 2024 Working Budget	Total	%	Sep 2023 T12 Actual	%	Variance
Rooms Available	6,200	6,000	6,200	6,200	5,800	6,200	6,000	6,200	6,000	6,200	6,200	6,000	73,200		36,600		36,600
Rooms Sold	4,429	3,791	4,413	4,197	4,298	4,652	4,559	4,675	4,917	4,935	4,985	4,800	54,651		16,397		38,254
ADR	187.08	168.59	163.36	160.58	179.36	187.57	173.92	177.05	196.35	194.89	186.13	173.20	179.56		196.96		(17.40)
Occupancy%	71.4%	63.2%	71.2%	67.7%	74.1%	75.0%	76.0%	75.4%	82.0%	79.6%	80.4%	80.0%	74.7%		44.8%		29.9
RevPAR	133.64	106.52	116.28	108.70	132.91	140.74	132.15	133.50	160.91	155.13	149.65	138.56	134.06		88.24		45.82
Total RevPAR	462.63	416.20	547.22	403.80	545.41	475.24	469.06	471.70	558.34	688.18	575.03	519.79	511.08		300.80		210.28
Rooms Revenue	828,581	639,133	720,925	673,971	770,907	872,566	792,911	827,705	965,445	961,804	927,854	831,364	9,813,166	26.2%	3,229,523	29.3%	6,583,644
Food & Beverage Revenue	657,679	576,434	1,023,599	1,064,138	1,055,453	1,117,510	1,101,516	1,150,864	1,137,972	1,047,617	1,220,130	1,264,319	12,417,232	33.2%	2,737,397	24.9%	9,679,836
Other Operated Departments	1,201,622	1,127,176	1,478,004	622,934	1,172,634	801,467	766,702	786,588	1,050,714	2,013,873	1,228,175	852,400	13,102,285	35.0%	4,322,158	39.3%	8,780,127
Miscellaneous Income	180,418	154,430	170,227	142,509	164,385	154,959	153,232	159,386	195,881	243,415	189,043	170,668	2,078,553	5.6%	720,129	6.5%	1,358,425
Total Operating Revenue	**2,868,301**	**2,497,173**	**3,392,755**	**2,503,551**	**3,163,379**	**2,946,503**	**2,814,361**	**2,924,542**	**3,350,012**	**4,266,709**	**3,565,202**	**3,118,751**	**37,411,237**	**100.0%**	**11,009,206**	**100.0%**	**26,402,031**
Departmental Expenses																	
Rooms Expense	492,908	435,124	478,302	462,411	464,209	501,707	492,164	519,043	528,811	550,747	546,740	530,111	6,002,277	61.2%	3,057,408	94.7%	(2,944,869)
Food & Beverage Expenses	703,702	595,629	842,760	876,078	841,074	899,313	931,919	973,602	936,840	889,190	1,020,984	1,061,577	10,572,668	85.1%	3,395,835	124.1%	(7,176,832)
Other Operated Expenses	258,435	259,104	678,148	269,359	563,835	311,335	249,617	311,434	299,805	590,201	284,856	275,831	4,351,959	33.2%	970,754	22.5%	(3,381,205)
Total Departmental Expenses	**1,455,045**	**1,289,857**	**1,999,210**	**1,607,847**	**1,869,117**	**1,712,356**	**1,673,700**	**1,804,078**	**1,765,456**	**2,030,138**	**1,852,580**	**1,867,519**	**20,926,904**	**55.9%**	**7,423,998**	**67.4%**	**(13,502,906)**
Total Departmental Profit	**1,413,255**	**1,207,316**	**1,393,544**	**895,704**	**1,294,262**	**1,234,147**	**1,140,661**	**1,120,464**	**1,584,556**	**2,236,571**	**1,712,621**	**1,251,232**	**16,484,333**	**44.1%**	**3,585,208**	**32.6%**	**12,899,125**
Undistributed Operating Expenses																	
Administration And General	302,670	303,697	329,192	311,777	317,172	310,239	313,560	321,421	314,578	353,935	329,945	320,637	3,828,823	10.2%	2,707,257	24.6%	(1,121,566)
Information And Telecommunication	53,559	55,494	59,035	62,426	58,497	59,451	73,262	71,410	64,555	71,410	68,531	67,358	764,989	2.0%	500,204	4.5%	(264,785)
Sales And Marketing	257,013	143,047	152,880	187,940	172,178	187,088	196,512	195,750	192,149	202,488	196,864	185,188	2,269,098	6.1%	967,829	8.8%	(1,301,269)
Utilities	94,553	94,553	94,553	94,553	94,553	94,553	94,553	94,553	104,244	94,553	94,553	94,553	1,144,327	3.1%	1,130,137	10.3%	(14,190)
Property Operations & Maintenance	223,784	222,478	217,449	231,528	211,458	218,247	223,586	236,287	253,041	244,241	230,134	226,533	2,738,767	7.3%	3,510,965	31.9%	772,198
Total Undistributed Expense	**931,579**	**819,269**	**853,109**	**888,224**	**853,857**	**869,579**	**901,473**	**919,421**	**928,568**	**966,627**	**920,028**	**894,270**	**10,746,004**	**28.7%**	**8,816,392**	**80.1%**	**(1,929,612)**
Gross Operating Profit	**481,676**	**388,047**	**540,436**	**7,480**	**440,404**	**364,568**	**239,188**	**201,043**	**655,988**	**1,269,944**	**792,594**	**356,962**	**5,738,330**	**15.3%**	**(5,231,184)**	**-47.5%**	**10,969,513**
Flow %																	**41.5%**
Management Fees	71,708	62,429	84,819	62,589	79,084	73,663	70,359	73,114	83,750	106,668	89,130	77,969	935,281	2.5%	414,876	3.8%	(520,405)
Unallocated Dept Bal (Laundry/Staff Dining)	8,582	8,404	8,192	8,973	8,022	8,192	8,656	9,242	7,869	9,242	8,656	8,438	102,467	0.3%	25,908	0.2%	(76,559)
Income before Non Op Inc & Exp	**401,386**	**317,214**	**447,424**	**(64,081)**	**353,298**	**282,713**	**160,173**	**118,688**	**564,369**	**1,154,035**	**694,808**	**270,555**	**4,700,582**	**12.6%**	**(5,671,968)**	**-51.5%**	**10,372,549**
Non Op Inc & Exp																	
Rent Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	569,217	5.2%	569,217
Property And Other Taxes	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	440,042	4.0%	440,042
Insurance Expenses	83,316	83,316	83,316	83,316	83,316	83,316	83,316	83,316	83,316	83,316	83,316	83,316	999,797	2.7%	352,977	3.2%	(646,820)
Owners Expense	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	90,000	0.2%	72,525	0.7%	(17,475)
Non Op Inc & Exp	**90,816**	**90,816**	**90,816**	**90,816**	**90,816**	**90,816**	**90,816**	**90,816**	**90,816**	**90,816**	**90,816**	**90,816**	**1,089,797**	**2.9%**	**1,434,761**	**13.0%**	**344,964**
EBITDA	**310,570**	**226,398**	**356,608**	**(154,898)**	**262,482**	**191,897**	**69,357**	**27,872**	**473,553**	**1,063,218**	**603,992**	**179,738**	**3,610,785**	**9.7%**	**(7,106,729)**	**-64.6%**	**10,717,514**
Replacement Reserve	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	0.0%	-
EBITDA Less Replacement Reserve	**310,570**	**226,398**	**356,608**	**(154,898)**	**262,482**	**191,897**	**69,357**	**27,872**	**473,553**	**1,063,218**	**603,992**	**179,738**	**3,610,785**	**9.7%**	**(7,106,729)**	**-64.6%**	**10,717,514**
Replacement Reserve - Contra	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	0.0%	-
Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	0.0%	-
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	0.0%	-
Amortization	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	0.0%	-
Partnership Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	0.0%	-
Impairment Loss	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	0.0%	-
Dividend Income	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	0.0%	-
Other Expense	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.0%**	**-**	**0.0%**	**-**
Income Before Income Taxes	**310,570**	**226,398**	**356,608**	**(154,898)**	**262,482**	**191,897**	**69,357**	**27,872**	**473,553**	**1,063,218**	**603,992**	**179,738**	**3,610,785**	**9.7%**	**(7,106,729)**	**-64.6%**	**10,717,514**
Net Income	**310,570**	**226,398**	**356,608**	**(154,898)**	**262,482**	**191,897**	**69,357**	**27,872**	**473,553**	**1,063,218**	**603,992**	**179,738**	**3,610,785**	**9.7%**	**(7,106,729)**	**-64.6%**	**10,717,514**