

Programme: 100m LNG Dual-fuelled Ro-Ro Passenger Ferry

Programme Director: [redacted]

Review Period: February 2020

<u>Name</u>	<u>Job Title</u>	<u>Signature</u>
[redacted]	Programme Director	
[redacted]	Project Accountant	
[redacted]	Planning and Controls Manager	



1a. SHE

[redacted]

01	Total Man Hours	Month Figures		Cumulative (YTD)
		41908		41908
02	Man Power	Direct	217	N.A.
		In-Direct	102	
		Total	319	
03	RIDDORS	0		0
04	Fatality Case (Fatal)	0		0
05	Lost Working day Case (LWC)	0		0
06	Medical Treatment Case (MTC)	1		1
07	First Aid Case (FAC)	4		4
08	Property Damage (PD)	0		0
09	Near Miss (NM)	2		2
10	Fire Incident (FI)	0		0
11	Environmental Incident	0		0
12	Total Number of Recorded Injuries (MTC+FAC)	5		5
13	Total Number of Days Lost	0		0
14	Total Recordable Incident Rate (TRIR) This Number Refers to RIDDOR Reportable Incidents Only	0		0
15	Lost Time Incident Rate (LTIR)	0		0

Events (NM/MT/FA/PD ETC...)

1. **Medical Treatment** – Operative was unable to remove a burr from finger which turned purulent. Referred on to hospital due to infection.
2. **First Aid** – 1 burr in finger, 1 fall – minor injury to elbow and knee, 1 cut to finger, 1 wound on hand dressed in First Aid Facility – wound not work related.
3. **Near Miss** – Confined space PAM alarm sounded, Top shed roller door blown in due to high winds. (both reports available)

Other SHEQ Activities

Description	This Month		Cumulative
Site Safety Inspection	4	West shed and module hall 802 Top Shed 801	4
Toolbox Talks	3	Green walkway Reporting of Near Misses and Hazard Spotting Smoking Policy	3
Policy/Paperwork Reviews	2	PPE on green walkway reviewed and changed to suit business needs PPE Policy written and passed on to D. Thomas for approval	2

SHEQ Initiatives

SHEQ Monthly Meeting held 30.01.20 – 42 Open issues on agenda to be actioned and closed out by next meeting. 10 issues closed out from previous meeting.

Action Number	Description	Owner	Date Raised	Required By	Forecast Date	RAG Status	Comments
MR 1.1						B	
						B	
						G	
						G	
						B	
						B	

2. Contract Summary [redacted]



Customer	CMAL	Contract Start	Restart – 2 nd December
Agreed Contract value	Budget to completion - £110m	Contract Finish	801 October 2021 – 802 July 2022
Project Type	Design and Build	Forecast Finish	801 October 2021 – 802 July 2022
Project Director	[redacted]	Contract Type	SG funded

Project Scope	Design, build and commission 2 off LNG dual fuel ferries. Including training and provision of spares and handbooks The scope of this project is to complete the design and build etc following the Receivership of 16 th August 2019
Significant Project Changes	None (in this phase)
Acceptance Criteria	As per the specification
Payment Terms	Currently – funding provided by the Scottish Government based upon FM(PG) cash flow forecast
Warranty	The warranty for both vessels is 12 months from delivery. No allowance has been made financially for either shipyard support or suppliers warranties that have lapsed during this period
Liquidated Damages	No allowance has been made for late delivery Performance penalty for weight – the maximum allowance of £250k per vessel has been made Performance penalty for speed - the maximum allowance of £250k per vessel has been made Performance penalty for fuel consumption – no allowance has been made
Special Conditions	

Success Criteria	Due	Enabler	Status	TL	Fut Tr
				G	↔
				G	↔
				A	↓
				A	↔
				A	↔
				A	↔
				G	↔
				A	↔
				G	↔
				A	↔

TO BE ADDED

Successes	Opportunities
<ul style="list-style-type: none"> • [redacted] contract has been finalised and agreed • Work being performed on 801/802 through work packages • Schedule to be baselined in next 2 weeks – including control account budgets • [redacted] lease signed and planned transfer of equipment to start on 16th March • Agreement for [redacted] support as required • CMAL progress meetings now re-commenced 	<ul style="list-style-type: none"> • Use of a 1st fixing system – [redacted] have been tasked to recommend and option and to provide yard standards • Use of MRP function in Factory Master for pipe procurement and installation
Failures	Threats
<ul style="list-style-type: none"> • Risk reviews not yet recommenced 	<ul style="list-style-type: none"> • [redacted] commercial settlement will have an as yet unidentified impact to the material budget • FM(PG) engineering resource to support [redacted] design reviews and information requirements is a critical concern • Subcontract pipe manufacture timescales to allow for public procurement already put the programme under pressure • Production resource to support the plan • Cryogenic pipework will require re-routing – also lack of resource • Lack of on torch fume extraction for aluminium delaying 801 bulkhead erection
Impact Statement / Help Needed	
<ul style="list-style-type: none"> • Decision required on way forward for Engineering support 	

5. Quality

[redacted]

Care & Protection Planner 801 - 802

		December		January		February		March		April		May	
		Friday 09/12/20	Friday 16/12/20	Friday 23/12/20	Friday 30/12/20	Friday 06/01/21	Friday 13/01/21	Friday 20/01/21	Friday 27/01/21	Friday 03/02/21	Friday 10/02/21	Friday 17/02/21	Friday 24/02/21
801	Zone 1	C+P 34						C+P 39					
	Zone 2			C+P 35	Anti Cor				C+P 40				
	Zone 3					C+P 37							
	Zone 4						Hol	C+P 38					
802	Zone 1		C+P 01						C+P 05				
	Zone 2												
	Zone 3						C+P 4						
	Zone 4							N/A					
		June		July		August		September		October		November	
		Friday 04/06/21	Friday 11/06/21	Friday 18/06/21	Friday 25/06/21	Friday 02/07/21	Friday 09/07/21	Friday 16/07/21	Friday 23/07/21	Friday 30/07/21	Friday 06/08/21	Friday 13/08/21	Friday 20/08/21
801	Zone 1												
	Zone 2												
	Zone 3												
	Zone 4												
802	Zone 1												
	Zone 2												
	Zone 3												
	Zone 4												

Survey No.: 5	Location: Berth	Date: 18/02/2020
Unit / Part No.: Zone 1		

Inspected By: [redacted]

Defects Found	Remedial Action Required	Date Remedial Action Completed	Initials
Engine Room <u>770</u> 30-bhd 39 open area at deck 3 major water ingress (Photo 1)	Remove water & cover if possible		
BHD 27-32 Port to <u>stbd</u> aft end major water ingress (Photo 2)	Remove water immediately		
<u>770</u> 28-29 Manhole open & full of water (Photo 3)	Remove water & cover manhole or fit safety ring		
Double bottoms full of rubbish (Photo 4)	Clean out double bottoms		
Generator Room <u>770</u> 24-27 open access causing water ingress port side (Photo 5)	Remove water & cover if possible		
BHD 27-32 Vent space below deck 3 L11 water ingress port & <u>stbd</u>	Remove water & cover from above		
Blige full of water port & <u>stbd</u> side (Photo 6)	Remove water		
Manhole open port & <u>stbd</u> side (Photo 7)	Cover manhole or fit safety ring		

Additional Information

Engineers workshop in good condition - no defects found

Engine room & Generator room - Once water is removed give good clean out in all areas

BHD 27-32 Vent space below deck 3 L11 water ingress port & stbd is a priority as water is starting to build up in main generator room

QC Name: [redacted]

QC Signature: _____

Date: 18/02/2020



Before

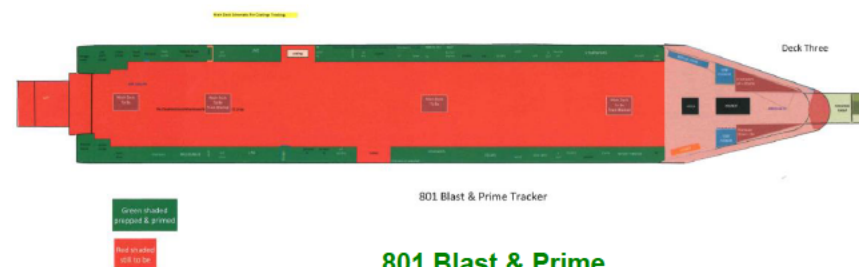


After

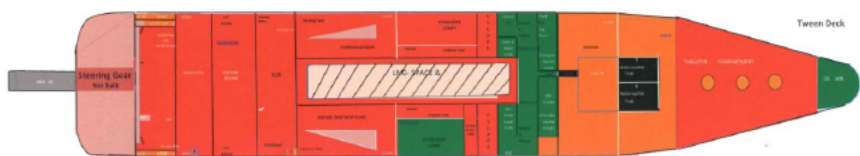


5. Quality [redacted]

The grit blasting programme was started on both ships around the 21/09/2019 and below shows a schematic that clearly defines the yards approach to bringing the steel surface back to an acceptable level of tolerance to receive clients specified coating systems. Having the colour coding plan in place ensures everyone involved in the programme is kept up to date with the process taking into account different levels of preparation from blasting to mechanical preparation (power tools) depending on overall breakdown of the existing blast primer.



801 Blast & Prime Tracker



802 Blast & Prime Tracker



6. Traffic Light Report [redacted]



Criteria	Overall Status				Future Trend	Return to Green		Comments
	Feb 20	Mar 20	Apr 20	May 20		Date	Status	
Overall Status	G				↔			
Safety	G				↔			
Quality	G				↔			
Customer Satisfaction	G				↔			
Schedule	G				↔			
Finance	G				↔			
Technical	G				↔			
Subcontractor	G				↔			
Resources	G				↔			
Risk	G				↔			

Schedule			
Milestone Completion			
	Planned	Actual	% Adherence
Ship 1	4	4	100%
Ship 2	1	1	100%
Ship 3	1	1	100%
Other	8	8	100%
Total	14	14	100%
Traffic Light	<90%	<100%	>=100%
Key Performance Indicators			
	Planned	Actual	% Adherence
Work Orders Closed	BEING DEVELOPED		
	Current	Previous	Prior
Work Orders Outstanding	BEING DEVELOPED		
Total			
Traffic Light			
Schedule Performance			
	Current	Previous	Prior
SPI	0.98	0.75	0.88
Schedule Variance	-£698,183	-£9,612,197	-£3,901,329
% Complete			
Traffic Light	<0.900	<0.950	<1.00
Supplier Delivery			
	Planned	Actual	% Adherence
Group 1 Modkits	3	3	100%
Group 1 Modkits	10	10	100%
Group 1 Modkits	10	10	100%
Cape	BEING DEVELOPED		
Material			0%
Material Shortages	BEING DEVELOPED		
Traffic Light			
Resource Management			
	Planned	Actual	% Adherence
CORE	3,069	2,403	78%
PDS	985	352	36%
PRE PLANN NG	2,586	2,726	105%
DESIGN	1,025	590	58%
REFIT 1,2 & 3	11,931	7,499	63%
KSA OPS	56	0	0%
TRAIN NG	142	156	110%
Total	19,795	13,726	69%
Traffic Light	+20%	+10%	+5%

Cost			
Forecast Margin (£k)			
	Original	Forecast	% Adherence
Ship 1	£3,808	£3,737	98%
Ship 2	£3,655	£3,056	84%
Ship 3	£7,767	£7,473	96%
Other	£1,769	£2,147	121%
Total	£17,000	£16,413	97%
Traffic Light	<80%	<90%	>=90%
Sales & Cash			
	Budget	Forecast	% Adherence
Sales Trading	£23,389	£21,205	91%
Cash Installments	£87,720	£78,215	89%
Total			
Traffic Light	<80%	<90%	>=90%
Cost Perform.			
	Current	Previous	Prior
CPI	0.9	0.75	1.00
Cost Variance	-£10,006	-£33,009	-£54,007
EAC	£102,514	£102,514	£102,514
Traffic Light	<0.900	<0.950	<1.00
Risk Management			
	Current	Previous	Prior
Total Risk Value (£)	£16,275	£16,275	£16,275
Risk % of Budget	15.9%	15.9%	15.9%
Risk Planned	£1,144	£1,144	£1,144
Risk Release Actual	£0	£0	£0
Emergent Risk	£0	£0	£0
Cost of Mitigation	£0	£0	£0
Traffic Light			
Opportunity Management			
	Current	Previous	Prior
Total Opportunity Value (£)	£3,692	£3,692	£4,026
Opportunity % of Budget	3.6%	3.6%	4.2%
Opportunity Realised Planned	£0	£0	£0
Opportunity Realised Actual	£0	£0	£0
Cost of Speculation	£0	£0	£0
Traffic Light			

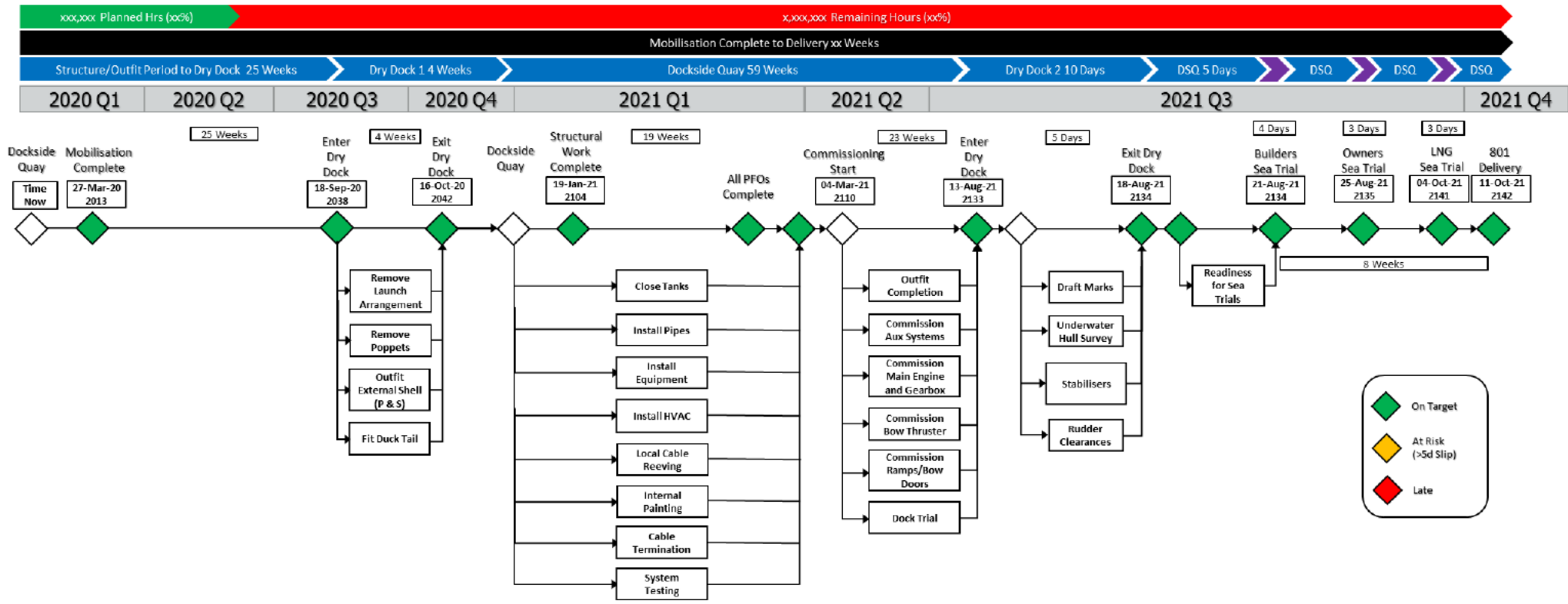
Quality			
Acceptance			
	Planned	Actual	Adherence
Ship 1	5	5	100%
Ship 2	5	5	100%
Ship 3	5	5	100%
Other	0	0	0%
Total	15	15	100%
Traffic Light	<90%	<95%	>=95%
Operational Rework (% of Total Hours)			
	Current	Previous	Prior
Ship 1	0.0%	0.0%	0.0%
Ship 2	0.0%	0.0%	0.0%
Ship 3	0.0%	0.0%	0.0%
Other	0.0%	0.0%	0.0%
Traffic Light			
Observation Status			
	Current	Previous	Prior
Critical	0	0	0
Significant	0	0	0
Minor	0	0	0
Total	0	0	0
Traffic Light			
Change Management			
	Current	Previous	Prior
Critical	0	0	0
Non-Critical	0	0	0
Customer Requested	0	0	0
No. Stopping Work	0	0	0
Total	0	0	0
Traffic Light			
Material Quality			
	Current	Previous	Prior
BEING DEVELOPED			
Traffic Light			

8. Schedule Overview (1)

[redacted]



801 Timeline to Delivery

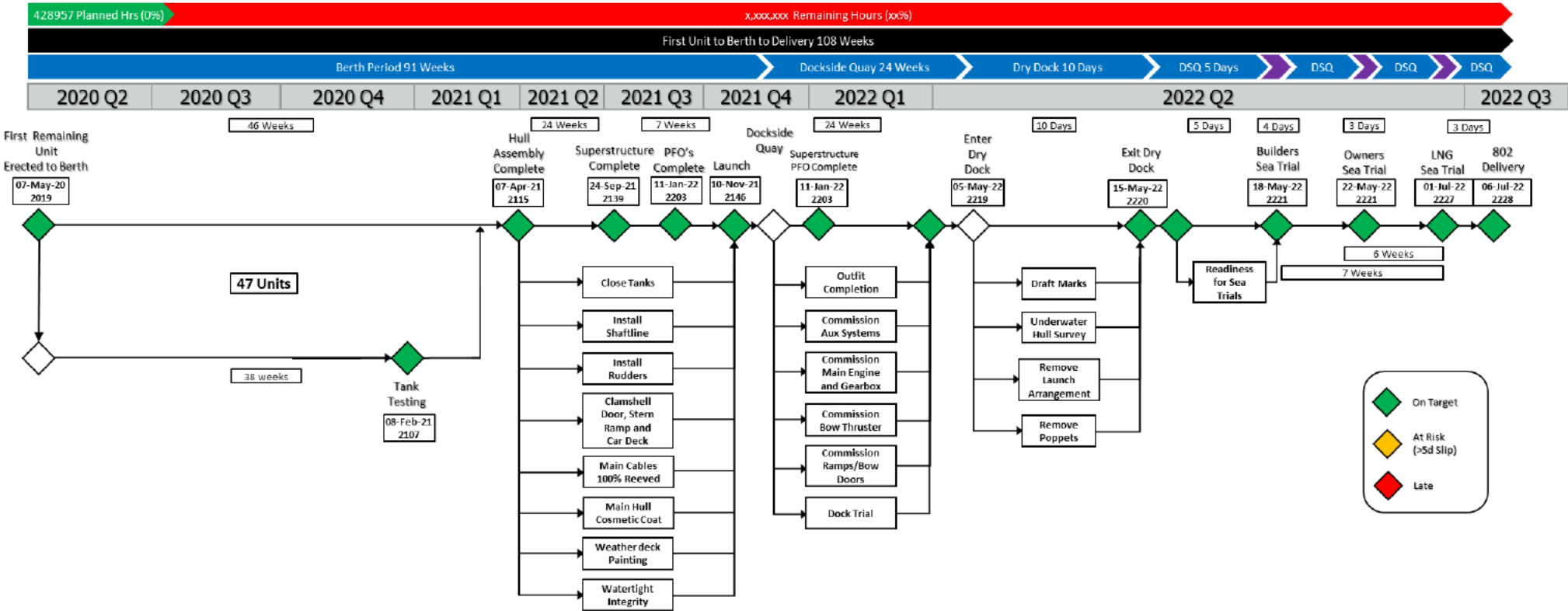


9. Schedule Overview (2)

[redacted]



802 Timeline to Delivery



9. Schedule Overview (3)

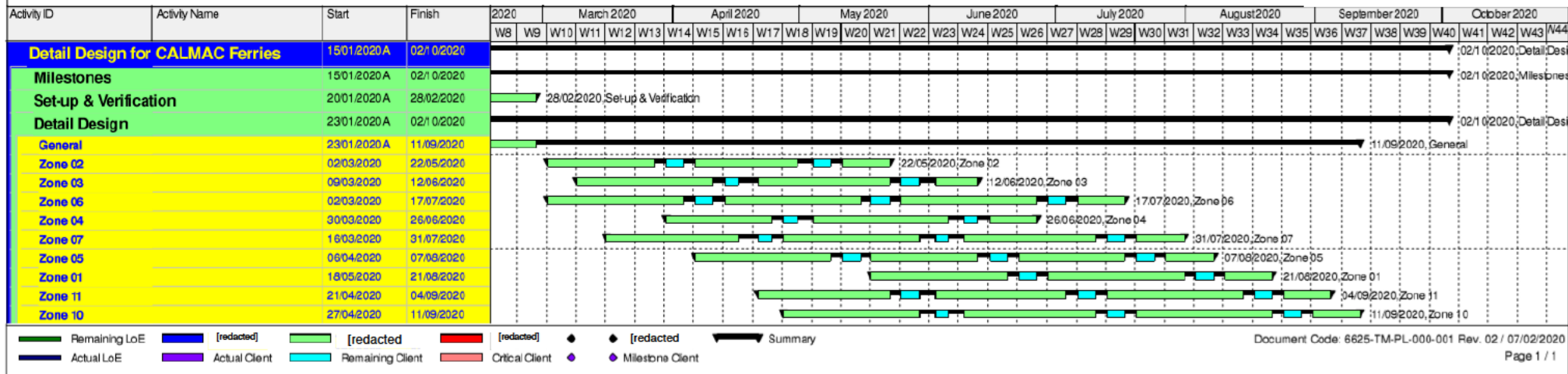
[redacted]



[redacted] Programme

[redacted]

Detail Design for CALMAC Ferries Level 2 Schedule - 3D Model (draft 5)



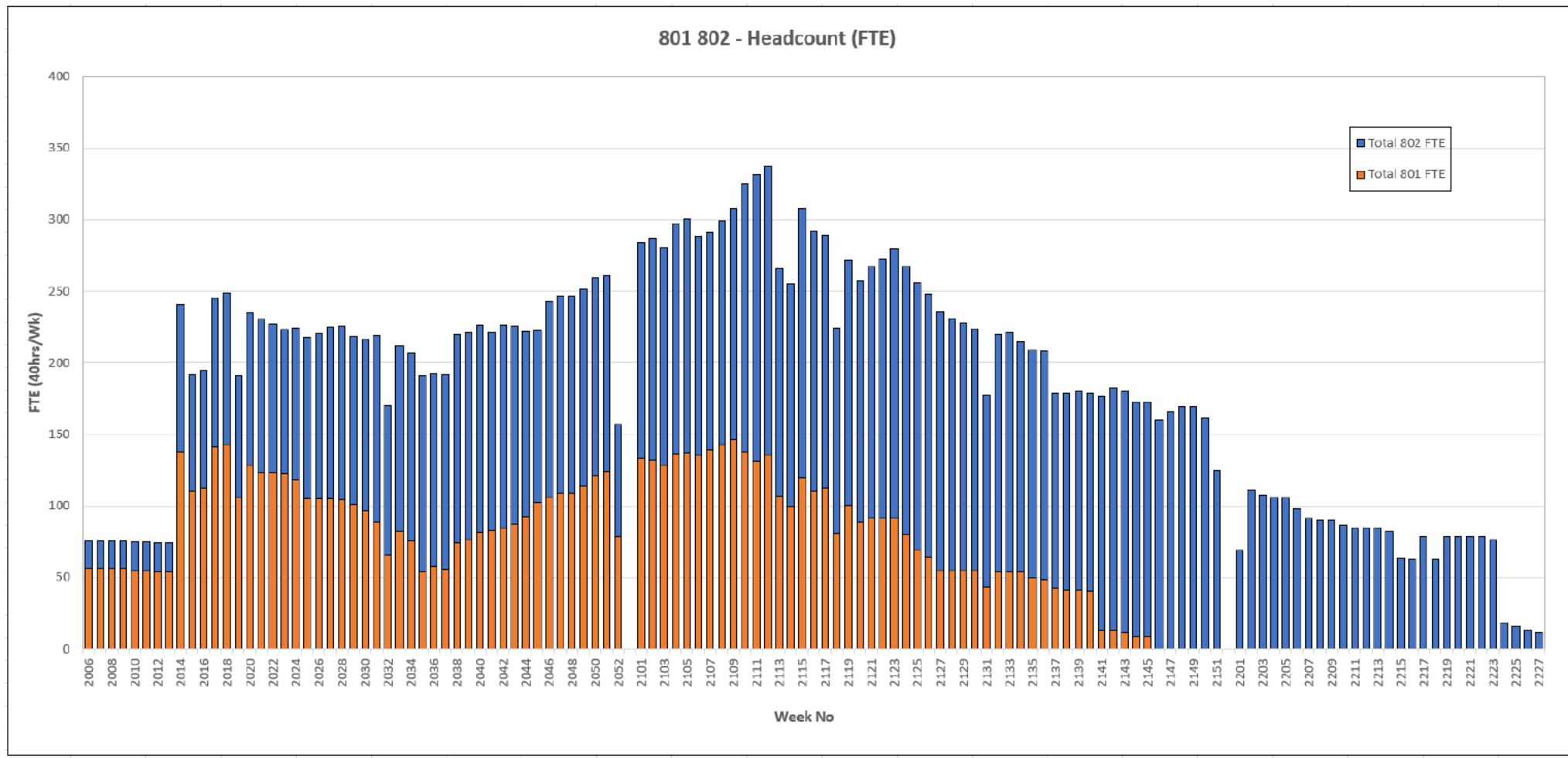
9. Key Deliverables / Milestones Status

Programme Milestones					
ID	Team/Discipline	Milestone Description	Baseline Date	Forecast/Achieved	Status
2020 Q1					
2020-01	FMPG	Agree Design Contract with [redacted]	February 20	February 20	Achieved - Contract Signed xx-Feb-20
2020-02	FMPG	Agree 2 Ship Integrated Baseline Programme	March 20		
2020-03	[redacted]	Zones 2, 3, 4, 6 & 7 - Start 3D Modelling	March 20		Programme Commences 02-Mar-20
2020-04		Zone 2 - Issue 3D Model for 60% Review	March 20		
2020-05	FMPG	Issue ITT for Pipe Manufacturing Contract	March 20		Outline ITT currently being produced
2020 Q2					
2020-06	[redacted]	Zone 2 - Issue 3D Model for 90% Review	April 20		
2020-07	Production	802 - Commence Fabrication of Remaining Units	April 20		Currently Reviewing Erection Sequence/Footprint Availability
2020-08	Production	801 - Fwd Mooring Deck Structure Complete	April 20		
2020-09	[redacted]	Zones 5, 10 & 11- Start 3D Modelling	April 20		
2020-10		Zone 2 - Freeze 3D Model	May 20		
2020-11	Production	802 - 1st Unit Erected at Berth	May 20		
2020-12	[redacted]	Zones 1, & 8 - Start 3D Modelling	May 20		
2020-13		Zone 2 Engine Room Approved Pipe Drawings Issued	June 20		
2020-14		Zones 9 - Start 3D Modelling	June 20		

TO BE DEVELOPED

10. Resource Profile

[redacted]



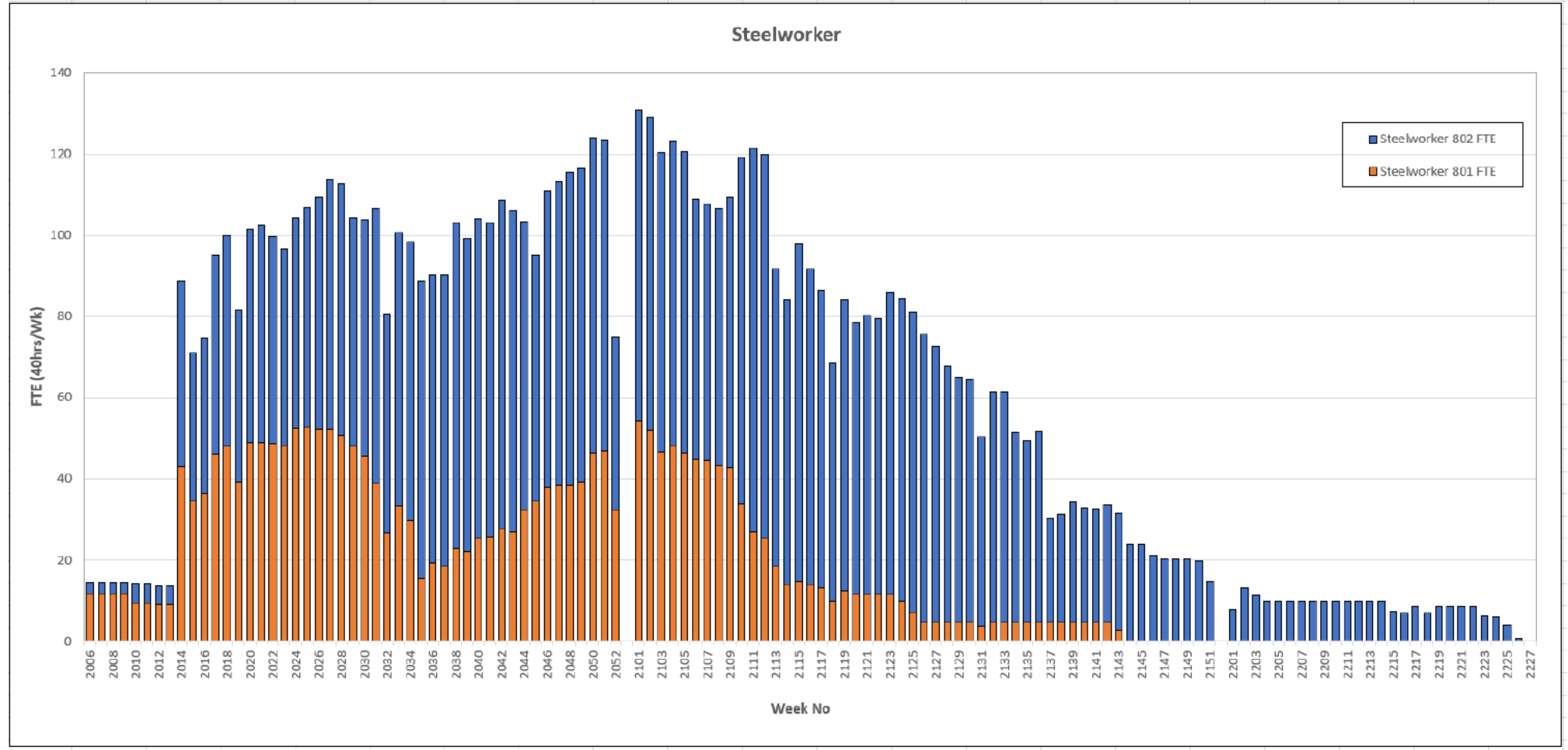
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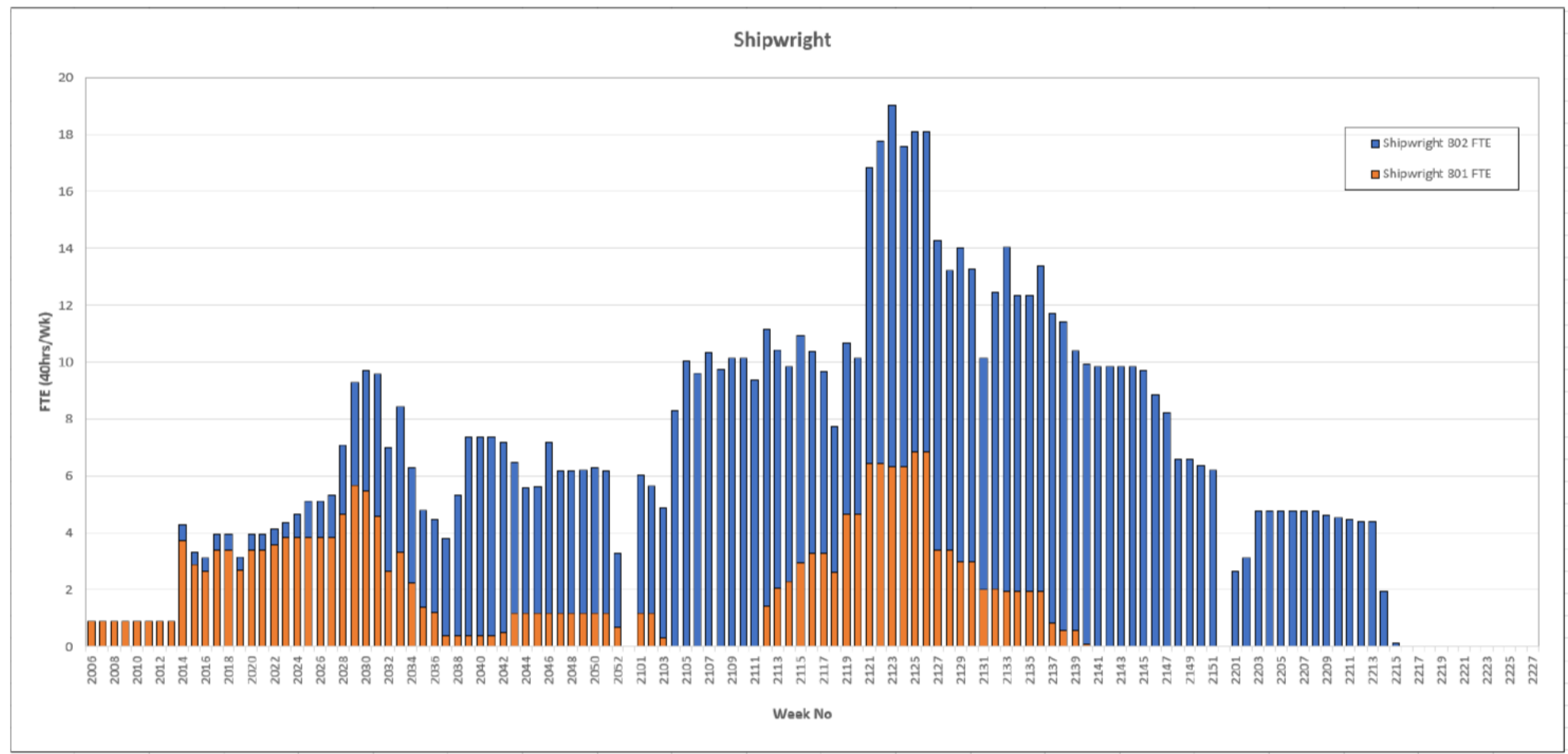
10. Resource Profile

[redacted]



10. Resource Profile

[redacted]



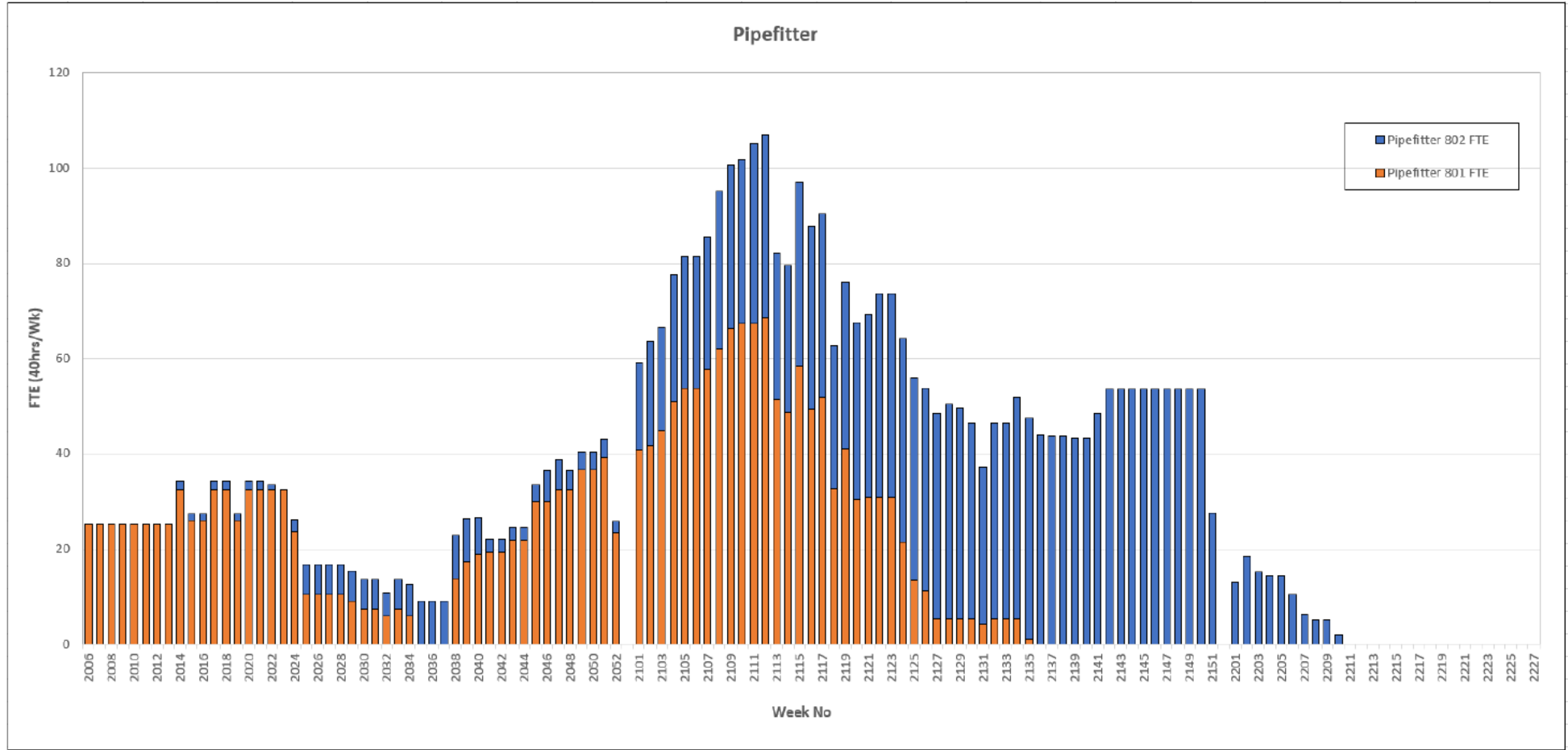
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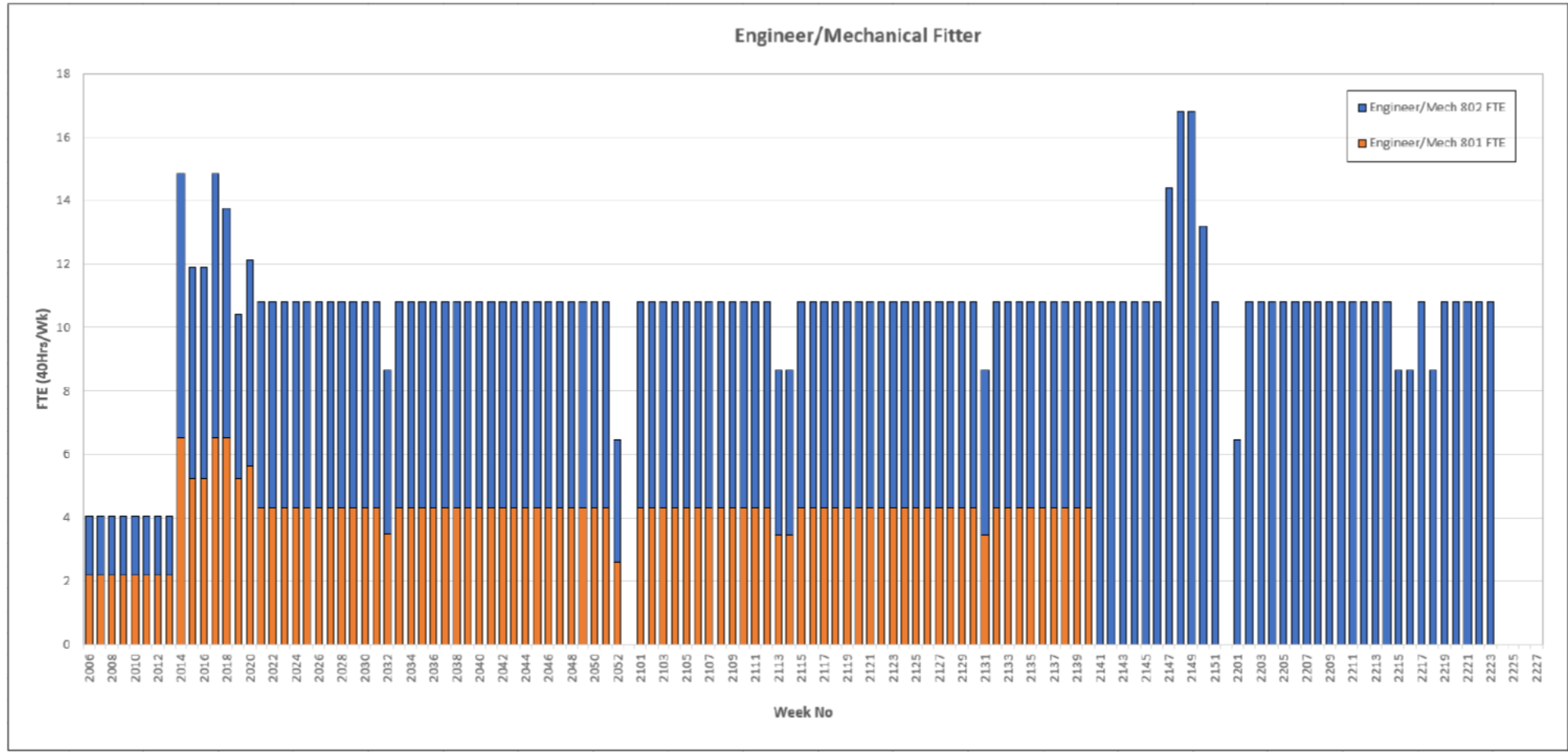
10. Resource Profile

[redacted]



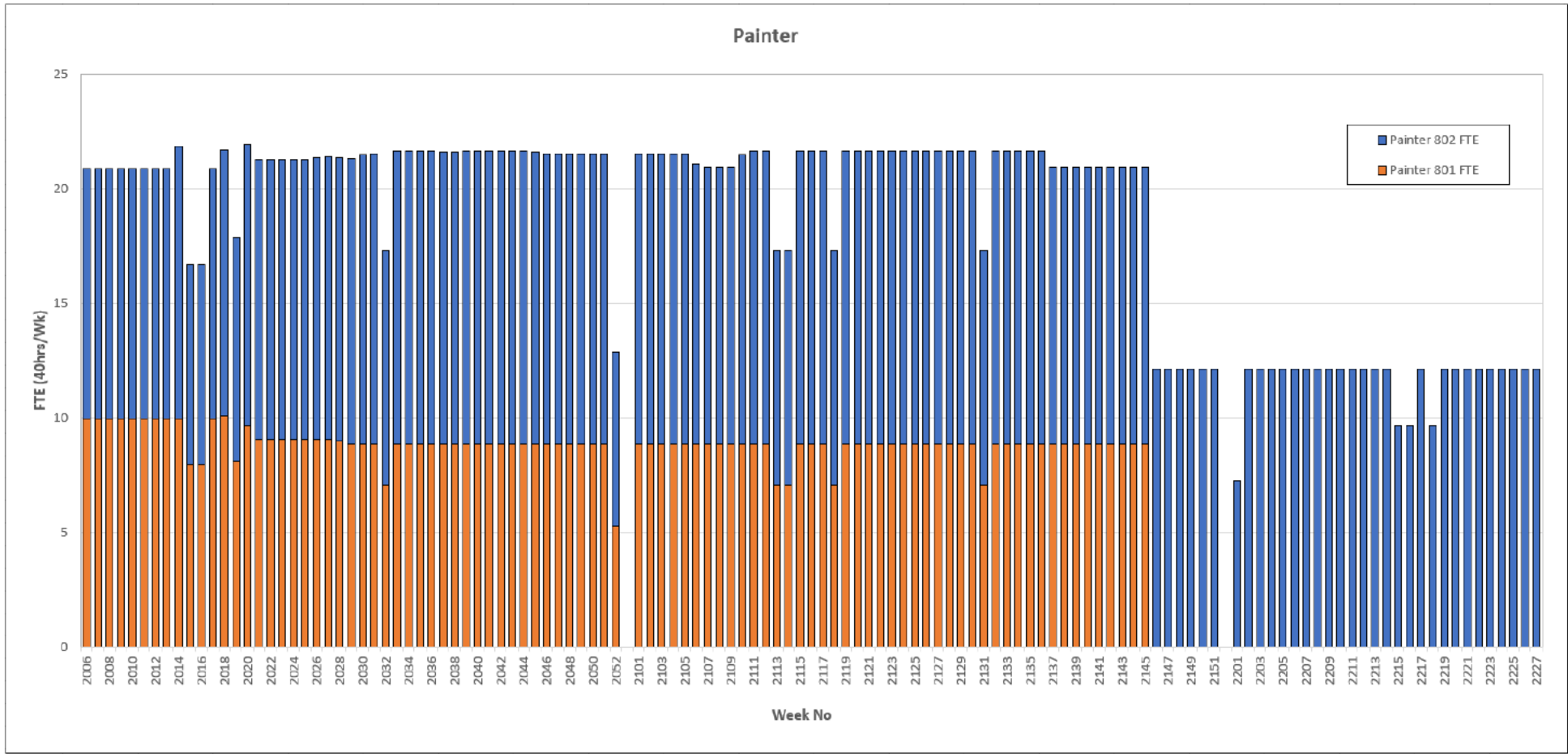
10. Resource Profile

[redacted]



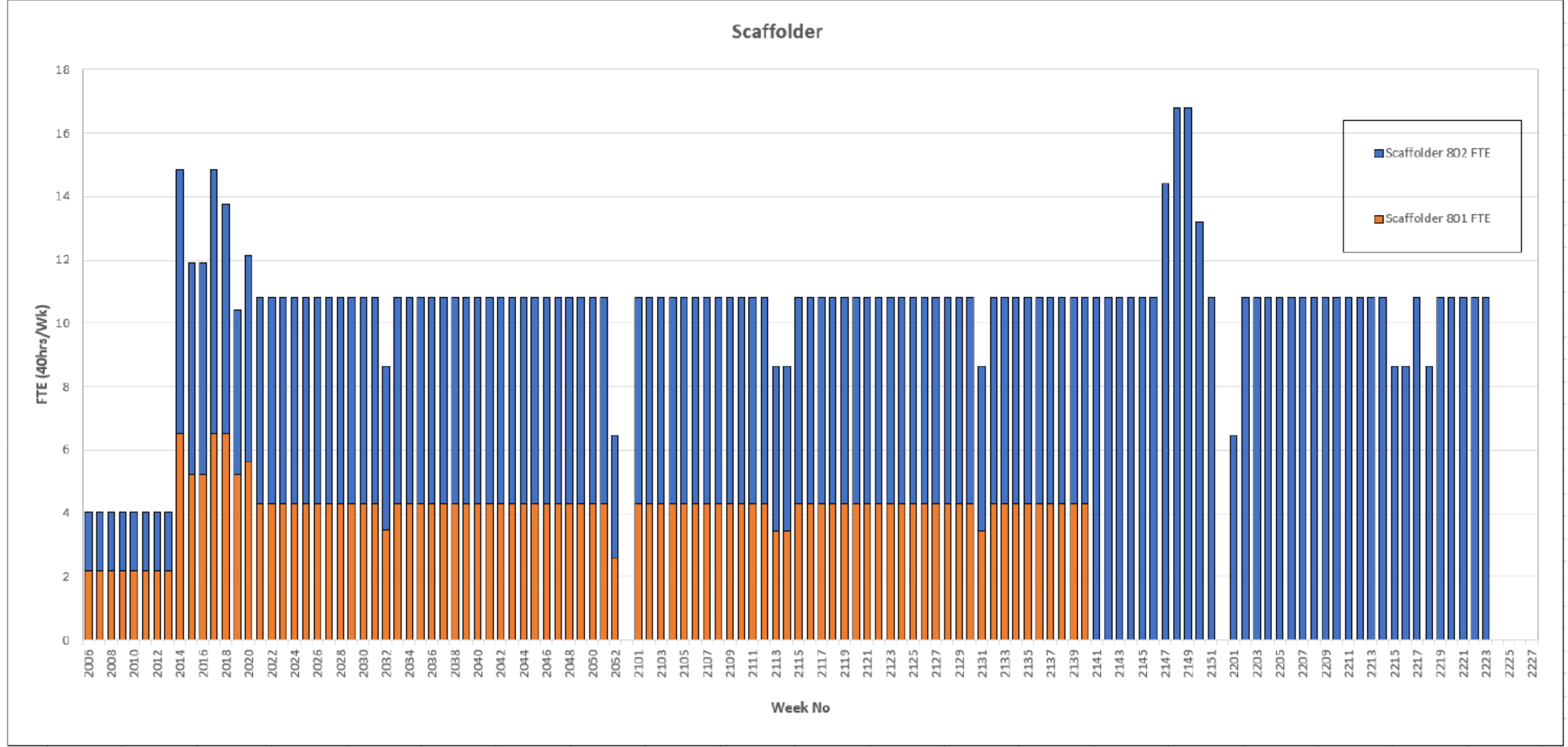
10. Resource Profile

[redacted]



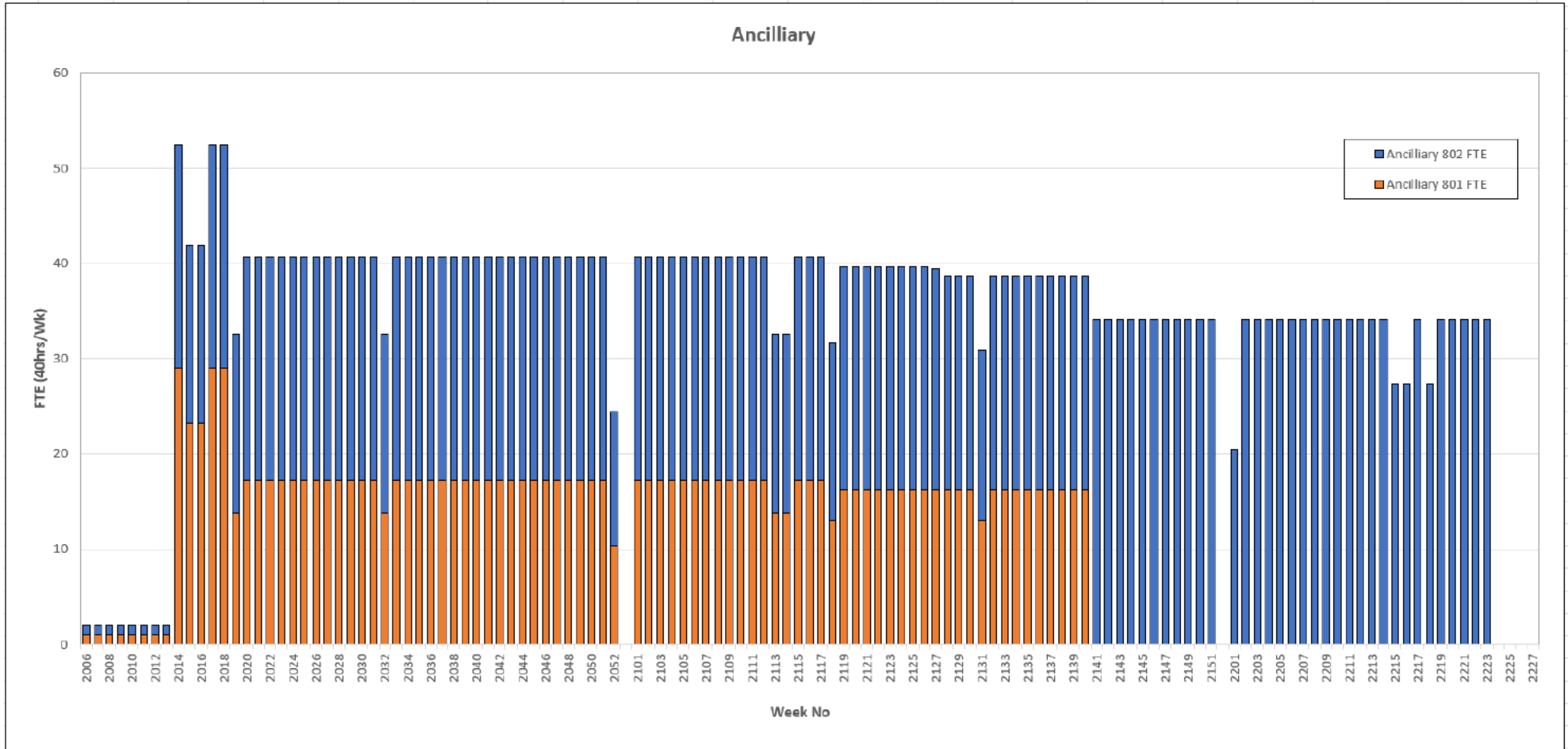
10. Resource Profile

[redacted]



10. Resource Profile

[redacted]



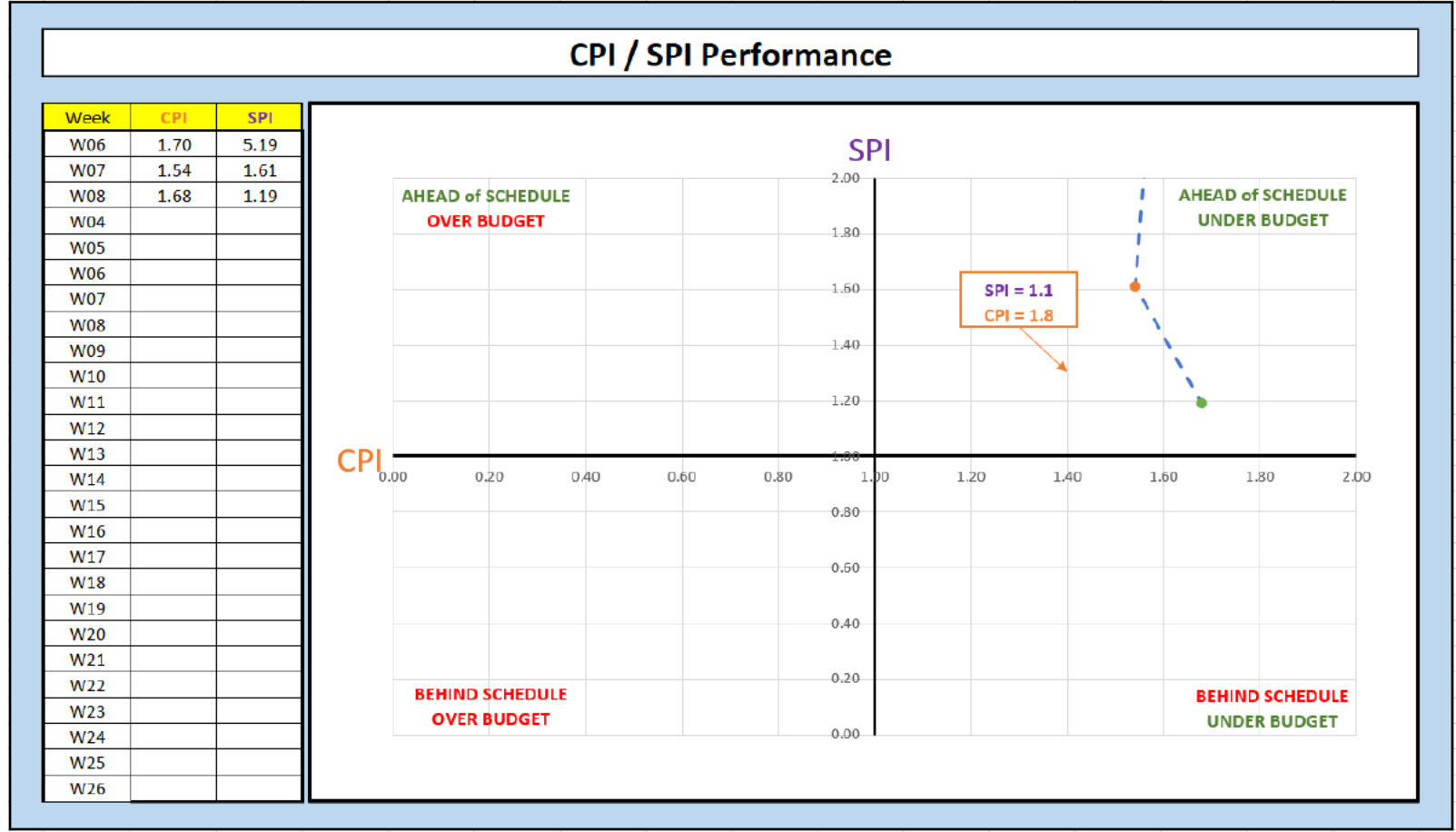
[redacted]

12. SPI & CPI Trends

[redacted]



Based on the 2020 Q1 Plan



To be developed

Risk Description	Controls in Place	Current Impact	Current Likelihood	Current Risk Score	Change to Risk Scoring	Action Planned	Target Impact	Target Likelihood	Target Risk Score	Change to Risk Scoring	Risk Contingency	Risk Owner	Date Last Updated	Date Last Reviewed
Workpackaging arrangements are not robust enough to control properly the work sequence and capturing performance	No workpackaging arrangement currently in place	50	5	250		1. Introduce a process for workpackaging 2. Improve the organisation to deliver the new process	50	4	200		2,000k	[redacted]		
Impact to the programme of the implementation of the Public Procurement process		50	5	250		1. increase procurement headcount 2. Allow for time in the programme	50	4	200		100k 3 months programme			
Production resource labour rates are below industry sector and may require an increase to be competitive in attracting and retaining resource		50	5	250		1. review allowance against market rates 2. Include allowance for potential increase	50	4	200		1,500k			
Materials has been stored offsite at Westway in poor conditions and unmanned. The material condition and level of stock is uncertain and may result in material stock write downs		50	5	250		1. relocate all offsite materials to a new storage facility 2. undertake a stock take 3. improve store location capability	50	4	200		1,800k		30th Oct	
Unable to recruit or retain Production staff in the required numbers, with suitable qualifications and experience	Resource plans from revised programme, together with yard plan	50	5	250		1. develop the programme resource demand 2. produce a yard resource plan showing all projects 3. develop a resource supply strategy 4. Assumes subcontract labour will be provided at same internal rate 5. Extra supervision may be required	50	3	150		250k		Oct-19	
Late delivery of 801/802	Risks associated with late delivery are captured elsewhere in the risk register with planned controls.	50	5	250		1. Include a time allowance for programme slippage	50	3	150		3,500k 3 months delay		Sep-19	
Programme launch date of 802 not met	Risks associated with late launch are captured elsewhere in the risk register with planned controls.	50	5	250		1. Include time allowance for programme slippage (same as late delivery)	50	3	150		included in risk 38		Sep-19	Oct-19
The level of rework is not sufficiently scoped. Known rework is not fully scoped. Unknown rework will occur particularly during the test and commissioning phase	As part of the re-baselining, OOR's, 200 series drawings and other sources of information have been reviewed, costed and added to the programme. Future rework will be controlled by a more robust engineering change process	50	5	250		1. Completion of re-baseline evaluation 2. Updated and improved change control process 3. Allow additional time in the commissioning programme	25	5	125		1,000k		Sep-19	
Equipment may not work during the setting to work and commissioning phase as a result of being idle for a significant length of time	there is a limited equipment maintenance package for all equipment with the exception of anti condensation heating and main engine supplier maintenance	25	4	100		1. appoint a commissioning manager 2. review maintenance requirements	25	4	100		100k			
The significant number of pipes made but not fitted cannot be found or are obsolete. There is a lack of stock control with pipes located at various places in the yard	There are no controls currently for made and stored pipes	25	5	125		1. Audit of pipes underway and grouping by system 2. Provide better storage location for pipes 3. Review pipes dup icate pipes made against latest iso and scrap surplus 4. Provide an allowance for pipes to be remade	24	4	100		175k		Oct-19	

[redacted]