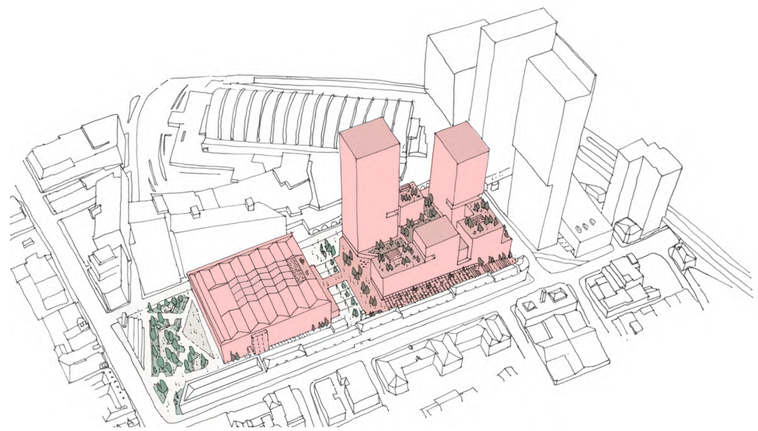
R.P.M.

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TRILOGY

Great Northern Warehouse



Sitewide Programme

Internal Review / Issue Process			File details	
Stage	Initials	Date		
Originator	GR	03 Aug 22	Status	For Planning
Review	-	-	Revision	2
-	-	-		
-	-	-		

Distribution - to be further distributed	Distribution
adam.linard@2110consult.com	--
jamie@trilogyproperty.com	--
sam@trilogyproperty.com	--
RPM FILE	--
--	--
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Description

Introduction

This issue of the programme is intended to be the first pass programme which will act a s a baseline going forwards. It was updated following the review with the Client Team on Mon 11 Jul 22. & 27 Jul 22.

A number of requests were made as a result of that meeting and these are listed and addressed on the next page with our comments against them, some of these are options that we believe should be carried out once the baseline programme has been reviewed by the team and tweaked if necessary.

Contents

Sitewide
Programme requests and responses
App 1 Summary Programme

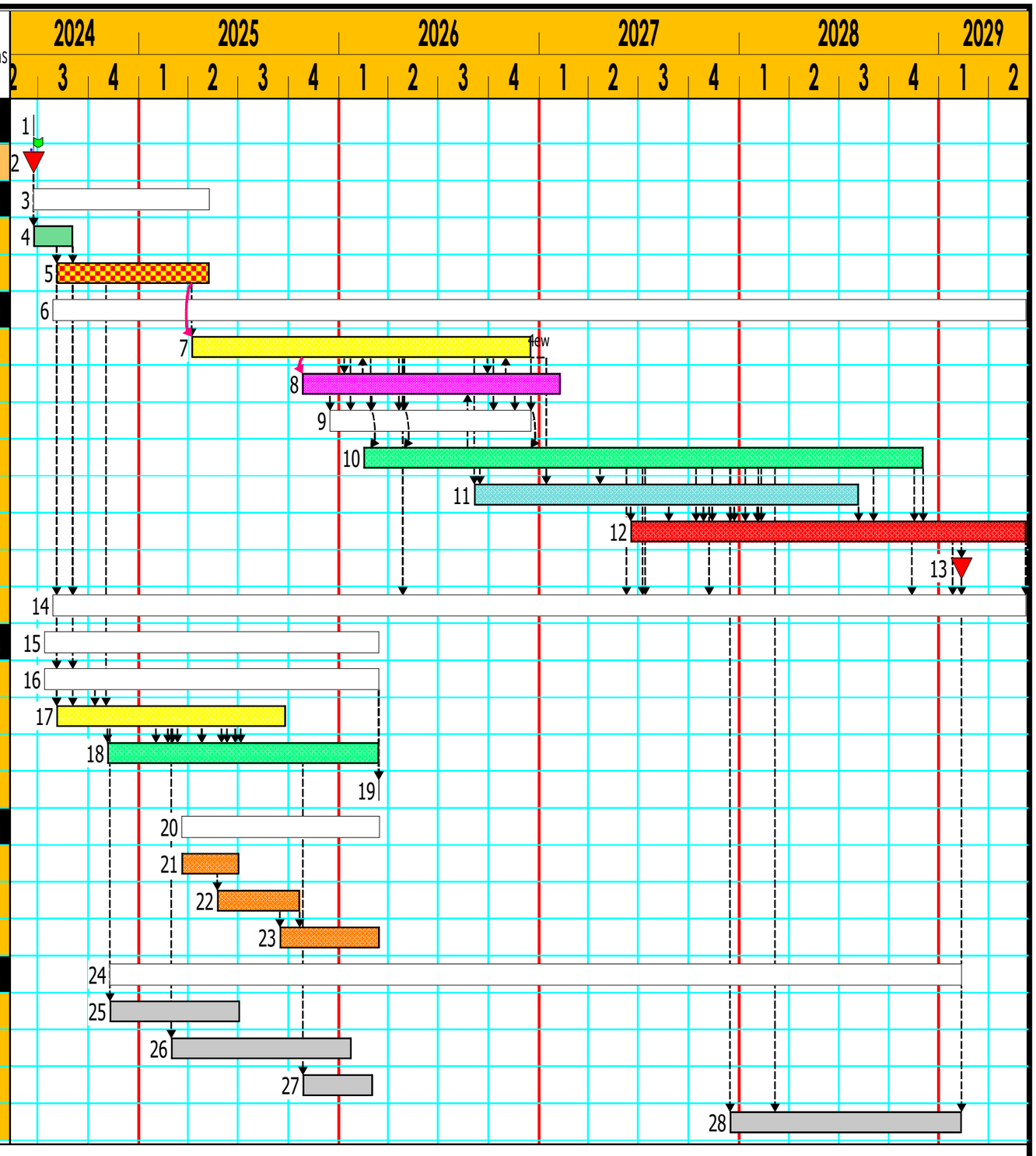
Leisure Box
Outline Programme Narrative
App 3 : Summary construction Programme
App 4.1 : Detailed Programme for Block A interventions
App 4.2 : Detailed construction Programme Block A above L02
App 7 : Tower Crane allocation
App 8 : Residential start per week

Great Northern Warehouse Building

Programme Notes

Request	RPM Comment
1.Pls can you prepare a very high-level summary (i.e.. 1. Demo/enabling works, 2. Warehouse, 3. Terraces, 4. Leisure Box, 5. Public Realm Square, 6. External Areas);	As App 1 in this document - Terraces still to be added
2.Review implications of NCP lease expiry June 2024 (would it be much more economical to start the car park related works then);	No implication as work start from this point but we still need to maintain 100 spaces for the incumbent tenants
3.Review possibly of commencing any enabling works in 2023, what can be done before the NCP lease expires etc;	This will be reviewed as an option once the baseline programme has been agreed
4.Do you have any clever ideas to reduce the overall programme;	This will be reviewed as an option once the baseline programme has been agreed
5.What overall effect does the car park 100 spaces issue have on the programme?; and	As we have revisited the parking strategy this no longer has a critical impact on the programme. It remains as a Risk item that could result in disruption.
6.Trilogy to urgently confirm specific/key items required as a part of this process.	As points
7.Is it possible to get the Warehouse up and operational before the end of the Leisurebox works. This is critical as we can't have it sitting empty for years.	We believe so - however this will rely on Watson St north being opened for site vehicles or a route through being created to the east of the Leisure Box to allow vehicles to access or egress on to Great Bridgewater Street - this will be reviewed as an option
8.Need more detail on the feasibility of delivering Deansgate North new-build office - where does this fit in the programme and can it be done before the Leisure box is completed?	Still to be added to the programme-this is linked to the logistics strategy and whether LB can be serviced from Watson Street North. If The new street is needed for vehicle deliveries we doubt these units would open. This makes it imperative to find an alternative solution so the terraces can open with the Warehouse.
9.Can hoists, etc. be moved away from the front square to keep the square operational for retained tenants - thinking specifically about the entrance to the Bowling Alley	Moved on drawings
10.How much will scaffolding the warehouse add to the programme, if required?	Added to programme - no overall impact.
11.Is there a feasible strategy where one (or more) of the residential towers can be phased in before construction completes on the leisure box?	We have based the programme on one LB PC date - this will need to be reviewed from a logistics and services perspective as an option.
12.Is it possible to get the refurbished car park operational before the end of the Leisure box works - how quickly can this be done in the programme?	This will be reviewed as an option once the baseline programme has been agreed
13.Can we do the necessary works to Leisure box at the end of 2023/beginning 2024 to avoid the need to disrupt NCP but also avoid the need to have the first phase of car parking being in the Warehouse	This will be reviewed as an option once the baseline programme has been agreed
14.RPM to speak to Curtins Transport on the potential to use Watson St for vehicles once the Warehouse is completed	This will be reviewed as an option once the baseline programme has been agreed
15.@Sam Evison to mark up locations for pit lanes on Deansgate	Awaited

Line	Name	Start	Finish	Cal Months
	Key Information	24 Jun 24	24 Jun 24	
2	Start on Site as directed form Trilogy [VP NCP 23 Jun 24]	24 Jun 24 *	24 Jun 24	
	Central Enabling Works	24 Jun 24	09 May 25	10.5em
4	Car Park reduction to 100 spaces	24 Jun 24	03 Sep 24	2.3em
5	Demolition to L02 slab and cladding removal	05 Aug 24	09 May 25	9.1em
	Leisure Box	28 Jul 24	08 Jun 29	58.4em
7	Structural Interventions & Construction to underside L02	08 Apr 25	17 Dec 26	20.3em
8	Slipform Cores from Bmt [dedicated small crane required]	27 Oct 25	09 Feb 27	15.5em
9	Superstructure Start Milestones	16 Dec 25	17 Dec 26	12.em
10	Construction above L02 [not including Commissioing]	16 Feb 26	01 Dec 28	33.5em
11	Steel Infill L03 & L04, Facade and fit out Podium [B,L00 to L03]	04 Sep 26	07 Aug 28	23.1em
12	Commissioning	17 Jun 27	08 Jun 29	23.7em
13	[PC WITHOUT IMPACT OF PRIMARY SUB]	09 Feb 29	09 Feb 29	
14	Other Data	28 Jul 24	08 Jun 29	58.4em
	Great Northern Warehouse	12 Jul 24	16 Mar 26	20.1em
16	Prelim items	12 Jul 24	13 Mar 26	20.em
17	Demolition & Structural alteration works	05 Aug 24	25 Sep 25	13.7em
18	Envelope and Fit Out	05 Nov 24	13 Mar 26	16.2em
19	PC	16 Mar 26	16 Mar 26	
	Northern Terraces [Defferred For Logistics]	20 Mar 25	16 Mar 26	11.9em
21	Sub & Super	20 Mar 25	02 Jul 25	3.4em
22	Envelpe	23 May 25	21 Oct 25	5.em
23	Fit out and Commsision	16 Sep 25	16 Mar 26	6.em
	External Works	08 Nov 24	09 Feb 29	51.1em
25	Ampitheatre Tank Room for GNW - Notional Start Date	08 Nov 24	03 Jul 25	7.8em
26	North Park, Subs truct and Landscaping	28 Feb 25	23 Jan 26	10.8em
27	GNW East & West	28 Oct 25	03 Mar 26	4.2em
28	Leisure Box	16 Dec 27	09 Feb 29	13.9em

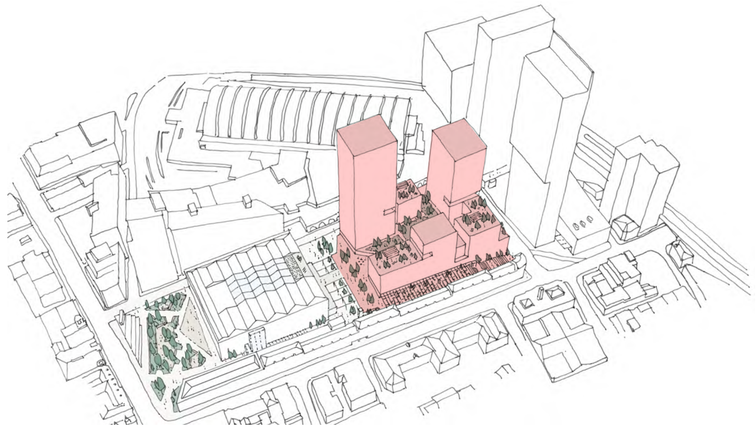


GNW SUMM

ENABLING WORKS | DEMO | INTERVENTIONS | SLIPFORM | WORKS ABOVE PODIUM | PODIUM

COMMISSIOING | TERRACES | EXTERNALS

CO–RE | Project: GNW | Title: Works On Site | View: App 1 Strategic Summary | *Baseline | slip from bmt | parking in bmt* | Prog No : GNW/C/APP1 | 03/08/2022 | Rev 2 | R.P.M.



Leisure Box Programme

TRILOGY

Great Northern Warehouse

Assumptions

Contents

Outline Programme Narrative
App 3 : Summary construction Programme
App 4.1 : Detailed Programme for Block A interventions
App 4.2 : Detailed construction Programme Block A above L02
App 7 : Tower Crane allocation
App 8 : Residential start per week

Structural Interventions L02 and below

All piles are 4m below existing basement slab only - assumed sandstone level
Piling output to be confirmed when core [mm] into bedrock known
Only power [- 4 x 6KV] to be slewed/diverted/spiked prior to new contig piled wall installation - this must be carried out before LB demolition phase to prevent delays between structural interventions and contig wall commencement. Must be prior to demo scaffold erection
All piling carried out by mini rigs 2no piles/day/rig allowed
Slipform starts at Basement Level

Services

Discussion required on Primary Substation- we currently have 2 options on the programme - external advice required to confirm the installation and commissioning periods

Superstructure

Footprint of buildings is RC for Levels L03 & L04.
L03 and L04 between building footprints is steel and composite slab.
L03 slab below building is not a deep transfer slab - assume the loads are efficiently going through the new piles.
Dedicated small tower cranes will be allowed for slip forms if required over and above the main Tower cranes. These could be located within the cores.
Slipform starts at Basement Level

Facade

Facade is : precast - pre glazed 3m wide units
Second hoist is installed after a vertical section of de glazed precast is installed in a stack. This stack is glazed following the hoist removal upon the commissioning of the new lifts

Fit out

Highest apartments do NOT have enhanced finishes
No bathroom pods
Jump lifts 3/3 in core A | 2/2 Core C

R.P.M.

Great Northern Warehouse [GNW]

Programme notes for the Leisure Box [LB] enabling, demolition and fit out programme

Rev 01 15-07-22

Central enabling Works

- Car Park [CP] reduction to 100 spaces
    - Flatten the ground floor area below the link building to provide maximum flexibility for logistics
    - Relocate the current Casino and Bowling alley waste area and the delivery points
    - Provide 100 parking spaces in the GNW upper floor for ongoing tenants to provide VP of the CP for a short period. This is to
        - Realign the car park entrance and exit
        - Construct a temporary ramp from L00 to Basement [B1] as the current down ramp needs to be demolished as part of Core C build.
        - Erect protection measures over the access road immediately to the north of the LB, this will isolate and protect the CP users from any future construction and logistics activities overhead.
        - Re-lay out the signs and lines for the 100 spaces in the basement
    - Once the CP reopens, the GNW building has full VP at the upper levels and works can safely commence.
- Service diversions
    - We are aware of 3no 6KV cables in the footpath of Watson St that need to be removed/diverted/spiked/slewed to allow the new contig wall to be installed
- Demolition
    - See demolition document [xxx] for description of these works
    - Structure to be dismantled to L02 slab
    - Cladding to be removed completely to L00
    - Option to be reviewed – how much of these works can take place pre VP of the NCP 23 Jun 24
- Building A
    - Structural interventions – main slab removal
        - Start on Site when all LB structure is cleared down to L02 slab [lower cladding removal and scaffold dismantle ongoing – small overlap]
        - After a site set up period erect an encapsulated perimeter scaffold on the east side of the structure to allow safe demolition for the new core construction
        - Install vertical props then saw cut the slab edge and demolish each of the slabs L02, L01 then L00 bringing the scaffold down to suit.
    - The scaffold removal allows the new contig wall to be installed. This includes
        - Probing/obstruction removal - RISK
        - Guide wall 5lm/day
        - Piling: 2 rigs @ 2no/day
        - Capping beam construction 4 lm/day
        - Excavate out the new basement whilst removing the existing piled and RC walls 80m3/day

- This creates the space and access to break out the B1 slab and excavate for the main Core A pile cap. We have assumed this is 2m deep. The piling for the core is installed in parallel with the contig, the excavation does not happen until the contig is complete as we think this would undermine the raking props that will be needed to support the existing eastern basement wall to allow the L00 slab removal.
    - Install 600mm piles with I rig @ 2no/day
    - Break down piles form lift pits
    - Construct the pile cap – key duration 90 te of rebar @ 6te/day
    - Shutter and concrete pile cap 450m3
- This allow the core slipform to commence
    - Set up 3w
    - Slip 1.1 lm/day
    - Install precast landings and stairs during the slip process
    - Independent craneage to be provided if necessary – small luffer/articulated.
- Once the slip has reached L03 slab the intervention slabs commence to L00, L01 and finally L02. Each of these is 3w
- In parallel with the above and also starting once the existing structure is safely down to L02 the new column intervention works commence. These are to take the new load of the upper buildings through from L02 to new foundations at B1. These works comprise of
    - Create new openings through L02, L01 and L00 at the new column locations
    - Break out B1 for new pile caps [approx. 3m x 3m]
    - Install a piling mat
    - Install new piles 2 rigs @ 2no/day
    - Construct new pile caps cast 2 per day when going
    - Construct columns and infill to existing slab from B1 to underside of L02, 2 no/day of each operation
- The next phase is the frame construction L03 to the Roof at L36, for this to start 3 objectives must be meet
    - The slipform is at L06
    - All the new columns are complete to underside of L02 and cured
    - The slabs surrounding the new cores are complete to L02
- Upon this the frame can start, this is based on
    - Post tensioned concrete
    - 1 crane optimally achieving 475m2 of slab/week
    - Due to the size of the lower slabs [L03 to L12] we have used 2 Tower Cranes [TC] on Building A each generating the 475m2/week. These are TC1 and TC4
    - From L13 TC 1 continues with the frame to the roof.
- To start the next phase of cladding the falsework props will be cleared. We have linked the casting of L07 to the removal of L03.
- Next the Pre-Glazed Precast Façade starts
    - Once L08 is clear of props, there is 3w of setting out and installing brackets for the Pre-Cast Facade [PC]
    - The façade is hook dependant, for Building A TC4 is allocated to this task.
    - We have based this programme on installing 4no x 3m wide modules/day for one TC [there is an option for a 6m wide module]
    - A hoist should be erected following the PC install as leaving an entire column of precast out until the hoists are removed would be a critical mistake. Ther

will be need for a hoist to service the superstructure which will be struck immediately that activity is complete.

- Residential Fitting Out
  - The first residential floor is L04
  - Once the precast façade is complete to L05 then the perimeter firestopping at the L05 slab edge is installed. This along with temporary weathering in the core location at the highest-level possible level provides the correct environment for the drylining that will start the main residential fit out.
  - We have planned on starting 5 residential units/week. This is a generic rate for all apartment types.
  - The last apartment that starts at L35 has a duration of 24w no additional time has been allowed for any enhanced finishes that are regularly found in Penthouses.
- Hoist dismantle. Final commission & PC
  - 10w into the fit-out period of the L35 final apartment, the largest items requiring the hoist will have been loaded out. This allows the hoist to be removed. [the lifts are in BBU at this point]
  - The hoist dismantling and glazing of the precast is set at 3no floors/week from L35 down to L04.
  - The residual apartments also start 3no/week and the final hoist apartment at L04 has an 8w period to complete the affected areas.
  - Following the fit out of the final location of the final apt there is a 10w [8w for Buildings B and C] period for final commissioning, de-snagging and IST etc to the point of PC.

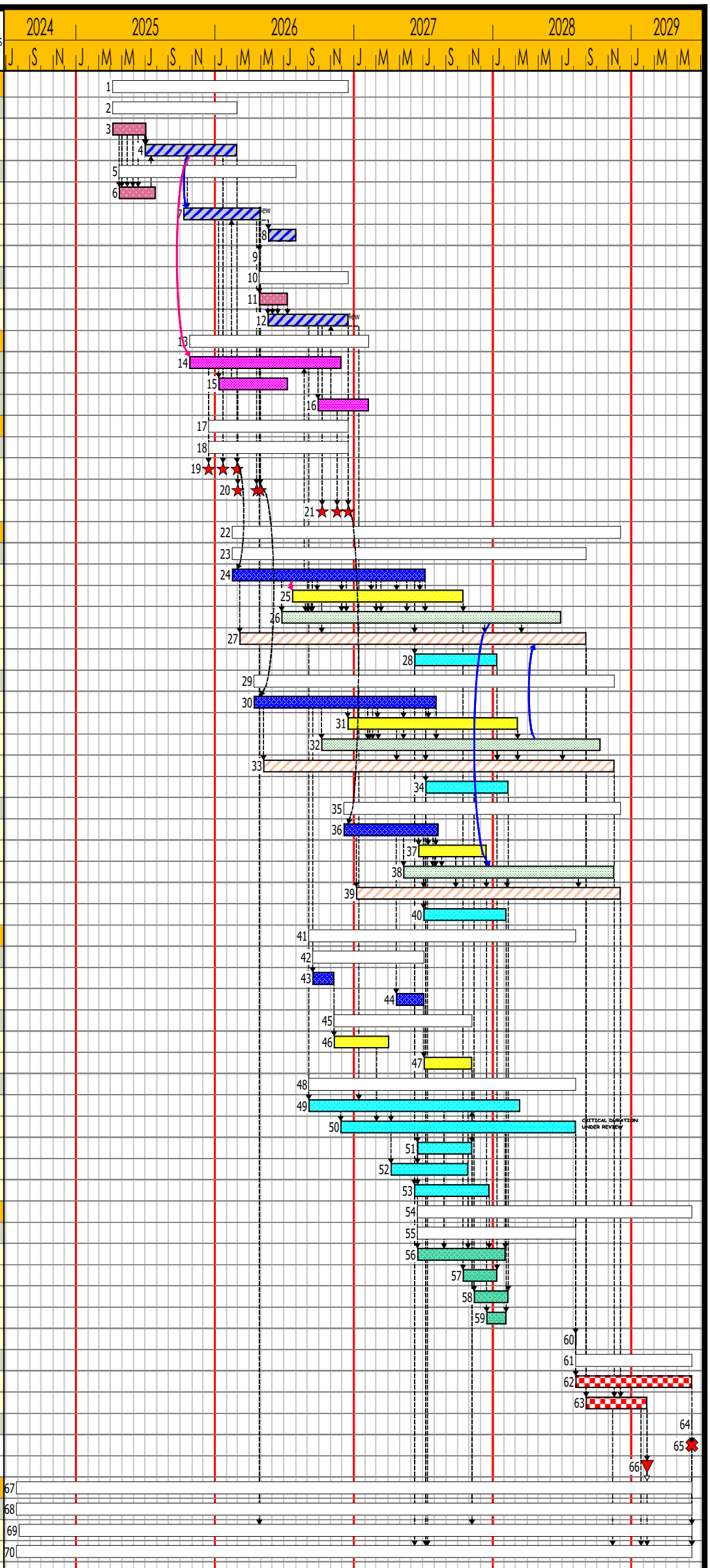
- Building C
  - Building C follows the same logic as Building A. The key differences are listed below
    - There is only 1 one TC dedicated to the superstructure construction, the lower very large floors do take a long time – we are considering this.
    - TC5 is needed to install the PC panels which we intend to locate on Core C [TC5 will complete the structure releasing the heavier lifting TC2 for the precast]
- Building B [includes apartment start constraint comment]
  - The interventions to Building B start as soon as the new column construction to A & C are complete to u/s of L01, the propping is clear and the central car park has been set up in the basement. This frees up the structure for all intervention works for Building B.
  - A key constraint we have place on this building is that the apartment fit out does not start until all the apartments have started in Building A. This prolongs Building B but limits the number of start across the project to 10no/week. RPM is not familiar with the Manchester construction metrics; we would like to explore the number of starts per week with the client team to reflect what is right for the local market and contractor capabilities. This link and the total project ratee can be seen on programme 'App 8'.

- Central Podium: Between the 3 buildings PT superstructures there are slabs at L03 and L04 formed from Steel frame and composite metal decking [our allowance] This has been split east and west. East starts once all propping is cleared from L04 in Buildings A and C to allow on floor access where the steel connects the PT frame. The craneage allocation for this

needs to be resolved, it may be piecemeal so as not to delay any critical activities. We have not stopped any of the 3 main buildings to carry these works out but from the logic described above for Building B's apartments this structure could be delayed carrying this out. We believe it is an issue that can be resolved further down the process. Once podium structure is built and the façade installed, we have started the Primary Substation.

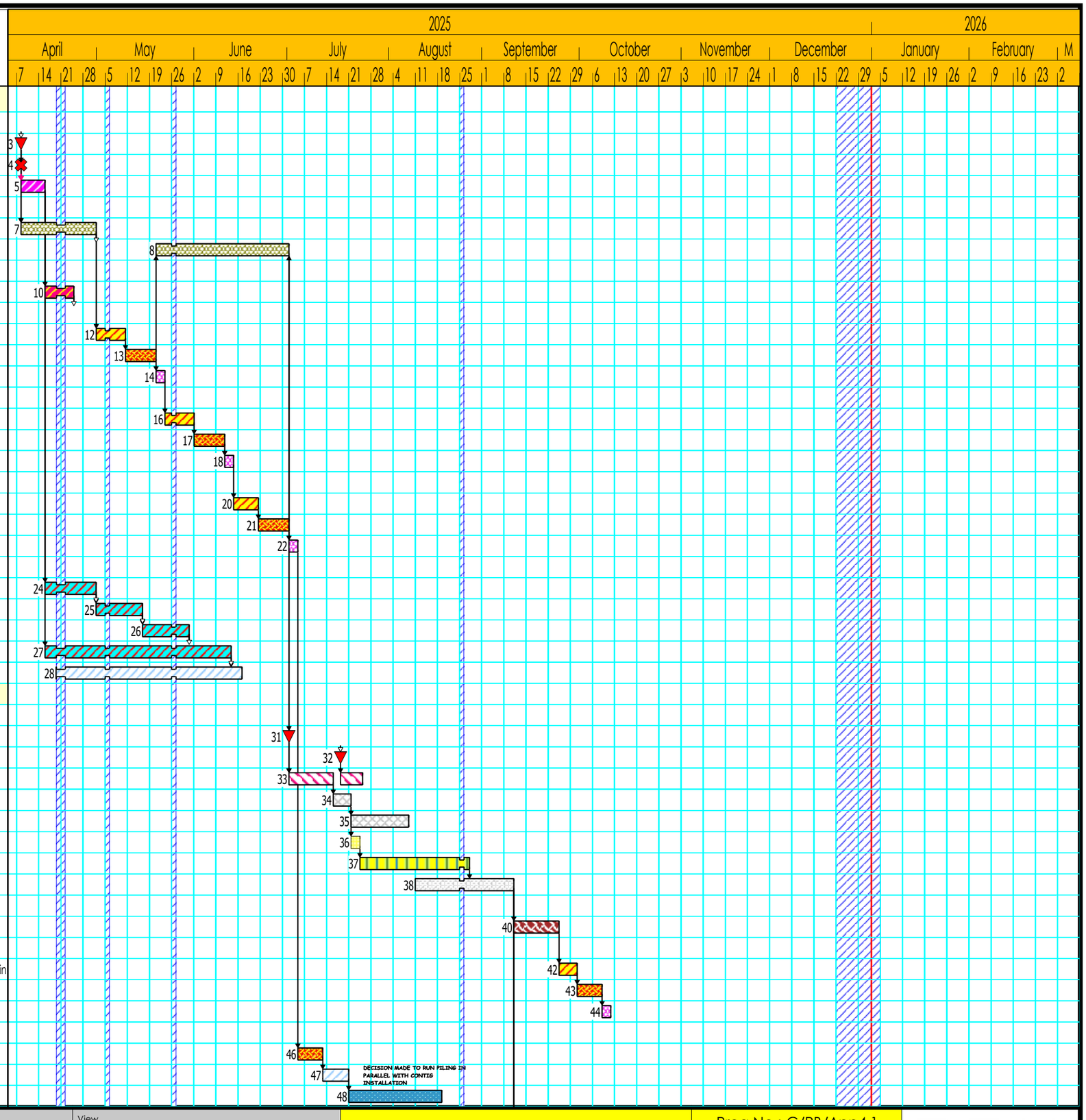
- Primary Substation: as explained CURRENTLY this starts once the eastern podium facade is in place, we have highlighted this area as a concern/risk as we know that some substations can take a substantial time for design | procure | lead in | install and commission. Our period here is at large and is critical and does need to be revisited. We have indicated on the programme where the PC date could be if the Primary Substation is taken off the critical path.
- Car Parking: We have been asked to cater for 100 car parking spaces for the tenants that are remaining operational within the development. We have proposed the use of the LB basement for this, a more detailed graphical explanation is laid out in out Car Parking document. As we are not car park designers the proposals need to be tested and vetted by the architect/CDM coordinator to prove the approach meets all regulations and spatially cars can use the spaces/turns etc. We have adopted a one-way system where cars entering, and exiting do not cross each other so we believe it is a sensible starting point.

Line	Name	Start	Finish	Duration	Cal Weeks
1	Structural Interventions & Construction to underside L02	08 Apr 25	17 Dec 26	20.3em	88ew
2	Building A: 35 storeys + roof [346 aprtts - NE]	08 Apr 25	27 Feb 26	10.7em	46ew
3	Structural Interventions B-1, L00, L01	08 Apr 25	03 Jul 25	2.8em	12ew
4	Sub and Superstructure B1 to L02	01 Jul 25	27 Feb 26	7.9em	34ew
5	Building C: 26 storey tower + roof [292 apartments - SE]	23 Apr 25	03 Aug 26	15.3em	67ew
6	Structural Interventions B-1, L00, L01	23 Apr 25	29 Jul 25	3.2em	14ew
7	Sub and Superstructure B1 to L02	10 Oct 25	30 Apr 26	6.6em	29ew
8	Reconstruct Car Park Ramps Bmt to L01	21 May 26	03 Aug 26	2.4em	11ew
9	Open Basement Car Park Release Building B [west]	28 Apr 26	28 Apr 26		
10	Building B: 14 storey tower + roof [113 apartments - W]	28 Apr 26	17 Dec 26	7.7em	33ew
11	Structural Interventions B-1, L00, L01	28 Apr 26	10 Jul 26	2.4em	10ew
12	Sub and Superstructure B1 to L02	20 May 26	17 Dec 26	6.9em	30ew
13	Slipform Cores from Bmt [dedicated small crane required]	27 Oct 25	09 Feb 27	15.5em	67ew
14	Building A Slipform Core - Dedicated small TC | static Pump,line,and placing boom]	27 Oct 25	30 Nov 26	13.1em	57ew
15	Building C Slipform Core - Dedicated small TC | static Pump,line,and placing boom]	12 Jan 26	10 Jul 26	5.9em	26ew
16	Building B Slipform Core - Dedicated small TC | static Pump,line,and placing boom]	29 Sep 26	09 Feb 27	4.4em	19ew
17	Superstructure Start Milestones	16 Dec 25	17 Dec 26	12.em	52ew
18		16 Dec 25	17 Dec 26	12.em	52ew
19	A - L03 Superstructure start milestones	16 Dec 25	27 Feb 26	2.4em	10ew
20	C - L03 Superstructure start milestones	02 Mar 26	30 Apr 26	1.9em	8ew
21	B - L03 Superstructure start milestones	09 Oct 26	17 Dec 26	2.3em	10ew
22	Construction above L02 [not including Commissioing]	16 Feb 26	01 Dec 28	33.5em	146ew
23	Building A: 35 storeys + roof [346 aprtts - NE]	16 Feb 26	04 Sep 28	30.6em	133ew
24	Frame Construction [PT] TC1	16 Feb 26	07 Jul 27	16.6em	72ew
25	External Precast [Pre Glazed] Assumed 3.0m wide [3m or 6m module possible]	23 Jul 26	15 Oct 27	14.8em	64ew
26	Fit Out	25 Jun 26	28 Jun 28	24.1em	105ew
27	Hoist Strategy, removal and close up	06 Mar 26	04 Sep 28	30.em	130ew
28	Roofs & Plant Rooms	09 Jun 27	12 Jan 28	7.1em	31ew
29	Building C: 26 storey tower + roof [292 apartments - SE]	14 Apr 26	16 Nov 28	31.1em	135ew
30	Frame Construction [PT] TC2	14 Apr 26	06 Aug 27	15.7em	68ew
31	External Precast [Pre Glazed] Assumed 3.0m wide [3m or 6m module possible]	16 Dec 26	07 Mar 28	14.7em	64ew
32	Fit Out [Tower and Main Risers etc.]	08 Oct 26	10 Oct 28	24.1em	105ew
33	Hoist Strategy, removal and close up	08 May 26	16 Nov 28	30.3em	132ew
34	Roofs & Plant Rooms	09 Jul 27	11 Feb 28	7.1em	31ew
35	Building B: 14 storey tower + roof [113 apartments - W]	04 Dec 26	01 Dec 28	23.9em	104ew
36	Frame Construction [PT] TC2	04 Dec 26	11 Aug 27	8.2em	36ew
37	External Precast [Pre Glazed] Assumed 3.0m wide [3m or 6m module possible]	21 Jun 27	16 Dec 27	5.8em	25ew
38	Fit Out	12 May 27	15 Nov 28	18.2em	79ew
39	Hoist Strategy, removal and close up	07 Jan 27	01 Dec 28	22.8em	99ew
40	Roofs & Plant Rooms	05 Jul 27	07 Feb 28	7.1em	31ew
41	Steel Infill L03 & L04, Facade and fit out Podium [B,L00 to L03]	04 Sep 26	07 Aug 28	23.1em	100ew
42	Infill Steel Frame Structure	15 Sep 26	05 Jul 27	9.6em	42ew
43	East Around Buildings A & C 320 m2	15 Sep 26	10 Nov 26	1.8em	8ew
44	West Around Building B 1673 m2	22 Apr 27	05 Jul 27	2.4em	11ew
45	Podium Facades	10 Nov 26	08 Nov 27	11.9em	52ew
46	East Facade installation L00 to L04 slab	10 Nov 26	02 Apr 27	4.7em	20ew
47	West Facade installation L00 to L04 slab	05 Jul 27	08 Nov 27	4.1em	18ew
48	Podium Fitting Out	04 Sep 26	07 Aug 28	23.1em	100ew
49	Basement	04 Sep 26	13 Mar 28	18.3em	79ew
50	L00 Ground Floor	27 Nov 26	07 Aug 28	20.4em	88ew
51	L01	17 Jun 27	08 Nov 27	4.7em	21ew
52	L02	08 Apr 27	28 Oct 27	6.7em	29ew
53	L03	09 Jun 27	23 Dec 27	6.5em	28ew
54	Commissioning	17 Jun 27	08 Jun 29	23.7em	103ew
55	Areas Ready Milestones	17 Jun 27	07 Aug 28	13.7em	60ew
56	Podium Plantrooms	17 Jun 27	03 Feb 28	7.6em	33ew
57	Building A	14 Oct 27	12 Jan 28	3.em	13ew
58	Building C	15 Nov 27	11 Feb 28	2.9em	13ew
59	Building B	16 Dec 27	07 Feb 28	1.7em	8ew
60	Primary substation HV Ready	07 Aug 28	07 Aug 28		
61	Final Snagging and Clear Commissioning Periods	07 Aug 28	08 Jun 29	10.em	44ew
62	Follwing Primary Sub HV Power On	07 Aug 28	08 Jun 29	10.em	44ew
63	Following Fit Out Periods	04 Sep 28	09 Feb 29	5.2em	23ew
64	PC	08 Jun 29	08 Jun 29		
65	PC	08 Jun 29	08 Jun 29		
66	[PC WITHOUT IMPACT OF PRIMARY SUB]	09 Feb 29	09 Feb 29		
67	Other Data	28 Jul 24	08 Jun 29	58.4em	254ew
68	Car Park Phasing & Build Vectors	28 Jul 24	08 Jun 29	58.4em	254ew
69	Car Parking for Circa 100 spaces	05 Aug 24	08 Jun 29	58.1em	253ew
70	Vectors	28 Jul 24	08 Jun 29	58.4em	254ew



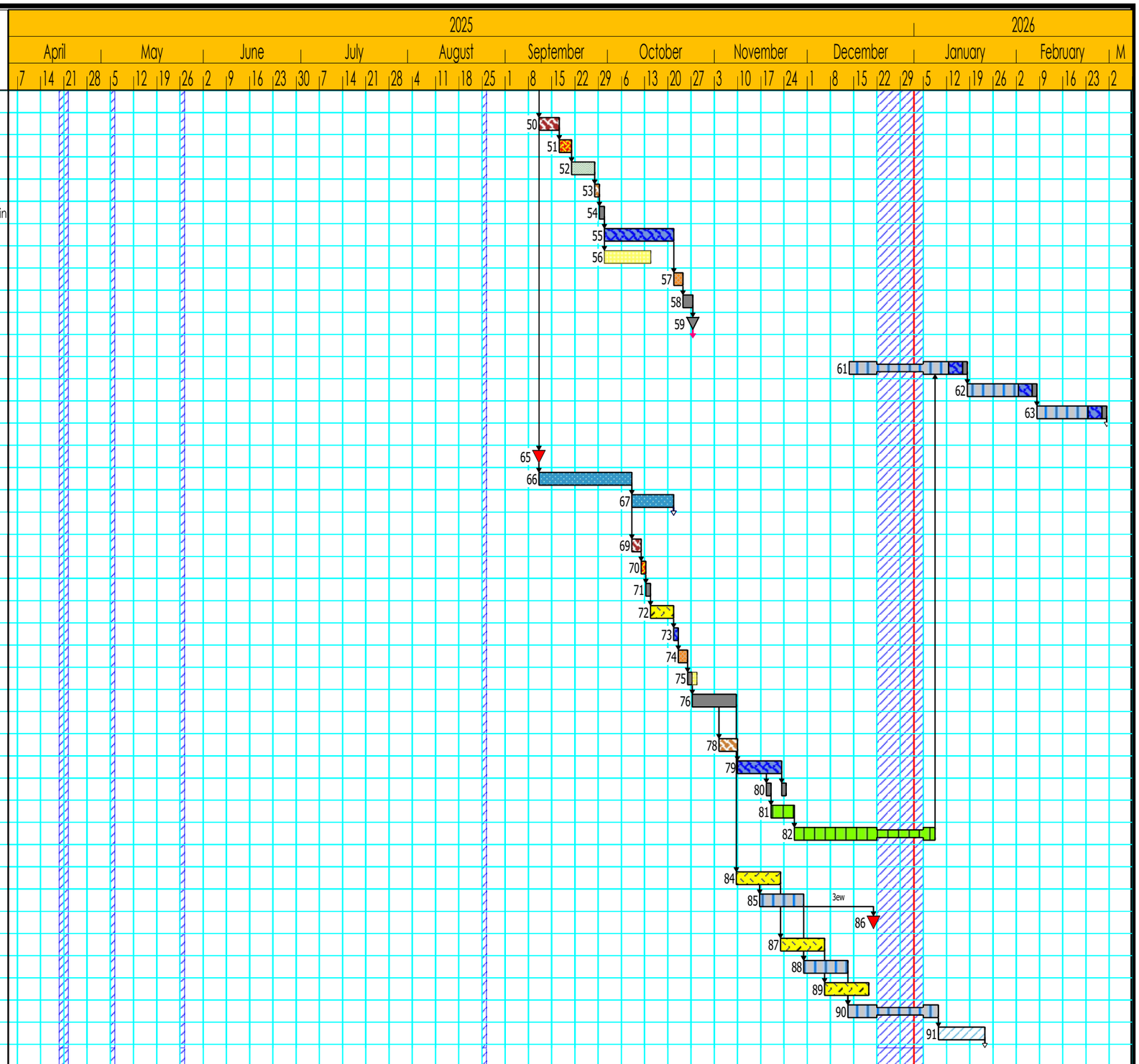
R.P.M.	Project: GNW	Title: Leisure Box	*Work In Progress*	Prog No T/GNW/LB	TRILOGY
	View: App 3 On Site Summary			03/08/2022 Rev 2	

NO	NAME	QUANT	RATE	UNIT	PER	DUR
1	**Structural Interventions B-1, L00, L01**					
2	**Reconfigure Internal Hoardings**					
3	Demolition complete to top of L02 slab					
4	All services diverted on new contig line					
5	Re-align hoarding for 100 parking spaces on the west of GF [OUT OF HOURS]	136.40 ln m	25.00	ln m	Day	1w 4h
6	**Encapsulated scaffold [Erect | Dismatle]**					
7	Erect encapsulated scaffold to east facade	3.00 No	1.00	No	Week	3w
8	Remove encapsulated scaffold			m2	Hour	5w 4d
9	**Install temp propping to allow beam removal**					
10	3no B,L00,L01	9.00 No	2.00	No	Day	4d 4h
11	**L02 slab removal**					
12	Saw cutting L02 [500mm th av]	55.90 m2	10.00	m2	Day	1w 5h
13	Demolish slab L02	650.00 m2	470.00	m2	Week	1w 2d
14	Clear away arising from slab below			m2	Hour	2d
15	**L01 slab removal**					
16	Saw cutting L01 [500mm th av]	55.90 m2	10.00	m2	Day	1w 5h
17	Demolish slab L01	650.00 m2	470.00	m2	Week	1w 2d
18	Clear away arising from slab below			m2	Hour	2d
19	**L00 slab removal**					
20	Saw cutting L00 [500mm th av]	55.90 m2	10.00	m2	Day	1w 5h
21	Demolish slab L00	650.00 m2	470.00	m2	Week	1w 2d
22	Clear away arising from slab below			m2	Hour	2d
23	**Cut outs for new Columns locations B1 to L02 [extg ramps as access]**					
24	Saw cut & demo new column openings L02	19.00 No	2.00	No	Day	1w 4d
25	Saw cut & demo new column openings L01	19.00 No	2.00	No	Day	1w 4d
26	Saw cut & demo new column openings L00	19.00 No	2.00	No	Day	1w 4d
27	Saw cut & demo new column pile caps @ B-1 [2d per location]	19.00 No	0.50	No	Day	7w 3d
28	Backfill for piling	19.00 No	0.50	No	Day	7w 3d
29	**Sub and Superstructure B1 to L02**					
30	**600mm contig pilied wall from L00 footpath [outside of exist contig]**					
31	Encapsulated Scaffold Dismantled for slab removal Cores A					
32	Encapsulated Scaffold Dismantled for slab removal Cores C					
33	Allow for site clear - footpath					3w
34	Construct Guidewall - first 20m	20.00 ln m	5.00	ln m	Day	4d
35	Construct Guidewall - remainder	65.00 ln m	5.00	ln m	Day	2w 3d
36	Set up piling rigs 2no			m2	Hour	2d
37	Install contig piles	95.00 No	4.00	No	Day	4w 4d
38	Construct Capping Beam	85.00 ln m	4.00	ln m	Day	4w 1d
39	**Excavate existing contig wall to expose new contifg piles**					
40	Excavation 4m x 2.4m x 85m [incl existing contg and RC wall]	815.00 m3	80.00	m3	Day	2w 2h
41	**Remainder B-1 slab removal**					
42	Saw cutting B-1 [500mm th av]	41.20 m2	10.00	m2	Day	4d 58min
43	Demolish slab B-1 assume 0.5 deep average [inc ex pile caps]	112.00 m3	20.00	m3	Day	1w 5h
44	Clear away arising from slab			m2	Hour	2d
45	**Core A Piling to Main Pile Cap**					
46	Break out locally for pile cap [not impacing on raking props to east wall]	112.00 m3	20.00	m3	Day	1w 5h
47	Prepare pile mat & compact 6 loads per day @ 500mm thick [1w min]	112.00 m3	19.06	m3	Day	1w 7h
48	Piling 600mm dia 1 Mini Rigs - detaills TBC	42.00 No	2.00	No	Day	4w 1d



Project: GNW	Title: Building A: 35 storeys + roof [346 aprtts - NE]	View: App 4.1 A interventions	Prog No : C/PB/App4.1	R.P.M.
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NO	NAME	QUANT	RATE	UNIT	PER	DUR
49	**Core A Construct Pile Cap**					
50	Core excavate - allow 2m 12 loads/day	448.00 m3	102.00	m3	Day	4d 3h
51	Break down piles	42.00 No	16.00	No	Day	2d 5h
52	Allowance for lift pit construction			m2	Hour	1w
53	Bottom up			m2	Hour	1d
54	Blinding @ 100mm	22.40 m3	21.00	m3	Day	1d 32min
55	Fix Rebar [2m thick] @ 200kg/m3 6 fixers	89.60 Tonne	6.00	Tonne	Day	2w 5d
56	Break out apron and tie rebar in			m2	Hour	2w
57	Shutter and blow out			m2	Hour	2d
58	Concrete 224m2 x 2m	448.00 m3	210.00	m3	Day	2d 1h
59	Pile Cap Completed					
60	**Construct Insitu Slab Bmt to L02 [incl outriggers & stair core]**					
61	Construct L00 Slab SRC	548.00 m2,164.00 m3				3w 3h
62	Construct L01 Slab	548.00 m2,164.00 m3				3w
63	Construct L02 Slab	548.00 m2				3w
64	**Piling to individual RC Pile Caps [access driven]**					
65	Acces to basement from east openings					
66	Piling 600mm dia 1 Mini Rigs - detaills TBC Tower Pads 8 pile /location	80.00 No	4.00	No	Day	4w
67	Piling 600mm dia 1 Mini Rigs - detaills TBC Tower Pads 4 pile /location	36.00 No	4.00	No	Day	1w 4d
68	**Construct individual RC Pile Caps**					
69	Additional excavation			m2	Hour	2d
70	Break down piles			No	Day	1d
71	Blinding			m2	Hour	1d
72	Break out & tie into adjacent slab			m2	Hour	1w
73	Fix reinforcement			m2	Hour	1d
74	Blow out / inspect			m2	Hour	2d
75	Concrete - ful infill connecting to existing slab					2d
76	Complete at a rate of 2 per day	19.00 No	2.00	No	Day	1w 4d
77	**Construct B1 Slab extension to East & Liner Walls**					
78	Trim piles & Blinding			m2	Hour	4d
79	Reinforce 125kg	28.49 Tonne	3.00	Tonne	Day	1w 4d
80	Concrete	227.00 m3				2d
81	Cast first liner wall			m2	Hour	1w
82	10m pour every 3 days 1 set of shutters	67.60 ln m	3.33	ln m	Day	4w 2h
83	**Construct new Columns Bmt to u/s L02**					
84	Prepare L00 opeinings - trim back . dowel /starter bars	19.00 No	2.00	No	Day	1w 4d
85	Construct RC Column B-1 to L00 heads cast into slab	19.00 No	2.00	No	Day	1w 4d
86	Basement clear of propping					
87	Prepare L01 opeinings - trim back . dowel /starter bars	19.00 No	2.00	No	Day	1w 4d
88	Construct RC Column L00 to L01 heads cast into slab	19.00 No	2.00	No	Day	1w 4d
89	Prepare L02 opeinings - trim back . dowel /starter bars	19.00 No	2.00	No	Day	1w 4d
90	Construct RC Column L01 to L02 heads cast into slab	19.00 No	2.00	No	Day	1w 4d
91	Cure			m2	Hour	2ew



1.MAIN FILE

- 1.02 SITE SET UP
- 1.04 SCAFFOLDING/ACCESS
- 1.06 TEMP WORKS #2
- 2.12 ENABLING WORKS
- 2.10 STR. DEMOLITION
- 1.07 TEMP WORKS #2
- 2.22 NEW COLUMN OPENINGS
- 4.01 PILE ENABLING WORKS
- 2.SITE CLEAR
- 4.03 PILE GUIDE WALL
- 4.06 CONTIG PILING
- 4.11 SUBSTRUCTURE RC
- 4.10 EXCV
- 4.07 BORED PILING
- 4.17 SRC
- 4.12 GROUNDWORKS
- 4.16 CONCRETE
- 4.12 REBAR
- 4.14 SHUTTER
- 4.40 RC SUPERSTRUCTURE
- 4.62 STRUCTURAL ALTERATIONS
- 4.26 RC SUB WALLS/COLS
- 4.19 CURING

Project: GNW

Title: Building A: 35 storeys + roof [346 aprtts - NE]

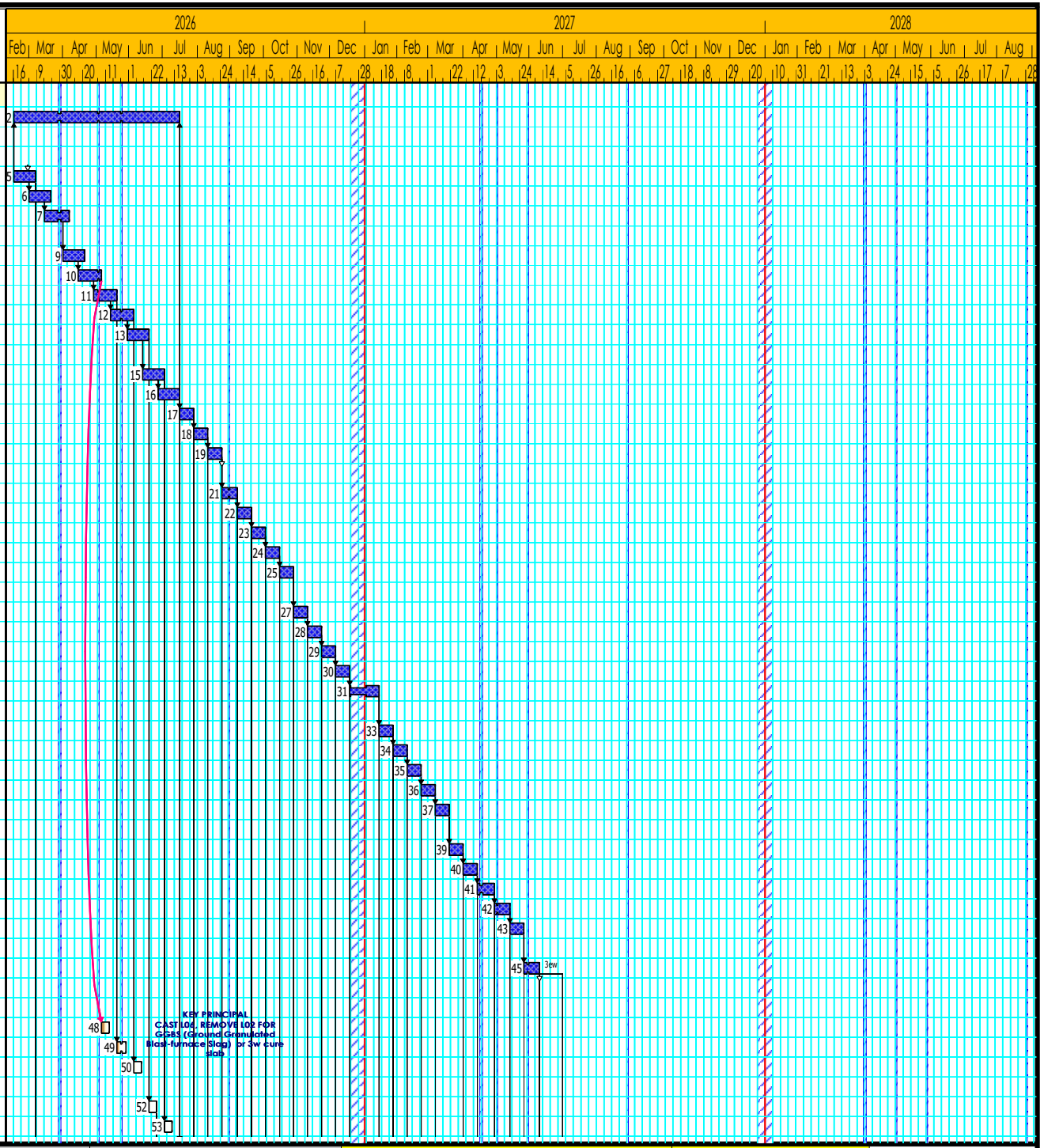
View: App 4.1 A interventions

Prog No : C/PB/App4.1

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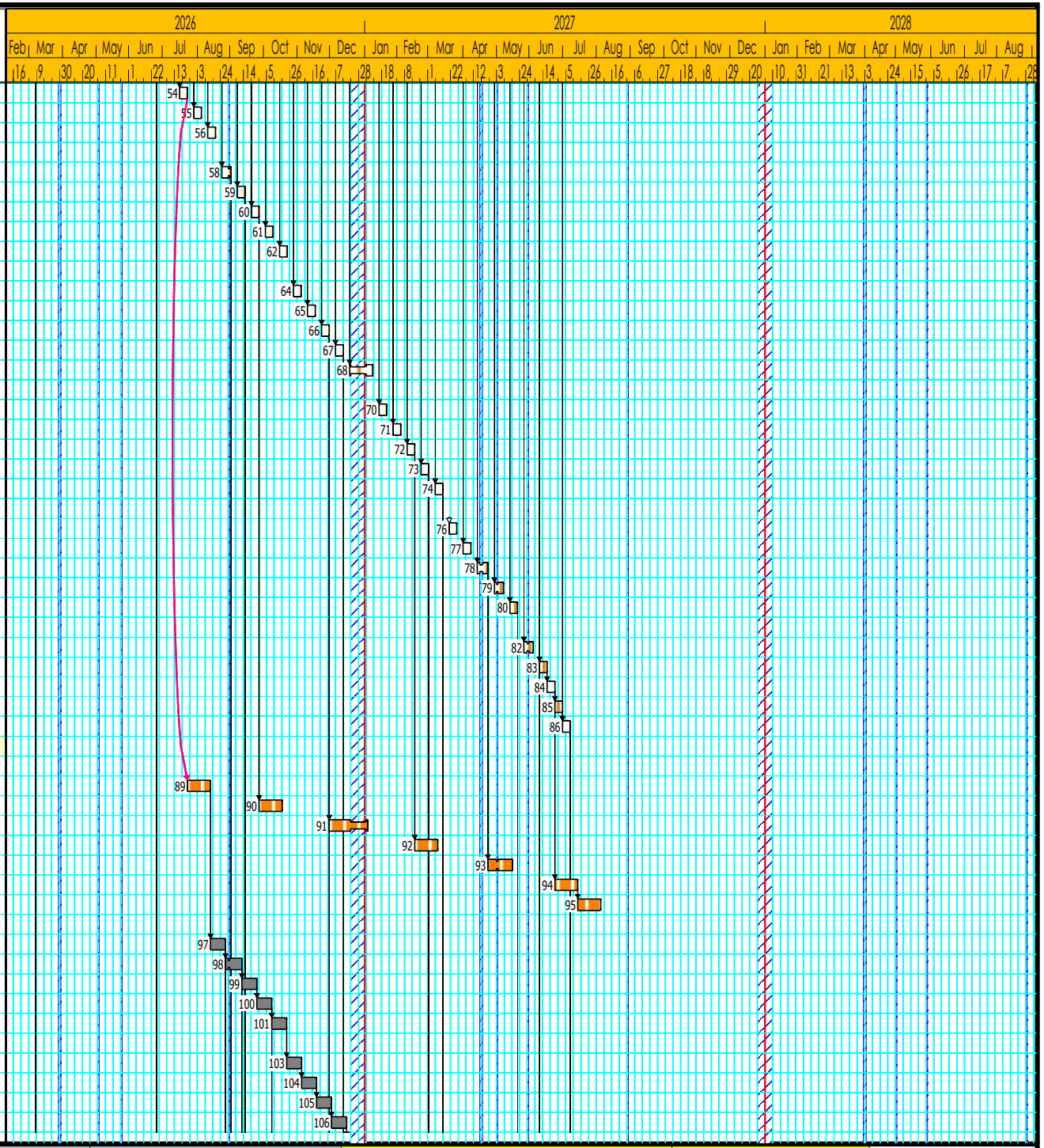
NO	NAME	QUANT	RATE	UNIT	PER	DUR
1	**Frame Construction [PT] TC1**					
2	TC4 assist for Large footprint			m2	Hour	20w 4d
3	**RC Superstructure Construct Slabs 1 tower crane**					
4	**L03 to L05**					
5	L03	1,345.00 m2	475.00	m2	Week	3w
6	L04	1,345.00 m2	475.00	m2	Week	3w
7	L05	1,345.00 m2	475.00	m2	Week	3w
8	**L06 to L10**					
9	L06	1,345.00 m2	475.00	m2	Week	3w
10	L07	1,345.00 m2	475.00	m2	Week	3w
11	L08	1,345.00 m2	475.00	m2	Week	3w
12	L09	1,345.00 m2	475.00	m2	Week	3w
13	L10	1,345.00 m2	475.00	m2	Week	3w
14	**L11 to L15**					
15	L11	1,345.00 m2	475.00	m2	Week	3w
16	L12	1,345.00 m2	475.00	m2	Week	3w
17	L13	869.00 m2	475.00	m2	Week	2w
18	L14	869.00 m2	475.00	m2	Week	2w
19	L15	869.00 m2	475.00	m2	Week	2w
20	**L16 to L20**					
21	L16	869.00 m2	475.00	m2	Week	2w
22	L17	869.00 m2	475.00	m2	Week	2w
23	L18	869.00 m2	475.00	m2	Week	2w
24	L19	869.00 m2	475.00	m2	Week	2w
25	L20	869.00 m2	475.00	m2	Week	2w
26	**L21 to L25**					
27	L21	869.00 m2	475.00	m2	Week	2w
28	L22	869.00 m2	475.00	m2	Week	2w
29	L23	869.00 m2	475.00	m2	Week	2w
30	L24	869.00 m2	475.00	m2	Week	2w
31	L25	869.00 m2	475.00	m2	Week	1w 4d
32	**L26 to L30**					
33	L26	869.00 m2	475.00	m2	Week	1w 4d
34	L27	869.00 m2	475.00	m2	Week	1w 4d
35	L28	869.00 m2	475.00	m2	Week	1w 4d
36	L29	869.00 m2	475.00	m2	Week	1w 4d
37	L30	869.00 m2	475.00	m2	Week	1w 4d
38	**L31 to L35**					
39	L31	869.00 m2	475.00	m2	Week	1w 4d
40	L32	869.00 m2	475.00	m2	Week	1w 4d
41	L33	869.00 m2	475.00	m2	Week	1w 4d
42	L34	869.00 m2	475.00	m2	Week	1w 4d
43	L35	869.00 m2	475.00	m2	Week	1w 4d
44	**L36 [roof]**					
45	L36 [roof slab]	869.00 m2	475.00	m2	Week	1w 4d
46	**Remove Propping**					
47	**L00 to L05**					
48	L03			m2	Hour	1w
49	L04			m2	Hour	1w
50	L05			m2	Hour	1w
51	**L06 to L10**					
52	L06			m2	Hour	1w
53	L07			m2	Hour	1w



	Project	Title	View	
	GNW	Building A: 35 storeys + roof [346 aprtts - NE]	App 4.2 A Construction	Prog No : GNW/LB/App 4.2
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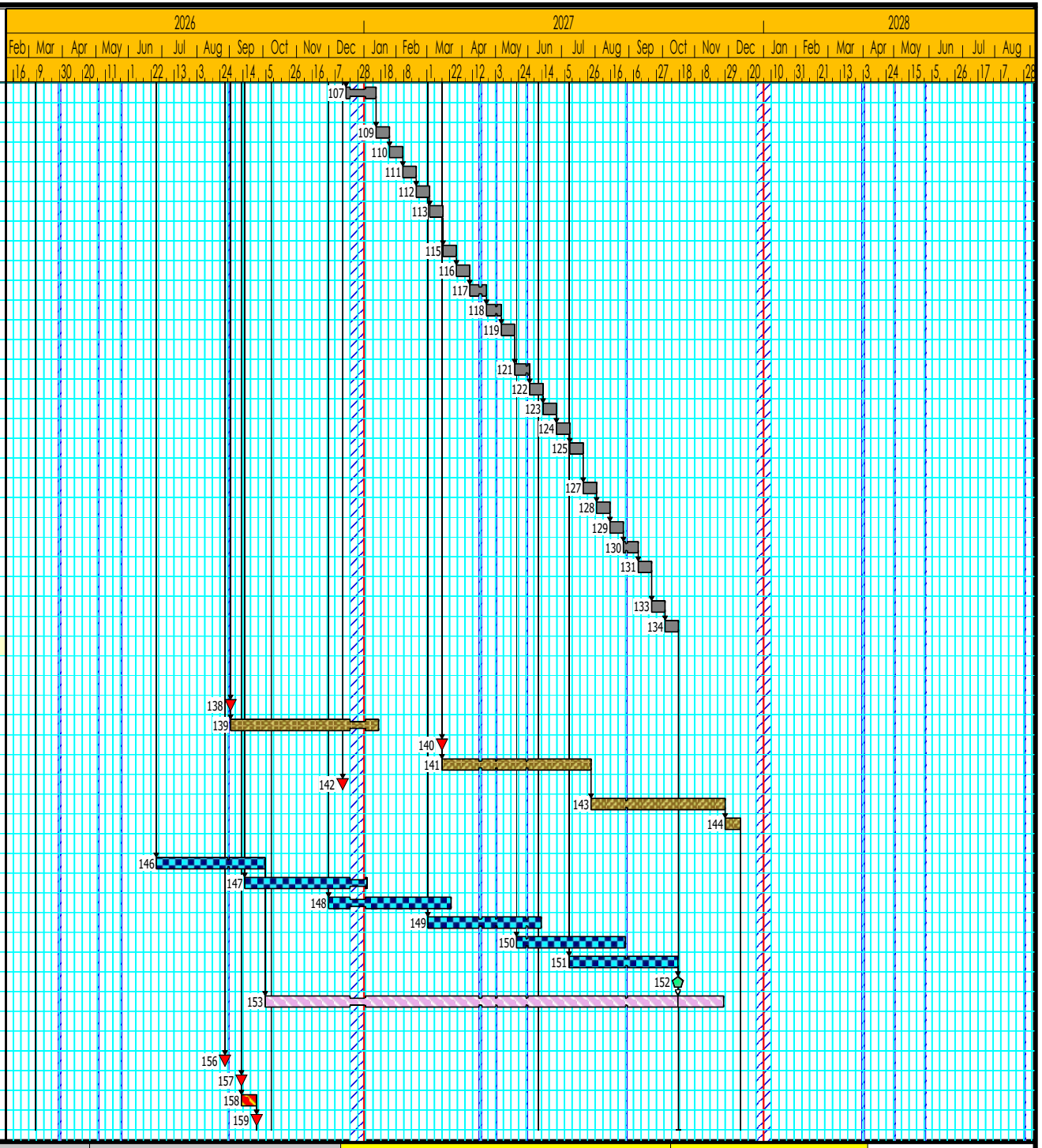
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NO	NAME	QUANT	RATE	UNIT	PER	DUR
54	L08			m2	Hour	1w
55	L09			m2	Hour	1w
56	L10			m2	Hour	1w
57	**L11 to L15**					
58	L11			m2	Hour	1w
59	L12			m2	Hour	1w
60	L13			m2	Hour	1w
61	L14			m2	Hour	1w
62	L15			m2	Hour	1w
63	**L16 to L20**					
64	L16			m2	Hour	1w
65	L17			m2	Hour	1w
66	L18			m2	Hour	1w
67	L19			m2	Hour	1w
68	L20			m2	Hour	1w
69	**L21 to L25**					
70	L21			m2	Hour	1w
71	L22			m2	Hour	1w
72	L23			m2	Hour	1w
73	L24			m2	Hour	1w
74	L25			m2	Hour	1w
75	**L26 to L30**					
76	L26			m2	Hour	1w
77	L27			m2	Hour	1w
78	L28			m2	Hour	1w
79	L29			m2	Hour	1w
80	L30			m2	Hour	1w
81	**L31 to L35**					
82	L31			m2	Hour	1w
83	L32			m2	Hour	1w
84	L33			m2	Hour	1w
85	L34			m2	Hour	1w
86	L35			m2	Hour	1w
87	**External Precast [Pre Glazed] Assumed 3.0m wide [3m or 6m module possible]**					
88	**Survey / Set Out / Bracketry**					
89	L04 to L08			m2	Hour	3w
90	L09 to L13			m2	Hour	3w
91	L14 to L18			m2	Hour	3w
92	L19 to L23			m2	Hour	3w
93	L24 to L28			m2	Hour	3w
94	L29 to L33			m2	Hour	3w
95	L34 to L37			m2	Hour	3w
96	**L04 to L08**					
97	L04	39.00 No	4.00	No	Day	2w
98	L05	39.00 No	4.00	No	Day	2w
99	L06	39.00 No	4.00	No	Day	2w
100	L07	39.00 No	4.00	No	Day	2w
101	L08	39.00 No	4.00	No	Day	2w
102	**L09 to L13**					
103	L09	39.00 No	4.00	No	Day	2w
104	L10	39.00 No	4.00	No	Day	2w
105	L11	39.00 No	4.00	No	Day	2w
106	L12	39.00 No	4.00	No	Day	2w



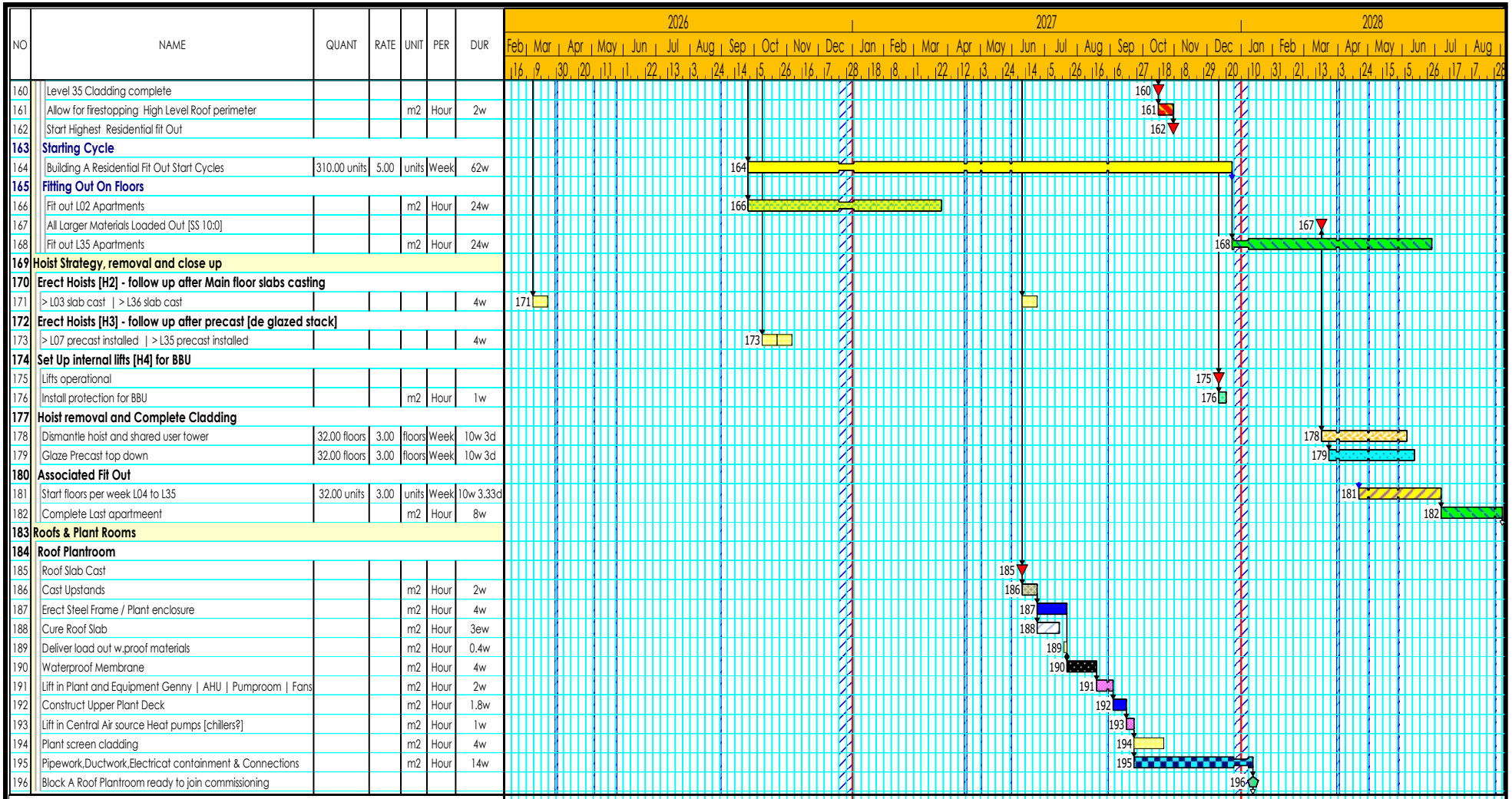
CO–RE | Project: GNW | Title: Building A: 35 storeys + roof [346 aprtts - NE] | View: App 4.2 A Construction | Prog No : GNW/LB/App 4.2 | 15/07/2022 | Rev 1 | R.P.M.

NO	NAME	QUANT	RATE	UNIT	PER	DUR
107	L13	39.00 No	4.00	No	Day	2w
108	**L14 to L18**					
109	L14	35.00 No	4.00	No	Day	2w
110	L15	35.00 No	4.00	No	Day	2w
111	L16	35.00 No	4.00	No	Day	2w
112	L17	35.00 No	4.00	No	Day	2w
113	L18	35.00 No	4.00	No	Day	2w
114	**L19 to L23**					
115	L19	35.00 No	4.00	No	Day	2w
116	L20	35.00 No	4.00	No	Day	2w
117	L21	35.00 No	4.00	No	Day	1w 4d
118	L22	35.00 No	4.00	No	Day	1w 4d
119	L23	35.00 No	4.00	No	Day	1w 4d
120	**L24 to L28**					
121	L24	35.00 No	4.00	No	Day	1w 4d
122	L25	35.00 No	4.00	No	Day	1w 4d
123	L26	35.00 No	4.00	No	Day	1w 4d
124	L27	35.00 No	4.00	No	Day	1w 4d
125	L28	35.00 No	4.00	No	Day	1w 4d
126	**L29 to L33**					
127	L29	35.00 No	4.00	No	Day	1w 4d
128	L30	35.00 No	4.00	No	Day	1w 4d
129	L31	35.00 No	4.00	No	Day	1w 4d
130	L32	35.00 No	4.00	No	Day	1w 4d
131	L33	35.00 No	4.00	No	Day	1w 4d
132	**L34 to L37**					
133	L34	35.00 No	4.00	No	Day	1w 4d
134	L35 [last habitable]	35.00 No	4.00	No	Day	1w 4d
135	**Fit Out**					
136	**Lifts & Risers**					
137	**Passenger Lifts [3no] 3 phased JUMP LIFT METHOD**					
138	Propping clear at L11					
139	Install Lift B-1 to L11	13.00 No	0.75	No	Week	17w 2d
140	Propping clear at L25					
141	Install Lift L12 to L25	14.00 No	0.75	No	Week	18w 3d
142	Propping clear at L37					
143	Install Lift L26 to L37	13.00 No	0.75	No	Week	17w 2d
144	Test and Bring on line for BBU			m2	Hour	2w
145	**Service Riser Install**					
146	Serivice riser install L00 to L06			m2	Hour	14w
147	Serivice riser install L06 to L12			m2	Hour	14w
148	Serivice riser install L13 to L18			m2	Hour	14w
149	Serivice riser install L19 to L24			m2	Hour	14w
150	Serivice riser install L25 to L30			m2	Hour	14w
151	Serivice riser install L31 to L36			m2	Hour	14w
152	Riser Install Complete					
153	Plasterboard close up and door install					56w 5d
154	**Residential Fit Out**					
155	**Key Resi Fit out milestones**					
156	Level 4 Cladding complete					
157	Level 5 Cladding complete					
158	Allow for firestopping Low Level L04 perimeter			m2	Hour	2w
159	Start Lowest Residential fit Out					



CO–RE | Project: GNW | Title: Building A: 35 storeys + roof [346 aprtts - NE] | View: App 4.2 A Construction | Prog No : GNW/LB/App 4.2 | 15/07/2022 | Rev 1 | R.P.M.

NO	NAME	QUANT	RATE	UNIT	PER	DUR
160	Level 35 Cladding complete					
161	Allow for firestopping High Level Roof perimeter			m2	Hour	2w
162	Start Highest Residential fit Out					
163	**Starting Cycle**					
164	Building A Residential Fit Out Start Cycles	310.00 units	5.00	units	Week	62w
165	**Fitting Out On Floors**					
166	Fit out L02 Apartments			m2	Hour	24w
167	All Larger Materials Loaded Out [SS 10:0]					
168	Fit out L35 Apartments			m2	Hour	24w
169	**Hoist Strategy, removal and close up**					
170	**Erect Hoists [H2] - follow up after Main floor slabs casting**					
171	> L03 slab cast | > L36 slab cast					4w
172	**Erect Hoists [H3] - follow up after precast [de glazed stack]**					
173	> L07 precast installed | > L35 precast installed					4w
174	**Set Up internal lifts [H4] for BBU**					
175	Lifts operational					
176	Install protection for BBU			m2	Hour	1w
177	**Hoist removal and Complete Cladding**					
178	Dismantle hoist and shared user tower	32.00 floors	3.00	floors	Week	10w 3d
179	Glaze Precast top down	32.00 floors	3.00	floors	Week	10w 3d
180	**Associated Fit Out**					
181	Start floors per week L04 to L35	32.00 units	3.00	units	Week	10w 3.33d
182	Complete Last apartmeent			m2	Hour	8w
183	**Roofs & Plant Rooms**					
184	**Roof Plantroom**					
185	Roof Slab Cast					
186	Cast Upstands			m2	Hour	2w
187	Erect Steel Frame / Plant enclosure			m2	Hour	4w
188	Cure Roof Slab			m2	Hour	3ew
189	Deliver load out w.proof materials			m2	Hour	0.4w
190	Waterproof Membrane			m2	Hour	4w
191	Lift in Plant and Equipment Genny | AHU | Pumproom | Fans			m2	Hour	2w
192	Construct Upper Plant Deck			m2	Hour	1.8w
193	Lift in Central Air source Heat pumps [chillers?]			m2	Hour	1w
194	Plant screen cladding			m2	Hour	4w
195	Pipework,Ductwork,Electricat containment & Connections			m2	Hour	14w
196	Block A Roof Plantroom ready to join commissioning					

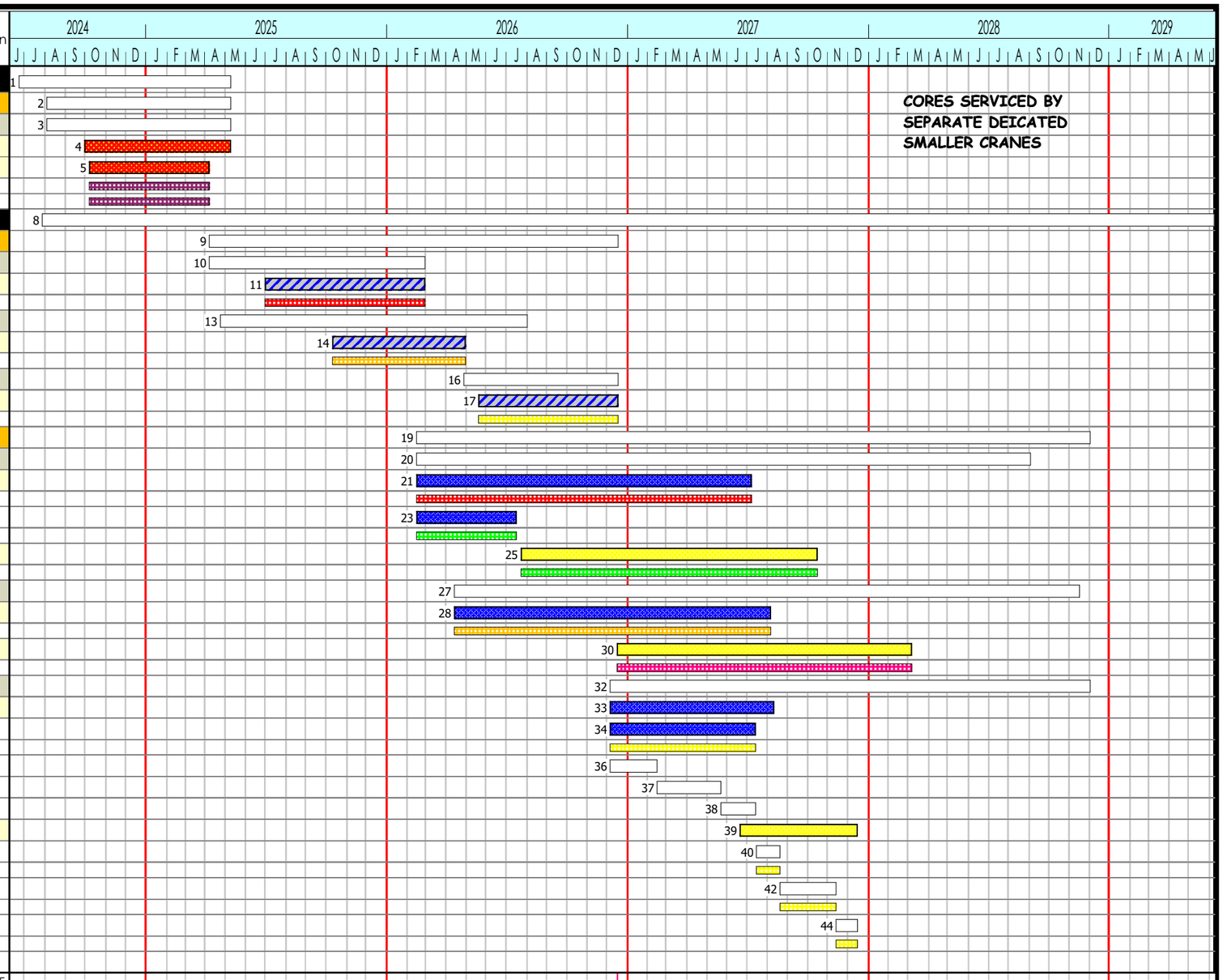


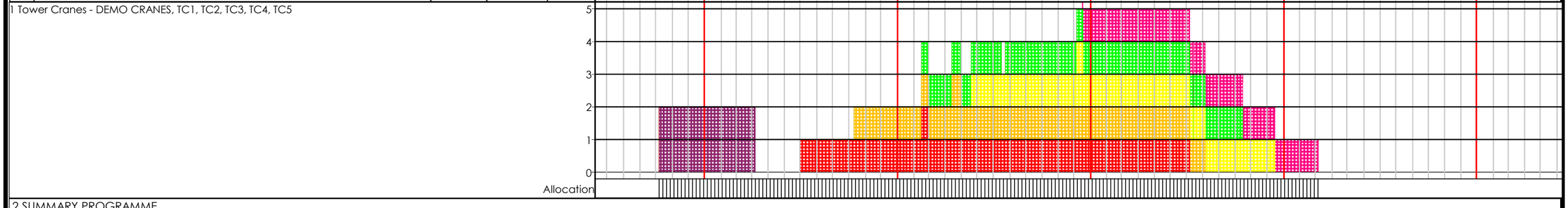
1.MAIN FILE

- 4.30 SUPERSTRUCTURE
- 4.44 PROPPING [STRIP OUT]
- 5.02 SET OUT/ BRACKETS
- 5.10 PRECAST CLADDING
- 6.01 LIFTS/ESCALATORS
- 6.00 COMBINED SERVICES
- 6.24 SERV MILESTONES
- 7.38 CORE BOARDING
- 7.40 FIRE PROT
- 7.02 FIT OUT CYCLE
- 7.02 RESI FIT FIRST GROUP
- 7.06 RESI FIT OUT FINAL GROUP
- 3.00 LOGISTICS
- 3.20 HOISTING
- 5.08 GLAZING
- 7.01 HOIST APT FIT OUT CYCLE
- 4.43 UPSTANDS
- 4.31 STEEL
- 5.41 CURE
- 5.42 ROOFING/WPROOFING
- 6.02 PLANT INSTALL

CO–RE | Project: GNW | Title: Building A: 35 storeys + roof [346 aprtts - NE] | View: App 4.2 A Construction | Prog No : GNW/LB/App 4.2 | 15/07/2022 | Rev 1 | R.P.M.

Line	Name	Start	Finish	Duration
	Central Enabling Works	**24 Jun 24**	**09 May 25**	**10em**
2	**Demolition to L02 slab and cladding removal**	**05 Aug 24**	**09 May 25**	**9em**
3	**Demolition to L02 slab - roof of existing car park**	**05 Aug 24**	**09 May 25**	**9em**
4	**External Cladding removal [building re-use lower level]**	**01 Oct 24**	**09 May 25**	**7em**
5	**Steel frame Dismantling**	**08 Oct 24**	**07 Apr 25**	**6em**
6	*DEMO CRANES*	*08 Oct 24*	*07 Apr 25*	*6em*
7	*DEMO CRANES*	*08 Oct 24*	*07 Apr 25*	*6em*
	Leisure Box	**28 Jul 24**	**08 Jun 29**	**58em**
9	**Structural Interventions & Construction to underside L02**	**08 Apr 25**	**17 Dec 26**	**20em**
10	**Building A: 35 storeys + roof [346 aprtts - NE]**	**08 Apr 25**	**27 Feb 26**	**11em**
11	**Sub and Superstructure B1 to L02**	**01 Jul 25**	**27 Feb 26**	**8em**
12	*TC1*	*01 Jul 25*	*27 Feb 26*	*8em*
13	**Building C: 26 storey tower + roof [292 apartments - SE]**	**23 Apr 25**	**03 Aug 26**	**15em**
14	**Sub and Superstructure B1 to L02**	**10 Oct 25**	**30 Apr 26**	**7em**
15	*TC2*	*10 Oct 25*	*30 Apr 26*	*7em*
16	**Building B: 14 storey tower + roof [113 apartments - W]**	**28 Apr 26**	**17 Dec 26**	**8em**
17	**Sub and Superstructure B1 to L02**	**20 May 26**	**17 Dec 26**	**7em**
18	*TC3*	*20 May 26*	*17 Dec 26*	*7em*
19	**Construction above L02 [not including Commissioing]**	**16 Feb 26**	**01 Dec 28**	**34em**
20	**Building A: 35 storeys + roof [346 aprtts - NE]**	**16 Feb 26**	**04 Sep 28**	**31em**
21	**Frame Construction [PT] TC1**	**16 Feb 26**	**07 Jul 27**	**17em**
22	*TC1*	*16 Feb 26*	*07 Jul 27*	*17em*
23	TC4 assist for Large footprint	16 Feb 26	16 Jul 26	5em
24	*TC4*	*16 Feb 26*	*16 Jul 26*	*5em*
25	**External Precast [Pre Glazed] Assumed 3.0m wide [3m or 6m module possible]**	**23 Jul 26**	**15 Oct 27**	**15em**
26	*TC4*	*23 Jul 26*	*15 Oct 27*	*15em*
27	**Building C: 26 storey tower + roof [292 apartments - SE]**	**14 Apr 26**	**16 Nov 28**	**31em**
28	**Frame Construction [PT] TC2**	**14 Apr 26**	**06 Aug 27**	**16em**
29	*TC2*	*14 Apr 26*	*06 Aug 27*	*16em*
30	**External Precast [Pre Glazed] Assumed 3.0m wide [3m or 6m module possible]**	**16 Dec 26**	**07 Mar 28**	**15em**
31	*TC5*	*16 Dec 26*	*07 Mar 28*	*15em*
32	**Building B: 14 storey tower + roof [113 apartments - W]**	**04 Dec 26**	**01 Dec 28**	**24em**
33	**Frame Construction [PT] TC2**	**04 Dec 26**	**11 Aug 27**	**8em**
34	**RC Superstructure Construct Slabs 1 tower crane**	**04 Dec 26**	**14 Jul 27**	**7em**
35	*TC3*	*04 Dec 26*	*14 Jul 27*	*7em*
36	**L03 to L05**	**04 Dec 26**	**15 Feb 27**	**2em**
37	**L06 to L10**	**15 Feb 27**	**21 May 27**	**3em**
38	**L11 to L15 [roof]**	**21 May 27**	**14 Jul 27**	**2em**
39	**External Precast [Pre Glazed] Assumed 3.0m wide [3m or 6m module possible]**	**21 Jun 27**	**16 Dec 27**	**6em**
40	**L04 to L05**	**15 Jul 27**	**20 Aug 27**	**1em**
41	*TC3*	*15 Jul 27*	*20 Aug 27*	*1em*
42	**L06 to L10**	**20 Aug 27**	**12 Nov 27**	**3em**
43	*TC3*	*20 Aug 27*	*12 Nov 27*	*3em*
44	**L11 to L13**	**12 Nov 27**	**16 Dec 27**	**1em**
45	*TC3*	*12 Nov 27*	*16 Dec 27*	*1em*





2 SUMMARY PROGRAMME

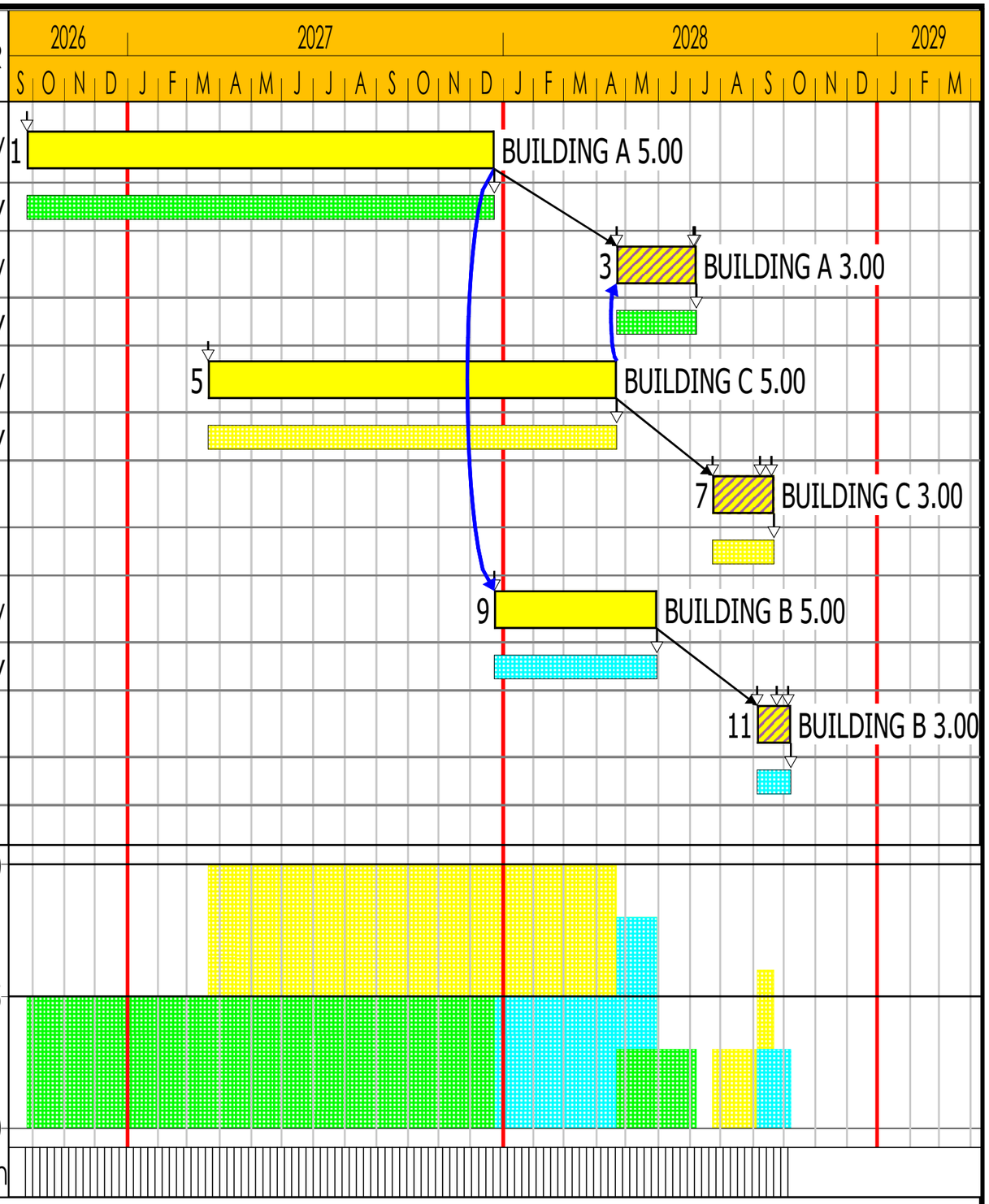
3.05 ENABLING | 3.06 SUB & SUPER | 3.15 SUPERSTRUCTURE | 3.20 ENVELOPE

Histogram Legend

Allocation - DEMO CRANES | Allocation - TC1 | Allocation - TC2 | Allocation - TC3 | Allocation - TC4 | Allocation - TC5

CO–RE	Project: GNW	Title: Works On Site	View: App 7 Main Plant	*Baseline | slip from bmt | parking in bmt*	Prog No : GNW/C/APP1 · 03/08/2022 · Rev 2 · R.P.M.

NO	NAME	QUANT	RATE	UNIT	PER	DUR
1	Building A Residential Fit Out Start Cycles	310.00 units	5.00	units	Week	62w
2	*BUILDING A*					*62w*
3	Start floors per week L04 to L35	32.00 units	3.00	units	Week	11w
4	*BUILDING A*					*11w*
5	Building C Residential Fit Out Start Cycles	267.00 units	5.00	units	Week	53w
6	*BUILDING C*					*53w*
7	Start floors per week L04 to L26	25.00 units	3.00	units	Week	8w
8	*BUILDING C*					*8w*
9	Building B Residential Fit Out Start Cycles	99.00 units	5.00	units	Week	20w
10	*BUILDING B*					*20w*
11	Start floors per week L04 to L13	14.00 units	3.00	units	Week	5w
12	*BUILDING B*					*5w*



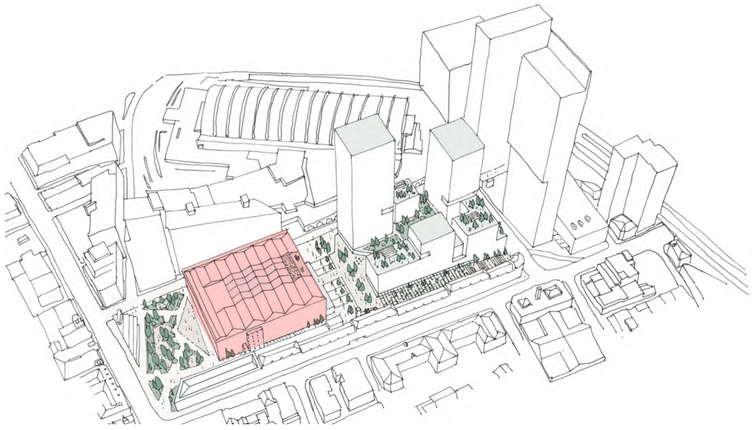
1.MAIN FILE

7.02 FIT OUT CYCLE

7.01 HOIST APT FIT OUT CYCLE

R.P.M.	Project	Title	View		
	GNW	Works On Site	App 8 Residential Programme Metrics	*Baseline | slip from bmt | parking in bmt*	Prog No : GNW/C/APP1 03/08/2022 Rev 2

TRILOGY



Warehouse Programme

Great Northern Warehouse

Programme notes for he Great Northern warehouse enabling, demolition and fit out programme to be incorporated into main programme issue document – Rev 01 13-07-22

- R&D Asbestos surveys, HSE notifications have been identified within the programme along with a minimal period of time for asbestos removal, this will need to be validated by the R&D Surveys.

- No allowance has been made within the programme for the removal of lead based paint from existing steelwork – steel windows etc.

- A twelve week period for existing MEP services diversion, re zoning and isolation works has been identified within the programme in advance of the week 1 start on site. Ahead of these works full surveys, drawing, scoping and procurement will need to be undertaken

- We have assumed full tenants in occupation and Ground and First floors (incl mezz levels) and that these will be in occupation throughout the duration of the project. Segregation works to maintain this occupancy have been identified in the programme and logistics plans

- Logistics for the Warehouse redevelopment will be primarily from the South and West elevations *(see logistics plans)

- If the Warehouse redevelopment was to progress in advance of the Leisure box redevelopment we have assumed that there is enough HV capacity in the local network / existing subs for the new structure to operate

- We have assumed that the new warehouse development is stand along with regards to MEP Plant and systems and there are no operational dependencies with the Leisure box or Deansgate terrace structures

- To release early commencement at roof level we have proposed installing a protection screen to the internal face of the roof parapet to release works at this level

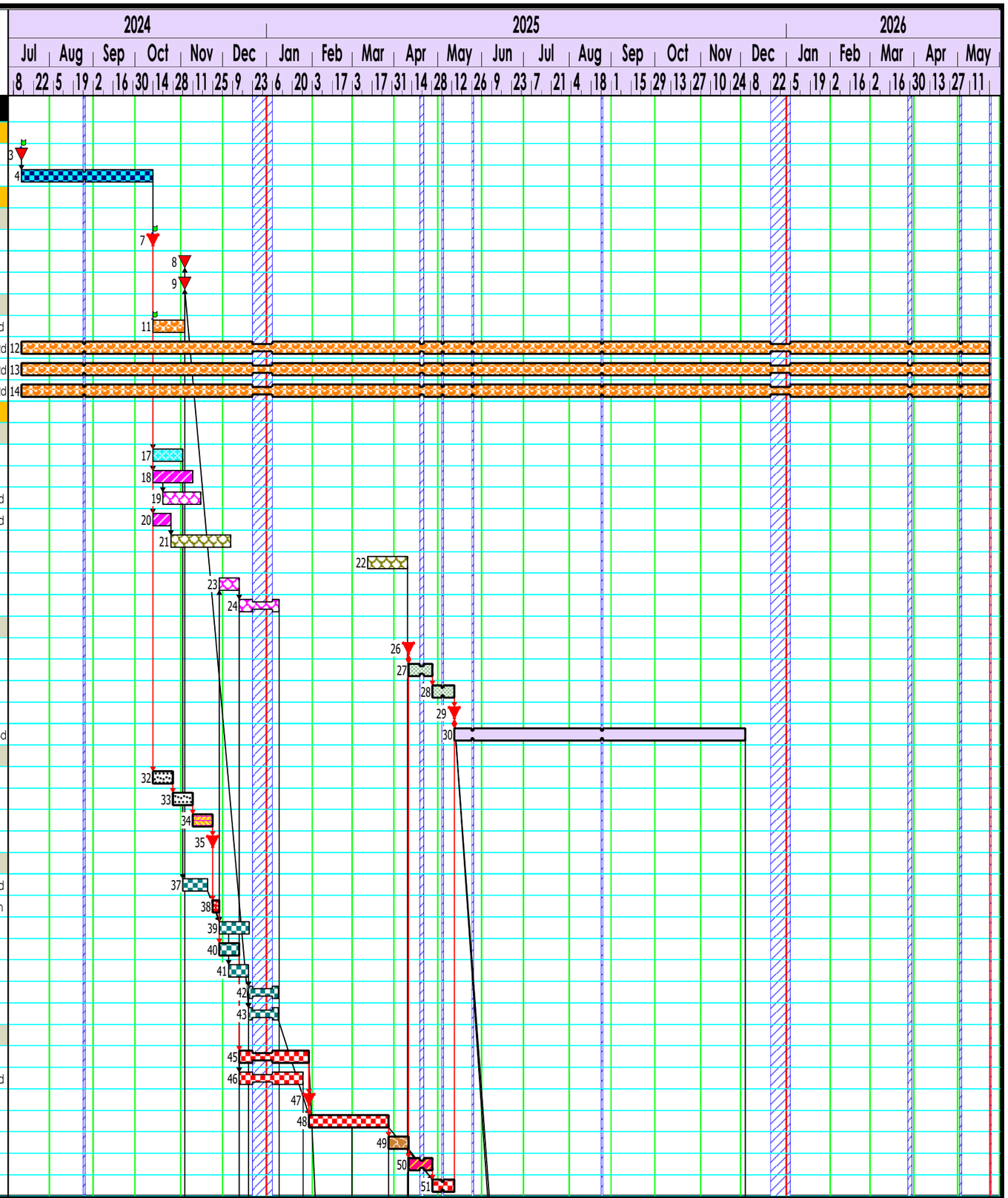
- Temporary waterproofing measures have been identified at 4th and 2nd floor levels including a temporary protection deck over the new 4th floor atrium void

- Scaffold erection to he external elevations of the Warehouse structure will commence once demolition of interfacing structures has been completed

- Remedial works to the external elevations – façade cleaning / repairs, roof parapet & window renovations have been identified as provisional activities within the programme – the full scope for these items is to be confirmed

- Mobile craneage will be utilised to service the early roof works and demolition operations until TC06 is operational

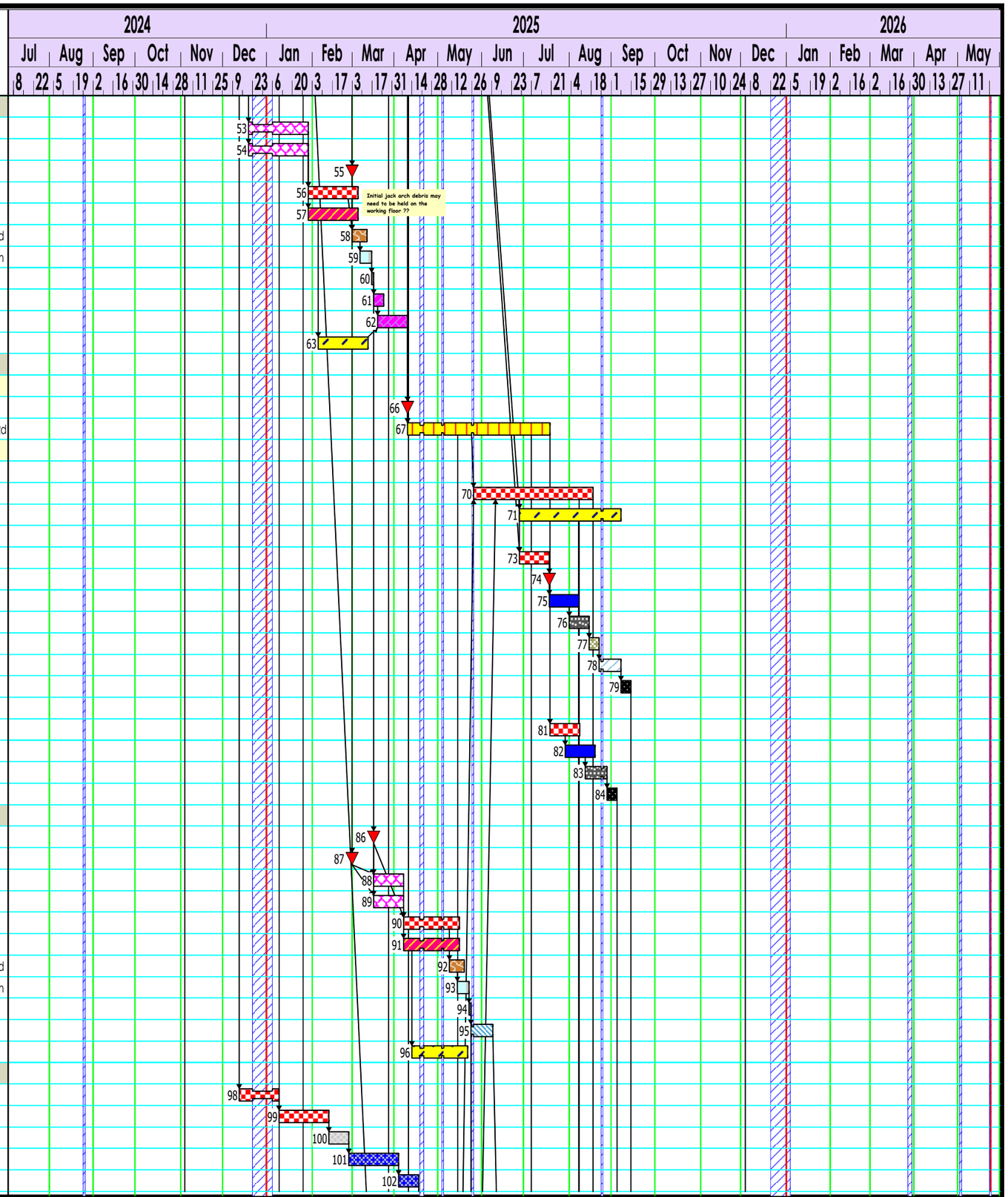
NO	NAME	QUANT	RATE	UNIT	PER	DUR
	Great Northern Warehouse					
2	**Advanced MEP Services - Surveys & diversion works**					
3	Survey, review and design completed to allow advanced MEP service works to commence					
4	MEP Services advanced diversion / isolation works - Scope TBC			m2	Hour	13w
5	**VP & Retained Tenants**					
6	**VP Of non retained tenants**					
7	VP of all Tenants not being retained					
8	VP of Car park levels 3&4 following re configuring of Leisure Box Car park					
9	VP of Car park level 2 following re configuring of Leisure Box Car park					
10	**Retained tenants**					
11	Car parking level 2 operational until leisure box car parking is reconfigured			m2	Hour	3w 1d
12	Casino remaining in occupation *(including public access areas)			m2	Hour	91w 2d
13	Bowling Alley remaining in occupation *(including public access areas)			m2	Hour	91w 2d
14	Ground floor F&B Outlet remaining in occupation at NE Corner			m2	Hour	91w 2d
15	**Demolition & Structural alteration works**					
16	**Site set-up, scaffold & Protection Works**					
17	Drain down and decommission services - non retained areas			units	Hour	3w
18	Set up internal screens to segregate live / retained areas					4w
19	Additional water integrity measures at interface with live / retained areas					3w 4d
20	Set up perimeter hoarding		25.00		Day	1w 4d
21	Progressive erection of scaffold access tower, lifting beam & hoist from first floor retained link structure	6.00 floors	1.00	floors	Week	6w
22	Progressive erection of protection screens to internal line of roof parapet (Initial loading out by mobile crane)			m2	Hour	4w
23	Existing SE Lift enclosure - Installation of temporary roof,weathering and bunding (Load out by mobile crane)	1.00 No	0.50	No	Week	2w
24	Existing NW Lift enclosure - Installation of temporary roof,weathering and bunding (Load out by mobile crane)	1.00 No	0.50	No	Week	2w
25	**Tower Crane - Located in SW Corner of NW / Deansgate Terrace**					
26	Car park ramp structure removal completed to release TC Base works					
27	Formation of tower crane base			m2	Hour	2w
28	Curing of tower crane base (*to run concurrent with adjacent link slab removal)			m2	Hour	2w
29	Erection of tower crane test and commission					
30	Tower crane operational			m2	Hour	28w 4d
31	**Asbestos Enabling**					
32	Intrusive R&D Asbestos Survey *(excluding occupied areas)			m2	Hour	2w
33	Prepare and Submit Report			m2	Hour	2w
34	HSE Review Period			m2	Hour	2w
35	ASB 5 notification in place to allow commencement of notifiable asbestos removal					
36	**Strip Out Works to non retained areas**					
37	Pre Asbestos soft strip	5.00 floors	2.00	floors	Week	2w 2d
38	Progressive asbestos removal [limited]	2.00 floors	3.00	floors	Week	3d 3h
39	Soft strip back to retained structure / cladding Ground & 1st floors *(incl Mezz levels)	3.00 floors	1.00	floors	Week	3w
40	Soft strip back to retained structure of North West infill structure between GNW & Deansgate Terrace	2.00 floors	1.00	floors	Week	2w
41	Soft strip back to retained structure / cladding - 4th floor / u side roof	1.00 floors	0.50	floors	Week	2w
42	Soft strip back to retained structure / cladding - 3rd floor	1.00 floors	1.00	floors	Week	1w
43	Soft strip back to retained structure / cladding - 2nd floor	1.00 floors	1.00	floors	Week	1w
44	**Structural Demolition / Deconstruction - General Areas**					
45	Deconstruction of North West infill structure between GNW & Deansgate Terrace			units	Hour	5w
46	Progressive removal of North elevation canopy *(Public Access maintained - may need to be out of hours working?)			units	Hour	4w 2d
47	Area North of Existing ramp released providing mobile crane access					
48	Deconstruction of existing car park ramp structures - L4 to Ground	4.00 units	0.50	units	Week	8w
49	Removal of car park ramp base structure & backfill			m2	Hour	2w
50	installation of back propping to underside of link deck structure			m2	Hour	2w
51	Saw cut and break out podium slab section between GNW & Deansgate Terrace (South)	1.00 unit	0.50	units	Week	2w



Project	Title	View		Prog No : C/PB/App4	
Great Northern Warehouse	Works On Site	App 4 Strategic Detail	*Draft - Start date indicative only*	15/07/2022	Rev 1

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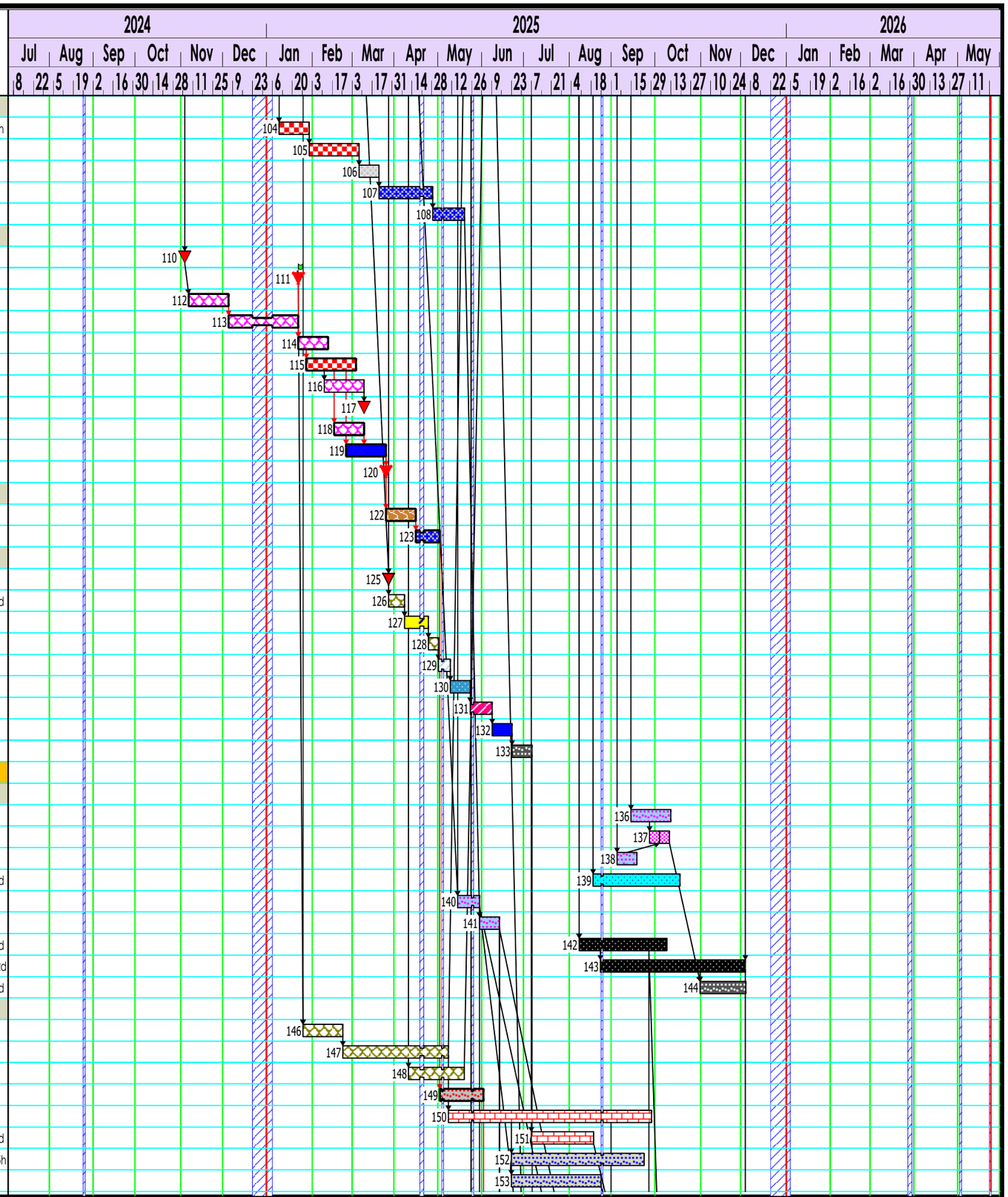
NO	NAME	QUANT	RATE	UNIT	PER	DUR
52	**Structural alterations to 4th Floor car park deck to form new atrium void**					
53	Advanced installation of protection deck below 4th floor slab atrium area			units	Hour	4w
54	Advanced saw cutting to perimeter of new atrium area			units	Hour	4w
55	Sufficient removal of existing ramp structure to allow installation of 2no canti decks to level 4					
56	Existing floor bays progressive removal (Jack arch brickwork / secondary steelwork)	10.00 units	2.00	units	Week	5w
57	Progressive installation of temporary work propping in line with jack arch removal					5w
58	Installation of new structural steel primary and trimming beams	30.00 No	4.00	No	Day	1w 2d
59	Progressive installation of metal decking concrete topping	292.00 m2	50.00	m2	Day	1w 7h
60	Concrete topping to new atrium slab area	1.00 No	1.00	No	Day	1d
61	Install temporary bind to edge of new atrium opening			m2	Hour	1w
62	Installation of temporary weathered access & protection deck to new atrium void area			m2	Hour	3w
63	Progressive formation of riser slab penetrations BRIC - Scope TBC			m2	Hour	5w
64	**Main Roof Area Cladding removal and structural alterations**					
65	**Main Roof Area - Cladding removal**					
66	Existing 4th floor slab sealed works can proceed on roof removal works					
67	Progressive removal of artificial slates and roof lining sheets	6,750.00 m2	100.00	m2	Day	13w 2d
68	**Main Roof Area - Structural alterations & plant rooms structures**					
69	**General Roof area**					
70	Structural alterations / repairs to existing Queen post trusses *(Scope TBC)				Week	12w
71	Progressive formation of new North - South service walkways			m2	Hour	10w
72	**North Plantroom**					
73	Removal of existing roof trusses to new North plantroom area			m2	Hour	3w
74	Release North roof area for new plantroom structure					
75	Structural steelwork to form new North plant room including new columns down to 4th floor slab level			m2	Hour	3w
76	Construct new North RC plant room slab on metal deckng			m2	Hour	2w
77	Formation of upsatnds to plantroom			m2	Hour	1w
78	Curing of plantroom slab / upstands			m2	Hour	2w
79	Waterproof membrane to plantroom / roof interface			m2	Hour	1w
80	**South plant area**					
81	Structural alterations to existing roof trusses to new South Terrace area			m2	Hour	3w
82	Structural steelwork strengthening to form new South Terrace / plant area			m2	Hour	3w
83	Construct new South Terrace and Plant area - type of structure tbc			m2	Hour	2w
84	Waterproof membrane to plantroom / roof interface			m2	Hour	1w
85	**Structural alterations to 3rd Floor car park deck to form new atrium void**					
86	4th floor structure & protection deck completed releasing 3rd floor					
87	Sufficient removal of existing ramp structure to allow installation of 2no canti decks to level 4					
88	Advanced installation of Temp works parallel to jack arch cut lines			units	Hour	3w
89	Advanced saw cutting to perimeter of new atrium area			units	Hour	3w
90	Existing floor bays progressive removal (Jack arch brickwork / secondary steelwork)	10.00 units	2.00	units	Week	5w
91	Progressive installation of temporary work propping in line with jack arch removal					5w
92	Installation of new structural steel primary and trimming beams	30.00 No	4.00	No	Day	1w 2d
93	Progressive installation of metal decking concrete topping	292.00 m2	50.00	m2	Day	1w 7h
94	Concrete topping to new atrium slab area	1.00 No	1.00	No	Day	1d
95	Strike out back propping / prepare floor for finishing trades			m2	Hour	2w
96	Progressive formation of riser slab penetrations BWIC - Scope TBC			m2	Hour	5w
97	**Structural alterations to existing South East Lift Enclosure**					
98	Existing SE Lift enclosure - Removal of Lift Motor room structure down to roof level	1.00 No	0.50	No	Week	2w
99	Progressive demolition / structural opening up of existing lift shaft structure	5.00 floors	1.00	floors	Week	5w
100	Re- configure existing Lift shaft base			m2	Hour	2w
101	Progressive demolition / structural opening up of existing lift shaft structure & edging slabs	5.00 floors	1.00	floors	Week	5w
102	Formation of roof level lift motor room structure				Hour	2w



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Great Northern Warehouse	Works On Site	App 4 Strategic Detail	*Draft - Start date indicative only*	15/07/2022	Rev 1

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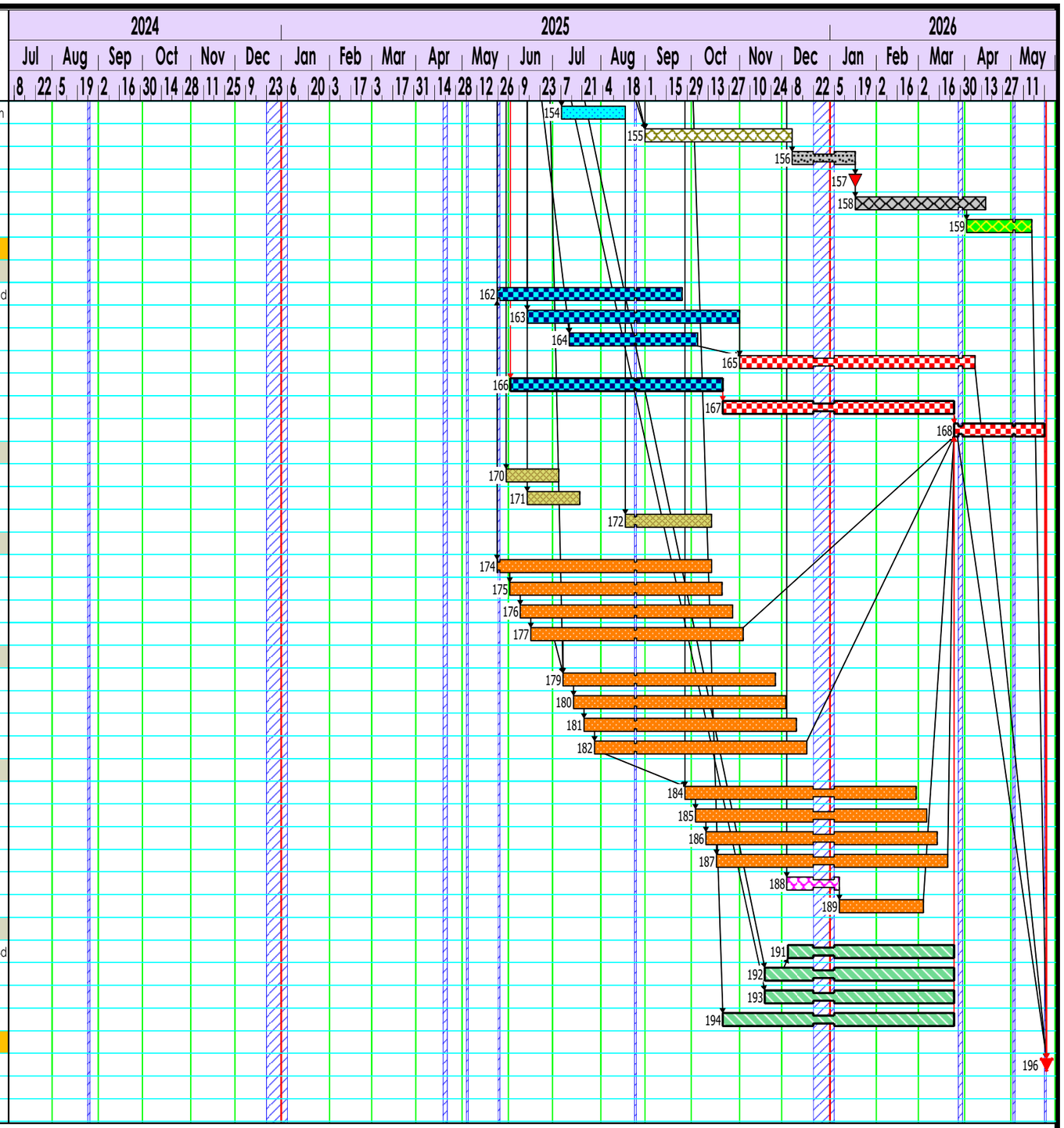
NO	NAME	QUANT	RATE	UNIT	PER	DUR
103	**Structural alterations to existing North West Lift Enclosure**					
104	Existing NW Lift enclosure - Removal of Lift Motor room structure down to roof level	1.00 No	0.33	No	Week	3w 1h
105	Progressive demolition / structural opening up of existing lift shaft structure	5.00 floors	1.00	floors	Week	5w
106	Re- configure existing Lift shaft base			m2	Hour	2w
107	Progressive demolition / structural opening up of existing lift shaft structure & edging slabs	5.00 floors	1.00	floors	Week	5w
108	Formation of roof level lift motor room structure & new access Walkway				Hour	3w
109	**Structural Alterations First Floor Jack arch slab structure between Warehouse & Leisure Block**					
110	VP of Car park level 2 following re configuring of Leisure Box Car park					
111	Atrium link structure de-construction completed down to first floor slab level					
112	Advanced installation of Temp works parallel to jack arch cut lines			units	Hour	4w
113	Advanced installation of protection deck below 1st floor jack arch bays	10.00 No	2.00	No	Week	5w
114	Advanced saw cutting to perimeter of new atrium area			units	Hour	3w
115	Existing floor bays progressive removal (Jack arch brickwork / secondary steelwork)	10.00 units	2.00	units	Week	5w
116	Progressive decking over new openings to provide storage / logistics space			m2	Hour	4w
117	Link structure deck at 1st floor available for site logistics use					
118	Strike out protection deck following jack arch bay removal	10.00 No	3.33	No	Week	3w
119	Remedial works to jack arch primary steel structure- scope tbc (Assume working from MEWPS)					4w
120	New structure - area Ground to underside 1st floor south of Warehouse released					
121	**Formation of new infill structure to South elevation below first floor link slab**					
122	Groundwork's to new structure area below 1st floor link slab to South elevation			m2	Hour	3w
123	Install new primary elevation structure to area below 1st floor link slab to South elevation			m2	Hour	2w
124	**Formation on new external lift core & Link Bridge to North - West elevation**					
125	Area released following demolition of existing link structure & car park ramps					
126	Erect access scaffold to enlarge existing window openings for new lift core access	4.00 floors	2.50	floors	Week	1w 3d
127	Enlarge existing window openings & make good reveals (including link bridge opening)	4.00 floors	2.00	floors	Week	2w
128	Strike access scaffold following enlargement of openings	4.00 floors	4.00	floors	Week	1w
129	Pile enabling	1.00 No	1.00	No	Week	1w
130	install mini piles	20.00 No	10.00	No	Week	2w
131	Trim piles and form new lift core base and pits	1.00 No	0.50	No	Week	2w
132	Erection of new Steelwork lift core structure & link bridge	4.00 No	2.00	No	Week	2w
133	Metal decking / concrete topping to lift lobby floors	3.00 No	1.50	No	Week	2w
134	**External Envelope**					
135	**Main Roof Area Finishes**					
136	Cladding to North Plant room structure	1.00 No	0.25	No	Week	4w
137	Lift into position major roof plant for North & south plant rooms / enclosures					2w
138	Cladding to South plant room structure	1.00 No	0.50	No	Week	2w
139	Construct atrium glazing to central roof truss area	1,277.00 m2	30.00	m2	Day	8w 3d
140	Cladding to SE Core roof area	1.00 No	0.50	No	Week	2w
141	Cladding to NW Core roof area	1.00 No	0.50	No	Week	2w
142	Insulated roof liner and roof membrane	4,306.00 m2	100.00	m2	Day	8w 3d
143	Roof finishes to perimeter areas - Valleys, Guttering, roof lights roof liner and roof slates	4,306.00 m2	60.00	m2	Day	14w 2d
144	Finishes to roof terrace area & walkways	122.00 m2	5.30	m2	Day	4w 3d
145	**External Elevations**					
146	Basing out / form pedestrian tunnels and access bridging scaffold - Ground to first floor N,E&S elevations *(Partial out of hours working)	1.00 floors	0.25	floors	Week	4w
147	Progressive erection of encapsulation scaffold to N,E&S-elevations	5.00 floors	0.50	floors	Week	10w
148	Progressive erection of encapsulation scaffold to W-elevation	5.00 floors	1.00	floors	Week	5w
149	Cladding to new structure at ground floor south elevation below retained link slab			m2	Hour	4w
150	Remedial works to existing brickwork facades Full Scope TBC	5.00 floors	0.25	floors	Week	20w
151	Remedial works to high level brickwork parapets	1.00 floors	0.16	floors	Week	6w 1d
152	Renovation of existing windows 2nd to 4th floor *(assumed insiu remedial works)	210.00 No	16.00	No	Week	13w 5h
153	infills / glazing to existing facade interventions in location of previous car park ramp - (West Elevation)	18.00 No	2.00	No	Week	9w



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NO	NAME	QUANT	RATE	UNIT	PER	DUR
154	Glazed cladding to new external lift core	4.00 floors	0.66	floors	Week	6w 2h
155	Progressive striking of encapsulation scaffolding following elevation works			m2	Hour	14w
156	Progressive installation of new canopys to the North elevation *(Likely undertake out of hours)			m2	Hour	4w
157	Release of Ground level for lexternal works / planting					
158	External works			m2	Hour	12w
159	Soft Landscaping			m2	Hour	6w
160	**Fit Out Works**					
161	**MEP Risers, Plant rooms & commissioning**					
162	MEP Installation to general risers			m2	Hour	17w 1d
163	MEP Installation to North Plantroom			m2	Hour	20w
164	MEP Installation to South Plant Area			m2	Hour	12w
165	Plantroom Commissioning			m2	Hour	20w
166	Fit out HV/LV Substation & switch rooms Ground floor South plant area			m2	Hour	20w
167	commissioning HV/LV Substation & switchrooms Ground floor South plant area			m2	Hour	20w
168	Testing & commissioning to common areas / office floors			m2	Hour	8w
169	**Lift Installation**					
170	Installation of new lift to SE Core (1no)	5.00 floors	1.00	floors	Week	5w
171	Installation of new lift to NW Core (1no)	5.00 floors	1.00	floors	Week	5w
172	Installation of lifts to new external core (3no)	4.00 floors	0.50	floors	Week	8w
173	**Second floor Office Fit Out**					
174	Cat A Office fit out - 2nd floor Zone 1			m2	Hour	20w
175	Cat A Office fit out - 2nd floor Zone 1			m2	Hour	20w
176	Cat A Office fit out - 2nd floor Zone 1			m2	Hour	20w
177	Cat A Office fit out - 2nd floor Zone 1			m2	Hour	20w
178	**Third floor Office Fit Out**					
179	Cat A Office fit out - 3rd floor Zone 1			m2	Hour	20w
180	Cat A Office fit out - 3rd floor Zone 1			m2	Hour	20w
181	Cat A Office fit out - 3rd floor Zone 1			m2	Hour	20w
182	Cat A Office fit out - 3rdd floor Zone 1			m2	Hour	20w
183	**Fourth floor Office Fit Out**					
184	Cat A Office fit out - 4th floor Zone 1			m2	Hour	20w
185	Cat A Office fit out - 4th floor Zone 1			m2	Hour	20w
186	Cat A Office fit out - 4th floor Zone 1			m2	Hour	20w
187	Cat A Office fit out - 4th floor Zone 1			m2	Hour	20w
188	Strike out temporary protection deck at third floor			m2	Hour	3w
189	Finishes to Perimeter of atrium following removal of temporary potection deck			m2	Hour	8w
190	**Finishes to common areas**					
191	Finishes to First floor Co-Working / events area - Scope tbc			m2	Hour	13w 4d
192	Main Office Entrance and NW Core Finishes			m2	Hour	16w
193	Watson Street Office Entrance and SW Core Finishes			m2	Hour	16w
194	Refurbishment of existing corner staircases (4no)			m2	Hour	20w
195	**Handover**					
196	Handover					



1.MAIN FILE

6.00 COMBINED SERVICES	1.24 Tenants in Occupation	6.SERVICES	1.02 SITE SET UP	1.07 TEMP WORKS #2	1.04 SCAFFOLDING/ACCESS	4.17 SRC	3.16 TC-6	2.02 ASB SURVEY & REP
2.04 ASB HSE REVIEW	2.08 SOFT STRIP	2.06 ASB REMOVAL	2.14 Deconstruction	4.12 GROUNDWORKS	1.06 TEMP WORKS #2	4.34 METAL DECK/STUDS	4.16 CONCRETE	2.16 Temp Weathering
4.62 STRUCTURAL ALTERATIONS	2.10 CLADD REMOVAL	4.31 STEEL	4.36 MESH/CONC TOPPING	4.43 UPSTANDS	4.19 CURING	5.42 ROOFING/WPROOFING	Strike out / clear area	4.11 SUBSTRUCTURE RC
4.30 SUPERSTRUCTURE	1.MILESTONE	4.01 PILE ENABLING WORKS	4.07 BORED PILING	4.18 PILE CAP	5.44 PLANTROOM ENCL.	6.02 PLANT INSTALL	5.08 GLAZING	5.46 RAIN SCREEN CLADDING
5.28 BRICKWORK REMEDIALS	5.24 WINDOWS	5.52 Canopies	8.00 EXTERNAL WORKS	8.04 SOFT LANDSCAPING	6.26 COMMISSIONING	6.01 LIFTS/ESCALATORS	7.10 CAT A Z1	7.32 GEN FINISHES

Project	Title	View		
Great Northern Warehouse	Works On Site	App 4 Strategic Detail	*Draft - Start date indicative only*	Prog No : C/PB/App4
				15/07/2022 Rev 1

R.P.M.