Alpha
Consulting Engineers Pte Ltd

PROJECT QUALITY PLAN

6 DERBYSHIRE

For

FANTASIA (NOVENA) PTE LTD

Copy No.	1

Prepared By: Yip Yoke Fun/Shangkari Kanasan Moorthy/Derek Ong

Authorised By: Loh Fook Yuen

Date: 17 January 2017

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SECTION 1

QUALITY PLAN CONTROL AND DISTRIBUTION

1.1 List of Copy Holders

Copy No.	Copy Holder	Date of Issue
1	6190-PQP	17 January 2017

1.2 Revision Record

Revision	Date of Issue	Section Reference	Page(s)	Remarks
0	November 2013	1 to 11	28	
1	07 October 2014	1 to 11	28	+ 10 pgs (Sect. 4.1 – Overall Master Programme and Sect 9.1 – Sustainable Design Feature/Criteria)
2	29 January 2016	1 to 11	28	+ 11 pgs (Sect. 4.1 – Overall Master Programme and Sect 9.1 – Sustainable Design Feature/Criteria)
3	17 January 2017	1 to 11	29	+ 10 pgs (Sect. 4.1 – Overall Master Programme) +1 pg (Sect 9.1 – Sustainable Design Feature/Criteria)

SECTION 2

PROJECT INFORMATION

2.1 Project Description

Type of Development	Residential

Statistics of Development	
Site Area, m²	4228.20
Nett Floor Area, m²	-
Gross Floor Area, m²	13022.86
Covered Carpark, m²	2500
No. of Covered Carpark Lots	168
No. of Apartments/Houses	168
No. of Beds (for Hospitals)	NA
No. of Guestroom (for Hotels)	NA
No. of Blocks / No. of Storeys	1 Block/ 30-Storey
Green Mark Category	Certified
No. of Phases	1

2.2 Project Cost

M&E Services Cost Plan (S$ x 1M)										
Services	EI	ACVI	LEI	FFAI	PSI	SPFI				
Estimate	3.1	2.8	0.6	0.6	2.8	0.3				
Awarded	2.757	1.343	0.748	0.68	2.8	0.145				

Total Project Construction Cost (S$ x1M)			
	Site Clearance	Piling Works	Main Contract
Estimate	-	-	-
Awarded	-	2.59	50.498

Site Clearance shall include earth work, soil improvement, service diversion and termination.

2.3 Scope of Works

2.3.1 Scope of Consultancy Services

Conceptual/Schematic Design	✓
Detailed Design	✓
Tender Documentation	✓
Tender Evaluation	✓
Contract Supervision	✓
M&E Costing	✓
Submissions to Authority	✓

(✓*where applicable*)

2.3.2 Scope of M&E Services

ELECTRICAL	✓	AIR CONDITIONING	✓	SPRINKLER	✓	SANITARY	✓	SWIMMING POOL	✓
LIFT	✓	MECHANICAL VENTILATION	✓	FIRE ALARM	✓	COLD WATER	✓	STEAM BOILER	
ESCALATOR		MECHANICAL SMOKE EXTRACT		HOSEREEL	✓	HOT WATER	✓	FUEL STORAGE	
PABX		COMPUTER A/C		WET RISER	✓	TOWN GAS	✓		
SECURITY	✓	BST CARPARK EXH	✓	DRY RISER	✓	LPG GAS			
TELELIFT		HEATING				MEDICAL GAS			
DATA COMM.									
FLUSHFLOOR TRUNKING									

(✓*where applicable*)

2.3.3 Submission to Relevant Authorities by Others

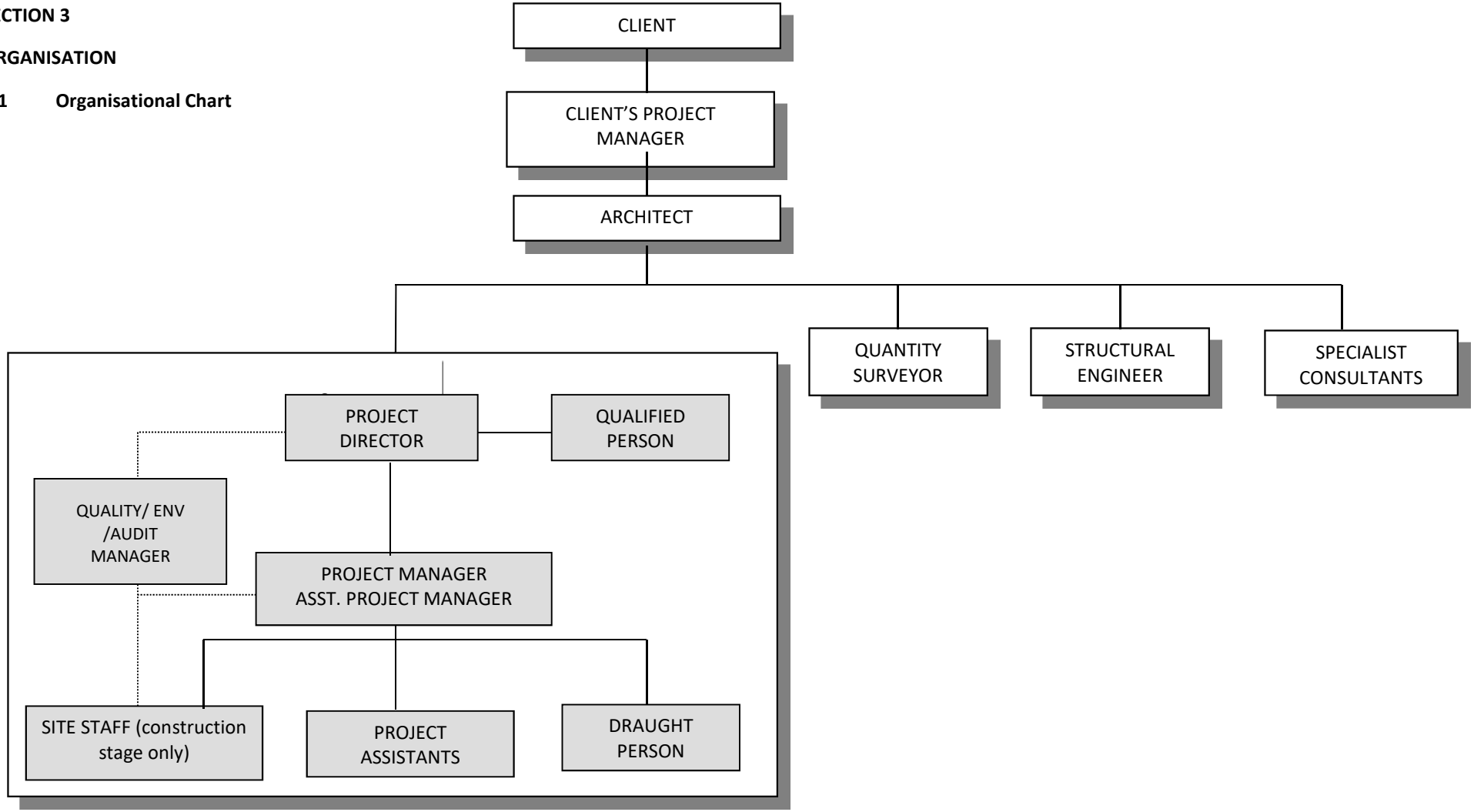
EJECTOR & DIVERTER	✓	SUMP PUMP	✓	FUEL OIL TANK		LIFT & ESCALATOR		PRESSURE VESSEL	✓	HOISTS		FOAM	

(✓*where applicable*)

SECTION 3

ORGANISATION

3.1 Organisational Chart



SECTION 3

ORGANISATION

3.2 ACEPL's Project Team Member

TITLE		NAME
Project Director		Loh Fook Yuen (LFY)
Qualified Person	Mechanical	Choong Choon Guan (CCG)
	Electrical	Loh Fook Yuen (LFY)
Project Manager		Yip Yoke Fun (YYF)
Assistant Project Manager		Derek Ong (DO)
Project Assistant (Mech)		Shangkari Kanasan Moorthy (SKM)
Project Assistant (Elect)		-
Draughtsperson		Common Pool
Resident Engineer (M&E)		-
Assistant Resident Engineer (M&E)		
Clerk-of-Work (M&E)		

3.3 Client/Client's Representatives

Client:- Fantasia (Novena) Pte Ltd

Address:- 143 Cecil St
#16-01 GB Building
Singapore 069542

Tel:- 6224 1788

Fax:- 6224 8558

Client's Representatives:-

Name of Company	Contact Person	Contact
Fantasia (Novena) Pte Ltd	Name: Mr Wang Lian/ Mr Steven Soo/ Ms Brenda Position: General Manager/ Project Manager / Quantity Surveyor	Tel: (+65) 6224 1788 Fax: (+65) 6224 8558 Handphone: Email: wanglian828@gmail.com / steven.trgrp@gmail.com / qs.sg@cnfantasia.com
	Name: Position:	Tel: Fax: Handphone: Email:
	Name: Position:	Tel: Fax: Handphone: Email:
	Name: Position:	Tel: Fax: Handphone: Email:
	Name: Position:	Tel: Fax: Handphone: Email:

3.4 **Other Consultants** (Local)

Function / Name of Company	Contact Person	Contact
Architect Forum Architects Pte Ltd	Name: Mr Tan Kok Hiang / Ms Ho Sweet Woon Position: Director/ Qualified Person	Tel: (+65) 6224 2778 Fax: (+65) 6323 4603 Handphone: Email: kokhiang@forum-architects.com / fapl066-4derbyshire@forum architects.com
Quantity Surveyor OTN Building Cost Consultants Pte Ltd	Name: Mr Steve Leu Position: Senior Quantity Surveyor	Tel: (+65) 6252 3848 Fax: (+65) 6295 0388 Handphone: Email: project1@otngroup.com.sg
Structural Engineer Ronnie & Koh Pte Ltd	Name: Mr Low Chee Kong Position: Director	Tel: (+65) 6225 7128 Fax: (+65) 6225 7182 Handphone: Email: cklow@rkconsl.com
Interior Designer	Name: Position:	Tel: Fax: Handphone: Email:
Lighting Consultant	Name: Position:	Tel: Fax: Handphone: Email:
Acoustic Consultant Acviron Acoustics Consultants Pte Ltd	Name: Dr Lim Chiak Hwee Position: Director	Tel: (+65) 6273 5426 Fax: (+65) 6270 5700 Handphone: (+65) 9689 3946 Email: acviron@singnet.com.sg
Landscape Architect Coen Design International Pte Ltd	Name: Ms Joyce Tey Position: Landscape Architect	Tel: (+65) 6345 6323 Fax: (+65) 6345 6386 Handphone: (+65) 9117 2294 Email: 170-derbyshire@coen-design.com
_____	Name: Position:	Tel: Fax: Handphone: Email:

3.4 Other Consultants (Overseas) – NOT APPLICABLE

Function / Name of Company	Contact Person	Contact
Architect NA	Name: Position:	Tel: Fax: Handphone: Email:
M&E Consultant NA	Name: Position:	Tel: Fax: Handphone: Email:
Quantity Surveyor NA	Name: Position:	Tel: Fax: Handphone: Email:
Structural Engineer NA	Name: Position:	Tel: Fax: Handphone: Email:
Interior Designer NA	Name: Position:	Tel: Fax: Handphone: Email:
Lighting Consultant NA	Name: Position:	Tel: Fax: Handphone: Email:
Acoustic Consultant NA	Name: Position:	Tel: Fax: Handphone: Email:
_____	Name: Position:	Tel: Fax: Handphone: Email:

3.5 Contractors/Sub-Contractors

Function / Name of Company	Contract *	Contact Person	Contact
Main Contractor BHCC Construction Pte Ltd	DC	Name: Mr Andy Koh Position: Senior Project Manager	Tel: (+65) 6659 4666 Fax: (+65) 6659 4555 Handphone: (+65) 9620 1612 Email: 6-Derbyshire@bhcc.com.sg
Air Conditioning & Ventilation Installation Sub-Contractor E-Com Engineering Pte Ltd	NSC	Name: Mr Keith Lim Position: Project Manager	Tel: (+65) 6282 6720 Fax: (+65) 6282 5720 Handphone: (+65) 9657 7872 Email: keithlkp@ecomepl.sg
Plumbing & Sanitary Installation Sub-Contractor Markpoint Engineering Pte Ltd	DSC	Name: Mr Patrick Chua Position: Project Manager	Tel: (+65) 6456 8012 Fax: (+65) 6454 8012 Handphone: (+65) 8598 2090 Email: markpoint@markpoint.com.sg
Electrical Installation Sub-Contractor E-Com Engineering Pte Ltd	NSC	Name: Mr Keith Lim Position: Project Manager	Tel: (+65) 6282 6720 Fax: (+65) 6282 5720 Handphone: (+65) 9657 7872 Email: keithlkp@ecomepl.sg
Lift & Escalator Installation Sub-Contractor Schindler Lifts (Singapore) Pte Ltd	NSC	Name: Mr Alan Long Position: Senior Project Engineer	Tel: (+65) 6854 7778 Fax: (+65) 6846 2212 Handphone: (+65) 9452 4036 Email: alan.long@sg.schindler.com
Fire Fighting & Alarm Installation Sub-Contractor Sprinkler Engineering Pte Ltd	NSC	Name: Mr Jeff Tan Position: Project Manager	Tel: (+65) 6453 1488 Fax: (+65) 6453 7656 Handphone: (+65) 9380 7580 Email: sprinkler@singnet.com.sg
Swimming Pool Filtration Plant Installation Sub-Contractor Hydrotechs Mechanical and Electrically Service Pte Ltd	NSC	Name: Mr Kelvin Ang Position: Deputy Project Manager	Tel: (+65) 6748 4779 Fax: (+65) 6748 8016 Handphone: (+65) 8138 4474 Email: project@hydrotech.com.sg
Carpark System Installation Sub-Contractor		Name: Position:	Tel: Fax: Handphone: Email:
_____		Name: Position:	Tel: Fax: Handphone: Email:

** Type of Contract*
- *NSC (Nominated Sub-Contract)*
- *DSC (Domesticated Sub-Contract)*
- *DC (Direct Contract)*
- *NS (Nominated Supplier)*

3.6 Authorities

Authorities/Department	Contact Person	Tel/Fax Nos./E-mail
SP PowerGrid:		
(a) Sub-Station	Mr Abbas Mohd Suppiah	6378 8557
(b) Diversion		
SP Services:		
(a) Customer Supply	Ms Ernie Suriani	6671 7194
(b) Installation	Ms Tan Lay Hua	6809 2605
(c) Meter Section		
(d) Road Lighting		
TFCC:		
(a) SCV	Mr Kent Foo	9459 9500
(b) SingTel	Mr Mohd Ghani	9735 3186
(c) IDA		
BCA:		
(a) Building Plan	Ms Sharon H C Tan	6804 4404
(b) Green Mark	Mr Chia Kum Hoong	6804 4703
FSSD:		
(a) Building Plan		
(b) M&E Plan	Ms Ang Ai Hua Nancy	6548 1729
PUB (Water Supply) Network Dept:		
(a) Water Conservation		
(b) Plumbing Plan	M/s Marwin/Nazilah Sapuan	6731 3934 / 6731 3598
(c) Diversion	Mr Khairul Fadzil Masord	9067 0640
(d) NEWater		
PUB Water Reclamation (Network) Dept:		
(a) Building Plan/CBPU	Mr Yeo Khoon Joo	6731 3253
(b) M&E Plan		
(c) Diversion		
City Gas Pte Ltd:		
(a) Planning/Submission	Mr Liew Khee Boon	6578 7603
(b) Installation/Inspection	Mr Lim Teck Seng	9007 5727
PowerGas Pte Ltd		
(a) Diversion		
NEA (Pollution Control)		
(a) Planning/Submission		
(b) Inspection		

SECTION 4

PROGRAMME

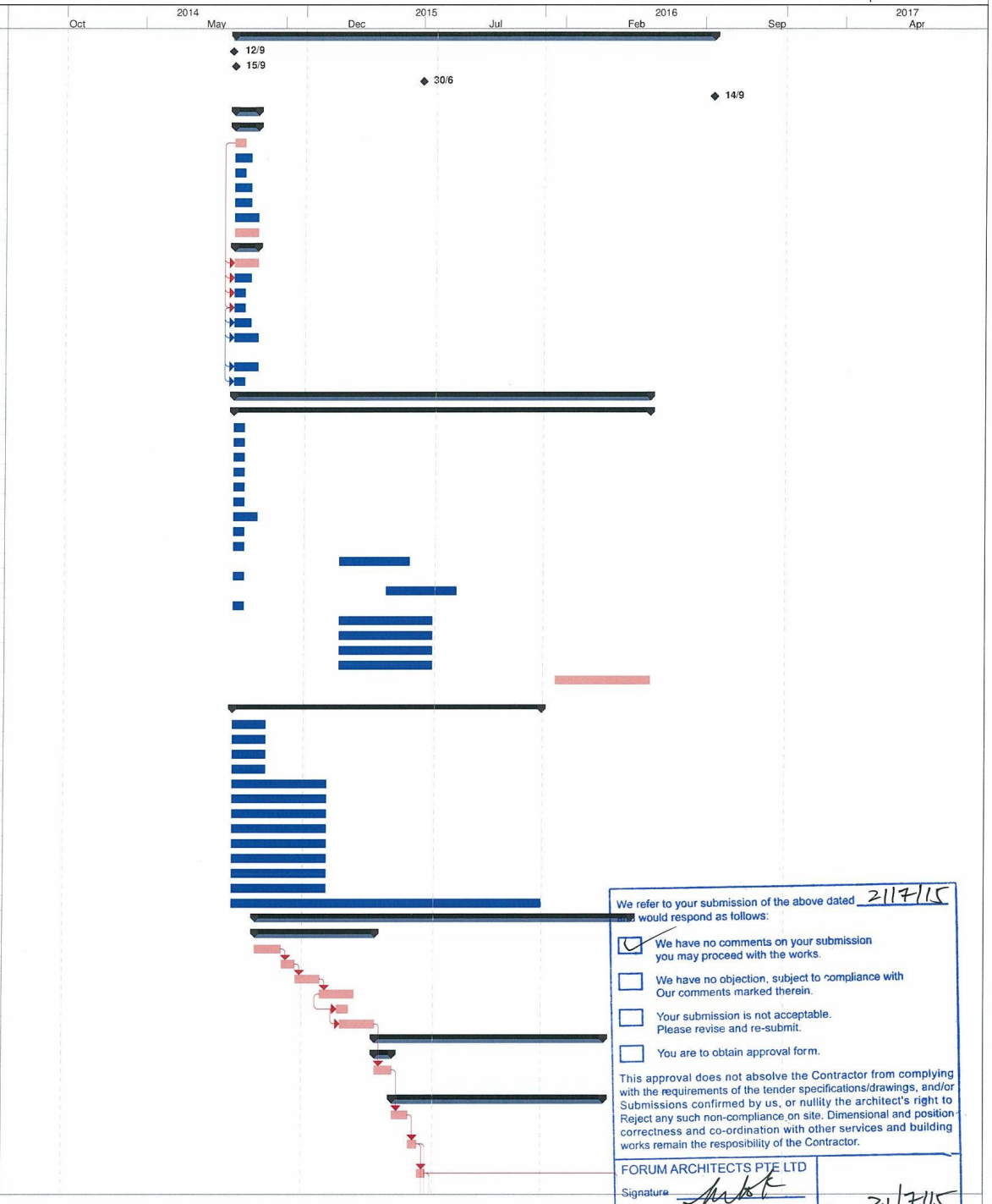
4.1 Overall Programme (Refer to attached master program)

ID	TASK NAME	MONTHS	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
1.	Preliminary Planning																									
2.	Planning Submission																									
3.	Detail Design																									
4.	BP Submission																									
5.	BP Submission (Amendments)																									
6.	Tender Period for Piling																									
7.	Tender Period for Sub-Structure																									
8.	Tender Period for Super-Structure																									
9.	Piling Period																									
10.	Sub-Structure Construction Period																									
11.	Super-Structure Construction Period																									
12.	TOP																									
13.	CSC																									

6-Derbyshire Project Revised Master Programme (BHCC Construction Pte Ltd)

Update: 21-7-2015

ID	Task Name	Duration	Start	Finish	Predecessors
1	**MASTER PROGRAM @ 6 Derbyshire Road**	**606 d**	**Mon 15/9/14**	**Wed 14/9/16**	
2	Site Possession	0 d	Fri 12/9/14	Fri 12/9/14	
3	Contract Commencement	0 d	Mon 15/9/14	Mon 15/9/14	
4	Phase 1- Power Turn-On	0 d	Tue 30/6/15	Tue 30/6/15	
5	Project Completion Date / TOP	0 d	Wed 14/9/16	Wed 14/9/16	
6	**Site mobilisation**	**30 d**	**Mon 15/9/14**	**Mon 20/10/14**	
7	**Applications**	**30 d**	**Mon 15/9/14**	**Mon 20/10/14**	
8	Application of Factory Permit	14 d	Mon 15/9/14	Tue 30/9/14	
9	Application of Permit to Carry Out Structural Work	21 d	Mon 15/9/14	Thu 09/10/14	
10	Application of Temporary Power & Water Supply	14 d	Mon 15/9/14	Tue 30/9/14	
11	Application of LTA access permit	21 d	Mon 15/9/14	Thu 09/10/14	
12	Application of Telecommunication	21 d	Mon 15/9/14	Thu 09/10/14	
13	Application of ECM	30 d	Mon 15/9/14	Mon 20/10/14	
14	ERSS Submission	30 d	Mon 15/9/14	Mon 20/10/14	
15	**Site Work**	**30 d**	**Mon 15/9/14**	**Mon 20/10/14**	
16	Pre-Condition Survey	30 d	Mon 15/9/14	Mon 20/10/14	8SS
17	Pre-Computation Survey	21 d	Mon 15/9/14	Thu 09/10/14	8SS
18	Cable Detection	14 d	Mon 15/9/14	Tue 30/9/14	8SS
19	Erection of Hoarding	14 d	Mon 15/9/14	Tue 30/9/14	8SS
20	Installation of Monitoring Instrumentation	21 d	Mon 15/9/14	Thu 09/10/14	19SS
21	Installation of ECM (Including wash bay,perimeter drain,filtration plant etc)	30 d	Mon 15/9/14	Mon 20/10/14	19SS
22	Site Office	30 d	Mon 15/9/14	Mon 20/10/14	19SS
23	BCA Signboard	14 d	Mon 15/9/14	Tue 30/9/14	19SS
24	**Awards to DSC & NSC & suppliers**	**526 d**	**Mon 15/9/14**	**Fri 10/6/16**	
25	**Award of DSC**	**526 d**	**Mon 15/9/14**	**Fri 10/6/16**	
26	Award of Pest Control sub-contractor	14 d	Mon 15/9/14	Tue 30/9/14	
27	Award of Temporary Electrical with LEW submission	14 d	Mon 15/9/14	Tue 30/9/14	
28	Award of Temporary Work- P & S contractor	14 d	Mon 15/9/14	Tue 30/9/14	
29	Award of Reinforcement Bar Supplier	14 d	Mon 15/9/14	Tue 30/9/14	
30	Award of Concrete Supplier	14 d	Mon 15/9/14	Tue 30/9/14	
31	Award of RC work sub-contractor	14 d	Mon 15/9/14	Tue 30/9/14	
32	Award of Anti-Termite Specialist	30 d	Mon 15/9/14	Mon 20/10/14	
33	Award of Earthwork sub-contractor	14 d	Mon 15/9/14	Tue 30/9/14	
34	Award of Cranage Supplier	14 d	Mon 15/9/14	Tue 30/9/14	
35	Award of Architectural Wet Trades	90 d	Mon 23/2/15	Wed 10/6/15	
36	Award of Waterproofing Specialist	14 d	Mon 15/9/14	Tue 30/9/14	
37	Award of Metal works	90 d	Wed 06/5/15	Fri 21/8/15	
38	Award of P&S and Gas Works	14 d	Mon 15/9/14	Tue 30/9/14	
39	Award of Timber Door	120 d	Mon 23/2/15	Wed 15/7/15	
40	Award of Timber Flooring Specialist	120 d	Mon 23/2/15	Wed 15/7/15	
41	Award of Ceiling work	120 d	Mon 23/2/15	Wed 15/7/15	
42	Award of Painting works	120 d	Mon 23/2/15	Wed 15/7/15	
43	Award of External Works - drainage,external wall,planter, Fire engine access	120 d	Tue 19/1/16	Fri 10/6/16	
44	**Award of NSC / NS**	**390 d**	**Mon 15/9/14**	**Tue 29/12/15**	
45	Award of Electrical *	41 d	Mon 15/9/14	Mon 03/11/14	
46	Award of ACMV *	41 d	Mon 15/9/14	Mon 03/11/14	
47	Award of Lift Specialist *	41 d	Mon 15/9/14	Mon 03/11/14	
48	Award of Fire Fighting / Protection *	41 d	Mon 15/9/14	Mon 03/11/14	
49	Award of Swimming Pool Filtration Specialist *	119 d	Mon 15/9/14	Wed 04/2/15	
50	Award of Alumin & Glazing works *	119 d	Mon 15/9/14	Wed 04/2/15	
51	Award of Ironmongery *	119 d	Mon 15/9/14	Wed 04/2/15	
52	Award of Tiles & Stone Suppliers *	119 d	Mon 15/9/14	Wed 04/2/15	
53	Award of Carpentry & Joinery works (Kitchen / Wardrobe) *	119 d	Mon 15/9/14	Wed 04/2/15	
54	Award of Electrical Appliances / Kitchen Appliances *	119 d	Mon 15/9/14	Wed 04/2/15	
55	Award of Indoor / Outdoor fitness & sports equipments *	119 d	Mon 15/9/14	Wed 04/2/15	
56	Award of Landscaping works *	119 d	Mon 15/9/14	Wed 04/2/15	
57	Award of Signages works *	390 d	Mon 15/9/14	Tue 29/12/15	
58	**Phase 1(Gridline 1-12)**	**472 d**	**Tue 21/10/14**	**Fri 13/5/16**	
59	**Sub-Strcture Works**	**151 d**	**Tue 21/10/14**	**Tue 21/4/15**	
60	Sheet Piling/Soil Improvement	34 d	Tue 21/10/14	Sat 29/11/14	
61	Excavation	18 d	Mon 01/12/14	Sat 20/12/14	60
62	Pilecap Construction / Backfilling	30 d	Mon 22/12/14	Tue 27/1/15	61
63	RC works & Concreting to Basement Beam and Slab	43 d	Wed 28/1/15	Fri 20/3/15	62
64	Basement to 1st sty Column / Walls	16 d	Mon 23/2/15	Thu 12/3/15	63SS+20 d
65	1st sty RC Beam & Slab	44 d	Sat 28/2/15	Tue 21/4/15	64SS+5 d
66	**Super-structure Casting**	**288 d**	**Wed 22/4/15**	**Sat 02/4/16**	
67	**1st storey - 3rd storey**	**22 d**	**Wed 22/4/15**	**Mon 18/5/15**	
68	Columns,Stairccase, lift Corewall , Sub-station -12 days cycle Per Floor	22 d	Wed 22/4/15	Mon 18/5/15	65
69	**4th storey - Roof level**	**266 d**	**Tue 19/5/15**	**Sat 02/4/16**	
70	Columns,Stairccase, lift Corewall, Beams and Slab -12 days cycle Per Floor @ 4th sty	21 d	Tue 19/5/15	Fri 12/6/15	68
71	Columns,Stairccase, lift Corewall, Beams and Slab -12 days cycle Per Floor @ 5th sty	12 d	Sat 13/6/15	Fri 26/6/15	70
72	Columns,Stairccase, lift Corewall, Beams and Slab -12 days cycle Per Floor @ 6th sty	11 d	Sat 27/6/15	Thu 09/7/15	71



We refer to your submission of the above dated 21/7/15 and would respond as follows:

- [x] We have no comments on your submission you may proceed with the works.
- [ ] We have no objection, subject to compliance with Our comments marked therein.
- [ ] Your submission is not acceptable. Please revise and re-submit.
- [ ] You are to obtain approval form.

This approval does not absolve the Contractor from complying with the requirements of the tender specifications/drawings, and/or Submissions confirmed by us, or nullity the architect's right to Reject any such non-compliance on site. Dimensional and position correctness and co-ordination with other services and building works remain the resposibility of the Contractor.

FORUM ARCHITECTS PTE LTD

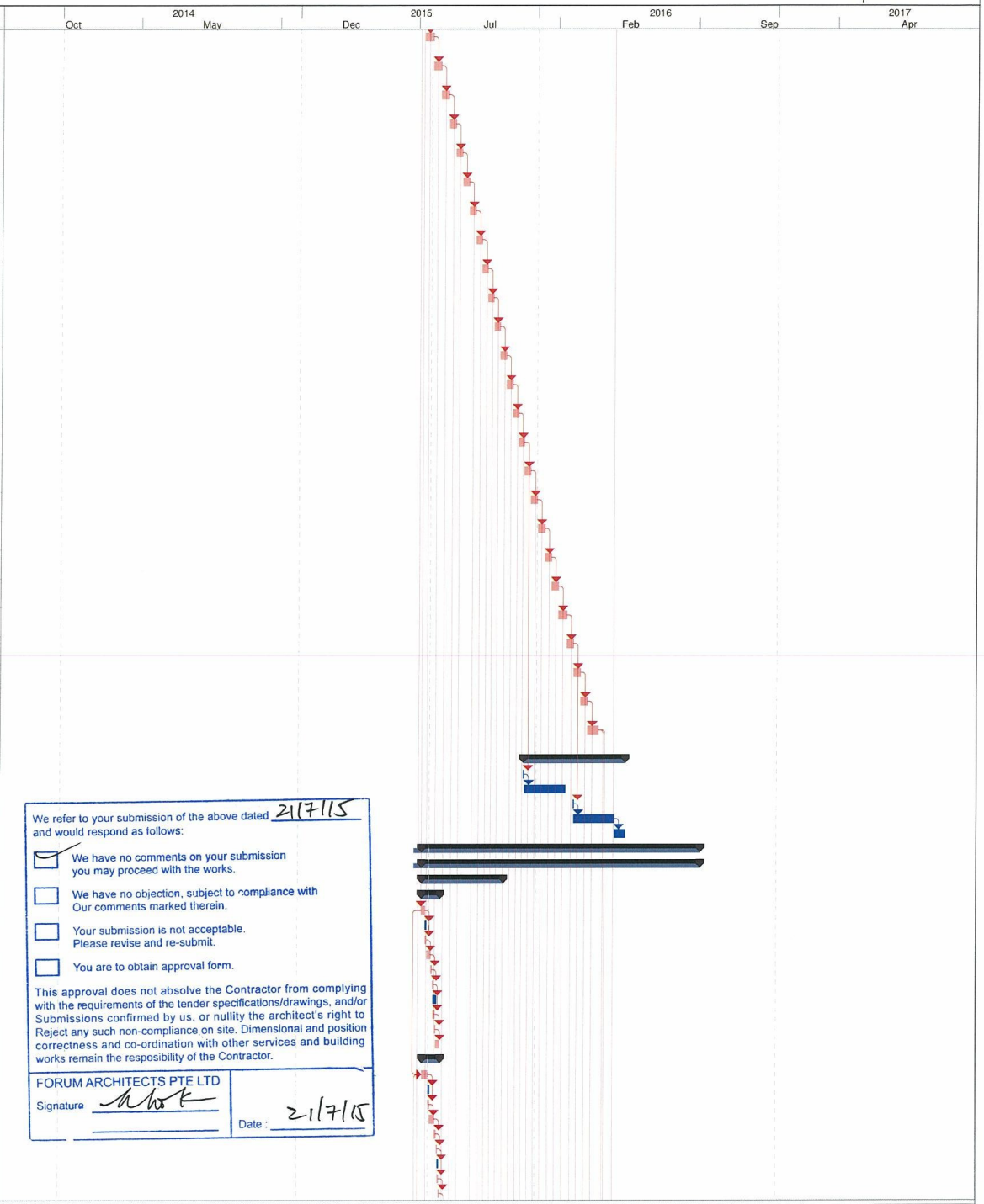
Signature

Date : 21/7/15

6-Derbyshire Project Revised Master Programme (BHCC Construction Pte Ltd)

Update: 21-7-2015

ID	Task Name	Duration	Start	Finish	Predecessors
73	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 7th sty -12 days	10 d	Fri 10/7/15	Wed 22/7/15	72
74	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 8th sty -12 days	10 d	Thu 23/7/15	Mon 03/8/15	73
75	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 9th sty -12 days	10 d	Tue 04/8/15	Sat 15/8/15	74
76	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 10th sty -12 days	9 d	Mon 17/8/15	Wed 26/8/15	75
77	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 11th sty -12 days	9 d	Thu 27/8/15	Sat 05/9/15	76
78	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 12th sty -12 days	9 d	Mon 07/9/15	Wed 16/9/15	77
79	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 13th sty -12 days	8 d	Thu 17/9/15	Sat 26/9/15	78
80	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 14th sty -12 days	8 d	Mon 28/9/15	Tue 06/10/15	79
81	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 15th sty -12 days	8 d	Wed 07/10/15	Thu 15/10/15	80
82	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 16th sty -12 days	8 d	Fri 16/10/15	Sat 24/10/15	81
83	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 17th sty -12 days	8 d	Mon 26/10/15	Tue 03/11/15	82
84	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 18th sty -12 days	8 d	Wed 04/11/15	Fri 13/11/15	83
85	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 19th sty -12 days	8 d	Sat 14/11/15	Mon 23/11/15	84
86	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 20th sty -12 days	8 d	Tue 24/11/15	Wed 02/12/15	85
87	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 21st sty -12 days	8 d	Thu 03/12/15	Fri 11/12/15	86
88	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 22nd sty -12 days	8 d	Sat 12/12/15	Mon 21/12/15	87
89	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 23th sty -12 days	8 d	Tue 22/12/15	Thu 31/12/15	88
90	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 24th sty -12 days	9 d	Sat 02/1/16	Tue 12/1/16	89
91	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 25th sty -12 days	9 d	Wed 13/1/16	Fri 22/1/16	90
92	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 26th sty -12 days	9 d	Sat 23/1/16	Tue 02/2/16	91
93	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 27th sty -12 days	9 d	Wed 03/2/16	Mon 15/2/16	92
94	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 28th sty -12 days	9 d	Tue 16/2/16	Thu 25/2/16	93
95	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 29th sty -12 days	9 d	Fri 26/2/16	Mon 07/3/16	94
96	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ 30th sty -12 days	9 d	Tue 08/3/16	Thu 17/3/16	95
97	Columns,Stairccase, lift Corewall, Beams and Slab cycle Per Floor @ Roof Level -12 days	14 d	Fri 18/3/16	Sat 02/4/16	96
98	**Lift Installation / Commissioning**	**126 d**	**Sat 12/12/15**	**Fri 13/5/16**	
99	1st Handing Over of Lift Core / Shaft	1 d	Sat 12/12/15	Sat 12/12/15	87
100	Installation and alignment of rails / lift car / machine / wiring	50 d	Mon 14/12/15	Sat 13/2/16	99
101	2nd Handing Over of Lift Core / Shaft	1 d	Fri 26/2/16	Fri 26/2/16	94
102	Installation and alignment of rails / lift car / machine / wiring	50 d	Sat 27/2/16	Tue 26/4/16	101
103	Testing & Commissioning	14 d	Wed 27/4/16	Fri 13/5/16	102
104	**Phase 1(Gridline 1-12)**	**352 d**	**Thu 09/7/15**	**Mon 05/9/16**	
105	**Architecture & M&E Works**	**352 d**	**Thu 09/7/15**	**Mon 05/9/16**	
106	**Sub-Station**	**104 d**	**Thu 09/7/15**	**Wed 11/11/15**	
107	**1st storey (cable chamber & transformer room)**	**24 d**	**Thu 09/7/15**	**Thu 06/8/15**	
108	Brickwall	5 d	Thu 09/7/15	Tue 14/7/15	71FS+10 d
109	Joinery 1st fix	2 d	Wed 15/7/15	Thu 16/7/15	108
110	M&E 1st fix	2 d	Wed 15/7/15	Thu 16/7/15	108
111	Plastering	5 d	Sat 18/7/15	Thu 23/7/15	110
112	Floor Screed	2 d	Fri 24/7/15	Sat 25/7/15	111
113	Painting (1st coat)	1 d	Mon 27/7/15	Mon 27/7/15	112
114	M&E 2nd fix	5 d	Tue 28/7/15	Sat 01/8/15	113
115	Door & Ironmongery	3 d	Tue 28/7/15	Thu 30/7/15	113
116	MS Grating and Railing	1 d	Fri 31/7/15	Fri 31/7/15	115
117	M&E final fix	5 d	Sat 01/8/15	Thu 06/8/15	116
118	**2nd storey (switch room & transformer room)**	**23 d**	**Sat 11/7/15**	**Fri 07/8/15**	
119	Brickwall	7 d	Sat 11/7/15	Mon 20/7/15	108SS+2 d
120	Joinery 1st fix	2 d	Tue 21/7/15	Wed 22/7/15	119
121	M&E 1st fix	2 d	Tue 21/7/15	Wed 22/7/15	119
122	Plastering	7 d	Thu 23/7/15	Thu 30/7/15	121
123	Floor Screed	2 d	Fri 31/7/15	Sat 01/8/15	122
124	Painting (1st coat)	1 d	Mon 03/8/15	Mon 03/8/15	123
125	M&E 2nd fix	2 d	Tue 04/8/15	Wed 05/8/15	124
126	Door & Ironmongery	2 d	Tue 04/8/15	Wed 05/8/15	124
127	MS Grating and Railing	1 d	Thu 06/8/15	Thu 06/8/15	126



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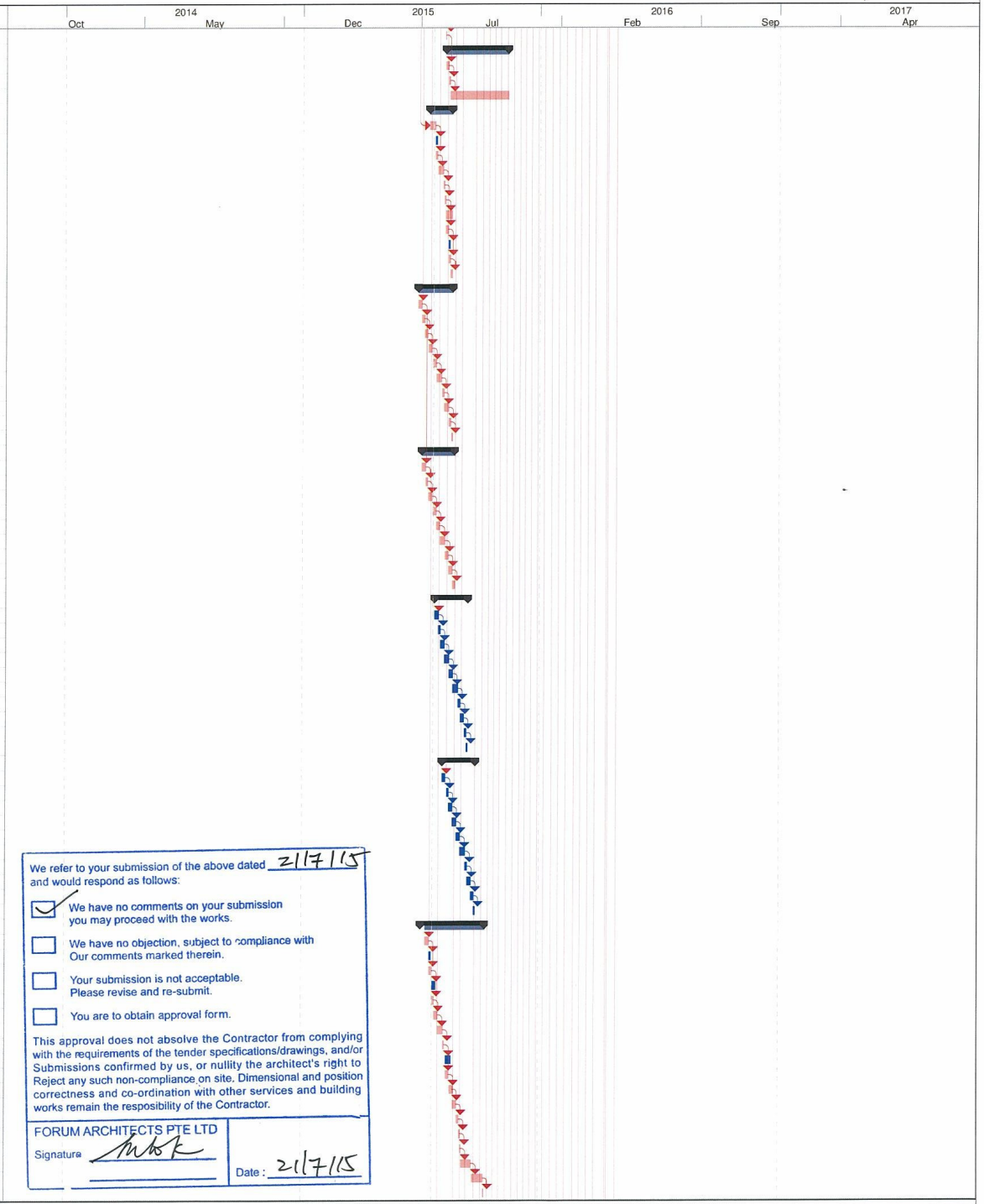
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Date : 21/7/15

6-Derbyshire Project Revised Master Programme (BHCC Construction Pte Ltd)

Update: 21-7-2015

ID	Task Name	Duration	Start	Finish	Predecessors
128	M&E final fix	1 d	Fri 07/8/15	Fri 07/8/15	127
129	**SPPG Sub-Station Power Turn On**	**79 d**	**Sat 08/8/15**	**Wed 11/11/15**	
130	Painting (2nd + final coat) to 1st and 2nd storey	2 d	Sat 08/8/15	Tue 11/8/15	128
131	Inspection and Handing Over to SPPG	2 d	Wed 12/8/15	Thu 13/8/15	130
132	Installation & Energization of SubStation	75 d	Fri 14/8/15	Wed 11/11/15	131
133	**LV Switch Room & MDF Room at 1st sty**	**28 d**	**Tue 14/7/15**	**Mon 17/8/15**	
134	Brickwall	7 d	Tue 14/7/15	Wed 22/7/15	119SS+2 d
135	Joinery 1st fix	2 d	Thu 23/7/15	Fri 24/7/15	134
136	M&E 1st fix	3 d	Thu 23/7/15	Sat 25/7/15	134
137	Plastering	7 d	Mon 27/7/15	Mon 03/8/15	136
138	Floor Screed	2 d	Tue 04/8/15	Wed 05/8/15	137
139	Painting (1st coat)	2 d	Thu 06/8/15	Fri 07/8/15	138
140	M&E 2nd fix	7 d	Sat 08/8/15	Mon 17/8/15	139
141	Door & Ironmongery	2 d	Sat 08/8/15	Tue 11/8/15	139
142	MS Grating and Railing	2 d	Wed 12/8/15	Thu 13/8/15	141
143	M&E final fix	3 d	Wed 12/8/15	Fri 14/8/15	141
144	Painting (2nd + final coat)	2 d	Sat 15/8/15	Mon 17/8/15	143
145	**Basement**	**43 d**	**Sat 27/6/15**	**Tue 18/8/15**	
146	Brickwall	5 d	Sat 27/6/15	Thu 02/7/15	71
147	Joinery 1st fix	3 d	Fri 03/7/15	Mon 06/7/15	146
148	M&E 1st fix	5 d	Tue 07/7/15	Sat 11/7/15	147
149	Plastering	5 d	Mon 13/7/15	Sat 18/7/15	148
150	Waterproofing	5 d	Mon 20/7/15	Fri 24/7/15	149
151	Ceiling Works	7 d	Sat 25/7/15	Sat 01/8/15	150
152	Painting (1st coat)	3 d	Mon 03/8/15	Wed 05/8/15	151
153	M&E 2nd fix / sanitary wares	5 d	Thu 06/8/15	Wed 12/8/15	152
154	Door & Ironmongery	3 d	Thu 13/8/15	Sat 15/8/15	153
155	Painting (2&3 coat)	2 d	Mon 17/8/15	Tue 18/8/15	154
156	**1st storey**	**41 d**	**Fri 03/7/15**	**Fri 21/8/15**	
157	Brickwall	5 d	Fri 03/7/15	Wed 08/7/15	146
158	Joinery 1st fix	3 d	Thu 09/7/15	Sat 11/7/15	157
159	M&E 1st fix	5 d	Mon 13/7/15	Sat 18/7/15	158
160	Plastering	5 d	Mon 20/7/15	Fri 24/7/15	159
161	Waterproofing	5 d	Sat 25/7/15	Thu 30/7/15	160
162	Ceiling Works	7 d	Fri 31/7/15	Fri 07/8/15	161
163	Painting (1st coat)	3 d	Sat 08/8/15	Wed 12/8/15	162
164	M&E 2nd fix / sanitary wares	5 d	Thu 13/8/15	Tue 18/8/15	163
165	Door & Ironmongery	3 d	Wed 19/8/15	Fri 21/8/15	164
166	**2nd storey**	**43 d**	**Thu 23/7/15**	**Fri 11/9/15**	
167	Brickwall	5 d	Thu 23/7/15	Tue 28/7/15	73
168	Joinery 1st fix	3 d	Wed 29/7/15	Fri 31/7/15	167
169	M&E 1st fix	5 d	Sat 01/8/15	Thu 06/8/15	168
170	Plastering	5 d	Fri 07/8/15	Thu 13/8/15	169
171	Waterproofing	5 d	Fri 14/8/15	Wed 19/8/15	170
172	Ceiling Works	7 d	Thu 20/8/15	Thu 27/8/15	171
173	Painting (1st coat)	3 d	Fri 28/8/15	Mon 31/8/15	172
174	M&E 2nd fix / sanitary wares	5 d	Tue 01/9/15	Sat 05/9/15	173
175	Door & Ironmongery	3 d	Mon 07/9/15	Wed 09/9/15	174
176	Painting (2&3 coat)	2 d	Thu 10/9/15	Fri 11/9/15	175
177	**3rd storey**	**43 d**	**Tue 04/8/15**	**Wed 23/9/15**	
178	Brickwall	5 d	Tue 04/8/15	Sat 08/8/15	74
179	Joinery 1st fix	3 d	Tue 11/8/15	Thu 13/8/15	178
180	M&E 1st fix	5 d	Fri 14/8/15	Wed 19/8/15	179
181	Plastering	5 d	Thu 20/8/15	Tue 25/8/15	180
182	Waterproofing	5 d	Wed 26/8/15	Mon 31/8/15	181
183	Ceiling Works	7 d	Tue 01/9/15	Tue 08/9/15	182
184	Painting (1st coat)	3 d	Wed 09/9/15	Fri 11/9/15	183
185	M&E 2nd fix / sanitary wares	5 d	Sat 12/9/15	Thu 17/9/15	184
186	Door & Ironmongery	3 d	Fri 18/9/15	Mon 21/9/15	185
187	Painting (2&3 coat)	2 d	Tue 22/9/15	Wed 23/9/15	186
188	**Mock up units @ 4th sty**	**81 d**	**Fri 03/7/15**	**Thu 08/10/15**	
189	Brickwall	5 d	Fri 10/7/15	Wed 15/7/15	72
190	Joinery 1st fix	2 d	Thu 16/7/15	Sat 18/7/15	189
191	M&E 1st fix	3 d	Thu 16/7/15	Mon 20/7/15	189
192	Plastering	5 d	Tue 21/7/15	Sat 25/7/15	191
193	Waterproofing	3 d	Tue 21/7/15	Thu 23/7/15	191
194	Ceiling Works	5 d	Fri 24/7/15	Wed 29/7/15	193
195	Wall & Floor tiles	7 d	Thu 30/7/15	Thu 06/8/15	194
196	Painting (1st coat)	2 d	Fri 07/8/15	Sat 08/8/15	195
197	Glazing Works (window/sliding door/balustrades/railing)	7 d	Tue 11/8/15	Tue 18/8/15	196
198	M&E 2nd fix / sanitary wares	5 d	Tue 11/8/15	Sat 15/8/15	196
199	Timber Flooring	5 d	Mon 17/8/15	Fri 21/8/15	198
200	Wardrobe / Kitchen Cabinet / Electrical Appliances	5 d	Sat 22/8/15	Thu 27/8/15	199
201	Door & Ironmongery	3 d	Fri 28/8/15	Mon 31/8/15	200
202	Painting (2&3 coat)	2 d	Tue 01/9/15	Wed 02/9/15	201
203	Marble Polish / Timber Varnish / Clean-Up	1 d	Thu 03/9/15	Thu 03/9/15	202
204	1st Inspection and rectification work of mock up units	14 d	Fri 04/9/15	Sat 19/9/15	203
205	2nd Inspection and rectification work of mock up units	14 d	Mon 21/9/15	Wed 07/10/15	204
206	Mock up units approval	1 d	Thu 08/10/15	Thu 08/10/15	205



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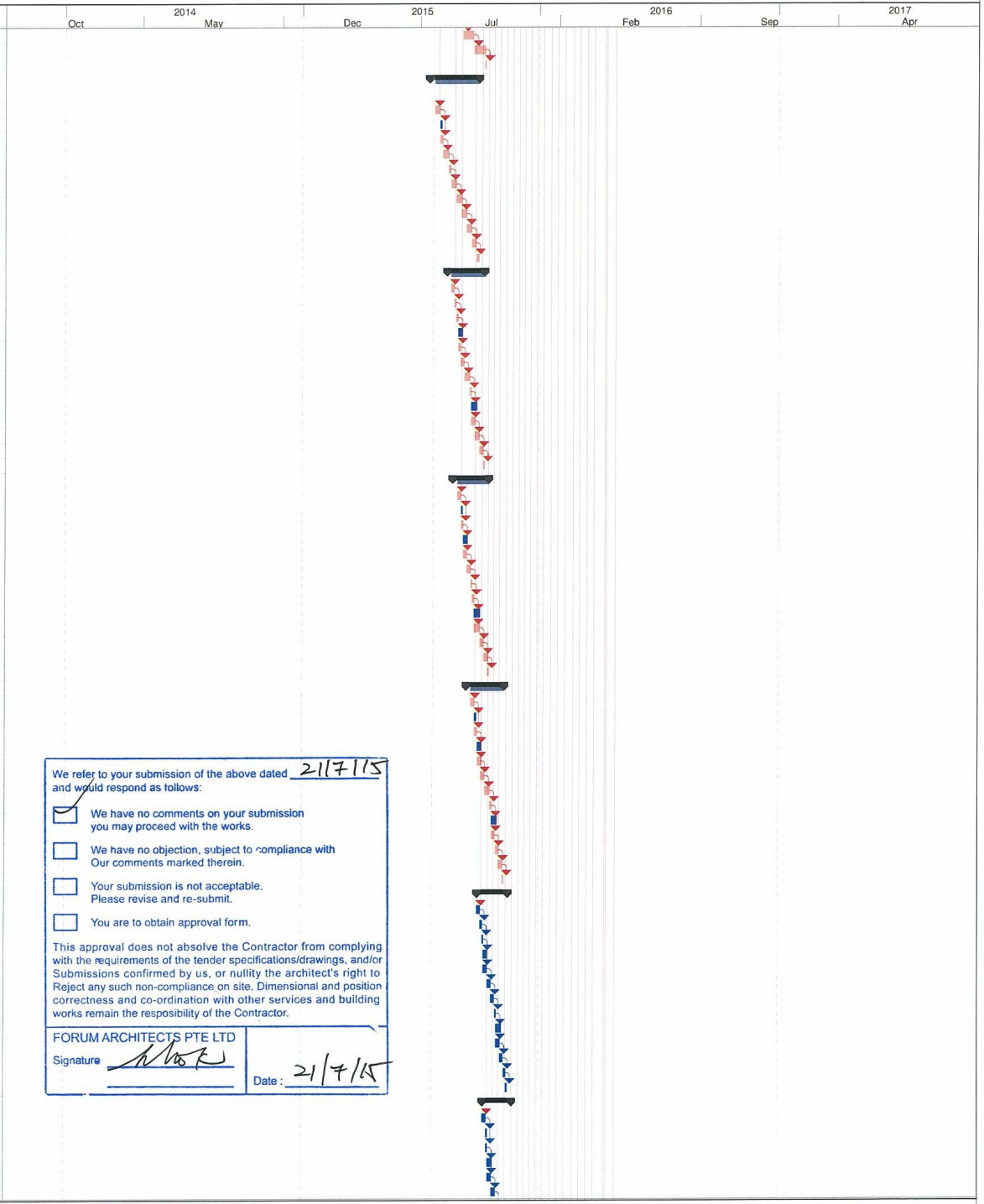
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Date : 21/7/15

6-Derbyshire Project Revised Master Programme (BHCC Construction Pte Ltd)

Update: 21-7-2015

ID	Task Name	Duration	Start	Finish	Predecessors
207	RI Inspection (Arch / M&E)	14 d	Fri 04/9/15	Sat 19/9/15	203
208	BCA TOP Application / Inspection / Documents Compilation	14 d	Mon 21/9/15	Wed 07/10/15	207
209	Partial TOP	1 d	Thu 08/10/15	Thu 08/10/15	208
210	**1st to 4th storey Common Area (staircase / lift lobby) with Partial TOP**	**62 d**	**Wed 15/7/15**	**Mon 28/9/15**	
211	Brickwall / Fire-Rated Dry Wall	7 d	Thu 23/7/15	Thu 30/7/15	73
212	Joinery 1st fix	2 d	Fri 31/7/15	Sat 01/8/15	211
213	M&E 1st fix	3 d	Fri 31/7/15	Mon 03/8/15	211
214	Plastering	7 d	Tue 04/8/15	Wed 12/8/15	213
215	Painting (1st coat)	3 d	Thu 13/8/15	Sat 15/8/15	214
216	M&E 2nd fix	7 d	Mon 17/8/15	Mon 24/8/15	215
217	Ceiling works	7 d	Tue 25/8/15	Tue 01/9/15	216
218	Staircase Railing	7 d	Wed 02/9/15	Wed 09/9/15	217
219	Floor tiles	7 d	Thu 10/9/15	Thu 17/9/15	218
220	Door & Ironmongery	5 d	Fri 18/9/15	Wed 23/9/15	219
221	Painting (2&3 coat)	3 d	Fri 25/9/15	Mon 28/9/15	220
222	**5th storey**	**49 d**	**Tue 11/8/15**	**Wed 07/10/15**	
223	Brickwall	5 d	Mon 17/8/15	Fri 21/8/15	75
224	Joinery 1st fix	2 d	Sat 22/8/15	Mon 24/8/15	223
225	M&E 1st fix	3 d	Tue 25/8/15	Thu 27/8/15	224
226	Plastering	5 d	Fri 28/8/15	Wed 02/9/15	225
227	Waterproofing	3 d	Fri 28/8/15	Mon 31/8/15	225
228	Ceiling works	5 d	Tue 01/9/15	Sat 05/9/15	227
229	Wall & Floor tiles	7 d	Mon 07/9/15	Mon 14/9/15	228
230	Painting (1st coat)	2 d	Tue 15/9/15	Wed 16/9/15	229
231	Glazing Works (window/sliding door/balustrades/railing)	7 d	Thu 17/9/15	Fri 25/9/15	230
232	M&E 2nd fix / sanitary wares	5 d	Thu 17/9/15	Tue 22/9/15	230
233	Timber Flooring	5 d	Wed 23/9/15	Tue 29/9/15	232
234	Wardrobe / Kitchen Cabinet / Electrical Appliances	5 d	Wed 30/9/15	Mon 05/10/15	233
235	Door & Ironmongery	2 d	Tue 06/10/15	Wed 07/10/15	234
236	**6th storey**	**47 d**	**Thu 20/8/15**	**Wed 14/10/15**	
237	Brickwall	5 d	Thu 27/8/15	Tue 01/9/15	76
238	Joinery 1st fix	2 d	Wed 02/9/15	Thu 03/9/15	237
239	M&E 1st fix	3 d	Wed 02/9/15	Fri 04/9/15	237
240	Plastering	5 d	Sat 05/9/15	Thu 10/9/15	239
241	Waterproofing	5 d	Sat 05/9/15	Thu 10/9/15	239
242	Ceiling works	5 d	Fri 11/9/15	Wed 16/9/15	241
243	Wall & Floor tiles	2 d	Thu 17/9/15	Fri 18/9/15	242
244	Painting (1st coat)	2 d	Sat 19/9/15	Mon 21/9/15	243
245	Glazing Works (window/sliding door/balustrades/railing)	7 d	Tue 22/9/15	Wed 30/9/15	244
246	M&E 2nd fix / sanitary wares	7 d	Tue 22/9/15	Wed 30/9/15	244
247	Timber Flooring	5 d	Thu 01/10/15	Tue 06/10/15	246
248	Wardrobe / Kitchen Cabinet / Electrical Appliances	5 d	Wed 07/10/15	Mon 12/10/15	247
249	Door & Ironmongery	2 d	Tue 13/10/15	Wed 14/10/15	248
250	**7th storey**	**50 d**	**Thu 10/9/15**	**Sat 07/11/15**	
251	Brickwall	5 d	Thu 17/9/15	Tue 22/9/15	78
252	Joinery 1st fix	2 d	Wed 23/9/15	Fri 25/9/15	251
253	M&E 1st fix	3 d	Wed 23/9/15	Sat 26/9/15	251
254	Plastering	5 d	Mon 28/9/15	Fri 02/10/15	253
255	Waterproofing	5 d	Mon 28/9/15	Fri 02/10/15	253
256	Ceiling works	5 d	Sat 03/10/15	Thu 08/10/15	255
257	Wall & Floor tiles	7 d	Fri 09/10/15	Fri 16/10/15	256
258	Painting (1st coat)	2 d	Sat 17/10/15	Mon 19/10/15	257
259	Glazing Works (window/sliding door/balustrades/railing)	7 d	Tue 20/10/15	Tue 27/10/15	258
260	M&E 2nd fix / sanitary wares	5 d	Tue 20/10/15	Sat 24/10/15	258
261	Timber Flooring	5 d	Mon 26/10/15	Fri 30/10/15	260
262	Wardrobe / Kitchen Cabinet / Electrical Appliances	5 d	Sat 31/10/15	Thu 05/11/15	261
263	Door & Ironmongery	2 d	Fri 06/11/15	Sat 07/11/15	262
264	**8th storey**	**40 d**	**Mon 28/9/15**	**Fri 13/11/15**	
265	Brickwall	5 d	Mon 28/9/15	Fri 02/10/15	79
266	Joinery 1st fix	2 d	Sat 03/10/15	Mon 05/10/15	265
267	M&E 1st fix	2 d	Tue 06/10/15	Wed 07/10/15	266
268	Plastering	5 d	Thu 08/10/15	Tue 13/10/15	267
269	Waterproofing	5 d	Thu 08/10/15	Tue 13/10/15	267
270	Ceiling works	5 d	Wed 14/10/15	Mon 19/10/15	269
271	Wall & Floor tiles	5 d	Tue 20/10/15	Sat 24/10/15	270
272	Painting (1st coat)	2 d	Mon 26/10/15	Tue 27/10/15	271
273	Glazing Works (window/sliding door/balustrades/railing)	7 d	Wed 28/10/15	Wed 04/11/15	272
274	M&E 2nd fix / sanitary wares	5 d	Wed 28/10/15	Mon 02/11/15	272
275	Timber Flooring	5 d	Tue 03/11/15	Sat 07/11/15	274
276	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Mon 09/11/15	Wed 11/11/15	275
277	Door & Ironmongery	2 d	Thu 12/11/15	Fri 13/11/15	276
278	**9th storey**	**38 d**	**Wed 07/10/15**	**Fri 20/11/15**	
279	Brickwall	5 d	Wed 07/10/15	Mon 12/10/15	80
280	Joinery 1st fix	2 d	Tue 13/10/15	Wed 14/10/15	279
281	M&E 1st fix	2 d	Tue 13/10/15	Wed 14/10/15	279
282	Plastering	5 d	Thu 15/10/15	Tue 20/10/15	281
283	Waterproofing	5 d	Thu 15/10/15	Tue 20/10/15	281
284	Ceiling works	5 d	Wed 21/10/15	Mon 26/10/15	283



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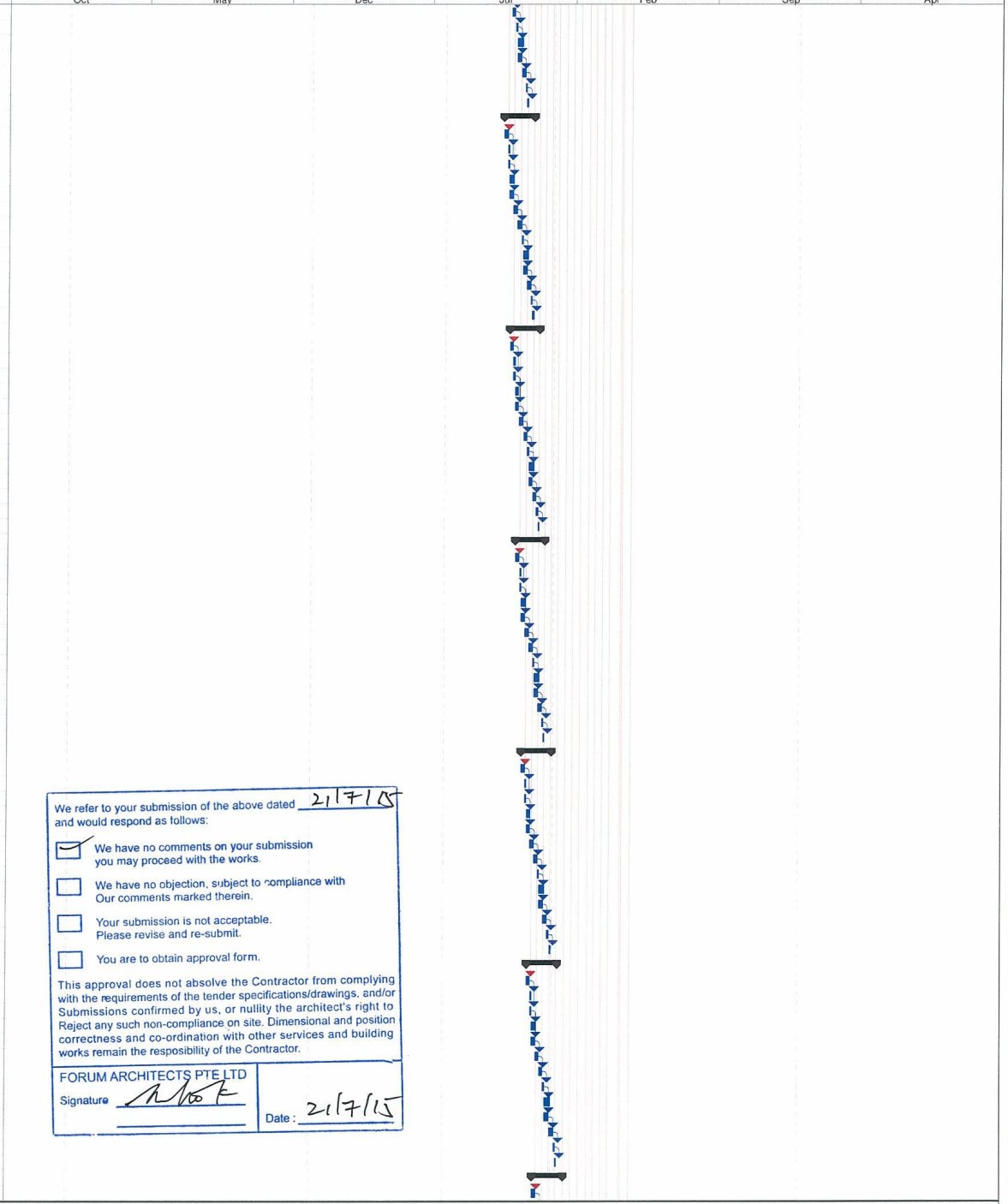
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Date : 21/7/15

6-Derbyshire Project Revised Master Programme (BHCC Construction Pte Ltd)

Update: 21-7-2015

ID	Task Name	Duration	Start	Finish	Predecessors
285	Wall & Floor tiles	5 d	Tue 27/10/15	Sat 31/10/15	284
286	Painting (1st coat)	2 d	Mon 02/11/15	Tue 03/11/15	285
287	Glazing Works (window/sliding door/balustrades/railing)	7 d	Wed 04/11/15	Thu 12/11/15	286
288	M&E 2nd fix / sanitary wares	5 d	Wed 04/11/15	Mon 09/11/15	286
289	Timber Flooring	5 d	Wed 11/11/15	Mon 16/11/15	288
290	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Tue 17/11/15	Wed 18/11/15	289
291	Door & Ironmongery	2 d	Thu 19/11/15	Fri 20/11/15	290
292	**10th storey**	**38 d**	**Fri 16/10/15**	**Mon 30/11/15**	
293	Brickwall	5 d	Fri 16/10/15	Wed 21/10/15	81
294	Joinery 1st fix	2 d	Thu 22/10/15	Fri 23/10/15	293
295	M&E 1st fix	2 d	Thu 22/10/15	Fri 23/10/15	293
296	Plastering	5 d	Sat 24/10/15	Thu 29/10/15	295
297	Waterproofing	5 d	Sat 24/10/15	Thu 29/10/15	295
298	Ceiling works	5 d	Fri 30/10/15	Wed 04/11/15	297
299	Wall & Floor tiles	5 d	Thu 05/11/15	Wed 11/11/15	298
300	Painting (1st coat)	2 d	Thu 12/11/15	Fri 13/11/15	299
301	Glazing Works (window/sliding door/balustrades/railing)	7 d	Sat 14/11/15	Sat 21/11/15	300
302	M&E 2nd fix / sanitary wares	5 d	Sat 14/11/15	Thu 19/11/15	300
303	Timber Flooring	5 d	Fri 20/11/15	Wed 25/11/15	302
304	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Thu 26/11/15	Fri 27/11/15	303
305	Door & Ironmongery	2 d	Sat 28/11/15	Mon 30/11/15	304
306	**11th storey**	**38 d**	**Mon 26/10/15**	**Wed 09/12/15**	
307	Brickwall	5 d	Mon 26/10/15	Fri 30/10/15	82
308	Joinery 1st fix	2 d	Sat 31/10/15	Mon 02/11/15	307
309	M&E 1st fix	2 d	Sat 31/10/15	Mon 02/11/15	307
310	Plastering	5 d	Tue 03/11/15	Sat 07/11/15	309
311	Waterproofing	5 d	Tue 03/11/15	Sat 07/11/15	309
312	Ceiling works	5 d	Mon 09/11/15	Sat 14/11/15	311
313	Wall & Floor tiles	5 d	Mon 16/11/15	Fri 20/11/15	312
314	Painting (1st coat)	2 d	Sat 21/11/15	Mon 23/11/15	313
315	Glazing Works (window/sliding door/balustrades/railing)	7 d	Tue 24/11/15	Tue 01/12/15	314
316	M&E 2nd fix / sanitary wares	5 d	Tue 24/11/15	Sat 28/11/15	314
317	Timber Flooring	5 d	Mon 30/11/15	Fri 04/12/15	316
318	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Sat 05/12/15	Mon 07/12/15	317
319	Door & Ironmongery	2 d	Tue 08/12/15	Wed 09/12/15	318
320	**12th storey**	**38 d**	**Wed 04/11/15**	**Fri 18/12/15**	
321	Brickwall	5 d	Wed 04/11/15	Mon 09/11/15	83
322	Joinery 1st fix	2 d	Wed 11/11/15	Thu 12/11/15	321
323	M&E 1st fix	2 d	Wed 11/11/15	Thu 12/11/15	321
324	Plastering	5 d	Fri 13/11/15	Wed 18/11/15	323
325	Waterproofing	5 d	Fri 13/11/15	Wed 18/11/15	323
326	Ceiling works	5 d	Thu 19/11/15	Tue 24/11/15	325
327	Wall & Floor tiles	5 d	Wed 25/11/15	Mon 30/11/15	326
328	Painting (1st coat)	2 d	Tue 01/12/15	Wed 02/12/15	327
329	Glazing Works (window/sliding door/balustrades/railing)	7 d	Thu 03/12/15	Thu 10/12/15	328
330	M&E 2nd fix / sanitary wares	5 d	Thu 03/12/15	Tue 08/12/15	328
331	Timber Flooring	5 d	Wed 09/12/15	Mon 14/12/15	330
332	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Tue 15/12/15	Wed 16/12/15	331
333	Door & Ironmongery	2 d	Thu 17/12/15	Fri 18/12/15	332
334	**13th storey**	**38 d**	**Sat 14/11/15**	**Tue 29/12/15**	
335	Brickwall	5 d	Sat 14/11/15	Thu 19/11/15	84
336	Joinery 1st fix	2 d	Fri 20/11/15	Sat 21/11/15	335
337	M&E 1st fix	2 d	Fri 20/11/15	Sat 21/11/15	335
338	Plastering	5 d	Mon 23/11/15	Fri 27/11/15	337
339	Waterproofing	5 d	Mon 23/11/15	Fri 27/11/15	337
340	Ceiling works	5 d	Sat 28/11/15	Thu 03/12/15	339
341	Wall & Floor tiles	5 d	Fri 04/12/15	Wed 09/12/15	340
342	Painting (1st coat)	2 d	Thu 10/12/15	Fri 11/12/15	341
343	Glazing Works (window/sliding door/balustrades/railing)	7 d	Sat 12/12/15	Sat 19/12/15	342
344	M&E 2nd fix / sanitary wares	5 d	Sat 12/12/15	Thu 17/12/15	342
345	Timber Flooring	5 d	Fri 18/12/15	Wed 23/12/15	344
346	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Thu 24/12/15	Sat 26/12/15	345
347	Door & Ironmongery	2 d	Mon 28/12/15	Tue 29/12/15	346
348	**14th storey**	**38 d**	**Tue 24/11/15**	**Fri 08/1/16**	
349	Brickwall	5 d	Tue 24/11/15	Sat 28/11/15	85
350	Joinery 1st fix	2 d	Mon 30/11/15	Tue 01/12/15	349
351	M&E 1st fix	2 d	Mon 30/11/15	Tue 01/12/15	349
352	Plastering	5 d	Wed 02/12/15	Mon 07/12/15	351
353	Waterproofing	5 d	Wed 02/12/15	Mon 07/12/15	351
354	Ceiling works	5 d	Tue 08/12/15	Sat 12/12/15	353
355	Wall & Floor tiles	5 d	Mon 14/12/15	Fri 18/12/15	354
356	Painting (1st coat)	2 d	Sat 19/12/15	Mon 21/12/15	355
357	Glazing Works (window/sliding door/balustrades/railing)	7 d	Tue 22/12/15	Wed 30/12/15	356
358	M&E 2nd fix / sanitary wares	5 d	Tue 22/12/15	Mon 28/12/15	356
359	Timber Flooring	5 d	Tue 29/12/15	Mon 04/1/16	358
360	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Tue 05/1/16	Wed 06/1/16	359
361	Door & Ironmongery	2 d	Thu 07/1/16	Fri 08/1/16	360
362	**15th storey**	**38 d**	**Thu 03/12/15**	**Mon 18/1/16**	
363	Brickwall	5 d	Thu 03/12/15	Tue 08/12/15	86



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and would respond as follows:

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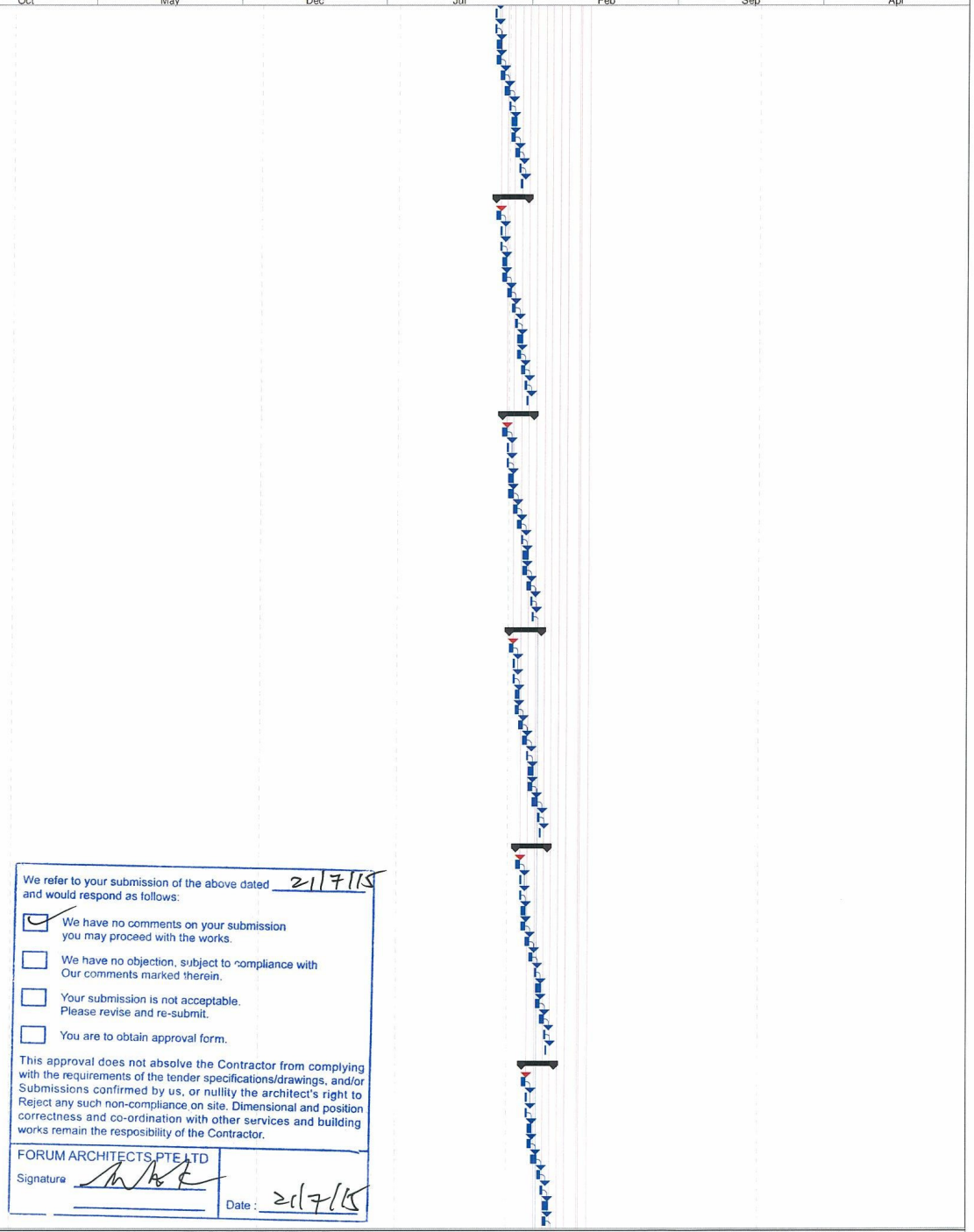
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FORUM ARCHITECTS PTE LTD
Signature
Date : 21/7/15

6-Derbyshire Project Revised Master Programme (BHCC Construction Pte Ltd)

Update: 21-7-2015

ID	Task Name	Duration	Start	Finish	Predecessors
364	Joinery 1st fix	2 d	Wed 09/12/15	Thu 10/12/15	363
365	M&E 1st fix	2 d	Wed 09/12/15	Thu 10/12/15	363
366	Plastering	5 d	Fri 11/12/15	Wed 16/12/15	365
367	Waterproofing	5 d	Fri 11/12/15	Wed 16/12/15	365
368	Ceiling works	5 d	Thu 17/12/15	Tue 22/12/15	367
369	Wall & Floor tiles	5 d	Wed 23/12/15	Tue 29/12/15	368
370	Painting (1st coat)	2 d	Wed 30/12/15	Thu 31/12/15	369
371	Glazing Works (window/sliding door/balustrades/railing)	7 d	Sat 02/1/16	Sat 09/1/16	370
372	M&E 2nd fix / sanitary wares	5 d	Sat 02/1/16	Thu 07/1/16	370
373	Timber Flooring	5 d	Fri 08/1/16	Wed 13/1/16	372
374	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Thu 14/1/16	Fri 15/1/16	373
375	Door & Ironmongery	2 d	Sat 16/1/16	Mon 18/1/16	374
376	**16th storey**	**38 d**	**Sat 12/12/15**	**Wed 27/1/16**	
377	Brickwall	5 d	Sat 12/12/15	Thu 17/12/15	87
378	Joinery 1st fix	2 d	Fri 18/12/15	Sat 19/12/15	377
379	M&E 1st fix	2 d	Fri 18/12/15	Sat 19/12/15	377
380	Plastering	5 d	Mon 21/12/15	Sat 26/12/15	379
381	Waterproofing	5 d	Mon 21/12/15	Sat 26/12/15	379
382	Ceiling works	5 d	Mon 28/12/15	Sat 02/1/16	381
383	Wall & Floor tiles	5 d	Mon 04/1/16	Fri 08/1/16	382
384	Painting (1st coat)	2 d	Sat 09/1/16	Mon 11/1/16	383
385	Glazing Works (window/sliding door/balustrades/railing)	7 d	Tue 12/1/16	Tue 19/1/16	384
386	M&E 2nd fix / sanitary wares	5 d	Tue 12/1/16	Sat 16/1/16	384
387	Timber Flooring	5 d	Mon 18/1/16	Fri 22/1/16	386
388	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Sat 23/1/16	Mon 25/1/16	387
389	Door & Ironmongery	2 d	Tue 26/1/16	Wed 27/1/16	388
390	**17th storey**	**38 d**	**Tue 22/12/15**	**Fri 05/2/16**	
391	Brickwall	5 d	Tue 22/12/15	Mon 28/12/15	88
392	Joinery 1st fix	2 d	Tue 29/12/15	Wed 30/12/15	391
393	M&E 1st fix	2 d	Tue 29/12/15	Wed 30/12/15	391
394	Plastering	5 d	Thu 31/12/15	Wed 06/1/16	393
395	Waterproofing	5 d	Thu 31/12/15	Wed 06/1/16	393
396	Ceiling works	5 d	Thu 07/1/16	Tue 12/1/16	395
397	Wall & Floor tiles	5 d	Wed 13/1/16	Mon 18/1/16	396
398	Painting (1st coat)	2 d	Tue 19/1/16	Wed 20/1/16	397
399	Glazing Works (window/sliding door/balustrades/railing)	7 d	Thu 21/1/16	Thu 28/1/16	398
400	M&E 2nd fix / sanitary wares	5 d	Thu 21/1/16	Tue 26/1/16	398
401	Timber Flooring	5 d	Wed 27/1/16	Mon 01/2/16	400
402	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Tue 02/2/16	Wed 03/2/16	401
403	Door & Ironmongery	2 d	Thu 04/2/16	Fri 05/2/16	402
404	**18th storey**	**38 d**	**Sat 02/1/16**	**Wed 17/2/16**	
405	Brickwall	5 d	Sat 02/1/16	Thu 07/1/16	89
406	Joinery 1st fix	2 d	Fri 08/1/16	Sat 09/1/16	405
407	M&E 1st fix	2 d	Fri 08/1/16	Sat 09/1/16	405
408	Plastering	5 d	Mon 11/1/16	Fri 15/1/16	407
409	Waterproofing	5 d	Mon 11/1/16	Fri 15/1/16	407
410	Ceiling works	5 d	Sat 16/1/16	Thu 21/1/16	409
411	Wall & Floor tiles	5 d	Fri 22/1/16	Wed 27/1/16	410
412	Painting (1st coat)	2 d	Thu 28/1/16	Fri 29/1/16	411
413	Glazing Works (window/sliding door/balustrades/railing)	7 d	Sat 30/1/16	Sat 06/2/16	412
414	M&E 2nd fix / sanitary wares	5 d	Sat 30/1/16	Thu 04/2/16	412
415	Timber Flooring	5 d	Fri 05/2/16	Fri 12/2/16	414
416	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Sat 13/2/16	Mon 15/2/16	415
417	Door & Ironmongery	2 d	Tue 16/2/16	Wed 17/2/16	416
418	**19th storey**	**38 d**	**Wed 13/1/16**	**Sat 27/2/16**	
419	Brickwall	5 d	Wed 13/1/16	Mon 18/1/16	90
420	Joinery 1st fix	2 d	Tue 19/1/16	Wed 20/1/16	419
421	M&E 1st fix	2 d	Tue 19/1/16	Wed 20/1/16	419
422	Plastering	5 d	Thu 21/1/16	Tue 26/1/16	421
423	Waterproofing	5 d	Thu 21/1/16	Tue 26/1/16	421
424	Ceiling works	5 d	Wed 27/1/16	Mon 01/2/16	423
425	Wall & Floor tiles	5 d	Tue 02/2/16	Sat 06/2/16	424
426	Painting (1st coat)	2 d	Wed 10/2/16	Thu 11/2/16	425
427	Glazing Works (window/sliding door/balustrades/railing)	7 d	Fri 12/2/16	Fri 19/2/16	426
428	M&E 2nd fix / sanitary wares	5 d	Fri 12/2/16	Wed 17/2/16	426
429	Timber Flooring	5 d	Thu 18/2/16	Tue 23/2/16	428
430	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Wed 24/2/16	Thu 25/2/16	429
431	Door & Ironmongery	2 d	Fri 26/2/16	Sat 27/2/16	430
432	**20th storey**	**38 d**	**Sat 23/1/16**	**Wed 09/3/16**	
433	Brickwall	5 d	Sat 23/1/16	Thu 28/1/16	91
434	Joinery 1st fix	2 d	Fri 29/1/16	Sat 30/1/16	433
435	M&E 1st fix	2 d	Fri 29/1/16	Sat 30/1/16	433
436	Plastering	5 d	Mon 01/2/16	Fri 05/2/16	435
437	Waterproofing	5 d	Mon 01/2/16	Fri 05/2/16	435
438	Ceiling works	5 d	Sat 06/2/16	Sat 13/2/16	437
439	Wall & Floor tiles	5 d	Mon 15/2/16	Fri 19/2/16	438
440	Painting (1st coat)	2 d	Sat 20/2/16	Mon 22/2/16	439
441	Glazing Works (window/sliding door/balustrades/railing)	7 d	Tue 23/2/16	Tue 01/3/16	440
442	M&E 2nd fix / sanitary wares	5 d	Tue 23/2/16	Sat 27/2/16	440



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FORUM ARCHITECTS PTE LTD

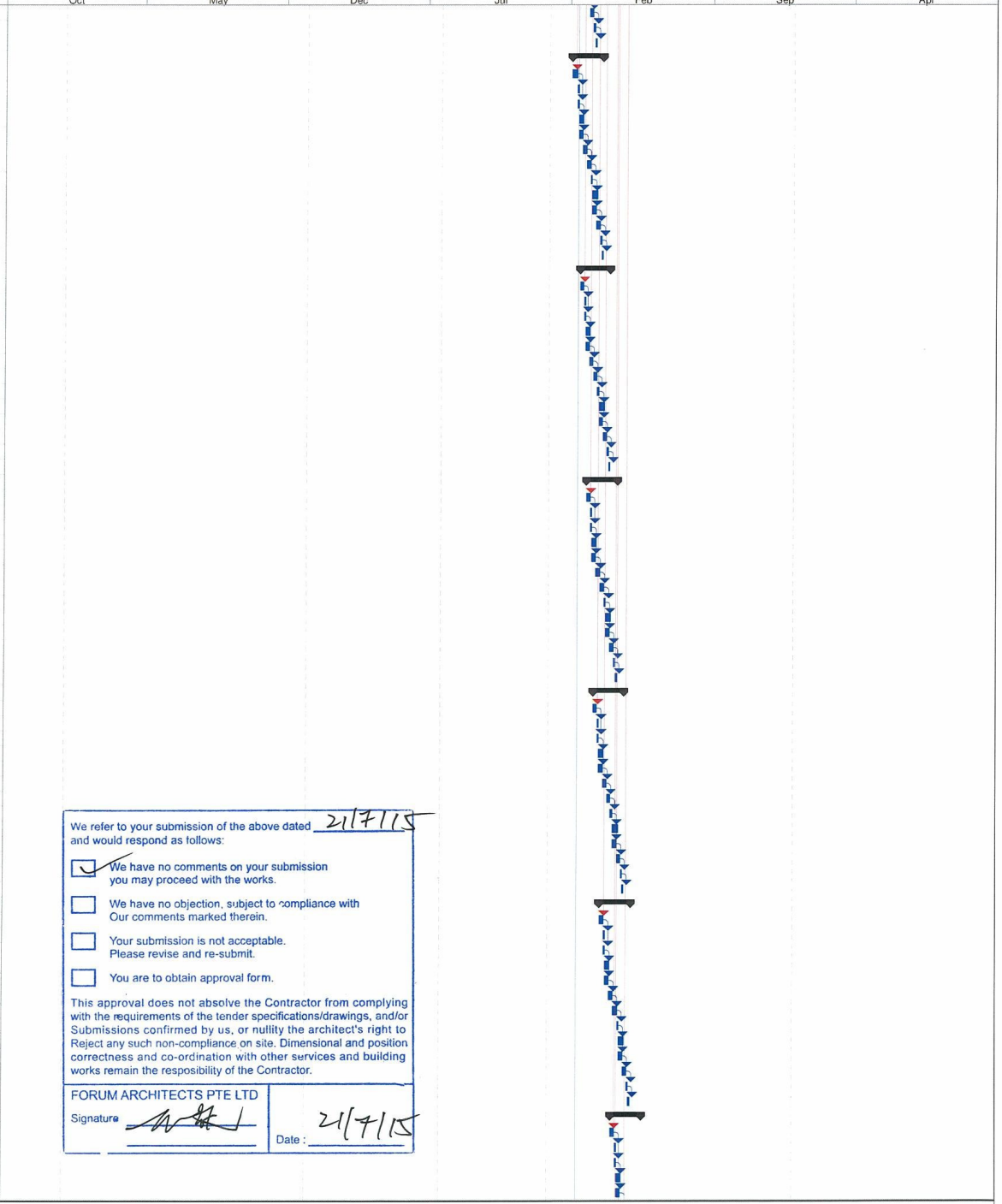
Signature

Date : 21/7/15

6-Derbyshire Project Revised Master Programme (BHCC Construction Pte Ltd)

Update: 21-7-2015

ID	Task Name	Duration	Start	Finish	Predecessors
443	Timber Flooring	5 d	Mon 29/2/16	Fri 04/3/16	442
444	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Sat 05/3/16	Mon 07/3/16	443
445	Door & Ironmongery	2 d	Tue 08/3/16	Wed 09/3/16	444
446	**21st storey**	**38 d**	**Wed 03/2/16**	**Sat 19/3/16**	
447	Brickwall	5 d	Wed 03/2/16	Wed 10/2/16	92
448	Joinery 1st fix	2 d	Thu 11/2/16	Fri 12/2/16	447
449	M&E 1st fix	2 d	Thu 11/2/16	Fri 12/2/16	447
450	Plastering	5 d	Sat 13/2/16	Thu 18/2/16	449
451	Waterproofing	5 d	Sat 13/2/16	Thu 18/2/16	449
452	Ceiling works	5 d	Fri 19/2/16	Wed 24/2/16	451
453	Wall & Floor tiles	5 d	Thu 25/2/16	Tue 01/3/16	452
454	Painting (1st coat)	2 d	Wed 02/3/16	Thu 03/3/16	453
455	Glazing Works (window/sliding door/balustrades/railing)	7 d	Fri 04/3/16	Fri 11/3/16	454
456	M&E 2nd fix / sanitary wares	5 d	Fri 04/3/16	Wed 09/3/16	454
457	Timber Flooring	5 d	Thu 10/3/16	Tue 15/3/16	456
458	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Wed 16/3/16	Thu 17/3/16	457
459	Door & Ironmongery	2 d	Fri 18/3/16	Sat 19/3/16	458
460	**22nd storey**	**38 d**	**Tue 16/2/16**	**Wed 30/3/16**	
461	Brickwall	5 d	Tue 16/2/16	Sat 20/2/16	93
462	Joinery 1st fix	2 d	Mon 22/2/16	Tue 23/2/16	461
463	M&E 1st fix	2 d	Mon 22/2/16	Tue 23/2/16	461
464	Plastering	5 d	Wed 24/2/16	Mon 29/2/16	463
465	Waterproofing	5 d	Wed 24/2/16	Mon 29/2/16	463
466	Ceiling works	5 d	Tue 01/3/16	Sat 05/3/16	465
467	Wall & Floor tiles	5 d	Mon 07/3/16	Fri 11/3/16	466
468	Painting (1st coat)	2 d	Sat 12/3/16	Mon 14/3/16	467
469	Glazing Works (window/sliding door/balustrades/railing)	7 d	Tue 15/3/16	Tue 22/3/16	468
470	M&E 2nd fix / sanitary wares	5 d	Tue 15/3/16	Sat 19/3/16	468
471	Timber Flooring	5 d	Mon 21/3/16	Fri 25/3/16	470
472	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Sat 26/3/16	Mon 28/3/16	471
473	Door & Ironmongery	2 d	Tue 29/3/16	Wed 30/3/16	472
474	**23rd storey**	**38 d**	**Fri 26/2/16**	**Mon 11/4/16**	
475	Brickwall	5 d	Fri 26/2/16	Wed 02/3/16	94
476	Joinery 1st fix	2 d	Thu 03/3/16	Fri 04/3/16	475
477	M&E 1st fix	2 d	Thu 03/3/16	Fri 04/3/16	475
478	Plastering	5 d	Sat 05/3/16	Thu 10/3/16	477
479	Waterproofing	5 d	Sat 05/3/16	Thu 10/3/16	477
480	Ceiling works	5 d	Fri 11/3/16	Wed 16/3/16	479
481	Wall & Floor tiles	5 d	Thu 17/3/16	Tue 22/3/16	480
482	Painting (1st coat)	2 d	Wed 23/3/16	Thu 24/3/16	481
483	Glazing Works (window/sliding door/balustrades/railing)	7 d	Fri 25/3/16	Fri 01/4/16	482
484	M&E 2nd fix / sanitary wares	5 d	Fri 25/3/16	Wed 30/3/16	482
485	Timber Flooring	5 d	Thu 31/3/16	Tue 05/4/16	484
486	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Wed 06/4/16	Thu 07/4/16	485
487	Door & Ironmongery	2 d	Sat 09/4/16	Mon 11/4/16	486
488	**24th storey**	**38 d**	**Tue 08/3/16**	**Thu 21/4/16**	
489	Brickwall	5 d	Tue 08/3/16	Sat 12/3/16	95
490	Joinery 1st fix	2 d	Mon 14/3/16	Tue 15/3/16	489
491	M&E 1st fix	2 d	Mon 14/3/16	Tue 15/3/16	489
492	Plastering	5 d	Wed 16/3/16	Mon 21/3/16	491
493	Waterproofing	5 d	Wed 16/3/16	Mon 21/3/16	491
494	Ceiling works	5 d	Tue 22/3/16	Sat 26/3/16	493
495	Wall & Floor tiles	5 d	Mon 28/3/16	Fri 01/4/16	494
496	Painting (1st coat)	2 d	Sat 02/4/16	Mon 04/4/16	495
497	Glazing Works (window/sliding door/balustrades/railing)	7 d	Tue 05/4/16	Wed 13/4/16	496
498	M&E 2nd fix / sanitary wares	5 d	Tue 05/4/16	Mon 11/4/16	496
499	Timber Flooring	5 d	Tue 12/4/16	Sat 16/4/16	498
500	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Mon 18/4/16	Tue 19/4/16	499
501	Door & Ironmongery	2 d	Wed 20/4/16	Thu 21/4/16	500
502	**25th storey**	**38 d**	**Fri 18/3/16**	**Mon 02/5/16**	
503	Brickwall	5 d	Fri 18/3/16	Wed 23/3/16	96
504	Joinery 1st fix	2 d	Thu 24/3/16	Fri 25/3/16	503
505	M&E 1st fix	2 d	Thu 24/3/16	Fri 25/3/16	503
506	Plastering	5 d	Sat 26/3/16	Thu 31/3/16	505
507	Waterproofing	5 d	Sat 26/3/16	Thu 31/3/16	505
508	Ceiling works	5 d	Fri 01/4/16	Wed 06/4/16	507
509	Wall & Floor tiles	5 d	Thu 07/4/16	Wed 13/4/16	508
510	Painting (1st coat)	2 d	Thu 14/4/16	Fri 15/4/16	509
511	Glazing Works (window/sliding door/balustrades/railing)	7 d	Sat 16/4/16	Sat 23/4/16	510
512	M&E 2nd fix / sanitary wares	5 d	Sat 16/4/16	Thu 21/4/16	510
513	Timber Flooring	5 d	Fri 22/4/16	Wed 27/4/16	512
514	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Thu 28/4/16	Fri 29/4/16	513
515	Door & Ironmongery	2 d	Sat 30/4/16	Mon 02/5/16	514
516	**26th storey**	**38 d**	**Mon 04/4/16**	**Thu 19/5/16**	
517	Brickwall	5 d	Mon 04/4/16	Sat 09/4/16	97
518	Joinery 1st fix	2 d	Mon 11/4/16	Tue 12/4/16	517
519	M&E 1st fix	2 d	Mon 11/4/16	Tue 12/4/16	517
520	Plastering	5 d	Wed 13/4/16	Mon 18/4/16	519
521	Waterproofing	5 d	Wed 13/4/16	Mon 18/4/16	519



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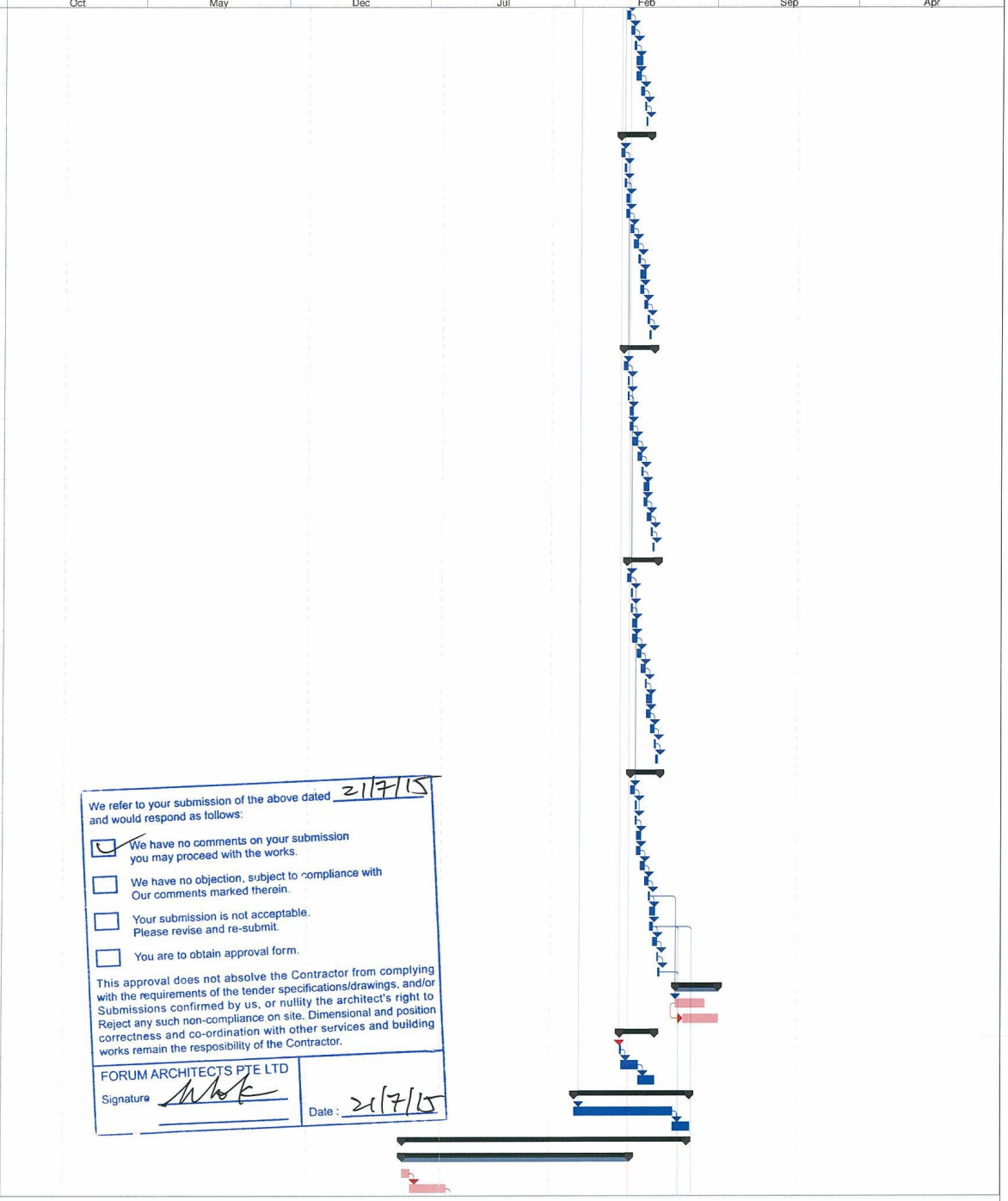
FORUM ARCHITECTS PTE LTD

Signature: _____ Date: 21/7/15

6-Derbyshire Project Revised Master Programme (BHCC Construction Pte Ltd)

Update: 21-7-2015

ID	Task Name	Duration	Start	Finish	Predecessors
522	Ceiling works	5 d	Tue 19/4/16	Sat 23/4/16	521
523	Wall & Floor tiles	5 d	Mon 25/4/16	Fri 29/4/16	522
524	Painting (1st coat)	2 d	Sat 30/4/16	Mon 02/5/16	523
525	Glazing Works (window/sliding door/balustrades/railing)	7 d	Tue 03/5/16	Wed 11/5/16	524
526	M&E 2nd fix / sanitary wares	5 d	Tue 03/5/16	Mon 09/5/16	524
527	Timber Flooring	5 d	Tue 10/5/16	Sat 14/5/16	526
528	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Mon 16/5/16	Tue 17/5/16	527
529	Door & Ironmongery	2 d	Wed 18/5/16	Thu 19/5/16	528
530	**27th storey**	**38 d**	**Mon 11/4/16**	**Wed 25/5/16**	
531	Brickwall	5 d	Mon 11/4/16	Fri 15/4/16	517
532	Joinery 1st fix	2 d	Sat 16/4/16	Mon 18/4/16	531
533	M&E 1st fix	2 d	Sat 16/4/16	Mon 18/4/16	531
534	Plastering	5 d	Tue 19/4/16	Sat 23/4/16	533
535	Waterproofing	5 d	Tue 19/4/16	Sat 23/4/16	533
536	Ceiling works	5 d	Mon 25/4/16	Fri 29/4/16	535
537	Wall & Floor tiles	5 d	Sat 30/4/16	Fri 06/5/16	536
538	Painting (1st coat)	2 d	Sat 07/5/16	Mon 09/5/16	537
539	Glazing Works (window/sliding door/balustrades/railing)	7 d	Tue 10/5/16	Tue 17/5/16	538
540	M&E 2nd fix / sanitary wares	5 d	Tue 10/5/16	Sat 14/5/16	538
541	Timber Flooring	5 d	Mon 16/5/16	Fri 20/5/16	540
542	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Sat 21/5/16	Mon 23/5/16	541
543	Door & Ironmongery	2 d	Tue 24/5/16	Wed 25/5/16	542
544	**28th storey**	**38 d**	**Sat 16/4/16**	**Tue 31/5/16**	
545	Brickwall	5 d	Sat 16/4/16	Thu 21/4/16	531
546	Joinery 1st fix	2 d	Fri 22/4/16	Sat 23/4/16	545
547	M&E 1st fix	2 d	Fri 22/4/16	Sat 23/4/16	545
548	Plastering	5 d	Mon 25/4/16	Fri 29/4/16	547
549	Waterproofing	5 d	Mon 25/4/16	Fri 29/4/16	547
550	Ceiling works	5 d	Sat 30/4/16	Fri 06/5/16	549
551	Wall & Floor tiles	5 d	Sat 07/5/16	Thu 12/5/16	550
552	Painting (1st coat)	2 d	Fri 13/5/16	Sat 14/5/16	551
553	Glazing Works (window/sliding door/balustrades/railing)	7 d	Mon 16/5/16	Mon 23/5/16	552
554	M&E 2nd fix / sanitary wares	5 d	Mon 16/5/16	Fri 20/5/16	552
555	Timber Flooring	5 d	Sat 21/5/16	Thu 26/5/16	554
556	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Fri 27/5/16	Sat 28/5/16	555
557	Door & Ironmongery	2 d	Mon 30/5/16	Tue 31/5/16	556
558	**29th storey**	**38 d**	**Fri 22/4/16**	**Mon 06/6/16**	
559	Brickwall	5 d	Fri 22/4/16	Wed 27/4/16	545
560	Joinery 1st fix	2 d	Thu 28/4/16	Fri 29/4/16	559
561	M&E 1st fix	2 d	Thu 28/4/16	Fri 29/4/16	559
562	Plastering	5 d	Sat 30/4/16	Fri 06/5/16	561
563	Waterproofing	5 d	Sat 30/4/16	Fri 06/5/16	561
564	Ceiling works	5 d	Sat 07/5/16	Thu 12/5/16	563
565	Wall & Floor tiles	5 d	Fri 13/5/16	Wed 18/5/16	564
566	Painting (1st coat)	2 d	Thu 19/5/16	Fri 20/5/16	565
567	Glazing Works (window/sliding door/balustrades/railing)	7 d	Sat 21/5/16	Sat 28/5/16	566
568	M&E 2nd fix / sanitary wares	5 d	Sat 21/5/16	Thu 26/5/16	566
569	Timber Flooring	5 d	Fri 27/5/16	Wed 01/6/16	568
570	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Thu 02/6/16	Fri 03/6/16	569
571	Door & Ironmongery	2 d	Sat 04/6/16	Mon 06/6/16	570
572	**30th storey**	**37 d**	**Thu 28/4/16**	**Fri 10/6/16**	
573	Brickwall	5 d	Thu 28/4/16	Tue 03/5/16	559
574	Joinery 1st fix	2 d	Thu 05/5/16	Fri 06/5/16	573
575	M&E 1st fix	2 d	Thu 05/5/16	Fri 06/5/16	573
576	Plastering	5 d	Sat 07/5/16	Thu 12/5/16	575
577	Waterproofing	5 d	Sat 07/5/16	Thu 12/5/16	575
578	Ceiling works	5 d	Fri 13/5/16	Wed 18/5/16	577
579	Wall & Floor tiles	5 d	Thu 19/5/16	Tue 24/5/16	578
580	Painting (1st coat)	2 d	Wed 25/5/16	Thu 26/5/16	579
581	Glazing Works (window/sliding door/balustrades/railing)	7 d	Fri 27/5/16	Fri 03/6/16	580
582	M&E 2nd fix / sanitary wares	4 d	Fri 27/5/16	Tue 31/5/16	580
583	Timber Flooring	5 d	Wed 01/6/16	Mon 06/6/16	582
584	Wardrobe / Kitchen Cabinet / Electrical Appliances	2 d	Tue 07/6/16	Wed 08/6/16	583
585	Door & Ironmongery	2 d	Thu 09/6/16	Fri 10/6/16	584
586	**Painting & Touch-up works 7th to 30th storey**	**53 d**	**Tue 05/7/16**	**Mon 05/9/16**	
587	Painting (2&3 coat)	36 d	Tue 05/7/16	Tue 16/8/16	580
588	Marble Polish / Timber Varnish / Clean-Up	43 d	Sat 16/7/16	Mon 05/9/16	587SS+10 d
589	**Roof Level**	**44 d**	**Wed 13/4/16**	**Fri 03/6/16**	
590	Water Ponding Test	2 d	Wed 13/4/16	Thu 14/4/16	97FS+7 d
591	Waterproofing & Panelling	21 d	Fri 15/4/16	Tue 10/5/16	590
592	Architectural Fitments / M&E Equipments /Machinery	21 d	Wed 11/5/16	Fri 03/6/16	591
593	**External Façade**	**141 d**	**Sat 06/2/16**	**Mon 25/7/16**	
594	External Plaster	120 d	Sat 06/2/16	Thu 30/6/16	403
595	Texture Coating / Painting	21 d	Fri 01/7/16	Mon 25/7/16	594
596	**Phase 2(Gridline 12-12F)**	**352 d**	**Mon 25/5/15**	**Thu 21/7/16**	
597	**Structure (MSCP+Pool Deck)**	**281 d**	**Mon 25/5/15**	**Wed 27/4/16**	
598	Demolition of Existing ShowFlat	10 d	Mon 25/5/15	Fri 05/6/15	
599	Phase-2 piling work	45 d	Sat 06/6/15	Wed 29/7/15	598



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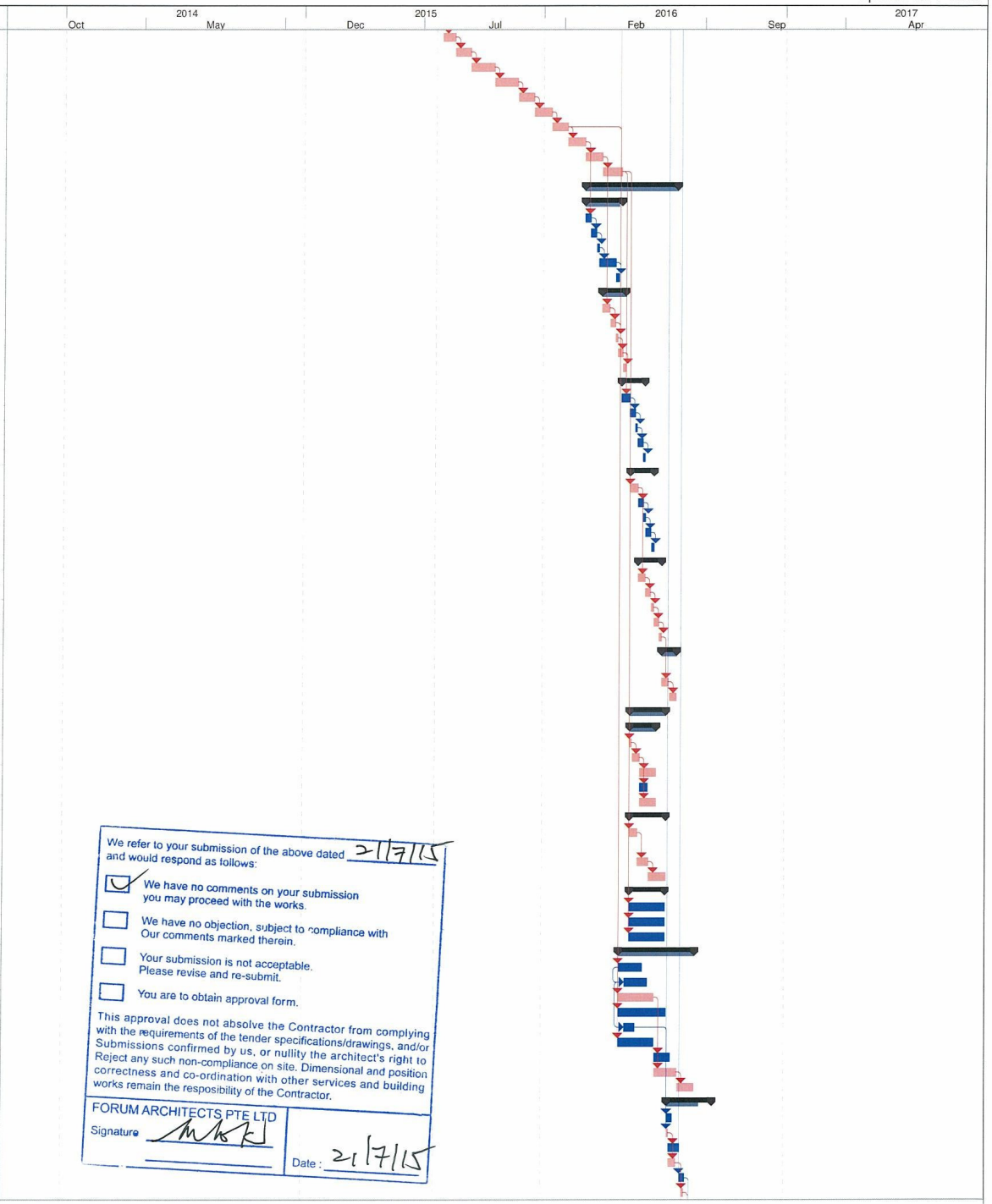
Signature

Date : 21/7/15

6-Derbyshire Project Revised Master Programme (BHCC Construction Pte Ltd)

Update: 21-7-2015

ID	Task Name	Duration	Start	Finish	Predecessors
600	Sheet Piling/Soil Improvement	15 d	Thu 30/7/15	Mon 17/8/15	599
601	Excavation	21 d	Tue 18/8/15	Thu 10/9/15	600
602	Pilecap Construction / Backfilling	30 d	Fri 11/9/15	Fri 16/10/15	601
603	RC works & Concreting to Basement Beam and Slab	30 d	Sat 17/10/15	Sat 21/11/15	602
604	Basement to 1st sty Column / Walls and 1st sty Slab	21 d	Mon 23/11/15	Wed 16/12/15	603
605	1st sty Carpark RC Beam & Slab & Ramp	21 d	Thu 17/12/15	Tue 12/1/16	604
606	2nd sty Carpark RC Beam & Slab & Ramp	21 d	Wed 13/1/16	Fri 05/2/16	605
607	3rd sty Carpark RC Beam & Slab & Ramp	21 d	Sat 06/2/16	Thu 03/3/16	606
608	4th sty Carpark RC Beam & Slab & Ramp	21 d	Fri 04/3/16	Mon 28/3/16	607
609	5th sty Pool Deck RC Beam & Slab	25 d	Tue 29/3/16	Wed 27/4/16	608
610	**Architecture & M&E Works**	**117 d**	**Fri 04/3/16**	**Thu 21/7/16**	
611	**Basement**	**46 d**	**Fri 04/3/16**	**Wed 27/4/16**	
612	Ceiling Works	7 d	Fri 04/3/16	Fri 11/3/16	607
613	Wall / Column Plaster	7 d	Sat 12/3/16	Sat 19/3/16	612
614	Painting (1st coat)	3 d	Mon 21/3/16	Wed 23/3/16	613
615	M&E 1st & 2nd fix (Ductless System/Sprinkler/Electrical)	21 d	Thu 24/3/16	Mon 18/4/16	614
616	Metal Joinery Works	5 d	Tue 19/4/16	Sat 23/4/16	615
617	**1st sty**	**30 d**	**Tue 29/3/16**	**Tue 03/5/16**	
618	Ceiling Works	10 d	Tue 29/3/16	Sat 09/4/16	608
619	Wall / Column Plaster	7 d	Mon 11/4/16	Mon 18/4/16	618
620	Painting (1st coat)	3 d	Tue 19/4/16	Thu 21/4/16	619
621	M&E 1st & 2nd fix (Ductless System/Sprinkler/Electrical)	7 d	Fri 22/4/16	Fri 29/4/16	620
622	Metal Joinery Works	3 d	Sat 30/4/16	Tue 03/5/16	621
623	**2nd sty**	**30 d**	**Thu 28/4/16**	**Thu 02/6/16**	
624	Ceiling Works	10 d	Thu 28/4/16	Tue 10/5/16	609
625	Wall / Column Plaster	7 d	Wed 11/5/16	Wed 18/5/16	624
626	Painting (1st coat)	3 d	Thu 19/5/16	Sat 21/5/16	625
627	M&E 1st & 2nd fix (Ductless System/Sprinkler/Electrical)	7 d	Mon 23/5/16	Mon 30/5/16	626
628	Metal Joinery Works	3 d	Tue 31/5/16	Thu 02/6/16	627
629	**3rd sty**	**30 d**	**Thu 12/5/16**	**Thu 16/6/16**	
630	Ceiling Works	10 d	Thu 12/5/16	Mon 23/5/16	609FS+11 d
631	Wall / Column Plaster	7 d	Tue 24/5/16	Tue 31/5/16	630
632	Painting (1st coat)	3 d	Wed 01/6/16	Fri 03/6/16	631
633	M&E 1st & 2nd fix (Ductless System/Sprinkler/Electrical)	7 d	Sat 04/6/16	Sat 11/6/16	632
634	Metal Joinery Works	3 d	Mon 13/6/16	Thu 16/6/16	633
635	**4th sty**	**30 d**	**Tue 24/5/16**	**Tue 28/6/16**	
636	Ceiling Works	10 d	Tue 24/5/16	Fri 03/6/16	630
637	Wall / Column Plaster	7 d	Sat 04/6/16	Sat 11/6/16	636
638	Painting (1st coat)	3 d	Mon 13/6/16	Thu 16/6/16	637
639	M&E 1st & 2nd fix (Ductless System/Sprinkler/Electrical)	7 d	Fri 17/6/16	Fri 24/6/16	638
640	Metal Joinery Works	3 d	Sat 25/6/16	Tue 28/6/16	639
641	**Finishes & Touch-up works to Carpark from Basement to 4th storey**	**20 d**	**Wed 29/6/16**	**Thu 21/7/16**	
642	Painting (2&3 coat)	10 d	Wed 29/6/16	Sat 09/7/16	640
643	Car Park lot painting & kerb installation	10 d	Mon 11/7/16	Thu 21/7/16	642
644	**5th sty - Pool Deck**	**46 d**	**Thu 12/5/16**	**Tue 05/7/16**	
645	**Arch Finishes & M&E System to Swimming Pool & Deck**	**33 d**	**Thu 12/5/16**	**Mon 20/6/16**	
646	Water Ponding Test	3 d	Thu 12/5/16	Sat 14/5/16	609FS+11 d
647	Waterproofing works	10 d	Mon 16/5/16	Thu 26/5/16	646
648	Wall & Floor tiles including Overflow Channel	20 d	Fri 27/5/16	Mon 20/6/16	647
649	Pool Specialist System	10 d	Fri 27/5/16	Tue 07/6/16	647
650	Pool Deck Floor Finishes	20 d	Fri 27/5/16	Mon 20/6/16	647
651	**Softscape works**	**46 d**	**Thu 12/5/16**	**Tue 05/7/16**	
652	Planters inclusive of waterproofing and plastering works & M&E provisions	10 d	Thu 12/5/16	Mon 23/5/16	609FS+11 d
653	Soil	15 d	Tue 24/5/16	Thu 09/6/16	652
654	Tree & Shrubs planting	21 d	Fri 10/6/16	Tue 05/7/16	653
655	**Minor Building & Fixtures**	**45 d**	**Thu 12/5/16**	**Mon 04/7/16**	
656	Indoor Gym / Shower Room	45 d	Thu 12/5/16	Mon 04/7/16	609
657	Outdoor Exercise Station	45 d	Thu 12/5/16	Mon 04/7/16	609FS+11 d
658	BBQ Pavilion	45 d	Thu 12/5/16	Mon 04/7/16	609FS+11 d
659	**External Works**	**96 d**	**Tue 26/4/16**	**Thu 18/8/16**	
660	Guard House	30 d	Tue 26/4/16	Tue 31/5/16	606
661	Bin Centre	30 d	Thu 05/5/16	Wed 08/6/16	660SS+7 d
662	Drainage works	45 d	Tue 26/4/16	Sat 18/6/16	606
663	Reflective Pool	60 d	Tue 26/4/16	Wed 06/7/16	606
664	Bulk Meter Wall and Cover	14 d	Thu 05/5/16	Fri 20/5/16	661SS
665	Children Playground	45 d	Tue 26/4/16	Sat 18/6/16	72
666	Boundary Wall / Fencing	21 d	Mon 20/6/16	Wed 13/7/16	662
667	Service Road (Fire Engine Accessway)	30 d	Mon 20/6/16	Sat 23/7/16	662
668	Landscaping works	21 d	Mon 25/7/16	Thu 18/8/16	667
669	**Testing & Commissioning**	**57 d**	**Sat 09/7/16**	**Wed 14/9/16**	
670	HHS BCA Inspection	7 d	Sat 09/7/16	Sat 16/7/16	585
671	Bulk Meter Installation and Water Turn-on	2 d	Sat 09/7/16	Mon 11/7/16	582,664
672	PUB Form C	14 d	Tue 12/7/16	Wed 27/7/16	671
673	Pre RI inspection (Arch / M&E) / Combine Testing & Commissioning	10 d	Tue 12/7/16	Fri 22/7/16	671
674	Gas Testing & Commissioning	7 d	Thu 28/7/16	Thu 04/8/16	582FS+48 d
675	R I inspection- M & E	3 d	Mon 01/8/16	Wed 03/8/16	673FS+7 d



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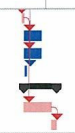
Signature

Date : 21/7/15

6-Derbyshire Project Revised Master Programme (BHCC Construction Pte Ltd)

Update: 21-7-2015

ID	Task Name	Duration	Start	Finish	Predecessors
676	R I inspection - Arch	3 d	Mon 01/8/16	Wed 03/8/16	673FS+7 d
677	Pre-Unit Power Turn-On	18 d	Thu 04/8/16	Thu 25/8/16	675
678	Units water sub-meter installation	18 d	Thu 04/8/16	Thu 25/8/16	675
679	Gas charge in	2 d	Fri 05/8/16	Sat 06/8/16	674
680	**TOP / Handing Over**	**35 d**	**Thu 04/8/16**	**Wed 14/9/16**	
681	BCA TOP Application / Inspection / Documents Compilation	30 d	Thu 04/8/16	Thu 08/9/16	675,676
682	Obtain TOP	5 d	Fri 09/9/16	Wed 14/9/16	681



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FORUM ARCHITECTS PTE LTD

Signature

Date : 21/7/15

SECTION 4

PROGRAMME

4.2 Authority Submission Status for M&E Services - 1st Submission

Service	Authority	Original Submission		Comments/Resubmission						Approval/
		Scheduled	Actual	Comment	Resubmit	Comment	Resubmit	Comment	Resubmit	Clearance
Application for Electricity Supply	SP Services Ltd	6 Sep 2013	6 Sep 2013							24 Sep 2013
Power Supply Substation	SP PowerGrid Ltd	15 Jan 2013	7 Apr 2014	17 Apr 2014	9 Jul 2014	22 Jul 2014	12 Aug 2014			25 Aug 2014
Sanitary Installation	Central Building Plan Dept	15 Jan 2015	18 Apr 2016							25 Apr 2016
	PUB Water Reclamation (Network) Dept	15 March 2016	20 Oct 2016	8 Nov 2016	14 Nov 2016	16 Nov 2016	16 Dec 2016			16 Dec 2016
Domestic Water Supply	PUB (Water Supply) Network Dept	31 July 2014	9 July 2014	21 Aug 2014	13 October 2014	18 Dec 2014	14 Jan 2015			26 Feb 2015
Gas Supply Installation	City Gas Pte Ltd	30 Sep 2014	26 Feb 2014	18 Mar 2014	25 Mar 2014	1 Apr 2014	4 April 2014			17 Apr 2014
Air Conditioning & Ventilation Inst.	FSSD	27 Feb 2015	22 Sep 2015							20 Oct 2015
Fire Fighting & Alarm Installation	FSSD	31 March 2016	22 Aug 2016							2 Sept 2016
Telephone Installation	TFCC	18 Jul 2014	2 Apr 2015							13 May 2015
		-								
		-								

SECTION 4

PROGRAMME

4.3 Authority Submission Status for M&E Services (Amendments) - 2nd Submission

Service	Authority	Original Submission		Comments/Resubmission						Approval/
		Scheduled	Actual	Comment	Resubmit	Comment	Resubmit	Comment	Resubmit	Clearance
Application for Electricity Supply	SP Services Ltd	NA								
Power Supply Substation	SP PowerGrid Ltd	NA								
Metering Layout	SP Services Ltd	NA								
Sanitary Installation	PUB Water Reclamation (Network) Dept	NA								
Domestic Water Supply	PUB (Water Supply) Network Dept	30 Sept 2016	7 Oct 2016	19 Oct 2016	25 Oct 2016					26 Oct 2016
Gas Supply Installation	City Gas Pte Ltd	23 Nov 2015	24 Nov 2015	25 Nov 2015	26 Apr 2016	27 Apr 2016	6 May 2016			20 May 2016
Air Conditioning & Ventilation Inst.	FSSD	28 Feb 2017								
Fire Fighting & Alarm Installation	FSSD	28 Feb 2017								
Telephone Installation	TFCC	NA								
Broadband Co-axial Cable System (BCS)	Starhub Cable Vision	NA								
Fuel Storage	FSSD	NA								
	NEA (Pollution Control)	NA								

SECTION 5

PROJECT RECORDS

5.1 List of Internal Files

Standard Files

File Ref:		File Ref:	
- Owner	✓	- Architect	✓
- Authorities	✓	- Other Consultants	✓
- Contractors	✓	- CC	✓
- CF	✓	- PQP/QSP	✓

Project Files to be initiated by PM as and when required

File Ref:		File Ref:		File Ref:	
MC/EC	✓				

(✓*where applicable*)

SECTION 5

PROJECT RECORDS

5.2 Filing of Drawings

The following team members shall take charge of filing of drawings, stamping "SUPERSEDED" drawings, etc.

Description	Team Member
Incoming Architectural Floor Plans	Soft copy save in server
Incoming Architectural Sketches/Details	
Incoming Structural Drawings	
M&E Drawings - Electrical Installation - Lift & Escalator Installation - Air Conditioning & Ventilation Installation - Fire Fighting & Alarm Installation - Plumbing & Sanitary Installation - Swimming Pool & Filtration Installation	
Other Drawings - Landscape Drawings - FSSD Approval Building Plan	

SECTION 6

INTERFACING

6.1 Method of Interface

Description	Method of Interface	
Client's Review & Approval	M&E Design Report	✓
	Pre-planned meeting at fixed intervals	✓
	Telefax, letter and telephone	✓
	Email	✓
Interface With External Design Teams	M&E Design Report	✓
	Pre-planned meeting at fixed intervals	✓
	Telefax, letter and telephone	✓
	Email	✓
Interface Between Internal Design Teams	Telephone	✓
	Email	✓
	Internal Project Team Meeting	✓
	Circulation of Information	✓

(✓*where applicable*)

SECTION 6

INTERFACING

6.2 Internal Design Interface – NOT APPLICABLE

Item No.	Description*	Required From	Required By	Date Required	Remarks

** Information required by INTERNAL DESIGN TEAM MEMBERS*

SECTION 6

INTERFACING

6.3 Circulation of Documents to External Parties

	Code: A - Approval Required C - For Comments I - For Information Only	Client/ Client Rep.	Client's Project Manager	Architect	Structural Engineer	Quantity Surveyor	
1.	**Letters/Fax:**						
a.	Project Design	A	A	A	C	I	
b.	Project Administration	A	A	C	C	I	
c.	Project Cost Estimate/Contract Cost	A	A	C	C	I	
2.	**Drawings**						
a.	Outline Design Drgs.	A	A	A	C	-	
b.	Sketch Design Drgs.	A	A	A	C	-	
c.	Final Design Drgs.	A	A	A	C	-	
d.	Shop Drawings	I	I	A/C	C	-	
e.	As Built Drgs.	I	I	I	I	-	
3.	**Other Document**						
a.	Specification	A	A	A	I	I	
b.	Tender Document	A	A	A	I	I	
c.	Tender Evaluation Report	A	A	A	I	I	
d.	Design Report	C	C	I	-	-	
e.	Progress Report	-	-	-	-	-	
f.	Financial Report	-	-	-	-	-	
g.	Minutes of Meeting	I	I	I	I	-	
h.	Inspection Report	I	I	I	-	-	
i.	Testing & Comm. Report	I	I	I	-	-	
j.	O & M Manual	I	I	I	-	-	

SECTION 7

WORK AUTHORISATION

Activity \ Authorised Signatories	PD	QP	PM	AE	SS
General Correspondences with Client	✓	✓	✓		
General Correspondences with Other Consultants			✓	✓	
M&E Cost Estimate Report	✓	✓			
M&E Design Report	✓	✓			
Check Prints	✓	✓			
Tender Drawing Approval	✓	✓			
Tender Specification Approval	✓	✓			
List of Tenderers	✓	✓			
Tender Questionnaires	✓	✓			
Tender Reports	✓	✓			
Draft Letter of Award			✓		
Review of Contractor's Shop Drawing			✓	✓	
Review of Contractor's Technical Submittal			✓	✓	
Review of Contractor's Sample Submittal			✓	✓	
Contractor's Request for Deviation	✓	✓	✓		
Progress Payment Valuation Form	✓	✓			
Final Account Valuation	✓	✓			
Draft Variation Order	✓	✓	✓		
Engineer/Architect's Instruction/Direction	✓	✓			
Site Instruction/Direction	✓		✓		
Correspondence/Submission to Authorities	✓	✓	✓		

(✓*where authorised*)

Key to abbreviations:-

PD : Project Director
QP : Qualified Person
PM : Project Manager/Assistant Project Manager
AE : Assistant Engineer
SS : ACEPL Site Staff

SECTION 8

DESIGN INPUT & METHODOLOGY

8.1 List of Client's Standards, Reference Documents or Brief

ITEM	KEPT BY
NA	

8.2 List of Applicable Code of Practice and Regulations

Services	Title of Code of Practice/Standard
Electrical Wiring	SS CP5
Lightning Protection System	SS 555
Air Conditioning & Ventilation Installation	SS 553
Lift & Escalator Installation	SS 550
Sprinkler System	SS CP 52
Wet Riser System	SS CP 575
Automatic Fire Alarm System	SS CP 10
Sanitary System	Code of Practice on Sewerage & Sanitary Works
Plumbing System	SS CP 48
Town Gas/~~LPG~~ Supply System	SS CP 51

SECTION 8

DESIGN INPUT & METHODOLOGY

8.3 List of Design Guide or Handbook Used

Carrier's Handbook of Air Conditioning System Design (Not Used)

ASHRAE Handbooks (Not Used)

Institute of Plumbing's Plumbing Services Design Guide

8.4 List of Pre-Consultation and Waiver – NOT APPLICABLE

S/N	Description	Date of Application	Date of Approval	Remarks
1	*Clause number in Code of Practice for (Services) which require clarification or waiver. Consultation Ref No. Waiver Ref. No.	NA		
2	*Clause number in Code of Practice for (Services) which require clarification or waiver. Consultation Ref No. Waiver Ref. No.	NA		
3	*Clause number in Code of Practice for (Services) which require clarification or waiver. Consultation Ref No. Waiver Ref. No.	NA		

*To fill in actual information

8.5 List of Applicable Quality System Procedures

Alpha Consulting Engineers Pte Ltd's Quality Management System Procedures

Section	Title	✓ where applicable
M1	Preparation of Consultancy Offer	✓
M2	Project Commissioning and Service Agreement	✓
M3	Design Control	✓
M4	Design Change Control	✓
M5	Tender Process and Evaluation	✓
M6	Authority Submission	✓
M7	Construction Process Control	✓
M8	Testing and Commissioning	✓
S1	Document Control	✓
S2	Documentation of Quality & Environmental Management System Procedure	✓
S3	Documentation of Project Quality Plan	✓
S4	Specification Control	✓
S5	Library Control	
S6	Archive Control	✓
S7	Filing Control	✓
S8	Drawing Control	✓
S9	Administration Control	✓
S10	Purchasing Control	
S11	Training Control	
S12	Computer Control	
QE1	Quality & Environmental System Audit	✓
QE2	Feedback Reporting	✓
QE3	Clients Feedback	✓
QE4	Management Review	✓

8.6 List of Software Used For Design/Analysis

DESCRIPTION/ PACKAGE NAME	VERSION	SUPPLIER/ SOURCE	PURPOSE	
Cophos	3.31	Zumtobel	Lighting design	
Carrier E20-II	3.21	Carrier	Programme for determination of heat load, duct size and its losses, etc.	
Gensize 2	2.1	Onan	Generator sizing	
Hyena	4.00.1	ACADS-BSG	Fire Sprinkler & Hydrant Analysis	
Dialux	4.11	Freeware	Lighting Design	✓
Lift Traffic	7.18	Elevate	Lift Traffic Calculation	✓
Fault Level Calculation	11.1.1	Etap	Calculation of fault level and voltage drop	

(✓*where applicable*)

SECTION 9

ENVIRONMENTAL CONSIDERATIONS

9.1 Sustainable Design Features / Criteria

Item	Remarks
Green Mark criteria	Certified
Green Design Features	Refer to attached list

9.2 Site PPE Requirement

The necessary Personal Protective Equipment (detailed below) shall be provided by the main contractor / Company in accordance to the site EHS requirements prior to the site monitoring.

PPE	✓ where applicable
Safety Helmet	✓
Safety Shoes	✓
Eye Protection	-
Ear Protection	-
Safety Harness / Belt	-
Others:	-

9.3 Site Emergency Preparedness

Site staff shall comply with the site emergency preparedness and response procedure, established by the main contractor / owner, which shall include the following details.

Items	✓ where applicable
Evacuation Route	✓
Emergency Exit	✓
Assembly Point	✓
Emergency Contact List / Person	✓
Alarm system / methods	✓

LIST OF GREEN FEATURES

- T5 light fittings are used in basement & multi-storey car park
- LED light fitting are used in common areas
- Natural ventilation to units and common areas
- Inverter and environmentally friendly air conditioner split units with 4 NEA 'ticks' green label is used in all apartment units
- Variable frequency variable voltage (VVVF) drive lifts. The lights and fans in the lifts will be switched off after a predetermined time delay when there are no hall calls.
- Basement car park is provided with 2.5% openings as natural ventilation intake
- Multi-storey are naturally ventilated
- CO sensor is used at basement car park to control ductless exhaust system
- 2 ticks for water efficient fittings
- Collection of rainwater for irrigation system
- Motion sensors are provided in common toilets
- Automatic water efficient irrigation system with rain sensor
- Gas heater is used in all apartment units
- Private sub-meter to common usage
- Building users guide
- Provision of bicycles parking for 5% of dwelling units

SECTION 9

ENVIRONMENTAL CONSIDERATIONS

9.4 Reporting of Environmental Non-conformances

When encountering environmental non-conformances, Site Staff shall be responsible to feedback to the main contractor.

9.5 List of Applicable Environmental management system Procedures

Alpha Consulting Engineers Pte Ltd's Environmental Management System Procedures

Section	Title	✓ where applicable
E1	Aspect / Impact Identification, Risk Assessment & Risk Control	✓
E2	Identifying Legal & Other Requirements	✓
E3	Objectives, Targets & Programmes	✓
E4	Communication	✓
E5	Emergency Preparedness & Response	✓
E6	Monitoring & Measurement	✓
E7	Control of Air & Noise Pollution	✓
E8	Management of Wastes	✓

SECTION 10

CLIENT'S REQUIREMENTS

10.1 List of Output Required by Client:-

Item	* Remarks
M&E Design Report	A
M&E Cost Estimate Report	A
Pre-Qualification of Tenderers	NA
Tender Documents	A
Tender Report	A
Payment Valuation for QS	A
Certificates of Supervision for TOP/CSC	I

* *Remarks*

A: for approval *C: for comment* *I: for Information* *Re: for record*

Other purposes and for action: please specify.

10.2 Specific Procedures Required By Client *(If applicable)*

NOT APPLICABLE

SECTION 11

LIST OF SUB-JOB

11.1 List of Sub-Job Numbers - NOT APPLICABLE

Sub Job No	Description	Allocation Details
	NA	