Alpha
Consulting Engineers Pte Ltd

PROJECT QUALITY PLAN

THE RAINTREE CONDOMINIUM AT BUKIT DRIVE

For

FCL PLACE PTE LTD

Copy No.	

Prepared By: Chim Heng Leong

Authorised By: Richard Teo

Date: 16 May 2008

TABLE OF CONTENTS

SECTION	DESCRIPTION
-	**TITLE PAGE**
-	**TABLE OF CONTENTS**
1	**QUALITY PLAN CONTROL AND DISTRIBUTION**
1.1	List of Copy Holders
1.2	Revision Record
2	**PROJECT INFORMATION**
2.1	Project Description
2.2	Project Cost
2.3	Scope of Works
3	**ORGANISATION**
3.1	Organisation Chart
3.2	ACEPL's Project Team Member
3.3	Client/Client's Representative
3.4	Other Consultants - Local - Overseas – Not Used
3.5	Contractor/Sub-Contractors
3.6	Authorities
4	**PROGRAMME**
4.1	Overall Programme
4.2	Authority Submission Status for M&E Services – 1st Submission
4.3	Authority Submission Status for M&E Services (Amendment) – 2nd Submission - Not Used
5	**PROJECT RECORDS**
5.1	List of Internal Files
5.2	Filing of Drawings

TABLE OF CONTENTS

SECTION	DESCRIPTION
6	**INTERFACING**
6.1	Method of Interface
6.2	Internal Design Interface - Not Used
6.3	Circulation of Documents to External Parties
7	**WORK AUTHORISATION**
8	**DESIGN INPUT AND METHODOLOGY**
8.1	List of Client's Standards, Reference Documents or Brief - Not Used
8.2	List of Applicable Code of Practice and Regulations
8.3	List of Design Guide or Handbook Used
8.4	List of Applicable Quality System Procedures
8.5	List of Software Used for Design/Analysis
9	**ENVIRONMENTAL CONSIDERATIONS – NOT USED**
9.1	Sustainable Design Features / Criteria
9.2	Site PPE Requirement
9.3	Site Emergency Preparedness
9.4	Reporting of Environmental Non-conformances
9.5	List of Applicable Environmental Management System Procedures
10	**CLIENT'S REQUIREMENTS**
10.1	List of Output Required by Client
10.2	Specific Procedures Required by Client - Not Used
11	**LIST OF SUB-JOB**
11.1	List of Sub-Job Numbers - Not Used

SECTION 1

QUALITY PLAN CONTROL AND DISTRIBUTION

1.1 List of Copy Holders

Copy No.	Copy Holder	Date of Issue
1	1420-PQP File	18 April 2006
2	Chim Heng Leong	18 April 2006

1.2 Revision Record

Revision	Date of Issue	Section Reference	Page(s)	Remarks
0	31 October 2005	1 to 10	26	
1	18 April 2006	1 to 10	26	+ 4 pgs (Sect 4.1 – Master Programme)
2	18 September 2006	1 to 10	26	+ 4 pgs (Sect 4.1 – Master Programme)
3	21 June 2007	1 to 10	26	+ 4 pgs (Sect 4.1 – Master Programme)
4	16 May 2008	1 to 11	28	

SECTION 2

PROJECT INFORMATION

2.1 Project Description

Type of Development	Residential

Statistics of Development	
Site Area, m²	21192.70m²
Nett Floor Area, m²	-
Gross Floor Area, m²	40689.908 m² (Plot ratio 1.92)
Covered Carpark, m²	
No. of Covered Carpark Lots	335 lots
No. of Apartments/Houses	315 Units
No. of Beds (for Hospitals)	Not Applicable
No. of Guestroom (for Hotels)	Not Applicable
No. of Blocks / No. of Storeys	3 blocks of 5 storey, 1 block of 5/6 storey, 1 block 7 storey, 1 block 8 storey and 4 blocks of 10 storey
No. of Phases	1 phase

2.2 Project Cost

M&E Services Cost Plan (S$ x 1M)								
Services	EI	ACVI	LEI	FFAI	PSI	SPFI		
Estimate								
Awarded	3.25	2.63	1.8	0.52	2.73	0.3		

Total Project Construction Cost (S$ x1M)			
	Site Clearance	Piling Works	Main Contract
Estimate			
Awarded	Included	Included	60

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

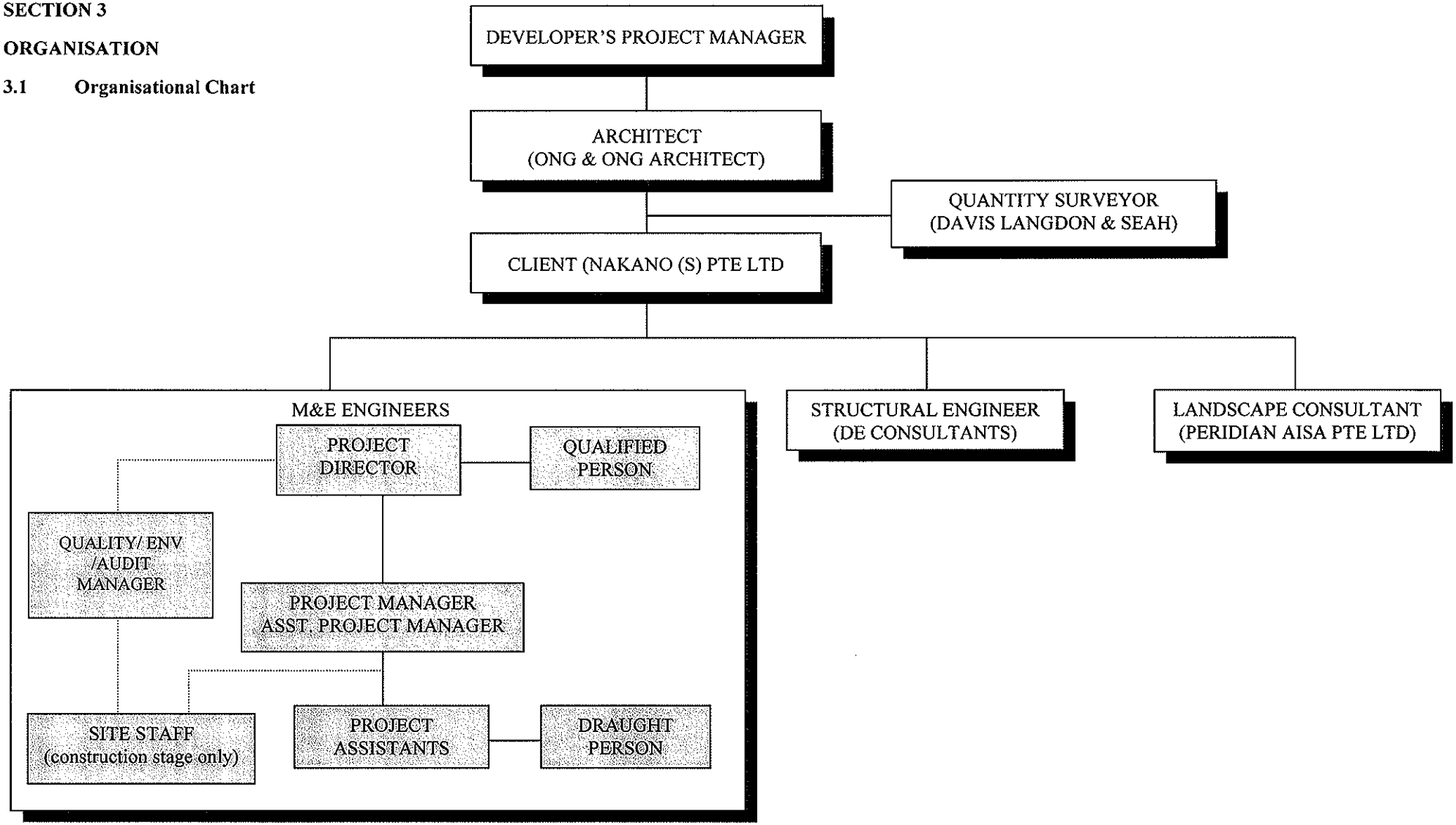
EJECTOR & DIVERTER	✓	SUMP PUMP	✓	FUEL OIL TANK		LIFT & ESCALATOR	✓	PRESSURE VESSEL		HOISTS		FOAM	

(✓*where applicable*)

SECTION 3

ORGANISATION

3.1 Organisational Chart



SECTION 3

ORGANISATION

3.2 ACEPL's Project Team Member

TITLE		NAME
Project Director		Richard Teo (RT)
Qualified Person	Mechanical	Andrew Loh (LCT)
	Electrical	Richard Teo (RT)
Project Manager		Chim Heng Leong (CHL)
Assistant Project Manager		Goh Soon Huat (GSH)
Project Assistant (Mech)		-
Project Assistant (Elect)		Trece Koh (TK)
Draughtsperson		Common Pool
Resident Engineer (M&E)		-
Assistant Resident Engineer (M&E)		-
Clerk-of-Work (M&E)		-

3.3 Client/Client's Representatives

Developer:- FCL Place Pte Ltd

Address:- 2 Alexandra Road #21-00
Alexandra Point
Singapore 119958

Tel:- 6276 4882

Fax:- 6276 6328

Developer's Representatives:-

Name of Company	Contact Person	Contact
Owner FCL Place Pte Ltd	Name: Mr Victor Goh Position: Project Manager	Tel: 6276 4882 Fax: 6276 6330 Handphone: - Email: victorg@fraserscentrepoint.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 Ong & Ong Architects	Name: Ms Lee Shiu Ming Position: Architect	Tel: 62588666 Fax: 62598648 Handphone: - Email: lee.shiu.ming@ong-ong.com
Quantity Surveyor Davis Langdon & Seah Singapore Pte Ltd	Name: Mr Tay Ter Long Position: Quantity Surveyor	Tel: 6222 3888 Fax: 6224 7089 Handphone: - Email: -
Structural Engineer DE Consultants (S) Pte Ltd	Name: Mr Lim Hwee Sin Position:	Tel: 6227 3900 Fax: 6227 2909 Handphone: - Email: deconsult@pacific.net.sg
Landscape Consultant Peridian Asia Pte Ltd	Name: Mr Nakagawa Takehito Position: Landscape Architect	Tel: 6227 7998 Fax: 6227 0509 Handphone: - Email: peridianasia@pacific.net.sg
Lighting Consultant	Name: Position:	Tel: Fax: Handphone: Email:
Acoustic Consultant	Name: Position:	Tel: Fax: Handphone: Email:
_____	Name: Position:	Tel: Fax: Handphone: Email:
_____	Name: Position:	Tel: Fax: Handphone: Email:

3.4 Other Consultants (Overseas) – NOT USED

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

3.5 Contractors/Sub-Contractors

Function / Name of Firm	Contract *	Contact Person	Contact
Main Contractor (Client) Nakano Singapore (Pte) Ltd	DC	Name: Mr Tay Hui Chua Position: Project Manager	Tel: 6333 4933 Fax: 6338 8568 Handphone: - Email: tayhuichua@nakano.com.sg
Air Conditioning & Ventilation Installation Sub-Contractor Design Aire Engineering (S) Pte Ltd	DSC	Name: Mr William Liew Position: Director	Tel: 6746 9611 / 6252 4981 Fax: 6747 4922 Handphone: 96726277 Email: igiam@dae.com.sg
Plumbing & Sanitary Installation Sub-Contractor WTC Engineering Pte Ltd	DSC	Name: Mr Wang T C Position: Director	Tel: 6745 9733 Fax: 6745 6806 Handphone: - Email: wtc97@mbox2.singnet.com.sg
Electrical Installation Sub-Contractor Bond Electrical Pte Ltd	DSC	Name: Mr Vincent Chin Position: Project Director	Tel: 67411968 Fax: 67416763 Handphone: 91458782 Email: bepl@bondgrp.net
Lift Installation Sub-Contractor Ryoden Singapore Pte Ltd	DSC	Name: Mr Jacky Lim Chit Hwee Position: Sales Executive	Tel: 6845 9124 Fax: 6748 2292 Handphone: - Email: Jacky@rs.meap.com
Fire Fighting & Alarm Installation Sub-Contractor Design Aire Engineering (S) Pte Ltd	DSC	Name: Mr William Liew Position: Director	Tel: 6746 9611 / 6252 4981 Fax: 6747 4922 Handphone: 96726277 Email: igiam@dae.com.sg
Swimming Pool Filtration Plant Installation Sub-Contractor Hydrotech M&E Services Pte Ltd	DSC	Name: Mr Lai Heng Tong Position:	Tel: 6748 4779 Fax: 6748 8016 Handphone: 9026 1457 Email: hydrotech3@yahoo.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 Chin Yoke Fah	6823 8556
(b) Diversion		
SP Services: (a) Customer Supply	Mr Rick Lim	6823 8008
(b) Installation		
(c) Meter Section		
(d) Road Lighting		
TFCC: (a) SCV		
(b) SingTel		
(c) IDA		
BCA: (a) Building Plan		
FSSD: (a) Building Plan		
(b) M&E Plan		
PUB (Water Supply) Network Dept: (a) Water Conservation		
(b) Plumbing Plan		
(c) Diversion		
PUB Water Reclamation (Network) Dept: (a) Building Plan/CBPU		
(b) M&E Plan		
(c) Diversion		
City Gas Pte Ltd: (a) Planning/Submission		
(b) Installation/Inspection		
PowerGas Pte Ltd (a) Diversion		
NEA (Pollution Control) (a) Planning/Submission		
(b) Inspection		

SECTION 4

PROGRAMME

4.1 Overall Programme

ID	TASK NAME	MTHS	2005											2006											2007										
			A	M	J	J	A	S	O	N	D	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	4																																	
2.	Planning Submission	4																																	
3.	Detail Design	4																																	
4.	BP Submission	2																																	
5.	BP Submission (Amendments)	-																																	
6.	Tender Period for Piling	NA																																	
7.	Tender Period for Sub-Structure	NA																																	
8.	Tender Period for Super-Structure	NA																																	
9.	Piling Period	8																																	
10.	Sub-Structure Construction Period	7																																	
11.	Super-Structure Construction Period	14																																	
12.	TOP	3																																	
13.	CSC																																		

ID	TASK NAME	MTHS	2008											
			J	F	M	A	M	J	J	A	S	O	N	D
11.	Super-Structure Construction Period	14												
12.	TOP (27 February 2008)													
13.	CSC													

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	N.A.	25/05/2005	-	-	-	-	-	-	3/6/05
Power Supply Substation	SP PowerGrid Ltd	30/06/2005	18/7/2005	28/7/2005	9/09/2005	-	-	-	-	28/09/05
Metering Layout	SP Services Ltd	17/10/07	17/10/07	-	-	-	-	-	-	9/11/07
Sanitary Installation	PUB Water Reclamation (Network) Dept	30/05/2006	23/6/06	30/6/06	3/8/06	-	-	-	-	8/8/06
Domestic Water Supply	PUB (Water Supply) Network Dept	30/5/06	31/5/06	29/6/06	26/7/06	11/9/06	25/9/06	-	-	20/10/06
Gas Supply Installation	City Gas Pte Ltd	28/2/06	16/3/06	7/4/06	6/6/06	-	-	-	-	21/6/06
Air Conditioning & Ventilation Inst.	FSSD	29/9/06	26/10/06	-	-	-	-	-	-	15/11/06
Fire Fighting & Alarm Installation	FSSD	30/10/06	8/3/06	-	-	-	-	-	-	16/3/06
Telephone Installation	TFCC	15/6/06	20/7/06	8/8/06	29/9/06	-	-	-	-	13/10/06
Broadband Co-axial Cable System (BCS)	Starhub Cable Vision	29/9/06	29/9/06	-	-	-	-	-	-	13/10/06
Fuel Storage	FSSD	-	-	-	-	-	-	-	-	-
	NEA (Pollution Control)	-	-	-	-	-	-	-	-	-
Street Lighting	LTA	20/4/07	20/4/07	15/5/07	9/7/07	-	-	-	-	25/7/07

SECTION 4

PROGRAMME

4.3 Authority Submission Status for M&E Services (Amendments) - 2nd Submission – NOT USED

Service	Authority	Original Submission		Comments/Resubmission						Approval/ Clearance
		Scheduled	Actual	Comment	Resubmit	Comment	Resubmit	Comment	Resubmit	
Application for Electricity Supply	SP Services Ltd									
Power Supply Substation	SP PowerGrid Ltd									
Metering Layout	SP Services Ltd									
Sanitary Installation	PUB Water Reclamation (Network) Dept									
Domestic Water Supply	PUB (Water Supply) Network Dept									
Gas Supply Installation	City Gas Pte Ltd									
Air Conditioning & Ventilation Inst.	FSSD									
Fire Fighting & Alarm Installation	FSSD									
Telephone Installation	TFCC									
Broadband Co-axial Cable System (BCS)	Starhub Cable Vision									
Fuel Storage	FSSD									
	NEA (Pollution Control)									

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:	

(✓*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	TK / Server (soft copy)
Incoming Architectural Sketches/Details	TK / Server (soft copy)
Incoming Structural Drawings	TK / Server (soft copy)
M&E Drawings	
- Electrical Installation	TK
- Lift & Escalator Installation	TK
- Air Conditioning & Ventilation Installation	CHL
- Fire Fighting & Alarm Installation	CHL
- Plumbing & Sanitary Installation	CHL
- Swimming Pool & Filtration Installation	CHL
Other Drawings	-

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 USED

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	C	C	C	-	
b.	Project Administration	-	-	-	-	-	
c.	Project Cost Estimate/ Contract Cost	-	-	-	-	-	
2.	**Drawings**						
a.	Outline Design Drgs.	C	C	C	C	-	
b.	Sketch Design Drgs.	C	C	C	C	-	
c.	Final Design Drgs.	A	C	C	C	-	
d.	Shop Drawings	-	-	A/C	C	-	
e.	As Built Drgs.	I	-	-	-	-	
3.	**Other Document**						
a.	Specification	-	-	-	-	-	
b.	Tender Document	-	-	-	-	-	
c.	Tender Evaluation Report	-	-	-	-	-	
d.	Design Report	C	C	I	-	-	
e.	Progress Report	-	-	-	-	-	
f.	Financial Report	-	-	-	-	-	
g.	Minutes of Meeting	I	I	I	I	-	
h.	Inspection Report	-	-	-	-	-	
i.	Testing & Comm. Report	-	-	-	-	-	
j.	O & M Manual	-	-	-	-	-	

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 – NOT USED

ITEM	KEPT BY

8.2 List of Applicable Code of Practice and Regulations

Electrical Wiring	~~BS~~	SS	~~IEE~~	~~NFPA~~	
Lightning Protection System	~~BS~~	SS			
Emergency Voice Communication System	~~BS~~	~~SS~~	~~NFPA~~		
Air Conditioning & Ventilation Installation	~~BS~~	AS	~~NFPA~~	SS	~~MS~~
Lift & Escalator Installation	~~BS~~	SS			
Sprinkler System	~~BS~~	SS	~~NFPA~~	~~AS~~	~~LPC~~
Wet Riser System	~~BS~~	SS	~~NFPA~~	~~AS~~	~~MS~~
Automatic Fire Alarm System	~~BS~~	SS	~~NFPA~~	~~AS~~	~~MS~~
Sanitary System	~~BS~~	SS	~~NFPA~~	~~AS~~	~~MS~~
Plumbing System	~~BS~~	SS	~~NFPA~~	~~AS~~	~~MS~~
Town Gas/LPG Supply System	~~BS~~	SS	~~NFPA~~	~~AS~~	
Boiler and Steam Supply System	~~ASME~~	~~BS~~	~~AS~~		
Mechanical Smoke Control System	~~BS~~	~~NFPA~~	~~AS~~		

(Delete where necessary)

SECTION 8

DESIGN INPUT & METHODOLOGY

8.3 List of Design Guide or Handbook Used

Carrier's Handbook of Air Conditioning System Design

ASHRAE Handbooks

Institute of Plumbing's Plumbing Services Design Guide

8.4 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	

8.5 List of Software Used For Design/Analysis

DESCRIPTION/ PACKAGE NAME	VERSION	SUPPLIER/ SOURCE	PURPOSE	
Calculux	2.30	Philips	Lighting design	
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	✓
Lift Traffic	-	Alpha Consulting Engineers Pte Ltd	Lift traffic calculation	✓
Econdial	2.5	Merlin Gerlin	Design for low voltage network	
Hyena	4.00.1	ACADS-BSG	Fire Sprinkler & Hydrant Analysis	
Fault Level Calculation	-	Alpha Consulting Engineers Pte Ltd	Calculation of voltage drop and fault level	

(✓*where applicable*)

SECTION 9

ENVIRONMENTAL CONSIDERATIONS – NOT USED

9.1 Sustainable Design Features / Criteria

Item	Remarks
Green Mark criteria	
Green Design Features	

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, stablished 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	

SECTION 9

ENVIRONMENTAL CONSIDERATIONS – NOT USED

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	C
M&E Cost Estimate Report	NA
Pre-Qualification of Tenderers	NA
Tender Documents	NA
Tender Report	NA
Payment Valuation for QS	NA
Certificates of Supervision for TOP/CSC	Re

* *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 USED

SECTION 11

LIST OF SUB-JOB

11.1 List of Sub-Job Numbers – NOT USED

Sub Job No	Description	Allocation Details