

Mechanical, Hydraulic, and Electrical Service Disciplines Submission

Prepared for:

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1. Introduction

We are pleased to present our submission in providing Mechanical, Hydraulic, Electrical and Fire protection Consultancy Services. We have prepared this submission in response to an invitation from Jeremy Son of Design Corp for the provision of Consultancy Service for 198-200 Princes Highway, Kogarah Bay.

2. General Scope of Works

2.1 Overview

The general scope of our service comprises design development and construction documentation stage. We have priced as per the architecture drawing set provided.

2.2 Programme

We understand that the programme is yet to be finalized and we look forward to contributing to this. We confirm that we have the necessary resources to undertake this project

2.3 Documents

We have reviewed the following documents in preparing this submission:

 Email sent form Richard Shalala on 18 April 2023 with attached files for Architectural Drawings, Notice of determination, etc.

2.4 General Scope for Staging

Scope of the service comprises the following stages:

Design Development	•	Carry out detailed investigations, calculations and prepare reports or sketches, as required
	•	Where appropriate, describe system operations for client approval
	•	Establish major points of interface between engineering disciplines
	•	Liaising with relevant consultants
	•	Attend consultant project meetings, 2 off
Construction	•	Describe the engineering systems by means of drawings
Documentation	•	Carry out detailed calculations
	•	Pre-empt and address constructability issues within documents where possible
	•	Finalise details of interface between engineering disciplines
	•	Refer details for client and authority approval where appropriate
	•	Attend consultant project meetings, 1 off

2.5 General Clarifications

Scope of services and associated fees does not include:

- Authority fees and charges.
- Any costs associated with sourcing existing documentation. We assume that existing documentation will be provided to Premium consulting Engineers at the project commencement.
- Any works, other than liaising with the Authorities, associated with upgrading, modifying, diverting, removing or protecting utility infrastructure.
- Any works, including legal fees, associated with creating, relinquishing or modifying services easements.
- Project will be documented in PDF sketch
- Demolition works;
- Site inspection, review contractor's shop drawings and review of contractors' alternatives (Optional Construction administration fee provided below);
- Transportation, Environmental, Acoustics, Audio Visual;
- Reissue and update of documentation due to Requests for Information, contractor's alternatives, etc;

- Redesign as a result of client changes post construction issues;
- Production of as constructed drawings;
- Travel and accommodation costs;
- Intrusive surveys and inspections; (Non-intrusive inspections have been included).
- Preparation of engineering assessments and reports for performance based alternate solutions to Building Code of Australia;

2.6 Services Deliverables:

- PDF sketch for design development as required
- Full set of drawings in bluebeam PDF and 2D DWG
- Coordination with related services
- Design certificate.

3. Mechanical Service

Mechanical engineering scope of services will be in accordance with Section 2.4 as clarified below:

3.1 Mechanical Services – Extent

The extent of mechanical service will comprise:

- Car park ventilation design
- Air Conditioning systems to all apartments.
- Air conditioning system design to other communal area as required.
- Toilet and laundry ventilation to apartments.
- Rangehood exhaust system to apartments.
- Plant room ventilations.
- Other ventilation to AS 1668.2.
- Liaise with relevant authorities and consultants
- D&BP Act class 2 building design declaration

3.2 Mechanical Services – Clarifications

We have not yet allowed for the following in our scope of service and fee.

- · Fire engineering.
- Assessment of compliance with environmental noise regulations.
- Our fee does not include for any predictive energy analysis using thermal modelling or CFD (computational fluid dynamics) for determining energy performance of the development.

4. Car Park Ventilation CFD Services

Car Park Ventilation CFD scope of services will be as clarified below:

4.1 CFD (Computational Fluid Dynamics) - Extent

The extent of Car Park Ventilation CFD will comprise:

- Review of all drawings relevant to the car park design.
- Creation of a three-dimensional model for the car park suitable for the CFD simulations.
- CFD ventilation simulations to assess the performance of the proposed design. This will provide a basis on which to compare subsequent designs.
- CFD ventilation simulations for up to three design changes. This includes altering natural ventilation openings, supply/exhaust flow rates, re-locating jet fans, etc.
- Preparation of a Technical Report detailing the results and recommendations.

4.2 Car Park Ventilation CFD Deliverables

- PDF spatial sketch as required
- Car park CFD ventilation report
- NSW regulated design and submission
- 1 meeting

4.3 Car Park Ventilation CFD - Clarifications

We have allowed 3 off model simulation/modification, if additional simulations are required (for example, in the event of still unacceptable CO levels) then these will be discussed with the client and will be subject to a variation.

We have not allowed fire engineering solution for jet fan which might affect sprinkler performance, this will need to be addressed by fire engineer on the job.

5. Hydraulic Services

Hydraulic engineering scope of services will be in accordance with Section 2.4 as clarified below.

5.1 Hydraulic Services- Extent

The extent of hydraulic services document will comprise:

- Connection to authority services including sewer, water and gas.
- Sanitary waste and drainage services incorporating:
 - Gravity flow system connecting to authorities sewer main.
- Stormwater drainage incorporating:
 - Buildings only with connection to Civil drainage systems.
- Cold water supply and distribution services.
- Hot water supply and distribution services.
- Backflow prevention.
- Natural gas supply and distribution services.
- Metering of water supplies.
- Metering of gas supplies.
- Fire Hydrant and Hose Reel supply and distribution services.
- Mechanical plant condensate waste.
- Liaise with relevant authorities and consultants
- D&BP Act class 2 building design declaration

5.2 Hydraulic Services -Clarifications

We have not yet allowed for the following in our scope of service and fee.

- Nomination and scheduling of sanitary fixtures and tapware.
- Nomination of fire extinguishers.
- Landscape irrigation.
- Tenancy fitout services beyond the base building provisions.
- Nomination of sanitary ancillaries such as roll holders, soap dispensers, hand dryers etc.
- Water features including associated plant and distribution systems.
- Diversions, upgrades and/or extension of Authority infrastructure services.
- Shop drawings and work shop drawings

6. Electrical Services

Electrical engineering scope of services will be in accordance with Section 2.4 as clarified below.

6.1 Electrical Services - Extent

The extent of electrical services document will comprise:

- Electrical Maximum Demand calculation;
- Existing Tenancy Distribution Board modification and electricity metering rearrangement;
- General lighting including lighting lux level calculation;
- Lighting control system
- Exit signages and Emergency spit fire as per AS2293-2005
- General power distribution and outlets as per AS3000-2017
- Communications and outlets
- Communication and Power cable reticulation containment
- Coordinate with all other services
- Security services, access control, CCTV cameras and associated power and data provisions
- Lead-in NBN design and application
- Liaise with relevant authorities and consultants
- D&BP Act class 2 building design declaration

6.2 Electrical Services - Clarifications

The electrical service yet has not allowed for following:

- Audio Visual services
- ASP Level 3 design
- Public address and background music
- WAP heat map
- Inter cabinet communications design
- IT hardware and software
- WAP heat map
- Building automation systems
- Temporary work
- Fire Protection Services

7. Fee

7.1 Fee proposal details

We are pleased to outline below our lump sum fees for the provision of services to be undertaken in accordance with the afore mentioned scope.

SERVICES	Design Development	CC Documentation	TOTAL
Mechanical	\$6,600	\$6,600	\$13,200
Car Park CFD	\$3,000	\$3,000	\$6,000
Electrical	\$6,200	\$6,200	\$12,400
Hydraulic	\$6,600	\$6,600	\$13,200
TOTAL (excl GST)	\$22,400	\$22,400	\$44,800
Go	ods & Services Tax (GST	10%	\$4,480
	TOTAL (incl GST)		\$49,280

Any additional work required beyond the scope defined will be charged at hourly rates. The following rates (GST exclusive) are current to project completion.

•	Project Co-ordinator	\$ 240	per hour
•	Engineer	\$ 210	per hour
•	Design Drafter	\$ 150	per hour
•	Administration	\$ 90	per hour
•	Meeting (Extra)	\$ 350	per each

In the event of travel outside the metropolitan area, travel time will be charged at the above rates.

7.2 Claiming of fees

Our fee will be invoiced in the beginning of each design stage.

Payment is due within 14 days of the date of invoice.

8. Terms and Condition

- 1 The Consultant shall provide to the Client the consulting services described in the accompanying letter together with such other services as may be agreed from time to time (the "Services").
- The Consultant shall provide the Services with such skill, care and diligence as is generally exercised by competent members of the consulting profession performing services of a similar nature, at the time the Services are provided.
- The Services will be performed at either or both the site of the project (the "Site") or at other places reasonably required by the Client. Where the locations of the Consultant's work are not under the Consultant's control (including the Site), the Client must provide reasonable access to allow the Consultant to fulfil its obligations (including to provide the Services).
- 4 The Client shall, at its own cost, as soon as practicable make available to the Consultant all information, documents and other particulars relating to the Client's requirement for the project as is necessary for the Consultant to carry out the services as expressly set out in this Agreement (the "Requirements"). The Consultant is entitled to rely on such information, documents and other particulars as are provided by the Client pursuant to or in connection with this Agreement.
- 5 The Client shall pay to the Consultant:
 - a) the Fee and the Reimbursable Expenses as set out in the accompanying letter together with such other amounts in respect of other services agreed to be provided;
 - b) reasonable adjustments to the Fee and the Reimbursable Expenses to reflect the additional costs, expenses, liabilities, losses or other amounts incurred or suffered by the Consultant in the performance of the Services and arising out of or in connection with any event or matter beyond the Consultant's control; and
 - c) to the extent that amounts payable under this Agreement are not expressed to be GST inclusive, an additional amount for the GST incurred by the Consultant in relation to the supply of the Services ("GST").
- The Consultant may claim payment in accordance with the times set out in the accompanying letter or, if no time is set out, monthly in arrears. The Client must pay to the Consultant, without set-off or deduction:
 - a) the amount payable under this Agreement for the Services provided during the relevant period, within 15 days of the Consultant's invoice; and
 - b) the GST payable under this Agreement for the Services provided during the relevant period, within 15 days of receiving a valid tax invoice.
- 7 If the Client does not pay the Consultant in accordance with this Agreement then, without prejudice to any other rights or remedies the Consultant may have, interest will be payable from the date of invoice until payment at a rate per annum equal to the Unsecured Personal Overdraft Rate as most recently published by Westpac, plus 1% per annum.
- 8 To the maximum extent permitted by law:
 - a) subject to paragraphs (b), (c) and (d) below, the Consultant's liability to the Client arising out of or in connection with this Agreement (including the performance or non-performance of the Services), whether under the law of contract, in tort, in equity, under statute or otherwise, shall be limited in aggregate to the amount specified in the accompanying letter or \$300,000, if no amount is stated in the letter.
 - b) the Consultant is not liable to the Client in respect of any indirect, consequential or special losses (including loss of profit,

loss of business opportunity and payment of liquidated sums or damages under any other agreement);

- c) the Consultant shall be deemed to have been discharged from all liability in respect of the Services whether under contract, in tort, in equity, under statute or otherwise, at the expiration of the period specified in the accompanying letter, or if no date is specified, on the expiration of 3 years from the completion of the Services;
- d) if, and to the extent that, any of this clause is void as a result of section 68 of the Trade Practices Act 1974 (Cth), then the Consultant's liability for a breach of a condition or warranty is limited to:
 - (i) the supplying of the relevant Services again; or
 - (ii) the payment of the cost of having the Services supplied again.
- Subject to the Client complying with its obligations under the Agreement, the Consultant grants to the Client a non-exclusive, royalty-free and irrevocable licence to use (and allow others to use) any intellectual property (including all drawings, reports, specifications, bills of quantity, calculations and other documents, including "works" as defined in the Copyright Act 1968 (Cth) created or produced by the Consultant) arising out of provision of the Services ("IP Rights") for the purposes of completing the Project. As between the Client and the Consultant, the ownership of the IP Rights vests in the Consultant.
- 10 Neither the client nor the Consultant shall disclose to third parties or use for any purpose (other than providing or benefiting from the Services) any information provided by the other unless:
 - a) required by law;
 - b) the information is already generally known to the public; or
 - c) the other consents to the disclosure.

All documentation and materials containing confidential information provided by one party to the other shall be returned upon request.

- Any dispute or difference ("Dispute) between the Client and the Consultant may be notified by a party to the other party and the parties shall:
 - a) firstly meet to negotiate, in good faith, resolution of the Dispute; and
 - b) secondly, if negotiation fails to achieve a resolution of the Dispute within 5 working days of the notification of the Dispute, attend mediation, administered in accordance with procedures as set out by the Institute of Arbitrators and Mediators Australia, provided that this provision shall not prevent the Consultant from instituting legal action at any time to recover moneys owing by the Client to the Consultant.
- 12 The Client may, without prejudice to any other rights or remedies it may have, by written notice served on the Consultant terminate its obligations under this Agreement:
 - a) if the Consultant is in breach of the terms of the Agreement and the breach has not been remedied within 28 days of a written notice served by the Client on the Consultant specifying the breach and requiring the breach to be remedied; or
 - b) upon the Client giving the Consultant 60 days' written notice of its intention to do so; or
 - c) if the Consultant informs the Client that it is insolvent, becomes bankrupt, or becomes subject to any official management, receivership, liquidation, provisional liquidation, voluntary administration, winding up or external administration ("Insolvency Event").
- 13 The Consultant may, without prejudice to any other rights or remedies it may have, by notice in writing served on the Client

suspend its obligations under this Agreement:

- a) immediately by written notice if the Client has failed to pay in accordance with this Agreement; or
- b) if the Client is in breach of any of the other terms of the Agreement and the breach has not been remedied within 10 working days (or longer as the Consultant may allow) of a written notice served by the Consultant on the Client specifying the breach and requiring the breach to be remedied.
- 14 The Consultant may, without prejudice to any other rights or remedies it may have, terminate its obligations under this Agreement:
 - a) if the breach referred to in clause 13(a) has not been remedied within 5 days of a written notice served by the Consultant on the Client specifying the breach and requiring the breach to be remedied; or
 - b) if the Client is in breach of any of the other terms of the Agreement and the breach has not been remedied within 28 days of a written notice served by the Consultant on the Client specifying the breach and requiring the breach to be remedied; or
 - c) upon the Consultant giving the Client 60 days' written notice of its intention to do so; or
 - d) if an Insolvency Event occurs in relation to the Client.
- 15 If the Consultant considers it appropriate to do so, it may, with the Client's prior approval, which shall not be unreasonably withheld or delayed, engage other consultants to assist the Consultant in specialist areas. The other consultant shall be engaged at the Client's risk, cost and expense, and on its behalf.
- 16 Neither party may assign, transfer or sublet any obligations under this Agreement without the written consent of the other.

 Unless stated in writing to the contrary, no assignment, transfer or subletting shall release the assignor from any obligation under this agreement.
- 17 In the interpretation of this Agreement, no rule of construction applies to the disadvantage of one party on the basis that it put forward this Agreement or any part of it.

9. Confirmation of Engagement form

Project: 198-200 Princes Highway, Kogarah Bay

I/We hereby to accept this fee proposal and the responsibility for payment in accordance with the stated "Terms of Agreement for Professional Services".

I/We hereby agree to and accept the proposed lump sum fee as outlined in their Submission for the disciplines selected below:

please tick	Discipline
	Mechanical
	Car Park CFD
	Hydraulic
	Electrical

Client / Company Authorised Representative Signature	Date
ull Name (Please print in in BLOCK LETTERS)	
Company Name	ABN Number