

175A - 179 Burns Bay Rd, Lane Cove

Mechanical, Electrical, Hydraulic
Disciplines Submission

Prepared for:

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Date:
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1. Introduction

We are pleased to present our submission in providing Mechanical, Electrical and Hydraulic Consultancy Services. We have prepared this submission in response to an invitation from Alex Xiao of Zhengde group for the provision of Consultancy Service for 175A - 179 Burns Bay Rd, Lane Cove, residential townhouse project.

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2. Scope of Works

2.1 General Scope

The general scope of our service comprises post DA service of Schematic design, design development, tender documentation and construction documentation stage. We have priced for 9 townhouses and its auxiliary facilities.

2.2 Programme

We understand that the programme is yet to be finalised 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:

- 175A - 179 Burns Bay Road. DA.PDF
- BASEMENT-A101.pdf
- BASEMENT-A104.pdf
- FIRST FLOOR PLAN-A103.pdf
- FIRST FLOOR PLAN-A106.pdf
- GROUND FLOOR PLAN-A102.pdf
- GROUND FLOOR PLAN-A105.pdf

2.4 Mechanical, Electrical and Hydraulic Services

Scope of Mechanical, Electrical and Hydraulic Services comprises the following stages.

2.4.1 General Scope For Design Application Stage

| | |
|-----------------------------|---|
| Schematic Design | <ul style="list-style-type: none">• Identify the project and its objectives• Establish the component parts or systems in broad terms to be included in the project• Calculate preliminary services estimates of costs and time where appropriate. Structural and civil costs to be provided by the Quantity Surveyor• Prepare preliminary project brief• Attend consultant project meetings, as appropriate (2 off allowed per service) |
| Design Development | <ul style="list-style-type: none">• Present options with costs (services only), advantages/disadvantages• Preliminary negotiations with relevant authorities having jurisdiction• Define the principles of the engineering systems in the project• 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• Review services cost estimates and time programme where appropriate• Prepare the final brief for the project• Attend consultant project meetings, as appropriate (2 off allowed per service) |
| Tender Documentation | <ul style="list-style-type: none">• Describe the engineering systems by means of specification and drawings• Carry out detailed calculations• Pre-empt and address constructability issues within documents where possible |

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| | |
|-----------------------------------|---|
| | <ul style="list-style-type: none"> • Finalise details of interface between engineering disciplines • Refer details for client and authority approval where appropriate • Review documents against the brief • Final co-ordination check with other team members • Attend consultant project meetings, as appropriate (2 off allowed per service) • Full Tender Documentation in Revit |
| Construction Documentation | <ul style="list-style-type: none"> • Finalize design and update drawing for construction certification • Coordinate between services as required |

2.4.2 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 2D AutoCAD

2.4.3 Mechanical Service Specific Inclusion

Mechanical engineering scope of services will be in accordance with Section 2.4.1 General Scope of Service as clarified below:

Mechanical Services - Extent

The extent of mechanical services document will comprises:

- Car Park ventilation to AS 1668.2.
- Air Conditioning systems to all townhouses.
- Wet area ventilation to all townhouses.
- Plant room ventilations.
- Other ventilation to AS 1668.2.

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 (however, we have the capability for this service and are able to provide an acoustics consultancy fee, if required).
- 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.

2.4.4 Electrical Services Specific Inclusion

Electrical engineering scope of services will be in accordance with Section 2.1 General Scope of Service as clarified below.

Electrical Services - Extent

The extent of electrical services document will comprises:

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- Power distribution within the site.
- Metering.
- Mains and submains cables.
- Advice on dimensions and location of the substation (if needed, subject to level 3 design)
- Power distribution boards.
- Internal lighting.
- Emergency egress lighting.
- External lighting.
- General power requirements.
- NBN Distribution.
- Automatic fire alarm system in apartments
- Lightning Protection.
- Landscape lighting (if required)
- Master antenna TV system (MATV).
- Access control systems plus CCTV, Security and Pay TV.

Electrical Services - Clarifications

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

- ASP Level 3 design fees, charges and costs.
- Any works related to detailed substation design, construction and authority charges.
- Temporary work

2.4.5 Hydraulic Services Specific Inclusion

Hydraulic engineering scope of services will be in accordance with Section 3.1 General Scope of Service as clarified below.

Hydraulic Services- Extent

The extent of hydraulic services document will comprises:

- Connection to authority services including sewer, water and gas.
- Sanitary waste and drainage services incorporating:
 - Gravity flow system connecting to authorities sewer main.
- Rainwater collection from roof, balconies and canopies incorporating:
 - Gravity flow systems (balconies).
- 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.

Hydraulic Services -Extent

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

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- Nomination and scheduling of sanitary fixtures and tapware.
- Nomination of fire extinguishers.
- Landscape irrigation.
- 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.

2.4.6 ESD / Sustainability Services

Sustainability scope of services will be in accordance with Section 2.1 General Scope of Service as clarified below.

The Sustainability Services outlined below include the following sustainability assessment:

- Building Sustainability Index (BASIX) Certificate

Building Sustainability Index (BASIX) – Extent

- Undertake a BASIX assessment for the proposed development based on the preliminary design to determine current performance and any improvements required to achieve compliance.
- The development will be assessed for conformance with BASIX in accordance with the Nationwide House Energy Rating Scheme (NatHERS).
- This is a performance solution method which assesses the individual components of the building envelope and its water and energy consuming elements as a whole. Typically, this leads to greater flexibility in the design of the façade and glazing.
- It is proposed to assess the performance of the building against the NatHERS Scheme with the use of BERS PRO 2nd generation energy modelling software package. BERS PRO meets the Australian Building Codes Board (ABCB) Protocol for 2nd generation thermal simulation software and is approved for use in New South Wales in association with the BASIX energy assessment system.
- Provide direction on any improvements required to achieve compliance based on preliminary assessment of the current design solution. Improvements will be based on the most cost effective solutions.
- Liaise with the project team to incorporate any required improvements to achieve the required criteria.
- Provide final certification for inclusion in DA (Development Approval) submission to council.
- Liaise with all relevant authorities and organisations.

Deliverables:

- Preliminary BASIX Report.
- BASIX Certificate

Clarification:

Authority fees and charges are not included, shown as follows:

- BASIX Certificate fees charged by department of planning and environment, NSW (approximately \$11,220 (GST free), based on 558 apartments)
- Universal Certificate fees charged by energy inspection (approximately \$16,740 + GST, based on 558 apartments)

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3. Key Personnel

Our key personnel proposed for this project are as follows:

| | | |
|--|---|------------|
| Project Co-ordinator/Mechanical Engineer | - | Felix Ye |
| Electrical Engineer | - | Gary Pan |
| Hydraulic Engineer | - | Jim Ding |
| ESD Engineer | - | Lance Chen |

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4. Fee

4.1 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 aforementioned scope.

| SERVICES | Schematic Design | Design Development | Tender Documentation | Construction Documentation | TOTAL |
|---|------------------|--------------------|----------------------|----------------------------|-----------------|
| Mechanical | \$1,500 | \$3,000 | \$4,000 | \$1,500 | \$10,000 |
| Electrical | \$1,500 | \$3,000 | \$4,000 | \$1,500 | \$10,000 |
| Hydraulic | \$1,500 | \$3,000 | \$4,000 | \$1,500 | \$10,000 |
| ESD | \$3,000 | \$4,000 | \$0 | \$1,000 | \$8,000 |
| TOTAL (excl GST) | \$7,500 | \$13,000 | \$12,000 | \$5,500 | \$38,000 |
| Goods & Services Tax (GST) 10% | | | | | \$3,800 |
| TOTAL (incl GST) | | | | | \$41,800 |

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.

4.2 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.

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5. 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").
- 2 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.
- 3 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").
- 6 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,

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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.

- 9 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.

- 11 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

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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.

6. Confirmation of Engagement form

Project: 175A - 179 Burns Bay Rd, Lane Cove Multi-service Consultancy

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:

| <i>please tick</i> | Discipline |
|---------------------------|-------------------|
| <input type="checkbox"/> | Electrical |
| <input type="checkbox"/> | Mechanical |
| <input type="checkbox"/> | Hydraulic |
| <input type="checkbox"/> | ESD |

Client / Company Authorised Representative Signature

Date

Full Name (Please print in in BLOCK LETTERS)

Company Name

ABN Number