



## **R. BOUWMEESTER & ASSOCIATES**

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*Shadow Impact & Solar Access Studies • Site Planning & Building Design Input • Accident Investigation Input*

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October 17, 2016

*“BY E-MAIL ONLY”*

Hawaii Ocean Plaza LP  
1585 Kapiolani Boulevard, Suite 1215  
Honolulu HI 96814

Attention: Mr. Jay Fang

Dear Mr. Fang:

**Re: Proposal for Shadow Impact Study  
Proposed Mixed-Use Highrise Development  
*Hawaii Ocean Plaza*  
1362 Kapiolani Boulevard  
Honolulu, Hawaii**

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Thank you for your RFP. We are pleased to provide you with this proposal for the preparation of a shadow impact study as required by the City and County of Honolulu in support of your development applications. This proposal is based on ‘Concept 5’ plans dated October 7, 2016, prepared by FSC Architects, showing a 40-storey building consisting of a 23-storey tower on a 17-storey podium. The site is located at 1362, 1370, and 1376 Kapiolani Boulevard.

The following summarizes the proposed terms of reference and scope of work.

### **1.0 Background Information to be Provided by Client** (in AutoCAD 2013 format or earlier)

- site plan showing the proposed development
- floor plans and roof plan of the proposed building
- elevation views of the proposed building
- topographical survey of the subject site and immediate surroundings
- legal boundary survey of the subject site
- 3D massing model of the proposal.

### **2.0 Purpose of Study**

- to support your development applications
- to demonstrate the shadow reach of the proposal on adjacent lands, particularly at ground level as stipulated in the Interim Planned Development - Transit, Application Instructions as provided.

### **3.0 Methodology**

- the study dates will be the 21<sup>st</sup> of each month
- study times will be 9:00 am, noon and 3:00 pm local time on each study date
- Mar, Jun, Sep and Dec 21<sup>st</sup> will include a comparison of the proposed height (400 feet) vs. permitted height (350 feet)



- the drawings will include shadows of the proposed building overlaid on an aerial image of the area. (Shadows from existing buildings will not be shown since existing building heights are not available.)
- the shadow patterns will be shown on an assumed flat ground plane.

**4.0 Deliverables**

- the shadow drawings will be issued in PDF format to scale (imperial) on 11 x 17 sheets
- the study will include a roof height key plan
- the study will include a written summary of the shadow impacts related to the difference between the proposed tower height (400') and the height limit for the area (350') on Mar, Jun, Sep and Dec 21<sup>st</sup>.

**5.0 Timing**

- please allow 3 weeks from receipt of the required background information.

**6.0 Fees & Terms**

- fixed fee of \$7,000.00 including expenses (this assumes that the deliverables will be provided to you by email and that printing will be carried out at your end)
- one invoice for the above will be issued following the submission of the study to you
- if required, additional study times will be prepared for \$200.00 each
- if required, additional proposed vs permitted comparisons will be prepared for \$75.00 per study time
- all payments are to be made by wire transfer
- invoices are due upon receipt and interest will be charged at the rate of 1% per month (12.68% per annum) on accounts outstanding after 30 days.

Revisions to the study as a result of building and/or site plan revisions are not included in the above fixed fee. In addition, this proposal does not include in-person meetings or travel, however, we will coordinate with you and your architect by email and telephone as needed.

Thank you for considering us for this assignment. Upon your authorization, as indicated by signing and returning a copy of this proposal to us for our records, and upon receipt of the required background information, we will proceed with the study.

If you have any questions, or if any clarification is required, please let me know.

I look forward to your favourable reply and to working with you and your team on this project.

Yours very truly,

**R. BOUWMEESTER & ASSOCIATES**



Ralph Bouwmeester, P. Eng.  
Principal

Accepted by:

Maraisi Odeem Hazn 10/30/2016  
Company Date

Zhe Fang Manager  
Name & Title Signature