

## Cliffe, Ashley AVED:EX

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**From:** Nickerson, Catherine M AVED:EX  
**Sent:** Tuesday, January 5, 2016 2:01 PM  
**To:** Gogela, Deborah AVED:EX; McMahan, Alana AVED:EX  
**Cc:** Gill, Inder AVED:EX; Gellor, Richard AVED:EX; Prive, Doris L AVED:EX  
**Subject:** vote 13 re: interim Strategic Advisory Services for KPU

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Hi Deborah and Alana,

Last fall, Rick Steele (formerly of PBC) provided interim Strategic Advisory Services to KPU to help them get their project back on track. Subsequently, KPU issued a RFP and hired Mark Bullen as their Strategic Advisor and Rick no longer provides services.

I think that Rick was engaged by PBC who they then assigned him to provide services to KPU.

I do not know and/or don't recall if PBC invoiced KPU directly or if AVED was billed for Rick's services under the AVED-PBC contract for services that PBC provides periodically during the year.

Can you please review the PBC contract and invoices and determine if the cost for Rick's services have been invoiced and paid by AVED?

If they have been that's fine. If they haven't, we should check with Karen to find out if KPU paid them or if we should be planning to pay them from vote 13.

I don't know how much the charge is/was.

Please let me know if you would like to discuss.

Thanks, Catherine

# Chip & Shannon Wilson School of Design

## Construction Contracting & Procurement Strategy

Draft for Discussion Rev B

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January 7, 2016

## INTRODUCTION

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### Project Overview

The new Chip and Shannon Wilson School of Design Building (the “Project”) will be built at the Richmond campus of Kwantlen Polytechnic University (“KPU”). The Project has a total budget of \$36m, with the construction contract estimated to be \$22.1m; the building has a Gross Floor Area of approximately 6,000m<sup>2</sup>; and classes are scheduled to commence in the new facility on January 3, 2018.

### Contracting and Procurement

It is helpful first of all to define the terms Contracting and Procurement, as they are often mistakenly used interchangeably. Contracting refers to the terms and conditions under which the construction contractor will be engaged by KPU; whereas Procurement refers to the process of taking the Project to the market.

How we contract and procure the Project can have a profound impact on value for money and ultimately the overall viability of the Project, which why it is important to develop and document a contracting and procurement strategy. This contracting and procurement strategy has been developed within the existing constraints based upon the key project-specific risks and prioritized project objectives listed overleaf.

### Existing Constraints

The Project Board has mandated that the construction of the Project:

- a. be competitively procured (without shortlisting of bidders);
- b. be procured on the basis of a design-bid-build delivery method;
- c. utilize the contract form CCDC 2 (2008) Stipulated Price Contract; and
- d. include a *downward scope ladder* as part of the contracting strategy.

From this starting point, there are clearly restrictions on the scope of this contracting and procurement strategy, however, there is much that can be done to improve the likelihood of project success, and this report aims to set out the necessary steps.

## PROJECT RISKS & OBJECTIVES

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### Key Project Risks

The Project risk register includes a detailed listing of all previously identified Project risks, however, the Chief Project Officer has identified the following procurement and contracting specific risks, which this strategy should address:

- Construction bid prices come in over budget
- Inadequate number of bids are received
- Unrealistically low bid price received
- Downward scope savings are not priced competitively
- Basis of bid evaluation is unclear to bidders
- Contract award is challenged
- Tender response duration is insufficient
- Construction duration results in bid price premium

### Key Project Objectives

1. To deliver the Project within the overall budget of \$36m - based on the latest cost forecast, this means that we have a budget for this procurement of \$22.1m, with a possible contingency of up to \$2m through to project completion.
2. To deliver a facility to a superior level of architectural design that performs to high environmental standards, and which meets the faculty's functional requirements, providing a quality educational space with ample natural light and ventilation, and high acoustic performance in design studios.
3. To deliver the facility in time for commencement of classes on January 3, 2018.



## PROCUREMENT VEHICLE

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Perhaps the most fundamental question to address is whether the procurement vehicle is a Request for Proposals (an RFP) or a call for tenders – the key difference between these two procurement vehicles being whether the contractor's submissions are the basis for negotiation or if in fact they are firm and irrevocable bids submitted on an equal basis, of which KPU is obliged to accept the lowest compliant bid.

Since the over-riding intent with this procurement is to identify the lowest price bid from the market based on identical information, namely: a complete design; a fixed start and end date; and full acceptance of proposed terms and conditions, it is likely that this procurement process would be deemed a call for tenders regardless of what it is called.

Having said this, the downward scope ladder is a feature more common to an RFP process than a call for tenders, and so we need to take care to accommodate pricing and evaluation of the downward scope ladder within the procurement process in a way does not give perceived or actual unfair advantage to any one bidder.

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## BASIS OF EVALUATION

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There are a number of issues to consider in terms of how the tenders will be evaluated.

### Obligation to Accept Lowest Compliant Bid

The first issue is that the procuring entity (KPU) should not be obliged to accept the lowest bid price in the event that it is above the Project budget. The following are means of dealing with this scenario:

- Make the requirement for bid prices to be within budget a bid compliance requirement. This would reasonably require that the budget be disclosed to bidders.
- Include a statement to the effect that KPU reserves the right to cancel the tender if no bids are submitted within the Project's "affordability criteria" – this will leave the door open to accepting a bid which is over budget.
- Include a statement to the effect that KPU reserves the right to negotiate with bidders if no compliant bids are received within budget.

To not disclose the actual budget may be a missed opportunity to provide very clear direction to the market, and would not provide a benefit to this Project, since it is understood that additional funding will not be made available in any circumstances.

If disclosed, the Construction budget should be credible, but given the nature of design-bid-build, it should also leave an adequate contingency to tackle issues that may arise post-contract. The current cost report identifies \$2.2m total project contingency – if this is unchanged following receipt of the Class A construction estimate, this would permit the Construction Budget of \$22.1m to increase by up to a modest \$1.1m to \$23.2m, leaving a further 5% (\$1.1m) post-contract contingency.

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## Evaluation of Alternate Bids

In the case that no compliant bid prices are received within budget, the downward scope ladder would then be implemented. The downward scope ladder creates a more complex evaluation as we are essentially asking the market to price a range of alternate bids.

If the range of alternate bid prices are to form part of the evaluation procedure, it will require strict adherence to an order of priority for implementation of the downward scope savings - picking and choosing from the downward scope ladder to fit the budget cannot be allowed as this could be construed as bid price manipulation.

If the range of alternate bid prices are not to form part of the evaluation procedure, but rather form the basis of negotiation with the bidder submitting the lowest base bid,

then since there is no competition involved in the pricing of the downward scope ladder, it is more likely that bidders will not offer full value for the downward scope ladder savings.

A possible solution to this is to use “first past the post” as the evaluation method, where the “post” is the budget:

- Comparison of the Construction Budget against the base bid would be the basis of evaluation
- If there are no base bids under the defined budget threshold, comparison of the Construction Budget against the base bid less the proposed savings for the first item on the downward scope ladder would be the basis of evaluation.
- If there are still no bids under the defined budget threshold, comparison of the Construction Budget against the base bid less the proposed savings for the first and second item on the downward scope ladder would be the basis of evaluation, and so on.
- If all the downward scope ladder items are deducted and there are still no bid prices that are below the defined budget threshold, the Owner may either negotiate with the bidder who is closest to the Construction Budget or otherwise cancel the procurement process. Refer to Appendix A for an example.

In terms of how the downward scope ladder is presented in the tender documents, not all potential bidders will be familiar with the “downward scope ladder” terminology, which may cause confusion. CCDC has suitable terminology “alternate pricing” that may work better.

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A further issue is that use of a call for tenders typically precludes consideration of bidder proposed alternate bids, the prices for which could not be compared on an equal basis.

The options here are to either prohibit bidder proposed alternate bids entirely, or otherwise to only permit consideration of such alternatives provided by the successful bidder, although this second option would mean that such proposals would not be subject to competitive pricing.

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There is one alternate bid option that has been considered which is not based on scope omission or substitution, and that is for the extension of the construction duration. This option is not being taken forward since it is unlikely to deliver a saving unless the Project schedule was particularly aggressive and/or the contract stipulated liquidated damages.

The construction duration on this Project is not aggressive, as confirmed by the Construction Manager and to apply liquidated damages would be an additional cost to the Project that was not included during the last tender and has not been included in the construction cost estimate. A further issue with liquidated damages is that it encourages a more aggressive pursuit of time and cost entitlement for change orders, which will place pressure on any post-contract contingency.

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## BONDING & INSURANCE

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CCDC 2 is a tried and tested form of contract that is generally well received by the market, and it comes with three standard forms for the following types of bond:

- **Bid Bond** – This security is intended to ensure that the bidder will honour their tender and is typically 10% of the tender price. The successful bidder's bid bond will not be released until after the contract has been executed and they have provided a performance and labour and materials bond. A further benefit of a bid bond derives from the fact that the bonding company (surety) will conduct due diligence to ensure that they are comfortable that the contractor is capable of delivering the contract, and has a track record of honouring their commitments.

Note: Requiring a "consent of surety" (or "agreement to bond") in addition to the bid bond can provide further assurance as it commits the provider of the bid bond to subsequently providing the performance bond and labour and materials bond in the event that the bidder executes the contract. There is no CCDC standard form for a consent of surety.

- **Performance Bond** – This security is intended to ensure that the successful bidder (the General Contractor) will deliver the work for which they have been contracted, and is typically set at 50% of the contract value.
- **Labour and Materials Bond** – This bond provides security in favour of subcontractors of the General Contractor in the eventuality that the General Contractor does not pay those subcontractors, and reduces the risk of lien claims. This bond is typically set at 50% of the contract value

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## PROCUREMENT TRANSPARENCY

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As with any publicly funded construction Project over \$100k, the call for tenders must be open to public competition, and provincial ministries are required to do so by posting on BC Bid. Ministries are also required to post contract award summaries for each competitive opportunity published on BC Bid.

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It is good practice to hold a public tender opening, and this can be performed electronically by publishing “unverified bid results” together with the corresponding bid amounts.

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An additional opportunity exists to leverage BC Bid to notify potential bidders and subcontractors to the upcoming opportunity in advance of the call for tenders. This notice may also be used to advertise a project information session. These sessions can be helpful in clarifying project details and generally raising awareness and interest in the project from the contracting community. This is considered an important opportunity with this particular Project as it is important to convey the message to the market that the Project has been substantially redesigned, and that the budget is very much a fixed constraint.

A further option is to hold a trades / subcontractor information session to review design/specification details of key trades packages e.g. façade, Mechanical / Electrical / Plumbing.

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## SUPPLEMENTARY CONDITIONS

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The Supplementary Conditions and Project Specific Amendments employed during the previous tender are not onerous and should not raise any concerns with the contracting community, however, the clauses required by the Province for Insurance, Bonding and Indemnification have been updated since and are as set out in Appendix B.

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## APPENDIX A

The following is an example of how bid prices would be evaluated.

- In this example, the Construction Budget is set at \$22,100,000 and there are three bidders.
- None of the bidders have submitted a base bid under the project budget threshold
- The first table (below) indicates the Base Bid Prices as well as the savings for each item on the downward scope ladder.

	Bidder 1	Bidder 2	Bidder 3
<b>Base Bid Price</b>	<b>23,735,000</b>	<b>23,015,000</b>	<b>25,585,000</b>
Base Bid - Saving #1	\$450,000	\$600,000	\$300,000
Base Bid - Saving #2	\$20,000	\$10,000	\$30,000
Base Bid - Saving #3	\$20,000	\$5,000	\$25,000
Base Bid - Saving #4	\$120,000	\$100,000	\$50,000
Base Bid - Saving #5	\$20,000	\$220,000	\$150,000
Base Bid - Saving #6	\$120,000	\$200,000	\$50,000
Base Bid - Saving #7	\$40,000	\$35,000	\$40,000
Base Bid - Saving #8	\$20,000	\$20,000	\$10,000
Base Bid - Saving #9	\$50,000	\$34,000	\$58,000
Base Bid - Saving #10	\$120,000	\$100,000	\$85,000
Base Bid - Saving #11	\$320,000	\$200,000	\$180,000
Base Bid - Saving #12	\$150,000	\$200,000	\$950,000
Base Bid - Saving #13	\$185,000	\$150,000	\$190,000

- In practice, the savings would be reflected in the bids as Alternate Prices 1 to 13, as shown in the second table (overleaf).

	Bidder 1	Bidder 2	Bidder 3
<b>Base Bid Price</b>	<b>23,735,000</b>	<b>23,015,000</b>	<b>25,585,000</b>
Alternate Price #1	23,285,000	22,415,000	25,555,000
Alternate Price #2	23,265,000	22,405,000	25,530,000
Alternate Price #3	23,245,000	22,400,000	25,480,000
Alternate Price #4	23,125,000	22,300,000	25,330,000
Alternate Price #5	23,105,000	<b>22,080,000</b>	25,280,000
Alternate Price #6	22,985,000	21,880,000	25,240,000
Alternate Price #7	22,945,000	21,845,000	25,230,000
Alternate Price #8	22,925,000	21,825,000	25,172,000
Alternate Price #9	22,875,000	21,791,000	25,087,000
Alternate Price #10	22,755,000	21,691,000	24,907,000
Alternate Price #11	22,435,000	21,491,000	23,957,000
Alternate Price #12	22,285,000	21,291,000	23,767,000
Alternate Price #13	22,100,000	21,141,000	23,767,000

- Bidder 2 is the *first past the post* - their base bid plus the first 5 downward scope item savings is the first to come underneath the budget threshold
- Bidder 2's Alternate Price #5 would be accepted.



## APPENDIX B

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### **ADVANCED EDUCATION (PUBLIC POST SECONDARY INSTITUTIONS) – OWNER INSURED CONSTRUCTION PROJECTS**

**Indemnification and Insurance Clauses  
(to be included in Supplementary Conditions to the  
CCDC 2 – 2008 Contracts for Advanced Education projects insured  
by the Owner with an Estimated Project Cost of \$50,000.00 or greater)**

#### **MODIFICATIONS TO GENERAL CONDITIONS**

**GC 11.1 – INSURANCE**, replace entirely with the following:

11.1.1 Without restricting the generality of GC 12.1 – INDEMNIFICATION, insurance and coverage will be arranged and paid for as under-noted:

**a) Commercial General Liability Insurance**

- 1) The Owner shall provide, maintain and pay for Commercial General Liability Insurance with a limit of Ten Million Dollars (\$10,000,000.00), inclusive per occurrence, Twenty Million Dollars (\$20,000,000.00) general aggregate for bodily injury, death, and damage to property including loss of use thereof, product/completed operations liability with a limit of Ten Million Dollars (\$10,000,000.00) annual aggregate.
- 2) The insurance shall cover the Owner, Contractors & Sub-contractors, Architects, Engineers, Consultants and anyone employed by them to perform a part or parts of the Work but excluding suppliers whose only function is to supply and/or transport products to the project site. The insurance does not extend to any activities, works, jobs or undertakings of the insureds other than those directly related to the Work of this Contract.
- 3) The insurance shall preclude subrogation claims by the insurer against anyone insured hereunder.
- 4) The insurance shall include coverage for:
  - .01 Premises and Operations Liability;
  - .02 Products and Completed Operations Liability;
  - .03 Blanket Contractual Liability;
  - .04 Cross Liability;

- .05 Elevator and Hoist Liability;
  - .06 Contingent Employer's Liability;
  - .07 Personal Injury Liability;
  - .08 Shoring, Blasting, Excavating, Underpinning, Demolition, Piledriving and Caisson Work, Work Below Ground Surface, Tunneling and Grading, as applicable;
  - .09 Liability with respect to Non-Owned Licensed Vehicles (\$5,000,000.00);
  - .10 Broad Form Property Damage;
  - .11 Broad Form Completed Operations;
  - .12 Limited Pollution Liability (\$2,000,000.00);
  - .13 Employees as Additional Insureds;
  - .14 Broad Form Tenants Legal Liability (\$1,000,000.00); and
  - .15 Operation of Attached Machinery.
- 5) Any applicable deductibles shall not exceed Ten Thousand Dollars (\$10,000.00) except with respect to loss or damage arising from hot roofing operations which will carry a deductible of Two Million Dollars (\$2,000,000.00).

If the Project requires hot roofing work, the Contractor will provide, maintain and pay for a Commercial General Liability Insurance in the amount of Two Million Dollars (\$2,000,000.00) inclusive per occurrence against bodily injury and property damage and will require the roofing Sub-contractor to maintain a similar insurance policy. The Owner shall be added as an additional insured. Such insurance shall include, but not be limited to:

- .01 Premises and Operations Liability;
- .02 Products and Completed Operations;
- .03 Owner's and Contractor's Protective Liability;
- .04 Blanket Written Contractual Liability;
- .05 Contingent Employer's Liability;



- .06 Personal Injury Liability;
  - .07 Non-Owned Automobile Liability;
  - .08 Cross Liability;
  - .09 Employees as Additional Insureds; and
  - .10 Broad Form Property Damage.
- 6) This insurance shall be maintained continuously from commencement of the Work until the date of final certificate for payment is issued or when the insured project is completed and accepted by or on behalf of the Owner, whichever occurs first, plus with respect to completed operations, cover a further period of twenty-four (24) months.

**b) Property Coverage**

- 1) The Owner shall provide, maintain and pay for Course of Construction insurance, against "All Risks" of physical loss or damage, and will cover all materials, property, structures and equipment purchased for, entering into, or forming part of the Work whilst located anywhere in Canada and continental United States of America (excluding Alaska) during construction, erection, installation and testing until completed and handed over and accepted by the Owner. Such insurance shall not include coverage for Contractor's equipment of any description. There will be a deductible of Five Thousand Dollars (\$5,000.00) for each and every occurrence except for the perils of flood which shall have a deductible of Ten Thousand Dollars (\$10,000.00) and earthquake which shall have a five percent (5%) (subject to minimum One Hundred Thousand Dollars (\$100,000.00)) deductible based upon completed values at time of loss.
- 2) The insurance shall include as a protected entity, each Contractor, Subcontractor, Architect or Engineer who is engaged in the Project.
- 3) The insurance will contain a waiver of the Owner's rights of subrogation against all protected entities except where a loss is deemed to have been caused by or resulting from any error in design or any other professional error or omission.
- 4) The Contractor shall, at their own expense, take special precaution to prevent fires occurring in or about the Work and

shall observe, and comply with, all laws and regulations in force respecting fires.

**c) Automobile Liability Insurance**

The Contractor shall provide, maintain and pay for and require all Subcontractors to provide, maintain and pay for Automobile Liability Insurance in respect of all owned or leased vehicles, subject to limits of not less than Two Million Dollars (\$2,000,000.00) inclusive per occurrence. The insurance shall be placed with such company or companies and in such form and deductibles as may be acceptable to Owner.

**d) Aircraft and/or Watercraft Liability Insurance**

The Contractor shall provide, maintain and pay for liability insurance with respect to owned or non-owned aircraft and watercraft if used directly or indirectly in the performance of the Work, subject to limits of not less than Two Million Dollars (\$2,000,000.00) inclusive per occurrence for bodily injury, death, and damage to property including loss of use thereof and including Aircraft Passenger Hazard where applicable. The insurance shall be placed with such company or companies and in such form and deductibles as may be acceptable to Owner.

**NOTE: The following insurance sub-clause is an additional amendment not previously included:**

**(e) Contractors Pollution Liability Insurance**

*When applicable, the Contractor (or Contractor's Subcontractors) will be required to provide, maintain and pay for:*

Contractor's Pollution Liability, where the Contractor's performance (or Contractor's Subcontractors performance) of the work is associated with hazardous materials clean-up, removal and/or containment, transit and disposal. This insurance must have a limit of liability not less than \$2 million inclusive per occurrence insuring against bodily injury, death, and damage to property including loss of use thereof. The Owner must be included as an additional insured for its vicarious liability. Such insurance shall not be impaired by any time element limitations, biological contaminants (without limitation, mould and bacteria), asbestos, or lead based paint exclusions. Any "insured vs. insured" exclusion shall not prejudice coverage for the Owner and shall not affect the Owner's ability to bring suit against the Contractor as a third party.

Any insurance required under this section (e) must be endorsed to provide the Owner with 30 days advance written notice of cancellation. If any such insurance is provided on a claims-made basis and that insurance is cancelled or not renewed, such policy must provide a 24 month extended reporting period. The Contractor must cause all Subcontractors to provide to the Owner a Certificate of Insurance confirming all policies and endorsements necessary to comply with the insurance requirements outlined herein, or upon request, provide a certified copy of the required insurance policy.



- 11.1.2 Unless specified otherwise, the duration of each coverage and insurance policy shall be from the date of commencement of the Work until the date of final certificate for payment.
- 11.1.3 The Owner shall, upon request, provide the Contractor with proof of coverage and insurance for those coverages and insurances required to be provided by the Owner prior to commencement of the Work.
- 11.1.4 The Contractor and/or their Subcontractors, as may be applicable, shall be responsible for any deductible amounts under the policies of coverage and insurance except for perils of flood and earthquake.
- 11.1.5 The Contractor shall provide, maintain and pay for any additional insurance which he is required to provide by law or which he considers necessary to cover risks not otherwise covered by coverage/insurance specified in this section.
- 11.1.6 The Contractor shall provide the Owner with proof of insurance for those insurances required to be provided by the Contractor prior to the commencement of the Work in the form of a completed Certificate of Insurance.
- 11.1.7 The Owner shall not be responsible for any injury to the Contractor's employees or for loss or damage to the Contractor's or to the Contractor's employees' machinery, equipment, tools or supplies which may be temporarily used or stored in, on or about the premises during construction and which may, from time-to-time, or at the termination of the contract, be removed from the premises. The Contractor hereby waives all rights of recourse against the Owner or any other contractor with regard to damage to the Contractor's property.

### **Bond Clause**

**(to be included in Supplementary Conditions to the CCDC 2 – 2008 Contracts  
for Projects \$150,000.00 or greater)**

#### **MODIFICATIONS TO GENERAL CONDITIONS**

**GC 11.2 CONTRACT SECURITY, delete entirely and replace with the following:**

- 11.2.1 The Contractor shall prior to commencement of the *Work* furnish performance and labour and material payment bonds within fourteen (14) days of the date of this Contract. Each bond must be in a sum equal to 50% of the total Contract price. The bonds must be issued on the latest CCDC-221 or CCDC-222 approved forms or other such forms approved by the Surety Association of Canada and issued by a surety company registered in the Province of BC or another surety company acceptable to the Owner. The Contractor must maintain the bonds in good standing until the fulfilment of the Contract.

**GC 12.1 – INDEMNIFICATION**, delete GC 12.1.1 and 12.1.2 and replace with the following:

**GC 12.1 – INDEMNIFICATION**

12.1.1 Without restricting the parties' obligation to indemnify as described in paragraphs 12.1.4 and 12.1.5, and excepting always losses arising out of the independent acts of the party for whom indemnification is sought, the Owner and the Contractor shall each indemnify and hold harmless the other from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings whether in respect to losses suffered by them or in respect to claims by third parties that arise out of, or are attributable in any respect to their involvement as parties to this contract, provided such claims are:

- .1 caused by:
  - (1) the acts or omissions of the party from whom indemnification is sought or anyone for whose acts or omissions that party is liable, or
  - (2) a failure of the party to the Contract from whom indemnification is sought to fulfill its terms or conditions; and
- .2 made by Notice in Writing within such periods as prescribed by the Limitation Act of the Province of British Columbia.

12.1.2 The obligation of either party to indemnify as set forth in paragraph 12.1.1 shall be limited as follows:

- .1 In respect to losses suffered by the Owner and the Contractor for which insurance is to be provided by the owner pursuant to GC 11.1 – INSURANCE, the limit of the GENERAL LIABILITY COVERAGE – GC 11.1.1(a) or the limit of the PROPERTY COVERAGE – GC 11.1.1(b) whichever is pertinent to the loss.
- .2 In respect to losses suffered by the *Owner* and the *Contractor* for which insurance is not required to be provided by either party in accordance with GC 11.1 – INSURANCE, the greater of the *Contract Price* as recorded in Article A-4 – CONTRACT PRICE or \$2,000,000.00, but in no event shall the sum be greater than \$20,000,000.00.
- .3 In respect to claims by third parties for direct loss resulting from bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, the obligation to indemnify is without limit. In respect to all other claims for indemnity as a result of claims advanced by third parties, the limits of indemnity set forth in paragraphs 12.1.2.1 and 12.1.2.2 shall apply.



## Cliffe, Ashley AVED:EX

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**From:** mark bullen <mark@capexprojects.com>  
**Sent:** Monday, January 11, 2016 10:45 AM  
**To:** Gogela, Deborah AVED:EX  
**Cc:** Nickerson, Catherine M AVED:EX; Prive, Doris L AVED:EX  
**Subject:** RE: KPU Mid-January Project Progress Checkin  
**Attachments:** Contracting & Procurement Strategy B.pdf

Deborah

In preparation for our call on Wednesday, I attach the project contracting and procurement strategy which has been reviewed by KPU.

If possible, it would be good to have a read through in advance, but I can walk you through it in any case.

Regards,

Mark Bullen  
Director | Capex Project Advisory Services Inc.  
Mobile: +1 778 985 2649  
[mark@capexprojects.com](mailto:mark@capexprojects.com) | [capexprojects.com](http://capexprojects.com)

**From:** Gogela, Deborah AVED:EX [<mailto:Deborah.Gogela@gov.bc.ca>]  
**Sent:** December 7, 2015 2:20 PM  
**To:** 'mark bullen'  
**Cc:** Nickerson, Catherine M AVED:EX ; Prive, Doris L AVED:EX  
**Subject:** KPU Mid-January Project Progress Checkin

Hi Mark,

Great news on Friday regarding the Board passing the motion on the design. Thanks for all your hard work on refining the renderings and the downward scope ladder.

The next project board meeting is scheduled for Thursday, February 25<sup>th</sup> at 1:30pm. These meetings are typically held monthly, and we discussed whether a project board meeting should be held in January. Given there are no key milestones identified in January, we suggest instead a phone meeting between yourself and AVED to review progress. We would include the new Director, James Postans, who will be joining us on January 4<sup>th</sup>, and taking over Catherine's role (her last day is January 22<sup>nd</sup>).

Is there a time that works best for you? Say January 13 or 14, preferably in the afternoon? Please feel free to include Karen if she is available.

Regards,

**Deborah Gogela**  
Manager, Capital Asset Management

Post Secondary Finance Branch  
Ministry of Advanced Education  
PO Box 9147 Stn Prov Govt  
Victoria BC V8W 9H1

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## Cliffe, Ashley AVED:EX

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**From:** mark bullen <mark@capexprojects.com>  
**Sent:** Thursday, January 14, 2016 2:56 PM  
**To:** Prive, Doris L AVED:EX  
**Cc:** Evelyn Forrest; Angela Tao; Gogela, Deborah AVED:EX  
**Subject:** Chip & Shannon Wilson School of Design Project  
**Attachments:** AVED carg\_quarterly\_project\_rpt Oct-Dec v01-14-16.xlsx

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Doris

Please find attached Quarterly Report for the Chip & Shannon Wilson School of Design (CSWSOD) Project.

Do let me know if you have any queries.

Regards,

Mark Bullen  
Director | Capex Project Advisory Services Inc.  
Mobile: +1 778 985 2649  
[mark@capexprojects.com](mailto:mark@capexprojects.com) | [capexprojects.com](http://capexprojects.com)

**BC Ministry of Advanced Education, Innovation and Technology**
**Capital Asset Reference Guide**
**Template 7: Quarterly Project Progress Report**

Kwantlen Polytechnic University	15-Jan-16
Chip and Shannon Wilson School of Design	10

**OVERALL PROJECT STATUS** (check the box that applies)


Requires Ministry attention



Action is required and/or underway



Progress as planned

**1.0. TOMBSTONE INFORMATION**

Project ID (for internal use only):	804759
Quarterly reporting period:	Oct 1 - Dec 31, 2015
Name of institution:	Kwantlen Polytechnic University.
Campus:	Richmond.
Project title:	Chip and Shannon Wilson School of Design Building.
Category of Project	Category 1, New Priority Project.
Project description (short):	Construction of a 6026 GASM, five storey academic building.
Project leader (name, address, phone number, email):	Mark Bullen, Chief Project Officer, Capex Project Advisory Services Inc. 142-757 West Hastings Street, PMB 633 Vancouver, BC, V6C 1A1 778-985-2649 mark@capexprojects.com
Construction Manager/General Contractor:	To be selected.
Funding approved from all sources:	\$12M Province, \$12M KPU, \$12M Donors.
Projected Capacity (# of FTEs):	505 students, 32 employees.
Scheduled construction start date:	Site Preparation Fall 2013, Building Construction June 2016
Scheduled date of substantial completion:	Nov-17
Scheduled date of Occupancy:	Jan-18

**2.0. PROGRESS ON PROJECT**

Site development start date:	02-Dec-13
Actual construction start date:	Not commenced yet.
Anticipated date of substantial completion:	Nov-17
Anticipated occupancy date:	Jan-18
Anticipated project completion date:	Jan-18
Short description of work conducted during quarter:	New Chief Project Officer Appointed. Redesign Progressed. Class B Cost Estimate delivered within budget. Approval of primary design changes received.
Short description of work remaining:	Completion of redesign, tender, construction and occupancy.
Is the project on scope? [Y/N] (If 'no', provide a short summary of changes)	Yes
Is the project on schedule? [Y/N] (If 'no', provide a short summary of changes)	Yes
Describe changes to schedule from last quarter	The scope of the project is unchanged, but various design features have been changed, and approved by Project Board
Is the project on budget? [Y/N] (If 'no', provide a short summary of changes)	Yes

**3.0. PROGRAM AREA ANALYSIS**

#### Summary of areas, by space category

Instructional - 2120 GSM, Common - 1712 GSM, Offices - 689 GSM, Fabrication Facilities - 590 GSM, Multi-purpose - 460 GSM, Resource - 212 GSM, Building Services - 231 GSM.  
4063 GSM  
6024 GSM

Total Net Assignable Area

Total Gross Area

#### 4.0 FUNDING AND EXPENDITURES STATUS

Total expenditure to date:

\$4,270,521.66

Total expenditure during the quarter:

\$623,270.12

#### 5.0 COMMUNICATIONS

Summary of communications activities undertaken during quarter:

Project website: <http://www.kpu.ca/facilities/wilson-school-of-design>. Project webcam: <http://www.kpu.ca/design/construction>. Project governance meetings (including Steering Committee & Project Board) and design team.

#### 6.0 ECONOMIC IMPACT

Number of jobs created to date:

139

Job loss minimization:

During the site works phase, employment for ~12-15 people was maintained. An estimate of employment during the construction phase will be obtained in July after the General Contractor has been selected.

Creation of employment opportunities of tomorrow:

Direct employment of 32 permanent faculty and staff in the CSWSOD.

#### 7.0 OTHER

Contracts awarded to date:

Traffic and parking consultant, site works contractor, quantity surveyor, project management consultant for procurement and commissioning agent. New quantity surveyor and pre-construction manager, design team and a Chief Project Officer.

Key project risks and mitigation strategies:

**Risk:** Construction bids exceed budget. **Mitigation:** Redesign of building & development of downward scope ladder approved by Project Board. Engagement of construction manager & new quantity surveyor throughout redesign providing cost & specification advice & Class B and Class A estimates. Procurement & Contracting Strategy to optimize competitive advantage.

#### 8.0 PHOTOS

Attach photos showing progress to date

Report Certified By: Mark Bullen

Chief Project Officer

Signature

Date

## Cliffe, Ashley AVED:EX

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Monday, January 18, 2016 3:01 PM  
**To:** Nickerson, Catherine M AVED:EX; Postans, James AVED:EX  
**Cc:** Prive, Doris L AVED:EX  
**Subject:** KPU Wilson School of Design Project - summary of last week's check-in with KPU

Hi Catherine,

As requested in advance of our meeting today at 3pm, following is an update on the project's progress:

### *Construction Contracting and Procurement Strategy, dated January 7, 2016:*

- s.13
- 
- 
- 
- Advertise in BC Bid and phone contacts to ensure awareness

### *Updated Communications Strategy*

- KPU is working with GCPE and Chair (fundraising?) on an update

### *Last Project Board Meeting – Nov 23 2015*

- The Board agreed to the last meeting recommendations via electronic vote
- The draft minutes are ready and can be sent out this week

### *Interim Board Approval for Architectural Services – Required by end Jan/early Feb 2016*

- Increase value of architectural contract to include procurement services (not included with re-design)
- Apply via Change Order; can be accommodated within budget
- Request any additional services to be included (board approval only once)
- Undertake by electronic vote?
- Provide progress update, including Procurement Strategy document?

### *Next Project Board Meeting – Feb 25 2016*

- Require Board approval to go to tender week of March 3rd, including
  - Class A Estimate
  - Updated Project Budget
  - Current Renderings
  - Summary of Procurement Strategy and other information (i.e., Evaluation Panel members)

I will bring a copy of this for our meeting with Kevin.

Thanks,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education  
PO Box 9147 Stn Prov Govt  
Victoria BC V8W 9H1

Phone: (250) 387-0890  
Fax: (250) 356-7922  
e-mail: [deborah.gogela@gov.bc.ca](mailto:deborah.gogela@gov.bc.ca)

**Cliffe, Ashley AVED:EX**

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**From:** Nickerson, Catherine M AVED:EX  
**Sent:** Friday, January 22, 2016 6:18 AM  
**To:** Brewster, Kevin AVED:EX; Houle, Michael PSBC:EX; Mihlar, Fazil AVED:EX; 'Tina Swinton'; 'Jon Harding'; 'Harry.Gray@kpu.ca'  
**Cc:** Fountain, Kathy B AVED:EX; 'Gidget Maguire'; Gogela, Deborah AVED:EX; Kisilewich, Nicole AVED:EX; Dale, Raman FIN:EX; 'Karen.Hearn@kpu.ca'; 'mark@capexprojects.com'; Postans, James AVED:EX; Prive, Doris L AVED:EX  
**Subject:** CSWSOD Project Board: motion for approval December 4, 2015  
**Attachments:** Project Board Meeting 12 Supplementary Information Final B.PDF; CSWSOD Project Board Status Report 12 Final Draft Nov 18 A.PDF

Good morning,

Please be advised that on December 4, 2015 the Chip and Shannon Wilson School of Design Project Board voted "in favour" on the following motion based on the knowledge that it was supported by the donor:

***"Be it resolved that the Chip and Shannon Wilson School of Design Project Board acknowledges the need to incorporate the recommended changes to the building to bring it within the project budget and approves the redesign elements and downward scope ladder identified in the Project Status Report #12 Appendix 2 and 3 and Supplementary Information attached."***

Should you have any questions, please contact me at (250) 356-7896 or by email at [Catherine.Nickerson@gov.bc.ca](mailto:Catherine.Nickerson@gov.bc.ca).

Thank you,

Catherine Nickerson  
Project Board Secretariat  
Chip and Shannon Wilson School of Design Project Board

*Please note that effective end of day today, I am retiring from the Ministry of Advanced Education. It has been a pleasure working with you and I wish you continued success with the project. James Postans, Director, Post-Secondary Capital will be assuming my duties as Project Board Secretariat. James can be contacted at: [James.Postans@gov.bc.ca](mailto:James.Postans@gov.bc.ca)*



# **Chip & Shannon Wilson School of Design**

Project Board Meeting # 12

Supplementary Information

November 26, 2015

### Building Massing

The original construction procurement process for the Project did not result in successful award of the contract, with all bids received being substantially over the Project construction budget. In essence, the Project as it was then designed was unaffordable and it has since undergone an extensive design review whereby significant cost has been extracted through more cost effective and simpler, constructible design and specification. This re-design process has been guided by the following stakeholder priorities:

- Maintaining academic functional space program, including building layout and all interior functions
- Ample natural light and fresh air for design studios
- Acoustic performance suitable for design studios
- Minimum of LEED Gold certification
- Overall building massing and general architectural expression
- Bridge link to the existing building
- Energy and cost efficient heating & cooling system

We have been able to bring the design and specification marginally within budget while maintaining a high level of design integrity, notably visible wood structural elements, high acoustic and lighting standards in all key areas of the building, an impressive atrium that builds on the feeling of space and light provided by the very transparent facade and strategically placed glazed walling elements, and we remain on track to achieve a very high environmental performance (LEED Gold).

The only element of the above priorities which we propose to compromise on in any notable way is the overall building massing, with a change to Level 3 of the building to shift the cantilevered floor plan over to the South (refer to Appendix A for architectural illustrations). This change is aesthetic only but it delivers savings across all design disciplines without impacting on the functionality of the facility; and it also has the following distinct advantages:

- It will deliver approximately \$300k in direct cost savings, a value that cannot be extracted from any other aspects of the design
- It will help change the perception in the market that this is an overly complex, expensive and risky project, which should in turn positively impact both competition and bid pricing
- It results in a notably more constructible structure and façade which will in turn provide a schedule benefit during construction, which will in turn impact price
- It improves natural lighting into the North elevation at Levels 1 and 2, thereby responding positively to another of the Stakeholder Priorities

The Quantity Surveyor's latest construction cost estimate (Class B) is marginally under the approved construction budget. This estimate is based on a design that was less than 50% complete, and taking into account the degree of accuracy inherent in any estimate at this stage

## CAPEX | PROJECT | ADVISORY

of project definition, there is a very real risk that the estimate may rise over the coming months. More important still is that fact that the most significant risk to this project remains that, regardless of estimates (which are no more than that), bids may well not be received within budget, and we won't know this until the procurement process closes – our opportunity to influence those prices is now.

To not take advantage of the direct and indirect cost savings of this change to the building massing would put this second construction procurement process at increased and unnecessary risk of failure at a time when project success is finally within reach, with project scope, schedule and cost very finely balanced. Not only would this have reputational implications, but to revert to the original massing at this stage would also extend the cost and duration of pre-procurement activities as well as increase the likelihood of the items on the Downward Scope Ladder being implemented (see below) to the much more serious detriment of the Project.

### Downward Scope Ladder

In addition to the value engineering process, the project team were tasked by the Project Board with development of a Downward Scope Ladder. This is a tool that will provide an additional opportunity for a successful construction procurement process in the case of bid prices again coming in over budget.

It is essentially a list of scope items that can either be omitted entirely or substituted for a more cost effective alternative in order to reduce the contractor's bid price to a level that is within the project budget. This tool is widely used by the Province of BC and is generally well understood by the market.

The items on the Project's Downward Scope Ladder have been identified in collaboration with the Dean of the Chip and Shannon Wilson School of Design, and it is agreed that these would be implemented only if construction bids came in above budget. The order of preference in terms of which of these items would be implemented first must be agreed to prior to commencement of procurement, however the following list is the proposed order of priority.

The following items represent the current downward scope ladder. The dollar values indicated are preliminary estimates, and will be firmed up as the design of these elements progresses.

<b>Delete link bridge for Possible Later Addition</b>	<b>\$450,000</b>
There is currently a bridge linking the new building with the existing. There is an option to remove this bridge from the project, but to provide in the design for the future incorporation of the bridge at a later date. This would impact directly upon a Stakeholder Priority but not on the functionality of the facility.	
<b>Omit Exterior Windows in Stair Core</b>	<b>\$20,000</b>

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There are currently four windows in the staircase exit stairs on the south and east elevations of the building which provide natural lighting into the stairwell. There is an option to omit these windows, which would simplify the construction of the concrete core and save the cost of the windows themselves and their incorporation into the façade. This would impact upon natural lighting, but not in a priority area of the building.	
<b>Remove Electronic Access Control</b>	<b>\$20,000</b>
The building currently has electronic access control to all exterior doors plus internal service rooms. There is an option to omit this from the project.	
<b>Alternative Washroom Fixtures and Fittings</b>	<b>\$20,000</b>
There are five sets of washrooms with a total of 34 WCs in the building. There is an option for the contractor to provide a reduced specification of washroom fixtures and fittings.	
<b>Omit Remaining Serveries</b>	<b>\$20,000</b>
There are currently four servery areas in the project, one on each floor of the building. These serveries provide an area to prepare drinks or snacks and consist of millwork and MEP services. There is an option to omit these serveries from the project.	
<b>Shell 2nd Elevator for Possible Later Addition</b>	<b>\$120,000</b>
Only 1 elevator is required in the building, although a second would reduce the risk of no elevator being available in the event of breakdown or maintenance. There is an option to remove the second elevator from the project, but to retain the elevator shaft, which is part of the building structure and design such that the elevator car and infrastructure could be installed at a later date.	
<b>Further Reduction of Glazed Partitions</b>	<b>\$40,000</b>
There are 125m of glazed partition within the building which provide vision and light into interior rooms / circulation spaces. There is an option to replace these with solid partitions. This would impact to a degree upon borrowed natural lighting and visibility to academic activities.	
<b>Alternative Roof Specification (single-ply option)</b>	<b>\$120,000</b>
The roof currently has an industry standard 2-ply membrane – this is an additional capital cost but would be anticipated to deliver lifecycle cost savings	

## CAPEX | PROJECT | ADVISORY

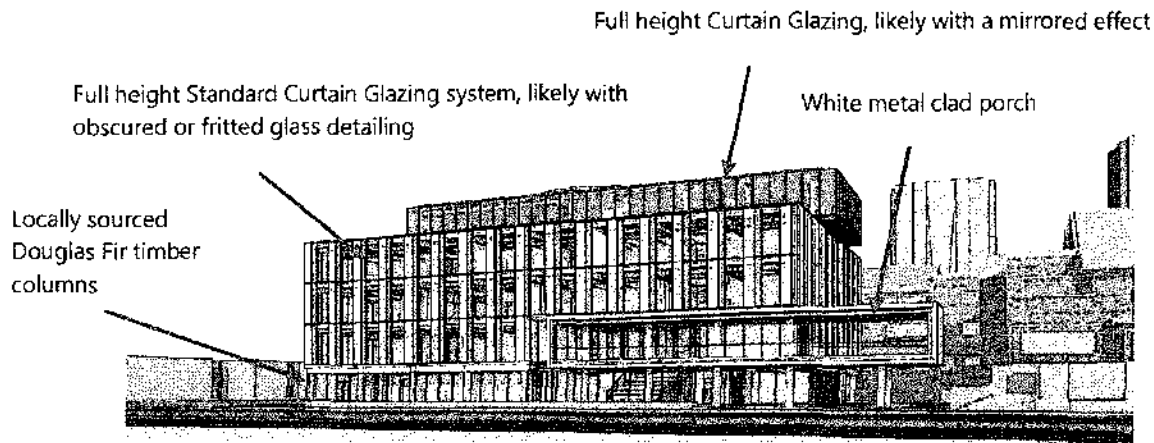
and reduce the risk of costly leaks. There is an option to replace with a single-ply membrane.	
<b>Shell Ground Floor Production Area for Future Completion</b>	<b>\$120,000</b>
A shelled area is an enclosed area of internal space that is built but not fitted out as a functioning space. There is an option to shell ground floor production area such that it may be fitted out at a later date. The perimeter walls would be boarded, services terminated within the space and any necessary requirements to turn over the building would also be in place, but internal walls, millwork, etc. will not.	
<b>Shell Level 4 for Future Completion</b>	<b>\$320,000</b>
A shelled area is an enclosed area of internal space that is built but not fitted out as a functioning space. There is an option to shell the entire level 4 such that it may be fitted out at a later date. The perimeter walls would be boarded, services terminated within the space and any necessary requirements to turn over the building would also be in place, but internal walls, millwork, etc. would not be included.	
<b>Alternative Lighting Specification</b>	<b>\$150,000</b>
The Crit Spaces, Studios and Offices currently have a high specification of interior lighting that meets the unique requirements of a design school including high lighting levels and even distribution for sewing and interior design work; optimal colour rendering; optics to minimize glare and shadows; and energy efficiency that meets a LEED gold standard. Currently only one lighting product is available from a single local BC manufacturer that meets the lighting specification for these areas. There is an option to replace the lighting specification with an alternative, but there is a risk that this may not meet all of the clients' lighting requirements or expectations.	
<b>Omit Feature Porch</b>	<b>\$185,000</b>
The building benefits currently from a large feature porch accessible from the café area which also acts to highlight the location of the building's main entrance. There is an option to omit this from the project, and while this would certainly affect the massing and overall impact of the building, it would not affect educational programming or functionality.	
<b>TOTAL (preliminary estimate of cost savings)</b>	<b>\$1,585,000</b>

## Appendix A – Architectural Illustrations

*NB: specifications are a work in progress subject to affordability*

# CAPEX | PROJECT | ADVISORY

## Proposed Building Massing

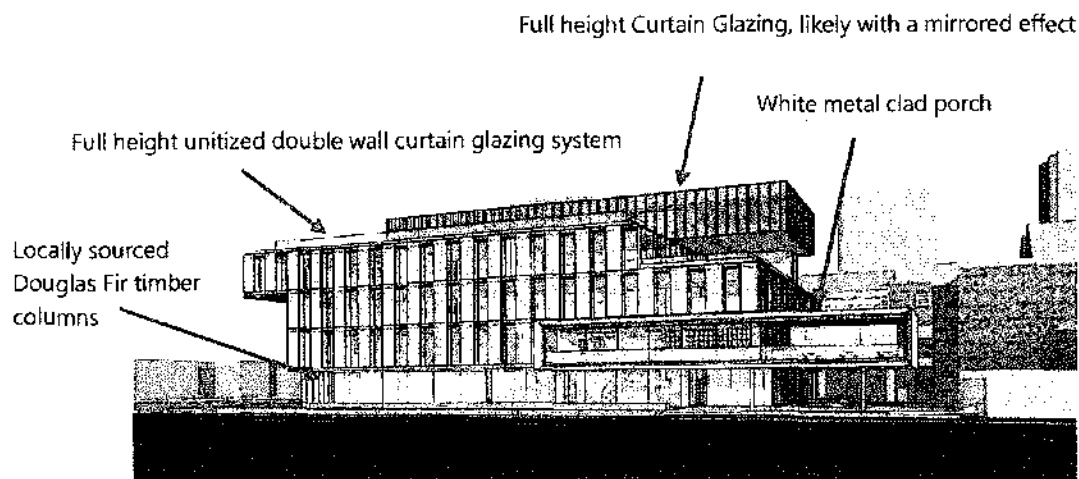


WILSON SCHOOL OF DESIGN  
KPMB • public

APPROACH FROM THE SKYTRAIN  
29/11/2015 3:59:06 PM

Level 3 (4<sup>th</sup> Floor) has moved along to the right of the picture to eliminate the cantilever; the glazing at ground level along this elevation has moved back from a slight projection to just behind the timber columns (approx. 1m from centreline of columns to face of glazing), maintaining the articulation between ground floors and the massing above; the timber columns themselves have increased in width due to alternate structural slab design; the full height glazed panel at the rear of the porch has been replaced with a simple glazed balustrade; the porch has moved approx. 2m to the left of the picture to better balance the revised massing and to align with the wider internal staircase; and the exterior roof patios have been omitted.

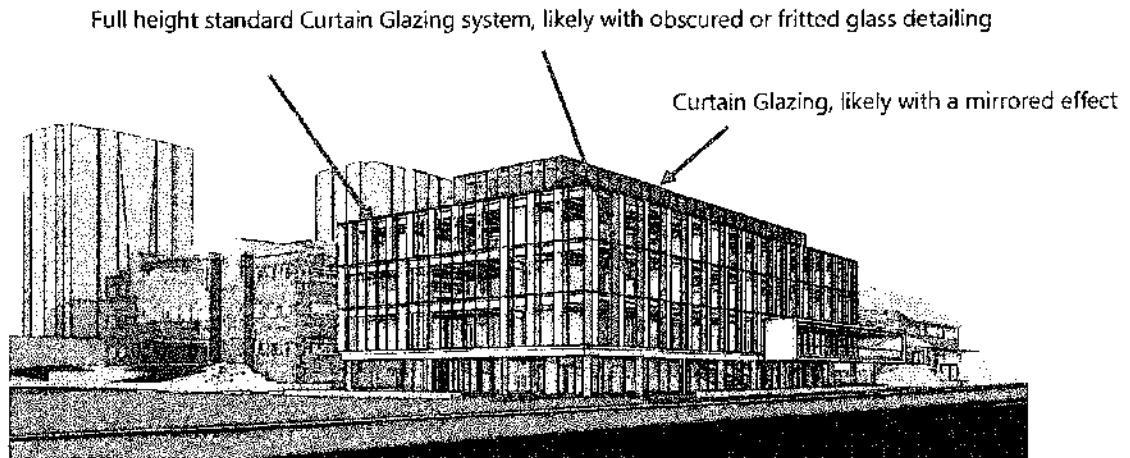
## Previous Building Massing



THE CHIP AND SHARON WILSON SCHOOL OF DESIGN  
KPMB • public

APPROACH FROM THE SKYTRAIN

## Proposed Building Massing



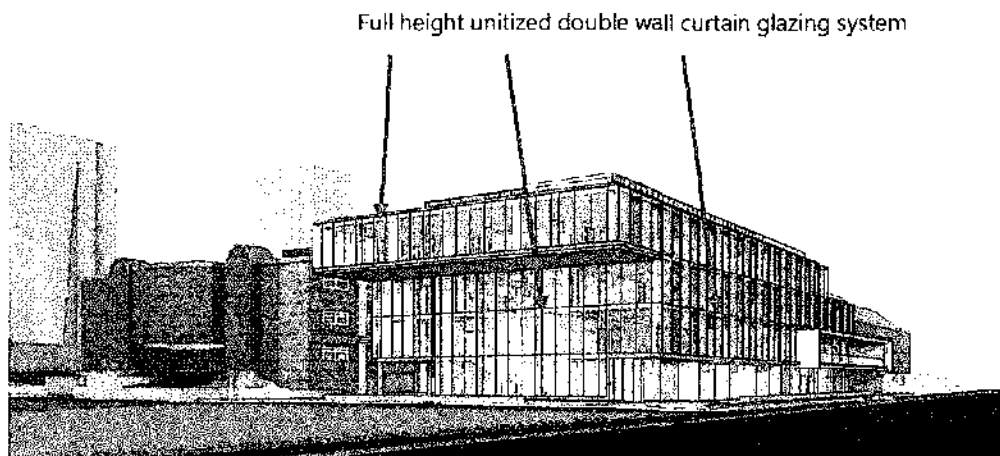
WILSON SCHOOL OF DESIGN  
KPMB • public

2017/02/15 4:09:32 PM

NW PERSPECTIVE

Level 3 (4<sup>th</sup> Floor) has moved along to the right of the picture to eliminate the cantilever, which will incidentally improve natural light into the North elevation below Level 3; the glazing at ground level has moved back along the two elevations here from a slight projection to just behind the timber columns (approx. 1m from centreline of columns to face of glazing), maintaining the articulation between ground floors and the massing above; the timber columns themselves have increased in width due to alternate structural slab design; the internal staircase visible in the previous design has been omitted; and while elements of obscured/etched glazing are required with this façade solution for energy performance purposes, as much transparency into the North façade will be retained as possible.

## Previous Building Massing

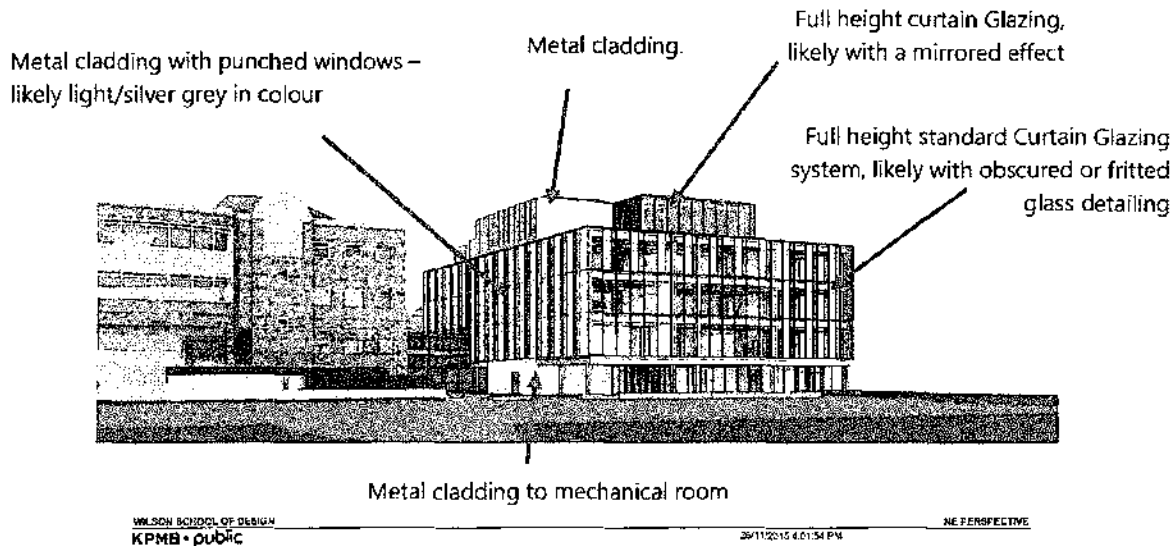


THE CHIP AND SHANNON WILSON SCHOOL OF DESIGN  
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NW PERSPECTIVE

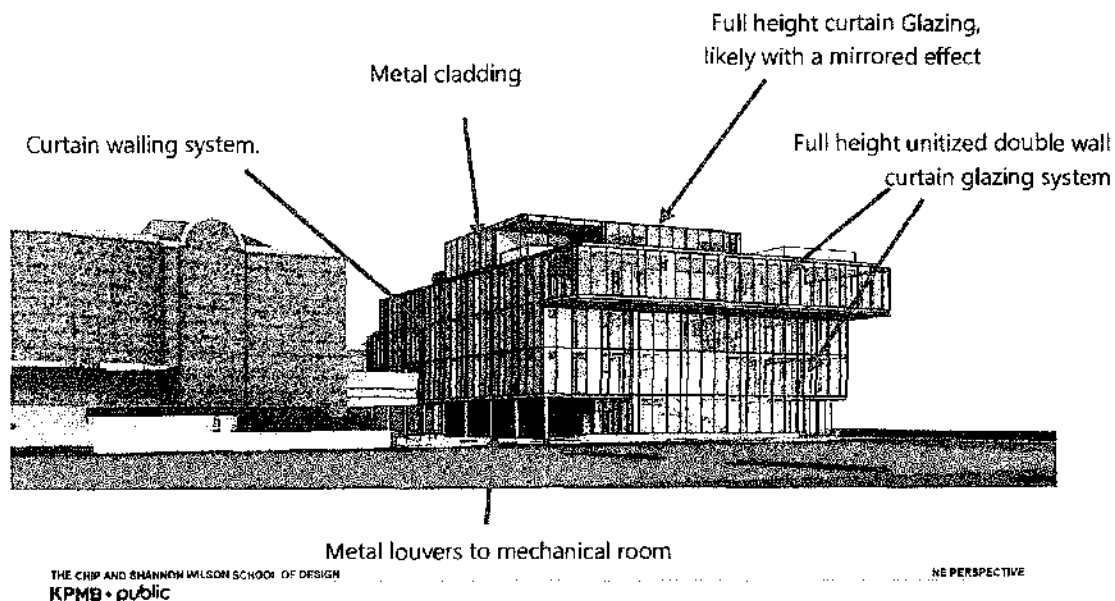


## Proposed Building Massing



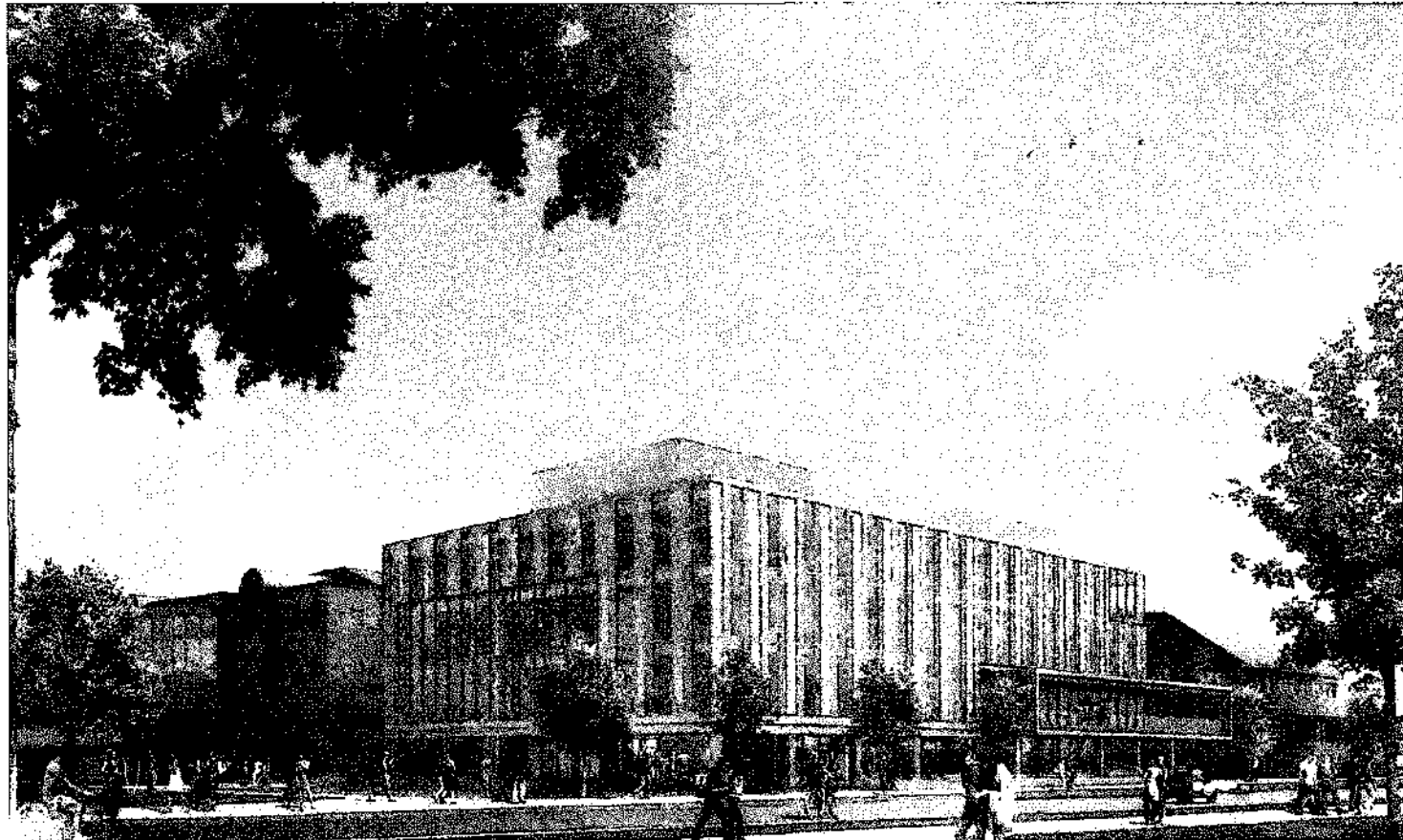
Level 3 (4<sup>th</sup> Floor) has moved along to the South to eliminate the cantilever, which will incidentally improve natural light into the North elevation below Level 3; the glazing at ground level has moved back along the two elevations here from a slight projection to just behind the timber columns (approx. 1m from centreline of columns to face of glazing); the timber columns themselves have increased in width due to alternate structural slab design; the internal staircase visible in the previous design has been omitted; the external patios have been omitted together with the roof top canopy; the treatment to the exterior of the mechanical room on the ground level has been changed from to louvers to metal cladding (likely silver grey – this is a work in progress) due to mechanical design changes; and while elements of obscured/etched glazing are required with this façade solution for energy performance purposes, as much transparency into the North façade will be retained as possible.

## Previous Building Massing



## CAPEX | PROJECT | ADVISORY

**Important Caveat:** Please note that the following illustration is a work in progress and has yet to be validated from a constructability and cost perspective, however, this image is included to provide a more realistic / lifelike expression of the overall architectural impression of the building which the project team are striving for.



**CONFIDENTIAL**

**DRAFT as of Nov. 18 2015**

**MEMO**

**To:** Chair and Members of the Chip & Shannon Wilson School of Design  
Project Board

**From:** Chief Project Officer

**Date:** November 23, 2015

**Subject:** PROJECT STATUS REPORT #12

**1) PROJECT STATUS**

**1.1 SUMMARY AND MAJOR ACCOMPLISHMENTS**

- Mark Bullen appointed as Chief Project Officer (CPO) and has met with all members of the design team and key KPU stakeholders, reviewed the project Business Case, past Project Board materials, schedule and budget documents, along with review of the design documents.
- CPO has developed a revised schedule to take account of slippage incurred to date and to establish a realistic plan against which progress can be monitored going forward. **Refer to Section 1.3**
- The Class B construction cost estimate was not complete as planned by Oct 16 due to delay in information being received from the sub-trades, however, preliminary budget information provided by both the Quantity Surveyor (QS) and the Construction Manager (CM) indicated that the design was still not affordable. An additional wave of aggressive value engineering was then identified and instructed to the design team, who proceeded to revise the design and specification details by Oct 29 to enable QS/CM pricing. **Refer to Section 1.4**
- The QS and CM provided their Class B construction cost estimates on Nov 12 based on complete sub-trade pricing and revised design and specifications. **Refer to Section 1.5**

**1.2 SNAPSHOT OF PROJECT STATUS**

**Table 1: Project Status**

Scope	<b>MONITOR</b>
Schedule	<b>MONITOR</b>
Budget	
Procurement / Contracting	<b>MONITOR</b>

### 1.3 PROJECT SCHEDULE UPDATE

The project schedule has been updated (See Appendix 1). The new schedule takes account of slippage incurred to date (approvals and Class B cost estimate) as well as the importance of:

- Ensuring that the design is fully coordinated;
- That the cost estimates are as accurate as possible;
- That sufficient time is allocated to approvals.

The following is a summary of changes to the key project milestones:

**Table 2: Key Project Milestones**

Milestone	Original	Proposed	Change (Weeks)	Project Board Information Discussion Or Approval
Class A Construction Cost Estimate	Nov 27, 2015	Feb 19, 2016	+11	Information
90% Design	Nov 18, 2015	Feb 8, 2016	+12	Information
RFP Issue	Jan 13, 2016	March 25, 2016	+11	Approval
RFP Close	Feb 11, 2016	April 22, 2016	+11	Information
Start of Construction	April 8, 2016	June 22, 2016	+11	Information
Substantial Completion	Oct 06, 2017	Nov 08, 2017	+5	Information
Start of Classes	Jan 3, 2018	Jan 3, 2018	0	Information

Note that from start of construction, the schedule allows 20 months to start of classes, and 18 months to substantial completion.

### 1.4 PROJECT SCOPE

The design team had already extracted significant cost savings from the project, however, an additional wave of value engineering items has been identified and instructed to further improve the affordability of the project while retaining overall functionality. These additional changes include:

- Simplification of the Level 3 structure;
- Simplification of the raft slab foundation;
- Omission of Level 3 and Level 4 external patios;
- Electronic access system for interior doors removed;
- Finishes (reduction in scope of folding screens; glazed partitions; millwork; timber ceilings);
- Further revision to landscaping specification and design;
- Further revision to mechanical and electrical specification and design.

**Appendix 2** summarizes the changes to the building design. **Appendix 3** summarizes the downward scope ladder, which has also been expanded. **Appendix 4** shows the changes to the building massing, along with the previous renderings for comparison.

## 1.5 PROJECT BUDGET

CPO has reviewed commitments and expenditures to date in addition to forecast costs and commitments and has revised the project budget (refer to **Appendix 5**), which indicates a maximum bid ceiling for construction of \$25,775,169, including all contingencies and the estimated value of the downward scope ladder.

The Class B Construction Cost Estimates have been received and are summarised in the table below:

**Table 3: Class B Construction Cost Estimates**

		Hanscombe Ltd.		Scott Construction	
Class B Construction Cost Estimate	A	\$	21,663,500	\$	21,245,619
+ Contingency Allowance	B	\$	2,166,350 10.0%	\$	1,699,650 8.0%
Construction Budget (Consultant Advised)	C=A+B	\$	23,829,850	\$	22,945,269
+ Downward scope ladder (TBC)	D	\$	1,500,000 6.9%	\$	1,500,000 7.1%
Bid Ceiling	E=C+D	\$	25,329,850 16.9%	\$	24,445,269 15.1%
Construction Budget	F	\$	22,100,000	\$	22,100,000
+ Contingency	G=C-F	\$	1,729,850 7.8%	\$	845,269 3.8%
Construction Budget (Consultant Advised)	H=C+F+G	\$	23,829,850	\$	22,945,269

### Important Notes:

#### • Construction Cost Estimate

The Class B construction cost estimates above have been provided by the QS and the CM, based on a design that is between 40-50% complete, excluding tax (GST and rebates). Before allowing for any contingency, both are within the construction budget allowance of \$22,100,000.

#### • Contingency

Scott (CM) has recommended a contingency of 8% to be applied to cover the cost of risks through the remainder of the design process, procurement and construction. Hanscombe (QS) has recommended a contingency of 10%.

#### • Construction Budget

The construction budget is the sum of the construction cost estimate and contingency. The budgets proposed by the two consultants are within the sum of line items for *New Construction* and *Contingency* in the project budget (**Appendix 5**) of \$24,275,169.

#### • Degree of Confidence

Hanscombe has clarified that the level of accuracy of their construction cost estimate is +15/-10%, which reflects their confidence at the stage as to the range where the median bid will likely fall. This is in line with standard estimating practice and may be expected to reduce to +/-5% for a Class A construction cost estimate.

#### • Downward Scope Ladder

A preliminary valuation has been performed of the downward scope ladder, which is anticipated to yield in the region of \$1.5m in potential savings. The effect of this is to increase the project bid ceiling i.e. the maximum bid price that could subsequently be brought within budget through omission of downward scope items from \$24,275,169 to \$25,775,169.



## 1.6 CURRENT WORK UNDERWAY AND NEXT STEPS

### Current work:

- Development of procurement strategy
- Delivery of detailed design
- Prepare and coordinate construction documents

### Next Steps include:

- Architect to issue 90% Design (Feb 08, 2016)
- QS/CM to issue Class A Construction Cost Estimate (Feb 19, 2016)

## 1.7 KEY RISKS

The table below highlights major risks.

**Table 2: Project Risks**

Issue	Discussion	Ranking, Impact, Mitigation
Project is unaffordable	<p>The Class B construction cost estimate plus contingency is within the assigned budget.</p> <p>While this is positive news, there remains significant risk (expressed as the degree of accuracy of +15%/-10%) that as the project definition progresses, that the Class A budget, and ultimately the bids, may be higher, and may exceed the budget.</p>	<p>This remains the most significant project risk. Mitigations include:</p> <ul style="list-style-type: none"> <li>▪ Close attention to affordability of design/specifications as they develop towards 100%</li> <li>▪ Incorporation of downward scope ladder items into the RFP documents</li> <li>▪ Hold General Contractor and trades communications sessions</li> <li>▪ Closely manage scope of end user review</li> </ul>
Project completion is delayed	<p>The revised schedule currently allows for an 18-month construction period from start of construction to substantial completion.</p> <p>To compress it further will likely have an impact on bid prices, therefore, any delay to critical activities prior to contract award will push out the end date.</p> <p>There is also a risk that the contractor - by fault or otherwise - will not complete the project on time, however, liquidated damages are not recommended, again to</p>	<p>This risk is significant but should not be mitigated at the expense of project affordability. Mitigations include:</p> <ul style="list-style-type: none"> <li>▪ Tracking of coordinated design schedule</li> <li>▪ Development of a construction schedule with the CM to validate the 18-month period and to help identify specific owner risks (and mitigations) to the critical path</li> <li>▪ Ensure that Project Board are comfortable with the time allowed for approvals. Approval to Award Contract is a critical path activity with a duration of 4 weeks; Approval to Proceed to Tender is</li> </ul>

	prevent upward pressure on bid prices.	currently a near critical activity at 3 weeks. <ul style="list-style-type: none"> <li>Allow contractors to provide and price an alternative construction period</li> <li>Proactive management of retained schedule risks</li> </ul>	
Project does not meet functional requirements of the faculty	The cost pressures have necessitated extremely deep value engineering, and while the Faculty's representative has been very cooperative, and most savings will not impact functionality, there is an inherent risk that not all anticipated functions will be catered to with the new design and specification.	This risk is significant but should not be mitigated at the expense of project affordability. Mitigations include: <ul style="list-style-type: none"> <li>Ongoing communication with Faculty representative and accommodation of comments where cost neutral</li> <li>One round of controlled end user engagement prior to finalization of Construction Documents, delivered as a carefully managed workshop with a documented and well communicated / enforced scope of review.</li> </ul>	

Risk Ranking Legend:

	High	Requires immediate attention
	Medium	Requires monitoring
	Low	Risk mitigated satisfactorily

## 1.8 PROJECT COMMUNICATIONS

All public project communications and updates continue to be led by the Ministry and coordinated with Government Communications and Public Engagement Office, in collaboration with KPU.

- No public communications since last Project Board meeting.

## 2.1 ITEMS FOR INFORMATION, DISCUSSION OR APPROVAL

### a) Issue #1:

Approval to proceed based on Class B Construction Budget.

#### Background:

Two independent Class B cost estimates have been provided based on a design that has undergone extensive value engineering. Both estimates are within budget, and the associated recommended contingency allowances are within the overall project contingency.

#### Discussion:

At this point in time, we have independent confirmation that the value engineering efforts have successfully brought the project back within the affordability envelope. There is always a degree of uncertainty at this stage of project definition, however, this uncertainty should be significantly reduced by the time the Class A construction cost estimate has been delivered.

#### For Approval:

"Be it resolved that the Chip and Shannon Wilson School of Design Project Board acknowledge that the value engineering efforts undertaken can reasonably be said to have achieved the desired outcome based on the Class B estimate and approve the redesign to continue."

### b) Issue #2:

Approval of revised Project Schedule.

#### Background:

The project schedule has been revised to ensure adequate time for:

- value engineering
- quality coordinated documents to be produced
- all required approvals
- procurement process
- construction

The revised schedule still achieves the same start of class date.

#### Discussion:

The revised Project Schedule positions the Project Team for success, while providing for an 18-month construction period and not impacting upon start of classes (January 3, 2018).

#### For Approval:

"Be it resolved that the Chip and Shannon Wilson School of Design Project Board recommend that the revised Project Schedule (**Appendix 1**) be adopted."

**c) Issue #3**

Approval of value engineering and downward scope ladder redesign elements.

**Background:**

Additional value engineering items have been identified subsequent to last Project Board meeting. **Appendix (2)** identifies the changes to the building to bring it within project budget. **Appendix (3)** identifies the currently identified downward scope items. **Appendix (4)** provides a visual representation of the revised building design.

**Discussion:**

Project Board review and support of the overall changes to the building design is required.

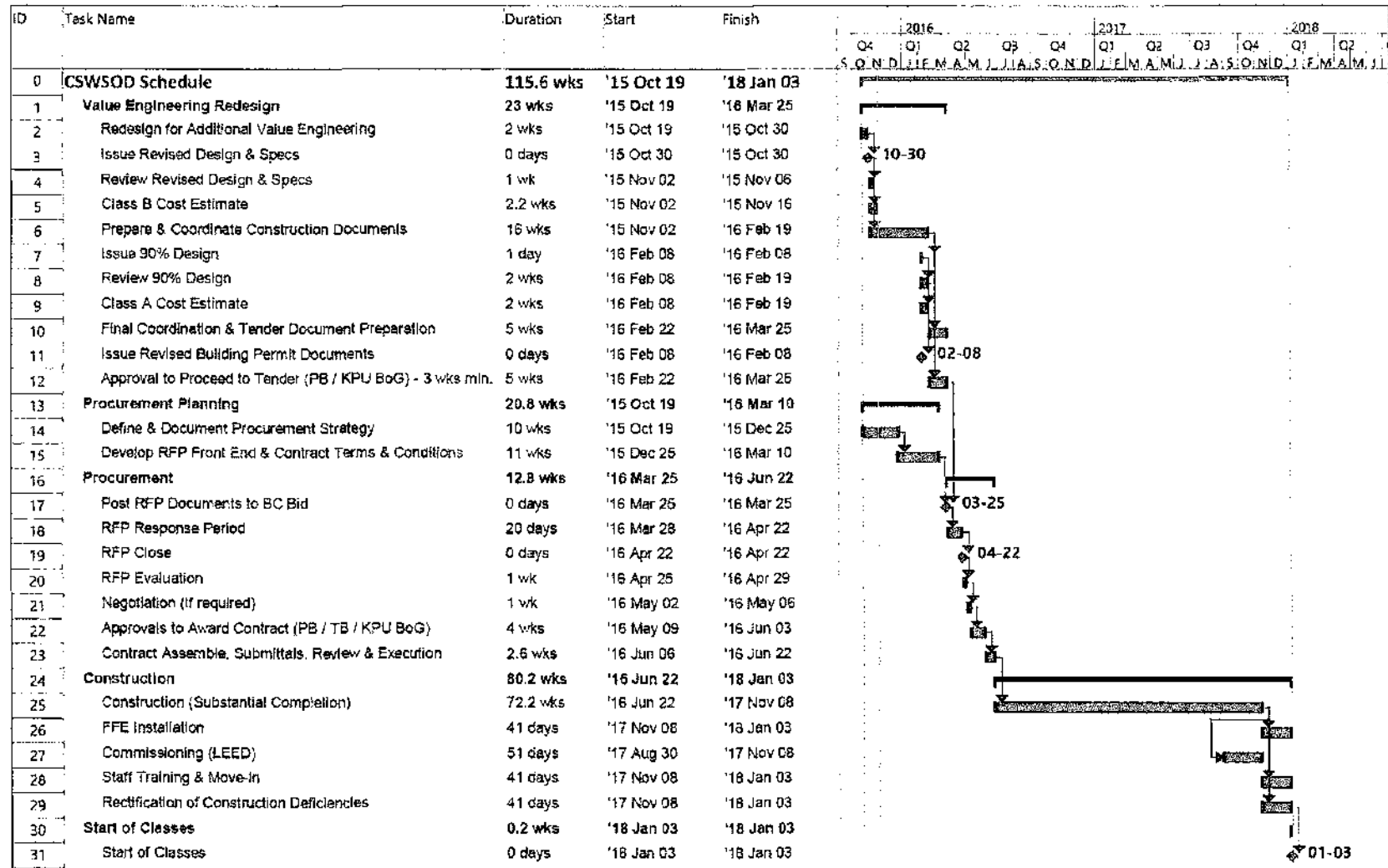
**For Approval:**

"Be it resolved that the Chip and Shannon Wilson School of Design Project Board identify their support for the redesign elements identified in **Appendix (2)** and **(3)** and **(4)**."

## **3 APPENDICES**

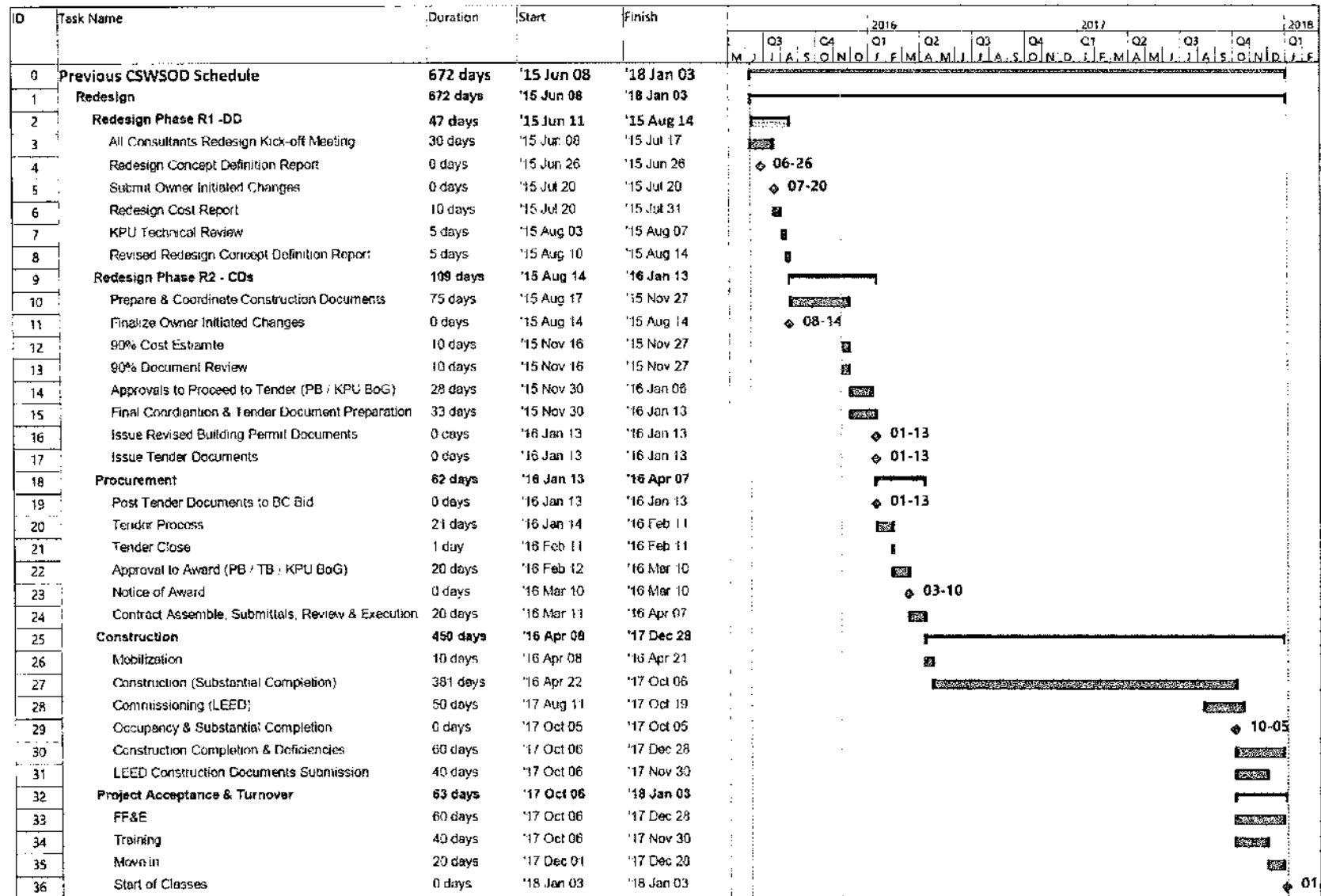
- **Appendix 1: Updated Project Schedule**
- **Appendix 2: Changes to Building Design**
- **Appendix 3: Downward Scope Ladder**
- **Appendix 4: Revised Rendering / 2D Perspective**
- **Appendix 5: Revised Project Budget**

# APPENDIX 1: UPDATED PROJECT SCHEDULE



Current Proposed Project Schedule





Previous Project Schedule

## APPENDIX 2- CHANGES TO BUILDING DESIGN

1. Reduced quantity of engineered wood in the building structure (and alternate product)
2. Replacement of engineered wood-concrete composite floor and wood roof panel systems with steel deck with a concrete topping
3. Replacement of precast concrete items with cast-in-place concrete
4. Reduced reinforcing steel in the typical floor by repositioning/ redesigning elevator core
5. Reduced complexity of Level 4 structural framing
6. Replacement of interior timber panels in the bridge with structural steel and steel stud framing
7. Removal of in-floor HVAC ductwork displacement system
8. Replacement of unitized double wall curtain system with standard curtain wall
9. Removal of automatic solar shading system and associated controls
10. Replacement of large skylight with clerestory glazing
11. Reduced building volume while maintaining the required minimum 6,026m<sup>2</sup> gross floor area
12. Replacement of green roofs with conventional membrane
13. Simplification of the Level 3 structure
14. Simplification of the raft slab foundation
15. Removal of Level 3 and Level 4 external patios
16. Reduced number and complexity of interior moveable wall panels
17. Simplified lighting and temperature controls
18. Reduced and simplified interior millwork
19. Reduced audio-visual equipment infrastructure
20. Simplified elevator configuration and finishes
21. Removal of operable partitions and simplified specification of remaining operable partitions
22. Removal of north stair
23. Replacement of wood decks to building exterior with concrete
24. Removal of electronic access system for interior doors

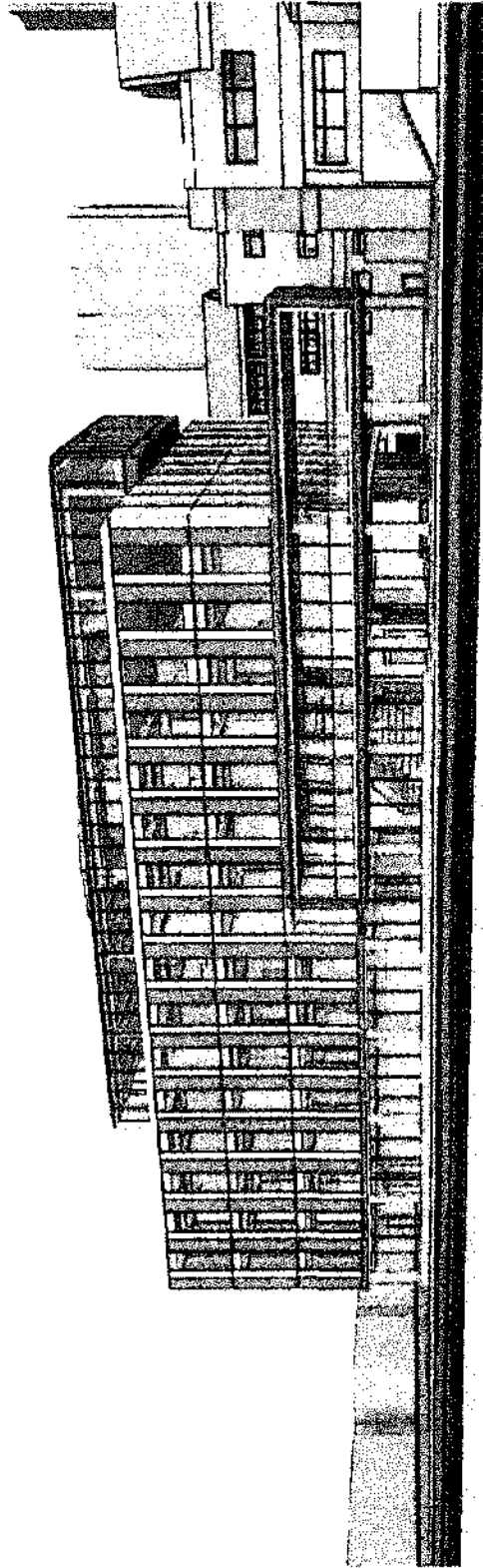
- 25. Reduced quantity of glazed partitions and doors
- 26. Reduced area of ceiling finishes
- 27. Revised bicycle storage solution
- 28. Omission of cast in place external benches
- 29. Replacement of retractable bollards with removable bollards

**APPENDIX 3: DOWNWARD SCOPE LADDER - NOT CURRENTLY IN RANKED ORDER**

1. Delete link bridge for possible later addition
2. Omit exterior windows in stair core
3. Omit remaining serveries
4. Shell 2nd Elevator for possible later addition
5. Shell Level 4 for future completion
6. Shell Ground Floor Production Area for future completion
7. Alternative Washroom Fixtures and Fittings
8. Omit remaining interior operable wall panels
9. Replacement of remaining glazed partitions with solid partitions
10. Alternative Lighting Specification
11. Alternative Roof Specification (single-ply option)
12. Omit Feature Porch

Current Proposed Rendering

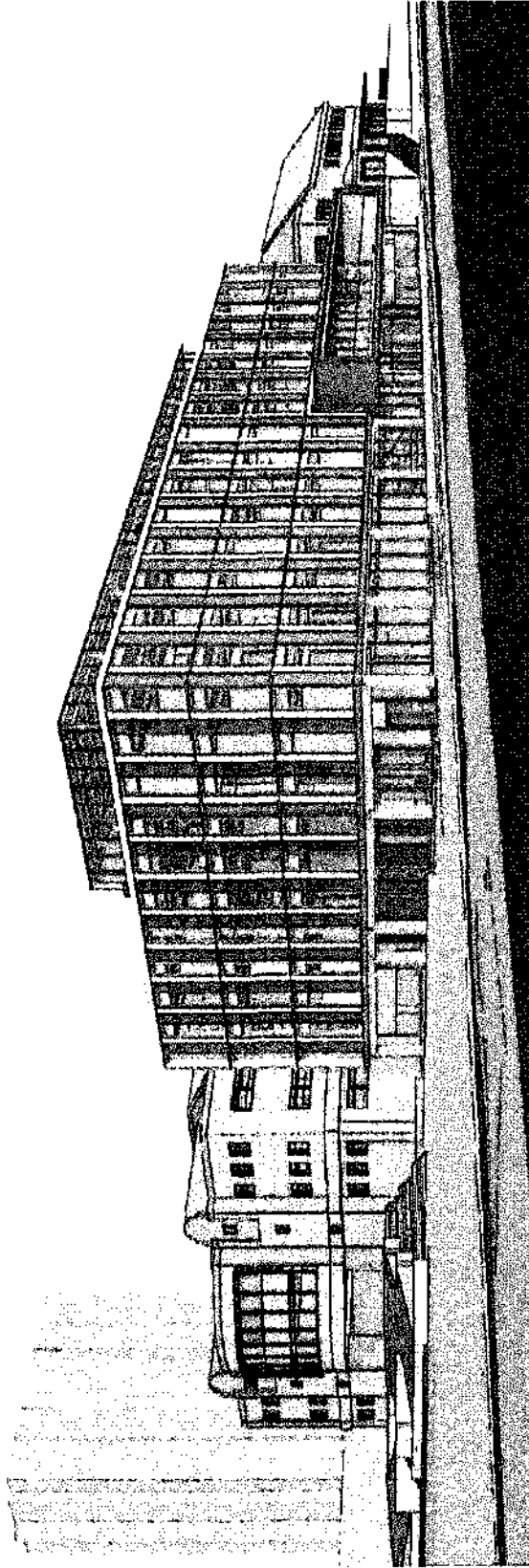
Approach from the SkyTrain





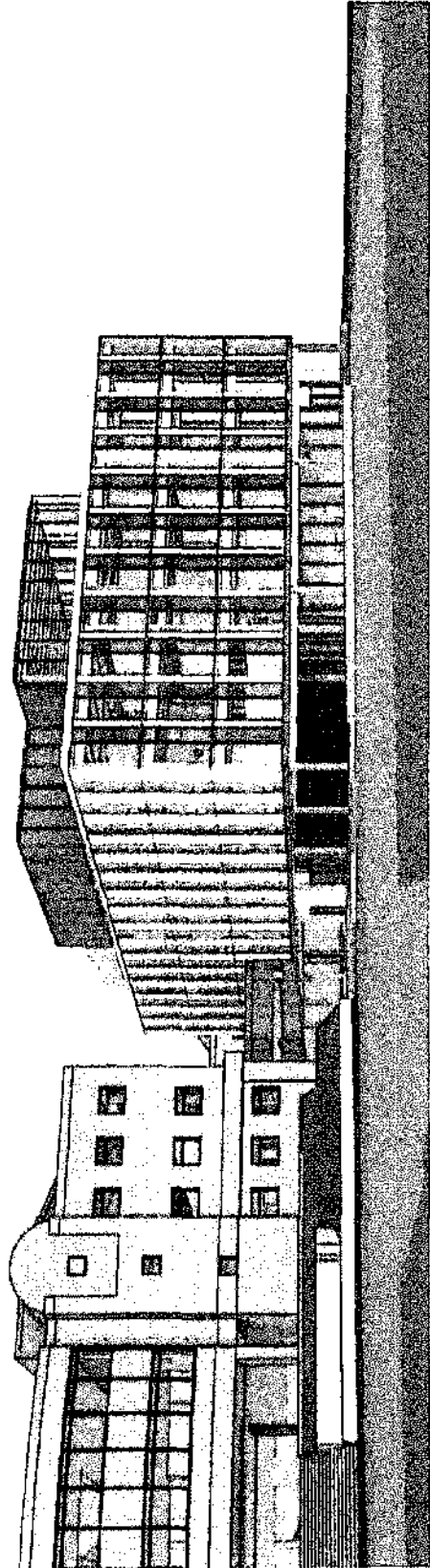
Current Proposed Rendering

Current Proposed – NW Perspective

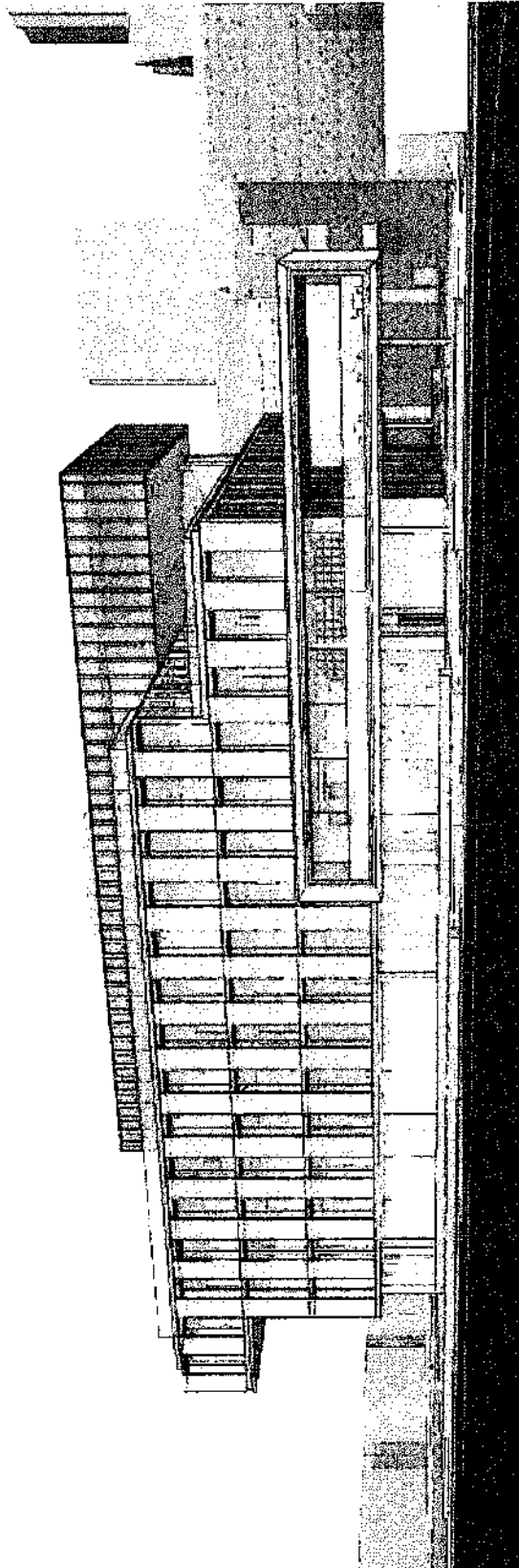


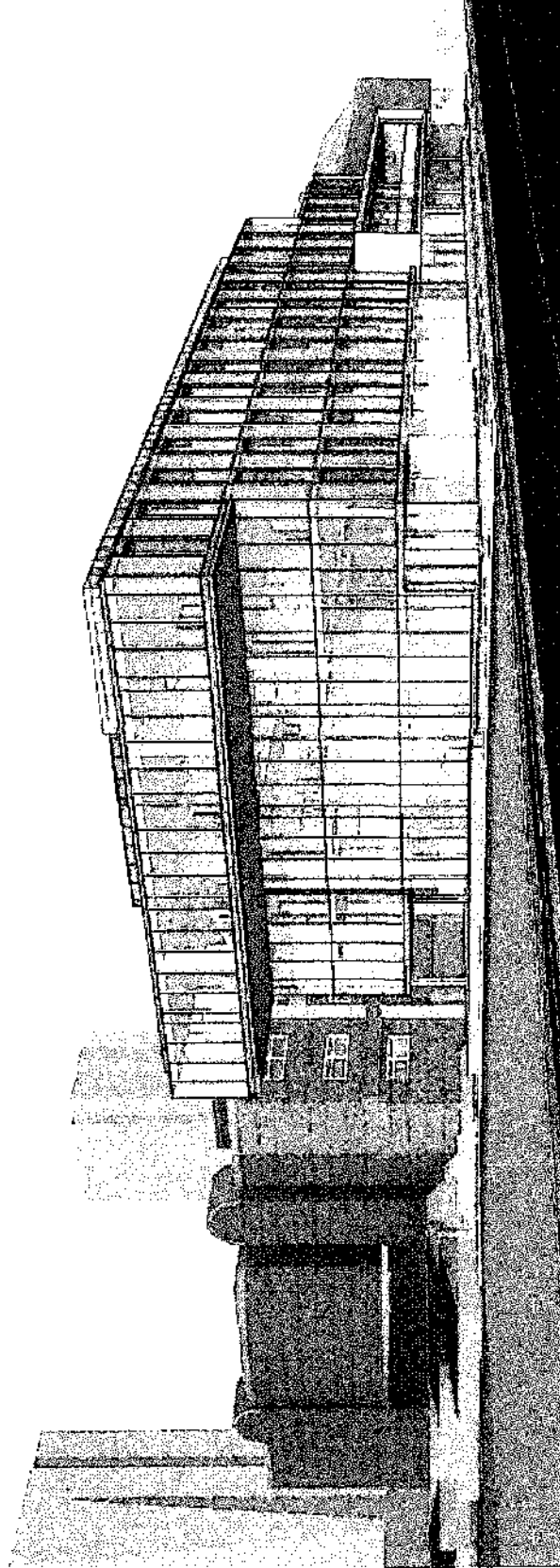
Current Proposed Rendering

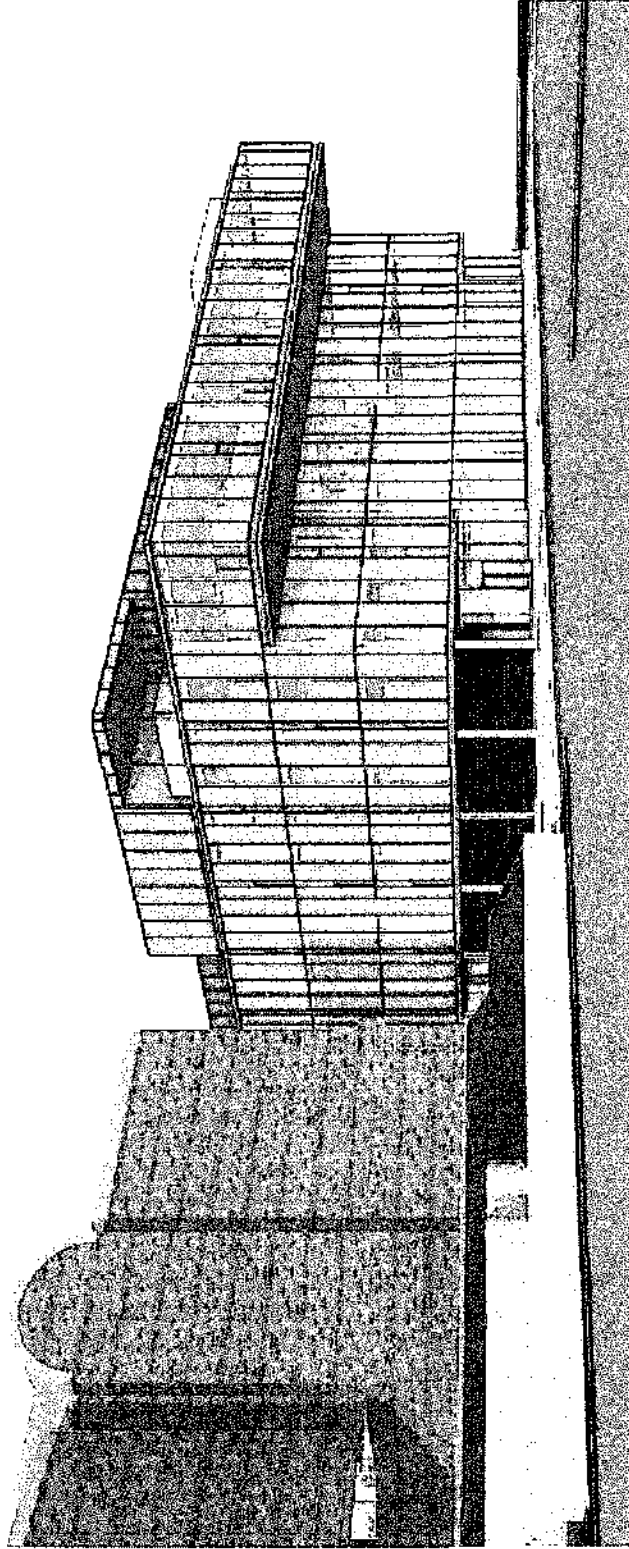
Current – NE Perspective



Approach from the SkyTrain







Page 057

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**Kwantlen Polytechnic University – Chip & Shannon Wilson School of Design**

**Project Board  
Terms of Reference  
Revised January 26, 2016**

**1.0 Background**

In November 2012, Kwantlen Polytechnic University (the University) received Treasury Board approval for provincial funding of up to one-third of the total project capital costs, to a maximum of \$12 million, towards the construction of a new \$36 million dollar School of Design at the Richmond Campus. The \$36 million total project costs are to be equally shared between the Ministry of Advanced Education (the Ministry), the University and private donors Chip and Shannon Wilson and *lululemon athletica*. In return for the \$12 million donation, the school is to be named the “Chip and Shannon Wilson School of Design” (WSOD).

The Ministry has established a project board to oversee the project.

The Project Board will be chaired by Assistant Deputy Minister, Ministry of Advanced Education, and include other representatives from the Ministry, the University, the major donor, and Partnerships BC.

The Ministry will be Secretariat to the Project Board, and coordinate all meetings and distribution of materials for Project Board members.

**2.0 Role and Function of the Project Board**

The Project Board is responsible to provide overall direction and key decision-making for the WSOD Project, with particular reference to scope, budget, schedule, and communications.

The Project Board will receive progress reports from the Chief Project Officer (CPO) and provide advice and guidance to the CPO on all matters pertaining to the management of the scope, budget, schedule and communications for the WSOD Project.

The Chief Project Officer is to advise the Project Board in advance of the intention to initiate a procurement process; and, the proposed procurement method for endorsement.

Project Board direction is required for:

- Any material<sup>1</sup> deviation from the budget and schedule approved by the Ministry and Treasury Board;
- Execution of key contracts  $\geq$ \$75,000; and,
- Execution of any material<sup>1</sup> change orders.



### **3.0 Communications**

Project Board approval is required for:

- The Project communications plan;
- Any significant deviations from the communications plan; and
- The messaging and processes to address any politically sensitive/controversial issues. This input will be provided to the Ministry's Communications Office.

### **4.0 Accountability**

- The Project Board will report directly to the Ministry.
- The CPO is accountable to and takes direction on project –related matters from the Project Board Chair.

### **5.0 Membership**

- Assistant Deputy Minister, Financial and Management Services, Ministry of Advanced Education (Chair)
- Assistant Deputy Minister, Institutions and Programs Division, Ministry of Advanced Education
- Vice-President, Partnerships BC
  - Assistant Vice-President, Partnerships BC (Alternate to Michael Houle)
- Associate Vice-President Administration, Kwantlen Polytechnic University
- Vice-President Finance and Administration, Kwantlen Polytechnic University
- Wilson Family Representative

### **6.0 Support to the Project Board**

- Chief Project Officer, Kwantlen Polytechnic University
- Project Board Secretariat, Director, Capital Asset Management, Post-Secondary Finance Branch, Ministry of Advanced Education
- Administrative Support, Capital Asset Management, Post-Secondary Finance Branch, Ministry of Advanced Education

### **7.0 Observer**

- Raman Dale, Treasury Board Analyst, Ministry of Finance

### **8.0 Project Board Member Roles and Responsibilities**

#### **8.1 Chair Responsibilities:**

The Chair will:

- Call Project Board meetings;
- Approve agendas;
- Provide direction as required to the membership regarding committee responsibilities;
- Issue and approve agendas and minutes for Project Board meetings; and,
- As required, request independent advice on different aspects of the project.

## **8.2 Role of the Chief Project Officer:**

The Chief Project Officer is:

- Accountable to the Project Board;
- Responsible for leading the project team;
- Responsible for all elements of the project including scope, schedule, budget, procurement and communication/consultation; and,
- To provide regular status reports to the Project Board on the progress of the project in relation to the project scope, schedule and budget.

## **8.3 Role and Function of the Project Board Secretariat:**

- All materials to be distributed to Project Board members must go through the Secretariat. The Secretariat will review all materials before distribution to the Project Board.
- Decisions made by the Project Board members outside regular scheduled Project Board meetings must involve the Secretariat in order to accurately document any actions and/or decisions.

## **8.4 Role and Function of the Observer:**

- The Ministry of Finance Treasury Board Analyst will act as independent observer (Observer) of the Project Board.
- The Observer will not participate in the Project Board discussions nor act as advisor to the Project Board.
- Any questions or concerns the Observer may have will be directed to the Project Board Chair.

## **9.0 Meeting Frequency**

- Bi-monthly meetings or as required.

## **10.0 Meeting Quorum**

A Quorum shall consist of:

- Chair;
- One member or alternate from the University; and,
- One member or alternate from the Ministry.

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<sup>1</sup> Definition of materiality as it pertains to changes in a capital project are as follows:

A material variance is defined as:

- a cost increase >10%
- a size increase >10%
- a scope change that results in a change in the use of a facility
- a schedule change that negatively impacts project objectives; program delivery; budget; or funding

## Cliffe, Ashley AVED:EX

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Tuesday, January 26, 2016 9:52 AM  
**To:** Harvey, James JAG:EX  
**Cc:** Postans, James AVED:EX; Prive, Doris L AVED:EX  
**Subject:** Request for Review of Construction Contracting and Procurement Strategy  
**Attachments:** Contracting & Procurement Strategy B.PDF

Hello James,

We have not met, but I understand you know James Postans, my Director. We are very fortunate to have had James join the Ministry's Capital Asset Management team earlier this month.

Kwantlen Polytechnic University (KPU) is preparing to take its *Chip and Shannon Wilson School of Design* project to market in the coming months. KPU's recently engaged Chief Project Officer, Mark Bullen with Capex Project Advisory, has prepared the attached Construction Contracting and Procurement Strategy. We are writing to you to request your services to review the attached strategy.

To give you a bit of background, two years ago KPU took the project to market and the bid results were approx. 50% over the project budget. The project was at risk of losing its major donor, Chip and Shannon Wilson (lululemon athletica), who are contributing 1/3 of the project budget of \$36 million. A Project Board was formed to provide oversight, on which AVED (including Kevin Brewster, our ADM), Partnerships BC, a Wilson family representative and KPU are members. The original project architect was retained to redesign the project. The project is currently at approx. 90% working drawing stage.

We do not require a 'full blown' review – what we are requesting is that you let us know your concerns if KPU were to follow this strategy. A Project Board meeting is scheduled for next Monday, February 1<sup>st</sup>. Perhaps you could let us know whether or not you think it is possible to review it by then?

Please feel free to call either me or James (250-387-8820) if you have any questions or need any more information. We look forward to your response.

Regards,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education  
PO Box 9147 Stn Prov Govt  
Victoria BC V8W 9H1

Phone: (250) 387-0890  
Fax: (250) 356-7922  
e-mail: [deborah.gogela@gov.bc.ca](mailto:deborah.gogela@gov.bc.ca)

## Cliffe, Ashley AVED:EX

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Tuesday, January 26, 2016 2:16 PM  
**To:** Houle, Michael PSBC:EX  
**Cc:** Postans, James AVED:EX; Prive, Doris L AVED:EX  
**Subject:** KPU Chip and Shannon Wilson School of Design - Update  
**Attachments:** Contracting & Procurement Strategy B.PDF

Hello Mike,

We are just preparing for the upcoming Project Board meeting on Monday and wanted to update you on a number of items:

1. *Welcome new Director* – As you know, Catherine Nickerson's last day was on Friday. We are very fortunate to have James Postans join us as our new Director. Previously, James was Director, Capital Projects with the Ministry of Health, and had worked there with Kevin Brewster before Kevin joined AVED. James will be attending the Project Board meeting this coming Monday.
2. *Upcoming Project Board Meeting* – The upcoming meeting is an opportunity for KPU to provide an update as to the status of the project. Topics will include, for example:
  - a. Procurement strategy;
  - b. Updated project schedule, including working drawings, Class A estimate, public information meeting pre-tender and tender;
  - c. Additional architectural fees required for the contract bid phase. These were not included in architect's additional re-design fee; and
  - d. Update on the donor agreement
3. *Construction Contracting and Procurement Strategy* – Mark Bullen, Chief Project Officer, has prepared the attached strategy. We would like for you to have the opportunity to review it prior to the Board meeting. If you have any feedback, we would be very interested in hearing it. For your information, we have asked James Harvey with the Ministry of Justice to do a high level legal review of the strategy and identify any potential concerns he might have with the proposed approach.
4. s.14

Please let me know if you have any questions. You can also feel free to phone James at (250) 356-7896. We look forward to your feedback.

Regards,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education

## Cliffe, Ashley AVED:EX

---

**From:** Michael Houle <Michael.Houle@partnershipsbc.ca>  
**Sent:** Friday, January 29, 2016 8:57 AM  
**To:** Gogela, Deborah AVED:EX  
**Cc:** Postans, James AVED:EX; Prive, Doris L AVED:EX; Brewster, Kevin AVED:EX; Anderson, Kim PSBC:EX  
**Subject:** RE: KPU Chip and Shannon Wilson School of Design - Update  
**Importance:** High

Thanks for your email Deborah,  
Apologies for my delay in responding, I am currently on leave. My comments follow;

1. Welcome James, good to be working with you.
2. Mark appears to be following his earlier commitments as well as associated Boards direction re: procurement strategy, schedule etc. No further comments
3. The contracting and procurement strategy as proposed is generally fine. I agree with the conclusion re: Tender over RFP. Your decision to ask James Harvey to review the materials is a good one. My only concern is with respect to proposed conditions described on Page 5 items a and c and page 7, item k. DMIIF has made a number of commitments to the construction associations re: supplementals and abuse of privilege clauses - we need to be absolutely certain we are consistent with those commitments and where we are not, have a clear justification for our departure from standard form. James should be able to provide direction on this matter.
4. Fairness advisors should not form part of any evaluation team, instead any identified fairness advisor should observe to be certain that the conditions of the tender or RFP have been followed wrt to fairness only (not process or legal interpretation). In this instance, I believe we have two matters we should resolve, the first is fairness (your suggestion that KPU contract with Jane Shakell is a good one). The second issue is process adherence. In a nutshell, the board will want to be absolutely certain that the selection process is comprehensive and documented effectively. In terms of resources, we (PBC) can appointment a due diligence advisor to oversee the work of the evaluation team (I'd proposed Kim Anderson of PBC in this role - she played an extensive role on the Em Carr procurement). Finally, it may be helpful to ask Doug Sanders to review the proposed strategy and the final tender package before release as well.

The only issue that I will want to have clearly explained to me is why we are paying this architect more money yet again. I believe any increase in architect fees will require the DM Finance approval as well.

M

Regards,

**M.R. (Mike) Houle, MBA, MA**

Vice President, Client and Market Engagement

**partnerships**

**British Columbia**

Cell: 250-818-7950

[michael.houle@partnershipsbc.ca](mailto:michael.houle@partnershipsbc.ca)

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**From:** Gogela, Deborah AVED:EX [Deborah.Gogela@gov.bc.ca]  
**Sent:** Tuesday, January 26, 2016 2:15 PM  
**To:** Michael Houle  
**Cc:** Postans, James AVED:EX; Prive, Doris L AVED:EX  
**Subject:** KPU Chip and Shannon Wilson School of Design - Update

Hello Mike,

We are just preparing for the upcoming Project Board meeting on Monday and wanted to update you on a number of items:

1. *Welcome new Director* – As you know, Catherine Nickerson's last day was on Friday. We are very fortunate to have James Postans join us as our new Director. Previously, James was Director, Capital Projects with the Ministry of Health, and had worked there with Kevin Brewster before Kevin joined AVED. James will be attending the Project Board meeting this coming Monday.
2. *Upcoming Project Board Meeting* – The upcoming meeting is an opportunity for KPU to provide an update as to the status of the project. Topics will include, for example:
  - a. Procurement strategy;
  - b. Updated project schedule, including working drawings, Class A estimate, public information meeting pre-tender and tender;
  - c. Additional architectural fees required for the contract bid phase. These were not included in architect's additional re-design fee; and
  - d. Update on the donor agreement
3. *Construction Contracting and Procurement Strategy* – Mark Bullen, Chief Project Officer, has prepared the attached strategy. We would like for you to have the opportunity to review it prior to the Board meeting. If you have any feedback, we would be very interested in hearing it. For your information, we have asked James Harvey with the Ministry of Justice to do a high level legal review of the strategy and identify any potential concerns he might have with the proposed approach.
4. **s.14**

Please let me know if you have any questions. You can also feel free to phone James at (250) 356-7896. We look forward to your feedback.

Regards,

**Deborah Gogela**

Manager, Capital Asset Management

Post Secondary Finance Branch

Ministry of Advanced Education

PO Box 9147 Stn Prov Govt

Victoria BC V8W 9H1

Phone: (250) 387-0890

Fax: (250) 356-7922

e-mail: [deborah.gogela@gov.bc.ca](mailto:deborah.gogela@gov.bc.ca)

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## Ministry of Advanced Education

### PROJECT BOARD MEETING #13 Kwantlen Polytechnic University Chip and Shannon Wilson School of Design

#### AGENDA

<b>DATE:</b>	February 1, 2016		
<b>TIME:</b>	10:00am to 11:30am		
<b>LOCATION:</b>	<b>Teleconference Dial-in:</b> s.15,s.17	<b>Participant ID:</b> s.15,s.17	
	<b>Moderator:</b> Kevin Brewster		

Item	Action	Lead
1. Welcome James Postans	Information	Kevin Brewster
2. Adoption of the Agenda (5 min)	For Decision	Kevin Brewster
3. Approval of the Minutes (5 min) a. Meeting Minutes #12 (Attachment 1)	For Decision	Kevin Brewster
4. Project Board Membership Update (10 min) a. Table of Changes to Terms of Reference (Attachment 2)	For Decision	Kevin Brewster
5. Project Status Update (20 min) a. CSWSOD Project Board Status Report #13 (Attachment 3a) b. Construction Contracting and Procurement Strategy (Attachment 3b)	For Decision For Discussion	Mark Bullen
6. Next Steps (5 min) • Upcoming Project Board Meeting #14: TBC – Proposed for Thursday, March 3, 2016	Information	Kevin Brewster

<b>BOARD MEMBERS</b>		
Kevin Brewster (Chair)	Assistant Deputy Minister, Ministry of Advanced Education	250 952-7410
Fazil Mihlar	Assistant Deputy Minister, Ministry of Advanced Education	250 952-0697
Jon Harding	Vice President Finance and Administration, Kwantlen Polytechnic University	604 599-2099
Harry Gray	Associate Vice-President Administration, Kwantlen Polytechnic University	604 599-2066
Michael Houle	Vice-President, Partnerships BC	250 475-4666
Karen Mill	Alternate Member, Assistant Vice-President, Partnerships BC	250 475-4672
Tina Swinton	Wilson Family Representative	604 737-7232
<b>NON-VOTING MEMBERS</b>		
Karen Hearn	Executive Director, Facilities Services, Kwantlen Polytechnic University	604 599-2442
Mark Bullen	Chief Project Officer, Kwantlen Polytechnic University	778 985-2649
James Postans	Secretariat	250 356-7896
<b>GUESTS</b>		
Raman Dale	Observer	250 387-9067
Deborah Gogela	Administrative Support	250 387-0890

### **Meeting Quorum**

A Quorum shall consist of:

- Chair;
- One member or alternate from the University; and,
- One member or alternate from the Ministry.



## Ministry of Advanced Education

### PROJECT BOARD MEETING # 12 Kwantlen Polytechnic University Chip and Shannon Wilson School of Design

DRAFT Minutes – November 23, 2015

<b>PRESENT:</b>	Kevin Brewster (Chair), Assistant Deputy Minister, Ministry of Advanced Education Fazil Mihar, Assistant Deputy Minister, Ministry of Advanced Education Jon Harding, Vice President Finance and Administration, Kwantlen Polytechnic University Michael Houle, Vice President, Partnerships BC Tina Swinton, Wilson Family Representative Mark Bullen, Chief Project Officer, Kwantlen Polytechnic University Karen Hearn, Executive Director, Facilities Services, Kwantlen Polytechnic University Catherine Nickerson (Secretariat), Director, Ministry of Advanced Education Deborah Gogea (Administrative Support), Manager, Ministry of Advanced Education
<b>ABSENT:</b>	Harry Gray, Associate Vice President Administration, Kwantlen Polytechnic University Karen Mill, Assistant Vice President, Partnerships BC Raman Dale (Observer), Ministry of Finance

ITEM	TOPIC	ACTION BY	STATUS
1.	<b>Project Board Membership Update</b> The Project Board welcomed Mark Bullen, the new Chief Project Officer (CPO) for Kwantlen Polytechnic University (KPU).		
2.	<b>Adoption of the Agenda</b>  <b>Proposed Motion #1:</b> "Be it resolved that the Chip and Shannon Wilson School of Design Project Board approves the agenda of Project Board Meeting #12." <i>Motion #1: moved by Fazil Mihar; seconded by Michael Houle; passed.</i>		
3.	<b>Approval of Minutes</b> a. Meeting Minutes #11  <b>Proposed Motion #2:</b> "Be it resolved that the Wilson School of Design Project Board approves the minutes of Project Board Meeting #11, held on September 29, 2015." <i>Motion #2: moved by Jon Harding; seconded by Mike Houle; passed.</i>		

ITEM	TOPIC	ACTION BY	STATUS
4.	<p><b>Report Back from CPO on Transition Update</b></p> <p>Mark reported briefly on his progress since he was engaged shortly after the last Project Board meeting in September, which has included a thorough review of all project materials. See Agenda Item 5.a. Project Status Update for a complete report on progress.</p>		
5.	<p><b>Project Status Update</b></p> <p><b>a. WSOD Project Board Status Report #12</b></p> <p>Mark presented the Project Status Report (Attachment 2a), including:</p> <ul style="list-style-type: none"> <li>• Revised Project Schedule</li> <li>• Revised Project Scope</li> <li>• Project Budget – Hanscomb Ltd. Class B Cost Estimate (Attachment 2b)</li> <li>• Current Work Underway and Next Steps</li> <li>• Key Risks</li> <li>• Communications</li> </ul> <p><b>Action:</b> Mark to advise Michael of bidder information meetings.</p> <p><b>RECOMMENDATIONS:</b></p> <p><b>Proposed Motion #3 (Status Report Issue #1):</b>  <i>"Be it resolved that the Chip and Shannon Wilson School of Design Project Board acknowledge that the value engineering efforts undertaken can reasonably be said to have achieved the desired outcome based on the Class B estimate and approve the redesign to continue."</i></p> <p><b>Proposed Motion #5 (Status Report Issue #3):</b>  <i>"Be it resolved that the Chip and Shannon Wilson School of Design Project Board identify their support for the redesign elements identified in Appendix (2) and (3) and (4)."</i></p> <p>After discussion of Proposed Motions #3 and #5, the Project Board agreed to defer the proposed motions by electronic vote until Mark provides to the Project Board the following:</p> <ul style="list-style-type: none"> <li>• In bullet points, a summary rationale for why the design changes were needed as part of the value engineering;</li> <li>• Revise the current renderings to look as much like the previous renderings as possible and put the 'before' and 'after' renderings on the same page for ease of comparison; and</li> <li>• In bullet points, a summary of the implications of the downward scope ladder (in prioritized order) with estimated costs attached.</li> </ul> <p><b>Action:</b> Mark to provide the requested information to the Project Board by the end of the week if possible.</p> <p>Tina and Michael, echoed by the rest of the Project Board, acknowledged and expressed appreciation for Mark's efforts to come into the project and expedite the process so effectively.</p>	MB	Complete

ITEM	TOPIC	ACTION BY	STATUS
	<p><b>Proposed Motion #3 (Status Report Issues #1 &amp; #3):</b>  <i>"Be it resolved that the Chip and Shannon Wilson School of Design Project Board acknowledges the need to incorporate the recommended changes to the building to bring it within the project budget and approves the redesign elements and downward scope ladder identified in the Project Status Report #12 Appendix 2 and 3 and Supplementary Information attached."</i>  <i>Motion #3: passed by electronic vote.</i></p> <p><b>Proposed Motion #4 (Status Report Issue #2):</b>  <i>"Be it resolved that the Chip and Shannon Wilson School of Design Project Board recommend that the revised Project Schedule (Appendix 1) be adopted."</i>  <i>Motion #4: moved by Tina Swinton; seconded by Michael Houle; passed.</i></p>		
6.	<p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>• Next Project Board Meeting: Monday, February 1<sup>st</sup>, 2016 at 10:00am <ul style="list-style-type: none"> <li>○ Updated project schedule to be presented</li> <li>○ Updated cost estimate to be presented</li> <li>○ Review costs for downward scope ladder</li> </ul> </li> <li>• Meeting Adjournment:</li> </ul> <p><b>Proposed Motion #5:</b>  <i>"Be it resolved that the Chip and Shannon Wilson School of Design Project Board meeting is adjourned."</i>  <i>Motion #5: moved by MH; seconded by FM; passed.</i>  The meeting was adjourned at approximately 10:15am.</p>		

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**BOARD MEMBERS**

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Kevin Brewster (Chair)	Assistant Deputy Minister, Ministry of Advanced Education	250 952-7410
Fazil Mihar	Assistant Deputy Minister, Ministry of Advanced Education	250 925-0698
Harry Gray	Associate Vice-President Administration, Kwantlen Polytechnic University	604 599-2066
Jon Harding	Vice President Finance and Administration, Kwantlen Polytechnic University	604 599-2099
Michael Houle	Vice-President, Partnerships BC	250 475-4666
Karen Mill	Alternate Member, Assistant Vice-President, Partnerships BC	250 475-4672
Tina Swinton	Wilson Family Representative	604 737-7232

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**NON-VOTING MEMBERS**

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Catherine Nickerson	Secretariat	250 356-7896
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**GUESTS**

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Karen Hearn	Executive Director, Facilities Services, Kwantlen Polytechnic University	604 599-2442
Raman Dale	Observer	250 387-9067
Deborah Gogela	Administrative Support	250 387-0890

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**Meeting Quorum**

A Quorum shall consist of:

- Chair;
- One member or alternate from the University; and,
- One member or alternate from the Ministry.



## Ministry of Advanced Education

### Kwantlen Polytechnic University Chip & Shannon Wilson School of Design

#### Project Board Terms of Reference *Summary of Revisions* January 26, 2016

Section:	Revision:
<b>1.0 Background</b>	The Project Board will be chaired by <del>Kevin Brewster</del> , Assistant Deputy Minister, Ministry of Advanced Education, and include other representatives from the Ministry, the University, the major donor, and Partnerships BC.
<b>5.0 Membership</b>	<ul style="list-style-type: none"><li>• <del>Kevin Brewster</del>, Assistant Deputy Minister, Financial and Management Services, Ministry of Advanced Education (Chair)</li><li>• <del>Fazil Mihar</del>, Assistant Deputy Minister, Institutions and Programs Division, Ministry of Advanced Education</li><li>• <del>Michael Houle</del>, Vice-President, Partnerships BC<ul style="list-style-type: none"><li>◦ <del>Karen Mill</del>, Assistant Vice-President, Partnerships BC (Alternate to Vice-President, Partnerships BC)</li></ul></li><li>• <del>Harry Gray</del>, Associate Vice-President Administration, Kwantlen Polytechnic University</li><li>• <del>Jon Harding</del>, Vice-President Finance and Administration, Kwantlen Polytechnic University</li><li>• <del>Tina Swinton</del>, Wilson Family Representative</li></ul>
<b>6.0 Support to the Project Board</b>	<ul style="list-style-type: none"><li>• Chief Project Officer: <del>Mark Bullen</del>, Kwantlen Polytechnic University</li><li>• Project Board Secretariat: <del>Catherine Nickerson</del>, Director, Capital Asset Management, Post-Secondary Finance Branch, Ministry of Advanced Education</li><li>• Administrative Support: <del>Deborah Gogela</del>, Manager, Capital Asset Management, Post-Secondary Finance Branch, Ministry of Advanced Education</li></ul>
<b>7.0 Observer</b>	<ul style="list-style-type: none"><li>• <del>Raman Dale</del>, Treasury Board Analyst, Ministry of Finance</li></ul>

Legend:  
Deleted



**CONFIDENTIAL**

**DRAFT as of January 26, 2016**

**MEMO**

**To:** Chair and Members of the Chip & Shannon Wilson School of Design  
Project Board

**From:** Chief Project Officer

**Date:** February 1, 2016

**Subject:** PROJECT STATUS REPORT #13

**1 PROJECT STATUS**

**1.1 SUMMARY AND MAJOR ACCOMPLISHMENTS**

- Re-design progressing to schedule. **Refer to Section 1.3** (APPENDIX 1, also APPENDIX 2)
- Project remains on budget. **Refer to Section 1.5** (APPENDIX 3)
- Construction Contracting & Procurement Strategy has been agreed with KPU, and is currently being implemented (APPENDIX 4). Border Ladner Gervais (Doug Sanders will be reviewing the resultant front end tender documents)

**1.2 SNAPSHOT OF PROJECT STATUS**

**Table 1: Project Status**

Scope	<b>MONITOR</b>
Schedule	<b>MONITOR</b>
Budget	
Procurement / Contracting	<b>MONITOR</b>

**1.3 PROJECT SCHEDULE UPDATE**

The project schedule remains on target for Start of Classes Jan 3, 2018 (**See Appendix 1**).

A detailed short term schedule is also provided (**See Appendix 2**).

The following amendments have been made to the schedule:

- Tender issue date brought forward 1 day to March 24, to allow for Good Friday on March 25.
- Substantial Completion date has been set at December 12, 2017 to provide a full 77-week construction period. This will not impact upon occupancy or start of classes, as the proposed Project Specific Amendments to the contract allow for FFE installation ahead of Substantial Completion (see GC 2.15 Right of Entry, below):

**GC 3.15 RIGHT OF ENTRY**

3.15.1 The Owner shall have the right to enter or occupy the Work in whole or in part for the purpose of placing fittings and equipment or for other uses before Substantial Performance of the Work, if, in the reasonable opinion of the Consultant and Contractor, such entry or occupation does not prevent or substantially interfere with the Contractor's completion of the Contract within the Contract Time. Such entry or occupation shall not be considered as acceptance of the Work or in any way relieve the Contractor from responsibility to complete the Contract.

**Table 2: Key Project Milestones**

Milestone	Target Date
90% Design	Feb 8, 2016
Class A Construction Cost Estimate	Feb 19, 2016
RFP Issue	March 24, 2016
RFP Close	April 22, 2016
Start of Construction	June 22, 2016
Substantial Completion	Dec 12, 2017
Start of Classes	Jan 3, 2018

**1.4 PROJECT SCOPE**

Following the last Project Board meeting (#12), a report entitled "Project Board Meeting #12: Supplementary Information" was prepared and approved by electronic vote of the Project Board. The Project re-design continues to progress in accordance with this report.

**1.5 PROJECT BUDGET**

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## 1.6 CURRENT WORK UNDERWAY AND NEXT STEPS

### Current work:

- Drafting and approval of front end tender documents
- Delivery of 90% design
- Arranging KPU review of 90% design

### Next Steps include:

- Architect to issue 90% Design (Feb 08, 2016)
- KPU design review facilitation meetings (Feb 12 and 15, 2106)
- Quantity Surveyor / Construction Management to issue Class A Construction Cost Estimate (Feb 19 and 26, 2016 respectively)
- Post Advance Procurement Notice to BC Bid, provided QS Class A is within budget
- Hold Project Information Session for interested contractors and trades, March 4, 2016

## 1.7 KEY RISKS




The table below highlights major risks.

**Table 2: Project Risks**

Issue	Discussion	Ranking, Impact, Mitigation
Project is unaffordable	<p>The Class B construction cost estimate plus contingency is within the assigned budget.</p> <p>While this is positive news, there remains significant risk (expressed as the degree of accuracy of +15%/-10%) that as the project definition progresses, that the Class A budget, and ultimately the bids, may be higher, and may exceed the budget.</p>	<p>This remains the most significant project risk. Mitigations include:</p> <ul style="list-style-type: none"> <li>▪ Close attention to affordability of design/specifications as they develop towards 100%</li> <li>▪ Incorporation of downward scope ladder items into the RFP documents</li> <li>▪ Hold General Contractor / trades communications session</li> <li>▪ Closely manage scope of end user review</li> </ul>

Project completion is delayed	<p>The revised schedule currently allows for an 18-month construction period from start of construction to substantial completion.</p> <p>To compress it further will likely have an impact on bid prices, therefore, any delay to critical activities prior to contract award will push out the end date.</p> <p>There is also a risk that the contractor - by fault or otherwise - will not complete the project on time, however, liquidated damages are not recommended, again to prevent upward pressure on bid prices.</p>	<p>This risk is significant but should not be mitigated at the expense of project affordability. Mitigations include:</p> <ul style="list-style-type: none"> <li>Tracking of coordinated design schedule</li> <li>Development of a construction schedule with the CM to validate the 18-month period and to help identify specific owner risks (and mitigations) to the critical path</li> <li>Ensure that Project Board are comfortable with the time allowed for approvals. Approval to Award Contract is a critical path activity with a duration of 4 weeks; Approval to Proceed to Tender is currently a near critical activity at 3 weeks.</li> <li>Proactive management of retained schedule risks</li> </ul>	
Project does not meet functional requirements of the faculty	<p>The cost pressures have necessitated extremely deep value engineering, and while the Faculty's representative has been very cooperative, and most savings will not impact functionality, there is an inherent risk that not all anticipated functions will be catered to with the new design and specification.</p>	<p>This risk is significant but should not be mitigated at the expense of project affordability. Mitigations include:</p> <ul style="list-style-type: none"> <li>Ongoing communication with Faculty representative and accommodation of comments where cost neutral</li> <li>One round of controlled end user engagement prior to finalization of Construction Documents, delivered as a carefully managed workshop with a documented and well communicated / enforced scope of review.</li> </ul>	

**Risk Ranking Legend:**

	High	Requires immediate attention
	Medium	Requires monitoring
	Low	Risk mitigated satisfactorily

## 1.8 PROJECT COMMUNICATIONS

All public project communications and updates continue to be led by the Ministry and coordinated with Government Communications and Public Engagement Office, in collaboration with KPU.

- No public communications since last Project Board meeting.
- The Advance Notice of Procurement (draft attached) is proposed to be issued on February 19, 2016, provided that the QS Class A estimate is within budget.
- A Project Information Session is proposed to be held on March 4, 2016

## 2.1 ITEMS FOR INFORMATION, DISCUSSION OR APPROVAL

### a) Issue #1:

Approval of revised Project Schedule.

#### **Background:**

The project schedule has been revised as follows:

- Tender issue date brought forward 1 day to March 24, 2016, to allow for Good Friday on March 25.
- Substantial Completion date has been set at December 12, 2017 to provide a full 77-week construction period. This will not impact upon occupancy or start of classes, as the proposed Project Specific Amendments to the contract allow for FFE installation ahead of Substantial Completion.

The revised schedule still achieves the same start of class date of January 3, 2018.

#### **Discussion:**

While June 2016 to November 2017 is 18 months inclusive, the exact dates worked out at 17 months. The revised Project Schedule allows for a 4-week longer construction period, which is appropriate, and there will be no impact on start of classes.

#### **For Approval:**

"Be it resolved that the Chip and Shannon Wilson School of Design Project Board recommend that the revised Project Schedule (**Appendix 1**) be adopted."

### b) Issue #2:

Discussion of Construction Contracting and Procurement Strategy.

#### **Background:**

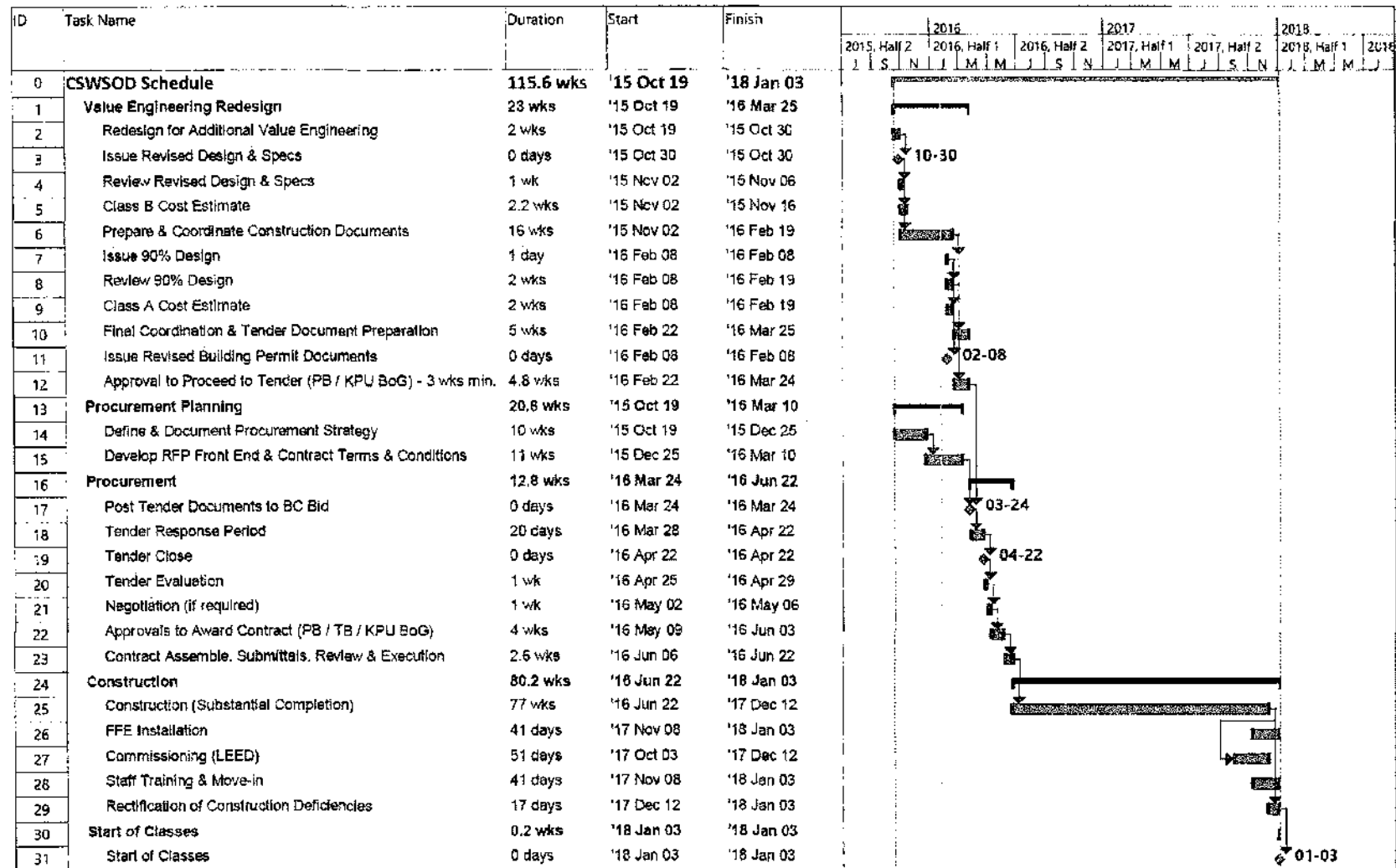
A construction contracting and procurement strategy (**Appendix 4**) was drafted and approved by KPU Procurement Department. There are a number of issues addressed here, notably for how to ensure competition in the pricing of the downward scope ladder, as well as a Privilege Article that addresses specified eventualities including negotiation.

#### **Discussion:**

The construction contracting and procurement strategy is currently being implemented. However, any comments, suggestions and/or questions are welcome at this time.

- Appendix 1: Updated Project Schedule
- Appendix 2: Detailed Short Term Project Schedule
- Appendix 3: Project Cost Report
- Appendix 4: Construction Contracting & Procurement Strategy
- Appendix 5: Draft Advance Notice of Procurement

# APPENDIX 1 - UPDATED PROJECT SCHEDULE





## APPENDIX 2- DETAILED SHORT TERM PROJECT SCHEDULE

	January																											
	February																											
	March																											
Prepare & Coordinate Design Documents																												
90% Design Review																												
Facilitated Meeting with KPU IT & Facilities (1) CSWSOD Facility (2)																												
90% Budget Review - Quantity Surveyor																												
90% Budget Review - Construction Manager																												
Prepare Request to Proceed to Tender for Project Board Approval																												
PB Meeting - Approval to Proceed to Tender																												
Approval Period																												
Final Design Coordination & Tender Document Preparation																												
Prepare Front End & Contract Terms & Conditions																												
Procure / Appoint Legal Advisor																												
Prepare Legal Opinion on Front End Documents																												
Post APN to BC Bid (Advertising Project Information Sessions)																												
Prepare Project Information Sessions (presentation, logistics, etc.)																												
Hold Project Information Sessions for GCs and Trades																												
Prepare Tender Posting																												
Post Tender to BC Bids																												

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#### APPENDIX 4: CONSTRUCTION CONTRACTING & PROCUREMENT STRATEGY

Attached as a separate document.

## NOTICE TO CONSTRUCTION CONTRACTORS & SUBCONTRACTORS

### ADVANCE INFORMATION NOTICE OF A UNIVERSITY ACADEMIC BUILDING IN THE CITY OF RICHMOND, BC, CANADA

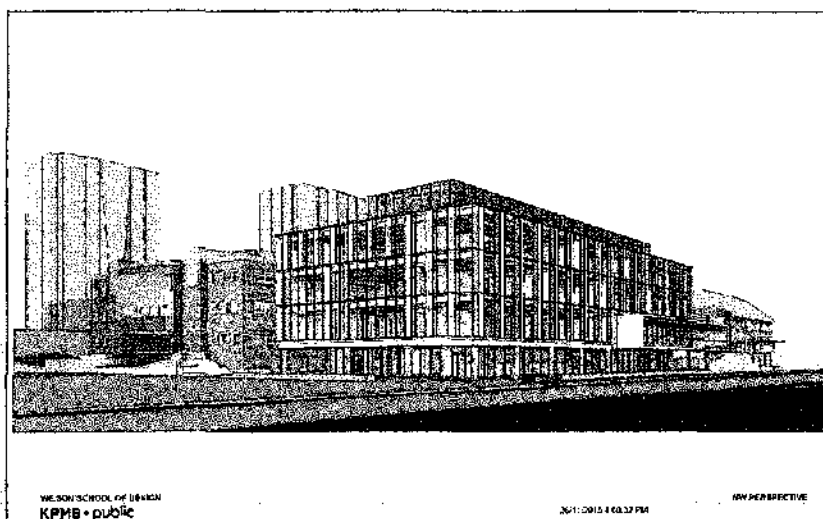
#### **This is not a tender call or an invitation to bid.**

Next month Kwantlen Polytechnic University (KPU) plans to commence procurement for construction of an academic building at the Richmond campus on Lansdowne Road - the newly redesigned Chip & Shannon Wilson School of Design.

You are invited to attend a Project Information Session on March 4, 2016 at KPU's Richmond Campus in the Melville Centre from 1:30 pm – 3:30 pm regarding the project and the upcoming tender. The information session will include a presentation by each of the key design disciplines, a visit to the site and opportunity to network with your industry peers.

#### **The Project**

The building is to provide flexible teaching spaces, with ample natural daylight, and good ventilation. The new 6000 m<sup>2</sup> facility is to support delivery of KPU's innovative design programs, and will be delivered under a design-bid-build contract strategy within a construction duration of approximately 18 months, ready for occupancy in January 2018.



The site has already been prepared under a separate ground improvement contract ready to receive the building's raft slab foundation, and the project has been through an extensive redesign process to simplify all key elements of the design to optimize value and enhance constructability.

#### **Project Information Session**

The success of this project depends to a large degree on engagement with the construction industry, and it's for this reason that we are providing the market with as much advance information as possible about the project.

We encourage you to consider pursuing this exciting opportunity and to start thinking about developing your construction team. To help you with this, we welcome your attendance at the project information session, which is open to all General Contractors, Sub-Contractors and

Suppliers. Please email Mark Bullen, Chief Project Officer at [procurement@capexprojects.com](mailto:procurement@capexprojects.com) to register your attendance at this event and to receive further details.

### **Project Drawings & Specifications**

The re-design is nearing completion, and while the design is subject to change and further development prior to tender, should you wish to view the work-in-progress design documents, please contact Mark Bullen at the email provided above for access credentials to the project FTP site. Note that you will automatically be provided with access credentials by registering for the Project Information Session.

## Cliffe, Ashley AVED:EX

---

**From:** Gogela, Deborah AVED:EX  
**Sent:** Wednesday, February 3, 2016 12:45 PM  
**To:** Porter, Rodney GCPE:EX  
**Cc:** Postans, James AVED:EX; Prive, Doris L AVED:EX  
**Subject:** FW: KPU Mid-January Project Progress Checkin  
**Attachments:** Contracting & Procurement Strategy B.pdf

Hi Rodney,

James (our new director) asked that I send this to you. This is from KPU's chief project officer - it is a construction contracting and procurement strategy for the Chip and Shannon Wilson School of Design project, and includes on the last page a draft advance public notice for a public information session that KPU is proposing to hold in early March.

The Project Board has seen this, and we just want to ensure that you are aware of what is being proposed.

Please let me know if you have any questions.

Regards,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education

Office: (250) 387-0890  
Mobile: (250) 415-1369

---

**From:** mark bullen [<mailto:mark@capexprojects.com>]  
**Sent:** Monday, January 11, 2016 10:45 AM  
**To:** Gogela, Deborah AVED:EX  
**Cc:** Nickerson, Catherine M AVED:EX; Prive, Doris L AVED:EX  
**Subject:** RE: KPU Mid-January Project Progress Checkin

Deborah

In preparation for our call on Wednesday, I attach the project contracting and procurement strategy which has been reviewed by KPU.

If possible, it would be good to have a read through in advance, but I can walk you through it in any case.

Regards,

Mark Bullen  
Director | Capex Project Advisory Services Inc.

Mobile: +1 778 985 2649  
[mark@capexprojects.com](mailto:mark@capexprojects.com) | capexprojects.com

**From:** Gogela, Deborah AVED:EX [<mailto:Deborah.Gogela@gov.bc.ca>]  
**Sent:** December 7, 2015 2:20 PM  
**To:** 'mark bullen' <[mark@capexprojects.com](mailto:mark@capexprojects.com)>  
**Cc:** Nickerson, Catherine M AVED:EX <[Catherine.Nickerson@gov.bc.ca](mailto:Catherine.Nickerson@gov.bc.ca)>; Prive, Doris L AVED:EX <[Doris.Prive@gov.bc.ca](mailto:Doris.Prive@gov.bc.ca)>  
**Subject:** KPU Mid-January Project Progress Checkin

Hi Mark,

Great news on Friday regarding the Board passing the motion on the design. Thanks for all your hard work on refining the renderings and the downward scope ladder.

The next project board meeting is scheduled for Thursday, February 25<sup>th</sup> at 1:30pm. These meetings are typically held monthly, and we discussed whether a project board meeting should be held in January. Given there are no key milestones identified in January, we suggest instead a phone meeting between yourself and AVED to review progress. We would include the new Director, James Postans, who will be joining us on January 4<sup>th</sup>, and taking over Catherine's role (her last day is January 22<sup>nd</sup>).

Is there a time that works best for you? Say January 13 or 14, preferably in the afternoon? Please feel free to include Karen if she is available.

Regards,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education  
PO Box 9147 Stn Prov Govt  
Victoria BC V8W 9H1

Phone: (250)387-0890  
Fax: (250)356-7922

e-mail: [deborah.gogela@gov.bc.ca](mailto:deborah.gogela@gov.bc.ca)

## Cliffe, Ashley AVED:EX

---

**From:** Gogela, Deborah AVED:EX  
**Sent:** Wednesday, February 3, 2016 4:06 PM  
**To:** Postans, James AVED:EX  
**Cc:** Prive, Doris L AVED:EX  
**Subject:** FW: CAMF - Implementation of the new Pre-Qualification and Privilege Clause Guidance Documents  
**Attachments:** 2015 05 06 Best Practice for Pre Qualification.pdf; 2015 06 29 Best Practice for Administering Tenders with Privilege Clause....pdf

Hi James (Doris),

I spoke to Mark about the pdf in the link below. I pointed out that the pdf references 'during the procurement process only', whereas KPU's proposed public information meeting is *outside* the procurement process.

Mark is going to double-check with KPU's soon-to-be lawyer (Doug Sanders) to confirm that this is the case, and will let me know what Doug says.

So nothing required from us for the time being.

Cheers,  
Deborah

---

**From:** mark bulien [mailto:mark@capexprojects.com]  
**Sent:** Tuesday, February 2, 2016 6:52 PM  
**To:** Gogela, Deborah AVED:EX  
**Subject:** FW: CAMF - Implementation of the new Pre-Qualification and Privilege Clause Guidance Documents

Deborah

In planning for the upcoming **Project Information Session**, I noted in the email Kevin circulated a link to the following:  
<http://www.pss.gov.bc.ca/psb/pdfs/ReleasableInformationNov2013.pdf>

Our plan for this session is very much to stipulate that any and all information or discussions at this meeting is to be considered non-binding and that the only source of reliable information for bidders was either the tender documents or addenda themselves or a documented response to a request for information, however, the link above states that "If a bidders or proponents' meeting is held, a verbatim transcript (or minutes) must be developed and posted publicly with the solicitation documents".

I find this requirement curious to be honest, and I would be very cautious about holding a session where I know that I cannot exert control over what is asked, nor what is stated by KPU or the design team, if anything that is mentioned goes on formal documented record – this is not our intent and I see this as a risk frankly.

On the other hand, I'm also very keen to hold this session as I believe the history and challenges of the project requires this upfront pre-procurement engagement. Perhaps the answer here is that, strictly speaking, this is not a bidder or proponent's meeting – it's a non-mandatory, open invitation to the contracting community to hear about the project and KPU's plans for the upcoming procurement – on this basis, I'd propose that such a transcript would neither be required nor desirable.



What do you think? Let me know if you'd like to discuss,

Regards,

Mark Bullen

Director | Capex Project Advisory Services Inc.

Mobile: +1 778 985 2649

[mark@capexprojects.com](mailto:mark@capexprojects.com) | [capexprojects.com](http://capexprojects.com)

**From:** Brewster, Kevin AVED:EX [<mailto:Kevin.Brewster@gov.bc.ca>]

**Sent:** January 29, 2016 4:07 PM

**To:** 'mark@capexprojects.com' <[mark@capexprojects.com](mailto:mark@capexprojects.com)>

**Cc:** Postans, James AVED:EX <[James.Postans@gov.bc.ca](mailto:James.Postans@gov.bc.ca)>; Gogela, Deborah AVED:EX <[Deborah.Gogela@gov.bc.ca](mailto:Deborah.Gogela@gov.bc.ca)>;

Houle, Michael PSBC:EX <[Michael.Houle@partnershipsbcc.ca](mailto:Michael.Houle@partnershipsbcc.ca)>; 'Karen Hearn' <[Karen.Hearn@kpu.ca](mailto:Karen.Hearn@kpu.ca)>; 'Harry Gray' <[Harry.Gray@kpu.ca](mailto:Harry.Gray@kpu.ca)>

**Subject:** CAMF - Implementation of the new Pre-Qualification and Privilege Clause Guidance Documents

Hi – I was reminded today by a colleague that govt has recently issued the following additional guidance documents for the Capital Asset Management Framework (which we expect KPU to follow).

This is guidance for projects considering pre-qualification and for the administration of privilege clauses in contracts.

Pls note that these topics have been developed for the Deputy Ministers Industry Infrastructure Forum (a BC govt/construction industry liaison group).

The Ministry will be expecting KPU to adhere to these guidance materials for the CSWSOD project.

Additionally, the Ministry will also expect KPU to comply with the following program of employing apprentices on public projects in British Columbia.

[http://www2.gov.bc.ca/assets/gov/business/economic-development/assets/apprentices-on-public-projects/policy\\_and\\_procedure\\_guidelines- final\\_07-09-2015.pdf](http://www2.gov.bc.ca/assets/gov/business/economic-development/assets/apprentices-on-public-projects/policy_and_procedure_guidelines- final_07-09-2015.pdf)

Happy to discuss.

**Kevin Brewster**

Assistant Deputy Minister | Financial & Management Services Division | Ministry of Advanced Education

Phone: 250-952-7410 Email: [Kevin.Brewster@gov.bc.ca](mailto:Kevin.Brewster@gov.bc.ca)

## **Recommended Best Practice for Pre-Qualification for Selection of General Contractors and Professional Consulting Services**

### **Executive Summary:**

This document has been developed to augment the Capital Asset Management Framework (CAMF). It includes the following guidance for all government reporting entity bodies engaged in capital procurement, primarily focused in a construction context:

- Recommended best practice for the use and application of pre-qualification processes for selecting general contractors and professional architectural or engineering services, including when pre-qualification processes should be considered, and how they should be structured, managed and implemented;
- References to applicable legislative and policy framework;
- A sample analysis/decision tool.

This document applies to the following types of pre-qualification processes:

- Request for Qualifications as the first step in a tender process; and
- Request for Qualifications as a first step in a Request for Proposals process.

This document is not intended to be binding, and alternate approaches to the principles and practices described in this document may be appropriate, provided that any such alternate approaches comply with applicable provincial policy and the laws applicable in British Columbia.

Related resources include:

- BC Government's Core Policy and Procedures Manual  
<http://www.fin.gov.bc.ca/ocg/fmb/manuals/manuals.htm>
- CAMF and related guidance <http://www.fin.gov.bc.ca/tbs/camf.htm>
- Purchasing Handbook, A Guide to Acquiring Goods and Services in the Government of British Columbia <http://www.pss.gov.bc.ca/psb/pdfs/PurchasingHandbook.pdf>
- Ministry of Technology, Innovation and Citizens' Services, Logistics and Business Services Division (Procurement Services Branch) <http://www.pss.gov.bc.ca/psb/home.html>
- PCCBC Contractor Recommended Guidelines for Pre-qualification of General Contractors <http://www.pccbc.com/wp-content/uploads/2012/02/Recommended-Guideline-for-Pre-qualification-of-General-Contractors-and-Trade-Contractors.pdf>
- CCDC 29 A Guide to Pre-Qualification (to be released)
- Release of information guidance  
<http://www.pss.gov.bc.ca/psb/pdfs/ReleasableInformationNov2013.pdf>

Questions regarding pre-qualification best practices can be directed to:

Shared Services BC, Procurement Services Branch  
[procurement@gov.bc.ca](mailto:procurement@gov.bc.ca).

This document is not a substitute for the application of policies and laws.

## **Recommended Best Practice for Pre-Qualification for Selection of General Contractors and Professional Consulting Services**

### **1. Objectives of the Recommended Best Practice:**

The purpose of this document is to:

- Provide a concise tool on the appropriate use and application of pre-qualification processes for selecting general contractors and professional architectural or engineering services to support fair, open and transparent capital procurement; and
- Support greater accountability from procuring entities.

These best practices are intended to apply in circumstances where pre-qualification is used to screen potential respondents for baseline threshold requirements, as the first step in a larger procurement process. Careful consideration should be given to ensure that any process created in accordance with this guideline is a pre-qualification process, rather than a source list, as different trade law and policy requirements may apply in the context of a source list.

### **2. Context:**

#### **a. Definition:**

Pre-qualification is a process by which the qualifications of a contractor or consultant are evaluated prior to completing a tendering or proposal submission process. Pre-qualification can be implemented through a variety of methods, and is typically used to select potential bidders or proponents for an individual project or scope of work, or is used to create a pre-qualified list of potential bidders or proponents for a defined program and/or timeframe.

A pre-qualification process may be conducted on a project by project basis, or, in appropriate circumstances, pre-qualification can be used for a limited category or group of anticipated and related projects or contracts. For example, where the procuring entity is planning a number of similar or related projects or contracts over a reasonably short period of time and considers that the same qualifications would be relevant, a pre-qualification process may be appropriate. In this case, the pre-qualification should clearly set out the scope of anticipated projects for which potential bidders or proponents are being pre-qualified and the timeframes during which subsequent procurements may be commenced.

This guidance applies to the following types of pre-qualification processes:

- Request for Qualifications as the first step in a tender process; and
- Request for Qualifications as a first step in a Request for Proposals process.

#### **b. Legislative and Policy Environment:**

Public sector procurement is informed and guided by applicable legislation, common law, policies and trade agreements. Pre-qualification processes must be aligned with all of these, where applicable. Government must also conduct its procurements consistent with the Core Policies and Procedures Manual (CPPM). Government reporting entities (as defined by the

**Recommended Best Practice for Pre-Qualification  
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*Budget Transparency and Accountability Act*) are expected to follow the spirit and intent of the CPPM, which, at a minimum means that procurement be undertaken in a manner that is fair, open and transparent and designed to maximize value for money.

c. Principles:

Government procurement is based on the foundation that taxpayers are best served through competitive procurement processes that are fair, open and transparent. The principles of fair, open and transparent procurement, as described in government's CPPM, include: competition, value for money, transparency and accountability.

Pre-qualification processes should be well structured, objective and inclusive; evaluation criteria should be clearly enunciated, objectively measured, and necessary to establish the threshold qualifications required for the respective services, in order that the process will be accessible to the maximum number of potential bidders and proponents. Bidders and proponents will be more likely to participate, and there will be more competition, where the selection process is clear and well understood..

**3. When and why should a pre-qualification process be considered?**

Pre-qualification can be a useful tool in connection with capital asset procurement. It is not best practice to conduct a pre-qualification process for all procurements. However, in certain circumstances, a properly designed and administered pre-qualification process may be appropriate to create an effective procurement process.

Procuring entities must assess each circumstance to determine whether a pre-qualification step will improve the procurement process and whether there may be any unintended consequences, such as artificially limiting or restricting certain bidders or proponents from participating.

Situations when a pre-qualification process may be appropriate include:

- When the project complexity or attributes require that potential bidders or proponents possess specific skills, experience, financial capability, qualifications, expertise or other characteristics that are relevant for successful completion of the project, and there is a benefit to establishing a pool of potential bidders or proponents that meet these requirements as a first step in a procurement process; or
- When the cost of preparing and administering bid submissions is onerous for bidders or proponents, and government. Procuring entities should analyze the size and complexity of the project and the cost of preparing and administering a procurement submission to determine if a pre-qualification process will prove beneficial, without unnecessarily restricting competition.

In cases where there is only one specialist able to deliver a product or service pre-qualification may be unnecessary.

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An analysis/decision tool to support procuring entities in determining whether pre-qualification is appropriate and beneficial to specific circumstances is described in Appendix 1.

**4. Best Practices for implementing a pre-qualification process:**

- a. Pre-qualification processes should be prepared and administered by persons properly trained and qualified to do so, in accordance with government policy and applicable trade agreements, and with the benefit of legal advice where required or otherwise appropriate.
- b. Prior to commencing a pre-qualification process, a procuring entity should identify from whom it will seek legal advice should such advice be necessary during the process. For example, legal advice may be required if there is a question about whether a bidder or proponent should be pre-qualified or whether a requirement for pre-qualification is being properly applied.
- c. Pre-qualification processes are subject to public sector procurement principles, including obligations arising from trade agreements, and are to be structured and administered in a fair, open and transparent manner that does not damage the integrity of the overall competitive process.
- d. Pre-qualification criteria should be capable of objective determination and easily measurable.
- e. Pre-qualification processes should be undertaken only after comprehensive planning which results in a full understanding and description of the scope of the opportunity, and a review and analysis of the potential market for that scope of work. This may involve market sounding exercises.
- f. For core government, the Procurement Services branch of Shared Services BC provides standard format solicitation templates that should be used where pre-qualification is required. In general, a request for qualifications should clearly describe:
  - The project(s) or contract(s) to which the pre-qualification process is to apply;
  - The scope of the project(s) or contract(s) including those that may be the subject of future opportunities. A procurement process resulting from a pre-qualification process must fall within that defined scope and should not be used for opportunities that may fall outside it;
  - Who may use the resulting short list;
  - The qualifications required and the manner in which the qualifications must be demonstrated;
  - The submission requirements. Note that a pre-qualification request should only require responding parties to submit information that is specifically relevant to the pre-qualification process;
  - The evaluation approach and criteria and the relative weightings by which the pre-qualification evaluation and selection will be undertaken. Criteria should be objective to ensure a fair evaluation process;

**Recommended Best Practice for Pre-Qualification  
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- The expected schedule for evaluation, notification, and debriefing;
  - The contact person for the document and terms and conditions related to communication about the process; and
  - Any minimum qualifications that must be met in order to be pre-qualified (such as specific expertise, experience, bonding capacity). Note that minimum qualifications should have clear rationale and not artificially limit competition.
- g. If a pre-qualification list for more than one project is being established then:
- Applicable trade agreement provisions must be followed, including requirements for publication of pre-qualification opportunities and future opportunities for contractors or consultants to qualify;
  - The type and scope of projects or contracts to which the pre-qualification will apply should be clearly described in the pre-qualification documentation;
  - The length of time during which any pre-qualification list will be valid is to be clearly described in the pre-qualification invitation, and is not to exceed 12 months;
  - In the event that a pre-qualification list is established for a broader scope of opportunities than generally contemplated in this guidance, there is to be a continuous, ongoing opportunity for qualified bidders or proponents to be added to the list; and
  - The process for selecting contractors or consultants from a pre-qualified list should be set out in the request for qualifications and should follow applicable trade agreement provisions.
- h. Promptly upon the completion of the pre-qualification process each bidder or proponent should be informed of the results of their own submission, but care should be taken not to disclose information about other submissions, except in accordance with applicable law and policy. Procuring entities should address Freedom of Information requirements, and seek legal advice. Debriefs may be appropriate to assist bidder or proponent with future submissions and to support continuous improvement for procuring entities.
- i. Records relating to the evaluation of pre-qualification submissions should be made and maintained by the procuring entity for so long as required by the *Document Disposal Act* or any other applicable legislation, as well as any applicable policies.
- j. The procuring entity should not make any changes to pre-qualification documents issued by that entity after expiry of the period in which pre-qualification submissions are permitted to be made and should not make changes at any other time, without first obtaining legal advice as to the risks of doing so.

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**5. Accountability and Transparency:**

Procuring entities are accountable for implementing pre-qualification processes in a manner consistent with policy, trade agreement requirements and contract law. In accordance with government's CPPM, and to support accountability in a fair, open and transparent manner, a procuring entity should maintain adequate documentation that supports decisions throughout the pre-qualification process.

Procuring entities should address pre-qualification processes within overall procurement performance measurement and reporting frameworks.

Reviews and audits may be undertaken or recommended by various organizations, including the following:

- The procuring ministry or crown agency;
- The ministry responsible for a crown agency;
- The Ministry of Finance;
- Office of the Auditor General; and
- Other public sector bodies as may be mandated from time to time by government.

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**Appendix 1: Procurement Pre-Qualification Best Practice Checklist**

## Procurement Pre-Qualification Best Practice Checklist

(To be completed by procuring agency to document how their process has met best practice guideline)

Project/Program Name: [INSERT]

What	(✓)	Details
<b>Review and analyze the potential market</b>		
<ul style="list-style-type: none"> <li>Has a market sounding been conducted?</li> </ul>		
<b>Document rationale for using pre-qualification</b>		
<ul style="list-style-type: none"> <li>Is this the first phase in a larger procurement process and would pre-qualification simplify the larger procurement process without imposing unwarranted restrictions?</li> </ul>		
<ul style="list-style-type: none"> <li>Does the contract/program scope justify pre-qualification? e.g. will this generate a list of consultants or contractors to bid on multiple projects over a specific time period, or is the project large and complex?</li> </ul>		
<ul style="list-style-type: none"> <li>Are there specific qualifications or attributes required?</li> </ul>		
<b>Document rationale for pre-qualification requirements and evaluation criteria</b>		
<ul style="list-style-type: none"> <li>Are the requirements/evaluation criteria supported by the features of the opportunity (size, complexity, specialist expertise)?</li> </ul>		
<ul style="list-style-type: none"> <li>What considerations have been given to maximizing competition, making the opportunity available to emerging entrants?</li> </ul>		
<ul style="list-style-type: none"> <li>Has consideration been given to knowledge or experience that could be transferred to the project and that would qualify a consultant or contractor?</li> </ul>		



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What	(✓)	Details
<ul style="list-style-type: none"> <li>Is the manner in which the pre-qualification list is to be used clearly defined within the pre-qualification documentation?</li> </ul>		
<b>Maximize awareness of opportunity</b>		
<ul style="list-style-type: none"> <li>Has the opportunity been posted on BC Bid?</li> </ul>		
<ul style="list-style-type: none"> <li>Has the opportunity been advertised? If yes, has it been advertised in the region where the work is available and in the manner specified in applicable trade agreements?</li> </ul>		
<b>Meet policy and trade requirements</b>		
<ul style="list-style-type: none"> <li>Have trade and policy requirements been reviewed?</li> </ul>		
<b>Evaluation process</b>		
<ul style="list-style-type: none"> <li>Do evaluators have appropriate expertise and experience?</li> </ul>		
<ul style="list-style-type: none"> <li>Has a Fairness Monitor been used?</li> </ul>		
<b>Debrief</b>		
<ul style="list-style-type: none"> <li>Will a debrief be offered? How long after the completion of the prequalification process?</li> </ul>		
<ul style="list-style-type: none"> <li>What information will be made available to bidders or proponents during the debrief?</li> </ul>		

## Recommended Best Practices for Administering Tenders with Privilege Clauses

### Executive Summary:

This document has been developed to augment the Capital Asset Management Framework (CAMF). It includes a summary of existing policies and best-practices guidance in relation to capital procurement. This document is not a substitute for the application of existing policies and laws.

Related resources include:

- BC Government's Core Policy and Procedures Manual  
<http://www.fin.gov.bc.ca/ocg/fmb/manuals/manuals.htm>;
- The CAMF and Related Guidance <http://www.fin.gov.bc.ca/tbs/camf.htm>;
- Purchasing Handbook, A Guide to Acquiring Goods and Services in the Government of British Columbia <http://www.pss.gov.bc.ca/psb/pdfs/PurchasingHandbook.pdf>;
- Ministry of Technology, Innovation and Citizens' Services, Logistics and Business Services Division (Procurement Services Branch) <http://www.pss.gov.bc.ca/psb/home.html>;
- Release of information guidance  
<http://www.pss.gov.bc.ca/psb/pdfs/ReleasableInformationNov2013.pdf>;
- The Vendor Complaint Review Process (VCRP) <http://www.fin.gov.bc.ca/ocg/pgo/VCRP.htm>;
- The Canadian Construction Documents Committee (CCDC), The Principles of Construction Procurement and Bidding Environment, "CCDC Bulletin 22 - The Privilege Clause",  
<http://www.ccdc.org/bulletins/pdf/eng/bulletin22.pdf>;
- BC Documents Committee Document BCDC 2, 2013 Standard Documents and Guidelines for a Stipulated Price Bid for use on Publicly Funded Building Projects In the Province of British Columbia, <http://www.pccbc.com/wp-content/uploads/2013/07/Guideline-to-BCDC-2-2013-July-8-2013.pdf>; and
- Stipulated Sum Bid Form for Use in Stipulated Price Bid Documents July 8, 2013 Publicly Funded Building Projects - BCDC 2, 2013 for Online bidding), <http://www.pccbc.com/wp-content/uploads/2013/07/Guideline-for-BCDC-2E-For-Online-Bidding-July-9-2013.pdf>.

Questions regarding privilege clause best practices can be directed to:

Logistics and Business Services, Procurement Services Branch  
[procurement@gov.bc.ca](mailto:procurement@gov.bc.ca).

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### 1. Objectives of the Guideline:

The purpose of this document is to provide a summary of existing policy and best practices regarding privilege clauses to support fair, open and transparent capital procurement.

This document will assist procuring entities to use privilege clauses in a manner consistent with applicable law and policy.

## Recommended Best Practices for Administering Tenders with Privilege Clauses

### 2. Context:

These best practices apply to invitations to bid (commonly used for procurement of publicly-funded capital projects) and other forms of competitive procurement, including requests for proposals and other documents that may be used for construction projects or other capital asset acquisitions.

#### a. Definition:

A privilege clause may be included in competitive procurement documents in order to reserve certain rights and privileges to the procuring entity, such as the right not to accept the lowest or any bid. An exclusion of liability clause, or a limitation of liability clause, is a type of privilege clause that is meant to manage the procuring entity's exposure to liability arising from the procurement process.

Privilege clauses have a role in protecting a procuring entity's interests, including situations in which unforeseen events happen such as when all the submitted proposals or compliant bids exceed the procuring entity's ability to pay for the project.

#### b. Legislative and Policy Environment:

Public-sector procurement must comply with applicable legislation, common law, policies and trade agreements.

The *Financial Administration Act* (FAA) states that Treasury Board may make regulations or issue directives respecting the planning, management and reporting of capital expenditures by government and government bodies. Further, under the FAA, Treasury Board has authority to create policy in relation to "government financial management and control, including expenditures and assets". The Core Policy and Procedures Manual (CPPM) is created pursuant to this authority. The CPPM applies to all ministries, offices, special funds, accounts, appropriations outlined in the FAA and independent officers of the Legislature. Crown corporations, public bodies and funded agencies are expected to follow the spirit and intent of the CPPM. The CPPM can be found at:

<http://www.fin.gov.bc.ca/ocg/fmb/manuals/CPM/CPMtoc.htm>

Capital Asset Management is detailed within Chapter 5 of the CPPM, which states that CAMF contains standards, guidelines and tools to support public sector capital management. Chapter 5 of the CPPM can be found at:

[http://www.fin.gov.bc.ca/ocg/fmb/manuals/CPM/05\\_Capital\\_Asset\\_Mgmt.htm](http://www.fin.gov.bc.ca/ocg/fmb/manuals/CPM/05_Capital_Asset_Mgmt.htm)

Chapter 6 of the CPPM details procurement policy and can be found at:

[http://www.fin.gov.bc.ca/ocg/fmb/manuals/CPM/06\\_Procurement.htm](http://www.fin.gov.bc.ca/ocg/fmb/manuals/CPM/06_Procurement.htm)

### **Recommended Best Practices for Administering Tenders with Privilege Clauses**

If there are inconsistencies between (a) this document and (b) Treasury Board regulations or directives respecting capital procurements, the CPPM, or CAMF (collectively, the policies), the policies will govern.

c. **Principles:**

Government procurement of goods, services and construction are based on the principles of fair and open public sector procurement: competition, value for money, transparency and accountability.

d. **Use of Privilege Clauses:**

Privilege clauses have a role in protecting the Province's interests, including in circumstances in which unforeseen events happen, such as proposals exceeding the Province's budget for a procurement or no compliant bids being received. However, privilege clauses should not take the place of planning in a procurement process, including expressly stating the terms that will govern the procurement process, careful preparation of the applicable procurement documents, and implementation and administration of the procurement in accordance with the terms of the procurement documents.

### **3. Procurement Templates:**

Procuring entities should use standard government solicitation documents, as these documents have been reviewed and approved as appropriate from policy, legal and practices perspectives. The requirement to use standard documents is embedded within Chapter 6.3.2(a)(5) of the CPPM, which states:

"Ministries must use the standard government formats for solicitation documents (e.g., SRFP, RFP, RFQ <http://www.pss.gov.bc.ca/psb/procurement/procurement-templates.html>) available from Procurement Services Branch. Ministries must obtain the approval of Procurement Services Branch and legal counsel for any changes to the standard formats. Only current versions of the solicitation documents may be used. Procurement Services Branch has developed guidelines for the selection of solicitation processes and templates: [www.pss.gov.bc.ca/procurementplanning.html](http://www.pss.gov.bc.ca/procurementplanning.html)."

### **4. Privilege Clauses vs. Privilege Articles:**

Privilege clauses tend to be a short statement that the lowest or any quotation/proposal may not be accepted. Some procurement documents include several statements or clauses that expressly state specific instances or scenarios in which a procuring entity reserves certain rights and privileges, or outlines with greater transparency or certainty the allocation of responsibility between the procuring entity and the bidders for certain matters. These clauses, taken together, form a type of "privilege

## **Recommended Best Practices for Administering Tenders with Privilege Clauses**

article". These extended privilege clauses generally reflect what the underlying market or commercial context for the public projects will reasonably accept.

Currently, there are no privilege articles approved as part of the Province's standard government solicitation documents.

Within the existing procurement templates, the following privilege clauses are found.

a. Short-Form Request for Proposals (SFRP):

"The SFRP should not be construed as an agreement to purchase goods or services. The Province is not bound to enter into a Contract with the Proponent who submits the lowest priced proposal or with any Proponent."

b. Invitation to Quote Services (ITQS):

"Lowest or any Quotation will not necessarily be accepted."

c. Request for Proposals (RFP):

"This Request for Proposals should not be construed as an agreement to purchase goods or services. The Province is not bound to enter into a Contract with the Proponent who submits the lowest priced proposal or with any Proponent. Proposals will be assessed in light of the evaluation criteria. The Province will be under no obligation to receive further information, whether written or oral, from any Proponent."

The templates linked from the CPPM should be reviewed on a regular basis for any updates.

An example of a privilege article employed by a number of provincial public sector organizations for stipulated price bid circumstances is provided in Appendix 1 (source BCDC 2, 2013). As this sample privilege article does not form part of the Province's standard government solicitation documents, use of this wording or of other privilege articles requires review by legal counsel.

### **5. Procurement Best Practices:**

Appropriate use of privilege clauses is one aspect of overall procurement best practices, many of which are requirements within CPPM.

All standard competitive solicitation processes (e.g., ITT (invitations to Tender), SFRP (Short Form Request for Proposals), RFP (Request for Proposals), ITQ (Invitation to Quote)) must provide identical information for potential bidders or proponents to the solicitation, to fairly and equally base their response. (CPPM, c. 6.3.2(a)(7))

## **Recommended Best Practices for Administering Tenders with Privilege Clauses**

The permitted response time to a solicitation must be sufficient to allow all potential proponents to have a reasonable opportunity to compete, taking into account the time required to disseminate information, the complexity of the procurement, and the time required to prepare an appropriate response. (CPPM, c. 6.3.2(a)(8))

Objective selection criteria for the awarding of a contract must be established prior to inviting bids and proposals and must be consistent with those specified in the solicitation documents. Selection procedures and timelines must not limit anyone from competing. (CPPM, c. 6.3.2(a)(9))

Procuring entities must award contracts on the basis of the criteria set forth in the solicitation documents. The rationale for the ranking of all proponents must be documented. Before considering a bid or proposal, procuring entities must ensure that it meets all mandatory requirements specified in the solicitation documents. (CPPM, c 6.3.3(b))

In the case of ITTs and ITQs, contracts must be awarded to the lowest-priced qualified bidder meeting the terms and conditions of the solicitation document. In the case of a SRFP or RFP, the contract must be awarded to the proponent whose proposal meets all mandatory proposal requirements, and achieves the highest overall rating of all evaluation criteria specified in the solicitation documents. (CPPM, c 6.3.3(b))

Competitive procurements that will result in a 'Contract B' must not be written in a manner that will avoid a 'Contract A' and its attendant legal obligations. Privilege clauses must not be written in a manner that will, or be relied upon to, breach 'Contract A' obligations.

### **6. Accountability and Transparency:**

The Vendor Complaint Review Process ("VCRP") is designed to ensure that there is a process for the review of vendor complaints about a government procurement process. The intent of the VCRP is to assist government in identifying and responding to problems in the establishment and application of government procurement policy and procedures.

The objectives of VCRP policies are to define a vendor complaint review process that is accessible, consistent, fair, impartial and timely, and to identify ways to make improvements in the manner in which procurement is undertaken by government.

The VCRP policies are found at

[http://www.fin.gov.bc.ca/ocg/fmb/manuals/CPM/06\\_Procurement.htm#11](http://www.fin.gov.bc.ca/ocg/fmb/manuals/CPM/06_Procurement.htm#11)

<http://www.fin.gov.bc.ca/ocg/pgp/VCRP.htm>

It is expected that the best practice guidance within this document be followed. However, it is recognized that variation may be warranted in specific circumstances. Where significant variation

### **Recommended Best Practices for Administering Tenders with Privilege Clauses**

occurs, the rationale for the variance should be documented within the project file. Any changes from standard privilege clauses should only be made in consultation with legal counsel.

Reviews and audits of procurement practices may be undertaken or recommended by various organizations, including the following:

- The procuring ministry or crown agency;
- The ministry responsible for a crown agency;
- The Ministry of Finance;
- Office of the Auditor General; and
- Other public sector bodies as may be mandated from time to time by government.

## Recommended Best Practices for Administering Tenders with Privilege Clauses

### Appendix 1: Sample Privilege Article (BCDC 2, 2013)

The following is a sample privilege article from the Stipulated Sum Bid Form for Use in Stipulated Price Bid Documents July 8, 2013, Publicly Funded Building Projects – BCDC 2, 2013, used by a number of provincial entities for capital procurements.

In the sample privilege article below, section 1 is what is commonly referred to as a privilege clause. The section 1 wording is similar to that found in the Province's standard solicitation documents. Sections 1-7, taken together, form a "privilege article". As this sample privilege article does not form part of the Province's standard government solicitation documents, use of this wording or of other privilege articles requires review by legal counsel.

#### CLAUSE 9 - ACCEPTANCE OF THE BID

##### 9.1 ACCEPTANCE OF THE BID.

1. The lowest or any bid will not necessarily be accepted.
2. The *Owner*, at its sole discretion, may accept or reject any or all of the Alternative Prices submitted in the Bid Documents. Alternative Prices will not be considered in determining the successful bidder.
3. Alternative Prices listed in the Bid Documents shall remain open for acceptance by the *Owner* for the period stated in the Bid Documents, from the time and date specified for closing of bids.
4. Bids which contain qualifying conditions or otherwise fail to conform to these Instructions to Bidders may, at the sole discretion of the *Owner*, be disqualified or rejected.
5. The *Owner* retains the separate right to waive irregularities in the Bid Form if, at the *Owner's* discretion, such irregularities are of a minor or technical nature and have not provided the bidder with a competitive advantage. Errors of a clerical or technical nature are not grounds for a bidder to revoke a bid. Bidding irregularities will be reviewed generally in accordance with 2.3 Guideline for Administering Bidding Irregularities of the British Columbia Documents Committee (BCDC) in effect at the time of bid closing.
6. In the event a single bid is received, the *Owner* may open the bid privately without reference to the bidder. If the bid is opened and it is in excess of the *Owner's* budget, the *Owner* reserves the right to re-issue the Bid Documents for new public re-bid without revisions being made to the Bid Documents and without disclosing the single Bid Price. The *Owner* reserves the right to accept or reject a single bid.
7. The *Owner* has the right to enter into over-budget negotiations with the lowest compliant bidder or a single bidder, without cancellation of all bids or consideration to other bidders, and to require that bidder to negotiate with Subcontractors named on their Bid Form.



## Cliffe, Ashley AVED:EX

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Tuesday, February 9, 2016 4:14 PM  
**To:** Houle, Michael PSBC:EX  
**Subject:** KPU CSWSOD Project Board Meeting - Following up re: Advisors

Hi Mike,

Hope you enjoyed the rest of your leave. I am following up to see if you are able to make a recommendation for a Due Diligence Advisor. I understand that this will be put to the Project Board for an electronic vote, which we can arrange once we have the recommendation.

As for the Fairness Advisor, was it your understanding from the discussion that we do need one, or not? If we do, does it need to be put to an electronic vote, and were you going to make a recommendation, or simply suggest contact names? Right now we have one contact, [s.22](#)

Feel free to call me if you wish to discuss.

Thanks,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education  
PO Box 9147 Stn Prov Govt  
Victoria BC V8W 9H1

Phone: (250) 387-0890  
Fax: (250) 356-7922  
e-mail: [deborah.gogela@gov.bc.ca](mailto:deborah.gogela@gov.bc.ca)

## Cliffe, Ashley AVED:EX

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Wednesday, February 10, 2016 10:47 AM  
**To:** Postans, James AVED:EX  
**Cc:** Prive, Doris L AVED:EX  
**Subject:** FW: KPU CSWSOD Project Board Meeting - Following up re: Advisors

Hi there,

See below, FYI. The outcome is that we will let Mark Bullen know about the Due Diligence Advisor, but there is no need for a Fairness Advisor.

Deborah

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**From:** Michael Houle [<mailto:Michael.Houle@partnershipsbcc.ca>]  
**Sent:** Wednesday, February 10, 2016 10:27 AM  
**To:** Brewster, Kevin AVED:EX; Gogela, Deborah AVED:EX  
**Subject:** RE: KPU CSWSOD Project Board Meeting - Following up re: Advisors

ok

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**From:** Brewster, Kevin AVED:EX [<mailto:Kevin.Brewster@gov.bc.ca>]  
**Sent:** Wednesday, February 10, 2016 10:27 AM  
**To:** Michael Houle; Gogela, Deborah AVED:EX  
**Subject:** RE: KPU CSWSOD Project Board Meeting - Following up re: Advisors

I don't recall any concerns.

I think that as long as the tender documents are clear on the process...and the owner can demonstrate they have followed the process they portray to the industry....they should be ok

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**From:** Michael Houle [<mailto:Michael.Houle@partnershipsbcc.ca>]  
**Sent:** Wednesday, February 10, 2016 10:25 AM  
**To:** Brewster, Kevin AVED:EX; Gogela, Deborah AVED:EX  
**Subject:** RE: KPU CSWSOD Project Board Meeting - Following up re: Advisors

Were there concerns re: fairness raised by the market during the last tender attempt?

---

**From:** Brewster, Kevin AVED:EX [<mailto:Kevin.Brewster@gov.bc.ca>]  
**Sent:** Wednesday, February 10, 2016 10:24 AM  
**To:** Michael Houle; Gogela, Deborah AVED:EX  
**Subject:** RE: KPU CSWSOD Project Board Meeting - Following up re: Advisors

Thanks Mike – do we feel we need a Fairness advisor...or will Due Diligence suffice?

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**From:** Michael Houle [<mailto:Michael.Houle@partnershipsbcc.ca>]  
**Sent:** Wednesday, February 10, 2016 10:08 AM  
**To:** Gogela, Deborah AVED:EX  
**Cc:** Brewster, Kevin AVED:EX  
**Subject:** RE: KPU CSWSOD Project Board Meeting - Following up re: Advisors

Thanks Deborah,

WRT to Due Diligence Advisor, we propose Kim Anderson, one of four Project Directors (I believe you know each other). Kim enjoys extensive experience in traditional forms of procurement and would be an excellent resource to the team. On the issue of fairness, should the board wish to proceed <sup>s.22</sup> would be an excellent choice.

I am fine with an electronic vote for both items.

M

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**From:** Gogela, Deborah AVED:EX [<mailto:Deborah.Gogela@gov.bc.ca>]  
**Sent:** Tuesday, February 9, 2016 4:14 PM  
**To:** Michael Houle  
**Subject:** KPU CSWSOD Project Board Meeting - Following up re: Advisors

Hi Mike,

Hope you enjoyed the rest of your leave. I am following up to see if you are able to make a recommendation for a Due Diligence Advisor. I understand that this will be put to the Project Board for an electronic vote, which we can arrange once we have the recommendation.

As for the Fairness Advisor, was it your understanding from the discussion that we do need one, or not? If we do, does it need to be put to an electronic vote, and were you going to make a recommendation, or simply suggest contact names? Right now we have one contact, <sup>s.22</sup>

Feel free to call me if you wish to discuss.

Thanks,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education  
PO Box 9147 Stn Prov Govt  
Victoria BC V8W 9H1

Phone: (250) 387-0890  
Fax: (250) 356-7922  
e-mail: [deborah.gogela@gov.bc.ca](mailto:deborah.gogela@gov.bc.ca)

## Cliffe, Ashley AVED:EX

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**From:** mark bullen <mark@capexprojects.com>  
**Sent:** Wednesday, February 10, 2016 4:58 PM  
**To:** Gogela, Deborah AVED:EX  
**Subject:** CSWSOD

Deborah

Thanks for the update re: Kim, PBC's Due Diligence Advisor – once I receive her contact details, I will work with her on a scope and fee.

As for the project renderings, they look good – check them out here:

*(if you can't access the FTP site, try a different browser)*

s.15

**IMPORTANT: the folder containing these design documents is entitled 160209 Promotional Images**

Logon information for the FTP site is as follows:

USER: s.15  
PASS:

Thanks,

Mark Bullen  
Director | Capex Project Advisory Services Inc.  
Mobile: +1 778 985 2649  
[mark@capexprojects.com](mailto:mark@capexprojects.com) | [capexprojects.com](http://capexprojects.com)

**Cliffe, Ashley AVED:EX**

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Wednesday, February 10, 2016 5:06 PM  
**To:** 'mark@capexprojects.com'  
**Cc:** Anderson, Kim PSBC:EX  
**Subject:** KPU Chip and Shannon Wilson School of Design - Due Diligence Advisor services

Hello Mark,

I'd like to introduce you to Kim Anderson, Project Director with Partnerships BC. Mike Houle has recommended Kim to provide services as Due Diligence Advisor during the procurement process for this project. Please get in touch with Kim to discuss scope and contract with her.

Hi Kim, look forward to seeing you again and having the opportunity to work with you!

Cheers,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education  
PO Box 9147 Stn Prov Govt  
Victoria BC V8W 9H1

Phone: (250) 387-0890  
Fax: (250) 356-7922  
e-mail: [deborah.gogela@gov.bc.ca](mailto:deborah.gogela@gov.bc.ca)

## **Cliffe, Ashley AVED:EX**

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Wednesday, February 10, 2016 5:20 PM  
**To:** Postans, James AVED:EX; Brewster, Kevin AVED:EX; Prive, Doris L AVED:EX  
**Subject:** KPU CSWSOD project update

Hi everyone,

Just spoke with Mark Bullen. He will follow up with Kim Anderson at Partnerships BC re: Due Diligence Advisor services. I let him know that a Fairness Advisor is not needed.

Mark provided an update on project progress:

- 90% construction documentation (CD) drawings are complete and were sent to CM and QS for costing
- Expect a cost estimate from the QS by end of next week (Feb 19), and from the CM by Feb 26
- KPU is preparing to hold stakeholder meetings shortly to review the 90% CD drawings

Now for the fun part – Mark sent a link to the FTP site with the latest project renderings (they look good!). Here are the FTP site access instructions:

*(if you can't access the FTP site, try a different browser)*

s.15

**IMPORTANT: the folder containing these design documents is entitled 160209 Promotional Images**

Logon information for the FTP site is as follows:

s.15

USER:

PASS:

Cheers,

**Deborah Gogela**

Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education

Office: (250) 387-0890

Mobile: (250) 415-1369

## **Cliffe, Ashley AVED:EX**

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Tuesday, February 23, 2016 3:35 PM  
**To:** Porter, Rodney GCPE:EX  
**Cc:** Postans, James AVED:EX  
**Subject:** KPU Chip and Shannon Wilson School of Design

Hi Rodney,

You already be aware of this, but for your information, KPU is preparing to hold a pre-tender information session for contractors next Friday, March 4 2016. KPU is posting the advance notice on BC Bid today, having received indication from an independent cost consultant that the project is within budget. This was discussed with the Project Board at the last board meeting. I believe James sent you the draft advance notice brochure after that meeting.

Please let me know if you have any questions or comments about this.

Regards,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education  
PO Box 9147 Stn Prov Govt  
Victoria BC V8W 9H1

Phone: (250) 387-0890  
Fax: (250) 356-7922  
e-mail: [deborah.gogela@gov.bc.ca](mailto:deborah.gogela@gov.bc.ca)

## Cliffe, Ashley AVED:EX

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Wednesday, February 24, 2016 10:41 AM  
**To:** Porter, Rodney GCPE:EX  
**Cc:** Prive, Doris L AVED:EX; Postans, James AVED:EX  
**Subject:** FW: CSWSOD Announcement  
**Attachments:** Advance Information Notice - Kwantlen Polytechnic University.pdf

Hi Rodney,

As mentioned yesterday and for your info, here is the notice that was posted to BC Bid yesterday.

Regards,  
Deborah

**From:** mark bullen [<mailto:mark@capexprojects.com>]  
**Sent:** Tuesday, February 23, 2016 5:43 PM  
**To:** Gogela, Deborah AVED:EX  
**Subject:** FW: CSWSOD Announcement

Deborah – Please see attached, for your information.

**From:** mark bullen [<mailto:mark@capexprojects.com>]  
**Sent:** February 23, 2016 5:04 PM  
**To:** 'John Wall' <[john@publicdesign.ca](mailto:john@publicdesign.ca)>; 'Brad Ou-Yang' <[brad.ouyang@aesengr.com](mailto:brad.ouyang@aesengr.com)>; 'Mike Reimer' <[mikereimer@amegroup.ca](mailto:mikereimer@amegroup.ca)>; 'GBurns@coregroupconsultants.com' <[GBurns@coregroupconsultants.com](mailto:GBurns@coregroupconsultants.com)>; 'Ross Dixon' <[rdixon@pfs.bc.ca](mailto:rdixon@pfs.bc.ca)>; 'Robert Jackson' <[rjackson@fastepp.com](mailto:rjackson@fastepp.com)>; 'Patrick Stewart' <[PatrickStewart@amegroup.ca](mailto:PatrickStewart@amegroup.ca)>; 'Bernhard Gafner' <[bgafner@fastepp.com](mailto:bgafner@fastepp.com)>; 'Darren Rae' <[darrenr@scottconstructiongroup.com](mailto:darrenr@scottconstructiongroup.com)>; 'Geoffrey Turnbull' <[gturnbull@kpmibarchitects.com](mailto:gturnbull@kpmibarchitects.com)>; 'Chris Forrest' <[chris@publicdesign.ca](mailto:chris@publicdesign.ca)>; 'Sunny Ghataurah' <[Sunny.Ghataurah@aesengr.com](mailto:Sunny.Ghataurah@aesengr.com)>; 'erica@recollective.ca' <[erica@recollective.ca](mailto:erica@recollective.ca)>; 'jasonf@scottconstructiongroup.com' <[jasonf@scottconstructiongroup.com](mailto:jasonf@scottconstructiongroup.com)>; 'Pierre Gallant' <[PGallant@morrisonhershfield.com](mailto:PGallant@morrisonhershfield.com)>; 'Nastaran Moradinejad' <[nmoradinejad@pfs.bc.ca](mailto:nmoradinejad@pfs.bc.ca)>; 'Luigi LaRocca' <[llarocca@kpmibarchitects.com](mailto:llarocca@kpmibarchitects.com)>; 'Laura Killam' <[laura@publicdesign.ca](mailto:laura@publicdesign.ca)>; 'Glenn MacMullin' <[gmacmullin@kpmibarchitects.com](mailto:gmacmullin@kpmibarchitects.com)>; 'Duane Palibroda' <[dpalibroda@fastepp.com](mailto:dpalibroda@fastepp.com)>; 'Ken King' <[kking@hanscomb.com](mailto:kking@hanscomb.com)>; 'Alejandra Horsley' <[Alejandra.Horsley@kpu.ca](mailto:Alejandra.Horsley@kpu.ca)>  
**Cc:** 'Karen.Hearn@kpu.ca' <[Karen.Hearn@kpu.ca](mailto:Karen.Hearn@kpu.ca)>; 'Carolyn Robertson' <[carolyn.robertson@kpu.ca](mailto:carolyn.robertson@kpu.ca)>; 'Craig Regan' <[craig.regan@kpu.ca](mailto:craig.regan@kpu.ca)>  
**Subject:** CSWSOD Announcement

Dear all,

Please note that an Advance Information Notice was posted to BCBid this afternoon for the CSWSOD project (attached for reference).

Thank you all for your efforts to date to get the project to this stage – I will advise further once approval to proceed to tender is secured over the coming weeks. I would also like to ask you all at this point to use your industry contacts (both GCs and trade sub-contractors) to generate interest in the upcoming Project Information Session, which will be taking place on March 4, 2016 at KPU's Richmond Campus in the Melville Centre from 1:30 pm – 3:30 pm. This is our opportunity to create awareness within the market, and to sell the project for the great opportunity that it is.

Regards,



Mark Bullen  
Director | Capex Project Advisory Services Inc.  
Mobile: +1 778 985 2649  
[mark@capexprojects.com](mailto:mark@capexprojects.com) | [capexprojects.com](http://capexprojects.com)

## **NOTICE TO CONSTRUCTION CONTRACTORS & SUBCONTRACTORS**

### **ADVANCE INFORMATION NOTICE OF A UNIVERSITY ACADEMIC BUILDING IN THE CITY OF RICHMOND, BC, CANADA**

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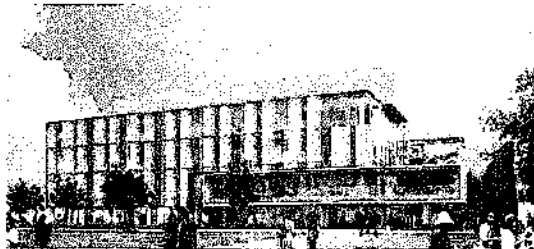
#### **This is not a tender call or an invitation to bid.**

Next month Kwantlen Polytechnic University (KPU) plans to commence procurement for construction of an academic building at the Richmond campus on Lansdowne Road - the newly redesigned Chip & Shannon Wilson School of Design.

You are invited to attend a Project Information Session on March 4, 2016 at KPU's Richmond Campus in the Melville Centre from 1:30 pm – 3:30 pm regarding the project and the upcoming tender. The information session will include a presentation by each of the key design disciplines, a visit to the site and opportunity to network with your industry peers.

#### **The Project**

The new 6000 m<sup>2</sup> facility is to provide flexible teaching spaces, with ample natural daylight, and good ventilation. The building is to support delivery of KPU's innovative design programs, and will be delivered under a design-bid-build contract strategy within a construction duration of approximately 18 months, ready for occupancy in January 2018.



The site has already been prepared under a separate ground improvement contract ready to receive the building's raft slab foundation, and the project has been through an extensive redesign process to simplify all key elements of the design to optimize value and enhance constructability.

#### **Project Information Session**

As part of our engagement with the construction industry, we are providing the market with as much advance information as possible about the project.

We encourage you to consider pursuing this exciting opportunity and to start thinking about developing your construction team. To help you with this, we welcome your attendance at the project information session, which is open to all General Contractors, Sub-Contractors and Suppliers. Please email Mark Bullen, Chief Project Officer at [procurement@capexprojects.com](mailto:procurement@capexprojects.com) to register your attendance at this event and to receive further details.

#### **Project Drawings & Specifications**

The re-design is nearing completion, and while the design is subject to change and further development prior to tender, should you wish to view the work-in-progress design documents, please contact Mark Bullen at the email provided above for access credentials to the project collaboration site. Note that you will automatically be provided with access credentials by registering for the Project Information Session.

# **Chip & Shannon Wilson School of Design**

## **Construction Procurement Manual**

March 2016

# CAPEX | PROJECT | ADVISORY

## Objective

It is the objective of the project team to ensure that the procurement of the General Contractor Services for the Chip and Shannon Wilson School of Design Project (the "Project") is conducted with fairness, openness and transparency, consistent with best practices and all applicable legislation, procedures and trade agreements, including the following:

- Government of BC Financial Administration Act
- Capital Asset Management Framework
- Provincial Construction Insurance Program
- New West Partnership Trade Agreement
- Agreement on Internal Trade

In support of the above, this Procurement Manual has been created to help ensure that the project team follows a structured process, that they use proforma templates, that adequate records are maintained, and that decisions are made at the appropriate level.

## Schedule

The key activities forming part of for this procurement are set out below over time:

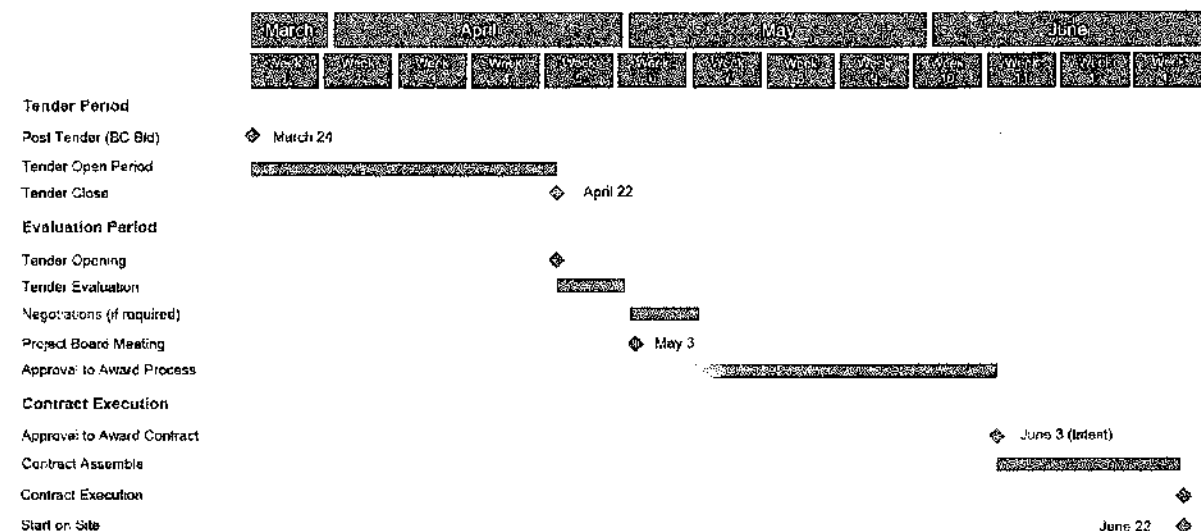


Figure 1. Procurement Schedule

The request for approval to award the contract may coincide with the May 3 Project Board meeting. However, depending on the requirement for negotiations, the request for approval may be prepared shortly after the Project Board Meeting, in which case it will be circulated electronically to the Project Board members and an electronic vote held to confirm agreed upon action.

# CAPEX | PROJECT | ADVISORY

## Roles & Responsibilities

As Chief Project Officer, Mark Bullen, will lead the procurement process and take responsibility for ensuring that the steps outlined in this Manual are implemented within the timelines provided.

Once the Chief Project Officer has provided the Bid Documents to Kwantlen Polytechnic University's ("KPU") Purchasing Services Department, KPU's Purchasing Services Department will be responsible for ensuring that the Bid Documents are successfully posted to BC Bid. They will also be responsible for posting any subsequent Addenda provided by the Chief Project Officer.

The Chief Project Officer will be responsible for managing communications with potential Bidders during the tender open period, with the exception of posting any Addenda.

Once the Chief Project Officer has submitted a request to award the contract to the Project Board, provided that there are sufficient funds in the Project Budget, the Project Board will be responsible for ensuring that approval to award the contract takes no longer than a maximum of 3 weeks.

Upon confirmation by the Project Board of approval to award the contract, KPU will be responsible for executing the construction contract.

Partnerships BC (Kim Anderson) will be responsible for providing due diligence oversight of the procurement process.

## Step 1. Tender Issue

- 1.1 The tender consists of the Bid Documents, namely the front end documents and the project drawings and specifications.
- 1.2 The front end documents will be forwarded to KPU's Purchasing Services Department no later than noon on March 24, together with a link to the project FTP site with direction to the drawings and specifications. KPU's Purchasing Services Department will download the drawings and specifications and post them to BC Bid together with the front end documents no later than 2pm on March 24.
- 1.3 KPU's Purchasing Services Department may also post the tender on MERX, provided that Bidders are referred to BC Bid to obtain the Bid Documents and any subsequent Addenda.
- 1.4 Members of the Project Team are free to contact the market directly to draw attention to the upcoming tender posting up until close of business the day before the tender is posted.

# CAPEX I PROJECT I ADVISORY

## Step 2. Tender Open Period

- 2.1 Commencing the day that the tender is posted, there must be no further contact with the market in respect of the project other than via the Chief Project Officer through [procurement@capexprojects.com](mailto:procurement@capexprojects.com) and any communication received by the Project Team must be referred to the Chief Project Officer at this email address.
- 2.2 For clarity, the Project Team refers to all staff and consultants with knowledge of, or involvement in, the Project including the Design Team, all KPU staff, and members of the Project Board and their colleagues.
- 2.3 Enquiries received by potential Bidders in accordance with the communication protocol set out in the Bid Documents (via [procurement@capexprojects.com](mailto:procurement@capexprojects.com)) will be evaluated in the first instance by the Chief Project Officer, and will either be responded to, or otherwise forwarded to selected members of the Project Team to consider and formulate a response.
- 2.4 A response to tender enquiries may take the form of an email response and/or the drafting of an Addendum. Where an Addendum is to be issued, the Chief Project Officer will provide this document to KPU's Purchasing Services Department who will post it to BC Bid within 2 hours. Addenda may address one or more than one separate issues.
- 2.5 All incoming and outgoing correspondence will be logged using the form provided as Appendix G.
- 2.6 Bidders will be instructed to use the Enquiries / RFI Form in Appendix H.

## Step 3. Tender Close

- 3.1 Tenders shall not be received at the Closing Place beyond the Closing Time.
- 3.2 Tenders shall be logged upon receipt on the form provided as Appendix A.
- 3.3 A tender clock will be provided by KPU's Purchasing Services Department at the Closing Place which shall be the reference for logging tenders received and for declining late tender submissions.
- 3.4 Upon receipt, tenders will be securely held by KPU's Purchasing Services Department until the Closing Time.

## Step 4. Tender Evaluation

- 4.1 Tenders may be opened only in the presence of the Chief Project Officer, a representative of KPU's Purchasing Services Department and a KPU member of the Project Board.

## CAPEX | PROJECT | ADVISORY

- 4.2 If any Bidder's envelope(s) are not clearly marked in accordance with the Instructions to Bidders, the Chief Project Officer is authorized to return the Bidder's tender submission as non-compliant.
- 4.3 Outer packaging may be removed to verify that there are within each Bid two separate, sealed envelopes – one marked Base Bid Price, the other marked Alternative Prices. The latter should include within it 4 additional separate, sealed envelopes marked as follows:
- Alternative Price 1
  - Alternative Price 2
  - Alternative Price 3
  - Alternative Price Breakdown
- 4.4 The envelopes marked Base Bid Price will be opened, and the figure indicated will be recorded on the form provided as Appendix B.
- 4.5 Once all Base Bid Price prices have been recorded:
- In the case that there is at least one Base Bid Price within the Construction Budget, the other envelopes shall not be opened. The Bidder who has submitted the lowest Base Bid Price is deemed the lowest Bidder (proceed to 4.8 below).
  - in the case that all Base Bid Prices exceed the Construction Budget, envelopes marked Alternative Price 1 will be opened, and the figure indicated will be recorded on the form provided as Appendix C.
- 4.6 Once all Alternative Price 1 prices have been recorded:
- In the case that there is at least one (Base Bid Price Less Alternative Price 1) within the Construction Budget, the other envelopes shall not be opened. The Bidder who has submitted the lowest (Base Bid Price Less Alternative Price 1) is deemed the lowest Bidder (proceed to 4.8 below).
  - in the case that all (Base Bid Prices Less Alternative Price 1) exceed the Construction Budget, envelopes marked Alternative Price 2 will be opened, and the figure indicated will be recorded on the form provided as Appendix D.
- 4.7 Once all Alternative Price 2 prices have been recorded:
- In the case that there is at least one (Base Bid Price Less Alternative Price 1 Less Alternative Price 2) within the Construction Budget, the other envelopes shall not be opened. The Bidder who has submitted the lowest (Base Bid Price Less Alternative Price 1 Less Alternative Price 2) is deemed the lowest Bidder (proceed to 4.8 below).
  - In the case that all (Base Bid Prices Less Alternative Price 1 Less Alternative Price 2) exceed the Construction Budget, envelopes marked Alternative Price 3 will be opened, and the figure indicated will be recorded on the form provided as Appendix E. The Bidder who has submitted the lowest (Base Bid Price Less Alternative Price 1 Less Alternative Price 2 Less Alternative Price 3) is deemed the lowest Bidder.

# CAPEX | PROJECT | ADVISORY

- 4.8 The Chief Project Officer shall contact the lowest Bidder and arrange to meet as soon as practicable following the Project Board meeting (anticipated May 3)
- 4.9 Unopened envelopes shall be securely stored by KPU's Purchasing Services Department.

## Step 5. Project Board Meeting

- 5.1 The Chief Project Officer will advise the Project Board, via an email to Deborah Gogela (Manager, Capital Asset Management, Post Secondary Finance Branch, Ministry of Advanced Education), how many Bids were received, and whether any Bids are within the Construction Budget, with or without taking account of the Alternative Prices.
- 5.2 The primary focus of the Project Board Meeting will be to provide direction to the Chief Project Officer regarding any necessary negotiations. The outcome of the meeting may alter or clarify the provisions of Step 6 below, and will be recorded in writing on the day of the meeting.

## Step 6. Negotiations

- 6.1 The Chief Project Officer may negotiate with the lowest and any other Bidder. Negotiations may happen concurrently with more than one Bidder.
- 6.2 Negotiation meetings will be attended by the Chief Project Officer and a representative of KPU's Purchasing Services Department. Members of the Project Team may also attend.
- 6.3 Where the Base Bid Price is within the Construction Budget plus reasonable contingency, and the lowest Bidder is willing to enter into contract without substantial alteration (as determined by the Chief Project Officer) to the terms and conditions of contract as included in the Bid Documents, then the Chief Project Officer shall make a recommendation to award the contract accordingly.
- 6.4 Where there is a requirement to accept Alternative Prices to bring the value of the construction contract within the Construction Budget plus reasonable contingency, then the lowest Bidder's Alternative Price Breakdown envelope shall be opened and discussed at the meeting with the lowest Bidder to reach agreement on a scope and value that the Chief Project Officer believes best represents the interests of the Project stakeholders.
- 6.5 Where the value of the construction contract cannot be brought down within the Construction Budget plus a reasonable contingency, then the Chief Project Officer may exercise judgment to negotiate further value engineering savings provided that the functional program is not compromised.



# CAPEX | PROJECT | ADVISORY

## Step 7. Approval to Award Contract

- 7.1 The Chief Project Officer will submit a documented approval to award the construction contract. This submission will be issued by email to Deborah Gogela for the attention of the Project Board and must include the following:
  - a. Legal Name of Bidder
  - b. Proposed Value of Construction Contract
  - c. Details of any Alternative Prices (downward scope items) provided for
  - d. Details of any substantial changes to the terms and conditions of contractThe Bid Summary Form in Appendix F may also be included.
- 7.2 The approval to award the contract must be confirmed by a vote of the Project Board (electronic or otherwise) no later than June 3. All Project Board members agree to making all necessary efforts to advance this date to provide additional schedule contingency for the construction phase of the Project.

## Step 8. Contract Assembly

- 8.1 While approval is being sought to award the contract, the Project Team will progress with assembling the Contract Documents on the understanding that the award will be confirmed as per the request to award the contract.

## Step 9. Contract Execution

- 9.1 Upon confirmation of approval to award the contract, KPU's authorized officer will execute the contract as assembled.
- 9.2 Unopened envelopes shall be returned to unsuccessful Bidders together with a letter thanking them for their participation.
- 9.3 Debriefs need not be held given the basis of evaluation.
- 9.3 KPU's Purchasing Services Department shall post to BC Bid a list of the Bidders and their Base Bid Prices, and shall identify the successful Bidder. Where the successful Bidder did not have the lowest Base Bid Price, a narrative shall be included to explain that the Base Bid prices were over budget and that Alternative Prices were taken into consideration to identify the successful Bidder.

**APPENDIX A**

Tender Receipt Form

# TENDER RECEIPT FORM

[illegible]

# CAPEX | PROJECT | ADVISORY

## APPENDIX B

### Base Bid Price Record Form

## BASE BID PRICE RECORD FORM

Project	Chip & Shannon Wilson School of Design		
Project No.	CB2756		
Date:		Time:	
Attendees:			
Name	Title	Signature	
Company Name		Base Bid Price (\$, in figures)	
By signing this form, attendees confirm that they are not aware of any potential and / or real conflict of interest or any other matter which may impact of their duty to act with probity during the procurement process and furthermore acknowledge the requirement not to disclose any confidential or sensitive knowledge or information gained during the process to any unauthorized party.			

**APPENDIX C**

Alternative Price 1 Record Form

## ALTERNATIVE PRICE 1 RECORD FORM

Project		Chip & Shannon Wilson School of Design	
Project No.		CB2756	
Date:		Time:	
Attendees:			
Name	Title	Signature	
Company Name		Alternative Price 1 (\$, in figures)	
By signing this form, attendees confirm that they are not aware of any potential and / or real conflict of interest or any other matter which may impact of their duty to act with probity during the procurement process and furthermore acknowledge the requirement not to disclose any confidential or sensitive knowledge or information gained during the process to any unauthorized party.			

# CAPEX | PROJECT | ADVISORY

## APPENDIX D

### Alternative Price 2 Record Form



## ALTERNATIVE PRICE 2 RECORD FORM

Project	Chip & Shannon Wilson School of Design		
Project No.	CB2756		
Date:		Time:	
Attendees:			
Name	Title	Signature	
Company Name		Alternative Price 2 (\$, in figures)	
By signing this form, attendees confirm that they are not aware of any potential and / or real conflict of interest or any other matter which may impact of their duty to act with probity during the procurement process and furthermore acknowledge the requirement not to disclose any confidential or sensitive knowledge or information gained during the process to any unauthorized party.			

# CAPEX | PROJECT | ADVISORY

## APPENDIX E

### Alternative Price 3 Record Form

## ALTERNATIVE PRICE 3 RECORD FORM

Project	<b>Chip &amp; Shannon Wilson School of Design</b>		
Project No.	<b>CB2756</b>		
Date:		Time:	
Attendees:			
Name	Title	Signature	
Company Name		Alternative Price 3 (\$, in figures)	
By signing this form, attendees confirm that they are not aware of any potential and / or real conflict of interest or any other matter which may impact of their duty to act with probity during the procurement process and furthermore acknowledge the requirement not to disclose any confidential or sensitive knowledge or information gained during the process to any unauthorized party.			

# CAPEX | PROJECT | ADVISORY

## APPENDIX F

### Bid Summary Form

## BID SUMMARY FORM

Project	<b>Chip &amp; Shannon Wilson School of Design</b>				
Project No.	<b>CB2756</b>				
Date:					
Company Name	Base Bid Price	Alternative Price 1	Alternative Price 2	Alternative Price 3	Revised Price
<b>Notes:</b> 1. Only enter Alternative Prices relating to envelopes that have been opened in accordance with the Procurement Manual 2. Revised Price = Base Bid Price less any Alternative Prices populated in this table 3. All prices to be entered in \$ and figures					

**APPENDIX G**

Bidder Correspondence Register

## BIDDER CORRESPONDENCE REGISTER

Project	<b>Chip &amp; Shannon Wilson School of Design</b>				
Project No.	<b>CB2756</b>				
Ref.	Company / Bidder	Contact Person	Subject	Incoming / Outgoing	Response Ref (if any)

**APPENDIX H**

Enquiries / Request for Information Form



## Enquiries / RFI Form

Project	<b>Chip &amp; Shannon Wilson School of Design</b>		
Project No.	<b>CB2756</b>		
Date:			
Nature of Enquiry:	Commercial <input type="checkbox"/>	Design <input type="checkbox"/>	Procurement Process <input type="checkbox"/>
Subject:			
Enquiry			
Note: Bidders must not submit multiple enquiries on the same form			
Bidder Ref.			
KPU Ref. (KPU use only)			



## Ministry of Advanced Education

### PROJECT BOARD MEETING #14 Kwantlen Polytechnic University Chip and Shannon Wilson School of Design

#### AGENDA

DATE:	March 2, 2016		
TIME:	10:30am to 12:00am		
LOCATION:	Teleconference Dial-in: s.15,s.17	Participant ID: s.15,s.17	Moderator: Kevin Brewster

Item	Action	Lead
1. Adoption of the Agenda (5 min)	For Decision	Kevin Brewster
2. Approval of the Minutes (5 min) a) Meeting Minutes #13 ( <b>Attachment 1</b> )	For Decision	Kevin Brewster
3. Project Status Update (20 min) a) CSWSOD Project Board Status Report #14 ( <b>Attachment 2</b> )	For Decision	Mark Bullen
4. Procurement Update (10 min) a) Memorandum: Request to Proceed to Tender ( <b>Attachment 3 – Appendix 3 to Status Report</b> ) b) Hanscomb Ltd. (QS) Class A Cost Estimate ( <b>Attachment 4 – Appendix 3 to Status Report</b> ) c) Scott Construction Ltd. (CM) Class A Cost Estimate ( <b>Attachment 5 – Appendix 3 to Status Report</b> )	For Decision	Mark Bullen
5. Next Steps (5 min) a) Upcoming Project Board Meeting #15: TBC – Proposed to follow the week after tender close (scheduled for April 22, 2016)	Information	Kevin Brewster

<b>BOARD MEMBERS</b>		
Kevin Brewster (Chair)	Assistant Deputy Minister, Ministry of Advanced Education	250 952-7410
Fazil Mihar	Assistant Deputy Minister, Ministry of Advanced Education	250 952-0697
Jon Harding	Vice President Finance and Administration, Kwantlen Polytechnic University	604 599-2099
Harry Gray	Associate Vice-President Administration, Kwantlen Polytechnic University	604 599-2066
Michael Houle	Vice-President, Partnerships BC	250 475-4666
Karen Mill	Alternate Member, Assistant Vice-President, Partnerships BC	250 475-4672
Tina Swinton	Wilson Family Representative	604 737-7232
<b>NON-VOTING MEMBERS</b>		
Karen Hearn	Executive Director, Facilities Services, Kwantlen Polytechnic University	604 599-2442
Mark Bullen	Chief Project Officer, Kwantlen Polytechnic University	778 985-2649
James Postans	Secretariat	250 356-7896
<b>GUESTS</b>		
Raman Dale	Observer	250 387-9067
Deborah Gogela	Administrative Support	250 387-0890

### **Meeting Quorum**

A Quorum shall consist of:

- Chair;
- One member or alternate from the University; and,
- One member or alternate from the Ministry.



## Ministry of Advanced Education

### PROJECT BOARD MEETING #13 Kwantlen Polytechnic University Chip and Shannon Wilson School of Design

#### DRAFT Minutes – February 1, 2016

<b>PRESENT:</b>	Kevin Brewster (Chair), Assistant Deputy Minister, Ministry of Advanced Education Fazil Mihar, Assistant Deputy Minister, Ministry of Advanced Education Jon Harding, Vice President Finance and Administration, Kwantlen Polytechnic University Michael Houle, Vice President, Partnerships BC Tina Swinton, Wilson Family Representative Mark Bullen, Chief Project Officer, Kwantlen Polytechnic University Karen Hearn, Executive Director, Facilities Services, Kwantlen Polytechnic University Catherine Nickerson (Secretariat), Director, Ministry of Advanced Education Deborah Gogela (Administrative Support), Manager, Ministry of Advanced Education
<b>ABSENT:</b>	Harry Gray, Associate Vice President Administration, Kwantlen Polytechnic University Karen Mill, Assistant Vice President, Partnerships BC Raman Dale (Observer), Ministry of Finance

ITEM	TOPIC	ACTION BY	STATUS
1.	<b>Project Board Membership Update</b> The Project Board welcomed James Postans, Director, Capital Asset Management with the Ministry of Advanced Education.		
2.	<b>Adoption of the Agenda</b>  <b>Proposed Motion #1:</b> <i>"Be it resolved that the Chip and Shannon Wilson School of Design Project Board approves the agenda of Project Board Meeting #13."</i> <i>Motion #1: moved by Fazil Mihar; seconded by Michael Houle; passed.</i>		
3.	<b>Approval of Minutes</b> a. Meeting Minutes #12  <b>Proposed Motion #2:</b> <i>"Be it resolved that the Chip and Shannon Wilson School of Design Project Board approves the minutes of Project Board Meeting #12, held on Nov 23, 2015."</i> <i>Motion #2: moved by Harry Gray; seconded by Fazil Mihar; passed.</i>		

ITEM	TOPIC	ACTION BY	STATUS
4.	<p><b>Project Board Membership Update</b></p> <ul style="list-style-type: none"> <li>All names have been removed from the Project Board Terms of Reference, listing only the roles. This eliminates the need to change the Terms of Reference for future membership updates. See the summary table of revisions to the Terms of Reference (Attachment 2).</li> </ul> <p><b>Proposed Motion #3:</b>  <i>"Be it resolved that the Chip and Shannon Wilson School of Design Project Board approves the change to the membership and corresponding change to the Terms of Reference."</i></p> <p><i>Motion #3 moved by Fazil Mihlar; seconded by Tina Swinton; Motion #3 passed.</i></p>		
5.	<p><b>Project Status Update</b></p> <p>a. CSWSOD Project Board Status Report #13 (Attachment 3a)  b. Construction Contracting and Procurement Strategy (Attachment 3b)</p> <p><u>Project Report Highlights:</u></p> <p>SCHEDULE – Remains on target for start of classes Jan 3, 2018. Schedule changes include:</p> <ul style="list-style-type: none"> <li>Tender issue date brought forward one day to March 24, 2016, to allow for Good Friday on March 25.</li> <li>Substantial Completion date has been set at Dec 12, 2017 to provide a full 77 week construction period.</li> </ul> <p>SCOPE – Following the last Project Board meeting (#12), a report entitled "Project Board Meeting #12: Supplementary Information" was prepared and approved by electronic vote of the Project Board. The Project re-design continues to progress in accordance with this report.</p> <p>BUDGET – The project remains on budget. Negotiations are underway with the Architect, KPMB, who is requesting additional fees of up to \$310,000. Once negotiations have concluded, the Project Board will be asked to approve the additional fees, together with retrospective approval for \$124,000 in additional services which were delivered (and paid for) in 2014. The total increase to the contract value is estimated to be less than \$434,000, which amount has been factored into the project budget.</p> <p>CURRENT WORK UNDERWAY:</p> <ul style="list-style-type: none"> <li>Drafting and approval of front end tender documents;</li> <li>Delivery of 90% design, anticipated Feb 9, 2016; and</li> <li>Arranging KPU review of 90% design.</li> </ul> <p>RISKS:</p> <ul style="list-style-type: none"> <li>Project is unaffordable (high risk) – closely monitor construction documents as they develop.</li> <li>Project completion is delayed (medium risk) – monitor schedule and ensure sufficient time allowed for approvals.</li> <li>Project does not meet functional requirements of faculty (medium risk) – ongoing communication with faculty and one round of controlled end user engagement.</li> </ul>		

ITEM	TOPIC	ACTION BY	STATUS
	<p>COMMUNICATIONS:</p> <p>No public communications since last board meeting. KPU is working with Government Communications and Public Engagement (GCPE) with items relating to the proposed procurement strategy; i.e., public information session and advance public notice to the construction industry.</p> <p>RECOMMENDATIONS:</p> <p><b>Proposed Motion #4 (Status Report Issue #1 – Revised Project Schedule)</b></p> <p><i>“Be it resolved that the Chip and Shannon Wilson School of Design Project Board recommend that the revised Project Schedule (Appendix 1) be adopted.”</i></p> <p><i>Motion #4: moved by Harry Gray; seconded by Michael Houle; passed.</i></p> <p><b>Status Report Issue #2 – Discussion of Construction Contracting and Procurement Strategy</b></p> <p>This issue was presented to the Board for discussion and feedback, and will be brought forward for approval at the next board meeting.</p> <p>Discussion included KPU engaging a Due Diligence Advisor. Michael Houle agreed to look into this and make a recommendation by the end of the week for the Project Board’s review and electronic vote.</p> <p><b>Proposed Motion #5 (Electronic Vote)</b></p> <p><i>“Be it resolved that the Chip and Shannon Wilson School of Design Project Board recommend that KPU engage Kim Anderson, Project Director with Partnerships BC, to provide due diligence advisory services during the procurement process.”</i></p> <p><i>Motion #5: passed by electronic vote.</i></p>	Michael Houle	Complete
6.	<p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>• Upcoming Project Board Meeting #14: March 2, 2016 10:30am – 12:00pm</li> <li>• Meeting Adjournment</li> </ul> <p><b>Proposed Motion #6:</b></p> <p><i>“Be it resolved that the Chip and Shannon Wilson School of Design Project Board meeting is adjourned.”</i></p> <p><i>Motion #6: moved by Fazil Mihar; seconded by Michael Houle; passed.</i></p>		

<b>BOARD MEMBERS</b>		
Kevin Brewster (Chair)	Assistant Deputy Minister, Ministry of Advanced Education	250 952-7410
Fazil Mihar	Assistant Deputy Minister, Ministry of Advanced Education	250 925-0698
Harry Gray	Associate Vice-President Administration, Kwantlen Polytechnic University	604 599-2066
Jon Harding	Vice President Finance and Administration, Kwantlen Polytechnic University	604 599-2099
Michael Houle	Vice-President, Partnerships BC	250 475-4666
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<b>GUESTS</b>		
Raman Dale	Observer	250 387-9067
Deborah Gogela	Administrative Support	250 387-0890

### **Meeting Quorum**

A Quorum shall consist of:

- Chair;
- One member or alternate from the University; and,
- One member or alternate from the Ministry.

# CONFIDENTIAL

## MEMO

**To:** Chair and Members of the Chip & Shannon Wilson School of Design  
Project Board

**From:** Chief Project Officer

**Date:** March 2, 2016

**Subject:** PROJECT STATUS REPORT #14

## PROJECT STATUS

### 1.1 SUMMARY AND MAJOR ACCOMPLISHMENTS

- Project remains on schedule **Refer to Section 1.3 and Appendix 1**
- Project remains on budget **Refer to Section 1.5 and Appendix 2**
- 90% design milestone reached, and design continues to schedule.
- Quantity Surveyor's Class A budget estimate delivered **Refer to Appendix 3.**
- Construction Manager's Class A budget estimate delivered **Refer to Appendix 3.**
- Fee negotiations concluded with Architect KPMB **Refer to Section 1.5**  
The additional cost is \$55k less than had been budgeted for
- Doug Sanders (BLG) hired to review / input into front end procurement documents
- Kim Anderson (PBC) contacted to conduct a Due Diligence Review of procurement
- KPU technical workshop delivered, concluding KPU facilities/IT/security pre-tender input
- KPU CSWSOD Faculty Open House delivered, concluding faculty pre-tender input
- Project Renderings produced **Refer to Appendix 4**
- Advance Information Notice issued inviting interested parties to attend an upcoming Project Information Session **Refer to Appendix 5**

### 1.2 SNAPSHOT OF PROJECT STATUS

Table 1: Project Status

Scope	MONITOR
Schedule	MONITOR
Budget	
Procurement / Contracting	MONITOR



### 1.3 PROJECT SCHEDULE UPDATE

The project schedule remains on target for Start of Classes Jan 3, 2018 **Refer to Appendix1**

The schedule has been updated to account for the actual date that the QS cost estimate was received (Feb 23, 2016 rather than Feb 19, 2016).

**Table 2: Key Project Milestones**

Milestone	Target Date
Tender Issue	March 24, 2016
Tender Close	April 22, 2016
Start of Construction	June 22, 2016
Substantial Completion	Dec 12, 2017
Start of Classes	Jan 3, 2018

### 1.4 PROJECT SCOPE

No changes to report to the scope of the project.

### 1.5 PROJECT BUDGET

- The Project remains on budget, and the current cost report is enclosed **Refer to Appendix 2.**
- In the previous Project Board status update, it was reported that fee negotiations were underway with KPMB. These negotiations have concluded within an agreement that is \$55k below the amount that had been budgeted for, and with KPMB formally withdrawing any claim to additional fees for the Re-Design phase services.

**Table 3: KPMB Fee Adjustment**

	Fee Adjustment	
	Project Status Report # 13 (KPMB 'ballpark')	Project Status Report # 14 (Proposed for approval)
Re-Design Services	s.17	s.13,s.17
Re-Procurement Services		
Prolongation of Construction Administration Services		
Retrospective Approval for Prolongation of Construction Drawing and Tender Phase		
<b>TOTAL</b>		

\*The Project Board is asked to approve this amount retrospectively to align the contract with services performed and fees paid in 2014

The key terms of the proposed agreement are as follows, which are in accordance with contractual entitlement:

1. s.13,s.17
- 2.
- 3.
- 4.

- The Pretender Construction Cost Estimates have been received and details can be found within the memorandum contained within **Appendix 3** (Request to Proceed to Tender)

## 1.6 CURRENT WORK UNDERWAY AND NEXT STEPS

### Current work:

- Finalization of design and specifications
- Finalization of front end procurement documents
- Project Information Session (March 4, 2016) – Kim Anderson (PBC) will be in attendance

### Next Steps include:

- Project Information Session (March 4, 2016)
- Issue Tender (March 24, 2016)
- Tender Close (April 22, 2014)

## 1.7 KEY RISKS

The table below highlights major risks.

**Table 2: Project Risks**

Issue	Discussion	Ranking Impact Mitigation
Project is unaffordable	<p>The Class A construction cost estimates confirm the affordability of the Project.</p> <p>While this is positive news, there remains a risk that the bids may be higher and may exceed the budget.</p>	<p>This remains the most significant project risk. Remaining mitigations include:</p> <ul style="list-style-type: none"> <li>▪ Incorporation of downward scope ladder items into the tender documents</li> <li>▪ Hold General Contractor / trades communications session</li> </ul>
Project completion is delayed	<p>The revised schedule currently allows for an 18-month construction period from start of construction to substantial completion.</p> <p>To compress it further will likely have an impact on bid prices.</p>	<p>This risk is significant but should not be mitigated at the expense of project affordability. Remaining mitigations include:</p> <ul style="list-style-type: none"> <li>▪ Ensuring that Project Board are comfortable with the time allowed for approvals. Approval to Award</li> </ul>

	<p>therefore, any delay to critical activities prior to contract award will push out the end date.</p> <p>There is also a risk that the contractor - by fault or otherwise - will not complete the project on time, however, liquidated damages are not recommended, again to prevent upward pressure on bid prices.</p>	<p>Contract is a critical path activity with a duration of 4 weeks; as is Approval to Proceed to Tender at 3 weeks.</p> <ul style="list-style-type: none"> <li>Proactive management of retained schedule risks</li> </ul>	
Project does not meet functional requirements of the faculty	<p>The cost pressures have necessitated extremely deep value engineering, and while the Faculty's representative has been very cooperative, and most savings will not impact functionality, there is an inherent risk that not all anticipated functions will be catered to with the new design and specification.</p>	<p>This risk is significant but should not be mitigated at the expense of project affordability. Remaining mitigations include:</p> <ul style="list-style-type: none"> <li>Ongoing communication with Faculty representative</li> <li>Faculty engagement in the development of the FFE specifications.</li> </ul>	

Risk Ranking Legend:

	High	Requires immediate attention
	Medium	Requires monitoring
	Low	Risk mitigated satisfactorily

## 1.8 PROJECT COMMUNICATIONS

All public project communications and updates continue to be led by the Ministry and coordinated with Government Communications and Public Engagement Office, in collaboration with KPU.

- Advance Procurement Notice issued February 23, 2016.

## 2 RECOMMENDATIONS

### 2.1 ITEMS FOR INFORMATION, DISCUSSION OR APPROVAL

#### a) Issue #1:

Approval to proceed to tender.

#### Background:

Refer to Memorandum – Request to Proceed to Tender (**Appendix 3**).

#### Discussion:

Refer to Memorandum – Request to Proceed to Tender (**Appendix 3**).

**For Approval:**

"Be it resolved that the Chip and Shannon Wilson School of Design Project Board will seek approval to proceed to tender on March 24, 2016."

**b) Issue #2:**

Approval to increase the value of KPMB's contract by **s.17**

**Background:**

KPMB are contractually entitled to an increase in the value of their contract for the following three scope items (proposed fee indicated):

- a. **s.17** - Prolongation of 2014 Construction Drawings & Tender Services
- b. - Prolongation of Contract Administration Services by up to 5.5 months
- c. - Re-performance of Procurement Services

**TOTAL**

**Discussion:**

- 1 Services under item a. were performed back in 2014, however, a formal change order was not issued, and this approval will authorize rectification of contract administration
- 2 Payment of additional fees for Construction Administration Services is contingent on the schedule for construction actually being extended as anticipated
- 3 All fees have been fully budgeted for, and negotiations with KPMB have resulted in KPMB withdrawing a claim for additional Re-Design fees, therefore, the resulting proposed agreement is approximately **s.17** lower than had been provided for in the project budget. This saving will be added to the project contingency if this proposed agreement is approved

**For Approval:**

**s.13,s.17**

**§ APPENDICES**

- Appendix 1: Project Schedule
- Appendix 2: Project Budget
- Appendix 3: Memo: Request to Proceed to Tender
- Appendix 4: Revised Renderings
- Appendix 5: Advanced Information Notice

# APPENDIX 1: PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish												
					2015, Half 2			2016, Half 1			2016, Half 2			2017, Half 1		
					J	S	N	J	M	M	J	S	N	J	M	M
0	<b>CSWSOD Schedule</b>	<b>115.6 wks</b>	<b>'15 Oct 19</b>	<b>'18 Jan 03</b>												
1	<b>Value Engineering Redesign</b>	<b>23 wks</b>	<b>'15 Oct 19</b>	<b>'16 Mar 25</b>												
2	Redesign for Additional Value Engineering	2 wks	'15 Oct 19	'15 Oct 30												
3	Issue Revised Design & Specs	0 days	'15 Oct 30	'15 Oct 30												
4	Review Revised Design & Specs	1 wk	'15 Nov 02	'15 Nov 06												
5	Class B Cost Estimate	2.2 wks	'15 Nov 02	'15 Nov 16												
6	Prepare & Coordinate Construction Documents	16 wks	'15 Nov 02	'16 Feb 19												
7	Issue 90% Design	1 day	'16 Feb 08	'16 Feb 08												
8	Review 90% Design	2 wks	'16 Feb 08	'16 Feb 19												
9	Class A Cost Estimate	2.4 wks	'16 Feb 08	'16 Feb 23												
10	Final Coordination & Tender Document Preparation	5 wks	'16 Feb 22	'16 Mar 25												
11	Issue Revised Building Permit Documents	0 days	'16 Feb 08	'16 Feb 08												
12	Approval to Proceed to Tender (PB / KPU BoG) - 3 wks min.	3.2 wks	'16 Mar 02	'16 Mar 23												
13	<b>Procurement Planning</b>	<b>20.8 wks</b>	<b>'15 Oct 19</b>	<b>'16 Mar 10</b>												
14	Define & Document Procurement Strategy	10 wks	'15 Oct 19	'15 Dec 25												
15	Develop RFP Front End & Contract Terms & Conditions	11 wks	'15 Dec 25	'16 Mar 10												
16	<b>Procurement</b>	<b>12.8 wks</b>	<b>'16 Mar 24</b>	<b>'16 Jun 22</b>												
17	Post Tender Documents to BC Bid	0 days	'16 Mar 24	'16 Mar 24												
18	Tender Response Period	20 days	'16 Mar 28	'16 Apr 22												
19	Tender Close	0 days	'16 Apr 22	'16 Apr 22												
20	Tender Evaluation	1 wk	'16 Apr 25	'16 Apr 29												
21	Negotiation (if required)	1 wk	'16 May 02	'16 May 06												
22	Approvals to Award Contract (PB / TB / KPU BoG)	4 wks	'16 May 09	'16 Jun 03												
23	Contract Assemble, Submitte's, Review & Execution	2.6 wks	'16 Jun 06	'16 Jun 22												
24	<b>Construction</b>	<b>80.2 wks</b>	<b>'16 Jun 22</b>	<b>'18 Jan 03</b>												
25	Construction (Substantial Completion)	77 wks	'16 Jun 22	'17 Dec 12												
26	FFE Installation	41 days	'17 Nov 08	'18 Jan 03												
27	Commissioning (LEED)	51 days	'17 Oct 03	'17 Dec 12												
28	Staff Training & Move-in	41 days	'17 Nov 08	'18 Jan 03												
29	Rectification of Construction Deficiencies	17 days	'17 Dec 12	'18 Jan 03												
30	<b>Start of Classes</b>	<b>0.2 wks</b>	<b>'18 Jan 03</b>	<b>'18 Jan 03</b>												
31	Start of Classes	0 days	'18 Jan 03	'18 Jan 03												

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Withheld pursuant to/removed as

s.17

**APPENDIX 3 MEMO: REQUEST TO PROCEED TO TENDER**

As separate attachment.



Fig. 1 East Elevation / Main Entrance



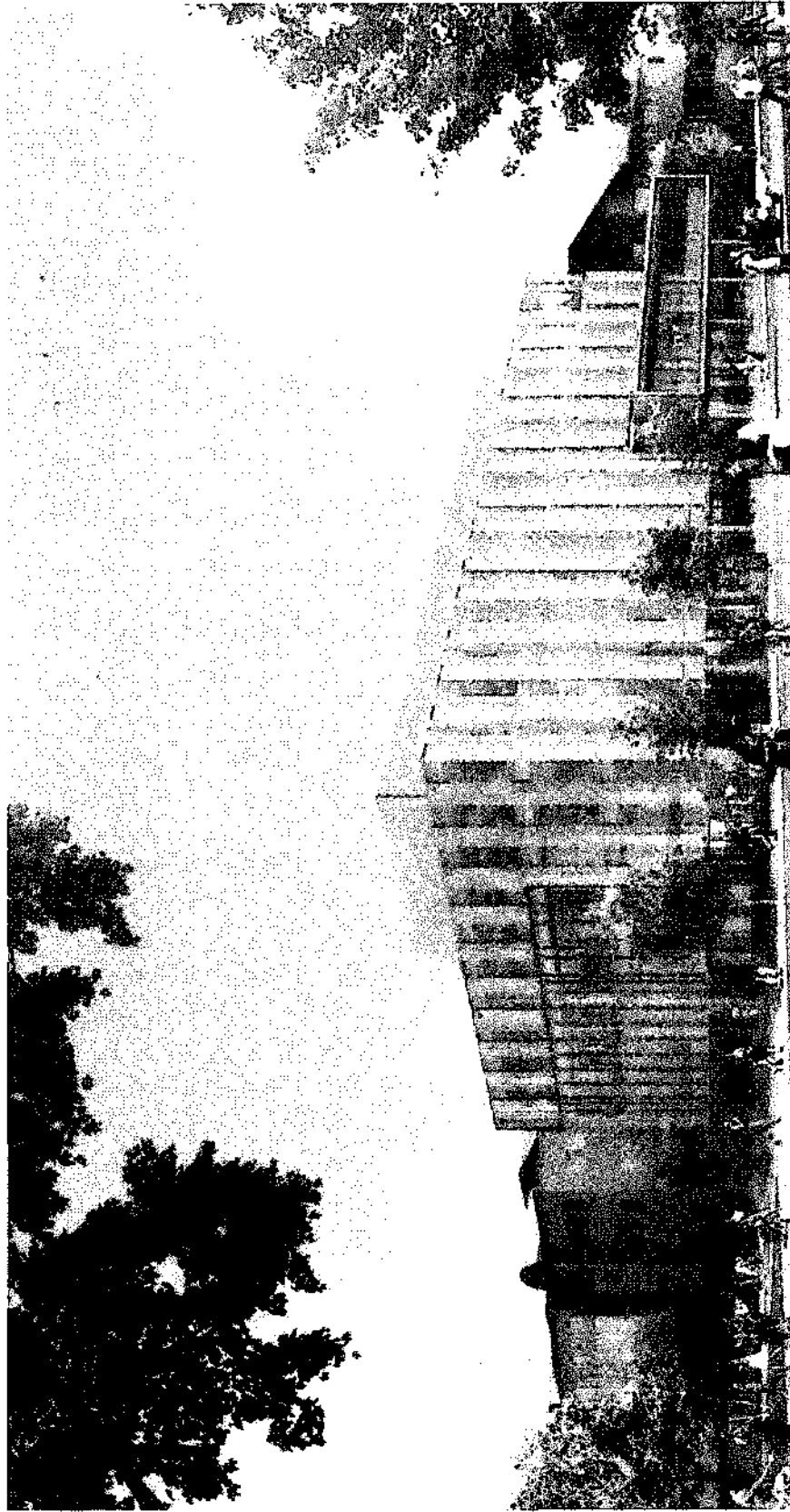


Fig. 2 North Elevation

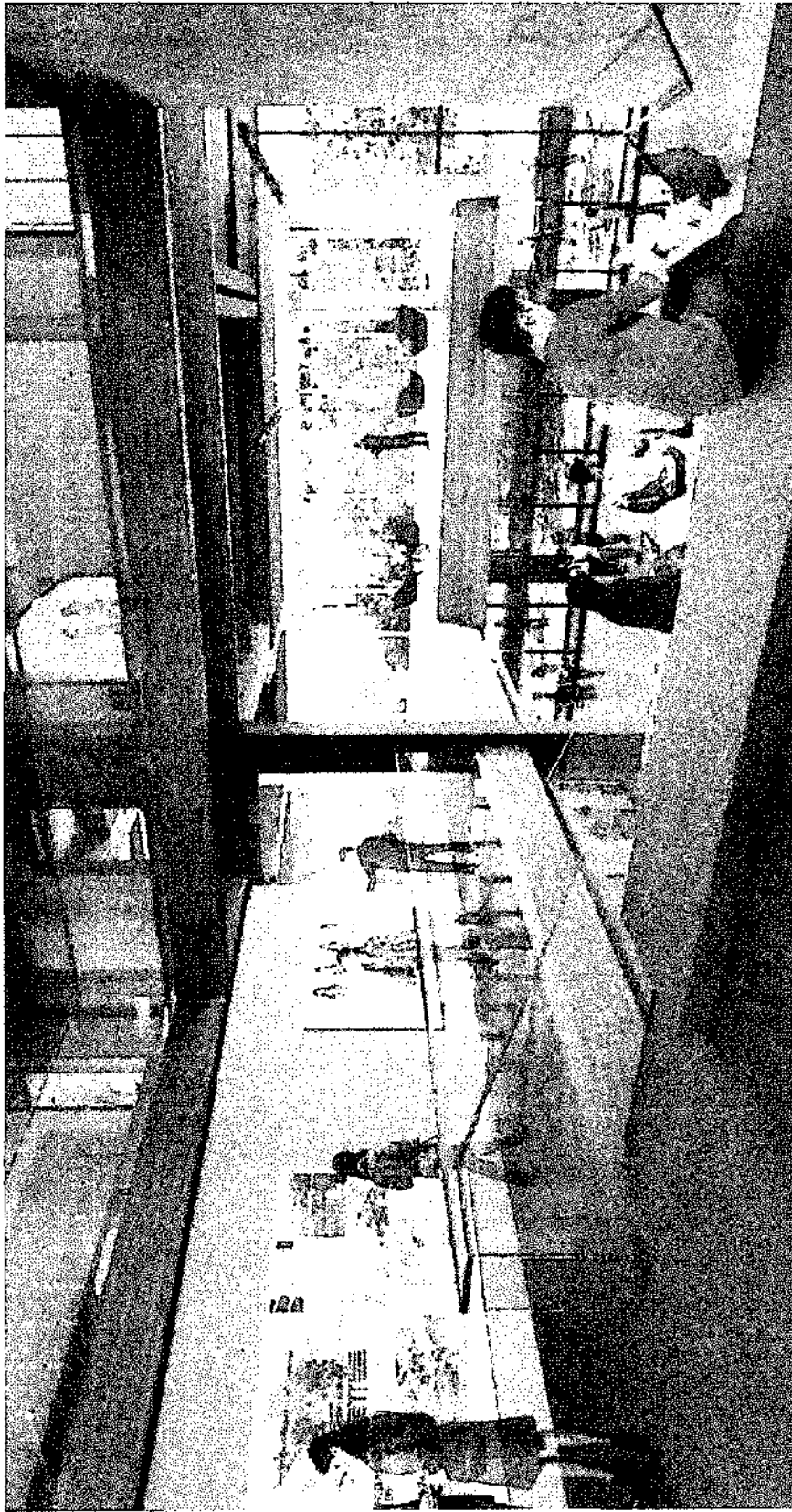


Image 3. Circulation Spaces

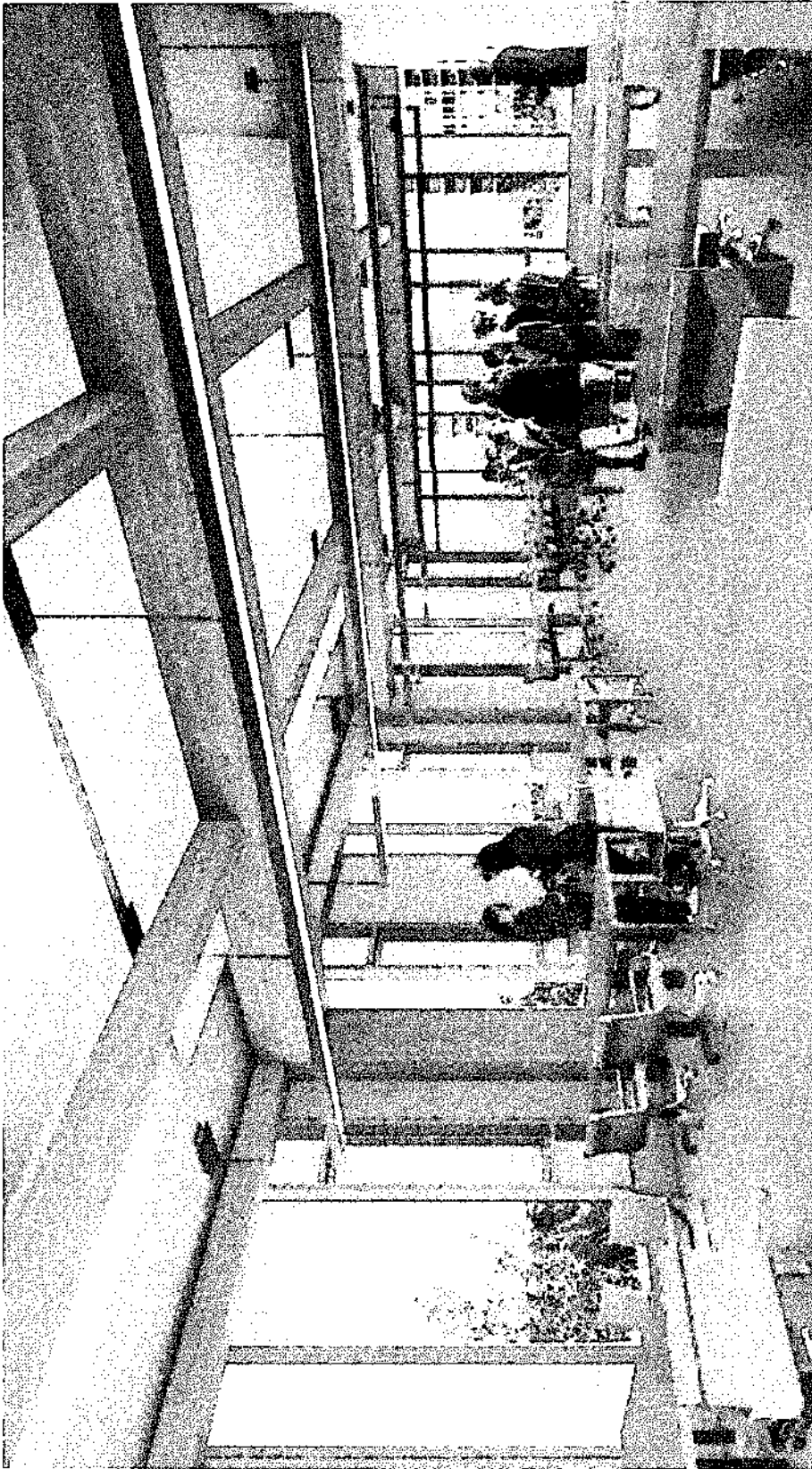


Image 4. Internal Perspective



## NOTICE TO CONSTRUCTION CONTRACTORS & SUBCONTRACTORS

### ADVANCE INFORMATION NOTICE OF A UNIVERSITY ACADEMIC BUILDING IN THE CITY OF RICHMOND, BC, CANADA

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**This is not a tender call or an invitation to bid.**

Next month Kwantlen Polytechnic University (KPU) plans to commence procurement for construction of an academic building at the Richmond campus on Lansdowne Road - the newly redesigned Chip & Shannon Wilson School of Design.

You are invited to attend a Project Information Session on March 4, 2016 at KPU's Richmond Campus in the Melville Centre from 1:30 pm – 3:30 pm regarding the project and the upcoming tender. The information session will include a presentation by each of the key design disciplines, a visit to the site and opportunity to network with your industry peers.

#### The Project

The new 6000 m<sup>2</sup> facility is to provide flexible teaching spaces, with ample natural daylight, and good ventilation. The building is to support delivery of KPU's innovative design programs, and will be delivered under a design-bid-build contract strategy within a construction duration of approximately 18 months, ready for occupancy in January 2018.



The site has already been prepared under a separate ground improvement contract ready to receive the building's raft slab foundation, and the project has been through an extensive redesign process to simplify all key elements of the design to optimize value and enhance constructability.

#### Project Information Session

As part of our engagement with the construction industry, we are providing the market with as much advance information as possible about the project.

We encourage you to consider pursuing this exciting opportunity and to start thinking about developing your construction team. To help you with this, we welcome your attendance at the project information session, which is open to all General Contractors, Sub-Contractors and Suppliers. Please email Mark Bullen, Chief Project Officer at [procurement@capexprojects.com](mailto:procurement@capexprojects.com) to register your attendance at this event and to receive further details.

#### Project Drawings & Specifications

The re-design is nearing completion, and while the design is subject to change and further development prior to tender, should you wish to view the work-in-progress design documents, please contact Mark Bullen at the email provided above for access credentials to the project collaboration site. Note that you will automatically be provided with access credentials by registering for the Project Information Session.

# **Chip & Shannon Wilson School of Design**

## **Project Board Meeting # 14**

**Memorandum:** Request to Proceed to Tender

March 2, 2016

## 1. Objective

The purpose of this memorandum is to request approval for the Project to proceed to tender. This request is based on presentation of the pre-tender cost estimates (also known as a Class A construction cost estimates) in the context of the available budget, together with identification of additional measures taken to provide the Project Board with assurance that the procurement documents will be of an acceptably high standard.

## 2. Summary

Two independent pre-tender construction cost estimates (together with pre-contract contingency allowances) based on a 90% complete design have been received which have validated that the re-design process has brought the Project back within the affordability envelope, and there is adequate contingency within the Project Budget to enable a General Contractor to be engaged to deliver the construction.

The Quantity Surveyor's pre-tender construction cost estimate was performed by Hanscomb Ltd., and is included as Appendix 1 to this Report. A second pre-tender cost estimate was performed by a General Contractor who is providing Construction Management Services to the Project (Scott Construction Ltd.), and is included as Appendix 2 to this Report. A summary of both reports is provided below, alongside the allocated line item budget for construction and a proposed pre-contract contingency to address pricing uncertainty:

	Hanscomb Ltd.	Scott Construction Ltd.	Proposed Budget	
Pre-tender Construction Cost Estimate	23,414,400	22,620,595	22,100,000	Construction Budget Line Item
Pre-Contract Contingency Allowance	585,400	658,278	\$1,611,761*	Pre-Contract Contingency Allowance
Consultant Advised Pre-Contract Construction Budget	<b>23,999,800</b>	<b>23,278,873</b>	<b>\$23,711,761</b>	Proposed Pre-Contract Construction Budget

\* The total Project contingency at time of drafting this report, including forecast surplus, is \$2,274,761. Refer to Appendix 3 for the rationale behind contingency allocation.

**Table 1: Pre-Contract Construction Budget & Cost Estimates**

## CAPEX | PROJECT | ADVISORY

On the direction of the Project Board at Board Meeting # 13, Kwantlen Polytechnic University ("KPU") has engaged Doug Sanders of Borden Ladner Gervais as legal counsel to provide input into the front end tender documents and Kim Anderson of PartnershipsBC to provide procurement due diligence services on the Project.

### 3. Recommendation

- Both consultants have advised independently a pre-contract construction budget that is within the affordability of the Project
- The Quantity Surveyor advises a pre-contract budget that is 1.2% above the proposed Pre-Contract Construction Budget; and the Construction Management consultant advises a pre-contract budget that is 1.8% below the proposed Pre-Contract Construction Budget
- Additional contingencies are available to the Project in the form of a separate allowance for post-contract change orders and for furniture, fixtures and equipment, which have been set aside for those purposes at this stage
- A further contingency is available to the Project in the form of a downward scope ladder worth in the order of \$1,934,600 (refer to Appendix 4)
- Doug Sanders (BLG) is actively involved in finalization of the front-end tender documents
- Kim Anderson (PBC) is actively involved in providing oversight / due diligence of the procurement process
- The project team aim to issue the tender documents to BCBid on March 24, 2016 in line with the approved project schedule, any delay to which will necessarily shorten the construction duration to less than the recommended 77 weeks and risk adding a premium to bid prices.

On the basis outlined above, it is recommended that the Project Board seek approval for the Project to proceed to tender, such approval to be issued not later than March 23, 2016.

## **APPENDIX 1**

### Hanscomb Ltd. Pre-tender Cost Estimate



## APPENDIX 2

Scott Construction Ltd. Pre-tender Cost Estimate

Page 163 to/à Page 164

Withheld pursuant to/removed as

s.13;s.17

## APPENDIX 4

### Downward Scope Ladder

Based on the current scope of the downward scope ladder (see below), a revised estimate has been provided of \$1,934,600 by the Quantity Surveyor.

Item 1a	Remove Link Bridge
Item 2a	Remove Feature Porch
Item 2b	Remove Exterior Windows in Stair Core
Item 2c	Substitute Roofing Membrane*
Item 3a	Remove Interior Works to Level 4
Item 3b	Remove Second Elevator
Item 3c	Remove Serveries
Item 3d	Substitute Washroom Fixtures & Fittings
Item 3e	Remove Glazed Partitions
Item 3f	Remove Measurement & Verification Requirements
Item 3g	Substitute Identified Lighting Fixtures

The impact of the downward scope ladder is to increase the proposed bid price ceiling i.e., the maximum bid price that could result in award within the proposed Pre-Contract Construction Budget from \$23,711,761 to \$25,646,361 based on the Quantity Surveyor's estimate of the value of the downward scope ladder.

\*This item is under review with the Architect and may not make it to the final downward scope ladder

## APPENDIX 5

### Class B Estimate

The design upon which the pre-tender (Class A) cost estimate is based was around 90% completion. A costing exercise (Class B cost estimate) was conducted in November 2015 when the design was around 40-50% complete. This previous cost estimate is summarized below:

	Hanscomb Ltd	Scott Construction Ltd
Class B Construction Cost Estimate	21,663,500	21,245,619
Contingency Allowance	2,166,350	1,699,650
Consultant Advised Construction Budget	23,829,850	22,945,269

The downward scope ladder was estimated at the Class B stage to be in the region of \$1,500,000.

**CHIP AND SHANNON WILSON SCHOOL OF  
DESIGN  
KWANTLEN POLYTECHNIC UNIVERSITY  
RICHMOND CAMPUS  
RICHMOND, BC**

**CLASS 'A' ESTIMATE**

**Report Date: February 23, 2016  
BASELINE**

**Hanscomb**

**CHIP AND SHANNON WILSON SCHOOL OF DESIGN  
KWANTLEN POLYTECHNIC UNIVERSITY RICHMOND  
CAMPUS  
RICHMOND, BC**

**CLASS 'A' ESTIMATE**

**Prepared For:**

**KWANTLEN POLYTECHNIC UNIVERSITY  
12666 - 72ND AVENUE  
SURREY, BRITISH COLUMBIA  
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**Prepared by:**

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**Report Date: February 23, 2016  
BASELINE**

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## 1. INTRODUCTION

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- 1.1 Purpose: This Class 'A' Estimate is intended to provide a realistic allocation of direct and indirect construction costs for the Chip and Shannon Wilson School of Design, Kwantlen Polytechnic University Richmond Campus, located in Richmond, BC with exceptions of items listed in 1.5 below.
- 1.2 Description: Generally, this centrally located project in the City of Richmond, BC comprises of a new five (5) storey heavy timber and metal deck with topping structure, a curtain wall and window wall exterior envelope with glazed or cold rolled steel frame / gypsum wall infill, and a full interior fit-out of a building with enclosed interconnecting link 'bridge'-way encompassing an enclosed finished building along with building projections / overhangs and exterior landscaping, alterations and works to facilitate the services normally required of a post-secondary educational facility of this type.
- 1.3 Methodology: From the documentation and information provided, quantities of all major elements were assessed or measured where possible and priced at rates considered competitive for a project of this type under a stipulated lump sum form of contract in Richmond, BC
- Pricing shown reflects probable construction costs obtainable in the Richmond, BC area on the effective date of this report. This estimate is a determination of fair market value for the construction of this project. It is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the work.
- 1.4 Specifications: For building and systems where specifications and design details are not available, quality standards have been established based on discussions with the design team.



1.5 Exclusions: This Class 'A' Estimate does not provide for the following, if required:

- Land acquisition costs and impost charges
- Development charges
- Legal fees and expenses
- Right of way charges
- Easement costs
- Utility connections and fees
- Financing costs
- Fund raising costs
- Contaminated materials removal
- Moving or relocation costs
- Decanting costs
- Works to original building areas unrelated to connecting to new building
- Graphic film wall coverings
- Window coverings
- Office equipment
- Systems furniture and related works
- Owner's staff and associated management
- Professional fees and expenses
- Maintenance equipment
- Phased construction premiums
- Preventative maintenance contracts
- Goods and Services Tax (GST)
- Shift Work
- Building Permit

## 2. DOCUMENTATION

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- This Class 'A' Estimate has been prepared from the documentation included in Appendix Z of this report

All of the above documentation was received from KPMB + Public and was supplemented with information gathered in meeting(s) and telephone conversations with the design team, as applicable.

Design changes and/or additions made subsequent to this issuance of the documentation noted above have not been incorporated in this report.

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### 3. COST CONSIDERATIONS

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- 3.1 Cost Base: All costs are estimated on the basis of competitive bids (a minimum of 3 general contractor bids and at least 3 subcontractor bids for each trade) being received in March 2016 from general contractors and all major subcontractors and suppliers based on a stipulated lump sum form of contract.
- 3.2 Escalation: An allowance has been included for construction cost escalation that may occur between March 2016 and the anticipated bid date for the project. Additionally, currency variations where the Canadian dollar is decreasing in value as compared with other currencies could have an inflationary effect on construction costs which we have reasonably addressed in our cost estimate. The reader should be aware that this effect may produce even higher costs should the project be delayed beyond the 2<sup>nd</sup> quarter of 2016.
- 3.3 Contingencies: A 2.5% allowance is included for any Pricing unknowns. As the contract documents are considered complete there is no Design allowance. Any Pricing allowance is not intended to cover any program space modifications but rather to provide some flexibility for the designers and cost planners during the tender process. A 0% Construction allowance has been made to cover construction (post contract) unknowns.
- A 0% allowance has been included for Escalation to cover the anticipated increase in costs from the date of this report to the projected date of tender.
- 3.4 Unit Rates: The unit rates in the preparation of this Class 'A' Estimate include labour and material, equipment, subcontractor's overheads and profits.
- 3.5 Taxes: No provision has been made for the Goods and Services Tax. It is recommended that the owner make separate provision for GST in the project budget.
- 3.6 Statement of Probable Costs: Hanscomb has no control over the cost of labour and materials, the contractor's method of determining prices, or competitive bidding and market conditions. This opinion of probable cost of construction is made on the basis of experience, qualifications and best judgment of the professional consultant familiar with the construction industry. Hanscomb cannot and does not guarantee that proposals, bids or actual construction costs will not vary from this or subsequent cost estimates.

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### 3. COST CONSIDERATIONS (cont'd)

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#### 3.6 Statement of Probable Costs: (continued)

Hanscomb has prepared this estimate in accordance with generally accepted principles and practices. Hanscomb's staff are available to discuss its contents with any interested party.

#### 3.7 Ongoing Cost Control:

Hanscomb recommends that the Owner and design team carefully review this document, including line item description, unit prices, clarifications, exclusions, inclusions and assumptions, contingencies, escalation and mark-ups. If the project is over budget, or if there are unresolved budgeting issues, alternative systems/schemes should be evaluated before proceeding into the next design phase.

Requests for modifications of any apparent errors or omissions to this document must be made to Hanscomb within ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

It is recommended that a final update estimate be produced by Hanscomb using Bid Documents to determine overall cost changes which may have occurred since the preparation of this estimate. The final updated estimate will address changes and additions to the documents, as well as addenda issued during the bidding process. Hanscomb cannot reconcile bid results to any estimate not produced from bid documents including all addenda.

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#### 4. GROSS FLOOR AND SITE DEVELOPED AREAS

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##### GROSS FLOOR AREA:

Description	m2
Main Building	6,271
Link 'Bridge'-Way	58
<b>TOTAL</b>	<b>6,329</b>

##### SITE DEVELOPED AREA:

Description	m2
Site Developed Area	1,245
<b>Site Developed Area</b>	<b>1,245</b>

The above areas have been measured in accordance with the Canadian Institute of Quantity Surveyors' Method of Buildings by Area and Volume.

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5. CONSTRUCTION COST ESTIMATE SUMMARY

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COST SUMMARY:

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<b>Element</b>		<b>19,248,800</b>
- Site and Ancillary Works		1,398,800
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<b>Sub-Total- Including Site and Ancillary Works</b>		<b>20,647,600</b>
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<b>General Requirements and Fees</b>		
Gen Requirements	8.0%	\$1,651,800
Fee	5.0%	\$1,115,000
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<b>Estimate Sub-Total</b>		<b>23,414,400</b>
<hr/>		
<b>Allowances</b>		
Design	0.0%	-
Escalation	0.0%	-
Pricing	2.5%	585,400
<hr/>		
<b>Total Construction Estimate excluding Tax</b>		<b>23,999,800</b>
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Taxes - excluded	0.0%	-
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<b>Total Construction Estimate</b>		<b>23,999,800</b>
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**Appendix**  
**A - Detailed Elemental Cost Estimate**

Project	Kwantlen Polytechnic University New School of Design Building				Report date : 23 Feb 2016				
Location	Richmond, British Columbia				Page No. : 1				
Owner	Kwantlen Polytechnic University				Bldg Type : 720				
Consultant	KPMB + Public				C.T. Index : 0.0				
					GFA : 6,271 m2				
					ELEMENTAL COST SUMMARY				
Element	Ratio to GFA	Elemental Cost		Elemental Amount		Rate per m2		%	
		Quantity	Unit rate	Sub-Total	Total	Sub-Total	Total		
A SHELL		6,271 m2			9,099,700		1,451.08	39.4	
A1 SUBSTRUCTURE					1,008,600		160.84	4.4	
A11 Foundations	0.179	1,125 m2	874.31	983,600		156.85			
A12 Basement Excavation				0		0.00			
A13 Special Conditions	0.058	363 m2	68.87	25,000		3.99			
A2 STRUCTURE					4,922,500		784.96	21.3	
A21 Lowest Floor Construction	0.179	1,125 m2	154.84	174,200		27.78			
A22 Upper Floor Construction	1.053	6,602 m2	601.48	3,971,000		633.23			
A23 Roof Construction	0.257	1,612 m2	482.20	777,300		123.95			
A3 EXTERIOR ENCLOSURE					3,168,600		505.28	13.7	
A31 Walls Below Grade				0		0.00			
A32 Walls Above Grade	0.503	3,156 m2	697.15	2,200,200		350.85			
A33 Windows & Entrances	0.001	8 No.	5,525.00	44,200		7.05			
A34 Roof Coverings	0.257	1,612 m2	294.35	474,500		75.67			
A35 Projections	0.000	1 Sum	449,700.00	449,700		71.71			
B INTERIORS		6,271 m2			3,730,200		594.83	16.2	
B1 PARTITIONS & DOORS					1,393,900		222.28	6.0	
B11 Partitions	0.827	5,189 m2	216.82	1,125,100		179.41			
B12 Doors	0.017	108 No.	2,488.89	268,800		42.86			
B2 FINISHES					1,841,800		293.70	8.0	
B21 Floor Finishes	0.860	5,393 m2	63.95	344,900		55.00			
B22 Ceiling Finishes	0.897	5,625 m2	221.10	1,243,700		198.33			
B23 Wall Finishes	1.801	11,296 m2	22.42	253,200		40.38			
B3 FITTINGS & EQUIPMENT					494,500		78.86	2.1	
B31 Fittings & Fixtures	1.000	6,271 m2	34.21	214,500		34.21			
B32 Equipment	1.000	6,271 m2	0.00	0		0.00			
B33 Elevators	0.000	1 No.	280,000.00	280,000		44.65			
B34 Escalators				0		0.00			
C SERVICES		6,271 m2			6,119,000		975.76	26.5	
C1 MECHANICAL					3,817,400		608.74	16.5	
C11 Plumbing & Drainage	1.000	6,271 m2	102.77	644,500		102.77			
C12 Fire Protection	1.000	6,271 m2	32.55	204,100		32.55			
C13 HVAC	1.000	6,271 m2	377.66	2,368,300		377.66			
C14 Controls	1.000	6,271 m2	95.76	600,500		95.76			
C2 ELECTRICAL					2,301,600		367.02	10.0	
C21 Service & Distribution	1.000	6,271 m2	83.22	521,900		83.22			
C22 Lighting, Devices & Heating	1.000	6,271 m2	196.33	1,231,200		196.33			
C23 Systems & Ancillaries	1.000	6,271 m2	87.47	548,500		87.47			
NET BUILDING COST - EXCLUDING SITE					\$	18,948,900		3,021.67	82.1
D SITE & ANCILLARY WORK		6,271 m2			1,398,800		223.06	6.1	
D1 SITE WORK					1,398,800		223.06	6.1	
D11 Site Development	0.199	1,245 m2	734.86	914,900		145.89			
D12 Mechanical Site Services	0.000	1 Sum	214,700.00	214,700		34.24			
D13 Electrical Site Services	0.000	1 Sum	269,200.00	269,200		42.93			
D2 ANCILLARY WORK					0		0.00	0.0	
D21 Demolitions	0.000	1 Sum	0.00	0		0.00			
D22 Alterations	0.000	1 Sum	0.00	0		0.00			
NET BUILDING COST - INCLUDING SITE					\$	20,347,700		3,244.73	88.2
Z1 GENERAL REQUIREMENTS & FEE					2,726,600		434.80	11.8	
Z11 General Requirements		8.0 %		1,627,800		259.58			
Z12 Fee		5.0 %		1,098,800		175.22			
TOTAL CONSTRUCTION ESTIMATE - EXCLUDING ALLOWANCES					\$	23,074,300		3,679.52	100.0
Z2 ALLOWANCES					576,900		91.99		
Z21 Pricing Allowance		0.0 %		0		0.00			
Z22 Escalation Allowance		0.0 %		0		0.00			
Z23 Pricing Allowance		2.5 %		576,900		91.99			
TOTAL CONSTRUCTION ESTIMATE - INCLUDING ALLOWANCES					\$	23,651,200		3,771.52	
VALUE ADDED TAX (GST/HST)					0		0.00		
Value Added Tax (GST/HST)		0.0 %		0		0.00			
TOTAL CONSTRUCTION ESTIMATE					\$	23,651,200	\$	3,771.52	



A1 SUBSTRUCTURE		Quantity	Unit rate	Amount
A11 Foundations				
1	Take up existing vegetation and remove off site	2,418 m2	1.30	3,140
2	Strip existing topsoil and store on site for reuse, assume 200mm thick	2,418 m2	5.00	12,090
3	Allow for rough grading to required levels	2,418 m2	10.00	24,180
4	F1-600mm thick raft slab on grade	1,796 m2	355.10	637,720
	- concrete 25Mpa	1,078 m3	300.00	323,400
	- reinforcing steel (44kg/m2)	79,024 kg	2.70	213,365
	- formwork	122 m2	120.00	14,640
	- excavate and remove off-site	1,616 m3	35.00	56,560
	- ditto workspace	55 m3	35.00	1,925
	- backfill workspace with imported granular materials	55 m3	65.00	3,575
	- compacted granular sub-base 300mm thick	539 m3	45.00	24,255
5	F2- 300mm thickening raft slab	186 m2	225.50	41,940
	- concrete	56 m3	290.00	16,240
	- reinforcing steel (44kg/m2)	8,184 kg	2.00	16,368
	- formwork	48 m2	120.00	5,760
	- excavate and remove off-site	56 m3	40.00	2,240
	- ditto workspace	14 m3	40.00	560
	- backfill workspace with imported granular materials	14 m3	55.00	770
6	F3-900mm thickening raft slab	436 m2	503.20	219,410
	- concrete	392 m3	300.00	117,600
	- reinforcing steel (say 52kg/m2)	22,672 kg	2.70	61,214
	- formwork	149 m2	120.00	17,880
	- excavate and remove off-site	392 m3	35.00	13,720
	- ditto workspace	90 m3	35.00	3,150
	- backfill workspace with imported granular materials	90 m3	65.00	5,850
7	200mm concrete perimeter foundation wall 600mm high	94 m2	276.10	25,950
	- concrete-included in raft foundation	0 m3	300.00	0
	- reinforcing steel (say 13kg/m3)	733 kg	2.70	1,979
	- formwork	188 m2	120.00	22,560
	- water stop see drawing A5.40	94 m	15.00	1,410
Carried Forward :				964,430

A1 SUBSTRUCTURE		Quantity	Unit rate	Amount
A11 Foundations	(Continued)		Brought Forward :	964,430
8 Acid neutralizer sump pit -by others			Allow	
9 Elevator sump pit		1 Sum	840.00	840
- formwork		4 m2	120.00	480
- extra reinforcement		132 kg	2.70	356
10 Elevator pit, Core 1		1 Sum	6,610.00	6,610
- formwork		31 m2	120.00	3,720
- extra reinforcement		1,071 kg	2.70	2,892
11 Allow for weeping tile to outside face of exterior foundations c/w clean stone surround 150mm drainage pipe		170 m	60.00	10,200
12 Connection of last to storm system			Allow	1,500
A11 Foundations	TOTAL : \$	1,125 m2	874.31	983,600
A13 Special Conditions				
1 Allowance for dewatering excavation during construction			Allow	25,000
A13 Special Conditions	TOTAL : \$	363 m2	68.87	25,000

A2 STRUCTURE		Quantity	Unit rate	Amount
A21 Lowest Floor Construction				
1	100mm thk reinforced concrete slab on granular fill / rigid insulation	1,125 m2	154.80	174,190
	- concrete	113 m3	300.00	33,900
	- VR membrane	1,125 m2	2.00	2,250
	- 100mm rigid insulation	1,125 m2	50.00	56,250
	- reinforcing steel (6kg/m3)	6,750 kg	2.70	18,225
	- screed/cure/finish	1,125 m2	11.50	12,938
	- isolation/control joints	1,125 m2	6.00	6,750
	- 600mm average engineered fill	675 m3	65.00	43,875
A21 Lowest Floor Construction TOTAL : \$		1,125 m2	154.84	174,200
A22 Upper Floor Construction Level L1				
1	C1 265X602 Douglas Fir Column	94 m	460.00	43,240
2	C2 410 X602 Douglas Fir Column	59 m	750.00	44,250
3	Baseplates to columns	39 No.	250.00	9,750
4	B6 265X608mm Douglas Fir Beam	134 m	480.00	64,320
5	B7 2-265X608mm Douglas Fir Beam	121 m	970.00	117,370
6	B3 265X304mm Douglas Fir Beam	53 m	270.00	14,310
7	B2 215X380mm Douglas Fir Beam	313 m	200.00	62,600
8	B1-W530 x165	4,785 kg	3.00	14,360
9	Beam end connectors	208 No.	100.00	20,800
10	2-25M around the side of opening.	354 kg	3.00	1,060
11	2-20M around perimeter	585 kg	2.00	1,170
12	HSS102X76X9.5	150 kg	3.00	450
Carried Forward :				393,680

A2 STRUCTURE		Quantity	Unit rate	Amount
A22	Upper Floor Construction (Continued)		Brought Forward :	393,680
13	D1 2-20M in steel deck concrete topping	190 kg	3.00	570
14	D2 2x25M in steel deck concrete topping	60 kg	3.00	180
15	D3 2-32T dywidag tempcore threaded bar	9 m	0.00	0
16	8 x430 FSZ @300 (in the balcony area)	88 m	0.00	0
17	300mm concrete shear wall	246 m2	400.40	98,510
	- concrete	74 m3	300.00	22,200
	- reinforcing steel (say 26kg/m2)	6,396 kg	2.70	17,269
	- formwork	492 m2	120.00	59,040
18	W1 200mm thick concete wall	46 m2	275.20	12,660
	- concrete	9 300	0.00	0
	- reinforcing steel(say 13kg/m2)	598 kg	2.70	1,615
	- formwork	92 m2	120.00	11,040
19	D1 166mm thk composite slab	1,456 m2	136.10	198,220
	- 90mm concrete topping	131 m3	300.00	39,300
	- reinforcing steel (say 6kg/m2)	8,736 kg	2.70	23,587
	- screed/cure/finish	1,456 m2	11.50	16,744
	- 76mm steel deck	1,456 m2	75.00	109,200
	- L76X76X6.4 edge	1,125 kg	7.50	8,438
	- miscellaneous connections & details	112 kg	8.50	952
20	Feature concrete stair Level L2	75 m2	300.00	22,500
21	C1 265X602mm Douglas Fir Column	94 m	460.00	43,240
22	C2 410X602mm Douglas Fir Column	59 m	750.00	44,250
23	Baseplates to columns	39 No.	250.00	9,750
24	Cap plates to columns	39 No.	150.00	5,850
25	B6 265X608mm Douglas Fir Beam	122 m	480.00	58,560
26	B7 2-265X608mm Douglas Fir Beam	130 m	970.00	126,100
Carried Forward :				1,014,070

A2 STRUCTURE		Quantity	Unit rate	Amount
A22	Upper Floor Construction (Continued)		<b>Brought Forward :</b>	1,014,070
27	B3 265X304mm Douglas Fir Beam	52 m	270.00	14,040
28	B2 215X380mm Douglas Fir Beam	261 m	200.00	52,200
29	B16 265X1036mm Douglas Fir Beam	9 m	820.00	7,380
30	B15 265 x 1036 Douglas Fir Column	53 m	790.00	41,870
31	B10 W610x 415	4,565 kg	7.50	34,240
32	D1 2-20M in steel deck concrete topping	123 kg	2.70	330
33	D2 2-25M in steel deck topping	187 kg	2.70	500
34	D3 2-32T dywidag tempcore threaded bar	5 m	0.00	0
35	2-20M around perimeter	769 kg	2.70	2,080
36	8x 430 FSZ @300 at the balcony area	84 m	0.00	0
37	Beam end connectors	204 No.	100.00	20,400
38	300mm concrete shear wall	255 m2	400.80	102,200
	- concrete	77 m3	300.00	23,100
	- reinforcing steel (say 26kg/m2)	6,630 kg	2.70	17,901
	- formwork	510 m2	120.00	61,200
39	165mm thk composite slab	1,433 m2	145.50	208,480
	- 89mm concrete topping	129 m3	300.00	38,700
	- reinforcing steel (say 6kg/m2)	8,598 kg	2.70	23,215
	- screed/cure/finish	1,433 m2	11.50	16,480
	- 76mm steel deck	1,433 m2	75.00	107,475
	- L76X76X6.4 edge	1,105 kg	7.50	8,288
	- miscellaneous connections & details	1,895 kg	8.50	14,323
<u>Level L3</u>				
40	C1 265X602mm Douglas Fir Column	105 m	460.00	48,300
41	C2 410X602mm Douglas Fir Column	65 m	750.00	48,750
42	Baseplates to columns	40 No.	250.00	10,000
<b>Carried Forward :</b>				<b>1,604,840</b>

A2 STRUCTURE		Quantity	Unit rate	Amount
A22	Upper Floor Construction (Continued)		Brought Forward :	1,604,840
43	Cap plates to columns	40 No.	150.00	6,000
44	B7 2-265X608mm Douglas Fir Beam	157 m	970.00	152,290
45	B3 285X304mm Douglas Fir Beam	78 m	270.00	21,060
46	B2 215X380mm Douglas Fir Beam	306 m	200.00	61,200
47	B6 265x 608mm Douglas Fir Column	109 m	480.00	52,320
48	2-25M around perimeter	1,281 kg	2.70	3,460
49	Beam end connectors	210 No.	100.00	21,000
50	300mm concrete shear wall	255 m2	400.80	102,200
	- concrete	77 m3	300.00	23,100
	- reinforcing steel (say 26kg/m2)	6,630 kg	2.70	17,901
	- formwork	510 m2	120.00	61,200
51	165mm thk composite slab	1,515 m2	148.70	225,240
	- 90mm concrete topping	136 m3	300.00	40,800
	- reinforcing steel (say 6kg/m2)	9,090 kg	2.70	24,543
	- screed/cure/finish	1,515 m2	11.50	17,423
	- 76mm steel deck	1,515 m2	75.00	113,625
	- L76X76X6.4 edge	1,105 kg	7.50	8,288
	- Allow for hangers	162 kg	7.50	1,215
	- miscellaneous connections & details	2,276 kg	8.50	19,346
<u>Level L4</u>				
52	C1 265X602mm Douglas Fir Column	36 m	460.00	16,560
53	C2 410X602mm Douglas Fir Column	53 m	750.00	39,750
54	Baseplates to columns	22 No.	250.00	5,500
55	Cap plates to columns	22 No.	150.00	3,300
56	B7 2-265X608mm Douglas Fir Beam	52 m	970.00	50,440
57	B6 265X608mm Douglas Fir Beam	46 m	480.00	22,080
58	B3 265X304mm Douglas Fir Beam	12 m	270.00	3,240
Carried Forward :				2,390,480

A2 STRUCTURE		Quantity	Unit rate	Amount
A22	Upper Floor Construction (Continued)		Brought Forward :	2,390,480
59	B2 215X304mm Douglas Fir Beam	115 m	200.00	23,000
60	B14 W360X64	1,024 kg	7.50	7,680
61	B8 2-265X1368mm Douglas Fir Beam	19 m	1,200.00	22,800
62	B9 215X1102mm Douglas Fir Beam	53 m	650.00	34,450
63	Beam end connectors	112 No.	100.00	11,200
64	D1 2-20M in steel deck	38 kg	2.70	100
65	D2 2-25M in the steel deck	304 kg	2.70	820
66	D3 2-32T dywidag tempcore threaded bar	48 m	0.00	0
67	D4 2 hold downs at wood beam to column	5 No.	0.00	0
68	2-25M along the perimeter	1,077 kg	2.70	2,910
69	300mm concrete shear wall	255 m2	5,104.20	1,301,570
	- concrete	77 m3	300.00	23,100
	- reinforcing steel (say 26kg/m2)	450,840 kg	2.70	1,217,268
	- formwork	510 m2	120.00	61,200
70	D1 166mm thk composite slab	742 m2	143.00	106,140
	- 90mm concrete topping	67 m3	300.00	20,100
	- reinforcing steel (say 6kg/m2)	4,452 kg	2.70	12,020
	- screed/cure/finish	742 m2	11.50	8,533
	- 76mm steel deck	742 m2	75.00	55,650
	- L76X76X6.4 edge	929 kg	7.50	6,968
	- miscellaneous connections & details	337 kg	8.50	2,865
<u>General</u>				
71	Exit concrete staircase	8 ft	8,000.00	64,000
72	Cap plates to columns	39 No.	150.00	5,850
A22 Upper Floor Construction		TOTAL : \$	6,602 m2	601.48
				3,971,000

A2 STRUCTURE		Quantity	Unit rate	Amount
A23 Roof Construction				
<u>Level L4 Roof</u>				
1	C1 265X602mm Douglas Fir Column	61 m	460.00	28,060
2	C2 410X602 mm Douglas Fir Column	12 m	750.00	9,000
3	Baseplates to columns	18 No.	250.00	4,500
4	Cap plates to columns	18 No.	150.00	2,700
5	B7 2-265X608mm Douglas Fir Beam	69 m	970.00	66,930
6	B6 265X608mm Douglas Fir Beam	45 m	270.00	12,150
7	B2 215X380mm Douglas Fir Beam	134 m	200.00	26,800
8	B3 265X304mm Douglas Fir Column	66 m	270.00	17,820
9	B17 215X494 mm Douglas Fir Column	33 m	350.00	11,550
10	B18 2-265X646 mm Douglas Fir Column	17 m	600.00	10,200
11	Beam end connectors	96 No.	100.00	9,600
12	166mm thk composite slab	781 m2	152.70	119,260
	- 90mm concrete topping	70 m3	300.00	21,000
	- reinforcing steel (say 6kg/m2)	4,686 kg	2.70	12,652
	- screed/cure/finish	781 m2	11.50	8,982
	- 76mm steel deck	781 m2	75.00	58,575
	- L76X76X6.4 edge	1,268 kg	7.50	9,510
	- miscellaneous connections & details	1,005 kg	8.50	8,543
<u>Upper Roof</u>				
13	C3 265X215mm Douglas Fir Column	113 m	460.00	51,980
14	Baseplates to columns	24 No.	250.00	6,000
15	Cap plates to columns	24 No.	150.00	3,600
16	300mm concrete shear wall	296 m2	400.40	118,520
	- concrete	89 m3	300.00	26,700
	- reinforcing steel (say 26kg/m2)	7,696 kg	2.70	20,779
	- formwork	592 m2	120.00	71,040
Carried Forward :				498,670



A2 STRUCTURE		Quantity	Unit rate	Amount
A23	Roof Construction (Continued)		Brought Forward :	498,670
17	B4 215X456mm Beam	353 m	310.00	109,430
18	B5 265X304mm Beam	16 m	250.00	4,000
19	B12 265X342mm Beam	44 m	220.00	9,680
20	B11 130X380mm Beam	94 m	150.00	14,100
21	Beam end connectors	130 No.	100.00	13,000
22	D5 Continuous 200x8mm thick plate	75 m	0.00	0
23	D2 38mmX1.21mm roof deck	737 m2	140.00	103,180
24	D3 76mm X 1.21mm roof deck	94 m2	215.00	20,210
25	Roof penetrations, allow		Allow	5,000
A23 Roof Construction		TOTAL : \$	1,612 m2	482.20
				777,300

A3 EXTERIOR ENCLOSURE		Quantity	Unit rate	Amount
A32 Walls Above Grade				
1	Glazed aluminum curtain wall GL1, double glazing (exterior lite 10mm, interior 6mm both tempered, low e, argon filled)	337 m2	750.00	252,750
2	Glazed aluminum curtain wall GL2, double glazing (exterior lite 6mm, interior 6mm both tempered, low e, argon filled)	790 m2	700.00	553,000
3	Extra over last for perforated metal screen MP1	790 m2	120.00	94,800
4	Glazed aluminum spandrel panel GL3 double glazing (exterior lite 6mm, interior 6mm both tempered, low e, argon filled) fritted one side	171 m2	750.00	128,250
5	Extra over last for 4" fibreglass insulation , 5/8" drywall on 92mm metal stud backpan	171 m2	90.00	15,390
6	Glazed aluminum curtain wall GL4,clear double glazed,low E	356 m2	700.00	249,200
7	Glazed aluminum curtain wall GL5,clear double glazed IGU, mirrored, low E	316 m2	800.00	252,800
8	W1a-Aluminum panel cladding c/w furring	704 m2	647.00	455,490
	- aluminum panel cladding c/w furring channels and z-girts & insulation	704 m2	550.00	387,200
	- 13mm exterior sheathing	704 m2	22.00	15,488
	- 92mm metal stud	704 m2	45.00	31,880
	- 16mm gypsum board	704 m2	30.00	21,120
9	W1b Aluminum panel cladding c/w furring channel	71 m2	550.00	39,050
	- aluminum panel cladding c/w furring channels and z-girts & insulation	71 m2	550.00	39,050
Carried Forward :				2,040,730

A3 EXTERIOR ENCLOSURE		Quantity	Unit rate	Amount
A32 Walls Above Grade (Continued)			Brought Forward :	2,040,730
10	W2a Aluminum panel cladding c/w furring channel	208 m2	647.00	134,580
	- aluminum panel cladding c/w furring channels and z-girts & insulation	208 m2	550.00	114,400
	- 13mm exterior sheathing	208 m2	22.00	4,576
	- 92mm metal stud	208 m2	45.00	9,360
	- 16mm gypsum board	208 m2	30.00	6,240
11	W2b Aluminum panel cladding c/w furring channel	24 m2	550.00	13,200
	- aluminum panel cladding c/w furring channels and z-girts & insulation	24 m2	550.00	13,200
12	W2c Aluminum panel cladding c/w furring	18 m2	647.20	11,650
	- aluminum panel cladding c/w furring channels and z-girts & insulation	18 m2	550.00	9,900
	- 13mm exterior sheathing	18 m2	22.00	396
	- 92mm metal stud	18 m2	45.00	810
	- 16mm gypsum board	18 m2	30.00	540
A32 Walls Above Grade TOTAL : \$		3,156 m2	697.15	2,200,200
A33 Windows & Entrances				
1	Aluminum glazed door c/w frame and standard hardware	4 No.	4,000.00	16,000
	- double	4 pr	4,000.00	16,000
2	Insulated metal doors c/w pressed steel frame and standard hardware	4 No.	2,900.00	11,600
	- single	2 no.	2,300.00	4,600
	- double	2 pr	3,500.00	7,000
3	Auto door operator	4 No.	2,900.00	11,600
4	Allowance for hardware upgrade		Allow	5,000
A33 Windows & Entrances TOTAL : \$		8 No.	5,525.00	44,200

A3 EXTERIOR ENCLOSURE		Quantity	Unit rate	Amount
<b>A34 Roof Coverings</b>				
1	R4 SBS Roof( in the upper roof area)	742 m2	215.00	159,530
	- 7mm 2-ply roof membrane	742 m2	60.00	44,520
	- 13mm Protection board	742 m2	50.00	37,100
	- 150mm rigid insulation	742 m2	75.00	55,650
	- 150-0mm topping sloped to drain rigid insulation vapour rectarder	742 m2	30.00	22,260
2	R1 Ballast roofing system, c/w insulation, vapour barrier and exterior sheathing L4 roof	831 m2	355.00	295,010
	- 50mm ballast on permeable non-moisture holding scrim sheet	831 m2	50.00	41,550
	- 125mm rigid insulation	831 m2	70.00	58,170
	- 25mm rigid insulation with drainage channel	831 m2	25.00	20,775
	- 2ply roof membrane	831 m2	60.00	49,860
	- leak detection system	831 m2	30.00	24,930
	- 150mm rigid insulation sloped	831 m2	90.00	74,790
	- vapour barrier	831 m2	30.00	24,930
3	Miscellaneous flashings, etc.		Allow	20,000
<b>A34 Roof Coverings TOTAL : \$</b>		<b>1,612 m2</b>	<b>294.35</b>	<b>474,500</b>
<b>A35 Projections</b>				
1	Level L1 soffit-S1 exterior system as required,AVB membrane as required,suspension system w/150mm semi-rigid insulation, metal channel, aluminum soffit panel	460 m2	140.00	64,400
2	Level L2 soffit S1,exterior sheathing as required, AVB membrane as required, suspension system w/150mm semi-rigid insulation,metal channel, aluminum soffit panel	5 m2	140.00	700
3	Level L4 soffit S2, GWB, GWB AVB membrane, suspension system w/100mm semi-rigid insulation,furring channel,aluminum soffit panel	22 m2	155.00	3,410
<b>Carried Forward :</b>				<b>68,510</b>

A3 EXTERIOR ENCLOSURE		Quantity	Unit rate	Amount
A35	Projections (Continued) <u>Porch</u>		<b>Brought Forward :</b>	68,510
4	C1 265X602mm Douglas Fir Column	16 m	460.00	7,360
5	Baseplates to columns	8 No.	250.00	2,000
6	B1 W530X165 Beam	3,465 kg	2.70	9,360
7	B13 310x253 Douglas Fir Beam	21 m	300.00	6,300
8	FSZ @300 at the porch area	150 m	0.00	0
9	Beam end connectors	4 No.	100.00	400
10	169 CLT Wall Panels finish both sides	105 m2	250.00	26,250
11	239 CLT Floor Panels	124 m2	215.00	26,660
12	239 CLT Roof Panels	124 m2	215.00	26,660
13	Allow for floor finish	124 m2	50.00	6,200
14	Allow for soffit finish	124 m2	140.00	17,360
15	Allow for ceiling finish	124 m2	140.00	17,360
16	Allow for roof covering	124 m2	250.00	31,000
17	Allow for edge detailing at floor and roof	90 m	50.00	4,500
18	Glazed guardrail	41 m	600.00	24,600
19	W1a-Aluminum panel cladding c/w furring	40 m2	647.00	25,880
	- aluminum panel cladding c/w furring channels and z-girts & insulation	40 m2	550.00	22,000
	- 13mm exterior sheathing	40 m2	22.00	880
	- 92mm metal stud	40 m2	45.00	1,800
	- 16mm gypsum board	40 m2	30.00	1,200
20	Glazed aluminum curtain wall GL1	39 m2	750.00	29,250
<b>Carried Forward :</b>				<b>329,650</b>

A3 EXTERIOR ENCLOSURE		Quantity	Unit rate	Amount
A35 Projections	(Continued)		Brought Forward :	329,650
General				
21 Parapet		300 m	400.00	120,000
22 Column cladding - assume non required			note	
TOTAL : \$		1 Sum	449,700.00	449,700

B1 PARTITIONS & DOORS		Quantity	Unit rate	Amount
B11 Partitions				
1	P2D Partition	13 m2	65.40	850
	- 92mm metal stud	13 m2	35.00	455
	- 16mm gypsum board	13 m2	30.00	390
2	P2E Partition	6 m2	80.00	480
	- 92mm metal stud	6 m2	35.00	210
	- R-12 batt insulation	6 m2	15.00	90
	- 16mm gypsum board	6 m2	30.00	180
3	P2G Partition	201 m2	90.00	18,090
	- 152mm metal stud	201 m2	45.00	9,045
	- R-12 batt insulation	201 m2	15.00	3,015
	- 16mm gypsum board	201 m2	30.00	6,030
4	P2H Partition	42 m2	90.00	3,780
	- 152mm metal stud	42 m2	45.00	1,890
	- R-12 batt insulation	42 m2	15.00	630
	- 16mm gypsum board	42 m2	30.00	1,260
5	P3A Partition	39 m2	120.00	4,680
	- 152mm metal stud	39 m2	45.00	1,755
	- R-12 batt insulation	39 m2	15.00	585
	- 16mm gypsum board	39 m2	30.00	1,170
	- 16mm gypsum board	39 m2	30.00	1,170
6	P3D Partition	1,004 m2	120.00	120,480
	- 152mm metal stud	1,004 m2	45.00	45,180
	- R-12 batt insulation	1,004 m2	15.00	15,060
	- 16mm gypsum board	1,004 m2	30.00	30,120
	- 16mm gypsum board	1,004 m2	30.00	30,120
7	P3E Partition	183 m2	124.00	22,690
	- 152mm metal stud	183 m2	45.00	8,235
	- R-12 batt insulation	183 m2	15.00	2,745
	- 16mm gypsum board type X	183 m2	32.00	5,856
	- 16mm gypsum board type X	183 m2	32.00	5,856
8	P4C Partition	64 m2	150.00	9,600
	- 152mm metal stud	64 m2	45.00	2,880
	- R-12 batt insulation	64 m2	15.00	960
	- 16mm gypsum board	64 m2	30.00	1,920
	- 16mm gypsum board	64 m2	30.00	1,920
(Continued)				
Carried Forward :				180,650

B1 PARTITIONS & DOORS		Quantity	Unit rate	Amount
B11 Partitions	(Continued)		<b>Brought Forward :</b>	<b>180,650</b>
8 P4C Partition	(Continued)			
- 16mm gypsum board		64 m2	30.00	1,920
9 P4D Partition		59 m2	155.90	9,200
- 152mm metal stud		59 m2	45.00	2,655
- R-12 batt insulation		59 m2	15.00	885
- 16mm gypsum board type X		59 m2	32.00	1,888
- 16mm gypsum board type X		59 m2	32.00	1,888
- 16mm gypsum board type X		59 m2	32.00	1,888
10 P5C Partition		978 m2	180.00	176,040
- 152mm metal stud		978 m2	45.00	44,010
- R-12 batt insulation		978 m2	15.00	14,670
- 16mm gypsum board		978 m2	30.00	29,340
- 16mm gypsum board		978 m2	30.00	29,340
- 16mm gypsum board		978 m2	30.00	29,340
- 16mm gypsum board		978 m2	30.00	29,340
11 P5D Partition		137 m2	188.00	25,760
- 152mm metal stud		137 m2	45.00	6,165
- R-12 batt insulation		137 m2	15.00	2,055
- 16mm gypsum board type X		137 m2	32.00	4,384
- 16mm gypsum board type X		137 m2	32.00	4,384
- 16mm gypsum board type X		137 m2	32.00	4,384
- 16mm gypsum board type X		137 m2	32.00	4,384
12 P6C Partition		504 m2	223.00	112,390
- 152mm metal stud		504 m2	45.00	22,680
- R-12 batt insulation		504 m2	15.00	7,560
- 64mm metal stud		504 m2	30.00	15,120
- R-12 batt insulation		504 m2	13.00	6,552
- 16mm gypsum board		504 m2	30.00	15,120
- 16mm gypsum board		504 m2	30.00	15,120
- 16mm gypsum board		504 m2	30.00	15,120
- 16mm gypsum board		504 m2	30.00	15,120
13 P7A Partition		169 m2	197.00	33,290
- 152mm metal stud		169 m2	45.00	7,605
- R-12 batt insulation		169 m2	15.00	2,535
- 92mm metal stud		169 m2	35.00	5,915
- R-12 batt insulation		169 m2	13.00	2,197
	(Continued)			
			<b>Carried Forward :</b>	<b>537,330</b>



B1 PARTITIONS & DOORS		Quantity	Unit rate	Amount
B11 Partitions	(Continued)		<b>Brought Forward :</b>	<b>537,330</b>
13 P7A Partition	(Continued)			
- 16mm gypsum board type X		169 m2	32.00	5,408
- 25mm gypsum board		169 m2	57.00	9,633
14 P8A Partition		<b>389 m2</b>	<b>95.00</b>	<b>36,960</b>
- 152mm metal stud		389 m2	45.00	17,505
- R-12 batt insulation		389 m2	15.00	5,835
- 13mm cement board		389 m2	35.00	13,615
15 P8B Partition		<b>219 m2</b>	<b>125.00</b>	<b>27,380</b>
- 152mm metal stud		219 m2	45.00	9,855
- R-12 batt insulation		219 m2	15.00	3,285
- 16mm gypsum board		219 m2	30.00	6,570
- 13mm cement board		219 m2	35.00	7,665
16 P8C Partition		<b>55 m2</b>	<b>127.10</b>	<b>6,990</b>
- 152mm metal stud		55 m2	45.00	2,475
- R-12 batt insulation		55 m2	15.00	825
- 16mm gypsum board type X		55 m2	32.00	1,760
- 13mm cement board		55 m2	35.00	1,925
17 P8D Partition		<b>163 m2</b>	<b>122.00</b>	<b>19,890</b>
- 152mm metal stud		163 m2	45.00	7,335
- R-12 batt insulation		163 m2	15.00	2,445
- 13mm gypsum board		163 m2	27.00	4,401
- 13mm cement board		163 m2	35.00	5,705
18 P9A LVL Panels c/w custom CNC design		<b>95 m2</b>	<b>225.10</b>	<b>21,380</b>
- 51mm LVL panels		95 m2	150.00	14,250
- custom CNC design allowance		95 m2	75.00	7,125
19 P9C LVL Panels c/w custom CNC design		<b>48 m2</b>	<b>275.00</b>	<b>13,200</b>
- 51mm LVL panels		48 m2	150.00	7,200
- custom CNC design allowance		48 m2	75.00	3,600
- 92mm steel studs		48 m2	35.00	1,680
- R-12 batt insulation		48 m2	15.00	720
20 P9A LVL Panels		<b>306 m2</b>	<b>305.00</b>	<b>93,330</b>
- 80mm LVL panels		306 m2	230.00	70,380
- custom CNC design allowance		306 m2	75.00	22,950
			<b>Carried Forward :</b>	<b>756,460</b>

B1 PARTITIONS & DOORS		Quantity	Unit rate	Amount
B11 Partitions	(Continued)		<b>Brought Forward :</b>	756,460
21	P10A glazed interior partition	376 m2	570.00	214,320
22	2.4x2m interior glazing	24 m2	550.00	13,200
23	2.4x1m interior glazing transom	67 m2	550.00	36,850
24	Glazed guardrail c/w SS cap	115 m	650.00	74,750
25	Glazed guardrail c/w SS railings	20 m	600.00	12,000
26	Blocking, backing, etc.		Allow	10,000
27	Firestopping, caulking & sealants		Allow	7,500
<b>B11 Partitions TOTAL : \$</b>		<b>5,189 m2</b>	<b>216.82</b>	<b>1,125,100</b>
B12 Doors				
1	Single glazed doors (P10A) c/w standard hardware	10 ea.	2,100.00	21,000
2	Double glazed doors (P10A)	8 pair	3,950.00	31,600
3	Hollow metal door c/w frame and standard hardware, single	76 No.	1,800.00	136,800
4	Hollow metal door c/w frame and standard hardware, double	3 pair	3,450.00	10,350
5	Sliding door c/w frame and standard hardware allowance	12 No.	3,500.00	42,000
6	Allowance for hardware upgrade, allow		Allow	27,000
<b>B12 Doors TOTAL : \$</b>		<b>108 No.</b>	<b>2,488.89</b>	<b>268,800</b>

B2 FINISHES		Quantity	Unit rate	Amount
B21 Floor Finishes				
1	Sealed concrete finish	5,085 m2	45.00	228,830
2	PLT-3 Porcelain tile	202 m2	118.00	23,840
3	PLT-4 Porcelain tile (mozaic floor)	3 m2	150.00	450
4	Tactile warning area at top of stairs	8 m2	550.00	4,400
5	WDF - IPE flooring	103 m2	400.00	41,200
6	Bases, rubber	3,079 m	15.00	46,190
B21 Floor Finishes TOTAL : \$		5,393 m2	63.95	344,900
B22 Ceiling Finishes				
1	C1 Acoustic GWB ceiling	368 m2	108.00	39,740
	- 65mm suspension system	368 m2	35.00	12,880
	- 22mm furring channel	368 m2	25.00	9,200
	- 16mm gypsum board	368 m2	30.00	11,040
	- paint	368 m2	18.00	6,624
2	C1B Acoustic GWB ceiling	22 m2	75.00	1,650
	- 22mm furring channel	22 m2	25.00	550
	- 16mm gypsum board type X	22 m2	32.00	704
	- paint	22 m2	18.00	396
3	C1C Acoustic GWB ceiling	220 m2	123.00	27,060
	- 65mm suspension system	220 m2	35.00	7,700
	- R12 batt insulation	220 m2	15.00	3,300
	- 22mm furring channel	220 m2	25.00	5,500
	- 16mm gypsum board	220 m2	30.00	6,600
	- paint	220 m2	18.00	3,960
4	C2 Suspended metal panel ceiling	88 m2	310.00	27,280
	- 65mm suspension system	88 m2	35.00	3,080
	- 22mm furring channel	88 m2	25.00	2,200
	- 40mm perforated metal panels, w/ wood grain finish	88 m2	250.00	22,000
Carried Forward :				95,730

B2 FINISHES		Quantity	Unit rate	Amount
B22 Ceiling Finishes	(Continued)		Brought Forward :	95,730
5	C3A Suspended wood ceiling	87 m2	475.10	41,330
	- 65mm suspension system	87 m2	35.00	3,045
	- batt insulation	87 m2	15.00	1,305
	- 22mm strapping	87 m2	25.00	2,175
	- 32mm wood boards (IPE)	87 m2	400.00	34,800
6	C3B Suspended linear wood grille ceiling	844 m2	160.00	135,040
	- 51mm T-bar suspension system	844 m2	75.00	63,300
	- 50mm crosspiece backer	844 m2	40.00	33,760
	- 57mm linear wood ceiling system (Douglas Fir)	844 m2	45.00	37,980
7	C3C Suspended perforated wood ceiling	920 m2	377.00	346,840
	- 41mm Z-grid suspension system	920 m2	40.00	36,800
	- R-12 batt insulation	920 m2	15.00	13,800
	- 22mm furring channel	920 m2	22.00	20,240
	- 17mm perforated wood panels (Topperfo Micro w/ Douglas Fir Veneer)	920 m2	300.00	276,000
8	C4 - Stretched fabric ceiling	1,479 m2	350.00	517,650
9	S2 Exterior IPE wood soffit	36 m2	475.00	17,100
10	S3 Exterior aluminum panel cladding	60 m2	250.00	15,000
11	Paint to exposed structure	1,501 m2	20.00	30,020
12	Bulkheads allowance	1 sum	45,000.00	45,000
B22 Ceiling Finishes	TOTAL : \$	5,625 m2	221.10	1,243,700
B23 Wall Finishes				
1	Paint finish to interior partitions and interior of exterior wall	6,779 m2	15.00	101,690
2	Paint to CIP concrete walls	3,864 m2	10.00	38,640
3	Paint to doors	80 no.	75.00	6,000
			Carried Forward :	146,330

B2 FINISHES		Quantity	Unit rate	Amount
B23 Wall Finishes	(Continued)		Brought Forward :	146,330
4	PLT1 - Porcelain tile	469 m2	120.00	56,280
5	Full height fabric wrapped acoustic panels	184 m2	275.00	50,600
B23 Wall Finishes		TOTAL : \$	11,296 m2	22.42
				253,200

B3 FITTINGS & EQUIPMENT		Quantity	Unit rate	Amount
B31 Fittings & Fixtures				
1	LVL bench in amphitheater	10 ea	4,000.00	40,000
2	LVL stairs and landing	1 sum	8,000.00	8,000
3	Washroom accessories, allow	1 Sum	34,380.00	34,380
	- BC1 baby change station	4 ea	500.00	2,000
	- GB1 grab bar	11 No.	150.00	1,650
	- GB2 grab bar	7 No.	200.00	1,400
	- GB3 grab bar	0 No.	210.00	0
	- HD hand dryer	12 No.	750.00	9,000
	- HK coat hook	37 No.	30.00	1,110
	- MR mirror	16 m2	200.00	3,200
	- ND recessed napkin disposal	25 No.	150.00	3,750
	- RWWP recessed wall waste receptor	14 No.	125.00	1,750
	- SD1 soap dispenser, wall mounted	10 ea	150.00	1,500
	- SD2 soap dispenser, counter top mounted	18 ea	100.00	1,800
	- SF shelf	28 ea	75.00	2,100
	- ST shower seat	1 ea	300.00	300
	- TD napkin/tampon dispenser	3 No.	80.00	240
	- TT toilet tissue dispenser	25 No.	160.00	4,000
	- SCT shower rod & curtain	1 No.	580.00	580
4	Toilet and shower partitions	11 No.	1,945.50	21,400
	- standard cubicle	6 No.	800.00	4,800
	- barrier free	9 No.	1,100.00	9,900
	- urinal	3 No.	400.00	1,200
	- glazed shower partition w/w door	1 ea	5,500.00	5,500
5	SS countertop c/w build up wall in washroom allowance	6 m	2,500.00	15,000
6	Janitor utility shelf and mop holder, allow	1 No.	250.00	250
7	Roller shutters on exterior wall window, allow	1 sum	45,000.00	45,000
8	Copy center millwork allowance	3 ea	800.00	2,400
9	Servery center millwork allowance	7 ea	1,100.00	7,700
10	GL12 - Whiteboard	4 ea	7,500.00	30,000
Carried Forward :				204,130

[illegible]

C1 MECHANICAL	Quantity	Unit rate	Amount
<b>C11 Plumbing &amp; Drainage</b>			
1 Fixtures & rough-in	1 Sum	125,320.00	125,320
- WC-1, water closet, wall mt'd electronic faucet, ECO powered	15 No.	1,400.00	21,000
- WC-2, water closet, wall mt'd, HC electronic faucet, ECO powered	12 No.	1,460.00	17,520
- LAV-1, Vanity lavatory (wash sink- 2 station c/w faucets- electronic)	6 Set	3,000.00	18,000
- LAV-2, Vanity lavatory (wash sink- 1 station c/w faucets- electronic)	12 No.	1,600.00	19,200
- EEW1, eyewash in station, HC c/w Tempered MV, HC	1 No.	2,500.00	2,500
- SK-1, S.S sink , single bowl, CT - 316 SS	4 No.	900.00	3,600
- SK-2, S.S sink , single bowl, CT -304 SS	3 No.	800.00	2,400
- SK-3, SS Lab sink, 316 SS self stand	2 No.	2,000.00	4,000
- JS-1, Janitor sink	3 No.	700.00	2,100
- SH-1, Shower head c/w MV	1 No.	700.00	700
- SH-2, Shower head c/w MV & Hand sp ray	1 No.	900.00	900
- WFS-1, water fountain	3 No.	2,600.00	7,800
- Fixture rough in	63 No.	400.00	25,200
- Rough in to coffee maker	1 No.	400.00	400
2 Domestic water	1 Sum	206,950.00	206,950
- Water meter & backflow preventer (BMS out put)	1 No.	10,000.00	10,000
- Water meter- install water meter provided by city	1 No.	2,000.00	2,000
- DHWT-1/2, DHW tank, Natural gas fired boiler, 205 kw, 492 l	2 No.	38,000.00	76,000
- RCP-1, DHW Recirculation pump	1 No.	2,000.00	2,000
- PDW-1/2, DW Booster pump Packaged, 5.7 l/s @ 18.3 m head, 3 HP	1 Set	20,000.00	20,000
- Piping	850 m	70.00	59,500
- Insulation	850 m	15.00	12,750
- Incoming main- 100 mm dia	12 m	215.00	2,580
- Insulation	1 Sum	1,200.00	1,200
- ET	1 No.	800.00	800
- MX-DHW mixing valve, main	1 No.	3,200.00	3,200
- line mixing valve	16 No.	220.00	3,520
- HB-1, Wall hydrant, NF	2 No.	400.00	800
- HB-2, Wall hydrant, NF	1 No.	400.00	400
- HU to mechanical c/w water meter	2 No.	3,000.00	6,000
- Valves, WHA, HB etc, allow	1 Sum	5,000.00	5,000
- Cap on pipe for Future connection	8 No.	150.00	1,200
Carried Forward :			332,270.



C1 MECHANICAL		Quantity	Unit rate	Amount
C11	Plumbing & Drainage (Continued)		Brought Forward :	332,270
3	Sanitary drainage & vent	6,271 m2	14.70	91,980
	- Piping, AG, allow	235 m	94.00	22,090
	- Piping, BG, allow	73 m	90.00	6,570
	- Piping, BG up to 150 mm dia	68 m	110.00	7,480
	- Condensate pipe, allow	120 m	40.00	4,800
	- Vent piping, allow	390 m	80.00	31,200
	- CO	22 No.	190.00	4,180
	- FCO	4 No.	280.00	1,120
	- FD-2	2 No.	450.00	900
	- FD-1	14 No.	340.00	4,760
	- FD-3, Elevator	1 No.	600.00	600
	- FFD	4 No.	400.00	1,600
	- Sump pit in mech room	1 Sum	1,600.00	1,600
	- VTR, allow	5 No.	300.00	1,500
	- Back water valve-150 mm dia	1 No.	800.00	800
	- SD-1, Shower drain	2 No.	240.00	480
	- Flexible coupling, 150 mm dia	2 No.	800.00	1,600
	- VTR	2 No.	350.00	700
		1 Sum	10,230.00	10,230
4	Acid Drainage			
	- Piping, BG	25 m	145.00	3,625
	- Vent Piping	15 m	135.00	2,025
	- FCO	1 No.	325.00	325
	- Neutralizing tank	1 No.	3,800.00	3,800
	- FD-3	1 No.	450.00	450
5	Storm Drainage	6,271 m2	8.80	55,040
	- Piping, AG	341 m	94.00	32,054
	- Piping, AG, 150 mm dia	6 m	110.00	660
	- Piping, BG up to 100 mm dia	17 m	90.00	1,530
	- Piping, BG up to 150 mm dia	32 m	100.00	3,200
	- CO	12 No.	200.00	2,400
	- FCO	1 No.	300.00	300
	- RD	5 No.	500.00	2,500
	- RD-1	12 No.	500.00	6,000
	- RD-2	8 No.	500.00	4,000
	- AD-1, Area drain	4 No.	600.00	2,400
6	Natural gas distribution	1 Sum	33,350.00	33,350
	- Gas meter	3 No.	5,000.00	15,000
	- Piping, up to 50 mm dia	100 m	110.00	11,000
	- HU to Boiler	5 No.	600.00	3,000
	(Continued)			
Carried Forward :				522,870

C1 MECHANICAL		Quantity	Unit rate	Amount
C11 Plumbing & Drainage	(Continued)		Brought Forward :	522,870
6 Natural gas distribution	(Continued)			
- HU to DHWT	2 No.	450.00	900	
- HU to Burner	1 No.	450.00	450	
- Valves & PRV, allow	1 Sum	3,000.00	3,000	
7 Compressed air	1 Sum	31,900.00	31,900	
- COMP-1, Air compressor, 15 HP	1 No.	12,000.00	12,000	
- Piping	155 m	80.00	12,400	
- PRV (main)	1 No.	1,800.00	1,800	
- HU to Equipment- Lab c/w point of use regulator	5 No.	500.00	2,500	
- Cap off for future connection c/w PRV	4 No.	800.00	3,200	
8 Fuel oil system for generator- Not required	1 Sum	0.00	0	
9 Domestic water- in site mechanical	1 Sum	53,280.00	53,280	
- Piping 150 mm dia c/w trenching & bedding for fire	48 m	240.00	11,520	
- Piping, 100 mm dia for fire department connection c/w trenching & bedding	4 m	210.00	840	
- Piping, 150mm dia for sprinkler system, install in Existing building	94 m	265.00	24,910	
- Fire department connection	1 No.	1,000.00	1,000	
- HB-2, NFHB	2 No.	600.00	1,200	
- Piping for Fire Hydrant	43 m	235.00	10,105	
- Flexible joint- 100 mm dia	1 No.	1,000.00	1,000	
- Flexible joint- 150 mm dia	1 No.	1,200.00	1,200	
- CTE	1 No.	1,500.00	1,500	
10 Sanitary drainage & vent- mechanical site	1 Sum	5,460.00	5,460	
- Piping, BG c/w trenching & bedding -100 mm dia	19 m	140.00	2,660	
- FCO	2 No.	450.00	900	
- Grease interceptor, future	1 Nil	0.00	0	
- CAP	2 No.	150.00	300	
- Connection to existing pipe in existing building	1 Sum	1,600.00	1,600	
11 Storm Drainage- Site work	1 Sum	2,960.00	2,960	
- Piping, BG up to 100 mm dia c/w trenching & bedding	4 m	140.00	560	
	(Continued)			
			Carried Forward :	616,470

C1 MECHANICAL		Quantity	Unit rate	Amount
C11 Plumbing & Drainage	(Continued)		<b>Brought Forward :</b>	<b>616,470</b>
11 Storm Drainage- Site work	(Continued)			
- Connection to site	2 No.	1,200.00	2,400	
12 Natural Gas- in Site mech	1 Sum	24,000.00	24,000	
- Piping-50 mm dia c/w excavation and back fill	43 m	160.00	6,880	
- Piping-50 mm dia within existing building	126 m	120.00	15,120	
- Tie in to existing main	1 No.	1,000.00	1,000	
- Seismic shutt off valve-50 mm dia	1 No.	1,000.00	1,000	
13 Miscellaneous	1 Sum	4,000.00	4,000	
- Setting out & sleeving	1 Sum	2,000.00	2,000	
- Tagging & identification	1 Sum	800.00	800	
- Testing & disinfecting	1 Sum	1,200.00	1,200	
C11 Plumbing & Drainage	<b>TOTAL : \$</b>	<b>6,271 m2</b>	<b>102.77</b>	<b>644,500</b>
C12 Fire Protection				
1 Fire stand Pipe	6,271 m2	5.10	31,750	
- Combined Riser main	90 m	160.00	14,400	
- Hose valve & connection pipe	10 No.	700.00	7,000	
- Fire department connection pipe	70 m	135.00	9,450	
- Fire department connection	1 No.	900.00	900	
2 Fire Pump & Jokey pump, Not incl.	1 Sum	0.00	0	
3 Sprinkler system	6,271 m2	26.00	163,300	
- For floor areas	6,271 m2	24.00	150,504	
- Premium for Side wall head	29 No.	200.00	5,800	
- Premium for Dry sprinkler (2 Valve)	1 Sum	7,000.00	7,000	
4 Fire extinguishers	6,271 m2	1.40	9,000	
- FE	6 No.	300.00	1,800	
- FE c/w recessed Cabinet	16 No.	450.00	7,200	
C12 Fire Protection	<b>TOTAL : \$</b>	<b>6,271 m2</b>	<b>32.55</b>	<b>204,100</b>

C1 MECHANICAL	Quantity	Unit rate	Amount
<b>C13 HVAC</b>			
1 Heat generation - Supplementary heating	1 Sum	83,500.00	83,500
- 117 kw gas fired condensing boiler	5 No.	9,000.00	45,000
- Primary piping	1 Sum	15,000.00	15,000
- Vent. allow	50 m	250.00	12,500
- Vent cap	5 No.	400.00	2,000
- P-1 to 5, Boiler circulation pump	5 No.	1,800.00	9,000
2 Electric Heating	1 Sum	9,100.00	9,100
- FF-1 to 7, force flow heater, 4 kw	7 No.	1,300.00	9,100
3 Cooling Chiller	1 Sum	125,000.00	125,000
- ACCH-1, Air cooled chille unit, 357 kw	1 No.	125,000.00	125,000
4 Heat pump System	1 Sum	204,780.00	204,780
- AHP-1, Air source heat pump packag c/w Cir.pump, 313.3 kw/299.8 kw heat/cool, integral switch & valve	1 No.	145,000.00	145,000
- Primary piping, heat, 100 mm dia,	47 m	180.00	8,460
- Primary piping, Cool, 200	48 m	365.00	17,520
- Insulation (inside)	29 m	30.00	870
- Insulation c/w Weather proofing in roof	42 m	80.00	3,360
- Piping, up to 50 mm dia	35 m	80.00	2,800
- Insulation	36 m	17.00	612
- BT-1/2 (Buffer tank), for Cool & heat	2 No.	3,500.00	7,000
- Connection to heat pump (Heat & cool)	2 Unit	2,000.00	4,000
- Heat trace	42 m	80.00	3,360
- Glycol, allow	1 Sum	4,000.00	4,000
- HU to HX	2 No.	2,500.00	5,000
- Flow meter on Main, 200 mm dia , install only	1 No.	1,800.00	1,800
- Flow meter on Main, 100 mm dia , install only	1 No.	1,000.00	1,000
5 Liquid heat transfer- Heating, Infloor/ reheat	6,271 m2	77.00	482,660
- HE-1, 385 kw	1 No.	16,000.00	16,000
- HU to HE	1 No.	1,800.00	1,800
- P-6/7, Circulation Pump- Secondary heating, 12 l/s, 15.5 m head	2 No.	5,500.00	11,000
- VFD	2 No.	1,500.00	3,000
- Piping up to 50 mm dia, allow	1,245 m	70.00	87,150
- Piping up to 75 mm dia, allow	150 m	110.00	16,500
(Continued)			
Carried Forward :			905,040

C1 MECHANICAL		Quantity	Unit rate	Amount
C13 HVAC	(Continued)		Brought Forward :	905,040
5	Liquid heat transfer- Heating, Infloor/ reheat (Continued)			
	- Piping 100 mm dia, allow	48 m	180.00	8,640
	- Piping 150 mm dia, allow	142 m	265.00	37,630
	- Insulation , up to 75 mm dia	1,395 m	17.00	23,715
	- Insulation , up to 150 mm dia	190 m	28.00	5,320
	- Infloor heating area	4,938 m2	32.00	158,016
	- Manifold (for heat / cool)	45 No.	800.00	36,000
	- Circulation pump for manifold	45 No.	300.00	13,500
	- ET-1/AS-1	1 Sum	3,600.00	3,600
	- Pot feeder	1 No.	800.00	800
	- By pass control valve	1 Sum	2,500.00	2,500
	- UH-1 to 4, 3 kw	4 No.	1,650.00	6,600
	- HU to FCU	2 No.	400.00	800
	- HU to RHC	48 No.	380.00	18,240
	- HU to UH	4 No.	400.00	1,600
	- HU to manifold	45 No.	450.00	20,250
	- Valve & cap for district energy connection	2 No.	1,500.00	3,000
	- HU to MAU	2 No.	1,500.00	3,000
	- Flow meter for each level- install only	5 No.	400.00	2,000
	- Flow meter on Boiler loop, 100 mm dia , install	1 No.	1,000.00	1,000
	- Flow meter on main loop, 100 mm dia , install	1 No.	1,000.00	1,000
6	Liquid heat transfer- HRV heating, allow	1 Sum	15,000.00	15,000
7	Liquid heat transfer - Chilled water	6,271 m2	48.60	304,660
	- HE-2, 580 kw, Glycol water to chilled water	1 No.	18,000.00	18,000
	- HU to HE	1 No.	2,500.00	2,500
	- P-8/9, Circulation Pump- Secondary cooling, 18.4 @ 19.3 m head, 7.5 HP	2 No.	6,000.00	12,000
	- P-10, 4.4 l/s @ 6.3 m head HRV coil circulator	1 No.	3,500.00	3,500
	- P-11/12/13, HRV coil circulator	3 No.	1,500.00	4,500
	- VFD	2 No.	2,000.00	4,000
	- Piping up to 50 mm dia, allow	1,420 m	70.00	99,400
	- Piping up to 75 mm dia, allow	140 m	110.00	15,400
	- Piping 100 mm dia, allow	58 m	180.00	10,440
	- Piping 150 mm dia	92 m	285.00	26,220
	(Continued)			
Carried Forward :				1,224,700

C1 MECHANICAL		Quantity	Unit rate	Amount
C13 HVAC	(Continued)		<b>Brought Forward :</b>	<b>1,224,700</b>
7 Liquid heat transfer - Chilled water	(Continued)			
- Piping, allow for HRV-1/2	40 m	120.00	4,800	
- Insulation, up to 75 mm dia	1,560 m	17.00	26,520	
- Insulation, up to 150 mm dia	150 m	26.00	3,900	
- Insulation, allow for HRV	40 m	26.00	1,040	
- HU to manifold	48 No.	600.00	28,800	
- ET-1/AS-1	1 Sum	3,000.00	3,000	
- Pot feeder	1 No.	800.00	800	
- By pass control valve	1 Sum	2,500.00	2,500	
- HU to FCU	30 No.	400.00	12,000	
- HU to HC	48 No.	380.00	18,240	
- HU to HRV	2 No.	1,800.00	3,600	
- Flow meter for each level- install only	5 No.	400.00	2,000	
- Flow meter on Main, 150 mm dia , install only	1 No.	1,500.00	1,500	
8 Air distribution equipment	6,271 m2	65.30	409,250	
- HRV-1, 9,450 l/s C/W HC,CC, Heat recovery, 100 % FA	1 No.	260,000.00	260,000	
- HRV-2, 1,900 l/s C/W HC,CC, Heat recovery, 100 % FA	1 No.	52,000.00	52,000	
- MAU-1/2, 1250 l/s @ 312.5 Pa	2 No.	17,000.00	34,000	
- FCU, 1.4 kw cool only	20 No.	1,000.00	20,000	
- FCU, 7.7 kw cool only, CU	1 No.	3,500.00	3,500	
- FCU, 6.8 kw Cool/ 3.9 kw Heat, FCU	1 No.	3,750.00	3,750	
- FCU, 10.7 kw cool	3 No.	4,500.00	13,500	
- FCU, 13.9 kw cool, FCU	2 No.	6,000.00	12,000	
- FCU, XX kw cool only	2 No.	1,000.00	2,000	
- FCU, 19.5kw cool/3.9 kw heat FCU,	1 No.	8,500.00	8,500	
9 Air distribution ductwork & devices	6,271 m2	75.20	471,550	
- Ductwork	10,500 kg	16.50	173,250	
- Cir. Duct, up to 250 mm dia	330 m	38.00	12,540	
- Cir. Duct, up to 450 mm dia	300 m	70.00	21,000	
- Cir. Duct, up to 650 mm dia	60 m	140.00	8,400	
- Insulation	1,250 m2	39.00	48,750	
- Accoustic insulation	490 m2	49.00	24,010	
- Insulation on roof	70 m2	75.00	5,250	
- S-1, Displacement (500X300)	13 No.	300.00	3,900	
- S-1, Displacement (1150X450)	48 No.	1,000.00	48,000	
- S-2, Linear diff- 1 Slot	10 m	200.00	2,000	
	(Continued)			
			<b>Carried Forward :</b>	<b>2,105,500</b>

C1 MECHANICAL		Quantity	Unit rate	Amount
C13 HVAC	(Continued)		Brought Forward :	2,105,500
9 Air distribution ductwork & devices	(Continued)			
- S-3/5, Linear diff- 2 Slot -supply with plenum	43 m	240.00	10,320	
- S-3/5, Linear diff- 2 Slot -return	19 m	200.00	3,800	
- SAG	23 No.	140.00	3,220	
- RA boot duct (acc)	19 No.	600.00	11,400	
- RAG	23 No.	120.00	2,760	
- RHC	48 No.	600.00	28,800	
- SAV c/w Airflow measuring sensor, install only	49 No.	400.00	19,600	
- MD-1200X900	1 No.	1,000.00	1,000	
- MD	5 No.	600.00	3,000	
- FD-2250X700	1 No.	1,400.00	1,400	
- FD-1800X800	1 No.	1,100.00	1,100	
- FD, main	5 No.	800.00	4,000	
- FD	23 No.	400.00	9,200	
- L-1, 1000X500 c/w pressure control damper	1 No.	800.00	800	
- T/Duct	29 No.	600.00	17,400	
- TG, allow	1 Sum	2,000.00	2,000	
- FAI, 1200X900	1 No.	900.00	900	
- FAI, 1800X900	1 No.	1,350.00	1,350	
- Back draft damper c/w T/duct & louvre-1000X500	1 No.	1,200.00	1,200	
- Intake louvre	2 No.	600.00	1,200	
10 Exhaust & ventilation	6,271 m2	30.30	189,760	
- EF-1, 570 l/s @ 125 Pa water entry rm	1 No.	2,000.00	2,000	
- EF-2, 350 l/s @ 100 Pa Communication rm	1 No.	1,350.00	1,350	
- EF-3, 566 l/s @ 75 Pa Electrical rm	1 No.	2,000.00	2,000	
- EF-4, 150 l/s @ 190 Pa Janitor rm	1 No.	1,000.00	1,000	
- EF-5, 415 l/s @ 100 Pa, workshop	4 No.	1,600.00	6,400	
- EF-6, XXX l/s, allow for spray booth	1 No.	5,000.00	5,000	
- EF-7/8, XXX l/s, allow for fume hood	2 No.	3,000.00	6,000	
- TF-1/2/3, 350 l/s @ 100 Pa	3 No.	1,350.00	4,050	
- SF-1, 570 l/s @ 125 Pa mechanical rm ventilation	1 No.	2,000.00	2,000	
- SPF-1/2, 3300 l/s @ 125 Pa for stairwell pressurization	2 No.	7,500.00	15,000	
- SEF-1, Smoke exhaust fan, 28,300 l/s	1 No.	40,000.00	40,000	
- Duct work	1,560 kg	16.50	25,740	
- Circ. Duct, up to 250 mm dia	195 m	38.00	7,410	
- Circ. Duct, up to 350 mm dia	52 m	55.00	2,860	
	(Continued)			
			Carried Forward :	2,295,260

C1 MECHANICAL	Quantity	Unit rate	Amount
<b>C13 HVAC</b> (Continued)		<b>Brought Forward :</b>	<b>2,295,260</b>
<b>10 Exhaust &amp; ventilation</b> (Continued)			
- Roof insulation, allow	25 m2	75.00	1,875
- EG	40 No.	90.00	3,600
- E/Louvre/ intske	2 No.	300.00	600
- FD	18 No.	400.00	7,200
- L-1, 1800X500	1 No.	800.00	800
- L-1, 300X300	1 No.	200.00	200
- L-1, 600X300	1 no.	250.00	250
- MD	10 No.	600.00	6,000
- MD-2100X800 for Smoke fan	1 No.	2,500.00	2,500
- Exhaust plenum	6 m2	220.00	1,320
- Duct work, allow for spray booth	1 Sum	15,000.00	15,000
- Ductwork for smoke fan	1 Sum	4,000.00	4,000
- Dryer vent	1 Sum	1,600.00	1,600
- Duct work for fume hood X 2	1 Sum	24,000.00	24,000
<b>11 Generator exhaust system - Deleted</b>	<b>1 Nil</b>	<b>0.00</b>	<b>0</b>
<b>12 Humidification- Not required</b>	<b>1 Nil</b>	<b>0.00</b>	<b>0</b>
<b>13 24/ 7 cooling, allow</b>	<b>1 Sum</b>	<b>10,000.00</b>	<b>10,000</b>
<b>14 Testing, adjusting &amp; balancing</b>	<b>1 Sum</b>	<b>40,000.00</b>	<b>40,000</b>
<b>15 Micellaneous</b>	<b>1 Sum</b>	<b>23,000.00</b>	<b>23,000</b>
- Setting out & sleeving	1 Sum	4,000.00	4,000
- Tagging & identification	1 Sum	4,000.00	4,000
- Cranage	1 No.	15,000.00	15,000
<b>C13 HVAC TOTAL : \$</b>	<b>6,271 m2</b>	<b>377.66</b>	<b>2,368,300</b>
<b>C14 Controls</b>			
<b>1 DDC controls</b>	<b>6,271 m2</b>	<b>86.20</b>	<b>540,500</b>
- Heat pump (package c/w 2 pump)	1 No.	5,000.00	5,000
- Air cooled chiller	1 No.	5,000.00	5,000
- Boiler	5 No.	2,000.00	10,000
- Pumps for heating / cooling	13 No.	1,500.00	19,500
- Circ pump for manifold	45 No.	800.00	36,000
- Manifold	45 No.	1,000.00	45,000
(Continued)			
<b>Carried Forward :</b>			<b>540,500</b>



C1 MECHANICAL		Quantity	Unit rate	Amount
C14 Controls	(Continued)		Brought Forward :	540,500
1 DDC controls	(Continued)			
- sump pump (elevator)	1 No.	1,000.00	1,000	
- Domestic hot water circ	1 No.	1,000.00	1,000	
- DW Booster pump pkg	1 Sum	2,400.00	2,400	
- EF/SF/TF	12 No.	800.00	9,600	
- Stair pressurization system	2 No.	2,000.00	4,000	
- Smoke exhaust system	1 No.	1,600.00	1,600	
- MUA w/ HC	2 No.	3,000.00	6,000	
- HRV	2 No.	8,000.00	16,000	
- Grease Int.	1 Sum	2,400.00	2,400	
- Air compressor	1 No.	1,600.00	1,600	
- Split A/C	1 No.	1,200.00	1,200	
- HX	2 No.	2,000.00	4,000	
- RHC (heating&cooling)	48 No.	1,200.00	57,600	
- FC unit, heating & cooling	2 No.	2,000.00	4,000	
- FC unit, cooling	28 No.	1,200.00	33,600	
- UH/FFH	11 No.	800.00	8,800	
- Supply air valve	49 No.	1,600.00	78,400	
- Exhaust air valve	11 No.	1,400.00	15,400	
- Flow meter Natural gas interface	5 No.	600.00	3,000	
- Flow meter DW incoming interface	1 No.	600.00	600	
- MD	17 No.	600.00	10,200	
- Control valves on CHW/HW	1 Sum	5,000.00	5,000	
- Natural gas meter	3 No.	1,200.00	3,600	
- Flow meter (hot / Cool)	10 No.	1,500.00	15,000	
- Flow meter, 100 mm dia	3 No.	3,500.00	10,500	
- Flow meter, 150 mm dia	1 No.	4,500.00	4,500	
- Flow meter, 200 mm dia	1 No.	6,000.00	6,000	
- CO2	1 No.	2,000.00	2,000	
- Weather station	1 Sum	12,000.00	12,000	
- Additional work for lab not included (budget included in 100K)	1 Sum	0.00	0	
- Miscellaneous	1 Sum	5,000.00	5,000	
- Window contacts interface, allow	80 No.	800.00	64,000	
- BAS & workstation	1 Sum	30,000.00	30,000	
2 Measurement & verification, allow	1 Sum	60,000.00	60,000	
C14 Controls	TOTAL : \$	6,271 m2	95.76	600,500

C2 ELECTRICAL	Quantity	Unit rate	Amount
<b>C21 Service &amp; Distribution</b>			
<b>1 Normal Power Distribution</b>	<b>1 Sum</b>	<b>294,320.00</b>	<b>294,320</b>
- 1000A 600V Main distribution panel c/w disconnect switch, SPD & feeder breakers	1 No.	22,500.00	22,500
- Modify existing Central Utility Plant Distribution, add new 1000A 3P 600V breaker	1 No.	15,600.00	15,600
- 600A 600V Distribution panel "CDP-6N4M1"	1 No.	12,000.00	12,000
- 500kVA 600V-208/120V Transformer "TX-A"	1 No.	25,200.00	25,200
- 2000A 208/120V Main distribution panel c/w Main 2000A ACB breaker, feeder breakers, metering & SPD	1 No.	77,800.00	77,800
- 600A 208/120V Distribution panel "CDP-2N1" c/w 1-400A, 1-225A, 1-150A & 3-100A brk	1 No.	11,300.00	11,300
- 600A 208/120V Distribution panel "CDP-2NG1" c/w 1-400A, 1-225A, 1-200A & 1-100A brk	1 No.	9,400.00	9,400
- 600A 208/120V Distribution panel "CDP-2N2" c/w 1-225A, 1-150A & 3-100A brk	1 No.	8,200.00	8,200
- 600A 208/120V Distribution panel "CDP-2N3" c/w 1-225A, 1-200A, 2-150A & 4-100A brk	1 No.	11,900.00	11,900
- 600A 208/120V Distribution panel "CDP-2N4M1" c/w 1-200A/3P breaker	1 No.	5,400.00	5,400
- 400A 208/120V Distribution panel "CDP-2NGM1" c/w 1-200A/3P breaker	1 No.	5,200.00	5,200
- 400A 208/120V Panel "2NGP2" c/w 84ccts	1 No.	3,800.00	3,800
- 400A 208/120V Panel "2N1P3" c/w 1-100A/3P main & 66ccts	1 No.	3,600.00	3,600
- 225A 208/120V Panel "2N1P1, 2N2P1, 2N3P1 & 2NGP1" c/w 132ccts	4 No.	6,400.00	25,600
- 225A 208/120V Panel "2N4P1" c/w 66ccts	1 No.	3,400.00	3,400
- 225A 208/120V Panel c/w 42ccts	3 No.	3,100.00	9,300
- 200A 208/120V Panel "2N3M1" c/w 66ccts	1 No.	3,300.00	3,300
- 200A 208/120V Panel "2N4L1, 2N4M2, & 2NGM2" c/w 42ccts	3 No.	3,100.00	9,300
- 100A 208/120V Panel c/w 66ccts	6 No.	3,200.00	19,200
- 100A 208/120V Panel "2N1P2, 2N1P4, 2N2P2 & 2NGL1" c/w 42ccts	4 No.	2,900.00	11,600
- 400A, 208/120V Splitter for elevator	1 No.	720.00	720
<b>2 Emergency Power</b>	<b>1 Sum</b>	<b>55,100.00</b>	<b>55,100</b>
- 500KW 600V/347V Generator - existing to remain	1 Nil	0.00	0
(Continued)			
Carried Forward :			349,420

C2 ELECTRICAL		Quantity	Unit rate	Amount
C21 Service & Distribution	(Continued)		<b>Brought Forward :</b>	<b>349,420</b>
2 Emergency Power	(Continued)			
- Add new 60A-3P breaker in existing generator panel board c/w special inspection & testing	1 Sum	8,000.00	8,000	
- 45kVA 600V to 208/120V Emergency transformer c/w disconnect switch	1 No.	3,800.00	3,800	
- 150A 3P Auto transfer switch	1 No.	21,700.00	21,700	
- 150A 208/120V Distribution panel "CDP-2EG1" c/w 3-100A/3P breakers & SPD	1 No.	7,100.00	7,100	
- 100A 208/120V Emergency Power panels c/w 42 ccts	5 No.	2,900.00	14,500	
3 Feeders - Normal & Emergency Power	1 Sum	133,160.00	133,160	
- 4 #400MCM + gnd in 91mmC	30 m	309.00	9,270	
- 4 #350MCM + gnd in 91mmC	215 m	286.00	61,490	
- 3 #350MCM + gnd in 78mmC	10 m	240.00	2,400	
- 4 #300MCM + gnd in 78mmC	30 m	262.00	7,860	
- 4 #4/0 + gnd in 63mmC	20 m	198.00	3,960	
- 4 #3/0 + gnd in 63mmC	120 m	178.00	21,360	
- 4 #2/0 + gnd in 53mmC	18 m	134.00	2,412	
- 4 #1/0 + gnd in 53mmC	25 m	119.00	2,975	
- 4 #3 + gnd in 35mmC	282 m	76.00	21,432	
4 Grounding & bonding	1 Sum	19,420.00	19,420	
- Main electrical room ground bus bar	25 m	240.00	6,000	
- Main communication room ground bus bar	1 No.	610.00	610	
- Electrical / communication rooms ground bus bar	7 No.	450.00	3,150	
- Ground rods	5 No.	340.00	1,700	
- #3/0 Ground green copper conductor	70 m	28.00	1,960	
- Ground system testing	1 Sum	6,000.00	6,000	
5 Future Photovoltaic System	1 Sum	5,880.00	5,880	
- 2x78mm C from main electrical room to roof for future Photovoltaic System	35 m	168.00	5,880	
6 Metering System	1 Sum	14,000.00	14,000	
- Metering system interconnected to BMS	1 Sum	14,000.00	14,000	
C21 Service & Distribution	<b>TOTAL : \$</b>	<b>6,271 m2</b>	<b>83.22</b>	<b>521,900</b>

C2 ELECTRICAL		Quantity	Unit rate	Amount
C22 Lighting, Devices & Heating				
1	Lighting Fixtures - supply, install & wiring	1 Sum	793,560.00	793,560
	- Type CA - Wall mounted vapor proof round light fixture c/w aluminium guard	3 No.	240.00	720
	- Type LE - Linear adjustable LED cove luminaire	31 m	540.00	16,740
	- Type LF - Recessed Linear LED luminaire c/w acrylic lens	56 m	565.00	31,640
	- Type LG - Recessed wet rated linear LED luminaire c/w acrylic lens	21 m	575.00	12,075
	- Type LH - 8' Surface mount IP66 vapor tight LED luminaire	6 No.	810.00	4,860
	- Type LH - 4' Surface mount IP66 vapor tight LED luminaire	47 No.	445.00	20,915
	- Type LJ - 4' Long LED wall mounted luminaire c/w wrap acrylic lens	39 No.	835.00	32,565
	- Type LL - 4" Square trimless downlight fixture c/w 42DEG optic	121 No.	450.00	54,450
	- Type LP - 4" Square trimless downlight multiple fixture c/w 42DEG optic	3 No.	920.00	2,760
	- Type LX - 6" Adjustable surface mount square downlight	29 No.	565.00	16,385
	- Type LY - Wet rated surface mount linear LED light fixture	30 m	580.00	17,400
	- Type L11 - LED Wall pack luminaire	10 No.	1,020.00	10,200
	- Type LA - 8' Linear direct / indirect light fixture	246 No.	1,120.00	275,520
	- Type LA - 4' Linear direct / indirect light fixture	60 No.	580.00	34,800
	- Type LB - 4' Linear direct / indirect light fixture	35 No.	580.00	20,300
	- Type LC - 8' Surface mount direct light fixture	60 No.	1,120.00	67,200
	- Type LC - 4' Surface mount direct light fixture	2 No.	580.00	1,160
	- Type LD - 4' Long surface mount direct light fixture	93 No.	580.00	53,940
	- Type LM - 4' Linear direct / indirect light fixture	3 No.	580.00	1,740
	- Type LN - 8' Linear direct / indirect light fixture	47 No.	1,120.00	52,640
	- Laser blade light	4 No.	520.00	2,080
	- Elevator pit light c/w switch	2 No.	380.00	760
	- Light fixtures conduit & wiring	6,271 m2	10.00	62,710
Carried Forward :				793,560

C2 ELECTRICAL		Quantity	Unit rate	Amount
C22	Lighting, Devices & Heating (Continued)		Brought Forward :	793,560
2	Exit/Emergency Lighting	1 Sum	24,020.00	24,020
	- Exit sign - single face	34 No.	290.00	9,860
	- Exit sign - double face	14 No.	320.00	4,480
	- Dual remote heads	8 No.	130.00	1,040
	- Emergency battery unit c/w dual remote heads	6 No.	450.00	2,700
	- Branch wiring for exit sign & remote heads	54 No.	110.00	5,940
3	Lighting Controls	1 Sum	98,090.00	98,090
	- Toggle switch	7 No.	125.00	875
	- Low voltage switch	2 No.	130.00	260
	- Low voltage switch - WP	2 No.	140.00	280
	- Low voltage override switch	1 No.	130.00	130
	- Dimmer switch	2 No.	280.00	560
	- Low voltage dimmer switch	54 No.	290.00	15,660
	- Switch bank	6 No.	520.00	3,120
	- Line voltage occupancy sensor - ceiling mount	25 No.	310.00	7,750
	- Line voltage occupancy sensor - wall mount	4 No.	180.00	720
	- Low voltage occupancy sensor - ceiling mount	59 No.	310.00	18,290
	- Low voltage occupancy sensor c/w override switch - wall mount	1 No.	195.00	195
	- Day light sensor - ceiling mount	42 No.	310.00	13,020
	- Vacancy sensor - ceiling mount	30 No.	310.00	9,300
	- Vacancy sensor - wall mount	60 No.	180.00	10,800
	- Vacancy sensor c/w manual ON / Automatic off	14 No.	195.00	2,730
	- Low voltage relay panel	4 No.	3,600.00	14,400
4	Power Outlets & Connections	1 Sum	189,230.00	189,230
	- 15A duplex receptacle	202 No.	140.00	28,280
	- 15A duplex receptacle - GFI	28 No.	155.00	4,340
	- 15A duplex receptacle - GFI c/w dedicated circuit for elevator	2 No.	170.00	340
	- 15A duplex receptacle - CPU	69 No.	140.00	9,660
	- 15A duplex receptacle - dedicated circuit	9 No.	155.00	1,395
	- 15A duplex receptacle - ceiling mount	14 No.	140.00	1,960
	- 15A duplex receptacle - floor mount	24 No.	275.00	6,600
	- 15A duplex receptacle, switched	86 No.	150.00	12,900
	- 15A duplex receptacle - stand-by power	1 No.	140.00	140
	(Continued)			
			Carried Forward :	1,104,900

C2 ELECTRICAL		Quantity	Unit rate	Amount
C22 Lighting, Devices & Heating	(Continued)		<b>Brought Forward :</b>	<b>1,104,900</b>
4 Power Outlets & Connections	(Continued)			
- 15A quad receptacle - dedicated circuit	1 No.	190.00	190	
- 15A quad receptacle - floor mount	3 No.	280.00	840	
- 15A quad receptacle, switched	9 No.	195.00	1,755	
- 15A quad receptacle - CPU	9 No.	190.00	1,710	
- 20A T-Slot duplex receptacle	40 No.	150.00	6,000	
- 20A T-Slot duplex receptacle - GFI	6 No.	160.00	960	
- 20A T-Slot duplex receptacle - WP	1 No.	180.00	180	
- 20A T-Slot duplex receptacle - GFI/WP	6 No.	190.00	1,140	
- 20A T-Slot duplex receptacle - house keeping	79 No.	150.00	11,850	
- 20A T-Slot duplex receptacle - dedicated circuit	183 No.	165.00	30,195	
- 20A T-Slot duplex receptacle - GFI - dedicated circuit	2 No.	180.00	360	
- 20A T-Slot duplex receptacle GFI/WP - dedicated circuit	3 No.	205.00	615	
- 20A T-Slot duplex receptacle - stand-by power	6 No.	170.00	1,020	
- 20A T-Slot duplex receptacle - ceiling mount	26 No.	150.00	3,900	
- 20A T-Slot quad receptacle	6 No.	210.00	1,260	
- 20A T-Slot quad receptacle - floor mount	30 No.	280.00	8,400	
- Power connection to door operator	14 No.	350.00	4,900	
- Power connection to hand dryer	15 No.	240.00	3,600	
- Power connection for plumbing fixtures	16 No.	120.00	1,920	
- Power connection for motorized projector screen	2 No.	320.00	640	
- Pedestal mounted power outlet	3 No.	560.00	1,680	
- Line voltage occupancy sensor to control switch receptacles - ceiling mount	18 No.	310.00	5,580	
- Emergency power off push button	12 No.	720.00	8,640	
- 1x27mm & 1x35mm conduit from car call bollard to hoisway (5 place)	1 Sum	760.00	760	
- 1x27mm conduit from cafe to ceiling space	4 No.	110.00	440	
- Branch wiring	6,271 m2	4.00	25,084	
5 Owners Equipment Connections	1 Sum	14,240.00	14,240	
- Power connection to owners equipment in testing, bureau & workshop area - assume 208V	27 No.	410.00	11,070	
	(Continued)			
			<b>Carried Forward :</b>	<b>1,119,140</b>

C2 ELECTRICAL		Quantity	Unit rate	Amount
C22	Lighting, Devices & Heating (Continued)		Brought Forward :	1,119,140
5	Owners Equipment Connections (Continued)			
	- Receptacle for light lab equipment by owner - dedicated circuit - ceiling mount	4 No.	170.00	680
	- Switch for light lab equipment receptacle	6 No.	125.00	750
	- Dimmer Switch for light lab equipment receptacle	6 No.	290.00	1,740
6	Mechanical Motor Connection	1 Sum	112,010.00	112,010
	- ASHP-1&2 at 575V/3P Power connection	2 No.	3,050.00	6,100
	- ASHP-1&2 at 208V/1P Power connection for heat trace	2 No.	480.00	960
	- Boiler-1 to 5 at 120V/1P Power connection	5 No.	480.00	2,400
	- Boiler controller & kill switch at 120V/1P power connection	2 No.	380.00	760
	- HRV-1 at 575V/3P Power connection c/w WP disconnect switch	1 No.	1,050.00	1,050
	- HRV-1&2 at 575V/3P Power connection c/w WP disconnect switch	5 No.	1,000.00	5,000
	- MUA-1&2 at 208V/3P Power connection c/w disconnect switch & motor relay starter	2 No.	1,040.00	2,080
	- SPF-1&2 at 575V/3P Power connection c/w disconnect switch	2 No.	870.00	1,740
	- SEF-1 at 208V/3P Power connection c/w WP magnetic starter	1 No.	3,800.00	3,800
	- SF-1 at 208V/1P Power connection c/w disconnect switch & motor relay starter	1 No.	980.00	980
	- EF-1 at 208V/1P Power connection c/w disconnect switch & motor relay starter	1 No.	980.00	980
	- EF-2 to 5 at 120V/1P Power connection c/w disconnect switch & motor relay starter	4 No.	980.00	3,920
	- EF-6,7&8 at 575V/3P Power connection c/w magnetic starter	3 No.	1,070.00	3,210
	- TF-1,2&3 at 120V/1P Power connection c/w disconnect switch & motor relay starter	3 No.	980.00	2,940
	- Boiler P-1 to 5 at 208V/3P Power connection	5 No.	550.00	2,750
	- P-6,7&10 to 13 at 208V/3P Power connection c/w disconnect switch	6 No.	870.00	5,220
	- P-8&9 at 208V/3P Power connection c/w disconnect switch	2 No.	910.00	1,820
	- Manifold at 120V/1P Power connection c/w disconnect switch & motor relay starter	45 No.	690.00	31,050
	(Continued)			
Carried Forward :				1,231,150

C2 ELECTRICAL		Quantity	Unit rate	Amount
C22 Lighting, Devices & Heating	(Continued)		<b>Brought Forward :</b>	1,231,150
6 Mechanical Motor Connection	(Continued)			
- Fan coil at 120V/1P Power connection c/w disconnect switch & motor relay starter	29 No.	690.00	20,010	
- UH-1 to 4 at 120V/1P Power connection c/w disconnect switch & motor relay starter	4 No.	690.00	2,760	
- FFH-1 to 7 at 208V/1P Power connection	7 No.	480.00	3,360	
- ERP-1 to 4 at 208V/1P Power connection	4 No.	480.00	1,920	
- PDW-1/2 at 208V/3P Power connection c/w disconnect switch	1 No.	870.00	870	
- RCP-1 at 208V/1P Power connection c/w disconnect switch & motor relay starter	1 No.	690.00	690	
- COMP-1 at 208V/3P Power connection c/w disconnect switch	1 No.	1,340.00	1,340	
- Elevator motor power connection c/w disconnect switches & controls	2 No.	1,800.00	3,600	
- Elevator cab light power connection	2 No.	350.00	700	
C22 Lighting, Devices & Heating	<b>TOTAL : \$</b>	6,271 m2	196.33	1,231,200
C23 Systems & Ancillaries				
1 Fire Alarm System	1 Sum	105,010.00	105,010	
- Fire alarm control panel, annunciator panel & amplifier panel	1 Sum	16,500.00	16,500	
- Modify existing school fire alarm and interconnect with new c/w reprogramming & verification	1 Sum	2,500.00	2,500	
- Pull station	17 No.	265.00	4,505	
- Smoke detectors	56 No.	345.00	19,320	
- Smoke detectors - XAD for elevator shaft	1 No.	350.00	350	
- Thermal detectors	5 No.	265.00	1,325	
- FA Horn	86 No.	310.00	26,660	
- FA Horn - WP	1 No.	340.00	340	
- Strobe	1 No.	280.00	280	
- Sprinkler system power connections	15 No.	200.00	3,000	
- Relocate smoke detector at bicycle park area	1 No.	120.00	120	
- Fire alarm connection to generator controls	1 Sum	1,200.00	1,200	
- Fire alarm devices testing	183 set	25.00	4,575	
- Fire alarm conduit & wiring	183 set	110.00	20,130	
	(Continued)			
			<b>Carried Forward :</b>	105,010



C2 ELECTRICAL		Quantity	Unit rate	Amount
C23 Systems & Ancillaries	(Continued)		<b>Brought Forward :</b>	<b>105,010</b>
1 Fire Alarm System	(Continued)			
- F/A third party testing & verification	1 Sum	4,200.00	4,200	
2 Communication/IT	1 Sum	257,620.00	257,620	
- Data outlet - 1D	91 No.	165.00	15,015	
- Data outlet - 2D	47 No.	165.00	7,755	
- Data outlet - 2D - floor mount	1 No.	285.00	285	
- Data outlet - 4D	8 No.	185.00	1,480	
- Data outlet - 4D - floor mount	1 No.	305.00	305	
- Voice outlet - 1V	3 No.	165.00	495	
- Voice/Data outlet - 1V/1D	5 No.	165.00	825	
- Wireless access point - 2D	46 No.	320.00	14,720	
- Communication cable drop & termination	347 No.	210.00	72,870	
- 300mm Cable tray	315 m	170.00	53,550	
- 1x78mm Conduit for communication	20 m	83.00	1,660	
- 6x78mm Conduit for communication riser	20 m	498.00	9,960	
- Sleeves	1 Sum	2,100.00	2,100	
- Communication fire rated plywood	48 m	80.00	3,840	
- Back-bone cabling-24 strand between communication room	65 m	35.00	2,275	
- Back-bone cabling-25 Pair Cat3	55 m	16.00	880	
- Communication head-end equipment - racks, patch panels, bix block	1 Sum	64,000.00	64,000	
- Testing & certification	1 Sum	5,600.00	5,600	
3 A/V System - rough-in only	1 Sum	14,790.00	14,790	
- A/V Outlet	31 No.	240.00	7,440	
- A/V Outlet c/w micro phone input	21 No.	350.00	7,350	
- A/V system head-end equipment and cabling - by others	1 Nil	0.00	0	
4 Security Access Control and Intrusion Alarm	1 Sum	137,900.00	137,900	
- Key pad	2 No.	820.00	1,640	
- Card reader	16 No.	780.00	11,700	
- Card reader outlet (rough-in)	44 No.	220.00	9,680	
- Door contact	32 No.	250.00	8,000	
- Door contact outlet (rough-in)	44 No.	180.00	7,920	
- Electric strike	17 No.	540.00	9,180	
- Electric strike outlet (rough-in)	41 No.	180.00	7,380	
- Electric strike power connection	58 No.	250.00	14,500	
- Request to exit sensor	23 No.	400.00	9,200	
	(Continued)			
			<b>Carried Forward :</b>	<b>515,320</b>

C2 ELECTRICAL		Quantity	Unit rate	Amount
C23 Systems & Ancillaries	(Continued)		<b>Brought Forward :</b>	<b>515,320</b>
4 Security Access Control and Intrusion Alarm	(Continued)			
- Request to exit sensor outlet (rough-in)	44 No.	180.00	7,920	
- Alert system display	19 No.	360.00	6,840	
- Door push button - rough-in	25 No.	180.00	4,500	
- Door push button - rough-in c/w bollard	3 No.	480.00	1,440	
- Security devices conduit and wiring c/w testing and commissioning	1 Sum	12,000.00	12,000	
- Security Access control & Intrusion Alarm head-end equipment	1 Sum	26,000.00	26,000	
5 CCTV System - rough-in only	1 Sum	1,350.00	1,350	
- CCTV camera outlet c/w conduit	3 No.	450.00	1,350	
- CCTV cameras, cabling & head-end equipment - by others	1 Nil	0.00	0	
6 Demolition - Bicycle Parking Area	1 Sum	190.00	190	
- Light fixtures	3 No.	30.00	90	
- Power outlets	2 No.	25.00	50	
- Data outlets	2 No.	25.00	50	
7 Construction Items	1 Sum	31,600.00	31,600	
- Electrical permits & inspection	1 Sum	8,000.00	8,000	
- Electrical Testing & commissioning	1 Sum	11,000.00	11,000	
- Coordination with other divisions and owner	1 Sum	3,000.00	3,000	
- As built/close out documents	1 Sum	7,600.00	7,600	
- Firestopping	1 Sum	2,000.00	2,000	
C23 Systems & Ancillaries	TOTAL : \$	6,271 m2	87.47	548,500

D1 SITE WORK		Quantity	Unit rate	Amount
D11 Site Development				
1	Ornamental grass c/w topsoil	230 m2	24.40	5,620
	- compact subgrade	230 m2	1.50	345
	- subgrade	35 m3	30.00	1,050
	- planting medium	35 m3	55.00	1,925
	- ornamental grass	230 m2	10.00	2,300
2	Red Maple tree c/w backfill and mulch	3 ea	500.00	1,500
3	Golden Locust tree c/w backfill and mulch	7 ea	470.00	3,290
4	Scarlet Oak tree c/w backfill and mulch	1 ea	510.00	510
5	Akebono Cherry tree c/w backfill and mulch	9 ea	525.00	4,730
6	Jacquemontii Birch tree c/w backfill and mulch	32 ea	450.00	14,400
7	\Shrubs c/w backfill and mulch	140 ea	220.00	30,800
8	Salal c/w backfill and mulch	1,435 ea	100.00	143,500
9	Japanese pachysandra c/w backfill and mulch	1,690 ea	100.00	169,000
10	Fountain grass	198 ea	75.00	14,850
11	Feather reed grass	122 ea	75.00	9,150
12	Feather grass	1,083 ea	75.00	81,230
13	Soft rush	176 ea	65.00	11,440
14	Horsetail	162 ea	65.00	10,530
15	Install soil in planter boxes	44 m3	60.00	2,640
Carried Forward :				503,190

D1 SITE WORK		Quantity	Unit rate	Amount
D11 Site Development	(Continued)		<b>Brought Forward :</b>	503,190
16	Install soil and repair membrane above existing parking lot / new bike storage	31 m2	171.90	5,330
	- repair roof membrane allowance	31 m2	150.00	4,650
	- install planting medium	9 m3	75.00	675
17	Dark grey river rock	4 m3	75.00	300
18	Precast concrete unit pavers	1,109 m2	106.40	117,980
	- compact subgrade	1,109 m2	1.50	1,664
	- granular base B	277 m3	35.00	9,695
	- granular base	111 m3	45.00	4,995
	- sand setting bed	33 m3	55.00	1,815
	- precast pavers	1,109 m2	90.00	99,810
19	Aluminum paver edge restraints	206 m	35.00	7,210
20	CIP concrete paving 1/L10.01	619 m2	60.00	37,110
	- compact subgrade	619 m2	1.50	929
	- granular base B	93 m3	35.00	3,255
	- granular base	62 m3	35.00	2,170
	- CIP	93 m3	34.00	3,162
	- reinforcing steel (55kg/m3)	6,809 kg	2.70	18,384
	- formwork	19 m2	110.00	2,090
	- screed/cure/finish	619 m2	11.50	7,119
21	Concrete ramp type 1 (6/L10.01)	34 m2	138.20	4,700
	- compact subgrade	34 m2	1.50	51
	- granular base B	5 m3	35.00	175
	- granular base	3 m3	35.00	105
	- CIP	7 m3	300.00	2,100
	- reinforcing steel (55kg/m3)	374 kg	2.70	1,010
	- formwork	6 m2	110.00	660
	- screed/cure/finish	34 m2	11.50	391
	- control joints	34 m2	6.00	204
22	100mm CIP concrete side walk	25 m2	93.20	2,330
	- compact subgrade	25 m2	1.50	38
	- granular base	4 m3	35.00	140
	- CIP	3 m3	300.00	900
	- reinforcing steel (55kg/m3)	138 kg	2.70	373
	- formwork	4 m2	110.00	440
	- screed/cure/finish	25 m2	11.50	288
(Continued)			<b>Carried Forward :</b>	678,150

D1 SITE WORK		Quantity	Unit rate	Amount
D11 Site Development	(Continued)		<b>Brought Forward :</b>	<b>678,150</b>
22 100mm CIP concrete side walk	(Continued)			
- control joints	25 m2	6.00	150	
23 Concrete steps	12 m2	95.00	1,140	
24 Concrete ramp type 2 (7/L10.1)	29 m2	96.60	2,800	
- compact subgrade	29 m2	1.50	44	
- granular base	4 m3	35.00	140	
- CIP	3 m3	300.00	900	
- reinforcing steel (55kg/m3)	160 kg	2.70	432	
- formwork	6 m2	125.00	750	
- screed/cure/finish	29 m2	12.50	363	
- control joints	29 m2	6.00	174	
25 Concrete ramp wall/curb	11 m	372.70	4,100	
- compact subgrade	5 m2	1.50	8	
- granular base	1 m3	35.00	35	
- CIP	3 m3	300.00	900	
- reinforcing steel (55kg/m3)	110 kg	2.70	297	
- formwork	26 m2	110.00	2,860	
26 CIP concrete wall-400 height(9/L10.02)	93 m	317.10	29,490	
- compact subgrade	130 m2	1.50	195	
- granular base	26 m3	35.00	910	
- CIP	19 m3	300.00	5,700	
- reinforcing steel (55kg/m3)	825 kg	2.70	2,228	
- formwork	186 m2	110.00	20,460	
27 CIP concrete wall-900 height (1/L10.03)	21 m	726.20	15,250	
- compact subgrade	29 m2	1.50	44	
- granular base	6 m3	35.00	210	
- CIP	19 m3	300.00	5,700	
- reinforcing steel (55kg/m3)	1,733 kg	2.70	4,679	
- formwork	42 m2	110.00	4,620	
28 CIP concrete wall-signage wall	21 m	915.20	19,220	
- compact subgrade	21 m2	1.50	32	
- granular base	4 m3	35.00	140	
- CIP	27 m3	300.00	8,100	
- reinforcing steel (55kg/m3)	1,733 kg	2.70	4,679	
- formwork	57 m2	110.00	6,270	
<b>Carried Forward :</b>				<b>750,150</b>

<b>D1 SITE WORK</b>		<b>Quantity</b>	<b>Unit rate</b>	<b>Amount</b>
<b>D11 Site Development</b>	<b>(Continued)</b>		<b>Brought Forward :</b>	<b>750,150</b>
29	CIP concrete retaining wall	44 m	467.00	20,550
	- compact subgrade	53 m2	1.50	80
	- granular base	11 m3	35.00	385
	- CIP	24 m3	300.00	7,200
	- reinforcing steel (55kg/m3)	1,320 kg	2.70	3,564
	- formwork	62 m2	110.00	6,820
	- skate stops allowance	1 sum	2,500.00	2,500
30	Concrete planter wall 500mm tall	58 m	338.60	19,640
	- compact subgrade	58 m2	1.50	87
	- granular base	12 m3	35.00	420
	- CIP	16 m3	300.00	4,800
	- reinforcing steel (55kg/m3)	825 kg	2.70	2,228
	- formwork	110 m2	110.00	12,100
31	Concrete planter wall 700mm tall	48 m	385.40	18,500
	- compact subgrade	48 m2	1.50	72
	- granular base	10 m3	35.00	350
	- CIP	15 m3	300.00	4,500
	- reinforcing steel (55kg/m3)	1,320 kg	2.70	3,564
	- formwork	91 m2	110.00	10,010
32	Parking lot curbs	56 m	75.00	4,200
33	Road curbs and gutters	14 m	125.00	1,750
34	100mm weeping tile w/ connections to existing storm system	650 m	65.00	42,250
35	SS toe guard	78 m	250.00	19,500
36	R-8464 SS removable bollards	11 ea	1,100.00	12,100
37	'Ride' bike rack	10 ea	550.00	5,500
38	Exterior signage allowance	1 sum	10,000.00	10,000
39	Line painting allowance	1 sum	750.00	750
40	Miscellaneous landscaping allowance	1 sum	10,000.00	10,000
<b>D11 Site Development</b>		<b>TOTAL : \$</b>	<b>1,245 m2</b>	<b>734.86</b>
				<b>914,900</b>

D1 SITE WORK		Quantity	Unit rate	Amount
<b>D12 Mechanical Site Services</b>				
1	<b>Water main</b>	1 Sum	54,550.00	54,550
	- Piping, 150 mm dia c/w trenching & bedding	52 m	200.00	10,400
	- Piping, 200 mm dia c/w trenching & bedding	117 m	235.00	27,495
	- Cap, 150 mm dia	1 No.	300.00	300
	- FH	1 No.	5,000.00	5,000
	- Valve-150 mm dia	2 No.	1,650.00	3,300
	- Valve- 200 mm dia	1 No.	1,850.00	1,850
	- Tie into existing WM in road	1 No.	2,000.00	2,000
	- Thrust block	14 No.	300.00	4,200
2	<b>Sanitary main</b>	1 Sum	16,330.00	16,330
	- Piping- 150 mm dia c/w trenching & bedding	27 m	175.00	4,725
	- MH, Over the existing line	1 No.	4,500.00	4,500
	- MH	1 No.	3,200.00	3,200
	- Cleanout	6 No.	600.00	3,600
	- Cap on new line	1 No.	300.00	300
3	<b>Storm drainage</b>	1 Sum	143,820.00	143,820
	- Piping, 100 mm dia c/w trenching & bedding	122 m	160.00	19,520
	- Piping, 150 mm dia c/w trenching & bedding	150 m	175.00	26,250
	- Piping, 200 mm dia c/w trenching & bedding	5 m	210.00	1,050
	- Piping, 250 mm dia c/w trenching & bedding	104 m	235.00	24,440
	- Piping, 300 mm dia c/w trenching & bedding	3 m	285.00	855
	- Connection to existing main	1 No.	2,000.00	2,000
	- Lawn Basin	12 No.	800.00	9,600
	- Catch basin	6 No.	1,800.00	10,800
	- MH-1050 mm dia	5 No.	3,200.00	16,000
	- MH-1800 mm dia	1 No.	8,500.00	8,500
	- Oil interceptor (24X54)	1 No.	20,000.00	20,000
	- Tie into landscape/Silwa cell - 100mm dia.	16 No.	300.00	4,800
<b>D12 Mechanical Site Services</b>		<b>TOTAL: \$ 1 Sum</b>	<b>214,700.00</b>	<b>214,700</b>

D1 SITE WORK	Quantity	Unit rate	Amount
<b>D13 Electrical Site Services</b>			
<b>1 Incoming Power</b>	<b>1 Sum</b>	<b>136,830.00</b>	<b>136,830</b>
- 3x91mmC + 1x41mmC + 3x27mmC (EMT) for normal & emergency power & fire alarm from exis. KPU school	110 m	434.00	47,740
- 3x91mmC + 1x41mmC + 3x27mmC (RPVC) under ground service for power & FA c/w excavation & backfill	24 m	232.00	5,568
- Electrical weatherproof pullbox for power	2 No.	3,400.00	6,800
- 1000A feeder 3 runs (3 #400MCM CU + gnd) from existing KPU school in above conduits	140 m	519.00	72,660
- Feeder 3 #4 CU + gnd in above conduits from existing generator at existing KPU school	140 m	29.00	4,060
<b>2 Incoming Communication</b>	<b>1 Sum</b>	<b>42,070.00</b>	<b>42,070</b>
- 6x103mmC (RPVC) under ground service for incoming communication c/w excavation & backfill	20 m	376.00	7,520
- 3x103mmC (RPVC) under ground service for incoming fiber service c/w excavation & backfill	40 m	214.00	8,560
- 6x103mmC (EMT) for incoming communication from existing building	25 m	748.00	18,700
- 4x24-Strand singlemode fiber optic cable	45 m	140.00	6,300
- 50-Pair CAT3 cable	45 m	22.00	990
<b>3 Site Lighting</b>	<b>1 Sum</b>	<b>72,330.00</b>	<b>72,330</b>
- Type L2 - Linear exterior rated LED light fixture	12 m	440.00	5,280
- Type L4 - 15' Square pole and square head luminaire	8 No.	5,100.00	40,800
- Type LBB - 2' Tall aluminum bollard with square profile head	5 No.	1,140.00	5,700
- Type LCC - Exterior rated narrow step light fixture c/w direct light	19 No.	480.00	9,120
- Junction box for site light fixtures	3 No.	240.00	720
- Site light fixture conduit & wiring	210 m	51.00	10,710
<b>4 Site Power Connection</b>	<b>1 Sum</b>	<b>17,950.00</b>	<b>17,950</b>
- 20A T-Slot exterior duplex receptacle - GFI/WP/Vandal resistant	2 No.	280.00	560
- 20A T-Slot exterior duplex receptacle - GFI/WP/Vandal resistant & dedicated circuit	3 No.	310.00	930
(Continued)			
Carried Forward :			269,180



D1 SITE WORK		Quantity	Unit rate	Amount
D13 Electrical Site Services	(Continued)		<b>Brought Forward :</b>	269,180
4 Site Power Connection	(Continued)			
- 20A T-Slot exterior duplex receptacle - GFI/WP/Vandal resistant c/w pedestal		3 No.	650.00	1,950
- 50A Special exterior receptacle - GFI/WP/Vandal resistant		1 No.	460.00	460
- Power connection for exterior signage		1 No.	3,100.00	3,100
- Power connection for future electric car charger - 4 #4 + gnd in 41mm C		3 No.	3,250.00	9,750
- 1x27mmC from comm. room to bicycle room for access control		50 m	24.00	1,200
<b>D13 Electrical Site Services</b>		<b>1 Sum</b>	<b>269,200.00</b>	<b>269,200</b>

D2 ANCILLARY WORK		Quantity	Unit rate	Amount
D21 Demolitions				
1	Remove & dispose existing paving		Nil	
2	Remove & dispose existing sidewalk		Nil	
3	Remove and hand over to the owner existing signage		Nil	
4	Remove & dispose existing railings		Nil	
5	Remove & dispose existing overhead gate		Nil	
6	Remove & dispose existing concrete ramp		Nil	
7	Remove & dispose existing concrete curbs		Nil	
8	Remove & dispose existing retaining wall		Nil	
9	Remove & dispose existing letdown		Nil	
10	Remove and hand over to the owner existing plant material		Nil	
11	Miscellaneous demolition allowance		Nil	
D21 Demolitions TOTAL : \$		1 Sum	0.00	0
D22 Alterations				
<u>Bike storage renovation</u>				
1	HSS 76x76x6.4 column		Nil	
2	Miscellaneous connections and details		Nil	
3	MM - Expanded painted metal mesh cladding		Nil	
Carried Forward :				0

D2 ANCILLARY WORK		Quantity	Unit rate	Amount
D22 Alterations	(Continued)		Brought Forward :	0
4	MM - Expanded painted metal mesh gate and hardware		Nil	
5	250mm concrete curb/wall		Nil	
	- compact subgrade	0 m2	1.50	0
	- granular base	0 m3	35.00	0
	- CIP	0 m3	300.00	0
	- reinforcing steel (55kg/m3)	0 kg	2.70	0
	- formwork	0 m2	110.00	0
6	460mm concrete curb/wall		Nil	
	- compact subgrade	0 m2	1.50	0
	- granular base	0 m3	35.00	0
	- CIP	0 m3	300.00	0
	- reinforcing steel (55kg/m3)	0 kg	2.70	0
	- formwork	0 m2	110.00	0
7	Floor finishes allowance		Nil	
8	Paint to walls allowance		Nil	
9	Miscellaneous work allowance		Nil	
	<u>Existing stairs renovation</u>			
10	CIP concrete paving		Nil	
	- compact subgrade	0 m2	1.50	0
	- granular base	0 m3	35.00	0
	- CIP	0 m3	300.00	0
	- reinforcing steel (55kg/m3)	0 kg	2.70	0
	- formwork	0 m2	110.00	0
	- screed/cure/finish	0 m2	11.50	0
	- control joints	0 m2	6.00	0
11	CIP concrete stairs & landing		Nil	
12	150x4080mm concrete wall		Nil	
	- concret	0 m3	300.00	0
	- reinforcing steel (55kg/m3)	0 kg	2.70	0
	- formwork	0 m2	110.00	0
Carried Forward :				0

D2 ANCILLARY WORK		Quantity	Unit rate	Amount
D22 Alterations	(Continued)		Brought Forward :	0
13	150x600mm concrete wall		Nil	
	- concret	0 m3	300.00	0
	- reinforcing steel (55kg/m3)	0 kg	2.70	0
	- formwork	0 m2	110.00	0
14	Connect to existing slabs and walls allowance		Nil	
15	CIP concrete planter slab		Nil	
	- compact subgrade	0 m2	1.50	0
	- granular base	0 m3	35.00	0
	- CIP	0 m3	300.00	0
	- reinforcing steel (55kg/m3)	0 kg	2.70	0
	- formwork	0 m2	110.00	0
16	200mm wide concrete planter wall		Nil	
	- concret	0 m3	300.00	0
	- reinforcing steel (55kg/m3)	0 kg	2.70	0
	- formwork	0 m2	110.00	0
17	Glass guardrail		Nil	
18	SS railings		Nil	
19	Concrete bench		Nil	
20	Miscellaneous work allowance		Nil	
D22 Alterations		TOTAL : \$	1 Sum	0.00
				0

Project	: Kwantlen Polytechnic University				Report date	: 23 Feb 2016		
	: New Link Bridge				Page No.	: 1		
Location	: Richmond, British Columbia				Bldg Type	: 720		
Owner	: Kwantlen Polytechnic University				C.T. Index	: 6.0		
Consultant	: KPMB + Public				GFA	: 58 m2		
ELEMENTAL COST SUMMARY								
Element	Ratio to GFA	Elemental Cost		Elemental Amount		Rate per m2		
		Quantity	Unit rate	Sub-Total	Total	Sub-Total	Total	%
A SHELL		58 m2			219,600		3,786.21	64.6
A1 SUBSTRUCTURE					28,200		486.21	8.3
A11 Foundations	1.000	58 m2	356.90	20,700		356.90		
A12 Basement Excavation				0		0.00		
A13 Special Conditions	1.000	58 m2	129.31	7,500		129.31		
A2 STRUCTURE					110,700		1,908.62	32.6
A21 Lowest Floor Construction	1.000	58 m2	1,412.07	81,900		1,412.07		
A22 Upper Floor Construction				0		0.00		
A23 Roof Construction	1.379	80 m2	360.00	28,800		496.55		
A3 EXTERIOR ENCLOSURE					80,700		1,391.38	23.7
A31 Walls Below Grade				0		0.00		
A32 Walls Above Grade	2.483	144 m2	170.83	24,600		424.14		
A33 Windows & Entrances	0.224	13 m2	753.85	9,800		168.97		
A34 Roof Coverings	1.000	58 m2	389.66	22,600		389.66		
A35 Projections	0.017	1 Sum	23,700.00	23,700		408.62		
B INTERIORS		58 m2			45,200		779.31	13.3
B1 PARTITIONS & DOORS					34,600		596.55	10.2
B11 Partitions	1.000	58 m2	515.52	29,900		515.52		
B12 Doors	0.017	1 No.	4,700.00	4,700		81.03		
B2 FINISHES					8,600		148.28	2.5
B21 Floor Finishes	0.879	51 m2	50.98	2,600		44.83		
B22 Ceiling Finishes	0.879	51 m2	113.73	5,800		100.00		
B23 Wall Finishes	0.172	10 m2	20.00	200		3.45		
B3 FITTINGS & EQUIPMENT					2,000		34.48	0.6
B31 Fittings & Fixtures	1.000	58 m2	34.48	2,000		34.48		
B32 Equipment	1.000	58 m2	0.00	0		0.00		
B33 Elevators				0		0.00		
B34 Escalators				0		0.00		
C SERVICES		58 m2			35,100		605.17	10.3
C1 MECHANICAL					22,900		394.83	6.7
C11 Plumbing & Drainage	1.000	58 m2	0.00	0		0.00		
C12 Fire Protection	1.000	58 m2	193.10	11,200		193.10		
C13 HVAC	1.000	58 m2	146.55	8,500		146.55		
C14 Controls	1.000	58 m2	55.17	3,200		55.17		
C2 ELECTRICAL					12,200		210.34	3.6
C21 Service & Distribution	1.000	58 m2	0.00	0		0.00		
C22 Lighting, Devices & Heating	1.000	58 m2	203.45	11,800		203.45		
C23 Systems & Ancillaries	1.000	58 m2	6.90	400		6.90		
NET BUILDING COST - EXCLUDING SITE				\$	299,900		5,170.69	88.2
D SITE & ANCILLARY WORK		58 m2			0		0.00	0.0
D1 SITE WORK					0		0.00	0.0
D11 Site Development	21.466	1,245 m2	0.00	0		0.00		
D12 Mechanical Site Services	0.017	1 Sum	0.00	0		0.00		
D13 Electrical Site Services				0		0.00		
D2 ANCILLARY WORK					0		0.00	0.0
D21 Demolitions	0.017	1 Sum	0.00	0		0.00		
D22 Alterations	0.017	1 Sum	0.00	0		0.00		
NET BUILDING COST - INCLUDING SITE				\$	299,900		5,170.69	88.2
Z1 GENERAL REQUIREMENTS & FEE					40,200		693.10	11.8
Z11 General Requirements		8.0 %		24,000		413.79		
Z12 Fee		5.0 %		16,200		279.31		
TOTAL CONSTRUCTION ESTIMATE - EXCLUDING ALLOWANCES				\$	340,100		5,863.79	100.0
Z2 ALLOWANCES					8,500		146.55	
Z21 Design Allowance		0.0 %		0		0.00		
Z22 Escalation Allowance		0.0 %		0		0.00		
Z23 Pricing Allowance		2.5 %		8,500		146.55		
TOTAL CONSTRUCTION ESTIMATE - INCLUDING ALLOWANCES				\$	348,600		6,010.34	
VALUE ADDED TAX (GST/HST)					0		0.00	
Value Added Tax (GST/HST)		0.0 %		0		0.00		
TOTAL CONSTRUCTION ESTIMATE				\$	348,600	\$	6,010.34	

A1 SUBSTRUCTURE		Quantity	Unit rate	Amount
A11 Foundations				
1	Take up existing vegetation and remove off site	58 m2	1.30	80
2	Strip existing topsoil and store on site for reuse, assume 200mm thick	58 m2	5.00	290
3	Allow for rough grading to required levels	58 m2	10.00	580
4	300 x 300mm grade beam	30 m	243.70	7,310
	- concrete	3 m3	300.00	900
	- reinforcing steel (45kg/m)	1,350 kg	2.70	3,645
	- formwork	18 m2	120.00	2,160
	- excavate and remove off-site	3 m3	35.00	105
	- ditto workspace	5 m3	35.00	175
	- backfill workspace with imported granular materials	5 m3	65.00	325
5	10000 x 2500 x 600mm pad footing	1 No.	12,480.00	12,480
	- concrete	15 m3	300.00	4,500
	- reinforcing steel (63kg/m3)	1,575 kg	2.70	4,253
	- formwork	15 m2	120.00	1,800
	- excavate and remove off-site	15 m3	35.00	525
	- ditto workspace	14 m3	35.00	490
	- backfill workspace with imported granular materials	14 m3	65.00	910
A11 Foundations TOTAL : \$		58 m2	356.90	20,700
A13 Special Conditions				
1	Allowance for dewatering excavation during construction		Allow	7,500
A13 Special Conditions TOTAL : \$		58 m2	129.31	7,500

A2 STRUCTURE		Quantity	Unit rate	Amount
A21 Lowest Floor Construction				
1	166mm thk composite slab-D1	58 m2	1,112.90	64,550
	- 90mm concrete topping	5 m3	300.00	1,500
	- reinforcing steel (6kg/m2)	348 kg	2.70	940
	- screed/cure/finish	58 m2	11.50	667
	- 76mm steel deck	58 m2	75.00	4,350
	- L76X76X6.4 edge	264 kg	7.50	1,980
	- 178 dia x 13mm HSS column	440 kg	7.50	3,300
	- W200x19 beam	570 kg	7.50	4,275
	- W460x177 beam	4,956 kg	7.50	37,170
	- W530x92 beam	828 kg	7.50	6,210
	- miscellaneous connections & details	489 kg	8.50	4,157
2	88mm thk composite secondary slab-D3	58 m2	299.10	17,350
	- 50mm concrete topping	3 m3	300.00	900
	- reinforcing steel (6kg/m2)	348 kg	2.70	940
	- screed/cure/finish	58 m2	11.50	667
	- 38mm steel deck	58 m2	70.00	4,060
	- L76X76X6.4 edge	237 kg	7.50	1,778
	- miscellaneous connections & details	24 kg	8.50	204
	- Metal stud framing	58 m2	100.00	5,800
	- Allow for forming steps etc	1 sum	3,000.00	3,000
A21 Lowest Floor Construction TOTAL : \$		58 m2	1,412.07	81,900
A23 Roof Construction				
1	169mm 5 ply CLT Roof Panels	58 m2	230.00	13,340
2	Structural steel support to last	80 m2	193.60	15,490
	- W200X19 beam	570 kg	7.50	4,275
	- W410x19 beam	608 kg	7.50	4,560
	- W530x92 beam	368 kg	7.50	2,760
	- miscellaneous connections & details	458 kg	8.50	3,893
A23 Roof Construction TOTAL : \$		80 m2	360.00	28,800

A3 EXTERIOR ENCLOSURE		Quantity	Unit rate	Amount
A32 Walls Above Grade				
1	W1a Aluminum panel cladding wall	140 m2	170.00	23,800
2	Reinstall existing brick cladding	4 m2	200.00	800
A32 Walls Above Grade TOTAL : \$		144 m2	170.83	24,600
A33 Windows & Entrances				
1	Glazed aluminum window GL1, low iron, double glazing IGU with Low-E coating on surface #2	13 m2	750.00	9,750
A33 Windows & Entrances TOTAL : \$		13 m2	753.85	9,800
A34 Roof Coverings				
1	Ballast roofing system, c/w insulation, vapour barrier and exterior sheathing	58 m2	355.00	20,590
	- 50mm ballast on permeable non-moisture holding scrim sheet	58 m2	50.00	2,900
	- 125mm rigid insulation	58 m2	70.00	4,060
	- 25mm rigid insulation with drainage channel	58 m2	25.00	1,450
	- 2ply roof membrane	58 m2	60.00	3,480
	- leak detection system	58 m2	30.00	1,740
	- 150mm rigid insulation sloped	58 m2	90.00	5,220
	- vapour barrier	58 m2	30.00	1,740
2	Miscellaneous flashings, etc.		Allow	2,000
A34 Roof Coverings TOTAL : \$		58 m2	389.66	22,600



A3 EXTERIOR ENCLOSURE	Quantity	Unit rate	Amount
A35 Projections			
1 Soffit finish c/w insulation	58 m2	140.00	8,120
2 Parapet	39 m	400.00	15,600
3 Column cladding - assume non required		note	
A35 Projections	TOTAL : \$ 1 Sum	23,700.00	23,700

<b>B1 PARTITIONS &amp; DOORS</b>		<b>Quantity</b>	<b>Unit rate</b>	<b>Amount</b>
<b>B11 Partitions</b>				
1	P10 Glazed interior partition	10 m2	570.00	5,700
2	P9A LVL panels c/w custom CNC design	48 m2	225.00	10,800
	- 51mm LVL panels	48 m2	150.00	7,200
	- custom CNC design allowance	48 m2	75.00	3,600
3	Expansion joint allowance	1 Sum	5,500.00	5,500
4	Wood blocking and backing	1 Sum	1,500.00	1,500
5	Hand rail	29 m	150.00	4,350
6	Firestopping, caulking & sealants		Allow	2,000
<b>B11 Partitions TOTAL : \$</b>		<b>58 m2</b>	<b>515.52</b>	<b>29,900</b>
<b>B12 Doors</b>				
1	Double glazed door ( 950 )	1 pair	3,950.00	3,950
2	Allowance for hardware upgrade, allow		Allow	750
<b>B12 Doors TOTAL : \$</b>		<b>1 No.</b>	<b>4,700.00</b>	<b>4,700</b>

B2 FINISHES		Quantity	Unit rate	Amount
<b>B21 Floor Finishes</b>				
1	Connect to existing floor	1 Sum	250.00	250
2	Conc 1: Polished concrete	51 m2	45.00	2,300
<b>B21 Floor Finishes TOTAL : \$</b>		<b>51 m2</b>	<b>50.98</b>	<b>2,600</b>
<b>B22 Ceiling Finishes</b>				
1	Connect to existing ceiling	1 Sum	250.00	250
2	C1: Acoustic GWB ceiling	51 m2	108.00	5,510
	- 65mm suspension system	51 m2	35.00	1,785
	- 22mm furring channel	51 m2	25.00	1,275
	- 16mm gypsum board	51 m2	30.00	1,530
	- paint	51 m2	18.00	918
<b>B22 Ceiling Finishes TOTAL : \$</b>		<b>51 m2</b>	<b>113.73</b>	<b>5,800</b>
<b>B23 Wall Finishes</b>				
1	Paint finish to interior partitions and interior of exterior wall (PT-1)	10 m2	15.00	150
<b>B23 Wall Finishes TOTAL : \$</b>		<b>10 m2</b>	<b>20.00</b>	<b>200</b>

Page No. : 8

C1 MECHANICAL		Quantity	Unit rate	Amount
C11 Plumbing & Drainage				
1	Storm drainage, Scupper & RWL by Arch	0 Nil	0.00	0
C11 Plumbing & Drainage TOTAL : \$		58 m2	0.00	0
C12 Fire Protection				
1	Sprinkler system	1 Sum	10,800.00	10,800
	- Main piping, allow	20 m	150.00	3,000
	- Sprinkler heads c/w branch piping	10 No.	300.00	3,000
	- Sprinkler heads c/w branch piping for glazing	8 No.	600.00	4,800
2	Fire extinguisher, allow	1 No.	400.00	400
C12 Fire Protection TOTAL : \$		58 m2	193.10	11,200
C13 HVAC				
1	Liquid heat transfer- Heating	1 Sum	7,950.00	7,950
	- ERP-1 to 4, Radiant ceiling panel (600X1200)	4 No.	300.00	1,200
	- Piping, Allow	50 m	70.00	3,500
	- Insulation	50 m	17.00	850
	- Radiant zone	4 No.	600.00	2,400
2	Air distribution ductwork & devices - Assume not required	0 Nil	0.00	0
3	Miscellaneous	1 Sum	500.00	500
C13 HVAC TOTAL : \$		58 m2	146.55	8,500
C14 Controls				
1	Controls	1 Sum	3,200.00	3,200
	- Radiant zone	4 No.	800.00	3,200
C14 Controls TOTAL : \$		58 m2	55.17	3,200

C2 ELECTRICAL		Quantity	Unit rate	Amount
C21 Service & Distribution				
1	- No Work Required	1 Nil	0.00	0
C21 Service & Distribution TOTAL : \$		58 m2	0.00	0
C22 Lighting, Devices & Heating				
1	Lighting Fixtures - Supply, install & wiring	1 Sum	11,150.00	11,150
	- Type LF - Recessed linear LED luminaire c/w acrylic lens - reduced length	10 m	565.00	5,650
	- Type LG - Recessed wet rated linear LED luminaire c/w acrylic lens - reduced length	8 m	575.00	4,600
	- Light fixtures conduit & wiring	10 set	90.00	900
2	Exit/Emergency Lighting - No Work Required	1 Nil	0.00	0
3	Lighting Controls	1 Sum	620.00	620
	- Day light sensor - ceiling mount	2 No.	310.00	620
4	Power Outlets & Connections	1 Nil	0.00	0
5	Mechanical Motor Connections - No Work Required	1 Nil	0.00	0
C22 Lighting, Devices & Heating TOTAL : \$		58 m2	203.45	11,800
C23 Systems & Ancillaries				
1	Fire Alarm System - No Work Required	1 Nil	0.00	0
2	Communication/IT - No Work Required	1 Nil	0.00	0
3	A/V System - rough-in only - No Work Required	1 Nil	0.00	0
4	Security Access Control and Intrusion Alarm - No Work Required	1 Nil	0.00	0
Carried Forward :				0

C2 ELECTRICAL		Quantity	Unit rate	Amount
C23 Systems & Ancillaries	(Continued)		<b>Brought Forward :</b>	0
5 CCTV System - No Work Required		1 Nil	0.00	0
6 Construction Items - Electrical permits & inspection, As built/close out documents & fire stopping		1 Sum	400.00	400
C23 Systems & Ancillaries		<b>TOTAL : \$</b>	58 m2	6.90
				400

D2 ANCILLARY WORK		Quantity	Unit rate	Amount
D21 Demolitions				
1	Remove existing ceiling and fixtures	0 m2	0.00	0
2	Remove existing wall structure and brick cladding. Salvage existing brick for re-use	0 m2	0.00	0
3	Remove existing windows	0 m2	0.00	0
4	Miscellaneous demolition	0 Sum	0.00	0
5	Disposeal allowance	0 Sum	0.00	0
D21 Demolitions TOTAL : \$		1 Sum	0.00	0
D22 Alterations				
1	Allow for alterations to existing building at connection to new bridge link	0 Sum	0.00	0
D22 Alterations TOTAL : \$		1 Sum	0.00	0



Appendix Z  
Drawing List

## APPENDIX Z - DRAWING LIST

### ARCHITECTURAL DRAWINGS

Number	Title	Issue Date	Received
A0.00	Architectural – Cover Sheet	2016/02/04	2016/02/05
A0.01	Architectural – Drawing List	2016/02/04	2016/02/05
A0.02	Architectural – Project Statistics + Context Plan	2016/02/04	2016/02/05
A0.03	Architectural – Site Survey	2016/02/04	2016/02/05
A0.04	Architectural – Fire Ratings	2016/02/04	2016/02/05
A0.10	Architectural – Exterior Wall, Roof & Soffit Types	2016/02/04	2016/02/05
A0.11	Architectural – Interior Partition Types	2016/02/04	2016/02/05
A0.12	Architectural – Ceiling Types & Typ. Details	2016/02/04	2016/02/05
A0.13	Architectural – Misc. Details	2016/02/04	2016/02/05
A0.20	Architectural – Room Finish Schedule + Abbreviations	2016/02/04	2016/02/05
A0.30	Architectural – Door Schedule	2016/02/04	2016/02/05
A0.31	Architectural – Frame Types	2016/02/04	2016/02/05
A0.32	Architectural – Exterior Door Frames	2016/02/04	2016/02/05
A0.33	Architectural – Interior HM Frames	2016/02/04	2016/02/05
A0.40	Architectural – Typical Mounting Heights	2016/02/04	2016/02/05
A0.50	Architectural – Base Transition & Trim Details	2016/02/04	2016/02/05
A1.01	Architectural – Site Plan – Parking Layout	2016/02/04	2016/02/05
A1.02	Architectural – Demolition Plan 1 to 100	2016/02/04	2016/02/05
A2.01	Architectural – Ground + Level 1 Floor Plans	2016/02/04	2016/02/05
A2.02	Architectural – Level 2 + Level 3 Floor Plans	2016/02/04	2016/02/05
A2.03	Architectural – Level 4 + Roof Plans	2016/02/04	2016/02/05
A2.11	Architectural – Ground Raft + Slab Edge Plans	2016/02/04	2016/02/05
A2.12	Architectural – Level 1 + Level 2 Slab Edge Plans	2016/02/04	2016/02/05
A2.13	Architectural – Level 3 + Level 3 Roof Slab Edge Plans	2016/02/04	2016/02/05
A2.14	Architectural – Level 4 + Roof Slab Edge Plans	2016/02/04	2016/02/05
A3.01	Architectural – Reflected Ceiling Plan – Ground + Level 1	2016/02/04	2016/02/05
A3.02	Architectural – Reflected Ceiling Plan – Level 2 + Level 3	2016/02/04	2016/02/05
A3.03	Architectural – Reflected Ceiling Plan – Level 4	2016/02/04	2016/02/05
A3.04	Architectural – Reflected Ceiling Plan – Ground Level Existing Building	2016/02/04	2016/02/05

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**ARCHITECTURAL DRAWINGS (continued)**

Number	Title	Issue Date	Received
A4.01	Architectural – North Elevation + South Elevation	2016/02/04	2016/02/05
A4.02	Architectural – East Elevation + West Elevation	2016/02/04	2016/02/05
A4.20	Architectural – Building Sections	2016/02/04	2016/02/05
A4.21	Architectural – Building Sections	2016/02/04	2016/02/05
A4.22	Architectural – Building Sections	2016/02/04	2016/02/05
A5.01	Architectural – Plan Details	2016/02/04	2016/02/05
A5.30	Architectural – Section Details – Typical Door Sections	2016/02/04	2016/02/05
A5.40	Architectural – Section Details – Ground	2016/02/04	2016/02/05
A5.41	Architectural – Section Details – Exterior Walls + Soffits	2016/02/04	2016/02/05
A5.42	Architectural – Section Details – Roofs + Parapets	2016/02/04	2016/02/05
A5.50	Architectural – Miscellaneous Details	2016/02/04	2016/02/05
A6.10	Architectural – Stair 1	2016/02/04	2016/02/05
A6.20	Architectural – Stair 2	2016/02/04	2016/02/05
A6.30	Architectural – Stair 3	2016/02/04	2016/02/05
A6.40	Architectural – Stair 2 + 3 Details	2016/02/04	2016/02/05
A6.50	Architectural – Elevator Details	2016/02/04	2016/02/05
A6.60	Architectural – W/C @ Ground, L4	2016/02/04	2016/02/05
A6.61	Architectural – W/C @ L1, L2, L3	2016/02/04	2016/02/05
A6.70	Architectural – Link to Existing	2016/02/04	2016/02/05
A6.71	Architectural – Link to Existing Details	2016/02/04	2016/02/05
A6.80	Architectural – Porch	2016/02/04	2016/02/05
A6.81	Architectural – Porch Details	2016/02/04	2016/02/05
A6.90	Architectural – Owner Supplied Equipment	2016/02/04	2016/02/05
A7.01	Architectural – Ground Level and L1 – Interior Corridor Elevations	2016/02/04	2016/02/05
A7.02	Architectural – Ground Level – Interior Elevations	2016/02/04	2016/02/05
A7.03	Architectural – L1 – Interior Elevations	2016/02/04	2016/02/05
A7.04	Architectural – L2 and L3 – Interior Corridor Elevations	2016/02/04	2016/02/05
A7.05	Architectural – L2 and L3 – Interior Elevations	2016/02/04	2016/02/05
A7.06	Architectural – L4 – Interior Elevations	2016/02/04	2016/02/05

#### ARCHITECTURAL DRAWINGS (continued)

Number	Title	Issue Date	Received
A8.01	Architectural – Plan Details – Ground + L1	2016/02/04	2016/02/05
A8.02	Architectural – Plan Details – L1 + L2	2016/02/04	2016/02/05
A8.03	Architectural – Plan Details – L2 + L3	2016/02/04	2016/02/05
A8.04	Architectural – Plan Details – L3 + L4	2016/02/04	2016/02/05
A8.10	Architectural – Section Details	2016/02/04	2016/02/05
A8.11	Architectural – Section Details	2016/02/04	2016/02/05
A8.20	Architectural – Ceiling Details	2016/02/04	2016/02/05
A9.10	Architectural – Servery Millwork + Details	2016/02/04	2016/02/05
A9.11	Architectural – Copy Centre Millwork + Details	2016/02/04	2016/02/05

#### STRUCTURAL DRAWINGS

S2.01	Structural – Foundation & Level 1 Floor Plans	2016/02/04	2016/02/05
S2.02	Structural – Level 2 & Level 3 Floor Plans	2016/02/04	2016/02/05
S2.03	Structural – Level 4 & Roof Plans	2016/02/04	2016/02/05
S3.01	Structural – Typical Sections and Details	2016/02/04	2016/02/05
S4.01	Structural – Building Sections	2016/02/04	2016/02/05
S5.01	Structural – Sections & Details	2016/02/04	2016/02/05
S5.02	Structural – Sections & Details	2016/02/04	2016/02/05
S6.01	Structural – Core Sections & Details	2016/02/04	2016/02/05
S6.02	Structural – Core 1 Reinforcing & Elevations	2016/02/04	2016/02/05
S6.03	Structural – Core 2 Reinforcing & Elevations	2016/02/04	2016/02/05
S6.04	Structural – Core 3 Reinforcing & Elevations	2016/02/04	2016/02/05
S7.01	Structural – Porch Sections & Details	2016/02/04	2016/02/05
S8.01	Structural – Link Bridge Sections & Details	2016/02/04	2016/02/05

#### CIVIL DRAWINGS

C1.00	Civil – Key Plan	2016/02/04	2016/02/05
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## LANDSCAPE DRAWINGS

Number	Title	Issue Date	Received
L0.00	Landscape – Cover Page	2016/02/04	2016/02/05
L1.00	Landscape – Site Plan	2016/02/04	2016/02/05
L2.00	Landscape – Tree Management Plan	2016/02/04	2016/02/05
L3.00	Landscape – Materials Plan	2016/02/04	2016/02/05
L4.00	Landscape – Layout Plan	2016/02/04	2016/02/05
L5.00	Landscape – Grading Plan	2016/02/04	2016/02/05
L6.00	Landscape – Planting Plan	2016/02/04	2016/02/05
L7.00	Landscape – Lighting Plan	2016/02/04	2016/02/05
L10.01	Landscape – Details – Paving	2016/02/04	2016/02/05
L10.02	Landscape – Details – Walls and Stairs	2016/02/04	2016/02/05
L10.03	Landscape – Details – Walls	2016/02/04	2016/02/05
L10.04	Landscape – Details – Furniture	2016/02/04	2016/02/05
L10.05	Landscape – Details – Planting	2016/02/04	2016/02/05

## MECHANICAL DRAWINGS

Number	Title	Issue Date	Received
M0.01	Mechanical – Cover Sheet, Drawing List + Symbol Schedule	2016/02/04	2016/02/05
M0.02	Mechanical – Mechanical Equipment Schedules – 01	2016/02/04	2016/02/05
M0.03	Mechanical – Mechanical Equipment Schedules – 02	2016/02/04	2016/02/05
M0.04	Mechanical – Mechanical Equipment Schedules – 03	2016/02/04	2016/02/05
M1.01	Mechanical – Mechanical Site Plan	2016/02/04	2016/02/05
M2.00	Mechanical – Foundation Plan	2016/02/04	2016/02/05
M2.01	Mechanical – Ground Floor & Level 1 Plumbing Plans	2016/02/04	2016/02/05
M2.02	Mechanical – Level 2 & Level 3 Plumbing Plans	2016/02/04	2016/02/05
M2.03	Mechanical – Level 4 & Roof Plumbing Plans	2016/02/04	2016/02/05
M3.00	Mechanical – Fire Suppression Zoning Plans	2016/02/04	2016/02/05
M3.01	Mechanical – Ground Floor & Level 1 Fire Suppression Plans	2016/02/04	2016/02/05
M3.02	Mechanical – Level 2 & Level 3 Fire Suppression Plans	2016/02/04	2016/02/05
M3.03	Mechanical – Level 4 Fire Suppression Plan	2016/02/04	2016/02/05

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**MECHANICAL DRAWINGS (continued)**

Number	Title	Issue Date	Received
M4.01	Mechanical – Ground Floor & Level 1 HVAC Plans	2016/02/04	2016/02/05
M4.02	Mechanical – Level 2 & Level 3 HVAC Plans	2016/02/04	2016/02/05
M4.03	Mechanical – Level 4 HVAC Plan	2016/02/04	2016/02/05
M4.11	Mechanical – Ground Floor & Level 1 Control Plans	2016/02/04	2016/02/05
M4.12	Mechanical – Level 2 & Level 3 Control Plans	2016/02/04	2016/02/05
M4.13	Mechanical – Level 4 & Roof Control Plans	2016/02/04	2016/02/05
M5.01	Mechanical – Ground Floor & Level 1 Radiant Slab Plans	2016/02/04	2016/02/05
M5.02	Mechanical – Level 2 & Level 3 Radiant Slab Plans	2016/02/04	2016/02/05
M5.03	Mechanical – Level 4 Radiant Slab Plan	2016/02/04	2016/02/05
M5.11	Mechanical – Ground Floor & Level 1 Hydronic Plans	2016/02/04	2016/02/05
M5.12	Mechanical – Level 2 & Level 3 Hydronic Plans	2016/02/04	2016/02/05
M5.13	Mechanical – Level 4 Hydronic Plan	2016/02/04	2016/02/05
M6.01	Mechanical – Enlarged Plumbing Plans	2016/02/04	2016/02/05
M6.02	Mechanical – Enlarged Studio Plans & Sections	2016/02/04	2016/02/05
M6.03	Mechanical – Enlarged Mechanical Room, AHU Area & Shaft Plans	2016/02/04	2016/02/05
M6.04	Mechanical – Enlarged Atrium Plans	2016/02/04	2016/02/05
M6.05	Mechanical – Link to Existing Plans	2016/02/04	2016/02/05
M7.01	Mechanical – Mechanical Sections – 01	2016/02/04	2016/02/05
M8.01	Mechanical – Domestic Water, Fire Suppression, Compressed Air & Natural Gas Schematic	2016/02/04	2016/02/05
M8.02	Mechanical – Hydronic Schematic	2016/02/04	2016/02/05
M9.01	Mechanical – Mechanical Details – 01	2016/02/04	2016/02/05
M9.02	Mechanical – Mechanical Details – 02	2016/02/04	2016/02/05
M9.03	Mechanical – Mechanical Details – 03	2016/02/04	2016/02/05

## ELECTRICAL DRAWINGS

Number	Title	Issue Date	Received
E0.00	Electrical – Cover Sheet, Drawing List and Legend	2016/02/04	2016/02/05
E0.01	Electrical – Site Service, Power and Low Tension Plan	2016/02/04	2016/02/05
E0.02	Electrical – Site Service Lighting Plan	2016/02/04	2016/02/05
E0.03	Electrical – Site Service Details	2016/02/04	2016/02/05
E1.01	Electrical – Ground Level + Level 1 Lighting Plans	2016/02/04	2016/02/05
E1.02	Electrical – Level 2 + Level 3 Lighting Plans	2016/02/04	2016/02/05
E1.03	Electrical – Level 4 + Roof Lighting Plans	2016/02/04	2016/02/05
E1.50	Electrical – Luminaire Schedule & Lighting Details	2016/02/04	2016/02/05
E1.51	Electrical – Lighting Low Voltage Control Zone and Control Riser	2016/02/04	2016/02/05
E2.01	Electrical – Ground Level + Level 1 Power Plans	2016/02/04	2016/02/05
E2.02	Electrical – Level 2 + Level 3 Power Plans	2016/02/04	2016/02/05
E2.03	Electrical – Level 4 + Roof Power Plans	2016/02/04	2016/02/05
E2.50	Electrical – Electrical Single Line Diagram	2016/02/04	2016/02/05
E2.52	Electrical – Electrical Service Rooms Detail and Ground Riser	2016/02/04	2016/02/05
E2.60	Electrical – Communication Riser & Room Details	2016/02/04	2016/02/05
E2.70	Electrical – Electrical Details Sheet 1 of 3	2016/02/04	2016/02/05
E2.71	Electrical – Electrical Details Sheet 2 of 3	2016/02/04	2016/02/05
E2.72	Electrical – Electrical Details Sheet 3 of 3	2016/02/04	2016/02/05
E2.80	Electrical – Mechanical Schedule and Equipment Schedule	2016/02/04	2016/02/05
E3.01	Electrical – Ground Level + Level 1 Low Tension Plans	2016/02/04	2016/02/05
E3.02	Electrical – Level 2 + Level 3 Low Tension Plans	2016/02/04	2016/02/05
E3.03	Electrical – Level 4 + Roof Low Tension Plans	2016/02/04	2016/02/05
E3.50	Electrical – Fire Alarm Risers & Fire Alarm Zones	2016/02/04	2016/02/05
E3.60	Electrical – Security System Riser Details	2016/02/04	2016/02/05
E3.70	Electrical – AV Detail Plan	2016/02/04	2016/02/05
E3.80	Electrical – Low Tension Details	2016/02/04	2016/02/05
E3.90	Electrical – Modification to Existing Building	2016/02/04	2016/02/05

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**SPECIFICATIONS AND REPORTS**

<b>Pages</b>	<b>Title</b>	<b>Issue Date</b>	<b>Received</b>
18	WSP Geotechnical Report	2016/01/18	2016/02/05
380	Architectural Specifications	2016/02/04	2016/02/05
49	Structural Specifications	2016/02/04	2016/02/05
76	Landscape Specifications	2016/02/04	2016/02/05
533	Mechanical Specifications	2016/02/04	2016/02/05
213	Electrical Specifications	2016/02/04	2016/02/05



## KPU WILSON SCHOOL OF DESIGN 90%

Richmond BC

KPU

PUBLIC/KPMB

90% DEVELOPMENT DRAWINGS

2/10/2016

## CLASS "A" ESTIMATE

*Presented by: Jason Festing*

**February 25, 2016**

Scott Construction

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Built on trust.



25-Feb-16

KPU

KPU WILSON SCHOOL OF DESIGN 90%  
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**SCOTT**

### KPU WILSON SCHOOL OF DESIGN 90%

Scott Construction is pleased to provide its proposal budget for construction of the Wilson School of Design project. The project generally includes for the following scope:

Total approximate area: 65,951 SF  
Number of project storeys: 5

Our total budget for the proposed work is (Contingency Included. See Estimate Summary):

**\$23,519,216.00**

The budget is based on our email correspondence, discussions, sketches, specification and the following drawings provided by KPMB & Public Architecture. (Dated February 04, 2016):

1. Issued for Coordination/Pre-Tender Costing Architectural
2. Issued for 90% Structural
3. Issued for Feb. 1, 2016 Civil
4. Issued for Costing Landscape
5. Issued for 90% Review Mechanical
6. Issued for 90% Review Electrical

#### 1. Budget Criteria:

We have assumed and included for the following items in the enclosed budget:

- Included in the budget is earth excavation only to the underside of the granular base below the slab on grade.
- The perimeter raft slab to be backfilled with imported material.
- Detailed excavation for Services and Raft slabs has been included.
- We have not allowed for excavation handling or disposal of contaminated or toxic material (earth, soil or man made).
- We assumed the existing site is flat and have therefore made no allowance for mass cut & fill operation.
- Subgrade for the raft slab will be proof rolled & compacted to meet applicable engineering standards.
- We have not included in the budget piles or caissons foundations.
- We have not included in the budget for underpinning or caisson wall support system.
- We have allowed for control joints (sawcuts)
- No allowance has been made for special coatings for reinforcing steel ie. epoxy coatings.
- No allowance for interior signage
- We have allowed for hardener and polish on floor finishes as shown
- Included in the budget is roof blocking as required for parapets and equipment pads etc.
- We have included perimeter foundation insulation at heated spaces.
- Elevator pit is waterproofed with a KIM admixture in the concrete mix
- Included in the budget are standard wall louvres as required for mechanical rooms.
- Included in the budget are the partitions & doors as shown on the above list of drawings. All partitions & doors will meet the local seismic & fire code requirements.
- We have allowed for interior partitions as shown on the drawings
- We have not allowed for impact resistant gypsum wall board
- We have allowed for furring & drywall to the columns & walls
- We have allowed for the elevators as indicated
- We have allowed for selective demolition of existing structures.

**2. Qualifications and Exclusions:**

Excludes soft costs including design fees, permits, connection fees, insurance, bonding, etc.

Parking, and access are provided at no additional cost.

Work shall be performed during normal working hours.

The work involved is only related to work done within the owners properties.

Price excludes lockers

Price accounts for custom millwork and cabinetry

Excludes Legal & Accounting Costs

Excludes Construction Financing Costs

Excludes Goods & Services Tax

Excludes Owner Induced Acceleration Costs

Excludes Acceleration Costs Due To Labour Strikes

Excludes Cost of Mock-ups Not Incorporated in The Work

Excludes Abatement of Contaminated & Toxic Material

Excludes Storage Shelving

Excludes Artwork

Excludes Drapery, Curtains & Blinds

Excludes LCD Monitors

Excludes Furniture

Excludes Vending Equipment

Excludes Audio Visual Equipment (Inc. Projection Screens or Projectors)

**3. Schedule:**

The construction period has been assessed as being **18 months** from the start of work on the site until substantial completion.

Scott Construction has made no allowance in the budget for an accelerated construction schedule including any associated premiums in labour, material and equipment.

All labour cost are based on a standard work week with no allowance made for overtime of any nature.

From the documents and information provided, areas of all sections of the work were assessed or, where possible quantities of all major elements were assessed or measured and priced at rates considered competitive for a project of this type under a construction lump sum form of contract. Where this was not possible, composite and elemental prices and cash allowances were established for the various items of work.

For building components & systems where drawn information, design details and specifications were not available, quality standards have been established based on a level of quality and workmanship consistent with the design intent and nature and level of sophistication of the project being constructed.

**4. Bidding Considerations :**

All costs have been estimated on the basis of multiple stipulated lump sum bids being received from the trade contractors under the standard lump sum form of contract (CCDC 2 - 2008), and that these contractors will have full use of the site, and will work continuously until completion, governed always by the access, work area and restrictions placed upon them by the nature of the project.

A competitive bid situation has been assumed with a minimum of three responsive bids being received for each major trade. No bidding coefficient has been included to cover less bidders. If the bid situation is not competitive and few bids are received, then the cost of the project may increase. No allowance has been made for the potential effects of unusual market conditions that may arise during the bid and construction periods.

No allowance has been made for sole source or negotiated procurement of any building component or material.

The unit prices used in the estimate include for labour and material, equipment and trade contractors overhead and profit.

The rates that have been established are for budgetary purposes only and are not to be used to establish the cost of additions to or deletions from the scope of work that may arise during the actual construction process.

The cost indicated represents reasonable market prices for the work involved.

**5. Escalation :**

Escalation for the 18 month construction period starting in May 2016 has been built into the unit rates and allowances used in the budget. Any escalation due to a delayed construction start beyond the above stated time has not been allowed for in the budget.

The budget is based on the current annual rate of inflation for the construction industry in British Columbia and does not allow for any hyper inflation that may occur due to locally accelerated construction activity.

**6. Contingency Allowance :**

A separate allowance has been included to cover design pricing unknowns. This allowance would not be to cover any program space modifications, but rather would provide some flexibility for designers and consultants during the remaining design stages.

A separate allowance has been included to cover unforeseen site conditions, scope or design changes, and changes resulting from co-ordination problems that may be encountered during construction.

**7. Statement of Probable Costs**

Scott Construction has no control over the cost of labour, materials, the trade contractor's or any subcontractor's method of determining prices, or of competitive bidding and market conditions. This opinion of the probable cost of construction is made on the basis of the experience, qualifications, and best judgement of a professional consultant familiar with the construction industry. Scott Construction, however, cannot and does not guarantee that proposal bids, or actual construction costs will not vary from this or subsequent cost budgets.

Should you have any question regarding the enclosed budget, please call us at 604-874-8228 at your convenience.

**Scott Construction Ltd.**

Sincerely,



Jason Festing  
Estimator

# DRAWING LIST



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## KPU WILSON SCHOOL OF DESIGN 90%

ARCHITECTURAL SHEETS		Date	Consultant
Sheet No.	Sheet Name		
A0.00	COVER SHEET	2/4/2016	Public/KPMB
A0.01	DRAWING LIST	2/4/2016	Public/KPMB
A0.02	PROJECT STATISTICS + CONTEXT PLAN	2/4/2016	Public/KPMB
A0.03	SITE SURVEY	2/4/2016	Public/KPMB
A0.04	FIRE RATINGS	2/4/2016	Public/KPMB
A0.10	EXTERIOR WALL, ROOF, & SOFFIT TYPES	2/4/2016	Public/KPMB
A0.11	INTERIOR PARTITION TYPES	2/4/2016	Public/KPMB
A0.12	CEILING TYPES & TYP DETAILS	2/4/2016	Public/KPMB
A0.13	MISC. DETAILS	2/4/2016	Public/KPMB
A0.20	ROOM FINISH SCHEDULE + ABBREVIATIONS	2/4/2016	Public/KPMB
A0.30	DOOR SCHEDULE	2/4/2016	Public/KPMB
A0.31	FRAME TYPES	2/4/2016	Public/KPMB
A0.32	EXTERIOR DOOR FRAMES	2/4/2016	Public/KPMB
A0.33	INTERIOR HM FRAMES	2/4/2016	Public/KPMB
A0.40	TYPICAL MOUNTING HEIGHTS	2/4/2016	Public/KPMB
A0.50	BASE, TRANSITION AND TRIM DETAILS	2/4/2016	Public/KPMB
A1.0	SERIES - SITE, DEMO & CODE COMPLIANCE	2/4/2016	Public/KPMB
A1.01	SITE PLAN 1 to 100	2/4/2016	Public/KPMB
A1.02	DEMOLITION PLAN 1 to 100	2/4/2016	Public/KPMB
A2.0	SERIES - FLOOR PLANS	2/4/2016	Public/KPMB
A2.01	GROUND + LEVEL 1 FLOOR PLANS	2/4/2016	Public/KPMB
A2.02	LEVEL 2 + LEVEL 3 FLOOR PLANS	2/4/2016	Public/KPMB
A2.03	LEVEL 4 + ROOF PLANS	2/4/2016	Public/KPMB
A2.1	SERIES - SLAB EDGE	2/4/2016	Public/KPMB
A2.11	GROUND RAFT + SLAB EDGE PLANS	2/4/2016	Public/KPMB
A2.12	LEVEL 1 + LEVEL 2 SLAB EDGE PLANS	2/4/2016	Public/KPMB
A2.13	LEVEL 3 + LEVEL 3 ROOF SLAB EDGE PLANS	2/4/2016	Public/KPMB
A2.14	LEVEL 4 + ROOF SLAB EDGE PLANS	2/4/2016	Public/KPMB
A3.0	SERIES - REFLECTED CEILING PLANS	2/4/2016	Public/KPMB
A3.01	REFLECTED CEILING PLAN - GROUND + LEVEL 1	2/4/2016	Public/KPMB
A3.02	REFLECTED CEILING PLAN - LEVEL 2 + LEVEL 3	2/4/2016	Public/KPMB
A3.03	REFLECTED CEILING PLAN - LEVEL 4	2/4/2016	Public/KPMB
A3.04	REFLECTED CEILING PLAN - GROUND LEVEL EXISTING BUILDING	2/4/2016	Public/KPMB
A4.0	SERIES - ELEVATIONS AND BUILDING SECTIONS	2/4/2016	Public/KPMB
A4.01	N/S ELEVATIONS	2/4/2016	Public/KPMB
A4.02	E/W ELEVATIONS	2/4/2016	Public/KPMB
A4.20	BUILDING SECTIONS	2/4/2016	Public/KPMB
A4.21	BUILDING SECTIONS	2/4/2016	Public/KPMB
A4.22	BUILDING SECTIONS	2/4/2016	Public/KPMB
A5.0	SERIES - EXTERIOR PLAN AND SECTION DETAILS	2/4/2016	Public/KPMB
A5.01	PLAN DETAILS	2/4/2016	Public/KPMB
A5.30	SECTION DETAILS - TYPICAL DOOR SECTIONS	2/4/2016	Public/KPMB
A5.40	SECTION DETAILS - GROUND	2/4/2016	Public/KPMB
A5.41	SECTION DETAILS - EXTERIOR WALLS + SOFFITS	2/4/2016	Public/KPMB
A5.42	SECTION DETAILS - ROOF + PARAPETS	2/4/2016	Public/KPMB
A5.50	MISC. DETAILS	2/4/2016	Public/KPMB
A6.0	SERIES - VERTICAL CIRCULATION AND ENLARGED PLANS	2/4/2016	Public/KPMB
A6.10	STAIR 1	2/4/2016	Public/KPMB
A6.20	STAIR 2	2/4/2016	Public/KPMB

A6.30 STAIR 3	2/4/2016	Public/KPMB
A6.40 STAIR 2 + 3 DETAILS	2/4/2016	Public/KPMB
A6.50 ELEVATOR DETAILS	2/4/2016	Public/KPMB
A6.60 W/C @ GROUND, L4	2/4/2016	Public/KPMB
A6.61 W/C @ L1, L2, L3	2/4/2016	Public/KPMB
A6.70 LINK TO EXISTING	2/4/2016	Public/KPMB
A6.71 LINK TO EXISTING DETAILS	2/4/2016	Public/KPMB
A6.80 PORCH	2/4/2016	Public/KPMB
A6.81 PORCH DETAILS	2/4/2016	Public/KPMB
A6.90 OWNER SUPPLIED EQUIPMENT	2/4/2016	Public/KPMB
A7.0 SERIES - INTERIOR ELEVATIONS	2/4/2016	Public/KPMB
A7.01 GROUND LEVEL AND L1 - INTERIOR CORRIDOR ELEVATIONS	2/4/2016	Public/KPMB
A7.02 GROUND LEVEL - INTERIOR ELEVATIONS	2/4/2016	Public/KPMB
A7.03 L1 INTERIOR ELEVATIONS	2/4/2016	Public/KPMB
A7.04 L2 AND L3 - INTERIOR CORRIDOR ELEVATIONS	2/4/2016	Public/KPMB
A7.05 L2 AND L3 - INTERIOR ELEVATIONS	2/4/2016	Public/KPMB
A7.06 L4 - INTERIOR ELEVATIONS	2/4/2016	Public/KPMB
A8.0 SERIES - INTERIOR DETAILS	2/4/2016	Public/KPMB
A8.01 PLAN DETAILS - GROUND + L1	2/4/2016	Public/KPMB
A8.02 PLAN DETAILS - L1 + L2	2/4/2016	Public/KPMB
A8.03 PLAN DETAILS - L2 + L3	2/4/2016	Public/KPMB
A8.04 PLAN DETAILS - L3 + L4	2/4/2016	Public/KPMB
A8.10 SECTION DETAILS	2/4/2016	Public/KPMB
A8.11 SECTION DETAILS	2/4/2016	Public/KPMB
A8.20 CEILING DETAILS	2/4/2016	Public/KPMB
A9.0 SERIES - MILLWORK	2/4/2016	Public/KPMB
A9.10 SERVERY MILLWORK + DETAILS	2/4/2016	Public/KPMB
A9.11 COPY CENTER MILLWORK + DETAILS	2/4/2016	Public/KPMB
A0.0 SERIES - GENERAL	2/4/2016	Public/KPMB

#### STRUCTURAL SHEETS

##### Sheet No. Sheet Name

S2.01 FOUNDATION & LEVEL 1 FLOOR PLANS	2/4/2016	Fast+Epp
S2.02 LEVEL 2 & LEVEL 3 FLOOR PLANS	2/4/2016	Fast+Epp
S2.03 LEVEL 4 & ROOF PLANS	2/4/2016	Fast+Epp
S3.01 TYPICAL SECTIONS & DETAILS	2/4/2016	Fast+Epp
S4.01 BUILDING SECTIONS	2/4/2016	Fast+Epp
S5.01 SECTIONS & DETAILS	2/4/2016	Fast+Epp
S5.02 SECTIONS & DETAILS	2/4/2016	Fast+Epp
S6.01 CORE SECTIONS & DETAILS	2/4/2016	Fast+Epp
S6.02 CORE 1 REINFORCING & ELEVATIONS	2/4/2016	Fast+Epp
S6.03 CORE 2 REINFORCING & ELEVATIONS	2/4/2016	Fast+Epp
S6.04 CORE 3 REINFORCING AND ELEVATIONS	2/4/2016	Fast+Epp
S7.01 PORCH SECTIONS & DETAILS	2/4/2016	Fast+Epp
S8.01 LINK BRIDGE SECTIONS & DETAILS	2/4/2016	Fast+Epp

#### LANDSCAPE SHEETS

##### Sheet No. Sheet Name

LANDSCAPE	2/4/2016	PFS Studio
L0.00 COVER PAGE	2/4/2016	PFS Studio
L1.00 SITE PLAN	2/4/2016	PFS Studio
L2.00 TREE MANAGEMENT PLAN	2/4/2016	PFS Studio
L3.00 MATERIALS PLAN	2/4/2016	PFS Studio
L4.00 LAYOUT PLAN	2/4/2016	PFS Studio
L5.00 GRADING PLAN	2/4/2016	PFS Studio
L6.00 PLANTING PLAN	2/4/2016	PFS Studio
L7.00 LIGHTING PLAN	2/4/2016	PFS Studio
L10.01 DETAILS - PAVING	2/4/2016	PFS Studio
L10.02 DETAILS - WALLS AND STAIRS	2/4/2016	PFS Studio
L10.03 DETAILS - WALLS	2/4/2016	PFS Studio

L10.04 DETAILS - FURNITURE	2/4/2016	PFS Studio
L10.05 DETAILS - PLANTING	2/4/2016	PFS Studio
<b>CIVIL SHEETS</b>		
Sheet No. Sheet Name		
C1.00 SITE SERVICING	2/1/2016	Core Group
C2.00 EROSION AND SILTATION CONTROL PLAN	2/1/2016	Core Group
<b>MECHANICAL SHEETS</b>		
Sheet No. Sheet Name		
M0.01 COVER SHEET, DRAWING LIST + SYMBOL SCHEDULE	2/4/2016	AME Group
M0.02 MECHANICAL EQUIPMENT SCHEDULES - 01	2/4/2016	AME Group
M0.03 MECHANICAL EQUIPMENT SCHEDULES - 02	2/4/2016	AME Group
M0.04 MECHANICAL EQUIPMENT SCHEDULES - 03	2/4/2016	AME Group
M1.01 MECHANICAL SITE PLAN	2/4/2016	AME Group
M2.00 FOUNDATION PLAN	2/4/2016	AME Group
M2.01 GROUND FLOOR & LEVEL 1 PLUMBING PLANS	2/4/2016	AME Group
M2.02 LEVEL 2 & LEVEL 3 PLUMBING PLANS	2/4/2016	AME Group
M2.03 LEVEL 4 AND ROOF PLUMBING PLAN	2/4/2016	AME Group
M3.00 FIRE SUPPRESSION ZONING PLANS	2/4/2016	AME Group
M3.01 GROUND FLOOR & LEVEL 1 FIRE SUPPRESSION PLANS	2/4/2016	AME Group
M3.02 LEVEL 2 & LEVEL 3 FIRE SUPPRESSION PLANS	2/4/2016	AME Group
M3.03 LEVEL 4 FIRE SUPPRESSION PLAN	2/4/2016	AME Group
M4.01 GROUND FLOOR & LEVEL 1 HVAC PLANS	2/4/2016	AME Group
M4.02 LEVEL 2 & LEVEL 3 HVAC PLANS	2/4/2016	AME Group
M4.03 LEVEL 4 & ROOF HVAC PLANS	2/4/2016	AME Group
M4.11 GROUND FLOOR + LEVEL 1 CONTROL PLANS	2/4/2016	AME Group
M4.12 LEVEL 2 & LEVEL 3 CONTROL PLANS	2/4/2016	AME Group
M4.13 LEVEL 4 & ROOF CONTROL PLANS	2/4/2016	AME Group
M5.01 GROUND FLOOR & LEVEL 1 RADIANT SLAB PLANS	2/4/2016	AME Group
M5.02 LEVEL 2 & LEVEL 3 RADIANT SLAB PLANS	2/4/2016	AME Group
M5.03 LEVEL 4 RADIANT SLAB PLAN	2/4/2016	AME Group
M5.11 GROUND FLOOR & LEVEL 1 HYDRONIC PLANS	2/4/2016	AME Group
M5.12 LEVEL 2 & LEVEL 3 HYDRONIC PLANS	2/4/2016	AME Group
M5.13 LEVEL 4 HYDRONIC PLAN	2/4/2016	AME Group
M6.01 ENLARGED PLUMBING PLANS	2/4/2016	AME Group
M6.02 ENLARGED STUDIO PLANS & SECTIONS	2/4/2016	AME Group
M6.03 ENLARGED MECHANICAL ROOM, AHU AREA & SHAFT PLANS	2/4/2016	AME Group
M6.04 ENLARGED ATRIUM PLANS	2/4/2016	AME Group
M6.05 LINK TO EXISTING PLANS	2/4/2016	AME Group
M7.01 MECHANICAL SECTIONS - 01	2/4/2016	AME Group
M8.01 DOMESTIC WATER, FIRE SUPPRESSION, COMPRESSED AIR & NATURAL GAS SCHEMATIC	2/4/2016	AME Group
M8.02 HYDRONIC SCHEMATIC	2/4/2016	AME Group
M8.03 VENTILATION & CONTROL SCHEMATIC	2/4/2016	AME Group
M9.01 MECHANICAL DETAILS - 01	2/4/2016	AME Group
M9.02 MECHANICAL DETAILS - 02	2/4/2016	AME Group
M9.03 MECHANICAL DETAILS - 03	2/4/2016	AME Group
<b>ELECTRICAL SHEETS</b>		
Sheet No. Sheet Name		
E0.00 COVER SHEET, DRAWING LIST AND LEGEND	2/4/2016	AES
E0.01 SITE SERVICE, POWER AND LOW TENSION PLAN	2/4/2016	AES
E0.02 SITE SERVICE LIGHTING PLAN	2/4/2016	AES
E0.03 SITE SERVICE DETAILS	2/4/2016	AES
E1.01 GROUND LEVEL + LEVEL 1 LIGHTING PLAN	2/4/2016	AES
E1.02 LEVEL 2 + LEVEL 3 LIGHTING PLAN	2/4/2016	AES
E1.03 LEVEL 4 + ROOF LIGHTING PLAN	2/4/2016	AES
E1.50 LIGHTING LOW VOLTAGE CONTROL ZONE AND CONTROL RISER	2/4/2016	AES
E1.51 LUMINAIRE SCHEDULE & LIGHTING DETAILS	2/4/2016	AES
E2.01 GROUND LEVEL + LEVEL 1 POWER PLAN	2/4/2016	AES
E2.02 LEVEL 2 + LEVEL 3 POWER PLAN	2/4/2016	AES

E2.03 LEVEL 4 + ROOF POWER PLAN	2/4/2016	AES
E2.50 ELECTRICAL SINGLE LINE DIAGRAM	2/4/2016	AES
E2.52 ELECTRICAL SERVICE ROOMS DETAIL AND GROUND RISER	2/4/2016	AES
E2.60 COMMUNICATION RISER AND ROOM DETAILS	2/4/2016	AES
E2.70 ELECTRICAL DETAILS SHEET 1 OF 3	2/4/2016	AES
E2.71 ELECTRICAL DETAILS SHEET 2 OF 3	2/4/2016	AES
E2.72 ELECTRICAL DETAILS SHEET 3 OF 3	2/4/2016	AES
E2.80 MECHANICAL SCHEDULE AND EQUIPMENT SCHEDULE	2/4/2016	AES
E3.01 GROUND LEVEL + LEVEL 1 LOW TENSION PLAN	2/4/2016	AES
E3.02 LEVEL 2 + LEVEL 3 LOW TENSION PLAN	2/4/2016	AES
E3.03 LEVEL 4 + ROOF LOW TENSION PLAN	2/4/2016	AES
E3.50 FIRE ALARM RISER AND FIRE ALARM ZONES	2/4/2016	AES
E3.60 SECURITY SYSTEM RISER DETAILS	2/4/2016	AES
E3.70 AV DETAIL PLAN	2/4/2016	AES
E3.80 LOW TENSION DETAILS SHEET 1 OF 2	2/4/2016	AES
E3.90 MODIFICATION TO EXISTING BUILDING	2/4/2016	AES



# PROPOSED BUDGET SUMMARY

**SCOTT**

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Total SF: 85,951  
Total SM: 6,127

## KPU WILSON SCHOOL OF DESIGN 90%

	FEB. 26, 2016	COST	COST	% OF	NOV. 26, 2016	VARIANCE	%	
	BUDGET	/SQ.MT.	/SQ.FT.	TOTAL	BUDGET	TOTAL	DIFF	
TRADE BUDGET								
2	Site Work	1,182,499	193.00	17.93	5.17	1,247,999	65,500	-5.2%
3	Concrete & Formwork	2,039,198	332.82	30.92	8.92	2,246,356	207,158	-9.2%
4	Masonry	36,641	5.98	0.56	0.16	0	(36,641)	100.0%
5	Metals	1,439,510	234.95	21.83	6.30	741,743	(697,767)	94.1%
6	Wood & Plastic	2,597,597	423.96	39.39	11.37	2,733,077	135,480	-5.0%
7	Thermal & Moisture Protection	1,616,959	263.91	24.52	7.38	1,270,519	(346,440)	27.3%
8	Doors, Entrances & Windows	2,731,501	445.81	41.42	11.95	2,365,422	(366,079)	15.5%
9	Finishes	1,494,093	243.85	22.65	6.54	1,481,254	(12,839)	0.9%
10	Specialties	147,260	24.03	2.23	0.64	275,448	128,188	-46.5%
11	Equipment	14,950	2.44	0.23	0.07	0	(14,950)	100.0%
12	Furnishings	85,000	13.67	1.29	0.37	0	(85,000)	100.0%
13	Special Construction	0	0.00	0.00	0.00	0	0	0.0%
14	Conveying Systems	350,000	57.12	5.31	1.53	375,000	25,000	6.7%
15	Mechanical	3,561,356	581.26	54.00	15.58	3,919,442	358,086	-9.1%
16	Electrical	2,730,000	445.57	41.39	11.95	1,656,979	(1,073,021)	65.4%
*****								
TOTAL TRADE BUDGET		\$20,026,564	\$3,268.58	\$303.66	87.63	\$18,307,239	(\$1,719,325)	
GENERAL REQUIREMENTS & FEES								
1	General Requirements	1,849,234	301.82	28.04	8.09	1,634,365	(214,869)	13.1%
1	Fees	685,026	111.80	10.39	3.00	618,804	(66,222)	10.7%
1	Architect & Consultant Fees	0	0.00	0.00	0.00	0	0	
1	Bonding	240,319	39.22	3.64	1.05	201,380	(38,939)	19.3%
1	Cash Allowances	53,000	8.65	0.80	0.23	483,831	430,831	89.0%
*****								
TOTAL GR, FEES & CA's		\$2,827,579	\$461.49	\$42.87	12.37	\$2,938,380	\$110,801	
TOTAL BUDGET		\$22,854,143	\$3,838.62	\$356.62	100%	\$21,245,619	(\$1,608,524)	
CONTINGENCY								
18	Design Development Contingency	221,691	36.18	3.36	0.97			
19	Pricing Contingency & Escalation	221,691	36.18	3.36	0.97			
20	Post Tender Construction Contingency	221,691	36.18	3.36	0.97			
*****								
TOTAL CONTINGENCY		\$665,074	\$108.55	\$10.08	2.9%			
TOTAL BUDGET WITH CONTINGENCY		\$23,519,216	\$3,947	\$366.70				

The proposed estimate has been priced at current rates taking in account the size, location and nature of the project. The unit rates utilized, considers a construction management form of contract with competitively bid subtrade pricing. The estimate allows for labour, material, equipment and other input cost at current market rates and level of productivity. It does not take into account extraordinary market changes and conditions. Cost escalations have not been accounted for and Scott Construction highly recommends the owner/client takes measures to account and/or allow for future price variances.

# PROPOSED DETAILED BUDGET ESTIMATE

**SCOTT**

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Thursday, February 25, 2016

## KPU WILSON SCHOOL OF DESIGN 90%

KPU WILSON SCHOOL OF DESIGN 90%  
KPU

START  
FINISH

### CSWSOD

DESCRIPTION	BUDGET	COST/SM.	COST/SF.	% OF COST
<b>DIVISION # 1 GENERAL REQUIREMENTS:</b>				
01050 CONSTRUCTION MANAGEMENT FEES	685,026	111.80	10.39	2.91
DESIGN DEVELOPMENT CONTINGENCY	221,691	36.18	3.36	0.94
PRICING CONTINGENCY	221,691	36.18	3.36	0.94
POST CONTRACT CONTINGENCY	221,691	36.18	3.36	0.94
01100 ARCHITECT & CONSULTANT FEES				
01210 CASH ALLOWANCES	53,000	8.65	0.80	0.23
01500 GENERAL REQUIREMENTS	2,089,553	341.04	31.68	8.88
SUB-TOTAL :	<u>\$3,492,652</u>	<u>\$570.04</u>	<u>\$52.96</u>	<u>14.85%</u>
<b>DIVISION # 2 SITE WORK:</b>				
02220 DEMOLITION	91,640	15.45	1.44	0.40
02300 EARTHWORK	321,585	52.49	4.88	1.37
02500 UTILITY SERVICES	260,413	42.50	3.95	1.11
02620 SUBDRAINAGE	20,844	3.40	0.32	0.09
02700 BASE, BALLAST, PAVEMENT & APPURTENANCES	189,979	31.01	2.88	0.81
02800 SITE IMPROVEMENTS & AMENITIES	131,758	21.50	2.00	0.56
02900 PLANTING	163,280	26.65	2.48	0.69
SUB-TOTAL :	<u>\$1,182,499</u>	<u>\$193.00</u>	<u>\$17.93</u>	<u>5.03%</u>
<b>DIVISION # 3 CONCRETE &amp; FORMWORK:</b>				
03100 CONCRETE	1,376,210	224.61	20.87	5.85
03210 REINFORCING STEEL	662,988	108.21	10.05	2.82
SUB-TOTAL :	<u>\$2,039,198</u>	<u>\$332.82</u>	<u>\$30.92</u>	<u>8.67%</u>
<b>DIVISION # 4 MASONRY:</b>				
04200 MASONRY UNITS	36,641	5.98	0.56	0.16
SUB-TOTAL :	<u>\$36,641</u>	<u>\$5.98</u>	<u>\$0.56</u>	<u>0.16%</u>
<b>DIVISION # 5 METALS:</b>				
06100 STRUCTURAL STEEL	252,824	41.26	3.83	1.07
06300 STEEL DECK	548,447	89.51	8.32	2.33
06500 METAL FABRICATION	409,299	66.80	6.21	1.74
06510 METAL STAIRS RAILINGS & LADDERS	68,970	11.26	1.05	0.29
06700 ORNAMENTAL METALS	152,320	24.86	2.31	0.65
06800 EXPANSION CONTROL	7,650	1.25	0.12	0.03
SUB-TOTAL :	<u>\$1,439,510</u>	<u>\$234.95</u>	<u>\$21.83</u>	<u>6.12%</u>

**DIVISION # 6 WOOD & PLASTIC :**

06100 ROUGH CARPENTRY	55,543	9.07	0.84	0.24
06130 HEAVY TIMBER CONSTRUCTION	325,550	53.13	4.94	1.38
06180 GLUED-LAMINATED CONSTRUCTION	2,164,289	353.24	32.82	9.20
06400 ARCHITECTURAL WOODWORK	52,215	8.52	0.79	0.22
*****				
<b>SUB-TOTAL :</b>	<b>\$2,597,597</b>	<b>\$423.96</b>	<b>\$39.39</b>	<b>11.04%</b>

**DIVISION # 7 THERMAL & MOISTURE PROTECTION :**

07210 THERMAL INSULATION	25,118	4.10		0.11
07260 VAPOUR BARRIER	0	0.00		0.00
07430 COMPOSITE METAL WALL PANELS	889,645	145.20	13.49	3.78
07500 MEMBRANE ROOFING	503,195	82.13	7.63	2.14
07720 ROOF ACCESSORIES	2,362	0.39	0.04	0.01
07760 ROOF PAVERS	19,375	3.16	0.29	0.08
07840 FIRESTOPPING	19,264	3.14	0.29	0.08
07900 CAULKING & SEALANTS	28,000	4.57	0.42	0.12
*****				
<b>SUB-TOTAL :</b>	<b>\$1,616,959</b>	<b>\$263.91</b>	<b>\$22.17</b>	<b>6.88%</b>

**DIVISION # 8 DOORS, ENTRANCES & WINDOWS :**

08110 METAL DOORS & FRAMES	67,106	10.95	1.02	0.29
08200 WOOD & PLASTIC LAMINATE DOORS	20,312	3.32	0.31	0.09
08400 ENTRANCES & STOREFRONTS	93,900	15.33	1.42	0.40
08500 WINDOWS	13,680	2.23	0.21	0.06
08700 FINISH HARDWARE	64,345	10.50	0.98	0.27
08800 GLASS & GLAZING	292,987	47.82	4.44	1.25
08900 GLAZED CURTAIN WALL	2,179,172	355.67	33.04	9.27
*****				
<b>SUB-TOTAL :</b>	<b>\$2,731,501</b>	<b>\$445.81</b>	<b>\$41.42</b>	<b>11.61%</b>

**DIVISION # 9 FINISHES :**

09250 GYPSUM WALLBOARD	630,048	102.83	9.55	2.68
09310 CERAMIC TILE	83,346	13.60	1.26	0.35
09510 ACOUSTICAL CEILINGS	380,830	62.16	5.77	1.62
09545 SPECIAL CEILINGS	34,014	5.55	0.52	0.14
09670 FLUID - APPLIED FLOORING	17,825	2.91	0.27	0.08
09830 ACOUSTICAL BARRIERS	250,909	40.95	3.80	1.07
09900 PAINTING & FINISHING	97,122	15.86	1.47	0.41
*****				
<b>SUB-TOTAL :</b>	<b>\$1,494,093</b>	<b>\$243.85</b>	<b>\$22.65</b>	<b>6.35%</b>

**DIVISION # 10 SPECIALTIES :**

10100 VISUAL DISPLAY BOARDS	59,430	9.70	0.90	0.25
10150 COMPARTMENTS & CUBICLES	22,907	3.74	0.35	0.10
10260 WALL & CORNER GUARDS	1,526	0.25	0.02	0.01
10600 SPECIAL PARTITIONS	17,600	2.87	0.27	0.07
10700 EXTERIOR PROTECTION	32,500	5.30		0.14
10800 WASHROOM ACCESSORIES	9,204	1.50	0.14	0.04
10900 WARDROBE & COAT SPECIALTIES	4,093	0.67	0.06	0.02
*****				
<b>SUB-TOTAL :</b>	<b>\$147,260</b>	<b>\$24.03</b>	<b>\$1.74</b>	<b>0.63%</b>

**DIVISION # 11 EQUIPMENT :**

11010 MAINTENANCE & SHOP EQUIPMENT	14,950	2.44	0.23	0.06
*****				
SUB-TOTAL :	<u>\$14,950</u>	<u>\$2.44</u>	<u>\$0.23</u>	<u>0.06%</u>
<b>DIVISION # 12 FURNISHINGS :</b>				
12400 FURNISHINGS & ACCESSORIES	85,000	13.87	1.29	0.36
*****				
SUB-TOTAL :	<u>\$85,000</u>	<u>\$13.87</u>	<u>\$1.29</u>	<u>0.36%</u>
<b>DIVISION # 13 SPECIAL CONSTRUCTION :</b>				
*****				
<b>DIVISION # 14 CONVEYING SYSTEMS :</b>				
14200 ELEVATORS	350,000	57.12	5.31	1.49
*****				
SUB-TOTAL :	<u>\$350,000</u>	<u>\$57.12</u>	<u>\$5.31</u>	<u>1.49%</u>
<b>DIVISION # 15 MECHANICAL :</b>				
15000 INTERIOR MECHANICAL	3,561,356	581.26	54.00	15.14
*****				
SUB-TOTAL :	<u>\$3,561,356</u>	<u>\$581.26</u>	<u>\$54.00</u>	<u>15.14%</u>
<b>DIVISION # 16 ELECTRICAL :</b>				
16000 INTERIOR ELECTRICAL	2,730,000	445.57	41.39	11.61
*****				
SUB-TOTAL :	<u>\$2,730,000</u>	<u>\$445.57</u>	<u>\$41.39</u>	<u>11.61%</u>
<b>TOTAL PRELIMINARY BUDGET :</b>	<u>\$23,519,216</u>	<u>\$3,838.62</u>	<u>\$353.77</u>	<u>100.00%</u>

## Cliffe, Ashley AVED:EX

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**From:** mark bullen <mark@capexprojects.com>  
**Sent:** Monday, March 7, 2016 4:44 PM  
**To:** Gogela, Deborah AVED:EX  
**Subject:** CSWSOD Project Information Session

Deborah

At our last status update, the Project Board asked for an update following the Project Information Session that took place last Friday.

The event was very well attended, with the following firms registered (the General Contractors are at the top the list):

- 1 Ledcor
- 2 Axiom Builders
- 3 Kenaidan Contracting Ltd.
- 4 Wales McLellan
- 5 Ellisdon
- 6 Bird
- 7 Graham Construction
- 8 Magil Construction Pacific
- 9 ITC Construction Group
- 10 Lark Group
- 11 KDS Construction Ltd.
- 12 Urban One Builders
- 13 Mierau Contractors
- 14 GBS Construction Managers Inc.
- 15 Effort Global Construction
- 16 Conti Evolution
- 17 Giffels WestPro
- 18 EnerCorp
- 19 Apex Aluminium Extrusions
- 20 Omega Mechanical
- 21 TerraCana Foundation Solutions Inc.
- 22 BCP Installations
- 23 Cedar Crest Lands (BC) Ltd.

This is better than we could have expected for a project of this size, and feedback was very positive – I spoke with many of these firms on the day including Graham, Ledcor, Kenaidan, Ellisdon, Axiom, Wales McLellan, Miereau and Urban One and there was real interest in the project as well as appreciation of our efforts to give the market as a whole a head start on this opportunity in advance of the formal procurement process.

Regards,

Mark Bullen  
Director | Capex Project Advisory Services Inc.  
Mobile: +1 778 985 2649  
[mark@capexprojects.com](mailto:mark@capexprojects.com) | [capexprojects.com](http://capexprojects.com)

## Cliffe, Ashley AVED:EX

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**From:** Harry Gray <Harry.Gray@kpu.ca>  
**Sent:** Monday, March 21, 2016 1:21 PM  
**To:** Gellor, Richard AVED:EX  
**Cc:** Postans, James AVED:EX  
**Subject:** RE: Capital Asset Activities  
**Attachments:** FY16 Q3 Capital Cashflow for Consolidated Forecast.pdf; FY16 Q3 Capital Cashflow for Consolidated Forecast.xlsx

Hi Richard

I am hoping that the attached information is in the detail and form that meets the needs of AVED. The pdf file is a copy of the consolidated Q3 Cashflow forecast. The (much) greater detail is in the excel file, which has a series of tabs showing line by line expenditures. Please let me know if you need anything else, or if you would like it in a different format.

...harry



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**Harry Gray**  
AVP, Administration  
Kwantlen Polytechnic University  
t 604.599.2066 c 604.218.3522 f 604.599.3456 e [harry.gray@kpu.ca](mailto:harry.gray@kpu.ca)  
[www.kpu.ca](http://www.kpu.ca)

This e-mail and any attachments may be confidential or legally privileged. If you received this message in error or are not the intended recipient, please destroy the e-mail message and any attachments or copies.

Please note, all Kwantlen email addresses and url's have been changed recently. Please update your records accordingly.

**From:** Gellor, Richard AVED:EX [<mailto:Richard.Gellor@gov.bc.ca>]  
**Sent:** Monday, March 21, 2016 12:03 PM  
**Cc:** Postans, James AVED:EX  
**Subject:** RE: Capital Asset Activities

Hi,

I wanted to follow-up on the request below, as this information is required as soon as possible.

If it helps, the summary forecast numbers are part of your institutions finance dept. Q3 submission, which was sent to the AVED finance dept.

Your earliest reply is appreciated.

**Richard**  
Manager, Capital Asset Management  
Phone: (250) 953-4983

**From:** Gellor, Richard AVED:EX  
**Sent:** Thursday, March 10, 2016 9:33 AM  
**Cc:** Postans, James AVED:EX  
**Subject:** Capital Asset Activities  
**Importance:** High

Hi,

As part of AVED's Capital Asset Management's reporting responsibilities for post-secondary institutional projects we need to provide a complete picture on forecasted projects. Therefore, can you please provide details on the self-funded projects planned by your institution without provincial funding.

The list should reflect the projects that make up your capital asset activities summary submission for self-funded projects for fiscals 15/16 to 18/19 for the budget 2016 plan period.

Specifically we need to know: the project name, total project cost, cash flow (if possible), scope description and completion date.

This information is needed at your earliest opportunity (ideally by the beginning of next week).

Thanks in advance

Richard

**Richard Gellor, BA (Hon), PgMP, PMP**  
Manager, Capital Asset Management  
Post-Secondary Finance Branch  
Ministry of Advanced Education  
Tel: (250) 953-4983

Page 266 to/à Page 267

Withheld pursuant to/removed as

s.17



**Cliffe, Ashley AVED:EX**

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**From:** mark bullen <mark@capexprojects.com>  
**Sent:** Monday, March 21, 2016 1:27 PM  
**To:** Craig Regan; 'Carolyn Robertson'; Karen Hearn; 'Alix Best'  
**Cc:** 'Harry Gray'; 'Jon Harding'; Gogela, Deborah AVED:EX  
**Subject:** CSWSOD Procurement  
**Attachments:** CSWSOD Procurement Manual Confidential.pdf

Dear all,

Please see attached Procurement Manual for the CSWSOD project which will be issued for tender this coming Thursday.

The attached has been reviewed by Alixe and reviewed and approved for circulation by Partnerships BC's procurement due diligence advisor.

Note that there should be no contact with the market (and by this we include not only potential bidders, but also the public and any of your colleagues who are not directly involved in the Project) regarding the project during the tender open period – please refer any contact received to the following email address for my attention:

[procurement@capexprojects.com](mailto:procurement@capexprojects.com)

Any questions, please feel free to ask.

Regards,

Mark Bullen  
Director | Capex Project Advisory Services Inc.  
Mobile: +1 778 985 2649  
[mark@capexprojects.com](mailto:mark@capexprojects.com) | [capexprojects.com](http://capexprojects.com)

## Cliffe, Ashley AVED:EX

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**From:** Cliffe, Ashley AVED:EX on behalf of Postans, James AVED:EX  
**Sent:** Thursday, March 24, 2016 3:09 PM  
**To:** Brewster, Kevin AVED:EX; Lemmer, Nicola I AVED:EX; harry.gray@kpu.ca; jon.harding@kpu.ca; gidget.maguire@kpu.ca; lorna.gordon@kpu.ca; Houle, Michael PSBC:EX; Mill, Karen PSBC:EX; Sandra.Moretti@partnershipsbc.ca; tina@tinawinton.com; michelen@holditall.com; mark@capexprojects.com; Gogela, Deborah AVED:EX; Butler, Jason FIN:EX  
**Cc:** Parkinson, Carolyn AVED:EX; Fountain, Kathy B AVED:EX; Duckmanton, Judi AVED:EX  
**Subject:** KPU Chip and Shannon Wilson School of Design - Report on progress since the March 2 Project Board meeting

Good afternoon,

The KPU Chip and Shannon Wilson School of Design project will be releasing the tender at 2 pm today (Thursday, March 24).

Partnerships BC's Due Diligence Advisor has reviewed and approved for circulation the attached Procurement Manual for the project.

Tender can be viewed here:

<http://www.bcbid.gov.bc.ca/open.dll/showDisplayDocument?sessionID=718661624&disID=31832904&docType=Tender&dis version nos=0&doc search by=Tend&docTypeQual=TN>

Should you receive any questions from potential bidders or the public regarding the project during the tender open period, please refer them to Mark Bullen's attention at the following email address:  
[procurement@capexprojects.com](mailto:procurement@capexprojects.com)<<mailto:procurement@capexprojects.com>>

Mark also reported that the Project Information Session held on Friday, March 4th was well attended, with the following firms registered (the General Contractors are at the top the list):

- 1 Ledcor
- 2 Axiom Builders
- 3 Kenaidan Contracting Ltd.
- 4 Wales McLellan
- 5 Ellisdon
- 6 Bird
- 7 Graham Construction
- 8 Magil Construction Pacific
- 9 ITC Construction Group
- 10 Lark Group
- 11 KDS Construction Ltd.
- 12 Urban One Builders
- 13 Mierau Contractors
- 14 GBS Construction Managers Inc.
- 15 Effort Global Construction
- 16 Conti Evolution
- 17 Giffels WestPro

- 18 EnerCorp
- 19 Apex Aluminium Extrusions
- 20 Omega Mechanical
- 21 TerraCana Foundation Solutions Inc.
- 22 BCP Installations
- 23 Cedar Crest Lands (BC) Ltd.

The above attendance was better than expected for a project of this size with positive feedback provided by several proponents. Mark spoke with many of the represented firms including Graham, Ledcor, Kenaidan, Ellisdon, Axiom, Wales McLellan, Mierau and Urban One and each proponent expressed interest in the project as well as appreciation of the project team's efforts to give the market an opportunity to view the project in advance of the formal procurement process.

The project tender will close on Friday, April 22nd and the project team will report the results of the tender process at the next project board.

Thank you,

James Postans

## Cliffe, Ashley AVED:EX

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Thursday, April 7, 2016 12:17 PM  
**To:** Postans, James AVED:EX  
**Cc:** Prive, Doris L AVED:EX  
**Subject:** RE: Tendering results and disclosure

Hi James,

I talked to Mark Bullen just now. He has no issue with posting the contract, but wants to check with KPU first, since technically they are the ones entering into the contract.

He would like to ask the successful proponent *after the tendering process is complete and the bidder has been selected* rather than issue an addendum during the tendering process. He is of course being protective of the project and does not want to concern the bidders in any way (and potentially reduce the number of bidders). The successful proponent may wish to redact some of the information from the contract, further to sec 21 as you mentioned, and that can be worked out after the bidder is selected.

I will send him an email with our request that he can share with KPU. Anything you wish to add?

Thanks,  
Deborah

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**From:** Postans, James AVED:EX  
**Sent:** Wednesday, April 6, 2016 4:42 PM  
**To:** Gogela, Deborah AVED:EX; Prive, Doris L AVED:EX  
**Subject:** FW: Tendering results and disclosure

Hi –

Could one of you please contact Mark and ask him if he's okay with publically posting the construction contract on KPU's website once the tendering process is complete?

The reason for this requires is there is a joint construction sector / government committee that has committed government to proactive disclosure of the successful contracts as a way of expanded transparency which will be a requirement for projects completing the procurement process on a go forward basis (NLC approval onwards). Kevin would however like to be proactive and start this process with UBC and Selkirk and see if it's possible to do this with KPU.

This however may be problematic for KPU given the project is on the street and would require an addendum that discloses this fact to the proponents (which Mark may be fine doing).

The disclosure would be done once the tendering process is completed and the contract is in place and is subject to the applicable exceptions (such as Sec 21 – disclosure harmful to economic interests).

Happy to discuss.

Thanks,

James

## Cliffe, Ashley AVED:EX

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**From:** Postans, James AVED:EX  
**Sent:** Thursday, April 7, 2016 1:34 PM  
**To:** Gogela, Deborah AVED:EX; Prive, Doris L AVED:EX  
**Subject:** RE: Tendering results and disclosure

This is coming from a DM committee with industry so I'm sure PBC is very aware of this – it will be a requirement for projects going forward as we are being requested to be more proactive in our disclosures.

There will be some exemptions that can be removed from contracts (the FOI exemptions) however the direction is to be more proactive.

Again – Kevin wanted to see if Mark (and KPU) were receptive to the idea as we will be requiring this on a go forward basis for new projects.

Thanks,

James

---

**From:** Gogela, Deborah AVED:EX  
**Sent:** Thursday, April 7, 2016 12:23 PM  
**To:** Postans, James AVED:EX; Prive, Doris L AVED:EX  
**Subject:** RE: Tendering results and disclosure

I forgot to mention, Mark is wondering what Mike Houle at Partnerships BC thinks of this idea?

Also, a heads up that bidders are asking for an extra day (Monday, April 25) to provide the separate alternate prices, after they get their base bids together for Friday, April 22). They will date stamp and lock up the base bid envelopes in a safe on the Friday, and wait to open them all on the Monday.

He has vetted all this through the procurement advisor, Kim Anderson at PBC, and will issue the addendum early next week. He will provide an update for the Board that we can send out.

Thanks,  
Deborah

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**From:** Postans, James AVED:EX  
**Sent:** Wednesday, April 6, 2016 4:42 PM  
**To:** Gogela, Deborah AVED:EX; Prive, Doris L AVED:EX  
**Subject:** FW: Tendering results and disclosure

Hi –

Could one of you please contact Mark and ask him if he's okay with publically posting the construction contract on KPU's website once the tendering process is complete?

The reason for this requires is there is a joint construction sector / government committee that has committed government to proactive disclosure of the successful contracts as a way of expanded transparency which will be a requirement for projects completing the procurement process on a go forward basis (NLC approval onwards). Kevin

would however like to be proactive and start this process with UBC and Selkirk and see if it's possible to do this with KPU.

This however may be problematic for KPU given the project is on the street and would require an addendum that discloses this fact to the proponents (which Mark may be fine doing).

The disclosure would be done once the tendering process is completed and the contract is in place and is subject to the applicable exceptions (such as Sec 21 – disclosure harmful to economic interests).

Happy to discuss.

Thanks,

James

## **Cliffe, Ashley AVED:EX**

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Monday, April 11, 2016 9:08 AM  
**To:** 'mark bullen'  
**Cc:** Postans, James AVED:EX; Prive, Doris L AVED:EX  
**Subject:** KPU CSWSOD - Tendering results and contract disclosure

Hi Mark,

This is further to our discussion last Thursday. Through a government/industry committee, the government has committed to the proactive disclosure of the construction procurement process as a way of increased transparency; for example, institutions posting successful construction contracts to their website. This will be a requirement for projects going forward, and while the KPU Wilson School of Design is being tendered before this requirement is instated, we would like to be proactive and include projects like this one.

This can be done after the tendering process is completed and the contract is in place. Some of the information in the contract will be exempt (i.e., FOI exemptions such as Section 21 – disclosure harmful to economic interests).

Thank you for sharing this with your colleagues at KPU. Let me know if there are any questions or concerns.

Regards,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education  
PO Box 9147 Stn Prov Govt  
Victoria BC V8W 9H1

Phone: (250) 387-0890  
Fax: (250) 356-7922  
e-mail: [deborah.gogela@gov.bc.ca](mailto:deborah.gogela@gov.bc.ca)



## Cliffe, Ashley AVED:EX

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Thursday, April 14, 2016 11:53 AM  
**To:** Postans, James AVED:EX  
**Cc:** Prive, Doris L AVED:EX  
**Subject:** RE: CSWSOD Tender

Hi James,

I spoke to Mark last week and heard from him again this morning. In response to your questions:

- No major issues have arisen. He has issued three addenda, one of which answers your next question. I looked at the Invitation for Tender (IFT) on BC Bid a couple of times. It's very well organized, including the addenda log.
- Addendum #3 includes an extension to the Alternate Bid Price submissions to **Monday, April 25 at 2pm**, at the request of the contractors. The Base Bid Price submission due date remains Friday April 22 at 2pm. This gives the contractors sufficient time to review the alternate prices. Kim Anderson with PBC was in agreement with this. They will lock up the Base Bid envelopes over the weekend, and open them on Monday.
- No other major concerns from the contractors, apart from the alternate price submission date.
- The tenders will be opened on Monday after the Alternate Price Bid envelopes are received. It is not a public opening. Only the CPO, KPU Purchasing Department Staff and KPU Project Board member will be in attendance (see excerpt from Procurement Manual below).

### Step 3. Tender Close

- 3.1 Tenders shall not be received at the Closing Place beyond the Closing Time.
- 3.2 Tenders shall be logged upon receipt on the form provided as Appendix A.
- 3.3 A tender clock will be provided by KPU's Purchasing Services Department at the Closing Place which shall be the reference for logging tenders received and for declining late tender submissions.
- 3.4 Upon receipt, tenders will be securely held by KPU's Purchasing Services Department until the Closing Time.

### Step 4. Tender Evaluation

- 4.1 Tenders may be opened only in the presence of the Chief Project Officer, a representative of KPU's Purchasing Services Department and a KPU member of the Project Board.

Do you want me to draft up an email that you can send out to the Project Board?

Thanks,  
Deborah

---

**From:** Postans, James AVED:EX  
**Sent:** Wednesday, April 13, 2016 7:17 PM  
**To:** Gogela, Deborah AVED:EX  
**Subject:** CSWSOD Tender

Hi Deborah,

Can you ask Mark how the tendering process is going for the CSWSOD? Specifically:

- Are there any issues in the tendering process he thinks we need to know about?
- Are they still planning on closing the tender on April 22nd? Are there any planned extension to that date?
- Any concerns expressed by the bidders that we should be concerned about?
- Are they closing tenders and opening them on the spot or in another location at a different time?

Thanks,

James



**VIA E-MAIL**

File No. 64300-20/KPU/SOD

Fiscal Year 2016/17- 804759

April 18, 2016

Mr. Jon Harding  
Vice-President, Finance  
Kwantlen Polytechnic University  
12666 72nd Ave  
Surrey BC V3W 2M8

Dear Mr. Harding:

I am pleased to advise that the Ministry of Advanced Education (the Ministry) has increased the Certificate of Approval (COA) advance in accordance with the terms and conditions of the funding approval for the following project:

**Project No.:** 804759  
**Project Title:** *Chip and Shannon Wilson School of Design*  
**Project Rationale:** Cost-shared construction of a new School of Design at the Richmond Campus to accommodate growth in new and existing programs in Fashion and Technology; Foundations in Design; Fashion Marketing; Graphic Design for Marketing; and Interior Design.  
**Project Scope:** Construction of a new 6,026 square metre (m<sup>2</sup>) building, accommodating a minimum of 505 student full-time equivalents (FTEs). Project includes classrooms; labs; and instructional support space including Dean and faculty offices, meeting rooms, a lecture theatre, student study space, a materials research centre, and gallery space for the exhibition of student work and curated shows related to innovation.

2016/17 Total Approved Budget: \$36,000,000

2016/17 Total Approved Ministry Contribution: \$12,000,000

COA No.: s.17

COA Amount:

COA Expiry:

Please find a COA and Project Summary enclosed. The general terms and conditions of this approval are included in Attachment 1.

... /2

**Ministry of  
Advanced Education**

Post-Secondary  
Finance Branch

Capital Asset  
Management

Mailing Address:  
PO Box 9134 Stn Prov Govt  
Victoria BC V8W 9B5

Location Address:  
1<sup>st</sup> Floor, 835 Humboldt Street  
Victoria BC V8V 4W8

Telephone: (250) 356-9393  
Facsimile: (250) 356-7922

### Reporting Requirements

As a stipulation of this funding approval, your institution will be required to submit the following:

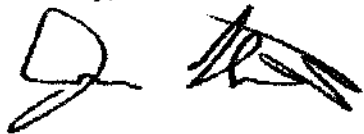
1. Quarterly cashflow projections, sent to the attention of Mr. Inder Gill, Capital Financial Officer, at [AVED.PostSecondaryFinanceBranch@gov.bc.ca](mailto:AVED.PostSecondaryFinanceBranch@gov.bc.ca).
2. Funding issued through the COA is to be reflected in the appropriate lines on quarterly forecasts and year-to-date actuals (Appendix Cs), uploaded to the AVED Reporting Portal SharePoint site at:  
<https://aved.collaborate.gov.bc.ca/branches/avedreporting/SitePages/Home.aspx>.

It is critical that your institution provide accurate cash flow projections and make project draws as soon as viable. Diligent monitoring of cashflow for this and all capital projects is expected.

Please provide the following reporting information to Doris Privé, Capital Planning Officer, at [AVED.PostSecondaryFinanceBranch@gov.bc.ca](mailto:AVED.PostSecondaryFinanceBranch@gov.bc.ca):

- Quarterly project status reports until project completion, (please use Template 7 accessed from the following link [http://www.aved.gov.bc.ca/cppm/related\\_documents.htm](http://www.aved.gov.bc.ca/cppm/related_documents.htm));
- Updated project summary report prior to issuance of each COA; and
- Confirmation of LEED registration.

Sincerely,



James Postans, CPA, CGA  
Director | Capital Asset Management | Ministry of Advanced Education

Enclosures

pc: Mr. Kevin Brewster, Assistant Deputy Minister and EFO  
Ministry of Advanced Education

Ms. Kathy Lylyk, Executive Director of Finance  
Kwantlen Polytechnic University

Ms. Angela Tao, Director of Finance planning, Reporting and Assurance  
Kwantlen Polytechnic University

Mr. Harry Gray, Director, Facilities  
Kwantlen Polytechnic University

Ms. Deborah Gogela, Manager, Capital Asset Management  
Ministry of Advanced Education

### Terms and Conditions of Funding Approval

Under the terms and conditions of this funding approval, it is the Ministry of Advanced Education's expectation that:

- Fiscal year spending limits as follows:
  - Maximum draw down for fiscal year 16/17 is **s.17** and
  - Maximum draw down for fiscal year 17/18 is
- Funding is subject to confirmation of final, actual construction costs;
- Significant changes to project schedule, scope and/or provincial cashflow cannot be implemented without prior approval of Treasury Board and the Ministry;
- Kwantlen Polytechnic University (the University) will manage all incremental operating costs (building, FTEs, amortization, etc.) without seeking further Provincial government funding; and
- All additional conditions are as per the original November 2012 approval for the Wilson School of Design project.
- The equipment and/or renovated space and/or building will be used for its entire useful life;
- The funding received is a restricted contribution for the development of a capital project that will maintain, create or extend the service life of the asset(s) and therefore will be treated as a deferred contribution. The reduction of the deferral will be over the service life of the equipment and/or building;
- The project(s) will proceed within the approved scope, budget and cashflow allocations to achieve service delivery objectives as per the approved Business Case;
- The institution is responsible for any cost overruns that may occur on the project(s), without impacting the Province's debt;
- If, at the completion of the project, the total actual eligible costs vary from the approved project budget, the provincial funding will be limited to either the approved maximum contribution or the agreed percentage share, whichever is less; and
- The project(s) will proceed in accordance with various provincial government requirements and policies including, but not limited to:
  - Capital Asset Management Framework  
<http://www.fin.gov.bc.ca/tbs/camf.htm>
  - Capital Asset Reference Guide  
[http://www.aved.gov.bc.ca/cppm/related\\_documents.htm](http://www.aved.gov.bc.ca/cppm/related_documents.htm)
  - Where applicable:
    - University Act, College and Institute Act, Thompson Rivers University Act, Royal Roads University Act;
    - Greenhouse Gas Reduction Targets Act;
    - Wood First Legislation;
    - LEED Gold for new construction; certification must be obtained from Canada Green Building Council (CaGBC); and
    - LEED Silver for major renovation and renewal project; certification must be obtained from CaGBC.

## Cliffe, Ashley AVED:EX

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**From:** Cliffe, Ashley AVED:EX on behalf of Postans, James AVED:EX  
**Sent:** Monday, April 18, 2016 8:53 AM  
**To:** jon.harding@kpu.ca  
**Cc:** Brewster, Kevin AVED:EX; kathy.lylyk@kpu.ca; angela.tao@kpu.ca; harry.gray@kpu.ca; Gogela, Deborah AVED:EX  
**Subject:** KPU **s.17** School of Design April 2016  
**Attachments:** F - KPU - **s.17** - School of Design - Apr 18.pdf

Good morning,

Please find attached, the letter regarding the **Increased** funding for the Chip and Shannon Wilson School of Design COA project # **s.17** , including relevant information.

Should you have any questions, please contact me at (250) 356-7896 or by email at [James.Postans@gov.bc.ca](mailto:James.Postans@gov.bc.ca)

Thank you

James Postans, CPA, CGA  
Director | Capital Asset Management | Ministry of Advanced Education  
1<sup>st</sup> Floor – 835 Humboldt St | Victoria, BC | V8V 4W8  
Phone:(250) 356-7896 | Fax: (250) 356-7922

## Cliffe, Ashley AVED:EX

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**From:** Cliffe, Ashley AVED:EX on behalf of Postans, James AVED:EX  
**Sent:** Friday, April 22, 2016 1:47 PM  
**To:** Brewster, Kevin AVED:EX; Lemmer, Nicola I AVED:EX; Gogela, Deborah AVED:EX; Butler, Jason FIN:EX; harry.gray@kpu.ca; jon.harding@kpu.ca; gidget.maguire@kpu.ca; lorna.gordon@kpu.ca; Houle, Michael PSBC:EX; Mill, Karen PSBC:EX; Sandra.Moretti@partnershipsbc.ca; tina@tinawinton.com; michelen@holditall.com; mark@capexprojects.com  
**Cc:** Parkinson, Carolyn AVED:EX; Fountain, Kathy B AVED:EX; Duckmanton, Judi AVED:EX  
**Subject:** KPU Chip and Shannon Wilson School of Design - Update on the Tender Process

Good afternoon,

The Tender is scheduled to close this afternoon at 2pm. Mark Bullen, the Chief Project Officer (CPO) provided the following report and update on the Tender Process:

- The process has gone smoothly, and no major concerns have arisen from the Bidders.
- Five addenda have been issued since the Invitation for Tender was posted to BC Bid on March 24, 2016.
- In Addendum #3 KPU agreed to extend the Alternate Bid Price submission date to *Monday, April 25 at 2pm*. This is at the request of some of the Bidders and with the concurrence of the Due Diligence Advisor.
- The Base Bid Price submission due date remains today, April 22 at 2pm.
- KPU will securely hold the unopened Base Bid Price envelopes until the Closing Time.
- Only the CPO, a KPU Purchasing Department representative, and a KPU Project Board member will be present for the Tender Evaluation (see excerpt from Procurement Manual below specifically outlining the steps).

### Step 3. Tender Close

- 3.1 Tenders shall not be received at the Closing Place beyond the Closing Time.
- 3.2 Tenders shall be logged upon receipt on the form provided as Appendix A.
- 3.3 A tender clock will be provided by KPU's Purchasing Services Department at the Closing Place which shall be the reference for logging tenders received and for declining late tender submissions.
- 3.4 Upon receipt, tenders will be securely held by KPU's Purchasing Services Department until the Closing Time.

### Step 4. Tender Evaluation

- 4.1 Tenders may be opened only in the presence of the Chief Project Officer, a representative of KPU's Purchasing Services Department and a KPU member of the Project Board.

Please feel free to contact me with any questions.

Regards,  
James Postans, CPA, CGA  
Director | Capital Asset Management | Ministry of Advanced Education

1st Floor – 835 Humboldt St | Victoria, BC | V8V 4W8  
Phone:(250) 356-7896 | Fax: (250) 356-7922



## **Cliffe, Ashley AVED:EX**

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Friday, April 22, 2016 3:32 PM  
**To:** 'mark bullen'  
**Cc:** Postans, James AVED:EX  
**Subject:** KPU CSWSOD - AVED Call in during Tender Evaluation

Hi Mark,

Thanks for checking with Kim Anderson about AVED calling in during KPU's Tender Evaluation time.

Assuming all is fine with Kim, we will each call in around 2pm to the following conference number:

Participant Conf ID: s.15,s.17  
Dial in numbers s.15,s.17  
Vancouver local

Regards,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education

Office: (250) 387-0890  
Mobile: (250) 415-1369

## **Cliffe, Ashley AVED:EX**

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Monday, April 25, 2016 2:29 PM  
**To:** Brewster, Kevin AVED:EX; Postans, James AVED:EX; Prive, Doris L AVED:EX  
**Cc:** 'mark bullen'  
**Subject:** KPU CSWSOD Tender Evaluation Results

Hi everyone,

Two bidders came in under the construction budget, with DGS coming out as the successful bidder, subject to confirmation of their submission documents.

If I heard correctly, following is a summary of the six bids:

s.12

We can all breathe a collective sigh of relief... Kudos to Mark and KPU procurement staff for a very smooth tender process.

Mark, look forward to discussing with you further tomorrow afternoon.

Cheers,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education  
PO Box 9147 Stn Prov Govt  
Victoria BC V8W 9H1

Phone: (250) 387-0890  
Fax: (250) 356-7922  
e-mail: [deborah.gogela@gov.bc.ca](mailto:deborah.gogela@gov.bc.ca)

**Cliffe, Ashley AVED:EX**

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**From:** mark bullen <mark@capexprojects.com>  
**Sent:** Tuesday, April 26, 2016 3:49 PM  
**To:** Postans, James AVED:EX; Gogela, Deborah AVED:EX; Prive, Doris L AVED:EX  
**Subject:** CSWSOD Change in cost report, consultants

Dear all,

The main change in the cost report is an additional \$39k for design costs and \$33k for non-design costs.

For design costs, this is mostly attributable to a PO to AME (Mechanical Engineer) for delivery of an energy study to meet BC Hydro requirements which we expect will return a credit in the region of at least \$50k.

For non-design costs, this is mostly attributable to the lawyer fees for Doug Sanders and an adjustment to the forecast to allow for an augmented role for the QS in providing payment certification services (fee yet to be firmed up).

There will always be fluctuations in the cost report as there are many costs that we don't know with certainty, but I will certainly advise of anything material.

Regards,

Mark Bullen  
Director | Capex Project Advisory Services Inc.  
Mobile: +1 778 985 2649  
[mark@capexprojects.com](mailto:mark@capexprojects.com) | [capexprojects.com](http://capexprojects.com)

## Cliffe, Ashley AVED:EX

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**From:** mark bullen <mark@capexprojects.com>  
**Sent:** Tuesday, April 26, 2016 3:59 PM  
**To:** Postans, James AVED:EX; Prive, Doris L AVED:EX; Gogela, Deborah AVED:EX  
**Subject:** FW: ADM Ltr - Brewster to Bullen re Chief Project Officer  
**Attachments:** 100780 - Att 1 - KPU WSOD Project Board Terms of Reference - (Rev Oct 19 2015).pdf

Dear all

Reference the attached, Project Board approval is required for execution of contracts over \$75k and for material change orders (to those contracts), where materiality of cost is defined as a cost increase of more than 10%.

On this basis, my reading is that as CPO I have authorization for change orders up to 10% of the contract value (within the overall \$36m budget, of course), so no change is proposed.

Regards,

Mark Bullen  
Director | Capex Project Advisory Services Inc.  
Mobile: +1 778 985 2649  
[mark@capexprojects.com](mailto:mark@capexprojects.com) | [capexprojects.com](http://capexprojects.com)

**From:** AVED ADM Financial and Mgmt Services AVED:EX [<mailto:AVED.ADMFinancialandMgmtService@gov.bc.ca>]  
**Sent:** October 20, 2015 11:02 AM  
**To:** 'mark bullen'  
**Cc:** 'jon.harding@kpu.ca'; Houle, Michael PSBC:EX; 'tina@tinawinton.com'; AVED ADM Institutions and Programs AVED:EX; 'harry.gray@kpu.ca'; 'karen.hearn@kpu.ca'; Nickerson, Catherine M AVED:EX; Gogela, Deborah AVED:EX  
**Subject:** ADM Ltr - Brewster to Bullen re Chief Project Officer

Dear Mark,

Please find attached letter re KPU Wilson School of Design Chief Project Officer Responsibilities.

Sincerely,

**Kevin Brewster**  
Assistant Deputy Minister & EFO | Financial & Management Services Division  
Ministry of Advanced Education  
☎ 250-356-2496 | ✉ [Kevin.Brewster@gov.bc.ca](mailto:Kevin.Brewster@gov.bc.ca)

**Kwantlen Polytechnic University – Chip & Shannon Wilson School of Design**

**Project Board  
Terms of Reference  
Revised October 19, 2015**

**1.0 Background**

In November 2012, Kwantlen Polytechnic University (the University) received Treasury Board approval for provincial funding of up to one-third of the total project capital costs, to a maximum of \$12 million, towards the construction of a new \$36 million dollar School of Design at the Richmond Campus. The \$36 million total project costs are to be equally shared between the Ministry of Advanced Education (the Ministry), the University and private donors Chip and Shannon Wilson and *lululemon athletica*. In return for the \$12 million donation, the school is to be named the “Chip and Shannon Wilson School of Design” (WSOD).

The Ministry has established a project board to oversee the project.

The Project Board will be chaired by Kevin Brewster, Assistant Deputy Minister, Ministry of Advanced Education, and include other representatives from the Ministry, the University, the major donor, and Partnerships BC.

The Ministry will be Secretariat to the Project Board, and coordinate all meetings and distribution of materials for Project Board members.

**2.0 Role and Function of the Project Board**

The Project Board is responsible to provide overall direction and key decision-making for the WSOD Project, with particular reference to scope, budget, schedule, and communications.

The Project Board will receive progress reports from the Chief Project Officer (CPO) and provide advice and guidance to the CPO on all matters pertaining to the management of the scope, budget, schedule and communications for the WSOD Project.

The Chief Project Officer is to advise the Project Board in advance of the intention to initiate a procurement process; and, the proposed procurement method for endorsement.

Project Board direction is required for:

- Any material<sup>1</sup> deviation from the budget and schedule approved by the Ministry and Treasury Board;
- Execution of key contracts  $\geq$  \$75,000; and,
- Execution of any material<sup>1</sup> change orders.

### **3.0 Communications**

Project Board approval is required for:

- The Project communications plan;
- Any significant deviations from the communications plan; and
- The messaging and processes to address any politically sensitive/controversial issues. This input will be provided to the Ministry's Communications Office.

### **4.0 Accountability**

- The Project Board will report directly to the Ministry.
- The CPO is accountable to and takes direction on project –related matters from the Project Board Chair.

### **5.0 Membership**

- Kevin Brewster, Assistant Deputy Minister, Ministry of Advanced Education (Chair)
- Fazil Mihar, Assistant Deputy Minister, Institutions and Programs Division, Ministry of Advanced Education
- Michael Houle, Vice-President, Partnerships BC
  - Karen Mill, Assistant Vice-President, Partnerships BC (Alternate to Michael Houle)
- Harry Gray, Associate Vice-President Administration, Kwantlen Polytechnic University
- Jon Harding, Vice-President Finance and Administration, Kwantlen Polytechnic University
- Tina Swinton, Wilson Family Representative

### **6.0 Support to the Project Board**

- Chief Project Officer:  
Mark Bullen, Kwantlen Polytechnic University
- Project Board Secretariat:  
Catherine Nickerson, Director, Capital Asset Management,  
Post-Secondary Finance Branch, Ministry of Advanced Education
- Administrative Support:  
Deborah Gogela, Manager, Capital Asset Management,  
Post-Secondary Finance Branch, Ministry of Advanced Education

### **7.0 Observer**

- Raman Dale, Treasury Board Analyst, Ministry of Finance

### **8.0 Project Board Member Roles and Responsibilities**

#### **8.1 Chair Responsibilities:**

The Chair will:

- Call Project Board meetings;
- Approve agendas;
- Provide direction as required to the membership regarding committee responsibilities;
- Issue and approve agendas and minutes for Project Board meetings; and,
- As required, request independent advice on different aspects of the project.

## **8.2 Role of the Chief Project Officer:**

The Chief Project Officer is:

- Accountable to the Project Board;
- Responsible for leading the project team;
- Responsible for all elements of the project including scope, schedule, budget, procurement and communication/consultation; and,
- To provide regular status reports to the Project Board on the progress of the project in relation to the project scope, schedule and budget.

## **8.3 Role and Function of the Project Board Secretariat:**

- All materials to be distributed to Project Board members must go through the Secretariat. The Secretariat will review all materials before distribution to the Project Board.
- Decisions made by the Project Board members outside regular scheduled Project Board meetings must involve the Secretariat in order to accurately document any actions and/or decisions.

## **8.4 Role and Function of the Observer:**

- The Ministry of Finance Treasury Board Analyst will act as independent observer (Observer) of the Project Board.
- The Observer will not participate in the Project Board discussions nor act as advisor to the Project Board.
- Any questions or concerns the Observer may have will be directed to the Project Board Chair.

## **9.0 Meeting Frequency**

- Bi-monthly meetings or as required.

## **10.0 Meeting Quorum**

A Quorum shall consist of:

- Chair;
- One member or alternate from the University; and,
- One member or alternate from the Ministry.

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<sup>1</sup> Definition of materiality as it pertains to changes in a capital project are as follows:

A material variance is defined as:

- a cost increase >10%
- a size increase >10%
- a scope change that results in a change in the use of a facility
- a schedule change that negatively impacts project objectives; program delivery; budget; or funding

## Cliffe, Ashley AVED:EX

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**From:** Postans, James AVED:EX  
**Sent:** Wednesday, April 27, 2016 8:50 AM  
**To:** 'mark bullen'; Prive, Doris L AVED:EX; Gogela, Deborah AVED:EX  
**Subject:** RE: ADM Ltr - Brewster to Bullen re Chief Project Officer

Thanks Mark – I would agree with that assessment based on the CPO letter.

Based on the letter, you have discretion up to ~\$2M (10% of \$21.6M contract) for change orders within the construction contract. For project boards I have been involved with in the past, typically these approved change orders are brought up at the next project board within the status report for reporting purposes only.

I also confirmed with Kevin that we can proceed with executing the contract subject to Project Board (and KPU internal) approvals.

s.12

Thanks again,

James Postans, CPA, CGA  
Director | Capital Asset Management | Ministry of Advanced Education  
1<sup>st</sup> Floor – 835 Humboldt St | Victoria, BC | V8V 4W8  
Phone: (250) 356-7896 (New Number) | Fax: (250) 356-7922

---

**From:** mark bullen [<mailto:mark@capexprojects.com>]  
**Sent:** Tuesday, April 26, 2016 3:59 PM  
**To:** Postans, James AVED:EX; Prive, Doris L AVED:EX; Gogela, Deborah AVED:EX  
**Subject:** FW: ADM Ltr - Brewster to Bullen re Chief Project Officer

Dear all

Reference the attached, Project Board approval is required for execution of contracts over \$75k and for material change orders (to those contracts), where materiality of cost is defined as a cost increase of more than 10%.

On this basis, my reading is that as CPO I have authorization for change orders up to 10% of the contract value (within the overall \$36m budget, of course), so no change is proposed.

Regards,

Mark Bullen  
Director | Capex Project Advisory Services Inc.  
Mobile: +1 778 985 2649  
[mark@capexprojects.com](mailto:mark@capexprojects.com) | [capexprojects.com](http://capexprojects.com)



**From:** AVED ADM Financial and Mgmt Services AVED:EX [<mailto:AVED.ADMFinancialandMgmtServicest@gov.bc.ca>]  
**Sent:** October 20, 2015 11:02 AM  
**To:** 'mark bullen' <[mark@capexprojects.com](mailto:mark@capexprojects.com)>  
**Cc:** 'jon.harding@kpu.ca' <[jon.harding@kpu.ca](mailto:jon.harding@kpu.ca)>; Houle, Michael PSBC:EX <[Michael.Houle@partnershipsbc.ca](mailto:Michael.Houle@partnershipsbc.ca)>; 'tina@tinawinton.com' <[tina@tinawinton.com](mailto:tina@tinawinton.com)>; AVED ADM Institutions and Programs AVED:EX <[AVED.ADMInstitutionsandPrgrms@gov.bc.ca](mailto:AVED.ADMInstitutionsandPrgrms@gov.bc.ca)>; 'harry.gray@kpu.ca' <[harry.gray@kpu.ca](mailto:harry.gray@kpu.ca)>; 'karen.hearn@kpu.ca' <[karen.hearn@kpu.ca](mailto:karen.hearn@kpu.ca)>; Nickerson, Catherine M AVED:EX <[Catherine.Nickerson@gov.bc.ca](mailto:Catherine.Nickerson@gov.bc.ca)>; Gogela, Deborah AVED:EX <[Deborah.Gogela@gov.bc.ca](mailto:Deborah.Gogela@gov.bc.ca)>  
**Subject:** ADM Ltr - Brewster to Bullen re Chief Project Officer

Dear Mark,

Please find attached letter re KPU Wilson School of Design Chief Project Officer Responsibilities.

Sincerely,

**Kevin Brewster**

Assistant Deputy Minister & EFO | Financial & Management Services Division  
Ministry of Advanced Education

☎ 250-356-2496 | ✉ [Kevin.Brewster@gov.bc.ca](mailto:Kevin.Brewster@gov.bc.ca)

**Cliffe, Ashley AVED:EX**

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Wednesday, April 27, 2016 10:59 AM  
**To:** Prive, Doris L AVED:EX  
**Subject:** Letter re: KPU report back  
**Attachments:** Scan\_20160427.pdf

We do not have this in the file, but I don't think we're supposed to? I know Kevin shared this with me before – I just couldn't remember!

Page 294

Withheld pursuant to/removed as

s.12

**PROJECT BOARD MEETING #15**  
**Kwantlen Polytechnic University**  
**Chip and Shannon Wilson School of Design**

**AGENDA**

<b>DATE:</b>	May 3, 2016		
<b>TIME:</b>	9:00am to 10:30am		
<b>LOCATION:</b>	<b>Teleconference Dial-in:</b> s.15,s.17	<b>Participant ID:</b> s.15,s.17	
	<b>Moderator:</b> Kevin Brewster		

Item	Action	Lead
1. Adoption of the Agenda (5 min) ( <b>Attachment 1</b> )	For Decision	Kevin Brewster
2. Approval of the Minutes (5 min) a) Meeting Minutes #14 ( <b>Attachment 2</b> )	For Decision	Kevin Brewster
3. Project Status Update (20 min) a) CSWSOD Project Board Status Report #15 ( <b>Attachment 3</b> )	For Decision	Mark Bullen
4. Procurement Update (10 min) a) Results of the Tender ( <i>see Attachment 3, Sec. 1.5</i> )	For Decision	Mark Bullen
5. Next Steps (5 min) a) Upcoming Project Board Meeting #16: TBC – Proposed in early July 2016 after construction start	Information	Kevin Brewster

<b>BOARD MEMBERS</b>		
Kevin Brewster (Chair)	Assistant Deputy Minister, Ministry of Advanced Education	250 952-7410
Nicola Lemmer	A/Assistant Deputy Minister, Ministry of Advanced Education	250 387-1950
Jon Harding	Vice President Finance and Administration, Kwantlen Polytechnic University	604 599-2099
Harry Gray	Associate Vice-President Administration, Kwantlen Polytechnic University	604 599-2066
Michael Houle	Vice-President, Partnerships BC	250 475-4666
Karen Mill	Alternate Member, Assistant Vice-President, Partnerships BC	250 475-4672
Tina Swinton	Wilson Family Representative	604 737-7232
<b>NON-VOTING MEMBERS</b>		
Karen Hearn	Executive Director, Facilities Services, Kwantlen Polytechnic University	604 599-2442
Mark Bullen	Chief Project Officer, Kwantlen Polytechnic University	778 985-2649
James Postans	Director, Ministry of Advanced Education	250 356-7896
<b>GUESTS</b>		
Jason Butler	Observer	250 387-9071
Deborah Gogela	Administrative Support	250 387-0890

### Meeting Quorum

A Quorum shall consist of:

- Chair;
- One member or alternate from the University; and,
- One member or alternate from the Ministry.

**PROJECT BOARD MEETING #14**  
**Kwantlen Polytechnic University**  
**Chip and Shannon Wilson School of Design**

**DRAFT Minutes – March 2, 2016**

<b>PRESENT:</b>	Kevin Brewster (Chair), Assistant Deputy Minister, Ministry of Advanced Education Fazil Mihar, Assistant Deputy Minister, Ministry of Advanced Education Harry Gray, Associate Vice President Administration, Kwantlen Polytechnic University Michael Houle, Vice President, Partnerships BC Kim Anderson, Project Director, Partnerships BC Tina Swinton, Wilson Family Representative Mark Bullen, Chief Project Officer, Kwantlen Polytechnic University Karen Hearn, Executive Director, Facilities Services, Kwantlen Polytechnic University James Postans (Secretariat), Director, Ministry of Advanced Education Deborah Gogela (Administrative Support), Manager, Ministry of Advanced Education Doris Prive (Administrative Support), Capital Planning Officer, Ministry of Advanced Education
<b>ABSENT:</b>	Karen Mill, Assistant Vice President, Partnerships BC Jon Harding, Vice President Finance and Administration, Kwantlen Polytechnic University Jason Butler (Observer), Ministry of Finance

ITEM	TOPIC
1.	<b>Adoption of the Agenda</b>  <i><b>Proposed Motion #1:</b></i> <i>"Be it resolved that the Chip and Shannon Wilson School of Design Project Board approves the agenda of Project Board Meeting #14."</i>  <i><b>Motion #1:</b> moved by MH; seconded by FM; passed.</i>
2.	<b>Approval of Minutes</b>  a. Meeting Minutes #13 (February 1, 2016) – Adopted as amended (Attachment 1), per the following revisions: Karen Hearn and Jon Harding did <u>not</u> attend Harry Gray <u>did</u> attend Remove Raman Dale's name and replace with Jason Butler  <i><b>Proposed Motion #2:</b></i> <i>"Be it resolved that the Chip and Shannon Wilson School of Design Project Board approves the minutes as amended of Project Board Meeting #13, held on Feb 1, 2016."</i>  <i><b>Motion #2:</b> moved by FM; seconded by TS; passed.</i>

ITEM	TOPIC
3.	<p><b>Project Status Update</b></p> <p>Mark presented Project Board Status Report #14 (Attachment 2).</p> <p><u>Project Report Highlights:</u></p> <p>SCHEDULE – Remains on target for start of classes Jan 3, 2018.</p> <ul style="list-style-type: none"> <li>• Tender Issue – March 24, 2016</li> <li>• Tender Close – April 22, 2016</li> <li>• Start of Construction – June 22, 2016</li> <li>• Substantial Completion – Dec 12, 2017</li> <li>• Start of Classes – Jan 3, 2018</li> </ul> <p>SCOPE – No changes to report.</p> <p>BUDGET – The project remains on budget. Fee negotiations with KPMB have concluded within an agreement of \$378k, which is \$55k below the amount budgeted of \$434K, and with KPMB formally withdrawing any claim to additional fees for the Re-Design phase service.</p> <p>CURRENT WORK UNDERWAY:</p> <ul style="list-style-type: none"> <li>• Finalization of design and specifications;</li> <li>• Finalization of front end procurement documents; and</li> <li>• Project information session (March 4, 2016) – Kim Anderson (PBC) will be in attendance.</li> </ul> <p>RISKS:</p> <ul style="list-style-type: none"> <li>• Project is unaffordable (high risk) – closely monitor construction documents as they develop.</li> <li>• Project completion is delayed (medium risk) – monitor schedule and ensure sufficient time allowed for approvals.</li> <li>• Project does not meet functional requirements of faculty (medium risk) – ongoing communication with faculty and one round of controlled end user engagement.</li> </ul> <p>COMMUNICATIONS:</p> <p>All public project communications and updates continue to be led by the Ministry and coordinated with Government Communications and Public Engagement Office, in collaboration with KPU.</p> <ul style="list-style-type: none"> <li>▪ Advance Procurement Notice issued February 23, 2016.</li> </ul> <p>RECOMMENDATIONS:</p> <p><b>Issue #1 – Approval to Proceed to Tender</b></p> <p>See also Agenda Item 4. Procurement Update. The Board discussed the recommended motion and agreed to revise it to read as follows:</p> <p><b>Motion # 3</b></p> <p><i>“Be it resolved that the Chip and Shannon Wilson School of Design Project Board provides approval to proceed to tender on or about March 24, 2016.”</i></p> <p><b>Motion #3:</b> moved by MH; seconded by HG; passed.</p>

ITEM	TOPIC
	s.13,s.17
4.	<p><b>Procurement Update</b></p> <p>Mark Bullen presented to the Project Board a <i>Memorandum: Request to Proceed to Tender</i> (Attachment 3), including a summary of the Class A cost estimates relative to the Project Budget:</p> <ul style="list-style-type: none"> <li>• Two independent pre-tender construction cost estimates based on a 90% complete design have been received, which validate that the re-design process has brought the Project back within the affordability envelope.</li> <li>• The estimates were performed by: <ul style="list-style-type: none"> <li>○ Quantity Surveyor/Cost Consultant (Hanscomb Ltd.); and</li> <li>○ General Contractor (Scott Construction Ltd.)</li> </ul> </li> <li>• There is adequate contingency within the Project Budget to enable a General Contractor to be engaged to deliver the construction.</li> </ul> <p>See Agenda Item 3. Project Status Update for approved Board motion.</p>
5.	<p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>• <b>Project Board Meeting #15:</b> Proposed for the week of May 2, 2016, following tender close (scheduled for April 22, 2016)</li> <li>• The Board requested that Mark provide email updates for the following events: <ol style="list-style-type: none"> <li>1. Project Information Session – March 4, 2016</li> <li>2. Confirmation of release of tender – on or about March 24, 2016</li> <li>3. Who responded to the tender – April 22, 2016</li> <li>4. Any issues that arise during the tender period</li> </ol> </li> <li>• Meeting Adjournment</li> </ul> <p><b>Motion #5:</b></p> <p><i>"Be it resolved that the Chip and Shannon Wilson School of Design Project Board meeting is adjourned."</i></p> <p><i>Motion #5: moved by FM; seconded by MH; passed.</i></p> <p>Kevin thanked Mark and Karen for their tremendous work to successfully move the project forward to this point.</p>



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## BOARD MEMBERS

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Kevin Brewster (Chair)	Assistant Deputy Minister, Ministry of Advanced Education	250 952-7410
Fazil Mihar	Assistant Deputy Minister, Ministry of Advanced Education	250 925-0698
Harry Gray	Associate Vice-President Administration, Kwantlen Polytechnic University	604 599-2066
Jon Harding	Vice President Finance and Administration, Kwantlen Polytechnic University	604 599-2099
Michael Houle	Vice-President, Partnerships BC	250 475-4666
Karen Mill	Alternate Member, Assistant Vice-President, Partnerships BC	250 475-4672
Tina Swinton	Wilson Family Representative	604 737-7232

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## NON-VOTING MEMBERS

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Karen Hearn	Executive Director, Facilities Services, Kwantlen Polytechnic University	604 599-2442
Mark Bullen	Chief Project Officer, Kwantlen Polytechnic University	778 985-2649
James Postans	Director, Ministry of Advanced Education	250 356-7896

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## GUESTS

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Jason Butler	Observer	250 387-9071
Deborah Gogela	Administrative Support	250 387-0890
Doris Prive	Administrative Support	250 356-2420
Kim Anderson	Partnerships BC	250 475-4683

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## Meeting Quorum

A Quorum shall consist of:

- Chair;
- One member or alternate from the University; and,
- One member or alternate from the Ministry.

# CONFIDENTIAL

## MEMO

**To:** Chair and Members of the Chip & Shannon Wilson School of Design  
Project Board

**From:** Chief Project Officer

**Date:** May 3, 2016

**Subject:** PROJECT STATUS REPORT #15

## 1 PROJECT STATUS

### 1.1 SUMMARY AND MAJOR ACCOMPLISHMENTS

- Design and specifications finalized
- Front end procurement documents finalized
- Project Information Session held
- Tender issued
- Procurement process delivered & tender closed
- Tenders received, opened and analysed
- Amendment to donor agreement signed by Chip Wilson (to be executed by KPU)
- Project remains on schedule **Refer to Section 1.3 and Appendix 1**
- Project remains on budget **Refer to Section 1.5 and Appendix 2**

### 1.2 SNAPSHOT OF PROJECT STATUS

**Table 1: Project Status**

Scope	ON TRACK
Schedule	ON TRACK
Budget	ON TRACK
Procurement / Contracting	ON TRACK

### 1.3 PROJECT SCHEDULE UPDATE

The project schedule remains on target for Start of Classes Jan 3, 2018 **Refer to Appendix 1.**

**Table 2: Key Project Milestones**

Milestone	Target Date
Start of Construction	June 22, 2016 (see discussion under 2.1 and revised schedule, ref. opportunity to bring forward to May 18, 2016)
Substantial Completion	Dec 12, 2017
Start of Classes	Jan 3, 2018

### 1.4 PROJECT SCOPE

No changes to report to the scope of the project, and the downward scope ladder is not currently envisaged to be required.

### 1.5 PROJECT BUDGET

The Project remains on budget, and the current cost report is enclosed **Refer to Appendix 2.**

Two Base Bid Prices were received within the Construction Budget, and in accordance with the Procurement Manual, the Alternative Price envelopes were not opened.

The breakdown of Base Bid Prices is as follows:

s.12

## 1.6 CURRENT WORK UNDERWAY AND NEXT STEPS

### Current work:

- Request to approve contract execution

### Next Steps include:

- Assemble contract documents for execution
- Approval to execute contract
- Execution of contract

## 1.7 KEY RISKS

The table below highlights major risks.

**Table 2: Project Risks**

Issue	Discussion	Ranking, Impact, Mitigation	
Project is unaffordable	Based on the lowest bid, there is an additional \$500k of contingency in the project budget, however, there is a risk that the lowest bidder may seek to make up profit through change orders	Remaining mitigations include: <ul style="list-style-type: none"><li>▪ Careful contract management</li><li>▪ Proposed introduction of Payment Certifier role to enhance contract monitoring and administration</li></ul>	
Project completion is delayed	The revised schedule currently allows for an 18-month construction period from start of construction to substantial completion. All compliant bidders have accepted this schedule.  There is a residual risk that the contractor - by fault or otherwise - will not complete the project on time.	Remaining mitigations include: <ul style="list-style-type: none"><li>▪ Expedite approvals to provide additional schedule float</li><li>▪ Proactive management of retained schedule risks</li></ul>	
Project does not meet functional requirements of the faculty	The cost pressures have necessitated extremely deep value engineering, and while the Faculty's representative has been very cooperative, and most savings will not impact functionality, there is an inherent risk that not all anticipated functions will be catered to with the new design and specification.	Remaining mitigations include: <ul style="list-style-type: none"><li>▪ Ongoing communication with Faculty representative</li><li>▪ Faculty engagement in the development of the FFE specifications.</li></ul>	

### Risk Ranking Legend:

	High	Requires immediate attention
	Medium	Requires monitoring
	Low	Risk mitigated satisfactorily

## **1.8 PROJECT COMMUNICATIONS**

All public project communications and updates continue to be led by the Ministry and coordinated with Government Communications and Public Engagement Office, in collaboration with KPU.

The revised donor agreement has been executed by the donor, and is to be executed by KPU.

## **2 RECOMMENDATIONS**

### **2.1 ITEMS FOR INFORMATION, DISCUSSION OR APPROVAL**

#### **a) Issue #1:**

Approval to execute construction contract.

##### **Background:**

We have a compliant bid within the Construction Budget, and the opportunity to take advantage of an early start on site by expediting approval.

##### **Discussion:**

A small number of RFIs were received after the Final Date for Inquiries of April 14 2016 at 2:00pm. The decision was made not to address these through addenda so as not to extend the Closing Time. While there may be some benefit in making minor adjustments to the design documents prior to contract execution, to request approval to enter into negotiations with the lowest bidder at this point would delay this request to execute the construction contract.

The schedule benefit that we can gain by expediting execution will more than offset any benefit to making such minor adjustments to the design at this point.

Once the contract is executed, we will discuss with the contractor any minor changes that may result in a benefit to the project, and deal with these as a change order (a material net change to either the cost or the schedule is not anticipated).

It is best to keep these two matters separate, in the interests of schedule.

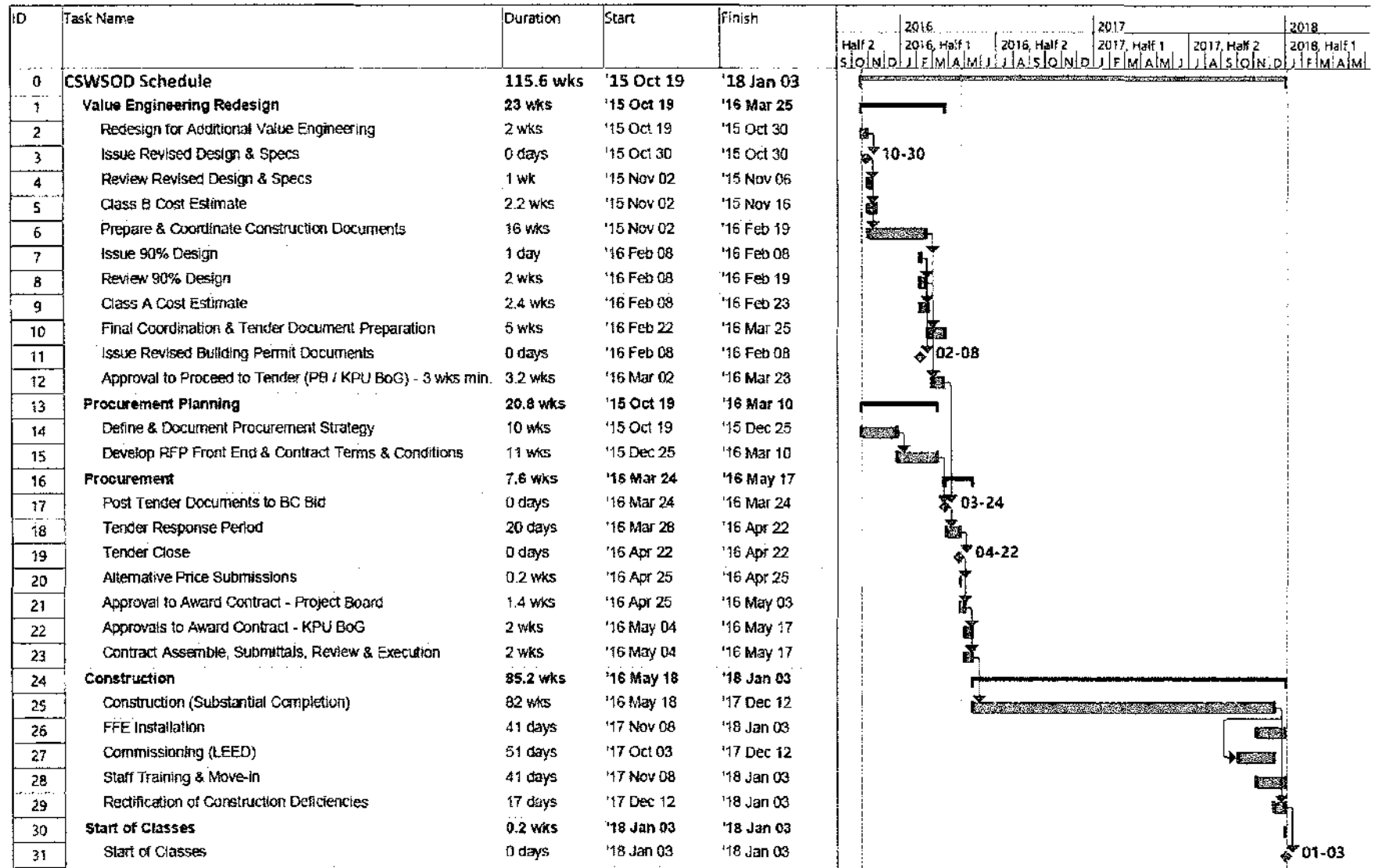
##### **For Approval:**

s.13,s.17

## **3 APPENDICES**

- Appendix 1: Project Schedule
- Appendix 2: Project Budget

# APPENDIX 1: PROJECT SCHEDULE



Page 306

Withheld pursuant to/removed as

s.17

## Cliffe, Ashley AVED:EX

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**From:** Brewster, Kevin AVED:EX  
**Sent:** Friday, May 6, 2016 11:13 AM  
**To:** Postans, James AVED:EX; Gogela, Deborah AVED:EX; Prive, Doris L AVED:EX  
**Subject:** FW: Our Ref 102258 - Letter to Athana Mentzelopoulos - Re: Kwantlen Polytechnic University School of Design – Results of Tender Process  
**Attachments:** 102258 - Letter to DM Athana Mentzelopoulos.pdf; 102258 Attachment 1.pdf

fyi

---

**From:** AVED Deputy Minister AVED:EX  
**Sent:** Friday, May 6, 2016 11:12 AM  
**To:** Mentzelopoulos, Athana FIN:EX  
**Cc:** Brewster, Kevin AVED:EX; Enemark, Gord FIN:EX  
**Subject:** Our Ref 102258 - Letter to Athana Mentzelopoulos - Re: Kwantlen Polytechnic University School of Design – Results of Tender Process

Attached is a signed letter with attachment from Deputy Minister Sandra Carroll to Deputy Minister Athana Mentzelopoulos.

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Office of the Deputy Minister  
Sandra Carroll, Deputy Minister  
Ministry of Advanced Education  
Ph: (250) 356-5170



Page 308 to/à Page 310

Withheld pursuant to/removed as

s.12

## Cliffe, Ashley AVED:EX

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**From:** Brewster, Kevin AVED:EX  
**Sent:** Friday, May 6, 2016 11:47 AM  
**To:** Gogela, Deborah AVED:EX  
**Cc:** Postans, James AVED:EX; Prive, Doris L AVED:EX  
**Subject:** RE: KPU CSWSOD - Course of Construction insurance \*for your approval\*

- 1) Thank you for the clarity of explanation
- 2) I agree to the proposed solution.

### Kevin Brewster

Assistant Deputy Minister and EFO | Ministry of Advanced Education  
Phone: 250-356-2496  
Email: [Kevin.Brewster@gov.bc.ca](mailto:Kevin.Brewster@gov.bc.ca)

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**From:** Gogela, Deborah AVED:EX  
**Sent:** Friday, May 6, 2016 11:38 AM  
**To:** Brewster, Kevin AVED:EX  
**Cc:** Postans, James AVED:EX; Prive, Doris L AVED:EX  
**Subject:** KPU CSWSOD - Course of Construction insurance \*for your approval\*

Hi Kevin,

I have been in touch with Kira Kenny and Mark Bullen this morning. Kira has identified a solution to the deductible issue that requires your approval.

Here is a quick summary:

- If the project was funded by the Ministry, KPU could self-insure through the University, College , Institute Protection Program (UCIPP).
- The deductibles were identified in the tender documents based on the project being self-insured.
- RMB provided specific wording for KPU to include in the Supplementary Conditions of the tender documents, **requiring the Contractor to pay the deductible**. Note that typically it is the Owner (i.e., KPU who pays the deductible).
- Because the funding is split between the three parties, KPU needs to purchase Course of Construction (COC) insurance, which increases the deductibles that the Contract would need to pay.
- **Issue** – this is the issue that Mark was concerned with. It would require him to open up the contract terms, and the Contractor would need to revise their price.
- **Proposed solution** – in the event of an insurance claim, the Contractor pays the original deductible amount and KPU pays the difference. Jon Harding agrees with this approach.
- **Request for approval** – please advise if you are comfortable with this approach.

See summary email from Kira below, explaining the situation.

Thanks,

**Deborah Gogela**  
Manager, Capital Asset Management  
Post Secondary Finance Branch  
Ministry of Advanced Education  
PO Box 9147 Stn Prov Govt  
Victoria BC V8W 9H1

Phone: (250) 387-0890  
Fax: (250) 356-7922  
e-mail: [deborah.gogela@gov.bc.ca](mailto:deborah.gogela@gov.bc.ca)

*Kira Kenny's email from 10:41am this morning:*

Hi Mark and Deborah,

Further to our conversations, I just wanted to clarify a few things and after you read this email if you still wish to discuss, please let me know and we'll set up a conference call.

The reason we are looking for direction from the Ministry of Advanced Education for placement of the construction insurance is because of the funding. Typically construction projects in the advanced education sector are self-insured. Please note that we are only talking about the Course of Construction coverage (i.e. physical damage) as the Wrap Up (liability) is always purchased. The reasons for purchasing commercial insurance would be if the structure is not going to be used for educational purposes (e.g. a student residence) or if the Ministry is not funding the entire project. We also check with the Ministry if the project has a significant value (as this one does).

In this case, and for an example, if the school of design were 90% completed and there was a loss, it would fall to the Ministry to provide funding as it would be a capital project. The question that needs to be answered by the Ministry is whether or not they are comfortable taking on 100% of the risk for this project when they only contributed a 1/3 towards the project.

Another concern I had is whether or not KPU has a funding agreement with the Wilson's and a contractual obligation to purchase commercial insurance for this project.

As mentioned, there are some deductible differences between the self-insured course of construction program and the purchased commercial policy. The insurance language that you have inserted into the supplementary conditions makes the Contractor responsible for the deductible (either \$5,000 if self-insured or \$25,000 if the COC is purchased). If the Ministry requires KPU to purchase coverage and you do not want to renegotiate the contract terms, then KPU may need to honour the difference in these deductibles (i.e. \$20,000) in the event of a loss. The deductibles for the perils of Flood (\$25,000) and Earthquake (5% - minimum \$250,000) are also different, but this is KPU's responsibility to pay (as the Contractor does not have control over those perils), so that should be less of a concern with respect to amending the contract terms. Although the minimum Earthquake deductible is higher (\$250,000 rather than \$100,000), this isn't really relevant as given the project value it would be the 5% that would apply.

Please let me know how you wish to proceed.

Regards,

**Kira Kenny, CIP, CRM**  
Senior Risk Management Consultant – Education Programs  
Risk Management Branch and Government Security Office  
PO Box 9405 Stn Prov Govt | Victoria BC V8W 9V1

Telephone: 250-952-0851 | Facsimile: 250-356-6222  
Email: [Kira.Kenny@gov.bc.ca](mailto:Kira.Kenny@gov.bc.ca)

**From:** Kenny, Kira FIN:EX  
**Sent:** Wednesday, May 4, 2016 2:47 PM  
**To:** 'mark bullen'  
**Cc:** Brewster, Kevin AVED:EX  
**Subject:** RE: cswsod - SRQ 011615

Hi Mark,

I can appreciate that you do not want to open up contract negotiations. I know that we exchanged a lot of correspondence about this project, so I do apologize if I wasn't clear about the differences between the self-insured program and the purchased COC coverage.

If the project is self-insured, this will not be an issue. If coverage is purchased and you do not want to/or can't change the contract terms, then KPU may need to take on responsibility for the difference in the deductibles.

Please give me a call if you wish to discuss.

Regards,

**Kira Kenny, CIP, CRM**  
Senior Risk Management Consultant – Education Programs  
Risk Management Branch and Government Security Office  
PO Box 9405 Stn Prov Govt | Victoria BC V8W 9V1  
Telephone: 250-952-0851 | Facsimile: 250-356-6222  
Email: [Kira.Kenny@gov.bc.ca](mailto:Kira.Kenny@gov.bc.ca)

**From:** mark bullen [<mailto:mark@capexprojects.com>]  
**Sent:** Wednesday, May 4, 2016 2:18 PM  
**To:** Kenny, Kira FIN:EX  
**Cc:** Brewster, Kevin AVED:EX  
**Subject:** RE: cswsod - SRQ 011615

Kira

Thank you – I will get the form completed and returned.

Regarding insurances, I would prefer not to have to open up the contract terms at this point, if possible.

Regards,

Mark

**From:** Kenny, Kira FIN:EX [<mailto:Kira.Kenny@gov.bc.ca>]  
**Sent:** May 4, 2016 2:12 PM  
**To:** 'mark bullen' <[mark@capexprojects.com](mailto:mark@capexprojects.com)>  
**Cc:** Brewster, Kevin AVED:EX <[Kevin.Brewster@gov.bc.ca](mailto:Kevin.Brewster@gov.bc.ca)>  
**Subject:** RE: cswsod - SRQ 011615

Hi Mark,

Thanks for sending a copy of the insurance requirements as included in the RFP for the KPU CSWSOD.

If the project will be covered under the self-insured program, then the deductibles referenced in your RFP are accurate.

If AVED requires that KPU purchase the Course of Construction (COC) coverage (rather than self-insure), then the minimum deductibles should be amended accordingly (if possible). Do you have the opportunity to negotiate the contract terms?

If COC coverage is purchased, the following deductibles will apply:

\$25,000 each and every loss where the project value is exceeding \$10,000,000; except  
5% (minimum \$250,000) with respect to Earthquake (*fyi – this 5% deductible is based on the total project value, not the value of the structure at the time of the loss*)  
Minimum 30 Day Waiting Period with respect to Soft Costs

If the Ministry wishes KPU to purchase COC coverage, here is the revised language that you can insert into your supplementary conditions.

**b) Property Coverage**

*1) The Owner shall provide, maintain and pay for Course of Construction insurance, against "All Risks" of physical loss or damage, and will cover all materials, property, structures and equipment purchased for, entering into, or forming part of the Work whilst located anywhere in Canada and continental United States of America (excluding Alaska) during construction, erection, installation and testing until completed and handed over and accepted by the Owner. Such insurance shall not include coverage for Contractor's equipment of any description. There will be a deductible of Twenty Five Thousand Dollars (\$25,000.00) for each and every occurrence except for the peril of earthquake which shall have a five percent (5%) (subject to minimum Two Hundred Fifty Thousand Dollars (\$250,000.00)) deductible based upon the total project value ~~completed~~ values at the time of loss.*

As promised, please find attached the construction application. Please forward a fully completed copy (including the cost worksheet on page 4) and I will get coverage placed promptly.

In the meantime if you have any questions, please do not hesitate to give me a call.

Regards,

**Kira Kenny, CIP, CRM**

Senior Risk Management Consultant – Education Programs  
Risk Management Branch and Government Security Office  
PO Box 9405 Stn Prov Govt | Victoria BC V8W 9V1  
Telephone: 250-952-0851 | Facsimile: 250-356-6222  
Email: [Kira.Kenny@gov.bc.ca](mailto:Kira.Kenny@gov.bc.ca)

## Cliffe, Ashley AVED:EX

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**From:** Parkinson, Carolyn AVED:EX  
**Sent:** Friday, May 6, 2016 2:12 PM  
**To:** Gogela, Deborah AVED:EX  
**Cc:** Prive, Doris L AVED:EX  
**Subject:** RE: 102273 - KPU from ADM Kevin Brewster  
**Attachments:** 102273 - KPU from ADM Kevin Brewster

Attached.

### ***Carolyn Parkinson***

*A/Executive Administrative Assistant, Assistant Deputy Minister Kevin Brewster  
Financial and Management Services Division, Ministry of Advanced Education  
Phone: 250 356-2496*

**From:** Gogela, Deborah AVED:EX  
**Sent:** Friday, May 6, 2016 1:49 PM  
**To:** Parkinson, Carolyn AVED:EX  
**Cc:** Prive, Doris L AVED:EX  
**Subject:** FW: 102273 - KPU from ADM Kevin Brewster

Hi Carolyn,

Would you be able to send us the original document that went to the KPU President? We would like to have this as a reference for future similar documents (so we don't need to reinvent the wheel!).

Thanks,  
Deborah

**From:** Brewster, Kevin AVED:EX  
**Sent:** Tuesday, May 3, 2016 6:42 PM  
**To:** Aitken, Cathy M AVED:EX; Gogela, Deborah AVED:EX; Prive, Doris L AVED:EX  
**Cc:** Postans, James AVED:EX  
**Subject:** Fw: 102273 - KPU from ADM Kevin Brewster

Note the well earned thank you from the KPU President

Well done and we make progress

KB

Sent from my BlackBerry 10 smartphone on the Rogers network.

**From:** Alan Davis  
**Sent:** Tuesday, May 3, 2016 6:02 PM  
**To:** AVED ADM Financial and Mgmt Services AVED:EX; Brewster, Kevin AVED:EX  
**Cc:** Carroll, Sandra AVED:EX; 'mark@capexprojects.com'; 'tina@tinawinton.com'  
**Subject:** RE: 102273 - KPU from ADM Kevin Brewster

Thanks for this Kevin and for all the help from yourself and the staff at AVED.

**From:** AVED ADM Financial and Mgmt Services AVED:EX [mailto:AVED.ADMFinancialandMgmtServicest@gov.bc.ca]

**Sent:** Tuesday, May 03, 2016 4:21 PM

**To:** Alan Davis

**Cc:** Carroll, Sandra AVED:EX; 'mark@capexprojects.com'; 'tina@tinaswinton.com'

**Subject:** 102273 - KPU from ADM Kevin Brewster

Good Afternoon:

Please find attached a memorandum dated May 3, 2016, from ADM Kevin Brewster regarding Kwantlen Polytechnic University- Chip and Shannon Wilson School of Design Tender.

Thank you

---

Office of Assistant Deputy Minister

Kevin Brewster

Financial and Management Services Division

Ministry of Advanced Education

Ph: (250) 356-2496

**Cliffe, Ashley AVED:EX**

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**From:** AVED ADM Financial and Mgmt Services AVED:EX  
**Sent:** Tuesday, May 3, 2016 4:21 PM  
**To:** 'alan.davis@kpu.ca'  
**Cc:** Carroll, Sandra AVED:EX; 'mark@capexprojects.com'; 'tina@tinawinton.com'  
**Subject:** 102273 - KPU from ADM Kevin Brewster  
**Attachments:** 102273 signed memo to A Davis from ADM Brewster.pdf

Good Afternoon:

Please find attached a memorandum dated May 3, 2016, from ADM Kevin Brewster regarding Kwantlen Polytechnic University- Chip and Shannon Wilson School of Design Tender.

Thank you

---

Office of Assistant Deputy Minister  
Kevin Brewster  
Financial and Management Services Division  
Ministry of Advanced Education  
Ph: (250) 356-2496





## MEMORANDUM

To: Dr Alan Davis  
President and Vice-Chancellor  
Kwantlen Polytechnic University

Date: May 3, 2016  
Our Ref: 102273

Re: Kwantlen Polytechnic University - Chip and Shannon Wilson School of Design Tender

As chair of the Project Board for the Kwantlen Polytechnic University (KPU), Chip and Shannon Wilson School of Design, I am writing to advise you that the Project Board met on May 3, 2016 to review the results of the project tender.

The tendering process resulted in six valid submissions with DGS Construction identified as the lowest base bid price at **s.17**

As a result, the Project Board endorses the results of the tendering process and recommends KPU execute the construction contract with DGS Construction Company Ltd in the amount of **s.17** as per their tender submission. The Project Board is obviously pleased with the results and we look forward to the successful completion of this important project.

Please contact me if you require further information.

Regards,

A handwritten signature in black ink, appearing to read "Kevin Brewster".

Kevin Brewster  
Assistant Deputy Minister

cc. Sandra Carroll  
Deputy Minister  
Ministry of Advanced Education

Mark Bullen  
Chief Project Officer, Chip and Shannon Wilson School of Design project  
Kwantlen Polytechnic University

Tina Swinton  
Wilson Family Representative

Ministry of  
Advanced Education

Financial and  
Management Services  
Division

Mailing Address:  
PO Box 9134 Stn Prov Govt  
Victoria BC V8W 9B5

Telephone: (250) 356-2496  
Facsimile: (250) 356-5468