PART B: DOING CONSTRUCTION WORK ON CAMPUS

SCHEDULING OF WORK

Hours of operation

SFU’s normal hours of operation are from 8:00 a.m. until 4:30 p.m., Monday through Friday. Work requiring Facilities Services trade assistance should be scheduled between 8:30 a.m. to 4:00 p.m., but are subject to negotiations from the Owner’s representative.

Noisy work must be coordinated with SFU, and scheduled typically before 8:00 a.m. or after 6:00 p.m.

Minimize impact on university events and activities

The university operates year round and critical activities and events must not be disrupted. Facilities Services may require disruptive construction activities or noise be shut down on specified days such as Convocations (two times per year, typically beginning of October and the second week of June. Confirm with project coordinator), exams (for 2 weeks/ three times per year) and other public events that may occur from time to time.

Research and experiments (often involving live organisms) run 24/7, 365 days a year and are NEVER shut down. Consideration must be given and planned for well in advance to ensure the environmental conditions required for this research is maintained during the project.

Further details on scheduling of construction activities are provided below.

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Utility Shutdowns and Service interruptions

Disruptions to existing services (electrical, data, heating, water) must be minimized and planned at least 2 weeks (10 working days) in advance. Any downtime must be kept to an absolute minimum. The request must include the specific date requested for the shut down, the likely duration and the Facilities back up required to ensure smooth shut down and start up.

All major shutdowns must be shown clearly on the construction schedule. The number, duration and approximate timing of all shutdowns must be indicated on the construction schedule. These shutdowns must be coordinated through SFU’s Project Representative. SFU personnel will be on hand at the shutdowns as required.

Facilities Services must be notified in advance of any work on the structural electrical, fire alarm, HVAC or plumbing systems. Campus Security must also be notified of any disruptions to the fire alarm system or areas the contractor is working in that require devices to be bagged.

SITE OFFICE AND ADMINISTRATION

General Conditions cover basic Contractor mobilization costs, including GC site office and servicing of the site during the work. An itemized list is attached in Appendix B-1: Contractor Integral Work under General Requirements.

Contractual Liability coverage

The User’s contractor(s) must show, prior to commencement of work, evidence that they are adequately and properly covered by insurance, according to the following terms:

That the contractor carries a general liability policy containing a limit of at least.

• $5,000,000 inclusive of bodily injury and property damage, with property damage written on an “occurrence basis”

That the User’s General Liability Policy also contains:

• Cross Liability Clause
• Severability of Interest Clause
• 30 days Notice of Cancellation to each Additional Named Insured

Permits and Notices

• Building permits must be posted on site
• A list of sub-contractors, complete with company names, addresses, and telephone

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numbers, must be provided to Facilities Services at commencement of work and a copy available on site

- For Projects under $150,000 union sub-trades are required. Proof of Standing may be requested. (updated March 17, 2015)

Contractor(s) must comply with the requirements of the applicable Provincial Health Safety Act as well as SFU Environmental Health and Safety (EH&S) office.

Site Office Drawings

The Contractor must maintain a neat set of Issued for Construction drawings on site for mark up of changes and as-built information. A neat set of as-built mark up drawings, verified and initialed by the Contractor, must be provided at the end of the project, together with CAD Record drawings (see Appendix D-3: Records Submission Requirements -Updated May 30, 2016).

Contractor Parking

Any vehicle owner who requires parking outside of the construction site must make arrangements with SFU Parking Services to obtain the correct parking permit, and the vehicles must then be parked in the appropriately designated areas.

Deliveries

All deliveries of materials and equipment must be sent directly to the construction site. SFU will not receive any items at their Central Stores operation.

Washrooms

Major projects shall provide their own washroom facilities.

In minor projects, Contractor’s employees may use only existing building washrooms prearranged with the Project representative.

TRAFFIC AND LOADING ACCESS

Construction vehicle Access

SFU Parking Services is responsible for monitoring traffic flow and parking on campus.

Please note there is a 3.7 M. height restriction for access through the Rotunda/Transportation Centre tunnel. Construction vehicles are NOT allowed to go through the Rotunda (See Appendix B-2: Burnaby Campus Construction Map).

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Loading Area

There are several Loading bay areas on Campus. Review with Facilities the allocated Contractors drop off areas. The time limit of 30 minutes is strictly enforced unless previously authorized by Campus Security.

Use of existing building elevators

Should a particular item be of such size or configuration that it is physically impossible to use the designated route or freight elevators, alternate arrangements must be reviewed with operations staff.

Staging and Storage

Contractor(s) are restricted to the enclosed construction premises for all work and storage of all construction materials, tools and equipment.

ENVIRONMENTAL REQUIREMENTS

Maintaining a clean site

All trades MUST clean up after themselves and remove all excess materials from the job site.

Construction Waste

All contractors are expected to sort and recycle construction waste to meet Metro Vancouver Build smart standards. Drywall, metals, wood waste, cardboard, etc. must be recycled. As much as possible, construction waste is to be diverted from landfill. Packaging must be removed by the Supplier/Contractor and recycled.

In major renewal and new buildings, contractors will be required to comply with LEED requirements for construction waste diversion including submitting a full Construction Waste Management Plan prior to starting work on site and making regular reporting to LEED compliance consultant.

Absolutely no dumping at Facilities Services works yard is permitted without prior permission.

Managing Site runoff and storm water

For major projects, the Contractor should submit a storm water management plan for approval, including measures to divert soil erosion and storm water detention and retention strategies. Burnaby campus is a watershed for adjoining communities and every effort should be made to avoid polluting the creeks and waterways, including No Dumping (refer to Appendix B-3: Storm Water Management Standards).

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For projects with earthworks, the Contractor must provide wheel-washing requirements within the Construction zone to avoid salt runoff into the waterways.

**JOB SITE SAFETY**

**SFU Environmental Health and Safety and Work Safe BC**

Comply with all requirements of Work Safe BC and safety instructions from SFU Environmental Health and Research Safety (EHRS).

Refer to *Appendix B-4: Health and Safety Manual 2017*

During the construction period, the contractor(s) must keep operable fire extinguishers on the premises, as required by codes and by-laws, and shall be insured for any loss, whatsoever, of any of their materials. Contractor(s) must also keep adequate first aid facilities. Safety shoes must be worn at all times. A First Aid Kit must be made available to all workers on site (refer to *Appendix B-5: SFU Contractor Safety Orientation and Checklist*).

**SFU Health Services**

SFU has its own Health Services department which is staffed by registered doctors and nurses. This facility is available in the case of emergencies only. The contractor is responsible for meeting all of the Work Safe BC requirements with respect to first aid attendance, etc.

**Medical Emergencies**

A “Medical Emergencies Procedure” will be provided by the Development Manager/Project Representative at the initiation of site work.

**SECURITY OF THE JOB SITE**

**Construction site security**

Contractor(s) shall be fully responsible for securing the Construction Premises and protection of the User’s contents throughout the construction period. SFU Security is responsible for monitoring security throughout the existing buildings. The security for the construction site is the responsibility of the contractor, but SFU’s Security department must be kept informed of any unusual situations such as working at night or off hours.

No security will be provided or compensation paid by SFU for materials or work stolen, lost, damaged or destroyed.
Construction site access

All access points to the construction site must be double-locked. This means that a lock supplied by the contractor and a lock supplied by SFU will be connected together so that both parties can have access to the area.

WORK OUTSIDE OF THE CONSTRUCTION SITE

Any work which is to be carried out outside of the Construction Site is to be approved by SFU's Development /Project Representative prior to the work being carried out. This approval is to be requested in writing a minimum of 48 hours in advance (unless it relates to shutdowns of any of SFU's utility systems, see above). The written request is to clearly indicate the extent of the area that the work will take place in, a schedule outlining the sequence of the work and a clear description of the extent of the work (see Appendix B-1: Contractor Integral Work under General Requirements).

This relates to the parking of any delivery vehicles that will be in place for more than 10 minutes. Proper safety precautions must be in place prior to any work starting. As well, all routes for pedestrians and vehicles must be maintained or appropriately re-routed. Where required, the contractor must supply personnel to direct traffic.

Any work which takes place in occupied areas must be clearly shown on the construction schedule as well as adequate notice given to SFU’s Project Representative. If this involves working outside of the normal SFU working hours, clearance from Parking and Security must also be obtained.

PROTECTING EXISTING

Protecting existing HVAC systems

No work shall commence until arrangements have been made with the Facilities Services for protection of all base building mechanical equipment. If there is any dirt in the filters, or the heating system, it will be the Contractor's responsibility to return them to their original state in accordance with the Facilities Service's specifications.

Maintaining access for equipment servicing

Contractors must maintain access panels in drywall walls, ceiling and floor construction as necessary for SFU personnel access to services or equipment where it is required. The access panel should be sized to enable easy servicing of the equipment.

Common areas

Any damage caused to common areas of the building (elevators, hallways, floors, loading bay, entrances/exits, lobbies, etc.) will be repaired at the Contractor's expense.

Sticky mats will be placed inside and outside the work area.

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Ceiling tiles

If ceiling tiles must be moved to do the Work, they must be removed, piled and covered neatly to protect them from damage. Facilities Services is not responsible for supplying or replacing any ceiling tile or damage to T-bar. The General Contractor must inspect ceiling tile with the project representative before the start of the construction work. The General Contractor is responsible for the replacement of all ceiling tiles damaged during construction. Ceiling tile damaged during Construction must be repaired and, if necessary, replace with tile purchased from the Facilities Services's stock.

Blinds and window coverings

Damage to roller shades will result in the replacement of the complete blind, at the Contractors expense.

Poly must be used to seal off working areas to prevent dust migration. Poly must be used to seal off elevator doors to prevent dust from entering the elevator shaft.

Surplus Light Fixtures

Surplus fixtures must be delivered to Facilities Services in the location within the Building designated for storage of surplus items.

Doing X-Ray for construction work on Campus

X-rays of existing concrete slabs or walls may occasionally be required to determine if the area where a hole is planned to be cored for new piping or conduits is clear of electrical conduit and rebar buried in the concrete.

X-rays must be performed by an agency certified by the Canadian Nuclear Safety Commission. By law they are required to secure an area for a radius of 50 feet from the center of the shot. No one is allowed in this area during the time the x-ray shot is made. The technicians must mark the 50 foot safety zone with signs and caution tape then check the area for people before making the shot. Anyone found in the area is required to move outside the 50 foot safety zone before the shot can be made. Personal are on hand while the shot is being made to ensure no one enters the area during the procedure. The actual X-ray takes on average 10 to 15 minutes depending on the thickness of the concrete.

Adjacent departments should be notified. Anyone having materials sensitive to radiation exposure in their office or lab is required to have them removed from the 50 foot safety zone prior to the date and times scheduled for the x-ray procedure or have them safely stored in some protective manner.

Work must be scheduled for early morning or evening to avoid as much disruption as possible.

All concerns or questions should be directed to the SFU project representative.
Call before you dig on Burnaby Campus

SFU owns and maintains its own utilities infrastructure on campus. The utilities include water, sanitary sewer, storm sewer, electrical duct banks, street lighting, gas, hot water heating distribution mains, and fiber optic cables. Some roads are also designed as ground water recharge systems. Depending on the location, infrastructure may be owned by SFU, SFU Community Trust (SFUCT), City of Burnaby and private utility companies in the public and private road/trails/right of ways.

It is critical to check with SFU Records in Facilities Services for utilities drawings and engineering information on SFU utilities.

Other Contacts:

SFUCT utilities contact Jesse Galicz at galicz@univercity.ca and Dale Mikkelsen at mikkelsen@univercity.ca

City of Burnaby utilities is online at BC One Call at http://www.bconecall.bc.ca/

OTHER RULES AND REGULATIONS

No smoking on campus

SFU campus is a no smoking zone and no smoking is permitted in any building, within 10 metres of any entrance or air intakes or in loading bays. Smoking is only allowed in the designated covered exterior smoking areas.

Other Rules

Contractor employees shall abide by all rules and regulations for SFU including the construction guidelines and any changes thereto that Facilities Services may make from time to time.