



March 2, 2021

British Columbia Institute of Technology
1126 Barclay Street
Vancouver, British Columbia, V6E 1H1

Attention: Anne Matheson

**Re: Job #276537 – Return to Operations Risk Assessment – Fixed Furniture Teaching Spaces
– REVISED March 2, 2021
BCIT, 2700 Willingdon Avenue, Burnaby, British Columbia**

Pinchin Ltd. (Pinchin) is pleased to provide the attached Return to Operations Risk Assessment – Fixed Furniture Teaching Spaces, for the campuses and programs operated by the British Columbia Institute of Technology (BCIT; “Client”). This package is a revised version of that previously provided to the Client, dated September 2, 2020.

The Risk Matrix is a form of qualitative public health risk assessment, which can be used to help identify the building occupants and activities that present the greatest risk of SARS-CoV-2 virus spread, aid the communication of these risks and inform the selection of management measures, during various stages of the return to operations, following a pandemic-induced mandatory shutdown.

The objective of each Risk Matrix is to identify the main sources of risk associated with the transmission of SARS-CoV-2, while engaging in a set of defined activities within the campus environment. The Risk Matrix takes into consideration building occupants, staff and visitors and the activities in which they engage as well as the building or room uses and layouts. Based on the risk rankings, the matrix provides high level recommendations for prioritizing management measures to mitigate spread of SARS-CoV-2 as activities within the building resume. The Risk Matrix is intended as an appendix to the BCIT COVID-19 Go Forward Plan, which Pinchin has provided under separate cover.

I trust this information is satisfactory for your purposes. Should you require additional information, please do not hesitate to contact the undersigned.

Pinchin Ltd.

Prepared by:

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Characteristics/ Activities	Risk Ranking (LOW-MED-HIGH)	Rationale	Risk Management Strategies
Building Staff Occupants/ Location/ Likelihood of Public Access			
<ul style="list-style-type: none"> • Possibility for infected asymptomatic spreaders. • Transportation methods and likelihood of transmission from unknown sources. • Location within Province/Canada and incidence of infection within the Region. 	HIGH	<p>The Site is any educational instructional space associated with British Columbia Institute of Technology (BCIT) where the furniture is affixed to the ground or otherwise not moveable. These spaces may be located on any BCIT campus. The Site is likely located in an urban area with the potential for a medium to high population density. A second wave of COVID-19 cases is currently underway within the province as a whole, particularly within the Lower Mainland region. It is assumed that there is at least one infected person accessing each building, and for remaining rows of this matrix it is assumed there is at least one asymptomatic individual present on-Site.</p> <p>For the purpose of this RA Matrix, it is also assumed that the Client is planning on the full re-occupancy of instructional space. Most, if not all, instructional spaces have been closed or open on reduced occupancy. Building occupants include students and faculty staff/instructors (referred to hereafter as either staff or instructors) who are young adults and older.</p> <p>The public/visitors may have access to some areas associated with institutional spaces (e.g. building entrance, hallways, public washrooms etc.); however, it is assumed that there is limited or no public/visitor attendance within instructional spaces.</p>	<ul style="list-style-type: none"> ✓ Conduct health screening through self-assessment before entry to the building (i.e. BC COVID-19 Self-Assessment Tool). ✓ Add signage describing requirements for entry (no COVID-19 symptoms, etc.). ✓ Instruct building occupants to stay home if they are showing symptoms and self-isolate if they have conducted any travel internationally. ✓ Mandate that all students and staff returning to campus take training on COVID-19 prevention strategies (physical distancing, face coverings, hand washing, etc.). ✓ Provide clear communication to those who are sick or should be in isolation to not come to campus. ✓ Require face masks/coverings for anyone in shared spaces. ✓ Limit public/visitor entry to essential visits only. ✓ Control/limit entry/exit via specific routes to ensure signage is observed and space planning is completed. ✓ Encourage pedestrian traffic to take outdoor routes, rather than walking through buildings unnecessarily.



Characteristics/ Activities	Risk Ranking (LOW-MED-HIGH)	Rationale	Risk Management Strategies
		<p>Students and staff may visit other campus facilities located in the Greater Vancouver Area to attend and/or instruct classes.</p> <p>Building occupants may include individuals who have been exposed to SARS-CoV-2 from outside sources such as family members, users of public transit, and medical or long-term care professionals.</p> <p>Exposure frequency and duration, to infected individuals would vary depending on workspace size and location. However, risks were considered high due to the likelihood of viral transmission by a symptomatic person as well as the recent surge in incidences in the region.</p>	
General Building Layout / Indoor Environment			
<ul style="list-style-type: none"> • Post-secondary school programs • Academic layout (classrooms/labs) connected by hallways • Access routes (building entry and exit) 	MEDIUM	<p>Entrance/exit may result in individuals crossing paths at pinch points.</p> <p>Exposure frequencies and durations could be high if arrival and departure times coincide for large numbers of students and staff arriving together according to class schedules.</p> <p>In addition, there is potential for contact with high touch surfaces during building entry/egress.</p> <p>Although a high risk ranking might apply to this type of building and the activities within, the medium risk ranking is based on activities during entry and exit, and moving through the hallways.</p>	<ul style="list-style-type: none"> ✓ Control/limit entry/exit via specific routes to ensure signage is observed and space planning is completed. ✓ Stagger on-campus class schedules. ✓ Queue entry outside building and rooms, or if physical distancing cannot be maintained in hallways, then queue in empty classrooms. ✓ Prepare enhanced cleaning/ sanitizing plans. ✓ Remove furniture (where possible) from entry/exit points; alternatively, re-position or appropriately label, for physical distancing.



Characteristics/ Activities	Risk Ranking (LOW-MED-HIGH)	Rationale	Risk Management Strategies
		The primary mode of viral transfer is direct contact with droplets, and it is anticipated that potential exposures are of short duration until such time as students/staff enter specific classrooms. In addition, there is a small number of high touch surfaces, despite the number of people touching them and frequenting the access routes.	✓ Adopt doorknob contact mitigation measures such as: <ul style="list-style-type: none">• Providing tissues;• Providing hand sanitizer; or• Leaving doors open.
Classroom Type			
<ul style="list-style-type: none">• Lecture Theatre	HIGH	Students attend in-person classes with close proximity seating to each other and staff/instructors for prolonged periods of time. The high-risk ranking is based on the potential for a large number of people to be present within close proximity to each other and within an enclosed space.	<ul style="list-style-type: none">✓ Restrict theatre use to exams.✓ Reduce theatre capacity based on physical space available and egress.✓ Maintain physical distancing installing tape barriers or seat markings to encourage staggered seating.✓ Implement traffic patterns where possible.✓ Require face coverings when in lecture theatre setting.✓ Prepare enhanced cleaning/sanitizing plans.✓ Provide handwashing/sanitization stations and signage to encourage frequent and proper handwashing/hygiene.✓ Consider online delivery options or utilizing other spaces where physical distancing can be realized.



Characteristics/ Activities	Risk Ranking (LOW-MED-HIGH)	Rationale	Risk Management Strategies
<ul style="list-style-type: none"> Wet/dry laboratories with central demonstration space. Wet/dry laboratories without central demonstration space. 	HIGH	<p>Students attend various labs and may work individually or in pairs, resulting in the need to work in close proximity to each other and staff/instructors for prolonged periods of time or in repeat events of shorter duration.</p> <p>The lab classes involve the use of tools and equipment, as well as physically touching their partners. Students may wear scrubs/gowns while in the lab area. There may be labs in the health science programs that require use of beds and pillows which would have linens.</p> <p>Instructors demonstrate proper use of equipment/tools, perform assessment of students' work and aid students where necessary.</p> <p>Open/non-instructional use of some of the labs is permitted by students for practice.</p> <p>In addition to working in close quarters and, in some cases, physically touching other students, the high-risk ranking is based on there being a number of frequently touched surfaces to be contacted by a large number of people, which may lead to increased viral transmission.</p>	<ul style="list-style-type: none"> Redesign lab to space equipment apart allowing for physical distancing for student pairs (if applicable) and instructors/staff. Reduce class sizes if physical distancing is not possible. Require face coverings in labs. Prepare enhanced cleaning/ sanitizing plans. Implement traffic patterns where possible. If possible, assign tools, equipment and/or workspaces to students for duration of class and clean before and after use. Avoid distribution of handouts where possible, unless exposure control measures are in place, such as hand hygiene before and after handling handouts. Develop protocol for instructors to demonstrate tasks, assess/grade work, distribute consumable items and assist students to maintain physical distancing. Provide handwashing/sanitization stations and signage to encourage frequent and proper handwashing/hygiene. Install partitions and/or require the use of face coverings where physical distancing is not possible. Provide training and signage for procedures when physical distancing is not possible.



Characteristics/ Activities	Risk Ranking (LOW-MED-HIGH)	Rationale	Risk Management Strategies
			<ul style="list-style-type: none">✓ Re-consider tasks that can not be performed while physical distancing.✓ Use disposable bedding or retain a laundry service to decontaminate used bedding.✓ Develop a scheduling and cleaning procedure for independent use of open lab space.
Other Shared Spaces			
<ul style="list-style-type: none">• Lockers• Changerooms	HIGH	Some students have access to lockers and/or changerooms where they may store their personal items. Lockers are likely close together and there is possibility for crowding and loitering in these areas.	<ul style="list-style-type: none">✓ Develop plans for changeroom use to maintain physical distancing (e.g. set occupancy limits, prohibit use of lockers).✓ Limit locker usage to maintain physical distancing between lockers and traffic corridors.✓ Restrict use of seating/benches with signage and/or coverings. Stagger start and end times, where possible.✓ Prepare enhanced cleaning/sanitizing plans.✓ Require face coverings in locker and changerooms.✓ Provide handwashing/sanitization stations and signage to encourage frequent and proper handwashing/hygiene.



Characteristics/ Activities	Risk Ranking (LOW-MED-HIGH)	Rationale	Risk Management Strategies
<ul style="list-style-type: none"> Instructor workspaces: hoteling/shared desks vs. private offices and cubicles. Proximity/density of cubicles. 	HIGH	<p>In cubicles and/or hotelling/shared desks where staff may work in close proximity, risk of viral transmission is higher. However, there may also be private offices for individual use, where exposure is less likely, and risks are low. In general, risks were ranked high because of the potential for staff to be working in close proximity for long durations (i.e., a workday) under the assumed scenario where 100% of staff return to work within each office.</p>	<ul style="list-style-type: none"> ✓ Stagger work schedules, if possible. ✓ Set occupancy limits. ✓ Assign workspaces and use tape barriers and chair markings to induce physical distancing. ✓ Reposition workspaces for physical distancing. ✓ Install barrier partitions between cubicles. ✓ Prohibit sharing of office equipment (computers etc.) where appropriate cleaning protocols are not in place. ✓ Require face coverings when not seated. ✓ Require face coverings when seated if physical distancing and/or partitions are not feasible. ✓ Prepare enhanced cleaning/sanitizing plans.
<ul style="list-style-type: none"> Shared breakroom/lunchrooms 	HIGH	<p>Shared breakrooms/lunchrooms may be available for select students and staff that may include refrigerators, microwaves and dining areas, which entail frequent touching. The main avenue for viral spread is direct contact with saliva/droplets, therefore exposure via shared dishes is considered to be a high risk.</p>	<ul style="list-style-type: none"> ✓ Stagger break/lunch schedules. ✓ Set room occupancy limits. ✓ Eliminate shared dishes/utensils, if any. ✓ Develop alternate dining protocol for physical distancing (e.g. outside, at workstations etc.). ✓ Implement traffic patterns where possible. ✓ Require face coverings when not seated. ✓ Prepare enhanced cleaning/sanitizing plans. ✓ Provide handwashing/sanitization stations and signage to encourage frequent and proper handwashing.



Characteristics/ Activities	Risk Ranking (LOW-MED-HIGH)	Rationale	Risk Management Strategies
			<ul style="list-style-type: none">✓ Adopt doorknob contact mitigation measures.✓ Mitigate contact with other high touch surfaces by:<ul style="list-style-type: none">• Providing tissues; or• Provide hand washing station or hand sanitizer.
Non-Regular Activities			
<ul style="list-style-type: none">• Fire drills• Fire• Fire doors	MEDIUM	Emergency drills or actual events could result in disorderly conduct and crowding. First aid emergencies may require close proximity with the injured. Risk level is considered medium due to the short duration of building egress during drills and availability of fresh air during mustering outdoors.	<ul style="list-style-type: none">✓ Prepare emergency plan for non-scheduled maintenance, illness or fire.✓ Consider alternate methods for doing drills.