November 16, 2020

PROJECT: **Addition & Renovation to Hodgson Middle School – Hybrid Option**
282 Davisville Avenue, Toronto, Ontario
MCA File No. 17020

Scenario A: Explore the construction of the project while the school is kept in operation. This will require the phasing of the construction

Phase 1:

3 Months

- 1920's wing stays in operation during Phase 1. **(Life safety measures for operation of equipment to be isolated – Sprinkler, Electrical Safety, Fire Alarms, Backup Generator, etc.). This is typically under full occupancy measures and not when under construction that could affect the day to operation of the school and the students. As per Reg #213/07 Fire Code.**
- Relocate existing six portables and add thirteen more away from area of construction, closer to east and north property line. **(Proper egress and access for the students, winter maintenance of all walkways, public protection, 6' fencing enclosure for protection with signage posted). As per Reg #72 (213/91), Reg #65 (213/91) & Reg #44 (213/91).**
- Provide new power to portables and a washroom portable. **(Washrooms to meet legislation for the amount of students present on site, Backup Power when/if required for heat, water flow and servicing requirements). As per Reg #29.1 (213/91).**
- Erect construction hoarding around 1960's addition and construction staging area. **(Secured hoarding, maintenance, signage and safety inspections – Role of the supervisor). As per Reg #65 (213/91), Reg #44 (213/91) & #27 (OHSA)**
- Demolish 1960's wing. **(Demolition – separation, Ventilation, Hazardous Substances, Security measures, Public Protection, Isolation or contact that may hinder existing school). As per both Construction 213/91 and Industrial 851/90 requirements.**

1 Month

- School access to be from north stair at the middle of 1920's wing – existing east stair at the 1920's building to only be used for emergency exit. **(Fire code 213/07 – approval from Fire Department prior for any closures as a secondary means)**
- Distance from portable area to 1920's building entrance will be 600 to 800 feet apart; and will also require crossing a construction zone either along Davisville Avenue or around the back of the site. **(Winter maintenance, public protection, traffic control personnel, safety advisor review). High safety and security risk, potential COVID-19 protocols, and potential disruption to construction access.**
- Contractor deliveries to be scheduled only at times when students are not outside, arriving or departing from school. **(Disruption on local street, traffic controller required, isolate the delivery-shipping area for moving vehicles). Highest Injury claims on both construction and Industrial facilities consists of – Falls, Vehicle contact, Electrocution, Fallen Debris and Security measures.**

18 Months

- Construction of new 50,000 square foot wing commences. **(OHSA & Regulations to follow)**

2 Months

- School in 1920's building moves into new addition **(Assuming the time of year is convenient)**
- Portables remain in use. **(TDSB guidelines for student protection security)**

Phase 2:

12 Months

- Renovation of 1920's building commences. **(OHSA & Regulations enforced)**

3 Months

- The east existing stair is removed and the area around it is repaired and brought up to the standard of the new construction. **(Egress and Access issues for relocation is possible, Fire code to be approved for closure)**
- Portables removed and site is remediated. **(Construction within an enclosed space or fencing required)**
- Landscape is completed. **(Public protection, moving vehicles)**

Summary of Scenario A:

- 39 months of construction.
- High safety and security risk. **(Safety appointed personnel, supervision and security equipment or personnel)**
- No parking for rink during this period and possible limited access to rink for the public. **(4-month lease agreement to be honored, public access)**

References – 213/91 (Construction Regulations), 851/90 (Industrial Regulations), 213/07 (Ontario Fire Code). NFPA 101 (Life Safety Code), OHSA (Legal Requirements).

Evacuation – Emergency protocols are legally required and shall be updated constant if the school is operational during construction for both the construction workers and the students within the school that can be miscommunicated or failure on many issues – electrical power, radio communication, warning devices for Gas leaks, Explosion, chemicals, etc. Emergency services, EMS, Fire Department and or Police can be called during the construction process.

Incidents – Shall be preventable but may include the Ministry of Labour, Ministry of Environment, Press, Student/Parent interactions and Social Media may occure.

Scenario B: School operation moves off site

2 Months

- School is emptied of all furniture, fixtures and equipment. **(Little to no risks)**
- Timing is dependent on school schedule (ideally in the summer). **(No winter hazard for injuries)**

Construction commences:

3 Months

- Demolition of 1960's wing and stair at east side of 1920's wing. **(No Fire Department approval or egress and access concerns)**

16 to 18 Months

- Main addition and renovation commences. **(OHSA & Regulations for the workers only)**
- Contractor has entire site available for staging with exception of the rink area.
- Site work can start as soon as the addition is closed in.
- Very little risk to the public due to hoarding around site. **(Self explanatory)**

Summary of Scenario B

- 25 months to complete and have entire project available for occupancy.
- Low risk to public. **(Agree as per a safety perspective and risk analysis)**

Comparison of Scenario A and Scenario B

- Scenario B provides for a project that can be completed more quickly (by 14 months) with less risk to safety and security and less disturbance and inconvenience to surrounding neighbourhoods.
- It is likely to be a better project by having the renovation more fully integrated with the new systems of the addition.
- **Media attention/coverage if an injury or accident should occur due to congestion, organization and or lack of public/student protection. (Scenario A)**
- **Safety consultant fees or inspections, enforcement, along with security presence. (Scenario A).**
- **Fire Department involvement, Ministry of Labour, Ministry of Environment (Scenario A)**
- **Parent complaints, noise, student protection, timeframe is longer for completion, issues from previous construction and neighbourhood involvement have been less than smooth based on SCENARIO A in the past 10 years as the TDSB main safety consultant.**

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