

New Main Incoming Switchboard, based on preliminary mechanical loads and OESC calculations is **1600A at 600V, 3 Phase**

New Utility transformer (Hydro One), based on preliminary load calculation is approximately **1500kVA** – *This needs to be coordinated with Hydro One via Load Summary submission.*

*** Note that Hydro One will need to confirm if they have the capacity to add the new load in the existing main switchgear building (substation) or need to have a new feed from Hydro pole across the road.

*** Note that there is a possibility to reduce the size depending on updated mechanical loads and solar design (by another consultant). Need to coordinate with solar consultant asap.

New site duct bank and location of utility transformer (maybe outdoor). – *This needs to be coordinated with Hydro One based on the notes above.*

No Site Plan CAD available at the moment from Civil, including locates.

New Fibre duct bank or direct buried conduit. – *This needs to be coordinated and confirmed by client.*

New Electrical Distribution: *(Note that the list below is preliminary and subject to change as detailed design progresses.) All floor mounted equipment to have housekeeping pads.*

- **225kVA, 600-120/208V, 3 phase Transformer (for buildings A, C & D, 3 total)**
- **500kVA, 600-120/208V, 3 phase Transformer (for building B, 1 total)**
- **600A, 600V, 3 Phase Distribution Panel for Mechanical loads (1 total)**
- **400A, 208/120V, 3 phase, 4 wire Common Panels (for each building, 4 total)**
- **100A, 120/208V, 1 phase electrical panel in each suite (60 total)**

New Fire Alarm Single Stage System. Include connection of supervisory valves. Sprinkler only in garbage room.

New Telecommunication and Cable TV Riser. Unit smart box in each suite (60 total). Electrical scope of is only rough-ins and back boxes. Cabling by others.

New Security. Rough-ins, back boxes and power requirements only. Devices and cabling by others.

New Mechanical Equipment connections, disconnect switches, starters, etc – *Not shown in drawings. Refer to Mechanical drawing/list. New WP, GFI 5-20R maintenance receptacles for outdoor units.*

Elevator connection and requirements.

Rough-ins for Electric Vehicle Charging Stations (2 total)

New exterior lighting poles (2 total)

Wall packs per exterior door OR upgrade of downlights to LED.

Transfer existing exterior lighting circuits to new electrical panel.

Emergency Battery Units per floor/ per building + emergency remote heads in corridor and stairs.

No washer/dryer in suites, only in Common Area Building B.