

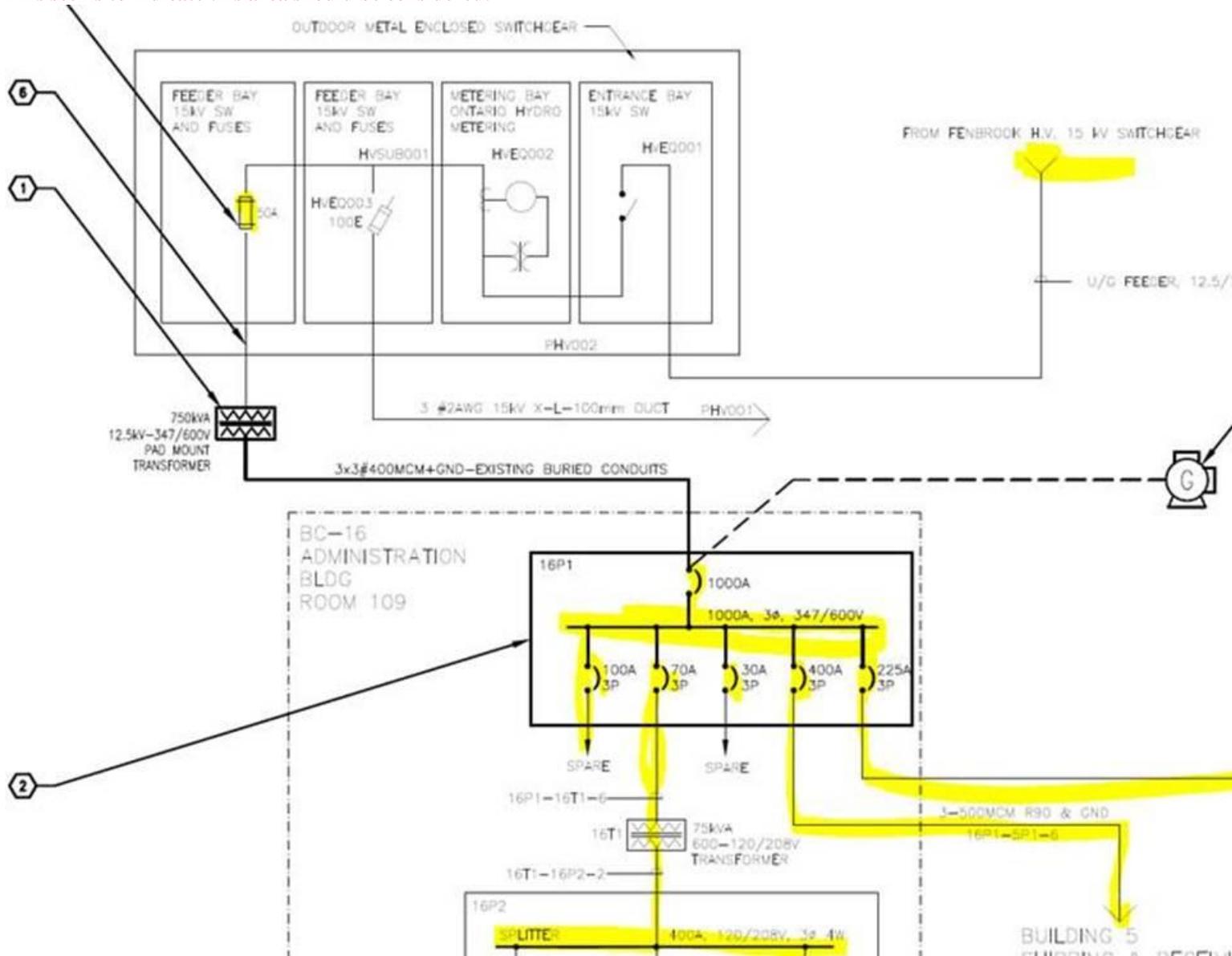
QUESTION & ANSWERS

Question 5

Could I please get a confirmation of what they are looking for. From Section 26 05 01 page 2 we have this:

- .2 The scope of the studies shall include:
 - .1 The Study shall include all relevant distribution and protective devices within the following scope:
 - .1 Upstream from the adjacent switchgear protection devices.
 - .2 Downstream to the affected branch circuit panels.

This seems to indicate this area should be considered:



**1.8 ARC FLASH
HAZARD ANALYSIS**

- .1 **Arc Flash Hazard Analysis**
- .1 The arc flash hazard analysis shall be performed according to the IEEE 1584 equations that are presented in NFPA (Fire) 70E, Annex D.
 - .2 The flash protection boundary and the incident energy shall be calculated at all significant locations in the electrical distribution system (switchboards, switchgear, motor-control centres, panelboards, busway and splitters) where work could be performed on energized parts.
 - .3 The Arc-Flash Hazard Analysis shall include all locations in the systems.

We don't have an overall single line diagram, however if arc flash analysis is desired throughout the entire system as defined in sub-section 1.8 then we will need to get the remainder of the system's details (i.e. one lines); specifically the feeder information for the other 12.5kV switch, "HVEQ003" and the G.O. and Building 5 fed from the new 16P1 distribution panel.

Would you be able to confirm the battery limits for the arc flash analysis and confirm that it is in reality limited to the same locations as the coordination and short circuit studies?

Answer 5

The scope of the short circuit, device coordination, and arc flash hazard analysis shall include the equipment affected by this project from the 12.5kV fuse in the switchgear to panel 16P1 inclusively. Existing systems upstream and downstream of this are considered existing to remain.

Question 6

Please confirm that the required ESA HV plan submission will be the responsibility of the electrical consultant and /or PWGSC and the contractor will only be responsible for ESA inspection when the work is complete.

Answer 6

Confirmed. GWAL is responsible for the submission to ESA plans review and the contractor is responsible for ESA inspections.

Question 7

Could you please also provide the listed oil volume of the existing transformer. We need this info for hiring a licensed hazardous waste contractor to dispose the oil as part of transformer disposal.

Answer 7

We have contacted the manufacturer and they do not have a record of the oil volume in the existing transformer. Unfortunately this information remains unknown