To whom it may concern,

The electrical contractor has received the below violation for the installation depicted in the attached sketch.

OBJECTION FOR APPLICATION #: M372485

OBJECTION ID	OBJECTION CODE	OBJECTION DESCRIPTION & COMMENTS	STAT	FIRST	LATEST	RESLVD
001	(999)	OTHER (FLOOR: 022)75KVA TRANS: COMBINED OCP ON SECONDARY IS GREATER THAN RATEDAMPACITY ON SECONDARY (450.5 NOTES)	OPEN	03/30/2016	03/30/2016	

We believe the referenced section 450.5 may have been a typo, and that the actual objection is to section 450.3(B), note #2. In either case, we believe the installation to be code compliant, based upon the following analysis.

Transformer Protection

Article 450.3(B) - OCPD for Transformers 600V, Nominal, or Less

Primary protection has been provided for our transformer through a 125 amp circuit breaker in 277/480V panel 'LP-HN'. Per table 450.3(B), only primary protection is required when the primary OCPD size does not exceed 125% of the transformer's rated current. For our 75kVA transformer, the rated current at 125% is 112.9 amps. With the allowance in table 450.3(B) note 1, we can use the next higher standard size overcurrent protection device, which gives the maximum allowed primary OCPD size of 125 amps. Since we have not exceeded this rating, secondary protection is not required, and table 450.3(B) note 2 does not apply. This satisfies all requirements for transformer protection.

Article 240.21(C) permits each set of transformer secondary conductors to be connected to the transformer secondary without overcurrent protection at the secondary per 240.21(C)(1) through (C)(6).

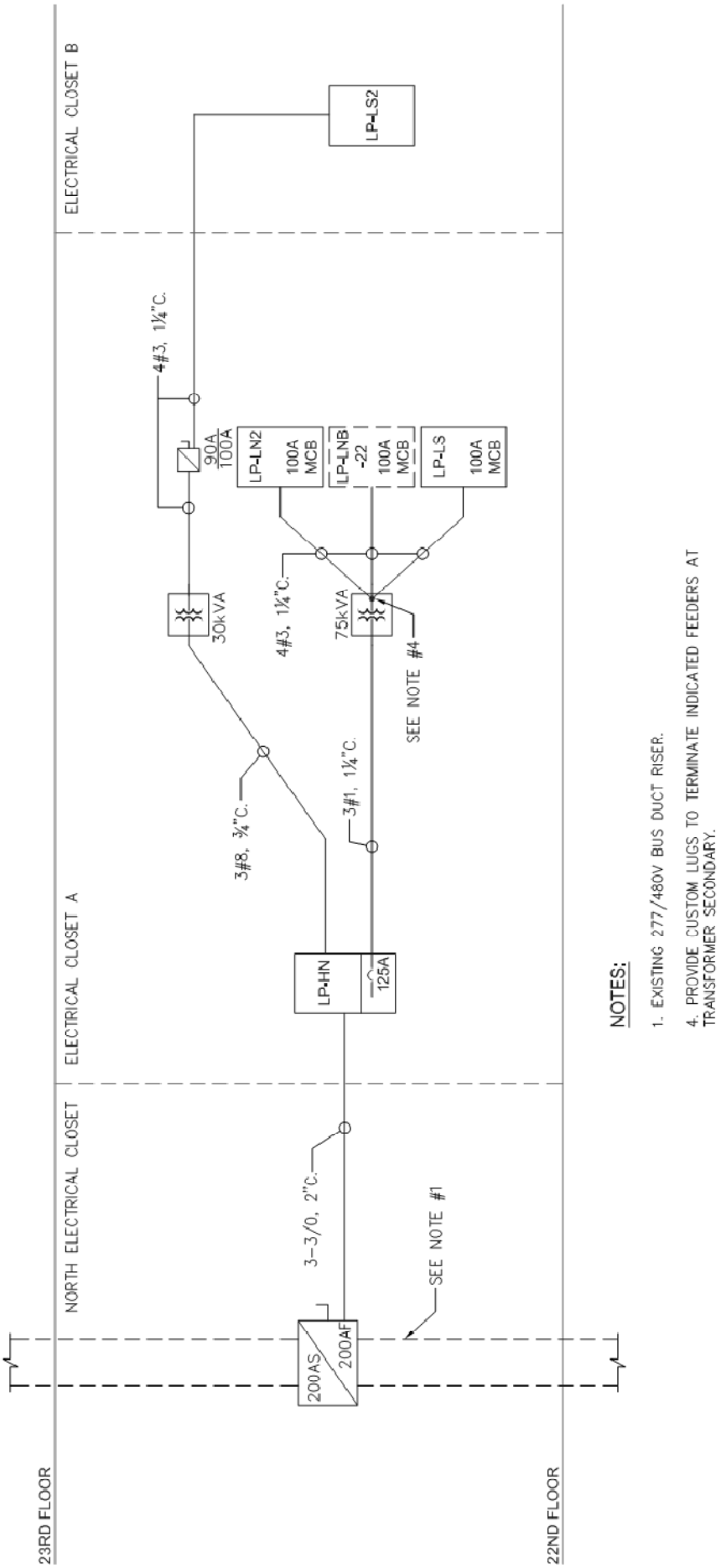
Article 240.21(C)(6) - OCPD for Transformer Secondary Conductors not over 25 feet long

Each of the 3 sets of secondary conductors are #3 AWG, 75˚C, with an ampacity of 100 amps, per table 310.16. This exceeds the minimum sizing required of 92 amperes by item 1 in section 240.21(C)(6). Each of the 3 sets of secondary conductors terminate in a separate 3 pole, 100 amp circuit breaker, which satisfies item 2. Additionally, all secondary conductors are protected from physical damage by being enclosed in conduit, which satisfies item 3.

The total code demand load on the transformer and the panels fed by the secondary conductors are as follows:

- Panel 'LP-LN2' - 79.8 amps, or 28.7kVA
- Panel 'LP-LNB-22' - 60.8 amps, or 21.9kVA
- Panel 'LP-LS' - 59.3 amps, or 21.3kVA
- Total for 75kVA transformer – 71.9kVA

Based on the above information, we believe the installation as described is code compliant.



NOTES:

1. EXISTING 277/480V BUS DUCT RISER.

4. PROVIDE CUSTOM LUGS TO TERMINATE INDICATED FEEDERS AT TRANSFORMER SECONDARY.