1 References
- NFPA 70 National Electric Code
- ANSI C57.12.70 American National Standard Terminal Markings and Connections for Distribution and Power Transformers
- IEEE C57.12.00 General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers
- IEEE C57.12.26 Pad-Mounted, Compartmental-Type, Self-Cooled, Three-Phase Distribution Transformers for Use with Separable Insulated High-Voltage Connectors

2 Load Interrupter Switchgear
2.1 The quality of components is to be that represented by S & C Electric Co.

3 General Requirements
3.1 Voltage
- 12.47 KV Primary system voltage
- 480Y/277 Secondary voltage for power
- 208Y/120 Secondary voltage for lighting

3.2 Building transformers are typically unit substation type in a vault flange connected to the primary switchgear and throat / busway connected to the secondary switchgear.

3.3 Pad-mounted transformers are typically for small services (<501 KVA) and at locations at campus perimeter.

3.4 Sample Specifications can be provided for Liquid Filled Unit Sub-Station Transformers and Pad Mount Liquid Filled Transformers

4 Grounding
4.1 The transformer shall have a 4/0 copper 600 v insulated green colored grounding conductor installed between the Xo bushing and a grounding pad.

4.2 The transformer shall have the two diagonally opposing ground pads connected by separate 4/0 bare copper conductors through PVC conduit sleeves inserted through the foundation pads to the grounding grid.

4.3 All grounding connections shall be copper, 2-hole, compression lugs.

5 Testing
5.1 Immediately prior to energization, a competent testing firm that is well versed in electrical equipment testing shall test the transformer.

5.2 The transformer shall have the following tests performed:
- Megger
- Hi-Pot
- TTR