DIVISION 16 - ELECTRICAL

Section 16320 - Transformers (Medium Voltage)

Introduction

Transformers should be mounted on a raised concrete pad a minimum of 4" above the finished floor.

At each transformer a ground ring should be supplied with a 3/4" x 10' copper weld or copper clad ground rod at each corner tied together with a 3/0 copper ground conductor. This shall supply a grounding electrode for the transformer. Exothermic weld grounding electrode conductor to transformer ground pad.

Part 1 - General

- Refer to Appendix Section 16320 and incorporate into project.
- Coordinate new building design to allow for easy removal of distribution transformers from building interiors.
- Transformers shall first be considered for outdoor placement. When indoor placement is approved, provide permanent hoisting and dolly apparatus with egress pathway for easy replacement. Utilize station transformers with a primary knife switch.
- Transformers shall not be loop feed with 4-way load break switch. Mount arrestors on the spare bushings. Refer to detail 16320-D1
- Aluminum wound transformers are acceptable up to 2500 KVA. Transformer shall be installed with load break primary terminations, surge arrestors and fee through load break adaptors.

Part 2 - Products

- Refer to Appendix Section 16320 and incorporate into project.

Part 3 - Execution

- Refer to Appendix Section 16320 and incorporate into project.
- All 13.8 KV equipment not utilized or in use inside or outside a building and its associated wiring shall be removed all the way back to where it originates.
### UNIVERSITY OF ARIZONA
MANUAL OF DESIGN SPECIFICATION STANDARDS

#### STANDARD DETAIL:
4-WAY LOOP FEED SWITCH

<table>
<thead>
<tr>
<th>DRAWN BY: C.P.B.</th>
<th>DETAIL NO.</th>
<th>REVISIONS</th>
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<tbody>
<tr>
<td>16320-2</td>
<td>16320-D1</td>
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#### FOUR-POSITION SECTIONALIZING LOADBREAKSWITCH PUB 03047 FOR INCLUSION IN PAD MOUNTED TRANSFORMERS

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SWITCH</th>
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<td>T-BLADE</td>
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**MAKE BEFORE BREAK**
- Lines A & B TO C
- Line A ONLY TO C
- Lines A TO B
- C OPEN

**VIEW OF CONTACTS FROM FRONT (HANDLE) END OF Switch**

**POSITION 1**
- Front Schematic
- As Shipped
- As Shown at Left

**POSITION 2**
- Schematic Switch Handle
- Rotated 90° Clockwise
- From Position 1

**POSITION 3**
- Schematic Switch Handle
- Rotated 90° Clockwise
- From Position 2

**POSITION 4**
- Schematic Switch Handle
- Rotated 90° Clockwise
- From Position 3