DESIGN GUIDELINES

Section III: Standards by CSI Divisions

26 13 00 Medium Voltage Switchgear

1. General:

A. Pad mounted medium voltage switches are used to switch power on the campus 12,470 volt medium voltage distribution system.

B. New switches shall be S&C Vista type switchgear. All gang operated switches and load-break interrupter switches shall be rated at 600 amps. Overcurrent settings shall be set as appropriate for the load served.

C. For replacement switches and legacy locations, install switches equal to S&C PMH style with SMC-20 fusing. Switches shall be set on 12” high spacer section. Fuses shall be sized as appropriate for the load served.

2. Installation:

A. Vista switches shall be mounted on concrete composite box pad designed for S&C Vista gear, equal to those manufactured by Concast or Quazite. Box pads shall be 36” high, and shall be installed with the top 6” above finished grade. Length and width of box pad shall be 12” greater than MV switch to provide 6” margin on all sides. Bottom of box pad excavation shall be covered with 8” of #57 stone, and ducts shall extend 6-12” above top of stone. Switches shall be solidly anchored to box pad per manufacturer’s instructions.

B. Ducts shall be turned up into box pad aligned in a row immediately beneath the box pad slot.

C. Medium voltage cables connections to switches shall be made with 15 kV load break elbows equal to Tyco ELB T-body connectors with capacitive test point. Unused switch terminations shall be fitted with 15kV deadbreak insulating caps. Provide one spare set of three T-body connectors and one spare set of three insulating caps with each switch, to be turned over to the UA Electrical Shop.

3. Labeling:

A. Switches shall be labeled per UA convention with 3” high adhesive labels as specified.

B. An as-built drawing in a vinyl sleeve shall be installed in each switch indicating duct layout, duct terminations, spare ducts turned out of switch and capped, and circuit size, routing, and year installed.