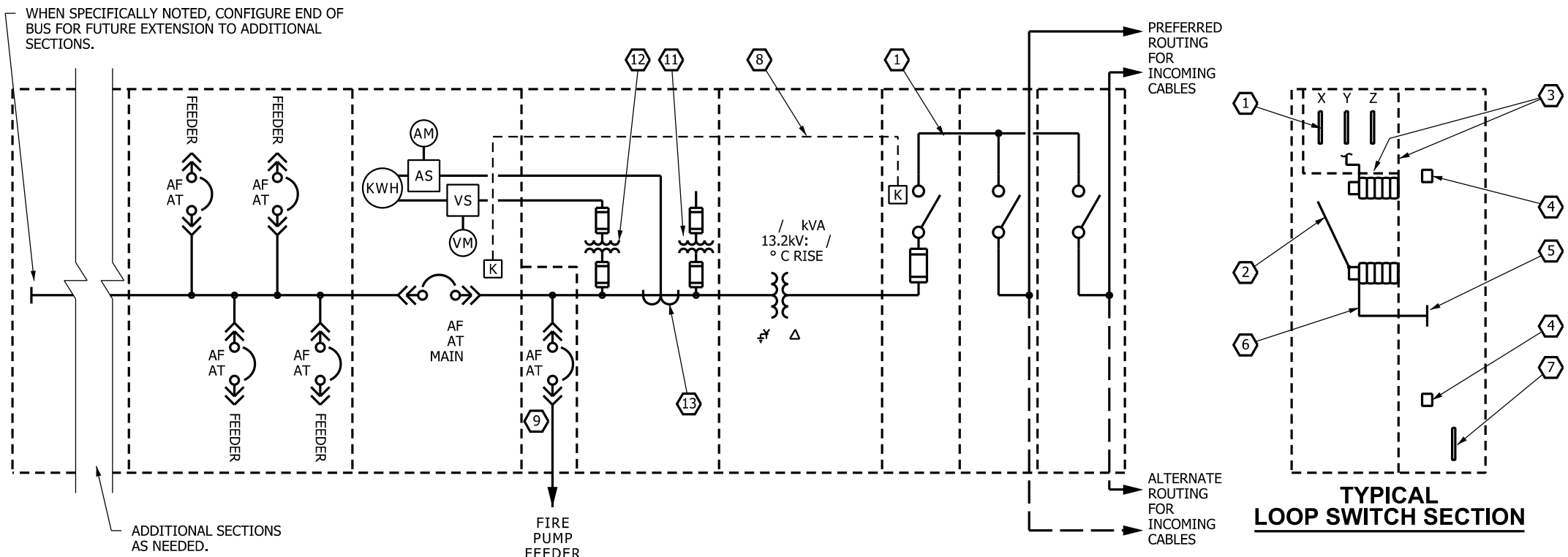




NOTES:

- 1 MEDIUM VOLTAGE "THRU" BUS

2 DISCONNECT SWITCH

3 BARRIERS TO COMPLETELY ISOLATE CABLE COMPARTMENT FROM MAIN BUS.

4 NON-METALLIC CABLE SUPPORT BRACKET

5 COMPRESSION LUGS FOR OVERHEAD OR BELOW GRADE CABLE CONNECTIONS (NEMA STANDARD 2 HOLE)

6 "BUS RUN BACK"

7 GROUND BUS, CONTINUOUS THROUGHOUT SUBSTATION.

8 KIRK KEY MAIN INTERLOCK
- 9 THE FIRE PUMP DISCONNECTING MEANS SHALL BE IN A DEDICATED FULLY-BARRIERED VERTICAL SECTION.

 - * PAINT THE ENCLOSURE RED
 - * THE BREAKER SHALL BE CAPABLE OF BEING LOCKED IN THE CLOSED (ON) POSITION
 - * CONCEAL CIRCUIT BREAKER TRIP BUTTONS BEHIND CUBICLE DOOR, OR PROVIDE COVERS OVER TRIP BUTTONS TO PREVENT INADVERTENT TRIPS
 - * EQUIP WITH A REDUCED ENERGY LET-THROUGH FEATURE, TO REDUCE ARC FLASH HAZARD DURING FIRE PUMP CONTROLLER MAINTENANCE
 - * EQUIP WITH AN AUXILIARY DRY CONTACT TO CHANGE STATE WHEN THE BREAKER HAS BEEN OPENED, FOR REMOTE SUPERVISORY MONITORING BY THE BUILDING MANAGEMENT SYSTEM (BMS)
 - * THE CELL POSITION SHALL BE MONITORED BY THE BMS, TO CHANGE STATE WHEN THE BREAKER HAS BEEN WITHDRAWN FROM THE CUBICLE
 - * THE BREAKER SHALL ALARM ONLY (NOT TRIP) UPON DETECTION OF A GROUND FAULT
 - * THE KEY FOR THE FIRE PUMP CIRCUIT BREAKER LOCK SHALL BE STORED IN A KEY BOX WITHIN THE SUBSTATION ROOM. UM UTILITIES WILL PROVIDE THE KEY BOX.
- 10 PHASING THROUGHOUT SHALL BE: X, Y, Z (A, B, C) LEFT TO RIGHT, TOP TO BOTTOM AND/OR FRONT TO BACK.

11 IF SECONDARY VOLTAGE IS GREATER THAN 208/120 VOLTS, PROVIDE CONTROL POWER TRANSFORMER (CPT) WITH PRIMARY AND SECONDARY FUSES.

12 IF SECONDARY VOLTAGE IS GREATER THAN 208/120 VOLTS, PROVIDE POTENTIAL TRANSFORMER FOR METERING WITH PRIMARY AND SECONDARY FUSES.

13 SEE SPECIFICATIONS FOR SPECIAL CT, AMMETER AND KWH METER REQUIREMENTS.

**SINGLE ENDED SUBSTATION
ELECTRICAL ONE-LINE DIAGRAM**

NO SCALE - REVERSE END-TO-END WHEN APPROPRIATE TO MATCH PLAN VIEW

26110001.dgn

**The University of Michigan
Standard Electrical Details**
One-Line Diagram
Single Ended
Substation

NO. 26110001

THE UNIVERSITY OF MICHIGAN
PLANT EXTENSION
ARCHITECTURE, ENGINEERING & CONSTRUCTION
ARCHITECTURAL AND
ENGINEERING SERVICES

326 EAST HOOVER STREET
ANN ARBOR, MI 48109-1002

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MARK	•	ISSUED FOR/REVISION:	•	/	/
				DATE	

NOTE: _____

DGN NO. _____