PART 1 - GENERAL

1.01 DESIGN CONSIDERATION

A. Heater selection shall be based on maintaining the pipe at 40 degrees F with fiberglass insulation at minimum ambient conditions with a 20MPH wind.

B. Breaker sizing shall be based on a heater start up temperature of 32 degrees F.

C. Heater cable shall be powered at designated voltage without use of transformers.

PART 2 - PRODUCTS

2.01 HEATERS

A. Heaters shall be parallel self regulating with a radiation cross-linked heating core extruded continuously over two parallel bus wires. The heating cable shall vary power output inversely with temperature such that power output decreases as pipe temperature increases.

B. Heater construction shall include a primary jacket thermally bonded to the heating core, a flame retarded polyolefin dielectric jacket, a tinned-copper braid for ground path, and a waterproof modified polyolefin outer jacket.

C. Heaters shall be Nelson CLT or approved equivalent.

2.02 CONTROLS & MONITORING

A. The heat tracing system shall be controlled by an ambient sensing thermostat in a NEMA-rated enclosure, with appropriate contactors set to energize the heat tracing system when ambient temperature decreases to 40 degrees F.

B. Thermostat shall be Nelson TF4X40 (fixed set point) or TA4X140 (15-140 degrees F adjustable) or equivalent.

C. Provide current proof on heat trace branch circuits. Use Veris Industries Hawkeye series.

PART 3 - EXECUTION

3.01 EXECUTION

A. Cable shall be installed in a straight run(s) and without heat transfer aids

B. All circuits shall be protected with 30mA ground fault interruption devices.
C. Electric traced signs are to be installed at intervals of 15 feet.

END OF SECTION