PART 1 - GENERAL

1.1 THE REQUIREMENT

A. General: The CONTRACTOR shall provide flow sensors, complete and operable in accordance with the Contract Documents.

B. The requirements of Section 40 90 00 – Process Control and Instrumentation Systems apply to this Section.

C. All instruments shall be UL-approved.

1.2 CONTRACTOR SUBMITTALS

A. Furnish submittals in accordance with MASS Section 10.05 Article 5.6 and Section 40 90 00 – Process Control and Instrumentation Systems.

PART 2 - PRODUCTS

2.1 AIR FLOW SENSOR

A. The air flow sensor shall consist of a 24 VDC power, 4-20 ma, 4-wire air velocity transmitter suitable for clean air with a temperature range of -40 degrees F to 212 degrees F. The sensor shall use a heated mass flow sensor with selectable ranges down to 250 FPS full scale and a resolution of 1 FPS. The sensor shall be position insensitive capable of being mounted in vertical pipe 4 inches in diameter. The unit shall be approximate size of a ¾” conduit body. The sensor shall include a set of controls and indicators within the unit to set the measurement range, calibrate the device, and display the air velocity. All wetted parts shall be stainless steel.

B. The unit shall be Dwyer Series 641, or equal.

C. Provide air flow sensors as shown on the Contract Drawings.

PART 3 - EXECUTION

3.1 GENERAL

A. Flow sensors shall be handled, installed, calibrated, loop-tested, precommissioned, and performance tested according to Section 40 90 00 – Process Control and Instrumentation Systems.
3.2 INSTALLATION

A. Install the air flow sensor in accordance with the Manufacturer’s requirements.

END OF SECTION 40 91 23.13