MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
CABLE INTERNET MODEM INTEGRATION

JAK:JRP 1 of 2 APPR: EG:MS:08-20-21

a. Description. This work consists of integrating and testing a cable internet modem (supplied by others) into the ITS cabinet and internet network at sites shown on the plans. Work also includes furnishing and installing accessories to make the system fully functional, such as patch cables and rack mounting hardware. The purpose of this integration is to allow remote communications to Closed Circuit Television (CCTV) cameras over the internet to the MDOT statewide Advanced Traffic Management System (ATMS) software platform. This work is to be coordinated with the work included in the Special Provision for Integration, Advanced Traffic Management System Software to provide a fully functioning ITS CCTV camera site on the MDOT ATMS software network.

Perform the work in accordance with the standard specifications, except as modified herein.

1. General.

A. Install, integrate, and test all equipment and components necessary to provide full and complete ITS functionality in all respects, without additional expense to the contract. This includes, but is not limited to, patch cables, power supplies, rack mounting hardware, and labels.

B. Demonstrate the CCTV camera functions across the internet as specified in 20SP-826F - Surveillance System, Remote Site.

b. Materials.

1. Furnish all Category 5 enhanced (CAT-5e) patch cables, rack mounting equipment, and power supplies required to connect to the Managed Field Ethernet Switch (MFES) to the cable modem.

2. Furnish any temporary equipment needed for testing including a laptop computer with appropriate software to connect to the cable modem, MFES, and Digital Video Encoder (DVE).

c. Construction.

1. Testing.

A. Test the data throughput between the MFES inside the ITS cabinet through the cable modem and to an internet connected computer using a standard software application designed for this purpose. The throughput test will be witnessed by the Engineer and System Manager, recorded, and signed off by both the Contractor and MDOT as adequate for the design intent. The expected value for data throughput will be provided by the Engineer upon coordination with the Cable Internet Provider.

B. Test and successfully show connectivity to each IP address of devices connected to the MFES inside the ITS cabinet. A standard “Ping” test with response time will be accepted, or other methods may be approved by the Engineer.

C. Work with the ATMS software vendor, per the Special Provision for Integration, Advanced Traffic Management System Software, to integrate the remote surveillance system site into the MDOT ATMS network.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	**Pay Unit**
Cable Modem, Integrate	Each