GENERAL NOTES:

1. Mounting brackets, extension arms, mounting options, and capabilities vary by manufacturer.
2. Roadside unit equipment, mounting options, and capabilities vary by manufacturer.
3. Antennas vary by manufacturer, antenna design varies by manufacturer.
4. Ethernet switch equipment at each location may vary. Field hardened Ethernet Switch required.
6. RSU located along the roadside of non-access controlled facilities to send and receive messages from OBU located inside vehicle.
7. V2X communications includes Dedicated Short Range Communications and Cellular Vehicle-to-Everything (C-V2X) communications. Refer to 3GPP Release 14 and 15, or latest release, standards when utilizing Dedicated Short Range Communications. Refer to 3GPP Release 14 and 15, or latest release, standards when utilizing C-V2X communications.
8. Refer to Special Specification, "Intelligent Transportation System (ITS) Fiber Optic Cable.
10. See plans for cellular router, fixed wireless, or fiber communication backhaul specified.

REFERENCE KEY NOTES:

1. On-Board unit (OBU) is located in the vehicle and may consist of physical hardware or mobile device. The OBU communicates NTCIP messages to Roadside Unit (RSU) along the roadside.
2. Antennas and cable entry points according to manufacturer instructions.
3. Antennas and cable entry points according to manufacturer instructions.
4. Power distribution equipment at each location may vary. Field hardened Power Distribution Equipment required.
5. Antennas and cable entry points according to manufacturer instructions.
6. Antennas and cable entry points according to manufacturer instructions.
7. Antennas and cable entry points according to manufacturer instructions.
8. Power distribution equipment at each location may vary. Field hardened Power Distribution Equipment required.
9. Antennas and cable entry points according to manufacturer instructions.
GENERAL NOTES:
1. Mounting bracket(s), extension arms, antennas, cooling and PoE injector are incidental to the roadside unit. All items not listed, shown, or otherwise specified are considered necessary for a complete installation, and sold for separate purchase.
2. Drawings intended to be a general guideline for roadside unit placement and are illustrative only. Actual site conditions may vary.
3. All existing equipment is to remain operational and are illustrative only. Actual site conditions may vary.
4. Height of the roadside unit shall not exceed 26 feet. Refer to manufacturer recommendations for minimum height.
5. Maintain 18" minimum separation between RSU and existing signage.

REFERENCE KEY NOTES:
1. Spacing and number of units to cover area is dependent on the results of V2X radio frequency study.
2. If cable length greater than 328 feet, use mid-span injector located at pole or base to extend cable. See plans for conduit type, size, location, and quantity.
3. Roadside unit placement is illustrative only. Refer to manufacturer recommendations for ideal location at intersection.
4. Follow manufacturer recommendations for roadside unit mounting distance away from mast arm. Mount roadside unit at least 9 ft minimum away from other devices if collocating.
5. Follow manufacturer recommendations for roadside unit mounting distance away from signal pole. Mount roadside unit at least 9 ft minimum away from other devices if collocating.
6. 120/240 VAC traffic cabinet with conventional power. Refer to standard RSE(2), ITS(20) and ITS(23).
7. Refer to enumerations 275(37) and 275(38) or 195(139) and 195(140) for ground box details. See plans for ground box size, type, and location.