1. Under FCC Rules & Regulations 90.242, the antenna is limited to a maximum height of 15 meters (49.2 feet). Mount the antenna to the pole with a bracket and high-strength insulated antenna mounts with stainless steel hardware.

2. The antenna shall be center or base loaded vertical featuring a low-loss, embedded weatherproof loading coil.

3. The amplitude modulated transmitter must be FCC type approved. See Contract for the transmitter frequency.

4. The voice storage unit shall be as specified in the Contract.

5. See Standard Plan J-60.14 for details on mounting a NEMA junction box to a timber pole.

6. All HAR conduits shall be secured to the pole with two-hole conduit straps spaced at 5’ (ft.) maximum centers. See Standard Plans J-60.13 and J-60.14 for steel channel support and mounting details.

7. The shield shall be tightly wrapped around the center conductor when attaching the PL 259 connector to the UG 175/U adapter. The shield wrapping on the center conductor may ONLY come in contact with the center pin at the solder point. The shield MUST NOT come in contact with the PL 259 shell.

8. The shield shall be soldered only at the holes on the PL 259 connector, and the center conductor shall be soldered at the top of the connector. The shield and center conductor MUST NOT be shorted together.

9. The shield shall be tightly wrapped around the center conductor. Crimp and solder the center conductor and shield to the terminal lug and attach securely to the antenna. Seal the entire connection with stainless steel hardware.

Notes:
- The antenna is limited to a maximum height of 15 meters (49.2 feet).
- Mount the antenna to the pole with a bracket and high-strength insulated antenna mounts with stainless steel hardware.
- The antenna shall be center or base loaded vertical featuring a low-loss, embedded weatherproof loading coil.
- The amplitude modulated transmitter must be FCC type approved. See Contract for the transmitter frequency.
- The voice storage unit shall be as specified in the Contract.
- See Standard Plan J-60.14 for details on mounting a NEMA junction box to a timber pole.
- All HAR conduits shall be secured to the pole with two-hole conduit straps spaced at 5’ (ft.) maximum centers. See Standard Plans J-60.13 and J-60.14 for steel channel support and mounting details.
- The shield shall be tightly wrapped around the center conductor when attaching the PL 259 connector to the UG 175/U adapter. The shield wrapping on the center conductor may ONLY come in contact with the center pin at the solder point. The shield MUST NOT come in contact with the PL 259 shell.
- The shield shall be soldered only at the holes on the PL 259 connector, and the center conductor shall be soldered at the top of the connector. The shield and center conductor MUST NOT be shorted together.
CONSTRUCTION NOTES

1. Backfill material shall meet ANSI/NSF Environmental Standard 60. Follow manufacturer's mixing recommendations.

2. Ground Pipe and types of non-hazardous salts will vary per manufacturer. See the WSDOT Qualified Products List (QPL) for approved manufacturers and follow guidance provided.
CABINET NOTES

1. The cabinet is a Type 331, with housing and rack as shown in Standard Plan J-12.15.
2. The service panel shall be installed on the left side of the cabinet as viewed from the rear.
3. Service PDA (SPDA) shall be as shown in the TEES, with the modifications shown here.
4. The battery shelf shall not obstruct any outlets on the SPDA.
5. The Receptacle Strip shall be plugged into a clean receptacle on the SPDA.
6. DSL Modem may be set on the drawer shelf if it is not designed for wall mounting.
7. Bus bars shall be capable of being used without lugs on wiring.

KEY NOTES

- POWER MODULE
- INTERFACE MODULE
- DIGITAL COMMUNICATION CONTROLLER MODULE
- AM TRANSMITTER MODULE
- MODULATION PICK-OFF

SERVICE POWER DISTRIBUTION ASSEMBLY WITH GENERATOR TRANSFER SWITCH WIRING DIAGRAM

SEE NOTE 3

REAR VIEW

SERIAL NUMBER SHEET 3 OF 3 SHEETS

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

HIGHWAY ADVISORY RADIO (HAR) TRANSMITTER
STANDARD PLAN J-86.10-00

APPROVED FOR PUBLICATION

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