All radio repeaters must be capable of mixed Analog and P25 Phase 1 modes of operation.

All channels except Bangs PD, Early 1, and Early 2 must be capable of simulcast transmit and receiver voting.

An additional multi-channel VHF repeater is to be located at Brownwood Fire Station #1 that will be capable of operating full duplex on Channel FD1. We will need a power supply, UPS, duplexer, antenna, transmission line, and full installation with the antenna mounted on the top of the belfry at FS#1. This station will be used as a backup for the county for communications should all other sites be disabled. It needs to be controlled by either a nearby walkie-talkie or low power mobile that is not part of this RFP.

Add an extra radio repeater at the Industrial Tower site for the following channels to include simulcast transmitters and receiver voting:
- IT Operations
- Utilities

In addition, the two-channel combiner at the Industrial Site will now be a 4-channel hybrid combiner and channels PW, UTILITIES, ITOPS, will need GPS receivers with antennas at the Industrial and Greenleaf sites.

All VHF transmitters will be operating in the VHF Public Safety band from 153 – 155 MHz and all VHF receiver inputs to the repeaters will be operating in the VHF Public Safety band from 158 – 159 MHz band.

The radio logging component must be accomplished by one of the following three methods:
1. Radios added at dispatch to receive all 12 dispatch channels currently in use with audio output to the current radio and 911 logging system with date and time stamps on each transmission
2. Devices added at dispatch to receive all 12 dispatch channels currently in use with audio output to the current radio and 911 logging system with date and time stamps on each transmission
3. An internal logging system that is part of the dispatch console system that can easily be reviewed with date and time stamps on each transmission and the data stored to a separate server that can be archived and retrieved as needed.
All transmitter combiners should be the hybrid type because we might have to use adjacent frequencies for some of the channels yet to be applied for.

If the vendor selects not to provide the duplexers, receiver multi-couplers, or combiners, Brownwood / Brown County will provide them. Please note in the response if that option is being invoked.

Brownwood / Brown County will provide the following material and equipment as their part of the project:
- Equipment Buildings
- Generators
- Concrete Pads for the Buildings and Generators
- UPS Systems
- IP Alarm Server
- All Towers except Winchell
- All Dispatch Furniture and Chairs
- AC Power in the Dispatch Room
- Lighting in the Dispatch Room
- HVAC in the Dispatch Room
- All general physical improvements in the Dispatch Room
- AC Power to the Remote Transmitter Sites
- All Electrical Wiring

The IP Routers will be supplied by Brownwood / Brown County if the vendor chooses not to provide them.
Provide 1 each IP Dispatch Console at the Early Texas City Hall in the Police Department Dispatch Room. This will connect to the main dispatch system at the Brownwood / Brown County Law Enforcement Center through the IP Microwave link that is part of Phase 3A in the main RFP. (See page 22) This will bring up the total number of identical dispatch consoles to a quantity of 10.
City of Early Designated Frequencies

IP Dispatch Console connected to WCW Early Tower via IP Microwave Link. All systems will be connected via IP Router.