

**Jefferson County, WI
Public Safety Radio System**

***Request for Proposals for
Public Safety Radio Systems***

ADDENDUM 1

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**Issued by:
Jefferson County**

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Additions to the RFP Text:

25.7.3 For each site the DC power plant will be designed to provide a minimum of 30 minutes runtime for all equipment at each site at 100% load.

27.3.3 If an alternate console system is considered the system will need to be compatible with the console system used by Watertown. This Mindshare console system is used for City of Watertown communications, has access to all County channels and has an intercom to Jefferson County Dispatch.

27.3.4 An alternate console platform is must provide the following control and monitoring functions in addition to the P25 and paging systems referenced in this RFP:

Channel	Console Name	Logged (Y/N)
EMERGENCY COMMS Backup	EMCOM1 STBY	Y
Interagency Fire Emergency Radio Network	IFERN	Y
Intercom with Watertown Dispatch	WATERTOWN ICOM	Y
Jail System	JE JAIL1	Y
LAW 2 (Receive Only)	JE LAW2	Y
LAW 3 SIMPLEX	LAW 3	Y
Local Government Channel	LOCAL GOV'T	Y
MARC_1 - TX and Repeater Control	MARC_1	Y
MARC_2 - RX Only	MARC_2	Y
P25 Interop 1 Trunking - multi-talk group	P25 Interop 1	Y
P25 Interop 2 Trunking - multi-talk group	P25 Interop 2	Y
P25 Interop 3 Trunking - multi-talk group	P25 Interop 3	Y
P25 Interop 4 Conventional - multi-channel	P25 Interop 4	Y
Paging (backup)	-	N
Paging Channel (monitor)	-	Y
Point to Point	POINT TO POINT	Y
VHF Interoperability (multi-channel)	LMPD	Y
VLAW31	VLAW31	Y

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Amendments to the RFP Text: (indicates new text)

6.2.3 TAB 3: References - Provide a list of all county-wide, simulcast radio communications projects completed in the last five years and at least five references of recent clients that have completed a similar project. If any of the systems are P25 simulcast, please identify same. Each reference must include the name, telephone number, address, and email address of a person who may be contacted and who has direct knowledge of your firm's capabilities and past performance. Also include a brief description of the project, including the start and completion dates.

10.1.4 If a commodity not in current manufacture is specified by the County, radio system successful bidder warrants that such commodity shall be given the warranty that accompanied the commodity when it was in current manufacture. Radio system successful bidder further warrants that with respect to such commodity, that Bidder, for at least five years (or such other period as may be specified by the County from the date of the contract, shall keep and maintain enough supply of parts, supplies, accessories, and all other items reasonably necessary to assure the high reliability and efficient operation of the commodity. Radio system successful bidder further warrants that in the event the necessary parts, etc., are not available to maintain the commodity, it shall, at no cost to the County, promptly replace the commodity with one that is in compliance with the contract documents and is the Bidders then current version.

25.1.16 Proposals shall provide a complete and operational interoperability and mutual aid communication system designed to provide maximum capabilities in the proposed radio and console systems. Except as noted, proposals shall provide new VHF stations (B – 100W base station, C/B – 25W control station / base, HPR – 100 W repeater), LPR – 25 W repeater) and antenna systems for backup, interoperability, mutual aid communication systems for the following channels:

25.1.16.1 HPR - EMCOM1 Backup – South Water Tower

25.1.16.2 B - IFERN* – Cemetery Hill

25.1.16.3 B - LAW3 – Jefferson County Sheriff Office

25.1.16.4 HPR - MARC 1* – Cemetery Hill

The MARC 1 Repeater must be equipped with DTMF control that allows the repeater to be enabled or disabled remotely. The unit is also to be equipped with a second receiver to monitor the MARC 2 channel (talk around mode).

25.1.16.5 B - BACKUP PAGING – South Water Tower

25.1.16.6 B - POINT TO POINT – Cemetery Hill

25.1.16.7 B - VLAW31 – Cemetery Hill

25.1.16.8 LPR – JAIL

25.1.16.9 C/B – 700/800 INTEROP

25.1.16.10 C/B – P25T INTEROP 1

25.1.16.11 C/B – P25T INTEROP 2

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25.1.16.12 C/B – P25T INTEROP 3

25.1.16.13 C/B – P25C INTEROP 4

25.1.16.14 C/B – Analog Interop

25.1.16.15 All channels in section 25.1.16 that are marked with “*” shall be voted to provide portable outdoor receive coverage of the County.

26.12.10 Only licensed 6 or 10/11 GHz microwave bands, or fiber optics shall be utilized for the primary interconnect path.

26.12.10.1 Leased data service paths over fiber optics shall not be considered.

26.12.14 A ring microwave/fiber optic design is highly recommended if possible though any links not part of a ring shall be established with hot standby or a parallel 4.9 GHz link.

26.12.14.1 The existing fiber installed from JCSO to the main Jefferson site is described as follows

- o 12 strand Single Mode fiber cable
- o 4 strands in use today
- o 8 strands are available
- o Buildings about one-mile separation
- o Jefferson Co IT would light the fiber

Appendix 6 Building List for Voice Testing

The list of building locations for subjective testing is provided and accompanies the RFP document in an MS Excel Spreadsheet and a Google Earth kmz file. These files accompany this addendum.

Jefferson Co Subjective Testing Locations 07-24-19.xlsx
Jefferson Co Subjective Testing Locations 07-24-19.kmz

Deletions to the RFP Text: (indicates deleted text)

25.1.16 Proposals shall provide new stations for single site backup, interoperability, mutual aid communication systems for the following channels:

~~LOCAL GOVERNMENT~~

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Documents included with Addendum 1 include the following:

1. 1mileBoundary.shp
2. Jefferson Co Radio System RFP Price Matrix Rev 2 – 2019-08-05.xls
3. Jefferson Co Subjective Test Locations.kmz
4. Jefferson Co Subjective Test Locations.xlsx
5. Jefferson County – Study Report – Final – 03-2019.pdf
6. PPM Attendees.pdf
7. Sullivan – Building Floor Plan
8. Sullivan Rack Drawing Rev 1
9. Sullivan Tower_(10125)_Structural_Analysis Report_2014-6-12.pdf
10. Sullivan Tower_(10125)_Structural_Tower Mapping_2014-06-11.pdf

**Response to written questions submitted following the Pre-proposal Meeting
Thursday, July 18, 2019. Questions are underlined. Answers are in *italics*.**

1. Will there be a Bid Opening? *This is a Request for Proposal, not a Bid. Proposals must be received at the location designated prior to the time and date specified in the Request for Proposal for consideration. When proposals received are opened only the firm names that provided proposals will be available.*
2. Do we have a total estimated current drain for new equipment? *Proposals shall provide the anticipated power requirements for equipment provided for each site in the proposed system.*
3. Do we know the final battery reserve required? *4 hours were discussed, but is that the final requested number? For each site the DC power plant will be designed to provide a minimum of 30 minutes runtime for all equipment at each site at 100% load. See Additions to the RFP Text - Section 25.7.3.*
4. Can AC be upgraded to specified parameters to match the planned plant design? *Proposals shall include the DC Plant equipment required to power all equipment at each site and provide the total commercial power and BTU requirements per site for the civil engineer.*
5. Are battery disconnects required for the new DC Batteries? *Yes. DC disconnect panel(s) shall be part of the design.*
6. Will the flooring be upgraded for plant and battery weight support by the sheriff's department? *This will be analyzed as required per site.*
7. Will the sheriff's department handle a floor load study? *If required, this will be done by the civil engineering firm.*
8. Is Union Labor required? *No*
9. What are the standard hours for non-service impacting work? *The County does not have a policy on the standard hours for non-service impacting work. This issue will be addressed, if necessary, during Contract Negotiations with the selected bidder.*

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10. What are the standard hours for service impacting work? The County does not have a policy on the standard hours for service impacting work. This issue will be addressed, if necessary, during Contract Negotiations with the selected bidder.
11. Is a DMOP required and who will approve? This is assumed to be a Detailed Method of Procedure. A Detailed Method of Procedure may be used by the successful bidder if this is a standard tool already in use and integrated into their construction practice. If used, the County would approve after review and approval by the County's consultant.
12. Remote monitoring, will the sheriff's department provide a router assignment for IP and is there a standard alarm reporting system? No. The radio network is anticipated to have its own IP addressing scheme completely independent of any in-house networks. All networking hardware is to be included in the proposal. Proposals are to include a stand-alone alarm reporting system. The microwave/fiber optic network will be designed with the capacity and capability to also carry County traffic not associated with the radio and alarm system network activity. County traffic may use an existing IP addressing scheme. VPNs shall be used to separate County and secure IP traffic with radio traffic being given the highest priority.
13. Are all sites 208V AC? Power to all repeater sites is 120/240 single phase.
14. Are all sites single phase or 3 phase AC? Power to all repeater sites is 120/240 single phase. Power to the Dispatch Center is 120/208.
15. Can potential vendors reply only to the radio system or DC Power services needed in the RFP? No. Any proposals received for only a portion of the stated system requirements (such as the DC Power Plant) will not be considered. Is Jefferson County looking for a full turn-key vendor? Yes. Although the County will provide the civil portions of this project as described in the RFP, the successful vendor will be responsible for all vendor supplied subsystems including, but not limited to, the radio system infrastructure, microwave/network system infrastructure, standalone IP network and all associated hardware elements, DC plant and alarm system.
16. Section 6.2.3 TAB 3: Is it preferred that the references be from county wide simulcast systems that were directly designed and deployed by the vendor in the last 5 years? References over the last five years should include VHF P25, conventional, simulcast systems. See change to Section 6.2.3.

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17. Section 6.2.3 TAB 3: Should the references include new system design and deployments, not including upgrades? *Yes. A significant upgrade could also be included in the reference list.*
18. Section 25.3: Should each bidder include services for performing structural analysis of each proposed tower, or will these services be handled through the Civil Work project? If the bidder is responsible for these reports, will the County provide up-to-date tower drawings that can be used for each tower analysis? *No. These services will be handled through the Civil Work project. The cost of the initial structural study for each antenna structure is the responsibility of the successful vendor. Bidders shall perform a visual review of each proposed tower, suggested location of to be installed antennas and result of initial contact with tower owner showing the Bidder has made a concerted effort to determine viability of the existing site. The provider of the structural analysis will be determined by the tower owner or civil engineer. For each site the successful bidder will provide loading information for each proposed structure to the Civil Engineering firm. Any required tower documentation for structural studies will be provided by the County or directly by the tower owner.*
19. Per discussions at the site walks, please provide the FCC license(s) for the existing system, shelter and compound floor plans, and the tower loading/structural analysis that was previously performed. *Most of these items can be found in the documentation included with Addendum 1. The structural analysis and floor plan information is available for Sullivan only. No other structural analysis documentation for any other tower is available at this time. If additional information becomes available, it will be provided.*
20. Please verify: Vendors will acquire the permit for civils and utilities, but the County will provide the work (per Section 2.1.11)? All permits for civils work including utilities will be acquired by the civils contractor, not the successful radio system vendor.
21. Please verify: The County's Civil Engineering firm will produce the civil site drawings (per Section 3.2.4)? *Yes*

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22. Please verify: The County definitely prefers to replace the existing 2012 vintage Eventide NexLog 740 logging recorder? *No. The proposal will provide any hardware, firmware or software to allow their present unit to be upgraded to log current radio and telephone traffic and P25 conventional traffic. As an alternate the proposal should provide a new replacement logger that will provide all necessary recording capabilities using the policies stated in the RFP as described in Section 26.8.*
23. Please verify: The County's Civil Engineering firm will manage/oversee tower design (per Section 3.2.4)? *Yes. Once the final design is complete, the detailed design is accepted and sites are secured, the radio system vendor will provide the detail on all proposed antenna systems to be supported by the antenna structure to the civil engineering firm. The radio system vendor will review the drawings provided to ensure it accurately depicts all requirements. Once a tower is ready the radio system vendor will provide, install and test all proposed antenna system elements on the antenna structure.*
24. Does the County request this coverage for any areas outside of the County? *Predictions in the proposal should be provided for all LMR systems 15 miles beyond the County border. Demonstration of on-street performance is required one mile beyond the County border. See Section 26.9 Coverage Requirements.*
25. Please verify: Will coverage need to extend at least a mile beyond the border, or will it need to extend more than 1 mile beyond the border? *Demonstration of on-street performance is required one mile beyond the County border. See Section 26.9 Coverage Requirements.*
26. Could the County provide us with the model number (name) of the Mindshare console that they are currently using? *The model number, if there is one, is not known. Is it the intent of the County for the bidder to work with Mindshare to determine what upgrades are required to meet the requirements of Section 26.7?* *Yes. The bidder must propose a system design using the Mindshare console. Bidders can also propose an alternate solution. See Section 27.3.*

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27. Please verify: Bidders will assist the County with the licensing process, but the County is responsible for securing the frequencies? No new frequencies are planned for the new system. If so, would the County ultimately be responsible for the frequencies and their spacing for combining? They will use existing frequencies and attempt to re-license them with the appropriate emission designator, coordinates, antenna height and RF power per the successful vendor RF design. The bidder is responsible for the combining system

28. In order to determine the number of courses needed, please provide the following information:

(1) total number of County agencies requiring training - (~31)

(2) total number of students per training group:

- i. system managers - (1)
- ii. dispatchers/dispatch supervisors - (15)
- iii. radio users (total number requiring train-the-trainer instruction from Fire, Law, EMS, and highway agencies) - (~75)
- iv. technicians/support staff - (0)

The counts above are estimates based on train the trainer for all but system manager and dispatcher training. The County has no technicians that will support the system.

29. Regarding dispatcher training: It is assumed that this is only required if the County purchases new consoles from the chosen vendor; please verify. It is unknown if there will be any operational changes that dispatch will need to be aware of if the existing Mindshare console system continues to be used. Please propose whatever training, if any, is appropriate for successful operation.

30. Please provide the Shape File For Additional Boundary (red line) outside of the County border, as indicated in RFP Appendix 7. The shape file is included in the documentation accompanying this addendum.

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31. Could the County clarify in detail what information they need from the bidder regarding this requirement, e.g.: Does the County want to know the amount of space our equipment requires, the amount of power our equipment consumes, what temperature ranges our equipment works in, etc.? *For each site, proposals shall include the proposed equipment parameters so the civil engineering firm can design the appropriate sub-systems for space, power, HVAC, etc., for the proposed equipment. This includes, but is not limited to, power requirements, operating temperature, BTU, dimensions, space requirements and weight.*
32. Could the County specify the height of the building? *The JCSO building is estimated to be 36 feet AGL.*
33. Could the County specify the vendor and model of the pager they are currently using? *Most pagers are Motorola Minitor Series (>90%) V and VI. Some departments also use some Swissphone and Unication pagers.*
34. 26.10.6 Page 91. If the system design does not need 100W transmitters can we use 50W PAs for cost and space savings? *For purposes of the RFP response such a design should take exception to the specification and justify with the appropriate narrative.*
35. 25.1.16 Page 74 & 25.5.1 Page 76. The current IFERN and MARC systems have base stations at the Main site and 8 remote receiver sites. Will the new system require the same voted configuration with receivers at all the proposed sites for maximum coverage? *Yes, the County would prefer that all sites proposed be used as receive sites for IFERN and MARC1.*
36. 25.5.1 Page 76. Please confirm the MASTR IIe Local Govt base, that needs to be replaced at the main tower, is 45.28MHz with a PL of 192.8Hz? *This station does not need to be replaced. See Deletions to the RFP Text: above.*
37. 24.2.7 Page 71. Please specify all bases, repeaters and control stations that need to be replaced in the table. Units in Section 25.1.16 need to be replaced as revised in this addendum.
38. 25.1.19 Page 74. Please provide a list of all agencies and their existing radios that will need to be checked, tested and updated. This will be needed to accurately quote this work. *For purposes of the response to this RFP please use the Estimated Inventory and Field Unit Distribution Summary found in Appendix 5 of the RFP plus 20%.*

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39.26.11.5 Page 92. Can we use more than one transmit antenna per site if we can still meet the coverage requirements? *For purposes of the RFP response such a design should take exception to the specification and justify with the appropriate narrative.*

40.30.5.2 Page 106. If >95% of the buildings pass, do we have to remedy the <5% of the buildings that don't? *Remedy is only required if >5% fail in buildings where the attenuation does not exceed 8dB in the County and if >5% fail in buildings where the attenuation does not exceed 15dB in the selected cities.*